AGENDA

FLOWER MOUND TOWN COUNCIL REGULAR MEETING

7/18/2022

FLOWER MOUND TOWN HALL, 2121 CROSS TIMBERS ROAD
FLOWER MOUND, TEXAS

6:00 P.M.

An agenda information packet is available online at flower-mound.com/AgendaCenter

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Comments regarding any agenda item can be sent to the Town Council by emailing towncouncil@flower-mound.com or by calling 972.874.6005 and leaving a message.

A. CALL MEETING TO ORDER

B. INVOCATION

C. PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG AND TO THE TEXAS FLAG

"Honor the Texas flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible."

D. PRESENTATIONS

1. Proclamation and Presentation of Hometown Hero Jon Kraatz
2. GoZone & Mobility Solutions

E. PUBLIC COMMENT

The purpose of this item is to allow the public an opportunity to address the Town Council regarding any item on this agenda that is not a "Public Hearing". Issues regarding daily operational or administrative matters should first be dealt with by calling Town Hall at 972.874.6000 during business hours.

In accordance with the Texas Open Meetings Act, the Town Council is restricted from discussing or acting on items not listed on the agenda.

To speak to Council during public comment, please fill out a comment form.

- **Speakers are limited to 3 minutes, a tone will sound at 30 seconds left and when time has expired, and times may be adjusted by the mayor**
- **Speakers must address their comments to the Town Council**
- **Please state your name and address when speaking**

F. ANNOUNCEMENTS

1. Announcements from the mayor and council members

G. TOWN MANAGER'S REPORT

Update and discussion on:

1. Capital Improvement projects
2. Economic Development projects

3. Organizational updates

H. FUTURE AGENDA ITEMS

The purpose of this item is to allow the Mayor and members of Council an opportunity to bring forward items they wish to discuss at a future meeting, with the understanding a consensus of Council is needed in order for that item to be placed on a future agenda and in accordance with the Town Council Agenda Setting Policy (Ord. 65-15).

I. COORDINATION OF CALENDARS

1. A regular meeting is scheduled for Monday, August 8.

J. CONSENT ITEMS

This part of the agenda consists of non-controversial or "housekeeping" items required by law. Items may be removed from Consent by any council member by making such request prior to a motion and vote.

1. Minutes 6/20 and 6/23- Consider approval of the Town Council minutes from a special and regular meeting held on June 20, 2022, and a special meeting held on June 23, 2022.
2. Network Firewall Replacements- Consider approval of the purchase of network firewall replacements from Edge Team Technology in the amount of $32,867.98
3. SIEM Technology Implementation- Consider approval of the purchase of Security Information and Event Management (SIEM) technology from Edge Team Technology in the amount of $32,502.96
4. 300 Old Gerault- Consider approval of Development Agreement for the 300 Old Gerault Project for $173,968.20 to replace some of the gravel portion of Old Gerault Road with concrete pavement.
5. Fuel for Town Vehicles- Consider approval of the purchase of unleaded and diesel fuels for Town Fleet Vehicles through OMNIA Cooperative Contract Number 53316 managed/ assigned to the City of Fort Worth, in the estimated annual amount of $963,000.
6. CDBG-CV Ranch Hands Rescue- Consider approval of a Service Agreement with Ranch Hands Rescue, in an amount not-to-exceed $25,000.00 in Community Development Block Grant-CV funds, to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.
7. CDBG-CV Friends of the Family- Consider approval of a Service Agreement with Denton County Friends of the Family, in an amount not-to-exceed $80,098.25 in Community Development Block Grant-CV funds, to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.
8. CDBG-CV Children's Advocacy Ctr- Consider approval of a Service Agreement with Children’s Advocacy Center for North Texas, in an amount not-to-exceed $80,098.25 in Community Development Block Grant-CV funds, to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.
9. Purchase of Ford Interceptor- Consider approval of the purchase of one (1) 2023 Ford Pursuit Rated Hybrid Police Interceptor Utility with Police equipment packages as per Town of Flower Mound Specifications and Vendor Quote from the Holiday Auto Group for Police Services in the amount of $61,863.00.

10. Signal Analytics Equipment Contract- Consider Approval of the purchase of traffic analytics detection systems and other traffic related parts, in the estimated annual amount of $500,000.00, from AM Signal, through the Purchasing Cooperative of America contract.

11. Strategic Planning Report- Consider adoption of the Town Council 2022 Strategic Planning Session Summary Report.

K. REGULAR ITEMS

12. SP22-0002 HTeaO Flower Mound- Consider a Site Plan (SP22-0002 – HTeaO) to develop a fast food restaurant with a drive through window, with a waiver to Architectural Standards in the Town's Urban Design Plan for roof pitch. The property is generally located south of Cross Timbers Road and west of Morriss Road. (PZ recommended approval by a vote of 6 to 0 at its July 11, 2022, meeting.)

13. SUP22-0001 1307 College Pkwy AD- Public Hearing to consider an ordinance granting a Specific Use Permit No. 478 (SUP22-0001– 1307 College Parkway Accessory Dwelling) to permit an accessory dwelling. The property is generally located south of College Parkway and west of Kirkpatrick Lane. (PZ recommended approval by a vote of 6 to 0 at its July 11, 2022, meeting.)

14. MPA21-0010 - Parks and Trails Plan- Public Hearing to consider an ordinance amending the Master Plan (MPA21-0010 - Parks and Trails Plan) by removing and replacing Section 5.0, “Parks and Trails Plan,” and adopting the 2022 Trails and Bikeways Master Plan. (The Parks Board recommended approval by a vote of 7 to 0 at its June 2, 2022, meeting.) (The Transportation Commission recommended approval by a vote of 6 to 0 at its June 14, 2022, meeting.) (PZ recommended approval by a vote of 6 to 0 at its June 27, 2022, meeting.)

15. School Crossing Guard Incentive Pay- Consider recommendation to increase School Crossing Guard compensation and/or adopt attendance incentive pay.

16. Working Hour Variance- Consider approval of a request (MISC22-0002) for a variance to Section 34-182(b)(5), entitled “Construction work,” of the Code of Ordinances to allow extended hours for construction of the Lakeside Village development.

L. BOARDS/COMMISSIONS *(Bold text represents boards with vacancies)*

Discuss and consider resignations, appointments, evaluations, reassignments, discipline, or dismissals for the following boards or commissions: All Together Flower Mound Commission, **Animal Services Board**, Cultural Arts Commission, Denton County Transportation Authority, Environmental Conservation Commission, Parks Board, School Liaison Committee, SMARTGrowth Commission, Tax Increment Reinvestment Zone Number One (TIRZ #1), **Transportation Commission**, and Veterans Liaison Board.

M. CLOSED MEETING

The Town Council to convene into closed meeting pursuant to Texas Government Code Chapter 551, including, but not limited to, Sections 551.071, 551.072, 551.074, and 551.087 for consultation with Town Attorney, and to discuss matters relating to real property, personnel, and economic development negotiations, as follows:

a. Consultation with Town Attorney.

   1. 2006 Rule 11 agreement and dismissal, Cause No. 2005-20153-158 and Flower Mound Ranch Development Application
   2. Housing Discrimination Complaint
   3. La Estancia Investments, L.P., v. Town of Flower Mound

b. Discuss and consider purchase, exchange, lease or value of real property for parks, public rights-of-way, and/or other municipal purposes and all matters incident and related thereto.

c. Discuss and consider resignations, appointments, evaluations, reassignments, discipline, or dismissals for the following boards or commissions: Board of Adjustment/Oil & Gas Board of Appeals, Community Development Corporation, and Planning and Zoning Commission.

d. Discuss and consider economic development incentives, including retail centers, corporate relocation/expansion/retention, hospitality projects, performance related to certain incentive agreements, and proposed Tax Increment Reinvestment Zone (TIRZ).

e. Discuss the duties of the Municipal Court Judge, including the June report regarding court activities.

The Town Council may convene in executive session to conduct a private consultation with its attorney on any legally posted agenda item, when the Town Council seeks the advice of its attorney about pending or contemplated litigation, a settlement offer, or on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the provisions of Chapter 551, including the above referenced items.

N. RECONVENE TO REGULAR MEETING

The Town Council to reconvene into an open meeting to take any action deemed necessary as a result of the closed meeting.

O. ADJOURN MEETING

I do hereby certify that the Notice of Meeting was posted on the bulletin board at the Town Hall for the Town of Flower Mound, Texas, in a place convenient and readily accessible to the general public at all times and said Notice was also posted on the Town's website in accordance with GC Section 551.056 on the following date and time: July 15, 2022, at 2:50 p.m., at least 72 hours prior to the scheduled time of said meeting.

Anne Carnes, Deputy Town Secretary

The Flower Mound Town Hall and Jody Smith Hall are wheelchair accessible. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting by contacting Theresa Scott, Town Secretary, at 972.874.6076. Additional time limits will be provided to members of the public that need to address the Town Council through a translator.

TOWN COUNCIL AGENDA ITEM NO. 1

CONSENT ITEM

DATE: July 18, 2022

FROM: Theresa Scott, Town Secretary

ITEM: **Consider approval of the Town Council minutes from a special and regular meeting held on June 20, 2022, and a special meeting held on June 23, 2022.**

BACKGROUND INFORMATION: The Town Council held a special and regular meeting on June 20, 2022, and a special meeting on June 23, 2022.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Draft minutes 6.20 – special
2. Draft minutes 6.20 – regular
3. Draft minutes 6.23 – special

DRAFT MOTION: Move to approve as presented in the agenda caption.

THE FLOWER MOUND TOWN COUNCIL SPECIAL MEETING HELD ON THE 20TH DAY OF JUNE, 2022, IN THE FLOWER MOUND TOWN HALL, LOCATED AT 2121 CROSS TIMBERS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS AT 4:45 P.M.

Administrative Note: No audio or video recording was taken of this special meeting; however, it was open for the public to attend.

The Town Council met in a special meeting with the following members present:

Derek France	Mayor
Sandeep Sharma	Mayor Pro Tem
Ann Martin	Deputy Mayor Pro Tem
Adam Schiestel	Councilmember Place 1
Brian Taylor	Councilmember Place 3
Jim Engel	Councilmember Place 4

constituting a quorum with the following members of the Town Staff participating:

Theresa Scott	Town Secretary

A. CALL SPECIAL MEETING TO ORDER

Mayor France called the special meeting to order at 4:45 p.m.

B. PUBLIC COMMENT

No one spoke.

C. BOARDS/COMMISSIONS

1. The Town Council convened to the Pre-Council Room to:

   a. Discuss and consider resignations, appointments, evaluations, reassignments, discipline, or dismissals for the Tax Increment Reinvestment Zone Number One (TIRZ #1) Board and conduct interviews for the vacant position of Place 1.

   No action taken.

D. ADJOURN SPECIAL MEETING

Mayor France adjourned the special meeting at 5:39 p.m. on Monday, June 20, 2022, and all were in favor.

TOWN OF FLOWER MOUND, TEXAS

_____

DEREK FRANCE, MAYOR

ATTEST:

_____

THERESA SCOTT, TOWN SECRETARY

DRAFT

THE FLOWER MOUND TOWN COUNCIL REGULAR MEETING HELD ON THE 20TH DAY OF JUNE 2022, IN THE FLOWER MOUND TOWN HALL, LOCATED AT 2121 CROSS TIMBERS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS AT 6:00 P.M.

Click here for meeting video link (subject to change)

The Town Council met in a regular meeting with the following members present:

Derek France	Mayor
Sandeep Sharma	Mayor Pro Tem
Ann Martin	Deputy Mayor Pro Tem
Adam Schiestel	Councilmember Place 1
Brian Taylor	Councilmember Place 3
Jim Engel	Councilmember Place 4

constituting a quorum with the following members of the Town Staff participating:

Theresa Scott	Town Secretary
Bryn Meredith	Town Attorney
James W. Childers	Town Manager
Tommy Dalton	Assistant Town Manager
Tiffany Bruce	Assistant Town Manager/Town Engineer
Lexin Murphy	Director of Planning Services
Chuck Jennings	Director of Parks and Recreation
Julie Taylor	Director of Treasury Operations
Tammy Wilson	Chief Financial Officer
Christa Crow	Property Standards Manager
Brittni Barnett	Grants and Financial Analyst

A. CALL MEETING TO ORDER

Mayor France called the regular meeting to order at 6:00 p.m.

B./C. INVOCATION/PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG AND THE TEXAS FLAG

Chaplain Holland led the invocation and Mayor France led the pledges.

D. PRESENTATIONS

1. Proclamation for National Parks and Recreation Month

   Mayor France recited the Proclamation and presented it to Chuck Jennings, Director of Parks and Recreation.

2. Proclamation for International Yoga Day

   Mayor France recited the proclamation and presented it to Dr. Dhanda Kulkarni and Professor Pankaj Jain.

3. Veterans Liaison Board Update

   Keith ‘Si’ Simonson, Chair, provided an update on their work, including a proposed Veteran memorial concept (from Carrollton) for the Town’s future Veteran memorial park located next to the Flower Mound Library.

DRAFT

4. All Together Flower Mound Commission Update

   Yvette Elliott, Chair, gave a presentation identifying or noting:

   - Duties and responsibilities
   - Highlights

   and she responded to questions from Council regarding:

   - If direction or assistance from the Council is needed
   - Recommendations for doing anything different and shaping the commission in a more effective way
   - Next steps and a path forward for the commission
   - Meeting intervals
   - Open Meetings Act
   - Feedback opportunity
   - The process used during the focus groups

E. PUBLIC COMMENT

Names listed below don't necessarily reflect the order in which each person spoke and all addresses are located in Flower Mound unless otherwise indicated.

	Speaker names and address	**Subject *(as written on the form)***
1.	Vince Gallo, 3201 Walnut Grove with donated time from: Mary Regan, 3128 Mission Ridge	ATFM
3.	Mellany Lamb, 5109 Prince Edward Ct	ATFM & open meeting act
4.	Patricia Hayden, 5309 Heather Ct	ATFM
5.	Mike Matthews, 401 Northwood Dr	D4
6.	Troy Andersen, 4104 Shelby Ct	All Together FM Commission
7.	Daniel Ottinger, 1221 Oakwood Ct	FM all together FM
8.	Jamie Honeycutt, 5305 Wildwood Dr	All Together FM
9.	Chris Corbett, 5104 Prairie Creek Dr	4
10.	Lacey Riley, 4300 Morning Star Cir	ATFM
11.	Larry Lipscomb, 950 Crestwood Cr	ATFM

F. ANNOUNCEMENTS

Councilmember Taylor reported on the Youth Fire Academy.

Councilmember Schiestel reported on a patriotic concert to be held at Trietsch Memorial Church on July 2 and 3.

Councilmember Martin extended congratulations to the Parks & Recreation Department for their proclamation, and stated she is looking forward to the Independence Fest event.

Mayor France extended thanks for those that attended or supported the Journey to Dream fund raiser event.

G. TOWN MANAGER'S REPORT

1. Capital improvement projects

   No discussion.

DRAFT

2. Economic Development projects

   No discussion.

3. Operational updates

   - Introduction of Flo Mo Convo engagement opportunities
   - Appreciation for the Communications team in making the recent Strategic Planning Session teleconference meeting possible for Councilmember Taylor

4. Municipal Debt overview

   John Martin, Hilltop Securities and Kristen Savant, Norton Rose Fulbright

   Mr. Martin or Ms. Savant gave a presentation identifying or noting:'

   - Common municipal debt in Texas
   - Overview of security types, tax notes
   - Voted versus non voted
   - HB 1869 in brief

   and they responded to questions from Council regarding:

   - M & O debt

5. Residential Rehabilitation Program

   Britni Barnett, Grants/Financial Analyst and Christa Crow, Property Standard Manager

   Ms. Barnett and Ms. Crow gave a presentation identifying or noting:

   - Program background
   - Home rehabilitation program in action

   and they responded to questions or comments from Council regarding:

   - Application process

H. FUTURE AGENDA ITEMS

1. Councilmember Schiestel indicated he would like Council to review and discuss the Town's ordinances as it relates to shade/patio structures that are attached to accessory buildings for circumstances where maybe they would not count against the square footage of that building.

   There was Council consensus to proceed with a discussion on the topic.

2. Mayor France reported on a recent local artist mural that garnered public interest. He would like the Town to have prints or recreations of that mural for the public to purchase.

   There was Council consensus to proceed with a discussion the topic.

I. COORDINATION OF CALENDARS

1. The July 4 meeting has been canceled in observance of Independence Day.

DRAFT

2. A regular meeting is scheduled for Monday, July 18.

   Mayor France announced the July 4 meeting cancellation and inquired if all members of Council will be available for the July 18 meeting. Mayor Pro Tem Sharma indicated he will not.

3. A work session is scheduled for Thursday, July 21.

   There was Council consensus to cancel this work session.

J. CONSENT ITEMS

1. Consider approval of the minutes from a regular meeting of the Town Council held on June 6, 2022, and of the Strategic Planning Session held on June 16, 2022.
2. Consider approval of the award of Competitive Sealed Bid Number 2022-29-A to establish an annual unit price contract to provide minor construction and repair activities in an estimated amount of $250,000; and authorization for the Mayor to execute same on behalf of the Town.
3. Consider approval of a Buy Board Quote from Stovall Commercial Contractors LLC to construct a brick screen wall, install an above ground fuel storage tank, dispenser, and piping for the fuel site at Fire Station 1 in the amount of $199,531.01
4. Consider approval of an interlocal agreement with the Dallas-Fort Worth International Airport (DFWIA) to allow the use of their firefighting training facility for Citizens Fire Academy as well as various practice skills for the Flower Mound Fire Department and authorization for the Mayor to execute same on behalf of the Town.
5. Consider approval of Change Order No. 4 for the construction of the Rheudasil Park project, amending the contract with North Rock Construction, LLC., to provide an increase to the contract in the amount of $52,479.33; and authorization for the Mayor to execute same on behalf of the Town.
6. Consider approval of services for the existing sanitary sewer main related to the Upper Timber Interceptor (Morriss Road to One Place Lane) project, to Insituform Technologies, LLC., utilizing The Local Government Purchasing Cooperative Contract #635-21, administered through Buyboard, in the amount of $55,302.50.
7. Consider approval of seventeen (17) professional engineering firms to provide professional engineering services, five (5) geotechnical engineering firms to provide material testing services, two (2) independent property appraisal firms to provide real property appraisals, and two (2) subsurface utility engineering firms to provide subsurface utility engineering for the Town, for a two-year term ending June 19, 2024.
8. Consider approval of the purchase and installation of chain-link fabric replacement on the fence and backstops of Glenwick Park and Wilkerson Park ballfields in the amount of $58,920.00 with B&S Fence Company.

Mayor Pro Tem Sharma moved to approve by consent Items 1 – 8, as presented in the agenda caption. Councilmember Engel seconded the motion. Each item, as approved by consent, is restated above, and if applicable, the Ordinance or Resolution caption for each, for the record.

VOTE ON MOTION: *Motion passed*
AYES: TAYLOR, SCHIESTEL, ENGEL, MARTIN, SHARMA
NAYS: NONE

DRAFT

K. REGULAR ITEMS

9. Consider approval of an ordinance authorizing the issuance of the Town of Flower Mound, Texas, Certificates of Obligation, Series 2022, for the purpose of paying for waterworks and sewer system improvements, establishing parameters for the sale and issuance of such bonds, delegating certain matters to an authorized official of the Town and resolving all matters incident and related thereto.

Staff Presentation

Ms. Taylor or John Martin, Hilltop Securities, gave a presentation regarding:

- Utility Capital Projects, Water, Wastewater

and Mr. Martin responded to questions or comments from Council regarding:

- Bond maturity
- AAA rating
- Enterprise fund

Councilmember Taylor moved to approve as presented. Deputy Mayor Pro Tem Martin seconded the motion.

ORDINANCE NO. 31-22

AN ORDINANCE AUTHORIZING THE ISSUANCE OF "TOWN OF FLOWER MOUND, TEXAS, CERTIFICATES OF OBLIGATION, SERIES 2022"; PROVIDING FOR THE PAYMENT OF SAID CERTIFICATES OF OBLIGATION BY THE LEVY OF AN AD VALOREM TAX UPON ALL TAXABLE PROPERTY WITHIN THE TOWN AND A LIMITED PLEDGE OF THE NET REVENUES DERIVED FROM THE OPERATION OF THE TOWN'S WATERWORKS AND SEWER SYSTEM; PROVIDING THE TERMS AND CONDITIONS OF SUCH CERTIFICATES AND RESOLVING OTHER MATTERS INCIDENT AND RELATING TO THE ISSUANCE, PAYMENT, SECURITY AND DELIVERY OF SAID CERTIFICATES OF OBLIGATION; DELEGATING MATTERS RELATING TO THE SALE AND ISSUANCE OF SAID CERTIFICATES TO AN AUTHORIZED TOWN OFFICIAL; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION: *Motion passed*
AYES: SHARMA, MARTIN, ENGEL, SCHIESTEL, TAYLOR
NAYS: NONE

10. Consider approval of an ordinance increasing the residential homestead ad valorem (property) tax exemption to 7.5%

Staff Presentation

Ms. Wilson gave a presentation identifying or noting:

- Background information
- What we know

DRAFT

- Revenue impact

And she, or Mr. Childers, responded to questions or comments regarding:

- Voter approval rate
- Appraisals coming in higher
- 7.5 % versus 10% homestead exemption
- Commercial versus residential benefit

Councilmember Schiestel moved to approve to increase the residential homestead ad valorem property tax exemption to 10%. Councilmember Engel seconded the motion.

ORDINANCE NO. 32-22

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, PROVIDING FOR A RESIDENTIAL HOMESTEAD AD VALOREM (PROPERTY) TAX EXEMPTION; PROVIDING A SAVINGS/REPEALING CLAUSE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION: *Motion passed*
AYES: TAYLOR, SCHIESTEL, ENGEL, SHARMA
NAYS: MARTIN

11. Hold a discussion and provide direction regarding funding options for the Tennis Center.

Staff Presentation

Mr. Childers outlined the following funding options for a Tennis Center:

1) Utilizing 4B fund balance and collections, i.e., cash
2) Issuance of certificates of obligation funded by 4B sales tax
3) Voter approval via a bond election (general obligation bonds) funded by 4B sales tax collections
4) Combination of 4B sales tax fund balance and bond proceeds
5) Voter approval via a bond election (general obligation bonds) backed by ad valorem tax

and he, Mr. Jennings, or John Martin (Hilltop Securities),responded to questions or comments regarding:

- Impact to other parks projects if 4b funding is used for a Tennis Center
- Finance fees
- Debt service years
- The $13 million overall cost and potential for higher due to construction cost, and the added personnel cost to support the facility
- Was the location a cost factor
- Sales tax use
- Interest in seeing a prioritization list from staff (where something needs to go to fund this)
- What is the amount of non-committed funds currently in the 4b account

DRAFT

There was Council discussion regarding:

- Community Development Corporation consideration
- Voter approval option

There was Council direction to continue to work with the concept associated with option 3 above, including a potential May 2023 election, as well as interest in seeing a project prioritization list and the associated impact to current projects.

12. Consider a request for a Site Plan (SP22-0004 – Argyle ISD Phase III HS Additional Parking) to install additional parking for the high school site, with a request for a deviation to computing parking and loading requirements pursuant to Section 82-73 of the Code of Ordinances. The property is generally located south of Canyon Falls Drive between Denton Creek Boulevard and Stonecrest Road. (PZ recommended approval by a vote of 7 to 0 at its June 13, 2022, meeting.)

Staff Presentation

Ms. Murphy gave a presentation identifying or noting:

- General and detailed location
- Land use and zoning
- Site plan
- Site photos
- Landscape plan

and she, or Robert Howman, Glenn Engineering, 4500 Fuller Dr, Irving, and Jeff Cohen, construction manager for Argyle ISD, applicants, responded to questions or comments from Council regarding:

- Purpose for additional parking
- Future parking needs

There was Council discussion regarding:

- Mixed messages regarding traffic

Councilmember Taylor moved to approve as presented. Mayor Pro Tem Sharma seconded the motion.

VOTE ON MOTION: *Motion passed*
AYES: SHARMA, MARTIN, SCHIESTEL, TAYLOR
NAYS: ENGEL

Mayor France opened items #13 & #14 at the same time.

13. Public Hearing to consider an ordinance for rezoning (ZPD21-0010 – Embree 2499) from Agricultural District (A) and Single Family-Estate (SF-E) to Planned Development District No. 186 (PD-186) with Retail-2 District (R-2) and Office District (O) uses, with certain modifications and exceptions to the Code of Ordinances. The property is generally located south of Sagebrush Drive and west of Long Prairie Road. (PZ tabled this item to a date certain by a vote of 6 to 0 at its May 23, 2022, meeting.) (PZ recommended approval by a vote of 7 to 0 at its June 13, 2022, meeting.)

DRAFT

14. Public Hearing to consider an application for a tree removal permit (TRP21-0028) for three (3) specimen trees on property proposed for development as Embree 2499. The property is generally located west of Long Prairie Road and south of Sagebrush Drive. (The Environmental Conservation Commission recommended approval by a vote of 5-1-0 at its January 4,2022, meeting).

Staff Presentation

Ms. Murphy gave a presentation for items 13 and 14 identifying or noting:

- General and detailed location
- Land use and zoning
- Exception requests
- Site photos
- Concept plan
- Development standards
- New development standards
- Unresolved items
- Concept landscape plan
- Tree survey
- Concept elevations
- Traffic analysis

and she responded to questions or comments from Council regarding:

- Angel Vet acceptance to a spine road
- Parking
- Underground utilities

Applicant Presentation

Doug Powell, McAdams

Mr. Powell gave a presentation identifying or noting:

- Property overview
- Future land use
- Specific Area Plan 2
- Current and proposed zoning
- Concept plan, including circulation
- Development standards
- Landscape plan
- Elevations
- Timeline and studies

and he responded to questions or comments from Council regarding:

- Spine road
- Open space
- Tree preservation
- Proposed tenants

Mayor France opened the Public Hearing for items 13 and 14 at 9:13 p.m. No one spoke. Mayor France closed the Public Hearing at 9:13 p.m.

DRAFT

Item 13

Deputy Mayor Pro Tem Martin moved to approve item 13 as written, and additionally, to incorporate development standards as presented today, including if those three specimen trees are removed, the longer turn lane will remain. Councilmember Taylor seconded the motion.

ORDINANCE NO. 33-22

AN ORDINANCE OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING THE OFFICIAL ZONING MAP, EXHIBIT "A" OF SUBPART B, "LAND DEVELOPMENT REGULATIONS," OF THE FLOWER MOUND CODE BY CHANGING THE ZONING ON APPROXIMATELY 6.81 ACRES OF LAND SITUATED IN THE J. WIZWELL SURVEY, ABSTRACT NO. 1346, FROM SF-E SINGLE FAMILY ESTATE DISTRICT AND A AGRICULTURAL DISTRICT USES TO PLANNED DEVELOPMENT DISTRICT-186 (PD-186) WITH R-2 RETAIL DISTRICT-2 (R-2) AND O OFFICE DISTRICT USES IN ACCORDANCE WITH THE TOWN'S MASTER PLAN AND SPECIFIC REQUIREMENTS AND EXHIBITS INCORPORATED HEREIN; PROVIDING THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION: *Motion passed*
AYES: TAYLOR, SCHIESTEL, ENGEL, MARTIN, SHARMA
NAYS: NONE

Item 14

Mayor Pro Tem Sharma moved to approve as presented. Councilmember Schiestel seconded the motion.

VOTE ON MOTION: *Motion passed*
AYES: SHARMA, MARTIN, ENGEL, SCHIESTEL, TAYLOR
NAYS: NONE

Mayor France opened items #15 & #16 at the same time.

15. Public Hearing to consider an ordinance for rezoning (ZPD21-0019 – Sethi Property) from Agricultural District uses to Planned Development District No. 191 (PD-191) with Single Family District-15 uses and with certain exceptions and modifications to the Code of Ordinances. The property is generally located North of Waketon Road and east of Timber Way. (PZ recommended approval by a vote of 7 to 0 at its June 13, 2022, meeting.)
16. Public Hearing to consider an application for a tree removal permit (TRP22-0005) for three (3) specimen trees on property proposed for development as Sethi Property. The property is generally located north of Waketon Road and east of Timber Way. (The Environmental Conservation Commission recommended approval for specimen trees #1107 and #1387A and denial of specimen tree #1388 by a vote of 4-0-0 at its June 7, 2022, meeting).

DRAFT

Staff Presentation

Ms. Murphy gave a presentation for items 15 and 16 identifying or noting:

- General and detailed location
- Land use and zoning
- Conceptual site plan
- Exceptions
- Site photos
- Conceptual landscape plan
- Tree survey

and she, Mr. Meredith, or Ms. Bruce, responded to comments or questions from Council regarding:

- Previous property owner objection and the super majority requirement being triggered
- Lot coverage exceptions
- Platting process
- Drainage

Applicant Presentation

Doug Powell, McAdams

Mr. Powell gave a presentation identifying or noting:

- Subject property
- Future land use
- Concept plan

and he responded to questions or comments from Council regarding:

- Tree removal request
- Drainage
- Traffic

Mayor France opened the Public Hearing for items 15 and 16 at 9:30 p.m.

The following individuals either spoke in support or opposition, or had questions / comments related to the item: *Names listed below don't necessarily reflect the order in which each person spoke and all addresses are located in Flower Mound unless otherwise indicated.*

Support: Comments/Questions	Opposition: Comments/Questions	Question(s)/Comments Only
Ash Pothula, 832 Prescott Ln, Coppell	None	Doug Fulmer, 5313 Townsend Dr, Drainage

Mayor France closed the Public Hearing at 9:33 p.m.

Item 15

Councilmember Schiestel moved to approve as presented, with additional language stating there shall be no connection to the north except for emergency vehicles. Mayor Pro Tem Sharma seconded the motion.

DRAFT

ORDINANCE NO. 34-22

AN ORDINANCE OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING THE OFFICIAL ZONING MAP, EXHIBIT "A" OF SUBPART B, "LAND DEVELOPMENT REGULATIONS," OF THE CODE OF ORDINANCES OF THE TOWN OF FLOWER MOUND, TEXAS, BY CHANGING THE ZONING ON APPROXIMATELY 3.99 ACRES OF LAND SITUATED IN THE EDWIN MARSH SURVEY, ABSTRACT NO. 834, DENTON COUNTY, TEXAS, FROM A AGRICULTURAL DISTRICT USES TO PLANNED DEVELOPMENT DISTRICT-191 (PD-191) WITH SF-15 SINGLE FAMILY DISTRICT-15 USES IN ACCORDANCE WITH THE TOWN'S MASTER PLAN AND SPECIFIC REQUIREMENTS AND EXHIBITS INCORPORATED HEREIN; PROVIDING THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION: *Motion passed*
AYES: TAYLOR, SCHIESTEL, ENGEL, MARTIN, SHARMA
NAYS: NONE

Item 16

Councilmember Schiestel moved to approve as presented, with the exception of tree # 1388, 36" green ash, shall not be removed. Councilmember Taylor seconded the motion.

VOTE ON MOTION: *Motion passed*
AYES: SHARMA, MARTIN, ENGEL, SCHIESTEL, TAYLOR
NAYS: NONE

L. BOARDS/COMMISSIONS

Discuss and consider resignations, appointments, evaluations, reassignments, discipline, or dismissals for the following boards or commissions: All Together Flower Mound Commission, **Animal Services Board**, Cultural Arts Commission, Denton County Transportation Authority, Environmental Conservation Commission, Parks Board, School Liaison Committee, SMARTGrowth Commission, **Tax Increment Reinvestment Zone Number One (TIRZ #1), Transportation Commission,** and Veterans Liaison Board.

There was Council discussion regarding All Together Flower Mound, including:

- Public Information Act
- Other boards that don't function under the Open Meetings Act
- Background regarding the origin of the group, including the decision to not have them function within the parameters of the Open Meetings Act
- Nonfactual social media content and various misunderstandings
- Interest in having Commissioners and staff provide their input regarding any recommended changes they would like to see
- Source for action items
- Lack of detailed direction and the need for guidelines
- Transparency
- Staff support

DRAFT

- Meeting frequency
- The need for retooling
- How the goal of the group is not well defined
- Scenario of a citizen group outside of the scope of a board or commission
- Meeting minutes

Mr. Meredith outlined the type of boards that are subject to the Open Meetings Act.

JP Walton, staff liaison, ATFMC, summarized that the direction is to gather feedback from Council, ATTMC, staff, and the public to formulate a revised plan.

Direction was given to add the minutes to the website immediately.

For the TIRZ Board, Councilmember Schiestel moved to appoint Tim Whisenant, Place 2, effective immediately, and ending December 31, 2022. Mayor Pro Tem Sharma seconded the motion.

VOTE ON MOTION: *Motion passed*
AYES: TAYLOR, SCHIESTEL, ENGEL, MARTIN, SHARMA
NAYS: NONE

For the TIRZ Board, Councilmember Schiestel moved to appoint Councilmember Jim Engel as Chair, effective immediately, and ending December 31, 2022. Mayor Pro Tem Sharma seconded the motion.

VOTE ON MOTION: *Motion passed*
AYES: SHARMA, MARTIN, ENGEL, SCHIESTEL, TAYLOR
NAYS: NONE

M./N. CLOSED/OPEN MEETING

The Town Council convened into a closed meeting at 10:11 p.m. on June 20, 2022, pursuant to Texas Government Code Chapter 551, including, but not limited to, Sections 551.071, 551.072, 551.074, and 551.087 for consultation with attorney, and to discuss matters relating to real property, personnel, and economic development negotiations, and reconvened into an open meeting at 10:43 p.m. on June 20, 2022, and there was no action taken on the following items:

a. Consultation with Attorney.

1. 2006 Rule 11 agreement and dismissal, Cause No. 2005-20153-158 and Flower Mound Ranch Development Application

2. Housing Discrimination Complaint

3. Stormwater Control

b. Discuss and consider purchase, exchange, lease or value of real property for parks, public rights-of-way, and/or other municipal purposes and all matters incident and related thereto.

c. Discuss and consider resignations, appointments, or evaluations for the following boards or commissions: Board of Adjustment/Oil & Gas Board of Appeals, Community Development Corporation, and Planning and Zoning Commission.

DRAFT

d. Discuss and consider economic development incentives, including retail centers, corporate relocation/expansion/retention, senior housing, hospitality projects, and performance related to certain incentive agreements.

O. ADJOURN REGULAR MEETING

Mayor France adjourned the meeting at 10:43 p.m. on Monday, June 20, 2022, and all were in favor.

TOWN OF FLOWER MOUND, TEXAS

_____

DEREK FRANCE, MAYOR

ATTEST:

_____

THERESA SCOTT, TOWN SECRETARY

DRAFT

THE FLOWER MOUND TOWN COUNCIL SPECIAL FACILITY VISITS MEETING HELD ON THE 23RD DAY OF JUNE, 2022, BEGINNING AT THE OPERATIONS AND MAINTENANCE FACILITY, 201 SPINKS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS AT 11:00 A.M.

The Town Council met in a special meeting with the following members present:

Derek France	Mayor
Ann Martin	Deputy Mayor Pro Tem (left at 12:50 p.m.)
Adam Schiestel	Councilmember Place 1
Brian Taylor	Councilmember Place 3
Jim Engel	Councilmember Place 4 (absent from 2:15-3:10 p.m.)

constituting a quorum with the following members absent:

Sandeep Sharma	Mayor Pro Tem

and with the following members of Town Staff participating:

Theresa Scott	Town Secretary
James W. Childers	Town Manager

and with the following members of Town Staff participating at various locations throughout the afternoon:

Clay Riggs	Director of Public Works
Matt Hotelling	Senior Engineering Transportation Manager
David Stallings	Traffic Operations Manager
Mika Clark	Signs & Markings Supervisor
Stephen Stacks	Chief Mechanic, Public Works, Operations & Maintenance
Curtis Williams	Chief Operator, Public Works, Service Center/WWTP
Julie Taylor	Fleet Supervisor
Matthew Woods	Director of Environmental Services
Chuck Jennings	Director of Parks and Recreation
Clayton Litton	Parks Superintendent
Christine Hastings	Animal Services Manager
Andy Kancel	Chief of Police
Shane Jennings	Assistant Chief
Paul Henley	Fire Chief
Dean Feldpausch	Deputy Chief/Administration
Jerry Duffield	Assistant Chief/Operations

Note: Additional staff participated in equipment demonstrations at the Water Treatment Plant, Police and Fire Departments.

A. CALL SPECIAL MEETING TO ORDER

Mayor France called the special meeting to order at 11:21 a.m.

DRAFT

B. PUBLIC COMMENT

No one spoke.

C. FACILITY VISITS

Town Council received an overview of operational activities at the following Town of Flower Mound facilities:

1. Public Works Water Treatment Plant and Sign Shop - 201 Spinks Rd
2. Fleet Services - 201 Spinks Rd
3. Green Acres Farm Memorial Park - 4400 Hide-A-Way Ln
4. Bruton Orand Water Tower - Bruton Orand Blvd @ FM 1171
5. Animal Adoption Center - 3950 Justin Rd
6. Stone Hill Farms Lift Station - 6200 Stone Hill Farms Rd
7. Police Department - 4150 Kirkpatrick Ln
8. Fire Department - Central Fire Station – 3911 S. Broadway Ave

D. ADJOURN SPECIAL MEETING

The special meeting was adjourned at 5:33 p.m. on Thursday, June 23, 2022.

TOWN OF FLOWER MOUND, TEXAS

_____

DEREK FRANCE, MAYOR

ATTEST:

_____

THERESA SCOTT, TOWN SECRETARY

DRAFT

TOWN COUNCIL AGENDA ITEM NO. 2
CONSENT ITEM

DATE: July 18, 2022

FROM: Gary Bertagnolli, Director of Information Technology

ITEM: **Consider approval of the purchase of network firewall replacements from Edge Team Technology in the amount of $32,867.98**

BACKGROUND INFORMATION: The Town's current SonicWall firewall infrastructure, installed in 2014, is at end of life and needs to be replaced.

A network firewall is a device that acts as a barrier to keep destructive forces on the internet away from computers, servers, and other devices on a private network behind the firewall. Firewalls can help protect against a wide range of security threats. Firewalls can block unauthorized remote logins, denial of service attacks, viruses, and ransomware. The Town's firewall infrastructure also provides internet web site filtering and, advanced threat protection analysis. It also provides virtual private networking (VPN), which allows employees to connect securely to the Town's network from remote locations.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $32,867.98

Proposed Expenditure/(Revenue):	Account Number(s):
$ 32,867.98	567-270-84510-2020

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Bryn D. Meredith of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the *quote* as to form and legality.

ATTACHMENTS:

1. Edge Team Technology- Quote - Firewalls

DRAFT MOTION: Move to approve as presented in the agenda caption.

ATTACHMENT 1

EdgeTeam Technology, LLC • 5810 Long Prairie Rd • Suite 700-213 • Flower Mound, TX 75028 • US
Phone: (817) 953-2750 • Fax: (817) 796-5797
http://www.edgeteam.com

Quotation

Quote Number	Q-2022-6731
Terms	Net 30 Days
Date	2022-06-06
Sales Person	Robert Maize
Valid Until	2022-08-06
Tax Info.	

Bill To

Town of Flower Mound
2121 Cross Timbers Road
Flower Mound, TX 75028

Ship To

Gary Bertagnolli
Town of Flower Mound
2121 Cross Timbers Road
Flower Mound, TX 75028
(972) 874-6051
Gary.bertagnolli@flower-mound.com

#	Qty.	Product	Unit Price	Ext. Price
1	2	FG-600E-BDL-950-12	$ 10,567.59	$ 21,135.18
		FORTINET INC. : FortiGate-600E Hardware plus 24x7 FortiCare and FortiGuard Unified (UTM) Protection		
2	1	FC-10-F6H0E-189-02-12	$ 435.00	$ 435.00
		FORTINET INC. : FortiGate-600E FortiConverter Service for one time configuration conversion service		
3	1	FG-200F-BDL-950-12	$ 5,155.92	$ 5,155.92
		FORTINET INC. : FortiGate-200F Hardware plus 24x7 FortiCare and FortiGuard Unified Threat Protection (UTP)		
4	1	FC-10-F200F-189-02-12	$ 213.00	$ 213.00
		FORTIGATE-200F 1YR FORTICONVERTER SVC		
5	2	FG-60F-BDL-950-12	$ 864.44	$ 1,728.88
		FORTINET INC. : FortiGate-60F Hardware plus 24x7 FortiCare FortiGuard Unified (UTM) Protection		
6	2	FC-10-0060F-189-02-12	$ 40.00	$ 80.00
		FORTINET INC. : FortiGate-60F FortiConverter Service for one time configuration conversion service		
7	1	FC1-10-AZVMS-465-01-12	$ 970.00	$ 970.00
		FORTINET INC. : FortiAnalyzer-VM Subscription License with Support 1 Year Subscription license for 5 GB/Day Central Logging & Analytics.Include 24x7 FortiCare support,IOC,SOC subscription,and FortiGuard Outbreak Alert service.		

Group Totals

Subtotal:	$ 29,717.98
Total:	$ 29,717.98

Implementation/Configuration

#	Qty.	Product	Unit Price	Ext. Price
1	1	ETT-PS-FORTIGATE	$ 1,750.00	$ 1,750.00
		Configuration and Implementation of Fortinet FortiGate 600E, 200F, and 60F firewall devices. Hours are not on-call hours and will be prescheduled based on availability of customer & technical team.		
2	1	ETT-PS-FORTIANALYZER	$ 1,400.00	$ 1,400.00
		Configuration and Implementation of Fortinet FortiAnalyzer. Hours are not on-call hours and will be prescheduled based on availability of customer & technical team.		

Group Totals

Subtotal:	$ 3,150.00
Total:	$ 3,150.00

EdgeTeam Technology, LLC • 5810 Long Prairie Rd • Suite 700-213 • Flower Mound, TX 75028 • US
Phone: (817) 953-2750 • Fax: (817) 796-5797
http://www.edgeteam.com

Quotation Totals

Currency:	US Dollar
Subtotal:	$ 32,867.98
Total:	$ 32,867.98

Notes

Texas DIR: DIR-TSO-4075

Terms & Conditions:

EdgeTeam Technology invoices upon shipment of the product to customer. All invoices are due upon receipt. Any invoice over 30 days will be subject to a 1.5% late charge per month. EDGETEAM TECHNOLOGY DOES NOT ACCEPT CREDIT CARD PAYMENTS FOR GOODS AND SERVICES SET FORTH HEREIN.

Requests to return product(s) must be received within 30-days of receipt of the product(s). Approval for the return of product(s) is subject to the manufacturer's return policy. All product(s) approved for return must: (i) be in new, unopened condition and complete, including but not limited to all packaging materials, instructions and accessories; (ii) has no permanent software keys issued; (iii) returned to EdgeTeam Technology with a RMA number issued by EdgeTeam Technology; and (iv) include the number of the EdgeTeam Technology invoice wherein the product was purchased. Returns for credit are subject to a 20% restocking fee. Customized products may not be returned at any time.

Buyer assumes all responsibility for ensuring that purchased product(s) are used in a manner conforming to FCC requirements, in addition to any other applicable Federal, State, or local government requirements. No implied warranty, including merchantability and fitness for a particular purpose applies to this (these) product(s) and no other warranty given by any employee, agent, dealer or other person with respect to the product(s) shall be binding on EdgeTeam Technology.

EdgeTeam Technology shall have no liability or responsibility to the purchaser or any other person for any loss or damage or any special, incidental or consequential damages caused or alleged to be caused directly or indirectly by the product, including but not limited to, any interruption of service, loss of customer goodwill, loss of business or anticipatory profits or consequential damages resulting from use of the product(s). In no event shall Edge Team Technology be liable for loss of profits or any indirect, special incidental, or consequential damages arising out of or connected with the sale or anticipated use of the product(s).

NOTICE: Prices are good for thirty (30) days from the date of this quote. This quote is the exclusive property of EdgeTeam Technology and is made available for use to the addressee of the quote and its' immediate employees only. **Any quote on labor is an estimate. The final labor quote will be provided by EdgeTeam Technology when an acceptable Scope of Work and Statement of Work has been agreed upon by EdgeTeam Technology and the client. Contact your EdgeTeam Account Manager for additional support options from our highly qualified support staff.

Prices do not include applicable state/local sales tax or shipping & handling. EdgeTeam invoices for installation upon completion of project. No terms and conditions other than the terms and conditions contained herein shall be binding upon EdgeTeam Technology unless accepted by it in a writing signed by an authorized party. Any request by Client for goods from EdgeTeam Technology shall be governed by the terms of this Sales Proposal. All terms and conditions contained in any oral or written communication, including, without limitation, a purchase order submitted by Client, which are different from or in addition to the terms and conditions herein are hereby rejected and shall not be binding on EdgeTeam Technology, whether or not they would materially alter this document, and EdgeTeam Technology hereby objects to any such terms and conditions. All prior proposals, negotiations and representations, if any, are merged herein. Client will be deemed to have assented to all terms and conditions contained herein if any part of the goods and/or services described herein are shipped or an invoice is presented in connection with the said goods and/or services.

ALL PLACED ORDERS CANNOT BE CANCELED AND ARE NON RETURNABLE UNLESS THERE IS A DEFECT.

Credit Card are accepted but are subject to 4% convenience fee.

Quotation Accepted By

Quote Number	Q-2022-6731
Print Name	_____
Title	_____
Signature	_____
Date	_____

TOWN COUNCIL AGENDA ITEM NO. 3
CONSENT ITEM

DATE: July 18, 2022

FROM: Gary Bertagnolli, Director of Information Technology

ITEM: **Consider approval to purchase Security Information and Event Management (SIEM) technology from Edge Team Technology in the amount of $32,502.96.**

BACKGROUND INFORMATION: Due to the fact there are massive amounts of logs generated by modern systems, firewalls, domain controllers, etc., a technology is needed to automate the process to expedite analysis. SIEM (System Information Event Management), is a technology that reviews the logs of servers and other network attached systems to detect potential security issues or system errors. This is another layer of security protection as well as preventative measures for Town systems.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $32,502.96

Proposed Expenditure/(Revenue):	Account Number(s):
$ 32,502.96	100-655-59100-5110

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Bryn D. Meredith of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the quote as to form and legality.

ATTACHMENTS:

1. Edge Team – Quote – SIEM Solution

DRAFT MOTION: Move to approve as presented in the agenda caption.

ATTACHMENT 1

EdgeTeam Technology, LLC • 5810 Long Prairie Rd • Suite 700-213 • Flower Mound, TX 75028 • US
Phone: (817) 953-2750 • Fax: (817) 796-5797
http://www.edgeteam.com

Quotation

Quote Number	Q-2022-6732
Terms	Net 30 Days
Date	2022-06-06
Sales Person	Robert Maize
Valid Until	2022-08-06
Tax Info.	

Bill To

Town of Flower Mound
2121 Cross Timbers Road
Flower Mound, TX 75028

Ship To

Gary Bertagnolli
Town of Flower Mound
2121 Cross Timbers Road
Flower Mound, TX 75028
(972) 874-6051
Gary.bertagnolli@flower-mound.com

#	Qty.	Product	Unit Price	Ext. Price
1	1	FSM-AIO-BASE	$ 14,401.72	$ 14,401.72
		FORTINET INC. : FortiSiem All-In-One - Base License - up to 50 devices, up to 500 EPS		
2	1	FSM-AGT-ADV-25-UG	$ 2,851.24	$ 2,851.24
		FORTINET INC. : FortiSIEM Perpetual License for Advanced Agents 25 Advanced Agents for perpetual license. Each Agent requires a device license. Does not include Maintenance & Support		
3	1	FC2-10-FSM97-248-02-12	$ 4,400.00	$ 4,400.00
		FORTINET INC. : FortiCare Support for Software based FortiSIEM deployments 24x7 FortiCare Contract		

Group Totals

Subtotal:	$ 21,652.96
Total:	$ 21,652.96

Implementation/Configuration

#	Qty.	Product	Unit Price	Ext. Price
1	1	ETT-PS-FORTISIEM	$ 10,850.00	$ 10,850.00
		Configuration and Implementation of FortiSIEM management system. Hours are not on-call hours and will be prescheduled based on availability of customer & technical team. Includes 3 additional tickets to be used at later date for additional rules/integrations.		

Group Totals

Subtotal:	$ 10,850.00
Total:	$ 10,850.00

Quotation Totals

Currency:	US Dollar
Subtotal:	$ 32,502.96
Total:	$ 32,502.96

Notes

Texas DIR: DIR-TSO-4075

Terms & Conditions:

EdgeTeam Technology invoices upon shipment of the product to customer. All invoices are due upon receipt. Any invoice over 30 days will be subject to a 1.5% late charge per month. EDGETEAM TECHNOLOGY DOES NOT ACCEPT CREDIT CARD PAYMENTS FOR GOODS AND SERVICES SET FORTH HEREIN.

Requests to return product(s) must be received within 30-days of receipt of the product(s). Approval for the return of product(s) is subject to the manufacturer's return policy. All product(s) approved for return must: (i) be in new, unopened condition and complete, including but not limited to all packaging materials, instructions and accessories; (ii) has no permanent software keys issued; (iii) returned to EdgeTeam Technology with a RMA number issued by EdgeTeam Technology; and (iv) include the number of the EdgeTeam Technology invoice wherein the product was purchased. Returns for credit are subject to a 20% restocking fee. Customized products may not be returned at any time.

EdgeTeam Technology, LLC • 5810 Long Prairie Rd • Suite 700-213 • Flower Mound, TX 75028 • US
Phone: (817) 953-2750 • Fax: (817) 796-5797
http://www.edgeteam.com

Buyer assumes all responsibility for ensuring that purchased product(s) are used in a manner conforming to FCC requirements, in addition to any other applicable Federal, State, or local government requirements. No implied warranty, including merchantability and fitness for a particular purpose applies to this (these) product(s) and no other warranty given by any employee, agent, dealer or other person with respect to the product(s) shall be binding on EdgeTeam Technology.

EdgeTeam Technology shall have no liability or responsibility to the purchaser or any other person for any loss or damage or any special, incidental or consequential damages caused or alleged to be caused directly or indirectly by the product, including but not limited to, any interruption of service, loss of customer goodwill, loss of business or anticipatory profits or consequential damages resulting from use of the product(s). In no event shall Edge Team Technology be liable for loss of profits or any indirect, special incidental, or consequential damages arising out of or connected with the sale or anticipated use of the product(s).

NOTICE: Prices are good for thirty (30) days from the date of this quote. This quote is the exclusive property of EdgeTeam Technology and is made available for use to the addressee of the quote and its' immediate employees only. **Any quote on labor is an estimate. The final labor quote will be provided by EdgeTeam Technology when an acceptable Scope of Work and Statement of Work has been agreed upon by EdgeTeam Technology and the client. Contact your EdgeTeam Account Manager for additional support options from our highly qualified support staff.

Prices do not include applicable state/local sales tax or shipping & handling. EdgeTeam invoices for installation upon completion of project. No terms and conditions other than the terms and conditions contained herein shall be binding upon EdgeTeam Technology unless accepted by it in a writing signed by an authorized party. Any request by Client for goods from EdgeTeam Technology shall be governed by the terms of this Sales Proposal. All terms and conditions contained in any oral or written communication, including, without limitation, a purchase order submitted by Client, which are different from or in addition to the terms and conditions herein are hereby rejected and shall not be binding on EdgeTeam Technology, whether or not they would materially alter this document, and EdgeTeam Technology hereby objects to any such terms and conditions. All prior proposals, negotiations and representations, if any, are merged herein. Client will be deemed to have assented to all terms and conditions contained herein if any part of the goods and/or services described herein are shipped or an invoice is presented in connection with the said goods and/or services.

ALL PLACED ORDERS CANNOT BE CANCELED AND ARE NON RETURNABLE UNLESS THERE IS A DEFECT.

Credit Card are accepted but are subject to 4% convenience fee.

Quotation Accepted By

Quote Number	Q-2022-6732
Print Name	_____
Title	_____
Signature	_____
Date	_____

TOWN COUNCIL AGENDA ITEM NO. 4

CONSENT ITEM

DATE: July 18, 2022

FROM: Robert Pegg PE, Assistant Director of Engineering

ITEM: **Consider approval of a Development Agreement for the 300 Old Gerault Project; and authorization for the Mayor to execute same on behalf of the Town.**

BACKGROUND INFORMATION: The Old Gerault Road reconstruction project was approved in this year's budget. The project consists of replacing some of the gravel portion of Old Gerault Road with concrete pavement. The developer of 300 Old Gerault will construct the road as part of their project; the developer will be reimbursed for the Town's share of the pavement costs.

The scope of the Development Agreement includes construction of approximately 696 linear feet of roadway. The road section is 37 feet wide including the curb and will consist of 6 inches of reinforced concrete pavement over 8" of stabilized subgrade.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS:

FISCAL IMPACT: $173,968.20

Proposed Expenditure/(Revenue):	Account Number(s):
$173,968.20	316-560-78035-6160

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Alicia Kreh, of Taylor, Olson, Adkin, Sralla, & Elam L.L.P., has reviewed the agreement as to form and legality.

ATTACHMENTS:

1. Development Agreement for 300 Old Gerault

DRAFT MOTION: Move to approve as presented in the agenda caption.

DEVELOPMENT AGREEMENT FOR 300 OLD GERAULT

THIS DEVELOPMENT AGREEMENT FOR 300 OLD GERAULT ("Agreement") is made and entered into this _18___ day of ___July_____, 2022, by and between the Town of Flower Mound, Texas (the "Town"), and Deus LLC, a Texas limited liability company ("Developer").

W I T N E S S E T H:

WHEREAS, 300 Old Gerault Rd. ("Project") is a development encompassing approximately 7.53 acres in Flower Mound and described by metes and bounds on Exhibit "1;" and

WHEREAS, the Town and Developer wish to address various development issues related to the Project and to provide for the construction of a roadway, among other matters and to provide for reimbursement by the Town of certain infrastructure construction costs; and

WHEREAS, the Town and Developer desire to address (1) infrastructure and related concerns associated with the Project due to its location; (2) the anticipated roadway and related improvements to be constructed at and near the Project necessitated by the development of the Project; and (3) the concern for the public health, safety and welfare due to the foregoing; and

WHEREAS, the Town and Developer acknowledge that the foregoing issues should be addressed through development agreement.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Town and Developer covenant and agree as follows:

1. Project Subject to Town Ordinances. The Project, or any portion thereof, at all times shall be developed and constructed in accordance with all applicable Town ordinances and agreements related to the Project, and shall be subject to said ordinances and agreements, as such now exist or may hereafter be amended and/or approved by the Town. Unless otherwise expressly stipulated in this Agreement, nothing herein shall relieve Developer from its responsibilities for the construction of public improvements under applicable development ordinances of the Town.

2. Old Gerault Road – Local Commercial Roadway.

A. Developer agrees to reconstruct Old Gerault Road from the southern property line to the northern property line of the Project ("Old Gerault Improvements") as more particularly shown on Exhibit "2," attached and incorporated herein for all purposes.

B. Developer agrees to dedicate to the Town right-of-way as depicted on Exhibit "3," attached and incorporated herein for all purposes.

C. Prior to commencing construction, Developer shall submit construction plans for the Old Gerault Improvements to the Town for review and approval. Upon approval of the plans, the Town will issue Developer a notice to proceed. Developer shall secure a maintenance bond of 10% of the total cost of Old Gerault Improvements for a period of two (2) years from the date of the Town's acceptance of the Old Gerault Improvements.

3. Reimbursement. The estimated total cost of the Old Gerault Improvements is 406,947.90 and includes construction costs and all soft costs, including but not limited to all engineering and design costs, staking costs, and material testing costs ("Costs of the Old Gerault Improvements"). Developer will be responsible for payment of all Costs of the Old Gerault Improvements as required herein and shall be entitled to reimbursement of the Town's portion, which shall be no more than $173,968.20, as shown in Exhibit "4," attached and incorporated herein for all purposes, only upon completion and acceptance of all improvements. The Costs of the Old Gerault Improvements are understood to be an estimate of the costs associated with such work; provided, however, that the Town agrees to reimburse Developer as shown in Exhibit "4" for the actual and reasonable Costs of the Old Gerault Improvements. Prior to award of any contract for construction of the Old Gerault Improvements, Developer shall use its own process in order to properly bid each contract for construction of the Old Gerault Improvements in accordance with applicable law. Developer shall be responsible for bid review and contractor selection. After completion of the Old Gerault Improvements, the Developer shall submit all verified costs for the construction of the Old Gerault Improvements to the Town for Town review and verification.

Notwithstanding anything to the contrary herein, the Town will not be obligated to provide reimbursement payment to Developer before October 1, 2023. The Town agrees to reimburse Developer for an amount of one-half of the actual total cost at the end of construction and acceptance but under no circumstances shall the Town be required to pay more than $173,968.20 regardless of whether this amount is less than one-half of the actual total costs for the construction of the Old Gerault Improvements.

4. Captions and Headings. The captions and headings of the sections of this Agreement are for convenience and reference only and shall not affect, modify or amplify the provisions of this Agreement, nor shall they be employed to interpret or aid in the construction of this Agreement.

5. Applicable Laws and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Denton County, Texas. Venue for any action arising under this Agreement shall lie in Denton County, Texas.

6. Notices. Any notices required or permitted to be given hereunder shall be given by hand delivery or by certified or registered mail, return receipt requested, to the addresses set forth below or to such other single address as either party hereto shall notify the other:

If to the Town: The Town of Flower Mound, Texas
2121 Cross Timbers Road
Flower Mound, Texas 75028
Attn: Town Manager's Office

If to Developer: Deus LLC
c/o Niagara Conservation Corporation
1200 Lakeside Parkway, 450
Flower Mound, Texas 75028
Attn: Kyle Cutler

7. Attorneys' Fees. In the event any person initiates or defends any legal action or proceeding to enforce or interpret any of the terms of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable costs and attorneys' fees (including its reasonable costs and attorneys' fees on any appeal). Nothing herein shall constitute a waiver of any claim or defense that could be asserted in any litigation related to this Agreement and the parties agree that this Agreement is subject to Subchapter 1 of Chapter 271 of the Texas Local Government Code.

8. Entire Agreement. This Agreement contains the entire agreement between the parties hereto and supersedes all prior agreements, oral or written, with respect to the subject matter hereof. The provisions of this Agreement shall be construed as a whole and not strictly for or against any party.

9. Severability. In the event any provision of this Agreement shall be determined by any court of competent jurisdiction to be invalid or unenforceable, the Agreement shall, to the extent reasonably possible, remain in force as to the balance of its provisions as if such invalid provision were not a part hereof.

10. Filing in Tarrant County Deed Records; Covenant Running with the Land. This Agreement or a memorandum thereof shall be filed in the deed records of Tarrant County, Texas. Upon any sale or other transfer of any ownership rights in the Property, Developer shall notify the Town in writing of such sale or transfer within thirty (30) days of such sale or transfer, provided, however, no notice shall be required for the sale of a lot for which a record plat has been approved and recorded in the deed records. This Agreement shall be deemed a covenant that runs with the land and is binding on all heirs, successors, assigns, grantees, vendors, trustees, representatives of Developer and all others holding any interest in the property now or in the future with the exceptions of the purchaser of a lot for which a record plat has been approved and recorded in the deed records and on which a residence has been constructed and common areas owned by a property owners' association (a "Fully Improved Lot").

11. Binding Obligation. The Agreement shall become a binding obligation on the signatories upon execution by all signatories hereto. The Town warrants and represents that the individual executing this Agreement on behalf of the Town has full authority to execute this Agreement and bind the Town to the same. Developer warrants and represents that the individual executing this Agreement on its behalf has full authority to

execute this Agreement and bind Developer to same. Further, this Agreement is and shall be binding upon Developer, its successors, heirs, assigns, grantees, vendors, trustees, representatives, and all others holding any interest in the Property now or in the future with the exception of the purchaser of a Fully Improved Lot.

12. Mediation. In the event of any disagreement or conflict concerning the interpretation of this Agreement, and such disagreement cannot be resolved by the signatories hereto, the signatories agree to submit such disagreement to non-binding mediation.

13. Default. No party shall be in default of provisions under this Agreement until notice of the alleged failure of such party to perform has been given as provided herein (which notice shall set forth in reasonable detail the nature of the alleged failure) and until such party has been given ten (10) days after the written notice in the case of the default of a payment obligation, and in all other cases a reasonable time, to cure the alleged failure (such reasonable time determined based upon the nature of the alleged failure, but in no event less than ten (10) days after written notice of the alleged failure has been given).

14. Roughly Proportionate Determination under Texas Law and Federal Law. Developer has been represented by legal counsel in the negotiation of this Agreement and has been advised regarding Developer's rights under Texas and federal law. Developer has carefully reviewed the development exactions (both construction and payment obligations) mandated by the Town associated with the Project and has been afforded the opportunity to consult with the Town and Developer's own professional consultants in order to ascertain whether Developer objects to same. In executing this Agreement, Developer hereby and in good faith agrees that the development exactions associated with the Project are roughly proportionate to the impact of the Project. In addition, Developer knows of no development exaction associated with the Project that would give rise to a claim relating to rough proportionality (procedural or substantive) arising out of 1) the Texas Constitution, §212.904 and Chapter 395 of the Texas Local Government Code and/or 2) the federal constitution, as mandated by the United States Supreme Court in *Dolan v. City of Tigard*, 512 U.S. 374 (1994), and its progeny; and Developer further agrees that there exists an essential nexus between said development exactions and the Project.

15. Exhibits. The following exhibits are attached hereto and incorporated into this Agreement for all purposes:

Exhibit 1 Metes and Bounds Description of the Project in the Town of Flower Mound;

Exhibit 2 Map depicting construction of Old Gerault Road;

Exhibit 3 Map depicting right-of-way to be dedicated; and

Exhibit 4 Engineer's Pre-Design Opinion of Construction Costs.

IN WITNESS WHEREOF, the parties hereto have caused this document to be executed as of the date first above written.

THE TOWN OF FLOWER MOUND, TEXAS

By: _____
Name: Derek France
Mayor, Town of Flower Mound

STATE OF TEXAS §
§
COUNTY OF DENTON §

This instrument was acknowledged before me on this the ___ day of _____, 2022 by Derek France, Mayor of the Town of Flower Mound, Texas, on behalf of the Town of Flower Mound, Texas.

_____
Notary Public, State of Texas

DEVELOPER:

DEUS LLC
A Texas Limited Liability Company

By: _____
Name: Kyle, Cutler
Managing Member

STATE OF TEXAS §
§
COUNTY OF Denton §

This instrument was acknowledged before me on this the 13 day of July, 2022 by Kyle Cutler Authorized Signatory of Niagara Conservation Corporation, a Texas corporation, on behalf of said company.

_____
Notary Public, State of Texas

CONNOR CREWS
Notary Public, State of Texas
Comm. Expires 04-05-2026
Notary ID 133687018

Exhibit 1
Legal Description

DESCRIPTION, of a 7.594 acre tract of land situated in the J. Turner Survey, Abstract No. 1251, Flower Mound County, Texas; said tract being all of that certain tract of land described in Special Warranty Deed to Deus LLC recorded in Instrument No. D220258684 of the Official Public Records of Tarrant County, Texas; said 7.594 acre tract being more particularly described as follows:

BEGINNING, at a 1/2-inch iron rod found for corner, point being the northern most northeast corner of said Deus LLC tract; said point being in the northwestern most west line of Lot 7X, Block A, Lakeside Ranch Business Park Addition an addition to the Town of Flower Mound, Texas according to the plat recorded in Cabinet X, Page 78 of said Official Public Records;

THENCE, South 01 degrees, 14 minutes, 44 seconds East, along the northern most east line of said Deus LLC tract and the west line of said Lot 7X, a distance of 172.65 feet to a 1/2-inch iron prod found for corner; said point being the southwest corner of said Lot 7X;

THENCE, North 88 degrees, 23 minutes, 25 seconds East, along the northeastern most north line of said Deus LLC tract and the south line of said Lot 7X, a distance of 276.97 feet to a 5/8-inch iron pipe found for corner; said point being in the southeasterly most northeast corner of said Deus LLC tract and the northwest corner of Lot 1R, Block A, Lakeside Trade Center an addition to the Town of Flower Mound, Texas according to the plat recorded in Cabinet V, Page 843 of said Official Public Records;

THENCE, South 01 degrees, 36 minutes, 35 seconds East, along the east line of said Deus LLC tract and the northwestern most west line of said Lot 1X, a distance of 511.64 feet to a 5/8-inch iron rod with "PACHECO KOCH" cap set for corner; said point being in the southeast corner of said Deus LLC tract and the southeastern most northwest corner of said Lot 1R;

THENCE, South 88 degrees, 23 minutes, 25 seconds West, along the said south line of Deus LLC tract and the north line of said Lot 1R, a distance of 554.32 feet to a 5/8-inch iron rod with "PACHECO KOCH" cap set for corner; said point being in the east line of Old Gerault Road (a variable width right-of-way), said point being the southwest corner of said Deus LLC tract;

THENCE, along the east line of said Old Gerault Road and the west line of said Deus LLC tract, the following two (2) calls;

> North 00 degrees, 51 minutes, 35 seconds West, a distance of 607.46 feet to a 1/2-inch iron rod found for corner;

North 16 degrees, 06 minutes, 35 seconds West, a distance of 93.03 feet to a 5/8-inch iron rod with "PACHECO KOCH" cap set for corner; said point being the northwest corner of said Deus LLC tract and the southwest corner tract of land described in Warranty Deed with vendors lien to Yo-Ko, LLC recorded in Instrument No. D215290774 of said Official Public Records;

THENCE, South 89 degrees, 44 minutes, 44 seconds East, along the northern most north line of Deus LLC tract and the south line of said Yo-Ko, LLC tract, a distance of 293.99 feet to the POINT OF BEGINNING;

CONTAINING: 330,798 square feet or 7.594 acres of land, more or less.

0 15 30 60 90
GRAPHIC SCALE IN FEET

PROP. BLDG
(127,810 SF)
LOT 1, BLOCK A
ROBERT C. DOUGLAS & PATRICIA ANN DOUGLAS (VOL. 456, PG. 343)
7.594 TOTAL ACRES

ENTERPRISE DRIVE

S 89°44'44" E 293.99'

EXISTING GUY WIRE IN CONFLICT WITH OLD GERAULT IMPROVEMENTS

545 SF OF PROP. DRIVE APPROACH

CONTRACTOR TO REMOVE EX. DRIVEWAY

CONTRACTOR TO REMOVE 455 LF OF EX. FENCE

660 SF OF PROP. DRIVE APPROACH

CONTRACTOR TO REMOVE EX. DRIVEWAY

CONTRACTOR TO REMOVE 215 LF OF EX. FENCE

CONTRACTOR TO RELOCATE EX. SPEED LIMIT SIGN

PROP. BFR

PROP. 4' SIDEWALK

PROP. CURB INLET

CONTRACTOR TO COORDINATE WITH FRANCHISE UTILITY COMPANY FOR RELOCATION OF EXISTING POWER POLES

24,650 SF

N 16°06'35" W 93.03'

N 00°51'35" W 603.84'

CONTRACTOR TO REMOVE TRAFFIC SIGNS

CONTRACTOR TO ADJUST WATER VALVE AS NEEDED

P.O.B.

EXISTING POLE IN CONFLICT WITH OLD GERAULT IMPROVEMENTS

EXISTING POLE IN CONFLICT WITH OLD GERAULT IMPROVEMENTS

CONTRACTOR TO REMOVE EX. MAILBOX

CONTRACTOR TO ADJUST WATER METER AS NEEDED

EXISTING POLE IN CONFLICT WITH OLD GERAULT IMPROVEMENTS

PROP. CURB INLET

CONTRACTOR TO RELOCATE PIPELINE MARKER SIGNS

OLD GERAULT ROAD
C.R. 3130
(VARIABLE WIDTH RIGHT-OF-WAY)

LOT 1X, BLOCK I
THE VILLAGES AT SOUTHGATE PHASE THREE
(INST. NO. D218165547)

LEGEND

BOLLARD	IRS (C.M.) 1/2-INCH IRON ROD W/"PACHECO KOCH" CAP SET CONTROLLING MONUMENT
ELECTRIC METER	PROPERTY LINE
POWER POLE	FENCE
LIGHT STANDARD	COORDINATE DESIGNATION
WATER METER	PROPOSED FENCE
WATER VALVE	FIRE LANE
IRRIGATION CONTROL VALVE	PROP. 6" CONCRETE PAVEMENT (REFER TO TOWN OF FLOWER MOUND CONSTRUCTION DETAILS SHEET ST-2, FOR SUBGRADE AND REINFORCEMENT DETAILS)
FIRE HYDRANT	
CLEANOUT	
MANHOLE	PROP. 6" CONCRETE PAVEMENT (REFER TO TOWN OF FLOWER MOUND CONSTRUCTION DETAILS SHEET ST-8, FOR SUBGRADE AND REINFORCEMENT DETAILS)
TRAFFIC SIGNAL CONTROL	
TRAFFIC SIGNAL POLE	
TELEPHONE BOX	
FLOOD LIGHT	
FLAG POLE	
TRAFFIC SIGN	

ISSUED FOR PRELIMINARY PRICING PURPOSES ONLY
(SUBJECT TO REVISION PRIOR TO CONSTRUCTION)

THESE DOCUMENTS HAVE BEEN PREPARED BY THE ENGINEER WITH THE INTENT OF COMPLYING WITH ALL CITY STANDARD REQUIREMENTS. THESE DOCUMENTS HAVE **NOT** BEEN APPROVED AND RELEASED FOR CONSTRUCTION BY THE CITY AS OF THIS DATE AND, THEREFORE, REVISIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION. BY ANY USE OF THESE DOCUMENTS, THE USER AFFIRMS THEIR UNDERSTANDING OF THE PRELIMINARY STATUS OF THE PLANS AND THE POTENTIAL FOR REVISION PRIOR TO ANY CONSTRUCTION.

Pacheco Koch
7557 RAMBLER ROAD SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-469
TX REG. SURVEYING FIRM LS-10008000

OLD GERAULT ROAD EXHIBIT

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AJC	OLL	AUG 2021	1"=30'			EX 1.1

NIAGRA CONSERVATION BTS

OLLINA
8/18/2021 4:39 PM
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0 20 40 80 120

GRAPHIC SCALE IN FEET
1" = 40'

LEGEND

(C.M.) CONTROLLING MONUMENT
IRS 5/8-INCH IRON ROD W/"PACHECO KOCH" CAP SET
PROPERTY LINE
EXISTING EASEMENT LINE
SETBACK LINE
CENTERLINE

YO-KO, LLC
(INST. NO. D215290774)

S 89°44'44" E 293.99'
262.72'

1/2-INCH IRON ROD FOUND (C.M.)
STATE PLANE
COORDINATES (GRID)
N: 7,045,936.89
E: 2,414,075.05

POINT OF BEGINNING

N 16°06'35" W 95.03'

RIGHT-OF-WAY DEDICATION (BY THIS PLAT)

PRIVATE DRAINAGE EASEMENT (BY THIS PLAT)

1/2-INCH IRON ROD FOUND

DRAINAGE EASEMENT (BY THIS PLAT)

S 01°14'44" E 172.65'

LOT 7X, BLOCK A,
LAKESIDE RANCH BUSINESS PARK ADDITION
(CAB X, PG. 78)

1/2-INCH IRON ROD FOUND

N 88°23'25" E 276.97'

1974.15'

5/8-INCH IRON PIPE ROD FOUND (C.M.)
STATE PLANE
COORDINATES (GRID)
N: 7,045,772.11
E: 2,416,359.03

S 88°23'25" W 153.60'

S 88°21'18" W 214.92'

N 88°23'25" E 228.39'

S 88°23'25" W 186.47'

15' WATER EASEMENT (BY THIS PLAT)

15' WATER EASEMENT (BY THIS PLAT)

15' PRIVATE DRAINAGE EASEMENT (BY THIS PLAT)

OLD GERAULT ROAD
(ALSO KNOWN AS C.R. 3130)
(VARIABLE WIDTH RIGHT-OF-WAY)

N 00°51'35" W 603.84'

LOT 1, BLOCK A

DEUS LLC
(INST. NO. D220258684)

7.594 TOTAL ACRES
(330,798 SF)
(SEE AREA TABLE)

LOT 1X, BLOCK I
THE VILLAGES AT SOUTHGATE PHASE THREE
(INST. NO. D218165547)

N 88°23'25" E 11.13'

WATER EASEMENT (BY THIS PLAT)

S 01°36'35" E 15.00'

S 88°23'25" W 11.33'

N 89°08'03" E 17.83'

WATER EASEMENT (BY THIS PLAT)

S 00°51'57" E 15.00'

S 89°08'03" W 17.83'

20' SANITARY SEWER EASEMENT (INST. NO. D2015-64568)

15' PRIVATE DRAINAGE EASEMENT (BY THIS PLAT)

RIGHT-OF-WAY DEDICATION (BY THIS PLAT)

N 88°23'25" E 42.27'

S 88°23'25" W 59.85'

N 01°36'57" W 17.08'

N 88°23'27" E 64.12'

N 88°23'25" E 15.00'

S 01°36'57" E 17.08'

15' WATER EASEMENT (BY THIS PLAT)

N 88°23'25" E 353.35'

S 88°23'25" W 462.69'

60' BUILDING SETBACK LINE (CAB. U, PAGE. 484)

S 88°23'25" W 554.32'

LOT 1R, BLOCK A,
LAKESIDE TRADE CENTER
(CAB V, PG. 843)

PATRIOT WAY
(40' WIDE RIGHT-OF-WAY)

L=136.02'

L=157.36'

LOT 2, BLOCK I
SOUTHGATE PHASE 1
(INST. NO. D216294866)

N 89°13'58" E 49.89'

BLANKET EASEMENT TO SINCLAIR REFINING COMPANY, VOLUME 341, PAGE 479, D.R.D.C.T. AND LATER ASSIGNED TO SINCLAIR PIPELINE COMPANY, VOLUME 367, PAGE 242, D.R.D.C.T., DEFINED AS A 50.0' EASEMENT BY LETTER FROM CLYDE M. STONE OF CITGO PRODUCTS PIPELINE COMPANY, DATED NOV. 17 1998. THE LOCATION OF SAID 50.0' EASEMENT AS SHOWN HEREON BEING DEFINED BY AMENDMENT TO RIGHT OF WAY AGREEMENT, DATED FEB. 5, 2001, BETWEEN CITGO PRODUCTS PIPELINE COMPANY AND D-F FUND VI, LTD., D-F FUND 18, LTD., D-F SOUTHWEST FUND, LTD. AND D-F FUNDS, GP, LLC.
(THIS DOCUMENT IS NOT FILED OF RECORD AS OF DATE.)

ENTERPRISE DRIVE
(60' WIDE RIGHT-OF-WAY)

N 89°12'24" E 2521.95'

2491.42'

2447.87'

S 00°10'55" W 448.29'

10' UTILITY EASEMENT (CAB. U, PG. 554)

15' UTILITY EASEMENT (CAB. U, PG. 554)

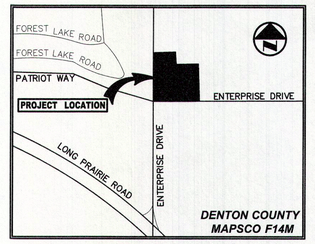
LOT 2A, BLOCK A,
LAKESIDE TRADE CENTER
(CAB U, PG. 484)

LOT 1R, BLOCK A,
LAKESIDE TRADE CENTER
(CAB V, PG. 843)

CURVE TABLE						
CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD BEARING	CHORD
C1	19°36'43"	25.14'	8.60'	4.34'	S 6°49'37" W	8.56'
C2	91°09'02"	15.00'	23.86'	15.30'	S 44°17'35" E	21.43'
C3	57°25'09"	15.71'	15.74'	8.60'	N 61°29'54" E	15.09'
C4	95°35'39"	15.00'	25.03'	16.54'	N 43°01'02" W	22.22'
C5	36°48'04"	25.14'	16.14'	8.36'	S 70°38'42" W	15.87'
C6	45°10'14"	72.63'	57.26'	30.21'	S 19°41'35" W	55.78'
C7	45°03'21"	87.63'	68.91'	36.35'	N 19°45'02" E	67.14'

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 01°36'35" E	8.21'
L2	S 88°23'25" W	15.00'
L3	N 01°36'35" W	8.21'
L4	S 88°23'25" W	8.82'
L5	S 88°24'31" W	8.00'
L6	N 01°36'35" W	15.00'
L7	N 88°23'25" E	8.00'
L8	S 46°36'35" E	22.02'
L9	N 88°23'25" E	26.93'
L10	N 01°36'35" W	24.00'
L11	N 88°23'25" E	15.00'
L12	S 01°36'35" E	24.00'
L13	N 46°36'35" W	34.45'
L14	S 46°36'57" E	29.69'
L15	N 46°36'57" W	29.69'
L16	N 01°26'52" W	34.48'
L17	S 88°33'08" W	15.00'
L18	S 01°26'52" E	34.52'
L19	N 00°50'12" W	12.67'
L20	N 89°08'25" E	15.00'
L21	S 00°57'16" E	27.48'
L22	N 42°17'45" E	34.88'
L23	N 68°12'13" W	45.69'
L24	N 01°14'44" W	16.30'
L25	S 68°12'13" E	35.95'
L26	N 32°30'10" E	34.35'
L27	N 04°46'48" E	22.47'
L28	S 42°17'45" W	81.25'
L29	N 77°42'15" W	67.81'
L30	N 00°51'35" W	15.40'

AREA TABLE		
GROSS: TOTAL PLAT AREA	7.594 Acres	330,798 SF
STREET R.O.W. DEDICATION	0.480 Acres	20,888 SF
NET: Lot 1A, BLOCK 12/7145	7.115 Acres	309,910 SF



VICINITY MAP
(NOT TO SCALE)

GENERAL NOTES

1. Bearing system for this survey is based on the State Plane Coordinate System, North American Datum of 1983 (2011), Texas North Central Zone 4202. Distances reported have been scaled by applying the Denton County TxDOT surface adjustment factor of 1.000150630.
2. Subject property is shown on the National Flood Insurance Program Flood Insurance Rate Map for Denton County, Texas and incorporated Areas, Map No. 48439C100K, Community-Panel No. 480777 0110 K, Map Revised: September 25, 2009. All of the subject property appears to be located in "Zone X" on said map. Relevant zones are defined on said map as follows:

   "Zone X" – Other Areas: Areas determined to be outside the 0.2% annual chance floodplain.

3. This survey does not provide a determination or opinion concerning the location or existence of wetlands, faultlines, toxic or hazardous waste areas, subsidence, subsurface and environmental conditions or geological issues. No statement is made concerning the suitability of the subject tract for any intended use, purpose or development.
4. The distances shown hereon for adjoining and adjacent properties have been compiled from recorded plats and deeds, and do not necessarily represent field verified or monumented distances.
5. Selling a portion of this addition by metes and bounds is a violation of Town subdivision ordinance and state platting statutes and is subject to fines and withholding of utilities and building certificates.
6. Oncor's existing OHL within the Old Gerault Right of Way will be relocated underground prior to final subdivision acceptance by the Town per Section 82-376 of the Town Code. The new location of the underground line is planned to will be installed within the Right of Way of Old Gerault Road. If the utilities are relocated within the subject property, an easement shall be dedicated per plat to encompass the improvements. When new easements are needed or required, or existing easements need to be relocated, after a record plat, replat or amended plat has been filed with the county, regardless of whether construction has been completed at the site, the owner or developer of the property burdened by such easements shall apply for an amended plat or replat, as applicable, noting the new or revised location of the subject easement.

FINAL PLAT

LOT 1, BLOCK A
DEUS LLC

AN ADDITION TO THE TOWN OF FLOWER MOUND, TEXAS AND BEING OUT OF THE J. TURNER SURVEY, ABSTRACT NO. 1251
TARRANT COUNTY, TEXAS
SHEET 1 OF 2

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS OF
TARRANT COUNTY, TEXAS
01/19/2022 11:53 AM
D222016848
PLAT
Pages: 4
Fees: $76.00
MARY LOUISE NICHOLSON
COUNTY CLERK

OWNER/MANAGER:
DEUS LLC
1200 LAKESIDE PARKWAY #450,
FLOWER MOUND, TEXAS 75028
(972) 661-0232
CONTACT: KYLE CUTLER

ENGINEERS/SURVEYOR:
PACHECO KOCH CONSULTING ENGINEERS 7557 RAMBLER ROAD, SUITE 1400
DALLAS, TEXAS 75231
(972) 235-3031
CONTACT: JONATHAN E. COOPER

Pacheco Koch
7557 RAMBLER ROAD SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-469
TX REG. SURVEYING FIRM LS-10008000

DRAWN BY	CHECKED BY	SCALE	DATE	JOB NUMBER
JMC	MWW/JEC	1"=40'	DEC. 2021	4695-20.361

MWER
12/15/2021 12:46 PM
M:\DWG-46\4695-20.361\DWG\SURVEY C3D 2018\4695-20.361FP(REVISED 2).DWG

FINAL PLAT - LOT 1, BLOCK A, DEUS LLC

OWNERSHIP CERTIFICATE

STATE OF TEXAS §

COUNTY OF TARRANT §

WHEREAS, **DEUS LLC**, acting through the undersigned, it's duly authorized agent, is the sole owner of a 7.594 acre tract of land situated in the J. Turner Survey, Abstract No. 1251, Flower Mound County, Texas; said tract being all of that certain tract of land described in Special Warranty Deed to Deus LLC recorded in Instrument No. D220258684 of the Official Public Records of Tarrant County, Texas; said 7.594 acre tract being more particularly described as follows:

BEGINNING, at a 1/2–inch iron rod found for corner, point being the northern most northeast corner of said Deus LLC tract; said point being in the northwestern most west line of Lot 7X, Block A, Lakeside Ranch Business Park Addition an addition to the Town of Flower Mound, Texas according to the plat recorded in Cabinet X, Page 78 of said Official Public Records;

THENCE, South 01 degrees, 14 minutes, 44 seconds East, along the northern most east line of said Deus LLC tract and the west line of said Lot 7X, a distance of 172.65 feet to a 1/2–inch iron prod found for corner; said point being the southwest corner of said Lot 7X;

THENCE, North 88 degrees, 23 minutes, 25 seconds East, along the northeastern most north line of said Deus LLC tract and the south line of said Lot 7X, a distance of 276.97 feet to a 5/8–inch iron pipe found for corner; said point being in the southeasterly most northeast corner of said Deus LLC tract and the northwest corner of Lot 1R, Block A, Lakeside Trade Center an addition to the Town of Flower Mound, Texas according to the plat recorded in Cabinet V, Page 843 of said Official Public Records;

THENCE, South 01 degrees, 36 minutes, 35 seconds East, along the east line of said Deus LLC tract and the northwestern most west line of said Lot 1X, a distance of 511.64 feet to a 5/8–inch iron rod with "PACHECO KOCH" cap set for corner; said point being in the southeast corner of said Deus LLC tract and the southeastern most northwest corner of said Lot 1R;

THENCE, South 88 degrees, 23 minutes, 25 seconds West, along the said south line of Deus LLC tract and the north line of said Lot 1R, a distance of 554.32 feet to a 5/8–inch iron rod with "PACHECO KOCH" cap set for corner; said point being in the east line of Old Gerault Road (a variable width right–of–way), said point being the southwest corner of said Deus LLC tract;

THENCE, along the east line of said Old Gerault Road and the west line of said Deus LLC tract, the following two (2) calls;

North 00 degrees, 51 minutes, 35 seconds West, a distance of 607.46 feet to a 1/2–inch iron rod found for corner;

North 16 degrees, 06 minutes, 35 seconds West, a distance of 93.03 feet to a 5/8–inch iron rod with "PACHECO KOCH" cap set for corner; said point being the northwest corner of said Deus LLC tract and the southwest corner tract of land described in Warranty Deed with vendors lien to Yo–Ko, LLC recorded in Instrument No. D215290774 of said Official Public Records;

THENCE, South 89 degrees, 44 minutes, 44 seconds East, along the northern most north line of Deus LLC tract and the south line of said Yo–Ko, LLC tract, a distance of 293.99 feet to the POINT OF BEGINNING;

CONTAINING: 330,798 square feet or 7.594 acres of land, more or less.

SURVEYOR'S STATEMENT

That I, Jonathan E. Cooper, do here by certify that I prepared this plat from an actual and accurate survey of the land and that corner monuments shown thereon were properly placed under my supervision.

STATE OF TEXAS
REGISTERED
JONATHAN E. COOPER
5369
PROFESSIONAL
LAND SURVEYOR

12-20-2021

Jonathan E. Cooper — Date
Texas Registered Professional Land Surveyor,
No. 5369
jcooper@pkce.com

STATE OF TEXAS §

COUNTY OF DALLAS §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Jonathan E. Cooper, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 20th day of December, 2021.

Sara Ramirez
Notary Public in and for the State of Texas

SARA RAMIREZ
Notary Public, State of Texas
Comm. Expires 08-29-2025
Notary ID 129542477

DRAINAGE EASEMENT NOTES

1. Upkeep and maintenance of the private drainage easement is the responsibility of the property owner.
2. Upkeep and maintenance shall include but not be limited to the following items:
   - i. Grass and ground cover shall be kept to a height required by Town ordinance.
   - ii. The detention facility shall be kept free of debris an litter, with particular attention given to keeping the outlet structure clear at all times.
   - iii. Accumulated sediment shall be removed from the facility as required to ensure that there is no reduction in function or detention capacity.
   - iv. No dumping of any type is permitted within this easement area.

OWNERSHIP DEDICATION

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, DEUS LLC, acting herein by and through its duly authorized officer, does hereby adopt this plat designated as, **LOT 1 , BLOCK A DEWS LLC**, an addition to the Town of Flower Mound, Tarrant County, Texas.

The easements shown hereon are hereby reserved for the purposes as indicated. All streets, alleys and rights–of–way and Lot 4R4, Block A, are hereby dedicated in fee simple to the Town of Flower Mound for municipal purposes. The utility and fire lane easements (streets, alleys and common areas) shall be open to the public, fire and police units, garbage and rubbish collection agencies and all public and private utilities for each particular use. No buildings, trees, shrubs or other improvements or growths shall be constructed, reconstructed or placed upon, over or across the utility easements as shown. Said utility easements being hereby reserved for the mutual use and accommodation of all public utilities using or desiring to use same.

All and any public utility shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs, or other improvements or growths which in any way endanger or interfere with the construction, maintenance or efficiency of its respective system on the utility easements and all public utilities shall at all times have the full right of ingress and egress to and from and upon the said utility easements for the purpose of construction, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or parts of its respective systems without the necessity at any time of procuring the permission of anyone. Any public utility shall have the right of ingress and egress to private property for the purposes of reading meters and any maintenance and service required or ordinarily performed by that utility.

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the Town of Flower Mound.

Witness my hand this the 10 day of January, 2022.

Deus LLC

By: _____
Kyle Cutler
Managing Member of Deus LLC

STATE OF TEXAS §

COUNTY OF DENTON §

BEFORE ME, the undersigned authority, on this day personally appeared Kyle Cutler, known to me to be the same person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed, in the capacity therein stated, and as the act and deed of said partnership.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 10 day of January, 2022.

Notary Public in and for the State of Texas

My Commission Expires: 01/16/2023

MORNA CAMPBELL
Notary ID #131857748
My Commission Expires
January 16, 2023

Regions Bank

By: Kyle Sederstrom
Kyle Sederstrom
Senior Vice President

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, on this day personally appeared Kyle Sederstrom, known to me to be the same person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed, in the capacity therein stated, and as the act and deed of said partnership.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 28 day of December, 2021.

Sara Long
Notary Public in and for the State of Texas

My Commission Expires: 1-14-2023

SARA LONG
NOTARY PUBLIC - STATE OF TEXAS
ID # 12956364-9
COMM. EXP. 01-14-2023

APPROVED:

TOWN OF FLOWER MOUND
PLANNING AND ZONING COMMISSION

Brad Ruthrauff, Chairman Planning and Zoning Commission

1-14-22
Date

Lexin Murphy, ~~Executive Director of Development Services~~ Director of planning Services

SIGNED AND SEALED:

TOWN OF FLOWER MOUND

Theresa Scott, Town Secretary
Town of Flower Mound

THE TOWN OF FLOWER MOUND SEAL TEXAS

FINAL PLAT

LOT 1, BLOCK A
DEUS LLC

AN ADDITION TO THE TOWN OF FLOWER MOUND,
TEXAS AND BEING OUT OF THE
J. TURNER SURVEY, ABSTRACT NO. 1251
TARRANT COUNTY, TEXAS
SHEET 2 OF 2

D222016648
01/19/2022 11:53 AM Page: 1 of 4 Fees: $76.00
PLAT
SUBMITTER: PACHECO KOCH
MARY LOUISE NICHOLSON
COUNTY CLERK

OWNER/MANAGER:

DEUS LLC
1200 LAKESIDE PARKWAY #450,
FLOWER MOUND, TEXAS 75028
(972) 661–0232
CONTACT: KYLE CUTLER

ENGINEERS/SURVEYOR:

PACHECO KOCH CONSULTING
ENGINEERS 7557 RAMBLER ROAD,
SUITE 1400
DALLAS, TEXAS 75231
(972) 235–3031
CONTACT: JONATHAN E. COOPER

Pacheco Koch
7557 RAMBLER ROAD SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F–469
TX REG. SURVEYING FIRM LS–10008000

DRAWN BY	CHECKED BY	SCALE	DATE	JOB NUMBER
JMC	MWW/JEC	NONE	DEC. 2021	4695–20.361

FINAL PLAT - LOT 1, BLOCK A, DEUS LLC

ENGINEER'S PRE-DESIGN OPINION OF CONSTRUCTION COST

CLIENT: Meinhardt & Associates Architects, P.L.L.C.
DATE: May 26, 2022
PROJECT: Enterprise Drive
LIMITS: Old Gerault ROW - limits of property line
LENGTH: ~700
WIDTH: Existing 26' HMAC Road

Prepared By: Pacheco Koch Consulting Engineers, Inc.
7557 Rambler Road , Suite 1400
Dallas , Texas 75231
(972) 235-3031
Reg No. F-469

DESIGN ASSUMPTIONS:

- ◊ Proposed Section is 36' F-F Curbed Concrete Road w/60' ROW, standard placement
- ◊ Roadway will be completely reconstructed to a width of 36' Face to Face
- ◊ Driveways will be concrete pavement constructed to the right-of-way
- ◊ Roadway section will be 6" lime stabilized subgrade (27 lbs/sy) and 6" reinforced concrete pavement , 3600 PSI
- ◊ Excavation for roadway and parkway is assumed 1' across ROW for length of the project
- ◊ The road will remain clossed during construction
- ◊ Specifications are NCTCOG Specifications supplemented by TOFM Specs as needed
- ◊ No Legal, Utility relocations, Easement/ROW Costs, Geotechnical, Structural, or Flood Study is included with Opinion of Construction Cost
- ◊ The Developer is responsible for the cost of the eastern 18' wide section of road and eastern 4' sidewalk
- ◊ Existing power pole relocation not included with Opinion of Construction Cost
- ◊ Drainge improvements not included with Opinion of Costruction Cost

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	Developer Responsibility	Developer Cost	Town Responsibility	Town Cost	TOTAL AMOUNT
Paving Improvements:									
1P	Mobilization	LS	1	$ 3,500.00	100%	$ 3,500.00	0%	$ -	$ 3,500.00
2P	Project Signage	LS	1	750.00	100%	750.00	0%	-	750.00
3P	Traffic Control	LS	1	9,160	100%	9,160.00	0%	-	9,160.00
4P	SW3P Implementation and Maintenance	LS	1	4,705	100%	4,705.00	0%	-	4,705.00
5P	Remove Existing Asphalt Pavement	SY	160	5.50	100%	880.00	0%	-	880.00
6P	Remove Existing Gravel Pavement	SY	1,650	4.50	100%	7,425.00	0%	-	7,425.00
7P	Remove Wire Fence	LF	700	0.10	100%	70.00	0%	-	70.00
8P	Unclassified Street Excavation	CY	1,775	2.25	50%	1,996.88	50%	1,996.88	3,993.75
9P	6" Lime Stabilized Subgrade	SY	3,100	3.30	50%	5,115.00	50%	5,115.00	10,230.00
10P	Lime for Subgrade Stabilization (40 lbs/sy)	TONS	62	355.00	50%	11,005.00	50%	11,005.00	22,010.00
11P	6" Concrete Pavement	SY	2,850	59.26	50%	84,445.50	50%	84,445.50	168,891.00
12P	6" Integral Concrete Curb	LF	1,450	28.28	50%	20,500.83	50%	20,500.83	41,001.65
13P	6" Thick Concrete Driveway	SY	140	43.19	100%	6,046.60	0%	-	6,046.60
14P	4" Thick Concrete Sidewalk (4' wide)	SY	310	42.79	100%	13,264.90	0%	-	13,264.90
15P	ADA Ramp	EA	4	350.00	100%	1,400.00	0%	-	1,400.00
16P	4" Thick Topsoil, Complete in Place	SY	1,500.00	4.50	50%	3,375.00	50%	3,375.00	6,750.00
17P	Pavement Markings	LS	1	4,200.00	50%	2,100.00	50%	2,100.00	4,200.00
18P	Pavement Header at Existing Pavement	LF	120	4.00	50%	240.00	50%	240.00	480.00
	Paving Subtotal					$ 175,979.70		$ 128,778.20	**$ 304,757.90**
	Contingencies (25%)					$ 43,990.00		$ 32,190.00	**$ 76,190.00**
	Paving Total					**$ 219,969.70**		**$ 160,968.20**	**$ 380,947.90**
	Opinion of Survey Costs (excludes ROW/Easement)				50%	**$ 3,000.00**	50%	**$ 3,000.00**	**$ 6,000.00**
	Opinion of Engineering Costs				50%	**10,000.00**	50%	**10,000.00**	**$ 20,000.00**
	TOTAL OPINION OF CONSTRUCTION COSTS					**$ 232,969.70**		**$ 173,968.20**	**$ 406,947.90**

TOWN COUNCIL AGENDA ITEM NO. 5

CONSENT ITEM

DATE: July 18, 2022

FROM: Billy Sterner, Fleet Services Manager

ITEM: **Consider approval of the purchase of unleaded and diesel fuels for Town Fleet Vehicles through OMNIA Cooperative Contract Number 53316 managed/assigned to the City of Fort Worth, in the estimated annual amount of $963,000.**

BACKGROUND INFORMATION: This item is to approve the purchase of unleaded and diesel fuels for the Town's bulk fuel storage tanks located at Fleet Services and the Fire Stations. The contract expires December 31, 2022, but has an option to renew for two additional twelve-month periods through December 31, 2024.

At the April 18, 2022, council meeting, Town Council approved the purchase of unleaded and diesel fuels through an existing interlocal agreement with Tarrant County. After further investigation, the Purchasing and Fleet divisions decided to not use that contract due to possible conflicts between vendors. The City of Fort Worth contract will take the place of the Tarrant County contract.

Deliveries will be made to the Town's storage tanks and used to fuel a majority of the Town's fleet. The Town estimates an annual expenditure of $132,000 of diesel fuel purchases for Fire & Emergency Services Tanks and $831,000 for the purchase of unleaded and diesel fuels for the Fleet Services Tanks; for a combined estimated annual amount of $963,000.

The contract is a cooperative purchasing agreement allowing Martin Eagle Oil Company to supply the City of Fort Worth and other participating agencies with motor fuel and related services.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $963,000

Proposed Expenditure/ (Revenue):	Account Number(s):
$704,000 Unleaded Fuel – Fleet Services Tanks	100-1111
$127,000 Diesel Fuel – Fleet Services Tanks	100-1112
$97,000 Diesel Fuel – Fire & Emergency Services	100-660-63000-2080
$35,000 Diesel Fuel – Fire & Emergency Services	100-660-61000-2080

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Original City of Fort Worth Contract
2. City of Fort Worth Renewal
3. Flower Mound Sales Agreement

DRAFT MOTION: Move to approve as presented in the agenda caption.

Attachment 1

RECEIVED
DEC 20 2019
CITY OF FORT WORTH
CITY SECRETARY

CITY SECRETARY
CONTRACT NO. 53316

SUPPLIER SERVICES AGREEMENT
MOTOR FUELS, AVIATION FUELS, AND RELATED SERVICES
(NON-EXCLUSIVE COOPERATIVE AGREEMENT)

This **SUPPLIER SERVICES AGREEMENT** ("Agreement") is made and entered into by and between the **CITY OF FORT WORTH** ("City"), a Texas home rule municipal corporation, acting by and through its duly authorized Assistant City Manager, and **MARTIN EAGLE OIL COMPANY, INC.** ("Supplier"), acting by and through its duly authorized representative, each individually referred to as a **"party"** and collectively referred to as the **"parties."**

AGREEMENT DOCUMENTS:

The Agreement documents shall include the following:

1. This Supplier Services Agreement;
2. Exhibit A – Scope of Services;
3. Exhibit B – City of Fort Worth Specifications
4. Exhibit C – Price Schedule;
5. Exhibit D – Verification of Signature Authority Form; and
6. Exhibit E – City of Fort Worth Request for Proposals (RFP) No. 19-0000037 and Supplier's response to the Request for Proposals.

Exhibits A, B, C, D, and E which are attached hereto and incorporated herein by reference, are made a part of this Agreement for all purposes. In the event of any conflict between the terms and conditions of Exhibits A, B, C, D, or E and the terms and conditions set forth in the body of this Agreement, the terms and conditions of this Agreement shall control.

1. SCOPE OF SERVICES.

Supplier shall provide City with the motor and aviation fuels, and related services for the City's fleet ("Services"). Exhibit "A," - Scope of Services and Exhibit "B" – City of Fort Worth Specifications more specifically describe the Services to be provided hereunder. Supplier agrees that the City may award non-exclusive agreements to multiple bidders for motor fuel, aviation fuel, and related services as outlined in the Request for Proposals.

In connection with this Agreement, City is acting as the Principal Procurement Agency with OMNIA Partners – Public Sector. This Agreement is a cooperative purchasing agreement allowing Supplier to Supply the City and Participating Agencies within the Dallas/Fort Worth metropolitan area and in the 48 contiguous United States, and the District of Columbia, with motor fuel, aviation fuel and related services. The general scope of this Agreement includes finished motor gasoline, finished aviation gasoline, Kerosene-Type Jet Fuel, Distillate Fuel Oil for on-highway and off-highway diesel engines, Renewable Green Diesel, Biodiesel, and Diesel Emission Fluid (collectively "Motor Fuels and Aviation Fuels"). This scope of Motor Fuels and Aviation Fuels covered by this Agreement is intended to be broad and inclusive of all motor and aviation fuels used by Participating Agencies in the United States and the District of Columbia. The specifications for the City are detailed in a dedicated section of this Agreement. Specifications for all other Participating Agencies are intentionally left at a general level to avoid omission of certain specifications or blends for any given Participating Agency, however Supplier is required to meet similar specification expectations as provided by the City, and as specified in the definitions provided in this Agreement, in the provision of fuel to other Participating Agencies.

2. TERM.

This Agreement shall begin on January 1, 2020 ("Effective Date") and shall expire on December 31, 2020 ("Expiration Date"), unless terminated earlier in accordance with this Agreement ("Initial Term"). Upon the expiration of the Initial Term, this Agreement may be renewed under the same terms and conditions for up to four (4) one-year renewal periods ("Renewal Term").

3. COMPENSATION.

City shall pay Supplier in accordance with the provisions of this Agreement and Exhibit "C," – Price Schedule. The aggregate amount of all contracts City awards to multiple bidders under RPF No. 19-0000037, including this Agreement, **shall not exceed twelve million dollars ($12,000,000.00)**. City makes no promise or guarantee of the total amount of motor fuel, aviation fuel, and related services that City will procure from Supplier under this Agreement. Supplier shall not perform any additional services or bill for expenses incurred for City not specified by this Agreement unless City requests and approves in writing the additional costs for such services. City shall not be liable for any additional expenses of Supplier not specified by this Agreement unless City first approves such expenses in writing.

4. TERMINATION.

4.1. Written Notice. City or Supplier may terminate this Agreement at any time and for any reason by providing the other party with 30 days' written notice of termination.

4.2 Non-appropriation of Funds. In the event no funds or insufficient funds are appropriated by City in any fiscal period for any payments due hereunder, City will notify Supplier of such occurrence and this Agreement shall terminate on the last day of the fiscal period for which appropriations were received without penalty or expense to City of any kind whatsoever, except as to the portions of the payments herein agreed upon for which funds have been appropriated.

4.3 Duties and Obligations of the Parties. In the event that this Agreement is terminated prior to the Expiration Date, City shall pay Supplier for services actually rendered up to the effective date of termination and Supplier shall continue to provide City with services requested by City and in accordance with this Agreement up to the effective date of termination. Upon termination of this Agreement for any reason, Supplier shall provide City with copies of all completed or partially completed documents prepared under this Agreement. In the event Supplier has received access to City Information or data as a requirement to perform services hereunder, Supplier shall return all City provided data to City in a machine readable format or other format deemed acceptable to City.

5. DISCLOSURE OF CONFLICTS AND CONFIDENTIAL INFORMATION.

5.1 Disclosure of Conflicts. Supplier hereby warrants to City that Supplier has made full disclosure in writing of any existing or potential conflicts of interest related to Supplier's services under this Agreement. In the event that any conflicts of interest arise after the Effective Date of this Agreement, Supplier hereby agrees immediately to make full disclosure to City in writing.

5.2 Confidential Information. Supplier, for itself and its officers, agents and employees, agrees that it shall treat all information provided to it by City ("City Information") as confidential and shall not disclose any such information to a third party without the prior written approval of City.

5.3 Unauthorized Access. Supplier shall store and maintain City Information in a secure manner and shall not allow unauthorized users to access, modify, delete or otherwise corrupt City

Information in any way. Supplier shall notify City immediately if the security or integrity of any City Information has been compromised or is believed to have been compromised, in which event, Supplier shall, in good faith, use all commercially reasonable efforts to cooperate with City in identifying what information has been accessed by unauthorized means and shall fully cooperate with City to protect such City Information from further unauthorized disclosure.

6. RIGHT TO AUDIT.

Supplier agrees that City shall, until the expiration of three (3) years after final payment under this contract, or the final conclusion of any audit commenced during the said three years, have access to and the right to examine at reasonable times any directly pertinent books, documents, papers and records, including, but not limited to, all electronic records, of Supplier involving transactions relating to this Agreement at no additional cost to City. Supplier agrees that City shall have access during normal working hours to all necessary Supplier facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. City shall give Supplier reasonable advance notice of intended audits.

7. INDEPENDENT CONTRACTOR.

It is expressly understood and agreed that Supplier shall operate as an independent contractor as to all rights and privileges and work performed under this Agreement, and not as agent, representative or employee of City. Subject to and in accordance with the conditions and provisions of this Agreement, Supplier shall have the exclusive right to control the details of its operations and activities and be solely responsible for the acts and omissions of its officers, agents, servants, employees, consultants and subcontractors. Supplier acknowledges that the doctrine of *respondeat superior* shall not apply as between City, its officers, agents, servants and employees, and Supplier, its officers, agents, employees, servants, vendors and subcontractors. Supplier further agrees that nothing herein shall be construed as the creation of a partnership or joint enterprise between City and Supplier. It is further understood that City shall in no way be considered a Co-employer or a Joint employer of Supplier or any officers, agents, servants, employees or subcontractors of Supplier. Neither Supplier, nor any officers, agents, servants, employees or subcontractors of Supplier shall be entitled to any employment benefits from City. Supplier shall be responsible and liable for any and all payment and reporting of taxes on behalf of itself, and any of its officers, agents, servants, employees or subcontractors.

8. LIABILITY AND INDEMNIFICATION.

8.1 ***LIABILITY - SUPPLIER SHALL BE LIABLE AND RESPONSIBLE FOR ANY AND ALL PROPERTY LOSS, PROPERTY DAMAGE AND/OR PERSONAL INJURY, INCLUDING DEATH, TO ANY AND ALL PERSONS, OF ANY KIND OR CHARACTER, WHETHER REAL OR ASSERTED, TO THE EXTENT CAUSED BY THE NEGLIGENT ACT(S) OR OMISSION(S), MALFEASANCE OR INTENTIONAL MISCONDUCT OF SUPPLIER, ITS OFFICERS, AGENTS, SERVANTS OR EMPLOYEES.***

8.2 ***GENERAL INDEMNIFICATION - SUPPLIER HEREBY COVENANTS AND AGREES TO INDEMNIFY, HOLD HARMLESS AND DEFEND CITY, ITS OFFICERS, AGENTS, SERVANTS AND EMPLOYEES, FROM AND AGAINST ANY AND ALL CLAIMS OR LAWSUITS OF ANY KIND OR CHARACTER, WHETHER REAL OR ASSERTED, FOR EITHER PROPERTY DAMAGE OR LOSS (INCLUDING ALLEGED DAMAGE OR LOSS TO SUPPLIER'S BUSINESS AND ANY RESULTING LOST PROFITS) AND/OR PERSONAL INJURY, INCLUDING DEATH, TO ANY AND ALL PERSONS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT,***

TO THE EXTENT CAUSED BY THE NEGLIGENT ACTS OR OMISSIONS OR MALFEASANCE OF SUPPLIER, ITS OFFICERS, AGENTS, SERVANTS OR EMPLOYEES.

8.3 ***INTELLECTUAL PROPERTY INDEMNIFICATION*** – **Supplier agrees to defend, settle, or pay, at its own cost and expense, any claim or action against City for infringement of any patent, copyright, trade mark, trade secret, or similar property right arising from City's use of the software and/or documentation in accordance with this Agreement, it being understood that this agreement to defend, settle or pay shall not apply if City modifies or misuses the software and/or documentation. So long as Supplier bears the cost and expense of payment for claims or actions against City pursuant to this section, Supplier shall have the right to conduct the defense of any such claim or action and all negotiations for its settlement or compromise and to settle or compromise any such claim; however, City shall have the right to fully participate in any and all such settlement, negotiations, or lawsuit as necessary to protect City's interest, and City agrees to cooperate with Supplier in doing so. In the event City, for whatever reason, assumes the responsibility for payment of costs and expenses for any claim or action brought against City for infringement arising under this Agreement, City shall have the sole right to conduct the defense of any such claim or action and all negotiations for its settlement or compromise and to settle or compromise any such claim; however, Supplier shall fully participate and cooperate with City in defense of such claim or action. City agrees to give Supplier timely written notice of any such claim or action, with copies of all papers City may receive relating thereto. Notwithstanding the foregoing, City's assumption of payment of costs or expenses shall not eliminate Supplier's duty to indemnify City under this Agreement. If the software and/or documentation or any part thereof is held to infringe and the use thereof is enjoined or restrained or, if as a result of a settlement or compromise, such use is materially adversely restricted, Supplier shall, at its own expense and as City's sole remedy, either: (a) procure for City the right to continue to use the software and/or documentation; or (b) modify the software and/or documentation to make it non-infringing, provided that such modification does not materially adversely affect City's authorized use of the software and/or documentation; or (c) replace the software and/or documentation with equally suitable, compatible, and functionally equivalent non-infringing software and/or documentation at no additional charge to City; or (d) if none of the foregoing alternatives is reasonably available to Supplier terminate this Agreement, and refund all amounts paid to Supplier by City, subsequent to which termination City may seek any and all remedies available to City under law.**

9. ASSIGNMENT AND SUBCONTRACTING.

9.1 Assignment. Supplier shall not assign or subcontract any of its duties, obligations or rights under this Agreement without the prior written consent of City. If City grants consent to an assignment, the assignee shall execute a written agreement with City and Supplier under which the assignee agrees to be bound by the duties and obligations of Supplier under this Agreement. Supplier and Assignee shall be jointly liable for all obligations of Supplier under this Agreement prior to the effective date of the assignment.

9.2 Subcontract. If City grants consent to a subcontract, the subcontractor shall execute a written agreement with Supplier referencing this Agreement under which subcontractor shall agree to be bound by the duties and obligations of Supplier under this Agreement as such duties and obligations may apply. Supplier shall provide City with a fully executed copy of any such subcontract.

10. INSURANCE.

10.1 Supplier shall assume all risk and liability for accidents and damages that may occur to persons or property during the prosecution of the work. Supplier shall file with the City of Fort Worth

Purchasing Division, before the commencement of services, a certificate of insurance documenting the following required insurance. Supplier will be responsible for providing proof of insurance as may be required by Public Participating Agencies.

10.1.1 Statutory Workers' Compensation Insurance and Employer's Liability Insurance at the following limits

10.1.1.1 $100,000 Each Accident
10.1.1.2 $500,000 Disease – Policy limit
10.1.1.3 $100,000 Disease – Each Employee

10.1.2 Commercial General Liability Insurance including Explosion, Collapse, and Underground Coverage shall be provided as follows:

10.1.2.1 $1,000,000 Each Occurrence
10.1.2.2 $2,000,000 Annual Aggregate

10.1.3 Auto Liability Insurance shall be provided as follows:

10.1.3.1 $250,000 Bodily Injury Per Person Each Accident
10.1.3.2 $250,000 Property Damage; or
10.1.3.3 $500,000 Combined Single Limit Each Accident
10.1.3.4 The named insured and employees of Supplier shall be covered under this policy. Liability for damage occurring while loading, unloading, transferring, and transporting materials under this Agreement shall be included under this policy.

10.1.4 Environmental Impairment Liability (EIL) and/or Pollution Liability

10.1.4.1 $2,000,000 per occurrence
10.1.4.2 EIL coverage(s) must be included in policies listed in subsection 10.1 above; or, such insurance shall be provided under separate policy(s). Liability for damage occurring while loading, unloading, transferring, and transporting materials under this Agreement shall be included under the Automobile Liability insurance or other policy(s).

10.2 Policies shall be endorsed to provide the City of Fort Worth a thirty (30) day notice of cancellation, material change in coverage, or non-renewal of coverage. Applicable policies shall also be endorsed to name the City of Fort Worth as an additional insured, as its interests may appear (ATIMA).

10.3 ADDITIONAL INSURANCE INFORMATION

10.3.1 The City, its officers, employees and servants shall be endorsed as an additional insured on Supplier's insurance policies excepting employer's liability insurance coverage under Supplier's workers' compensation insurance policy.

10.3.2 Certificates of insurance shall be delivered to the Purchasing Department of the City of Fort Worth, 200 Texas Street, Fort Worth, TX 76102, prior to a purchase order being issued.

10.3.3 Any failure on part of the City to request required insurance documentation shall

not constitute a waiver of the insurance requirements specified herein.

10.3.4 Each insurance policy shall be endorsed to provide the City a minimum thirty days' notice of cancellation, non-renewal, and/or material change in policy terms or coverage. A ten days' notice shall be acceptable in the event of non-payment of premium.

10.3.5 Insurers must be authorized to do business in the State of Texas and have a current A.M. Best rating of A: VII or equivalent measure of financial strength and solvency.

10.3.6 Deductible limits, or self-funded retention limits, on each policy must not exceed $10,000.00 per occurrence unless otherwise approved by the City.

10.3.7 Other than worker's compensation insurance, in lieu of traditional insurance, City may consider alternative coverage or risk treatment measures through insurance pools or risk retention groups. The City must approve in writing any alternative coverage.

10.3.8 Workers' compensation insurance policy(s) covering employees of the Supplier shall be endorsed with a waiver of subrogation providing rights of recovery in favor of the City.

10.3.9 City shall not be responsible for the direct payment of insurance premium costs for Supplier's insurance.

10.3.10 Supplier's insurance policies shall each be endorsed to provide that such insurance is primary protection and any self-funded or commercial coverage maintained by City shall not be called upon to contribute to loss recovery.

10.3.11 While this Agreement is in effect, Supplier shall report, in a timely manner, to the Purchasing Department any known loss occurrence that could give rise to a liability claim or lawsuit or which could result in a property loss.

10.3.12 Supplier's liability shall not be limited to the specified amounts of insurance required herein.

10.3.13 Upon the request of City, Supplier shall provide complete copies of all insurance policies required by these contract documents.

11. COMPLIANCE WITH LAWS, ORDINANCES, RULES AND REGULATIONS.

Supplier agrees that in the performance of its obligations hereunder, it shall comply with all applicable federal, state and local laws, ordinances, rules and regulations and that any work it produces in connection with this Agreement will also comply with all applicable federal, state and local laws, ordinances, rules and regulations. If City notifies Supplier of any violation of such laws, ordinances, rules or regulations, Supplier shall immediately desist from and correct the violation.

12. NON-DISCRIMINATION COVENANT.

Supplier, for itself, its personal representatives, assigns, subcontractors and successors in interest, as part of the consideration herein, agrees that in the performance of Supplier's duties and obligations hereunder, it shall not discriminate in the treatment or employment of any individual or group of individuals on any basis prohibited by law. **IF ANY CLAIM ARISES FROM AN ALLEGED VIOLATION OF THIS NON-DISCRIMINATION COVENANT BY SUPPLIER, ITS PERSONAL REPRESENTATIVES, ASSIGNS, SUBCONTRACTORS OR SUCCESSORS IN INTEREST, SUPPLIER AGREES TO ASSUME SUCH LIABILITY AND TO INDEMNIFY AND DEFEND CITY AND HOLD CITY HARMLESS FROM SUCH CLAIM.**

13. NOTICES.

Notices required pursuant to the provisions of this Agreement shall be conclusively determined to have been delivered when (1) hand-delivered to the other party, its agents, employees, servants or representatives, (2) delivered by facsimile with electronic confirmation of the transmission, or (3) received by the other party by United States Mail, registered, return receipt requested, addressed as follows:

To CITY:	To SUPPLIER:
City of Fort Worth Attn: Assistant City Manager 200 Texas Street Fort Worth, TX 76102-6314 Facsimile: (817) 392-8654 With copy to Fort Worth City Attorney's Office at same address	Martin Eagle Oil Company, Inc. Attn: Phillip Childers III 2700 James Street Denton, TX 76205

14. SOLICITATION OF EMPLOYEES.

Neither City nor Supplier shall, during the term of this Agreement and additionally for a period of one year after its termination, solicit for employment or employ, whether as employee or independent contractor, any person who is or has been employed by the other during the term of this Agreement, without the prior written consent of the person's employer. Notwithstanding the foregoing, this provision shall not apply to an employee of either party who responds to a general solicitation of advertisement of employment by either party.

15. GOVERNMENTAL POWERS.

It is understood and agreed that by execution of this Agreement, City does not waive or surrender any of its governmental powers or immunities.

16. NO WAIVER.

The failure of City or Supplier to insist upon the performance of any term or provision of this Agreement or to exercise any right granted herein shall not constitute a waiver of City's or Supplier's respective right to insist upon appropriate performance or to assert any such right on any future occasion.

17. GOVERNING LAW / VENUE.

This Agreement shall be construed in accordance with the laws of the State of Texas. If any action, whether real or asserted, at law or in equity, is brought pursuant to this Agreement, venue for such action shall lie in state courts located in Tarrant County, Texas or the United States District Court for the Northern District of Texas, Fort Worth Division.

18. SEVERABILITY.

If any provision of this Agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired.

19. FORCE MAJEURE.

City and Supplier shall exercise their best efforts to meet their respective duties and obligations as set forth in this Agreement, but shall not be held liable for any delay or omission in performance due to force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any government law, ordinance or regulation, acts of God, acts of the public enemy, fires, strikes, lockouts, natural disasters, wars, riots, material or labor restrictions by any governmental authority, transportation problems and/or any other similar causes.

20. HEADINGS NOT CONTROLLING.

Headings and titles used in this Agreement are for reference purposes only, shall not be deemed a part of this Agreement, and are not intended to define or limit the scope of any provision of this Agreement.

21. REVIEW OF COUNSEL.

The parties acknowledge that each party and its counsel have reviewed and revised this Agreement and that the normal rules of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or Exhibits A, B, C, D or E.

22. AMENDMENTS/ MODIFICATIONS/ EXTENSIONS.

No amendment, modification, or extension of this Agreement shall be binding upon a party hereto unless set forth in a written instrument, which is executed by an authorized representative of each party.

23. ENTIRETY OF AGREEMENT.

This Agreement, including Exhibits A, B, C, D, and E contains the entire understanding and agreement between City and Supplier, their assigns and successors in interest, as to the matters contained herein. Any prior or contemporaneous oral or written agreement is hereby declared null and void to the extent in conflict with any provision of this Agreement.

24. COUNTERPARTS.

This Agreement may be executed in one or more counterparts and each counterpart shall, for all purposes, be deemed an original, but all such counterparts shall together constitute one and the same instrument.

25. WARRANTY OF SERVICES.

Supplier warrants that its services will be of a high quality and conform to generally prevailing industry standards. City must give written notice of any breach of this warranty within thirty (30) days from the date that the services are completed. In such event, at Supplier's option, Supplier shall either (a) use commercially reasonable efforts to re-perform the services in a manner that conforms with the warranty, or (b) refund the fees paid by City to Supplier for the nonconforming services.

26. IMMIGRATION NATIONALITY ACT.

Supplier shall verify the identity and employment eligibility of its employees who perform work under this Agreement, including completing the Employment Eligibility Verification Form (I-9). Upon request by City, Supplier shall provide City with copies of all I-9 forms and supporting eligibility documentation for each employee who performs work under this Agreement. Supplier shall adhere to all Federal and State laws as well as establish appropriate procedures and controls so that no services will be performed by any Supplier employee who is not legally eligible to perform such services. **SUPPLIER SHALL INDEMNIFY CITY AND HOLD CITY HARMLESS FROM ANY PENALTIES, LIABILITIES, OR LOSSES DUE TO VIOLATIONS OF THIS PARAGRAPH BY SUPPLIER, SUPPLIER'S EMPLOYEES, SUBCONTRACTORS, AGENTS, OR LICENSEES.** City, upon written notice to Supplier, shall have the right to immediately terminate this Agreement for violations of this provision by Supplier.

27. OWNERSHIP OF WORK PRODUCT.

City shall be the sole and exclusive owner of all reports, work papers, procedures, guides, and documentation, created, published, displayed, and/or produced in conjunction with the services provided under this Agreement (collectively, "Work Product"). Further, City shall be the sole and exclusive owner of all copyright, patent, trademark, trade secret and other proprietary rights in and to the Work Product. Ownership of the Work Product shall inure to the benefit of City from the date of conception, creation or fixation of the Work Product in a tangible medium of expression (whichever occurs first). Each copyrightable aspect of the Work Product shall be considered a "work-made-for-hire" within the meaning of the Copyright Act of 1976, as amended. If and to the extent such Work Product, or any part thereof, is not considered a "work-made-for-hire" within the meaning of the Copyright Act of 1976, as amended, Supplier hereby expressly assigns to City all exclusive right, title and interest in and to the Work Product, and all copies thereof, and in and to the copyright, patent, trademark, trade secret, and all other proprietary rights therein, that City may have or obtain, without further consideration, free from any claim, lien for balance due, or rights of retention thereto on the part of City.

28. SIGNATURE AUTHORITY.

The person signing this Agreement hereby warrants that he/she has the legal authority to execute this Agreement on behalf of the respective party, and that such binding authority has been granted by proper order, resolution, ordinance or other authorization of the entity. This Agreement and any amendment hereto, may be executed by any authorized representative of Supplier whose name, title and signature is affixed on the Verification of Signature Authority Form, which is attached hereto as Exhibit "D". Each party is fully entitled to rely on these warranties and representations in entering into this Agreement or any amendment hereto.

29. CHANGE IN COMPANY NAME OR OWNERSHIP

Supplier shall notify City's Purchasing Manager, in writing, of a company name, ownership, or address change for the purpose of maintaining updated City records. The president of Supplier or authorized

official must sign the letter. A letter indicating changes in a company name or ownership must be accompanied with supporting legal documentation such as an updated W-9, documents filed with the state indicating such change, copy of the board of director's resolution approving the action, or an executed merger or acquisition agreement. Failure to provide the specified documentation so may adversely impact future invoice payments.

30. PROHIBITION ON CONTRACTING WITH COMPANIES THAT BOYCOTT ISRAEL

Supplier acknowledges that in accordance with Chapter 2270 of the Texas Government Code, the City is prohibited from entering into a contract with a company with ten or more full-times employees that has a value of $100,000 or more that is to be paid wholly or partly from public funds of the City for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The term "boycott Israel" has the meaning ascribed to it by Section 808.001 of the Texas Government Code. The term "company" has the meaning ascribed to it by Section 2270.001 of the Texas Government Code. To the extent that Chapter 2270 of the Government Code is applicable to this Agreement, by signing this Agreement, Supplier certifies that Supplier's signature provides written verification to the City that Supplier: (1) does not boycott Israel; and (2) will not boycott Israel during the term of this Agreement.

(signature page follows)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in multiples to be effective on the dates set forth in Section 2.

CITY OF FORT WORTH:

By: _____
Name: Kevin Gunn
Title: Interim Assistant City Manager

Date: 12/20/2019

APPROVAL RECOMMENDED:

By: _____
Name: Steve Cooke
Title: Director, Property Management Department

ATTEST:

By: _____
Name: Mary Kayser
Title: City Secretary

CONTRACT COMPLIANCE MANAGER:
By signing I acknowledge that I am the person responsible for the monitoring and administration of this contract, including ensuring all performance and reporting requirements.

By: _____
Name: Randy Rendon
Title: Fuel Service Manager

APPROVED AS TO FORM AND LEGALITY:

By: _____
Name: Richard A. McCracken
Title: Sr. Assistant City Attorney

CONTRACT AUTHORIZATION:
M&C: 19-0413 12/17/19
Form 1295: 2019-SS0906

CITY OF FORT WORTH TEXAS

SUPPLIER:

Martin Eagle Oil Company, Inc.

By: _____
Name: Phillip Childers III
Title: Vice President Sales

Date: 11/13/2019

ATTEST:

By: _____
Name: Sandy Apple
Title: Operations Mgr

EXHIBIT A
SCOPE OF SERVICES

1.0 DEFINITIONS

1.1 The following definitions are provided to establish a common understanding of the terms of this Agreement. The source for these definitions is the Energy Information Administration, which provides energy statistics for the U.S. government through the Department of Energy (http://www.eia.doe.gov/).

1.1.1 **Biodiesel:** Any liquid bio-fuel suitable as a diesel fuel substitute or diesel fuel additive or extender. Biodiesel fuels are typically made from oils such as soybeans, rapeseed, or sunflowers, or from animal tallow. Biodiesel can also be made from hydrocarbons derived from agricultural products such as rice hulls.

1.1.2 **Conventional Gasoline:** Finished motor gasoline not included in the oxygenated or reformulated gasoline categories.

1.1.3 **Renewable (Green) Diesel:** Hydretreating (hydroprocessing hydrodeoxygenation) Also called "green" diesel, renewable diesel is a biomass-derived transportation fuel suitable for use in diesel engines. It meets the ASTM D975 specification in the United States and EN 590 in Europe.

1.1.4 **Distillate Fuel Oil:** A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery.

1.1.5 **Finished Aviation Gasoline:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910, and Military Specification MIL-G-5572.

1.1.6 **Finished Motor Gasoline:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122° to 158° degrees Fahrenheit at the 10 percent recovery point to 365° to 374° degrees Fahrenheit at the 90 percent recovery point. Motor Gasoline includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. Finished motor gasoline includes all ethanol-blended gasoline (e.g. E10, E85).

1.1.7 **Kerosene-Type Jet Fuel:** A kerosene-based product having a maximum distillation temperature of 400° degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572° degrees Fahrenheit and meeting ASTM Specification D 1655 (Clear, No Additive) and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for

commercial and military turbojet and turboprop aircraft engines.

1.1.8 **OPRG:** "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.

1.1.9 **Reformulated Gasoline (RFG):** Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blend-stock for oxygenate blending (RBOB).

1.1.10 **Diesel Emission Fluid** (DEF): commonly referred to as **AdBlue** in Europe and standardized as **ISO 22241** is an **Aqueous Urea Solution** made with 32.5% high-purity urea (**AUS 32**) and 67.5% deionized water. DEF is used as a consumable in selective catalytic reduction (SCR) in order to lower NO_x concentration in the diesel exhaust emissions from diesel engines.

2.0 GENERAL REQUIREMENTS

2.1 All fuels procured under this Agreement must conform to the applicable federal, state and local codes of each Participating Agency utilizing the resulting master agreement for each fuel type requested. This Agreement requires that as legislation, both state and federal, governing the content characteristics and /or standards of Conventional Gasoline (including RVP during summer months), Ethanol Blended Gasoline, Reformulated Gasoline, Oxygenated Gasoline, Diesel, Renewable Green Diesel and/or Biodiesel fuel, Aviation Gasoline, Kerosene-Type Jet Fuel, and Diesel Emission Fluid could be modified that the providing Supplier shall deliver product that complies with the modified legislation. Regulations governing the standards for fuels utilized by Participating Agencies may change throughout the term of any contract between a Participating Agency and a Supplier. As regulations change, amendments may be made to this Agreement to reflect those modified standards. The City reserves the right, at its sole discretion, to change the list of fuel types covered by this Agreement either by deletion of fuel types no longer needed or addition of other fuel types or fuel additives as may become necessary for Participating Agencies utilizing this agreement. When a class, type or category of fuel is to be added to this Agreement, the City shall supply specifications for such fuel to Supplier and all other suppliers awarded an Agreement no less than fifteen (15) days in advance of the first request for pricing for such fuels. This Agreement is intended to establish a "living" contract that can be adapted to the changing needs of Participating Agencies, within the scope of the RFP for motor fuels and aviation fuels.

2.2 All motor fuels and aviation fuels delivered under this Agreement will be of high quality and will not contain any foreign substances or water, which may damage City or any Participating Agency's vehicle or contaminate the fuel storage tanks.

2.3 City and each Participating Agency will have their own designated representatives and methods of requesting delivery dates, sites and tracking of orders.

2.4 Allocation. In the event of a fuel shortage and/or catastrophic conditions, Supplier must be capable of providing fuel to the City and all Participating Agencies. The nature

of City and Participating Agencies is such that public safety might be jeopardized if Motor Fuels and Aviation Fuels are not delivered as ordered in the event of fuel shortages or catastrophic conditions. Supplier agrees that delivery of products covered by this Agreement will be made in a priority manner to City and Participating Agencies to the exclusion of non-governmental agencies during times of shortages and / or catastrophes. Supplier agrees to provide a detailed contingency plan to City and each Participating Agency requesting such.

2.5 Emergency Purchasing. In the event that an emergency or disaster is declared by City or a Participating Agency according to applicable laws governing states of emergency and disasters requiring the prompt and immediate delivery of products or services, City and the Participating Agency reserve the right to obtain such products or services from any source, including but not limited to this Agreement, which will meet the needs of such emergency. Supplier shall not be entitled to any claim or lost profits for products or services procured from other sources pursuant to this paragraph.

3.0 ORDERS

Orders may be placed by telephone, fax or other method selected by City and each Participating Agency. Orders will include the specific delivery dates and sites as designated by the City and each Participating Agency. Order and Emergency contact information for Participating Agencies will be provided by the Participating Agencies.

4.0 DELIVERY/FREIGHT

4.1 Fuel delivery charges are to be determined separately and apart from the Market Differential discussed in this Agreement. The Market Differential must not include cost estimates for delivery. The number and location of storage tanks at City and each Participating Agency, and the number and location of each Participating Agency necessitate that delivery charges be determined directly between Supplier and the City or each Participating Agency. Supplier must quote delivery charges directly to City and each Participating Agency upon request. Delivery charges shall be a direct cost pass-through to City and each Participating Agency. No mark-up or profit shall be added to actual freight / delivery costs to City or a Participating Agency. When determining delivery charges specific to City and each Participating Agency, Supplier must identify additional charges, if any, for split deliveries at different locations or for loads smaller than tank loads. The City and Participating Agencies reserve the right to add and/or delete delivery sites during the course of this Agreement.

4.2 Delivery is expressed in number of calendar days required to make delivery after receipt of a purchase order. Delivery shall be made in accordance with instructions on each Purchase Order. Deliveries will be made in accordance with petroleum bulk storage regulations as designated by City and each Participating Agency. If there is a discrepancy between the purchase order and what is listed in this Agreement, it is Supplier's obligation to seek clarification from the City and the Participating Agencies.

4.3 Supplier's delivery trucks WILL BE EQUIPPED WITH CALIBRATED METERS to accurately measure quantities delivered. All trucks used for delivery must have the ability to measure fuel delivered and correct the recorded volume delivered to 60 degrees Fahrenheit for billing purposes. Supplier will adjust for volume changes by temperature variations. Supplier shall use 60 degrees Fahrenheit as the normal temperature reading. All

deliveries must be accompanied by a Delivery Ticket showing Brand or Grade and gross gallons, temperature and adjusted gallons delivered. City and each Participating Agency may examine, upon request, a copy of the metered ticket showing gallons loaded into the vehicle making delivery.

4.4 Guaranteed delivery times will be within twenty-four (24) hours from receipt of order, or as specified by City or the Participating Agency if delivery is desired at some date beyond 24 hours. As much time as possible will be allowed the Supplier (with consideration for the stipulated guaranteed delivery) for making deliveries; however, Supplier shall be capable of making bulk deliveries within 24 hours after receipt of order, especially in emergency situations. Normal deliveries are considered to be Monday thru Sunday according to the hours of operation for each site unless an emergency situation should develop. Deliveries on Saturday or Sunday shall be priced using the OPIS contract net low for the Saturday (available from OPIS if Supplier does not currently receive Saturday prices) of the weekend during which the delivery occurred.

4.5 City and Participating Agencies shall ensure that storage tanks are accessible by Supplier, and it is strongly advised that a representative from City and Participating Agencies be present during the delivery. Failure of the City or Participating Agency to make appropriate arrangements, preventing delivery of product upon Supplier's arrival at delivery site, may result in a charge for the Supplier's transportation costs for that particular trip. City and Participating Agencies are responsible for the implementation of monitoring programs to insure compliance by fuel suppliers with the specification requirements as outlined herein and in accordance with any regulations stipulated by City or the Participating Agencies.

4.6 City and each Participating Agency shall be responsible for having the proper fuel fill and transfer vapor recovery system(s) operating on their storage tanks in accordance with the City or Participating Agency's state and local regulations. The transfers include delivery tank to storage tank (Stage I) and storage tank to vehicle tank (Stage II) systems. Suppliers have the responsibility of reporting faulty equipment to the end users and the appropriate regulatory agencies.

4.7 City and Participating Agencies may request "automatic replenishment" or for the Supplier to top-off tanks for testing purposes. The Supplier will comply with these requests at its option and shall notify the City or Participating Agency accordingly. Supplier must have the ability upon request from the City or a Participating Agency, to be able to remotely monitor the City or Participating Agency's fuel monitoring system and send a fuel truck when a full load is required.

4.8 The Supplier shall provide fuel content labels/signs for each pumping station. These labels shall satisfy the requirements of the City's, or each Participating Agency's, state and local regulations. An environmental awareness decal/label shall be provided and displayed on each affected pump.

4.9 City, and each Participating Agency, may pick-up fuel in their own vehicle if so capable, and/or request delivery to bulk storage tanks at the City or the Participating Agency. It is anticipated that the majority of purchases will be on a "delivered" basis, but some Participating Agencies have appropriate vehicles and the desire to pick up fuel. In the event of City, or a Participating Agency, ordering fuel to be picked up in their own vehicle, no additional freight or delivery charges will be allowed under this Agreement.

4.10 Freight terms, to be specified by City and each Participating Agency at the time of order, shall be either:

(1) FOB Origin – Title and risk of loss of fuel shall pass to City and each Participating Agency at the point the City or the Participating Agency actually receives and takes possession of fuel when loaded in the City's or Participating Agency's vehicle at the terminal. No delivery charges shall be charged or assessed; or

(2) FOB Destination - Title and risk of loss of fuel shall not pass to City or a Participating Agency until fuel is received and taken possession of at the point of delivery. Delivery charges to be a direct cost pass-through to City and each Participating Agency and added as a separate line item on the invoice. Delivery charges are to be pre-determined between Supplier and City, or each Participating Agency, prior to delivery.

5.0 INVOICES

5.1 City and each Participating Agency will provide their billing addresses for submission of invoices. All invoices should reference, at a minimum, delivery ticket and the City's or Participating Agency's purchase order / requisition number, specific delivery dates and delivery times, and delivery location.

5.2 Invoices must clearly indicate the OPIS Benchmark Index per the terms of this Agreement for each fuel product delivered as a separate line item on the invoice. Invoices must state as a separate line item the Market Differential for each fuel product sold per the terms of this Agreement. The OPIS Benchmark Index and Market Differential for each fuel product sold must be stated on a cost per gallon basis on the invoice, with number of gallons sold separately stated by fuel product. The extended total sales for each fuel product sold must be identified. Taxes, if any, and delivery charges, if any, should be stated as separate line items on the invoice to derive the total cost to the City or the Participating Agency. If confirmation of pricing by City, a Participating Agency, or OMNIA Partners finds any discrepancy with the terms of this Agreement, Supplier shall make correction before payment of invoice or refund any overpayment for incorrect invoices already paid without any penalty assessed upon the City or a Participating Agency.

5.3 A copy of the bill of lading when applicable, shall be attached to the invoice.

5.4 It shall be the sole responsibility of the Supplier to maintain all licenses necessary to fulfill all duties and obligations of Supplier under this Agreement. Supplier will hold City of Fort Worth, all Participating Agencies, and OMNIA Partners harmless of any copyright infringements or penalties.

6.0 PAYMENTS

Unless a Net 20 or Net 15 days is available and agreed upon, payment terms will be Net 30 days from the date of delivery or the receipt of an accurate invoice and bill of lading whichever is later.

7.0 REPORTING

Supplier will be required to maintain data and provide documentation and/or reports of all petroleum products and gallons purchased by City and each Participating Agency. Supplier must be able to supply reports by delivery date, fuel type, amount delivered, costs, tank location and

invoice number for City and each Participating Agency upon request.

8.0 OPIS LICENSING

The City has selected the OPIS Net Standard Contract Rack for Dallas Metro Texas Rack Average as the price index benchmark for settlement under this Agreement. OPIS prices are protected under strict copyright agreements and forwarding printed or electronic OPIS price reports is a violation of federal copyright law.

9.0 TESTING

Deliveries of fuel under this Agreement are subject to testing, to insure compliance with specifications. All tests shall be made as per methods specified or approved by the American Society of Testing Material (ASTM), unless otherwise specified. When the test analysis shows fuel meeting specification, the City or Participating Agency will pay for said test. When test analysis shows fuel does not meet specification, Supplier will pay for said test. In addition, Supplier agrees to be liable for all charges necessary to satisfactorily bring contaminated tanks within limits, including pumping out fuel and replacing as necessary.

EXHIBIT B
CITY OF FORT WORTH SPECIFICATIONS

10.0 SCOPE

The general scope for Martin Eagle Oil Company and this Agreement includes finished motor gasoline, E85, distillate fuel oil for on-highway and off-highway diesel engines, Renewable Green Diesel, Biodiesel, and Diesel Emission Fluid. This scope of motor fuels covered by this Agreement is intended to be broad and inclusive of all motor fuels used by Participating Agencies in the United States and the District of Columbia. The specifications for the City are detailed in this dedicated section of the Contract. Specifications for all other Participating Agencies are intentionally left at a general level to avoid omission of certain specifications or blends for any given Participating Agency, however Supplier is required to meet similar specification expectations as provided by the City of Fort Worth, and as specified in the definitions provided in section 1.5 of RFP 19-0000037, in the provision of fuel to other Participating Agencies.

All fuels procured under this Agreement must conform to the applicable federal, state and local codes of each Participating Agency utilizing the resulting master agreement for each fuel type requested. This Agreement requires that as legislation, both state and federal, governing the content characteristics and /or standards of Conventional Gasoline (including RVP during summer months), Ethanol Blended Gasoline, Reformulated Gasoline, Oxygenated Gasoline, Diesel, Renewable Green Diesel and/or Biodiesel fuel, could be modified that the providing Supplier shall deliver product that complies with the modified legislation. Regulations governing the standards for fuels utilized by Participating Agencies may change throughout the term of this Agreement, and as they change, amendments may be made to this Agreement to reflect those modified standards. The City of Fort Worth reserves the right, at its sole discretion, to change the list of fuel types covered by this Agreement by deletion of fuel types no longer needed or addition of other fuel types or fuel additives as may become necessary for Participating Agencies utilizing this Agreement. When a class, type or category of fuel is to be added to this Agreement, the City of Fort Worth shall supply specifications for such fuel to Supplier no less than fifteen (15) days in advance of the first request for pricing for such fuels. This Agreement is intended to establish a "living" contract that can be adapted to the changing needs of Participating Agencies, within the scope of the RFP for motor fuels.

EXHIBIT D
VERIFICATION OF SIGNATURE AUTHORITY

MARTIN EAGLE OIL COMPANY, INC.
2700 JAMES STREET
DENTON, TX 76205

Execution of this **Signature Verification Form** ("Form") hereby certifies that the following individuals and/or positions have the authority to legally bind Supplier and to execute any agreement, amendment or change order on behalf of Supplier. Such binding authority has been granted by proper order, resolution, ordinance or other authorization of Supplier. City is fully entitled to rely on the warranty and representation set forth in this Form in entering into any agreement or amendment with Supplier. Supplier will submit an updated Form within ten (10) business days if there are any changes to the signatory authority. City is entitled to rely on any current executed Form until it receives a revised Form that has been properly executed by Supplier.

1. Name: Phillip Childers III
   Position: Vice President Sales
   Phillip Childers III
   Signature

2. Name:
   Position:

   Signature

3. Name:
   Position:

   Signature

Name:
Signature of President / CEO Stephen L. Martin

Other Title: General Manager

Date: 11-13-19

EXHIBIT E
RFP NO. 19-0000037 AND SUPPLIER'S RESPONSE

(Attached)

Attachment 2

CSC No. 53316-R2

CITY OF FORT WORTH
CONTRACT RENEWAL NOTICE

October 19, 2021

U.S. Venture, Inc.
425 Better Way
Appleton, WI 54915

Re: **Contract Renewal Notice**
Contract No. CSC No. 53316 (the "Contract")
Renewal Term No. 2: January 1, 2022 to December 31, 2022

The above referenced Contract with the City of Fort Worth expires on December 31, 2021 (the "Expiration Date"). Under the terms of the Contract, the Contract may be renewed under the same terms and conditions. This letter is to inform you that the City wishing to renew the Contract for an additional one (1) year period, which will begin immediately after the Expiration Date. All other terms and conditions of the Contract remain will remain unchanged. **If you agree to renew the Contract, please sign the signature page following this Contract Renewal Notice letter, along with a copy of your current insurance certificate, to the address set forth below.**

Please log onto PeopleSoft Purchasing at http://fortworthtexas.gov/purchasing to insure that your company information is correct and up-to-date.

If you have any questions concerning this Contract Renewal Notice, please contact me at the telephone number listed below.

Sincerely,

Denise Garcia

City of Fort Worth, Property Management Department
Denise Garcia
Contract Services Administrator
(817) 392-6787

(Signature Page Follows)

OFFICIAL RECORD
CITY SECRETARY
FT. WORTH, TX

Attachment 2

CSC No. _____

ACCEPTED AND AGREED:

CITY OF FORT WORTH

By: Dana Burghdoff
Dana Burghdoff (Nov 23, 2021 15:24 CST)
Name: Dana Burghdoff
Title: Assistant City Manager

APPROVAL RECOMMENDED:

By: Steve Cooke
Steve Cooke (Nov 22, 2021 14:24 CST)
Name: Steve Cooke
Title: Property Management Director

ATTEST:

By: Melissa Brumer for
Name: Ronald Gonzales
Title: Acting City Secretary

CITY OF FORT WORTH TEXAS

CONTRACT COMPLIANCE MANAGER:
By signing I acknowledge that I am the person responsible for the monitoring and administration of this contract, including ensuring all performance and reporting requirements.

By:
Name: Randy Rendon
Title: Fuel Service Manager

APPROVED AS TO FORM AND LEGALITY:

By: Christopher Austria
Name: Christopher Austria
Title: Assistant City Attorney

CONTRACT AUTHORIZATION:
M&C: 19-0413
Date Approved: 12/17/2019

Form 1295 Certification No.: 2019-558906

U.S. Venture, Inc.

By:
Name: KEVIN E. OLSON
Title: VP - SALES + OPS

OFFICIAL RECORD
CITY SECRETARY
FT. WORTH, TX

Official Site of the City of Fort Worth, Texas

CITY COUNCIL AGENDA

DATE:	12/17/2019	**REFERENCE NO.:**	M&C 19-0413	**LOG NAME:**	13PMOTOR AND AVIATION FUEL LSJ PMD
CODE:	P	**TYPE:**	NON-CONSENT	**PUBLIC HEARING:**	NO

SUBJECT: Award a Multiple National Award and Authorize Execution of Non-Exclusive Agreements with Mansfield Oil Co. of Gainesville, Inc., Martin Eagle Oil Company, Inc., Truman Arnold Companies, Pinnacle Petroleum, Inc., and Petroleum Traders Corporation in an Annual Amount Up to $12,000,000.00 for Motor Fuels and Aviation Fuels for the Property Management Department and Other Public Agencies; Authorize Execution of a Rebate Agreement with National Intergovernmental Purchasing Alliance Company d/b/a OMNIA Partners, Public Sector (ALL COUNCIL DISTRICTS)

RECOMMENDATION:

It is recommended that the City Council:

1. Award a multiple national award to Mansfield Oil Co. of Gainesville, Inc., Martin Eagle Oil Company, Inc., Truman Arnold Companies, Pinnacle Petroleum, Inc., and Petroleum Traders Corporation as suppliers of motor and aviation fuels for public agencies in all forty-eight contiguous states in the United States;

2. Authorize Execution of Non-Exclusive Agreements with Mansfield Oil Co. of Gainesville, Inc., Martin Eagle Oil Company, Inc., Truman Arnold Companies, Pinnacle Petroleum, Inc., and Petroleum Traders Corporation in an annual amount up to $12,000,000.00 for Motor and Aviation Fuels for the Property Management Department; and

3. Authorize Execution of a Rebate Agreement with National Intergovernmental Purchasing Alliance Company d/b/a OMNIA Partners, Public Sector.

DISCUSSION:

The Property Management Department and other public agencies throughout the United States will use these agreements to obtain unleaded, diesel, Jet-A fuels, and alternative fuels required in the DFW nonattainment area to supply and operate equipment. No guarantee was made that a specific amount of these fuels would be purchased. Unleaded and diesel fuel will be used by various City departments. The Jet-A aviation fuel will be used by the Police Department.

The City previously awarded separate agreements for unleaded fuels and diesel fuels on December 2, 2014 (M&C P-11056) and for Jet-A aviation fuel on June 7, 2011 (M&C P-11716). The previous Agreements were competitively bid. During the previous year, the City purchased approximately $5,370,552.18 of motor fuels and approximately $42,643.00 of Jet-A aviation fuels. The additional estimated annual amount listed in this action is requested to cover potential increases in prices and volumes over the five year term of the Agreement. A price change of 50 cents per gallon can impact the annual expenditures by $1,000,000.00.

Other public agencies participating in the previous agreements have purchased approximately 44,194,959 gallons of motor fuels. The City of Fort Worth expects to save approximately $45,000.00 annually over previous agreements as a direct result of the increased volume of participation of the other public agencies.

Attachment 2

Under the Rebate Agreement, the City of Fort Worth will receive a minimum of 8.333 percent of a one-cent administration fee that is paid to National Intergovernmental Purchasing Alliance d/b/a OMNIA Partners, Public Sector by the petroleum vendors for each gallon of fuel sold under these national cooperative contracts. This rebate could generate approximately $50,000.00 annually in revenue to the City. The City will have no liability or responsibility for purchases by other public agencies. The Non-Exclusive Agreements were bid as a National Cooperative Purchasing Request for Proposals (RFP) to develop and encourage cooperative purchasing efforts to reduce the cost of motor and aviation fuel to the City and other public agencies. The RFP included estimated annual quantities from current public agencies using the contract and allowed for quantities additional new agencies may have under the contract with a total estimated quantity of 50 million gallons. The RFP evaluation factors included responsiveness and clarity of proposal, ability to meet City of Fort Worth specifications, the National Program, vendor qualifications and contract cost. Representatives of the City's Property Management Department, Fire, Police, Code Compliance, Transportation and Public Works and Water Departments were invited to participant in the evaluation. However, only Purchasing Division, Property Management Department, and Code Compliance participated in the evaluation of the proposals received and found all five participating fuel providers qualified in multiple categories; Mansfield Oil Co. of Gainesville, Inc., Martin Eagle Oil Company, Inc., Truman Arnold Companies, Pinnacle Petroleum, Inc., and Petroleum Traders Corporation to be the best evaluated firms for award of the agreements.

ADVERTISEMENT - A Request for Proposals (RFP) was advertised in the Fort Worth Star-Telegram on August 21, 2019, August 28, 2019, September 4, 2019, September 11, 2019, September 18, 2019, September 25, 2019 and October 2, 2019. Thirteen vendors were solicited from the purchasing database; five responses were received.

M/WBE OFFICE - A waiver of the goal for MBE/SBE subcontracting requirements was requested by the Purchasing Division and approved by the M/WBE Office, in accordance with the BDE Ordinance, because the purchase of goods or services is from sources where subcontracting or supplier opportunities are negligible.

ADMINISTRATIVE CHANGE ORDER - An administrative change order or increase may be made by the City Manager in the amount up to $50,000.00 and does not require specific City Council approval as long as sufficient funds have been appropriated.

AGREEMENT TERM - Upon City Council approval, these Agreements shall have an initial term of five years beginning on January 1, 2020 and ending on December 31, 2020.

RENEWAL OPTIONS - These Agreements may be renewed for up to four successive one-year terms at the City's option. This action does not require specific City Council approval, provided the City Council has appropriated sufficient funds to satisfy the City's obligation during the renewal term.

FISCAL INFORMATION/CERTIFICATION:

The Director of Finance certifies that upon approval of the above recommendations funds are available in the current operating budget, as appropriated, and that contingent on the approval and the adoption of the Fiscal Year 2021 Budget by the City Council, funds will be available in the Fiscal Year 2021 Operating Budget, as appropriated, in the Fleet & Equipment Services (Fleet & Equip Serv) Fund. Prior to an expenditure being incurred, the Property Management Department has the responsibility to validate the availability of funds.

BQN\\

TO

Fund	Department	Account	Project	Program	Activity	Budget	Reference #	Amount

	ID		ID			Year	(Chartfield 2)	Attachment 2

FROM

Fund	Department ID	Account	Project ID	Program	Activity	Budget Year	Reference # (Chartfield 2)	Amount

Submitted for City Manager's Office by: Kevin Gunn (2015)

Originating Department Head: Reginald Zeno (8517)

Additional Information Contact: Cynthia Garcia (8525)
LaKita Slack-Johnson (8314)

ATTACHMENTS

Attachment 3

Delivered Sales Agreement
5/18/2022

BUYER: **Town of Flower Mound**

SELLER: U.S. Oil a Division of U.S. Venture, Inc.

PRODUCT(S): See attached Exhibit A

DELIVERY: FOB Point of Destination (see attached Exhibit A)

MEASUREMENT: See attached Exhibit A

PRICE(S): See attached Exhibit A

TERM: Products and services under this Agreement will be for a term commencing on May 18, 2022 and shall end on December 31, 2022.

RATABILITY: Seller shall sell and Buyer shall purchase and accept from Seller products in accordance to the rights provided to Seller in General Terms referenced below.

PAYMENT TERMS: Net 30 days ACH after Ship Date.

ADDITIONAL PROVISIONS: See attached Exhibit A

GTC's: This Sales Agreement supersedes and replaces all prior sales agreements and other written documents sent or received by Buyer with respect to the transaction reflected herein, and except as provided in this Sales Agreement, incorporates U.S. Venture, Inc. Unbranded Products (Rack) General Terms of Sale December 2018 signed version dated February 3rd, 2020, ("General Terms") as applicable, attached hereto and constitutes the entire agreement between Buyer and Seller and supersedes all prior negotiations, proposals, inquiries, commitments and agreements, whether written or oral, with respect to the Transaction. You are deemed to have received, reviewed and agreed to the General Terms unless you advise U.S. Oil otherwise within three (3) business days from the date of this Transaction. This Sales Agreement (incorporating the General Terms) shall be deemed to constitute the final agreement of Seller and Buyer with regard to this Transaction.

Town of Flower Mound		**U.S. Oil a Division of U.S. Venture, Inc.**	
By:	_____	**By:**	_____
Printed Name:	_____	**Printed Name:**	**Kevin Olson, VP Sales & Marketing**
Date:	**[fillable box for date]**	**Date:**	**[fillable box for date]**

Emergency Services Sales Agreement

EXHIBIT A

Attachment 3

Point of Origin/Point of Destination	Product Grade	Volume (gross gallons)✧	Base Price Formula	Adder ($/gallon)	Additive, Dye or Other Fees ($/gallon)
DFW Market	ULS 2 Tex Led	Seller guarantees minimum of 70,000 up to what is needed at facilities	Same Day Settle OPIS Dallas Metro Net Average	-.0134 for Transport -.0034 Short Transport +.0166 Bobtail ***see additional charges below	
DFW Market	RFG Unleaded	Seller guarantees minimum of 175,000 up to what is needed at facilities	Same Day Settle OPIS Dallas Metro Net Average	-.0050 Transport +.0050 Short Transport +.0250 Bobtail ***see additional charges below	
Freight: .0285 per gallon freight charge per gallon Less than 4,000 gallons $50 $50 pump fee If the orders are for multiple locations, after 1st stop, there is a $50 per stop fee					

TOWN COUNCIL AGENDA ITEM NO. 6

CONSENT ITEM

DATE: July 18, 2022

FROM: Brittni Barnett, Grants and Financial Analyst

ITEM: **Consider approval of a Service Agreement with Ranch Hands Rescue, in an amount not-to-exceed $25,000.00 in Community Development Block Grant-CV funds to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.**

BACKGROUND INFORMATION: This item is to enter into a Service Agreement with Ranch Hands Rescue to provide services to Town residents who have been impacted by domestic violence. The Town of Flower Mound receives funds from the U.S. Department of Housing and Urban Development (HUD) as part of its Community Development Block Grant Program (CDBG). These funds provide services and activities that benefit primarily low- to moderate-income individuals and households. In 2020, the Town was allocated $347,556 in CDBG funds to be used to prevent, prepare for, and respond to the coronavirus pandemic (COVID-19). This funding was originally allocated toward the Town's existing Residential Rehabilitation Program to assist those whose income had been directly affected by the COVID-19 pandemic with necessary repairs to their homes. However, the Town has seen a decline in applicants who can demonstrate a direct COVID-19 impact on their income.

Due to a documented increase in the number of individuals affected by domestic violence during the course of the COVID-19 pandemic, the Town has decided to reallocate its remaining CDBG-CV funds to agencies that will assist those affected by this issue. This will ensure that the Town is able to spend its funds in a timely manner, as required by HUD.

BOARD REVIEW/CITIZEN FEEDBACK: This reallocation information was made available for public comment on the Town website for a period of 7 days. Staff did not receive any comments during this time. It was also presented for approval to the Town's Community Development Block Grant Advisory Committee, which is comprised of staff from various departments, at its annual meeting on May 19, 2022.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $25,000.00

Proposed Expenditure:	**Account Number(s):**
$25,000.00	CDBG Grant Fund
Proposed Revenue:	**Account Number(s):**
$(25,000.00)	361-4605

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Alicia Kreh, of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the Agreement as to form and legality.

ATTACHMENTS:

1. Agreement

DRAFT MOTION: Move to approve as presented in the agenda caption.

AGREEMENT BETWEEN THE TOWN OF FLOWER MOUND
AND
Ranch Hands Rescue

FOR
CDBG-CV Domestic Violence Assistance

THIS AGREEMENT entered this 18th day of July 2022 by and between the Town of Flower Mound (herein called the "Grantee") and Ranch Hands Rescue (herein called the "Subrecipient").

WHEREAS, the Town of Flower Mound has applied for and notified that it will receive grant monies from the United States Government under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), Public Law 116-136;

WHEREAS, the Grantee wishes to engage the Subrecipient to assist the Grantee in utilizing such funds:

NOW, THEREFORE, it is agreed between the parties hereto that.

I. SCOPE OF SERVICES

A. Activities

The Subrecipient will be responsible for administering a Community Development Block Grant – Coronavirus (CDBG-CV) Domestic Violence Assistance Program (Program) in a manner satisfactory to the Grantee and consistent with any standards required as a condition of providing these funds and with all requirements outlined in this Agreement. Such Program will include activities eligible under the Community Development Block Grant Program, as described in "Exhibit A - Program Summary."

B. National Objectives

The Subrecipient certifies that the activities carried out with funds provided under this Agreement will meet the CDBG Program's National Objectives as defined in the requirements of Title 24: Housing and Urban Development of the Code of Federal Regulations (CFR) Part 570. Grantee has applicable volumes of 24 CFR pertinent to this Agreement for review or reproduction.

C. CDBG-CV Objective

The primary objective of the CDBG-CV program is to prevent, prepare for, and respond to the coronavirus (COVID-19), using the CDBG program.

D. Performance Monitoring

The Grantee will monitor the performance of the Subrecipient against goals and performance standards as stated above and in the exhibit hereto. Substandard performance as determined by the Grantee will constitute noncompliance with this Agreement. If action to correct such substandard performance is

not taken by the Subrecipient within a 10 business days after being notified by the Grantee, contract suspension or termination procedures will be initiated.

II. TIME OF PERFORMANCE

Services of the Subrecipient shall start on the 1st day of August 2022 and end on the 31st day of July 2023, or until program funds are exhausted, unless earlier terminated under the terms of this Agreement. The term of this Agreement and the provisions herein shall be extended to cover any additional time period during which the Subrecipient remains in control of CDBG-CV funds or other CDBG assets disbursed under this Agreement, including program income.

III. BUDGET

The Subrecipient shall operate fiscally within the budget presented in "Exhibit A - Program Summary." It is expressly understood and agreed that repayment shall be based on a cost per service unit delivered for services provided in the previous month.

The Grantee may require a more detailed budget breakdown than the one contained herein, and the Subrecipient shall provide supplementary budget information in a timely fashion in the form and content prescribed by the Grantee. Any amendment to this budget for cost per service unit delivery must be approved in writing by the Grantee and the Subrecipient.

IV. PAYMENT

It is expressly agreed and understood that the total amount to be paid by the Grantee under this Agreement shall not exceed $25,000.00. Drawdowns for the payment of eligible expenses shall be made against the total project budget specified in paragraph III herein and in accordance with performance. Increases or decreases in budget line items must be approved by the Grantee in writing.

Payments may be contingent upon certification of the Subrecipient's financial management system, in accordance with the standards specified in 2 CFR 200, Subpart D (Grantee has copy available for review or reproduction).

Failure to meet the contracted service unit goal by the end of the Agreement term shall result in reimbursement of less than the full grant award of this Agreement. Exceptions may be made on a case-by-case basis, subject to Grantee approval.

V. NOTICES

Notices required by this Agreement shall be in writing and delivered via mail (postage prepaid), commercial courier, personal delivery, or sent by facsimile or other electronic means. Any notice delivered or sent as aforesaid shall be effective on the date of sending. All notices and other written communications under this Agreement shall be addressed to the individuals indicated below, unless otherwise modified by subsequent written notice.

Communication, details, and notices concerning this Agreement shall be directed to the following representatives:

Grantee	Subrecipient
Brittni Barnett, Grants & Financial Analyst	Robert F. Williams, Founder/CEO
Town of Flower Mound	Ranch Hands Rescue
2121 Cross Timbers Road	Fed. I.D. 26-4610450
Flower Mound, TX 75028	9477 Fort Worth Drive
972-874-6040	Denton , TX 76226
brittni.barnett@flower-mound.com	940-240-0500
	bob@ranchhandrescue.org

VI. SPECIAL CONDITIONS

Subrecipient will not commingle CDBG-CV monies with any other funds, including other CDBG funds or Town-awarded funds, in any manner that would prevent the Grantee from readily identifying expenditures for operation of the Program. Subrecipient will maintain records differentiating CDBG-CV funding from all other funding sources for auditing purposes.

VII. GENERAL CONDITIONS

A. General Compliance

The Subrecipient agrees to comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570 (the U.S. Housing and Urban Development regulations concerning Community Development Block Grants (CDBG)) including subpart K of these regulations, except that the Subrecipient does not assume the recipient's environmental responsibilities described in 24 CFR 570.604 or the Recipient's responsibility for initiating the review process under the provisions of 24 CFR Part 52. Grantee has a copy of the relevant sections of the CFR available for review or reproduction. The Subrecipient also agrees to comply with all other applicable Federal, state, and local laws, regulations, and policies governing the funds provided under this Agreement. The Subrecipient further agrees to utilize funds available under this Agreement to supplement, rather than supplant, funds otherwise available. The Subrecipient agrees to comply with all applicable requirements outlined in 24 CFR 570.502. In the event of noncompliance, Grantee may take any actions outlined under this Agreement or 2 CFR 200.338.

B. "Independent Contractor"

Nothing contained in this Agreement is intended to, or shall be construed in any manner, as creating, or establishing the relationship of employer/employee between the Parties. The Subrecipient shall at all times remain an "independent contractor" with respect to the services to be performed under this Agreement. The Grantee shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as the Subrecipient is an independent contractor.

C. Hold Harmless

The Subrecipient shall hold harmless, defend, and indemnify the Grantee from any and all claims, actions, suits, charges, and judgments whatsoever that arise out of the Subrecipient's performance or nonperformance of the services or subject matter called for in the Agreement.

D. Workers' Compensation

The Subrecipient shall provide Workers' Compensation Insurance coverage or its equivalent for all its employees involved in the performance of this Agreement.

E. Insurance & Bonding

The Subrecipient shall carry sufficient insurance coverage to protect contract assets from loss due to theft, fraud, and/or undue physical damage, and as a minimum shall purchase a blanket fidelity bond covering all employees in an amount equal to cash advances from the Grantee.

The Subrecipient shall comply with the bonding and insurance requirements of 2 CFR 200.325 (Grantee has a copy available for review or reproduction).

F. Amendments

The Grantee or Subrecipient may amend this Agreement at any time provided that such amendments make specific reference to this Agreement, are executed in writing, and signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release the Grantee or Subrecipient from its obligations under the Agreement.

The Grantee may, in its discretion, amend this Agreement to conform with Federal, state, or local governmental guidelines, policies, and available funding amounts, or for other reasons. If such amendments result in a change of funding, the scope of services, or schedule of the activities to be underwritten as part of this Agreement, such modifications will be incorporated only by written amendment signed by both Grantee and Subrecipient.

G. Suspension or Termination

Either party may terminate this Agreement at any time in accordance with 2 CFR 200.339, as it exists or may be amended. Partial terminations of the Scope of Service in Paragraph I.A above may only be undertaken with the prior approval of the Grantee. In the event of any termination for convenience, all finished or unfinished documents, data, studies, surveys, maps, models, photographs, reports, or other materials prepared by the Subrecipient under this Agreement shall, at the option of the Grantee, become the property of the Grantee, and the Subrecipient shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination.

The Grantee may also suspend or terminate this Agreement, in whole or in part, if the Subrecipient materially fails to comply with any term of this Agreement, or with any of the rules, regulations, or provisions referred to herein, by giving written notice to the Subrecipient of such termination or suspension, specifying the effective date thereof, which may be immediate, and in the case of a suspension, the period of and requirements for lifting the suspension; and the Grantee may declare the Subrecipient ineligible for any further participation in the Grantee's contracts, in addition to other remedies as provided by law. In the event there is probable cause to believe the Subrecipient is in noncompliance with any applicable rules or regulations, the Grantee may withhold up to fifteen percent (15%) of all funds disbursed under this Agreement until such time as the Subrecipient is found to be in compliance by the Grantee or is otherwise adjudicated to be in compliance.

VIII. ADMINISTRATIVE REQUIREMENTS

A. Financial Management

1. Accounting Standards

The Subrecipient agrees to comply with the financial management requirements of 2 CFR 200, Subpart D (Grantee has a copy available for review or reproduction) and agrees to adhere to the accounting principles and procedures required therein, utilize adequate internal controls required therein, and maintain necessary source documentation for all costs incurred.

2. Cost Principles

The Subrecipient shall administer its program in conformance with 2 CFR 200 Subpart E as applicable (Grantee has copies available for reproduction or review). These principles shall be applied for all costs incurred whether charged on a direct or indirect basis.

B. Documentation and Record-Keeping

1. Records to be Maintained

The Subrecipient shall establish and maintain records sufficient to enable the Grantee to: (1) determine whether the Subrecipient has complied with this Agreement, applicable Federal statutes and regulations, and the terms and conditions of the Grantee's Federal award; and (2) satisfy recordkeeping requirements applicable to the Grantee. The Subrecipient shall maintain, at a minimum, all records required by the Federal regulations specified in 24 CFR 570.506 that are pertinent to the activities to be funded under this Agreement.

2. Retention

As required by 24 CFR 570.502, the Subrecipient shall retain all records pertinent to expenditures incurred under this Agreement for a period of the longer of three (3) years after the expiration or termination of the subrecipient agreement, or three (3) years after the submission of the annual performance and evaluation report in which the specific activity is reported on for the final time. Records for individual activities subject to the reversion of assets provisions at 24 CFR 570.503(b)(7) or change of use provisions at 24 CFR 570.505 must be maintained for as long as those provisions continue to apply to the activity. Records for individual activities for which there are outstanding loan balances, other receivables, or contingent liabilities must be retained until such receivables or liabilities have been satisfied. Notwithstanding the above, if there is litigation, claims, audits, negotiations, or other actions that involve any of the records cited and that have started before the expiration of the three-year period, then such records must be retained until completion of the actions and resolution of all issues. Subrecipient shall also comply with the requirements of 2 CFR 200.333, as specified by 24 CFR 570.502.

3. Client Data

The Subrecipient shall maintain client data demonstrating client eligibility for services provided. Such data shall include, but not be limited to, client name, address, family size, income level or

other basis for determining eligibility, and description of service provided including how the service serves to prepare, prevent, or respond to COVID hardships. Such information shall be made available to Grantee monitors or their designees for review upon request and shall safeguard such information in compliance with 2 CFR 200.303. Subrecipient shall continue to maintain client data through the 'Use and Reversion of Assets' term identified in section VIII.E.2.

4. Disclosure

The Subrecipient understands that client information collected under this Agreement is private and the use or disclosure of such information, when not directly connected with the administration of the Grantee's or Subrecipient's responsibilities with respect to services provided under this Agreement, is prohibited unless written consent is obtained from such person receiving service and, in the case of a minor, that of a responsible parent/guardian.

5. Close-Outs

The Subrecipient's obligation to the Grantee shall not end until all close-out requirements are completed. Activities during this close-out period shall include, but are not limited to making final payments; disposing of program assets (including the return of all unused materials, equipment, unspent cash advances, program income balances, and accounts receivable to the Grantee); and determining the custodianship of records. Notwithstanding the foregoing, the terms of this Agreement shall remain in effect during any period that the Subrecipient has control over CDBG funds, including program income.

6. Audits & Inspections

All Subrecipient's records with respect to any matters covered by this Agreement shall be made available to the Grantee, grantor agency, their designees, or the Federal Government, or any of their authorized representatives, at any time during normal business hours, as often as the Grantee, or federal government deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by the Subrecipient within 30 days after receipt by the Subrecipient. Failure of the Subrecipient to comply with the above audit requirements will constitute a violation of this Agreement and may result in the withholding of future payments. The Subrecipient hereby agrees to have an annual agency audit conducted in accordance with current Grantee policy concerning recipient audits and, as applicable, 2 CFR 200 (grantee has copy available for review or reproduction). The Subrecipient agrees to participate in the implementation of the programmatic and fiscal requirements outlined in the Town of Flower Mound's CDBG CARES Act Program Polices & Procedures.

C. Reporting and Payment Procedures

1. Program Income

No program income will be generated under this Agreement.

2. Indirect Costs

If indirect costs are charged, the Subrecipient will develop an indirect cost allocation plan for determining the appropriate Subrecipient's share of administrative costs and shall submit such plan to the Grantee for approval, in a form specified by the Grantee.

3. Payment Procedures

The Grantee will pay the Subrecipient funds available under this Agreement monthly, based upon information submitted by the Subrecipient and consistent with any approved budget and Grantee policy concerning payments. Payments will be based on the established cost per unit for actual services provided. See Exhibit A. In addition, the Grantee reserves the right to liquidate funds available under this Agreement for costs incurred by the Grantee on behalf of the Subrecipient.

4. Progress Reports

The Subrecipient shall submit the following Monthly Activity Summary Reports: CDBG Request for Reimbursement Form and subsequent back-up documentation, the CDBG Client Data Summary Report, Demographic Report, and Summary Performance Objectives Report to the Town of Flower Mound Financial Services Department no later than the 15th of each month. Multiple failures to submit timely reports will be reflected in the Subrecipient's file and may be considered during the renewal process.

D. Procurement

1. Compliance

The Subrecipient shall comply with the procurement requirements of 2 CFR 200, Subpart D, as amended by 24 CFR 570.502, in all procurement under this Agreement. The Subrecipient shall additionally comply with current Grantee policy concerning the purchase of equipment and shall maintain inventory records of all non-expendable personal property as defined by such policy as may be procured with funds provided herein. See VIII.E.1. Reversion of Assets.

2. Travel

The Subrecipient shall obtain written approval from the Grantee for any travel outside the metropolitan area with funds provided under this Agreement.

IX. PERSONNEL & PARTICIPANT CONDITIONS

A. Civil Rights

1. Compliance

The Subrecipient agrees to comply with all local and state civil rights laws, regulations, or ordinances, as well as Title VI of the Civil Rights Act of 1964 as amended, Title VII of the Civil Rights Act of 1964 as amended, Section 104(b) and Section 109 of Title 1 of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973,

the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and with Executive Order 11246 as Amended by Executive Orders 11375 and 12086. Grantee has copies of applicable compliance documents for review or reproduction.

2. Nondiscrimination

The Subrecipient agrees to comply with the non-discrimination in employment and contracting opportunities laws, regulations, and executive orders referenced in 24 CFR 570.607, as amended. Any applicable non-discrimination provisions in Section 109 of the HCDA are still applicable.

3. Section 504

The Subrecipient agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 706), which prohibits discrimination against the handicapped in any Federally assisted program. The Grantee shall provide the Subrecipient with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Agreement.

B. Affirmative Action

1. Fair Housing

The Subrecipient agrees to assist the Grantee by taking meaningful actions to further fair housing. If requested, the Subrecipient will distribute outreach and educational materials to its clients on behalf of the Grantee and provide space for meetings, workshops, and other outreach efforts as needed.

2. Women- and Minority-Owned Businesses (W/MBE)

The Subrecipient will use its best efforts to afford minority- and women-owned business enterprises the maximum practicable opportunity to participate in the performance of the Agreement. As used in this Agreement, the term “minority and female owned business enterprise” means a business at least fifty-one percent (51%) owned and controlled by minority group members or women. For the purpose of this definition, “minority group members” are African Americans; Spanish-speaking, Spanish surnamed, or Spanish-heritage Americans; Asian-Americans; and American Indians. The Subrecipient may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

3. Access to Records

The Subrecipient shall furnish and cause each of its own subrecipients or subcontractors to furnish all information and reports required hereunder and will permit access to its books, records, financial statements, and accounts by the Grantee or its agents, HUD or its agent, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations, and provisions stated herein.

4. Notifications

The Subrecipient will send a notice to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding to be provided by the agency contracting officer, advising the labor union or worker's representative of the Subrecipient's commitments hereunder, and shall post copies of the notice in conspicuous places to employees and applicants for employment.

5. EEO/AA Statement

The Subrecipient will, in all solicitations or advertisements for employees placed by or on behalf of the Subrecipient, state that it is an Equal Opportunity or Affirmative Action employer.

6. Subcontract Provisions

The Subrecipient will include the provisions of Paragraphs XI.A, Civil Rights, and B, Affirmative Action, in every subcontract or purchase order, specifically or by reference, so that such provisions will be binding upon each of its own subrecipients or subcontractors.

C. Employment Restrictions

1. Prohibited Activity

The Subrecipient is prohibited from using funds provided herein or personnel employed in the administration of the program for political activities; sectarian or religious activities; or lobbying, political patronage, and nepotism activities.

D. Conduct

1. Assignability

The Subrecipient shall not assign or transfer any interest in this Agreement without the prior written consent of the Grantee thereto; provided, however, that claims for money due or to become due to the Subrecipient from the Grantee under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the Grantee.

2. Subcontracts

a. Approvals

The Subrecipient shall not enter into any subcontracts with any agency or individual in the performance of this Agreement without written consent of the Grantee prior to the execution of such agreement.

b. Monitoring

The Subrecipient will monitor all subcontracted services on a regular basis to assure compliance with this Agreement. Results of monitoring efforts shall be summarized in written reports and supported with documented evidence of follow-up actions taken to correct areas of noncompliance and shall be provided to Grantee upon request.

c. Content

The Subrecipient shall cause all of the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

d. Selection Process

The Subrecipient shall undertake to ensure that all subcontracts let in the performance of this Agreement shall be awarded on a fair and open competition basis. Executed copies of all subcontracts shall be forwarded to the Grantee along with documentation concerning the selection process.

3. Hatch Act

The Subrecipient agrees that no funds provided, nor personnel employed under the contract, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V United States Code.

4. Conflict of Interest

The Subrecipient agrees to abide by the provisions of 24 CFR 570.611 and 2 CFR 200 with respect to conflicts of interest. In the event of conflict between the provisions, the most stringent requirements shall apply.

5. Lobbying

The Subrecipient hereby certifies that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency; a Member of Congress; an officer or employee of congress; or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, it

will complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

c. It will require that the language of paragraph (d), "Lobbying Certification," be included in the award documents for all sub awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly; and

d. Lobbying Certification: This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

6. Copyright

If this Agreement results in any copyrightable material or inventions, the Grantee and/or grantor agency reserves the right to royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use and to authorize others to use, the work or materials for government purposes.

7. Religious Organization and Equal Participation of Faith-based Organizations

The Subrecipient agrees that funds provided under this Agreement will be used in compliance with 24 CFR 570.200(j) and the Federal regulations specified therein, specifically requiring equal participation, separation or religious activities, and beneficiary protections found in 24 CFR 5.109.

E. 24 CFR 570, Subpart K

The Subrecipient agrees to carry out each activity in compliance with all other applicable Federal laws and regulations described in 24 CFR 570, subpart K, as specified by 24 CFR 570.503, which are not specifically outlined herein.

X. SEVERABILITY

If any provision of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall not be affected thereby, and all other parts of this Agreement shall nevertheless be in full force and effect.

XI. WAIVER

The Grantee's failure to act with respect to a breach by the Subrecipient does not waive its right to act with respect to subsequent or similar breaches. The failure of the Grantee to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

XII. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the Grantee and the Subrecipient for the use of funds received under this Agreement and it supersedes all prior or contemporaneous

communications and proposals, whether electronic, oral, or written between the Grantee and the Subrecipient with respect to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this contract as of the date first written above.

Town of Flower Mound	Ranch Hands Rescue
By:_____	By:_____
Derek France, Mayor	Robert F. Williams, Founder/CEO

EXHIBIT A – PROGRAM SUMMARY

Ranch Hands Rescue is a human and animal santuary founded on hope and healing for the long-term recovery of trauma vicitims, special needs animals and male survivors of sex trafficking. Ranch Hands Rescue will utilize the CDBG-CV funds provided by the Town of Flower Mound to provide mental health counseling to Flower Mound residents who have experienced domestic violence.

Program Timeline

AUGUST 1, 2022 THROUGH JULY 31, 2023.

Scope of Services

A. Targeted Flower Mound (Unduplicated) Clients: 50

B. Each unit of service will be reimbursed at a rate of $90.00, not to exceed $25,000.00 for the entire contract.

Attachment 1

7

TOWN COUNCIL AGENDA ITEM NO. 7

CONSENT ITEM

DATE: July 18, 2022

FROM: Brittni Barnett, Grants and Financial Analyst

ITEM: **Consider approval of a Service Agreement with Denton County Friends of the Family, in an amount not-to-exceed $80,098.25 in Community Development Block Grant-CV funds to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.**

BACKGROUND INFORMATION: This item is to enter into a Service Agreement with Denton County Friends of the Family to provide services to Town residents who have been impacted by domestic violence. The Town of Flower Mound receives funds from the U.S. Department of Housing and Urban Development (HUD) as part of its Community Development Block Grant Program (CDBG). These funds provide services and activities that benefit primarily low- to moderate-income individuals and households. In 2020, the Town was allocated $347,556 in CDBG funds to be used to prevent, prepare for, and respond to the coronavirus pandemic (COVID-19). This funding was originally allocated toward the Town's existing Residential Rehabilitation Program to assist those whose income had been directly affected by the COVID-19 pandemic with necessary repairs to their homes. However, the Town has seen a decline in applicants who can demonstrate a direct COVID-19 impact on their income.

Due to a documented increase in the number of individuals affected by domestic violence during the course of the COVID-19 pandemic, the Town has decided to reallocate its remaining CDBG-CV funds to agencies that will assist those affected by this issue. This will ensure that the Town is able to spend its funds in a timely manner, as required by HUD.

BOARD REVIEW/CITIZEN FEEDBACK: This reallocation information was made available for public comment on the Town website for a period of 7 days. Staff did not receive any comments during this time. It was also presented for approval to the Town's Community Development Block Grant Advisory Committee, which is comprised of staff from various departments, at its annual meeting on May 19, 2022.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $80,098.25

Proposed Expenditure:	**Account Number(s):**
$80,098.25	CDBG Grant Fund
Proposed Revenue:	**Account Number(s):**
$(80,098.25)	361-4605

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Alicia Kreh, of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the Agreement as to form and legality.

ATTACHMENTS:

1. Agreement

DRAFT MOTION: Move to approve as presented in the agenda caption.

AGREEMENT BETWEEN THE TOWN OF FLOWER MOUND
AND
Denton County Friends of the Family

FOR
CDBG-CV Domestic Violence Assistance

THIS AGREEMENT entered this 18th day of July 2022 by and between the Town of Flower Mound (herein called the "Grantee") and Denton County Friends of the Family (herein called the "Subrecipient").

WHEREAS, the Town of Flower Mound has applied for and notified that it will receive grant monies from the United States Government under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), Public Law 116-136;

WHEREAS, the Grantee wishes to engage the Subrecipient to assist the Grantee in utilizing such funds:

NOW, THEREFORE, it is agreed between the parties hereto that.

I. SCOPE OF SERVICES

A. Activities

The Subrecipient will be responsible for administering a Community Development Block Grant – Coronavirus (CDBG-CV) Domestic Violence Assistance Program (Program) in a manner satisfactory to the Grantee and consistent with any standards required as a condition of providing these funds and with all requirements outlined in this Agreement. Such Program will include activities eligible under the Community Development Block Grant Program, as described in "Exhibit A - Program Summary."

B. National Objectives

The Subrecipient certifies that the activities carried out with funds provided under this Agreement will meet the CDBG Program's National Objectives as defined in the requirements of Title 24: Housing and Urban Development of the Code of Federal Regulations (CFR) Part 570. Grantee has applicable volumes of 24 CFR pertinent to this Agreement for review or reproduction.

C. CDBG-CV Objective

The primary objective of the CDBG-CV program is to prevent, prepare for, and respond to the coronavirus (COVID-19), using the CDBG program.

D. Performance Monitoring

The Grantee will monitor the performance of the Subrecipient against goals and performance standards as stated above and in the exhibit hereto. Substandard performance as determined by the Grantee will constitute noncompliance with this Agreement. If action to correct such substandard performance is

not taken by the Subrecipient within a 10 business days after being notified by the Grantee, contract suspension or termination procedures will be initiated.

II. TIME OF PERFORMANCE

Services of the Subrecipient shall start on the 1st day of August 2022 and end on the 31st day of July 2023, or until program funds are exhausted, unless earlier terminated under the terms of this Agreement. The term of this Agreement and the provisions herein shall be extended to cover any additional time period during which the Subrecipient remains in control of CDBG-CV funds or other CDBG assets disbursed under this Agreement, including program income.

III. BUDGET

The Subrecipient shall operate fiscally within the budget presented in "Exhibit A - Program Summary." It is expressly understood and agreed that repayment shall be based on a cost per service unit delivered for services provided in the previous month.

The Grantee may require a more detailed budget breakdown than the one contained herein, and the Subrecipient shall provide supplementary budget information in a timely fashion in the form and content prescribed by the Grantee. Any amendment to this budget for cost per service unit delivery must be approved in writing by the Grantee and the Subrecipient.

IV. PAYMENT

It is expressly agreed and understood that the total amount to be paid by the Grantee under this Agreement shall not exceed $80,098.25. Drawdowns for the payment of eligible expenses shall be made against the total project budget specified in paragraph III herein and in accordance with performance. Increases or decreases in budget line items must be approved by the Grantee in writing.

Payments may be contingent upon certification of the Subrecipient's financial management system, in accordance with the standards specified in 2 CFR 200, Subpart D (Grantee has copy available for review or reproduction).

Failure to meet the contracted service unit goal by the end of the Agreement term shall result in reimbursement of less than the full grant award of this Agreement. Exceptions may be made on a case-by-case basis, subject to Grantee approval.

V. NOTICES

Notices required by this Agreement shall be in writing and delivered via mail (postage prepaid), commercial courier, personal delivery, or sent by facsimile or other electronic means. Any notice delivered or sent as aforesaid shall be effective on the date of sending. All notices and other written communications under this Agreement shall be addressed to the individuals indicated below, unless otherwise modified by subsequent written notice.

Communication, details, and notices concerning this Agreement shall be directed to the following representatives:

Grantee	Subrecipient
Brittni Barnett, Grants & Financial Analyst	Toni Johnson-Simpson, Executive Director
Town of Flower Mound	Denton County Friends of the Family
2121 Cross Timbers Road	Fed. I.D. 75-1734175
Flower Mound, TX 75028	PO Box 640
972-874-6040	Denton, TX 76202
brittni.barnett@flower-mound.com	940-387-5131 x107
	toni@dcfof.org

VI. SPECIAL CONDITIONS

Subrecipient will not commingle CDBG-CV monies with any other funds, including other CDBG funds or Town-awarded funds, in any manner that would prevent the Grantee from readily identifying expenditures for operation of the Program. Subrecipient will maintain records differentiating CDBG-CV funding from all other funding sources for auditing purposes.

VII. GENERAL CONDITIONS

A. General Compliance

The Subrecipient agrees to comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570 (the U.S. Housing and Urban Development regulations concerning Community Development Block Grants (CDBG)) including subpart K of these regulations, except that the Subrecipient does not assume the recipient's environmental responsibilities described in 24 CFR 570.604 or the Recipient's responsibility for initiating the review process under the provisions of 24 CFR Part 52. Grantee has a copy of the relevant sections of the CFR available for review or reproduction. The Subrecipient also agrees to comply with all other applicable Federal, state, and local laws, regulations, and policies governing the funds provided under this Agreement. The Subrecipient further agrees to utilize funds available under this Agreement to supplement, rather than supplant, funds otherwise available. The Subrecipient agrees to comply with all applicable requirements outlined in 24 CFR 570.502. In the event of noncompliance, Grantee may take any actions outlined under this Agreement or 2 CFR 200.338.

B. "Independent Contractor"

Nothing contained in this Agreement is intended to, or shall be construed in any manner, as creating, or establishing the relationship of employer/employee between the Parties. The Subrecipient shall at all times remain an "independent contractor" with respect to the services to be performed under this Agreement. The Grantee shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as the Subrecipient is an independent contractor.

C. Hold Harmless

The Subrecipient shall hold harmless, defend, and indemnify the Grantee from any and all claims, actions, suits, charges, and judgments whatsoever that arise out of the Subrecipient's performance or nonperformance of the services or subject matter called for in the Agreement.

D. Workers' Compensation

The Subrecipient shall provide Workers' Compensation Insurance coverage or its equivalent for all its employees involved in the performance of this Agreement.

E. Insurance & Bonding

The Subrecipient shall carry sufficient insurance coverage to protect contract assets from loss due to theft, fraud, and/or undue physical damage, and as a minimum shall purchase a blanket fidelity bond covering all employees in an amount equal to cash advances from the Grantee.

The Subrecipient shall comply with the bonding and insurance requirements of 2 CFR 200.325 (Grantee has a copy available for review or reproduction).

F. Amendments

The Grantee or Subrecipient may amend this Agreement at any time provided that such amendments make specific reference to this Agreement, are executed in writing, and signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release the Grantee or Subrecipient from its obligations under the Agreement.

The Grantee may, in its discretion, amend this Agreement to conform with Federal, state, or local governmental guidelines, policies, and available funding amounts, or for other reasons. If such amendments result in a change of funding, the scope of services, or schedule of the activities to be underwritten as part of this Agreement, such modifications will be incorporated only by written amendment signed by both Grantee and Subrecipient.

G. Suspension or Termination

Either party may terminate this Agreement at any time in accordance with 2 CFR 200.339, as it exists or may be amended. Partial terminations of the Scope of Service in Paragraph I.A above may only be undertaken with the prior approval of the Grantee. In the event of any termination for convenience, all finished or unfinished documents, data, studies, surveys, maps, models, photographs, reports, or other materials prepared by the Subrecipient under this Agreement shall, at the option of the Grantee, become the property of the Grantee, and the Subrecipient shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination.

The Grantee may also suspend or terminate this Agreement, in whole or in part, if the Subrecipient materially fails to comply with any term of this Agreement, or with any of the rules, regulations, or provisions referred to herein, by giving written notice to the Subrecipient of such termination or suspension, specifying the effective date thereof, which may be immediate, and in the case of a suspension, the period of and requirements for lifting the suspension; and the Grantee may declare the Subrecipient ineligible for any further participation in the Grantee's contracts, in addition to other remedies as provided by law. In the event there is probable cause to believe the Subrecipient is in noncompliance with any applicable rules or regulations, the Grantee may withhold up to fifteen percent (15%) of all funds disbursed under this Agreement until such time as the Subrecipient is found to be in compliance by the Grantee or is otherwise adjudicated to be in compliance.

VIII. ADMINISTRATIVE REQUIREMENTS

A. Financial Management

1. Accounting Standards

The Subrecipient agrees to comply with the financial management requirements of 2 CFR 200, Subpart D (Grantee has a copy available for review or reproduction) and agrees to adhere to the accounting principles and procedures required therein, utilize adequate internal controls required therein, and maintain necessary source documentation for all costs incurred.

2. Cost Principles

The Subrecipient shall administer its program in conformance with 2 CFR 200 Subpart E as applicable (Grantee has copies available for reproduction or review). These principles shall be applied for all costs incurred whether charged on a direct or indirect basis.

B. Documentation and Record-Keeping

1. Records to be Maintained

The Subrecipient shall establish and maintain records sufficient to enable the Grantee to: (1) determine whether the Subrecipient has complied with this Agreement, applicable Federal statutes and regulations, and the terms and conditions of the Grantee's Federal award; and (2) satisfy recordkeeping requirements applicable to the Grantee. The Subrecipient shall maintain, at a minimum, all records required by the Federal regulations specified in 24 CFR 570.506 that are pertinent to the activities to be funded under this Agreement.

2. Retention

As required by 24 CFR 570.502, the Subrecipient shall retain all records pertinent to expenditures incurred under this Agreement for a period of the longer of three (3) years after the expiration or termination of the subrecipient agreement, or three (3) years after the submission of the annual performance and evaluation report in which the specific activity is reported on for the final time. Records for individual activities subject to the reversion of assets provisions at 24 CFR 570.503(b)(7) or change of use provisions at 24 CFR 570.505 must be maintained for as long as those provisions continue to apply to the activity. Records for individual activities for which there are outstanding loan balances, other receivables, or contingent liabilities must be retained until such receivables or liabilities have been satisfied. Notwithstanding the above, if there is litigation, claims, audits, negotiations, or other actions that involve any of the records cited and that have started before the expiration of the three-year period, then such records must be retained until completion of the actions and resolution of all issues. Subrecipient shall also comply with the requirements of 2 CFR 200.333, as specified by 24 CFR 570.502.

3. Client Data

The Subrecipient shall maintain client data demonstrating client eligibility for services provided. Such data shall include, but not be limited to, client name, address, family size, income level or

other basis for determining eligibility, and description of service provided including how the service serves to prepare, prevent, or respond to COVID hardships. Such information shall be made available to Grantee monitors or their designees for review upon request and shall safeguard such information in compliance with 2 CFR 200.303. Subrecipient shall continue to maintain client data through the 'Use and Reversion of Assets' term identified in section VIII.E.2.

4. Disclosure

The Subrecipient understands that client information collected under this Agreement is private and the use or disclosure of such information, when not directly connected with the administration of the Grantee's or Subrecipient's responsibilities with respect to services provided under this Agreement, is prohibited unless written consent is obtained from such person receiving service and, in the case of a minor, that of a responsible parent/guardian.

5. Close-Outs

The Subrecipient's obligation to the Grantee shall not end until all close-out requirements are completed. Activities during this close-out period shall include, but are not limited to making final payments; disposing of program assets (including the return of all unused materials, equipment, unspent cash advances, program income balances, and accounts receivable to the Grantee); and determining the custodianship of records. Notwithstanding the foregoing, the terms of this Agreement shall remain in effect during any period that the Subrecipient has control over CDBG funds, including program income.

6. Audits & Inspections

All Subrecipient's records with respect to any matters covered by this Agreement shall be made available to the Grantee, grantor agency, their designees, or the Federal Government, or any of their authorized representatives, at any time during normal business hours, as often as the Grantee, or federal government deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by the Subrecipient within 30 days after receipt by the Subrecipient. Failure of the Subrecipient to comply with the above audit requirements will constitute a violation of this Agreement and may result in the withholding of future payments. The Subrecipient hereby agrees to have an annual agency audit conducted in accordance with current Grantee policy concerning recipient audits and, as applicable, 2 CFR 200 (grantee has copy available for review or reproduction). The Subrecipient agrees to participate in the implementation of the programmatic and fiscal requirements outlined in the Town of Flower Mound's CDBG CARES Act Program Polices & Procedures.

C. Reporting and Payment Procedures

1. Program Income

No program income will be generated under this Agreement.

2. Indirect Costs

If indirect costs are charged, the Subrecipient will develop an indirect cost allocation plan for determining the appropriate Subrecipient's share of administrative costs and shall submit such plan to the Grantee for approval, in a form specified by the Grantee.

3. Payment Procedures

The Grantee will pay the Subrecipient funds available under this Agreement monthly, based upon information submitted by the Subrecipient and consistent with any approved budget and Grantee policy concerning payments. Payments will be based on the established cost per unit for actual services provided. See Exhibit A. In addition, the Grantee reserves the right to liquidate funds available under this Agreement for costs incurred by the Grantee on behalf of the Subrecipient.

4. Progress Reports

The Subrecipient shall submit the following Monthly Activity Summary Reports: CDBG Request for Reimbursement Form and subsequent back-up documentation, the CDBG Client Data Summary Report, Demographic Report, and Summary Performance Objectives Report to the Town of Flower Mound Financial Services Department no later than the 15th of each month. Multiple failures to submit timely reports will be reflected in the Subrecipient's file and may be considered during the renewal process.

D. Procurement

1. Compliance

The Subrecipient shall comply with the procurement requirements of 2 CFR 200, Subpart D, as amended by 24 CFR 570.502, in all procurement under this Agreement. The Subrecipient shall additionally comply with current Grantee policy concerning the purchase of equipment and shall maintain inventory records of all non-expendable personal property as defined by such policy as may be procured with funds provided herein. See VIII.E.1. Reversion of Assets.

2. Travel

The Subrecipient shall obtain written approval from the Grantee for any travel outside the metropolitan area with funds provided under this Agreement.

IX. PERSONNEL & PARTICIPANT CONDITIONS

A. Civil Rights

1. Compliance

The Subrecipient agrees to comply with all local and state civil rights laws, regulations, or ordinances, as well as Title VI of the Civil Rights Act of 1964 as amended, Title VII of the Civil Rights Act of 1964 as amended, Section 104(b) and Section 109 of Title 1 of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973,

the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and with Executive Order 11246 as Amended by Executive Orders 11375 and 12086. Grantee has copies of applicable compliance documents for review or reproduction.

2. Nondiscrimination

The Subrecipient agrees to comply with the non-discrimination in employment and contracting opportunities laws, regulations, and executive orders referenced in 24 CFR 570.607, as amended. Any applicable non-discrimination provisions in Section 109 of the HCDA are still applicable.

3. Section 504

The Subrecipient agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 706), which prohibits discrimination against the handicapped in any Federally assisted program. The Grantee shall provide the Subrecipient with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Agreement.

B. Affirmative Action

1. Fair Housing

The Subrecipient agrees to assist the Grantee by taking meaningful actions to further fair housing. If requested, the Subrecipient will distribute outreach and educational materials to its clients on behalf of the Grantee and provide space for meetings, workshops, and other outreach efforts as needed.

2. Women- and Minority-Owned Businesses (W/MBE)

The Subrecipient will use its best efforts to afford minority- and women-owned business enterprises the maximum practicable opportunity to participate in the performance of the Agreement. As used in this Agreement, the term “minority and female owned business enterprise” means a business at least fifty-one percent (51%) owned and controlled by minority group members or women. For the purpose of this definition, “minority group members” are African Americans; Spanish-speaking, Spanish surnamed, or Spanish-heritage Americans; Asian-Americans; and American Indians. The Subrecipient may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

3. Access to Records

The Subrecipient shall furnish and cause each of its own subrecipients or subcontractors to furnish all information and reports required hereunder and will permit access to its books, records, financial statements, and accounts by the Grantee or its agents, HUD or its agent, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations, and provisions stated herein.

4. Notifications

The Subrecipient will send a notice to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding to be provided by the agency contracting officer, advising the labor union or worker's representative of the Subrecipient's commitments hereunder, and shall post copies of the notice in conspicuous places to employees and applicants for employment.

5. EEO/AA Statement

The Subrecipient will, in all solicitations or advertisements for employees placed by or on behalf of the Subrecipient, state that it is an Equal Opportunity or Affirmative Action employer.

6. Subcontract Provisions

The Subrecipient will include the provisions of Paragraphs XI.A, Civil Rights, and B, Affirmative Action, in every subcontract or purchase order, specifically or by reference, so that such provisions will be binding upon each of its own subrecipients or subcontractors.

C. Employment Restrictions

1. Prohibited Activity

The Subrecipient is prohibited from using funds provided herein or personnel employed in the administration of the program for political activities; sectarian or religious activities; or lobbying, political patronage, and nepotism activities.

D. Conduct

1. Assignability

The Subrecipient shall not assign or transfer any interest in this Agreement without the prior written consent of the Grantee thereto; provided, however, that claims for money due or to become due to the Subrecipient from the Grantee under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the Grantee.

2. Subcontracts

a. Approvals

The Subrecipient shall not enter into any subcontracts with any agency or individual in the performance of this Agreement without written consent of the Grantee prior to the execution of such agreement.

b. Monitoring

The Subrecipient will monitor all subcontracted services on a regular basis to assure compliance with this Agreement. Results of monitoring efforts shall be summarized in written reports and supported with documented evidence of follow-up actions taken to correct areas of noncompliance and shall be provided to Grantee upon request.

c. Content

The Subrecipient shall cause all of the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

d. Selection Process

The Subrecipient shall undertake to ensure that all subcontracts let in the performance of this Agreement shall be awarded on a fair and open competition basis. Executed copies of all subcontracts shall be forwarded to the Grantee along with documentation concerning the selection process.

3. Hatch Act

The Subrecipient agrees that no funds provided, nor personnel employed under the contract, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V United States Code.

4. Conflict of Interest

The Subrecipient agrees to abide by the provisions of 24 CFR 570.611 and 2 CFR 200 with respect to conflicts of interest. In the event of conflict between the provisions, the most stringent requirements shall apply.

5. Lobbying

The Subrecipient hereby certifies that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency; a Member of Congress; an officer or employee of congress; or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, it

will complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

c. It will require that the language of paragraph (d), "Lobbying Certification," be included in the award documents for all sub awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly; and

d. Lobbying Certification: This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

6. Copyright

If this Agreement results in any copyrightable material or inventions, the Grantee and/or grantor agency reserves the right to royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use and to authorize others to use, the work or materials for government purposes.

7. Religious Organization and Equal Participation of Faith-based Organizations

The Subrecipient agrees that funds provided under this Agreement will be used in compliance with 24 CFR 570.200(j) and the Federal regulations specified therein, specifically requiring equal participation, separation or religious activities, and beneficiary protections found in 24 CFR 5.109.

E. 24 CFR 570, Subpart K

The Subrecipient agrees to carry out each activity in compliance with all other applicable Federal laws and regulations described in 24 CFR 570, subpart K, as specified by 24 CFR 570.503, which are not specifically outlined herein.

X. SEVERABILITY

If any provision of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall not be affected thereby, and all other parts of this Agreement shall nevertheless be in full force and effect.

XI. WAIVER

The Grantee's failure to act with respect to a breach by the Subrecipient does not waive its right to act with respect to subsequent or similar breaches. The failure of the Grantee to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

XII. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the Grantee and the Subrecipient for the use of funds received under this Agreement and it supersedes all prior or contemporaneous

communications and proposals, whether electronic, oral, or written between the Grantee and the Subrecipient with respect to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this contract as of the date first written above.

Town of Flower Mound	Denton County Friends of the Family
By:_____	By:_____
Derek France, Mayor	Toni Johnson-Simpson, Executive Director

EXHIBIT A – PROGRAM SUMMARY

Denton County Friends of the Family (DCFOF) is dedicated to providing compassionate, comprehensive services to those impacted by rape, sexual abuse, and domestic violence, while partenering with the community to promote safety, hope, healing, justice and prevention. DCFOF will utilize the CDBG-CV funds provided by the Town of Flower Mound to assist Flower Mound residents who have been impacted in this area of service. Services provided will include, but are not limited to, advocacy, child and adult individual counseling, emergency shelter, housing seach and placement, childcare, transportation, medical care, legal services and accompaniement, and food pantry.

Program Timeline

AUGUST 1, 2022 THROUGH JULY 31, 2023.

Scope of Services

A. Targeted Flower Mound (Unduplicated) Clients: 150

B. Each unit of service will be reimbursed at a rate of $55.14, not to exceed $80,098.25 for the entire contract.

TOWN COUNCIL AGENDA ITEM NO. 8

CONSENT ITEM

DATE: July 18, 2022

FROM: Brittni Barnett, Grants and Financial Analyst

ITEM: **Consider approval of a Service Agreement with Children's Advocacy Center for North Texas, in an amount not-to-exceed $80,098.25 in Community Development Block Grant-CV funds to provide services to Flower Mound residents impacted by domestic violence; and authorization for the Mayor to execute same on behalf of the Town.**

BACKGROUND INFORMATION: This item is to enter into a Service Agreement with Children's Advocacy Center for North Texas to provide services to Town residents who have been impacted by domestic violence. The Town of Flower Mound receives funds from the U.S. Department of Housing and Urban Development (HUD) as part of its Community Development Block Grant Program (CDBG). These funds provide services and activities that benefit primarily low- to moderate-income individuals and households. In 2020, the Town was allocated $347,556 in CDBG funds to be used to prevent, prepare for, and respond to the coronavirus pandemic (COVID-19). This funding was originally allocated toward the Town's existing Residential Rehabilitation Program to assist those whose income had been directly affected by the COVID-19 pandemic with necessary repairs to their homes. However, the Town has seen a decline in applicants who can demonstrate a direct COVID-19 impact on their income.

Due to a documented increase in the number of individuals affected by domestic violence during the course of the COVID-19 pandemic, the Town has decided to reallocate its remaining CDBG-CV funds to agencies that will assist those affected by this issue. This will ensure that the Town is able to spend its funds in a timely manner, as required by HUD.

BOARD REVIEW/CITIZEN FEEDBACK: This reallocation information was made available for public comment on the Town website for a period of 7 days. Staff did not receive any comments during this time. It was also presented for approval to the Town's Community Development Block Grant Advisory Committee, which is comprised of staff from various departments, at its annual meeting on May 19, 2022.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $80,098.25

Proposed Expenditure:	**Account Number(s):**
$80,098.25	CDBG Grant Fund
Proposed Revenue:	**Account Number(s):**
$(80,098.25)	361-4605

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: Alicia Kreh, of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the Agreement as to form and legality.

ATTACHMENTS:

1. Agreement

DRAFT MOTION: Move to approve as presented in the agenda caption.

AGREEMENT BETWEEN THE TOWN OF FLOWER MOUND
AND
Children's Advocacy Center for North Texas

FOR
CDBG-CV Domestic Violence Assistance

THIS AGREEMENT entered this 18th day of July 2022 by and between the Town of Flower Mound (herein called the "Grantee") and Children's Advocacy Center for North Texas (herein called the "Subrecipient").

WHEREAS, the Town of Flower Mound has applied for and notified that it will receive grant monies from the United States Government under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), Public Law 116-136;

WHEREAS, the Grantee wishes to engage the Subrecipient to assist the Grantee in utilizing such funds:

NOW, THEREFORE, it is agreed between the parties hereto that.

I. SCOPE OF SERVICES

A. Activities

The Subrecipient will be responsible for administering a Community Development Block Grant – Coronavirus (CDBG-CV) Domestic Violence Assistance Program (Program) in a manner satisfactory to the Grantee and consistent with any standards required as a condition of providing these funds and with all requirements outlined in this Agreement. Such Program will include activities eligible under the Community Development Block Grant Program, as described in "Exhibit A - Program Summary."

B. National Objectives

The Subrecipient certifies that the activities carried out with funds provided under this Agreement will meet the CDBG Program's National Objectives as defined in the requirements of Title 24: Housing and Urban Development of the Code of Federal Regulations (CFR) Part 570. Grantee has applicable volumes of 24 CFR pertinent to this Agreement for review or reproduction.

C. CDBG-CV Objective

The primary objective of the CDBG-CV program is to prevent, prepare for, and respond to the coronavirus (COVID-19), using the CDBG program.

D. Performance Monitoring

The Grantee will monitor the performance of the Subrecipient against goals and performance standards as stated above and in the exhibit hereto. Substandard performance as determined by the Grantee will constitute noncompliance with this Agreement. If action to correct such substandard performance is

not taken by the Subrecipient within 10 business days after being notified by the Grantee, contract suspension or termination procedures will be initiated.

II. TIME OF PERFORMANCE

Services of the Subrecipient shall start on the 1st day of August 2022 and end on the 31st day of July 2023, or until program funds are exhausted, unless earlier terminated under the terms of this Agreement. The term of this Agreement and the provisions herein shall be extended to cover any additional time period during which the Subrecipient remains in control of CDBG-CV funds or other CDBG assets disbursed under this Agreement, including program income.

III. BUDGET

The Subrecipient shall operate fiscally within the budget presented in "Exhibit A - Program Summary." It is expressly understood and agreed that repayment shall be based on a cost per service unit delivered for services provided in the previous month.

The Grantee may require a more detailed budget breakdown than the one contained herein, and the Subrecipient shall provide supplementary budget information in a timely fashion in the form and content prescribed by the Grantee. Any amendment to this budget for cost per service unit delivery must be approved in writing by the Grantee and the Subrecipient.

IV. PAYMENT

It is expressly agreed and understood that the total amount to be paid by the Grantee under this Agreement shall not exceed $80,098.25. Drawdowns for the payment of eligible expenses shall be made against the total project budget specified in paragraph III herein and in accordance with performance. Increases or decreases in budget line items must be approved by the Grantee in writing.

Payments may be contingent upon certification of the Subrecipient's financial management system, in accordance with the standards specified in 2 CFR 200, Subpart D (Grantee has copy available for review or reproduction).

Failure to meet the contracted service unit goal by the end of the Agreement term shall result in reimbursement of less than the full grant award of this Agreement. Exceptions may be made on a case-by-case basis, subject to Grantee approval.

V. NOTICES

Notices required by this Agreement shall be in writing and delivered via mail (postage prepaid), commercial courier, personal delivery, or sent by facsimile or other electronic means. Any notice delivered or sent as aforesaid shall be effective on the date of sending. All notices and other written communications under this Agreement shall be addressed to the individuals indicated below, unless otherwise modified by subsequent written notice.

Communication, details, and notices concerning this Agreement shall be directed to the following representatives:

Grantee	Subrecipient
Brittni Barnett, Grants & Financial Analyst	Kristen Howell, CEO
Town of Flower Mound	Children's Advocacy Center for North Texas
2121 Cross Timbers Road	Fed. I.D. 75-2559765
Flower Mound, TX 75028	1854 Cain Drive
972-874-6040	Lewisville, TX 75077
brittni.barnett@flower-mound.com	972-318-2818
	KHowell@cacnorthtexas.org

VI. SPECIAL CONDITIONS

Subrecipient will not commingle CDBG-CV monies with any other funds, including other CDBG funds or Town-awarded funds, in any manner that would prevent the Grantee from readily identifying expenditures for operation of the Program. Subrecipient will maintain records differentiating CDBG-CV funding from all other funding sources for auditing purposes.

VII. GENERAL CONDITIONS

A. General Compliance

The Subrecipient agrees to comply with the requirements of Title 24 of the Code of Federal Regulations, Part 570 (the U.S. Housing and Urban Development regulations concerning Community Development Block Grants (CDBG)) including subpart K of these regulations, except that the Subrecipient does not assume the recipient's environmental responsibilities described in 24 CFR 570.604 or the Recipient's responsibility for initiating the review process under the provisions of 24 CFR Part 52. Grantee has a copy of the relevant sections of the CFR available for review or reproduction. The Subrecipient also agrees to comply with all other applicable Federal, state, and local laws, regulations, and policies governing the funds provided under this Agreement. The Subrecipient further agrees to utilize funds available under this Agreement to supplement, rather than supplant, funds otherwise available. The Subrecipient agrees to comply with all applicable requirements outlined in 24 CFR 570.502. In the event of noncompliance, Grantee may take any actions outlined under this Agreement or 2 CFR 200.338.

B. "Independent Contractor"

Nothing contained in this Agreement is intended to, or shall be construed in any manner, as creating, or establishing the relationship of employer/employee between the Parties. The Subrecipient shall at all times remain an "independent contractor" with respect to the services to be performed under this Agreement. The Grantee shall be exempt from payment of all Unemployment Compensation, FICA, retirement, life and/or medical insurance, and Workers' Compensation Insurance as the Subrecipient is an independent contractor.

C. Hold Harmless

The Subrecipient shall hold harmless, defend, and indemnify the Grantee from any and all claims, actions, suits, charges, and judgments whatsoever that arise out of the Subrecipient's performance or nonperformance of the services or subject matter called for in the Agreement.

D. Workers' Compensation

The Subrecipient shall provide Workers' Compensation Insurance coverage or its equivalent for all its employees involved in the performance of this Agreement.

E. Insurance & Bonding

The Subrecipient shall carry sufficient insurance coverage to protect contract assets from loss due to theft, fraud, and/or undue physical damage, and as a minimum shall purchase a blanket fidelity bond covering all employees in an amount equal to cash advances from the Grantee.

The Subrecipient shall comply with the bonding and insurance requirements of 2 CFR 200.325 (Grantee has a copy available for review or reproduction).

F. Amendments

The Grantee or Subrecipient may amend this Agreement at any time provided that such amendments make specific reference to this Agreement, are executed in writing, and signed by a duly authorized representative of both organizations. Such amendments shall not invalidate this Agreement, nor relieve or release the Grantee or Subrecipient from its obligations under the Agreement.

The Grantee may, in its discretion, amend this Agreement to conform with Federal, state, or local governmental guidelines, policies, and available funding amounts, or for other reasons. If such amendments result in a change of funding, the scope of services, or schedule of the activities to be underwritten as part of this Agreement, such modifications will be incorporated only by written amendment signed by both Grantee and Subrecipient.

G. Suspension or Termination

Either party may terminate this Agreement at any time in accordance with 2 CFR 200.339, as it exists or may be amended. Partial terminations of the Scope of Service in Paragraph I.A above may only be undertaken with the prior approval of the Grantee. In the event of any termination for convenience, all finished or unfinished documents, data, studies, surveys, maps, models, photographs, reports, or other materials prepared by the Subrecipient under this Agreement shall, at the option of the Grantee, become the property of the Grantee, and the Subrecipient shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents or materials prior to the termination.

The Grantee may also suspend or terminate this Agreement, in whole or in part, if the Subrecipient materially fails to comply with any term of this Agreement, or with any of the rules, regulations, or provisions referred to herein, by giving written notice to the Subrecipient of such termination or suspension, specifying the effective date thereof, which may be immediate, and in the case of a suspension, the period of and requirements for lifting the suspension; and the Grantee may declare the Subrecipient ineligible for any further participation in the Grantee's contracts, in addition to other remedies as provided by law. In the event there is probable cause to believe the Subrecipient is in noncompliance with any applicable rules or regulations, the Grantee may withhold up to fifteen percent (15%) of all funds disbursed under this Agreement until such time as the Subrecipient is found to be in compliance by the Grantee or is otherwise adjudicated to be in compliance.

VIII. ADMINISTRATIVE REQUIREMENTS

A. Financial Management

1. Accounting Standards

The Subrecipient agrees to comply with the financial management requirements of 2 CFR 200, Subpart D (Grantee has a copy available for review or reproduction) and agrees to adhere to the accounting principles and procedures required therein, utilize adequate internal controls required therein, and maintain necessary source documentation for all costs incurred.

2. Cost Principles

The Subrecipient shall administer its program in conformance with 2 CFR 200 Subpart E as applicable (Grantee has copies available for reproduction or review). These principles shall be applied for all costs incurred whether charged on a direct or indirect basis.

B. Documentation and Record-Keeping

1. Records to be Maintained

The Subrecipient shall establish and maintain records sufficient to enable the Grantee to: (1) determine whether the Subrecipient has complied with this Agreement, applicable Federal statutes and regulations, and the terms and conditions of the Grantee's Federal award; and (2) satisfy recordkeeping requirements applicable to the Grantee. The Subrecipient shall maintain, at a minimum, all records required by the Federal regulations specified in 24 CFR 570.506 that are pertinent to the activities to be funded under this Agreement.

2. Retention

As required by 24 CFR 570.502, the Subrecipient shall retain all records pertinent to expenditures incurred under this Agreement for a period of the longer of three (3) years after the expiration or termination of the subrecipient agreement, or three (3) years after the submission of the annual performance and evaluation report in which the specific activity is reported on for the final time. Records for individual activities subject to the reversion of assets provisions at 24 CFR 570.503(b)(7) or change of use provisions at 24 CFR 570.505 must be maintained for as long as those provisions continue to apply to the activity. Records for individual activities for which there are outstanding loan balances, other receivables, or contingent liabilities must be retained until such receivables or liabilities have been satisfied. Notwithstanding the above, if there is litigation, claims, audits, negotiations, or other actions that involve any of the records cited and that have started before the expiration of the three-year period, then such records must be retained until completion of the actions and resolution of all issues. Subrecipient shall also comply with the requirements of 2 CFR 200.333, as specified by 24 CFR 570.502.

3. Client Data

The Subrecipient shall maintain client data demonstrating client eligibility for services provided. Such data shall include, but not be limited to, client name, address, family size, income level or

other basis for determining eligibility, and description of service provided including how the service serves to prepare, prevent, or respond to COVID hardships. Such information shall be made available to Grantee monitors or their designees for review upon request and shall safeguard such information in compliance with 2 CFR 200.303. Subrecipient shall continue to maintain client data through the 'Use and Reversion of Assets' term identified in section VIII.E.2.

4. Disclosure

The Subrecipient understands that client information collected under this Agreement is private and the use or disclosure of such information, when not directly connected with the administration of the Grantee's or Subrecipient's responsibilities with respect to services provided under this Agreement, is prohibited unless written consent is obtained from such person receiving service and, in the case of a minor, that of a responsible parent/guardian.

5. Close-Outs

The Subrecipient's obligation to the Grantee shall not end until all close-out requirements are completed. Activities during this close-out period shall include, but are not limited to making final payments; disposing of program assets (including the return of all unused materials, equipment, unspent cash advances, program income balances, and accounts receivable to the Grantee); and determining the custodianship of records. Notwithstanding the foregoing, the terms of this Agreement shall remain in effect during any period that the Subrecipient has control over CDBG funds, including program income.

6. Audits & Inspections

All Subrecipient's records with respect to any matters covered by this Agreement shall be made available to the Grantee, grantor agency, their designees, or the Federal Government, or any of their authorized representatives, at any time during normal business hours, as often as the Grantee, or federal government deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by the Subrecipient within 30 days after receipt by the Subrecipient. Failure of the Subrecipient to comply with the above audit requirements will constitute a violation of this Agreement and may result in the withholding of future payments. The Subrecipient hereby agrees to have an annual agency audit conducted in accordance with current Grantee policy concerning recipient audits and, as applicable, 2 CFR 200 (grantee has copy available for review or reproduction). The Subrecipient agrees to participate in the implementation of the programmatic and fiscal requirements outlined in the Town of Flower Mound's CDBG CARES Act Program Polices & Procedures.

C. Reporting and Payment Procedures

1. Program Income

No program income will be generated under this Agreement.

2. Indirect Costs

If indirect costs are charged, the Subrecipient will develop an indirect cost allocation plan for determining the appropriate Subrecipient's share of administrative costs and shall submit such plan to the Grantee for approval, in a form specified by the Grantee.

3. Payment Procedures

The Grantee will pay the Subrecipient funds available under this Agreement monthly, based upon information submitted by the Subrecipient and consistent with any approved budget and Grantee policy concerning payments. Payments will be based on the established cost per unit for actual services provided. See Exhibit A. In addition, the Grantee reserves the right to liquidate funds available under this Agreement for costs incurred by the Grantee on behalf of the Subrecipient.

4. Progress Reports

The Subrecipient shall submit the following Monthly Activity Summary Reports: CDBG Request for Reimbursement Form and subsequent back-up documentation, the CDBG Client Data Summary Report, Demographic Report, and Summary Performance Objectives Report to the Town of Flower Mound Financial Services Department no later than the 15th of each month. Multiple failures to submit timely reports will be reflected in the Subrecipient's file and may be considered during the renewal process.

D. Procurement

1. Compliance

The Subrecipient shall comply with the procurement requirements of 2 CFR 200, Subpart D, as amended by 24 CFR 570.502, in all procurement under this Agreement. The Subrecipient shall additionally comply with current Grantee policy concerning the purchase of equipment and shall maintain inventory records of all non-expendable personal property as defined by such policy as may be procured with funds provided herein. See VIII.E.1. Reversion of Assets.

2. Travel

The Subrecipient shall obtain written approval from the Grantee for any travel outside the metropolitan area with funds provided under this Agreement.

IX. PERSONNEL & PARTICIPANT CONDITIONS

A. Civil Rights

1. Compliance

The Subrecipient agrees to comply with all local and state civil rights laws, regulations, or ordinances, as well as Title VI of the Civil Rights Act of 1964 as amended, Title VII of the Civil Rights Act of 1964 as amended, Section 104(b) and Section 109 of Title 1 of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973,

the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and with Executive Order 11246 as Amended by Executive Orders 11375 and 12086. Grantee has copies of applicable compliance documents for review or reproduction.

2. Nondiscrimination

The Subrecipient agrees to comply with the non-discrimination in employment and contracting opportunities laws, regulations, and executive orders referenced in 24 CFR 570.607, as amended. Any applicable non-discrimination provisions in Section 109 of the HCDA are still applicable.

3. Section 504

The Subrecipient agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 706), which prohibits discrimination against the handicapped in any Federally assisted program. The Grantee shall provide the Subrecipient with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Agreement.

B. Affirmative Action

1. Fair Housing

The Subrecipient agrees to assist the Grantee by taking meaningful actions to further fair housing. If requested, the Subrecipient will distribute outreach and educational materials to its clients on behalf of the Grantee and provide space for meetings, workshops, and other outreach efforts as needed.

2. Women- and Minority-Owned Businesses (W/MBE)

The Subrecipient will use its best efforts to afford minority- and women-owned business enterprises the maximum practicable opportunity to participate in the performance of the Agreement. As used in this Agreement, the term “minority and female owned business enterprise” means a business at least fifty-one percent (51%) owned and controlled by minority group members or women. For the purpose of this definition, “minority group members” are African Americans; Spanish-speaking, Spanish surnamed, or Spanish-heritage Americans; Asian-Americans; and American Indians. The Subrecipient may rely on written representations by businesses regarding their status as minority and female business enterprises in lieu of an independent investigation.

3. Access to Records

The Subrecipient shall furnish and cause each of its own subrecipients or subcontractors to furnish all information and reports required hereunder and will permit access to its books, records, financial statements, and accounts by the Grantee or its agents, HUD or its agent, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations, and provisions stated herein.

4. Notifications

The Subrecipient will send a notice to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding to be provided by the agency contracting officer, advising the labor union or worker's representative of the Subrecipient's commitments hereunder, and shall post copies of the notice in conspicuous places to employees and applicants for employment.

5. EEO/AA Statement

The Subrecipient will, in all solicitations or advertisements for employees placed by or on behalf of the Subrecipient, state that it is an Equal Opportunity or Affirmative Action employer.

6. Subcontract Provisions

The Subrecipient will include the provisions of Paragraphs XI.A, Civil Rights, and B, Affirmative Action, in every subcontract or purchase order, specifically or by reference, so that such provisions will be binding upon each of its own subrecipients or subcontractors.

C. Employment Restrictions

1. Prohibited Activity

The Subrecipient is prohibited from using funds provided herein or personnel employed in the administration of the program for political activities; sectarian or religious activities; or lobbying, political patronage, and nepotism activities.

D. Conduct

1. Assignability

The Subrecipient shall not assign or transfer any interest in this Agreement without the prior written consent of the Grantee thereto; provided, however, that claims for money due or to become due to the Subrecipient from the Grantee under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the Grantee.

2. Subcontracts

a. Approvals

The Subrecipient shall not enter into any subcontracts with any agency or individual in the performance of this Agreement without written consent of the Grantee prior to the execution of such agreement.

b. Monitoring

The Subrecipient will monitor all subcontracted services on a regular basis to assure compliance with this Agreement. Results of monitoring efforts shall be summarized in written reports and supported with documented evidence of follow-up actions taken to correct areas of noncompliance and shall be provided to Grantee upon request.

c. Content

The Subrecipient shall cause all of the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

d. Selection Process

The Subrecipient shall undertake to ensure that all subcontracts let in the performance of this Agreement shall be awarded on a fair and open competition basis. Executed copies of all subcontracts shall be forwarded to the Grantee along with documentation concerning the selection process.

3. Hatch Act

The Subrecipient agrees that no funds provided, nor personnel employed under the contract, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V United States Code.

4. Conflict of Interest

The Subrecipient agrees to abide by the provisions of 24 CFR 570.611 and 2 CFR 200 with respect to conflicts of interest. In the event of conflict between the provisions, the most stringent requirements shall apply.

5. Lobbying

The Subrecipient hereby certifies that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency; a Member of Congress; an officer or employee of congress; or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, it

will complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

c. It will require that the language of paragraph (d), "Lobbying Certification," be included in the award documents for all sub awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly; and

d. Lobbying Certification: This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

6. Copyright

If this Agreement results in any copyrightable material or inventions, the Grantee and/or grantor agency reserves the right to royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use and to authorize others to use, the work or materials for government purposes.

7. Religious Organization and Equal Participation of Faith-based Organizations

The Subrecipient agrees that funds provided under this Agreement will be used in compliance with 24 CFR 570.200(j) and the Federal regulations specified therein, specifically requiring equal participation, separation or religious activities, and beneficiary protections found in 24 CFR 5.109.

E. 24 CFR 570, Subpart K

The Subrecipient agrees to carry out each activity in compliance with all other applicable Federal laws and regulations described in 24 CFR 570, subpart K, as specified by 24 CFR 570.503, which are not specifically outlined herein.

X. SEVERABILITY

If any provision of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall not be affected thereby, and all other parts of this Agreement shall nevertheless be in full force and effect.

XI. WAIVER

The Grantee's failure to act with respect to a breach by the Subrecipient does not waive its right to act with respect to subsequent or similar breaches. The failure of the Grantee to exercise or enforce any right or provision shall not constitute a waiver of such right or provision.

XII. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the Grantee and the Subrecipient for the use of funds received under this Agreement and it supersedes all prior or contemporaneous

communications and proposals, whether electronic, oral, or written between the Grantee and the Subrecipient with respect to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this contract as of the date first written above.

Town of Flower Mound	Children's Advocacy Center for North Texas
By:_____	By:_____
Derek France, Mayor	Kristen Howell, CEO

EXHIBIT A – PROGRAM SUMMARY

Children's Advocacy Center for North Texas (CACNT) and its partners are the front-line responders to reports of child abuse in Denton County. They provide a coordinated, multi-disciplinary approach to child abuse cases, empowering child abuse vicitims, their families, and our community by providing education, healing, and justice. Children are considred secondary vicitims of domestic violence and CACNT will utilize the CDBG-CV funds provided by the Town of Flower Mound to assist Flower Mound residents who have been impacted in this area of service. Services provided will include, but are not limited to, multi-disciplinary case coordination, forensic interviews, forensic medical exams, and mental health services.

Program Timeline

AUGUST 1, 2022 THROUGH JULY 31, 2023.

Scope of Services

A. Targeted Flower Mound (Unduplicated) Clients: 75

B. Each unit of service will be reimbursed at a rate of $196.63 not to exceed $80,098.25 for the entire contract.

TOWN COUNCIL AGENDA ITEM NO. 9
CONSENT ITEM

DATE: July 18, 2022

FROM: Lavona Burgess, Director of Police Support Services

ITEM: **Consider approval of the purchase of one (1) 2023 Ford Pursuit Rated Hybrid Police Interceptor Utility with Police equipment packages as per Town of Flower Mound Specifications and Vendor Quote from the Holiday Auto Group for Police Services in the amount of $61,863.00.**

BACKGROUND INFORMATION: The Police Services Department is requesting the purchase of one (1) new 2023 Ford Pursuit Rated Hybrid Police Interceptor Utility with Police equipment packages as per Town of Flower Mound Specifications and Vendor estimate #33647 in the amount of $61,863.00 from the Holiday Auto Group through Tarrant County Cooperative Contract #2020-174. This purchase is to replace Unit No. 43500-26, a 2015 Ford Taurus. The replacement of the vehicle is a part of the approved Fiscal Year 21-22 Vehicle Equipment Replacement Fund (VERF).

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: $61,863.00

Proposed Expenditure/(Revenue):	Account Number(s):
$ 61,863.00	565-450-84500-6130 - VERF

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Fleet Manager's Bid Award Recommendation for Vehicle
2. Quote – Estimate # 33647
3. Town of Flower Mound Specifications

DRAFT MOTION: Move to approve as presented in the agenda caption.

Attachment 1

Bid Award Recommendation

Date: 06/16/2022

Description: **Ford Pursuit Rated Hybrid Police Interceptor Utility – FY22 VERF**

Qty.: 1

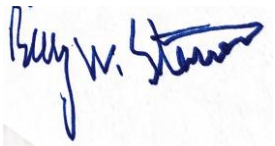
Replaces: *43500-26, a 2015 Ford Taurus.*

Bidder: Holiday Auto Group, Mike Hewitt 903-564-5641, mike@defendersupply.com
Estimate# 33647, Tarrant County Cooperative Contract# 2020-174.

Item: One – 2023 Ford Pursuit Rated Hybrid Police Interceptor Utility with Police Equipment Packages as per TOFM Specs and as identified within Cooperative quote 33647.

Total Cost of Vehicles, Equipment & Installation:
$61,863.00

It is Fleet Services recommendation to award the bid to **Holiday Auto Group** in the amount of **$61,863.00** utilizing the **Tarrant County Cooperative Contract # 2020-174**.



Fleet Services Manager

06/16/2022

Date

Attachment 2

HOLIDAY AUTOGROUP.COM

Date	4/28/2022
Estimate #	33647
Estimate By	Mike
	mike@defendersupply.com
	903-771-1089



Bill To
Town of Flower Mound 2121 Crosstimbers Rd Flower Mound, TX 75028

Customer Contact	
Customer Phone	972-874-6037 AP
Customer E-mail	accountspayable@flower-mound....

Description	Location	Qty	Price	Total
** Pricing Per Tarrant County Cooperative Contract # 2020-174 **				
2023 Ford INT SUV Hybrid Pursuit Rated Police Package (Unit 43500-26) Per attached Specs 2022 Ford INT SUV V6 Regular Gasonline Engine Pursuit Rated Police Package can be substituted for $33,479.00. Stock units already on order just held up due to microchip.		1	40,765.00	40,765.00T
2 Year Texas State Inspection Certificate		1	7.00	7.00T
Vehicle Dealer Prep		1	130.00	130.00T
Window Tint - For Two Front Windows 55% Madico Onyx		1	79.00	79.00T
7170-0734-05 Gamber Johnson 2020+ Ford Police Interceptor® Utility Low-Profile Console Box with Cup Holder , Armrest, and 6" Locking Slide Arm Kit		1	695.50	695.50T
Gamber Johnson Mongoose 9' Locking Slide Arm with 360 Degree Clevis for Computer Docking Station		1	249.00	249.00T
Docking Station for Dell's Latitude 14 Rugged and Latitude 12 & 14 Rugged Extreme Notebooks (Basic Port Replication)		1	497.00	497.00T
Setina Dual T-Rail Weapon System with handcuff key		1	349.00	349.00T
Setina T-Rail Universal Lock, EoTech Bracket		1	13.00	13.00T
Setina Self Supporting Gun Rack Mount, 2023 Ford INT SUV		1	122.00	122.00T
Vehicle Mount, Setina Box		1	188.00	188.00T
Pro-Gard cargo barrier for the 2020+ PI SUV (w/ wire mesh)		1	397.00	397.00T

Final sale amount may be subject to state and local sales tax. PLEASE NOTE: Once this estimate has been approved, either by signature on this form, written approval referencing the estimate number or the issuance of purchase order, any changes or cancellations of parts made by the customer are subject to a 25% restocking fee. Any addtional customer-requested parts/services will be added to the total amount of the sale.

Vehicle & Emergency Equipment Total

Signature

HOLIDAY AUTOGROUP.COM

Date	4/28/2022
Estimate #	33647
Estimate By	Mike
	mike@defendersupply.com
	903-771-1089



Bill To
Town of Flower Mound 2121 Crosstimbers Rd Flower Mound, TX 75028

Customer Contact	
Customer Phone	972-874-6037 AP
Customer E-mail	accountspayable@flower-mound....

Description	Location	Qty	Price	Total
Whelen FST WecanX Inner Edge for 2015-2020+ PI SUVs (front, 10-lights)	Front Visor	1	779.00	779.00T
Whelen Cencom Core Amp Control Module		1	559.00	559.00T
Whelen WeCanX Console Mount 21 Button/Slide Control Head		1	69.00	69.00T
2020 Ford Interceptor Utility Gateway Installation Kit for use WITHOUT Ford 61B Factory Option		1	86.00	86.00T
Whelen WeCanX Core 8 Expansion Module		1	88.00	88.00T
Whelen Vehicle-to-Vehicle Sync Module		1	11.00	11.00T
Whelen 100 Watt All Weather Heavy Duty Composite Siren Speaker	Behind Grll	1	139.00	139.00T
Behind the Grill speaker bracket (driver side) for a 2020 PI SUV.		1	22.00	22.00T
Whelen Surface Mount ION Trio Light Head in Red/Blue/White		2	89.00	178.00T
Whelen Trio Color LInear ION Red/Blue/White		6	89.00	534.00T
Whelen ION T-Series Linear Super-LED DUO Color Surface Mount in Red/Blue Split Heads		2	67.00	134.00T
Whelen Strip-Lite Plus Surface Mount Super-LED Series DUO, Red/Blue	Rear Quarter Glass	2	135.00	270.00T
Defender Intersector 180 Degree Output LED Tricolor - Red/Blue/White Under Mirror Mounted Light for Critical Intersection & Side Warning Purposes		2	282.00	564.00T
Inner Edge 8 Lamp Interior Light Tray Mounted in Rear Liftgate Window Firing to the Rear & Designed for the 2020+ Ford Interceptor Utility SUV	Rear Glass-Rear Facing		850.00	850.00T
Whelen 360 Degree LED Side Emitter Light Head - Red	Front&Rear Corner Provisions	2	61.00	122.00T
Whelen 360 Degree LED Side Emitter Light Head - Blue	Front&Rear Corner Provisions	2	61.00	122.00T
Whelen Universal Solid State Tail Light Flasher		1	56.00	56.00T
Whelen Howler system for a 2020+ PI SUV		1	381.00	381.00T

Final sale amount may be subject to state and local sales tax. PLEASE NOTE: Once this estimate has been approved, either by signature on this form, written approval referencing the estimate number or the issuance of purchase order, any changes or cancellations of parts made by the customer are subject to a 25% restocking fee. Any addtional customer-requested parts/services will be added to the total amount of the sale.

Vehicle & Emergency Equipment Total

Signature

HOLIDAY AUTOGROUP.COM

Date	4/28/2022
Estimate #	33647
Estimate By	Mike
	mike@defendersupply.com
	903-771-1089



Bill To
Town of Flower Mound 2121 Crosstimbers Rd Flower Mound, TX 75028

Customer Contact	
Customer Phone	972-874-6037 AP
Customer E-mail	accountspayable@flower-mound....

Description	Location	Qty	Price	Total
Whelen LED Flush Mount Compartment Light in Red & White		5	37.00	185.00T
Universal Mount 6 Round w/ Red LED Night Light, 10-30v - White LEDs/White Lens		1	49.00	49.00T
TCRWX5 Whelen WeCanX Tracer, Trio, R/B/W	Running Boards	2	877.00	1,754.00T
Whelen Tracer Mounting Kit for 2020+ Ford Interceptor Utility SUV (Pair)		2	22.00	44.00T
MINI ION T-SERIES LT RED/BLUE		2	69.00	138.00T
Streamlight Charger Sleeve Assembly (SL-20X, SL-20X-LED, SL-20XP-LED) (Cord not included)		1	18.00	18.00T
Streamlight Power Cord for Mobile Charger Sleeve		1	11.00	11.00T
Power Cord for DS-DELL-410 Series and DS-DELL-600 Series Docking Stations with Internal Power Supplies only.		1	72.00	72.00T
Cable for Stalker Radar:				
Stalker 8 ft. Antenna Cable		1	111.00	111.00T
OBSOLETE-USE PN AC-155-2591-20Stalker 20 ft. Antenna Cable		1	173.00	173.00T
VSS Cable Kit W/Serial Port--Caprice, Charger, Durango, F-150, Interceptor-Sedan, Interceptor-SUV		1	157.00	157.00T
Stalker Remote Display Interconnect Cable		1	89.00	89.00T
Stalker Mounting Brackets for Counting Unit & Front Antenna for the Stalker Dual SL & DSR 2X Radar Systems for the 2013+ Ford Interceptor Utility SUV		1	142.00	142.00T
Panorama GPS-D-2148, GPSD+/C29/C32/C74/CABLES KIT		1	312.00	312.00T
AFM 835 700-800 whip		1	14.00	14.00T
Radio Cable FRadio Cable FME(ftd) MPL(ftd) 5m CS23 cable		1	21.00	21.00T
Jotto Desk Magnetic Console Mic Clip		2	35.75	71.50T
Havis - Console Mount Mic Clip Bracket		2	10.00	20.00T
12-volt vehicular power cable for Cradlepoint		1	51.00	51.00T
CABLES for RADIO				

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Vehicle & Emergency Equipment Total

Signature

HOLIDAY AUTOGROUP.COM

Date	4/28/2022
Estimate #	33647
Estimate By	Mike
	mike@defendersupply.com
	903-771-1089



Bill To
Town of Flower Mound 2121 Crosstimbers Rd Flower Mound, TX 75028

Customer Contact	
Customer Phone	972-874-6037 AP
Customer E-mail	accountspayable@flower-mound....

Description	Location	Qty	Price	Total
HAF4013A Motorolla Antenna (762-870 mHz)		1	69.00	69.00T
Main radio power cable		1	29.00	29.00T
Power cable plus speaker outs for Motorola XTL 5000		1	56.00	56.00T
Motorola 13-Watt Police Radio Speaker with Mounting Bracket		1	77.00	77.00T
17' remote cable		1	76.00	76.00T
3/4', Thru-hole Mounts, 17' solid core coax cable		1	12.00	12.00T
Federal Signal External Use LED Opticom Emitter Designed for Public Service Use (square)		1	1,415.00	1,415.00T
Professional Design & Installation of Graphics for Customer's Department by Defender Supply-GRAFFIX SHOPPE		1	555.00	555.00
Professional Installation of Graphics by Defender Supply - DOUG		1	152.00	152.00
RED or YELLOW Rocker Switches for Cargo Dome		2	5.00	10.00T
SPEAKER MODULE ASSEMBLY, EXT SPKR 7.5W		1	59.00	59.00T
Watch Guard Cables		1	581.00	581.00T
Xantrex Prowatt 1000 Inverter w/remote switch		1	322.00	322.00T
ProClip Top Support Charger #560753		1	149.00	149.00T
ProClip Printer Mount Kit #241425		1	84.00	84.00T
Zebra ZQ520 Printer Charge Cable (hardwire)		1	121.00	121.00T
Defender Supply Electronic Equipment mounting system with Protection Cover - Mounts to cargo partition in the Rear Cargo Area to Install and Protect Electronic Equipment and Power Distribution for Cleanliness and Easy Maintenance Access.		1	179.00	179.00T

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Vehicle & Emergency Equipment Total

Signature

HOLIDAY AUTOGROUP.COM

Date	4/28/2022
Estimate #	33647
Estimate By	Mike
	mike@defendersupply.com
	903-771-1089



Bill To
Town of Flower Mound 2121 Crosstimbers Rd Flower Mound, TX 75028

Customer Contact	
Customer Phone	972-874-6037 AP
Customer E-mail	accountspayable@flower-mound....

Description	Location	Qty	Price	Total
Installation of Customer Supplied Items Cradle Point APX6500 Radio Axon Fleet 2 Video System		11	110.00	1,210.00
Removal of Watch Guard Video System		2	125.00	250.00
Installation of Above Emergency Equipment as Listed:		28	110.00	3,080.00
Shipping of Above Emergency Parts for Upfit		1	91.00	91.00T
Misc. Shop Supplies		1	87.00	87.00T
Defender Supply Wiring Harness, Power Distribution Block and Battery Management System		1	639.00	639.00T
Defender Supply Dual Tone Siren Package for Core. Includes Amp, 100 Watt Speaker, Bracket. Includes Installation.		1	672.00	672.00
Texas Government or Municipality - No Sales Tax			0.00%	0.00

Final sale amount may be subject to state and local sales tax. PLEASE NOTE: Once this estimate has been approved, either by signature on this form, written approval referencing the estimate number or the issuance of purchase order, any changes or cancellations of parts made by the customer are subject to a 25% restocking fee. Any addtional customer-requested parts/services will be added to the total amount of the sale.

Vehicle & Emergency Equipment Total **$61,863.00**

Signature _____

Town of Flower Mound

PURCHASING SPECIFICATIONS **SPECIFICATION NO.:**

Revised: April 25, 2022

ITEM: (1) New Ford Interceptor Hybrid Pursuit rated Police pkg. SUV, 4-door, All wheel drive

(TOFM vehicle replacement program Unit's 43500-26)

FUNCTION: Pursuit Application Vehicle. Public Safety unit with rear cargo area for transporting various types of equipment.

DESCRIPTION: (The following should be interpreted as examples only, for the type of vehicle requested. It is not the intent of the Town of Flower Mound to exclude any vehicle which meets or exceeds the required specifications in this bid.)

NOTE:

Bidder MUST indicate: 'Yes' unit bid meets or exceeds the minimum required specification, or 'No' unit bid does not meet or exceed the minimum required specification listed. Failure to do so could result in disqualification of bid.

ATTENTION:

It is the intent of the Town of Flower Mound to satisfy the requirements setforth by the EPA (Environmental Protection Agency) whenever purchasing new vehicles and/or equipment.

Bidder / Flower Mound		
Y/N	**Y/N**	
Y	Y__	1. Unit bid is EPA LEV (Certified Low Emmissions Vehicle).
Y	Y__	2. Unit bid is an E-85 flex-fuel vehicle. (FFV not required for this application.)

DRIVE TRAIN

Bidder / Flower Mound

Y/N	Y/N	
Y	Y__	1. Engine: Gasoline, minimum 3.0L or equal State engine size bid: 3.0L
__	Y__	2. Automatic Transmission
__	Y__	3. Fuel tank: min. 18 gal.
__	Y__	4. Dual Heavy duty battery
__	Y__	5. Power Anti-lock Braking System, 4-wheel Disc
__	Y__	6. All wheel drive
__	Y__	7. Hybrid Battery Technology

TIRES AND WHEELS

Bidder / Flower Mound

Y/N	Y/N	
Y	Y__	1. Tires: Radial highway, all season
__	Y__	2. Full size spare tire with jack
__	Y__	3. Matching full size spare tire/wheel
__	Y__	4. Ice/Snow cables (1 set, for 2 tires) per the tire size bid

CAB & EQUIPMENT

Bidder / Flower Mound

Y/N	Y/N	
Y	Y__	1. Power Steering
__	Y__	2. Tinted glass (rear factory darkness)
__	Y__	3. Intermittent wipers
__	Y__	4. Exterior Paint: **Black**
__	Y__	5. Seats: Cloth Front lowback (bucket) seats, Rear Vinyl

Y 6. Y__ Rear fold down seat, (preferred 60/40 split)

7. Y__ Front/ Rear Air Conditioning (17A)

8. Y__ Radio: Standard AM / FM

9. Y__ Rear Window Defroster

10. Y__ Interior cargo area.
Preferred width: min. 60".
State width of unit interior bid: 60"

Preferred cargo volume: min. 20 cu.ft.
State cargo volume of unit bid: 20 cu ft

Y 11. Y__ Rear window washer and wiper

12. Y__ Power windows, door locks, mirrors

13. Y__ Front and Rear vinyl flooring

14. Y__ Interior: Dark gray or equivalent dark interior

15. Y__ Keyless entry

16. Y__ Four (4) sets of keys (Must be included at time of vehicle delivery) (55F)

17. Y__ All vehicles keyed alike

18. Y__ Rear lift hatch

19. Y__ 1 - Vehicle spotlight/post and door mount (LED), located on the driver side only.

20. Y__ Tow Hitch / Package

21. Y__ Flasher System (Headlamp and Tailamp)

22. Y__ Bluetooth

23. Y__ LED Tails Pre-Drilled for Vertex (86T)

24. Y__ Front Passenger Power Seat 87P

25. Y__ Rear Hatch Switch Delete 18D

Y__ 26. Dark Car 43D

Y__ 27. OBD Splitter 61B

Y__ 28. Reverse Sense 76R

Y__ 29. Blind Spot Sensor 55B

Y__ 30. Rear Camera on Demand 19V

Y__ 31. Police Idle 47A

Y__ 32. Global Unlokck 18D

Y__ 33. Camera in Rear View Mirror 87R

Y__ 34. Tow Lighting Package 52T

Y__ 35. H8 AGM Battery 19K

Y__ 36. Noise Suppression Bond Straps 60R

OTHER EQUIPMENT

Bidder / Flower Mound
Y/N Y/N

Y__ 1. Pursuit Package (Law Enforcement Emergency Vehicle Package) to include but not limited to: engine and transmission cooling package, increased electrical power and heavy duty suspension.)

Y__ 2. Vehicle State Inspection when delivered (2 year certificate)

ATTENTION: *

ALL ITEMS LISTED UNDER "EQUIPMENT OPTIONS" BELOW WILL BE INCLUDED IN THE OVERALL COST AND MAKE READY OF THE REQUESTED VEHICLE SPECIFICATION AS PART OF THE FINAL UNIT. ALL PRICING AND INSTALLATION CHARGES MUST BE INCLUDED IN THE OVERALL COST OF EACH UNIT.

Quantity	Item Description	Cost
1	Gamber Johnson w/cup holder/armrest/slide	695.5
1	Gamber Johnson 9" Locking Slide Arm	249
1	GJ console bracket for USB and 12v	Incl
1	Havis Docking Station for Dell Rugged	497
1	Setina Dual T- Rail weapon Mount w/ handcuff	349
1	Setina Universal T-Rail Lock EOTech	13
1	Setina Self Supporting Gun Rack Mount	122
1	Setina Expanded Metal Rear Partition	397
1	Setina Ford legs for Cargo Storage Box	188
1	Whelen – Inner Edge FST Duo R/W B/W	779
1	Whelen Core Amp Module	559
1	Whelen Canport for 2021+ Explorer	86
1	Whelen Core w/ 21 Button Head	69
1	Whelen Core Expansion Pack	88
1	Whelen Core Sync Module	11
1	Whelen 100 Watt Siren Speaker	139
1	Whelen Siren Bracket (behind grill)	22
2	Whelen ION Trio Surface Mount R/B/W	178
6	Whelen ION TRIO R/B/W Universal	534
2	Whelen ION Mini T Duo R/B	134
2	Whelen Strip light R/B (rear quarters)	270
1	Defender/Soundoff 180 degree Intersector R/B/W	564
1	Whelen – Inner Edge RST Duo R/A B/A	850
2	Whelen Vertex Solo Red	122
2	Whelen Vertex Solo Blue	122
1	Whelen Headlight/Tailight Flasher Modules	56

1	Whelen Howler	381
5	Whelen 3" Round Super LED Light head R/W	185
1	Soundoff Interior Dome light (Officer)	49
1	Whelen Tracer Trio R/B/W w/ mount	1754
1	Whelen Tracer Interceptor Mount	44
2	Whelen Mini ION T R/B	138
1	Streamlight SL-20L LED Flashlight charge sleeve	18
1	Streamlight DS Charge Cable (22051)	11
1	Lind Power Suply for Dell Lat. 5414	72
1	Stalker 2X 8' antenna cable	111
1	Stalker 2X 20' antenna cable	173
1	Stalker VSS Cable Kit	157
1	Stalker Remote Display Cable	89
1	Stalker Rear Antenna Mount 200-1378-00	142
1	Stalker Display Mount 200-1379-00	Incl
1	Panomara GPS-D 2148 kit , C23F-SM	312
1	Panorama AFM 835 Whip	14
1	CS23 Radio Cable	21
2	Jotto Desk Mic Clips	71.5
2	Havis Console Mount Clip Bracket	20
1	Cradlepoint COR IBR900 wiring harness	51
1	HAF4013A Motorolla Antenna	69
1	Motorola Radio Power Cable	29
1	Motorola Power Cable with Speaker outs XTL5000	56
1	Motorola 13 Watt Speaker with mount	77
1	Motorola 17' Remote Cable	76
1	3/4" Thru Hole Mounts 17' COAX	12
1	Federal Signal Opticom w/ Bracket (square)	1415
1	FMPD Graphics Kit w/ US/TX Flags	555
1	Graphic Installation	152
2	Red Rocker Switches	10
1	Motorola Radio speaker 7.5w	59
1	WatchGuard Cable Kit 4RE	581

1	Xantrex Prowatt 1000 Inverter w/ remote switch	322
1	ProClip Top Support Charger #560753	149
1	ProClip Printer Mount Kit #241425	84
1	Zebra ZQ520 Printer Charge Cable hardwire	121
1	Madico Window Tint 35% Front 2 Windows	79
1	Defender Electronics Tray Partition Mount	179
1	Defender Wiring Harness	639
1	Defender Dual Tone Siren	672
	Total Equipment Cost	$16,243

ATTENTION: **
THE FOLLOWING ITEMS WILL BE REMOVED FROM TOWN OF FLOWER MOUND DECOMMISSIONED VEHICLES (Chevy Tahoe) AND RE-INSTALLED/TRANSFERRED ONTO NEW TAHOE UNITS. ALL PRICING AND INSTALLATION CHARGES MUST BE INCLUDED IN THE OVERALL COST OF EACH UNIT.

Quantity	Transferred Items		Cost
1	Install - Cradlepoint COR IBR900	Cust Supplied	302.50
1	Install - Motorola APX6500	Cust Supplied	302.50
1	Install - Watch Guard 4RE	Cust Supplied	302.50
1	Install - Setina Cargo Box	Cust Supplied	302.50
1	Removal – WatchGuard 4RE		250
	Total Transferred Cost		$1460

TOTAL Cost of EQUIP	**$ 16,243**
TOTAL COST OF INSTALL **(Includes Transferred Item Cost)**	**$ 4,718**
TOTAL VEHICLE COST	**$ 40,902**
TOTAL BID PRICE **(To include all listed equipment and installation)**	**$ 61,863**

Warranty: Standard Manufacturers warranty. Please specify.

_____

_____

COMMENTS

Use this page to explain any items that you marked no on above:

_____

_____

_____

_____

_____

TOWN COUNCIL AGENDA ITEM NO. 10

CONSENT ITEM

DATE: July 18, 2022

FROM: David Stallings, Traffic Operations Manager

ITEM: **Consider approval of the purchase of traffic analytics detection systems and other traffic related parts, in the estimated annual amount of $500,000.00, from AM Signal, through the Purchasing Cooperative of America contract.**

BACKGROUND INFORMATION: In order to maintain compatibility and expedite the timely order of traffic analytic detection systems and other related traffic products for the Town of Flower Mound, the Transportation Services Division is requesting to use the Purchasing Cooperative of America contract OD-358-21 for purchasing traffic signal related products.

The items available under this contract are traffic analytic detection systems, ITS cameras, and other related traffic products. Traffic analytic detection systems allow continuous, multimodal traffic data to be collected, providing the foundation for more accurate signal timing plans and adaptive signal implementation. By continuously collecting data, the impact of existing changes can be measured and, in the future, provide the measured benefit of adaptive signal timing when implemented. Orders will be placed on an as needed basis only. Each purchase will be funded by either the appropriate CIP project account or the Traffic Signal Division's base budget.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: If the use of this contract is not approved the cost and time frame of acquiring this equipment will increase.

FISCAL IMPACT: $500,000.00

Proposed Expenditure/(Revenue):	Account Number(s):
$500,000.00 estimated annually	Various Projects and Accounts

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Verified PCA contract #OD-358-21

DRAFT MOTION: Move to approve as presented in the agenda caption.

PCA Purchasing Cooperative of America

AM Signal, LLC

Awarded Contracts:

- **PCA OD-358-21 Traffic Control Products, Services and Related Items**
  - Awarded: December 13, 2021 Ends: December 12, 2026

Contacts:

Zac Ward – Vice President of Sales
PH: 303.408.1812
Email: zac@amsignalinc.com

Parker Koenig – Technical Sales Representative
PH: 469.408.6544
Email: parker@amsignalinc.com

Brooke Hageny – Chief Estimator
PH: 720-231-2641
Email: brooke@amsignalinc.com

Gale Nation – Estimator/Contract Manager
PH: 720-749-1671
Email: gale@amsignalinc.com

Members put "PCA OD-358-21 – Traffic Control Products… on your Purchase Order.

AM Signal, LLC – Established in 2001, AM Signal has grown to be a leader in the distribution of traffic signal control devices and Intelligent Transportation Systems (ITS) across 14 states in the Rocky Mountain Region. We are a full service, stocking distributor for numerous product lines, with full support from design to technical. AMS represents and distributes products from approximately30 vendors for the most renowned traffic signal control device and ITS system manufacturers, such as FLIR (detection and thermal cameras), TAPCO (flashing beacons and wrong way detection systems), Pelco (pedestrian signals), APC Schneider (UPS & power supplies), ATSI (Conflict Monitor Testers), Belden (Hirschman Ethernet Switches), Genetec (Video Management), Bosch (ITS Cameras), MioVision (360 Cameras) just to name a few.

AMSIGNAL

Please click on the logo to go directly to company's site.

AM Signal, LLC
8100 Southpark Way, Unit A10
Littleton, CO 80120

Phone: (720) 348-6925
Fax: (720) 348-6950

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TOWN COUNCIL AGENDA ITEM NO. 11

CONSENT ITEM

DATE: July 18, 2022

FROM: JP Walton, Strategic Services Manager

ITEM: **Consider adoption of the Town Council 2022 Strategic Planning Session Summary Report.**

BACKGROUND INFORMATION: The Town of Flower Mound is guided by its vision statement: "The vision of Flower Mound is to preserve our unique country atmosphere, heritage, and quality of life while cultivating a dynamic economic environment." This vision statement is embraced by the Town Council, Town Manager, and Executive Team, and underpins the Town's strategic planning and daily operations. The Town's strategic plan to achieve this vision is set by the Town Council during long-term planning sessions held annually. The Town has been conducting strategic planning since 1997 when it first adopted its vision statement.

Upon adoption of the report, staff will update the Town Council Strategic Plan and begin preparation for adoption following Fiscal Year 2022-2023 Budget approval. Adoption of the report ensures that the Town Council and staff are in alignment with the direction.

The Town Council met on June 16, 2022, to discuss the following topics during their Strategic Planning Session (packet/video). The attached report provides responsibility, scope of discussion, considerations, provided direction, timing and next steps for each topic below.

1. Cultural Arts Center	2. Traffic Management & Synchronization/Smart Traffic Signal Improvements	3. Homestead Exemption Increase	4. TIRZ #1 Status
5. ED Roundtable Update/Office Development Incentive Program	6. Development Fee Discussion	7. Cross Timbers Conservation Development District	8. Land Use Discussion
9. Warehouse Use	10. New Resident Development Education/Information	11. Regulatory Relief for Mandatory Sewer Connections	12. Dedicated Sales Tax Elections
13. FM Historical Commission	14. Murals and Public Art		

BOARD REVIEW/CITIZEN FEEDBACK: Each year, staff solicits topics for discussion from various boards and commissions. This year, the Planning & Zoning Commission and Environmental Conservation Commission elected to provide input.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. 2022 Town Council Strategic Planning Session Summary Report

DRAFT MOTION: Move to approve as presented in the agenda caption.

June 16, 2022, Town Council Strategic Planning Session Summary Report

ITEM	TOPIC	RESPONSIBILITY	SCOPE OF DISCUSSION	CONSIDERATIONS	DIRECTION	TIMING	NEXT STEPS
1.	Cultural Arts Center	TMO	Presentation of the Cultural Arts Center Feasibility Study for the site located at 1800 Timber Creek Rd.	Presented the feasibility of the existing building at 1800 Timber Creek Rd and presented a new Cultural Arts Center on the property to include options for phasing.	1. Interested in Cultural Arts Center 2. Not interested in 1800 Timber Creek Rd location 3. Look at including more outdoor programming space in future plans 4. Plan for the future use of the 1800 Timber Creek Rd Property	N/A	1. Identify alternate location for a Cultural Arts Center 2. Plan for the future use of the 1800 Timber Creek Rd property
2.	Traffic Management & Synchronization/Smart Traffic Signal Improvements	PW	Discussed traffic management, synchronization, and adaptive signal timing in order to receive direction from Council on their preference of an adaptive signal timing corridor for implementation.	Discussed how Adaptive Signal Control Technology (ASCT) works and possible outcomes of the system. Considered and discussed corridors to implement the ASCT system to include options along 407, Morriss/Gerault, and FM 2499.	Interested in implementing ASCT along the Morriss/Gerault Corridor. Bring back during the budget process.	August 18th TC Budget Work Session	1. Add ASCT along the Morriss/Gerault corridor to the FY22-23 CIP
3.	Homestead Exemption Increase	FS	Discussed increasing the current Homestead Exemption.	Discussed the upcoming FY22-23 Budget, background information on recent increases to the Homestead Exemption, and discussed the impacts of increasing the Homestead Exemption.	Interested in increasing the Homestead Exemption to 10%. Bring forward at the next TC Meeting.	June 20th TC Meeting	1. Bring forward a 10% Homestead Exemption to TC Meeting
4.	TIRZ #1 Status	ED/PW	Discussed the current status of TIRZ #1.	Discussed the current project plan for TIRZ #1, additional projects that can be added, and managing the termination of the TIRZ to include left over and ongoing funds.	Continue to look for potential project needs in the TIRZ boundary and bring forward to TIRZ #1 Board. Continue working with Denton County on securing their funds for future projects. Begin exploring TIRZ termination strategies and potential implications.	August 3rd TIRZ #1 Board Meeting	1. Schedule for a TIRZ #1 Board Meeting

ITEM	TOPIC	RESPONSIBILITY	SCOPE OF DISCUSSION	CONSIDERATIONS	DIRECTION	TIMING	NEXT STEPS
5.	ED Roundtable Update/Office Development Incentive Program	ED	Discussed findings from the Economic Development Roundtable at the TC Special Work Session on May 25, 2022.	Discussed the attractiveness of Flower Mound for future Class-A office buildings in the Lakeside Business District to include considerations on the Town's marketing efforts and development processes. Staff presented next steps regarding feedback received at the ED Roundtable	Move forward with the Lakeside Business District Class-A Office marketing campaign. Interested in focusing on specific Class-A office sectors (Medical, Tech, and Finance). Identify internal "bottlenecks" for potential new office developers in the planning and permitting process. Interested in continuing ED Roundtable.	1. Immediately/Ongoing 2. Schedule Future TC Work Session 3. Bi-annual	1. Move forward with implementing the LBD Class-A Office marketing campaign 2. Identify possible impediments for office users in the Town's development process and present to TC 3. Continue ED Roundtable
6.	Development Fee Discussion	DS	Discussed the development fee study and to follow up with Town Council on direction received at the December 16, 2021 TC Work Session.	Discussed the background of the development fee discussion, presented fees based on the direction received at the December 2021 TC Work Session, and discussed overall cost recovery percentages based on the fees presented.	Move forward with the fee structure presented Bring forward fees associated with Part B – Land Development Regulations to P&Z. Bring forward updated Development Fees to TC.	TBD	1. Schedule for P&Z Meeting 2. Schedule for TC Meeting
7.	Cross Timbers Conservation Development District	DS	Discussed the Cross Timbers Conservation Development District and to follow up with Town Council on direction received at the April 21, 2022 TC Work Session.	Discussed the CTCDD Master Plan review as well as changes made based on TC direction. Considered and discussed further options regarding passive park lighting, subdivision entrances, privacy fencing, development type visuals, and development processes.	Take the CTCDD item forward to P&Z for recommendations.	TBD	1. Schedule for P&Z Meeting 2. Schedule for TC Meeting
8.	Land Use Discussion	DS	Discussed land use in western Flower Mound, reviewing the Master Plan, and remaining infill properties.	Discussed current land use and undeveloped land in western Flower Mound to include infill properties that were identified and presented to TC during the 2021 SPS. Discussed engaging a consultant to perform a land use review.	Engage consultant on an estimated cost of a Land Use Review of Western FM and/or remaining infill properties.	As schedule permits	1. Provide a cost estimate to TC
9.	Warehouse Use	DS	Discussed warehouse uses and discussed making a distribution center a distinct and separate use.	Discussed the difference between a distribution center and the current warehouse definition to include the potential increased traffic volume a distribution center may create versus other warehouse uses. Discussed how to define a new and distinct distribution center type use.	Explore creating a separate use for distribution center type uses.	Schedule for future TC Work Session	1. Schedule for future TC Work Session

ITEM	TOPIC	RESPONSIBILITY	SCOPE OF DISCUSSION	CONSIDERATIONS	DIRECTION	TIMING	NEXT STEPS
10.	New Resident Development Education/Information	COM/DS	Discussed increasing development education and information for new residents.	Staff presented current new resident development outreach to include sharing available informative resources available to the public with local realtor organizations and associations as well as the New Residents page and Welcome Packet.	Continue community outreach as well as continue outreach to local realtor organizations and associations Explore creating a "What can be built next to me?" resource for New and Current Residents	As schedule permits	1. Continue community outreach 2. Explore creating additional resources regarding development for new and current residents.
11.	Regulatory Relief for Mandatory Sewer Connections	DS	Discussed creating a variance process to mandatory sewer connections.	Discussed properties located within a sewer service area but are currently on septic and discussed the challenges of connecting to the Town sewer system if these properties septic system fails or if the landowner decides to subdivide their property.	Interested in bringing forward a mechanism for regulatory relief to mandatory sewer connections for properties located within a sewer service area but are currently on septic, and for properties looking to subdivide that have limited access to existing sewer.	Schedule for future TC Work Session	1. Schedule for future TC Work Session
12.	Dedicated Sales Tax Elections	TSO	Discussed the upcoming dedicated sales tax elections and get feedback regarding the Town's options.	Discussed the benefits of reauthorizing sales tax districts for 10 years vs 20 years. Discussed re-authorizing the Street Maintenance and Repair sales tax for November 2022 in order to realize cost savings and have all three sales tax authorizations on the same ballot.	Reauthorize Crime Control and Prevention District and the Fire Control, Prevention, and Emergency Medical Services District for 20 years. Reauthorize Street Maintenance and Repair sales tax election for November 2022.	August 8th TC Meeting	1. Schedule for TC Meeting
13.	FM Historical Commission	TMO/TSO	Discussed creating a Flower Mound Historical Commission.	Discussed preserving the history and historical sites of Flower Mound and whether it would be more effective to form a Flower Mound Historical Commission and/or support the formation of a Flower Mound Historical non-profit organization.	Research how other communities have handled/formed a Historical Commission and/or Historical non-profit organization.	When research is complete	1. Research Historical Commissions 2. Provide research to TC
14.	Murals and Public Art	TMO	Discussed allowing public murals and public art.	Discussed the process differences between approving murals and public art on public property vs private property. Under Town code, murals are considered signage and the Town cannot regulate content.	Interested in creating a public art policy to allow for murals and art on private property and to create a policy for art on public property. Also, interested in limiting art and murals to specific areas of Town.	When research is complete	1. Research creating a Public Art Policy 2. Schedule for future TC Work Session

TOWN COUNCIL AGENDA ITEM NO. 12

REGULAR ITEM

DATE: July 18, 2022

FROM: Poornima Kashyap, Principal Planner

ITEM: **Consider a Site Plan (SP22-0002 – HTeaO) to develop a fast food restaurant with a drive through window, with a waiver to Architectural Standards in the Town's Urban Design Plan for roof pitch. The property is generally located south of Cross Timbers Road and west of Morriss Road. (*The Planning and Zoning Commission recommended approval by a vote of 6 to 0 at its July 11, 2022, meeting*.)**



SUMMARY DATA:

- Lot Size – 0.61 acres
- Zoning – Retail District-2 (R-2)
- Building square feet – 2,370 sf
- SMARTGrowth – Passed
- Traffic Analysis – Passed, based on the TA, traffic generated is not anticipated to exceed the 5% threshold, stacking and Queuing Analysis provided
- Exceptions – Roof pitch waiver
- Incentives – None requested

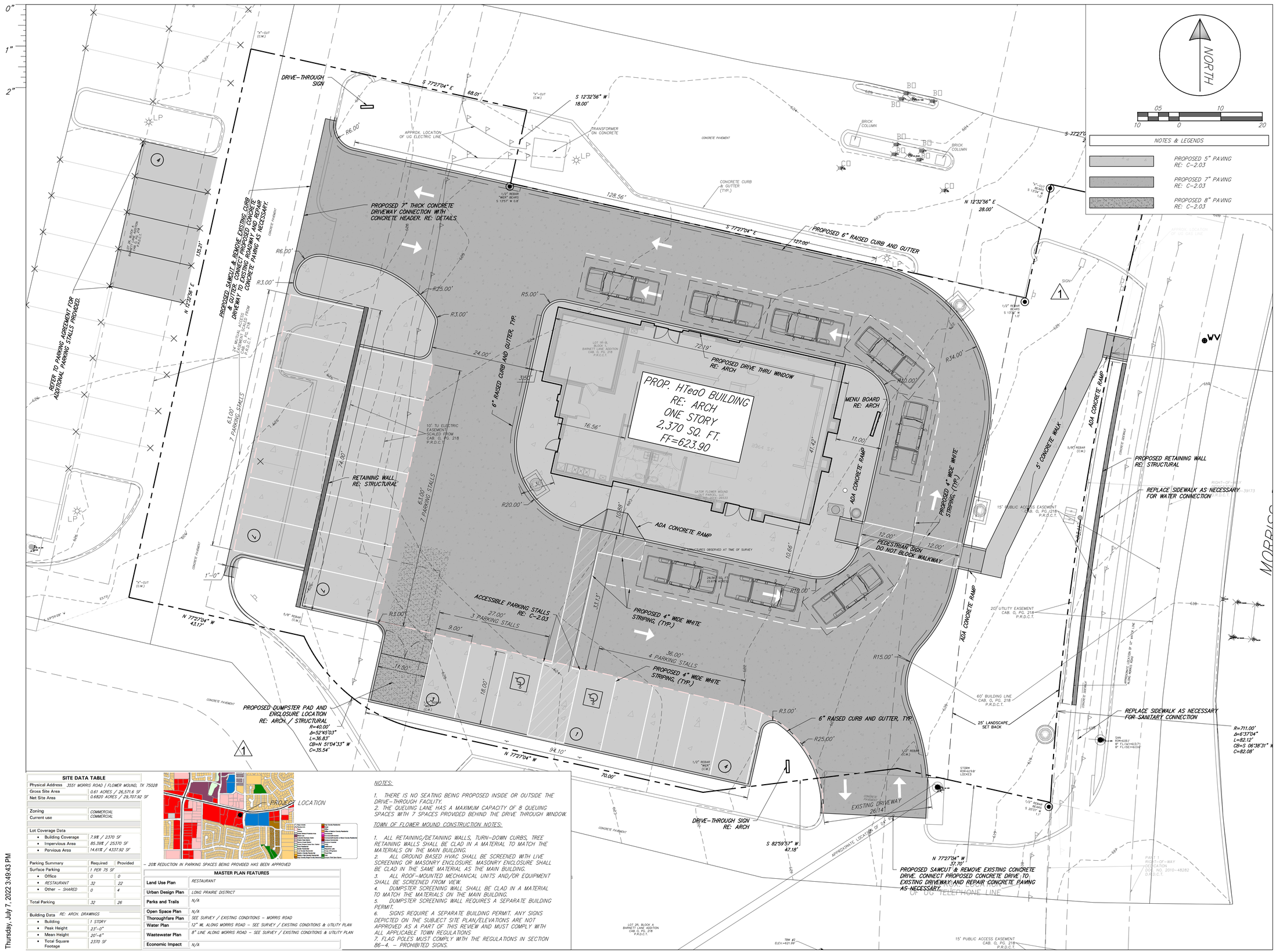
BACKGROUND INFORMATION: Below is the link for the Planning and Zoning Commission (P&Z) report and backup for this item. Updated Site Plan and Landscape Plan indicating the location of the lead walk from the building to the sidewalk along Morriss Road are included.

ATTACHMENTS:

1. Updated Site Plan & Landscape Plan
2. Planning and Zoning Commission Staff Report Link

LEGAL REVIEW: N/A

DRAFT MOTION: Move to approve as presented in the agenda caption.



SITE DATA TABLE		
Physical Address	3551 MORRIS ROAD / FLOWER MOUND, TX 75028	
Gross Site Area	0.61 ACRES / 26,571.6 SF	
Net Site Area	0.6820 ACRES / 29,707.92 SF	
Zoning	COMMERCIAL	
Current use	COMMERCIAL	
Lot Coverage Data		
• Building Coverage	7.9% / 2370 SF	
• Impervious Area	85.79% / 25370 SF	
• Pervious Area	14.61% / 4337.92 SF	
Parking Summary	Required	Provided
Surface Parking	1 PER 75 SF	
• Office	0	0
• RESTAURANT	32	22
• Other – SHARED	0	4
Total Parking	32	26
Building Data RE: ARCH. DRAWINGS		
• Building	1 STORY	
• Peak Height	23'-0"	
• Mean Height	20'-6"	
• Total Square Footage	2370 SF	

– 20% REDUCTION IN PARKING SPACES BEING PROVIDED HAS BEEN APPROVED

MASTER PLAN FEATURES	
Land Use Plan	RESTAURANT
Urban Design Plan	LONG PRAIRIE DISTRICT
Parks and Trails	N/A
Open Space Plan	N/A
Thoroughfare Plan	SEE SURVEY / EXISTING CONDITIONS – MORRIS ROAD
Water Plan	12" W. ALONG MORRIS ROAD – SEE SURVEY / EXISTING CONDITIONS & UTILITY PLAN
Wastewater Plan	8" LINE ALONG MORRIS ROAD – SEE SURVEY / EXISTING CONDITIONS & UTILITY PLAN
Economic Impact	N/A

NOTES:

1. THERE IS NO SEATING BEING PROPOSED INSIDE OR OUTSIDE THE DRIVE–THROUGH FACILITY.
2. THE QUEUING LANE HAS A MAXIMUM CAPACITY OF 8 QUEUING SPACES WITH 7 SPACES PROVIDED BEHIND THE DRIVE THROUGH WINDOW.

TOWN OF FLOWER MOUND CONSTRUCTION NOTES:

1. ALL RETAINING/DETAINING WALLS, TURN–DOWN CURBS, TREE RETAINING WALLS SHALL BE CLAD IN A MATERIAL TO MATCH THE MATERIALS ON THE MAIN BUILDING.
2. ALL GROUND BASED HVAC SHALL BE SCREENED WITH LIVE SCREENING OR MASONRY ENCLOSURE. MASONRY ENCLOSURE SHALL BE CLAD IN THE SAME MATERIAL AS THE MAIN BUILDING.
3. ALL ROOF–MOUNTED MECHANICAL UNITS AND/OR EQUIPMENT SHALL BE SCREENED FROM VIEW.
4. DUMPSTER SCREENING WALL SHALL BE CLAD IN A MATERIAL TO MATCH THE MATERIALS ON THE MAIN BUILDING.
5. DUMPSTER SCREENING WALL REQUIRES A SEPARATE BUILDING PERMIT.
6. SIGNS REQUIRE A SEPARATE BUILDING PERMIT. ANY SIGNS DEPICTED ON THE SUBJECT SITE PLAN/ELEVATIONS ARE NOT APPROVED AS A PART OF THIS REVIEW AND MUST COMPLY WITH ALL APPLICABLE TOWN REGULATIONS
7. FLAG POLES MUST COMPLY WITH THE REGULATIONS IN SECTION 86–4, – PROHIBITED SIGNS.

ROSE–VILLACORTE ARCHITECTURE LLC
HOUSTON–DALLAS, TEXAS
www.rvaarch.com

HTea0 – Flower Mound Tx

3551 Morriss Road
Flower Mound, Texas 75028

BARNETT LANE ADDN BLK 1 LOT 1R–B(PT)

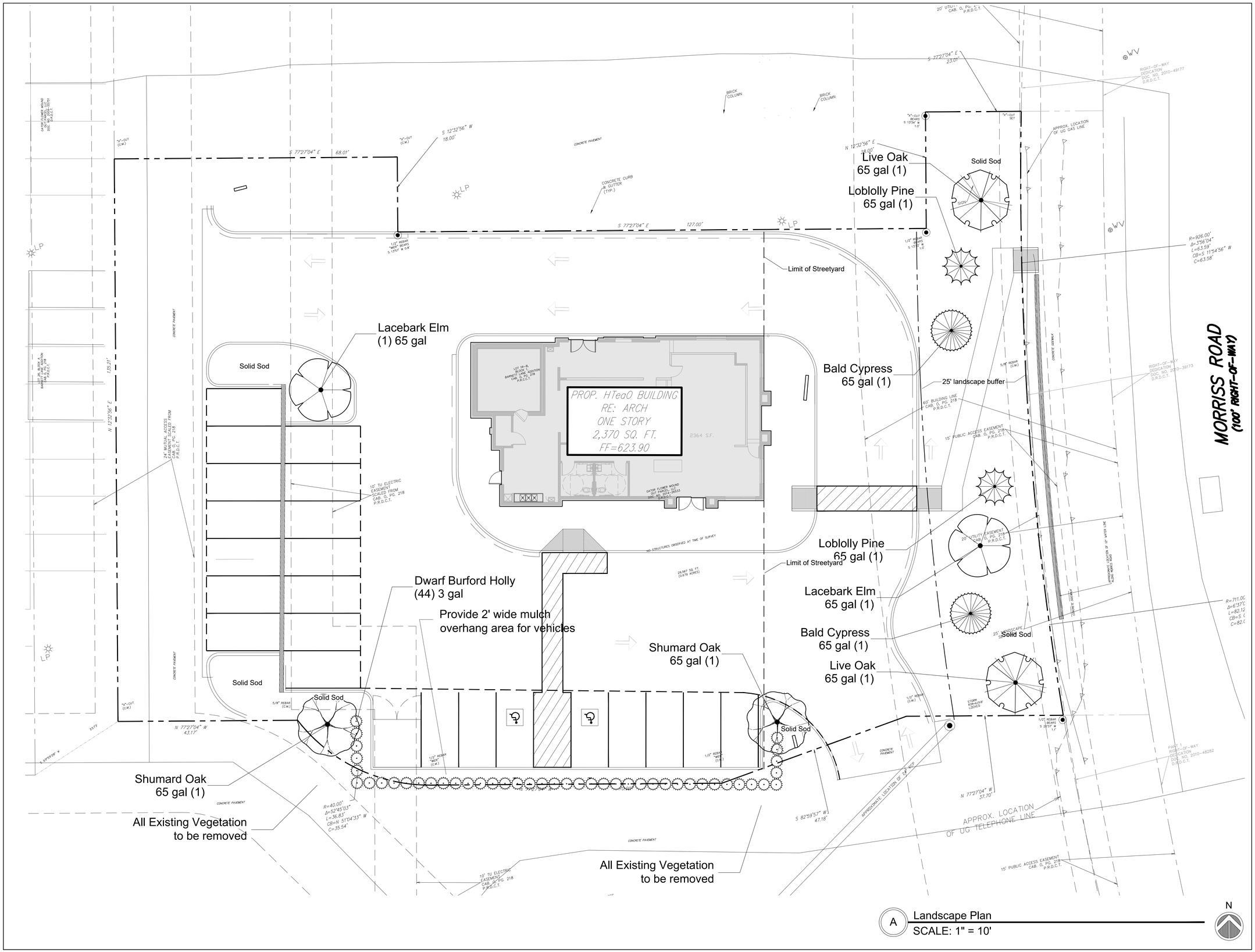


ALTIERI ENGINEERING, LLC
TBPE FIRM # F–22704
DATE: 03 / 15 / 2022

PROJECT NUMBER		21000
REVISIONS		
No.	Description	Date
01	CITY COMMENTS	03/31/2022
01	BOUNDARY LINE CHANGE	05/02/2022
01	CITY COMMENTS	06/06/2022
01	CITY COMMENTS	07/01/2022

FOR PERMIT

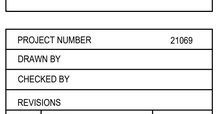
C-100
SITE PLAN



ROSE-VILLACORTE
ARCHITECTURE LLC
HOUSTON-DALLAS, TEXAS
www.rvaarch.com

HTea0 - Flower Mound Tx

Cross Timbers Road
Flower Mound, Texas 75028



07-06-22

PROJECT NUMBER		21069
DRAWN BY		
CHECKED BY		
REVISIONS		
No.	Description	Date
1	Parks & Planning comments	4.19.22
2	City Planning comments	5.09.22
3	City comments	6.10.22
4	City comments	7.06.22

Issue for Permit - Site Plan Approval

L1.01
Landscape Plan

TOWN COUNCIL AGENDA ITEM NO. 13

REGULAR ITEM

DATE: July 18, 2022

FROM: Claire Barnes, Planner

ITEM: **Public Hearing to consider an ordinance granting a Specific Use Permit No. 478 (SUP22-0001– 1307 College Parkway Accessory Dwelling) to permit an accessory dwelling. The property is generally located south of College Parkway and west of Kirkpatrick Lane. (*The Planning and Zoning Commission recommended approval by a vote of 6 to 0 at its July 11, 2022, meeting*.)**



SUMMARY DATA:

- Lot Size – 2.2 acres
- Zoning – Single-Family Estate (SF-E)
- Proposed primary residence – 4,095 sf
- Proposed Accessory Dwelling – 1,780 sf
- Lot coverage – approximately 9.6%
- SMARTGrowth – N/A, review not triggered
- Traffic Analysis – N/A, review not triggered
- Exceptions – None
- Incentives – N/A

BACKGROUND INFORMATION: Attached is the Planning and Zoning Commission (P&Z) report and backup for this item.

ATTACHMENTS:

1. Draft Ordinance
2. Planning and Zoning Commission Staff Report

LEGAL REVIEW: Alicia Kreh, of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the ordinance as to form and legality.

DRAFT MOTION: Move to approve as presented in the agenda caption.

TOWN OF FLOWER MOUND, TEXAS

ORDINANCE NO._____

AN ORDINANCE OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING THE OFFICIAL ZONING MAP, EXHIBIT "A" OF SUBPART B, "LAND DEVELOPMENT REGULATIONS," OF THE CODE OF ORDINANCES OF THE TOWN OF FLOWER MOUND, TEXAS, BY APPROVING SPECIFIC USE PERMIT NO. 478 (SUP-478) FOR AN ACCESSORY DWELLING ON CERTAIN PROPERTY DESCRIBED AS LOT 1, BLOCK A OF FLUFFY ESTATES AND ZONED SF-E SINGLE-FAMILY ESTATE; PROVIDING THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY FOR VIOLATIONS; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Flower Mound is a home rule municipality acting under its charter adopted by the electorate pursuant to Article XI, Section 5, of the Texas Constitution and Chapter 9 of the Local Government Code; and,

WHEREAS, the Town Council of the Town of Flower Mound heretofore adopted the Land Development Regulations of the Town of Flower Mound, as amended, which Ordinance regulates and restricts the location and use of buildings, structures and land for trade, industry, residence, and other purposes, and provides for the establishment of zoning districts of such number, shape, and area as may be best suited to carry out these regulations; and,

WHEREAS, in accordance with Chapter 78 of the Land Development Regulations, the owner of the property described as 2.2 acres of land and being all of Lot 1, Block A of Fluffy Estates, Denton County, Texas has filed an application for a Specific Use Permit for an accessory dwelling; and,

WHEREAS, the Planning and Zoning Commission of the Town of Flower Mound, Texas held a public hearing on July 11, 2022, and the Town Council of the Town of Flower Mound, Texas, held a public hearing on July 18, 2022, with respect to the Specific Use Permit described herein; and,

WHEREAS, the Town has complied with all requirements of Chapter 211 of the Local Government Code, Chapter 78 of the Land Development Regulations, and all other laws dealing with notice, publication and procedural requirements for the approval of a Specific Use Permit on the property described herein; and,

WHEREAS, the Town Council finds that the Specific Use Permit should be granted as outlined herein as it is in the best interest of the Town of Flower Mound and will promote the health, safety and general welfare of the citizens of the Town of Flower Mound and the general public;

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, THAT:

SECTION 1

The Land Development Regulations of the Town of Flower Mound, Texas, as amended, are hereby amended on the hereinafter described property and area as shown below:

2.2 acres of land being all of Lot 1, Block A of Fluffy Estates, Denton County, Texas.

The property shall remain in the SF-E, Single-Family Estate zoning district and Specific Use Permit No. 478 is hereby approved for an accessory dwelling, as more fully described in the exhibits attached hereto and incorporated herein.

SECTION 2

The Conceptual Plan and Conceptual Elevations of the proposed accessory dwelling, attached hereto as Exhibits “A” and “B,” each incorporated herein for all purposes allowed by law, are hereby approved as the Conceptual Plan and Conceptual Elevations for this Specific Use Permit.

SECTION 3

The official Zoning Map of the Town of Flower Mound is amended and the Director of Planning Services is directed to revise the official Zoning Map to reflect the approved Specific Use Permit, as set forth above.

SECTION 4

The use of the Property described above shall be subject to all applicable regulations contained in the Land Development Regulations and all other applicable and pertinent ordinances of the Town of Flower Mound.

SECTION 5

This Ordinance shall be cumulative of all provisions of ordinances and of the Code of Ordinances of the Town of Flower Mound, Texas, as amended, except when the provisions of this Ordinance are in direct conflict with the provisions of such ordinances and such code, in which event the conflicting provisions of such ordinances and such code are hereby repealed.

SECTION 6

It is hereby declared to be the intention of the Town Council that the sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable, and if any section, paragraph, sentence, clause, or phrase of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining sections, paragraphs, sentences, clauses, and phrases of this Ordinance, since the same would have been enacted by the Town Council without the incorporation in this Ordinance of any such unconstitutional section, paragraph, sentence, clause, or phrase.

SECTION 7

Any person, firm, or corporation who violates any provision of this Ordinance as adopted by the Town Council of the Town of Flower Mound shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine as provided in Section 1-13 of the Code of Ordinances of the Town of Flower Mound. Each day any such violation or violations exist shall constitute a separate offense and shall be punishable as such.

SECTION 8

All rights and remedies of the Town of Flower Mound are expressly saved as to any and all violations of the provisions of the Land Development Regulations or any ordinances governing zoning that have accrued at the time of the effective date of this Ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this Ordinance but may be prosecuted until final disposition by the courts.

SECTION 9

The Town Secretary of the Town of Flower Mound is hereby directed to publish the caption in the official newspaper of the Town of Flower Mound as required by Section 3.07 of the Charter of the Town of Flower Mound.

SECTION 10

This Ordinance shall be in full force and effect from and after the date of its passage and publication as required by law, and it is so ordained.

DULY PASSED AND APPROVED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, BY A VOTE OF ____ TO ____, ON THIS THE 18TH DAY OF JULY, 2022.

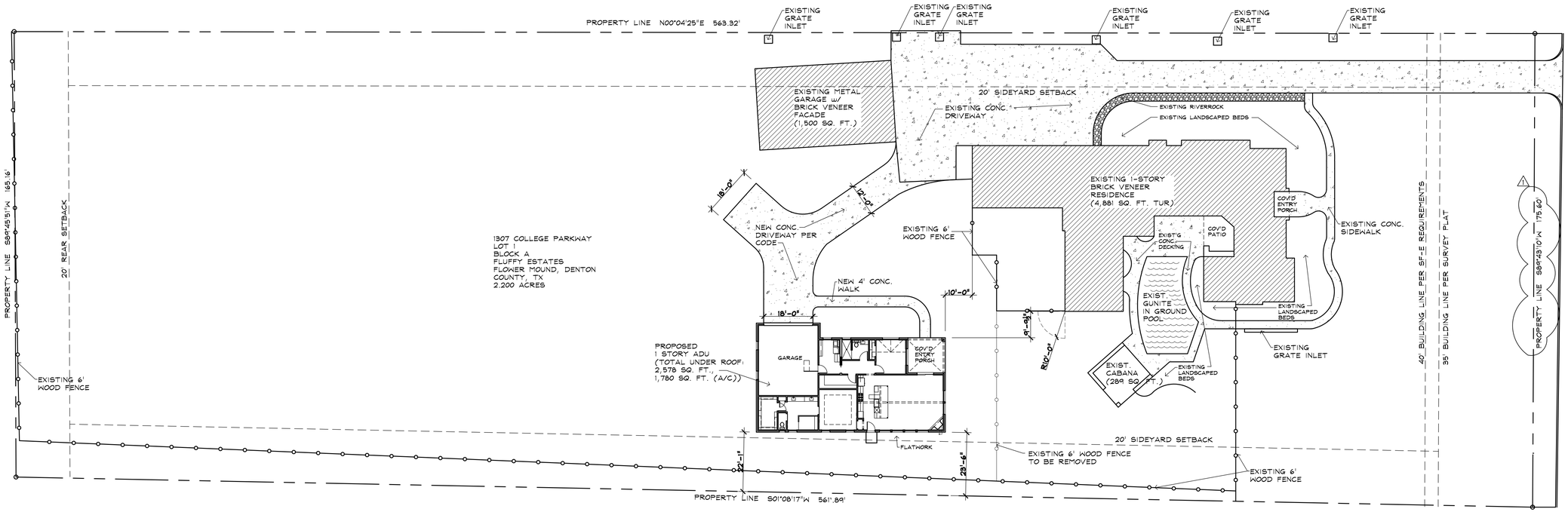
APPROVED:

_____
Derek France, MAYOR

ATTEST:

_____
Theresa Scott, TOWN SECRETARY

Exhibit A



PROPOSED
SITE PLAN
SCALE: 1" = 20'-0"

NORTH

AREA CALCULATIONS

RESIDENCE - TOTAL UNDER ROOF -	4,881 SQ. FT.
LIVING AREA A/C	4,095 SQ. FT
GARAGE	573 SQ. FT.
COV'D FRONT PORCH & PATIO	213 SQ. FT.
EXISTING DETACHED GARAGE -	1,500 SQ. FT.
EXISTING CABANA -	289 SQ. FT.
PROPOSED ADU - TOTAL UNDER ROOF	2,577 SQ. FT.
LIVING AREA A/C	1,780 SQ. FT.
GARAGE	617 SQ. FT.
COV'D FRONT PORCH	180 SQ. FT.
TOTAL SQUARE FOOTAGE OF STRUCTURES -	9,247 SQ. FT.
TOTAL SQUARE FOOTAGE OF PROPERTY -	95,832 SQ. FT.

2 9,247/ 95,832 = 9.65% OF COVERAGE

THESE ARE PRELIMINARY DRAWINGS AND ARE NOT INTENDED FOR CONSTRUCTION.

REGISTERED ARCHITECT DANIEL H. TANKERSLEY 13577 STATE OF TEXAS

Daniel H. Tankersley
6-30-22

1307 College Parkway Flower Mound, TX

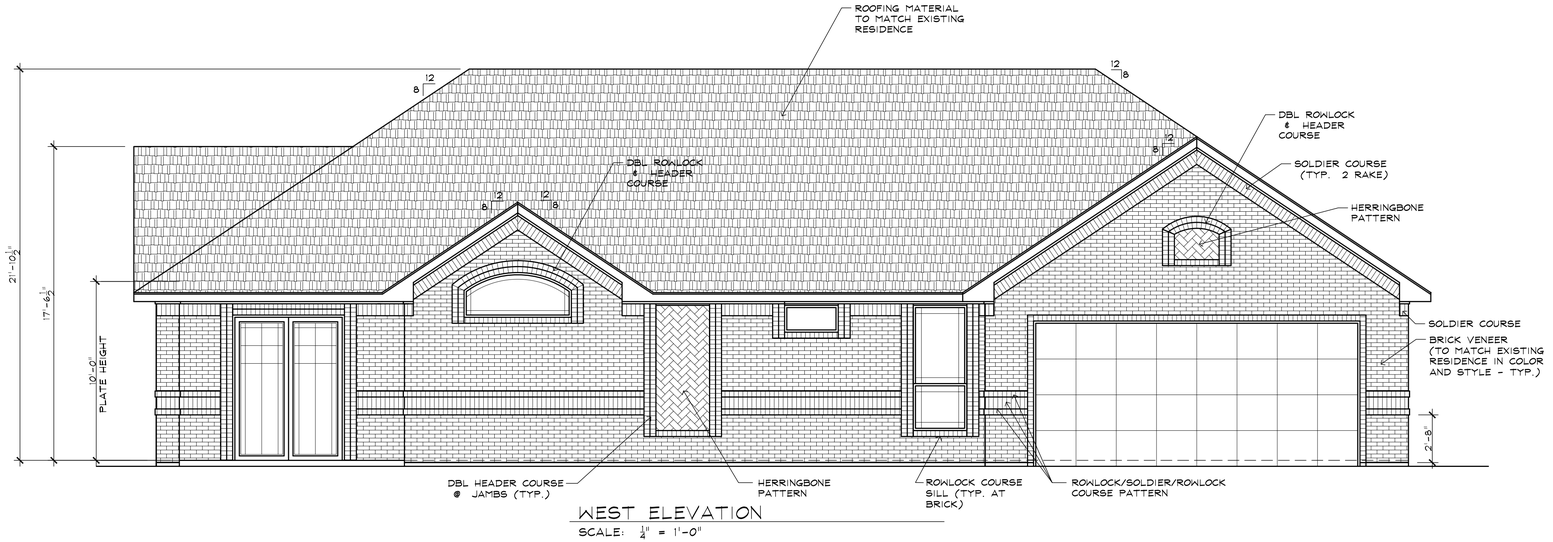
These drawings are property of the Architect and are to be used only for the address shown without written permission from the Architect.

REVISIONS	
6-22-22 PROP LINE DIM.	1
6-30-22 LOT COVERAGE %	2

dht Architects, Inc.
101 S. Main Street, Suite B
Irving, Texas 75060
972-258-6108

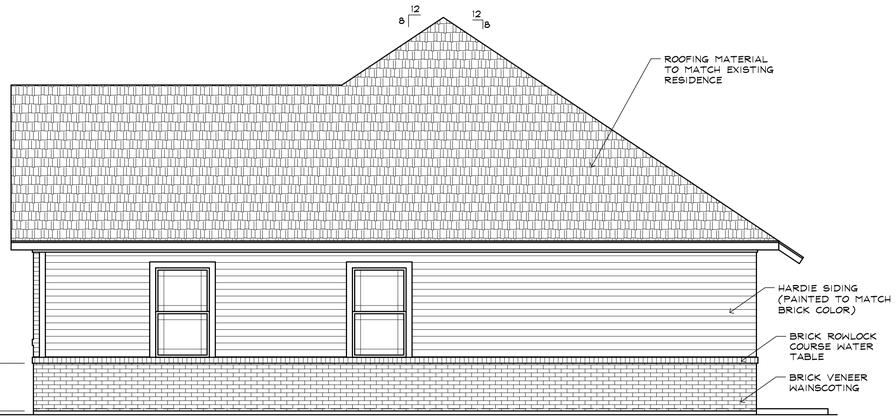
Accessory Dwelling Unit for
Steve & Kim Owen
1307 College Parkway
Flower Mound, TX

DATE: 2-11-22
SCALE: As Noted
DRAWN : DHT
JOB : 2022-01
SHEET
S1
OF 1 SHEETS



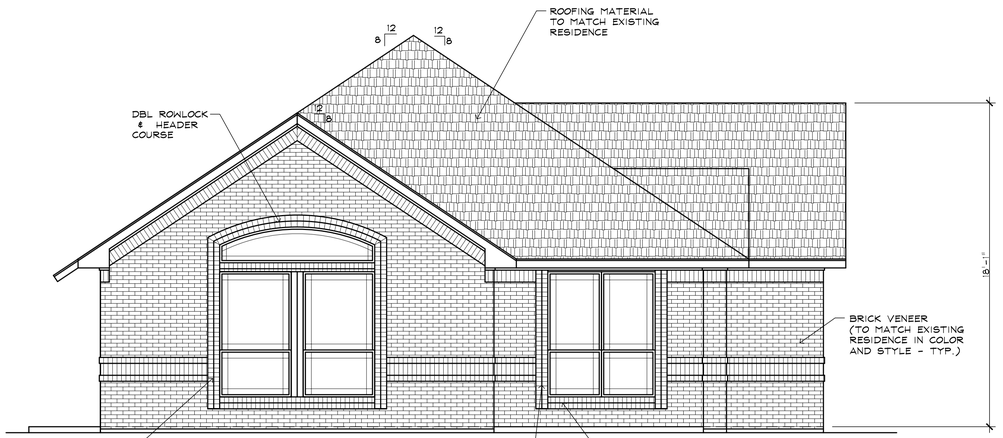
WEST ELEVATION

SCALE: ¼" = 1'-0"



SOUTH ELEVATION

SCALE: ¼" = 1'-0"



NORTH ELEVATION

SCALE: ¼" = 1'-0"



EAST ELEVATION

SCALE: ¼" = 1'-0"

1307 College Parkway Flower Mound, TX

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dht Architects, Inc.
1015 S. Main Street, Suite B
Irving, Texas 75060
972-258-6108

REVISIONS

Accessory Dwelling Unit for
Steve & Kim Owen
1307 College Parkway
Flower Mound, TX

DATE: 2-11-22

SCALE: As Noted

DRAWN : DHT

JOB : 2022-01

SHEET

A2

OF 2 SHEETS

REGISTERED ARCHITECT DANIEL H. TANKERSLEY 13570 STATE OF TEXAS

Daniel H. Tankersley
2-11-22

Exhibit B









**Materials for ADU will consist of the same brands and colors used on the existing main dwelling.*

OWEN ADU - 1307 COLLEGE PKWY, FLOWER MOUND, TX 75028

TOWN COUNCIL AGENDA ITEM NO. 14
REGULAR ITEM

DATE: July 18, 2022

FROM: Chuck Jennings, Director of Parks and Recreation

ITEM: **Public Hearing to consider an ordinance amending the Master Plan (MPA21-0010 - Parks and Trails Plan) by removing and replacing Section 5.0, "Parks and Trails Plan," and adopting the 2022 Trails and Bikeways Master Plan. (The Parks Board recommended approval by a vote of 7 to 0 at its June 2, 2022, meeting.) (The Transportation Commission recommended approval by a vote of 6 to 0 at its June 14, 2022, meeting.) (PZ recommended approval by a vote of 6 to 0 at its June 27, 2022, meeting.)**

BACKGROUND INFORMATION: The Town adopted its first comprehensive parks and trails master plan in 1989, which was updated in 1994, 2001, 2010 and 2017. These plans briefly touched on trails and did not cover bikeways. This Trails and Bikeways Master Plan is a comprehensive study that is only focusing on these two areas. The plan will serve as a roadmap to guide short and long-range priorities for the trails and bikeways network in Flower Mound over the next 10+ years. As part of the planning process, an assessment of existing conditions and future needs was conducted for off-street trails, on-street bikeways, equestrian trails, and nature trails.

The Town of Flower Mound entered into a Professional Services Agreement with Halff Associates on February 1, 2021, which was broken into five phases: Phase 1 – Community Understanding, Phase 2 – Community Visioning, Phase 3 – Needs Assessment, Phase 4 – Proposed Network, and Phase 5 – Action Plan. Staff held a kickoff meeting on February 23, 2021, with Halff regarding the master plan and the consultant toured many of the Town's trails and bikeways in March and April of 2021.

Throughout the months of May and June of 2021, the consulting team conducted a community input survey which had close to 1,000 responses. The team hosted visioning meetings on May 4 and 5 that included three stakeholder listening sessions, a Steering Committee meeting, Technical Working Group meeting, and a public open house at the Community Activity Center, where over 80 people attended including some from the Town Council and various Town Boards and Commissions. For residents that could not attend these meetings, the Town offered residents the opportunity to visit a virtual engagement room which mimicked the items discussed and questions asked at the public open house. Some questions that were asked of different groups and of the public at the different meetings included the following:

- What is your vision for the future of trails and bikeways in Flower Mound?
- What are some of the challenges related to trails and bikeways in Flower Mound today?
- What is the most important action item that should result from this plan?
- What word would you use to describe Trails & Bikeways in Flower Mound Today?
- What one word would you use to describe how you envision Trails and Bikeways in Flower Mound in the Future?
- Where are trails and bikeways most needed in Flower Mound?
- Where do barriers to walking, running, cycling, or horseback riding exist in Flower Mound today?

Key take away from the engagement included:

- Creating more of an east/west connection
- Filling in gaps in the system
- Providing a variety of trail types throughout the Town
- Providing more connections to the USACE trails

- More designated bikeway accommodations
- Additional trail access points, trailheads, and trail amenities
- Completing the loops for equestrian trails

Halff was also tasked with performing a deep assessment on five different corridors within Flower Mound. The consultant toured these areas in July and August to fully understand the opportunities, constraints, and feasibility of constructing trail or bikeways. The five areas studied were Cross Timbers E/W Connection, Shiloh Dr., Long Prairie Rd. (Veloweb corridor), Gaston Park/Long Prairie Rd., and Timber Creek trail connection. The study of the five corridors will be included in the overall master plan and will address crossings, overhead clearance, utility conflicts, property ownership and estimates of probable costs.

As part of the master plan process Halff Associates contracted with Civic Brand to develop a project brand identity package to be used throughout the planning process and in marketing pieces. In addition to the project branding, Civic Brand was responsible for the creation and updating of the project webpage (www.flowermoundtrailsplan.com). The website will remain active three months after the completion of the project. Civic Brand worked with Halff and Town staff to create three short, informative videos regarding trails and bikeways to generate excitement about the plan. Lastly, Civic Brand worked with staff to develop trail branding considerations. Signage is typically provided at trailheads and at key decision-making points along a trail. Signage can mark access points to the trail, provide directional and distance guidance for trail users, direct users to locations of key amenities along the trails, and provide brand recognition of the trail system. Halff has incorporated their recommendations into the draft master plan.

Work Sessions were held to review a draft of the Master Plan:

- April 7 Parks Board / Transportation Commission
- April 21 Town Council
- April 25 Planning & Zoning Commission

The Master Plan was presented at various meetings as Public Hearings throughout the month of June with final approval occurring in July. The schedule below details the meeting dates:

- June 2 Parks Board
- June 14 Transportation Commission
- June 27 Planning & Zoning Commission
- July 18 Town Council

To keep up with Flower Mound's growth, new development and redevelopment, and shifting demographic trends, developing a Trails and Bikeways Master Plan is essential to ensure that these facilities meet the needs of the community today and in the future. Having a current Master Plan will place the Town in a good position to apply for future grants.

BOARD REVIEW/CITIZEN FEEDBACK: The Parks Board recommended approval of the proposed master plan by a vote of 7-0 at its June 2, 2022, meeting. The Transportation Commission recommended approval of the proposed master plan update by a vote of 6-0, at its June 14, 2022, meeting. The Planning and Zoning Commission recommended approval of the proposed master plan update by a vote of 6-0, at its June 27, 2022, meeting.

The following links will provide additional detail related to the Public Hearings that were held for the Parks Board, Transportation Commission, and P&Z meetings:

Parks Board - https://flowermoundtx.swagit.com/play/06032022-521
Transportation Commission - https://flowermoundtx.swagit.com/play/06152022-833
P&Z – https://flowermoundtx.swagit.com/play/06282022-705

Town Code requires public notice in a newspaper of general circulation (Denton Record Chronicle) for all Master Plan amendments. At the time this report was written, staff has not received any correspondence regarding the request.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: James Donovan of Taylor, Olson, Adkins, Sralla, & Elam L.L.P., has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Proposed Ordinance

DRAFT MOTION: Move to approve an ordinance amending the Master Plan (MPA21-0010 - Parks and Trails Plan) by removing and replacing Section 5.0, “Parks and Trails Plan,” and adopting the 2022 Trails and Bikeways Master Plan.

TOWN OF FLOWER MOUND, TEXAS

ORDINANCE NO. _____

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING THE FLOWER MOUND 2001 MASTER PLAN BY AMENDING ORDINANCE NO. 24-01 IN PART, WHICH ADOPTED THE MASTER PLAN, BY REPEALING AND REPLACING SECTION 5.0, "PARKS AND TRAILS PLAN," AND ADOPTING THE 2022 TRAILS AND BIKEWAYS MASTER PLAN AS A COMPONENT OF THE MASTER PLAN; PROVIDING THAT THIS ORDINANCE IS CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Flower Mound is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5, of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, on March 19, 2001, the Town Council of the Town of Flower Mound adopted the Flower Mound 2001 Master Plan (the "Master Plan") which consisted of nineteen component plans, including the Parks and Trails Plan; and

WHEREAS, the Master Plan establishes and articulates a community based vision to: preserve the country atmosphere and natural environment that makes Flower Mound a unique and desirable community; mitigate the ill effects of rapid and intense urbanization; create a balanced tax base to ensure the Town's long-term economic health and prosperity; and ensure all development is of enduring and exemplary quality; and

WHEREAS, the Town engaged HALFF Associates, Inc. to update the Town's Parks and Trails Plan for the year 2022; and

WHEREAS, the Planning and Zoning Commission of the Town of Flower Mound, Texas held a public hearing on June 27, 2022, and the Town Council of the Town of Flower Mound Texas held a public hearing on July 18, 2022, with respect to the Master Plan amendment described herein and to consider adoption of the updated Section 5.0, "Parks and Trails Plan," and the 2022 Trails and Bikeways Master Plan, as components of the Master Plan; and

WHEREAS, upon due deliberation and consideration of the recommendation of the Planning and Zoning Commission and of all testimony and information submitted during the public hearings, the Town Council of the Town of Flower Mound, Texas, has determined that it is in the best interest of the citizens of the Town of Flower Mound that the Master Plan be amended to remove and replace Section 5.0 Parks and Trails Plan, and to adopt the 2022 Trails and Bikeways Master Plan as components of the Master Plan.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, THAT:

SECTION 1

All of the above premises are hereby found to be true and correct legislative and factual findings of the Town of Flower Mound, and they are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

SECTION 2

From and after the effective date of this Ordinance, Section 5.0, "Parks and Trails Plan," of the Master Plan, is hereby amended by repealing and replacing the existing Section 5.0, "Parks and Trails Plan," with a new Section 5.0, "Parks and Trails Plan," to read as set forth in Exhibit A attached hereto.

SECTION 3

The 2022 Trails and Bikeways Master Plan, attached hereto as Exhibit B is hereby adopted as a component of the Master Plan.

SECTION 4

This Ordinance shall be cumulative of all provisions of ordinances of the Town of Flower Mound, Texas, except where the provisions of this Ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

SECTION 5

It is hereby declared to be the intention of the Town Council that the phrases, clauses, sentences, paragraphs, and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph, or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Ordinance, since same would have been enacted by the Town Council without the incorporation in this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph, or section, and said remaining portions shall remain in full force and effect.

SECTION 6

This Ordinance shall take effect and be in full force on and after its passage.

DULY PASSED AND APPROVED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, BY A VOTE OF _____ TO _____, ON THIS THE 18TH DAY OF JULY 2022.

_____
DEREK FRANCE, MAYOR

ATTEST:

_____
THERESA SCOTT, TOWN SECRETARY

Exhibit A

5.0 PARKS AND TRAILS PLAN

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Introduction and Purpose

The purpose of the Town of Flower Mound Parks and Trails Plan is to provide guidelines and strategies for future acquisition and development of recreational facilities and guide the development of trails and bikeways facilities recommendations, design guidelines, and implementation strategies for the Town of Flower Mound. This chapter of the Flower Mound Master Plan 2001 is a summary document highlighting the major components of the Town of Flower Mound Parks and Recreation Master Plan, and Trails and Bikeways Master Plan, which contain more detailed information on individual parks, trails, bikeways, the planning processes, community demographic data, park planning standards, trail design standards, and implementation strategies. Also included in the Plans are recreation programming and maintenance/operations supplements. These plans are based on recognized park planning principles and standards, and reflects input from the citizens of Flower Mound, Town staff, Parks Board, Transportation Commission, Planning and Zoning Commission, and Town Council.

The Parks and Trails Plan focuses on the Town's needs analysis through current and ten-year needs. It is a community-based document that will aid Town staff and Town decision-makers in providing recreational facilities and amenities to the citizens of Flower Mound and in preserving the Town's floodplains and other open space areas in an orderly and economical way. When considering the Trails and Bikeways the plan focuses on the Town's needs in short (1-5 year), mid (5-10 years), and long-range (beyond 10 years) timeframes. It will create a diverse system of transportation and recreation options to provide residents with access to active and healthy lifestyle opportunities.

Physical Features and Development

Flower Mound has floodplain land within the Town limits, desirable for open space preservation and the development of trails and parkland. Although floodplain land is generally unsuitable for community development due to the potential for flooding and Federal Emergency Management Agency (FEMA) regulations, these areas provide natural corridors of open space, woodlands, and wildlife habitat throughout the Town. Several creeks flow through Flower Mound including Timber Creek, Prairie Creek, Sharps Branch, Whites Branch, Stone Creek, Bakers Branch, and Graham Branch forming picturesque greenways through both the Town's rural areas and urban core. Potential exists for additional park, trail, and greenway developments along these corridors.

Lake Grapevine, with 6,684 acres of surface area, is a significant physical feature of the Town and forms the southern and southwestern edge of the Town. There are currently four Army Corps of Engineers parks on the northern shore of Grapevine Lake that fall within the Town limits: North Shore Park, Knob Hills Park, Rocky Point Park, and Murrell Park. Twin Coves Park is also along the northern shore of Grapevine Lake and is leased and maintained by the Town. These parks offer citizens access to approximately 1,650 acres of land with opportunities for camping, fishing, boating, hiking, mountain biking, and equestrian trail riding.

Parks, like other types of land uses, produce both peak and off-peak volumes of traffic. Athletic complexes such as the Chinn Chapel Soccer Complex, Bakersfield Park, and Gerault Park can generate

substantial traffic during competitive events, tournaments, and playoffs. Four-lane streets are recommended adjacent to athletic complexes or multi-field installations.

Neighborhood parks are best located on local streets where the low-traffic volume allows for safe routes for pedestrian travel to these parks. Sidewalks in adjacent neighborhoods generally promote walking to these parks rather than driving. Neighborhood parks typically do not have parking spaces, however each site should be considered for parking needs.

The recreational needs of teens, seniors, and residents with disabilities are specialized and should be addressed as future parks are planned. Additional adventure recreational activities, passive recreational activities, as well as fully accessible athletic facilities and playgrounds, should be considered to encourage the use of park facilities and participation in park programs by these populations.

Previous Parks, Trails and Recreation Master Planning Efforts

The Town adopted its first comprehensive Parks and Trails Plan in 1989, which was updated in 1994, 2001, 2010, and 2017. Over the past decade, the Town has been involved in an extensive parks and recreation capital improvements program, primarily funded by the 1997 Parks Bond Election, the 2002 Parks and Recreation Bond Election, and the 2007 voter-approved ¼-cent sales tax that generates approximately $3.6 million annually for park improvements.

The 2017 Parks and Recreation Master Plan (PRMP) provided a framework for strategies regarding future acquisition and development of recreation facilities in Flower Mound. The 2017 PRMP plan outlined near and long-term priorities using public engagement insights as a foundation. The primary outcomes of the 2017 PRMP was to identify a vision for the Parks and Recreation Department, determine the level of needs in current offerings, identify new opportunities that can be met by the department, complete initial testing on strategies for funding, and identify possible park facility components for new and future facilities. Finally, the plan identifies a variety of recommendations for the direction of the Parks and Recreation facilities for implementation.

According to the PRMP's level of service analysis, paved multi-use trails were listed as the highest priority need out of all parks and recreation amenities assessed as part of the plan. Nature trails and unpaved multi-use trails were also listed as a high priority. Additionally, the overall quality of walking and biking trails was identified as the highest-ranking response for survey takers when asked which services should receive the most attention over the next five years. Equestrian trails were ranked near the bottom in several questions related to community-wide needs and priorities.

The 2017 PRMP recommended that the Town perform a more comprehensive study of the trails and bikeways system. This comprehensive study was accomplished during this review and is detailed in the 2022 Trails and Bikeways Master Plan.

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Park Planning Process

The PRMP planning process spanned a thirteen month period from February 2016 through March 2017. This included multiple meetings between the consultant team and Town staff, Parks Board, Planning and Zoning Commission, and Town Council. Besides these open public work sessions, meetings, and public hearings; three special Town Hall meetings were held to gain input for the development of the plan. In April and May 2016, statistically valid surveys, as well as, an online survey were conducted to determine community attitudes and needs regarding parks and recreation. A detailed summary of the meetings, focus groups, surveys and survey results is included in the Plan Update.

Park and Recreation Resources

Town Facilities

The Town of Flower Mound's recreational facility inventory is continually changing as the Town develops. As a part of this master planning process, the consultant visited each of Flower Mound's parks to assess the general condition of each park and to inventory each of the park's facilities. A detailed description and photographs of each park are included in the Plan Update. The Town has 979.91 acres of total parkland, of which 863.4 acres is developed and 116.51 acres is undeveloped or open space. Overall, Flower Mound's parks appear uniformly clean and very well maintained.

Public School/Joint Use Facilities

Lewisville Independent School District (LISD) owns recreational facilities, which may be available to the public during non-school hours and activities. They are not included in the Town facility inventory because school district needs and programs take priority over general public needs. Agreements between cities and school districts for joint use of facilities are common in north Texas, and they raise the level of service for the facilities listed in the agreements. These agreements also reduce the need to duplicate facilities and foster a sense of community spirit in such cities. Currently, there is an Interlocal Cooperation Agreement for Joint Use Property between the Town of Flower Mound and the Argyle ISD. The Town also has a Facility Use Agreement with the LISD.

Residents of Flower Mound also have access to other facilities in or near Flower Mound not currently owned or operated by the Town, including Bridlewood Golf Club, Flower Mound Equestrian Center, Greater Lewisville Family YMCA, Lifetime Fitness, Lake Grapevine, The Flower Mound, and Tour 18 Golf Club.

Park Classification and Park Design Principles

In developing design principles for parks, it is important that each park be programmed, planned, and designed to meet the needs of its service area and classification within the overall parks and recreation system. The term programming, when used in the context of planning and developing parkland, refers to a list of uses and facilities and does not always include staff-managed recreation

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programs. The program for a site can include such elements as ball fields, spray parks, shelters, restrooms, game courts, trails, natural resource stewardship, open meadows, nature preserves, or interpretive areas. These types of amenities are categorized as lead or support amenities. The needs of the population of the park it is intended to serve should be considered and accommodated at each type of park.

Park Design Principles in this document should apply to existing and future parks needing Master Plans. Every park, regardless of type, needs to have an established set of outcomes. Park planners/designers design to those outcomes, including operational and maintenance costs associated with the design outcomes.

Each park classification category serves a specific purpose, and the features and facilities in the park must be designed for the number of age segments the park is intended to serve, the desired length of stay deemed appropriate, and the uses it has been assigned. Recreation needs and services require different design standards based on the age segments that make up the community that will be using the park. A varying number of age segments will be accommodated with the park program depending on the classification of the park. The age segments are:

- Ages 2-5
- Ages 6-8
- Ages 9-12
- Ages 13-17
- Ages 18-24
- Ages 25-34
- Ages 35-44
- Ages 45-54
- Ages 55-64
- Ages 65-75
- Ages 76+

Definitions used in the Park Design Principles

- **Land Usage**: The percentage of space identified for either passive use or active use in a park. A Parks and Recreation Master Plan should follow land usage recommendations.
- **Programming**: Can include active or passive (i.e. none). Active means it is organized and planned with pre-registration by the user. Examples of active programming include sports leagues, day camps, and aquatics. Passive programming is self-directed by the user at their own pace. Examples of passive programming include playground usage, picnicking, disc golf, reading, or walking the dog.
- **Park/Facility Classifications:** Includes Pocket Park, Neighborhood Park, Community Park, Regional Park, Sports Complex Facility, Special Use Park/Facility, Greenbelts/Trails, and Open Space/Natural Area.
- **Revenue Facilities:** These include facilities that charge to play on them in the form of an access fee, player fee, team fee, or permit fee. These could include pools, golf courses, tennis courts,

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recreation centers, sport field complexes, concession facilities, hospitality centers, reservable shelters, outdoor or indoor theatre space, and special event spaces.

- **Signature Facility/Amenity:** This is an enhanced facility or amenity which is viewed by community as deserving of special recognition due to its design, location, function, natural resources, etc.

Design Principles for each park classification are as follows.

Pocket Parks

According to the NRPA, a pocket park is a small outdoor space, usually less than 0.25 acres up to 1 acre, most often located in an urban area surrounded by commercial buildings or houses. Pocket parks are small, urban open spaces that serve a variety of functions, such as: small event space, play areas for children, spaces for relaxing and socializing, taking lunch breaks, etc. Successful pocket parks have four key qualities: they are accessible; allow people to engage in activities; are comfortable spaces that are inviting; and are sociable places. In general, pocket parks offer minimal amenities on site and are not designed to support programmed activities. The service area for pocket parks is usually less than a quarter-mile and they are intended for users within close walking distance of the park.

Neighborhood Park

The service radius for a neighborhood park is one half mile or six blocks. Neighborhood Parks should have safe, pedestrian access for surrounding residents; parking may or may not be included but if included accounts for less than ten cars and provides for ADA access. Neighborhood Parks serve the recreational and social focus of the adjoining neighborhoods and contribute to a distinct neighborhood identity. A neighborhood park should be three to 10 acres; however, some Neighborhood Parks are determined by use and facilities offered and not by size alone.

- Service radius: 0.5 mile radius
- Site Selection: On a local or collector street. If near an arterial street, provide natural or artificial barrier. Where possible, located next to a school. Encourage location to link subdivisions and linked by trails to other parks
- Length of stay: One hour experience or less
- Amenities: One signature amenity (e.g. playground, spray ground park, sport court, gazebo); no restrooms unless necessary for signature amenity; may include one non-programmed sports field; playgrounds for ages 2-5 and 5-12 with some shaded elements; no reservable shelters; loop trails; one type of sport court; no non-producing/unused amenities; benches, small picnic shelters next to play areas. Amenities are ADA compliant
- Landscape Design: Appropriate design to enhance the park theme/use/experience
- Revenue facilities: none
- Land usage: 85 percent active/15 percent passive
- Programming: Typically none, but a signature amenity may be included which is programmed
- Maintenance Standards: Provide the highest level maintenance with available funding. Seek a goal of Level 2 maintenance standards. Some amenities may require Level 1 maintenance
- Signage: Directional signage and facility/amenity regulations to enhance user experience

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- Parking: Design should include widened on-street parking area adjacent to park. Goal is to maximize usable park space. As necessary, provide 5-10 spaces within park including handicap spaces. Traffic calming devices encouraged next to park
- Lighting: Security only. Lighting on all night for security
- Naming: Consistent with the Town's ordinances for naming of parks, or may be named after a prominent or historic person, event, or natural landmark
- Other: Customized to demographics of neighborhood; safety design meets established Crime prevention through environmental design (CPTED) standards; integrated color scheme throughout
- Size of park: Typically Three to 10 acres

Community Park

Community Parks are intended to be accessible to multiple neighborhoods and should focus on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces. Community Parks are generally larger in scale than neighborhood parks, but smaller than regional parks and are designed typically for residents who live within a three mile radius. When possible, the park may be developed adjacent to a school. Community Parks provide recreational opportunities for the entire family and often contain facilities for specific recreational purposes: athletic fields, swimming pool, tennis courts, extreme sports amenity, recreation center, loop trails, picnic areas, reservable picnic shelters, sports courts, permanent restrooms with drinking fountains, large turfed and landscaped areas and a playground and/or spray ground. Passive outdoor recreation activities such as meditation, quiet reflection, and wildlife watching also take place at Community Parks.

Community Parks generally range from 10 to 100 acres depending on the community. Community Parks serve a larger area –contain more recreation amenities than a Neighborhood Park.

- Service radius: One to three mile radius
- Site Selection: On two collector streets minimum and preferably one arterial street. If near an arterial street, provide natural or artificial barrier. Minimal number of residences abutting site. Preference is streets on four sides, or three sides with school or municipal use on fourth side. Encourage trail linkage to other parks
- Length of stay: Two to three hours experience
- Amenities: Four signature amenities at a minimum: (e.g., trails, sports fields, large shelters/ pavilions, community playground for ages 2-5 and 5-12 with some shaded elements, recreation center, pool or family aquatic center, sports courts, water feature); public restrooms with drinking fountains, ample parking, and security lighting. Amenities are ADA compliant. Sport Fields and Sport Complexes are typical at this park.
- Revenue facilities: One or more (e.g. pool, sports complex, pavilion)
- Land usage: 65 percent active and 35 percent passive
- Programming: Minimum of four essential program services (e.g. sports, day camps, aquatics)
- Maintenance Standards: Provide the highest level maintenance with available funding. Seek a goal of Level 2 maintenance standards. Some amenities may require Level 1 maintenance.

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- Parking: Sufficient to support the amenities; occupies no more than 10 percent of the park Design should include widened on-street parking area adjacent to park. Goal is to maximize usable park space. Traffic calming devices encouraged within and next to the park
- Lighting: Amenity lighting includes sport field light standards. Security lighting on dual system with 50 percent of lights off at a set time and 50 percent on all night for security
- Signage: Directional signage and facility/amenity regulations to enhance user experience. May include kiosks in easily identified areas of the facility
- Landscape Design: Appropriate design to enhance the park theme/use/experience. Enhanced landscaping at park entrances and throughout park
- Naming: Consistent with the Town's naming right ordinance, may be named after a prominent or historic person, event, or natural landmark
- Other: Strong appeal to surrounding neighborhoods; integrated color scheme throughout the park; partnerships developed with support groups, schools and other organizations; loop trail connectivity; linked to Regional Park, trail or recreation facility; safety design meets established CPTED standards.
- Size of park: Typically 10 to 100 acres

Regional Park

A regional park serves a large area of several communities, residents within a town, city or county, or across multiple counties. Depending on activities within a regional park, users may travel as many as 60 miles for a visit. Regional parks include recreational opportunities such as soccer, softball, golf, boating, camping, conservation-wildlife viewing and fishing. Although regional parks usually have a combination of passive areas and active facilities, they are likely to be predominantly natural resource-based parks.

A common size for a regional park is 100 to 1,000 acres but some parks can be 2,000 to 5,000 acres in size. A regional park focuses on activities and natural features not included in most types of parks and often based on a specific scenic or recreational opportunity. Facilities could include those found in a Community Park and have specialized amenities such as an art center, amphitheater, boating facility, golf course, or natural area with interpretive trails. Regional parks can and should promote tourism and economic development. Regional parks can enhance the economic vitality and identity of the entire region. Twin Coves Park is considered a regional park.

- Service radius: Three mile or greater radius
- Site Selection: Prefer location which can preserve natural resources on-site such as wetlands, streams, and other geographic features or sites with significant cultural or historic features. Significantly large parcel of land. Access from public roads capable of handling anticipated traffic.
- Length of stay: All day experience
- Amenities: 10 to 12 amenities to create a signature facility (e.g. golf course, tennis complex, sports complex, lake, regional playground, 3+ reservable picnic shelters, camping, outdoor recreation/extreme sports, recreation center, pool, gardens, trails, zoo, specialty facilities); public restrooms with drinking fountains, concessions, restaurant, ample parking, special event site. Sport Fields and Sport Complexes are typical at this park.

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- Revenue facilities: More than two; park designed to produce revenue to offset operational costs
- Land usage: Up to 50 percent active/50 percent passive
- Programming: More than four recreation experiences per age segment with at least four core programs provided
- Maintenance Standards: Provide the highest level maintenance with available funding. Seek a goal of Level 2 maintenance standards. Some amenities may require Level 1 maintenance
- Parking: Sufficient for all amenities. Traffic calming devices encouraged within and next to park
- Lighting: Amenity lighting includes sport field light standards. Security lighting on dual system with 50 percent of lights off at a set time and 50 percent on all night for security
- Signage: Directional signage and facility/amenity regulations to enhance user experience, May include kiosks in easily identified areas of the facility
- Landscape Design: Appropriate design to enhance the park theme/use/experience. Enhanced landscaping at park entrances and throughout park
- Naming: Consistent with the Town's naming ordinance, may be named after a prominent or historic person, event, or natural landmark
- Other: Safety design may meet CPTED safety standards; integrated color scheme throughout the park; linked to major trails systems, public transportation available, concessions, food and retail sales available, dedicated site managers on duty. Telephone/Cable TV conduit.
- Size of park: Typically 100 to 1,000 acres

Sports Complex

Sports complexes at Community Parks, Regional Parks, and stand-alone Sports Complexes are developed to provide four to 16 fields or courts in one setting. A sports complex may also support extreme sports facilities, such as BMX and skateboarding. Sports Complexes can be single focused or multi-focused and can include indoor or outdoor facilities to serve the needs of both youth and adults. Outdoor fields should be lighted to maximize value and productivity of the complex. Agencies developing sports complexes focus on meeting the needs of residents while also attracting sport tournaments for economic purposes to the community.

Sport field design includes appropriate field distances for each sport's governing body and support amenities designed to produce revenue to offset operational costs.

Signature sports complexes include enhanced amenities such as artificial turf, multipurpose field benches and bleachers, scoreboards, amplified sound, scorer's booths, etc. Enhanced amenities would be identified through discussion between Town and Schools and or sports associations and dependent upon adequate funding.

- Service radius: Determined by community demand
- Site Selection: Stand-alone sports complexes are strategically located on or near arterial streets. Refer to community or regional Park sections if sport complex located within a park. Preference is streets on four sides, or three sides with school or municipal use on fourth side.
- Length of stay: Two to three hours experience for single activities. Can be all day for tournaments or special events

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- Amenities: Four to sixteen fields or sports courts in one setting; public restrooms, ample parking, turf types appropriate for the facility and anticipated usage, and field lighting. Amenities are ADA compliant.
- Revenue facilities: Four or more (e.g. fields, concession stand, picnic pavilion)
- Land usage: 95 percent active and 5 percent passive
- Programming: Focus on active programming of all amenities
- Maintenance Standards: Provide the highest level maintenance with available funding. Plan for Level 1 and sometimes 2 level of maintenance standards at signature facility
- Parking: Sufficient to support the amenities. Traffic calming devices encouraged within and next to park
- Lighting: Amenity lighting includes sport field light standards. Security lighting on dual system with 50 percent of lights off at a set time and 50 percent on all night for security
- Signage: Directional signage and facility/amenity regulations to enhance user experience. May include kiosks in easily identified areas of the facility
- Landscape Design: Appropriate design to enhance the park theme/use/experience. Enhanced landscaping at entrances and throughout complex
- Naming: Consistent with the Town's naming ordinance, may be named after a prominent or historic person, event, or natural landmark
- Other: Integrated color scheme throughout the park; safety design meets established CPTED standards.
- Size of park: Preferably 40 or more acres for stand-alone complexes

Special Use Park/Facility

Special Use facilities are those spaces that don't fall within a typical park classification. A major difference between a Special Use facility and other parks is that they usually serve a single purpose whereas other park classifications are designed to offer multiple recreation opportunities. It is possible for a Special Use facility to be located inside another park. Special Use facilities generally fall into four categories:

- **Historic/Cultural/Social Sites** – unique local resources offering historical, educational, and cultural opportunities. Examples include historic downtown areas, commercial zones, plaza parks, performing arts parks, arboretums, display gardens, performing arts facilities, indoor theaters, churches, and amphitheaters. Frequently these are located in Community or Regional Parks
- **Golf Courses** – Nine and 18-hole complexes with ancillary facilities such as club houses, driving ranges, program space and learning centers. These facilities are highly maintained and support a wide age level of males and females. Programs are targeted for daily use play, tournaments, leagues, clinics and special events. Operational costs come from daily play, season pass holders, concession stands, driving range fees, earned income opportunities and sale of pro shop items
- **Indoor Recreation Facilities** – specialized or single purpose facilities. Examples include community centers, senior centers and community theaters. Frequently these are located in Community or Regional Parks

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- **Outdoor Recreation facilities** – Examples include aquatic parks, disk golf, skateboard, BMX, and dog parks, which may be located in a park
    - Size of park: Depends upon facilities and activities included. Their diverse character makes it impossible to apply acreage standards
    - Service radius: Depends upon facilities and activities included. Typically serves special user groups while a few serve the entire population
    - Site Selection: Given the variety of potential uses, no specific standards are defined for site selection. As with all park types, the site itself should be located where it is appropriate for its use.
    - Length of stay: varies by facility
    - Amenities: varies by facility
    - Revenue facilities: Due to nature of certain facilities, revenue may be required for construction and/or annual maintenance. This should be determined at a policy level before the facility is planned and constructed
    - Land usage: varies by facility
    - Programming: varies by facility
    - Maintenance Standards: Provide the highest level maintenance with available funding. Seek a goal of Level 2 maintenance standards. Some amenities (i.e., rose gardens) will require Level 1 maintenance
    - Parking: On-street or off-street parking is provided as appropriate. Design should include widened on-street parking area adjacent to park. Goal is to maximize usable park space. As necessary, provide a minimum of five to 10 spaces within park including handicap spaces. Traffic calming devices encouraged next to park
    - Lighting: Security or amenity only. Lighting on dual system with 50 percent of lights off at a set time and 50 percent on all night for security
    - Signage: Directional signage and facility/amenity regulations to enhance user experience
    - Landscape Design: Appropriate design to enhance the park theme/use/experience
    - Naming: Follows Town ordinance for naming or may be named after a prominent or historic person, event, or natural landmark
    - Other: Integrated color scheme throughout the park; safety design meets established CPTED standards. Cable TV conduit as appropriate.

Greenbelts/Trails

Greenbelts/Trails are recognized for their ability to connect people and place and often include either paved or natural trails. Trails can also be loop trails in parks. Linking neighborhoods, parks, recreation facilities, attractions, and natural areas with a multi-use trail fulfills two guiding principles simultaneously: protecting natural areas along creeks and open space areas and providing people with a way to access and enjoy them. Multi-use trails also offer a safe, alternative form of transportation; provide substantial health benefits, habitat enhancements for plants and wildlife, and unique opportunities for outdoor education and cultural interpretation.

- Site Selection: Located consistent with approved Trails Master Plan
- Amenities: Parking and restrooms at major trailheads. May include small parks along the trail
- Maintenance standards: Demand based maintenance with available funding

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- Lighting: Security lighting at trailheads is preferred. Lighting on dual system with 50 percent of lights off at a set time and 50 percent on all night for security
- Signage: Mileage markers at ¼ mile intervals. Interpretive kiosks at all trailheads and where deemed necessary
- Landscape Design: Coordinated planting scheme in urban areas. Limited or no planting in open space areas, may include shade trees in open space
- Other: Connectivity to parks or other Town attractions and facilities is desirable
- Size: Typically at least 30 ft width of unencumbered land for a Greenbelt. May include a trail to support walk, bike, run, equestrian type activities. Typically, an urban trail is 10-12 ft wide to support pedestrian and bicycle uses. Trails incorporate signage to designate where a user is located and where the trails connect in the Town.

Open Space/Natural Area

Open Space/Natural Areas are undeveloped but may include natural or paved trails. Grasslands under power line corridors are one example; creek areas are another. Open Space contain natural resources that can be managed for recreation and natural resource conservation values such as a desire to protect wildlife habitat, water quality and endangered species. Open Space also can provide opportunities for nature based, unstructured, low-impact recreational opportunities such as walking and nature viewing.

- Amenities: May include paved or natural trails, wildlife viewing areas, mountain biking, disc golf, interpretation and education facilities
- Maintenance standards: Demand-based maintenance with available funding. Biological management practices observed.
- Lighting: None
- Signage: Interpretive kiosks as deemed appropriate
- Landscape Design: Generally none. Some areas may include landscaping, such as entryways or around buildings. In these situations, sustainable design is appropriate.

Technical Needs Analysis

Equity Mapping

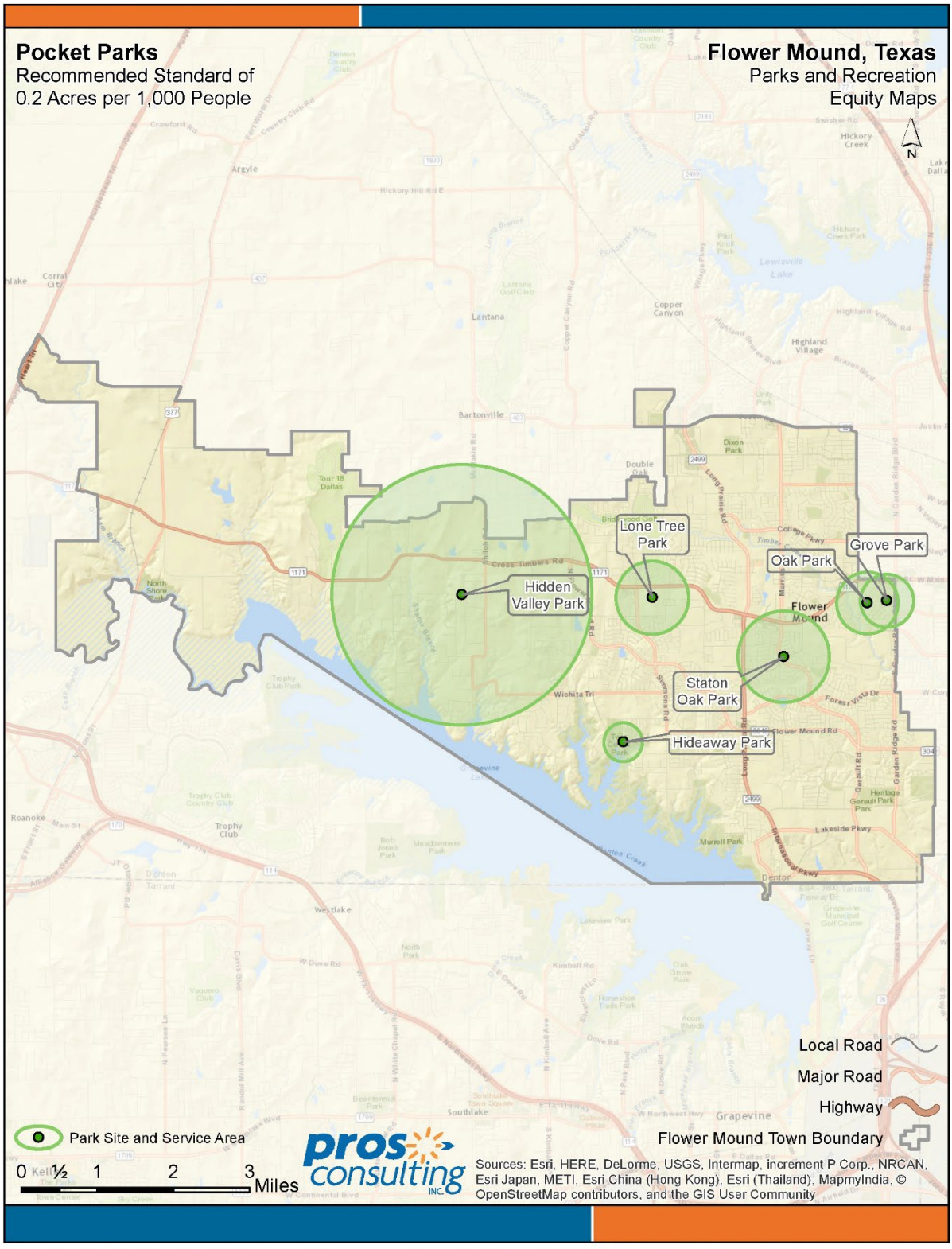
To further illustrate the distribution of current park types and park assets of the parks and recreation system across the entire community, an equity-mapping analysis was conducted. The maps included show the service areas of the *current* inventory of park types and park assets based on the *current* level-of-service standard. The current standard established per 1,000 residents per acre of park type or 10,000 residents per type of park asset are also indicated in the map title. The service area is calculated by the quantity of inventory of each site extended in a uniform radius until the population served by the recommended standard is reached. Shaded areas indicate the extent of the service area based on recommended inventories; unshaded areas indicate locations that would remain outside of the standard service area for each park type or park asset. Unshaded areas are not always the most appropriate location for future parks or park assets. They only represent areas that might be more thoroughly reviewed for potential additional facilities. Although there are occasions when the service area may extend beyond the border of Flower Mound, only Flower Mound resident

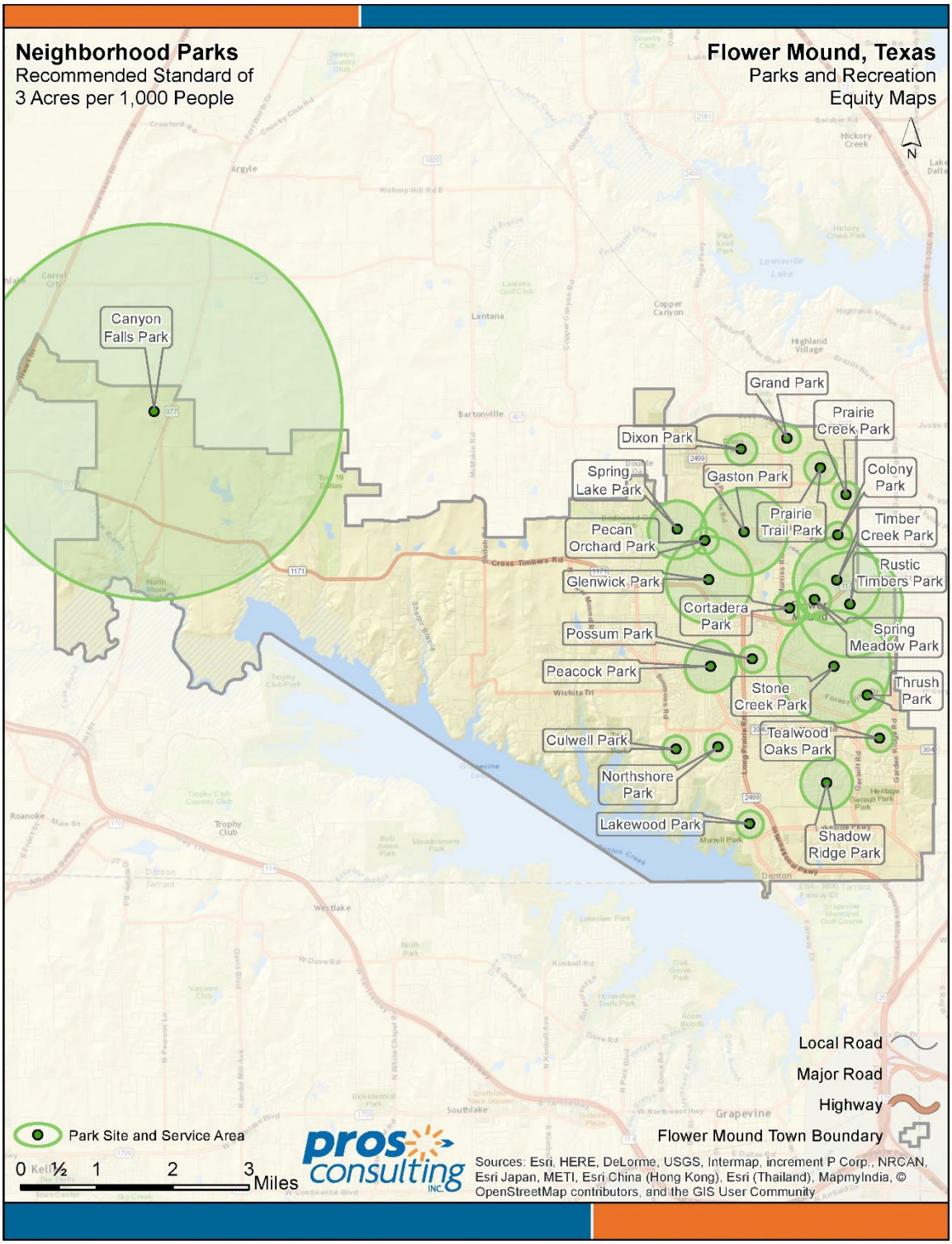
populations were utilized for calculating service-area standards in this analysis.

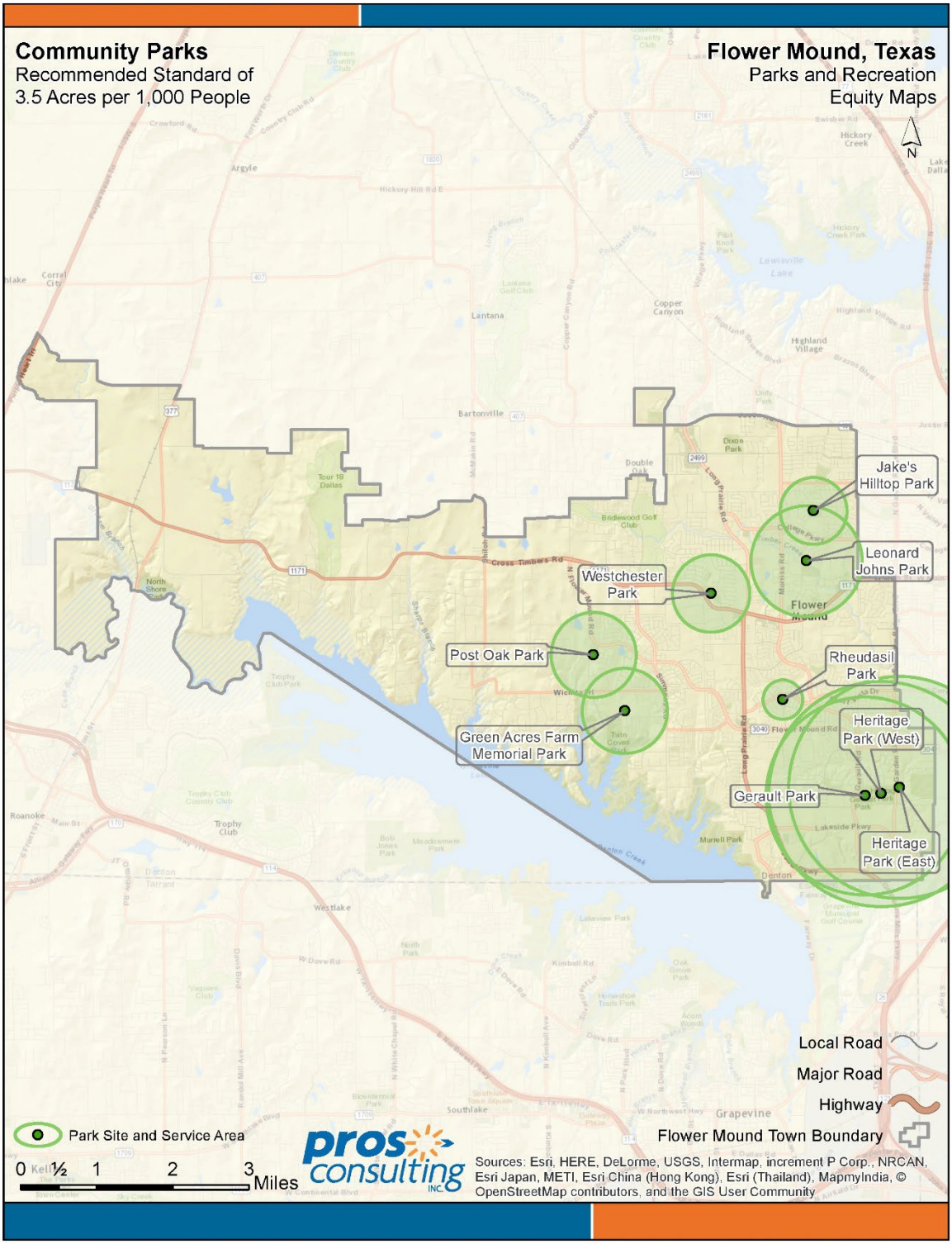
Community-wide maps of park types, or classifications, identified in this Master Plan, as well as the major park assets, are provided in the pages that follow. The maps on the following pages identify:

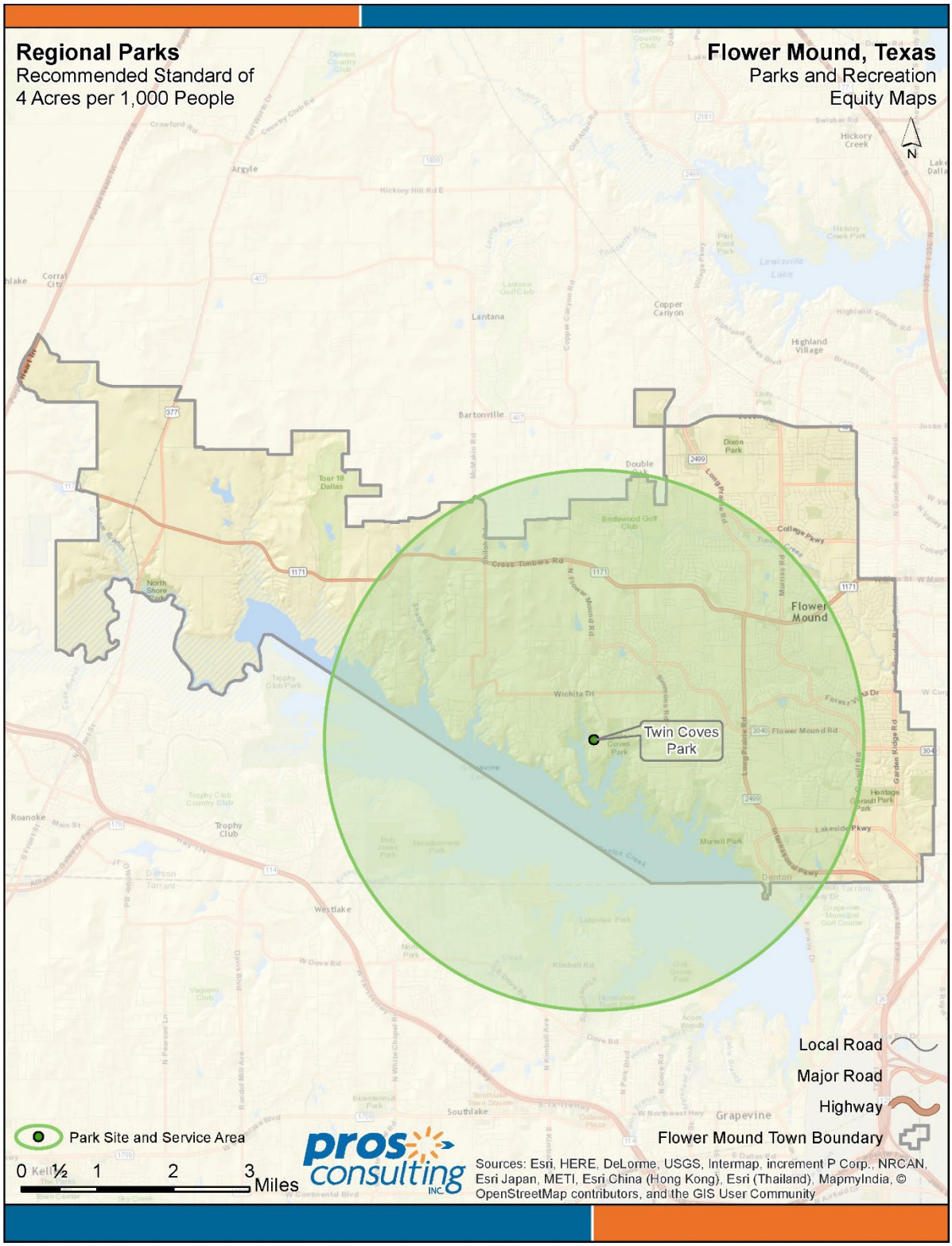
1. Pocket Parks
2. Neighborhood Parks
3. Community Parks
4. Regional Parks
5. Ball Fields
6. Picnic Shelters/Pavilions
7. Multi-Purpose Rectangle Fields (Football, Lacrosse, Cricket)
8. Soccer Fields
9. Basketball Multi-Use Courts, Outdoor
10. Tennis Courts
11. Playgrounds
12. Dog Parks
13. Outdoor Swimming Pools
14. Recreation/Gymnasium

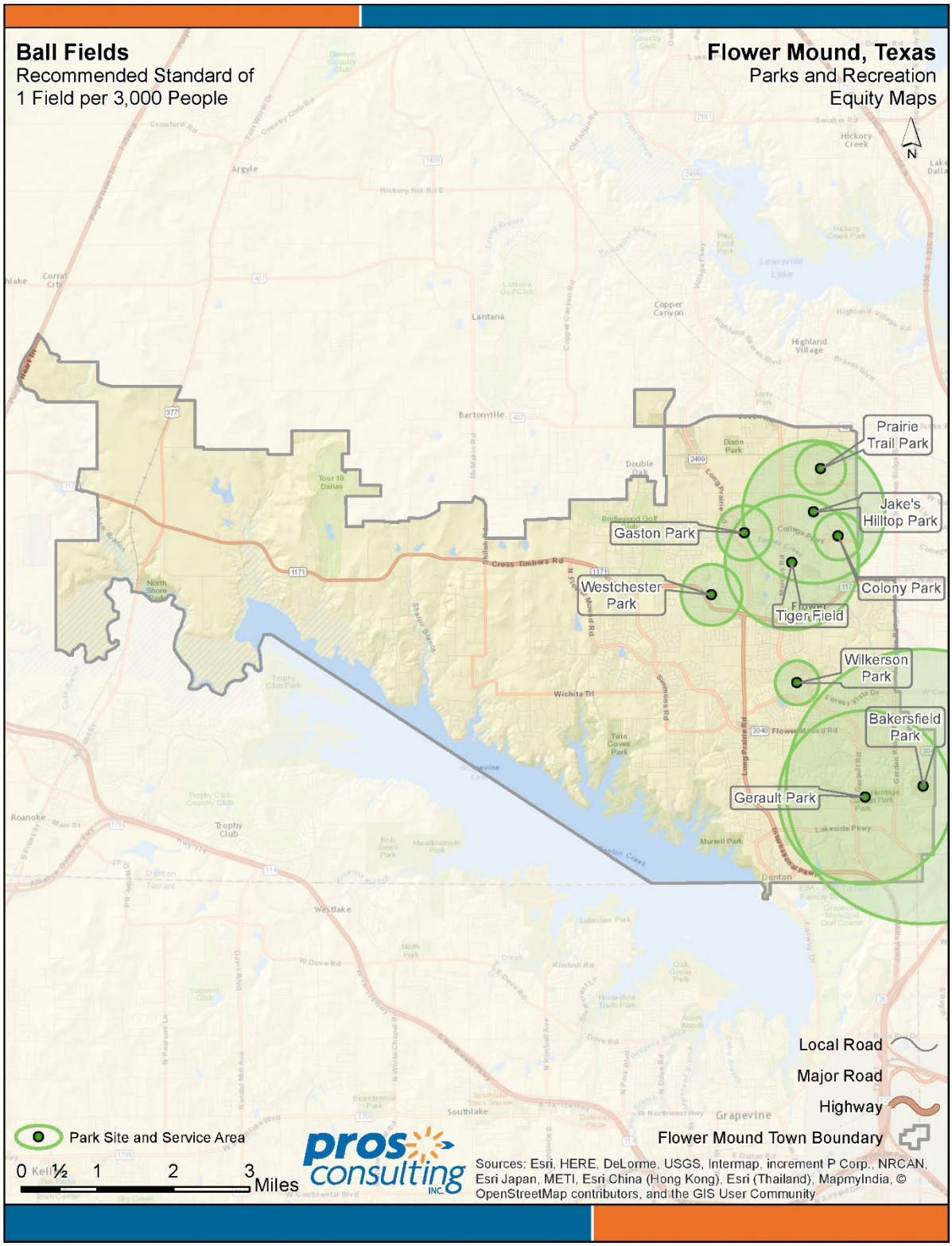
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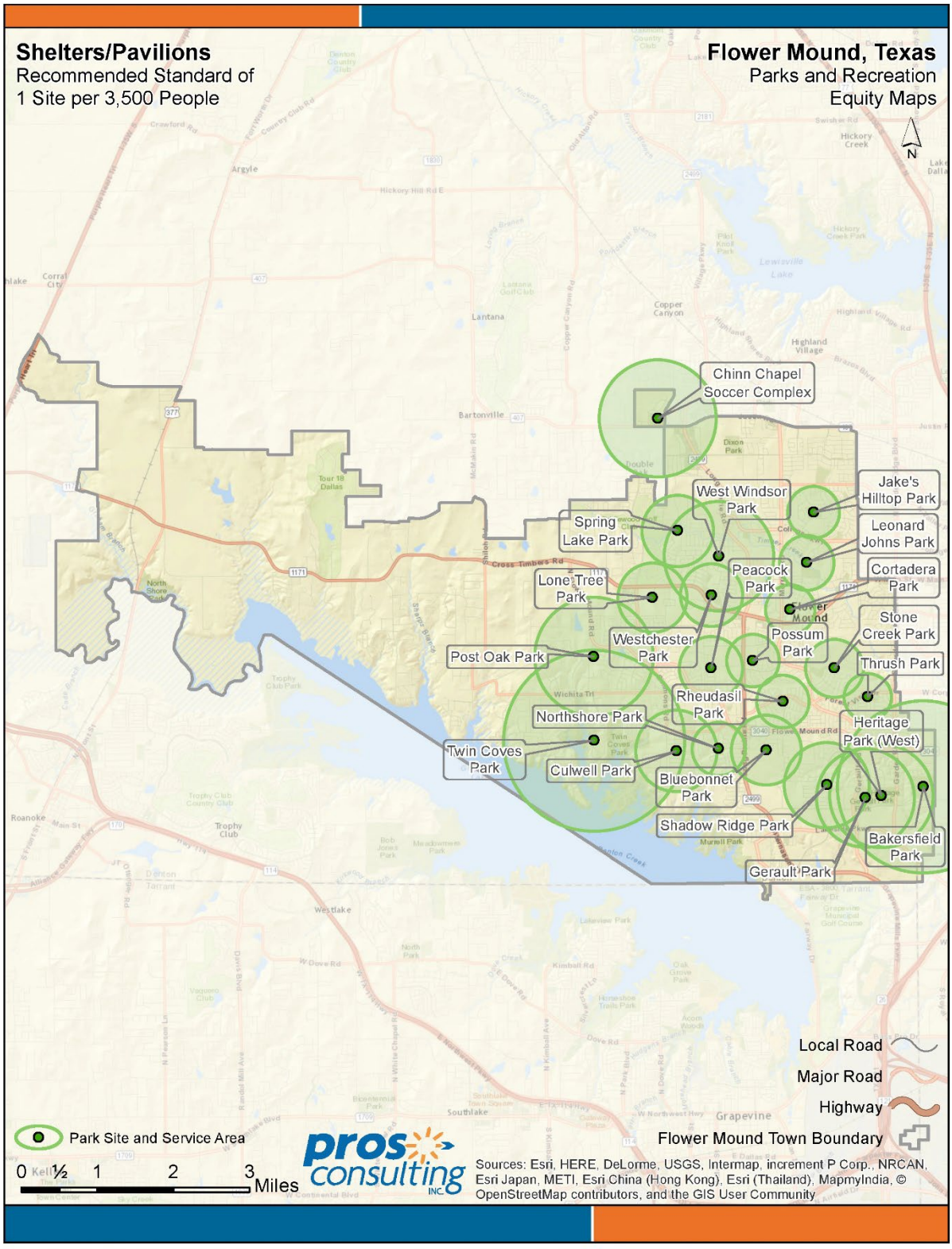

Pocket Parks
Recommended Standard of
0.2 Acres per 1,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Lone Tree Park
Grove Park
Oak Park
Hidden Valley Park
Staton Oak Park
Hideaway Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

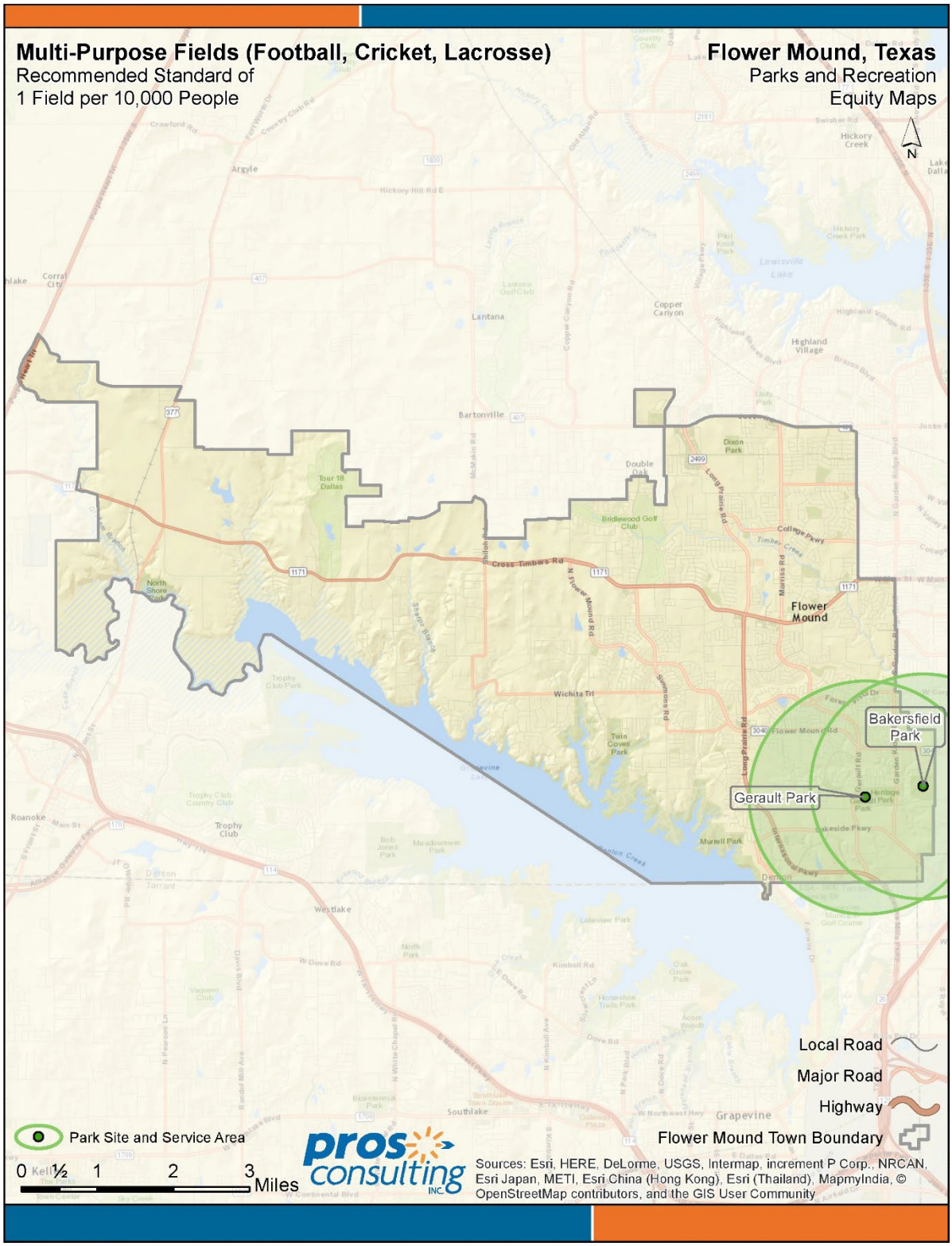

Neighborhood Parks
Recommended Standard of
3 Acres per 1,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Canyon Falls Park
Grand Park
Prairie Creek Park
Dixon Park
Spring Lake Park
Gaston Park
Colony Park
Prairie Trail Park
Timber Creek Park
Pecan Orchard Park
Rustic Timbers Park
Glenwick Park
Cortadera Park
Spring Meadow Park
Possum Park
Peacock Park
Thrush Park
Stone Creek Park
Culwell Park
Tealwood Oaks Park
Northshore Park
Lakewood Park
Shadow Ridge Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

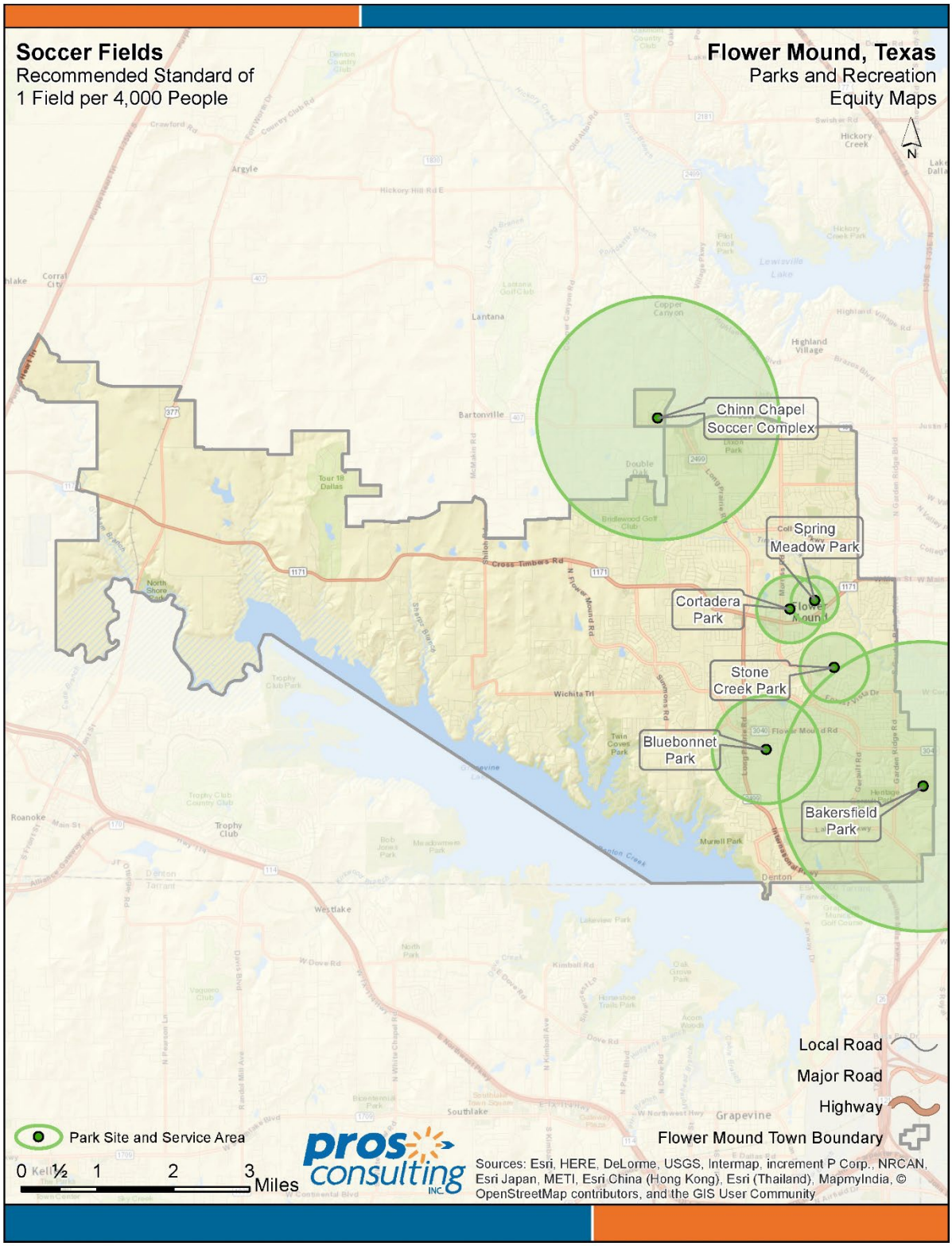

Community Parks
Recommended Standard of
3.5 Acres per 1,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Jake's Hilltop Park
Leonard Johns Park
Westchester Park
Post Oak Park
Rheudasil Park
Green Acres Farm Memorial Park
Heritage Park (West)
Gerault Park
Heritage Park (East)
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

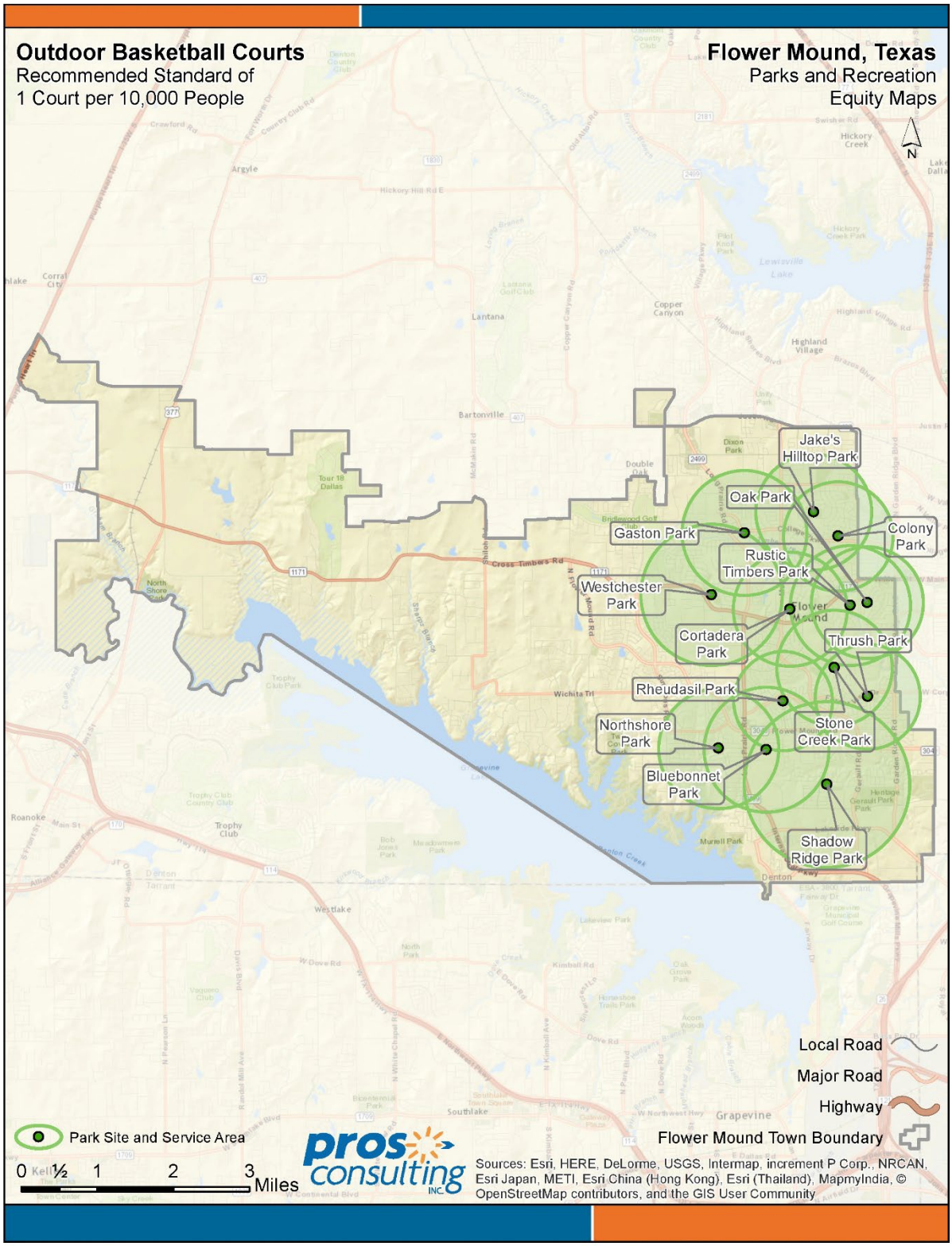

Regional Parks
Recommended Standard of
4 Acres per 1,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Twin Coves Park
Flower Mound
Lantana
Bartonville
Argyle
Trophy Club
Westlake
Southlake
Grapevine
Denton
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

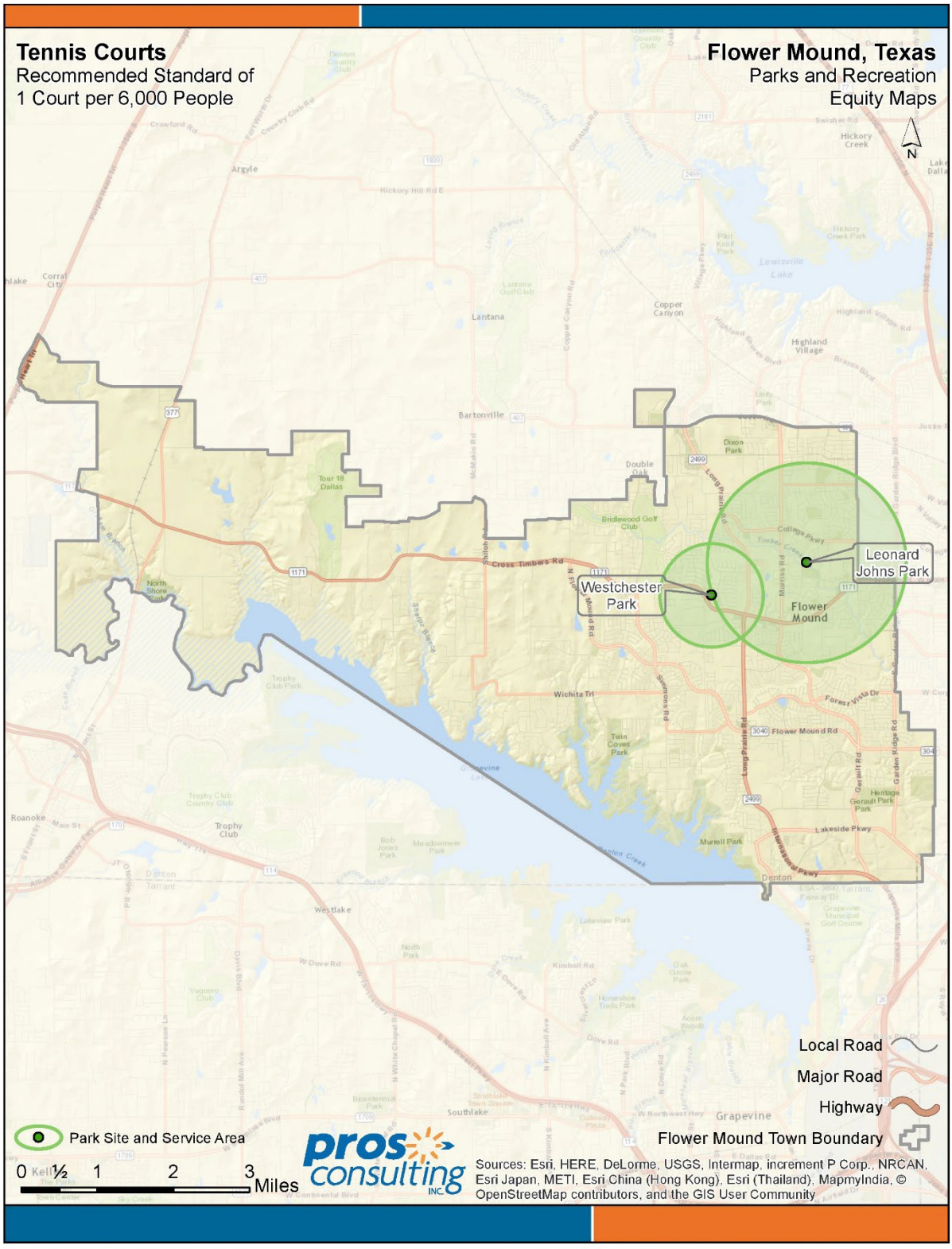

Ball Fields
Recommended Standard of
1 Field per 3,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Prairie Trail Park
Jake's Hilltop Park
Gaston Park
Westchester Park
Colony Park
Flower Tiger Field
Wilkerson Park
Bakersfield Park
Gerault Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

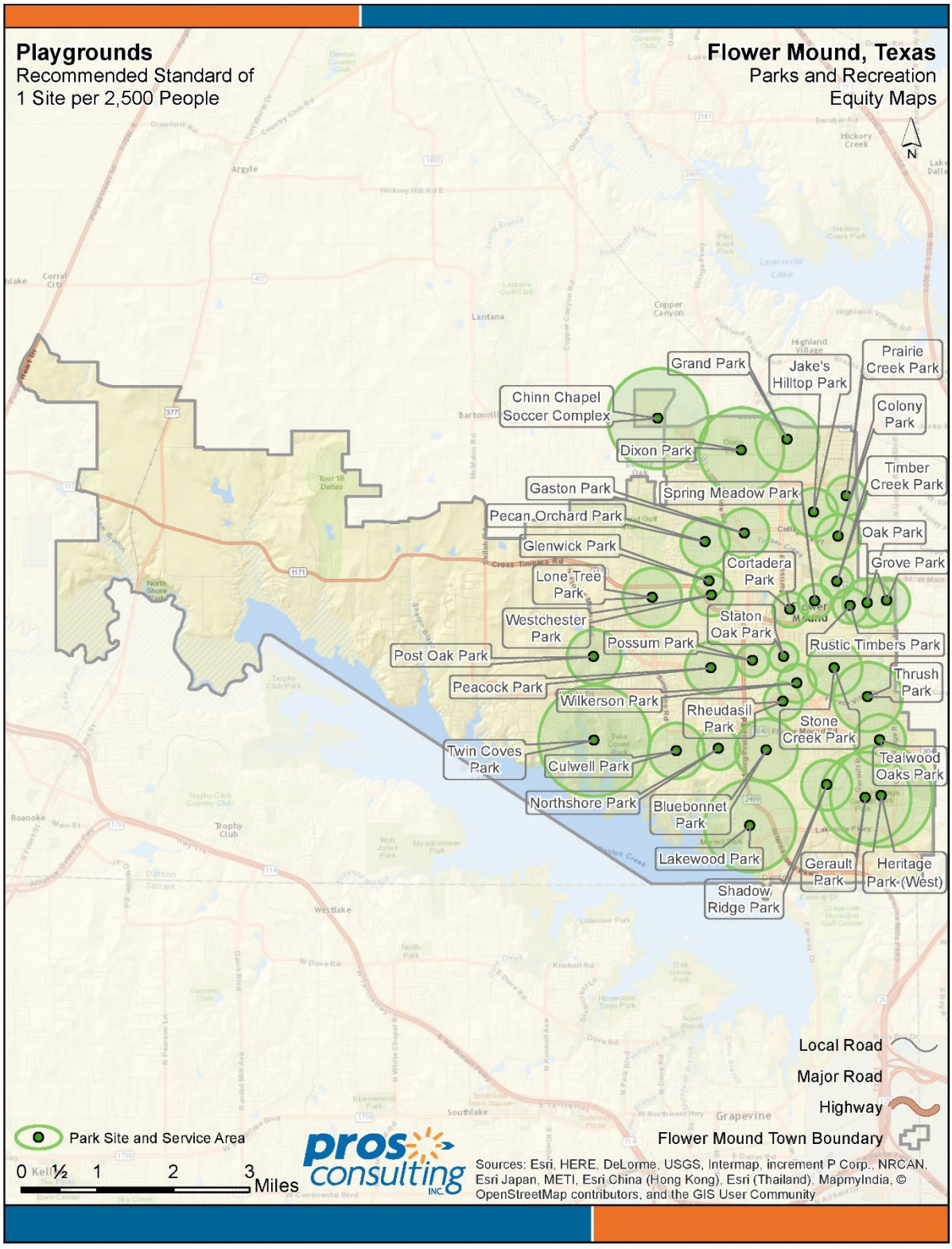

Shelters/Pavilions
Recommended Standard of
1 Site per 3,500 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Chinn Chapel Soccer Complex
West Windsor Park
Jake's Hilltop Park
Spring Lake Park
Leonard Johns Park
Peacock Park
Cortadera Park
Lone Tree Park
Stone Creek Park
Possum Park
Westchester Park
Post Oak Park
Thrush Park
Rheudasil Park
Northshore Park
Heritage Park (West)
Twin Coves Park
Culwell Park
Bluebonnet Park
Shadow Ridge Park
Bakersfield Park
Gerault Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

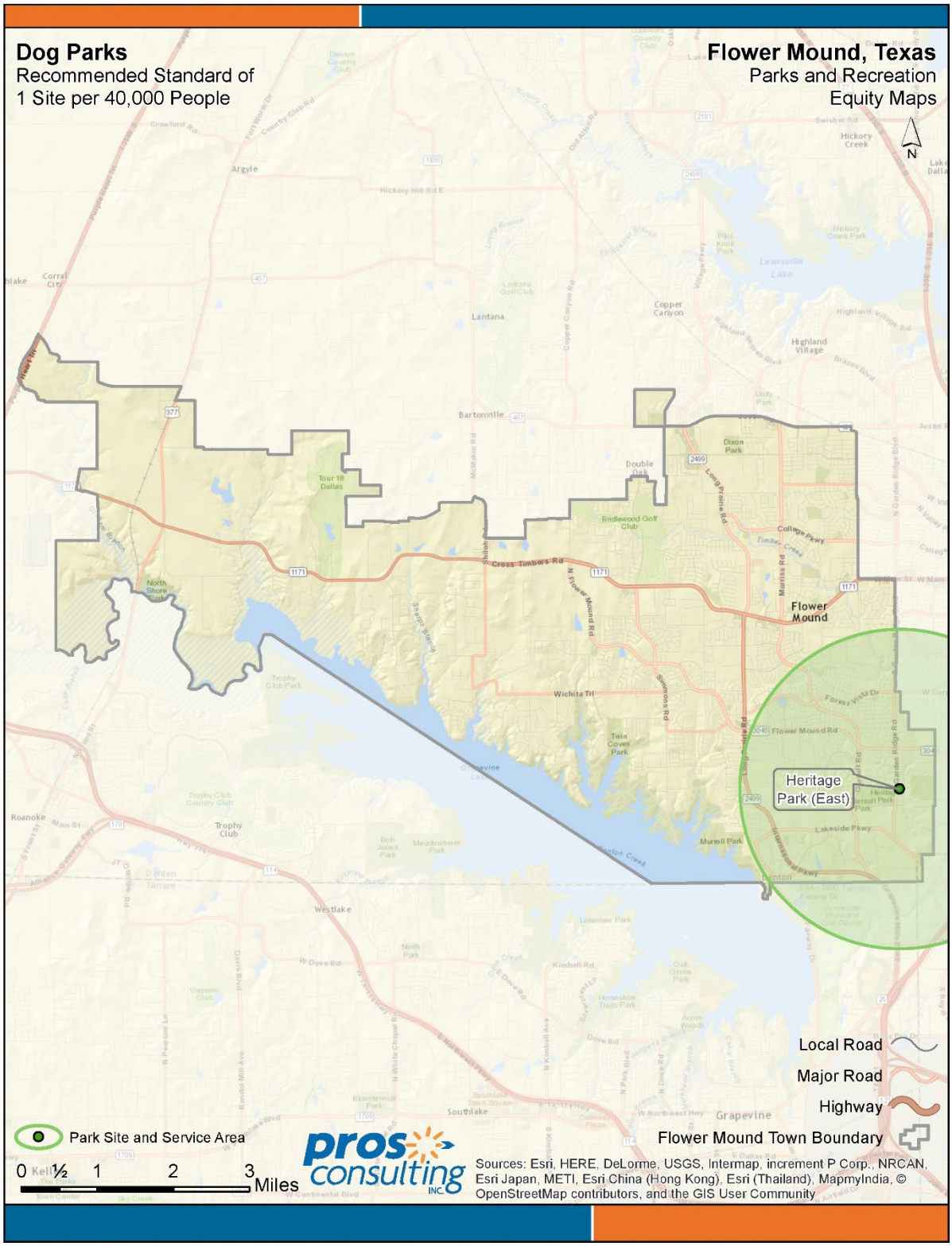

Multi-Purpose Fields (Football, Cricket, Lacrosse)
Recommended Standard of
1 Field per 10,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Bakersfield Park
Gerault Park
Flower Mound
Lantana
Bartonville
Argyle
Copper Canyon
Highland Village
Hickory Creek
Lewisville Lake
Double Oak
Dixon Park
Bridlewood Golf Club
Tour 18 Dallas
North Shore Golf
Cross Timbers Rd
N Flower Mound Rd
Long Prairie Rd
College Pkwy
Morriss Rd
Wichita Trl
Simmons Rd
Twin Coves Park
Trophy Club
Trophy Club Park
Roanoke
Westlake
Southlake
Grapevine
Murrell Park
Meadowmere Park
Bob Jones Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 Kilo ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

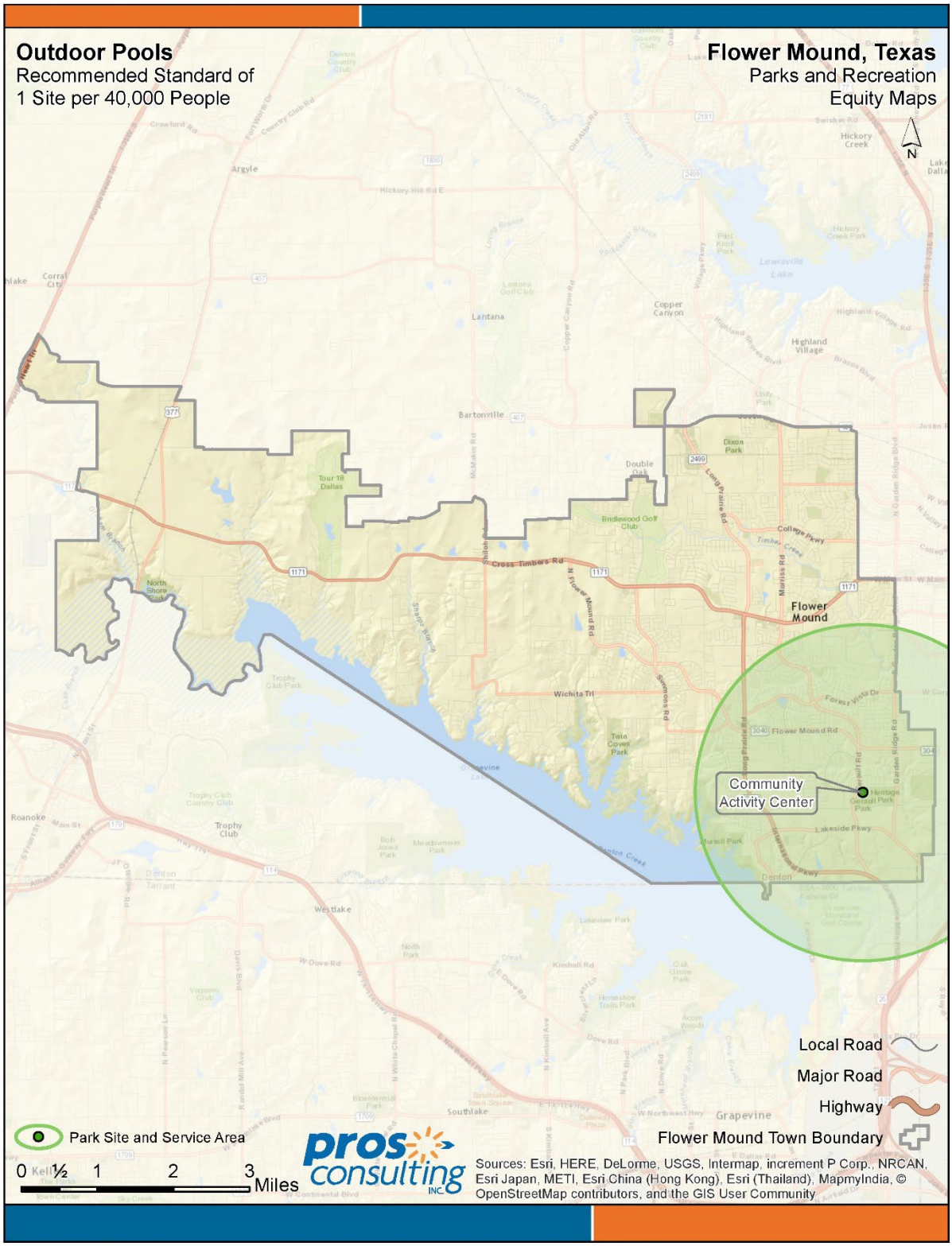

Soccer Fields
Recommended Standard of
1 Field per 4,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Chinn Chapel
Soccer Complex
Spring
Meadow Park
Cortadera
Park
Stone
Creek Park
Bluebonnet
Park
Bakersfield
Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

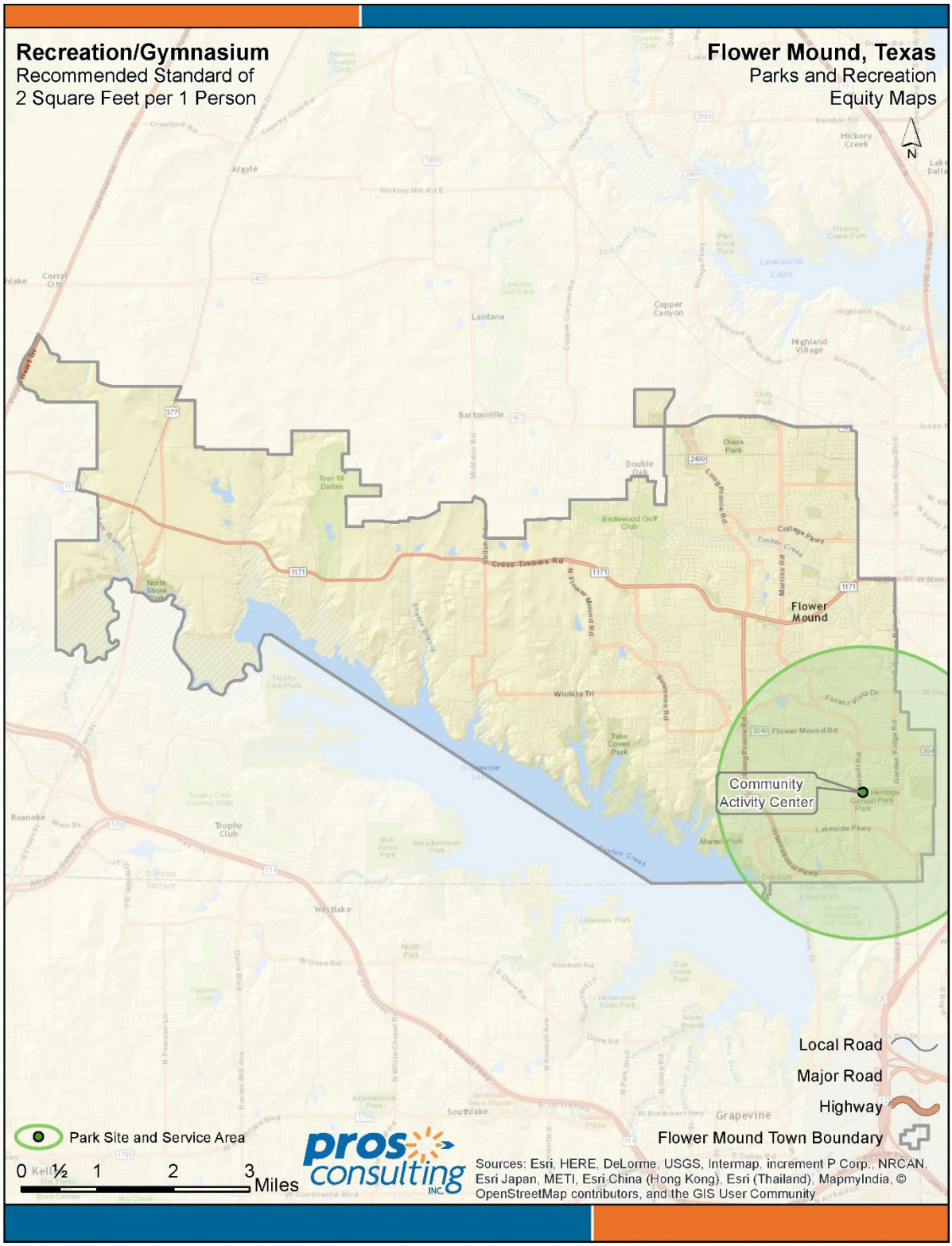

Outdoor Basketball Courts
Recommended Standard of
1 Court per 10,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Jake's Hilltop Park
Oak Park
Colony Park
Gaston Park
Rustic Timbers Park
Westchester Park
Flower Mound
Cortadera Park
Thrush Park
Rheudasil Park
Northshore Park
Stone Creek Park
Bluebonnet Park
Shadow Ridge Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


Tennis Courts
Recommended Standard of
1 Court per 6,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Leonard Johns Park
Westchester Park
Flower Mound
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


Playgrounds
Recommended Standard of
1 Site per 2,500 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Grand Park
Jake's Hilltop Park
Prairie Creek Park
Chinn Chapel Soccer Complex
Colony Park
Dixon Park
Timber Creek Park
Gaston Park
Spring Meadow Park
Pecan Orchard Park
Oak Park
Glenwick Park
Grove Park
Cortadera Park
Lone Tree Park
Staton Oak Park
Westchester Park
Possum Park
Rustic Timbers Park
Post Oak Park
Thrush Park
Peacock Park
Wilkerson Park
Rheudasil Park
Stone Creek Park
Twin Coves Park
Culwell Park
Tealwood Oaks Park
Northshore Park
Bluebonnet Park
Lakewood Park
Gerault Park
Heritage Park-(West)
Shadow Ridge Park
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


Dog Parks
Recommended Standard of
1 Site per 40,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Heritage
Park (East)
Flower
Mound
Lantana
Bartonville
Argyle
Copper
Canyon
Highland
Village
Double
Oak
Dixon
Park
Bridlewood Golf
Club
Cross Timbers Rd
Flower Mound Rd
Collage Pkwy
Wichita Trl
Twin
Coves
Park
Murrell Park
Lakeside Pkwy
Trophy
Club
Westlake
Southlake
Grapevine
Denton
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 Kilo ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


Outdoor Pools
Recommended Standard of
1 Site per 40,000 People
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Community
Activity Center
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


Recreation/Gymnasium
Recommended Standard of
2 Square Feet per 1 Person
Flower Mound, Texas
Parks and Recreation
Equity Maps
N
Community Activity Center
Local Road
Major Road
Highway
Flower Mound Town Boundary
Park Site and Service Area
0 ½ 1 2 3 Miles
pros consulting INC.
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Level of Service Standards

Level of Service (LOS) standards are guidelines that define service areas based on population that support investment decisions related to parks, facilities and amenities. LOS standards can and will change over time as the program lifecycles change and demographics of a community change.

In 2017, PROS evaluated park facility standards using a combination of resources. These resources included: National Recreation and Park Association (NRPA) guidelines; recreation activity participation rates reported by the Sports & Fitness Industry Association's (SFIA) 2015 Study of Sports, Fitness, and Leisure Participation as it applies to activities that occur in the United States and the Flower Mound area; community and stakeholder input; and general observations. This information allowed standards to be customized to the Flower Mound Parks and Recreation Department.

These LOS standards should be viewed as a guide. The standards are to be coupled with conventional wisdom and judgment related to the particular situation and needs of the community. By applying these standards to the population of Flower Mound, gaps and surpluses in park and facility/amenity types are revealed. These standards should be used to inform decisions when planning to develop new parks, facilities, and amenities. It should also be noted that pocket parks are not commonly found in a public park system, and are normally designed, constructed and maintained as a common's area within a Homeowner's Association.

Currently, there are multiple needs to be met in Flower Mound to properly serve the community now and in the future. As can be seen on the following page, the Town of Flower Mound currently provides a total LOS of 12.63 acres of parkland per 1,000 residents. The planning team has recommended increasing the LOS standard to 14.60 acres/1,000 population as a goal. This means that as of today, the Town is deficient by 135 acres. To keep up with the projected population growth, the Town would need to add a total of 214 acres to the parks and recreation system by the year 2021 in order to achieve the recommended standard.

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Flower Mound Level of Service Standards

	2016 Inventory	Service Levels						2016 Facility Standards			2021 Facility Standards		
Park Type	**Flower Mound**	**Current Service Level based upon population**			**Recommended Service Levels; Revised for Local Service Area**			**Meet Standard/ Need Exists**	**Additional Facilities/ Amenities Needed**		**Meet Standard/ Need Exists**	**Additional Facilities/ Amenities Needed**	
Pocket Parks	16.89	0.25	acres per	1,000	0.25	acres per	1,000	Need Exists	0	Acre(s)	Need Exists	2	Acre(s)
Neighborhood Parks	178.87	2.62	acres per	1,000	3.00	acres per	1,000	Need Exists	26	Acre(s)	Need Exists	43	Acre(s)
Community Parks	176.35	2.58	acres per	1,000	3.25	acres per	1,000	Need Exists	46	Acre(s)	Need Exists	63	Acre(s)
Regional Parks	243.00	3.56	acres per	1,000	4.00	acres per	1,000	Need Exists	30	Acre(s)	Need Exists	52	Acre(s)
Sports Complex	136.80	2.00	acres per	1,000	2.00	acres per	1,000	Meets Standard	-	Acre(s)	Need Exists	11	Acre(s)
Specialty Parks	3.59	0.05	acres per	1,000	0.10	acres per	1,000	Need Exists	3	Acre(s)	Need Exists	4	Acre(s)
Greenbelt/Linear Parks	107.90	1.58	acres per	1,000	2.00	acres per	1,000	Need Exists	29	Acre(s)	Need Exists	40	Acre(s)
Undeveloped/Open Space Acres	116.51	1.70	acres per	1,000	0.00	acres per	1,000	Meets Standard	-	Acre(s)	Meets Standard	-	Acre(s)
Total Park Acres	**979.91**	**12.63**	**acres per**	**1,000**	**14.60**	**acres per**	**1,000**	**Need Exists**	**135**	**Acre(s)**	**Need Exists**	**214**	**Acre(s)**
OUTDOOR AMENITIES:													
Shelters/Pavilions	27.00	1.00	site per	2,532	1.00	site per	3,500	Meets Standard	-	Sites(s)	Meets Standard	-	Sites(s)
Soccer Fields	19.00	1.00	field per	3,598	1.00	field per	4,000	Meets Standard	-	Field(s)	Meets Standard	-	Field(s)
Multi-Purpose Fields (Football, Cricket, Lacrosse)	4.00	1.00	field per	17,089	1.00	field per	10,000	Need Exists	3	Field(s)	Need Exists	3	Field(s)
Ball Fields	29.00	1.00	field per	2,357	1.00	field per	3,000	Meets Standard	-	Field(s)	Meets Standard	-	Field(s)
Basketball Courts	13.00	1.00	court per	5,258	1.00	court per	10,000	Meets Standard	-	Court(s)	Meets Standard	-	Court(s)
Tennis Courts	6.00	1.00	court per	11,392	1.00	court per	6,000	Need Exists	5	Court(s)	Need Exists	6	Court(s)
Playgrounds	35.00	1.00	site per	1,953	1.00	site per	2,500	Meets Standard	-	Site(s)	Meets Standard	-	Site(s)
Dog Parks	1.00	1.00	site per	68,354	1.00	site per	40,000	Need Exists	1	Site(s)	Need Exists	1	Site(s)
Skate Park	-	1.00	site per	50,000	1.00	site per	50,000	Need Exists	1	Site(s)	Need Exists	1	Site(s)
Sand Volleyball	-	1.00	site per	30,000	1.00	site per	30,000	Need Exists	2	Site(s)	Need Exists	2	Site(s)
Paved Multi-Use Trails	59.90	0.88	miles per	1,000	0.50	miles per	1,000	Meets Standard	-	Mile(s)	Meets Standard	-	Mile(s)
Outdoor Pools	1.00	1.00	site per	68,354	1.00	site per	40,000	Need Exists	1	Site(s)	Need Exists	1	Site(s)
INDOOR AMENITIES:													
Recreation Center (Square Feet)	61,000.00	0.89	SF per	person	2.00	SF per	person	Need Exists	75,708	Square Feet	Need Exists	86,598	Square Feet

Trails and Bikeways Master Plan

The purpose of the 2022 Trails and Bikeways Master Plan is to guide the development of network recommendations, design guidelines, and implementation strategies for a comprehensive system of multi-use trails and on-street bikeways throughout the Town of Flower Mound. This active transportation and recreation system aims to increase accessibility for users to key destinations within Flower Mound and leverage key regional connections to adjacent communities. This plan will augment previous planning efforts to create a more complete community and provide active and healthy lifestyle opportunities.

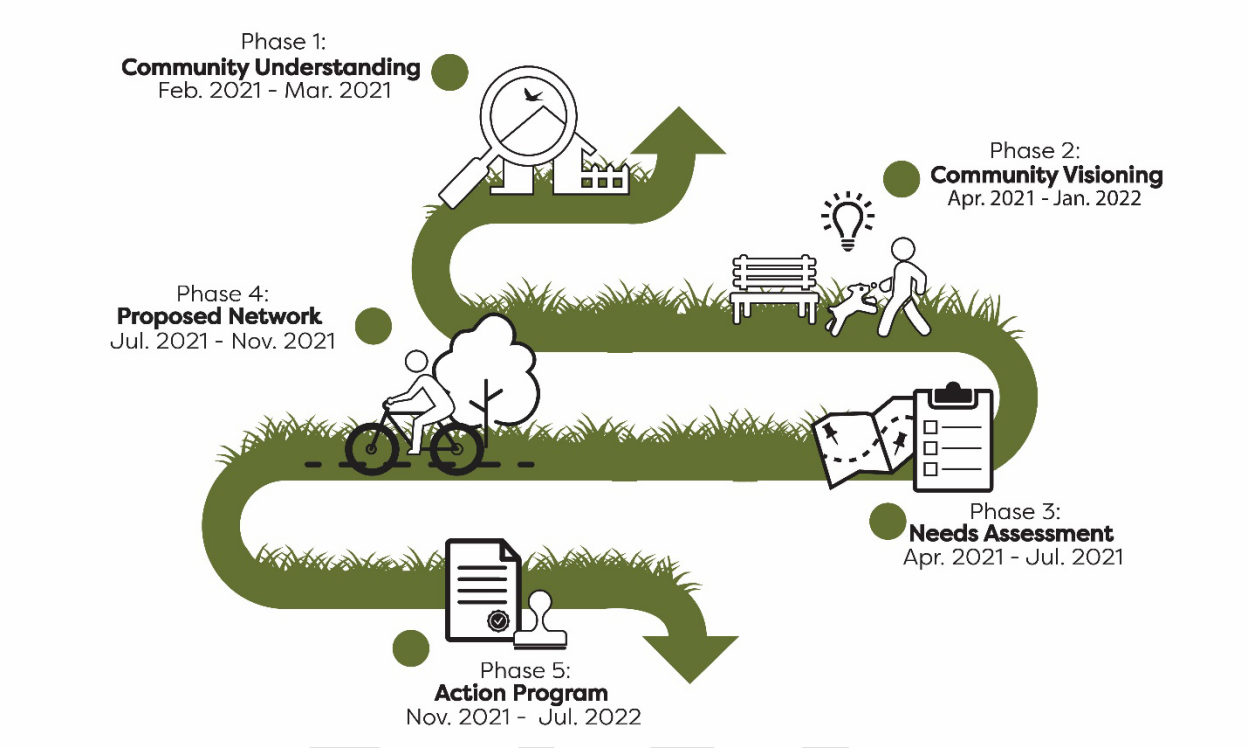
The plan contains more detailed information on trail and bikeway facilities, the trails planning process, community demographic profiles, existing system assessments, recommended strategies, trail and bikeway design standards and implementation mechanisms. This plan's principles are guided by industry standards for trail and bikeway planning methodology and reflects input from the residents of Flower Mound, Town staff, Parks Board, Transportation Commission, Planning and Zoning Commission, and Town Council.

Trails and Bikeways Plan Overview

The development of this plan spanned approximately 17 months, starting in February 2021 and concluding in July 2022. Throughout this process, the Town staff working group, a designated steering committee, stakeholders, elected/appointed officials, and residents were engaged to guide the master plan recommendations. The resulting community-driven vision forms the foundation for trails and bikeways in Flower Mound for the next decade and beyond. The formation of the plan included five distinct but iterative phases, shown in Figure 1.1.

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Figure 1.1 Planning Process



Phase 1: Community Understanding

Phase One included an assessment of existing trails and bikeways, identification of opportunities and barriers, and review of community demographics and relevant studies that may impact the Trails and Bikeways Master Plan.

The Town's current system provides residents with diverse options and access to various parks, schools, and destinations. Barriers to the system include safety issues like grading and slope along existing trails, major physical barriers like roadways, narrow trail segments, and accessibility concerns.

Phase 2: Community Visioning

The vision and goals of this plan were developed through an evaluation of feedback received through the plan's community engagement process. The process offered input opportunities through virtual engagement rooms, public open houses, an online survey, interactive maps, and pop-up tents at community events.

Key takeaways from the community engagement include:

- Residents love the trails; however, the current system is incomplete with numerous gaps and patches of trail which end without warning.

- The trail system lacks consistent and reliable wayfinding. A more comprehensive wayfinding system would help users better identify trails and destinations.
- Residents envision a future for trails and bikeways that is safe, provides connections, and has a variety of amenities (such as benches, parking, lighting, and drinking fountains).
- Off-street trails were preferred over on-street bikeways.

Phase 3: Needs Assessment
An analysis of the overall trails system needs included assessing the existing network, identifying safety issues and barriers, determining where gaps exist, and understanding demand for new facilities.

AASHTO and NACTO recommend trail widths of 10'-14' based on anticipated usage but many of the Town's current trails do not meet this national standard. Flower Mound's trails are frequently used by residents of all ages and abilities, which creates conflicts at pinch points such as blind curves, intersection crossings, and the convergence of trails.

An assessment of the named trails was conducted at the beginning of the planning process. General improvements for the trail system include:

- More comprehensive wayfinding system through consistent branding.
- Improved crossings at both roadways and mid-block where applicable with additional striping and signage.
- More amenities along the trail to improve the user experience.
- Identifying where trail segments need shade.
- Improved curb ramps at intersections.

Phase 4: Proposed Network
Based on the needs assessment, an expanded town-wide network was generated based on the barriers, opportunities, and desires of the community. The proposed network includes a variety of facility types, guidance on facility design standards, and policies related to bikeway and trail development.

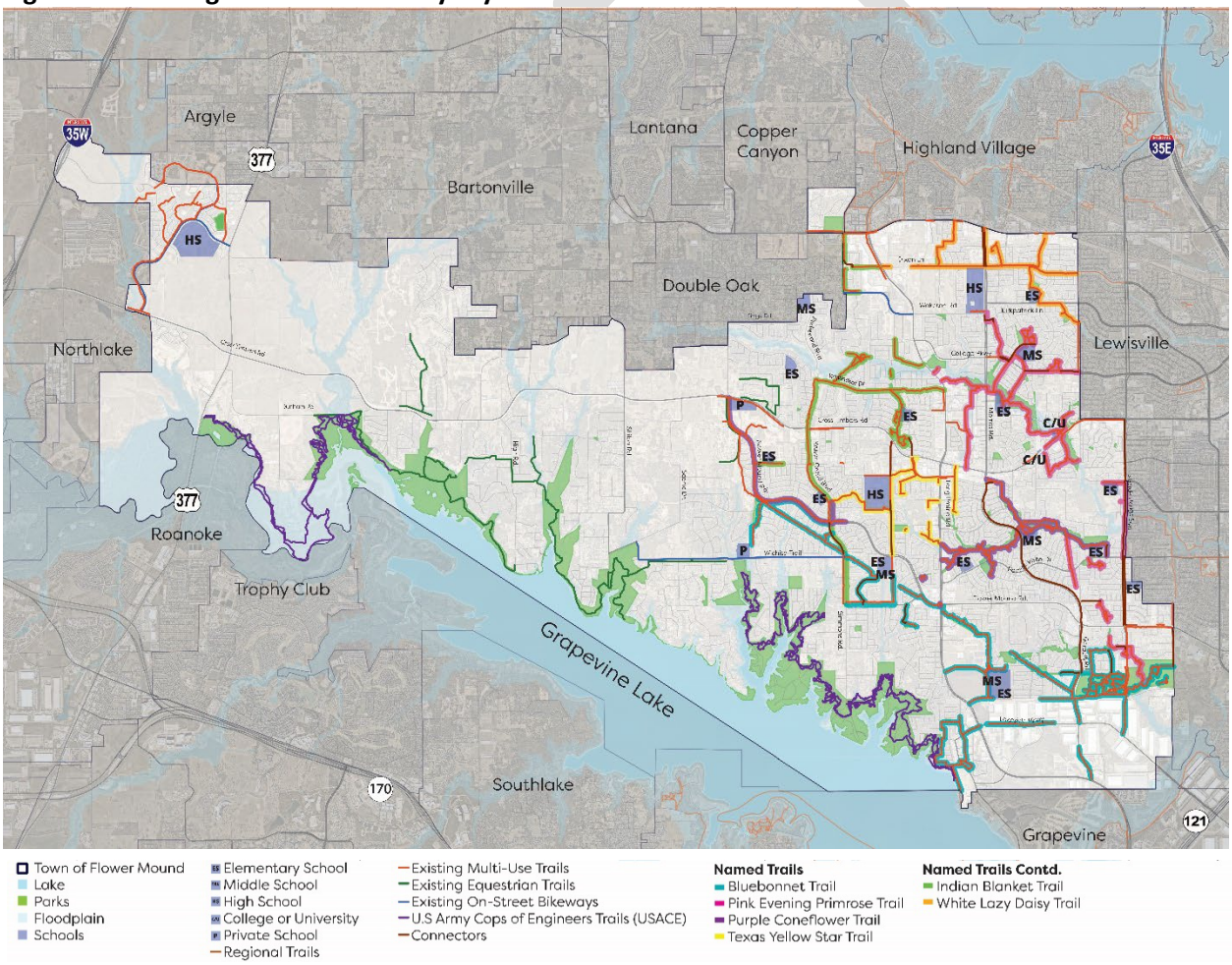
Phase 5: Action Program
Finally, an action plan was developed to provide implementation strategies for the proposed network. Recommendations for implementation are prioritized by short-term (1-5 years), mid-term (6-10 years), and long-term (10+ years) priorities.

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System Overview

The Flower Mound trails and bikeways system has diverse offerings for its residents and visitors from across the region and beyond. The system aims to connect residential neighborhoods to schools, parks, and commercial centers and expand mobility for its residents. Flower Mound has a unique natural landscape that adds to the overall experience of trail users. Currently, there are 65.3 miles of 8’ or wider paved Town trails. There are 14.6 miles of town maintained equestrian trails. There are 6.3 miles of on-street bikeways that include shared-use markings and bike lane designations. Finally, there are 34.5 miles of trails owned and maintained by other entities within Flower Mound that include soft-surface hike and bike trails as well as equestrian trails. Town Connectors are sidewalks that fill major gaps in the trail network where rights-of-way are constrained. There are approximately 11 miles of existing connectors. Figure 1.2 depicts the Town’s existing system trail and bikeway facilities.

Figure 1.2 Existing Trails and Bikeways System



Trail and Bikeway System Needs

The planning process included a series of meetings with Town stakeholders and the public. During those meetings, attendees were asked how they envision walking, cycling, riding, and paddling in Flower Mound in the future. Input from these meetings and interviews helped shape the vision and goals for the Town of Flower Mound Trails and Bikeways Master Plan.

The Recommended Network Map, depicted in Figure 1.4 (page 5.39), was developed through a combination of research, field observation, and community input. The network depicted encourages recreation, active transportation, and healthy living for current and future generations.

Based off the findings in the need assessment and community engagement, the below criteria were used to determine the level of impact and feasibility of each segment of the network.

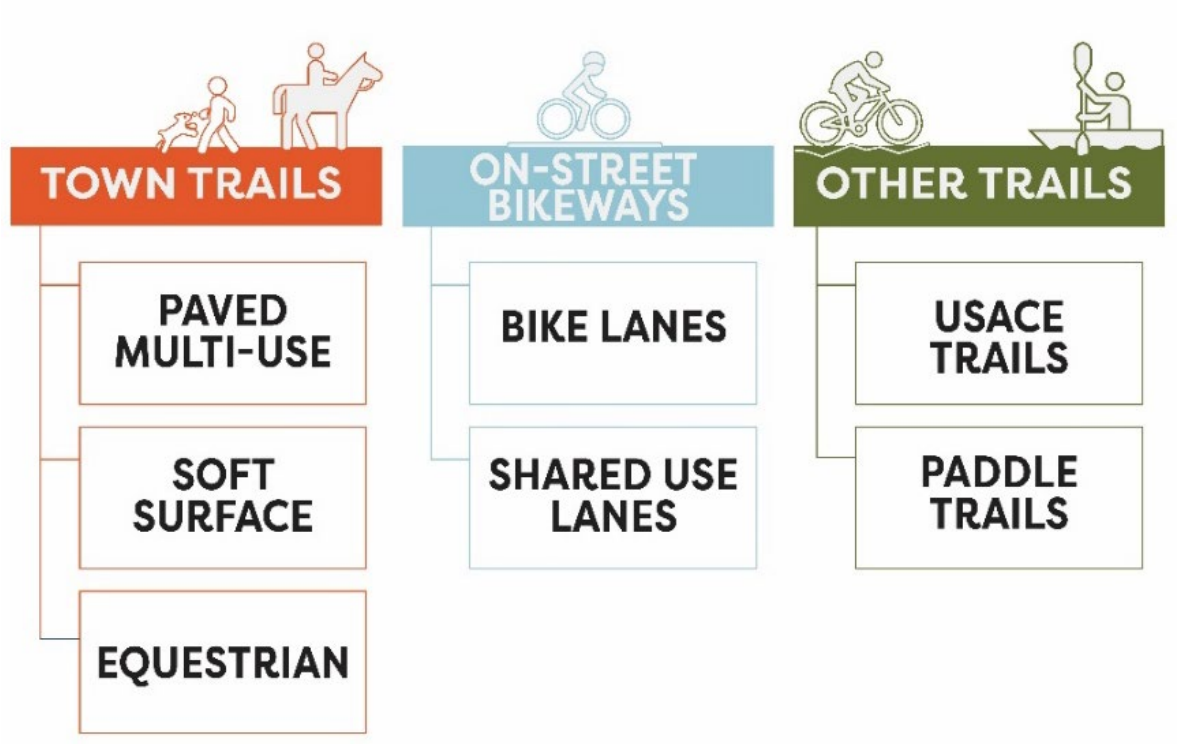
- **Connects the system**: The segment would provide connections to the existing or planned system by filling a gap within the existing network.
- **Connects to destinations**: The segment would provide connections to community destinations such as parks, schools, entertainment centers, and employment opportunities.
- **Addresses safety issues**: The segment would address safety concerns to improve access to the system.
- **Increases access**: The segment is located close to residential areas and would provide additional connectivity to neighborhoods.
- **Feasibility of corridor**: The segment should be generally feasible to construct. Elements considered during a planning-level review include available right-of-way or easements, lane widths, property ownership, topography, and floodplain.

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Facility Types

The Master Plan divides the town trails and bikeways network into three categories: town trails, on-street bikeways, and other trails. Each facility is designed to accommodate specific users as shown in Figure 1.3.

Figure 1.3 Trail and Bikeway System Facility Types



Town Trails are multi-use facilities maintained by the Town of Flower Mound that are designed to provide a high level of comfort for users by providing wider trails in locations that promote safety and usability. Town trails include paved multi-use, soft surface trails, and equestrian trails.

- *Paved multi-use trails* can be located adjacent to roadways, within utility easements or drainage corridors, or within parks and greenways. These wide, paved facilities are comfortable for bicycle and pedestrian users of various ages and abilities. The minimum width for trails is recommended to be 12', however, 10' may be applicable in areas where there are existing ROW constraints. This is consistent with AASHTO and regional standards. For trails designated as part of the Regional Veloweb trail system, the trail should be 12' to meet NCTCOG standards and provide for a high level of comfort and accommodate higher numbers of users.
- *Soft surface trails* maintained by the Town should be designed with decomposed granite or another soft surface material and should be a minimum of 8’ in width. Soft surface trails provide recreational opportunities, connect people to nature, and can be less expensive to construct than other trails. There is more significant maintenance required on these trails to

maintain ADA accessibility. Anticipated users include walkers, joggers, and people wanting to experience the outdoors.

- *Equestrian trails* are trails for primary use by people on horseback. These natural surface trails can be located through wooded and vegetated areas to provide people with alternative riding experiences and allow them to explore nature. The surface material is typically compacted earth with a width of approximately 15’. Where possible, considerations for hitching posts and trailer parking should be incorporated into equestrian trailheads.

On-Street Bikeways are bicycle facilities within existing roadway rights-of-way. These facilities are intended to support the movement of bicyclists only and include bike lanes and shared-use lanes.

- *Bike lanes* are designated spaces on roadways with relatively higher volumes and travel speeds. Based on AASHTO and Town standards, the minimum width of a bike lane is 5' to provide a more comfortable space for bicyclists. When the facilities are buffered with either striping or a physical barrier, bike lanes can be attractive for a wider range of comfort levels.
- *Shared-use lanes* are designated roadways with low traffic volumes and speeds that include pavement markings to indicate the street is to be shared between vehicles and bicyclists. Pavement markings include arrows and a bicycle, and the roads typically include shared lane signage. In lower traffic areas such as residential streets, these roadways can be designated with signage and no pavement markings.

Other Trails include USACE trails and paddling trails. These facilities provide diversity in the network, serve a variety of users, and enhance recreational opportunities in the Town.

- *Other soft surface trails* include US Army Corps of Engineers (USACE) soft-surface trails along Grapevine Lake maintained by the Dallas Off-Road Bicycling Association (DORBA) and the Cross Timbers Equestrian Trails Association (CTETA). These trails provide recreational opportunities for mountain bikers, hikers, people on horseback, and nature seekers. Any proposed changes to the trail system should be coordinated with USACE. These trails vary in width and are typically compacted dirt.
- *Paddling trails* located on Grapevine Lake are designated waterway trails that provide the opportunity to explore the lake, engage with nature, bird watch, fish, and experience similar water-based activities. Paddling trails are associated with a series of launch points where paddling users can put in and take out their watercraft. Considerations for interactions with operators of motorized boats are important.

Other Facilities include enhanced sidewalks. Most existing streets have limited right-of-way to expand sidewalks to a multi-use trail. Therefore, these gaps in the trail system should be filled with wide connectors.

- *Connectors* are enhanced sidewalks up to 8' in width that connect neighborhoods to key destinations, such as employment centers, entertainment opportunities, schools, and parks. All new connectors or reconstruction of existing connectors should be widened to a width of 6'-8' where feasible. This facility type is typically found along major roadways that have constraints restricting the construction of a wider multi-use path. These facilities differ from other sidewalks within the Town since they fill in key gaps in the overall trail and bikeway system.

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Trail and Bikeway Recommendations

Flower Mound's recommended network of trails, bikeways, and connectors was informed by public input, needs assessments, corridor evaluations, and guidance from the overall plan goals. The combined recommendation map displays the Town's cumulative network of existing and proposed multi-use trails, equestrian trails, connectors, and on-street bikeways. The recommendations displayed in Figure 1.4 create a comprehensive trails and bikeways system. The key components of this network leverage connections to major destinations, the creation of regional connections, and the reduction of existing gaps. Cumulatively, Flower Mound's recommended network would include approximately 125 miles of new trails and bikeways, shown in Table 1.1. These new facilities can increase accessibility for residents in the community and serve as a blueprint for Town staff, leaders, and developers when considering new trails and bikeways within Flower Mound.

Table 1.1 Trail and Bikeway Recommendations

TOWN TRAILS

FACILITY TYPE	Existing	Proposed	Total
MULTI-USE TRAILS – OFF-STREET	37.0	23.0	60.0
MULTI-USE TRAILS – ADJACENT TO ROADWAY	28.3	55.1	83.4
SOFT-SURFACE TRAILS[1]	0.1	0	0.1
EQUESTRIAN TRAILS	14.5	10.8	25.3
CONNECTORS	11.0	0.1	11.1
TOTAL	90.9	89.0	179.9

ON-STREET BIKEWAYS

FACILITY TYPE	Existing	Proposed	Total
BIKE LANES	5.0	19.3	24.3
SHARED-USE LANES	1.3	13.9	15.2
TOTAL	6.3	33.2	39.5

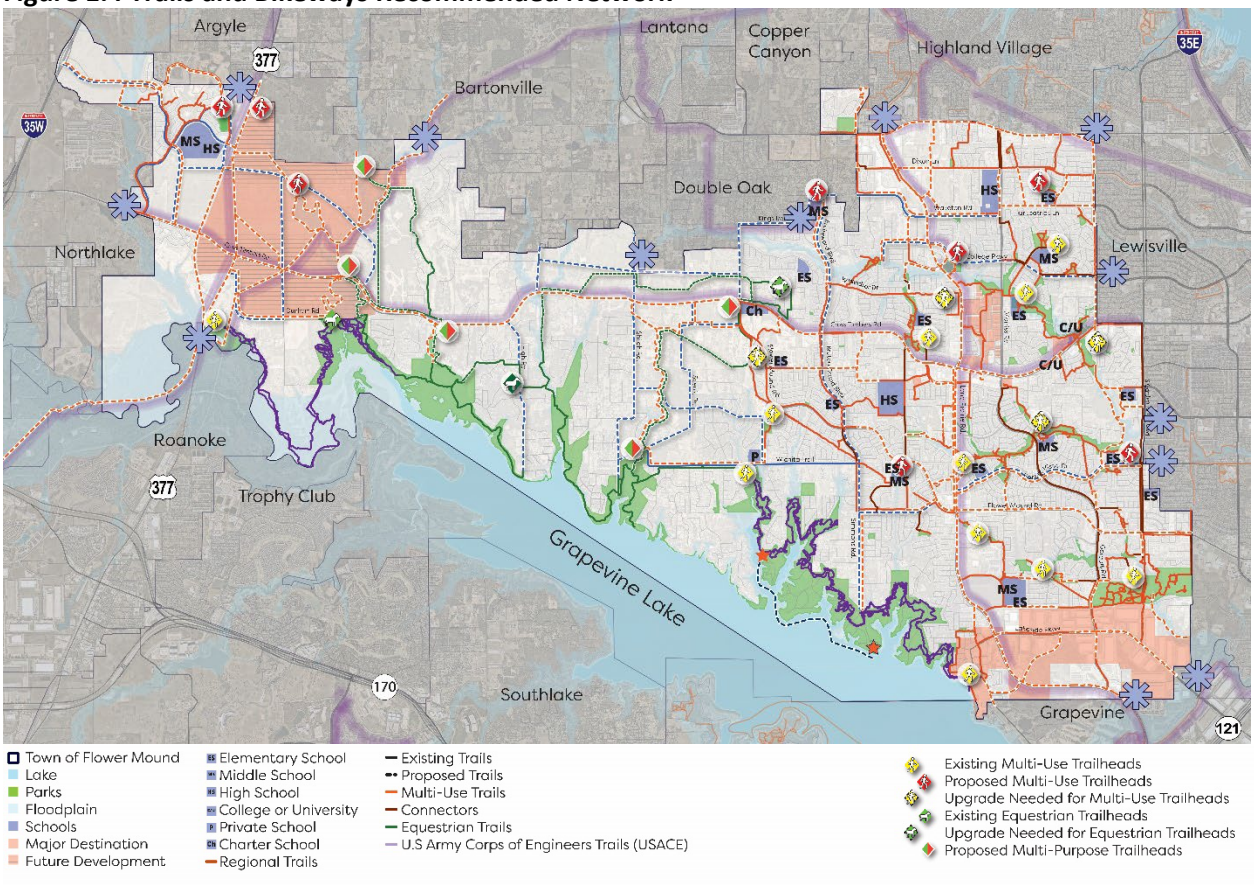
OTHER TRAILS

FACILITY TYPE	Existing	Proposed	Total
USACE[2]	34.5	0	34.5
PADDLING TRAILS	0	1.9	1.9
TOTAL	34.5	1.9	36.4

1 ***Soft surface trails will be strategically located based off of the Town's discretion in the future due to maintenance cost.***

2 United States Army Corps of Engineers Trails.

Figure 1.4 Trails and Bikeways Recommended Network



Level of Service

Level of service (LOS) is a metric used to compare the miles of trail within a community to the total population. The LOS analysis compares the existing and proposed network to current population and future population projections. Table 1.2 shows the level of service for multi-use trails based off of the trails in the recommended network.

Table 1.2 Trails and Bikeways Level of Service

2020 POPULATION	**78,080**
2038 POPULATION[3]	109,544
CURRENT TRAIL LOS (2020)[4]	1 mile per 1,310 residents
FUTURE TRAIL LOS (2038) [5]	1 mile per 1,318 residents
ALL RECOMMENDED TRAILS LOS (2038)	1 mile per 898 residents

Park and Facility Priority Rankings

3 ***Source: Town of Flower Mound Build-out Projections.***

4 ***Trail LOS for only multi-use trails.***

5 ***Future Trail LOS for only multi-use trails.***

The purpose of the Park and Facility Priority Rankings is to provide a prioritized list of facility/amenity needs and recreation program needs for the community served by Flower Mound Parks and Recreation. This model evaluates both quantitative and qualitative data.

Quantitative data includes the statistically valid community survey, which asked residents to list unmet needs and rank their importance. Qualitative data includes resident feedback obtained in community input, stakeholder interviews, staff input, local demographics, recreation trends, and planning team observations.

A weighted scoring system is used to determine the priorities for parks and recreation facilities. These weighted scores provide an overall score and priority ranking for the system as a whole. The results of the priority ranking are tabulated into three categories: High Priority (top third), Medium Priority (middle third), and Low Priority (bottom third).

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Facility	Priority
Paved multi-use trails	High
Small neighborhood parks	
Nature trails (paved and unpaved)	
Large community parks	
Outdoor swimming pools/water parks	
Outdoor amphitheaters	
Off-leash dog park	
Unpaved multi-use trails	
Community garden	Medium
Outdoor water splash pads	
Picnic areas/pavilions	
Outdoor tennis courts	
Playground equipment	
Indoor gymnasiums	
Outdoor basketball courts	
Disc golf course	
Outdoor fishing areas	
Soccer fields	Low
Campgrounds	
Skate park	
Baseball & softball fields	
Football & lacrosse fields	
Boardwalks	
Cricket fields	
Equestrian trails	

Trail and Bikeway Priority Rankings

This plan recommends approximately 124 miles of new trail and bikeway facilities in Flower Mound. To prioritize those projects over time, trail and bikeway segments were ranked based on criteria established and refined with the Steering Committee and Technical Working Group. Once the criteria were set, each proposed trail and bikeway segment was scored based on the established criteria and given an overall score, which was then translated to high, medium, and low priorities. High priority corridors are projects for the first five years of plan implementation, medium priority is five to ten years, and low priority is beyond ten years. Additional priority considerations included addressing existing safety concerns and intersections and overall improvements to the trail user experience through trailheads, wayfinding, and other trail amenities. The prioritization of the trails, bikeways, and other trails are shown in **Figures 1.5 – Figure 1.7**.

Figure 1.5 Multi-Use Trail Prioritization

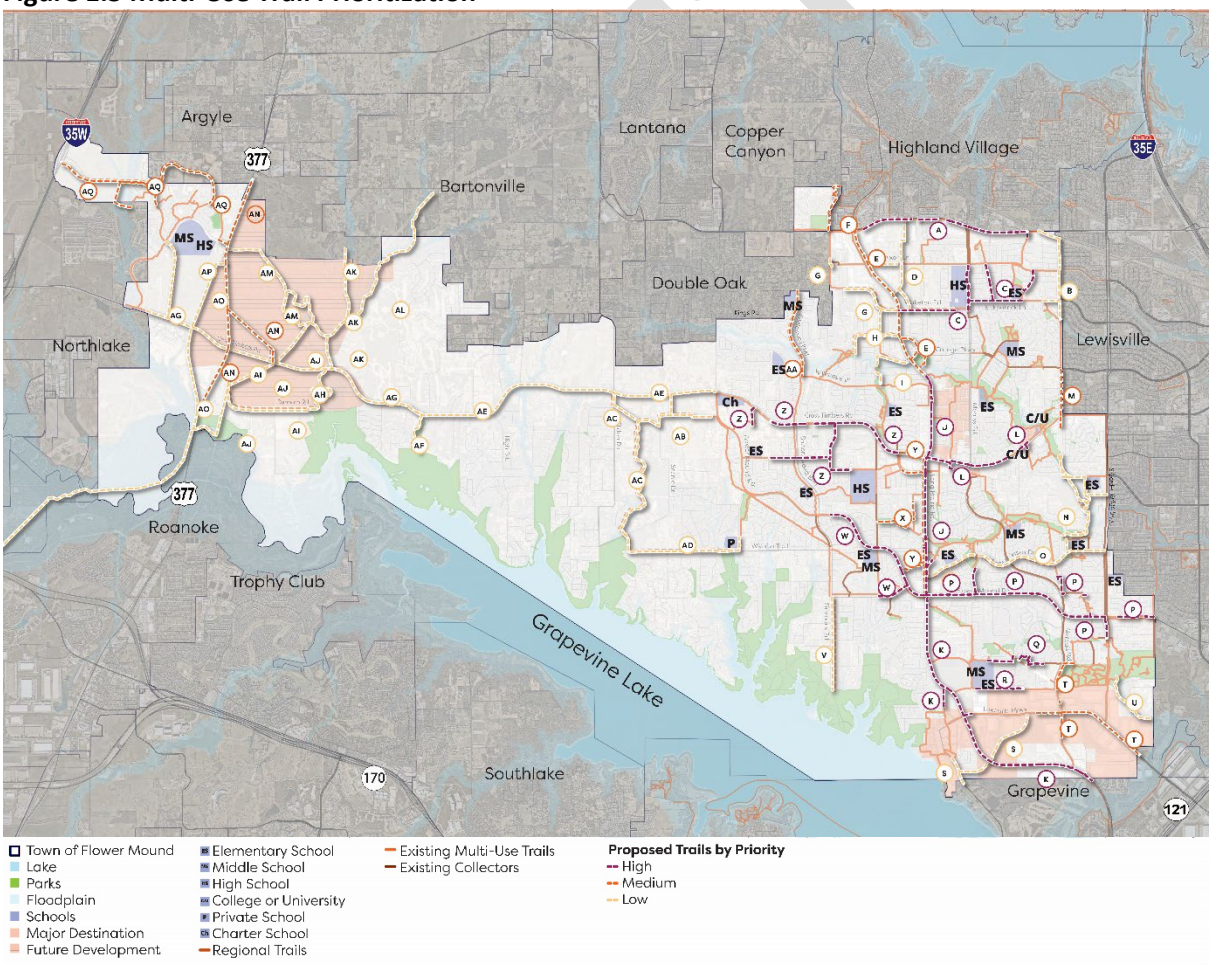


Figure 1.6 On-Street Bikeways Prioritization

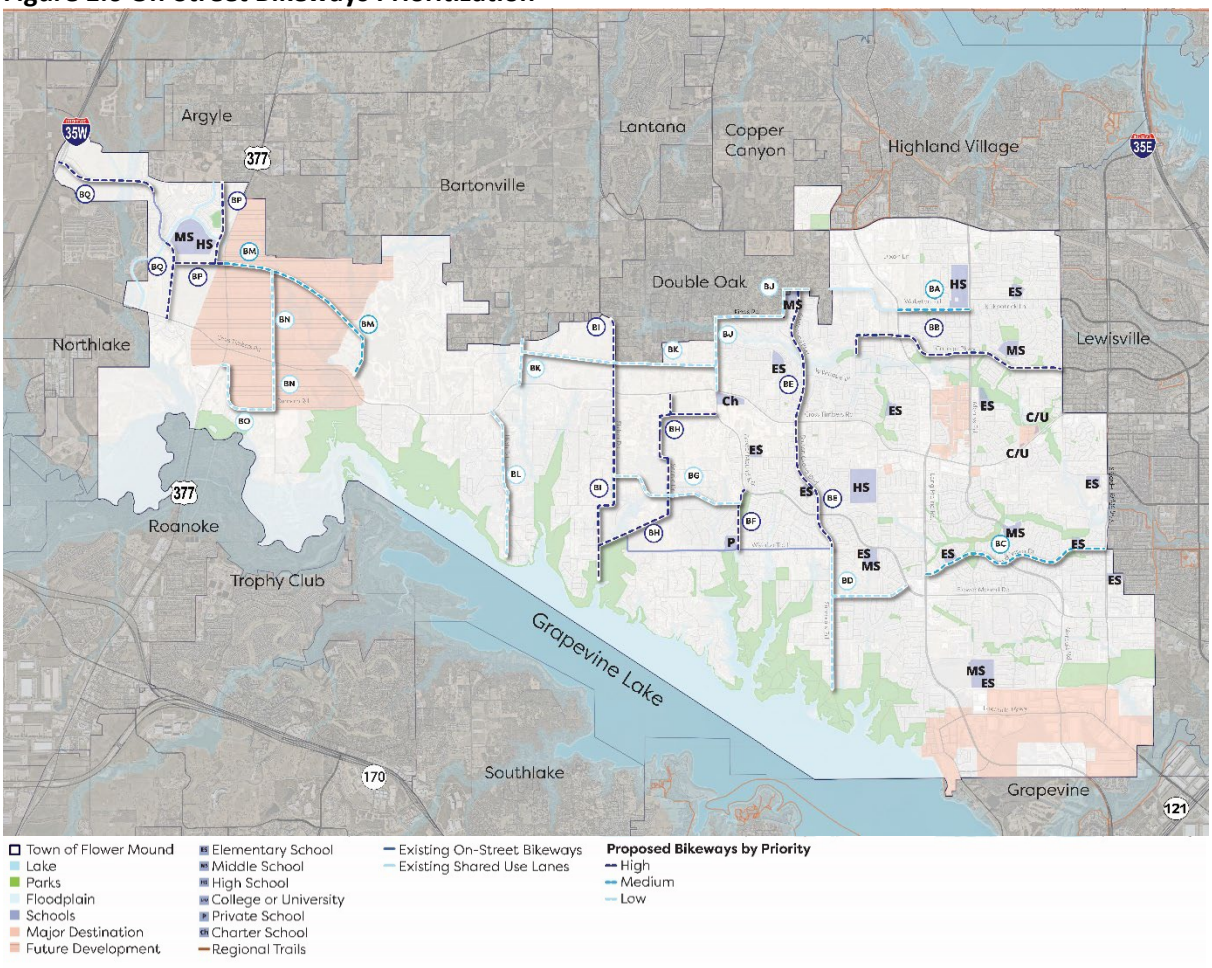
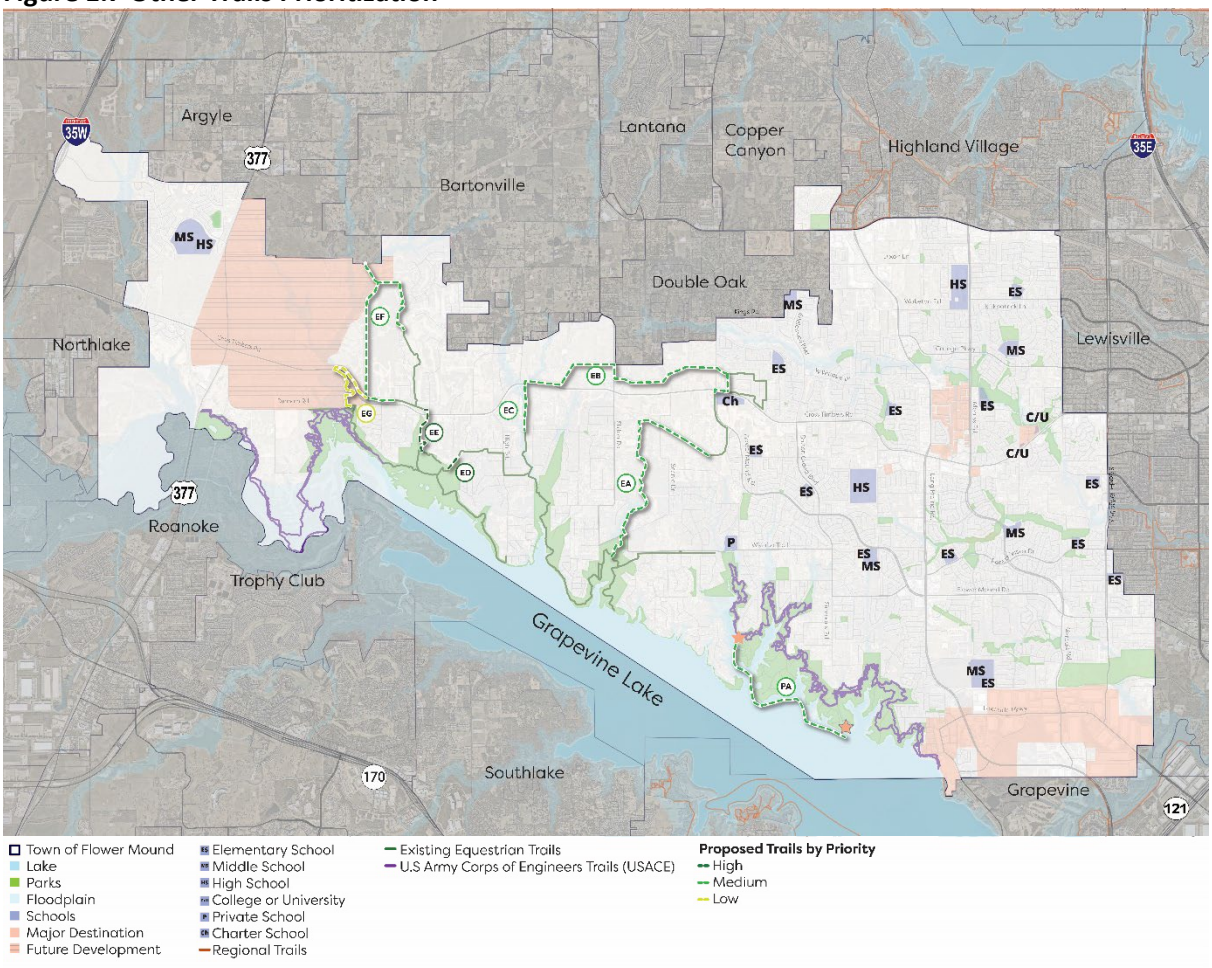


Figure 1.7 Other Trails Prioritization



Strategic Recommendations

The following Action Plan presents a summary of all major strategic recommendations.

	Community Vision for Park Land and Trails Community Mandates
	Create great parks and trails that create a sense of place that makes living in Flower Mound the place to be.
Strategy	Develop a network of parks, trails and open spaces that protect the natural areas in Flower Mound, connect to population centers that will support the needs of all residents through well designed parks and recreation amenities.
Strategy	Develop hard surface trails that create a network of accessibility and equity.
Strategy	Adopt Design Principles for each type of park (neighborhood, community, regional, special use, sports complex) to guide landscape architects and design architects to follow and for the operational staff to follow when the amenity or park is developed.
Strategy	Determine which parks are the Signature Parks that are defined as parks that frame the highest quality of land management maintenance and park related services that everyone in the community can identify with its purpose for recreation and in selling the quality of life aspects for living in Flower Mound.
Strategy	Ensure Healthy Biodiversity.
Strategy	Establish a lifecycle asset management plan for the Department.
Strategy	Update the Trails Master Plan to follow the Parks and Recreation Master Plan Update process to highlight updating existing trails, increasing access and connectivity but adding new trails to developing areas in the Town.
Strategy	Encourage trails to be funded and built in appropriate areas of the Town and to be maintained by private entities.

	Community Vision for Facilities
	Create signature recreational facilities that support all ages and make living in Flower Mound the best place to live, work, and play.
Strategy	Update the Community Activity Center to support a higher level of users to keep up with the demands of residents.
Strategy	Consider developing plans for a future recreation center on the west end of Flower Mound to support the resident's needs that exist today and in the future.
Strategy	Create recreation amenities desired by the community as it applies to the future approved level of service standards in the Master Plan.
Strategy	Consider program themes for park and facility updates to maximize use and value.
Strategy	Consider updating existing parks to maximize use for residents by increasing or improving basic amenities.

	Community Vision for Programming
	Increase community participation in programs to 35%.
Strategy	Refine core program services in Outdoor Adventure and Recreation, Wellness/Fitness, After School, Tennis, Arts and Teens.
Strategy	Track program lifecycles of programs and drop programs in their down cycle by adding new programs to take their place.
Strategy	Develop additional senior adult programs in Arts, Travel and Fitness, and Wellness
Strategy	Create additional marketing strategies to inform residents of the services being provided.
Strategy	Develop a yearly program plan specifically for the core program areas across the Town not just at the Community Activity Center and Senior Center.
Strategy	Create equitable partnerships across the system with sports and not-for-profit groups.
Strategy	Continue to grow the department's marketing and outreach to target current and potential users through additional mediums and Web 2.0 technology.
Strategy	Create a stronger volunteer system that builds advocacy and support for the park and recreation system.
Strategy	Continue to develop special events as a core service and economic tool for the Town.

	Community Vision for Operations and Staffing
	Empower and prepare the Department.
Strategy	Ensure job descriptions are reviewed and updated, and a complete salary assessment is done every five years to meet pay levels that keep salaries competitive.
Strategy	Institute demonstrated management practices and measure performance in parks and recreation services.
Strategy	Create a dedicated funding source to support operations and maintenance.
Strategy	Allow the Department to keep revenues earned to support operational costs.
Strategy	Develop earned income opportunities to support capital and operational needs.
Strategy	Seek to become 40% self-supporting from user fees, permits, reservations, earned income and effective partnerships.
Strategy	Develop a long term financial plan that is consistent with the goals of the Town and supports the initiatives and strategies reflected in the Master Plan to ensure long term sustainability.

The 2022 Trails and Bikeways Master Plan identified programs, policies, and initiatives to achieve the plan. Key recommendations of this plan were driven by the community's vision and identified goals.

Vision Statement: The Town of Flower Mound will have a connected, safe, and accessible system of trails and bikeways that promotes public health, economic development, and active transportation to improve overall quality of life for residents and visitors for generations to come.

	Trails and Bikeways
	Connected Community – Create a complete trails and bikeways system that connects the community with active transportation options.
Objective	Increase trail level of service.
Objective	Provide trail and bikeway connections to key destinations.
Objective	Fill in gaps in the existing trail system.

	Trails and Bikeways
	Safe and Accessible System – Ensure the trails and bikeway system is safe, comfortable, and accessible for users of all ages and abilities
Objective	Provide a variety of facility types appropriate for users of different abilities.

Objective	Improve overall safety and comfort of existing facilities.
Objective	Address areas identified as barriers within the existing trail system.

	Trails and Bikeways
	User Friendly – Improve awareness, signage, and usability of the trails and bikeways system
Objective	Increase awareness of the existing trail and bikeway system.
Objective	Create a consistent brand across the trails system so it is easily recognizable.
Objective	Install wayfinding signage to direct users to destinations along the trails.

	Trails and Bikeways
	Unique System – Design and construct trails that support the health and wellness of the community and natural environment
Objective	Provide trails through natural areas, parks, and open space.
Objective	Provide for interpretive signage and educational opportunities along trails.
Objective	Utilize an environmentally-friendly and context-sensitive approach to developing and maintaining trails.

	Trails and Bikeways
	Partnerships – Leverage partnerships between the Town and the community, internal and external organizations, and outside agencies to achieve a connected trails and bikeways system
Objective	Pursue joint projects with surrounding cities, the County, NCTCOG, TxDOT, TPWD, USACE, and utility providers.
Objective	Maintain relationships with user groups to solicit feedback on the trails and bikeways system.
Objective	Work with other departments to incorporate bicycle and pedestrian accommodations into ongoing or upcoming projects.

	Trails and Bikeways
	Funding – Pursue a variety of funding sources for trails and bikeway development.
Objective	Apply for grant funding to implement trail and bikeway projects.

Objective	Continue to work with developers to ensure trails and bikeways are included with new development.
Objective	Coordinate with user and volunteer groups to help fund improvements to trails and bikeways.

The Action Matrix can be used to develop and prioritize work plans. It can be used as a road map for continued improvements in the department. The key to success for the department is to continue to build on current success and address the major issues and recommendations in a systematic manner. This requires retaining what the department has achieved while adding programs, services, and facility improvements that will generate revenue, reduce operational expenditures, and enhance the experience for the users. In addition, focus needs to be placed on filling the off-peak times through effective pricing, and programming. The most important consideration is to keep the department fresh through programming and strategic improvements for the users and guests to ensure long-term success.

Capital Improvement Recommendations

This section of the plan reflects the capital improvement recommendations that are necessary to fulfill the facility needs of the community. In order to plan and prioritize investments, it is recommended that the Parks and Recreation Department applies specific guiding principles that balance the maintenance of current assets over the development of new facilities. The departmental investment framework is also utilized to determine and plan projects and make budget decisions that are sustainable over time. These criteria (e.g., safety compliance, commitment, efficiency, revenue) and priorities are also focused on maintaining the integrity of the current infrastructure and facilities before expanding and/or enhancing programs and facilities.

The community, through this planning process, has indicated strong support for this concept of prioritization. Even with the indications of a modest economic turnaround, funding is not sufficient to take care of all existing assets and build new facilities.

The result is the recommendation to develop a three-tier plan that acknowledges a stark fiscal reality, leading to the continuous rebalancing of priorities and their associated expenditures. Each tier reflects different assumptions about available resources.

- The **Critical Alternative** has plans for prioritized spending within existing budget targets. The intention of this alternative is to refocus and make the most of existing resources with the primary goal being for the department to maintain services. The actions associated with the Fiscally Constrained Alternative address deferred maintenance at existing facilities and is funded through existing tax dollars.
- The **Sustainable Alternative** describes the extra services or capital improvement that should be undertaken when additional funding is available. This includes strategically enhancing existing programs, beginning new alternative programs, adding new positions, or making other strategic changes that would require additional operational or capital funding. In

coordination with the Town Manager's Office and Town Council, the Parks and Recreation Department would evaluate and analyze potential sources of additional revenue, including but not limited to capital bond funding, partnerships, program income, grants, and existing or new taxes.

- The **Visionary Alternative** represents the complete set of services and facilities desired by the community. It is fiscally unconstrained but can help provide policy guidance by illustrating the ultimate goals of the community, and by providing a long-range look to address future needs and deficiencies. In this Master Plan, the Visionary Alternative addresses aging facilities to make improvements in operational effectiveness and the overall sustainability of the park and recreation system. Funding for visionary projects would be derived from partnerships, private investments and new tax dollars.

The following pages detail the recommended investments in the parks and recreation system for the three-tier spending plan.

Critical Capital Improvement Recommendations

This section outlines the projects that focus on the repair and lifecycle replacement of existing parks, facilities, and amenities.

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CRITICAL PROJECTS (Repair Existing)				
Asset	**Project Type**	**Brief Description**	**Estimated Total Project Cost**	**Years in which to be completed**
Bluebonnet Park	Repair	Playground Replacement; Trail backfill trail. Improve irrigation on soccer fields.	$300,000	1-5
Chinn Chapel Soccer	Repair	Playground Replacement	$200,000	1-5
Colony Park	Repair	Irrigation improvements and tree planting. Renovate basketball court. Trail improvements including backfill. Level practice infield and replace backstop.	$250,000	1-5
Cortadera Park	Repair	Dredge pond	$300,000	1-5
Culwell Park	Repair	Upgrade playground surfacing. Renovate/upgrade perimeter sidewalk.	$150,000	1-5
Gaston Park	Repair	Playground Replacement	$200,000	
Gerault Park	Repair	Renovate/replace Pavilion w/4 picnic tables, electric outlets, barbeque grill, and trash receptacle; Playground replacement	$450,000	1-5
Glenwick Park	Repair	Playground Replacement	$200,000	1-10
Grand Park	Repair	Playground Replacement; backfill trail	$250,000	1-5
Grove Park	Repair	Playground Replacement	$200,000	1-5
Hideaway Park	Repair	ADA Accessibility	$50,000	1-5
Jake's Hilltop Park	Repair	Partial pavilion conversion for maintenance purposes and scoreboards	$150,000	1-5
Lakewood Park	Repair	Playground and Pavilion Replacement	$450,000	1-5
Leonard Johns Park	Repair	ADA accessibility	$50,000	1-5
Oak Park	Repair	ADA accessibility improvements and playground replacement	$250,000	1-5
Parker Square Park	Repair	Lifecycle replacement of amenities	$50,000	1-5
Peacock Park	Repair	Playground Replacement	$200,000	1-5
Pecan Orchard Park	Repair	Playground Replacement	$200,000	1-5
Rustic Timbers Park	Repair	Creek bank stabilization, ADA improvements, Upgrade playground surfacing, consider relocating play area out of the floodplain.	$350,000	1-5
Shadow Ridge Park	Repair	ADA Accessibility Improvements; backfill trail	$75,000	1-5
Spring Lake Park	Repair	Drainage/Sidewalk Improvements; Clear vegetation for casting area at pond	$100,000	1-5
Spring Meadow Park	Repair	Playground Replacement	$200,000	1-5
Staton Oak Park	Repair	Replace irrigation system	$200,000	1-5
Stone Creek Park	Repair	Lifecycle replacement of park amenities including playground; ADA Improvements; add irrigation; renovate/replace pavilion	$550,000	1-5
Tealwood Oaks Park	Repair	ADA accessibility especially in the southern portion of the park in the picnic area along the creek; upgrade bridges and all amenities	$350,000	1-5
Thrush Park (west)	Repair	Playground Replacement	$200,000	1-5
Wilkerson Park	Repair	Backfill trails; drainage improvements;	$50,000	1-5

Trails and Bikeways Plan High Priority Projects

High priority projects are those that are recommended to be completed in the first five years of plan adoption. These projects include longer routes through the Town, provide connections to destinations and surrounding communities, reduce gaps in the existing trails system, and address existing safety concerns.

Table 1.3 is the overall recommendation summary for the high priority trail and bikeway segments in Flower Mound. The table reflects the facility type, length, and the average estimated cost based on recent project bids and engineering standards. The last column for funding partnerships displays mechanisms that can assist in the development of each of the corridors. Figure 1.8 graphically depicts the priority corridors. Figure 1.9 graphically depicts where other projects should be considered in the near-term, including safety projects, enhancement of existing trailheads, and intersection evaluations.

Table 1.3 Trails and Bikeways High Priority Projects

Corridor ID*	Corridor	Facility Type	Length (miles)	Average Cost Estimate	Funding Partnerships and % Contribution
A	Justin Rd	Multi-Use	1.7	$2,764,000	Developer (10%), Town (70%), Grants (20%)
C	Waketon/Morriss/Kirkpatrick Ln	Multi-Use	2.3	$3,803,000	Town (20%) Grants (80%)
J	Long Prairie Rd	Proposed Veloweb	2.5	$4,120,000	Town (50%), Grants (50%)
K	Long Prairie Rd	Proposed Veloweb	3.5	$5,697,000	Developer (50%), Town (20%), Grants (30%)
L	Cross Timbers Rd	Proposed Veloweb	1.1	$1,825,000	Developer (5%), Town (20%), Grants (75%)
P	Flower Mound Rd/Garden Ridge Blvd	Multi-Use	3.2	$5,170,000	Town (80%), Grants (20%)
Q	Shadow Ridge Park/Sweetwater Ln	Multi-Use	0.8	$1,256,000	Town (50%), Grants (50%)
R	Spinks Rd	Multi-Use	0.5	$856,000	Town (80%), Grants (20%)
W	Flower Mound Rd/McKamy Creek	Multi-Use	1.9	$2,954,000	Town (80%), Grants (20%)
Z	Cross Timbers Rd/Auburn Dr/ Quail Rn/Peters Colony	Multi-Use, Proposed Veloweb	3.0	$4,838,000	Developer (30%), Town (20%), Grants (50%)
Priority Trail Project Totals			**20.4**	**$33,283,000**	

Corridor ID*	Corridor	Facility Type	Length (miles)	Average Cost Estimate	Funding Partnerships and % Contribution
BB	College Pkwy	Shared-Use Lane	2.6	$193,000	Town (50%), Grants (50%)
BE	Bridlewood Blvd/Burton Orand Blvd	Shared-Use Lane	3.0	$226,000	Town (50%), Grants (50%)
BF	Skillern Rd	Shared-Use Lane	0.7	$50,000	Town (50%), Grants (50%)
BH	Scenic Dr	Bike Lane/Shared-Use Lane	2.8	$227,000	Town (50%), Grants (50%)
BI	Shiloh Rd	Bike Lane	3.0	$286,000	Town (50%), Grants (50%)
BP	Future Corridor/Stonecrest Dr	Shared-Use Lane/Bike Lane	0.9	$86,000	Developer (100%)
BQ	Denton Creek Blvd	Bike Lane	1.7	$164,000	Developer (100%)
ED	Equestrian	Hidden Brook Farm	0.2	$100,000	Town (50%), Grants (50%)
EF	Equestrian	Montalcino	0.6	$364,000	Developer (50%), Town (50%)
All Priority Project Totals**			**36.0**	**$34,979,000**	

DRAFT

Figure 1.8 Trail and Bikeway High-Priority Network Recommendations

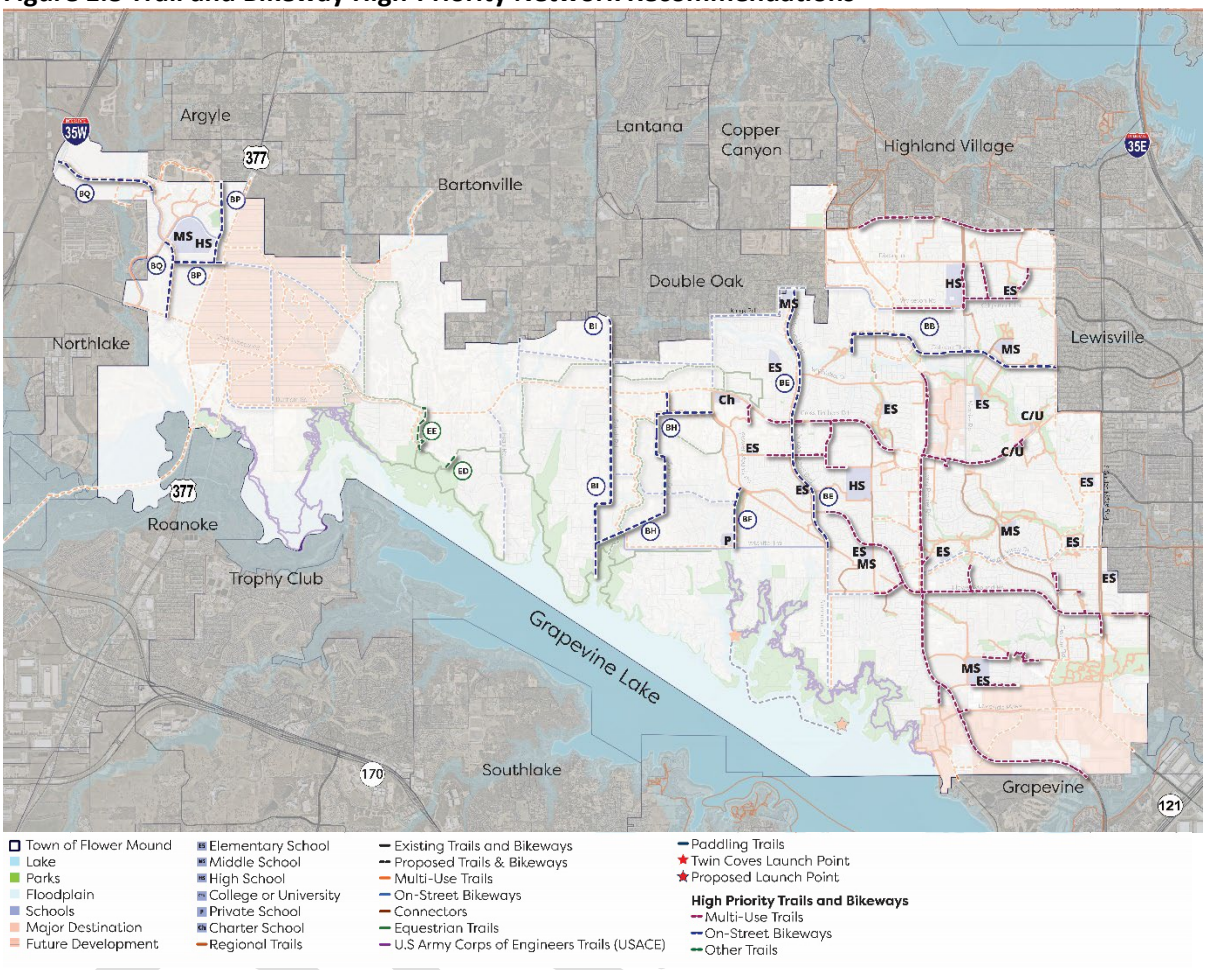
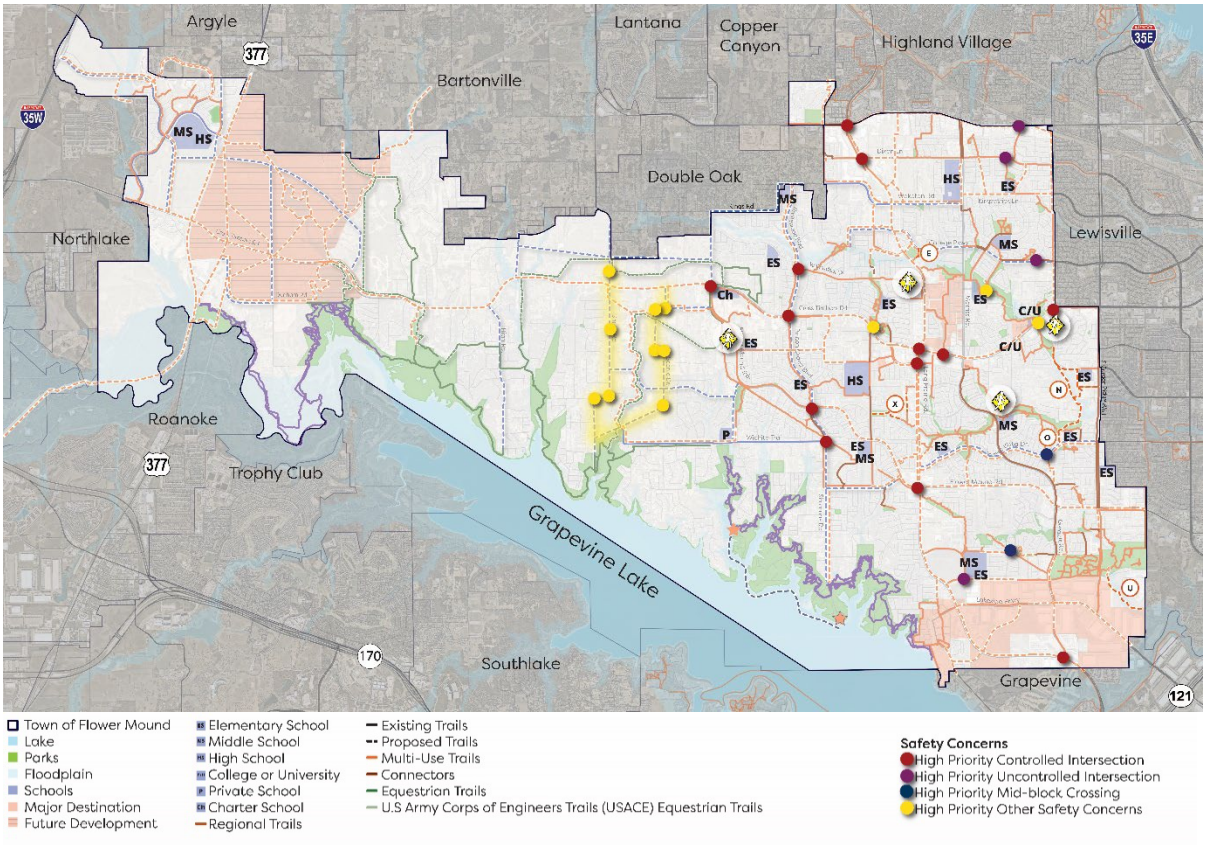


Figure 1.9 Other Trail and Bikeway Priority Recommendations



Sustainable Capital Improvement Recommendations

Options described in this section provide the extra services or capital improvement that could be undertaken when additional funding is available to meet need(s) with a focus on enhancements to existing facilities. The following provides a summary of the sustainable options recommended.

SUSTAINABLE PROJECTS (Upgrade and Renovation)				
Asset	**Project Type**	**Brief Description**	**Estimated Total Project Cost**	**Years in which to be completed**
Bakersfield Park	Upgrade	LED lighting upgrade; parking lot lighting improvements; restroom and multi-purpose field lighting; add 5 picnic pavilions	$1,000,000	1-10
Bluebonnet Park	Upgrade	Flower bed around signage needs improvement; park and trail connection is needed;	$25,000	1-10
Canyon Falls Park	Upgrade	Master Plan	$50,000	1-10
Chinn Chapel Soccer Complex	Upgrade	LED lighting upgrade; LED parking lot lighting improvements. ADA, drainage, and fencing improvements.	$250,000	1-10
Community Activity Center	Expansion	Expansion of Community Center	$22,000,000	1-10
Cortadera Park	Upgrade	Add loop trail to connect amenities, add irrigation, and add fencing between soccer field and pond.	$300,000	1-10
Dunham Ranch	Upgrade	Update Master Plan	$150,000	1-10
Dixon Park	Upgrade	Add picnic pavilion with two picnic tables, grill, and trash receptacle. Add "No Overnight Parking" signage.	$250,000	1-10
Forest Park	Upgrade	Add ADA compliant picnic station.	$25,000	1-10
Gaston Park	Upgrade	Master Plan	$100,000	1-10
Gerault Park	Upgrade	LED lighting upgrade; parking lot lighting improvements. Regrade the north field, add a monument sign, and convert one field to synthetic turf.	$1,750,000	1-10
Glenwick Park	Upgrade	LED lighting upgrade	$100,000	1-10
Grand Park	Upgrade	Pavilion w/1 picnic table, electric outlets, barbeque grill, and trash receptacle.	$250,000	1-10
Green Acres Farm	Upgrade	Master Plan	$100,000	1-10
Heritage Park	Upgrade	LED parking lot lighting improvements; Restroom at Dog Park on the East side; Upgrade playground surfacing on West	$750,000	1-10
Lawson Park	Upgrade	Wildflower improvements	$25,000	1-10
Leonard Johns Park	Upgrade	Addition of restroom	$250,000	1-10
Northshore Park	Upgrade	Add pavilion w/2 picnic tables, grill, trash receptacles, picnic/shade structures.	$250,000	1-10
Peacock Park	Upgrade	Boardwalk with Bioswale for Environmental and Wildlife education	$100,000	1-10
Post Oak Park	Upgrade	Restroom, interpretive signage; wayfinding signage; trail Improvements; remove stock pond; boardwalk improvements	$500,000	1-10
Prairie Trail Park	Upgrade	Master Plan	$100,000	1-10
Rheudasil Park	Upgrade	Implement Master Plan	$2,000,000	1-10
Spring Lake Park	Upgrade	Adult Fitness Stations	$100,000	1-10
Spring Meadow Park	Upgrade	Add irrigation, Pavilion w/1 picnic table, grill, trash receptacle, loop trail,	$300,000	1-10
Tealwood Oaks Park	Upgrade	Add pavilion with 2 picnic tables and grill; consider parking addition.	$350,000	1-10
Timber Creek Park	Upgrade	Install Butterfly Garden and ADA Accessibility	$100,000	1-10
Thrush Park	Upgrade	Master Plan	$100,000	1-10
Tiger Field	Upgrade	Add a restroom facility	$250,000	1-10
Timber Creek Park	Upgrade	Install Butterfly Garden and additional picnic tables on concrete pads (ADA Accessibility)	$100,000	1-10
Westchester Park	Upgrade	Install restrooms; provide ADA accessibility, new backstop, improve parking lot, add splash pad, and backfill trails	$750,000	1-10
West Windsor Park	Upgrade	Landscape Beautification	$100,000	1-10
Wilkerson Park	Upgrade	LED Light Upgrade for ballfield; add landscaping and irrigation around parking lot.	$150,000	1-10

Visionary Capital Improvement Recommendations

Recommendations described in this section represent the complete set of services and facilities desired by the community. It is fiscally unconstrained but can help provide policy guidance by illustrating the ultimate goals of the community, and by providing a long-range look to address future

needs and deficiencies. The following new development and redevelopment projects have been identified as relevant to the interests and needs of the community and are relevant to the Town's focus because they feature a high probability of success.

VISIONARY PROJECTS (New, Significant Upgrades)				
Asset	**Project Type**	**Project Title**	**Estimated Total Project Cost**	**Years in which to be completed**
Park Development	NEW	Canyon Falls	$2,500,000	1-5
Park Development	NEW	Dunham Ranch Recreational Area	$5,000,000	1-10
Facility Development	NEW	Recreation Center - West Flower Mound	$30,000,000	1-10
Facility Development	NEW	Tennis Center	$2,500,000	1-10
Trail Master Plan	NEW	Update Trails Master Plan	$250,000	6-10
Land Acquisition and Park Development	NEW	Neighborhood Parks - 43 acres	$10,750,000	6-10
Land Acquisition and Park Development	NEW	Community Parks- 63 acres	$15,750,000	6-10
Land Acquisition and Park Development	NEW	Regional Parks - 52 acres	$13,000,000	6-10
TOTAL			**$79,750,000**	

Updating the Parks and Trails Plan

Master planning should be viewed as a continuing process rather than the result of a study undertaken at a particular time. This master plan will be adopted by Town Council in July of 2022, but it will need to be reviewed and updated to reflect changes in available resources, the changing needs and desires of Flower Mound's residents, unexpected challenges and opportunities, and the Town's changing population and demographics. This plan has been prepared in compliance with the guidelines for park and recreation system master plans established by Texas Parks and Wildlife (TP&W). TP&W requires that plans be updated every five years to remain eligible for grant funding as well as reflect the changes in a growing community. A new plan is required every 10 years to remain eligible for grant funding.

Parks and Trails Map

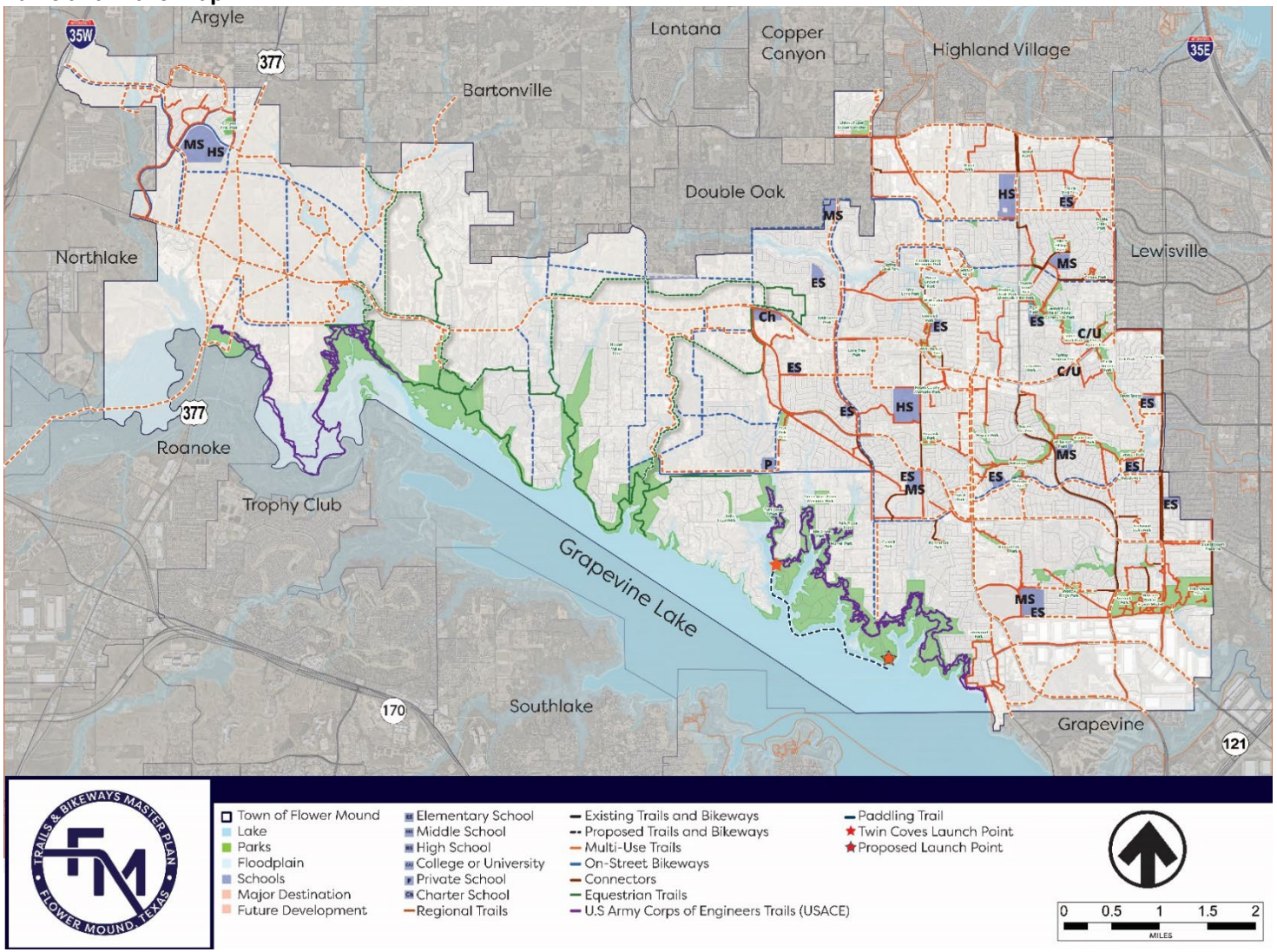


Exhibit B

TRAILS & BIKEWAYS MASTER PLAN

FLOWER MOUND, TEXAS

THE TOWN OF FLOWER MOUND Parks & Recreation

ACKNOWLEDGMENTS

The following individuals are recognized for their significant contributions to the preparation of the Town of Flower Mound Trails and Bikeways Master Plan.

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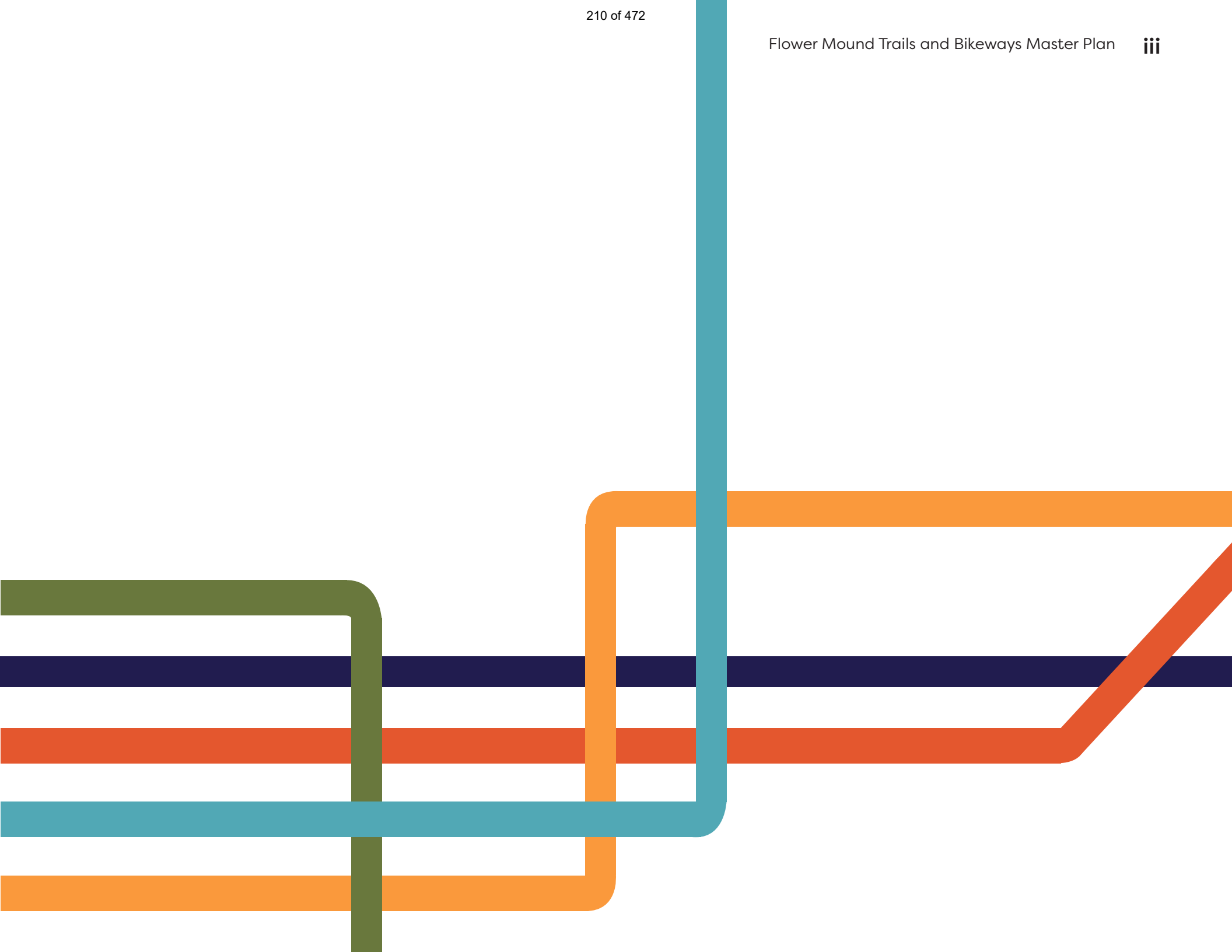


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LIST OF ACRONYMS

AASHTO: American Association of State Highway Transportation Officials
ACS: American Community Survey
ADA: Americans with Disabilities Act
ADAAG: Americans with Disabilities Act Accessibility Guidelines
CRIS: Crash Record Information System
CTETA: Cross Timbers Equestrian Trail Association
DFW: Dallas-Fort Worth
DORBA: Dallas Off-Road Bicycle Association
ESRI: Environmental Systems Research Institute
ISD: Independent School District
ITE: Institute of Transportation Engineers
LOS: Level of Service
NACTO: National Association of City Transportation Officials
NCTCOG: North Central Texas Council of Governments
PRMP: Parks and Recreation Master Plan
PROWAG: Public Rights-of-Way Accessibility Guidelines
ROW: Right-of-Way
RRFB: Rectangular Rapid Flashing Beacons
TAS: Texas Accessibility Standards
TMUTCD: Texas Manual on Uniform Traffic Control Devices
TTI: Texas Transportation Institute
TxDOT: Texas Department of Transportation
USACE: U.S. Army Corps of Engineers

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Existing System Overview
Needs Assessment Findings
Recommended Network
Plan Prioritization



EXECUTIVE SUMMARY



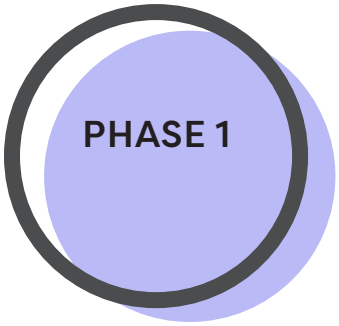
INTRODUCTION

The purpose of the Town of Flower Mound Trails and Bikeways Master Plan is to guide the development of the trails and bikeways network, provide design guidelines, and produce implementation strategies to create a complete system throughout the Town of Flower Mound. This active transportation and recreation system aims to increase accessibility for users to key destinations within Flower Mound and leverage key regional connections to adjacent communities. This plan will augment previous planning efforts to create a more complete community and provide active and healthy lifestyle opportunities.

PLANNING PROCESS

The development of the Town of Flower Mound Trails and Bikeways Master Plan spanned approximately 17 months, starting in February 2021 and concluding in July 2022. Throughout this process, Town staff, a designated steering committee, stakeholders, elected/appointed officials, and residents were engaged to guide the master plan recommendations. The resulting community-driven vision forms the foundation for trails and bikeways in Flower Mound for the next decade.

Plan development was spread over five distinct but iterative phases.



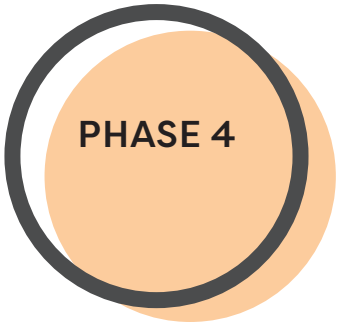
The initial phase reviewed existing conditions, community demographics, and relevant studies to understand community context.



The vision and goals of the plan were developed through an evaluation of feedback received through the plan's community engagement process.



An analysis of overall trails system needs included assessing the existing network, identifying safety issues and barriers, determining where gaps exist, and understanding demand for new facilities.



Based on the needs assessment, an expanded town-wide network was generated. This network included various trail types and addressed safety concerns.



Finally, an action plan was developed to provide implementation strategies for the proposed network. Recommendations are prioritized by short-term (1-5 years), mid-term (6-10 years), and long-term (10+ years) projects.

PLAN VISION

The planning process included a series of meetings with key town stakeholders and the public. During those meetings, attendees were asked how they envision walking, bicycling, riding, and paddling in Flower Mound in the future. Input from these meetings and interviews helped shape the vision and goals for the Town of Flower Mound Trails and Bikeways Master Plan.

KEY TAKEAWAYS FROM COMMUNITY ENGAGEMENT:

- The current system is incomplete, with numerous gaps and trails ending without warning.
- The trail system would be improved with branding, wayfinding, and trailheads.
- Safety along the trails should be prioritized, including enhanced roadway crossings at intersections and mid-block.
- Improved amenities, such as benches, shade, and waste receptacles along the trails system will improve the user experience.
- Provide a wider variety of on-street facilities and off-street trails to create a dynamic system, including multi-use, equestrian, and paddling trails.
- Residents want more east/west connections through the Town.
- Additional connections to the USACE trails were desired.
- Equestrian loops should be completed in the Town for the best rider experience.

VISION STATEMENT:

The Town of Flower Mound will have a connected, safe, and accessible system of trails and bikeways that promotes public health, economic impact, and active transportation to improve overall quality of life for residents and visitors for generations to come.

PLAN GOALS

GOAL 1: CONNECTED COMMUNITY

Create a complete trails and bikeways system that connects the community with active transportation options.

GOAL 2: SAFE AND ACCESSIBLE SYSTEM

Ensure the trails and bikeways system is safe, comfortable, and accessible for users of all abilities and ages.

GOAL 3: USER FRIENDLY

Improve awareness, signage, and usability of the trails and bikeways system.

GOAL 4: UNIQUE SYSTEM

Design and construct trails that support the health and wellness of the community and natural environment.

GOAL 5: PARTNERSHIPS

Leverage partnerships between the Town and the community, internal and external organizations, and outside agencies to achieve a connected trails and bikeways system.

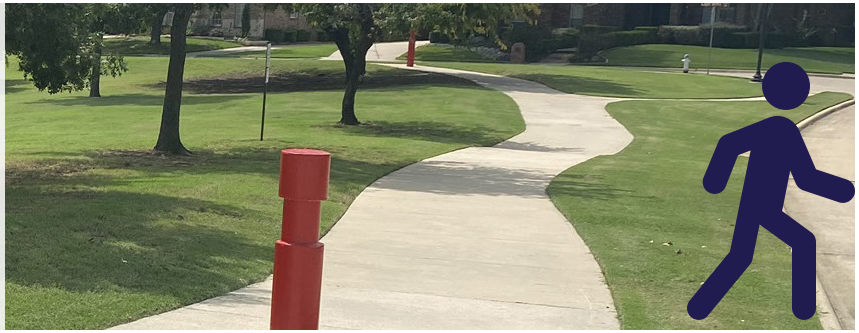
GOAL 6: FUNDING

Pursue a variety of funding sources for trails and bikeways development.

EXISTING SYSTEM OVERVIEW

The Flower Mound trails system has diverse offerings for its residents and visitors from across the region and beyond. These trails aim to connect residential neighborhoods to schools, parks, and commercial centers and to expand mobility for its residents. Flower Mound has a unique natural landscape that adds to the overall experience of trail users. The existing system includes Town Trails, Other Trails, and On-Street Bikeways.

Town Trails:
There are 65.5 miles of 8' or wider paved Town trails. Town trails include off-street multi-use trails, soft surface trails, and equestrian trails maintained by the Town. There are 14.6 miles of Town maintained equestrian trails.



Other Trails:
There are 34.5 miles of trails owned and maintained by other entities within Flower Mound that include soft-surface hike and bike trails as well as some equestrian trails. These trails are located on U.S. Army Corps of Engineers property along Lake Grapevine.



On-Street Bikeways:
There are 6.3 miles of on-street bikeways that include shared-use markings and bike lane designations.



NEEDS ASSESSMENT FINDINGS

The needs assessment included a review of benchmark communities, existing conditions for the trails, community needs, and a feasibility review of proposed corridors.

The assessment of Flower Mound's multi-use trails considered surface conditions, clearance, grades and slopes, street intersections/trail crossings, constructed trailway features, safety/security, signage and wayfinding, and trailheads. The major takeaways from the evaluation found that: wayfinding and directional signage needs to be improved, roadway crossings need to be evaluated for safety enhancements, that some pathways classified as trails are less than 8', and that trailway gaps should be closed to improve connectivity.

When assessing on-street bikeways the following metrics were considered: speed limit, traffic volumes, thoroughfare classification, number of lanes and right-of-way. The goal of recommending new bikeway designations is to provide safe on-street bicycle routes throughout Flower Mound that increase connectivity between neighborhoods and to regional destinations.

A feasibility study of proposed corridors reviewed rights-of-way, environmental features, the built environment, location of utilities, and similar elements which impact the feasibility of constructing a trail or bikeway.

The needs assessment informed the overall system recommendations. This system will connect residents to destinations and the greater DFW region, improve safety, and increase access to trails and bikeways by improving connections to neighborhoods and filling in gaps.



RECOMMENDED NETWORK

The recommended network includes a variety of facility types. The key components of this network leverage connections to major destinations and the greater DFW region, reduce existing gaps, provide longer continuous routes, and improve safety. Cumulatively, Flower Mound's recommended network would include approximately 125 miles of new trails and bikeways. This plan does not recommend additional Town maintained soft surface trails or other soft surface trails. Town maintained soft surface trails will be strategically located subject to Town discretion in the future due to maintenance cost. **Figure 4.2** on page 80 represents the overall combined recommendations map.



BLUEBONNET TRAIL WITHIN POST OAK PARK

PAVED MULTI-USE TRAILS

Existing: 65.3 miles
Proposed: 78.0 miles
Total: 143.3 miles

SOFT SURFACE TRAILS*

Existing: 0.1 miles
Proposed: 0 miles
Total: 0.1 miles

EQUESTRIAN TRAILS*

Existing: 14.5 miles
Proposed: 10.8 miles
Total: 25.3 miles

BIKE LANES

Existing: 5.0 miles
Proposed: 19.3 miles
Total: 24.3 miles

SHARED-USE LANES

Existing: 1.4 miles
Proposed: 13.9 miles
Total: 15.3 miles

PADDLING TRAILS

Existing: 0 miles
Proposed: 1.9 miles
Total: 1.9 miles

*Does not include the soft-surface or equestrian trails located on USACE property and maintained by other entities.

PLAN PRIORITIZATION

Implementation of this plan's recommendations will take time, funding, and coordination amongst various partners. This plan recommends around 125 miles of new trail and bikeway facilities. To prioritize those projects over time trail segments were ranked based on criteria established and refined with the Steering Committee and Technical Working Group. Once the criteria were set, each proposed trail and bikeway segment was scored based on the established criteria and given an overall score, which was then translated to high, medium, and low priorities. High priority corridors are projects intended to be initiated in the first five years of plan implementation, medium priority is five to ten years, and low priority is beyond ten years. Specific criteria were used to rank multi-use trails and bikeways respectively.

PRIORITY PROJECTS

The priority projects identified provide long routes for residents to travel both on- and off-street. The priority network includes over 35 miles of trails and bikeways to be implemented over the next five years. Many of the priority projects can be achieved via competitive grant processes. Additionally, the trail segments can be divided into smaller projects to initially fill gaps while pursuing other funding sources such as bond projects and roadway reconstruction funds.

Other priority projects include addressing existing safety issues, improving amenities and trailheads, analyzing existing roadway crossings, and providing trails off-street to access schools and parks.

Based on the final priority for all the facility types, 50 percent of the high priority projects are Town multi-use trails, 39 percent are bikeways, and 11 percent are equestrian trails. All high priority projects are combined into a single system-wide prioritization table (page xviii) and map (page xix). The figure on page xix represents the overall recommendation summary for the high priority trail segments in Flower Mound. The table on page xvii reflects the facility type, length, and the average estimated cost. The last column for funding partnerships displays mechanisms that can assist in the development of each of the corridors.


EXISTING BLIND SPOT

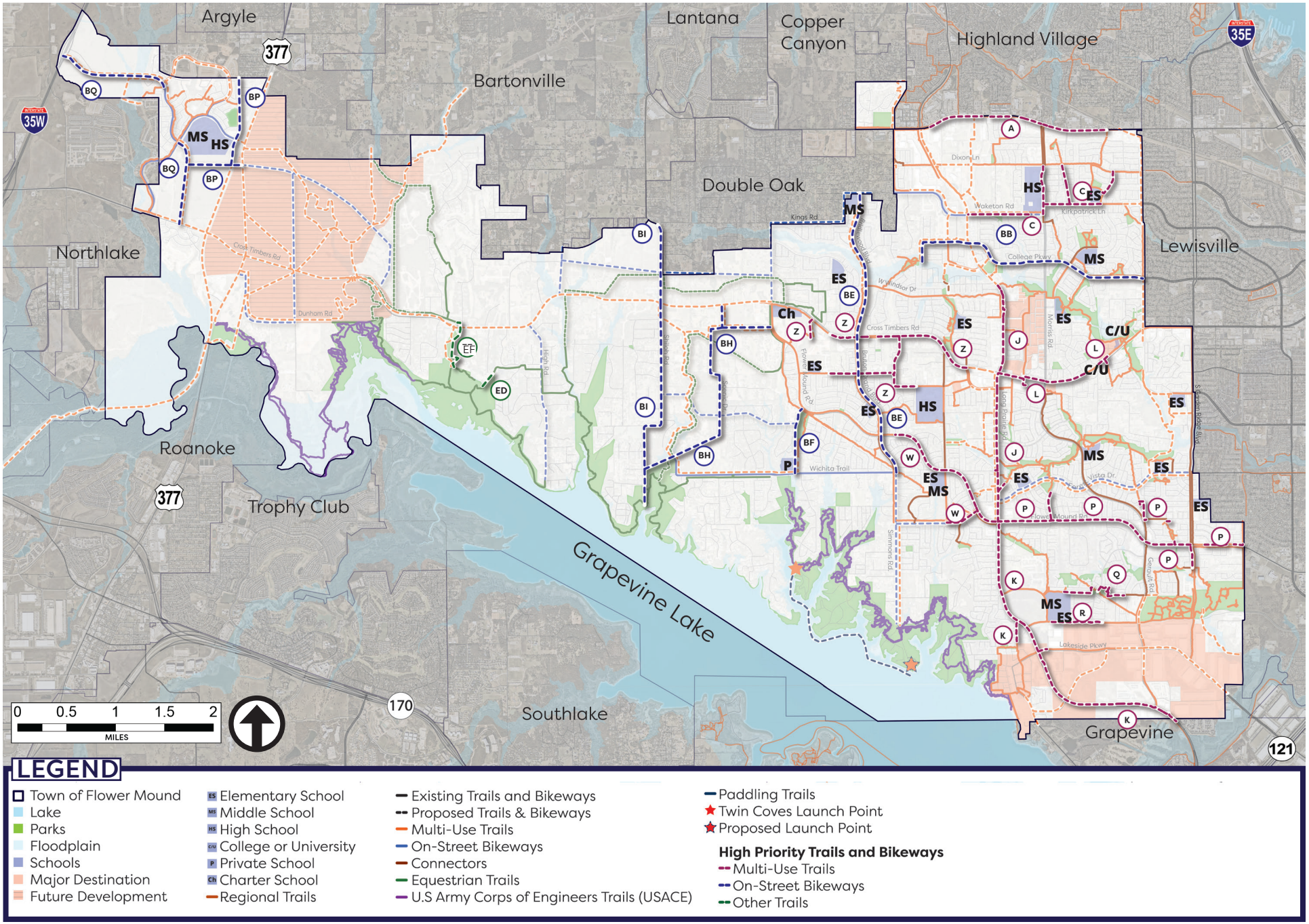

NEIGHBORHOOD ACCESS TO TRAILS SYSTEM

TABLE ES.1: HIGH PRIORITY PROJECT RECOMMENDATIONS SUMMARY

Corridor ID	Corridor	Facility Type	Length (miles)	Average Cost Estimate	Funding Partnerships
A	Justin Rd	Multi-Use	1.7	$2,764,000	Developer (10%), Town (70%), Grants (20%)
C	Waketon/Morris/Kirkpatrick Ln	Multi-Use	2.3	$3,803,000	Town (20%) Grants (80%)
J	Long Prairie Rd	Proposed Veloweb	2.5	$4,120,000	Town (50%), Grants (50%)
K	Long Prairie Rd	Proposed Veloweb	3.5	$5,697,000	Developer (50%) , Town (20%), Grants (30%)
L	Cross Timbers Rd	Proposed Veloweb	1.12	$1,825,000	Developer (5%), Town (20%), Grants (75%)
P	Flower Mound Rd/Garden Ridge Blvd	Multi-Use	3.18	$5,170,000	Town (80%), Grants (20%)
Q	Shadow Ridge Park/Sweet Water Ln	Multi-Use	0.77	$1,256,000	Town (50%), Grants (50%)
R	Spinks Rd	Multi-Use	0.53	$856,000	Town (80%), Grants (20%)
W	Flower Mound Rd/McKamy Creek	Multi-Use	1.87	$2,954,000	Town (80%), Grants (20%)
Z	Cross Timbers Rd/Auburn Dr/Quail Rn/Peters Colony	Multi-Use, Proposed Veloweb	2.98	$4,838,000	Developer (30%), Town (20%), Grants (50%)
BB	College Pkwy	Shared-Use Lane	2.57	$193,000	Town (50%), Grants (50%)
BE	Bridlewood Blvd/Burton Orand Blvd	Shared-Use Lane	3.01	$226,000	Town (50%), Grants (50%)
BF	Skillern Rd	Shared-Use Lane	0.67	$50,000	Town (50%), Grants (50%)
BH	Scenic Dr	Bike Lane/Shared-Use Lane	2.80	$227,000	Town (50%), Grants (50%)
BI	Shiloh Rd	Bike Lane	3.01	$286,000	Town (50%), Grants (50%)
BP	Future Corridor/Stonecrest Dr	Shared-Use Lane/Bike Lane	0.90	$86,000	Developer (100%)
BQ	Denton Creek Blvd	Bike Lane	1.73	$164,000	Developer (100%)
ED	Hidden Brook Farm	Equestrian	0.16	$100,000	Town (50%), Grants (50%)
EF	Cross Timbers	Equestrian	0.58	$364,000	Town (50%), Grants (50%)
		Priority Project Totals	**35.88**	**$34,979,000**	

Notes: See Chapter 6 for a discussion of all recommended projects. Average Cost Estimates represent a planning level cost estimate and will likely change as additional design and engineering occurs.

FIGURE ES.1: PRIORITY TRAILS & BIKEWAY RECOMMENDATIONS



Introduction
Plan Purpose
Benefits of Active Transportation
Planning Process
Plan Structure
Vision & Goals



01 INTRODUCTION




HERITAGE PARK

INTRODUCTION

The Town of Flower Mound Trails and Bikeways Master Plan serves as a blueprint for the future implementation of trail facilities and on-street bikeways throughout the town. The facilities recommended in this plan provide safe routes for cycling, walking, running, hiking, paddling, and horseback riding.

BACKGROUND

The Town of Flower Mound is located in Denton County and Tarrant County. The Town lies on the northern shore of Lake Grapevine, approximately 23 miles northwest of Dallas and 23 miles northeast of Fort Worth. With its proximity to the Dallas-Fort Worth Airport, major employers and entertainment opportunities, a unique and cultivated environment, great schools, and high-quality public facilities, Flower Mound has become a desirable place to live in the Dallas-Fort Worth (DFW) Metroplex. The Town's population has grown 20 percent in the last 10 years and is projected to roughly double in size to 109,554 residents by 2038[1]. While the eastern side of the town is primarily built out, there is an abundant amount of open space and vacant land in the western portion of Flower Mound. As the town continues to grow, the demand for a high-quality trails and bikeways system will continue to increase for both recreation and commuting purposes.

In 2017, the Town of Flower Mound updated their parks and recreation master plan. While this plan addressed trails, it did not provide the detailed guidance and implementation necessary to create a comprehensive system. The Town's intent was to later develop a trails and bikeways master plan to better assess the community's trail system needs today and in the future.

The trails and bikeways in Flower Mound today include a variety of branded trails named after wildflowers on the eastern side of town and soft surface trails used by hikers, mountain bikers, and equestrian users around Grapevine Lake. While these are great amenities and provide residents and visitors with active recreation opportunities, overall the trails are not well-connected and lack wayfinding. This plan identifies key opportunities to expand and enhance the trails and bikeways system to connect residents to schools, parks, neighborhoods, entertainment centers, and adjacent communities.

1. Source: Town of Flower Mound Planning Department

PLAN PURPOSE

The purpose of the Trails and Bikeways Master Plan is to guide the development of network recommendations, provide design guidelines, and create an implementation plan for a system of safe and accessible off-street trails and on-street bikeways that will connect users within Flower Mound and to adjacent communities. This plan will augment previous planning efforts to provide active and healthy lifestyle opportunities.

A key component of the Trails and Bikeways Master Plan is a needs assessment which determines the existing conditions of the trail system, compares it to similar communities, and explores opportunities to enhance the network. A corresponding implementation plan provides a guide for trail and bikeway development and design through the next decade and beyond.

KEY OBJECTIVES OF THIS PLAN:

- Create a *vision* for the trails and bikeways system based on a robust public engagement process;
- Conduct a *needs assessment* to determine how Flower Mound aligns with benchmark communities and where trails and bikeways are needed;
- Identify a *comprehensive and connected network* of trails and bikeways to be implemented over the next 10+ years;
- Provide *design standards and policy recommendations* for the system; and
- Provide guidance necessary to *implement the plan* in short, mid, and long-range targets.



BLUEBONNET TRAIL

BENEFITS OF ACTIVE TRANSPORTATION

The benefits of active transportation are well documented and include: healthier lifestyles, economic benefits, social benefits, and safer spaces.

HEALTH BENEFITS



Source: https://www.saferoutespartnership.org/healthy-communities/101/facts

By providing a safe and connected trails and bikeways system, walking and biking becomes more convenient. It is easier to incorporate physical activity into daily life when there is an accessible system. Active transportation can help combat obesity, improve mental health, and improve moods.

ECONOMIC BENEFITS

Source: Active Transportation and Health Economic Impact Study, Southern California Association of Governments

Proximity to parks and trails can have a positive impact on property values. There has been an increased demand for walkable places in Flower Mound, as illustrated in the Town Plan. Walking and biking can reduce costs associated with vehicle ownership, like routine maintenance, gas, and wear and tear on tires.

SOCIAL BENEFITS

Source: "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," Brian Teft, September 2011, http://aaafoundation.org/wp-content/ds/2018/02/2011PedestrianRiskVsSpeedReport.pdf

Trails and bikeways can connect residents to neighborhoods, parks, schools, entertainment areas, and surrounding communities. By activating the public realm, you can create social spaces that encourage interaction, and increase safety along corridors. Trails and bikeways provide safe, equitable transportation options.

SAFETY BENEFITS

Source: https://www.saferoutespartnership.org/

Roadways can be designed to be safer for all roadway users. Improvements include reduction in the number or width of travel lanes, widths, and speeds as well as intersection and mid-block crossing improvements. This can lead to less severe crashes, increased comfort, and usability of the roadway system for all users.

PLANNING PROCESS

The development of this plan spanned approximately 17 months, starting in February 2021 and concluding in July 2022. Throughout this process, Town staff, a designated steering committee, stakeholders, elected/appointed officials, and citizens were engaged to guide the master plan recommendations. The resulting community-driven vision forms the foundation for the future of trails and bikeways in Flower Mound for the next decade.

Phase 1: Community Understanding

The first step in any planning process is understanding the existing trails and bikeways system in the Town. This includes assessing the trails system, identifying strengths and opportunities, as well as gaining an understanding of the current population and relevant studies that may impact the Trails and Bikeways Master Plan.

Phase 2: Community Visioning

Engaging the community for their vision to create the overall system helps to create the vision and goals for plan. Engagement opportunities included virtual engagement rooms, public open houses, an online survey, interactive maps, and pop-up tents at community events.

Phase 3: Needs Assessment

An analysis of the needs and overall trails system compared to national best practices helps to identify recommendations for the proposed trails and bikeways network. This includes assessing the existing network, identifying safety issues and barriers, determining where gaps may exist, and assessing demand for new facilities.

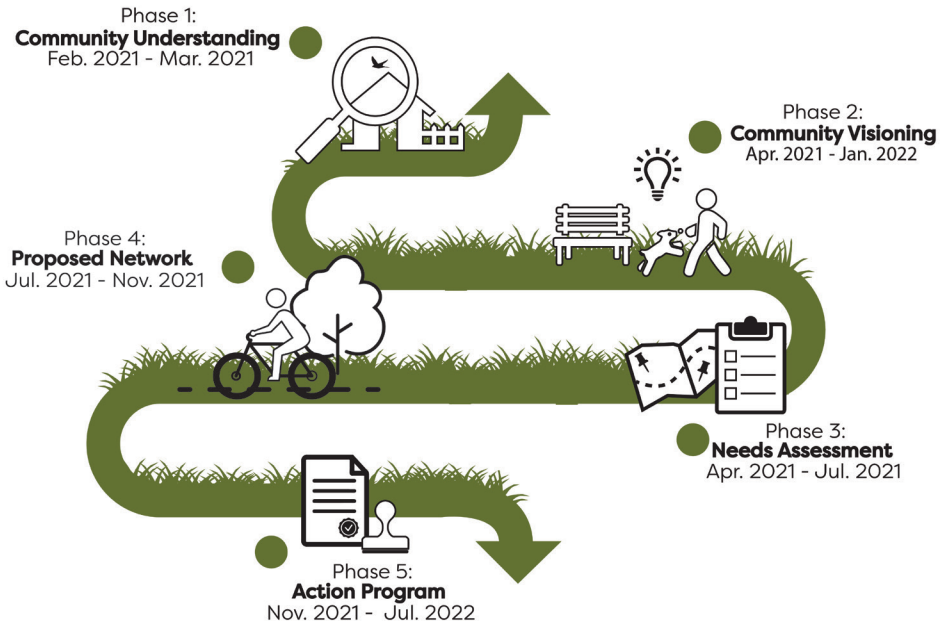
Phase 4: Proposed Network

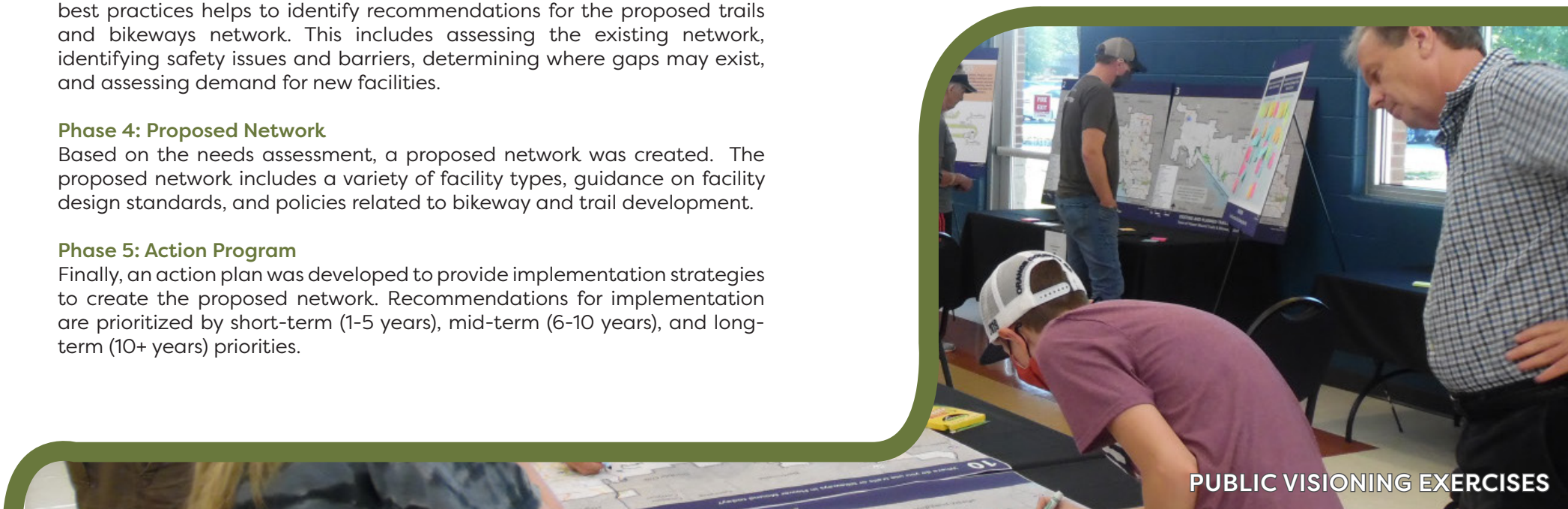
Based on the needs assessment, a proposed network was created. The proposed network includes a variety of facility types, guidance on facility design standards, and policies related to bikeway and trail development.

Phase 5: Action Program

Finally, an action plan was developed to provide implementation strategies to create the proposed network. Recommendations for implementation are prioritized by short-term (1-5 years), mid-term (6-10 years), and long-term (10+ years) priorities.

FIGURE 1.1: PLANNING PROCESS





PUBLIC VISIONING EXERCISES

PLAN STRUCTURE

The Flower Mound Trails and Bikeways Master Plan is separated into seven chapters.

01

Introduction – Describes the plan purpose and background and provides the plan's vision and goals.

02

Community Context – Provides an overview of the Town of Flower Mound, including demographics, relevant plans and studies, and the existing trails and bikeways system.

03

Trails & Bikeways System Needs – Documents the analysis undertaken which determines the needs for additional trails and bikeways by determining the current level of service, community needs, and barriers and opportunities for the system.

04

Trails & Bikeways System Network – Creates a proposed network and facility hierarchy to connect neighborhoods to key destinations and to surrounding communities.

05

Trails & Bikeways Design Standards – Provides design guidelines for the creation of trail and bikeway facilities, roadway crossing safety, trailheads and amenities, signage/wayfinding, maintenance, and a framework for a branding system.

06

Implementation – Prioritizes projects and provides implementation strategies for short and long-term improvements. This chapter identifies policy recommendations, potential projects, and potential funding mechanisms and partnerships to develop the system.

07

Appendix – Provides additional data, graphics, and resources to support the Trails and Bikeways Master Plan.

VISION AND GOALS

Visioning was a substantial and important part of the public engagement process. In the first phase of the project, the Town hosted a variety of public engagement meetings with key stakeholders and the general public. During those meetings, attendees were asked how they envision walking, cycling, riding, and paddling in Flower Mound in the future. Input from the engagement helped shape the vision and goals for the Town of Flower Mound Trails and Bikeways Master Plan.

PLAN VISION

The Town of Flower Mound will have a connected, safe, and accessible system of trails and bikeways that promotes public health, economic development, and active transportation to improve overall quality of life for residents and visitors for generations to come.

GOAL 1: CONNECTED COMMUNITY

Create a complete trails and bikeways system that connects the community with active transportation options.

Objective 1.1: Increase trail level of service.
Objective 1.2: Provide trail and bikeway connections to key destinations.
Objective 1.3: Fill in gaps in the existing trail system.



GOAL 2: SAFE AND ACCESSIBLE SYSTEM

Ensure the trails and bikeway system is safe, comfortable, and accessible for users of all abilities and ages.

Objective 2.1: Provide a variety of facility types appropriate for users of different abilities.
Objective 2.2: Improve overall safety and comfort of existing facilities.
Objective 2.3: Address areas identified as barriers within the existing trail system.

GOAL 3: USER FRIENDLY

Improve awareness, signage, and usability of the trails and bikeways system.

Objective 3.1: Increase awareness of the existing trail and bikeway system.
Objective 3.2: Create a consistent brand across the trails system so it is easily recognizable.
Objective 3.3: Install wayfinding signage to direct users to destinations along the trails.

GOAL 4: UNIQUE SYSTEM

Design and construct trails that support the health and wellness of the community and natural environment.

Objective 4.1: Provide trails through natural areas, parks, and open space.
Objective 4.2: Provide for interpretative and educational opportunities along trails.
Objective 4.3: Utilize an environmentally-friendly and context-sensitive approach to developing and maintaining trails.



GOAL 5: PARTNERSHIPS

Leverage partnerships between the Town and the community, internal and external organizations, and outside agencies to achieve a connected trails and bikeways system.

Objective 5.1: Pursue joint projects with surrounding cities, the Counties, NCTCOG, TxDOT, USACE, and utility providers.
Objective 5.2: Maintain relationships with user groups to solicit feedback on the trails and bikeways system.
Objective 5.3: Work with other departments to incorporate bicycle and pedestrian accommodations into ongoing or upcoming projects.

GOAL 6: FUNDING

Pursue a variety of funding sources for trails and bikeways development.

Objective 6.1: Apply for grant funding to implement trail and bikeway projects.
Objective 6.2: Continue to work with developers to ensure trails and bikeways are included with new development.
Objective 6.3: Coordinate with user and volunteer groups to help fund improvements to trails and bikeways.



LAKESIDE VILLAGE MIXED USE DEVELOPMENT

History
Demographics
Planning Guidelines
Existing Trails and Bikeways System



02 COMMUNITY CONTEXT



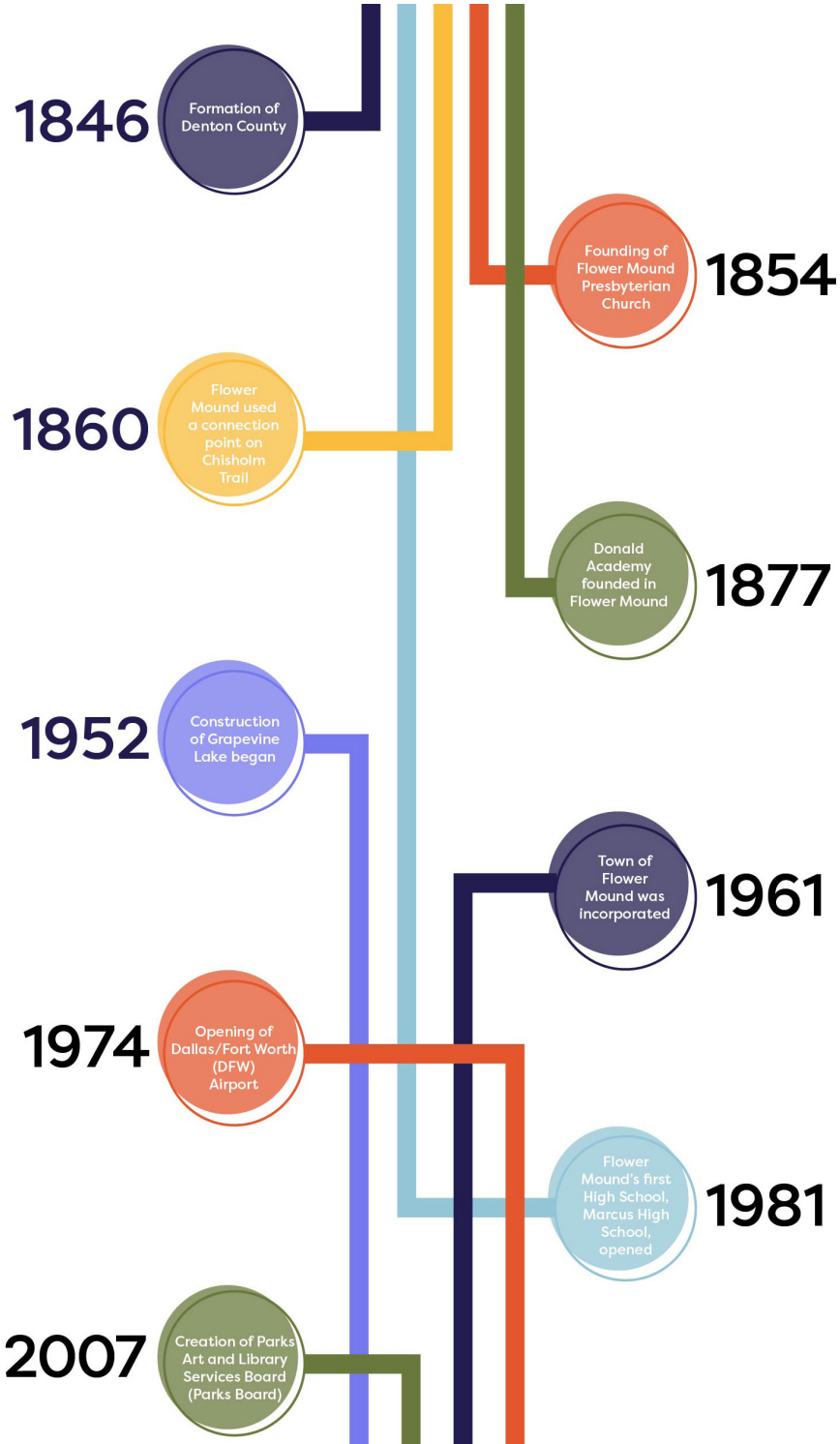
HISTORY

Based off archaeological surveys completed by the U.S. Army Corps of Engineers (USACE), people settled in Denton County as early as 4,000 – 2,500 B.C. However, in 1846 Denton County was officially formed in Texas. During the 1840s, the area of Flower Mound was used as religious camps and was permanently inhabited during the 1850s. In 1854, Flower Mound Presbyterian Church was founded. The community's most unique feature is its natural landscape, which made the area a great location for the historic Chisholm Trail. During the 1860s, along what would be Interstate 35 West (I-35W) today, the Chisholm Trail provided a network to over six million cattle during the 20-year period following the Civil War. In 1877, Donald Academy was founded in Flower Mound and was the largest rural school in Denton County. The school catered to grades first to tenth.

Transitioning into the 20th century, the landscape of Flower Mound began to truly take its form. In 1952, the construction of Grapevine Lake began and lasted for about a year. With the opening of road networks during the late 1950s like I-35 East, regional visitors could travel more easily throughout the Dallas-Fort Worth area. To avoid being annexed by the City of Irving, in 1961 the Town of Flower Mound became incorporated, and Bob Rheudasil became the first mayor of the Town. With the opening of Dallas/Fort Worth (DFW) Airport in 1974, Flower Mound's population boomed. During this decade, the first school in the Lewisville Independent School District, Timber Creek Elementary, opened. Then in 1981, Marcus High School, Flower Mound's first high school within the town boundaries, opened its doors to students. While the first traces of Flower Mound's Park Board dates before 1985, in 2007 the Town's Parks, Art and Library Services Board was created which is now readily recognized as today's parks board. Over the years, Flower Mound has continued to expand and build a community filled with recreation opportunities for its residents.



FIGURE 2.1: HISTORICAL TIMELINE OF FLOWER MOUND



DEMOGRAPHICS

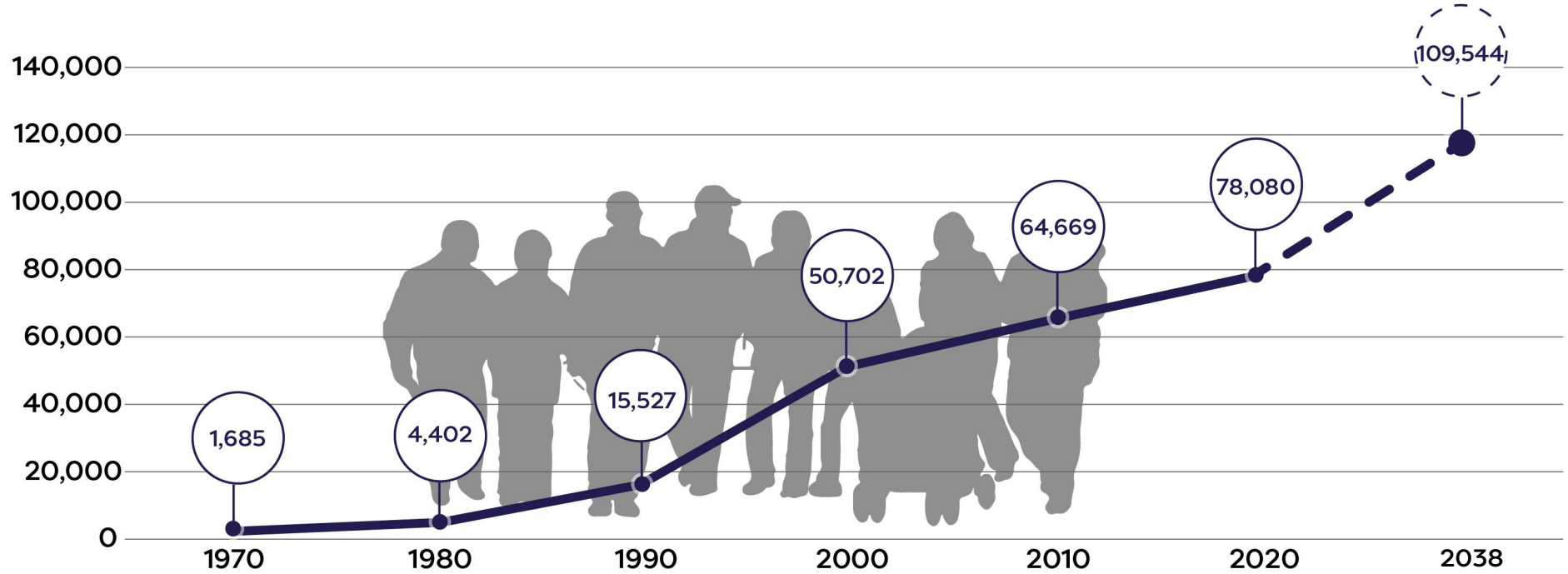
The demographic makeup of a community is significant in the beginning of the planning process. Demographic characteristics such as population growth, age, gender, race, and income help paint the landscape of a community and contribute to what the needs are for trails and bikeways.

GROWTH TRENDS

Flower Mound experienced a significant increase in population during the 1970s. This corresponds with many neighboring communities as the entire region saw a huge population boom during this time with the opening of DFW Airport in 1974 and subsequent expansion of road networks and job opportunities. Over the next 30 years, Flower Mound's population would continue to expand exponentially, with the most significant growth period occurring during the 1980s. After the 1990s, Flower Mound's population growth began to plateau. However, the town has seen an increase in their population by 54 percent since 2000. Based off population projections by the Town of Flower Mound, by 2038 the Town will be built-out with a population of approximately 109,544 residents. This would be about a 50 percent increase over the next 20 years.



FIGURE 2.2: FLOWER MOUND POPULATION GROWTH



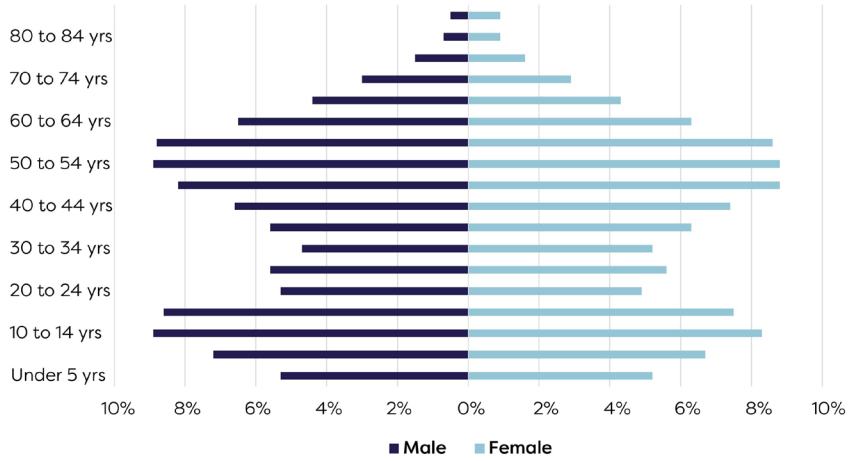
Source: Town of Flower Mound Planning Department

AGE AND GENDER CHARACTERISTICS

Flower Mound's population is characterized by two principal age groups: middle-aged adults and children. In 2020, individuals between the ages of 45-54 represented the largest portion of the population, equaling 17.4 percent. The next largest age group is between the ages of 55-64 making up 11 percent. The third largest group is younger adults between the ages of 10-14. Together these three cohorts reflect an older population being dominant in Flower Mound along with a strong presence of families. This idea can also be reinforced through the Town's median age of 39 years. This is older than both Denton County's median age of 35 and the state of Texas median age of 34.

Females make up 50.8 percent of the overall population. However, males in Flower Mound surpass their female counterparts between the ages of 5 to 24 and 50 to 74. The age groups where females surpass males is children under the age of 5 and individuals between the ages 30 to 49 and 70+.

FIGURE 2.3: AGE AND GENDER, 2020



RACE AND ETHNICITY CHARACTERISTICS

In 2020, 77.7 percent of Flower Mound's population identified as white, followed by 12.5 percent of residents identifying as Asian, and 4.4 percent identifying as Black. The percentage of residents that identify as Hispanic ethnicity is 9.9 percent. Over the past ten years, Flower Mound's overall population has increased by about 27 percent and during that time most racial and ethnic groups saw an increase as well. The group with the largest percent increase was the Asian population (85 percent increase from 2010 to 2020). The second group that saw the second largest increase was Black residents with a percent increase of 74 percent.

TABLE 2.1: RACE AND ETHNICITY CHARACTERISTICS, 2010-2020

Race	2010	2020	Percent Change
Total Population	64,669	81,920	26.7%
White	83.8%	77.7%	- 17.3%
Black	3.2%	4.4%	74.4%
American Indian and Alaska Native	0.5%	0.5%	23.5%
Asian	8.6%	12.5%	85.4%
Native Hawaiian and Other Pacific Islander	0.1%	0.1%	45%
Other Race	1.6%	2.1%	62.9%
Two or More Races	2.2%	2.7%	59%
Ethnicity			
Hispanic or Latino (of any race)	8.4%	9.9%	49.7%

Source: U.S. Census Bureau, Census 2010 Summary File 1. ESRI forecasts for 2020.

HOUSEHOLD CHARACTERISTICS

The majority of Flower Mound's housing stock is occupied and owned. In 2020, 99 percent of housing units were occupied. Since 2010, this percentage has increased by 2 percent. Of the occupied housing units in Flower Mound, 83.9 percent are owned, meaning that the remaining 15.4 percent are rented. The remaining 0.8 percent represents vacant units. These housing characteristics have stayed relatively consistent since 2010. The average housing value is currently $403,416, which is one of the highest average values in the DFW region. 51.1 percent of houses in Flower Mound fall within the value bracket of $300,000 to $499,999.

The median household income in Flower Mound is $138,873. This is significantly higher than the median household income of Denton County ($86,913) and the state ($61,874). Of the residents that live in Flower Mound, 68.8 percent of the population make $100,000 or more. These housing characteristics indicate that many households in Flower Mound have higher disposable incomes than other communities in the DFW region to spend on recreation and leisure.

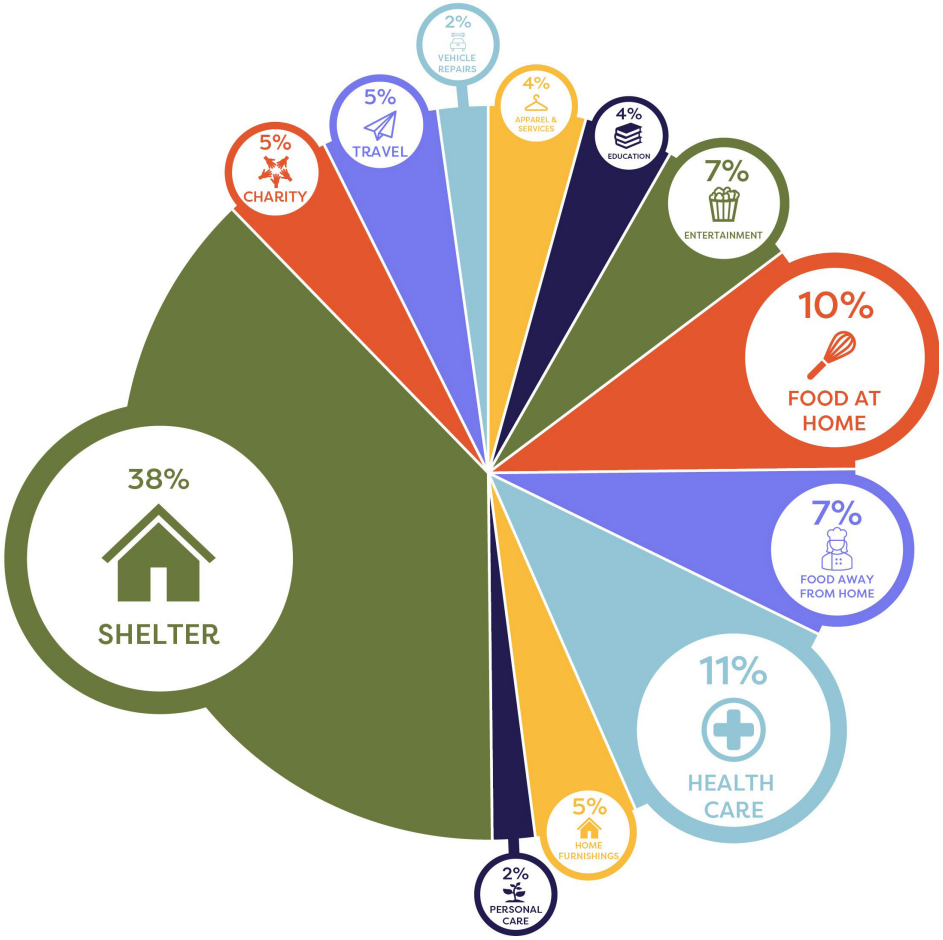
Figure 2.4 displays Flower Mound's consumer spending in 2020. Consumer spending shows the amount spent on a goods and services by households in Flower Mound in 2020. The largest category individuals in Flower Mound spent money on was towards their houses (38 percent). The second largest category was spent towards health care costs (11 percent), followed by food categories, such as food at home (10 percent) and food away from home (7 percent).

TABLE 2.2: HOUSEHOLD CHARACTERISTICS, 2010-2020

	2010	2020
Total Housing Units	43,097	51,244
Occupied Housing Units (%)	90.6%	91.1%
Vacant Housing Units (%)	9.4%	0.9%
Owner-Occupied Housing Units	18,488	22,747
Median Mortgage Cost	$1,545	$1,698
Renter-Occupied Housing Units	47.7%	46.7%
Median Rent	$782	$1,082
Total Households	95,794	126,100

Source: 2015-2019 American Community Survey 5-Year Estimates; 2006-2010 American Community Survey 5-Year Estimates.

FIGURE 2.4: CONSUMER SPENDING, 2020



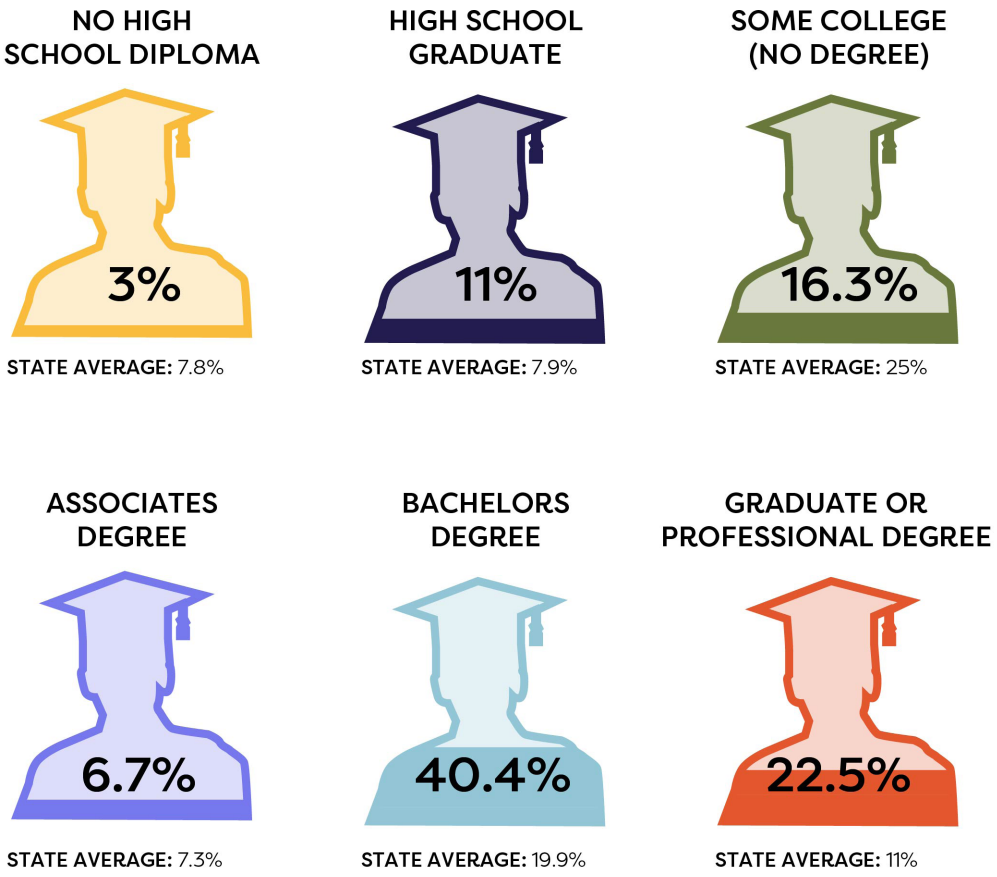
Source: U.S. Census Bureau, Census 2010 Summary File 1. ESRI forecasts for 2020.



EDUCATIONAL ATTAINMENT

Among the residents in Flower Mound who are over the age of 25, 40.4 percent have a bachelor's degree. This percentage is higher than the Denton County average at 30.8 percent and the state average at 19.9 percent. The next largest group is residents who earned their graduate or a professional degree, which make up 22.5 percent of Flower Mound's population. This percentage is also higher than the Denton County average of 15.4 percent and the state average of 11 percent. Overall, most of the population who are over the age of 25 have received a bachelor's degree or higher.

FIGURE 2.5: EDUCATIONAL ATTAINMENT, 2020



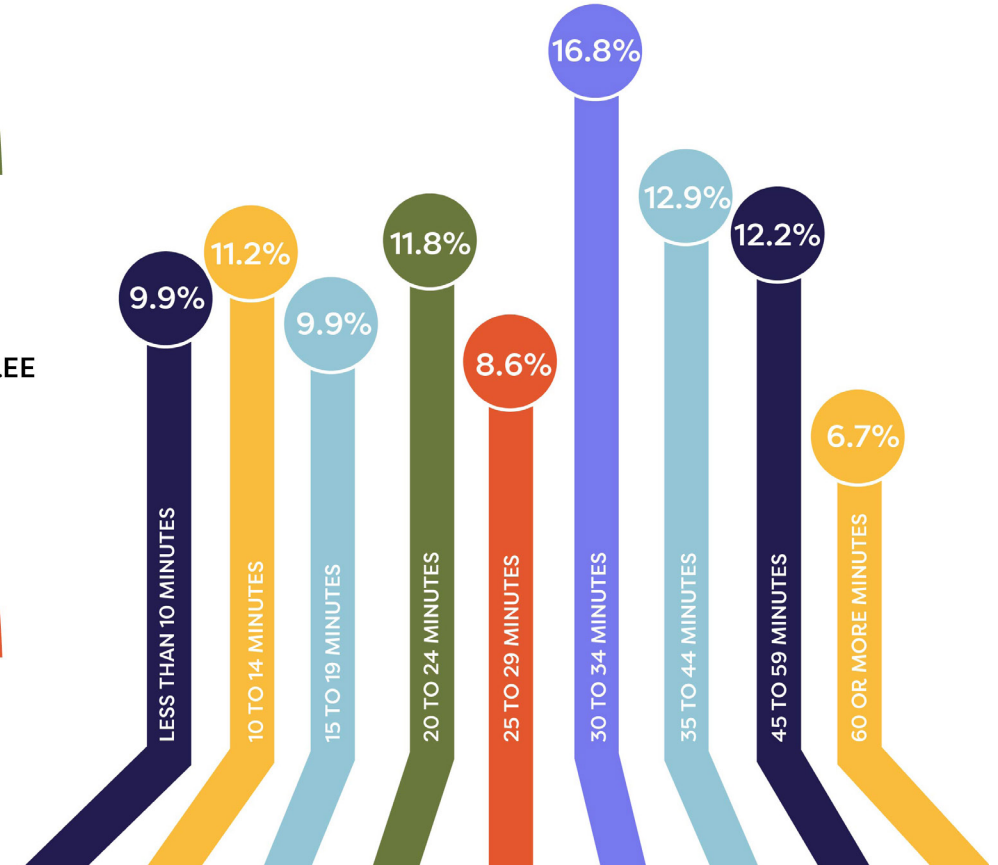
Source: U.S. Census Bureau, Census 2010 Summary File 1. ESRI forecasts for 2020.

COMMUTE TIME

According to the Census Bureau, the average commute time in 2019 was 28.4 minutes. Over the past five years, this number has decreased from 29.2 minutes and currently is at its lowest. For the working population over the age of 16, the most common commute time frame was between 30 - 34 minutes (16.8 percent). Additionally, 21.1 percent of the population in Flower Mound have a shorter commute time between 10 - 19 minutes and 25.1 percent of the population have a longer commute time between 35 – 59 minutes. In 2019, most of the population used a car, truck, or van as a means of transportation to work (86.6 percent). This number has fallen slightly since 2014. Over the past five years, Flower Mound has seen an increase of its population working from home and biking to work.

FIGURE 2.6: AVERAGE COMMUTE TIME, 2019

Source: U.S. Census Bureau, 2019 ACS 5-Year Estimates.



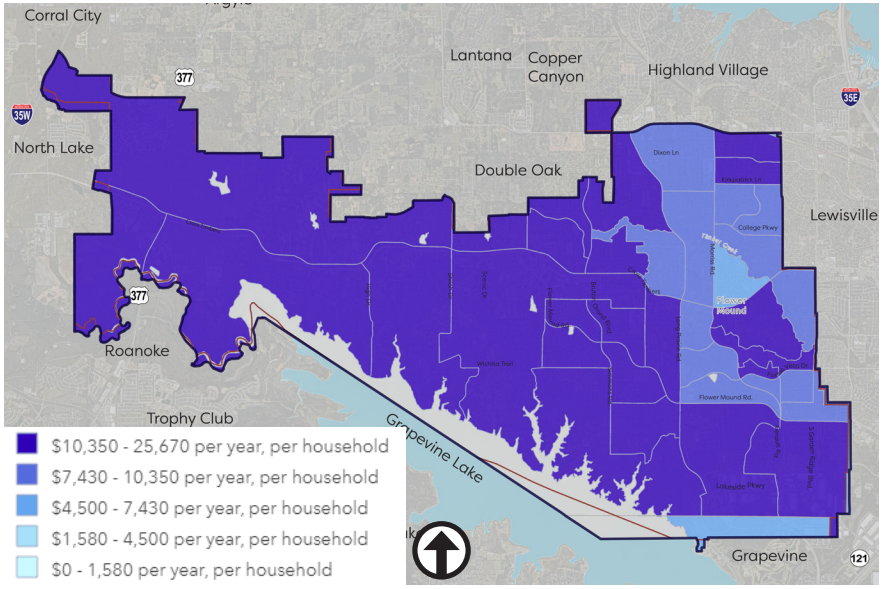
HEALTH

Figure 2.7 displays the average amount spent on healthcare per household in Flower Mound in 2021. All residents in the Town spend at least $4,500 per year towards their health. However, the largest proportion of the Town spends in the highest bracket that ranges between $10,350 - $25,670 a year. This aligns with healthcare services being the second largest category of consumer spending for the Town.

Figure 2.8 displays the percent of population with a disability, based off the six different types of disabilities: mobility/physical, visual, mental health, intellectual, hearing, and learning. Overall, Flower Mound has a low percentage of its population with a disability; in 2019, 5.8 percent of Flower Mound residents had a disability. The largest share of the population with a disability was residents over the age of 65 (55 percent). They are also concentrated on the east side of Flower Mound between Kirkpatrick St and Cross Timbers, primarily around the Pink Evening Primrose Trail.

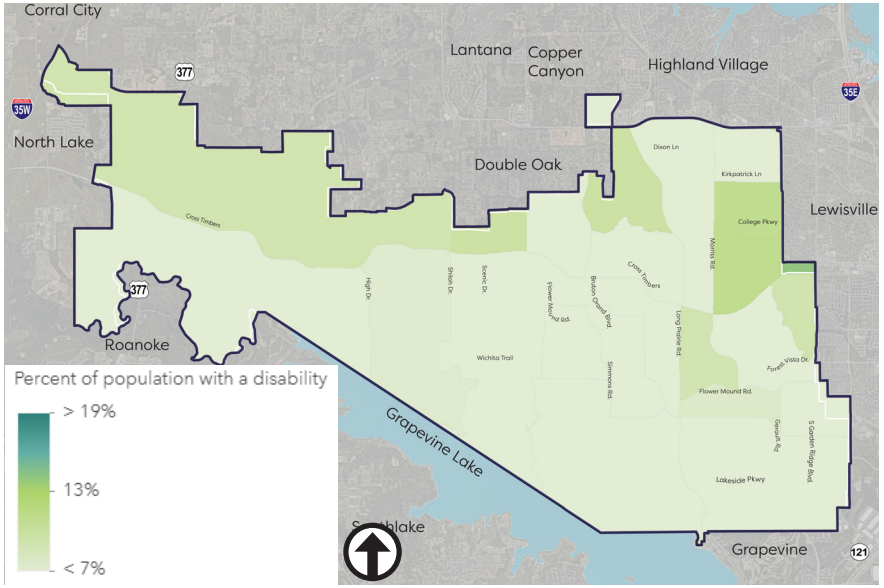


FIGURE 2.7: HEALTH SPENDING, 2021



Source: ESRI's 2021 U.S Consumer Spending Data in Census 2010 Geo-graphics, Business Analyst.

FIGURE 2.8: PERCENT OF POPULATION WITH A DISABILITY, 2014

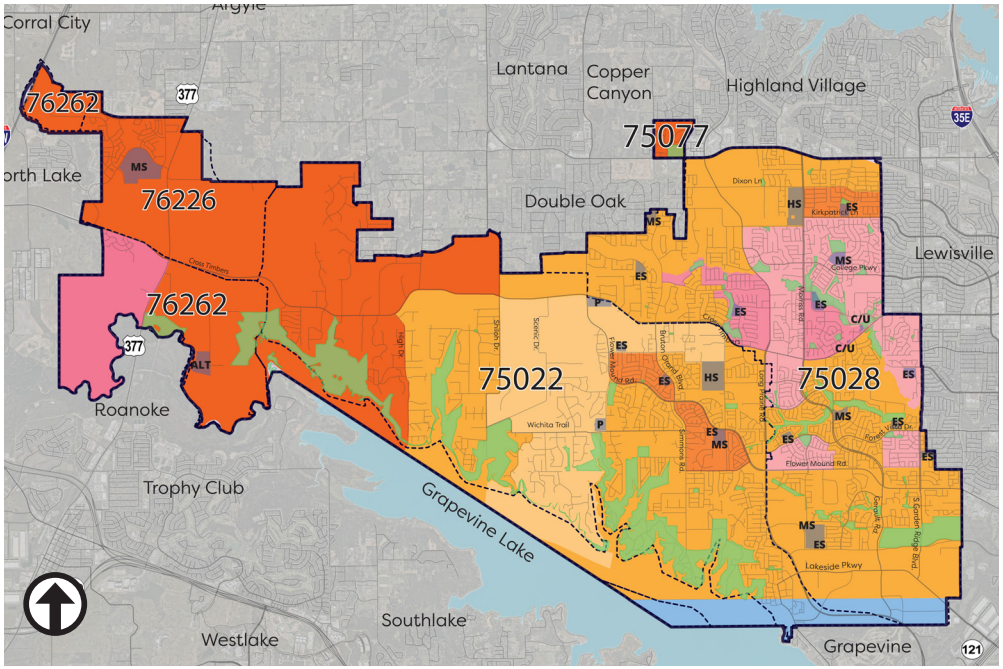


Source: 2010-2014 American Census Survey 5 year-data, Business Analyst.

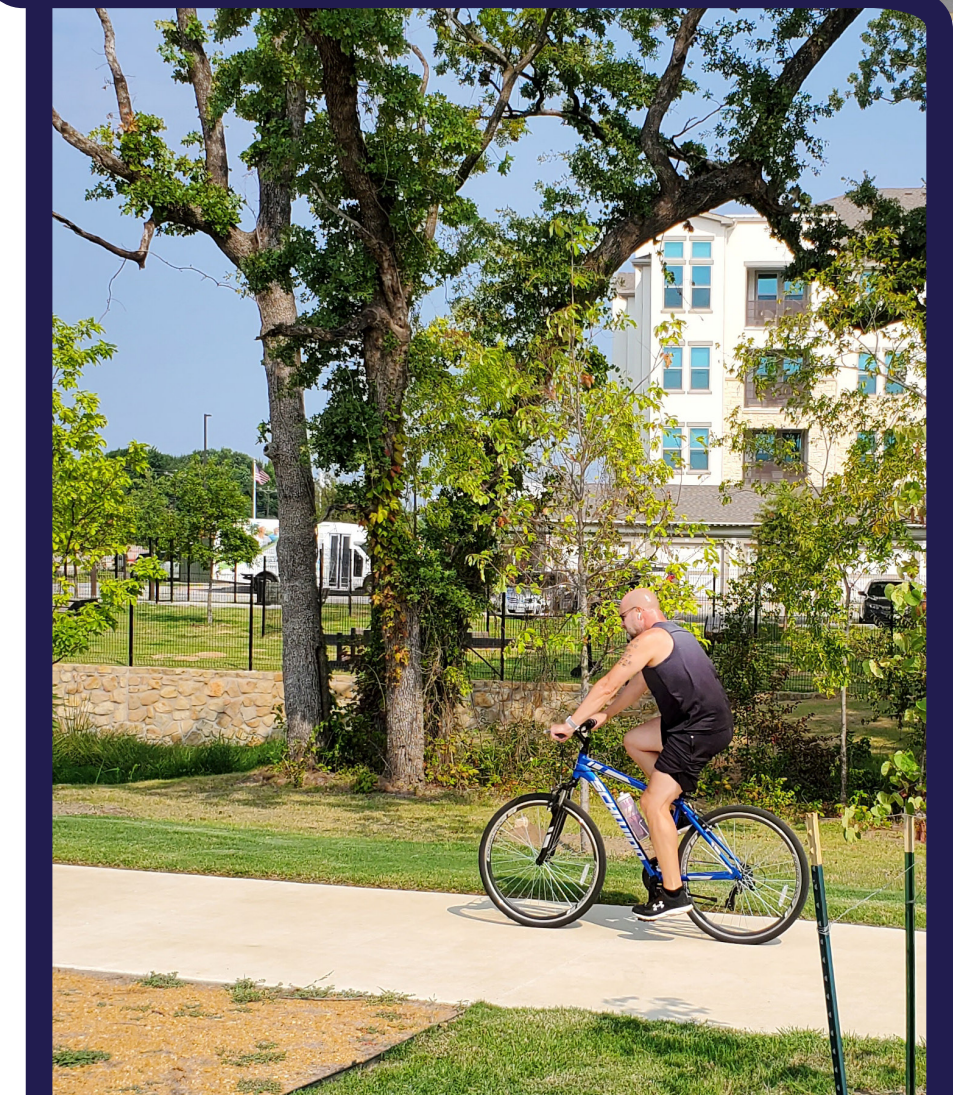
ESRI TAPESTRY SEGMENTS

ESRI (Environmental Science and Research Institute) is a demographic and mapping company that uses spatial data to help inform communities. The ESRI tapestry market segmentation identifies markets in each community using its geographic, socioeconomic, and demographic characteristics. This helps communities better understand their consumer market. Based on Census block groups in Flower Mound, the top three most represented segments within Flower Mound are "Professional Pride," "Soccer Moms," and "Boomburbs". Page 20 and 21 display all the segments that are represented within Flower Mound along with their associated characteristics and definitions. **Figure 2.9** displays the location of zip codes in Flower Mound and the associated tapestry segments.

FIGURE 2.9: ESRI TAPESTRY SEGMENTS







1A TOP TIER

This segment is considered the wealthiest Tapestry market; members earn more than three times the average US household income. They are also highly educated and more than one in three residents have a postgraduate degree. They are socially responsible consumers that aim for a balanced lifestyle and take interest in expanding their knowledge.

Median Household Income
$173,200
Median Age
47.3
Average Household Size
2.84

1B PROFESSIONAL PRIDE

These residents are well-educated, career professionals that work in fields such as science, technology, law, or finance. They are goal-oriented and have well established families. Households in this segment like routine as a daily ingredient to their lifestyle.

Median Household Income
$138,100
Median Age
40.8
Median Household Size
3.13

1C BOOMBURBS

This is a new growth market with many well-educated young professionals with new families. The unemployment in this segment is low and most households have more than two workers. They are well connected to the newest technology and trends. Physical fitness is a priority for this group and leisure activities include sports such as hiking, biking, and golf.

Median Household Income
$113,400
Median Age
34
Median Household Size
3.25

1D SAVVY SUBURBANITES

This segment includes residents who are well educated and well capitalized. They are informed shoppers and do extensive research prior to making a purchase. They are in older neighborhoods and include families that have no children or adult children. Their suburban lifestyle has a focus on the outdoors like gardening or active pursuits.

Median Household Income
$108,700
Median Age
45.1
Median Household Size
2.85



4A SOCCER MOMS

These residents are an affluent and family-oriented market. The neighborhoods have a country flavor that are in the suburban periphery of metropolitan areas. This group carries a higher level of debt with the largest proportion having only some college. They favor time saving services and purchases revolve around family-oriented products. Outdoor activities are an important aspect of this group's lifestyle.

Median Household Income
$90,500
Median Age
37
Median Household Size
2.97

4B HOME IMPROVEMENT

This group is comprised of primarily married couple families that own a single-family home. They have high participation in the labor force and households typically have 2+ workers. Majority of incomes go towards paying off student loans, home mortgages, and eating out.

Median Household Income
$72,100
Median Age
37.7
Median Household Size
2.88

4C MIDDLEBURG

These residents have transformed from the easy pace of country living to semi-rural subdivisions. They are family-oriented consumers and typically a younger demographic. 65 percent have a high school diploma or some college and have a labor force participation rate typical of a younger population. Outdoor activities popular with this segment include hunting, fishing, and baseball.

Median Household Income
$59,800
Median Age
36.1
Median Household Size
2.75

3B METRO RENTERS

This segment is highly mobile and well educated with many still enrolled in college. Socializing is important to them as well as environmentally safe practices. They participate in leisure activities such as outdoor activities and yoga. They are very well connected and get a lot of their information via technology.

Median Household Income
$67,000
Median Age
32.5
Median Household Size
1.67



PLANNING GUIDANCE

PARKS AND RECREATION MASTER PLAN UPDATE

The 2017 Parks and Recreation Master Plan (PRMP) provides a framework for strategies regarding acquisition and development of recreation facilities for Flower Mound in the future. This plan focuses on the needs of the community within the next five to ten years and uses insights through engagement efforts as a foundation. The primary outcomes of the master plan were to identify a vision for the Parks and Recreation Department, determine the level of needs in current offerings, identify new opportunities that can be met by the department, complete initial testing on strategies for funding, and identify possible parks/facility components for new and future facilities. Finally, this plan identifies a variety of recommendations for the direction of the Parks and Recreation facilities for implementation.

According to the PRMP's level of service analysis, **paved multi-use trails were listed as the highest priority need** out of all parks and recreation amenities assessed as part of the plan. Nature trails and unpaved multi-use trails were also listed as a high priority. Additionally, the overall quality of walking/biking trails was identified as the highest-ranking response for survey takers when asked which services should receive the most attention over the next five years. Equestrian trails were ranked near the bottom in several questions related to identifying needs and priorities moving forward.

The strategic recommendations in the Parks and Recreation Master Plan outline action plans towards the community vision. There are four core community visions that are summarized by parkland and trails community mandates, facilities, programming, and operations and staffing. These four concepts each have a set of strategies that can be used as a road map for the future.

FIGURE 2.10: PRIORITIZED PROGRAM RANKINGS IN PARKS MASTER PLAN

Facility	Priority
Paved multi-use trails	High
Small neighborhood parks	
Nature trails (paved and unpaved)	
Large community parks	
Outdoor swimming pools/water parks	
Outdoor amphitheaters	
Off-leash dog park	
Unpaved multi-use trails	
Community garden	Medium
Outdoor water splash pads	
Picnic areas/pavilions	
Outdoor tennis courts	
Playground equipment	
Indoor gymnasiums	
Outdoor basketball courts	
Disc golf course	
Outdoor fishing areas	
Soccer fields	Low
Campgrounds	
Skate park	
Baseball & softball fields	
Football & lacrosse fields	
Boardwalks	
Cricket fields	
Equestrian trails	



BLUEBONNET TRAIL

ECONOMIC DEVELOPMENT PLAN

The mission of the Economic Development Plan is to expand the commercial tax base and increase sales tax revenue through resiliency and sustainability efforts. This plan outlines goals, objectives, and strategies to create a diversified and regionally competitive economy within Flower Mound. One major goal outlined in this plan is to develop community resources that contribute to a business environment to encourage development. One example of a strategy that supports this concept is the prioritization of transportation and mobility planning to ensure the efficiency of the thoroughfare system. Another example is maintaining comprehensive park systems and preserving the natural environment that enhance the quality of life and support economic goals. Together, these strategies work to support the community in encouraging high-quality development and promote economic activity.



OPEN SPACE PLAN

A previous vision for Flower Mound identified that a key goal was focused on preservation. The Open Space Plan creates the foundation of a vision for how to adequately produce strategies towards defining and conserving open spaces. These strategies provide an array of techniques to maintain the town's unique natural environment. The plan highlights that it is not to be used as simply an inventory but instead provides an appropriate menu of protection techniques for agricultural, natural, and scenic open spaces in Flower Mound. This plan also determines funding strategies with the best potential as well as voluntary and incentive opportunities for landowners. Finally, the plan does reference providing trail connections throughout open space areas, but also notes that paved recreational trails are not the primary intended use of open space in Flower Mound.

LAND USE PLAN

The Land Use Plan aims to promote more efficient uses of land within Flower Mound. The plan goals center around preservation of the unique natural environment, mitigation efforts of rapid urbanization, creation of a balanced tax base, and development efforts that have exemplary quality and design. These goals reflect Flower Mound's vision of the community and dictates the shape of the town and identifies strategies achieved. The specific land use categories can be found in this plan in more detail, along with specific details regarding six major planning areas which include: Lakeside Business District, Long Prairie District, Cross Timbers Protection Area, Cross Timbers Conservation Development District, Prairie Vista District and Denton Creek District.

The Lakeside Business District prioritizes commercial development to spark economic growth. Long Prairie District is 90 percent developed, however any future uses will comply with emphasizing quality of life and preserving remaining natural landscapes. The Cross Timbers Protection Area covers the areas within the Long Prairie District where Cross Timbers ecosystem exists. The purpose is to preserve the remnants of the Cross Timbers that have been compromised due to urbanization and enact development standards to uphold the remaining Cross Timbers environmental character. The Cross Timbers Conservation Development District and the Prairie Vista District preserve the ecological area in central Flower Mound. Lastly, the Denton Creek District prioritizes future growth and economic opportunity through supporting uses such as commercial, industrial development, mixed office, retail, and residential uses.

FIGURE 2.11: DISTRIBUTION OF LAND USES FROM THE TOWN OF FLOWER MOUND'S MASTER PLAN

Land Use	Percentage of the Acreage	Flexibility Factor
Non-residential Uses*	45%	-25%
Public Uses	5%	±5%
Residential Uses**	45%	25%
Civic/Open Space (Public and Private)	5%	+10%
Total	**100%**	

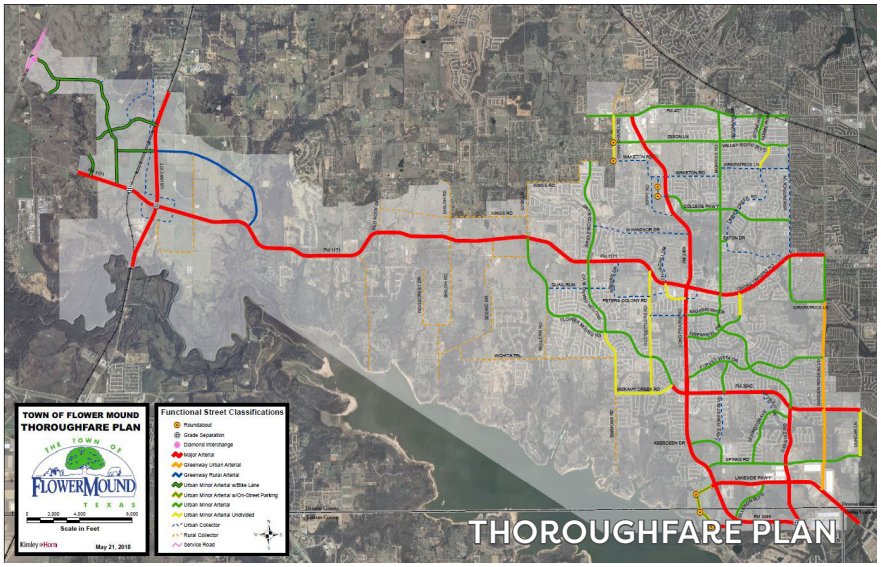
**Non-residential uses shall include retail, office, hospitality, entertainment, etc.*

*** Residential uses above commercial uses shall not be included in the calculation of percentage of residential uses in the overall development*



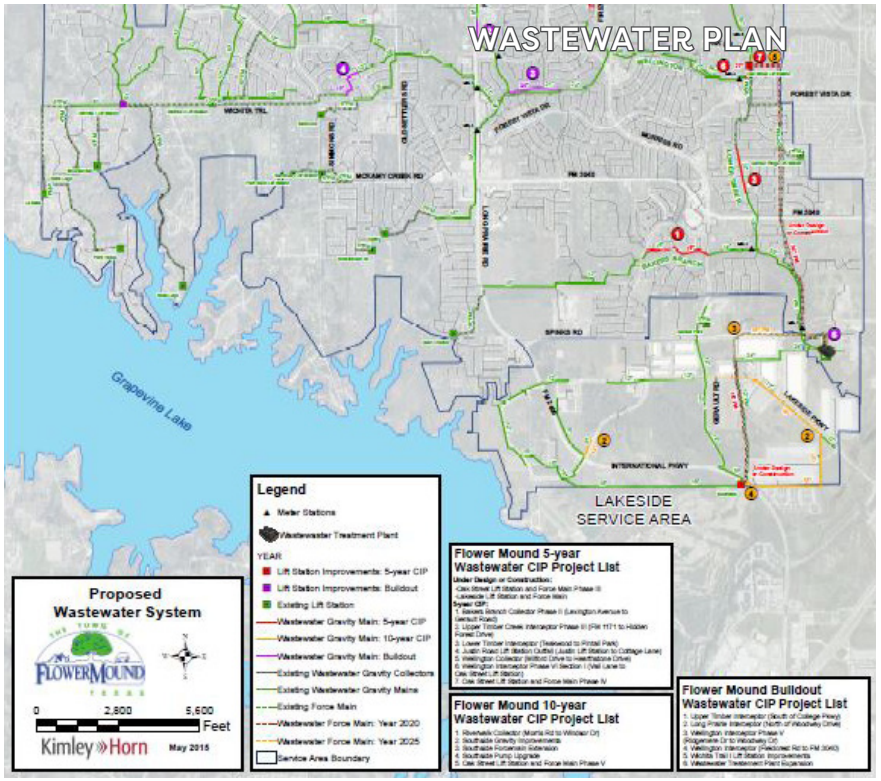
THOROUGHFARE PLAN

The Thoroughfare Plan uses projected land uses to guide the development of future thoroughfares. Recommendations were based off technical modeling and information obtained by the public in hearings. The features of this plan include a lakeside parkway connection to SH 121, Flower Mound Road, Kirkpatrick Extension, and collector street cross-sections. Recommendations include cross-sections that display the intended configuration of future roadways based on their purpose; the cross-sections with on-street bicycle accommodations are the urban minor arterial with bike lanes and the rural collector. In these cross-sections, a 5' bike lane is included in both directions with striping designating the bike lane from the travel lane. According to the 2018 thoroughfare map, roadways designated as the urban minor arterial with bike lanes are all located in the far western portion of the town which is currently primarily undeveloped.



WASTEWATER PLAN

The Wastewater Plan is an update from the Wastewater Master Plan adopted in 2009 and then amended in 2015 based on new demographics, land uses, and growth projections. The purpose was to provide strategies for the future of wastewater management within Flower Mound. The 2015 amendment projected growth for 2020, 2025, and community build-out and provided a guide for infrastructure needs. These recommendations directly link to the community's land use plan. Two major planning areas were identified to project wastewater demands: Lakeside and Denton Creek. This plan provides recommendations for the wastewater treatment plant, service areas, and each of the five districts outlined in the land use plan.



WATER PLAN

The Water Plan is based on the updates created in 2015 to the 2009 Water Master Plan. The purpose of this plan is to assess the existing conditions of the water storage and distribution system as well as to project future needs. The components that have been evaluated in this document are water supply, ground storage, elevated storage, pumping stations, and the distribution system. Other aspects of this plan outline the Denton Creek Reuse Water Master Plan and the Lakeside Reuse Water Master Plan. Both master plans were adopted to meet Flower Mound's reuse water system infrastructure needs, and to provide tools and strategies for current and future needs.

URBAN DESIGN PLAN

The Flower Mound Urban Design Plan provides design guidelines for landscaping elements and architectural standards for non-residential buildings. This was created as part of the Flower Mound Master Plan and was reviewed via community engagement and focus groups. The purpose of the plan is to provide structure to establish community-wide architectural standards for non-residential projects and landscape, gateway, and intersection treatments in the five districts outlined in the land use plan. Each district has a distinct goal that aims to strengthen the community and character identity of the following districts:

- Lakeside Business District
- Long Prairie District
- Cross Timbers Conservation Development District
- Denton Creek District
- Prairie Vista District

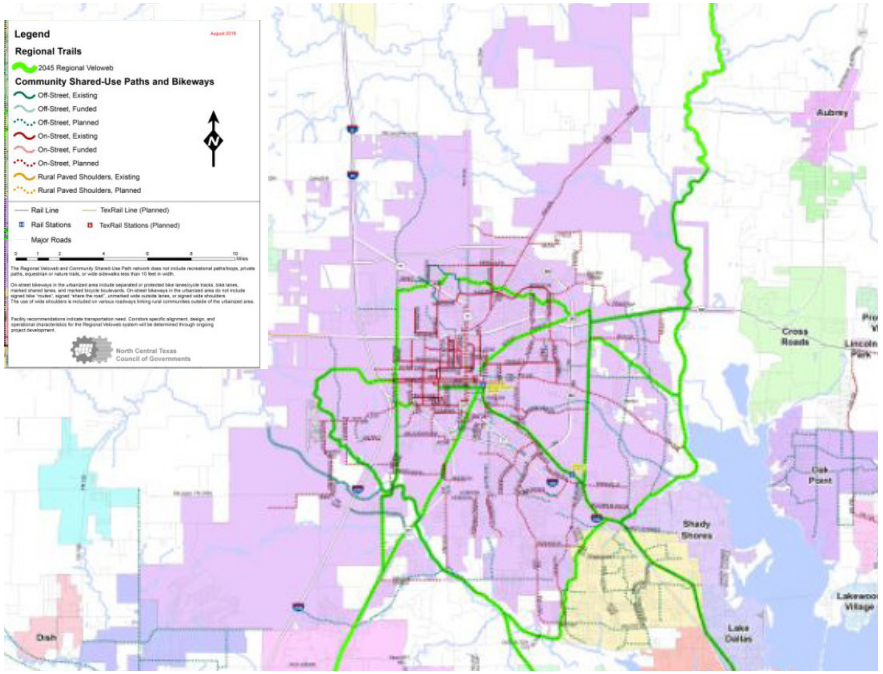


NCTCOG VELOWEB

The North Central Texas Council of Governments (NCTCOG) Regional Veloweb is a regional network of off-street shared use trails. These trails serve as a network of active transportation for multiple user groups including bicyclists, pedestrians, and other non-motorized modes of transportation. The Veloweb is updated by NCTCOG and the latest version of the regional network is included in the NCTCOG Mobility 2045 plan. This plan contains 1,876 miles of off-street trails that has planned connections in 10 counties and 105 cities in North Central Texas. Determining the alignments for the Veloweb trails are achieved through collaborative planning efforts between NCTCOG staff and local governments.

The Mobility 2045 Plan outlines the Veloweb trail segments as existing, funded and planned. Within the context of Flower Mound, all of the Veloweb segments are categorized as 'planned' trails. Most of the planned trails are north to south making connections to neighboring communities.

FIGURE 2.12: NCTCOG VELOWEB REGIONAL MAP

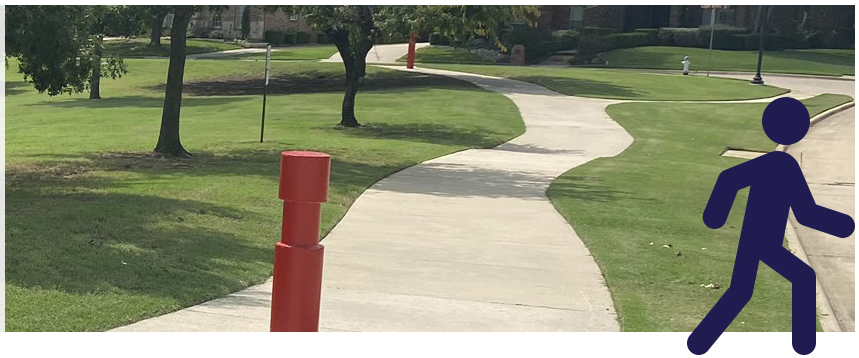


EXISTING TRAILS AND BIKEWAYS SYSTEM

The Flower Mound trail system has diverse offerings for its residents and visitors from across the region and beyond. These trails aim to connect residential neighborhoods to schools, parks, and commercial centers and expand mobility for its residents. Flower Mound has a unique natural landscape that adds to the overall experience of trail users. Currently, there are 65.3 miles of 8' or wider paved Town trails, 6.3 miles of on-street bikeways, 14.5 miles of equestrian trails, and 34.5 miles of trails owned and maintained by other entities within Flower Mound. **Figure 2.13** and **Table 2.3** display Flower Mound's inventory of trails and on-street bikeways.

For the purpose of this inventory the following facility definitions are used:

Town Trails:
Trails that are owned and mostly maintained by the Town of Flower Mound. These trails include multi-use paved trails that are between 8' and 10' in width, soft-surface trails, and equestrian soft-surface trails within an easement range of 15' to 50'. The Town has developed a trail naming system for much of the existing trail system; the majority of existing trails are named after various wildflowers. These trails are referred to as “branded trails.”



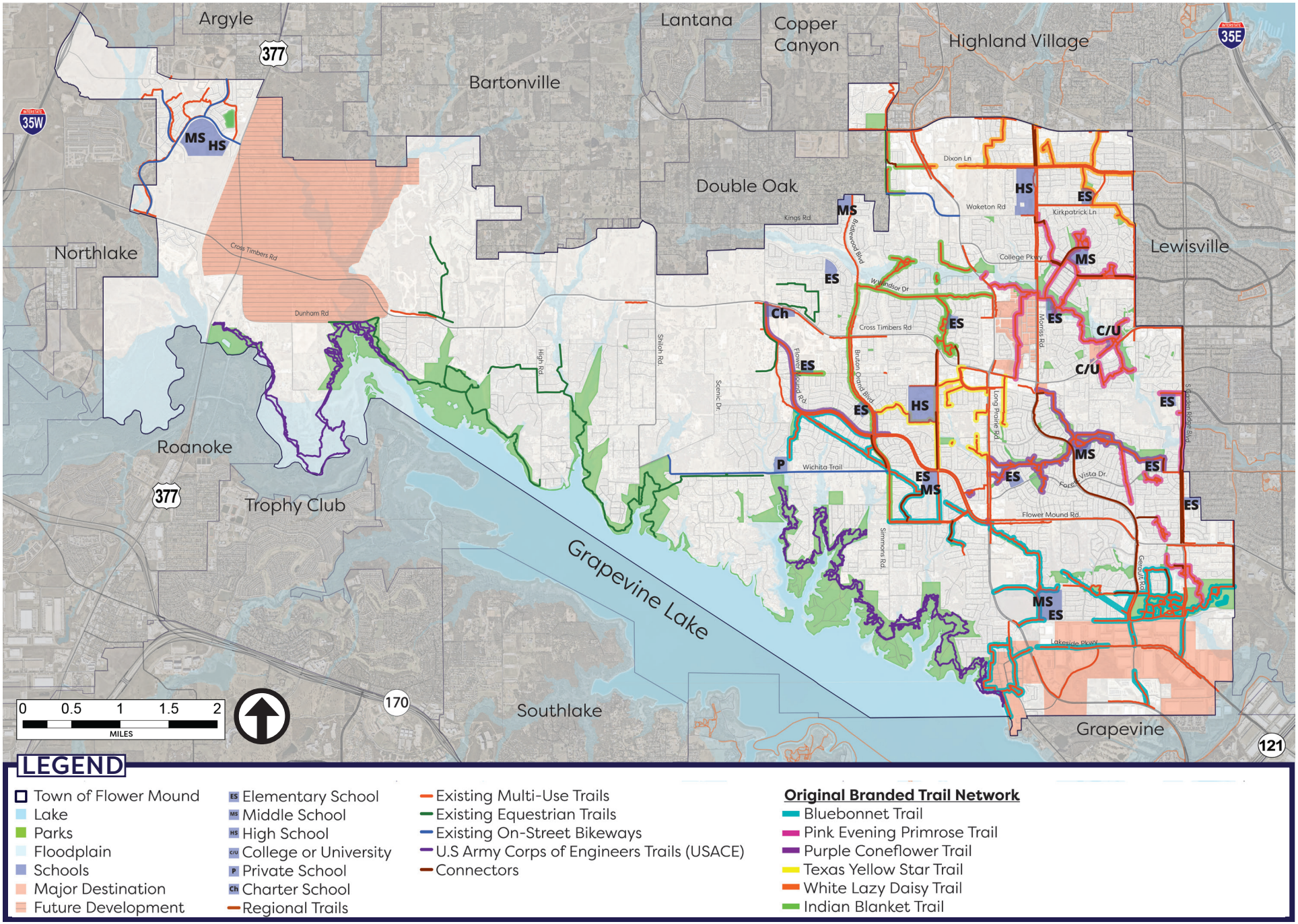
Other Trails:
Multi-use soft-surface paths for hiking and mountain biking that are located within the Town of Flower Mound and are not owned or maintained by the Town. The Dallas Off-Road Bicycle Association (DORBA) maintains over 30 miles of soft-surface trails on USACE land along the shores of Grapevine Lake.



On-Street Bikeways:
Designated accommodations for bicyclists within a roadway such as bike lanes and shared-use lanes. There are approximately six miles of existing on-street bikeways in Flower Mound today.



FIGURE 2.13: EXISTING TRAILS AND BIKEWAYS



TOWN TRAILS

Flower Mound's town trails include paved multi-use, soft-surface, and equestrian trails. These trails are owned and mostly maintained by the Town of Flower Mound. Currently, there are 65.3 miles of multi-use trails within Flower Mound's trail system that are 8' or wider. 70.6 percent of those paved multi-use trails that are 8' or wider are within Flower Mound's designated branded trail network, which are named after wildflowers found in Texas. The Bluebonnet Trail has the most mileage out of all the branded multi-use trails and connects to the town's most prominent park, Heritage Park. There is one short segment of the Pink Evening Primrose Trail that is made from decomposed granite. Equestrian trails are another type of soft-surface trail maintained by the Town. There is a total of 14.5 miles of equestrian trails located in Flower Mound, most of which are located on U.S Army Corps of Engineers land and is not maintained by the Town; 4.2 of those miles of equestrian trails are maintained by the Town.

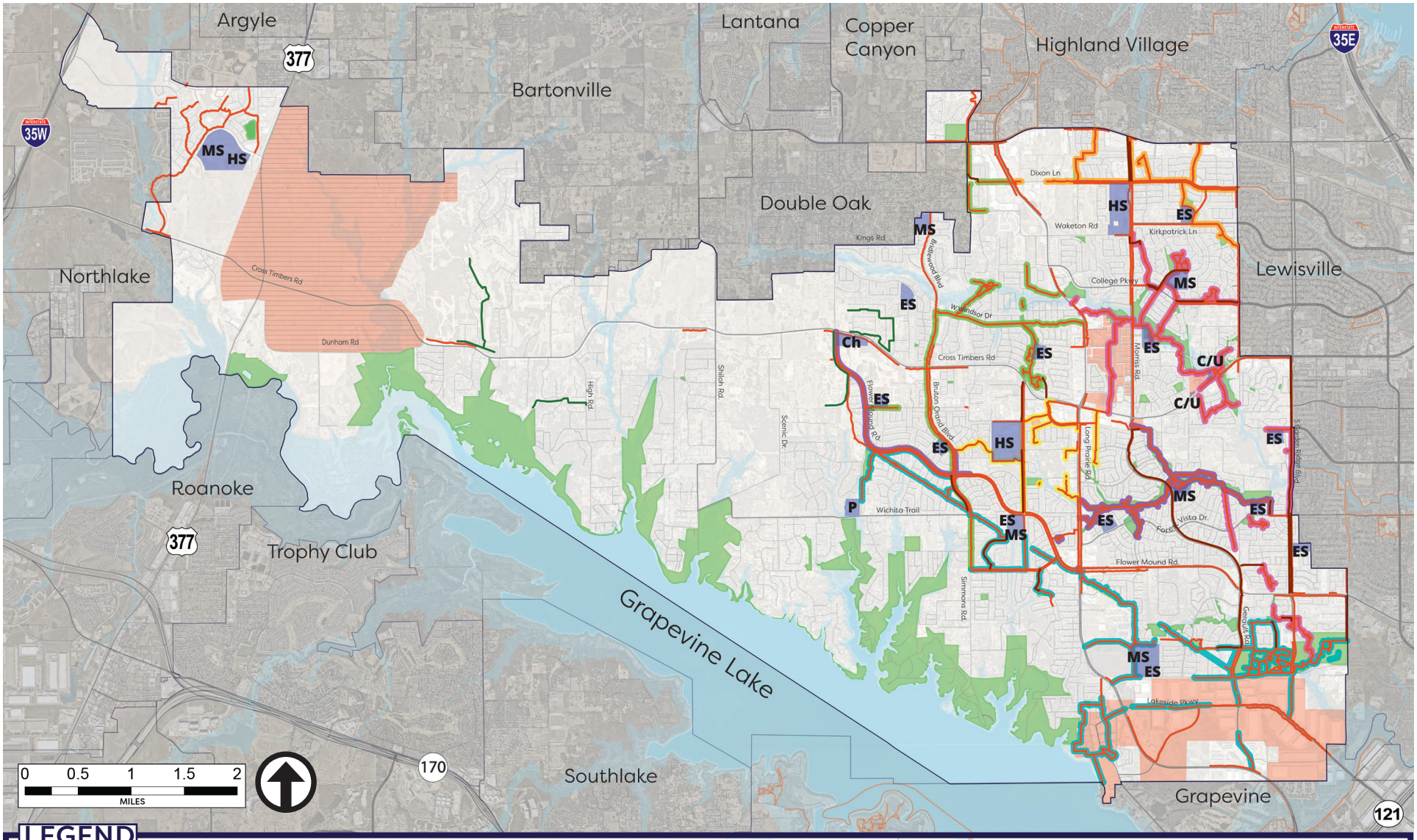
TABLE 2.3: TOWN TRAILS INVENTORY

Trail Name	Length (Miles)	Width (Feet)	Surface Type
Bluebonnet Trail	16.2	4'-10'	Concrete
Indian Blanket Trail	8.1	5'-10'	Concrete
Pink Evening Primrose Trail	12.5	4'-10'	Concrete/Soft-Surface
Purple Coneflower Trail	7.5	4'-8'	Concrete
Texas Yellow Star Trail	3.3	4'-8'	Concrete
White Lazy Daisy Trail	4.7	4'-10'	Concrete
Unnamed Multi-Use Trails	14.9	4'-10'	Concrete
Connectors (Unnamed)	6.4	4'	Concrete
Equestrian Trails	14.5	15'-50'	Soft-Surface
Total Length	**88.1**		
Total Length*((8ft or wider) (*Does not include equestrian or soft-surface trails)	**65.3**		
Total Length* (Less than 8ft) (*Does not include equestrian or soft-surface trails)	**8.3**		





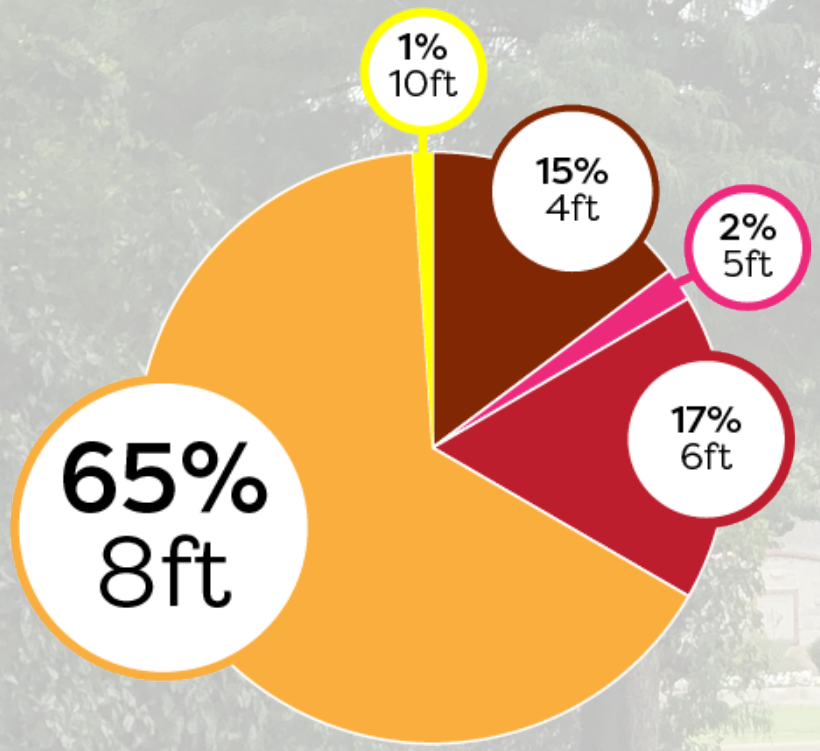
FIGURE 2.14: EXISTING TOWN TRAILS



** Map as of April 2022*

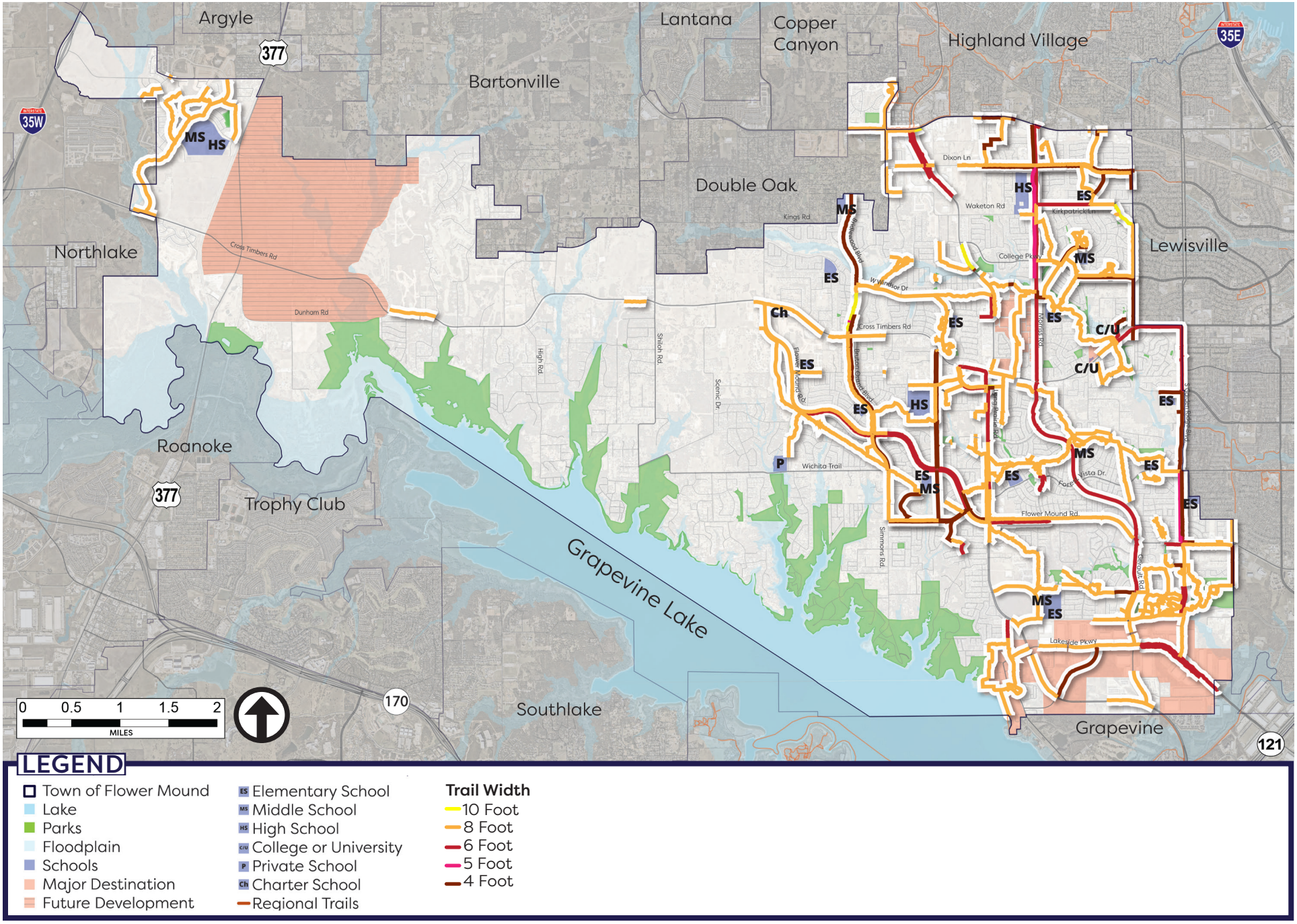
While there are segments of the existing branded trails that are 4' – 6' in width, to be considered multi-use trails, the facilities should be at least 8' wide, but preferably 10-foot. **Figure 2.15** depicts the breakdown of the widths of existing town trail facilities not including equestrian widths. Segments that depict 8' to 10' widths reflect the town multi-use trails and segments under 8' reflect connectors in the Town's trail system.

FIGURE 2.15: EXISTING TOWN TRAIL FACILITIES BY WIDTH



WHITE LAZY DAISY TRAIL

FIGURE 2.16: EXISTING TOWN TRAIL FACILITIES BY WIDTH



OTHER TRAILS

Flower Mound's proximity to Grapevine Lake adds to the natural landscape of the Town. Many of the soft-surface trails in Flower Mound are located along the northern shore of Grapevine Lake on the Town's southern border. These trails are located on United States Army Corps of Engineers (USACE) property and are maintained by DORBA (Dallas Off-Road Bicycle Association). The USACE trails are primarily used for mountain biking, hiking, and where designated, equestrian use.

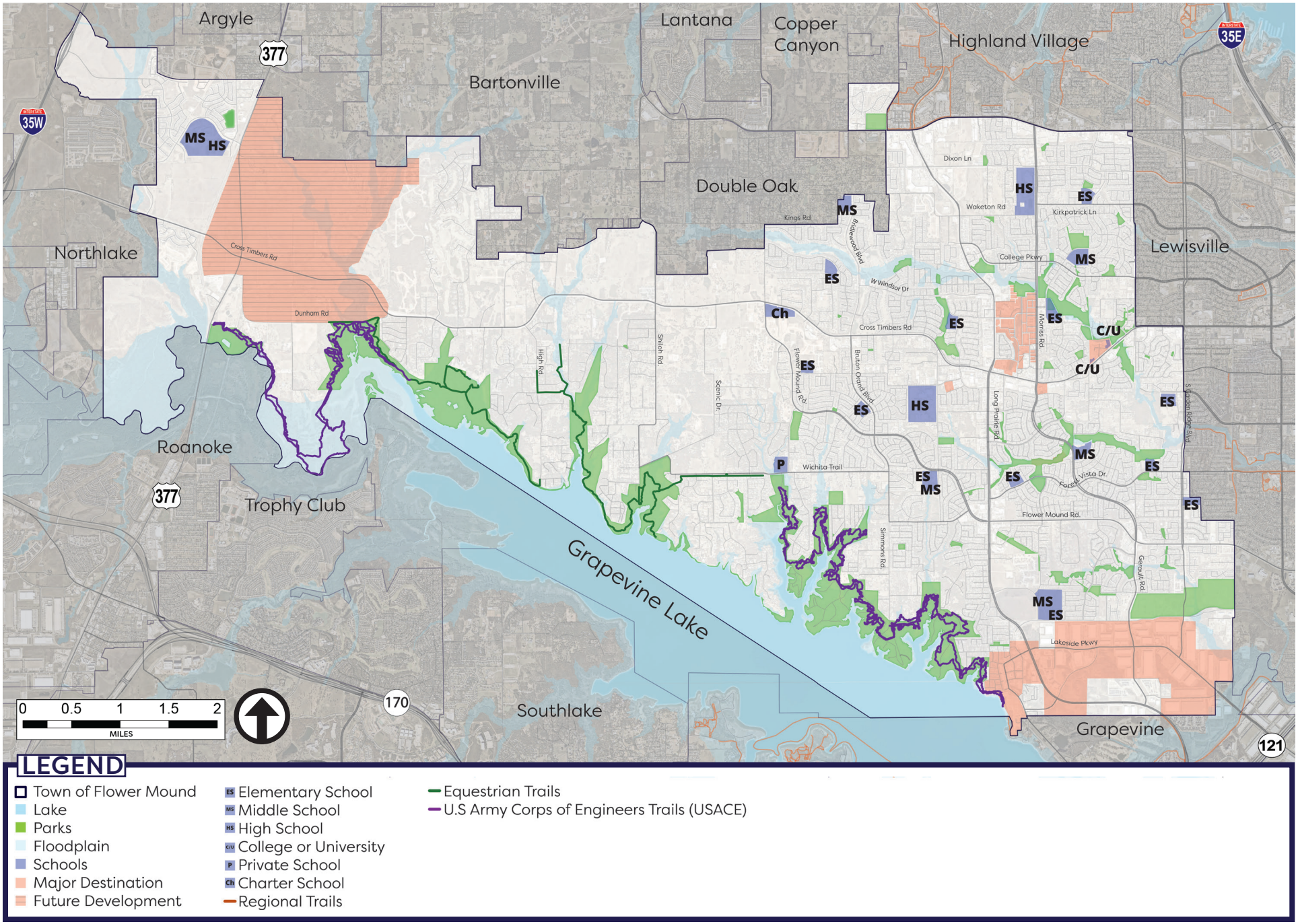
TABLE 2.4: OTHER TRAILS INVENTORY

Trail Name	Length (Miles)	Width (Feet)	Surface Type
Blue Diamond	0.6	6'	Soft-Surface
Boy Scout Loop	3.0	6'	Soft-Surface
Knob Hills	12.9	6'	Soft-Surface
MAAD East Loop	3.5	6'	Soft-Surface
MAAD West Loop	3.3	6'	Soft-Surface
Murrell Loop	3.3	6'	Soft-Surface
North Shore Far West	2.7	6'	Soft-Surface
Rockledge Loop	2.3	6'	Soft-Surface
Twin Coves Loop	2.7	6'	Soft-Surface
Undesignated	0.2	N/A	Soft-Surface
Total Length	**34.5**		





FIGURE 2.17: EXISTING OTHER TRAILS



ON-STREET BIKEWAYS

Flower Mound currently has limited offerings for existing on-street bikeways. The types of on-street bikeways in Flower Mound are primarily designated bike lanes that are located on Wichita Trail and Canyon Falls Drive. There are also shared lane markings on Prairie Ridge Road and Waketon Street.

TABLE 2.5: ON-STREET BIKEWAY INVENTORY

Bikeway Name	Length (Miles)	Accommodation
Canyon Falls Drive	1.9	Bike Lane
Denton Creek Blvd	0.7	Bike Lane
Prairie Ridge Road	0.5	Shared Lane Markings
Waketon Street	0.8	Shared Lane Markings
Wichita Trail	2.4	Bike Lane
Total Length	6.3	

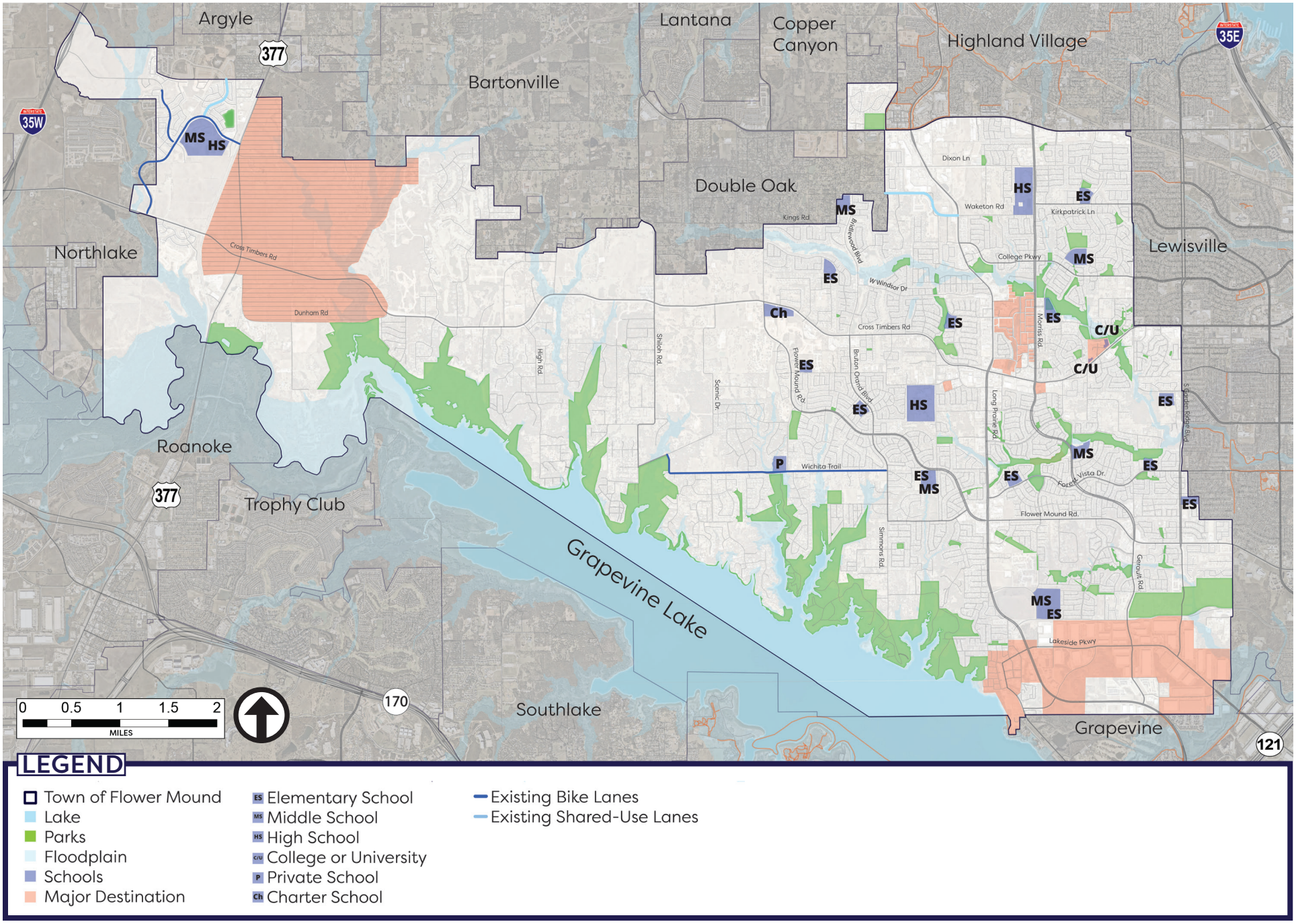


SHARED-USE LANE



CYCLISTS

FIGURE 2.18: EXISTING ON-STREET BIKEWAYS



CURRENTLY PLANNED SYSTEM

The 2017 Park and Trails Plan established a network of planned trails and bikeways for the Town. This plan identified over 50 miles of additional Town Trails and nearly 30 miles of additional on-street bikeways. These planned routes aim to fill gaps in the current trails system in Flower Mound and increase regional and internal connectivity. The currently planned trails will be reviewed as part of this planning effort to determine if they are still warranted and feasible.

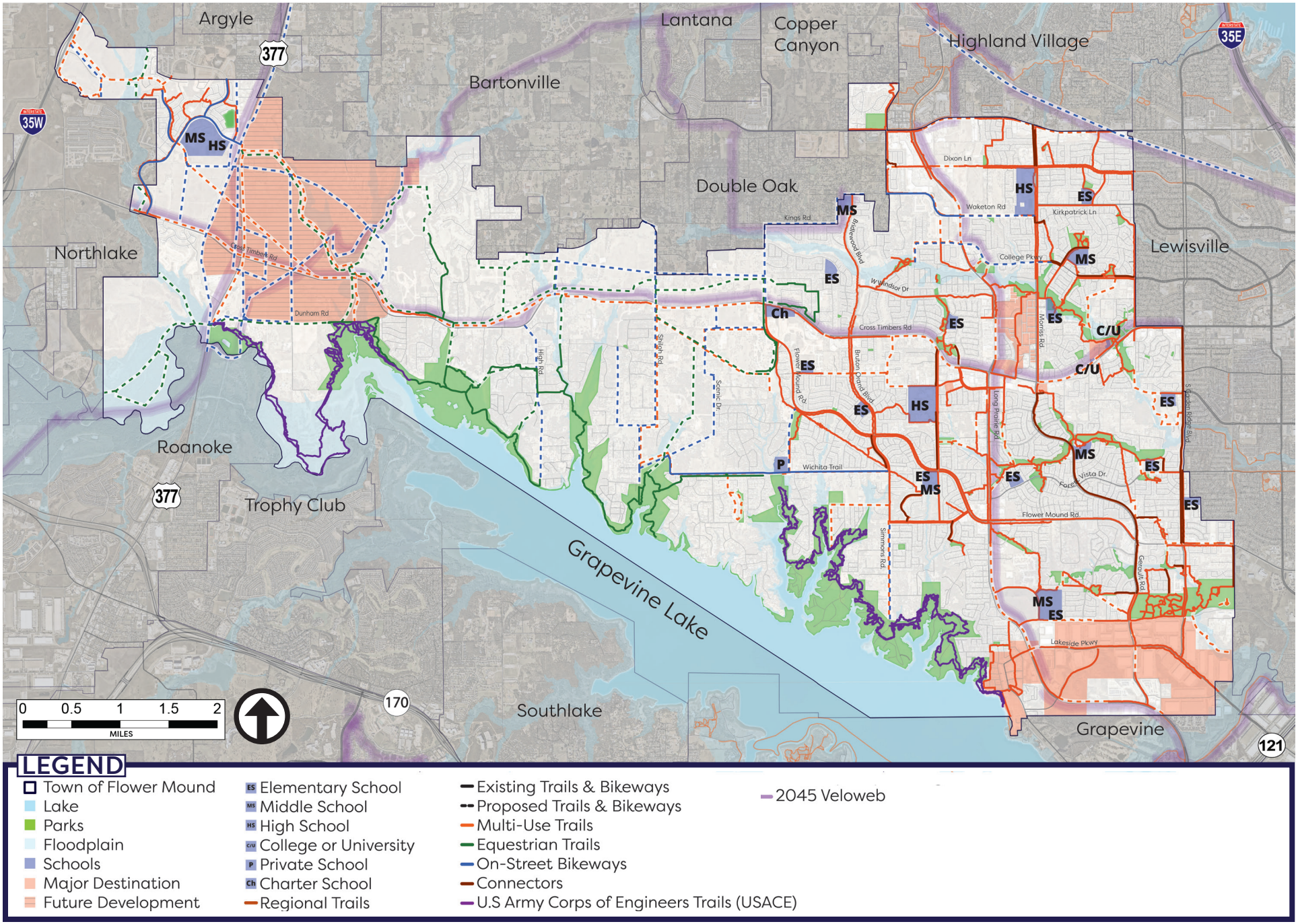
TABLE 2.6: EXISTING & CURRENTLY PLANNED SYSTEM

Facility Type	Existing Length (miles)	Planned Length (miles)
Town Trails (8' or wider)	65.3	53.4
On-Street BIkeways	6.3	29.0
Equestrian Trails	14.5	22.7
Total Length	**86.1**	**105.1**



SHILOH ROAD SIGNAGE

FIGURE 2.19: 2017 MASTER PLAN PROPOSED TRAILS & BIKEWAYS



System Users
Community Input
Needs Assessment
Barriers & Opportunities



03 TRAILS & BIKEWAYS SYSTEM NEEDS





A comprehensive trails and bikeways system is designed based on the needs of the community, the opportunities that exist, and the barriers that may prevent connections. This chapter describes Flower Mound's identified needs based on existing conditions, safety issues, standards, and benchmarking. This chapter also identifies needs based on community engagement, existing barriers in the trail system, and opportunities for new trail and bikeway corridors.

SYSTEM USERS

Trails and bikeways can be designed to serve a range of users that express and exhibit different needs, interests, and abilities. Communities that recognize and acknowledge the overlapping needs and preferences of their residents are best able to develop a trails and bikeways system that efficiently accommodates multiple user groups.

PEDESTRIANS

A large number of people use trails for recreational purposes and some use them for commuting purposes as well. Walking is a great option for passive recreation because it is affordable and accessible for most people. It is also important to provide pedestrian connections for residents without access to a vehicle. Therefore, it is crucial that trails provide connectivity between neighborhoods and nearby destinations to encourage walking. When developing trails for pedestrians it is important to design them to be safe, enjoyable, and comfortable.

RUNNERS/JOGGERS

Trail systems are great locations for runners and joggers who seek opportunities for sports, leisure, and fitness since they provide a safe, off-street environment away from motor vehicles. Multi-use trails provide adequate space for runners and joggers to safely and comfortably pass other users and provides enough space for running groups and meet-ups. Runners prefer either paved or soft-surface trails, so providing options for both is important.

BICYCLISTS

Bicyclists consist of three groups: the occasional rider (children and seniors); the recreational rider (basic); and, the more experienced rider (advanced).

Children and Seniors

Children and seniors represent some of a community's most vulnerable demographic groups and therefore require easily accessible trail routes that are simple and easy to navigate. When developing trails and bikeways, it is important to provide spaces that are safe and comfortable for children and seniors. These groups typically prefer to ride on an off-street trail that is located away from the roadway to minimize potential interaction with motorists.

Basic

Bicyclists who fall within the basic skill category typically ride for leisure and prefer off-street trails or sidepaths adjacent to roadways. This user group is less likely to cycle as a mode of transportation since they are generally less confident riders. However, they are more likely to ride on-street within residential neighborhoods with low traffic speeds and within parks.

Advanced

Experienced bicyclists typically view cycling as a mode of transportation and are more comfortable using on-street facilities. These bicyclists are confident on roadways and undeterred by various roadway conditions, including sharing lanes with motor vehicle traffic. Users within this group may be part of a cycling organization or view cycling as a viable commuting option for some of their weekly trips. If advanced riders use trails, implementing speed control elements is recommended to reduce the potential for conflict with slower trail users.

MOUNTAIN BIKERS

Mountain bikers use soft-surface off-road trails for recreation and fitness purposes. Soft-surface trails can incorporate features such as jumps, ramps, and grade changes to add obstacles for the trail users. These narrow trails can be designed for beginners through advanced riders and typically attract visitors from outside of the community.

HIKERS

Hikers use soft-surface off-road trails for recreation, leisure, and fitness purposes. Hikers enjoy physical activity in a more natural setting. Hiking trails can be designed with grade changes and switch backs to add variation for beginners to advanced hikers.

EQUESTRIAN USERS

Equestrian trails are enjoyed by people on horseback as a way to explore nature and ride in a different environment than arena riding. These trails are often soft-surface and natural. Equestrian trails may be designed primarily for horseback riding, or they may be shared for soft-surface walking, jogging, and biking. If multiple users are allowed, the trails should provide etiquette on sharing the trail for all users.

PADDLE SPORTS

Kayakers and canoers utilize a network of waterway trails. These trails, sometimes called paddling trails or blueways, are accessed through launch points along a river, creek, lake, or other body of water. Paddlers may consist of people in kayaks, canoes, small non-motorized boats, or paddle boards and may have varying experience levels.

COMMUNITY INPUT

Engaging with current and future trail system users to collaborate on the vision and goals of the trail system is a crucial part of the planning process. Establishing engagement sessions that reach a variety of residents in Flower Mound help the Town benchmark needs of the community regarding opportunities and barriers in the existing trails system. Various engagement methods were utilized that involved a variety of stakeholders and the community. These engagement efforts included a steering committee representing a diverse selection of community members and interests, a technical working group comprised of town staff, listening sessions, and in-person and online public engagement.

STEERING COMMITTEE

The Steering Committee is comprised of community leaders and key community stakeholders to review and guide the plan development. Members included representatives from cycling, running, and riding groups, boards and commissions, Lewisville ISD, and students. This committee met three times during the process to help with identifying trails and bikeways needs, visioning, reviewing findings and preliminary recommendations, and recommending approval of the final plan.



TECHNICAL WORKING GROUP

The Technical Working Group is comprised of town staff members from various departments to assist with review and development of the plan. During the planning process, the group met three times to discuss current and future needs, review preliminary recommendations, and provide final guidance on the draft plan. Having input from different departments throughout the process helped to ensure that the recommendations were feasible.



STAKEHOLDER LISTENING SESSIONS

During the initial phase of the project, visioning meetings with community organizations and key community representatives were conducted to solicit feedback on the strengths and weaknesses of the Town's existing trails and bikeways system. These meetings were designed to assess the needs and desires for the trails and bikeways system in the Town. Invited groups included governmental agencies, trail and bikeway user groups, economic development groups, and education groups.



OPEN HOUSES

Two public open houses were offered to solicit feedback from the community during the planning process. The first was conducted in person and virtually to determine the needs and vision of the community for the trails and bikeways system. The second meeting was held at the end of the project to allow the community to review and provide feedback on the draft master plan.



POP-UP EVENTS

The team attended Town of Flower Mound events to increase awareness of upcoming engagement opportunities (discussed on page 45) and to collect information about the existing trails and bikeways system in Flower Mound. The pop-up events included the Arts in the Park inaugural event and a Friday night concert series event in Heritage Park.



BOARD & COMMISSION MEETINGS

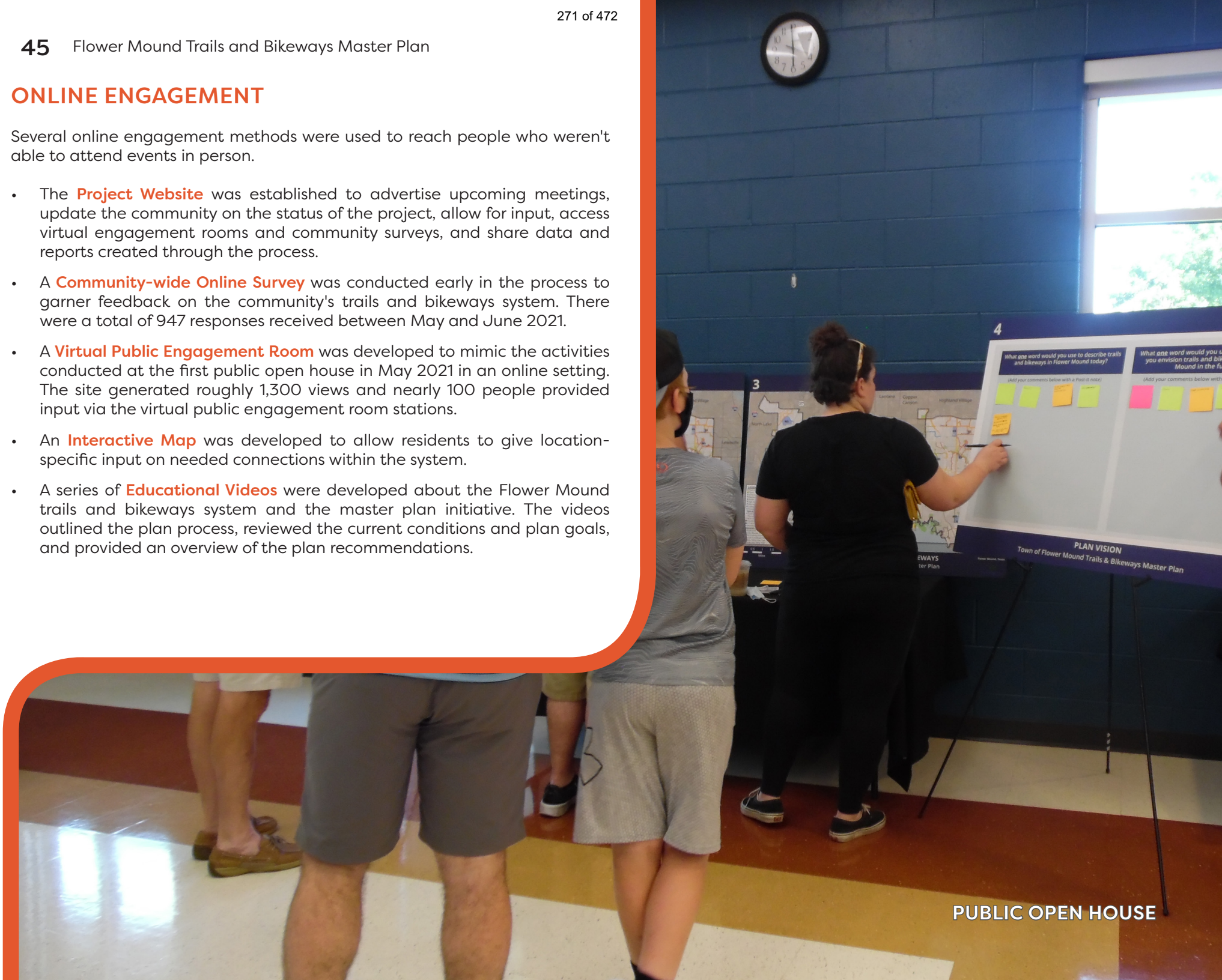
Presentations to the Parks Board, Transportation Commission, Planning & Zoning Commission, and Town Council during the process allowed the team to gather additional input and review draft recommendations for the plan.



ONLINE ENGAGEMENT

Several online engagement methods were used to reach people who weren't able to attend events in person.

- The **Project Website** was established to advertise upcoming meetings, update the community on the status of the project, allow for input, access virtual engagement rooms and community surveys, and share data and reports created through the process.
- A **Community-wide Online Survey** was conducted early in the process to garner feedback on the community's trails and bikeways system. There were a total of 947 responses received between May and June 2021.
- A **Virtual Public Engagement Room** was developed to mimic the activities conducted at the first public open house in May 2021 in an online setting. The site generated roughly 1,300 views and nearly 100 people provided input via the virtual public engagement room stations.
- An **Interactive Map** was developed to allow residents to give location-specific input on needed connections within the system.
- A series of **Educational Videos** were developed about the Flower Mound trails and bikeways system and the master plan initiative. The videos outlined the plan process, reviewed the current conditions and plan goals, and provided an overview of the plan recommendations.



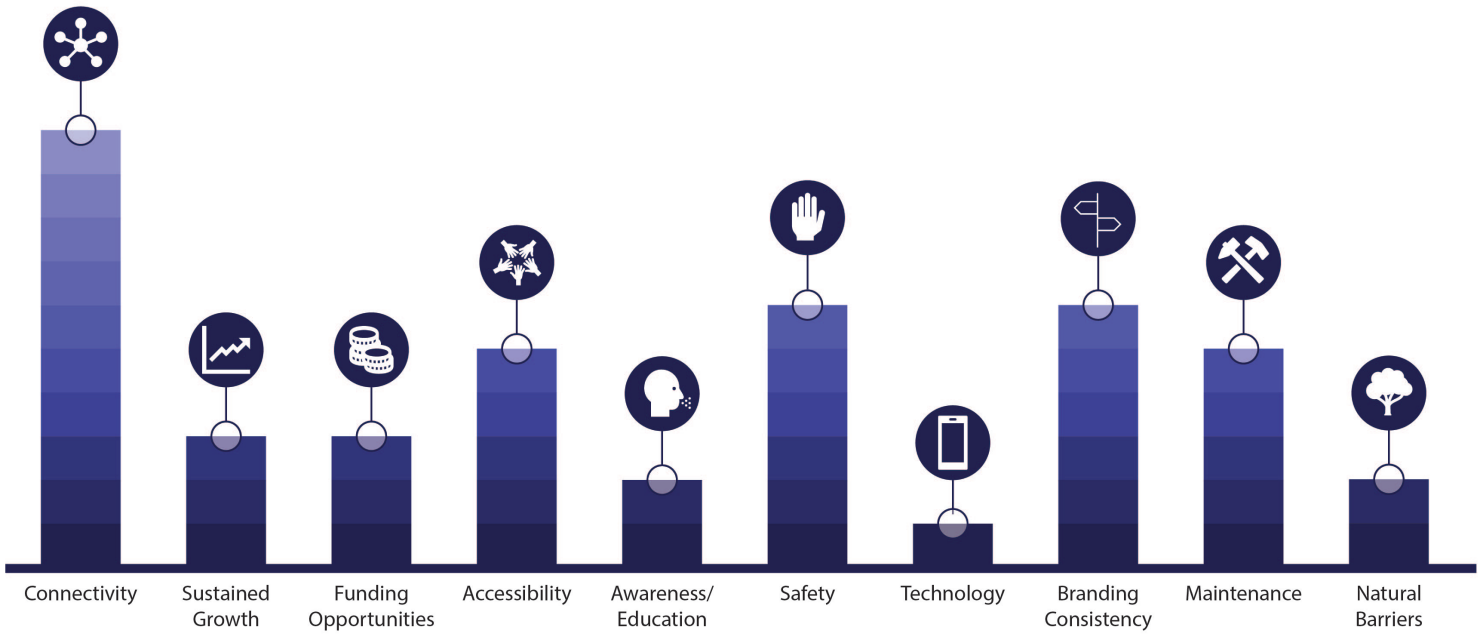
ENGAGEMENT RESULTS:
Steering Committee, Technical Working Group, and Stakeholder Listening Sessions

The following questions were asked during our visioning sessions in May 2021. The following graphics are a summary of the questions that were posed to the Steering Committee, Technical Working Group, and stakeholder listening sessions.

WHAT IS YOUR VISION FOR THE FUTURE OF TRAILS AND BIKEWAYS IN FLOWER MOUND?



WHAT ARE SOME OF THE CHALLENGES RELATED TO TRAILS AND BIKEWAYS IN FLOWER MOUND TODAY?



ENGAGEMENT RESULTS:
Public Open House & Virtual Public Engagement Room

The following questions were asked during the first public open house in May 2021 and within the virtual public engagement room that was available immediately following the open house. The following graphics are a summary of the feedback that was received during those meetings.

WHAT ONE WORD WOULD YOU USE TO DESCRIBE TRAILS AND BIKEWAYS IN FLOWER MOUND TODAY?



WHAT ONE WORD WOULD YOU USE TO DESCRIBE HOW YOU ENVISION TRAILS AND BIKEWAYS IN FLOWER MOUND IN THE FUTURE?

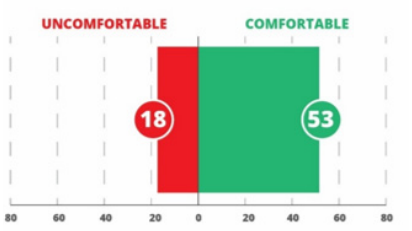


ENGAGEMENT RESULTS:
Public Open House & Virtual Public Engagement Room

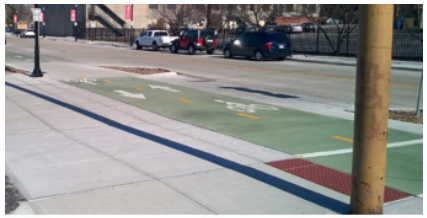
The following graphics summarize feedback received during the public open house and virtual public engagement room. Participants were asked to choose if they would feel comfortable or uncomfortable using the depicted facility. The number below each picture show the total responses for each.

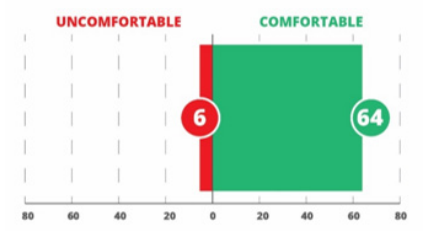
WHAT IS YOUR LEVEL OF COMFORT WITH THE FOLLOWING TYPES OF ON-STREET BICYCLE FACILITIES? (TOP 3 OF 6)





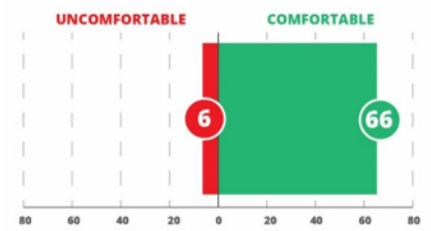
BICYCLE BOULEVARD





CYCLE TRACK

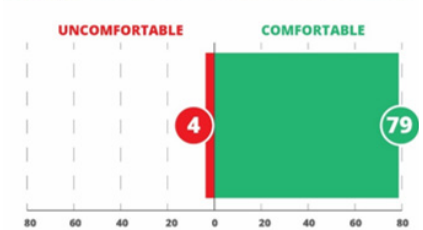




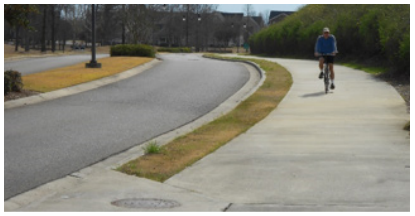
BUFFERED BIKE LANE

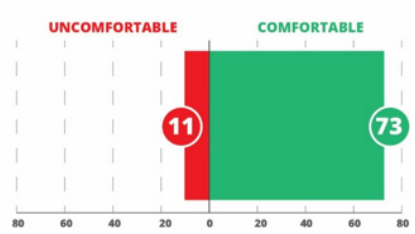
WHAT IS YOUR LEVEL OF COMFORT WITH THE FOLLOWING TYPES OF OFF-STREET TRAILS? (TOP 3 OF 6)





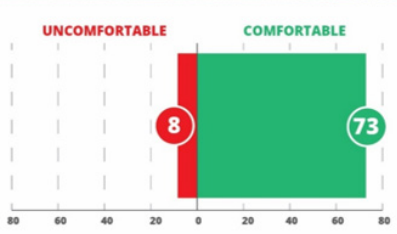
SHARED-USE PATH (PAVED)





SIDEPATH (PAVED)



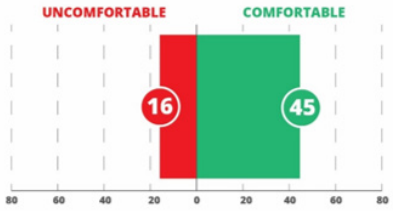


SHARED-USE PATH (SOFT SURFACE)

ENGAGEMENT RESULTS:
Public Open House & Virtual Public Engagement Room

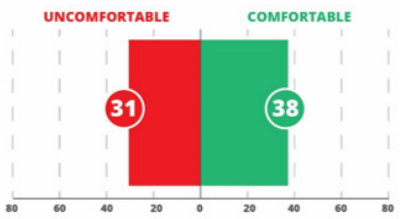
WHAT IS YOUR LEVEL OF COMFORT WITH THE FOLLOWING TYPES OF EQUESTRIAN PATHS?





SOFT-SURFACE (AWAY FROM ROAD)





SOFT-SURFACE (ADJACENT TO ROAD)

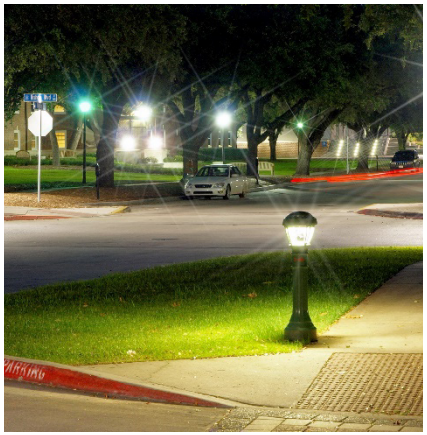
WHAT ARE YOUR TOP THREE PREFERRED TRAIL AMENITIES THAT YOU WOULD LIKE TO SEE ALONG TRAILS IN FLOWER MOUND?



WAYFINDING SIGNAGE

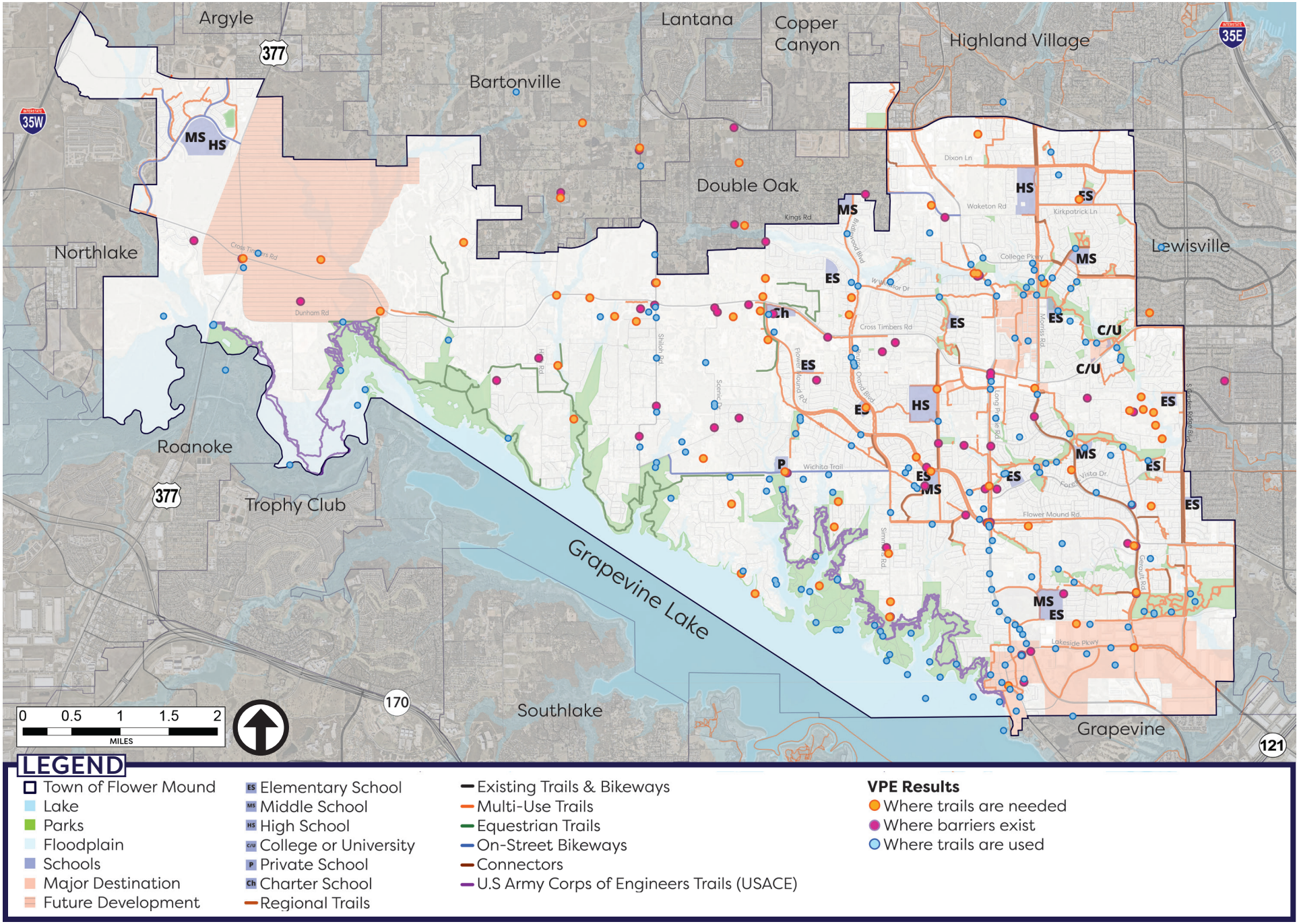


PARKING



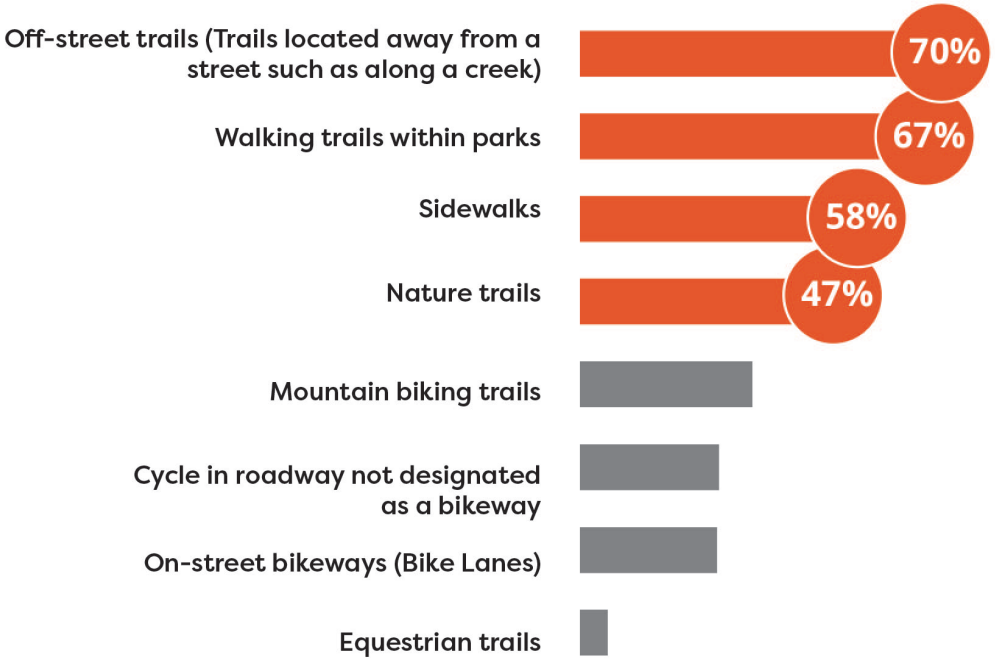
LIGHTING

FIGURE 3.1: VIRTUAL ENGAGEMENT ROOM RESULTS

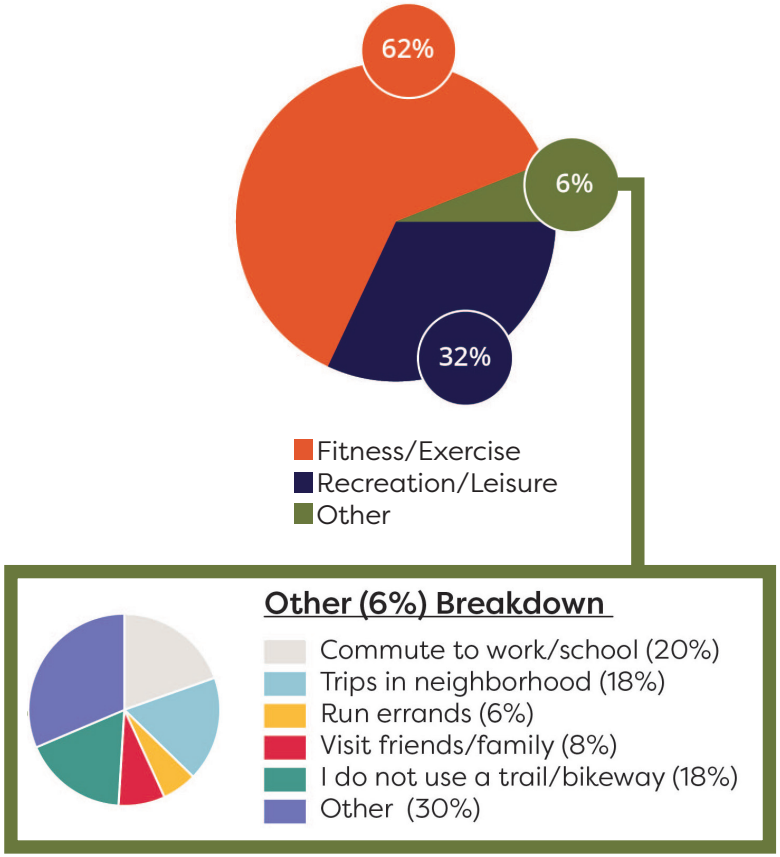


ENGAGEMENT RESULTS:
Public Open House & Virtual Public Engagement Room

WHAT TYPE OF TRAIL OR BIKEWAY IN FLOWER MOUND DO YOU GENERALLY USE?

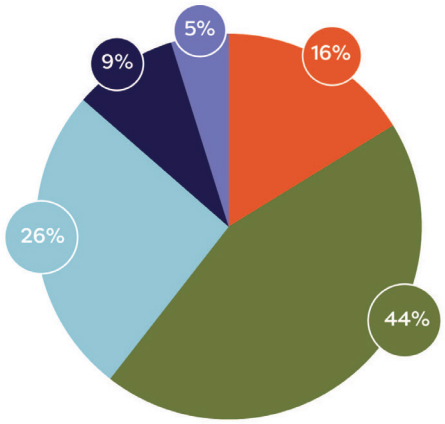


WHAT IS YOUR PRIMARY PURPOSE FOR USING A TRAIL OR BIKEWAY IN FLOWER MOUND?

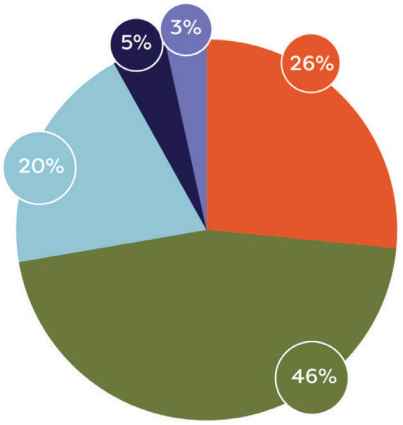


ENGAGEMENT RESULTS:
Public Open House & Virtual Public Engagement Room

HOW OFTEN DID YOU USE TRAILS OR BIKEWAYS IN FLOWER MOUND PRE-COVID?



HOW OFTEN DID YOU USE TRAILS OR BIKEWAYS IN FLOWER MOUND DURING COVID?



HOW IMPORTANT ARE EACH OF THE FOLLOWING FEATURES OF TRAIL FACILITIES?

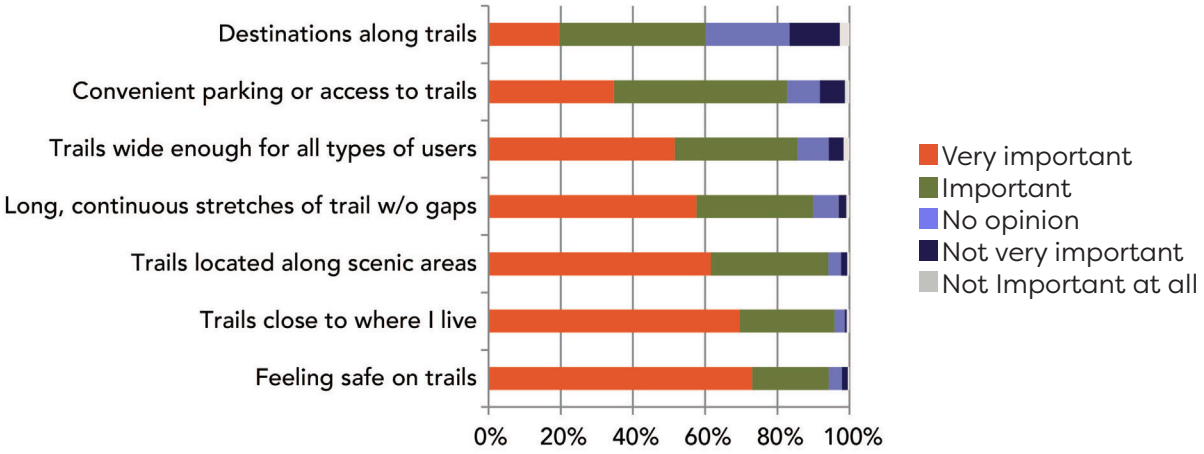
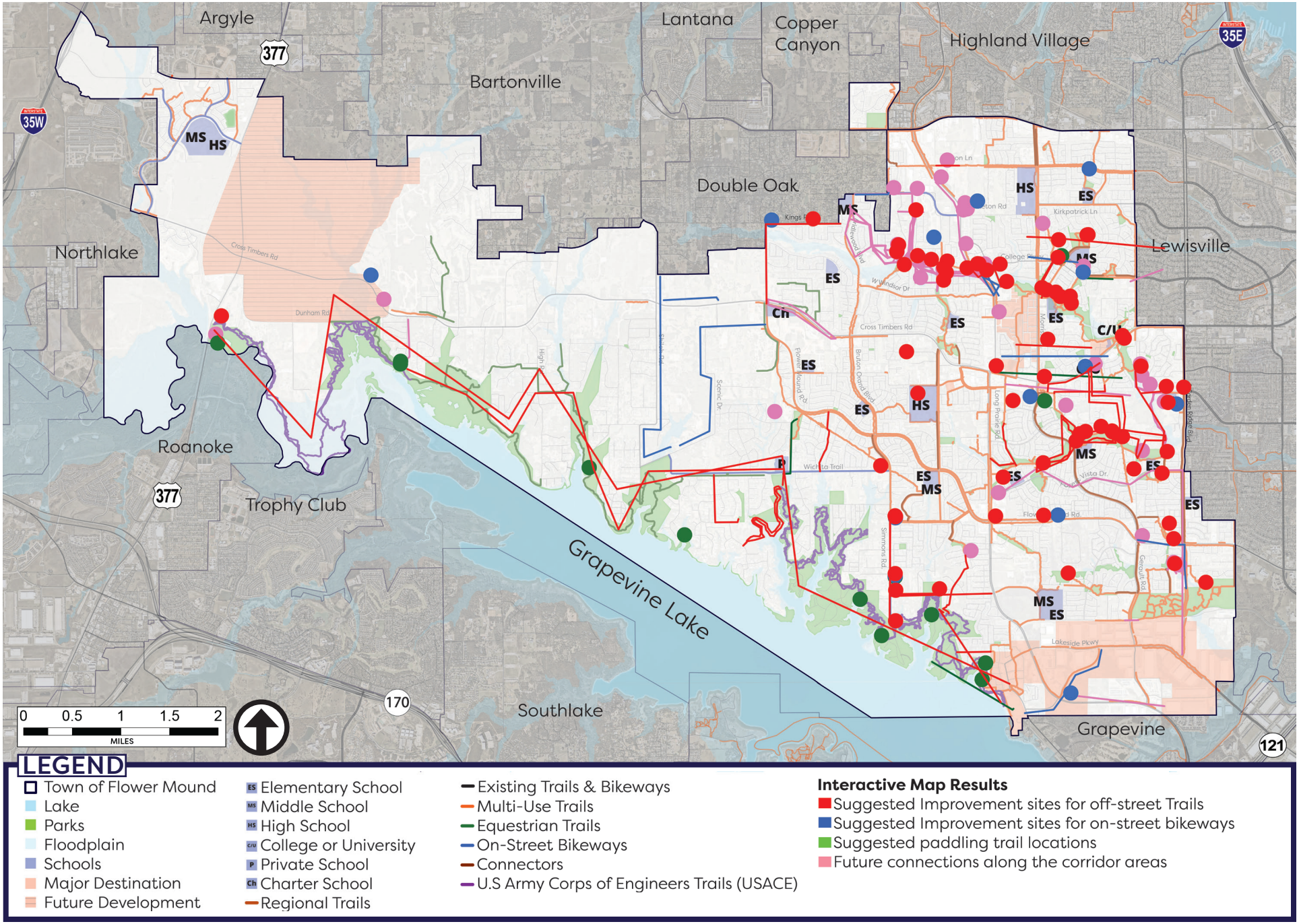


FIGURE 3.2: INTERACTIVE ONLINE ENGAGEMENT MAP



ENGAGEMENT KEY TAKEAWAYS:

- Filling in gaps in the system for overall better connectivity is needed.
- Wayfinding and directional signage is needed to help users identify what trail they are on and where they are going.
- Intersection crossings should be improved in many areas.
- Additional amenities, such as lighting, parking, and drinking fountains, are desired throughout the trail system.
- Off-street trails are preferred by a majority of respondents to roadside trails.



PURPLE CONEFLOWER TRAIL

NEEDS ASSESSMENT

As indicated in the previous section, the residents of Flower Mound have established that trails and bikeways are very important to their community. As the population in the town continues to increase, an additional burden will be placed on existing trail and bikeway facilities. This section provides the current state of Flower Mound's trails and bikeways today and projected into the future.

To evaluate the needs of the community, assessments of the existing system were conducted. Based on the assessment findings, recommendations for the future network can be proposed to ensure users of all ages and abilities are considered. Assessments are based on community input, trail evaluations, trail level of service, comparison to benchmark communities, opportunities and barriers, roadway characteristics, and potential corridor assessments.

TRAIL EVALUATION

Trail evaluations were completed for the existing named trails. The evaluations considered trail surface conditions, clearance, grades and slopes, street intersections/trail crossings, constructed trailway features, safety/security, signage and wayfinding, and trailheads. This section provides the key findings from each of the evaluations.



PINK EVENING PRIMROSE TRAIL



KNOB HILLS TRAIL

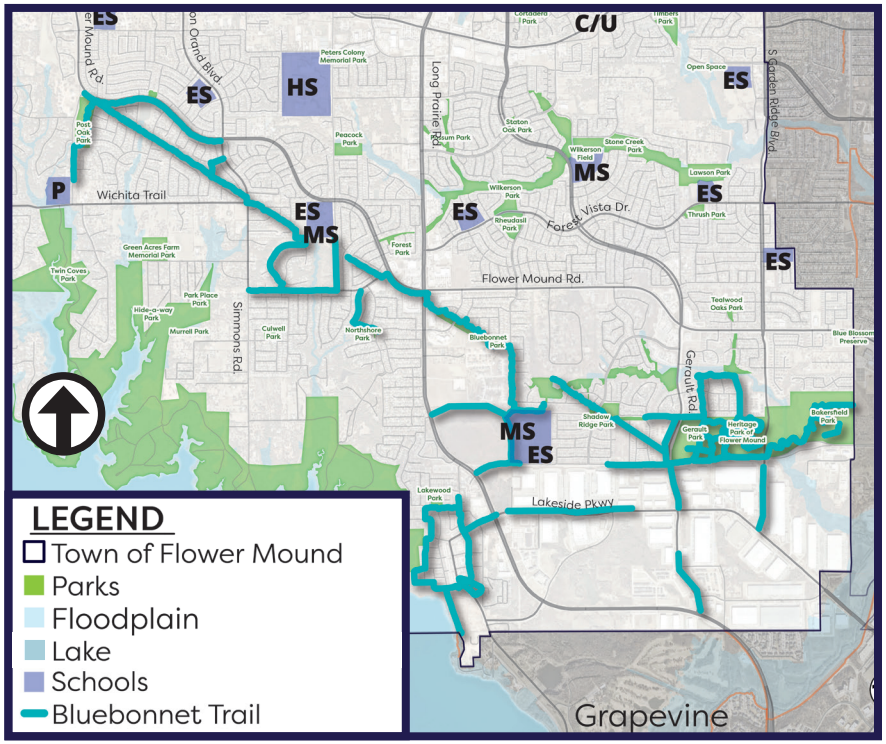
BLUEBONNET TRAIL

Length: 16.2 miles

The Bluebonnet Trail runs from Bakersfield Park in the far southeastern corner of the Town to the northwest ending at Post Oak Park. The trail is the longest of all the six branded trails (see page 27). There are numerous neighborhood connections to the trail; while the trail provides access to residents, it is disconnected in areas and features some segments that are only 4' in width. The trail is generally in good condition with adequate vertical and horizontal clearance. Most of the trail is designed at a grade and slope that is comfortable. However, the segment along Winding Oaks Drive and Pasadena Place includes switchbacks and a slope that may not be ADA accessible.

Improvements to intersection crossings are needed, both within the neighborhoods and along major corridors such as FM 2499. There are benches, waste receptacles, and pet waste stations distributed along the trail, however additional facilities such as water fountains, bike racks, and bike repair stations would improve the overall user experience. Additional signage and trail branding are needed for wayfinding and safety. Finally, the trail connects to many parks, schools, and other named trails, but additional segments would better connect the community.

FIGURE 3.3: BLUEBONNET TRAIL KEY MAP





Trail marker in a neighborhood



Trail within a power line easement



Retaining wall adjacent to trail



Trailhead marker

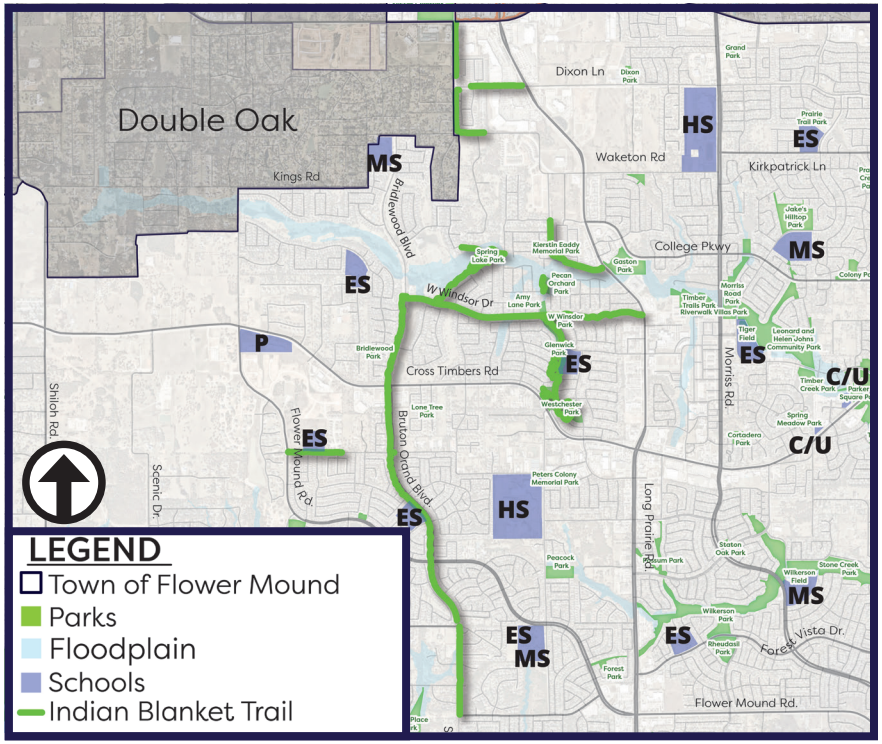
INDIAN BLANKET TRAIL

Length: 8.1 miles

The Indian Blanket Trail runs along West Windsor Drive, south to Simmons Road, connects Westchester Park to Spring Lake Park, and eventually connects to the Bluebonnet Trail. The trail segments north of Windsor Drive are largely disconnected, and there are portions of the trail that are only 4'-6' in width. The trail is generally in good condition with adequate vertical and horizontal clearance and designed at a grade and slope that is comfortable.

Improvements to intersection crossings are needed throughout the trail corridor. There are benches, waste receptacles, and pet waste stations, however additional facilities such as water fountains and bike racks could improve the overall user experience. Additional signage is needed for wayfinding and safety. The addition of trailheads would better identify the branding and location of the trail. Finally, the trail provides good access to neighborhoods, but aside from parks and schools there are not many destinations accessible from the trail.

FIGURE 3.4: INDIAN BLANKET TRAIL KEY MAP





Trail adjacent to roadway



Signalized pedestrian crossing



8' trail segment



Amphitheater in Park

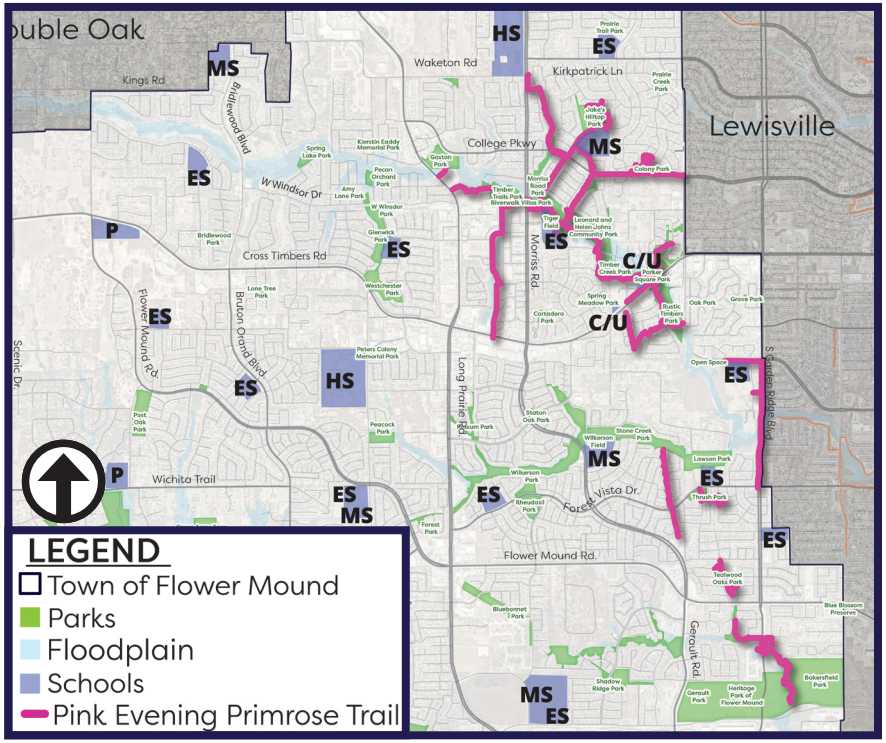
PINK EVENING PRIMROSE TRAIL

Length: 12.5 miles

The Pink Evening Primrose Trail is a north-south trail corridor in the far eastern portion of Flower Mound. The trail runs through numerous neighborhoods and connects to schools, parks, and the Bluebonnet Trail. The trail width varies from 6' to 8'. The trail is generally in good condition with adequate vertical clearance, however in some areas trees, vegetation, and retaining walls present horizontal clearance constraints. Most of the trail is designed at a grade and slope that is ADA accessible, but there are a few areas along the trail that are a little steep. The trail includes a few pedestrian activated signals, but additional improvements to intersection crossings are needed. The trail also travels under two major roadways: Morriss Road near the Riverwalk and Cross Timbers Road (FM 1171). Both under crossings would be safer if they were wider and if they had more cautionary signage to ensure users slow down when approaching the bridge. There are many segmented parts of the overall trail that could be better connected.

There are benches, waste receptacles, fitness stations, and pet waste stations located along the trail, however those facilities are mainly around the Timber Trails Park. Additional facilities such as water fountains, bike racks, and bike repair stations installed along the trail would improve the experience for trail users. Additional signage is needed for wayfinding and safety. Some of the corners and bends in the trail are difficult to navigate and views of oncoming traffic by trail users are obscured. There are also older bridges that should be assessed by a structural engineer to ensure their safety. Finally, the trail connects parks and schools but filling the gaps in the overall corridor would improve connectivity to schools, parks, and key destinations such as Riverwalk.

FIGURE 3.5: PINK EVENING PRIMROSE TRAIL KEY MAP

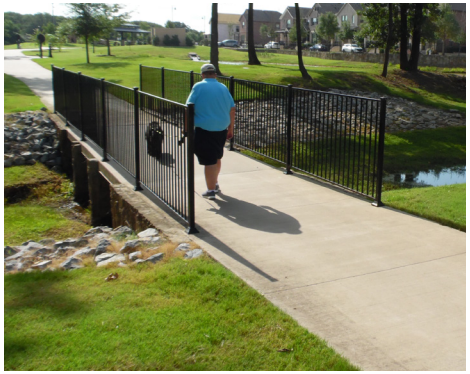




Red bollards designating trail



Intersection ramp



Trail bridge near Riverside



Fitness station along trail

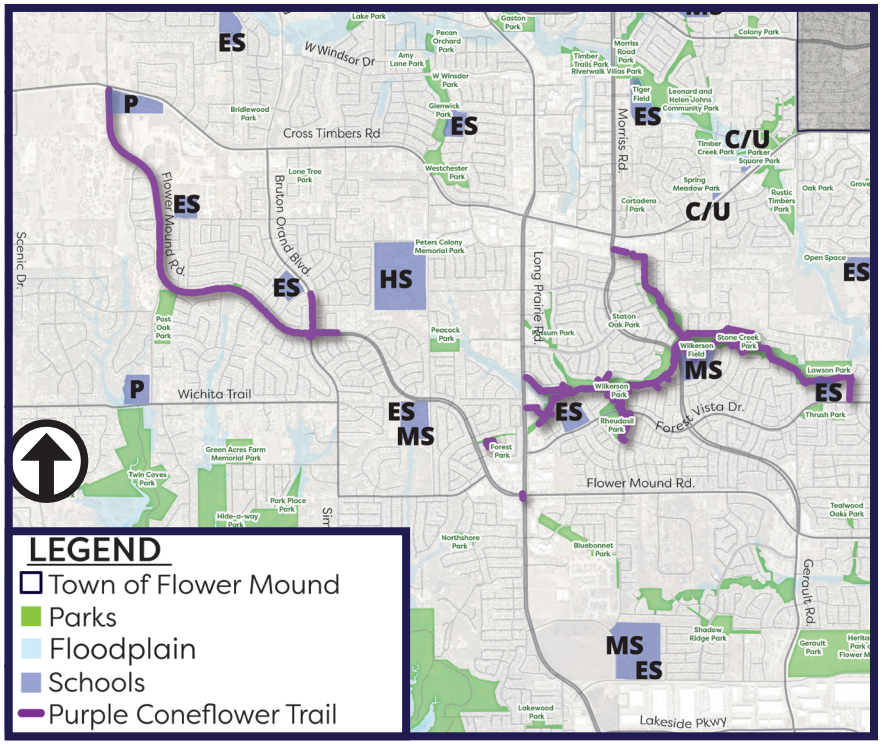
PURPLE CONEFLOWER TRAIL

Length: 7.5 miles

The Purple Coneflower Trail is an east/west corridor located north of the Bluebonnet Trail and connects the Tree Farm to Liberty Elementary School. While the trail provides access to numerous residents, it is disconnected in areas and has segments that are 4' to 6' in width in neighborhood loops. Additionally, the segment located along Flower Mound Road is only 4' wide. It is generally in good condition with adequate vertical and horizontal clearance. Most of the trail is designed at a grade and slope that is comfortable, but a few segments have steep slopes and grading issues. Improvements to some intersection crossings are needed as there are fewer pedestrian activated signals along this trail compared to others within the Town. Long Prairie Road (FM 2499) poses a significant barrier as the only way to get across now is at a signalized intersection.

There are standard amenities such as benches, waste receptacles, and pet waste stations, but enhancements to amenities such as water fountains, lighting, and bike repair stations could improve trail experiences. Red bollards are prevalent along the trail, and there are two larger trailheads. Additional signage is needed for wayfinding and safety. Finally, the trail connects parks and schools, but additional routes or segments would better connect the community to other trails and destinations.

FIGURE 3.6: PURPLE CONEFLOWER TRAIL KEY MAP





Pedestrian bridge over creek



Red bollards within a neighborhood



Trail leading to a park



Trailhead

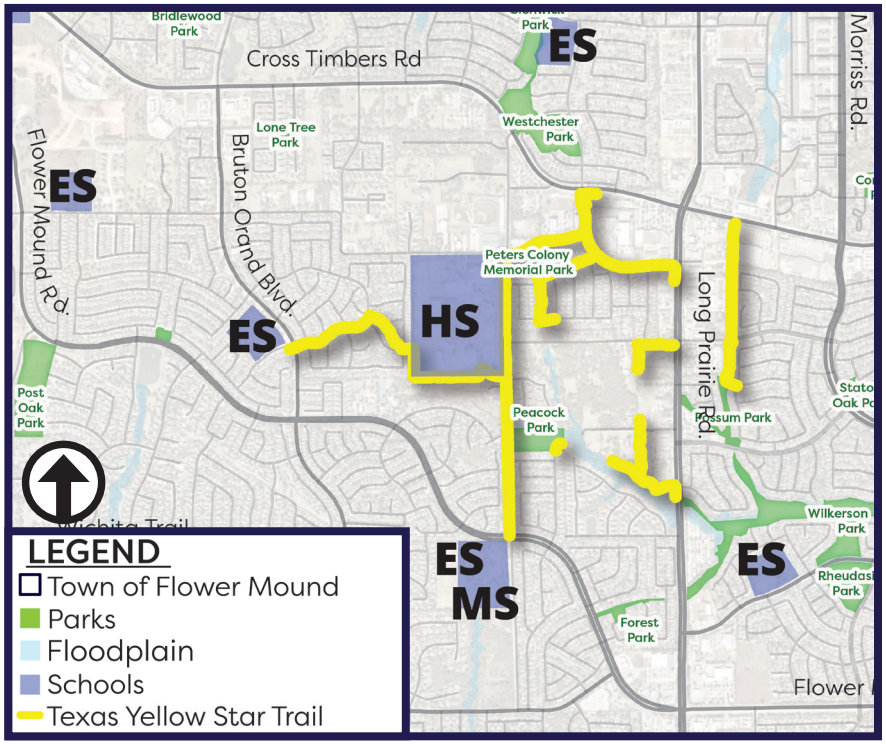
TEXAS YELLOW STAR TRAIL

Length: 3.3 miles

The Texas Yellow Star Trail is a shorter trail corridor in central Flower Mound. It links Wellington Elementary School and Flower Mound High School to the surrounding community. The trail is in good condition, with most segments being 8'-10' in width, and primarily runs adjacent to Old Settlers Road. Newer sections of trail that have been built with recent development are in very good condition. Much of the landscape is maintained by non-municipal entities such as homeowner associations.

The trail has adequate vertical and horizontal clearance and is designed at a grade and slope that is accessible for most users. Improvements to intersection crossings are needed. There are minimal amenities along the trail so additional trail amenities would improve the trail experience. Additional signage is needed for wayfinding and safety. The trail connects parks and schools, but additional routes or segments would better connect the community.

FIGURE 3.7: TEXAS YELLOW STAR TRAIL KEY MAP





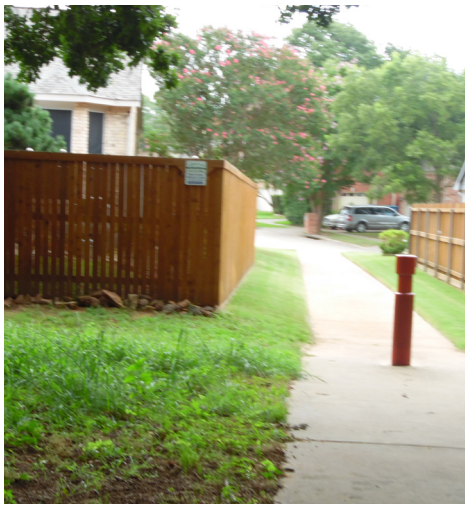
Red bollards within a neighborhood



Trail near the high school



Overgrowth along trail



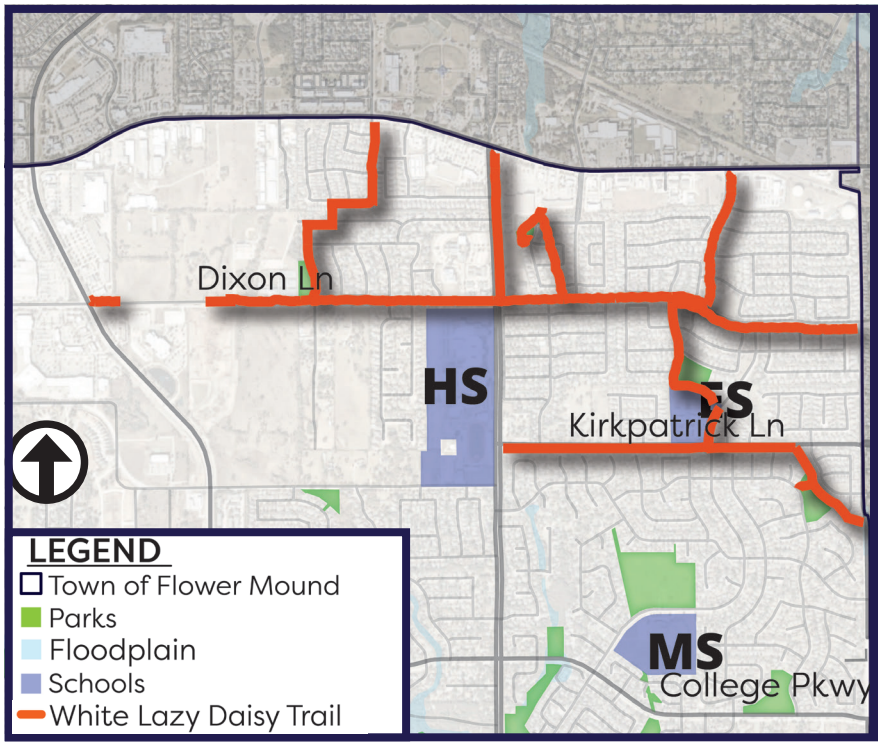
Neighborhood access point

WHITE LAZY DAISY TRAIL

Length: 4.7 miles

The White Lazy Daisy Trail is located in northern Flower Mound and connects Dixon Park to Prairie Trail Elementary School. There are numerous neighborhood connectors to the trail. The trail is in good condition, is mostly 8' in width, and runs adjacent to the roadway with some shade provided by vegetation. There is adequate vertical and horizontal clearance, with some vegetation encroachment. Most of the trail is designed at a grade and slope that is comfortable, however, portions along Valley Ridge Boulevard are steep and may not allow for ADA accessibility. Improvements to intersection crossings are needed as crosswalks, signage, improved ramps, and lighting is lacking along the corridor. There are limited amenities along the trail. Additional signage is needed for wayfinding and safety.

FIGURE 3.8: WHITE LAZY DAISY TRAIL KEY MAP





Curb ramp



Trail between houses



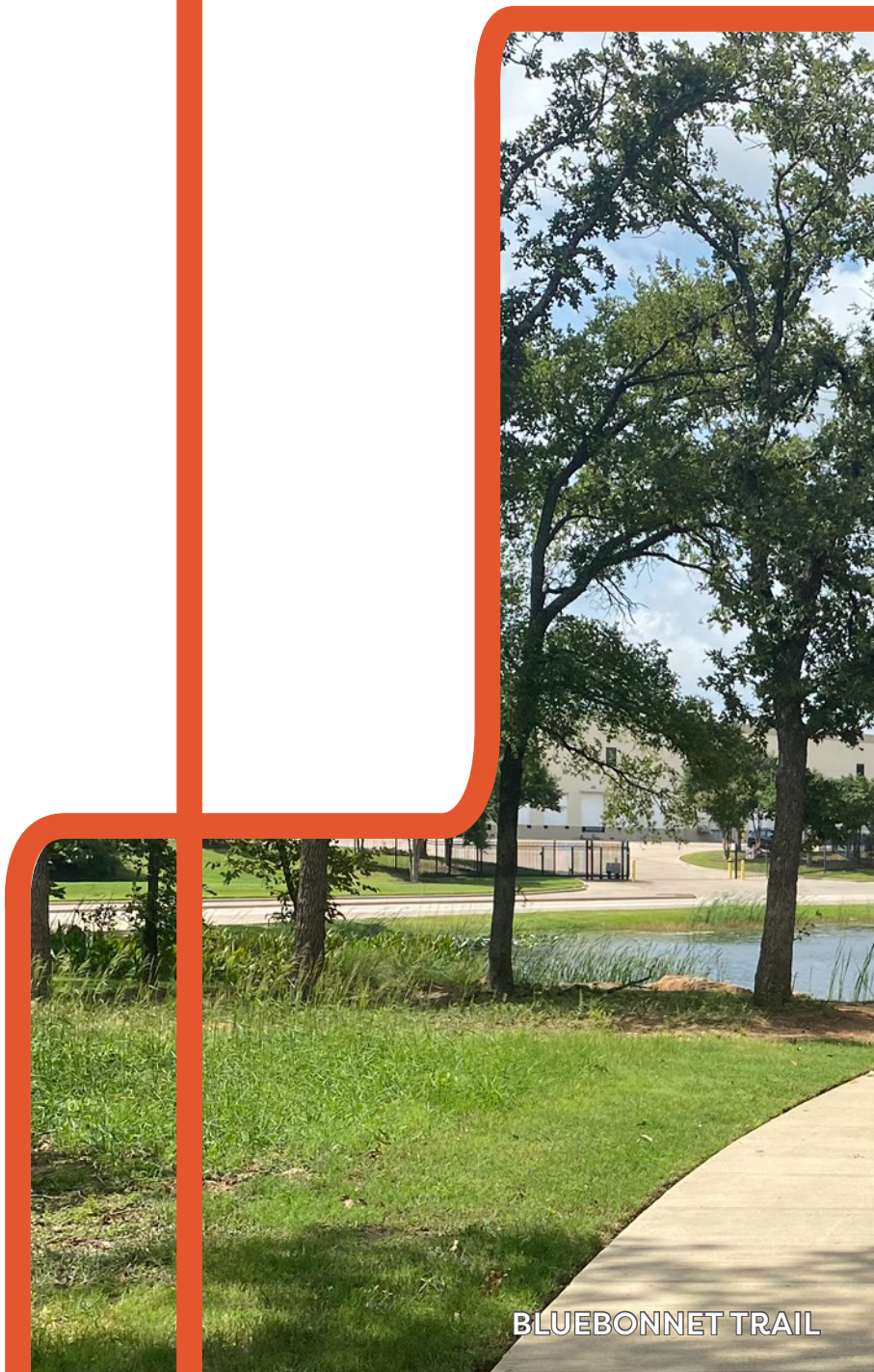
Trail adjacent to a school



Intersection crossing

OVERALL TRAIL EVALUATION KEY FINDINGS

- Wayfinding and directional signage along the trail system is needed.
- Four-foot wide segments should not be considered “trails”, instead they should be denoted as connectors to the trail system.
- Roadway crossings need to be improved to increase the safety for trail users, especially at major intersections that are identified as barriers to the system.
- Additional amenities along the trail are needed, such as bike racks and lighting at trailheads.
- Maps located at trailheads are outdated and with a rapidly growing system will likely continue to be. Alternatives such as QR codes that link to an online map should be explored.
- Emergency call boxes, lighting, cameras, and other safety factors should be included to increase safety and comfort.
- An overall ADA assessment of the trail system would confirm where trails are not ADA accessible.



TRAIL LEVEL OF SERVICE

Level of Service (LOS) is a metric used to compare the miles of trail within a community with the total population. The LOS analysis includes an assessment of existing and proposed trails and compares it to existing and future populations. Table 3.1 below shows the level of service for 6' and wider paths and 8' and wider paths. In order to compare to other communities, the LOS figures for trails 8' or wider is recommended to meet regional standards. The Future LOS represents the level of service if no additional trails were built between now and 2038, indicating that the level of service would decrease with expected additional population growth. For the DFW region, a target benchmark of 1 mile of trail for every 1,200 residents has been established. Chapter 4 reviews the recommended network. When the trails in the recommended network are constructed, the Town will surpass the regional target benchmark.

TABLE 3.1: TRAIL LEVEL OF SERVICE

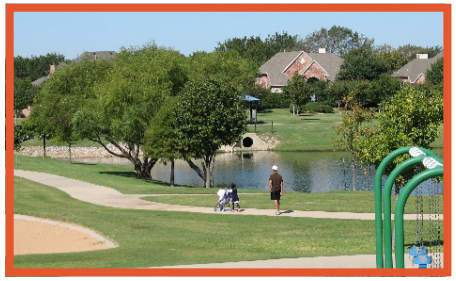
2020 Population* (Current Population)		78,080	
2038 Population (Projected Build-Out Population)**		**109,544**	
Trails = 6' or wider multi-use paths		**Trails = 8' or wider multi-use paths**	
Current LOS - 2020	1 mile per 867 residents (1.15 miles per 1,000)	**Current LOS- 2020**	1 mile per 1,251 residents (0.80 miles per 1,000)
Future LOS - 2038 (No additional trails built)	1 mile per 1,217 residents (0.82 miles per 1,000)	**Future LOS -2038 (No additional trails built)**	1 mile per 1,756 residents (0.57 miles per 1,000)
Future LOS - 2038 (All currently proposed trails built)	1 mile per 769 residents (1.30 miles per 1,000)	**Future LOS-2038 (All currently proposed trails built)**	1 mile per 947 residents (1.06 miles per 1,000)

**Source: NCTCOG Regional Data Center, 2020.*
***Source: Town of Flower Mound.*



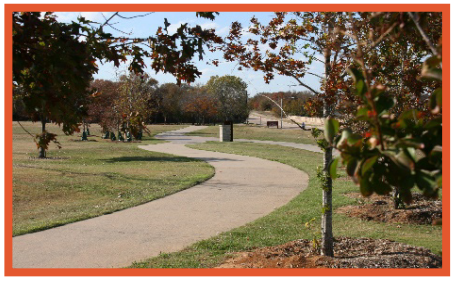
BENCHMARK COMMUNITIES

When analyzing the current LOS for Flower Mound, it is important to consider how it compares to cities of similar size and demographic composition in the DFW region. The population-per-mile benchmark is used to compare to the different cities; the lower the population-per-mile, the higher the LOS is for the trail system. Based on an average of many DFW communities, a regional benchmark of 1 mile of trail for every 1,200 residents has been established. The following communities are frequently used by Flower Mound to compare amenity and facility offerings. The following comparison only considers existing paved trails that are 8' or greater in width. Flower Mound has a current (2021) LOS of 1 mile per 1,251 residents. This ratio is better than the other identified benchmark communities, which indicates that Flower Mound has more trails per resident than the other communities but does not indicate the connectivity and accessibility of the overall system by comparison. Additionally, LOS just looks at the quantity of trails, not at the quality or condition of trails.



COLLEYVILLE

1 mile per 1,330 residents
Population: 26,462
Existing Trail Miles: 20
City Area: 8,384 Acres



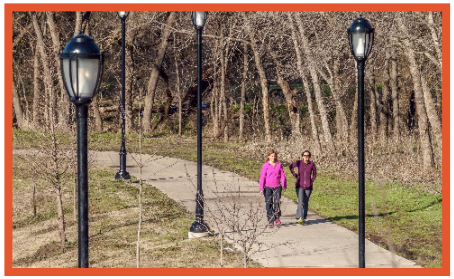
LEWISVILLE

1 mile per 5,172 residents
Population: 106,386
Existing Trail Miles: 21
City Area: 23,488 Acres



GRAPEVINE

1 mile per 2,424 residents
Population: 53,317
Existing Trail Miles: 22
City Area: 20,480 Acres



MCKINNEY

1 mile per 3,515 residents
Population: 182,055
Existing Trail Miles: 52
City Area: 40,320 Acres



KELLER

1 mile per 2,783 residents
Population: 46,813
Existing Trail Miles: 17
City Area: 11,840 Acres



FLOWER MOUND

1 mile per 1,251 residents
Population: 78,080
Existing Trail Miles: 65.3*
Town Area: 27,776 Acres

**Includes paved multi-use paths 8' or wider*

BICYCLE AND PEDESTRIAN CRASH DATA

To identify potential safety issues for the existing bicycle and pedestrian network in Flower Mound, bicycle and pedestrian crash data was evaluated. The database used for this section is the Texas Department of Transportation (TxDOT) Crash Record Information System (CRIS) 2016-2020 bicycle and pedestrian crash data. Only reported crashes are represented in the data, so if a minor crash occurs that was not reported to the police, this data would not reflect it. The figures displayed in **Table 3.2** represent the number of crash types in Flower Mound. **Figure 3.9** on page 66 represents the locations of bicycle and pedestrian crashes separated by user type (bicycle or pedestrian) and crash type (fatal or non-fatal), where the location of the crash was available.

Of all crashes involving a bicyclist and/or pedestrian between 2016-2020, sixty-five percent involved bicycles and were mostly non-fatal. Thirty five percent involved pedestrians and were mostly non-fatal. A common thread for the crashes is that they occurred along major roadways mainly at intersections where the trail system exists on at least one side of the road. The crashes can be contributed to gaps in the system and unsafe, unidentified, or non-existent pedestrian crossings. The fatal pedestrian crash was in the same location as a non-fatal bicycle crash and a non-fatal pedestrian crash, indicating that the intersection may need improvements. The fatal bicycle crash occurred on a six-lane major thoroughfare between two existing neighborhoods and close to Heritage Park. Without appropriate signage and advanced warning, motorized vehicles may not be aware of pedestrians and bicyclists crossing roadways or using facilities along roadways.

TRAIL USAGE

Strava is a Global Positioning System (GPS) application that allows runners, cyclists, and walkers to track their preferred routes or discover popular routes used by other users. Recent Strava data for Flower Mound is shown as a heat map in **Figure 3.10** on page 67 to indicate the most frequently used trail facilities while **Figure 3.11** on page 67 displays the most frequently used bikeway facilities. Strava data was used to show where people are biking and walking in Flower Mound today. As illustrated on page 67, major trails are heavily used, as well as sidewalks along major roadways and within neighborhoods. Sidewalks, bike lanes, and trails are more prevalent and used in the eastern part of Flower Mound. Both figures illustrate the locations of gaps in the system, where barriers may exist, and where trails and bikeways can be added.

TABLE 3.2: BICYCLE AND PEDESTRIAN CRASH DATA

Crash Type	Number of Crashes
Non-Injury Bicycle	23
Suspected Injury Bicycle	16
Fatal Bicycle	1
Non-Injury Pedestrian	21
Suspected Injury Pedestrian	10
Fatal Pedestrian	2
Total Crashes	**73**

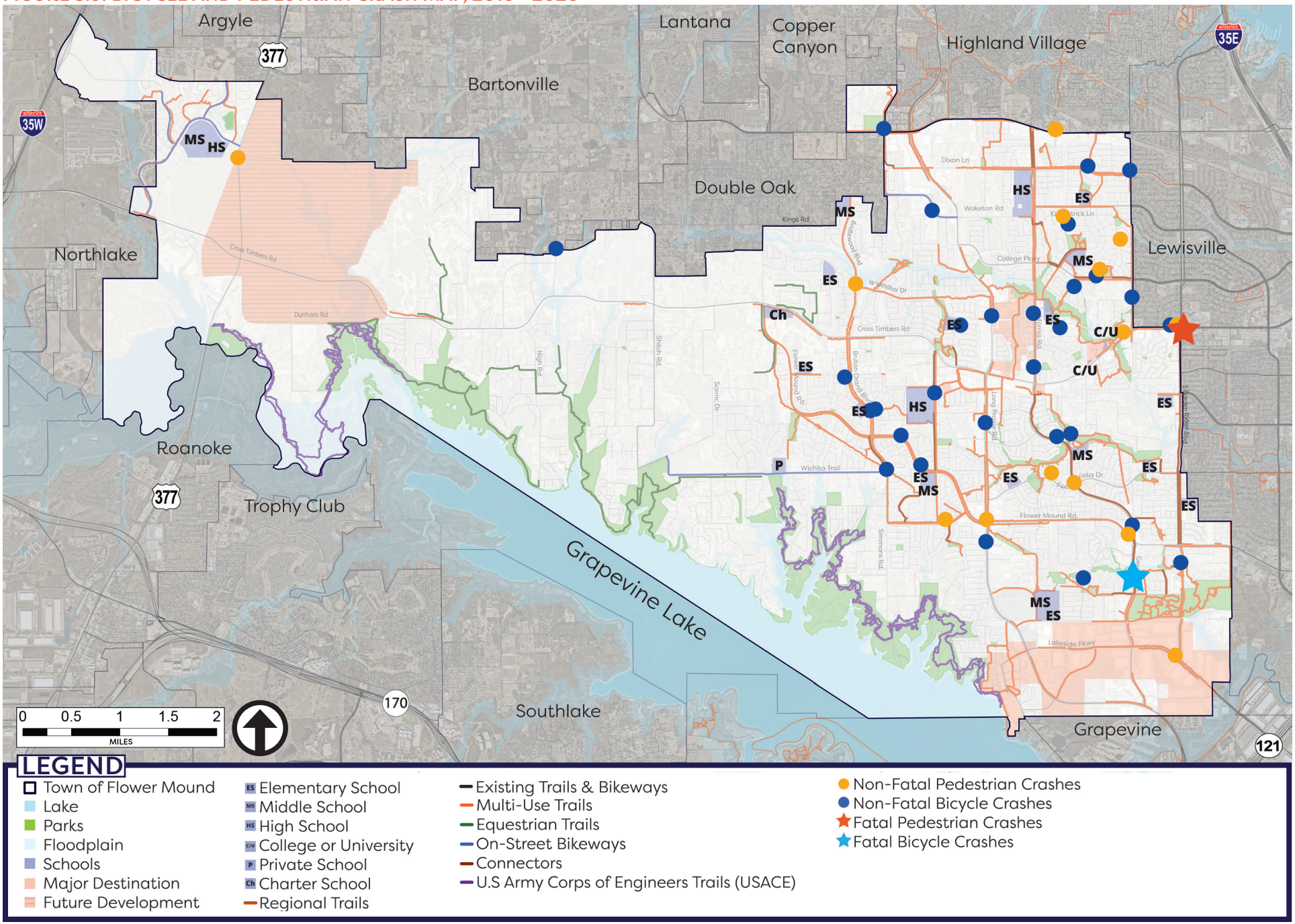
Source: TxDOT Motor Vehicle Crash Data for Flower Mound, 2016-2020
Note: Not all crashes are geo-located, some may be on boundary with other municipalities.

VISION ZERO

Vision Zero is the belief that everyone has the right to a safe transportation network. This approach is intended to improve safety on roadways for all users and prevent fatalities and severe injuries from crashes through design, policies, and technology. An effective Vision Zero policy focuses on the built environment, behaviors, and equity in order to have data-driven and measurable impacts to the system.

A Vision Zero policy can foster and encourage active transportation, improve accessibility to the roadway system for all users, and reduce economic impacts resulting from crashes through an implementable action plan. An action plan provides the Town with goals and recommended steps to improve roadway safety for all. These steps may include educational campaigns, safe speed design standards and engineering, data collection, and regular monitoring and evaluation.

FIGURE 3.9: BICYCLE AND PEDESTRIAN CRASH MAP, 2016 - 2020



Source: TxDOT Motor Vehicle Crash Data for Flower Mound, 2016-2020

ON-STREET BIKEWAY ASSESSMENT

The goal of recommending new bikeway designations is to provide safe on-street bicycle routes throughout Flower Mound that increase connectivity between neighborhoods and to regional destinations. The three types of on-street bikeway accommodations that are preferred by planning participants are shared-use lanes, standard bike lanes, and buffered bike lanes. These accommodations were determined by examining multiple attributes of Flower Mound's existing roadway system such as speed limit, existing traffic volumes, available capacity, and right-of-way widths. Examples of these facilities can be found on page 48 in the engagement section. As a reminder, bicyclists can also use sidepaths or off-street trails if they do not wish to ride in the street.

SHARED – USE LANES

Shared-use lanes are the easiest to implement and are proposed for roadways with low speeds and volumes since cyclists share the lane with motor vehicles. Utilizing these bikeway accommodations along Flower Mound's local and collector roads provides opportunities to expand upon the existing network and connect key areas.

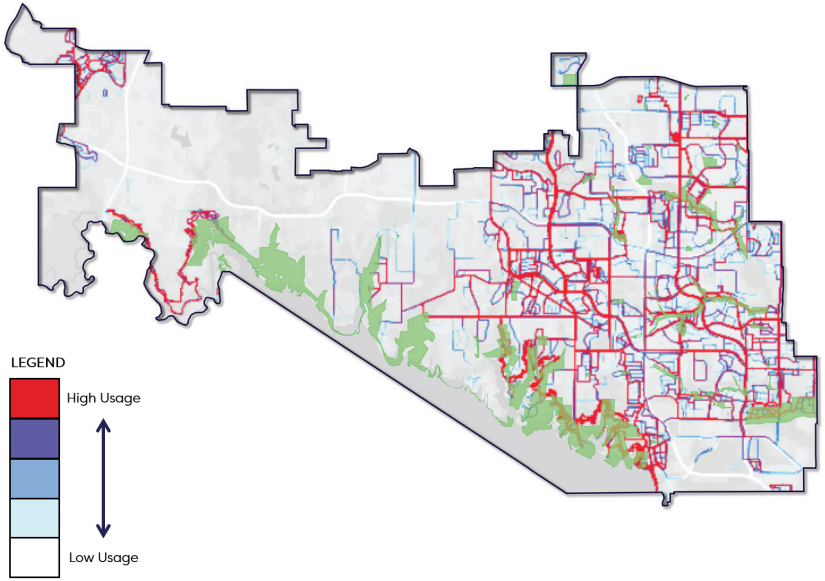
STANDARD BIKE LANES

Standard bike lanes are recommended along roadways that have slightly higher speeds and volumes for the safety of the user. These designations are also recommended on roadways that have the available width to accommodate modifications. Standard bike lanes offer increased comfort for cyclists and can encourage use by those that don't feel comfortable in a shared lane.

BUFFERED BIKE LANE

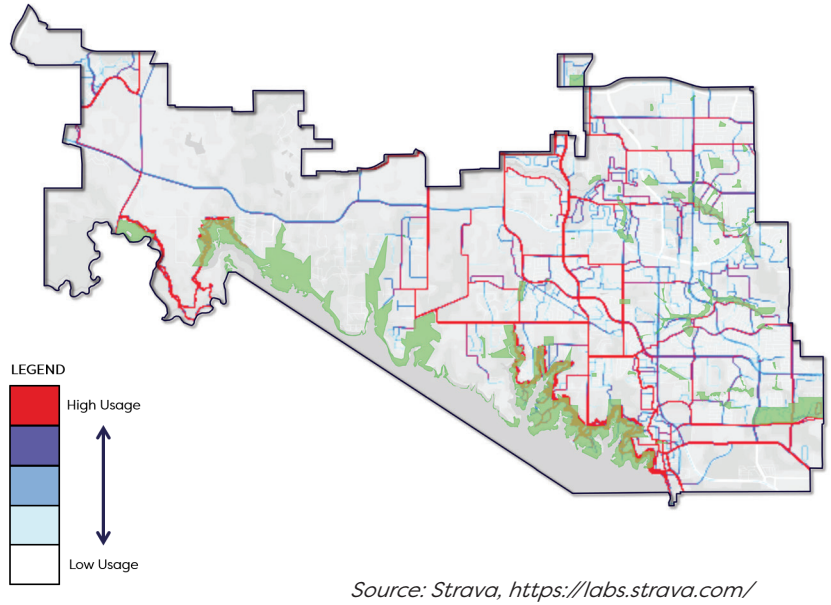
Similar to standard bike lanes, buffered bike lanes are offered along roadways that have higher speeds and volumes that need a spatial separation from the motor vehicles. However, these act as a major arterial for the bikeway network of a community. A buffered bike lane is used to connect major destinations and are proposed along major arterials in a community.

FIGURE 3.10: STRAVA PEDESTRIAN HEAT MAP, MAY 2021



Source: Strava, https://labs.strava.com/

FIGURE 3.11: STRAVA BICYCLE HEAT MAP, MAY 2021



Source: Strava, https://labs.strava.com/

BARRIERS AND OPPORTUNITIES

Based on the needs assessment and public input described earlier in this chapter, a series of barriers and opportunities were identified to help further expand the trails and bikeways system.

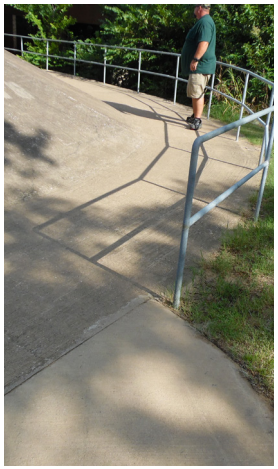
BARRIERS

The major barriers that exist in Flower Mound today can be divided into the following four categories and are shown in **Figure 3.12** on page 69.



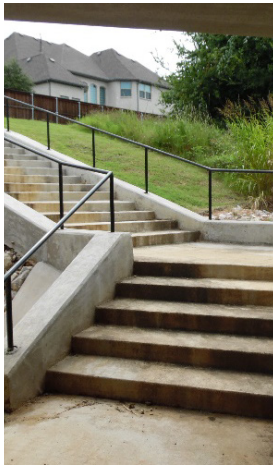
SAFETY ISSUES

This type of barrier includes major safety concerns along the trails such as lack of cautionary signage, unsafe roadway crossings, steep slopes or drop-offs, and poor visibility. Safety issues may discourage use of trails and bikeways because a user cannot cross roadways or maneuver trails safely. Improved roadway crossings throughout the system could improve safety for trail and bikeway users. Slope concerns exist along the Texas Yellow Star Trail and the White Lazy Daisy Trail. There is a need for additional cautionary signage at each of the trail crossings under roadway bridges.



PHYSICAL BARRIERS

This type of barrier includes major roadways, rail lines, and water features which may present difficulties to connect the trail system. Intersections with Flower Mound Road, Cross Timbers Road, Gerault Road, and Long Prairie Road present major challenges to the safety and accessibility of the trails and bikeways system.



NARROW TRAIL SEGMENTS

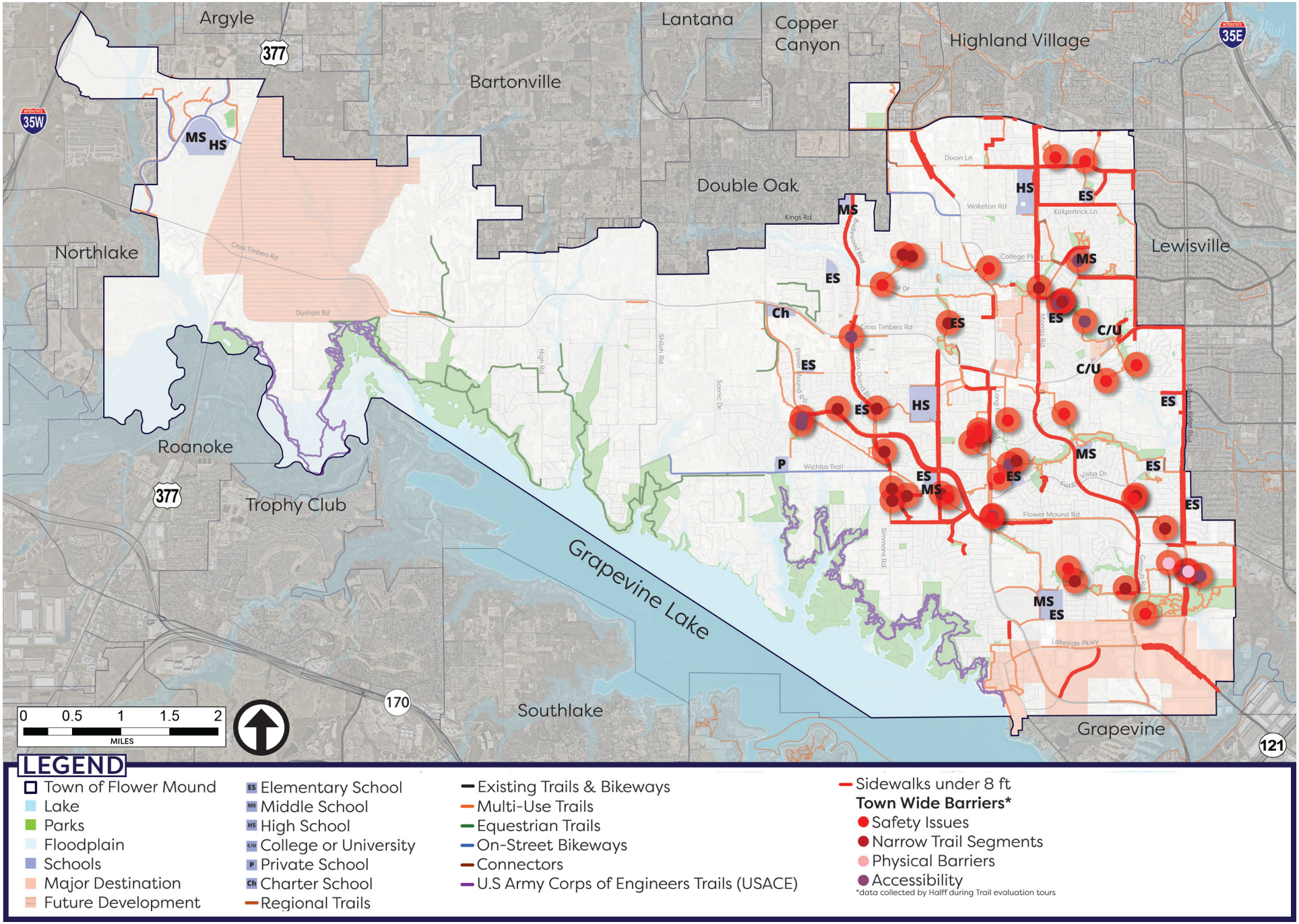
This type of barrier includes trail segments that are too narrow, including trails that are less than 8' in width. These segments may not be able to be widened due to right-of-way constraints, physical barriers, or may include bridges and infrastructure that cannot be widened. Narrow segments exist throughout the system, but are especially frequent within neighborhoods and internal to parks. As shown in **Figure 2.15**, just 65 percent of the trail system is 8' or wider. Narrow segments should be evaluated to see if they can be widened to meet national standards for trail widths.



ACCESSIBILITY

This type of barrier includes potential ADA compliance, lack of wayfinding/directional signage, and locations where trails dead end without warning. The entire trail system would benefit from increased wayfinding signage, but this would be especially useful where named trails intersect, or to provide direction to key destinations in Flower Mound.

FIGURE 3.12: MAJOR BARRIERS FOR TRAILS & BIKEWAYS



OPPORTUNITIES

Based on the needs assessment, evaluation of the existing trail system, and stakeholder input, opportunities for the trails and bikeways system were identified. These opportunities serve as a framework for the recommendations presented later in the document. **Figure 3.13** on page 72 shows opportunities in map form and the following categories are described below and on page 71.



CONNECTIONS TO MAJOR DESTINATIONS

Connections throughout the town were identified as important by system users. Key destinations include schools, parks, libraries, and activity centers such as Lakeside, Riverwalk, Parker Square, Grapevine Lake, Town Hall, and Stone Creek. Providing better connectivity to these places can reduce dependence on automobiles and encourage active transportation and healthier lifestyles.



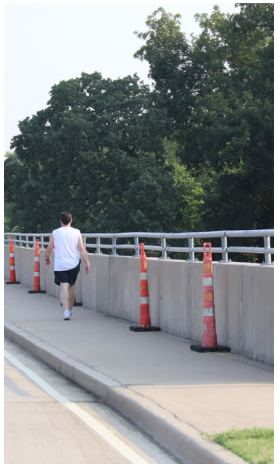
INTERJURISDICTIONAL CONNECTIONS

Interjurisdictional connections present opportunities to connect Flower Mound to adjacent communities like Grapevine, Coppell, Lewisville, Highland Village, Double Oak, Northlake, Roanoke, and Trophy Club. Improving bicycle and pedestrian connections to these communities, either through the expansion of the Regional Veloweb trailway system or through new connections, will enhance regional connectivity and provide access to key activity centers for residents of the region.



ACCESSIBILITY

The overall trails and bikeways system can be enhanced through filling in gaps in the existing system and providing for better connections to existing neighborhoods. Gaps in the system exist along all named and unnamed trails in Flower Mound. Potential new trails and connections would improve the accessibility of the system.



CORRIDORS TO WIDEN

Segments of trails that are less than 8 feet in width should be widened where possible to meet current standards and best practices. Opportunities to widen existing trails exist along Long Prairie Road, Gerault Road, S. Garden Ridge Blvd, Lakeside Parkway, and many other roads in eastern Flower Mound, as shown in **Figure 3.13**.

OPPORTUNITIES CONTD.



ADDITIONAL CONNECTIVITY OPPORTUNITIES

Opportunities to expand the system exist throughout the town. This plan considers five feasibility corridors discussed in the Appendix and utility corridors as places where new trails can be constructed to expand the system. It also looks at new paddling launch points for a paddling trail system, additional locations for trails along greenways or creeks, and improved intersection crossings to improve overall connectivity of the system.



PLACEMAKING

Placemaking can help strengthen and improve a community or system by improving the public realm. Placemaking strategies that can improve the trails and bikeways system in Flower Mound include branding of the trail system through trail naming, wayfinding, and trailheads. Interpretive signage can be included along trails to help educate the community about environmental resources, arts, culture, and history. Intersections of trails can be designed to match the brand of the trail systems.

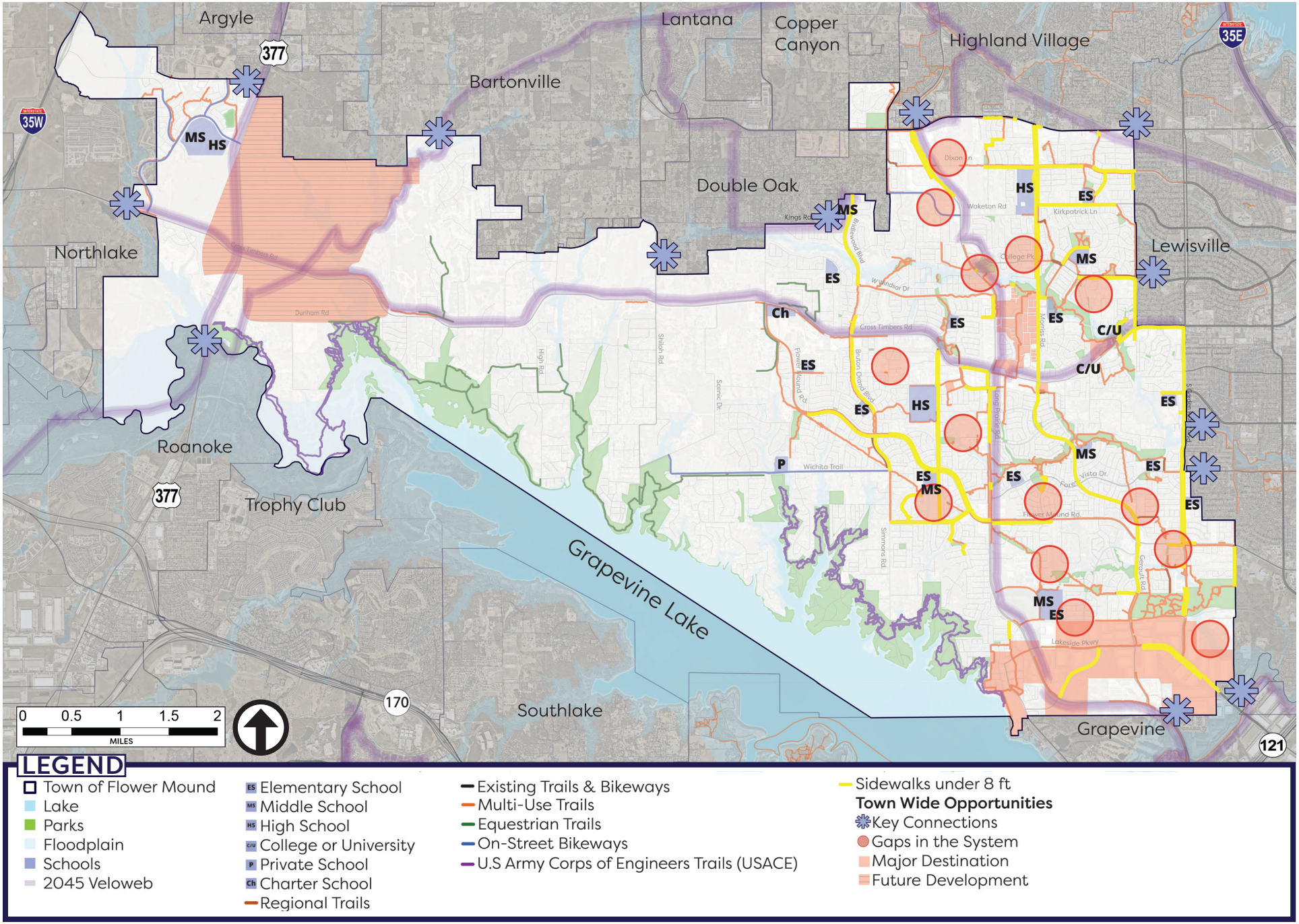


AMENITIES

Amenities can improve the overall experience for trail users. They provide shade, shelter, places to rest, and places to dispose of waste. Trailheads can be used to identify the start and end of trails. Wayfinding signage can help people identify where they are and where they want to go, while providing for branding along the trail. Other amenities that can improve user experience along trails, bikeways, and at trailheads include: bike racks, bike repair stations, waste receptacles, benches, pet waste stations, lighting, and parking.



FIGURE 3.13: MAJOR OPPORTUNITIES FOR TRAILS & BIKEWAYS



Corridor Identification
Facility Hierarchy
Recommended Network



04 TRAILS & BIKEWAYS SYSTEM NETWORK



This plan proposes a well-connected network of on- and off-street trails and bikeways throughout the Town. The proposed network was developed through a combination of research, field observation, and community input, much of which has been summarized in preceding chapters. The network depicted intends to encourage recreation, active transportation, and healthy living for generations to come.

CORRIDOR IDENTIFICATION

Five primary evaluation criteria were considered to determine the suitability of the trails and bikeways network in Flower Mound. These criteria, listed below, are used to help determine the level of impact and feasibility of each segment. Not all trails align with each criterion.

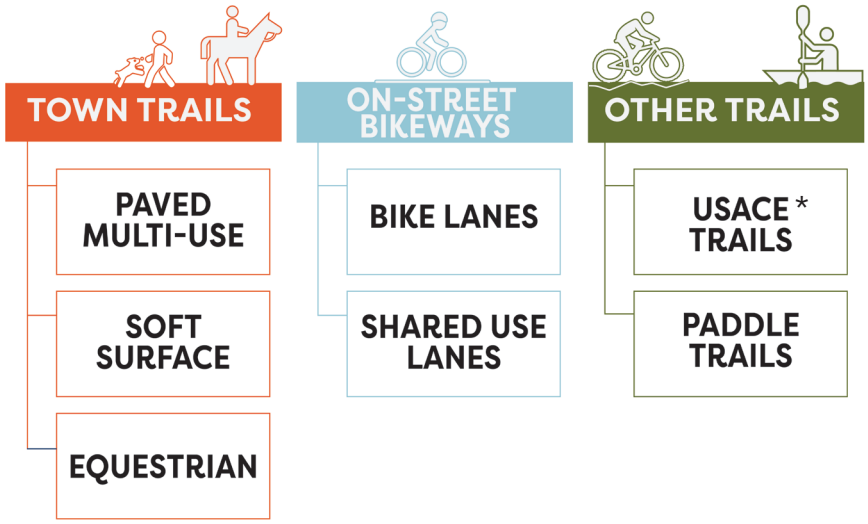
Connects the system – The segment would provide connections to the existing or planned system by filling a gap within the existing network.
Connects to destinations – The segment would provide connections to community destinations such as parks, schools, entertainment, and employment opportunities.
Addresses safety issues – The segment would address safety concerns to improve access to the system.
Increases access – The segment is located close to residential areas and would provide additional connectivity to neighborhoods.
Feasibility of corridor – The segment should be generally feasible to construct. Elements considered during a planning level review include available right-of-way or easements, lane widths, property ownership, topography, and floodplain.

FACILITY HIERARCHY

The Town of Flower Mound's network includes town trails, connectors, on-street bikeway facilities, and other trails, as shown in Figure 4.1. Each facility is designed to accommodate specific users. This section discusses key characteristics of each facility hierarchy. More details on design characteristics of each facility type is included in Chapter 5.



FIGURE 4.1: FACILITY HIERARCHY



* US Army Corps of Engineers

TOWN TRAILS

Town Trails provide a high level of comfort for users based on widths and locations of the trails. These trails include paved multi-use trails, soft surface trails, and equestrian trails that are maintained by the Town.

PAVED MULTI-USE TRAILS

Paved multi-use trails can be located adjacent to roadways, within utility easements, or within parks and greenways. These wide, paved facilities are comfortable for bicycle and pedestrian users of various ages and abilities. The minimum width for trails is recommended to be 12', however, 10' may be applicable in areas where there are existing ROW constraints. This is consistent with AASHTO and regional standards. For trails designated as part of the Regional Veloweb, the trail should be 12' to meet NCTCOG standards and provide for a high level of comfort. These paths can be used for recreational uses or for commuting when they connect to employment centers and schools.

SOFT SURFACE TRAILS

Soft surface trails maintained by the Town should be designed with decomposed granite or another soft surface material, and can be used in environmentally sensitive areas and should be a minimum of 8' in width. Soft surface trails provide recreational opportunities, connect people to nature, and can be less expensive to construct. There is heavier maintenance required on these trails to maintain ADA accessibility. Anticipated users include walkers, joggers, and people wanting to experience the outdoors.

EQUESTRIAN TRAILS

Equestrian trails are for primary use by people on horseback. These natural surface trails can be located through wooded and vegetated areas to provide people with alternative riding experiences and allows them to explore nature. The surface material is typically compacted earth with a width of approximately 15'. Where possible, considerations for hitching posts and trailer parking should be incorporated into equestrian trailheads.


PAVED MULTI-USE TRAIL


SOFT SURFACE TRAIL


BRIDLEWOOD EQUESTRIAN TRAIL

ON-STREET BIKEWAYS

BIKE LANES

Bike lanes are designated spaces on roadways with relatively higher volumes and travel speeds. Based on AASHTO and Town standards, the minimum width of a bike lane is 5' to provide a more comfortable space for bicyclists. When the facilities are buffered with either striping or a physical barrier, bike lanes can be attractive for a wider range of comfort levels.

SHARED-USE LANES

Shared-use lanes are designated roadways with low traffic volumes and speeds, and include pavement markings on the road to indicate the street is to be shared between vehicles and bicyclists. Pavement markings include arrows and a bicycle, and the roads typically include shared lane signage. In lower traffic areas such as residential streets, these roadways can be designated with just signage and not pavement markings.


SHARED-USE LANE

OTHER TRAILS

OTHER SOFT SURFACE TRAILS

The US Army Corps of Engineers (USACE) owns soft-surface trails along Grapevine Lake that are maintained by the Dallas Off-Road Bicycling Association (DORBA) and the Cross Timbers Equestrian Trails Association (CTETA). These trails provide recreational opportunities for mountain bikers, hikers, people on horseback, and nature seekers. Any proposed changes to the trail system should be coordinated with the USACE. These trails vary in width and are typically compacted dirt.

PADDLING TRAILS

Paddling trails located on Grapevine Lake are designated waterway trails that provide the opportunity to explore the lake, engage with nature, bird watch, fish, and experience similar water-based activities. Paddling trails are associated with a series of launch points where paddling users can put in and take out their watercraft. Considerations for interactions with operators of motorized boats is important.



USACE TRAIL AT GRAPEVINE LAKE



TWIN COVES PARK KAYAK LAUNCH

OTHER FACILITIES

CONNECTORS

Connectors are enhanced sidewalks up to 8' in width that connect neighborhoods to key destinations, such as employment centers, entertainment opportunities, schools, and parks. All new connectors or reconstruction of existing connectors should be widened to 6'-8' where feasible. This facility type is typically found along major roadways that have constraints restricting the construction of a wider multi-use path. These facilities differ from other sidewalks within the Town since they fill in key gaps in the overall trail and bikeway system.



HIERARCHY SUMMARY

Table 4.1 provides a summary of the key characteristics of each proposed facility type. For additional descriptions of the design of each facility type, please refer to Chapter 5.

TABLE 4.1: HIERARCHY SUMMARY

Facility Type	Preferred Surface Material	Width (Feet)	Primary Users	Locations
Town Trails				
Paved Multi-Use Trails	Concrete	12', 10' if existing ROW constraints	Pedestrian and Cyclist	Adjacent to roadways, greenbelt corridors, utility easements, within parks
Soft Surface Trails	Decomposed Granite	8'	Pedestrian	Areas of environmental interest
Equestrian Trails	Compacted Earth	15'	Equestrian Users	Located away from roadways
On-Street Bikeways				
Bike Lanes	Pavement	5' minimum	Cyclist	Roadways with speeds less than 45 mph
Shared-Use Lanes	Pavement	14' lane width	Cyclist	Roadways with speeds less than 35 mph
Other Trails				
USACE Trails	Compacted Earth	Varies	Hikers, Mountain Bikers, Equestrian	Within USACE land
Paddling Trails	n/a	n/a	Kayaks, Canoes	Along Grapevine Lake
Other Facilities				
Connectors	Concrete	6'-8' depending on existing ROW constraints	Pedestrian	Adjacent to roadways

RECOMMENDED NETWORK

The recommended network of trails, bikeways, and connectors was informed by public input, needs assessments, corridor evaluations, and guidance from the overall plan goals. This section discusses the proposed network.

COMBINED RECOMMENDATIONS

The combined recommendations create a robust trails and bikeways system throughout Flower Mound to connect residents to key destinations and to the larger DFW region. Some of the key components of the network recommendations are described below.

Major Destinations in Flower Mound include parks, schools, major employers, and entertainment centers. As development occurs in these areas, there are opportunities to enhance the system by widening existing facilities, filling in gaps, and constructing new facilities. As development occurs in western Flower Mound, connections should be provided to future destinations.

Regional Connections are important to connect residents to opportunities in surrounding communities. Interjurisdictional connections include trails and bikeways that can connect Flower Mound's citizens to all the DFW Metroplex has to offer, and improves overall regional connectivity, mobility, and recreation.

Filling in Gaps in the existing trail and bikeway system was identified as a priority through the master plan public input process. Many of the existing trail gaps are located in the eastern part of Town that is primarily built-out. This plan sought to fill in strategic gaps to provide more continuous trail segments. Many of these gaps are found along the branded trails such as the Pink Evening Primrose Trail and the Bluebonnet Trail.

HOW TO USE THE MAP

The Trails and Bikeways Master Plan recommendations map should serve as a blueprint for Town staff, leaders, and developers when considering new trails and bikeways within Flower Mound. Whenever a new development or redevelopment is proposed, the associated recommended trail facility is required to be constructed by the developer. Moreover, whenever a roadway is built, expanded, or reconstructed, the proposed bikeway accommodations should be included. Furthermore, future updates to the Thoroughfare Plan may necessitate modifications to the alignments of trails adjacent to roadways and on-street bikeway accommodations. Finally, the Trails and Bikeways Master Plan map may be amended by the Town Council; it is recommended that these modifications occur annually to reflect facilities that are built and other needed changes.

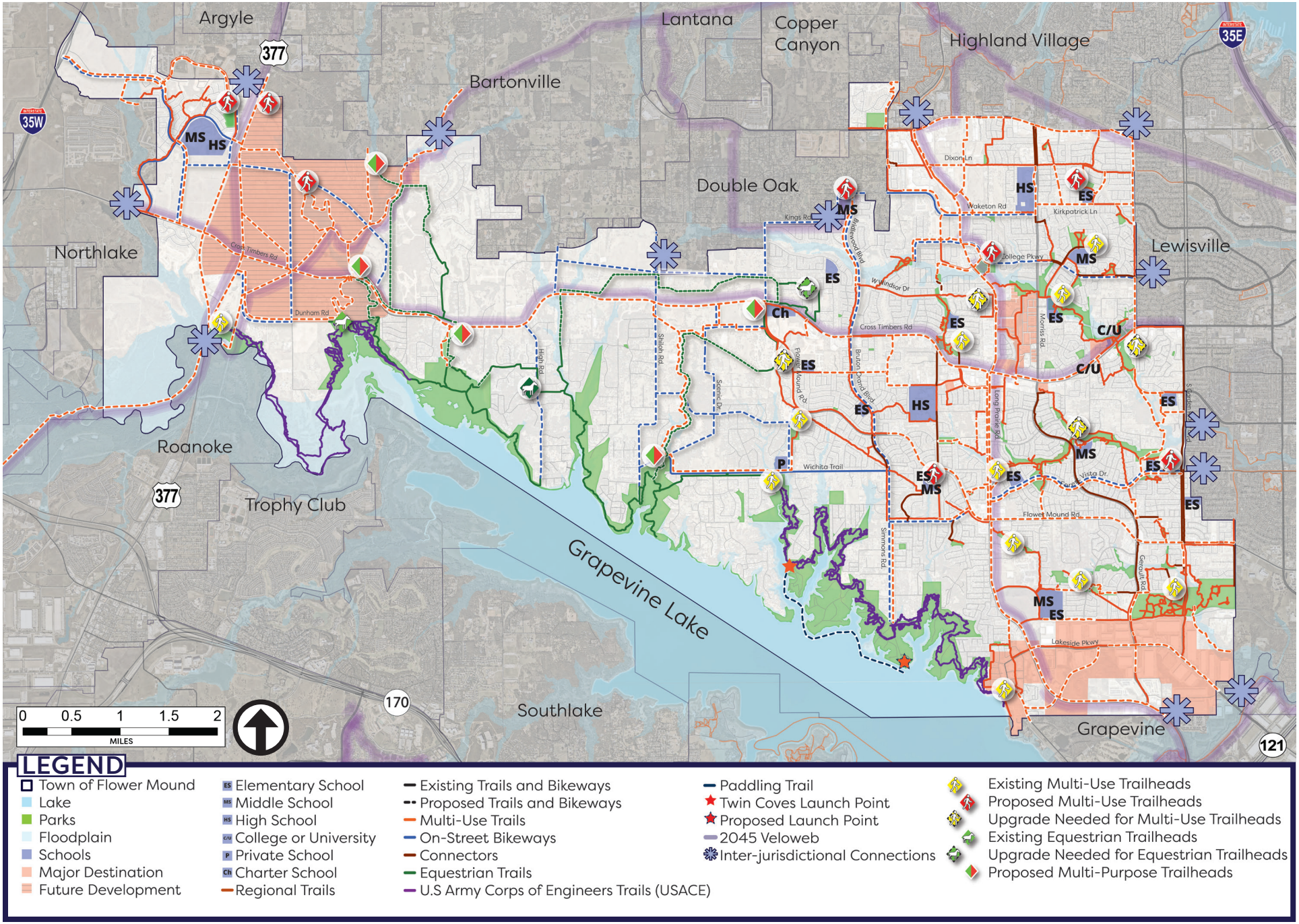
Figure 4.2 on the facing page represents the collective network recommendations for the Town of Flower Mound. Table 4.2 provides details on the existing and proposed mileage of all facility types.

TABLE 4.2: RECOMMENDED SYSTEMWIDE FACILITY MILEAGE

Facility Type	Existing Mileage	Recommended Mileage	Total Mileage
Town Trails*	90.9	88.9	179.9
On-Street Bikeways	6.4	33.2	39.6
Other Trails	34.5	1.9	36.4
Total	**131.8**	**124.0**	**255.9**

**Town Trails include paved multi-use, soft surface, collectors, and equestrian trails maintained by the Town.*

FIGURE 4.2: COMBINED RECOMMENDATIONS MAP



TOWN TRAIL RECOMMENDATIONS

Figure 4.3 illustrates the network of town trails intended to accommodate both pedestrians and bicyclists. The designated facilities aim to provide town-wide connectivity to destinations and the larger DFW Region.

PAVED MULTI-USE TRAILS

The proposed paved multi-use trails include on-street sidepaths and off-street trails to create connections and fill in gaps in the existing trail network town-wide. These trails provide local and regional connections, access to recreation and destinations, and improve overall accessibility of the system. The recommended segments include widening existing trails to meet new standards, and constructing new trails to improve the overall network.

SOFT SURFACE TRAILS

Soft surface trails will primarily exist on USACE property along Grapevine Lake. Beyond the existing soft-surface trails that are managed by the Town today, there are no additional soft-surface trails recommended since they are not accessible to all users. While this plan does not recommend these types of trails, this does not prohibit the Town from installing them in parks or floodways in the future.

EQUESTRIAN TRAILS

The Town of Flower Mound has an active and avid equestrian community. This plan seeks to connect existing trails, create trail loops, and enhance the overall equestrian trails network to connect riders with nature. There are opportunities to finish trail loops where development is proposed on the more natural, west side of Town. The addition of trails to connect north of Cross Timbers Road to the USACE trails along Grapevine Lake are provided at locations where trails either already exist, or where there will be enhanced trail crossing infrastructure, such as an underpass.

TOWN CONNECTORS

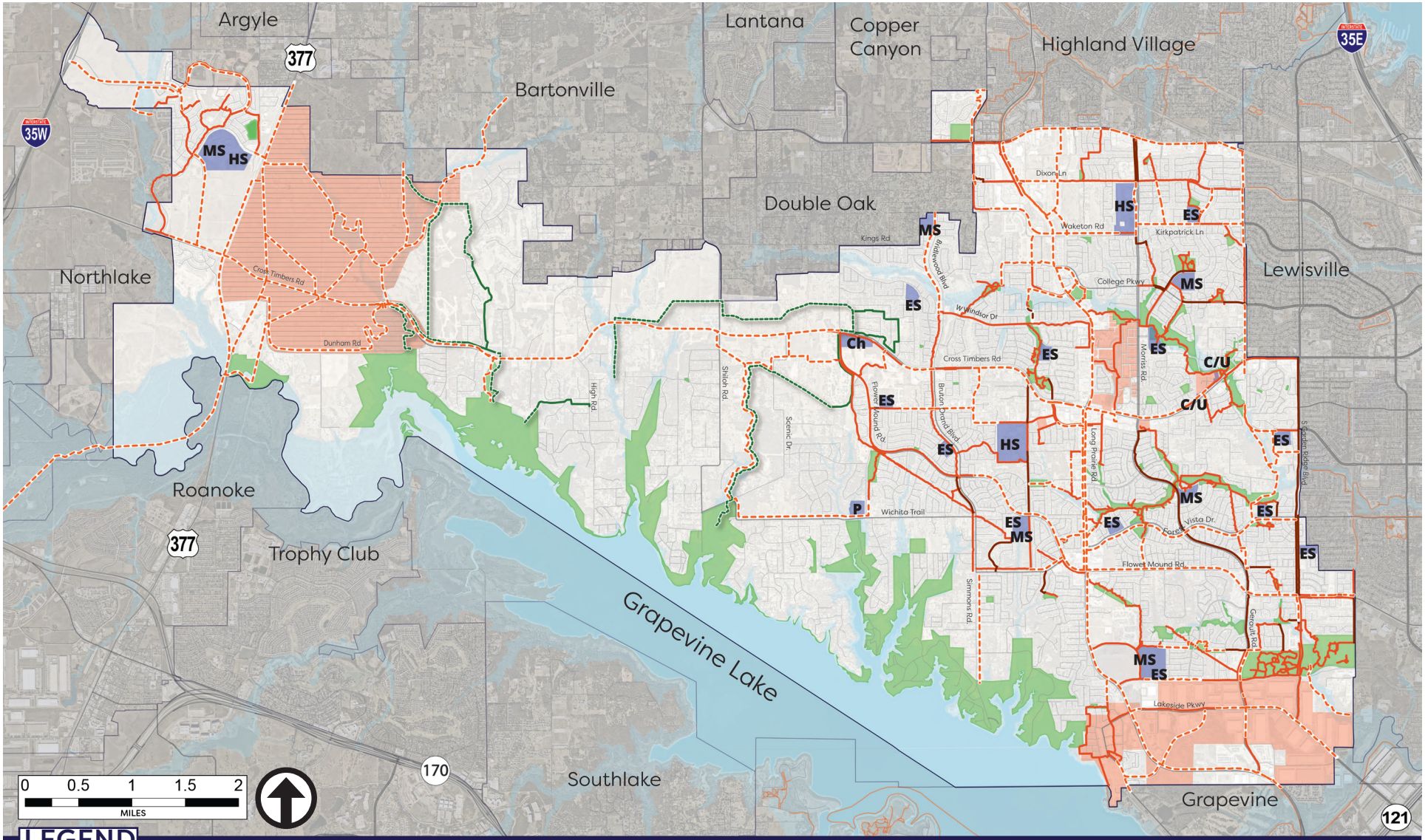
These are sidewalks that connect to major destinations and are usually on major roadways where existing constraints prohibit widening a trail. The desired width for connectors is 8', however where constraints exist and sidewalks cannot be widened, they should be a minimum of 6'.

TABLE 4.3: TOWN TRAILS RECOMMENDATION SUMMARY

Facility Type	Existing Mileage	Recommended Mileage	Total Mileage
Paved Off-Street Trails	37.0	23.0	60.0
Paved On-Street Sidepaths/Trails	28.3	55.1	83.4
Soft Surface Trails	0.1	0	0.1
Equestrian Trails	14.5	10.8	25.3
Connectors	11	0.1	11.1
Total	**90.9**	**89.0**	**179.9**


TEXAS YELLOW STAR TRAIL

FIGURE 4.3: TOWN TRAILS RECOMMENDATIONS MAP



ON-STREET BIKEWAYS RECOMMENDATIONS

BIKE LANES

Bike lanes have been recommended for the roadways that have relatively higher speeds and volumes and have the available right-of-way, or pavement width, to accommodate the modifications necessary to install bike lanes. Proposed bike lanes were designated along roadways where continuous and comfortable routes for residents are feasible. They provide key connections to the mountain biking trails along Grapevine Lake and to the proposed or existing Town Trails. Generally, riders feel an increased level of comfort on separated facilities, such as bike lanes, and as such they should be implemented opportunistically. The Town should consider designs to add bike lanes where feasible and there is available rights-of-way when thoroughfares are updated, whether they are shown on this map or not. Future updates to the thoroughfare plan can also indicate where additional bike lanes are feasible.

SHARED-USE LANES

Shared-use lanes can be easily implemented and require little change to the existing roadway. A majority of the bikeway facilities on the east side of Town are shared-use lanes due to existing constraints. These routes are on local roads or collectors with low volumes and speeds, which are more ideal for creating a comfortable riding experience for users of all ages and abilities. These routes connect residents to the trail system, bike lanes, and destinations throughout the Town.



WICHITA TRAIL ROAD

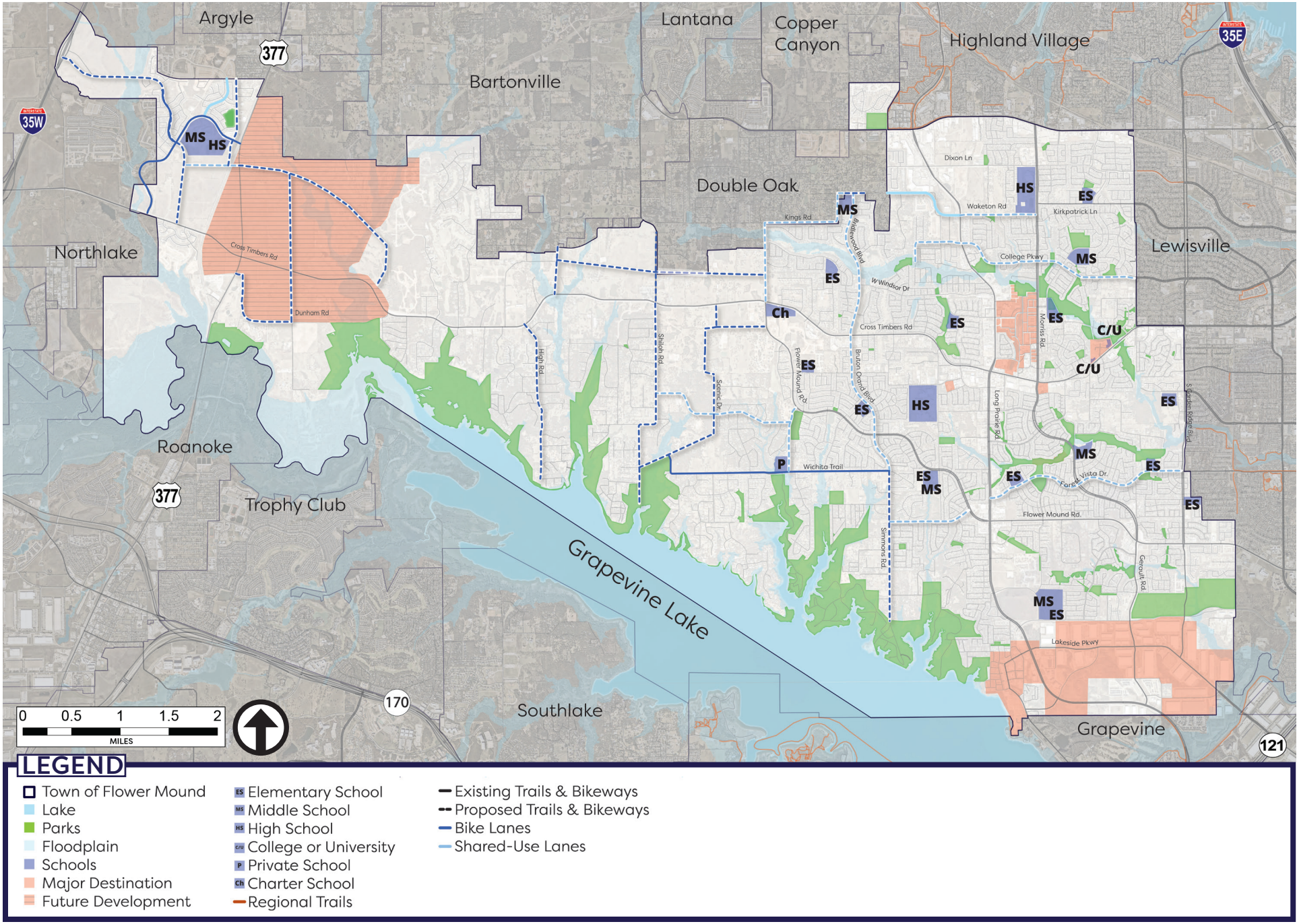
TABLE 4.4: ON-STREET BIKEWAYS RECOMMENDATION SUMMARY

Facility Type	Existing Mileage	Recommended Mileage	Total Mileage
Bike Lanes	5.0	19.3	24.3
Shared-Use Lanes	1.3	13.9	15.2
Total	**6.3**	**33.2**	**39.5**



BIKE & PED SIGN IN LAKESIDE

FIGURE 4.4: ON-STREET BIKEWAYS RECOMMENDATIONS MAP



OTHER TRAILS RECOMMENDATIONS

Other trails include the USACE soft-surface trails along Grapevine Lake and paddling trails in Grapevine Lake. These are diverse trails intended to serve a variety of users.

USACE TRAILS

USACE Trails are soft-surface trails located along Grapevine Lake and are maintained by DORBA and CTETA. This plan does not propose any additional trails on USACE property; additional trails would need to be planned by the USACE based on their requirements. These trails primarily serve mountain bikers, hikers, and equestrian users and attract people from around the DFW region.

PADDLING TRAILS

Paddling Trails are shown with proposed and existing launch points. These trails are intended to serve water users, including kayakers, canoers, and paddle boarders, exclusively. This plan proposes using the existing Twin Coves Launch point and a new launch point further south to create a 2.3 mile paddle route, as shown in **Figure 4.5**. The Town can work with the cities along Grapevine Lake to create a broader network of paddling trails in the future.



GRAPEVINE LAKE

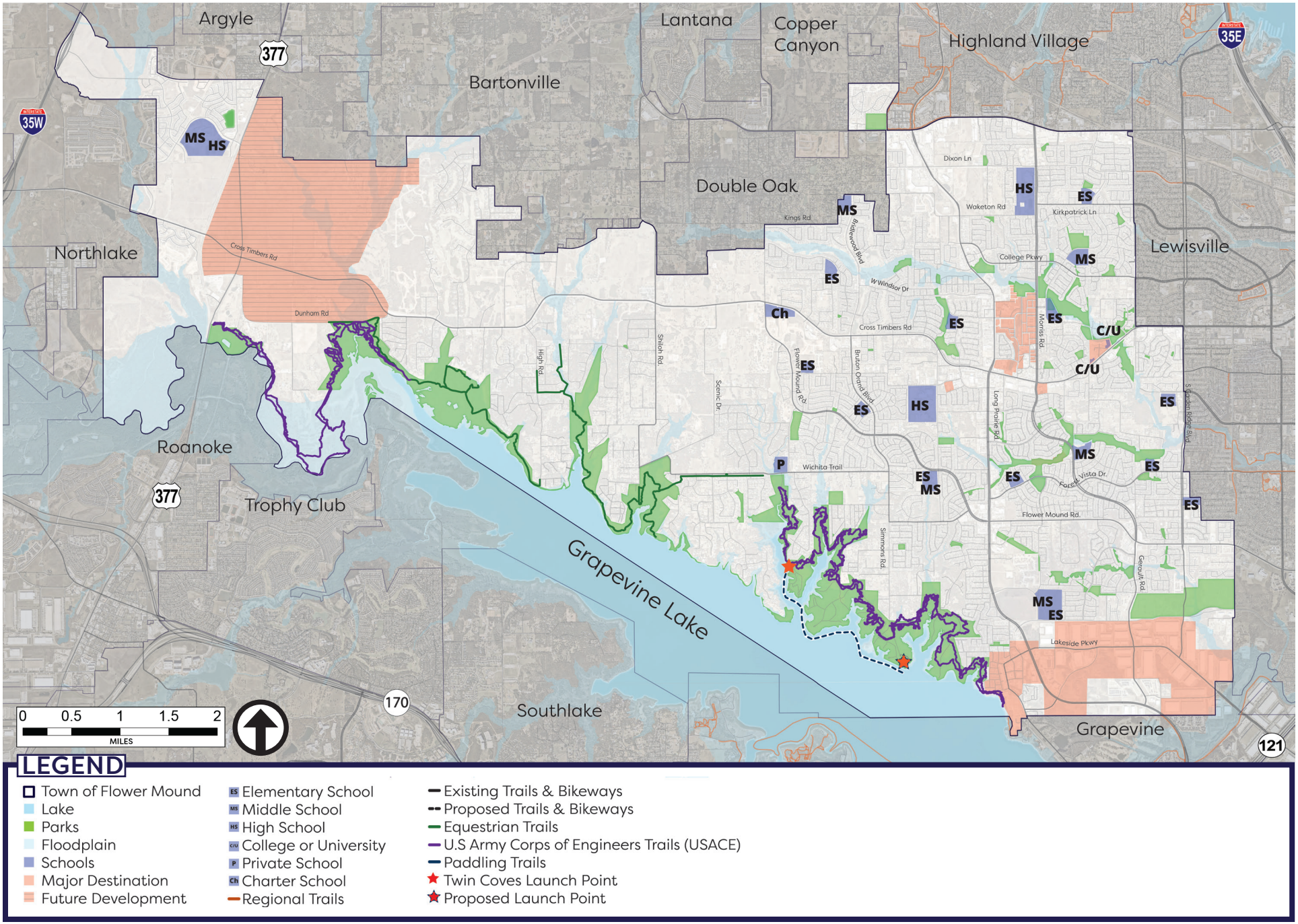
TABLE 4.5: OTHER TRAILS RECOMMENDATION SUMMARY

Facility Type	Existing Mileage	Recommended Mileage	Total Mileage
USACE Trails	34.5	0	34.5
Paddling Trails	0	1.9	1.9
Total	**34.5**	**1.9**	**36.4**



CYCLIST AT KNOB HILLS

FIGURE 4.5: OTHER TRAILS RECOMMENDATIONS MAP



TRAILHEADS AND THE PRIMARY TRAIL NETWORK

TRAILHEADS

Key entrances to the trail system should be designated by trailheads. They should be distributed throughout the town at major destinations, such as community parks and entertainment centers. While Figure 4.6 identifies proposed locations for trailheads, it does not limit the Town's ability to construct trailheads at other locations Design considerations for trailheads are provided in Chapter 5.

Equestrian Trailheads

Equestrian trailheads are located at major entry points to the equestrian trail system. These should include a variety of amenities including informational signage, parking, and tie ups. **This plan does not propose any new equestrian trailheads, however it does propose enhancing existing trailheads. The new trailheads for equestrian trails are identified as multi-purpose trailheads.** Existing trailheads should be evaluated and enhanced in order to provide the necessary amenities for horseback riding and accessing existing equestrian trails.

Multi-Purpose Trailheads

Multi-purpose trailheads are located where multi-use trails and equestrian trails converge. Due to their location and anticipated user demand, a wider range of amenities should be provided, including parking areas with trailer parking and automobile parking, lighting, seating, signage, waste receptacles, bike amenities, shade, and similar amenities. The location of horse tie-ups should be away from the bike and pedestrian entry to the trail system to reduce user conflict. Signage should include a map, directions, safety precautions, and rules and regulations for using the trail for the various users. **This plan proposes five new multi-purpose trailheads.**

Multi-Use Trailheads

Multi-use trail trailheads are located where trails converge, or at trail entry points for pedestrians and bicyclists. The anticipated user volume, space limitations, and similar elements may determine the classification of trailhead. Existing trailheads are used to mark entry of trails from neighborhoods, but may not include recommended amenities to enhance access and usability of the trail. **The plan proposes 12 new or enhanced multi-use trailheads.**

PRIMARY TRAILS

Primary trails, shown in Figure 4.6, are characterized by their accessibility though the Town. They are major east/west and north/south trails through Flower Mound, primarily located on major roadways like Long Prairie, Cross Timbers, and US-377. Many of these longer corridors are also part of the Regional Veloweb, which provides regional and local connectivity and can support major trailheads at main trail junctions. Primary trails can also be located through greenways and off major corridors to create loops and linkages to parks, schools, and destinations.

Primary trails provide residents with continuous corridors for walking, jogging, or general exercise purposes. In contrast, intersecting loop trails bring diversity to the system and create various mileage for trail users. Loops create scenic or relaxing experiences by connecting to off-road trail segments, improving shade along trails, and providing access to nature and exploration. These corridors are candidates for regional funding opportunities and should be prioritized in the overall system.

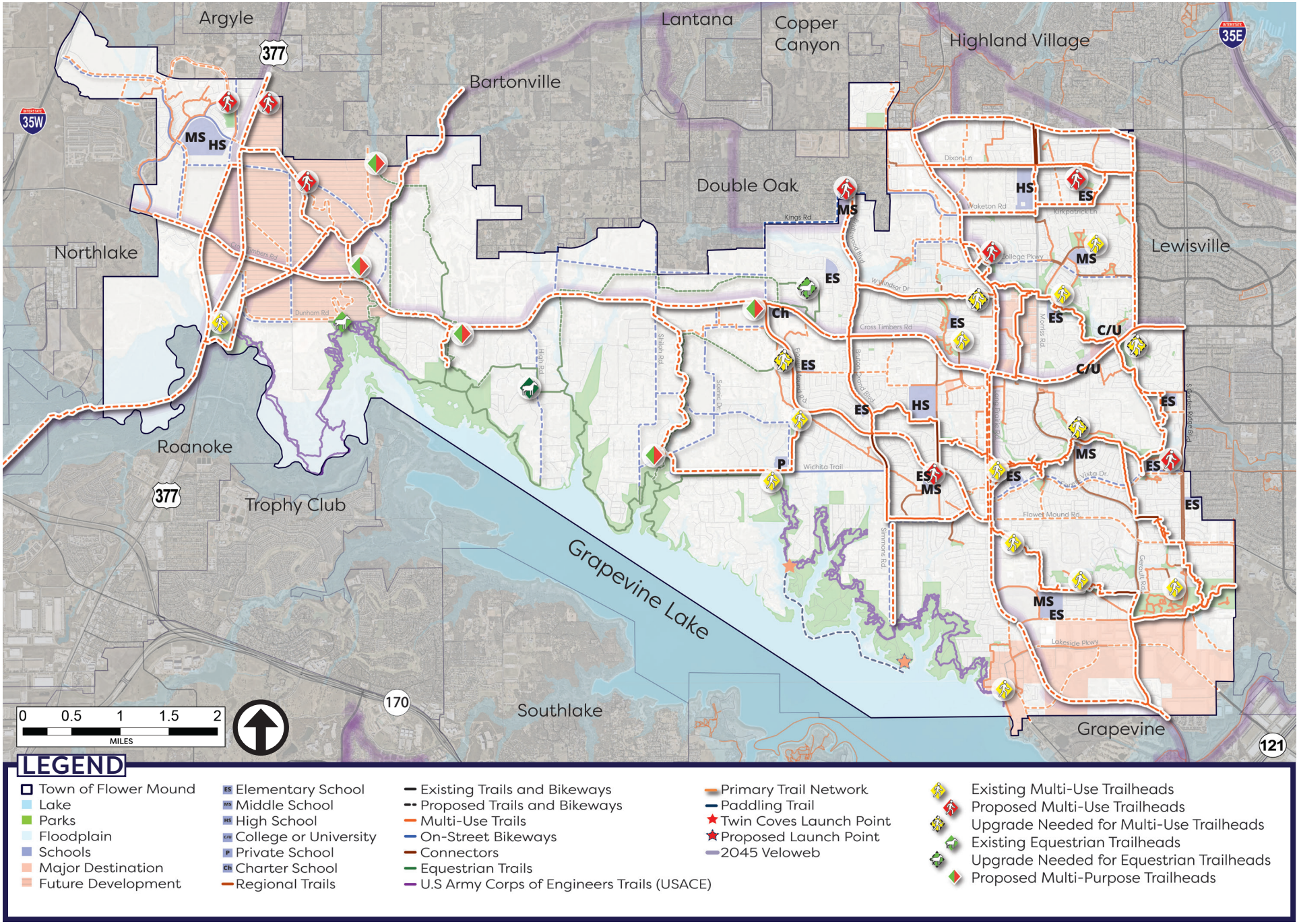
SECONDARY CORRIDORS

Secondary corridors are smaller segments that connect to residential neighborhoods. These smaller segments of trails are still important for creating accessibility throughout the entire system. These smaller trail segments are candidates for Town funding sources. The secondary trail system may be used more for recreation and access to schools and parks that are not located in major destinations.

INTERJURISDICTIONAL CONNECTIONS

The recommended network should take advantage of opportunities to connect residents to surrounding trails and bikeways in communities like Double Oak, Argyle, Highland Village, Grapevine, and Lewisville. Interjurisdictional connections and the Regional Veloweb allow Flower Mound residents to access amenities and entertainment throughout the DFW Metroplex. Interjurisdictional connections are shown in Figure 4.2 (page 80). The Regional Veloweb alignment through Flower Mound is shown in Figure 4.6.

FIGURE 4.6: TRAILHEADS AND PRIMARY TRAILS SYSTEM



SAFETY CONCERNS

MAJOR PEDESTRIAN CROSSINGS

Safety concerns were identified along the existing trails system as part of this master plan process. These include roadway crossings, blind spots, and existing slopes and drop-offs. General safety concerns are shown in **Figure 4.7**, however, this does not limit the Town's ability to address additional concerns that may be identified in the future. Design considerations for safety concerns are provided in Chapter 5.

Addressing the existing safety concerns should be a priority for the Town. In order to determine which intersections should be looked at more closely for improvements, all intersections where the trail network currently crosses were reviewed at a planning level. This high level analysis included:

- Completeness of crosswalks through the intersection;
- Quality of pavement markings;
- Number of lanes trail users have to cross; and,
- The speed of the roadway trail users have to cross.

ROADWAY INTERSECTIONS

Intersections are an important design consideration when creating a trails and bikeway system. Major roadways crossings are a barrier to connectivity in Flower Mound. Intersection design to enhance pedestrian crossings include signage, high emphasis pavement markings, and signalization, compliant with the TMUTCD. **Figure 4.7** shows existing controlled and uncontrolled intersections with the degree of priority indicated representing how critical needed improvements are.

MID-BLOCK CROSSINGS

Mid-block crossings are where facilities cross a road at a location between signalized intersections. They should be designed to alert drivers to trail users crossing the road through signage, rectangular rapid flashing beacons, and pavement markings relative to the roadway the trails are crossing. **Figure 4.7** shows existing mid-block and neighborhood crossings with the degree of priority for needed improvements.

Note: All design standards and placement of crossings shall comply with the TMUTCD and Town design guidelines.

NEIGHBORHOOD CROSSINGS

While neighborhood streets are typically less traveled and have lower speeds, it is important to provide warning of a trail crossing where the trail crosses mid-block, or there are visibility concerns for frequently used branded trails. This may include signage or standard striping. It is recommended that entrances to neighborhoods include crosswalk striping where there is a trail crossing.

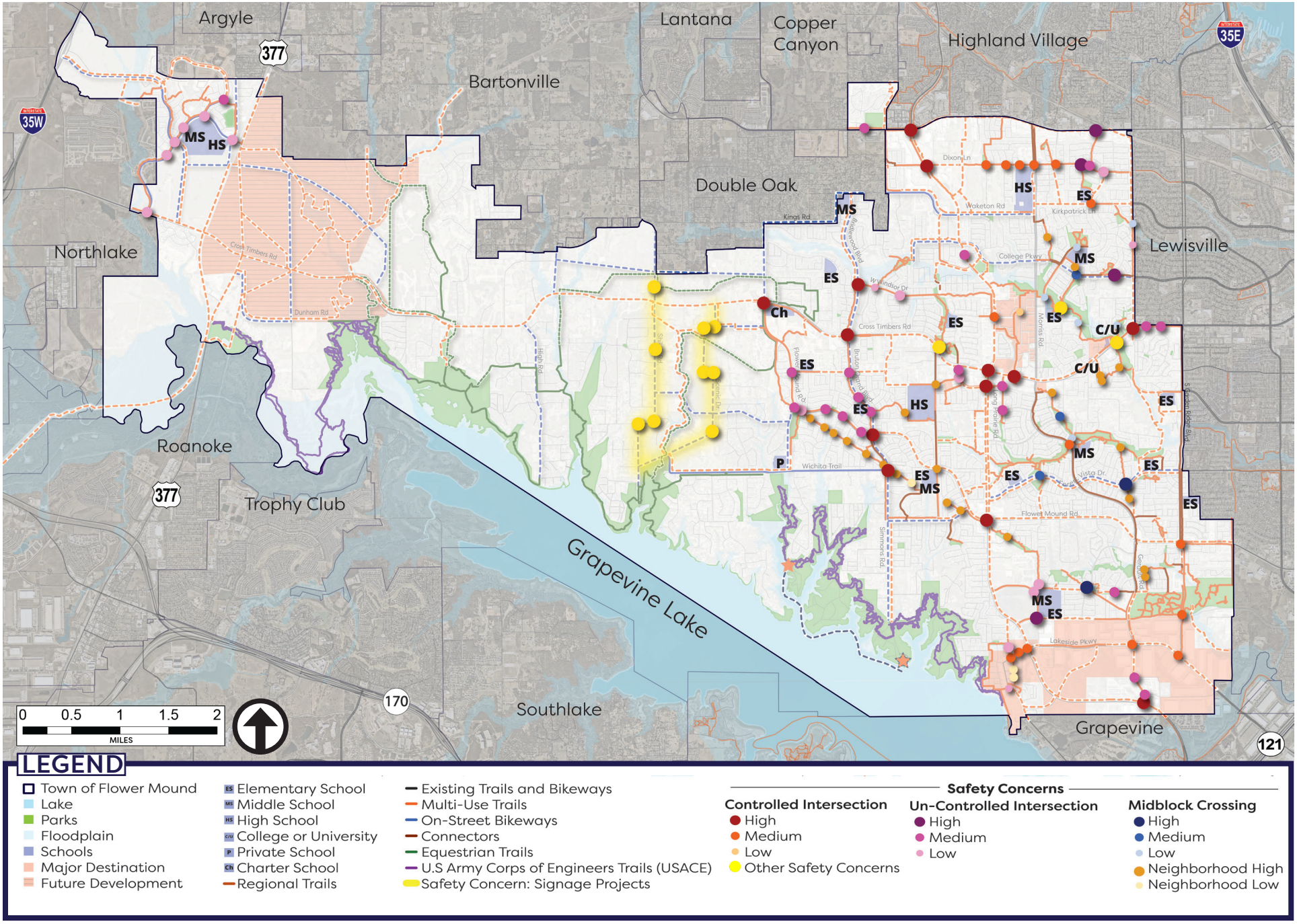
BLIND SPOTS AND OTHER SAFETY CONCERNS

Blind spots exist where a trail makes a 90 degree or extreme curve where trail users cannot see around the curve. This creates conflict points between different users.

Routine maintenance is needed along the existing trail system to ensure there are not drop-offs or slope issues which create an unsafe atmosphere. This includes the removal of vegetation that may encroach onto the surface of a trail or overhang the trail creating clearance hazards. This also includes cracks, uneven trail surfaces, or drop-offs.

Other safety concerns include enhancing signage along highly used bicycle routes to alert drivers of potential conflicts along Shiloh Road and Scenic Drive. Temporary measures such as enhanced signage can be implemented for a relatively low cost in the near term, while the reconstruction of the road may be a longer-term action.

FIGURE 4.7: SAFETY CONCERNS



Design Guidelines Toolbox
Using the Toolbox



05 TRAILS & BIKEWAYS DESIGN STANDARDS



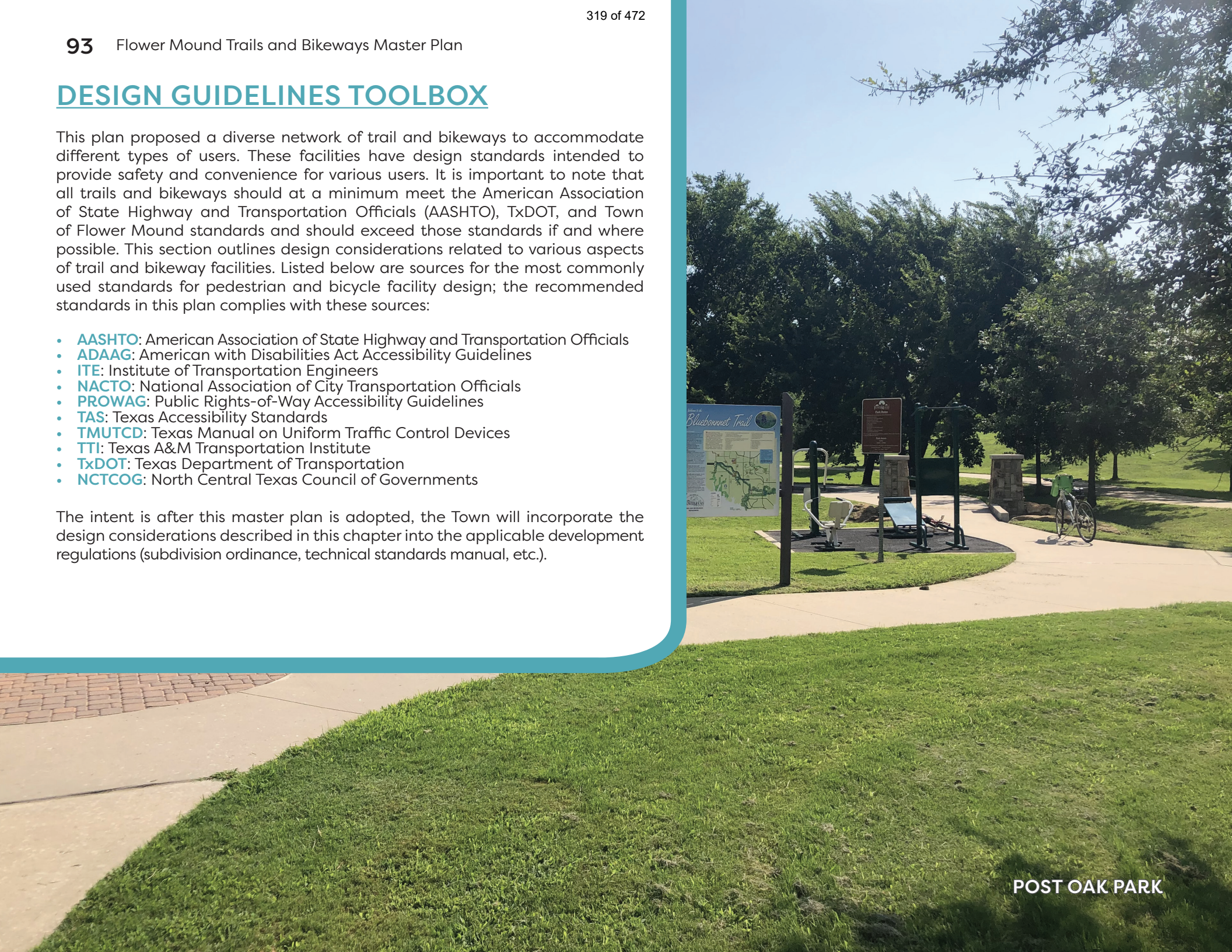
HERITAGE PARK NATURE TRAIL

DESIGN GUIDELINES TOOLBOX

This plan proposed a diverse network of trail and bikeways to accommodate different types of users. These facilities have design standards intended to provide safety and convenience for various users. It is important to note that all trails and bikeways should at a minimum meet the American Association of State Highway and Transportation Officials (AASHTO), TxDOT, and Town of Flower Mound standards and should exceed those standards if and where possible. This section outlines design considerations related to various aspects of trail and bikeway facilities. Listed below are sources for the most commonly used standards for pedestrian and bicycle facility design; the recommended standards in this plan complies with these sources:

- **AASHTO**: American Association of State Highway and Transportation Officials
- **ADAAG**: American with Disabilities Act Accessibility Guidelines
- **ITE**: Institute of Transportation Engineers
- **NACTO**: National Association of City Transportation Officials
- **PROWAG**: Public Rights-of-Way Accessibility Guidelines
- **TAS**: Texas Accessibility Standards
- **TMUTCD**: Texas Manual on Uniform Traffic Control Devices
- **TTI**: Texas A&M Transportation Institute
- **TxDOT**: Texas Department of Transportation
- **NCTCOG**: North Central Texas Council of Governments

The intent is after this master plan is adopted, the Town will incorporate the design considerations described in this chapter into the applicable development regulations (subdivision ordinance, technical standards manual, etc.).



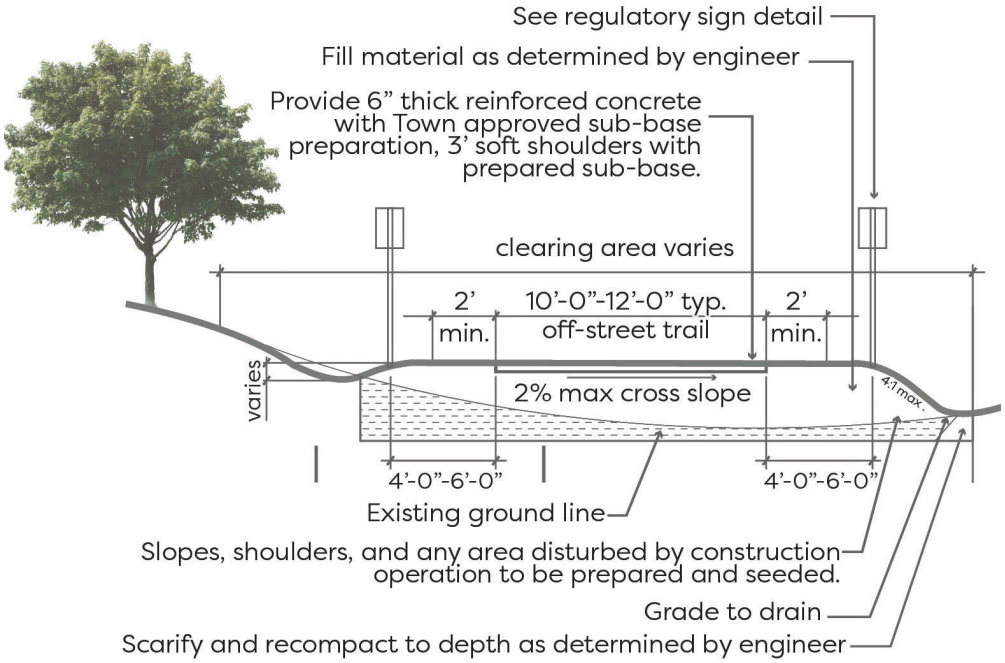
POST OAK PARK

PAVED MULTI-USE TRAILS

Paved multi-use trails include trails located off-street and adjacent to the roadway. This first section outlines design features for paved multi-use trails:

- Utilize guidelines to protect existing natural features along the trails. Canopy trees should be protected where feasible, and natural drainage patterns should be supported to reduce any impacts to the existing water systems. They should follow the natural topography.
- Alignment of trails should provide visual and experiential diversity. Extreme curves or long straight segments should be avoided where possible, except where tree preservation or other obstructions necessitate such an alignment.
- Intersections with trails and roadways should be located where sight lines are not obstructed, trail users are clearly visible, and should occur in locations that are strategic and necessary for the circulation of the trail system.
- Trails should align with all crosswalks and incorporate accessible ramps that meet the ADAAG, PROWAG, and TAS standards.

FIGURE 5.1: TYPICAL TRAIL CROSS-SECTION



TRAIL WIDTH

Paved multi-use trails include existing and future Town trails as well as Veloweb trails. While the existing trails mainly are 8', where feasible they should be widened to 12'. All newly constructed multi-use trails should be a minimum of 12' in width, unless there are existing ROW constraints, then 10' may be considered. Figure 5.1 illustrates a typical off-street trail cross-section.

As discussed in previous chapters, there are several gaps that exist in the existing trail system. Where a gap in the trail system is being filled, the Town should reserve the right to determine the required width to fill the gap in the system based on the following criteria. All trail segments do not have to meet all the criteria, the Town has the ability to determine feasibility on a case-by-case basis.

- Distance of the gap to be filled, for example it may not make sense to have a 100' stretch of 12' trail when the adjacent segments are 8'.
- Available right-of-way or easement constraints.
- Location of existing utilities and the inability to relocate them.
- Presence of environmentally sensitive resources.
- Other property constraints, such as existing infrastructure.
- Signage constraints.



PAVEMENT STRUCTURE

Paved multi-use trail pavement should be six inches thick reinforced concrete with a heavy broom finish. Expansion joints should be placed in the trail at an interval of 40' for 10' wide trails and 50' to 60' for 12' wide trails. Expansion joints should be topped and sealed with a self-leveling elastomeric joint compound and should be flush with the top surface of pavement on both sides of the joint. Control joints should be placed at intervals equal to the trail width and the depth should be one-fourth of the pavement thickness. The joints should be saw-cut and 1/4" wide. In order to provide the most user comfort, the finished surface of trails should not vary more than 1/4" from the lower edge of an 8' long straight edge when laid on the surface in any direction.

INTERSECTION TREATMENTS

Proper intersection treatments are important to reduce potential conflicts between trail users and motorists. In order to reduce crossing distances, improve visibility, and properly align curb ramps, the turning radii should be designed as tightly as possible.

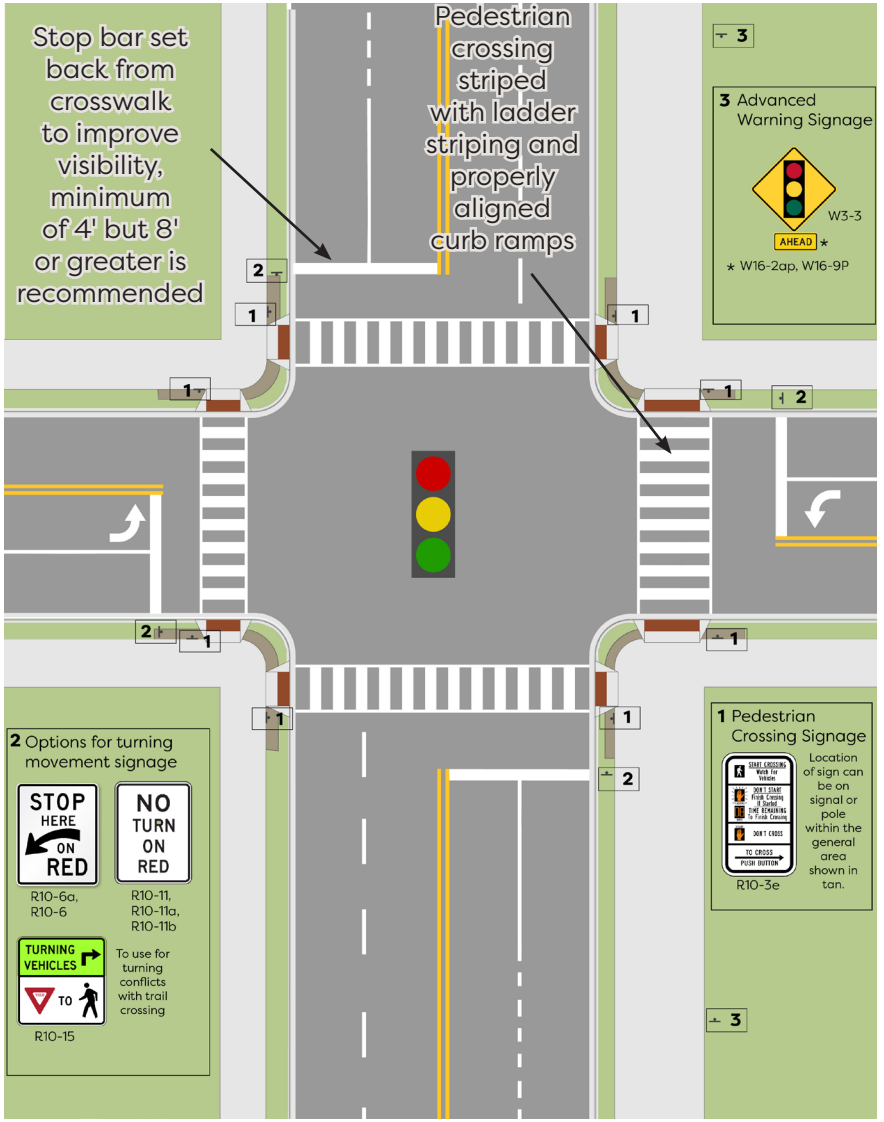
Trail crossings should include the appropriate signage, crosswalk markings, and pedestrian signals as generally depicted in Figure 5.2. An alternative, more expensive option for crossing roadways is to construct a pedestrian bridge or tunnel to provide a fully separated roadway crossing experience without conflicts from automobiles. There are several examples of trail underpasses in Flower Mound today that avoid an at-grade crossing for trail users.

Additional intersection crossing considerations are provided later in this section.



RECTANGULAR RAPID FLASHING BEACONS AND MEDIAN REFUGE ISLANDS ENHANCE SAFETY AT UNSIGNALIZED INTERSECTIONS

FIGURE 5.2: TYPICAL SIGNALIZED INTERSECTION TREATMENT



**The signage provided are examples and may not be a full list of available options, actual design shall comply with TMUTCD, Town, and other approved guidelines.*

EASEMENTS

When a trail is located away from a roadway, such as in a utility easement or adjacent to natural features, a 50' minimum easement is required. This is to ensure there is enough room to align trails away from creeks where erosion could impact the usability of the trail. For trails adjacent to a railroad, an easement of 20' outside of the railway foul zone, or 25' from the nearest track center line, is needed to ensure there is enough room for track maintenance.

TRAIL CLEARANCE

Vertical Clearance

Vertical clearance refers to the area above a trail that is to remain clear from obstructions. The recommended vertical clearance over a trail is 10' or higher; this height accommodates maintenance, patrol, and emergency vehicle access. All underpasses and tunnels should be a minimum of 8' in height and where there are vertical clearances less than 10', warning signage should be posted. In order to meet clearance standards for safety and visibility along trails, tree removal or pruning may be necessary in some areas. The trail evaluation section in Chapter 3 identified areas along existing trails that need to have vegetation scaled back; some of these areas are along trails that are not maintained by the Town so coordination with the HOA or other entity is needed.

Horizontal Clearance

The recommended horizontal clearance is the area on each side of the trail to remain free of obstructions. This area enhances the aesthetics, function, and safety for trail users. The desired horizontal clearance is two feet to five feet on each side of trail for heavily used trails. When a trail is adjacent to a roadway, the greatest separation in the form of a landscaped buffer, should be provided between trail users and vehicular travel lanes, where space exists. According to AASHTO, a five foot buffer from the trail facility and the roadway is recommended for optimum user comfort and safety.

Visual Clearance

Trails should be designed to prevent blindspots. Blindspots create conflicts between users, creating safety concerns. Where blindspots and blind curves exist, the trail should be widened or relocated, striped, and signed to provide the greatest awareness of oncoming trail traffic. Advanced warning can improve awareness and reduce potential conflicts.

OTHER CONSIDERATIONS

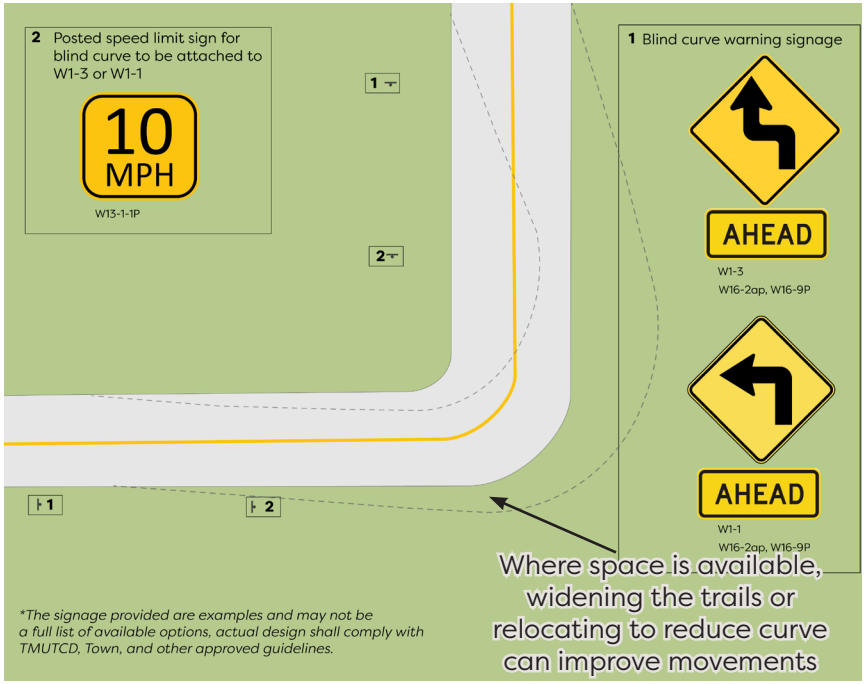
Design Speed

Design speed refers to the preferred speed of the fastest common user, so on multi-use trails, that would be an experienced cyclist. For paved multi-use trails, a minimum design speed of 20 mph should generally be used if the trail grade is less than 5 percent slope. In areas where strong prevailing winds exist or the trail grade exceeds 5 percent, a trail design speed of 30 mph is recommended.

Trail Drainage

Trail drainage should be designed to have adequate drainage away from the trail to mitigate flooding and debris after rain events. This requires the cross-slope of areas adjacent to trail shoulders to have at least a 2 percent minimum slope away from the trail and for the trail surfaces themselves to have a cross slope of 1 percent. Greater cross slope along the trail can make it difficult for some users to safely navigate the trail.

FIGURE 5.3: TYPICAL BLIND CURVE DESIGN



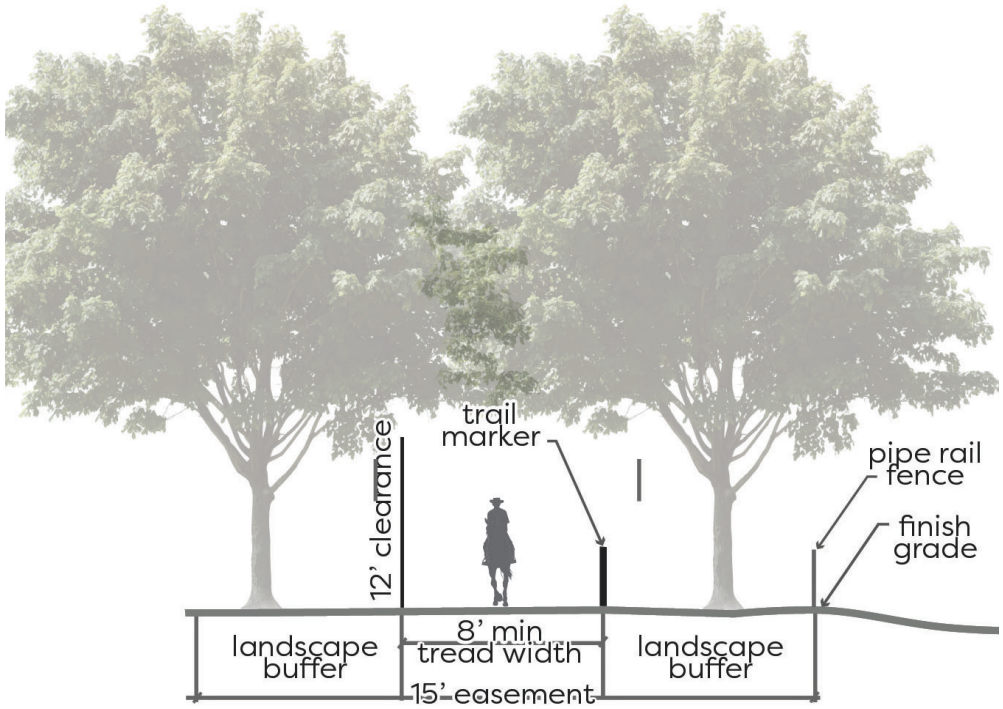
SOFT SURFACE TRAILS

EQUESTRIAN TRAILS

Equestrian trails are designed to provide outdoor experiences to people on horseback in rural or urban settings. Trails should be designed to be comfortable for users and provide space and buffers for multiple users, regardless of location. They should create safe loops with variety of amenities to ensure they are usable and safe.

In Flower Mound, the Town maintains several miles of equestrian trail and there is additional mileage located on the USACE land by Grapevine Lake. The recommended design considerations in this section only refers to the equestrian trails maintained by the Town.

FIGURE 5.4: TYPICAL EQUESTRIAN TRAIL CROSS-SECTION



Equestrian Trail Widths

Equestrian trails should be a minimum of 8' within a 15' easement. The trail surface within the easement should be a minimum of 8' in width, this provides space for passing. The vertical clearance for equestrian trails should be 12' to allow for space for a person on horseback. Trees may need to be pruned or removed in some cases to meet vertical clearance requirements

Surface Materials

Trails should generally be native materials, such as compacted dirt. In rural and preserve settings, they may include rivers or creek crossings, hills, woods, and other natural features. In urban areas, where multiple users are intended, the trails may be more compact, and comprised of crushed granite, dirt, or other accessible surfaces.

Amenities

Amenities along the trail may differ based on the intended purpose and user of the trail. If the trail is designed to be challenging and provide jumps, they may be offset from the trail to allow for more novice users to not encounter obstacles. Trails should also be marked by trailheads, provide adequate parking for vehicles and trailers, and informational signage with information about trail length, amenities, and etiquette. Posts should be provided to allow for the temporary tie up of horses.



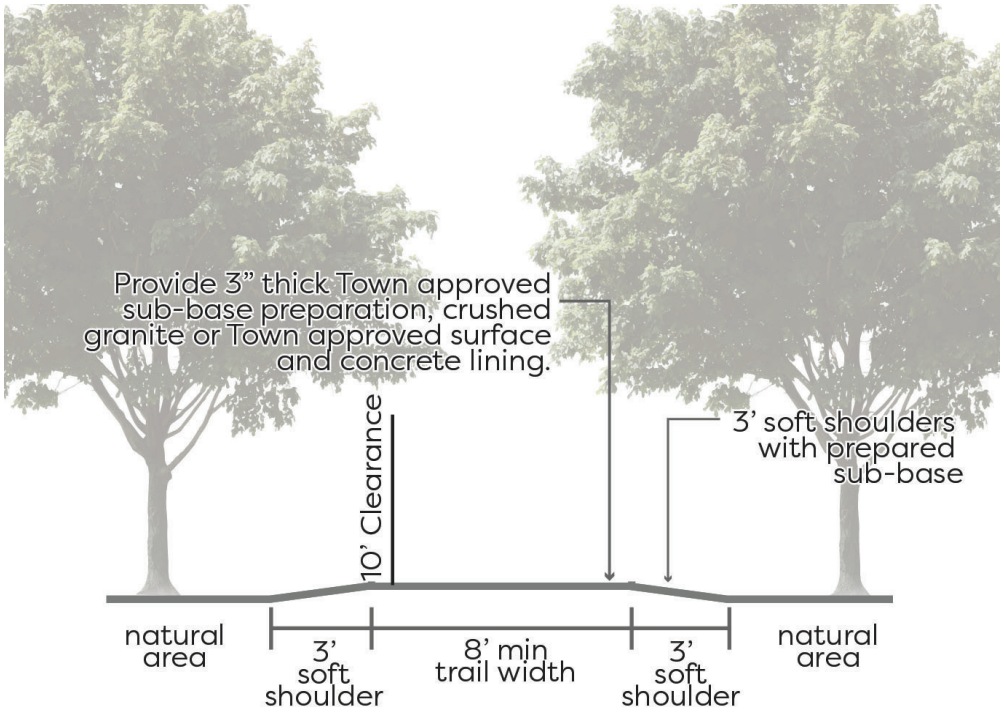
OTHER SOFT-SURFACE TRAILS

Other soft-surface trails may include natural trails through nature preserves, such as the USACE trails along Grapevine Lake, and town maintained soft-surface trails through parks and adjacent to roadways. Soft-surface trails are typically designed for hikers, mountain bikers, and equestrian users. Soft surface trails maintained by DORBA do not have provided standards.

Town Maintained Soft-Surface Trails

Town maintained soft-surface trails should be a minimum of 8' in width. They should include a clear zone of at least 3' on each side and a vertical clearance of at least 10' in height. Trees may need to be cut down or pruned to ensure proper vertical clearance. The trails should be a firm, stable surface such as decomposed granite. In order to maintain form, the trail should be lined by concrete, metal, or a similar hard lining.

FIGURE 5.5: TYPICAL SOFT-SURFACE TRAIL CROSS-SECTION



ON-STREET BIKEWAYS

Two types of on-street bikeways are identified on the recommended network: bike lanes and shared-use lanes. This section outlines key considerations for each type of facility in order to:

- Determine appropriate facility types based on roadway travel speeds, traffic volumes, available pavement widths, and roadway functional classification.
- Identify continuous bicycle routes through high demand corridors to provide connections throughout the Town and to adjacent communities.
- Provide guidance on pavement markings, signage, or a combination along identified and future routes to communicate safety procedures and provide wayfinding.



BIKE LANES

Bike lanes are a portion of the travel lane marked for the exclusive use by people on bicycles. This space is separated from travel lanes by striping and signage. Benefits of bike lanes include: enabling people to ride at a constant speed; making bicycles and their space physically visible; and, encouraging people on bicycles to use the street rather than sidewalks where the conflicts with pedestrians are greater. Bike lanes are typically implemented on roadways with relatively higher speeds and traffic volumes.

Width

Width is important to consider when designing your system. The minimum width for a standard one-direction bike lane is 5' from the face of curb or on an open shoulder to allow people on bicycles to be far enough from the curb to avoid debris and drainage grates.

Bike lanes can either be standard bike lanes or separated bike lanes as shown in Figures 5.6 and 5.7. Standard bike lanes have a painted stripe that separates the bicycle traffic from vehicles while the buffered bike lanes have a minimum 3' painted or physical buffer between the bike lane and the travel lane. A physical buffer can include bollards, planters, zebra cycle protectors, or similar barriers, and should be spaced at regular intervals to prohibit automobiles from entering the protected bike lane.

Markings

Markings should follow the TMUTCD, including a one-way directional arrow, bike lane marking, and a solid white stripe. They should be placed at regular intervals in accordance with guidance from the TMUTCD, AASHTO, and NACTO. Where a buffer exists, additional striping is needed, reference Figure 5.7. When the bike lane is between on-street parking and vehicular travel lanes, the lane should be lined on each side with a white stripe so vehicles that are parking are aware of the boundaries.

Signage

Signage required for bike lanes include those that state the bike lane is for cyclist use only. 'Bike Lane' signs should generally be provided adjacent to lane markings but not at all markings to avoid overuse, unless otherwise noted by national or Town standards. Signage, along with the pavement markings, can improve visibility and awareness of people on bicycles for motorists.

FIGURE 5.6: TYPICAL STANDARD BIKE LANE

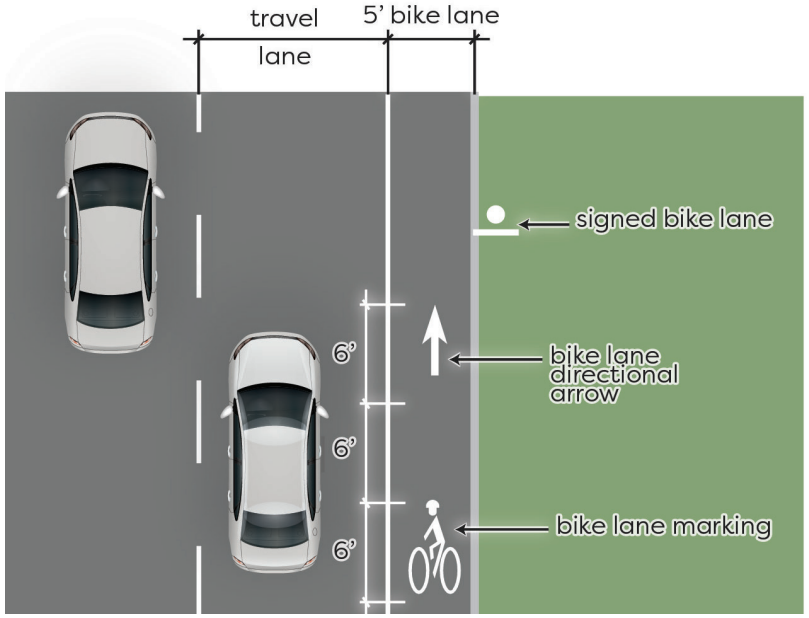


FIGURE 5.7: TYPICAL BUFFERED BIKE LANE

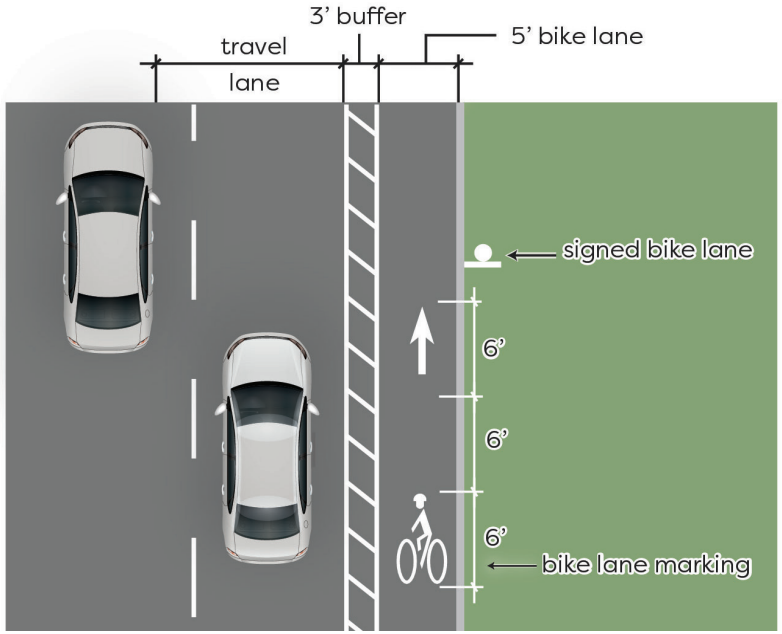
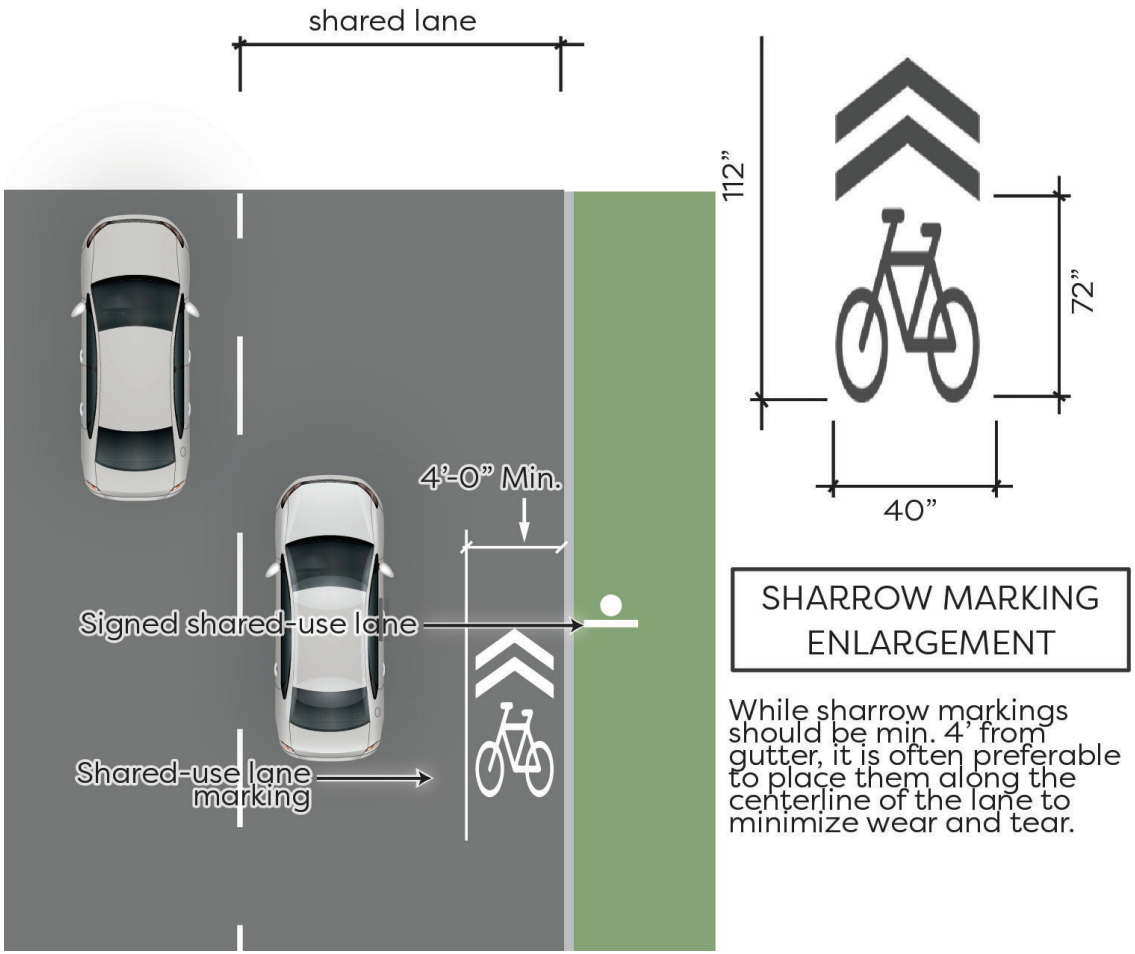


FIGURE 5.8: TYPICAL SHARED-USE LANE



SHARED-USE LANES

Shared-use lanes are when a lane on a street is designed for both drivers and people on bicycles. The designation is usually shown by pavement markings and/or signage. This accommodation is typically used on a street with relatively low travel speeds (less than 35 mph) and relatively low volumes since there is no physical separation between the cyclists and motor vehicles.

Roadway Lane Width

Bike lane width that supports shared-use should meet or exceed 14', not including the curb and gutter where they exist. If the lane is less than 14', then cyclists may ride in the middle of the lane. If the lane is 14' or greater, state law dictates that the cyclist must ride near the curb.

Shared-Use Markings

Shared-use lane markings should be located a minimum of 4' from the curb on roadways without on-street parking and a minimum of 5' from the outside of the parking lane on roads with on-street parking. Markings should occur immediately after intersections and at intervals of not greater than 250' unless otherwise required by the Town.

Signage

Signage should be provided along shared-use lanes. Required signage includes 'Share the Road' and 'Bicycle May Use Full Lane' signs, which alert motorists that they may encounter people on bicycles and encourage respectful shared use of the roadway.

Signed Route Considerations

Signed route considerations for residential streets with low speeds and low volumes should have signage without accompanying pavement markings. This would include 'Share The Road' and 'Bicycle May Use Full Lane' signage.

BIKEWAY INTERSECTION TREATMENTS

Intersections are the point where multiples modes of transportation meet, facilities overlap, and should be designed in a safe and efficient matter. At a minimum, intersections should clearly imply how to navigate the intersection for all users through signalization, pavement markings, aligning turning movements, and providing logical routes. Intersection treatment best practices are discussed below.

Bike Boxes

Bike boxes can be used at intersections where there is not enough width to continue a separate bike facility and a designated right-turn lane. An example of bike box configuration and pavement markings are shown in **Figure 5.9.** Bike boxes are defined spaces at the head of signalized intersections which provide safe, comfortable, and visible spaces for people on bicycles at intersections. To effectively communicate the purpose of the bike box, appropriate signage and pavement markings are required.

An ingress lane within the bike lane, defined by colored pavement, should be provided as cyclists approach the bike box at intersections. Change in pavement color alerts riders of approaching intersections and community cyclists' priority to motorists. Signage such as 'Stop Here on Red', 'Yield to Bikes' and 'No Turn on Red' are examples of informative signage directing users how to share the roadway at these types of intersections.

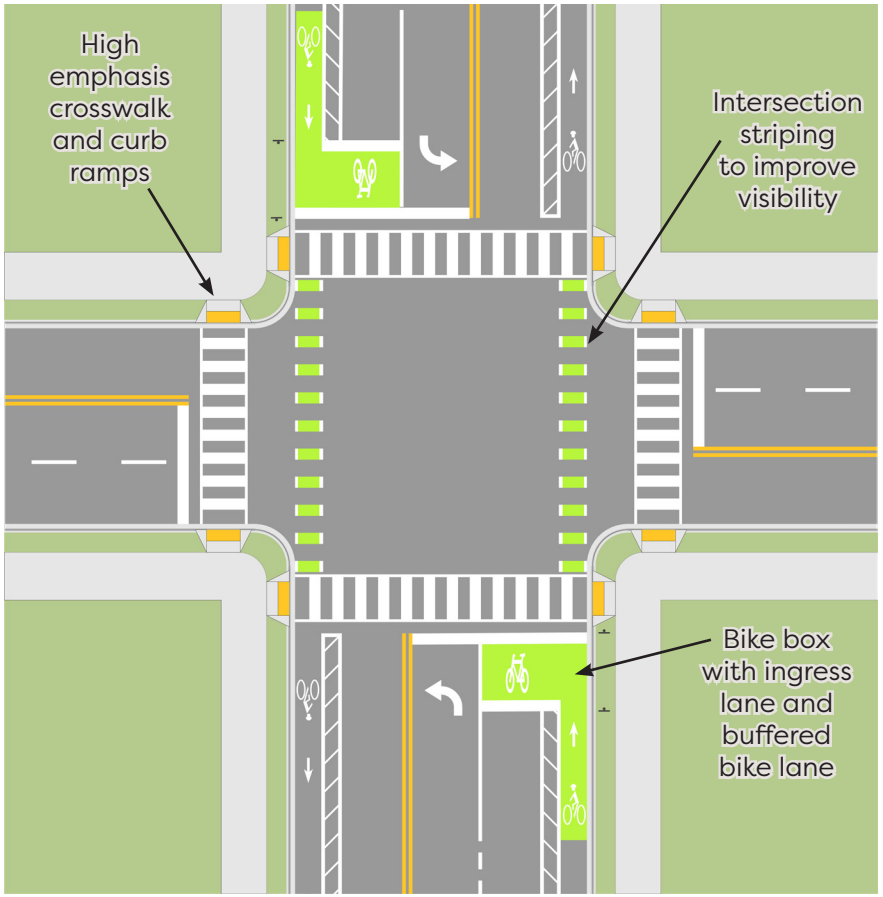
Driveway Crossings

Driveway crossings may include additional elements such as color, signs, signalization, and pavement markings. Continuing marked bicycle facilities at driveway intersections ensures that separation, positioning, and awareness is maintained through the intersection conflict areas.

OTHER CONSIDERATIONS

On-street bikeways should be safe and usable; they should have a smooth surface, uniform width, and should be free of encroachments and bumps such as utility lids, wide cracks, and longitudinal joints. Grates should be bicycle-safe without longitudinal openings to avoid tires being stuck. The use of uneven surfaces such as brick, pavers, or stamped concrete is not recommended along on-street bikeways.

FIGURE 5.9: TYPICAL BIKE BOX TREATMENT





PADDLING TRAILS

A well-designed paddling trail network should include consistent signage and branding, various launch points, and amenities for users of various skill levels, interests, and comforts.

LAUNCH POINTS

Launch points should take into consideration cost, topography, and accommodate expected volume of users. Launch points can be unimproved locations on shallow beaches or easily accessible creeks. Using this type of launch point can increase access quickly, however, may lack formal amenities that draw users to the site, such as parking and restrooms. More formal launch points can also be installed where there are existing motorized boat launches, however, special consideration should be given to the location of these launches to best reduce conflicts between paddle users and motorized boats. An informational kiosk should be provided at all launch points. Each kiosk should include information regarding waterway conservation, ethics, route guidance (including length and difficulty), and rules for paddling. Signage directing people to the launch points should be provided to increase awareness of the facility.

SIGNAGE/MARKERS

Signage and markers are important for a waterway system. Signage should guide paddle trail users, provide information for all waterway users to inform them of potential conflicts, and guide people on the water to other launch points and destinations. Signage at launch points can provide safety information, encourage the use of personal flotation devices, and provide emergency information. The TPWD has paddling trail markers that can be installed along the route. Trail markers can be installed on posts along the shore, or in the water attached to buoys.



TPWD PADDLING TRAIL TYPICAL SIGNAGE

Image Source: Texas Parks and Wildlife

CONNECTORS

As presented in Chapter 4, connectors are sidewalks that fill a gap in the trail network where limitations for a wider facility exist. This section describes the design objectives for pedestrian facilities, such as connectors, including:

- Location of the sidewalk to be within or parallel to the right-of-way within a pedestrian easement, with a buffer from vehicular traffic, preferably at least 2' wide.
- Crossings at intersections should be a priority consideration to improve safety and reduce potential conflicts.
- ADA compliant ramps shall be placed at intersections, driveways, and roadway crossings.

WIDTH

Connector width is important when designing Town Connectors. Because connectors are used to improve system connectivity and higher pedestrian volumes are anticipated, the desired width is 8'. The minimum acceptable width for a connector is 6' where there are existing constraints such as rights-of-way or utilities. All new connectors and improvements to existing connectors should be widened to the greatest extent possible.

INTERSECTION TREATMENTS

Intersection treatments are needed to ensure safety at conflict points. It is recommended that pedestrian crossings at roadway intersections and driveways be designed in a manner that reinforces the right-of-way of pedestrians and prioritizes their safety. To reduce conflicts at intersections, the corner radius for a 90-degree intersection should be designed to be as tight as possible. Curb extensions can better align crossings at intersections, force vehicles to make slower turns by reducing turning radii, and improve visibility for pedestrians crossing the street.

STANDARD PEDESTRIAN CROSSINGS

Standard pedestrian crossings use a combination of pavement markings, signals, and accessible ramps to cross intersecting streets with two-way traffic. Highly visible 'zebra' pavement striping is recommended as they better alert motor vehicles to yield to pedestrians. Routine maintenance of the crosswalk striping is recommended to ensure they are visible.

ENHANCED CROSSWALKS

Enhanced crosswalks may use a combination of pavement markings, pavement materials, mid-block crossing islands, and pedestrian signals such as rapid flashing beacons or pedestrian hybrid beacons to increase driver awareness of pedestrian activity and increase comfort of walkers.

DRIVEWAY CROSSINGS

Driveway crossings along major and minor thoroughfares should be designed to provide safety for pedestrians. Sidewalks and sidepaths should be set back from the back of curb at a sufficient distance to avoid crossing driveway aprons to maintain existing cross slopes and meet ADA accessibility standards. The Town should evaluate its driveway spacing and access management standards in order to improve the pedestrian realm and reduce conflicts between pedestrians, bicyclists, and motor vehicles.



INTERSECTION CONSIDERATIONS

A well-designed intersection facilitates the movements in a safe and efficient manner. Conflicts between users should be reduced by heightened visibility, denoting clear roadway use through signage and pavement markings, and by ensuring users are aware of each other.

MEDIAN REFUGE ISLANDS

Median refuge islands are protected spaces positioned in the center of the roadway used to facilitate bicycle and pedestrian crossings by having an additional protected stop when crossing at an intersection. This treatment is most appropriate for roadways with higher volumes, faster speeds, and wider pavement widths. Median refuge islands reduce crossing lengths, increase visibility of crossing movements, calm traffic through physical design, and prioritize crossing movements. Medians should be a minimum of 6' in width, be well lit, and if any vegetation is included it should be low to maintain visibility. Median refuge islands are preferred at signalized intersections, however they can also be a treatment for mid-block crossings.


MEDIAN REFUGE ISLANDS

CURB RAMPS

Curb ramps shall be designed for the use of mobility devices (including scooters, walkers, and crutches), provide direction and guidance for roadway crossings, and meet all ADA, TAS, and PROWAG standards. One curb ramp should be provided for each crosswalk, which usually translates to two per corner, and one on each side of the crosswalk. This provides direction and reduces crossing distances as opposed to when there is one crosswalk per corner. Curb ramps shall be sloped to provide a smooth transition from sidewalk to crosswalk. In some cases, curb extensions can be installed to better align crosswalks, reduce crossing distances, and slow turning movements for vehicles.


CURB RAMPS

TRAFFIC CONTROL SIGNAGE

Traffic control signage should indicate crossing features for all roadway users based on guidance from the TMUTCD. Signage should be highly visible and capture the attention of all users approaching the crossing area. Intersections can be further enhanced by flashing beacons, pavement markings, or change in pavement material. It is important to note that placing too many traffic control devices at one crossing can be overwhelming and may result in the loss of impact.

CROSSWALKS

Crosswalks should be clearly marked and highly visible. Where a crosswalk is signalized, leading pedestrian signals and longer walk signal times can improve accessibility for pedestrians. To minimize conflicts, other pedestrian crossing tools can include exclusive only left-turn phases, prohibiting right turns on red where sight lines may be reduced or where a leading pedestrian interval is used, and signage to remind drivers to yield to pedestrians. Intersections can include raised crosswalks to slow vehicles and improve visibility of pedestrians. Additional considerations shall be included for pedestrians that are visually or hearing impaired. Implementing elements such as Accessible Pedestrian Signals (APS) with integrated audio devices, detectable warning surfaces, and flashing lights can aid in creating a safe and comfortable pedestrian crossing environment.

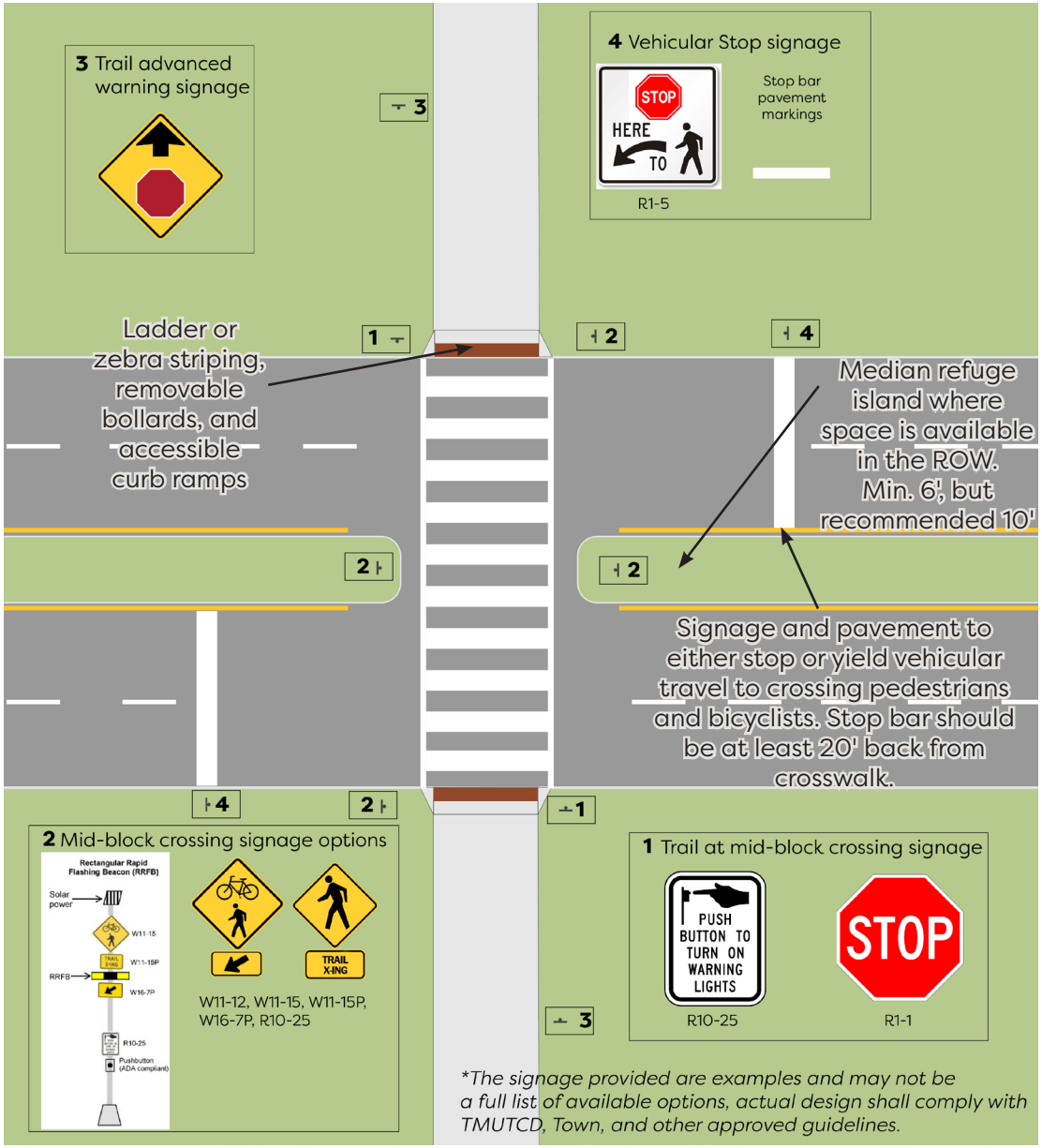
MID-BLOCK CROSSINGS

Where a trail crosses a roadway, not at an intersection, special consideration should be given to inform drivers that someone may cross the road. Figure 5.10 shows typical treatments for mid-block crossings, including rectangular rapid flashing beacons (RRFB), pavement markings, and signage. Local roads may not require a RRFB due to lower roadway speed and volumes. In some cases, the mid-block crossing area can be raised in order to provide a flat crossing surface and slow automobiles at the crossing area.

RECTANGULAR RAPID FLASHING BEACONS

Rectangular Rapid Flashing Beacons (RRFB) are highly visible traffic control devices that help alert motor vehicles of mid-block crossings. RRFB's include rectangular lights that flash at an irregular pattern when pressed by pedestrians crossing the street. These lights are positioned below a crossing sign and above a crosswalk arrow. The sign is pedestrian activated, typically by using a push button. The crossings can be accompanied by advanced signage and stop lines on each side of the intersection to alert drivers to the upcoming mid-block crossing.

FIGURE 5.10: TYPICAL MID-BLOCK CROSSING



TRAIL FEATURES

Trail features can enhance the overall user experience of a trail. This includes improved access, signage, and amenities to support users along the trails. This section details trail amenity features to be considered when designing trails throughout the town. The Parks and Recreation Department will need to determine the placement of each amenity type throughout the network based on the intended goals of each trail.

TRAILHEADS

Trailheads are located at key entrances to the trail system allowing users to access a trail, including within community parks and major destinations. Features typically found at a trailhead include:

- Parking: A minimum of 10 spaces for major trailheads and five spaces at minor trailheads. Shared parking should be encouraged where appropriate. All parking areas shall meet ADA requirements.
- Restrooms are appropriate at major trailheads.
- Informational Signage should include a larger kiosk with a map, rules and regulations, and contact information.
- Lighting promotes safety and accessibility.
- Amenities should be provided at all trailheads, such as benches, trash receptacles, bike racks, drinking fountains, and bike repair stations.

The typical trailhead amenities described here are appropriate for enhancing existing trailheads as well as to guide required amenities for future trailheads. Figures 5.11 and 5.12 show how major and minor trailheads can be designed.

TRAIL ACCESS POINTS

Trail access points are locations along an off-street trail where users can access the trails system. Access points can be found at parks, intersections, or minor destinations. Typically, they consist of a brief, paved spur that connects to an existing sidewalk. Trail markers and directional signage should aid users in wayfinding. Additional amenities at access points are not required.

TRAIL SIGNAGE

The trail network should be identified by consistent signage. Branding is covered in more detail later in this section.

FIGURE 5.11: EXAMPLE MAJOR TRAILHEAD

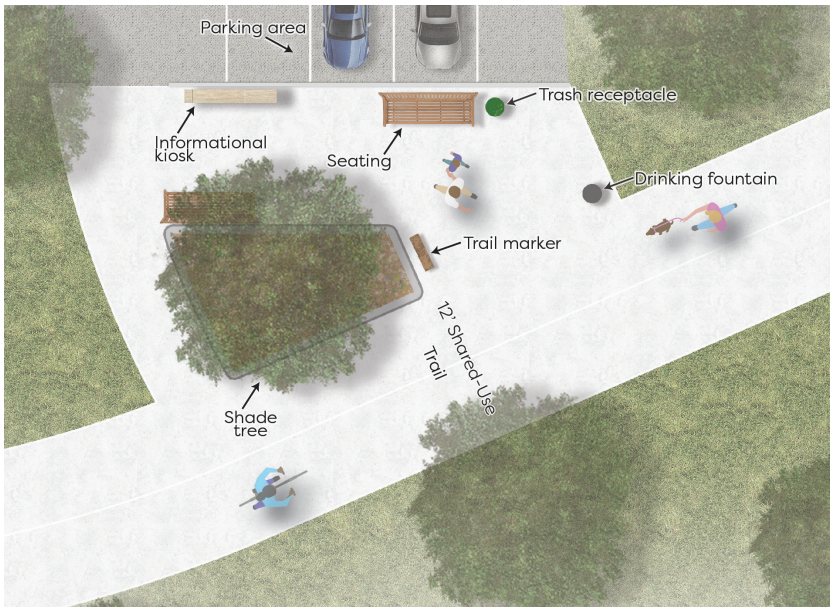
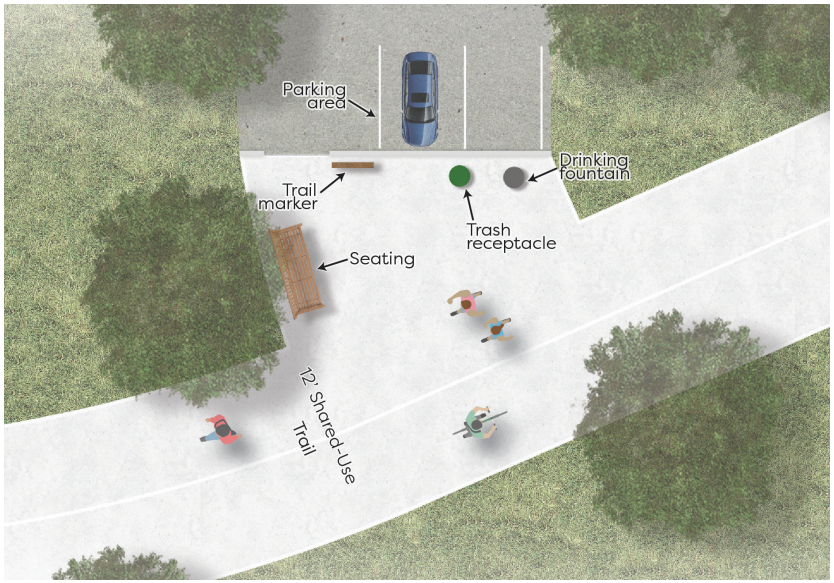


FIGURE 5.12: EXAMPLE MINOR TRAILHEAD



TRAIL AMENITIES

BIKE RACKS

Bike racks allow trail users to safely secure their bicycles while stopping at destinations along the trail, such as parks and entertainment centers. Bike racks should be located at trailheads and where the trail intersects with key destinations.



BIKE REPAIR STATIONS

Bike repair stations are self-service stations that include tools to perform basic repairs and maintenance to bicycles, including filling deflated tires or changing a flat tire. Such stations should be placed near bicycle parking found at key destinations like parks, schools, and commercial areas.

PARKING

Parking should be provided at all trailheads, with a minimum of 10 spaces for major trailheads. Providing parking allows residents who cannot walk or bike to the trail network the ability to utilize the trail system. Alternative ADA accessible parking surfaces, such as permeable pavement or pavers can be considered where appropriate for parking areas.



TRASH RECEPTACLES

Trash receptacles improve the overall cleanliness of the trail system. They allow users of the trail to dispose of trash in areas where there is a demonstrated need. Typically, these are found only at trailheads. Pet waste stations should be provided along the trail at regular intervals for the easy disposal and collection of pet waste. These amenities shall be placed so they are ADA accessible.

SEATING

Seating, such as benches, provide respite points along the trails. They should be placed at regular intervals along trails along with other amenities such as hydration stations and trash receptacles. Each bench shall have accessible companion seating outside of the pavement trail.



SHADE

Shade should be provided where possible along the trail to provide comfort and cooling during the summer months. Shade trees should be placed along trails at regular intervals, but it is important that they remain trimmed to maintain at least ten feet vertical clearance from the trail. Where shade trees cannot be placed due to constraints, shade structures can be included near benches, trail markers, scenic viewing points, and other resting places along the trail.

HYDRATION STATIONS

Drinking fountains or water bottle fill stations provide trail users and their pets hydration opportunities while using the trail. Hydration stations should be located at trailheads where there is existing water infrastructure to connect to, such as at parks. Otherwise, there is a risk that the water can become stagnate with little use.

FITNESS STATIONS

Fitness stations placed along trails are particularly useful for joggers and cyclists seeking to stretch, warm up, and cool down before or after a run or bike ride. Similar to those located within a park, a fitness station offers trail users an opportunity to engage with static exercise equipment and further their health goals.



INFORMATIONAL KIOSK


HYDRATION STATION


FITNESS STATION

TRAIL BRANDING

SIGNAGE

Signage is typically provided at trailheads and at key decision-making points along a trail. Signage can mark access points to the trail, provide directional and distance guidance for trail users, direct users to locations of key amenities along the trails, and provide brand recognition of the trail system. Signage can help identify and brand a trail for users. Figure 5.13 represents a systemwide branding concept that can be implemented along trails in Flower Mound to create a consistent look and feel for signage and wayfinding.

FIGURE 5.13: BRANDING CONSIDERATIONS



WAYFINDING

Wayfinding helps trail users identify their location on a trail or bikeway, distance to key destinations, and provides directional and distance guidance for preferred routes. Wayfinding can be provided along trails or bikeways by using TMUTCD approved signage. Wayfinding includes maps, directional signage, trailhead markers, mile markers, kiosks, and digital signage considerations.

Maps

Maps should be included at all major and minor trailheads to help identify the trail network and branded segments.

Directional Signage

Directional signage guides users of the trail system. It provides them with mileage, location information, and directions. These should be placed at trailheads and major trail access points to help guide trail patrons along the trail.

Trailhead Markers

Trailhead markers are located at trail access points. They can also be located where a trail meets a street right-of-way where an access point into the trail system is located. They should include the trail name and intended users of the trail.

Mile Markers

Trail mile markers should be placed at regular intervals along the trail to identify mileage, provide direction, and provide location information for emergency situations. They can help users be informed as to how far they've traveled. At a minimum, trail markers should be installed at every trailhead, trail access point, and trail intersection, however, trail markers should ideally be placed along the trail at ¼ to ½ mile intervals.

Digital Signage Considerations

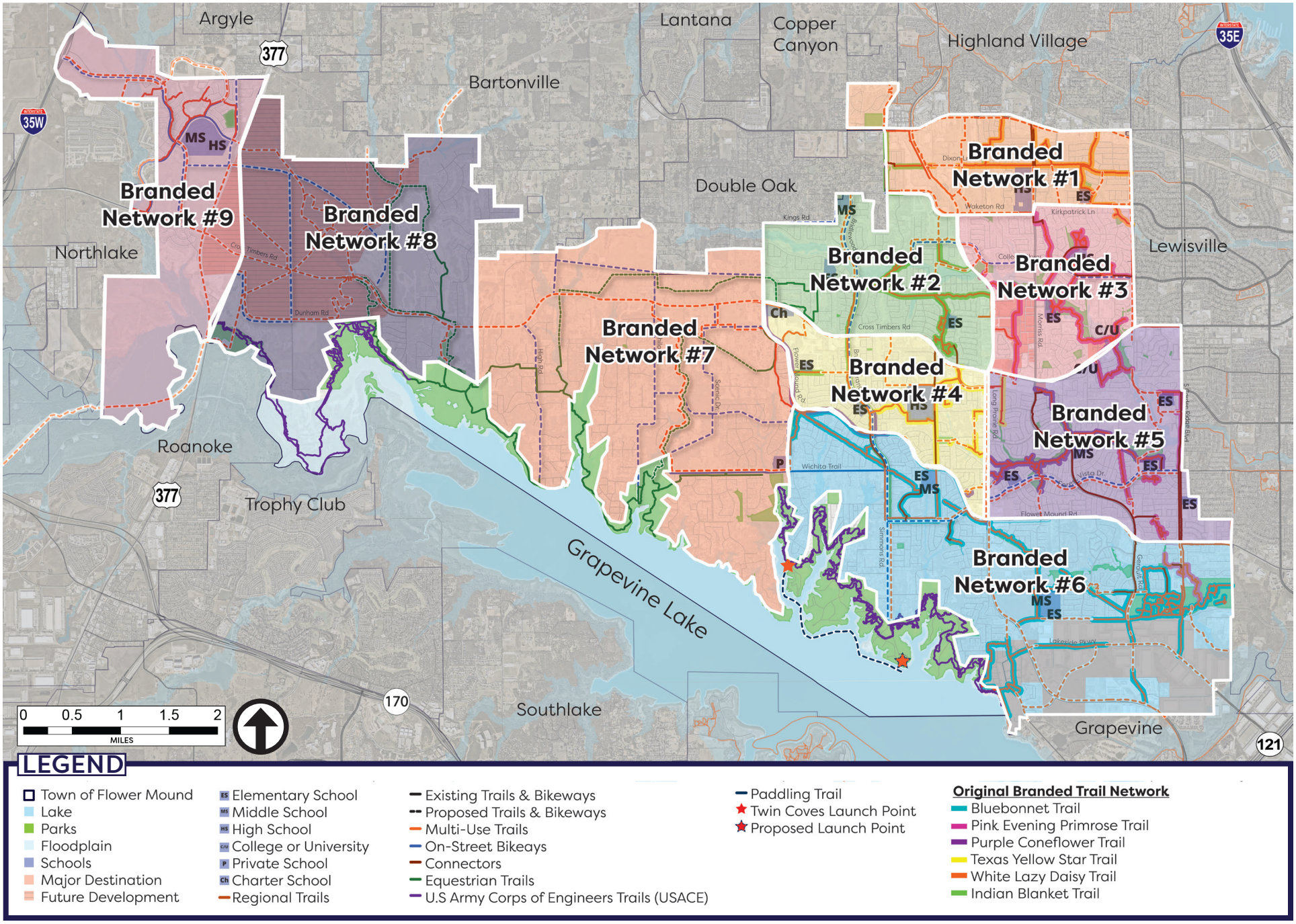
A quick response (QR) code can be included on all signage, which can take a trail user to a website to track where they are located on the trail network. A QR code is a matrix that is readable by a smart phone camera, and is linked to a specific website.



Kiosks

Kiosks can be provided in place of a map at major trailheads. They provide more information for trail users, including: rules and regulations for trail users, information on the trail system, and a map with directional guidance. Kiosks can be used to provide sense of place and safety for trail users.

FIGURE 5.14: RECOMMENDED TRAIL REGIONS OF FLOWER MOUND



FUTURE BRANDING NAMES

The current branding system for the Flower Mound trails system is based on North Texas wildflowers. To help facilitate clear wayfinding while on the trails, Figure 5.14 represents new proposed networks for branded trails in Flower Mound. As Flower Mound grows and more trails are constructed, this will help create clear guidelines into which branded system new trails would fall. These networks are based off of major roadways and geographies. Using this system to identify new branded trail corridors and rename existing ones helps with overall branding and placemaking along each trail segment and maintenance needs.

Additional trail names need to be considered as more trails are constructed in rural and undeveloped areas of the Town.

New branded networks can build upon the Texas wildflower theme. A list of potential trails include:

- Goldenrod
- Winecup
- Sunflower
- Basketflower
- Rain Lily
- Prickly Pear Cactus

Another option for new networks can enhance the nature theme by using plants found in the natural environment. Examples include:

- Texas Sage (shrub)
- Trumpet Vine (vines)
- Post Oak (tree)



RAIN LILY



BASKET FLOWER



SUNFLOWER

SAFETY AND SECURITY

LIGHTING

Lighting is important to consider when designing trails. Properly installing and maintaining lighting along a trail improves safety for trail users at dawn and dusk and in dark spaces such as densely wooded areas and underneath roadway overpasses. Lighting can improve visibility, increase access and convenience, and give trail users a sense of safety when using trails outside of daylight hours. Because nighttime etiquette is not always followed, proper lighting can help to increase visibility of trail users and reduce the likelihood of crashes. AASHTO recommends lighting to be installed in tunnels or overpasses, at trailheads, at bridge entrances and exits, at public gathering places, along streets, at crosswalks, at path intersections, and to illuminate key signage.

BRIDGES & LOW WATER CROSSINGS

Bridges and low water crossings should be designed by a Texas Professional Engineer and meet all Town or State established engineering standards. Low water crossings should not exceed four feet from the path to the waterway flowline unless otherwise approved by the Town Engineer. Any crossing exceeding this separation will require a bridge to ensure the trail meets all accessibility requirements. For creek crossings that require a short span, box culverts can be used with handrails.

TRAIL SAFETY RAILINGS

Safety railings should be provided where there is significant topography changes within five feet of the trail shoulder. The top of the railing should be a minimum of four feet higher than the trail surface. Railing should be horizontal to avoid catching bicycle handlebars and should be constructed in accordance with the latest International Building Code regulations and ADA standards.

WEB BASED TRAIL SAFETY

Web based trail safety is when there is a downloadable smart phone application (app) that can help a resident track their location on the trail system. The app can be used in tandem with trail signage to allow a trail user to identify their location in case of emergency. In addition to the app, QR codes connect users to websites and maps to identify where they are on the trail system. There may be strategic locations to provide wireless internet services for trail users, such as in parks or at major trailheads.



LIGHTING ALONG TRAILS



RAILINGS AND CREEK CROSSINGS

MAINTENANCE

Trails and bikeways shall be regularly maintained to ensure they meet vertical and horizontal clearance requirements, are safe for users, that they are free of debris, and maintain their integrity.

MOWING AND LANDSCAPING

In order to ensure there is no debris or obstructions encroaching on trail surfaces, routine mowing and string trimming is recommended. Removal or "cutting back" of vegetation in the clearance zones is required to maintain a safe environment along the trails.

SOFT SURFACE TRAILS

Soft surface trails shall be maintained regularly to ensure they meet ADA requirements, have a compact surface, and are free from debris and animals, such as snakes. This may need to be done more frequently than for paved trails due to environmental conditions, such as heavy rainfall or high winds.

VOLUNTEER GROUPS

Volunteer groups can be utilized to support the Town's maintenance program. The Town can support “Adopt a Trail” or “Friends of the Trail” groups that help with litter clean-up, tree planting, and raising funds for trail amenities. Trail volunteer groups can help with security patrolling along trails and identify maintenance concerns to Town staff.



VOLUNTEERING GROUP PROGRAMS



SOFT SURFACE TRAILS

USING THE TOOLBOX

UPDATING STANDARDS

The design considerations included in this chapter represent guidance for future updates to the Town's development ordinances. Upon adoption of the overall Trails and Bikeways Master Plan, these recommendations should be codified into the Town of Flower Mound Code of Ordinances and the Design Criteria and Construction Manual where applicable. The ordinances should be updated, including width of sidewalks and trails, and as well as classifications. An audit of the existing regulations can identify other necessary amendments to implement this plan. A brief audit is provided below.

GENERAL ORDINANCES

Chapter 58 - Streets, Sidewalks, and Other Public Places

This section of the general ordinances should be updated to reflect new trail and sidewalk terminology, widths, and design guidance. Replacement standards should include the replacement of sidewalk with new standards or trails where a trail is depicted in the master plan.

LAND DEVELOPMENT REGULATIONS

Article V: Landscaping and Screening

Division 2 - Section 82-232: should include language which allows trail and sidewalk placement within required street landscape buffers to allow greater separation between the trail and roadway, and improve level of comfort for trail users.

Division 5 - Sidewalk width should match the proposed cross-sections.

Chapter 90 - Subdivisions

Article 6 Division 8: Parks and Recreational Areas

Design criteria should be provided for subdivision development to place trails within common open spaces and integrate the trail as a recreational component of the community.

Sec. 90-310 - Culs-de-sac should explore opportunities for residential developments to connect to the trail system where a culs-de-sac terminates in proximity to the trail system.

Sec. 90-311 - Street design standards will need to be updated to ensure there is consistency between the plan, engineering design standards, and Master Thoroughfare Plan.

Sec. 90-443 - Character and minimum dedication will need to reflect the the trail classifications and information from the plan.

Sec. 90-445 - Payment of cash in lieu of dedication references the "primary trail network;" the reference to "primary" should be removed to just state the "trail network". The payment of cash in lieu should be applicable for trails on the primary and secondary trail network.

Sec. 90-449 - Park credit option. It is a recommendation of this plan to require that trails be 10-12' in width. This section references trails being 8' around stormwater ponds, this should be updated.

General Recommendations for the Development Regulations

The development standards should ensure the references to trail types, widths, and design are consistent throughout the different regulations and zoning requirements.

There should be guidance for the development of trails in new residential development. Generally, it is recommended that the trails within new developments be incorporated into the overall design of the community, with the trails being placed generally in open spaces, around stormwater ponds, and within greenways to enhance the user experience and provide separation between trail users and residences. Where feasible, all new developments should connect to the existing or proposed trail network and provide for access points.

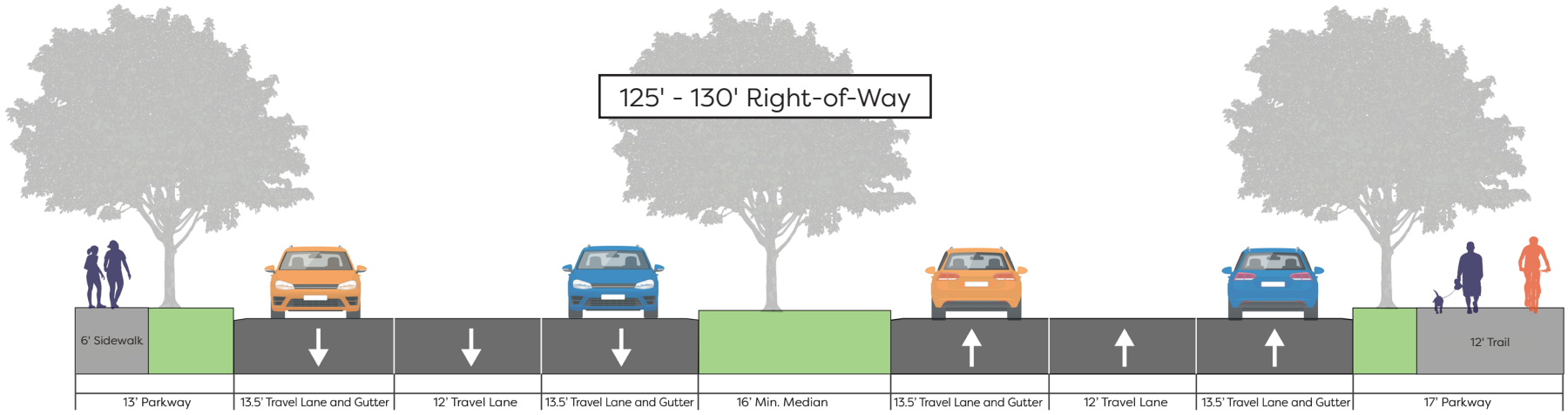
INTEGRATION WITH THOROUGHFARE PLAN

The last major update to the Town Thoroughfare Plan was in 2009, however several minor amendments have occurred since then. The plan specifies a variety of thoroughfare types, each with its own function and typical cross-section. Some of the cross-sections include specifications on the type and width of trail, pedestrian, or bikeway facility, but not all of the cross-sections address these multi-modal facilities. In order to better accommodate trail and bikeway facilities into future updates of the thoroughfare plan, modifications to the roadway cross-sections should be considered. **Figures 5.15 - 5.26,** on the following pages depict possible updates to the cross-sections as they exist today to more fully integrate trail and bikeway accommodations as recommended in this master plan. The following cross-sections are proposed modifications to the cross-sections from the Town Thoroughfare Plan. These recommendations may need to be modified as necessary to account for existing conditions and constraints. Nothing in this plan should prohibit or limit the use easements or landscape buffers outside of the right-of-ways to enhance or improve the location of trails along roadway corridors.

ENGINEERING DESIGN STANDARDS

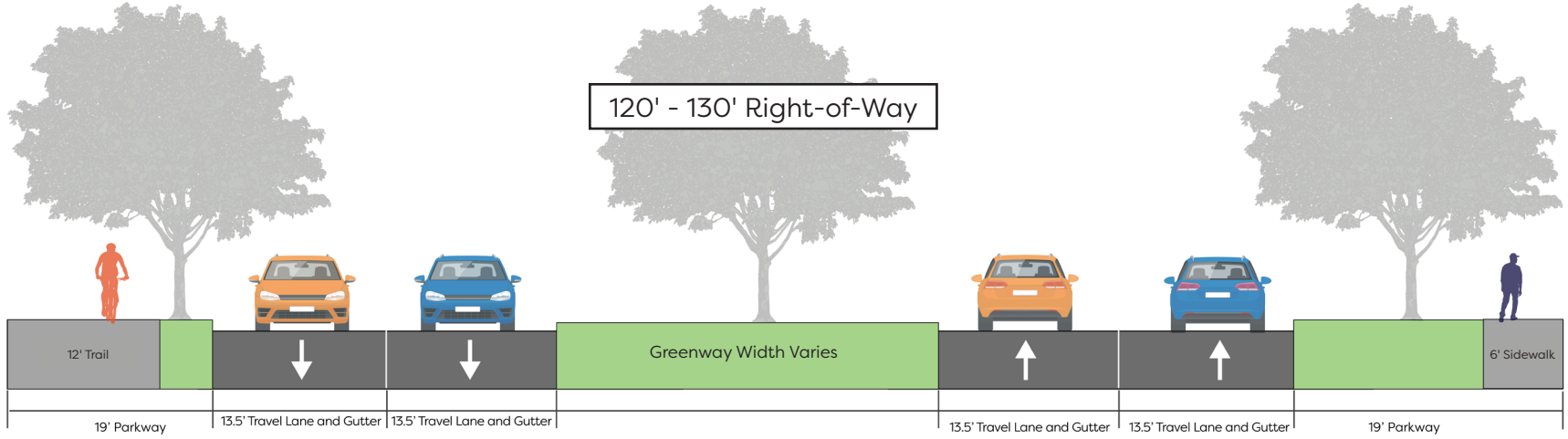
The Thoroughfare Plan is codified through the master plan process and the Engineering Design Standards (EDS). The EDS should be updated to reflect recommendations outlined in this plan, including any lane widths, rights-of-way widths, design speeds considerations, driveway spacing to improve the pedestrian realm, and similar topics. As the EDS is updated, it should be checked against the subdivision regulations to ensure there are consistencies between the two documents.

FIGURE 5.15: MAJOR ARTERIAL PROPOSED CROSS-SECTION



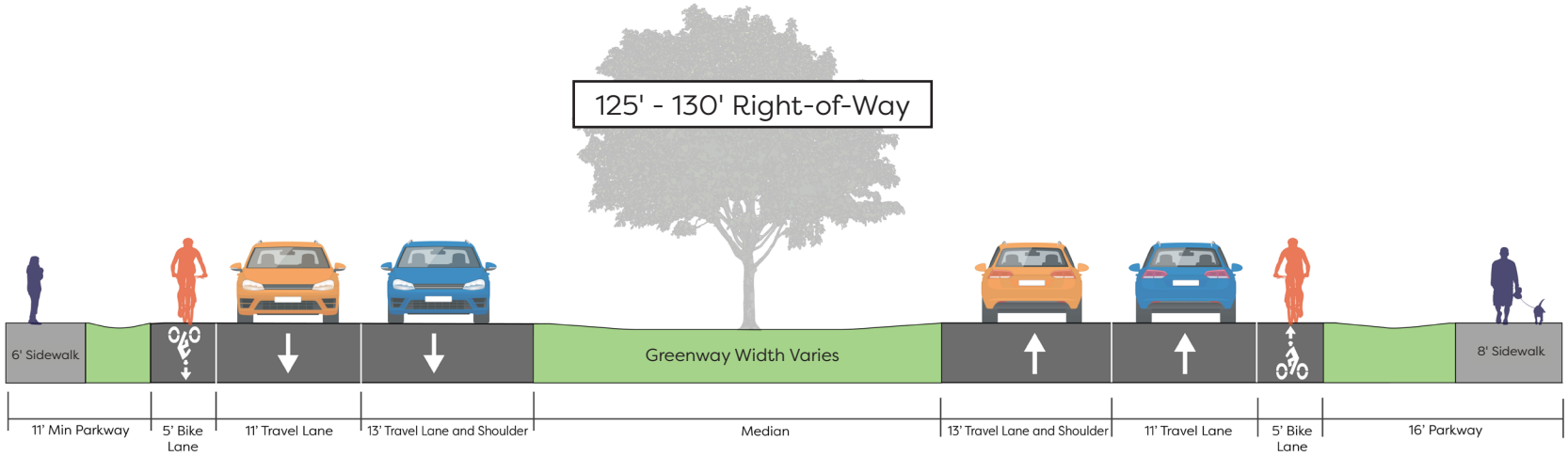
Major arterials include roads such as FM 1171, US HWY 377 and FM 2499. While these roads are mostly built-out, any new construction or reconstruction should consider minimizing the median in order to increase the buffer between pedestrian zones and motor vehicles. The road should also include a 6' wide sidewalk and 12' wide multi-use trail where able.

FIGURE 5.16: GREENWAY URBAN ARTERIAL PROPOSED CROSS-SECTION



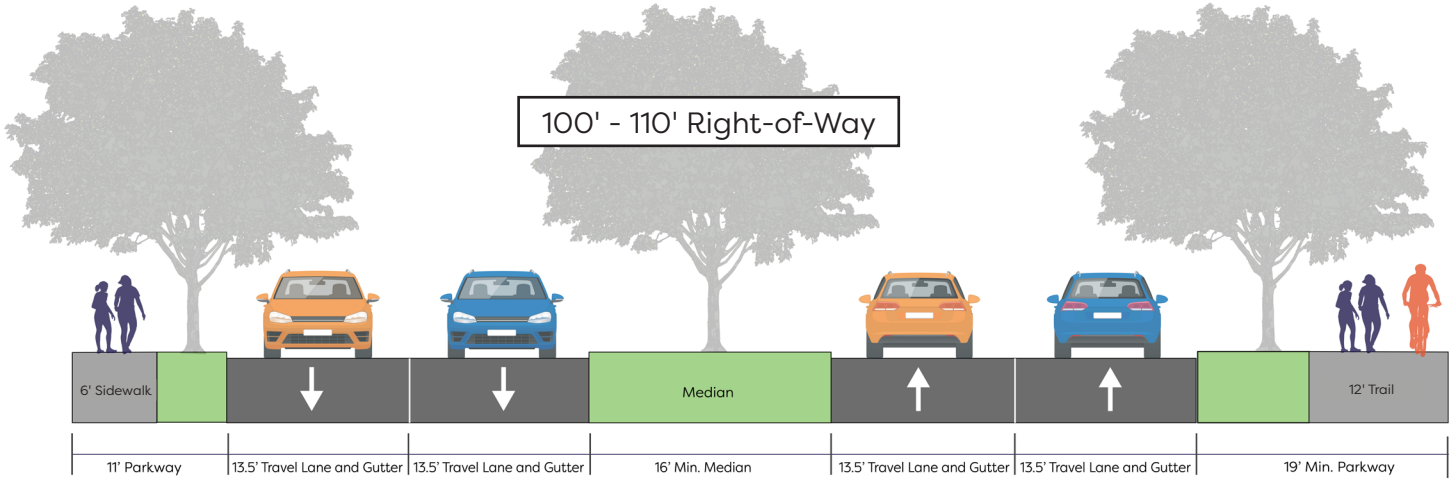
Greenway urban arterials include roads such as Garden Ridge Boulevard. This corridor includes a 12' wide multi-use trail where possible in order to create a comfortable shared realm. If the corridor is redeveloped, the median should be reduced in order to increase the width of the landscape buffer.

FIGURE 5.17: GREENWAY RURAL ARTERIAL PROPOSED CROSS-SECTION



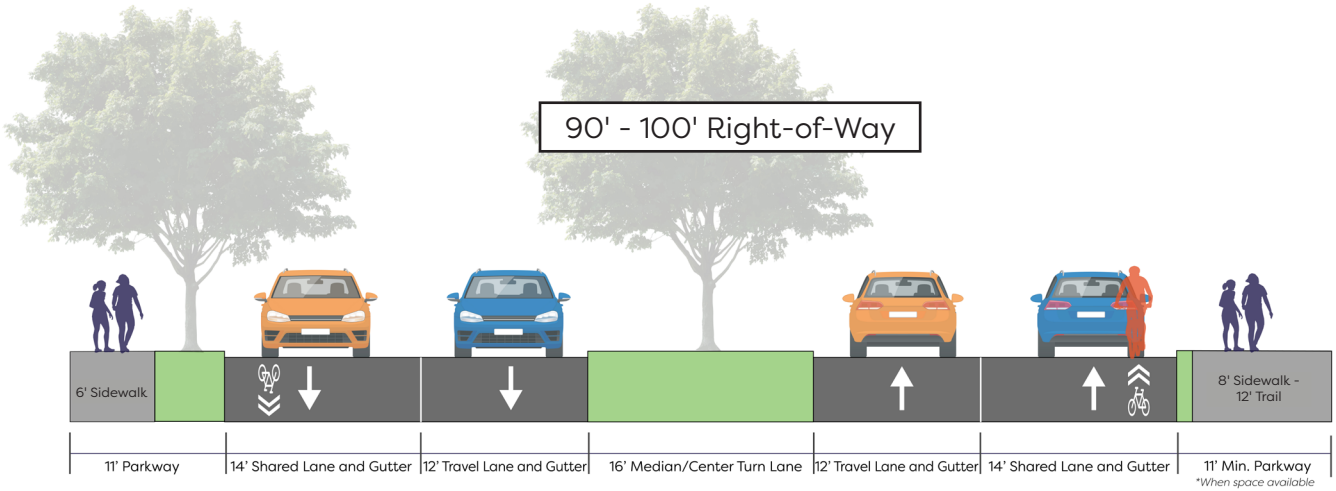
Greenway rural arterials are a future roadway classification in west Flower Mound. This roadway includes a landscaped median/center turn lane, bike lanes on each side of the road, and sidewalks with a minimum width of 6' on each side. If possible, the center turn lane should be reduced to the minimum necessary width in order to widen the parkways for landscape buffers between the sidewalk and motor vehicle lanes.

FIGURE 5.18: URBAN MINOR ARTERIAL PROPOSED CROSS-SECTION



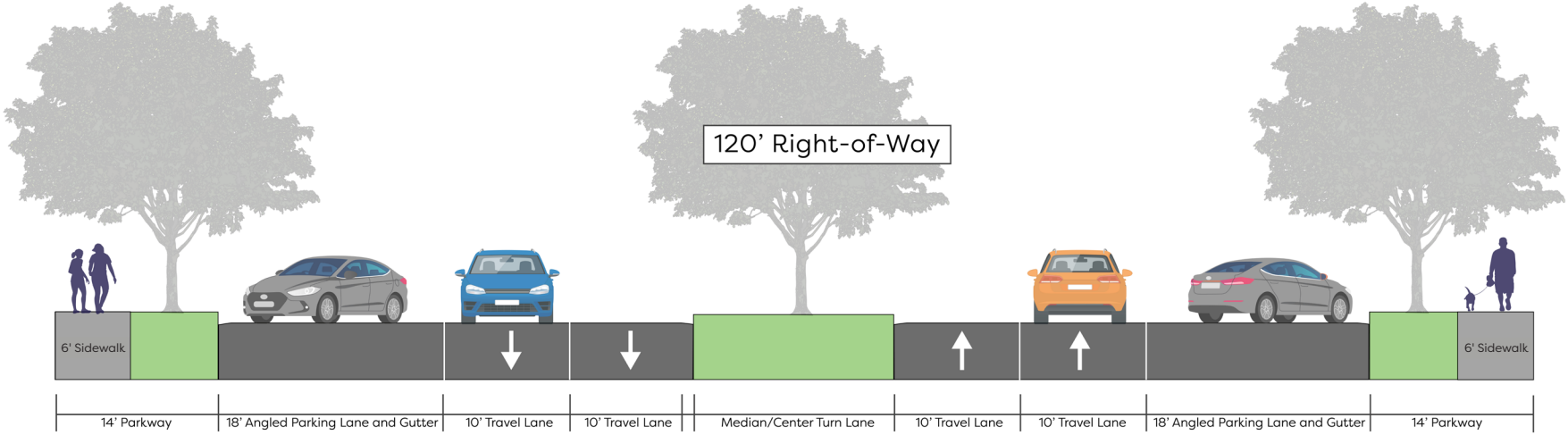
Urban minor arterials include a majority of the built roads in eastern Flower Mound, such as Flower Mound Road and Morriss Road which move people and vehicles to destinations throughout the Town. Where able, this roadway cross-section should include a 10'-12' multi-use trail, a 6' sidewalk, and landscaped medians. It is recommended that when redevelopment of minor arterials occurs, the median be reduced in order to increase buffers and landscaped areas between the pedestrian ways and travel lanes. All new minor arterials should include 100' rights-of-way to ensure there is adequate space to accommodate all facilities.

FIGURE 5.19: URBAN MINOR ARTERIAL WITH SHARED LANE PROPOSED CROSS-SECTION



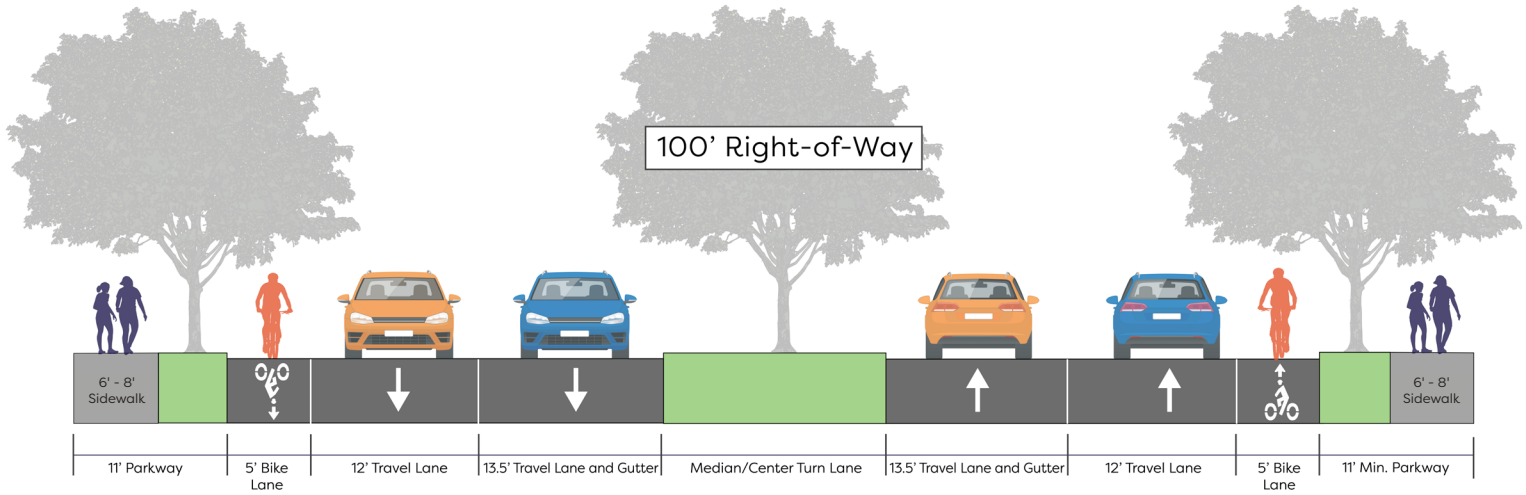
Urban minor arterials with shared-use lane is a new sub-classification of the urban minor arterial. In order to facilitate bicycle movement throughout the town, this roadway can include a shared-use lane by reducing the internal lane width. This cross-section should include a 6' sidewalk and a 10'-12' multi-use trail where space is available. All new urban minor arterials should have a 100' right-of-way.

FIGURE 5.20: URBAN MINOR ARTERIAL WITH ON-STREET PARKING PROPOSED CROSS-SECTION



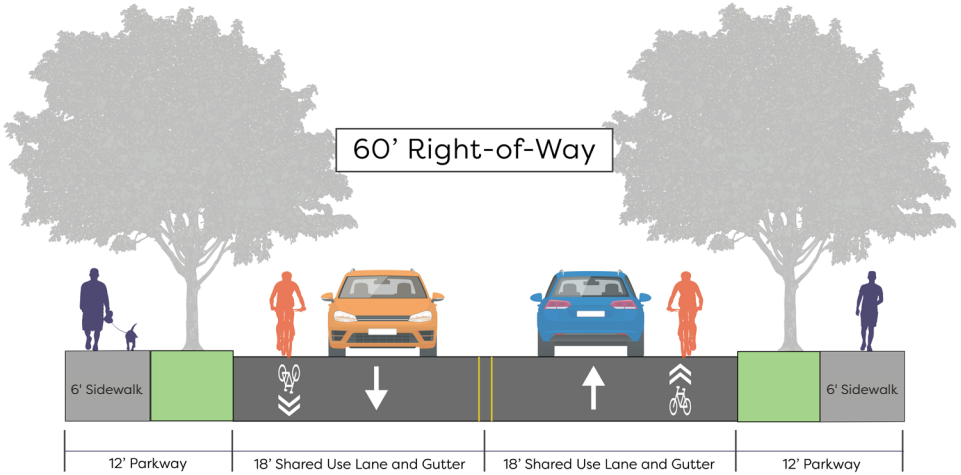
Urban minor arterials with on-street parking are found within the Lakeside Development. These roads are intended to provide parking for the shops and restaurants and provide wide sidewalks to encourage walking throughout the community. No changes have been proposed to this cross-section. Any new roadway segments should consider providing enhanced sidewalks where pedestrian volumes are expected to be higher.

FIGURE 5.21: URBAN MINOR ARTERIAL WITH BIKE LANES PROPOSED CROSS-SECTION



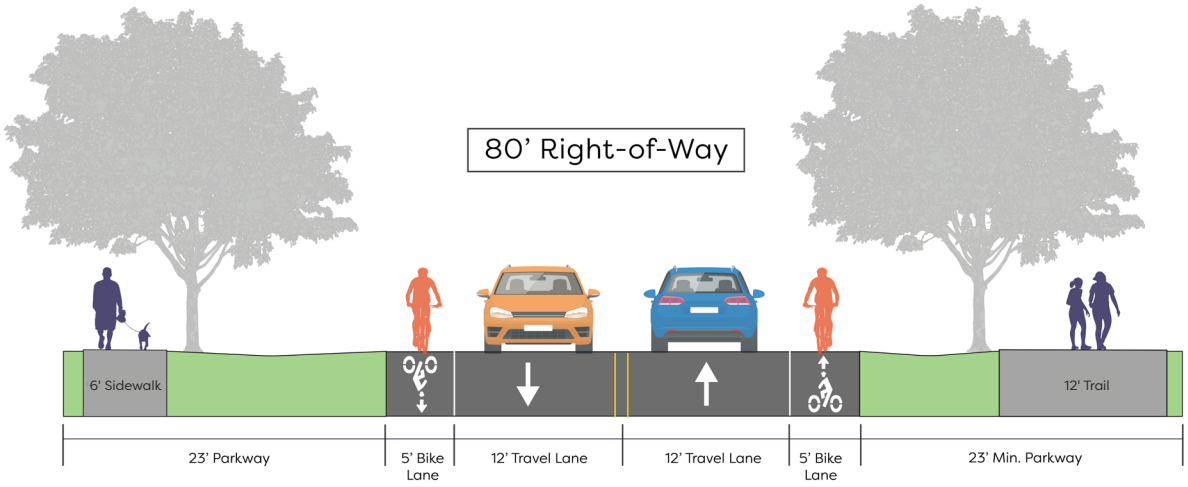
Urban minor arterials with bike lanes include roadways in west Flower Mound, including Canyon Falls Drive and other future corridors in the Canyon Falls Development. This cross-section provides 5' wide dedicated bike lanes, and 6' wide sidewalks on each side of the road. It would be appropriate to consider 8' sidewalks on these roads.

FIGURE 5.22: URBAN COLLECTOR PROPOSED CROSS-SECTION



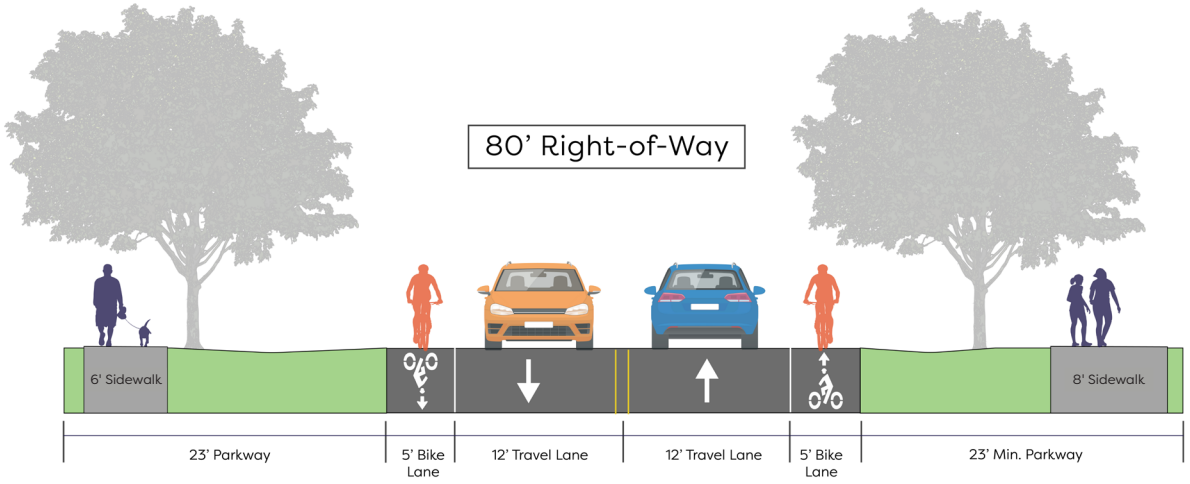
Urban collectors are roads in Flower Mound connect residents to arterial roadways. These include roads like Quail Run, Kirkpatrick Lane, and Lake Forest Boulevard. This cross-section should include shared-use lanes and 6' wide sidewalks buffered by landscaping. It would be appropriate to consider 5' bike lanes on urban collectors in place of the shared-use lane markings.

FIGURE 5.23: RURAL COLLECTOR PROPOSED CROSS-SECTION - A



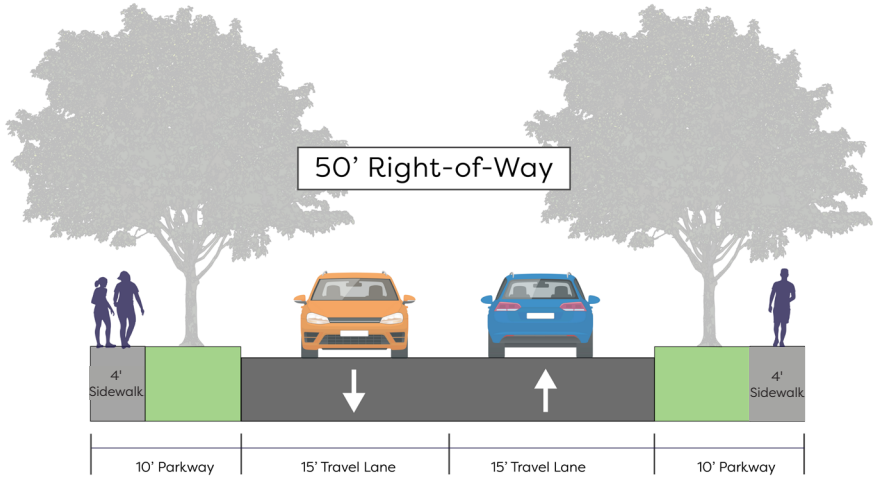
Rural collectors are roads in Flower Mound mainly found in the rural and undeveloped areas of the Town. These corridors should include bike lanes and 6' wide sidewalks. Where identified on the trails master plan, they should also include a 12' wide shared-use path.

FIGURE 5.24: RURAL COLLECTOR PROPOSED CROSS-SECTION - B



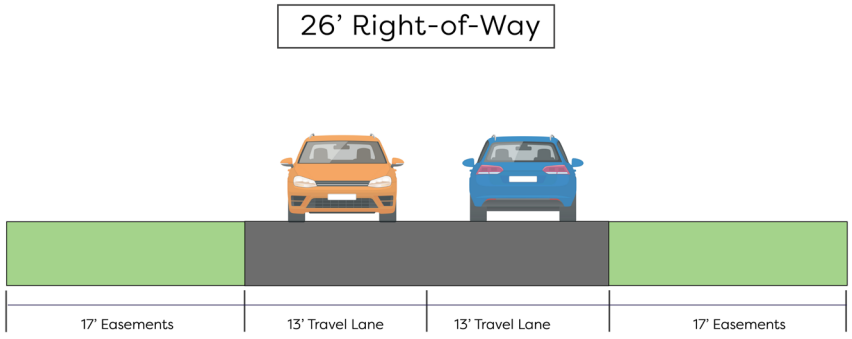
Rural collectors are roads in Flower Mound mainly found in the rural and undeveloped areas of the Town. These corridors should include bike lanes and 6' - 8' wide sidewalks.

FIGURE 5.25: LOCAL RESIDENTIAL URBAN PROPOSED CROSS-SECTION



Local residential urban roads are primarily residential roadways. There are no recommended changes to this cross-section. These roads can be considered for shared-use path signage due to the lower speeds and volumes. There should be connectivity from residential streets to the town-wide trails and bikeways system.

FIGURE 5.26: LOCAL RESIDENTIAL ESTATE PROPOSED CROSS-SECTION



Local residential estate roads are mainly local roads within large lot subdivisions. There are no recommended changes to this cross-section.

Corridor Prioritization Plan Implementation Conclusion



06 IMPLEMENTATION



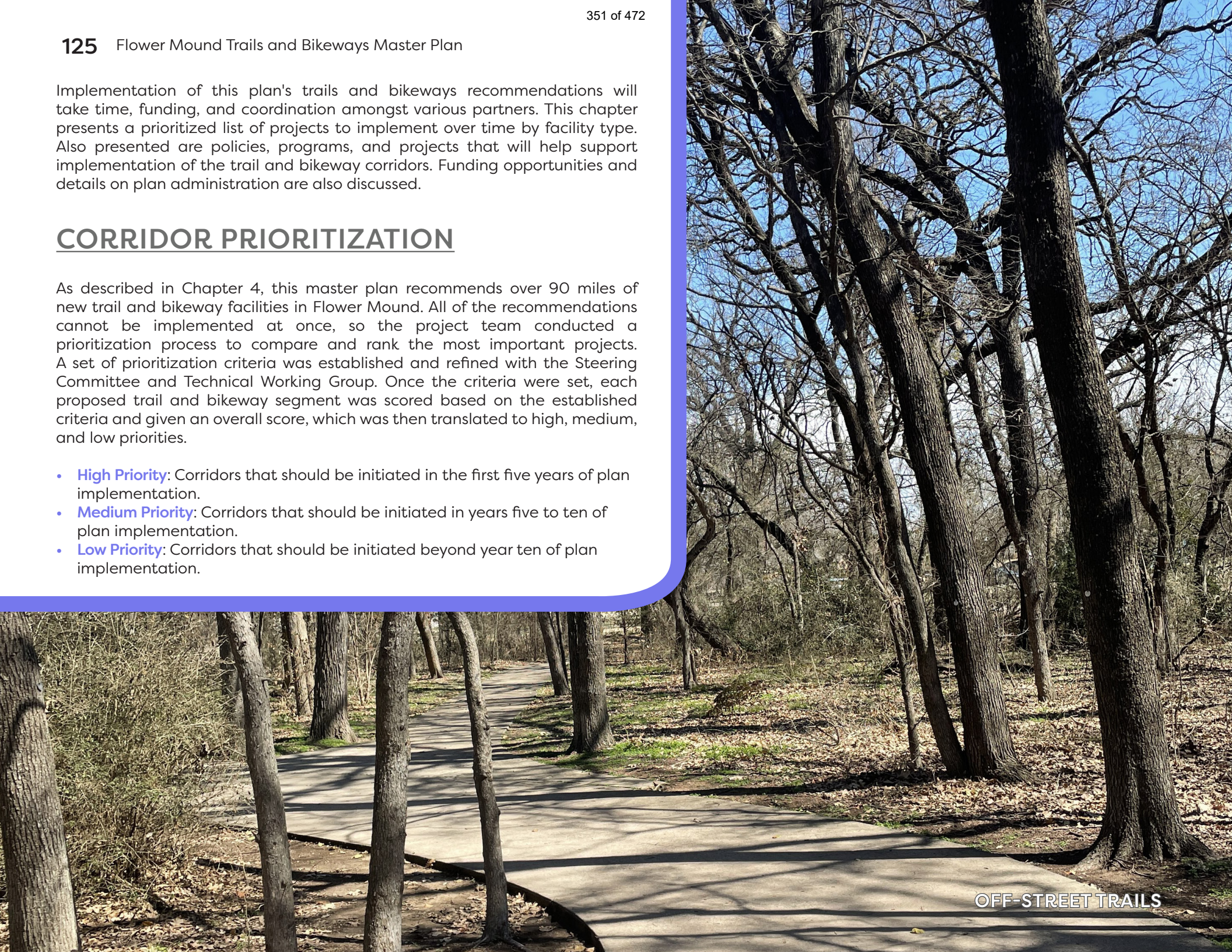
PINK EVENING PRIMROSE TRAIL

Implementation of this plan's trails and bikeways recommendations will take time, funding, and coordination amongst various partners. This chapter presents a prioritized list of projects to implement over time by facility type. Also presented are policies, programs, and projects that will help support implementation of the trail and bikeway corridors. Funding opportunities and details on plan administration are also discussed.

CORRIDOR PRIORITIZATION

As described in Chapter 4, this master plan recommends over 90 miles of new trail and bikeway facilities in Flower Mound. All of the recommendations cannot be implemented at once, so the project team conducted a prioritization process to compare and rank the most important projects. A set of prioritization criteria was established and refined with the Steering Committee and Technical Working Group. Once the criteria were set, each proposed trail and bikeway segment was scored based on the established criteria and given an overall score, which was then translated to high, medium, and low priorities.

- **High Priority**: Corridors that should be initiated in the first five years of plan implementation.
- **Medium Priority**: Corridors that should be initiated in years five to ten of plan implementation.
- **Low Priority**: Corridors that should be initiated beyond year ten of plan implementation.



TOWN MULTI-USE TRAILS

The Town's multi-use trail network, including off-street trails and sidepaths, will provide critical connections, improve existing corridors and facilities, and enhance safety for trail users. This section includes the action program for the Town to consider investment over the planning horizon.

CRITERIA

The criteria in Table 6.1 were used to score each of the town paved multi-use trail segments in order to determine the proposed timing for implementation. In order to determine the weighted score for each project, the criteria were assigned a weight based on the level of importance determined by the Steering Committee, Technical Working Group, and planning team.

TABLE 6.1: TOWN MULTI-USE TRAIL CRITERIA DESCRIPTIONS

Criteria	Description
Connects to key destinations	The trail segment connects residents to parks, schools, major shopping centers, or employment centers.
Connects to the existing trail/bikeway network	The trail segment provides a connection to the existing trail/bikeway network to create loops, primary routes, and high connectivity throughout the system.
Creates an interjurisdictional connection	The trail segment connects residents to surrounding communities and improves regional connectivity.
Located on the designated Regional Veloweb	The trail segment is part of the designated Regional Veloweb and connects residents to the greater DFW Metroplex. The Regional Veloweb provides funding opportunities through NCTCOG.
Solves a safety issue or overcomes a barrier	The trail segment addresses an identified safety issue or barrier.
Fills a gap in the existing system	The trail segment fills a gap in the existing system by connecting two segments of existing trail.
Improves an existing trail	The trail segment widens an existing facility to enhance the comfort along the trail.
Ease of implementation	The trail segment is feasible to construct. Factors considered for this criterion include property ownership, topography, floodplain, and barriers.
Amount of environmentally sensitive areas disturbed	The trail segment provides the least disruption of natural areas.
Facilitates bicycling/walking to school	The trail segment provides safe, off-street routes for students of all ages to get to school from their homes.
Population density	The trail segment provides access to higher population densities.
Primary Trail	The trail segment is located on a primary trail or loop trail, as discussed in Chapter 4.

TOWN OFF-STREET TRAIL NETWORK ACTION PLAN

There are a total of 78.1 miles of recommended off-street trails, 21 percent of which are designated as high priority, 24 percent as medium priority, and 55 percent as low priority, as shown in Figure 6.1. Figure 6.2 (page 129) and Table 6.2 represent the action plan for the Town's multi-use trail network.

Table 6.2 provides the **Corridor ID** for the trail projects shown from north to south; the **Facility Type** determines if it's a multi-use trail, part of the Regional Veloweb, or one of the more detailed feasibility corridors; the **Facility Location** states whether the trail is located adjacent to a roadway (sidepath), or located through a greenway, park, or open space (off-street); the **Corridor** describes where the segment is located; the **Length** provides approximate mileage of each project; and the **Priority** of the project is based on the weighted criteria.

In eastern Flower Mound, most trail corridors recommend filling gaps in the existing system and upgrading existing trails and sidewalks to reflect the recommendations of this plan. New trail segments include trails along greenways, easements, and undeveloped land.

In western Flower Mound, new trail segments are recommended through undeveloped land and along major corridors. It is anticipated that many of these trail segments will be constructed by private developers in conjunction with property development.

FIGURE 6.1: TOWN MULTI-USE TRAIL PRIORITY BREAKDOWN

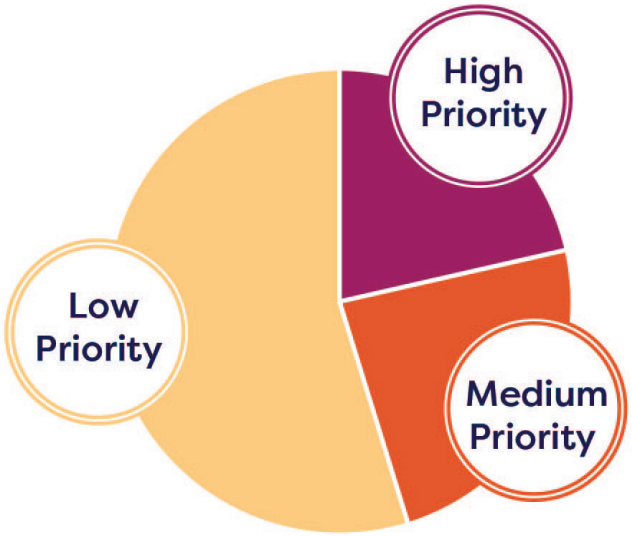


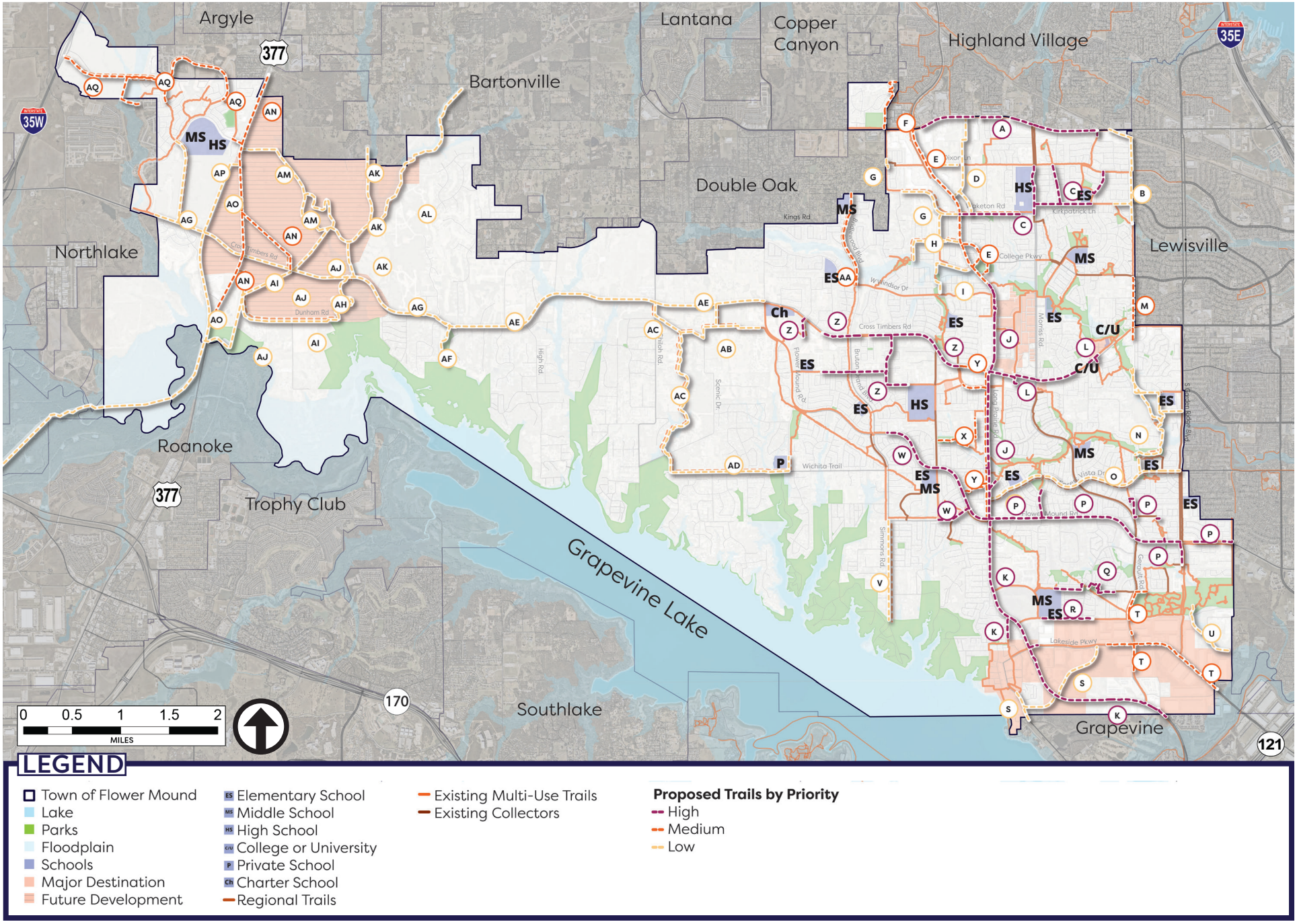
TABLE 6.2: TOWN MULTI-USE TRAILS RECOMMENDATION SUMMARY

Corridor ID	Facility Type	Facility Location	Corridor	Length (miles)	Priority
A	Multi-Use	Sidepath	Justin Rd	1.7	High
B	Multi-Use	Sidepath	Lone Buck Dr	2.2	Low
C	Multi-Use	Sidepath	Waketon/Morriss/Kirkpatrick Ln	2.3	High
D	Multi-Use	Varies	Easement/Dixon Ln	1.4	Low
E	Proposed Veloweb	Varies	Long Prairie Rd/College Pkwy	2.9	Medium
F	Multi-Use	Sidepath	Chinn Chapel Rd	0.7	Medium
G	Multi-Use	Sidepath	Chinn Chapel Rd/Waketon Rd	0.8	Low
H	Multi-Use	Sidepath	Rippy Rd/Pecan Meadows	0.9	Low
I	Multi-Use/Connector	Sidepath	Rippy Rd/Birch St	0.6	Low
J	Proposed Veloweb	Varies	Long Prairie Rd	2.5	High
K	Proposed Veloweb	Sidepath	Long Prairie Rd	3.5	High
L	Proposed Veloweb	Sidepath	Cross Timbers Rd	1.1	High

TABLE 6.2: TOWN MULTI-USE TRAILS RECOMMENDATION SUMMARY (CONT.)

Corridor ID	Facility Type	Facility Location	Corridor	Length (miles)	Priority
M	Multi-Use	Varies	Kirkpatrick Ln	0.8	Medium
N	Feasibility Corridor	Off-Street	Kirkpatrick Ln/Timber Creek Easement	1.4	Low
O	Multi-Use	Varies	Forest Vista Dr	2.2	Low
P	Multi-Use	Sidepath	Flower Mound Rd/Garden Ridge Blvd	3.2	High
Q	Multi-Use	Off-Street	Shadow Ridge Park/Sweetwater Ln	0.8	High
R	Multi-Use	Sidepath	Spinks Rd	0.5	High
S	Multi-Use	Sidepath	Lakeside Pkwy/Lakeside Village Pkwy	1.4	Low
T	Multi-Use	Sidepath	Lakeside Pkwy/Gerault Rd	2.0	Medium
U	Multi-Use	Off-Street	Easement by Water Treatment Plant	0.7	Low
V	Multi-Use	Sidepath	Simmons Rd	1.0	Low
W	Multi-Use	Sidepath	Flower Mound Rd/McKamy Creek	1.8	High
X	Multi-Use	Off-Street	Peacock Park	0.5	Medium
Y	Multi-Use	Varies	Long Prairie Rd	2.3	Medium
Z	Multi-Use	Varies	Cross Timbers Rd/Auburn Dr/Quail Rn/Peters Colony	3.0	High
AA	Multi-Use	Sidepath	Bridlewood Blvd	1.0	Medium
AB	Multi-Use	Varies	Walsingham/Scenic	1.2	Low
AC	Proposed Veloweb	Off-Street	Shiloh Easement	2.0	Low
AD	Multi-Use	Sidepath	Wichita Trail	1.6	Low
AE	Proposed Veloweb	Sidepath	1171 - Cross Timbers	3.6	Low
AF	Feasibility Corridor	Off-Street	Floodplain	0.6	Low
AG	Feasibility Corridor	Sidepath	1171 - Cross Timbers	3.2	Low
AH	Multi-Use	Off-Street	Floodplain	1.0	Low
AI	Multi-Use	Sidepath	Dunham Rd	1.4	Low
AJ	Proposed Veloweb	Off-Street	Future Corridor	2.0	Low
AK	Multi-Use	Off-Street	Floodplain	1.7	Low
AL	Proposed Veloweb	Off-Street	Floodplain	1.9	Low
AM	Multi-Use	Off-Street	Furst Ranch (Future Development)	2.2	Medium
AN	Proposed Veloweb	Varies	377	3.6	Medium
AO	Multi-Use	Off-Street	Railroad Corridor	5.0	Low
AP	Multi-Use	Sidepath	Future Corridor	0.9	Low
AQ	Multi-Use	Sidepath	Prairie Ridge Rd/Denton Creek Blvd	3.2	Medium
Total Trails System Length				**78.1**	

FIGURE 6.2: TOWN MULTI-USE TRAILS PRIORITIZATION



ON-STREET BIKEWAYS

On-street bikeways include bike lanes and shared-use lanes to improve active transportation town-wide. Many of the identified routes are frequently used by bicyclists, and connect residents to destinations and the region. On-street facilities can provide critical connections where other facilities may be constrained.



CRITERIA

The criteria shown in Table 6.3 were used to score each of the on-street bikeway segments in order to determine the proposed timing for implementation. In order to determine the weighted score for each project, the criteria were assigned a weight based on the level of importance determined by the Steering Committee, Technical Working Group, and planning team. Many of the criteria are similar to the trails, as they help to create a complete network. Level of comfort and level of coordination are specific to the bikeways in order to evaluate rights-of-way constraints and user preference.

TABLE 6.3: ON-STREET BIKEWAYS CRITERIA DESCRIPTIONS

Criteria	Description
Connects to the existing trail/ bikeway network	The bikeway segment provides a connection to the existing trail/bikeway network to create loops, primary routes, and high connectivity throughout the system.
Creates an interjurisdictional connection	The bikeway segment connects residents to surrounding communities and improves regional connectivity.
Solves a safety issue or overcomes a barrier	The bikeway segment addresses an identified safety issue or barrier.
Level of Comfort	The bikeway segment provides a high level of comfort. Comfort is a critical factor for the development of bikeways; the more comfortable a facility is perceived, the greater chance the facility will be utilized by users of all ages and abilities. The level of comfort of a roadway takes into consideration traffic volumes, speeds, and pavement widths.
Fills a gap in the existing system	The bikeway segment fills a gap in the existing system by connecting two segments of existing bikeways. The existing system is relatively disjointed, filling in gaps will help improve connectivity, particularly on the east side of Town.
Improves an existing facility	The bikeway segment improves a facility that cyclists currently use.
Ease of implementation	The bikeway segment is feasible to construct. Factors considered for this criterion include rights-of-way widths, speed of roadway, pavement widths, and roadway constraints.
Level of coordination needed with other entities	The bikeway segment requires little coordination with other entities. Bikeways are easier to implement when less coordination is needed. Entities that may need to be coordinated with include TxDOT, railroads, utility companies, and the USACE.
Population Density	The bikeway segment provides access to higher population densities.

ON-STREET BIKEWAYS NETWORK ACTION PLAN

There are a total of 33.2 miles of recommended on-street bikeways, 41 percent of which are designated as high priority, 18 percent as medium priority, and 41 percent as low priority, as shown in Figure 6.3. Figure 6.4 (page 132) and Table 6.4 represent the action plan for on-street bikeways in Flower Mound.

Table 6.4 provides the **Corridor ID** for the bikeway projects shown from north to south; the **Facility Type** to determine if it's a shared-use lane or bike lane; the **Corridor** to describe where the segment is located; the **Length** of each project; and the **Priority** of the project based on the weighted criteria.

In eastern Flower Mound, bikeways provide connections to surrounding communities, and connect to parks, schools, and destinations. In western Flower Mound, bikeways connect residents to the USACE trails, are proposed with future roadways, and connect residents to parks and schools.

FIGURE 6.3: ON-STREET BIKEWAYS PRIORITY BREAKDOWN

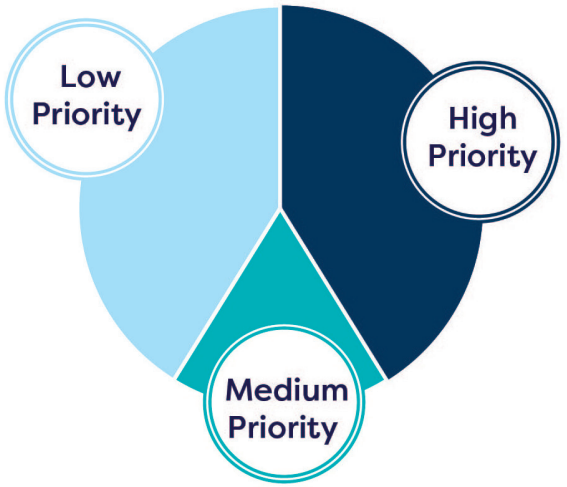
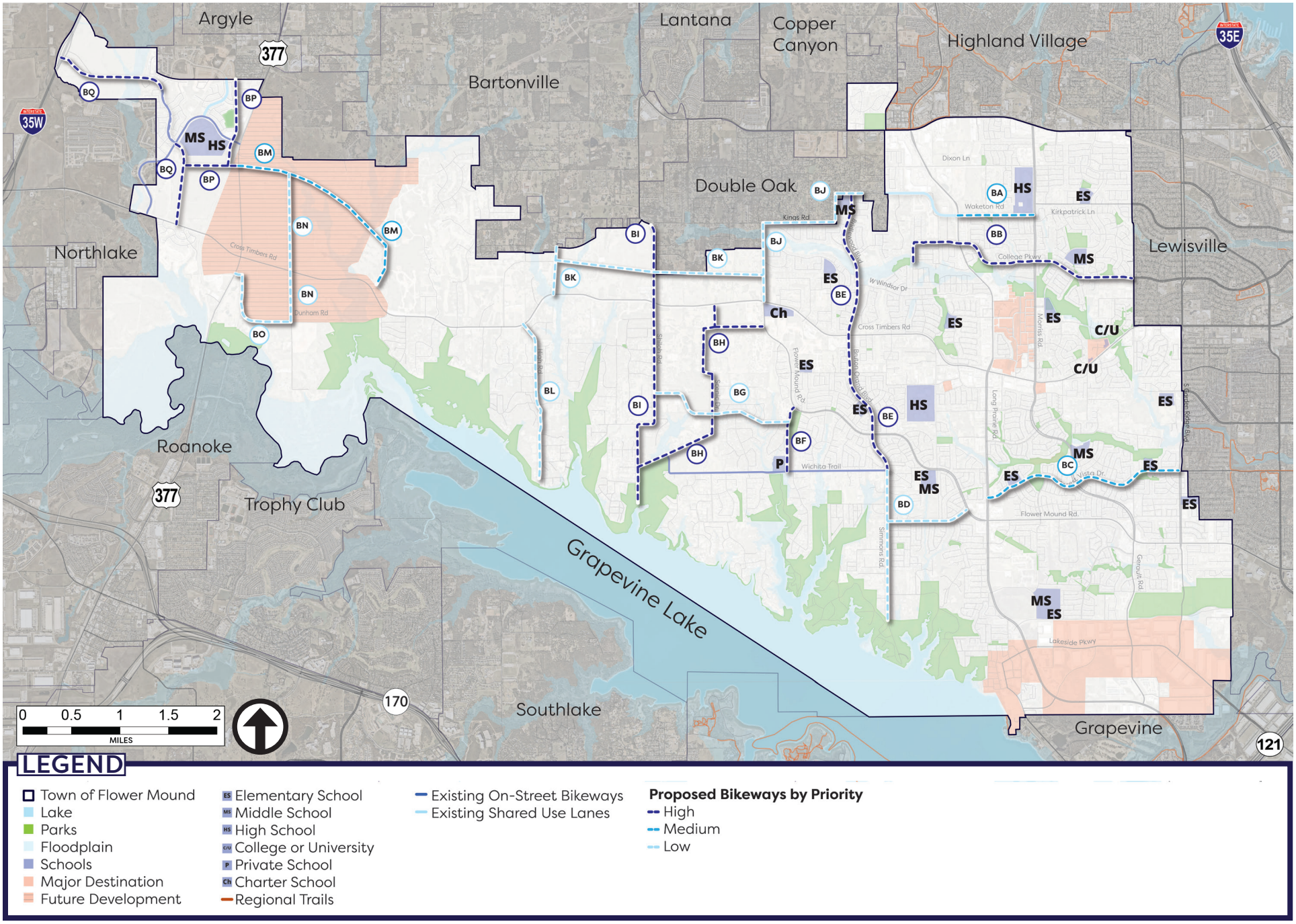


TABLE 6.4: ON-STREET BIKEWAYS RECOMMENDATION SUMMARY

Corridor ID	Facility Type	Corridor	Length (miles)	Priority
BA	Shared-Use Lane	Waketon Rd	0.8	Medium
BB	Shared-Use Lane	College Pkwy	2.6	High
BC	Shared-Use Lane	Forest Vista Dr	2.1	Medium
BD	Shared-Use Lane	Simmons Rd	2.4	Low
BE	Shared-Use Lane	Bridlewood Blvd/Burton Orand Blvd	3.0	High
BF	Shared-Use Lane	Skillern Rd	0.7	High
BG	Shared-Use Lane	River Hill Dr	1.5	Low
BH	Bike Lane/Shared-Use Lane	Scenic Dr	2.8	High
BI	Bike Lane	Shiloh Rd	3.0	High
BJ	Shared-Use Lane/Bike Lane	Lusk Ln/Kings Rd/Waketon Rd	2.1	Low
BK	Bike Lane	Red Rock Ln/Future Corridor	2.6	Low
BL	Bike Lane	High Rd	1.6	Low
BM	Bike Lane	Future Corridor	2.2	Medium
BN	Bike Lane	Future Corridor	1.5	Low
BO	Bike Lane	Dunham Rd	1.0	Low
BP	Shared-Use Lane/Bike Lane	Future Corridor/Stonecrest Dr	1.4	High
BQ	Bike Lane	Denton Creek Blvd	1.9	High
Total Bikeways System Length			**33.2**	

FIGURE 6.4: ON-STREET BIKEWAYS PRIORITIZATION



NON-TRADITIONAL TRAIL FACILITIES

For the non-traditional trails, including town equestrian trails and paddling trails, 25 percent are high priority trails, 63 percent are medium priority trails, and 12 percent are low priority trails, as shown in Figure 6.5. Figure 6.6 (page 134) and Table 6.5 represent the action plan for non-traditional trail facilities.

TOWN EQUESTRIAN TRAILS

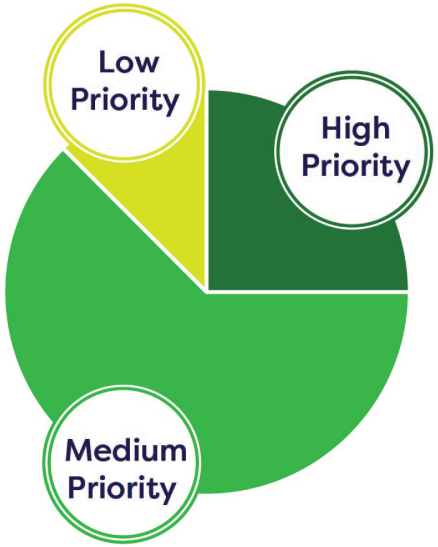
There are a total of 10.9 miles of equestrian trails recommended in this master plan. While there is not a set of established prioritization criteria for equestrian trails specifically, based on feedback from citizens and stakeholders, the most important components were:

- Completing existing equestrian trail loops
- Providing more connections to the existing USACE equestrian trails

OTHER TRAILS - PADDLING TRAILS

There are 2 miles of paddling trails recommended in this master plan. Similar to equestrian trails, there is not a set of established prioritization criteria for paddling trails. Given that there is only one primary recommended segment, this corridor was given a prioritization of medium priority based on the anticipated complexity to complete.

FIGURE 6.5: NON-TRADITIONAL TRAILS PRIORITY BREAKDOWN



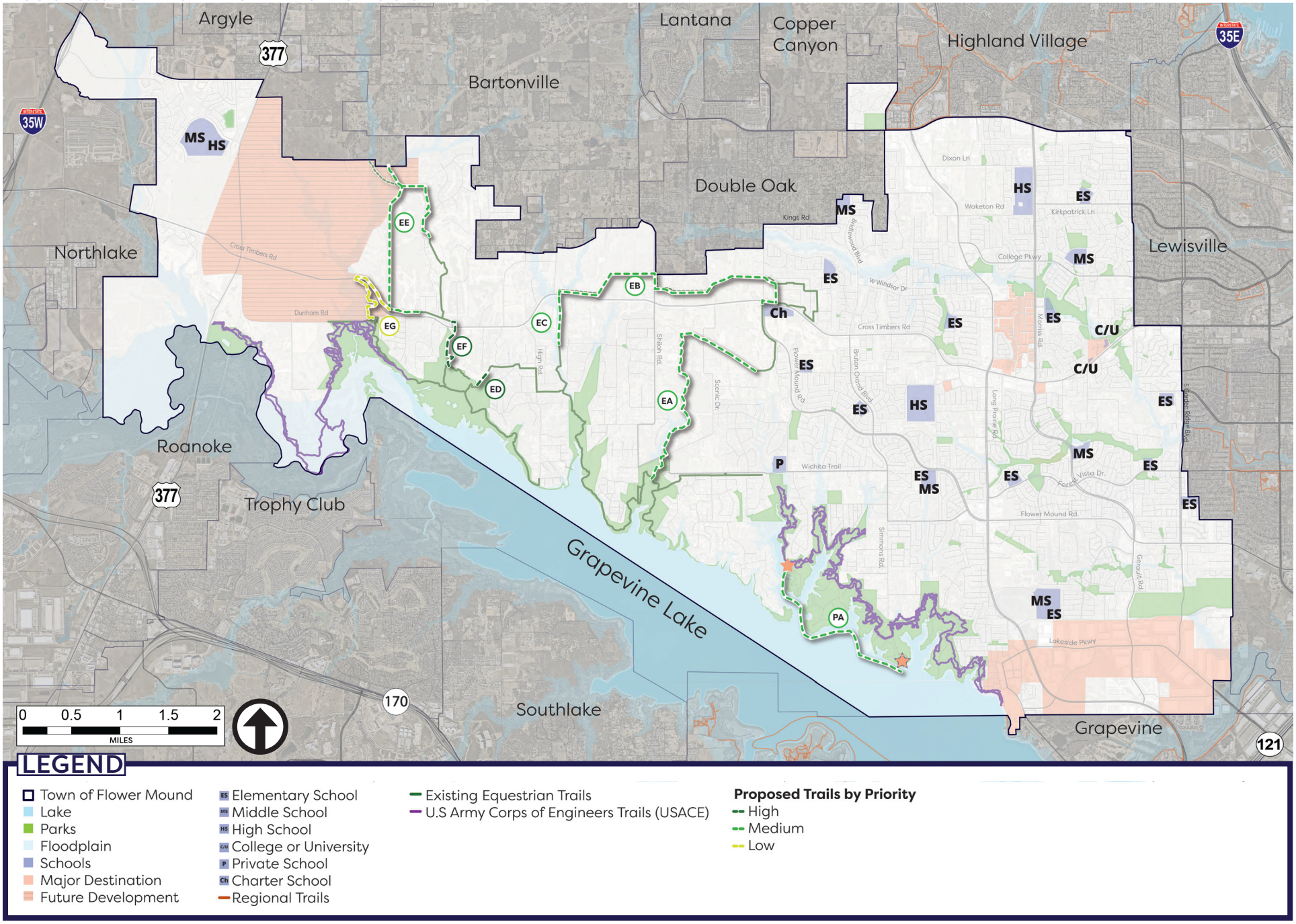
OTHER TRAILS - USACE TRAILS

This plan does not recommend additional USACE soft surface trails since they are built and maintained by an entity outside of the Town. However, important considerations include implementing cautionary signage to reduce potential conflict between different users.

TABLE 6.5: NON-TRADITIONAL TRAILS RECOMMENDATION SUMMARY

Corridor ID	Facility Type	From	To	Length (Miles)	Priority
EA	Equestrian	Melville Cir	Rocky Point	2.7	Medium
EB	Equestrian	Brindle Wy	Cross Timbers	3.0	Medium
EC	Equestrian	Cross Timbers	Raintree Pl	0.5	Medium
ED	Equestrian	Hidden Brook Farm		0.2	High
EE	Equestrian	Cross Timbers	Hidden Ridge Dr	2.7	Medium
EF	Equestrian	Cross Timbers	Montalcino	0.6	High
EG	Equestrian	Cross Timbers		1.2	Low
PA	Paddling	Twin Coves	Murrel Park	1.9	Medium
Total Non-Traditional Trails System Length				**12.8**	

FIGURE 6.6: NON-TRADITIONAL TRAILS PRIORITIZATION



PLAN IMPLEMENTATION

TYPICAL FACILITY COSTS

While implementing each corridor will pose different challenges, it is beneficial to establish typical facility costs to help with planning and budgeting. Table 6.6 represents the typical planning level cost range for all of the facility types recommended in this master plan.

These cost ranges are based on recent project bids, current market trends, and engineering standards and design methods. Each estimate considers general cost elements, demolition, transportation, and grading costs based on similar projects. *It is important to note that these cost estimate ranges are at a pre-design level and will likely change as additional planning, design, and engineering occurs for each project.*

TABLE 6.6: TYPICAL PROJECT COSTS BY FACILITY

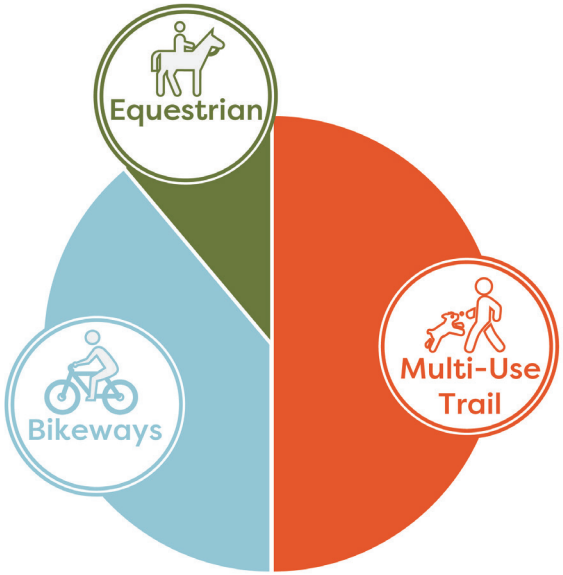
Facility Type	Parameters	Typical Cost Range
Paved Multi-Use Trail	12' paved trail	$1.35 – $1.9M per mile
Paved Multi-Use Trail	10' paved trail	$1.35 – $1.9M per mile
Connector	8' paved wide sidewalk	$1.0M - $1.4M per mile
Soft-Surface Trail	8' decomposed granite trail with grading	$600,000 – $900,000 per mile
Equestrian Trail	8' natural surface trail with grading	$250,000 – $400,000 per mile
Bike Lane	Lane striping, signage, and pavement markings on both sides of the street	$95,000 per mile (existing street surface)
Shared-Use Lane	Signage, pavement markings	$75,000 per mile (existing street surface)
Shared-Use Lane	Signage	$3,000 per mile
Paddling Trail	Signage	$2,000 - $10,000 per mile
Sidewalk	6' sidewalk	$900,000 - $1.6M per mile

Note: Costs for a specific trail or bikeway facility will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation rate of 3% per year should be factored into any project cost. Chapter 5 includes typical cross-sections and additional design considerations for these facility types. Source of cost estimates is Halff Associates, Inc. based on similar projects.

PRIORITY PROJECTS

Figure 6.7 illustrates the percentage of the high priority projects by facility type. Overall, 50 percent of the high priority projects are for Town multi-use trails, 39 percent are for bikeways, and 11 percent are for equestrian trails. All high priority projects are combined into a single systemwide prioritization map and table, shown in Figure 6.9 (page 138) and Table 6.7 (page 136).

FIGURE 6.7: PRIORITY BREAKDOWN BY FACILITY TYPE



Most high priority Town multi-use trails are located in eastern Flower Mound. These corridors can be implemented as one project with voter approved bonds or grant programs, or they can be divided into smaller segments to be included in the Town's annual budget.

High priority bikeway corridors are located throughout Flower Mound. These can be constructed through Town funding sources or through development requirements.

Table 6.7 provides the **Corridor ID** for the high priority projects; the **Facility Type** to determine if it's a multi-use trail, bikeway, or equestrian trail; the **Corridor** to describe where the segment is located; the **Length** of each project; and the **Average Cost Estimate** of the project based on the average of the planning level typical project costs; and **Partnerships** to identify potential funding partners for the construction of the system. Due to the length of many of the prioritized trail and bikeway segments, a variety of funding mechanisms may need to be utilized in order to complete the network, including private developer funds, Town funds, or grants. Each funding partner is assigned an estimated percent contribution based on an estimate of whether the trail is to be constructed on vacant or already developed land. It is important to note that if the Town is considering a project, they should include filling in gaps or enhancing existing facilities where trails may already exist or the property is vacant to create a complete trail segment.

TABLE 6.7: PRIORITY TRAILS RECOMMENDATION SUMMARY

Corridor ID*	Corridor	Facility Type	Length (miles)	Average Cost Estimate	Funding Partnerships and % Contribution
A	Justin Rd	Multi-Use	1.7	$2,764,000	Developer (10%), Town (70%), Grants (20%)
C	Waketon/Morriss/Kirkpatrick Ln	Multi-Use	2.3	$3,803,000	Town (20%) Grants (80%)
J	Long Prairie Rd	Proposed Veloweb	2.5	$4,120,000	Town (50%), Grants (50%)
K	Long Prairie Rd	Proposed Veloweb	3.5	$5,697,000	Developer (50%), Town (20%), Grants (30%)
L	Cross Timbers Rd	Proposed Veloweb	1.1	$1,825,000	Developer (5%), Town (20%), Grants (75%)
P	Flower Mound Rd/Garden Ridge Blvd	Multi-Use	3.2	$5,170,000	Town (80%), Grants (20%)
Q	Shadow Ridge Park/Sweetwater Ln	Multi-Use	0.8	$1,256,000	Town (50%), Grants (50%)
R	Spinks Rd	Multi-Use	0.5	$856,000	Town (80%), Grants (20%)
W	Flower Mound Rd/McKamy Creek	Multi-Use	1.9	$2,954,000	Town (80%), Grants (20%)
Z	Cross Timbers Rd/Auburn Dr/ Quail Rn/Peters Colony	Multi-Use, Proposed Veloweb	3.0	$4,838,000	Developer (30%), Town (20%), Grants (50%)
Priority Trail Project Totals			**20.4**	**$33,283,000**	

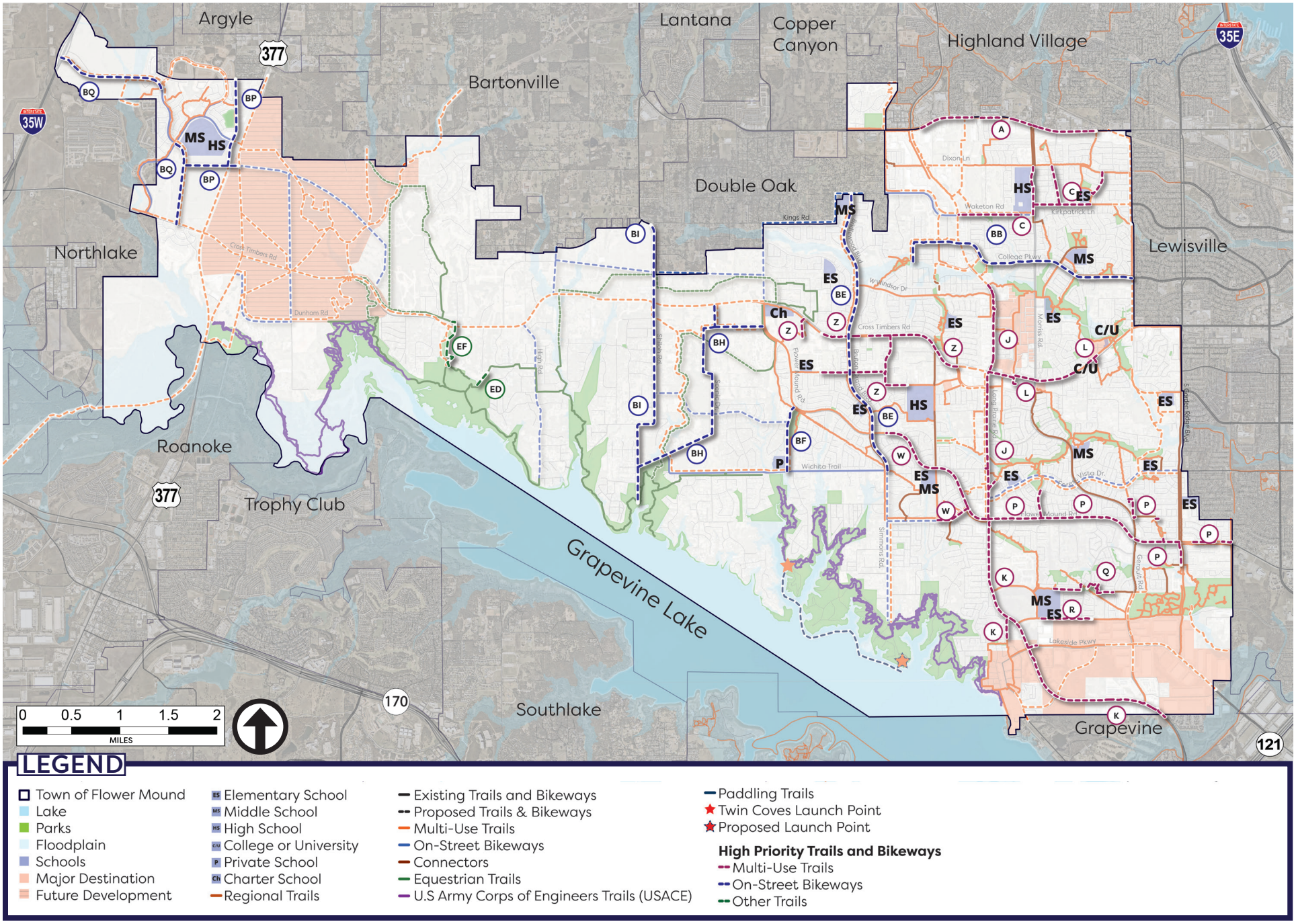
*Corridor ID is based on the Action Plan for each facility type (see pages 127-134)
Town funds may include: CIP, Transportation funds, voter approved bond projects, 4B funding, recreation funds, general fund, or similar funding mechanisms through the Town.
Grant funds may include: TxDOT, Safe Routes to School, Transportation Alternatives, RAISE, or similar grants that are available yearly or every other year. The match for these grants is typically 20%. While this funding mechanism is not guaranteed, it is recommended that the Town apply for grants to complete projects.

TABLE 6.7 PRIORITY TRAILS RECOMMENDATION SUMMARY (CONT.)

Corridor ID*	Corridor	Facility Type	Length (miles)	Average Cost Estimate	Funding Partnerships and % Contribution
BB	College Pkwy	Shared-Use Lane	2.6	$193,000	Town (50%), Grants (50%)
BE	Bridlewood Blvd/Burton Orand Blvd	Shared-Use Lane	3.0	$226,000	Town (50%), Grants (50%)
BF	Skillern Rd	Shared-Use Lane	0.7	$50,000	Town (50%), Grants (50%)
BH	Scenic Dr	Bike Lane/Shared-Use Lane	2.8	$227,000	Town (50%), Grants (50%)
BI	Shiloh Rd	Bike Lane	3.0	$286,000	Town (50%), Grants (50%)
BP	Future Corridor/Stonecrest Dr	Shared-Use Lane/Bike Lane	0.9	$86,000	Developer (100%)
BQ	Denton Creek Blvd	Bike Lane	1.7	$164,000	Developer (100%)
ED	Equestrian	Hidden Brook Farm	0.2	$100,000	Town (50%), Grants (50%)
EF	Equestrian	Montalcino	0.6	$364,000	Developer (50%), Town (50%)
All Priority Project Totals**			**36.0**	**$34,979,000**	

*Corridor ID is based on the Action Plan for each facility type (see pages 127-134)
**Includes total from table on page 136.
Town funds may include: CIP, Transportation funds, voter approved bond projects, 4B funding, recreation funds, general fund, or similar funding mechanisms through the Town. The roadway projects will likely come from transportation funds and CIP projects. Equestrian trails will likely come from 4B funding, recreation funds, and the general fund.
Grant funds may include: TxDOT, Safe Routes to School, Transportation Alternatives, RAISE, or similar grants that are available yearly or every other year. The match for these grants is typically 20%. While this funding mechanism is not guaranteed, it is recommended that the Town apply for grants to complete projects.

FIGURE 6.8: HIGH PRIORITY TRAIL AND BIKEWAY CORRIDORS



OTHER PRIORITY PROJECT CONSIDERATIONS

OFF-STREET CORRIDORS

Off-street corridors for recreational purposes were identified as a priority by Town Council. Off-street trails that can be priority projects in eastern Flower Mound that are not already identified as a priority project include portions of Corridor E, Corridor N/O, Corridor U, and Corridor X.

Corridor E (Long Prairie Rd/College Pkwy) Cost Estimate:
$148,000 - $209,000 (approximately 0.1 miles)
Corridor N/0 (Kirkpatrick Ln/Timber Creek Easement) Cost Estimate:
$3,730,000 - $5,250,000 (approximately 2.8 miles)
Corridor U (Easement by Water Treatment Plant) Cost Estimate:
$931,000 - $1,311,000 (approximately 0.7 miles)
Corridor X (Peacock Park) Cost Estimate:
$712,000 - $1,000,000 (approximately 0.5 miles)

TRAILHEADS

It is a recommendation of this plan to first enhance the existing trailheads. This can be done in the near term while other trails are being designed and constructed. These are shown in Figure 6.9.

Trailheads should include a variety of amenities and facilities based on if the facility is a major or minor trailhead. Estimated average cost for signage, amenities, general landscaping, and parking areas:
$350,000 - $850,000 per trailhead (depending on if a bathroom facility is included)
Note: *Costs for a specific project will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation rate of 3% per year should be factored into any project cost.*

MAJOR CONFLICT POINTS

This is intended to provide guidance on which intersections should be further analyzed to determine the level of recommended improvements. High priority intersections are shown in Figure 6.9, and are broken into three categories, controlled, uncontrolled, and mid-block. As new trails are designed and constructed, major roadway crossings should be evaluated during the design phase of the project. All pavement markings and signage guidance shall comply with the TMUTCD and Town standards.

Major Intersections

Improvements to existing intersections where trail crossings are located should be prioritized. Future trail development should include roadway crossings in the design of the project.

Estimated average cost for signage, striping, bulb-out, and ADA ramps:
$153,000 per intersection
Note: *Costs for a specific project will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation rate of 3% per year should be factored into any project cost.*

Mid-Block Crossings

Improvements to existing mid-block crossings should be prioritized to ensure there is proper signage, striping, and other advanced warning. New trails should include mid-block crossings in the design of the project.

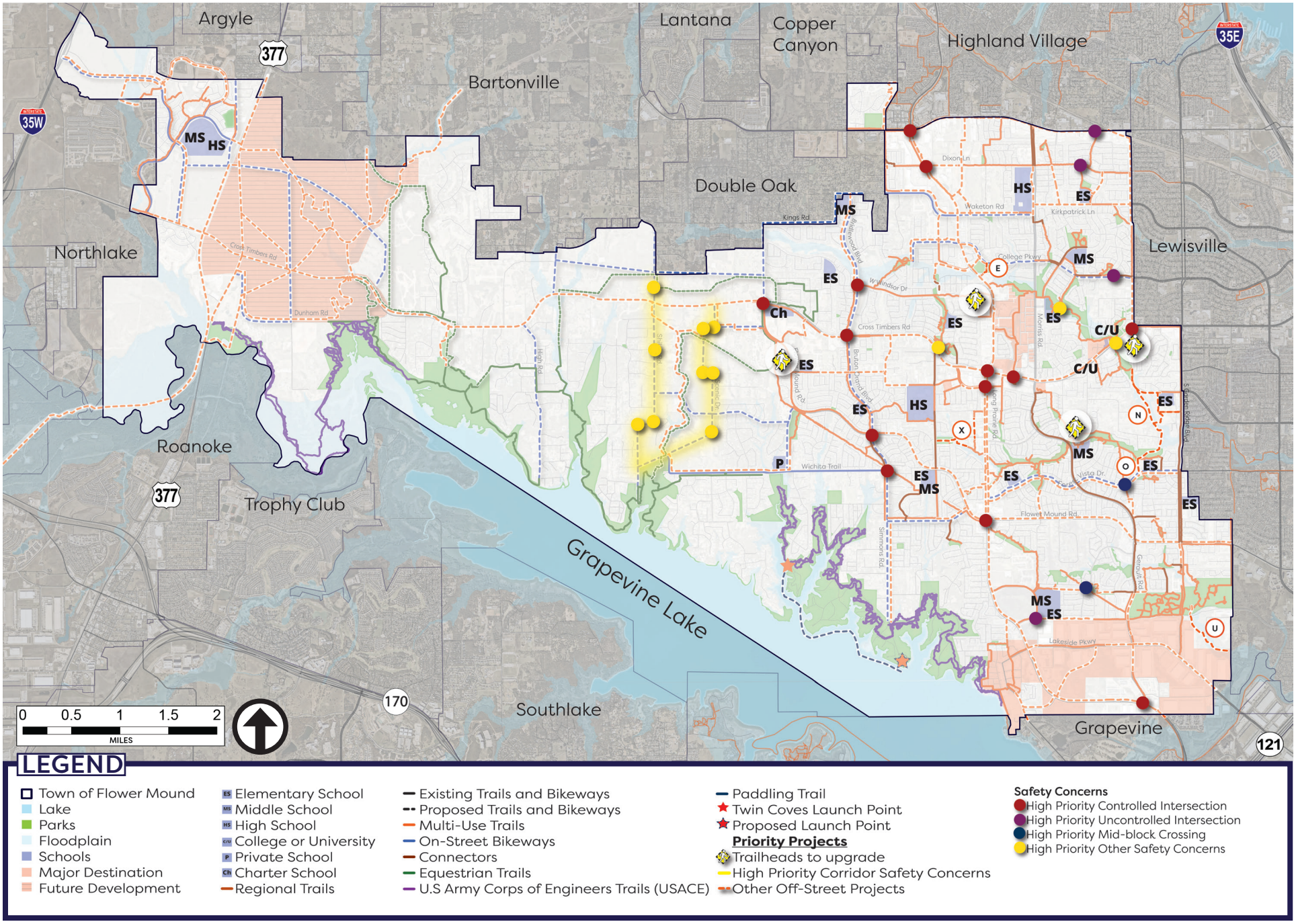
Estimated average cost range for signage, striping, and other improvements including RRFB's:
$75,500 per crossing
Note: *Costs for a specific project will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation rate of 3% per year should be factored into any project cost.*

Existing Trail Improvements

During the assessment, various maintenance and safety concerns were analyzed. Concerns to be evaluated include blindspots, where there is a 90 degree turn in the trail, bridge replacement needs, and low hanging vegetation. While some concerns can be fixed relatively easily, some need further investigation.

Estimated average cost range for signage, striping, and other improvements for blind curves:
$25,800 per curve improvement
Note: *Costs for a specific project will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation rate of 3% per year should be factored into any project cost.*

FIGURE 6.9: RECOMMENDED OTHER PROJECTS



POLICIES, PROGRAMS, AND PROJECTS

There are various policy changes, programs, and projects that can be completed to support the implementation of Flower Mound's recommended trails and bikeways network. This section identifies initiatives that should be considered to help with overall plan implementation and proposes metrics for tracking the plan's implementation.

GOAL 1: CONNECTED COMMUNITY

Create a complete trails and bikeways system that connects the community with active transportation options.

OBJECTIVES:

- **1.1:** Increase trail level of service.
- **1.2:** Provide trail and bikeway connections to key destinations.
- **1.3:** Fill in gaps in the existing trail system.

INITIATIVES:

- **Policy:** Attain a target level of service for trails of 1 mile per 1,200 residents.
- **Project:** Undergo design of the feasibility and high priority corridors.

METRICS:

- Increased level of service:
  - Mileage of off-street trails in Flower Mound
  - Mileage of on-street bikeways in Flower Mound
  - Mileage of new and improved connectors in Flower Mound
  - Mileage of equestrian trails in Flower Mound
- Greater percentage of bicycle and pedestrian mode share counts from the Census
- Number of interjurisdictional connections made

GOAL 2: SAFE & ACCESSIBLE SYSTEM

Ensure the trails and bikeway system is safe, comfortable, and accessible for users of all abilities and ages.

OBJECTIVES:

- **2.1:** Provide a variety of facility types appropriate for users of different abilities.
- **2.2:** Improve overall safety and comfort of existing facilities.
- **2.3:** Address areas identified as barriers within the existing trail system.

INITIATIVES:

- **Project:** Implement additional roadway crossing improvements.
- **Project:** Tie trail markers and system branding to the EMS system.
- **Policy:** Incorporate the design standards included in this master plan into the Town's standards.
- **Policy:** Implement blindspot and safety improvements on existing trails.
- **Project:** Evaluate high-frequency crash locations on an annual basis.

METRICS:

- Number of crashes involving bicyclists
- Number of crashes involving pedestrians
- Number of roadway crossings improved (at intersections or mid-block)
- Number of blindspots improved

GOAL 3: USER FRIENDLY

Improve awareness, signage, and usability of the trails and bikeways system.

OBJECTIVES:

- **3.1:** Increase awareness of the existing trail and bikeway system.
- **3.2:** Create a consistent brand across the trails system so it is easily recognizable.
- **3.3:** Install wayfinding signage to direct users to destinations along the trails.

INITIATIVES:

- **Program:** Implement the systemwide wayfinding and branding plan for the trails and bikeways system.
- **Program:** Develop a bicycle etiquette/awareness program that addresses cyclist and motor vehicle etiquette.
- **Project:** Install trail counters along the system to determine areas with most usage.
- **Project:** Create a smart phone application that links to a GPS system to provide guidance and assistance on the trail.
- **Policy:** Adopt a Vision Zero policy that aims to reduce bicycle and pedestrian serious injuries and deaths to zero.

METRICS:

- Number of new trailhead installations
- Facility usage from trail counters and Strava data
- Number of new amenities along the trail including:
  - Site furnishings (benches, trash receptacles, bike racks, bike repair stations, and similar)
  - Parking areas
  - Wayfinding features

GOAL 4: UNIQUE SYSTEM

Design and construct trails that support the health and wellness of the community and natural environment.

OBJECTIVES:

- **4.1:** Provide trails through natural areas, parks, and open space.
- **4.2:** Provide for interpretative and educational opportunities along trails.
- **4.3:** Utilize an environmentally-friendly and context-sensitive approach to developing and maintaining trails.

INITIATIVES:

- **Project:** Install interpretive signage that educates users on historic, cultural, and natural resources.
- **Project/Program:** Install new shade trees and explore additional shade opportunities along the trails.
- **Policy:** Encourage trails around stormwater ponds and through natural areas.

METRICS:

- Miles of trail constructed in greenways
- Number of new shade trees planted along trails
- Number of interpretive signage installations

GOAL 5: PARTNERSHIPS

Leverage partnerships between the Town and the community, internal and external organizations, and outside agencies to achieve a connected trails and bikeways system.

OBJECTIVES:

- **5.1:** Pursue joint projects with surrounding cities, the Counties, NCTCOG, TxDOT, TPWD, USACE, and utility providers.
- **5.2:** Maintain relationships with user groups to solicit feedback on the trails and bikeways system.
- **5.3:** Work with other departments to incorporate bicycle and pedestrian accommodations into ongoing or upcoming projects.

INITIATIVES:

- **Policy:** Provide NCTCOG with updated trail files so they can update their regional maps.
- **Project:** Update the Town's thoroughfare plan to include the additional bicycle/pedestrian accommodations recommended in this plan.
- **Program/Policy:** Work with the City of Grapevine to identify future kayak/canoe launch points to apply for TPWD Trail funding.
- **Program/Policy:** Work with adjacent cities to identify interjurisdictional trail opportunities and funding options.

METRICS:

- Miles of trail completed on the Regional Veloweb
- Number of meetings with outside entities regarding trail and bikeway planning, design, and construction with the construction and reconstruction of roadways
- Number of joint meetings held between the Town's appointed and elected officials
- Number of 'Adopt a Spot' spaces adopted along trails
- Miles of paddle trails completed in Flower Mound and connecting to other cities on Grapevine Lake

GOAL 6: FUNDING

Pursue a variety of funding sources for trails and bikeways development.

OBJECTIVES:

- **6.1:** Apply for grant funding to implement trail and bikeway projects.
- **6.2:** Continue to work with developers to ensure trails and bikeways are included with new development.
- **6.3:** Coordinate with user and volunteer groups to help fund improvements to trails and bikeways.

INITIATIVES:

- **Policy:** Utilize the prioritization criteria developed for this master plan to prioritize future CIP projects for trails and bikeways.
- **Policy:** Utilize 4B Sales Tax funds for trail infrastructure projects.
- **Project:** Submit applications for Transportation Alternative, Safe Routes to School, and Texas Parks and Wildlife funding where applicable.
- **Project:** Explore the opportunity for crowd sourcing for funding trails and bikeways development.

METRICS:

- Amount of grant funding received for trail and bikeway implementation
- Percent of Town's budget dedicated to trail and bikeway implementation

PLAN ADMINISTRATION

IMPLEMENTATION ROLES

There are various public and private entities that will have roles in the implementation and maintenance of the Trails and Bikeways Master Plan.

TOWN OF FLOWER MOUND IMPLEMENTATION ROLES

- The **Parks and Recreation Department** will incorporate trails into park facilities, maintain the trail infrastructure, and track the progress of the plan.
- The **Transportation Services Department** will prioritize bicycle facilities in the design and implementation of roadway construction projects and coordinate thoroughfare plan updates consistent with this plan.
- The **Planning Department** will continue to coordinate the construction of trails identified within the plan with new development projects and provide updates to the land development code and subdivision regulations.
- **Elected and Appointed Officials** are responsible for supporting the plan and determining funding eligibility for projects.

OTHER PUBLIC ENTITY IMPLEMENTATION ROLES

- **TxDOT** will coordinate the construction of trails and bikeways in roadway construction or improvement projects, provide facility types which are consistent with the plan, and support bikeway designation efforts.
- **Denton County** will partner with the Town to identify and develop the bicycle and pedestrian network.
- **Tarrant County** will partner with the Town to identify and develop the bicycle and pedestrian network.
- **Utility Companies** will continue to support the development of off-street trails within utility easements given appropriate design measures for the trails are followed.

PRIVATE ENTITY ROLES

- **Developers** will be responsible for the construction of trails and bikeways within development projects consistent with this plan to enhance connectivity and user experience for the overall network.
- **Foundations/Non-Profits** will continue to support the construction, maintenance, and implementation of trails and bikeways.
- **Homeowners Associations** will continue to maintain trails within their neighborhoods and support the implementation of the plan.

FUNDING OPPORTUNITIES

There are a variety of funding opportunities available to implement the vision of this plan. This section outlines typical funding opportunities at local, state, and federal levels but does not represent a comprehensive list of funding sources.

TOWN OF FLOWER MOUND FUNDING SOURCES

- The **General Fund** is used for smaller repair and replacement efforts and routine maintenance for existing parks and facilities. It also funds the administration and services provided by the Town of Flower Mound. The general fund provides funds for routine pavement and sidewalk maintenance.
- The **Special Revenue Fund** are funds from special revenue sources to support the development of new facilities. In Flower Mound, these include:
  - Park Development Fund
  - Street Maintenance Tax
  - 4B Parks Sales Tax funding
- **Capital Improvement Program (CIP)** expenditures provide funding for significant public improvements, such as the construction of new parks, replacement of park equipment, new trail construction, and street construction and maintenance projects which can include on and off-street bicycle facilities.

REGIONAL FUNDING SOURCES

NCTCOG apportions funds for transportation improvement projects from the Federal Government and TxDOT. NCTCOG then administers the funds to local jurisdictions for the construction of projects which improve mobility and air quality throughout the region. **They administer the following funds:**

- **The Transportation Alternatives Program (TAP)** are funds for the construction of on- and off-road bicycle and pedestrian facilities, shared-use paths, similar bicycle and pedestrian safety measures, and Safe Routes to School (SRTS) projects. These projects focus on interconnectivity within communities, to destinations such as schools and employment centers, and connections to the region.
- **Transportation Improvement Program (TIP)** is a short-term planning document for various transportation related projects in the DFW region. This plan is updated every two years and is created in concert with TxDOT, local governments, and transportation authorities. The program implements projects identified in the Master Transportation Plan (MTP) through 2045.

DEVELOPMENT FUNDING MECHANISMS

- The Town requires new development to install trails within the development and along rights-of-way where the trail network is defined. Developer funding can greatly reduce the burden on the Town's funding sources for the construction of trails. It can generally be assumed that the trails within undeveloped parcels of land, and those fronting undeveloped parcels will be developer funded.

STATE FUNDING SOURCES

- **National Recreational Trails Grants** are administered by the Texas Parks and Wildlife Department (TPWD) to construct new recreational trails, to improve existing trails, to develop trailheads and amenities, and to acquire land for trail construction. The reimbursable grants can be up to 80 percent of the project cost for non-motorized trail projects up to $300,000.
- **Outdoor Recreation Grants** provide 50 percent matching grant funds to cities, counties, Municipal Utility Districts (MUDs), and other special districts with a population less than 500,000 to acquire and develop parkland or to renovate existing public recreation areas. There are two funding cycles per year with a maximum award of $750,000. Projects must be completed within three years of approval. Application deadlines are October 1st of each year (the master plans submission deadline is 60 days prior to application deadline). Award notifications occur six months after deadlines.

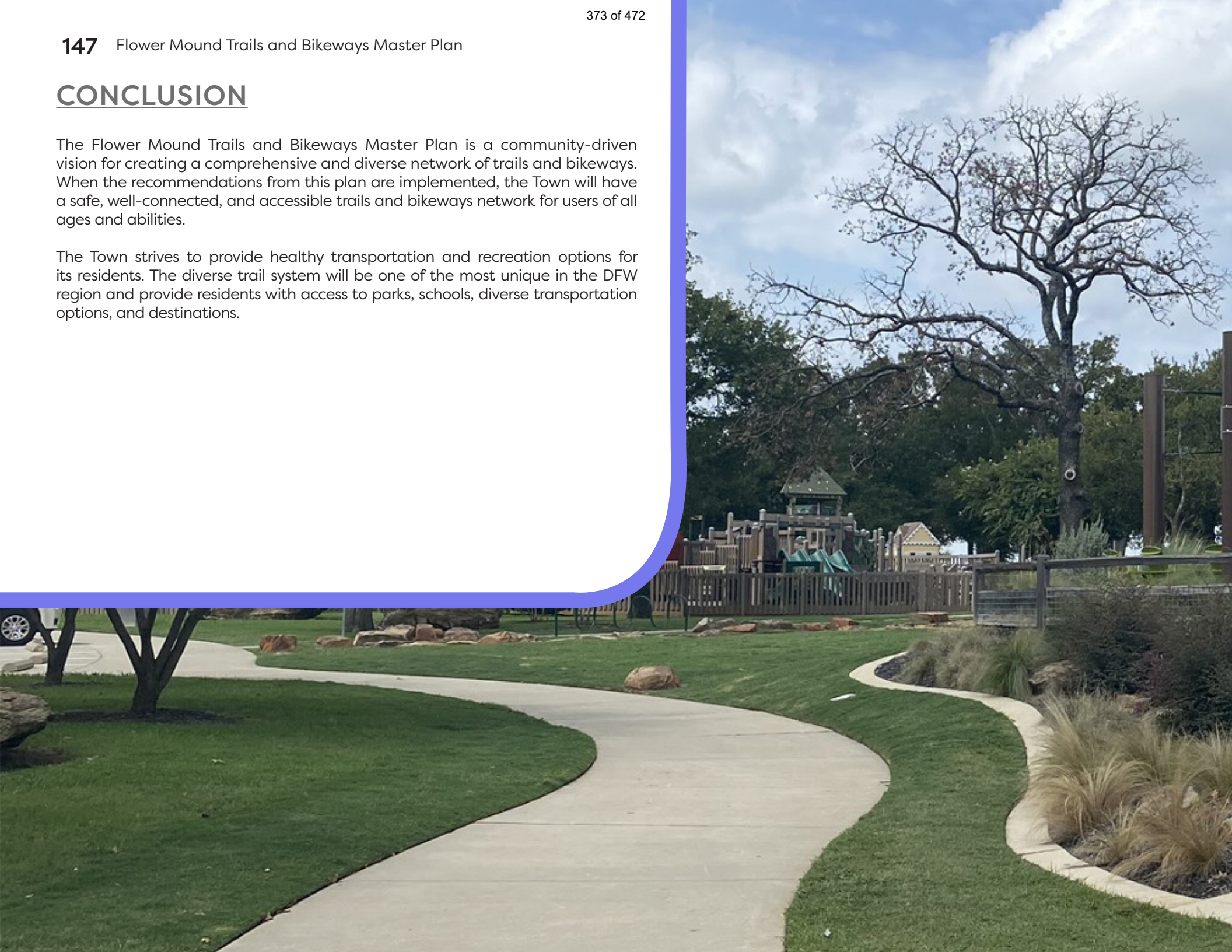
FEDERAL FUNDING SOURCES

- **Rebuilding American Infrastructure with Sustainability and Equity (RAISE)** Discretionary Grants are available on a competitive basis for projects that will have a significant impact on local and regional travel. The Department of Transportation administers funding. Projects can include roadway, rail, and alternative transportation.
- **Congestion and Air Quality Improvement Program (CMAQ)** funds are for projects that help improve air quality. Bicycle and pedestrian facilities are eligible for these funds because they act as an alternative mode of transportation and reduce emissions from automobiles.
- **Surface Transportation Block Grant Program (STBG)** funds are for projects that address mobility needs for bicycle and pedestrian improvement projects. Federal funds are allocated to TxDOT to distribute. TxDOT works with MPO's to administer the funds for eligible and prioritized projects.

CONCLUSION

The Flower Mound Trails and Bikeways Master Plan is a community-driven vision for creating a comprehensive and diverse network of trails and bikeways. When the recommendations from this plan are implemented, the Town will have a safe, well-connected, and accessible trails and bikeways network for users of all ages and abilities.

The Town strives to provide healthy transportation and recreation options for its residents. The diverse trail system will be one of the most unique in the DFW region and provide residents with access to parks, schools, diverse transportation options, and destinations.





HERITAGE PARK

Appendix A: Glossary of Terms
Appendix B: Commonly Used Signage
Appendix C: Detailed Community Input
Appendix D: Feasibility Corridors
Appendix E: Detailed Maps



07 APPENDIX



PINK EVENING PRIMROSE TRAIL ON LONG PRAIRIE RD

APPENDIX A - GLOSSARY OF TERMS

Bicycle: Every vehicle propelled solely by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices. The term "bicycle" in this planning process also includes three and four-wheeled human-powered vehicles, but not tricycles for children.

Bicycle Accommodations/Facilities: A general term denoting a variety of improvements and provisions that are made by public agencies to accommodate or encourage bicycling, including bike lanes, shared-use pathways, signed bike routes, and bicycle parking and storage facilities.

Bicycle Boulevard: A roadway designated for the mix of bicycle and motor vehicle traffic, which creates a comfortable shared-use environment through a combination of traffic calming measures, pavement markings, and signage.

Bike Lane: A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

Bikeway: A generic term for any road, street, path, trail, or way that, in some manner, is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Buffer: The portion of a highway, road or street between the curb-face or edge of the pavement and the sidewalk that provides a spatial buffer between vehicular traffic and pedestrians on sidewalks. Buffers often include landscape plantings such as grass, trees or shrubs, or utility poles, and may also be referred to as the "planting strip," "landscape buffer," "tree buffer," or "tree box." Buffers can also include barriers such as highway guide rails (guardrails) or bollards. In rural or suburban areas the buffer may be a grassy swale or drainage ditch. In urban areas, downtowns, the buffer may also include street furniture, street signs, fire hydrants, vending boxes, lighting poles, etc.

Cross-Slope: Defined as the slope measured perpendicular to the direction of travel. Cross-slope must be measured at specific points. The average cross-slope is the average of cross-slopes measures at regular intervals along the trail. Running cross slope is defined as the average cross-slope of a contiguous section of trail. The running cross-slope can be determined by taking periodic measurements throughout a section of trail and then averaging the values.

Crosswalk: The horizontal portion of roadways, usually at intersections, reserved for pedestrian crossing; it may be marked or unmarked. Three marking patterns using white striping are most common: 1) Double parallel lines, 2) "zebra stripes:" white cross hatches perpendicular to the pedestrian direction of travel, or 3) "Ladder:" perpendicular white cross hatches combined with double parallel lines on the outside edges.

Enhanced Sidewalks: These are sidewalks that are wider than the standard sidewalk at 8' wide. This facility specifically serves pedestrians connecting to key destinations and allowing for bi-directional foot traffic.

Intersection Treatment: The design of intersections to reduce conflict between pedestrians, cyclists, and motorists that occurs at roadway and trail intersections. The purpose of these treatments is to Increase awareness for all users, achieved through the implementation of visual or physical indicators such as specialized signals, changes in pavement material, pavement markings, and the addition of refuge medians on wide roadways.

Major Thoroughfares: Roadways designated for large traffic volumes, higher speeds, and intended for long-distance travel. Typically, this type of thoroughfare creates interjurisdictional connections and is part of a regional roadway network.

Mid-Block Crossing: Pedestrian or bicyclist crossings located in between signalized intersections. Mid-block crossings have marked crosswalks on the pavement and may also include a pedestrian signal. These crossings can offer a more convenient option for crossing roadways, especially ones with long distances in between intersections.

Minor Thoroughfares: Roadways with lower traffic volumes, slower speeds, and intended for local travel needs. Typically, these thoroughfares create key cross-town connections and connect to major thoroughfares.

Pedestrian: A person walking or traveling by means of a wheelchair, electric scooter, crutches, or other walking devices or mobility aids. Use of the term pedestrian is meant to include all disabled individuals regardless of which equipment they may use to assist their self-directed locomotion (unless they are using a bicycle). It also includes runners, joggers, those pulling or pushing strollers, carriages, carts and wagons, and those walking bicycles.

Pedestrian Activated Signal: A traffic control device used to indicate the presence of a pedestrian to allow for a safe crossing away from a signalized intersection. Once the signal is activated, flashing lights appear to signal their presence and vehicles are required to stop.

Rest Area: Defined as level portions of a trail wide enough to provide wheelchair users and others a place to rest and gain relief from prevailing grade and cross-slope demands. Users can benefit from rest stops on steep or very exposed trails to pause from their exertions and enjoy the environment. Rest areas are most effective when placed at intermediate points, scenic lookouts, or near trail amenities. Rest areas located on the trail allow stopped trail users to move out of the way of continuing traffic. The most inviting rest areas have a bench, shade, a place to rest bicycles, and a trash receptacle.

Sidepaths: This type of multi-use trail provides connections for pedestrians and bicyclists, and are typically located adjacent to roadways. They should provide wide spaces that are comfortable for users when on the primary system and there is right-of-way available they should be 12', other trails can be 10'.

Shared-Use Lane: A roadway that is open to both bicycle and motor vehicle travel. Unless bicycle travel is explicitly prohibited, all highways, roads, and streets are “share lanes.” Some shared lanes may have wide curb lanes or paved shoulders to increase comfort for bicyclists; however in most cases these roads do not have sufficient width to accommodate a designated bike lane.

Shared-Use Path: A bicycle and pedestrian path separated from motorized vehicular traffic by an open space barrier or curb, also called a **multi-use trail**. Shared-use paths may be within the highway right-of-way (often termed “sidepaths”) or within an independent right-of-way, such as on an abandoned railroad bed or along a stream valley park. Shared use paths typically accommodate two-way travel and are open to pedestrians, in-line skaters, wheelchair users, joggers and other non-motorized path users. They are typically surfaced in asphalt or concrete, but may have hard-packed/all weather gravel or dirt surfaces as well.

Sharrow: A pavement marking with two inverted ‘V’ shapes above a bicycle indicating that the entire lane is meant to be shared by motor vehicles and bicyclists. Often times sharrows will be accompanied by a “Bicycle May Use Full Lane” sign.

Shoulder: Any pavement of a roadway to the right of the right-most travel lane, but not including curbs, planting buffers, and sidewalks. Shoulders can have a variety of surface treatments including pavement, gravel, or grass. Depending on their width and surface, they serve a variety of purposes, including providing space for vehicles to slow and turn right, accommodation of stopped or broken-down vehicles, to allow emergency vehicles to pass, for structural support of the roadbed, or for bicycle and pedestrian travel.

Sidewalk: The portion of a highway, road or street specifically constructed for the use of pedestrians on the outside edge of the vehicular travel way. Sidewalks are typically, but not always, curb-separated from the roadway and made of concrete, brick, asphalt or another hard surface material.

Primary Trail: These multi-use trail facilities serve a variety of users and are typically 12’ or wider to accommodate high volumes of users. These trails are primary east/west and north/south routes throughout the Town that provide access to various locations and destinations.

Texas Accessibility Standards (TAS): Standards for developing ADA accessible public facilities in Texas. The TAS are regulated by the Texas Department of Licensing and Regulation (TDLR).

Trail: The word “trail” has come to mean a wide variety of facility types, including everything from a “marked or beaten path, as through woods or wilderness” to a paved “multi-use trail.” Note: Several of these definitions are taken from the American Association of State Highway and Transportation Officials (AASHTO) “Guide for the Development of Bicycle Facilities,” 1999 Edition.

Trailhead: A trailhead is a place where a trail begins; generally they are marked by signage and include a variety of amenities for trail users, including parking, lighting, signage, benches, waste receptacles, bike racks, and similar amenities. Usually, they will be located within parks and major destinations. Trailheads can be located at equestrian trails, multi-use trails, or where multiple trail types intersect.

Veloweb: An expansive network of multi-use trails established by NCTCOG’s Mobility 2045 plan. This off-street trail network has existing, funded, and planned routes throughout the DFW Metroplex and accommodates a variety of user groups including bicyclists, pedestrians, and other non-motorized modes of transportation. Routes are established through collaborative efforts between NCTCOG and local jurisdictions.

Wayfinding: Wayfinding is a system of signage that helps people navigate the built environment. A wayfinding system includes directional signage, mile markers, trailhead signage, digital directional guidance, and kiosks. This system can help guide to destinations, move around parks, and provide a sense of safety.

APPENDIX B - COMMONLY USED SIGNAGE



R9-7

THE SHARED-USE PATH RESTRICTION

Location: Installed on facilities that are to be shared by pedestrians and bicyclists



R9-6

BICYCLE YIELD TO PEDESTRIAN

Location: At crosswalk
Size: 12” x 18” (min. for trails)



D4-3

BICYCLE PARKING AREA

Location: Installed where it is desirable to show the direction to a designated bicycle parking area. The arrow may be reversed as appropriate



D11-1

BIKE ROUTE

Location: At beginning of each route and at intersections
Size: 24” x 18” (min. for trails)



R9-5

USED PEDESTRIAN SIGNAL

Location: At crosswalk
Size: 12” x 18” (min. for trails)



R3-17

BIKE LANE

Location: Sign spacing should be determined by engineering judgment based on prevailing speed of bicycle and other traffic, block length, distances from adjacent intersections, and other considerations.



R3-17A

AHEAD

Location: Should be mounted directly below a R3-17 sign in advance of the beginning of a marked bicycle lane



M4-11, 12, 13, M7-1, 2, 3, 4, 5, 6, 7

BIKE ROUTE SUPPLEMENTAL PLAQUES

Location: Where bike lanes begin, end, or change direction
Size: 12"x4", 12"x9" (min. for trails)



R3-17B

ENDS

Location: Should be mounted directly below a R3-17 sign at the end of a marked bicycle lane



BIKE MAY USE FULL LANE

Location: Where shared use lanes begin and along the designated route



D1-1B, D3-1

DIRECTIONAL SIGNS

Location: At intersections where access to destinations are available
Size: 24"x6" (min. for trails)



R5-3

NO MOTOR VEHICLE

Location: Entrance to trail
Size: 24"x24" (min. for trails)



W16-1

SHARE THE ROAD

Location: Where there is a need to warn motorists to watch for bicyclists traveling along the highway



R1-1

STOP

Location: At trail intersections and crossings
Size: 18"x18" (min. for trails)



W11-1

BICYCLE WARNING

Location: Oriented toward motorists at trail crossing
Size: 18"x18" (min. for trails)



R1-2

YIELD

Location: At trail intersections and crossings
Size: 18"x18"x18" (min. for trails)



W11-2

PEDESTRIAN WARNING

Location: Oriented toward motorists at trail crossing
Size: 18"x18" (min. for trails)



W3-1

STOP AHEAD

Location: Where stop sign visibility is obscured
Size: 18"x18" (min. for trails)



W3-2

YIELD AHEAD

Location: Where yield sign visibility is obscured
Size: 18"x18" (min. for trails)



W2-1,2,3,4,5

TRAIL INTERSECTION WARNING

Location: At trail intersections where no stop or yield sign is required; locations with limited sight lines
Size: 18"x18" (min. for trails)



W3-3

SIGNAL AHEAD

Location: Where traffic signal visibility is obscured
Size: 18"x18" (min. for trails)



PLEASE STAY ON TRAIL

Location: In environmentally-sensitive areas where the trail travels near wildlife and heavy vegetation
Size: 12" x 18" (minimum dimensions for trails)



W1-1,2,3,4,5

TURN & CURVE WARNING

Location: At turns and curves which exceed design speed criteria
Size: 18"x18" (min. for trails)



W11-15, W11-15B

TRAIL CROSSING SIGNAGE

Location: At mid-block or unsignalized, uncontrolled movement, trail crossing locations.
Size: 18"x18" (min. for trails), 18"x12"



R10-15

TURNING VEHICLES YIELD

Location: At intersections to remind drivers who are making turns to yield to pedestrians
Size: 30"x30"

TRAIL CLOSED: NO ENTRY UNTIL MADE ACCESSIBLE & SAFE FOR PUBLIC USE

Location: Where trail or access points are closed due to hazardous conditions or construction
Size : 18" x 18" (minimum dimensions for trails)

TRAIL REGULATIONS/RULES OF THE TRAIL

Location: Entrances to trail
Size : 18" x 18" (minimum dimensions for trails)

APPENDIX C - DETAILED COMMUNITY INPUT

MEETINGS AND ENGAGEMENT EVENTS

Event	Date	Topic
Visioning		
Stakeholder Groups Visioning Sessions	May 4 and 5, 2021	Visioning
Technical Working Group #1	May 4, 2021	Visioning
Steering Committee #1	May 4, 2021	Visioning
Public Open House #1 (in person and virtual)	May 5, 2021	Visioning
Public Survey #1	May - June 2021	Visioning
Virtual Engagement Room	May 2021	Visioning
Arts in the Park	May 8, 2021	Visioning
Music in the Park	May 14, 2021	Visioning
Parks Board Meeting	June 3, 2021	Visioning, engagement results
Mid-Point Briefings and Network Recommendations		
Steering Committee #2	August 25, 2021	Needs Assessment, Engagement Results, Prioritization Criteria
Technical Working Group #2	August 26, 2022	Needs Assessment, Engagement Results, Prioritization Criteria
Steering Committee #3	January 19, 2022	Recommended Network
Public Open House #2 and Parks Board Briefing	February 3, 2022	Recommended Network and Design Guidelines
Prioritization Work Sessions		
Parks Board and Transportation Commission Joint Work Session	April 7, 2022	Recommended Network, Design Guidelines, Prioritization
Town Council Work Session	April 21, 2022	Recommended Network, Design Guidelines, Prioritization
Planning and Zoning Commission Work Session	April 25, 2022	Recommended Network, Design Guidelines, Prioritization
Approval Meetings		
Parks Board Approval Meeting	June 2, 2022	Plan Approval
Transportation Commission Approval Meeting	June 14, 2022	Plan Approval
Planning and Zoning Commission Approval Meeting	June 27, 2022	Plan Approval
Town Council Approval Meeting	July 18, 2022	Plan Approval

Engagement Key Findings



Community Engagement

- Steering Committee
- Technical Working Group
- Stakeholder Listening Sessions
- Elected & Appointed Officials Briefings
- Public Open Houses
- Project Website www.flowermoundtrailsplan.com
- Community Input Survey
- Virtual Engagement Room

Engagement Results

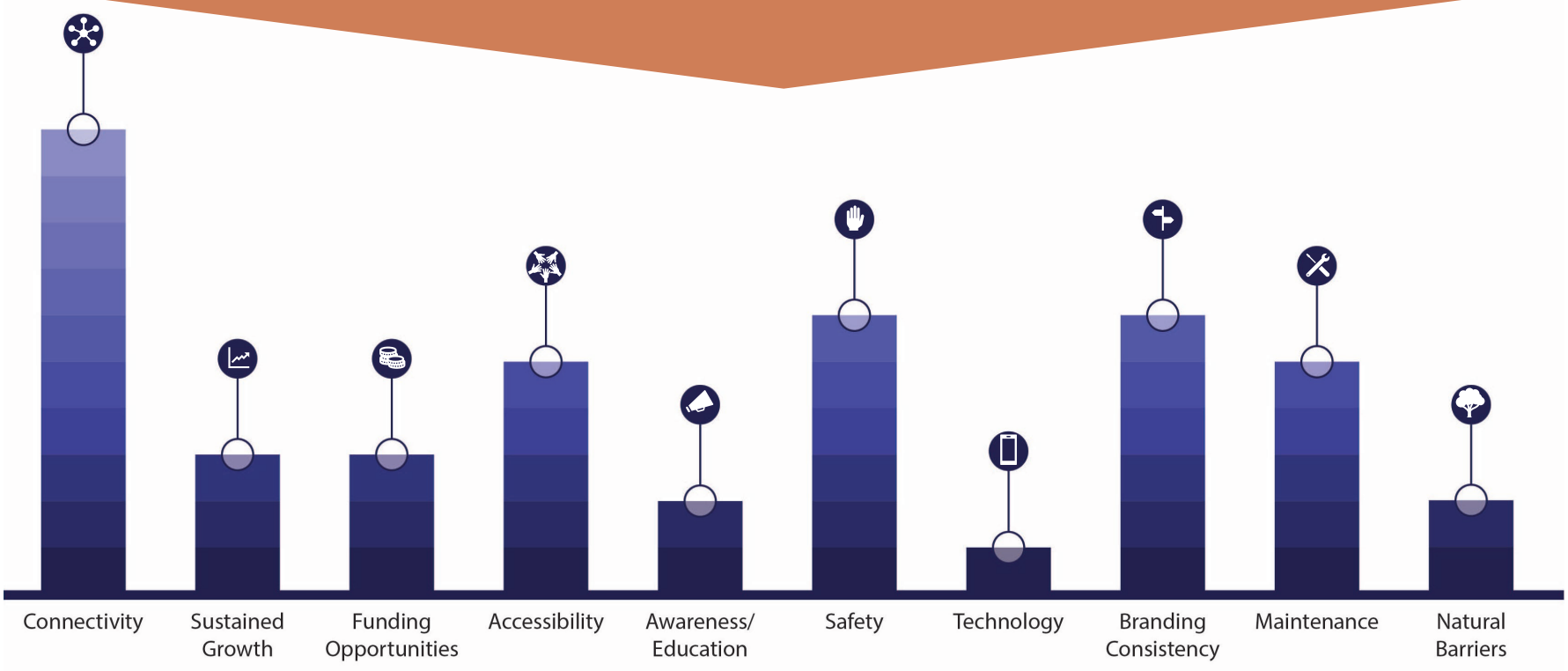
Steering Committee, Technical Working Group, Stakeholder Listening Sessions



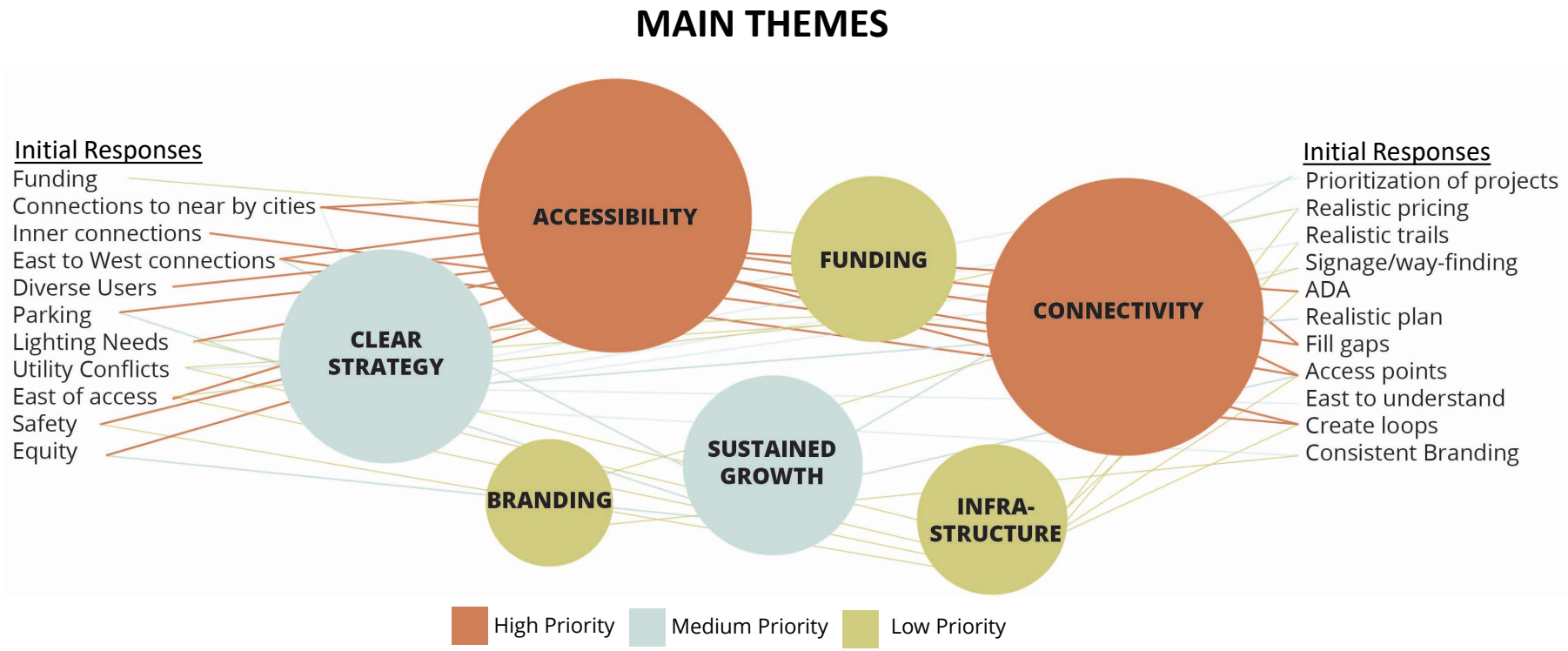
What is your vision for the future of trails and bikeways in Flower Mound?



What are some of the challenges related to trails and bikeways in Flower Mound today?



In your opinion, what is the most important action item that should result from this plan?



Engagement Results

Public Open House & Virtual Open House



What one word would you use to describe Trails and Bikeways in Flower Mound Today?



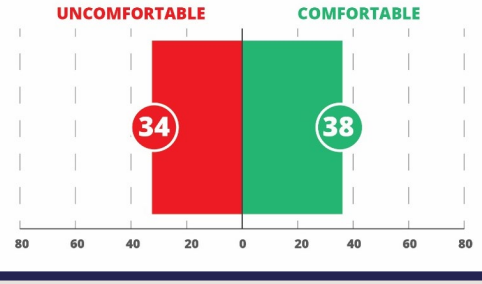
What one word would you use to describe how you envision Trails and Bikeways in Flower Mound in the Future?



What is your level of comfort with the following types of on-street bicycle facilities?

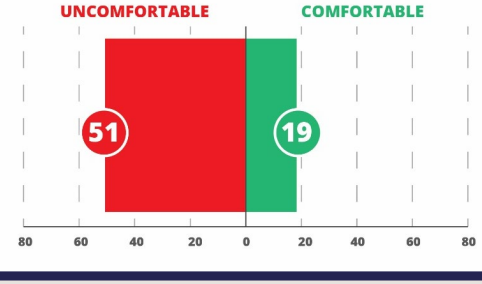
BIKE LANE





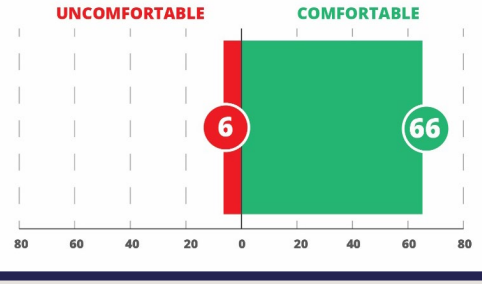
SHARED LANE





BUFFERED BIKE LANE

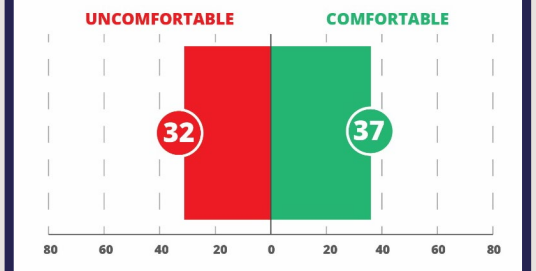




What is your level of comfort with the following types of on-street bicycle facilities?

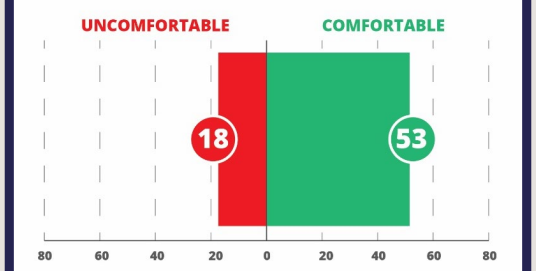
WIDE SHOULDER



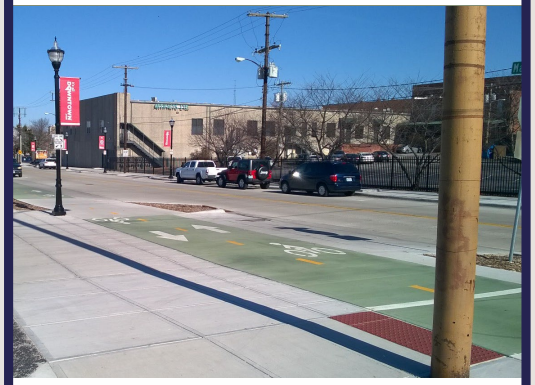


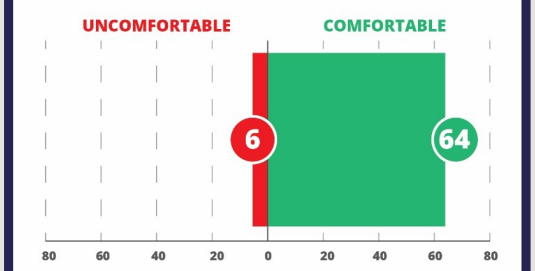
BICYCLE BOULEVARD





CYCLE TRACK

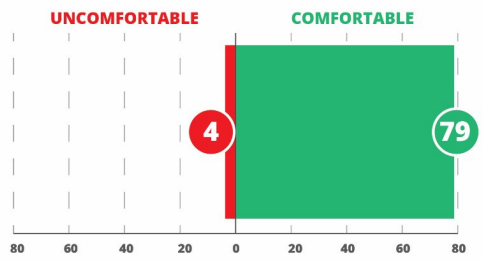




What is your level of comfort with the following types of off-street trails?

SHARED-USE PATH





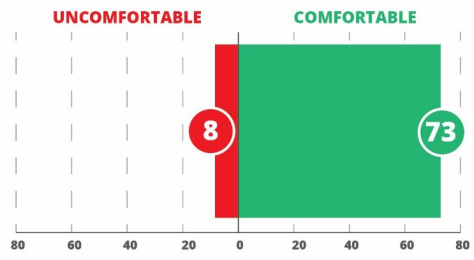
SIDEPATH





SHARED-USE PATH
(SOFT SURFACE)



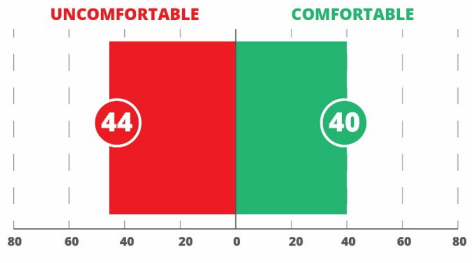


11

What is your level of comfort with the following types of off-street trails?

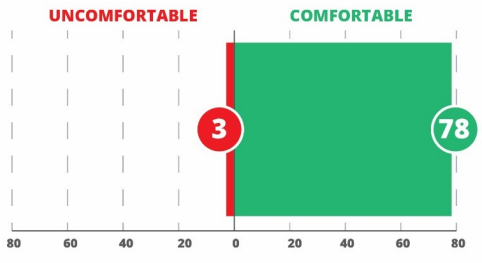
SIDEPATH





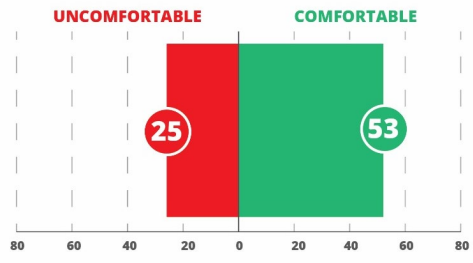
SHARED-USE PATH





SIDEPATH





What is your level of comfort with the following types of Equestrian Paths?

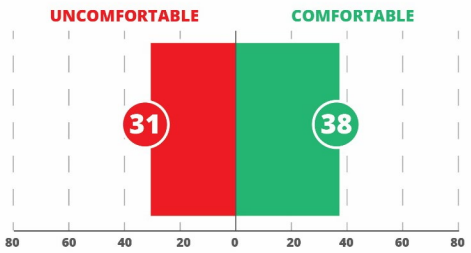
EQUESTRIAN PATH





EQUESTRIAN SIDEPATH





What are your top three preferred trail amenities that you would like to see along trails in Flower Mound?

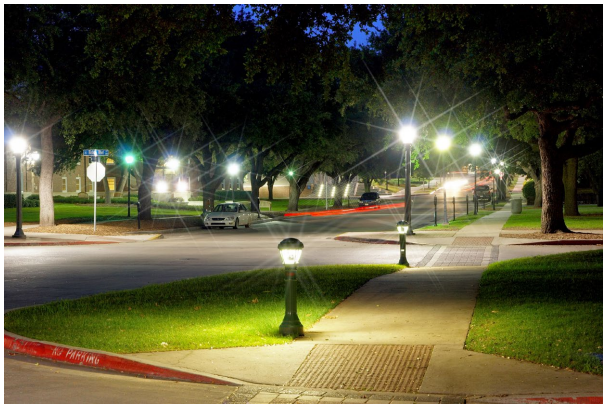
WAYFINDING SIGNAGE

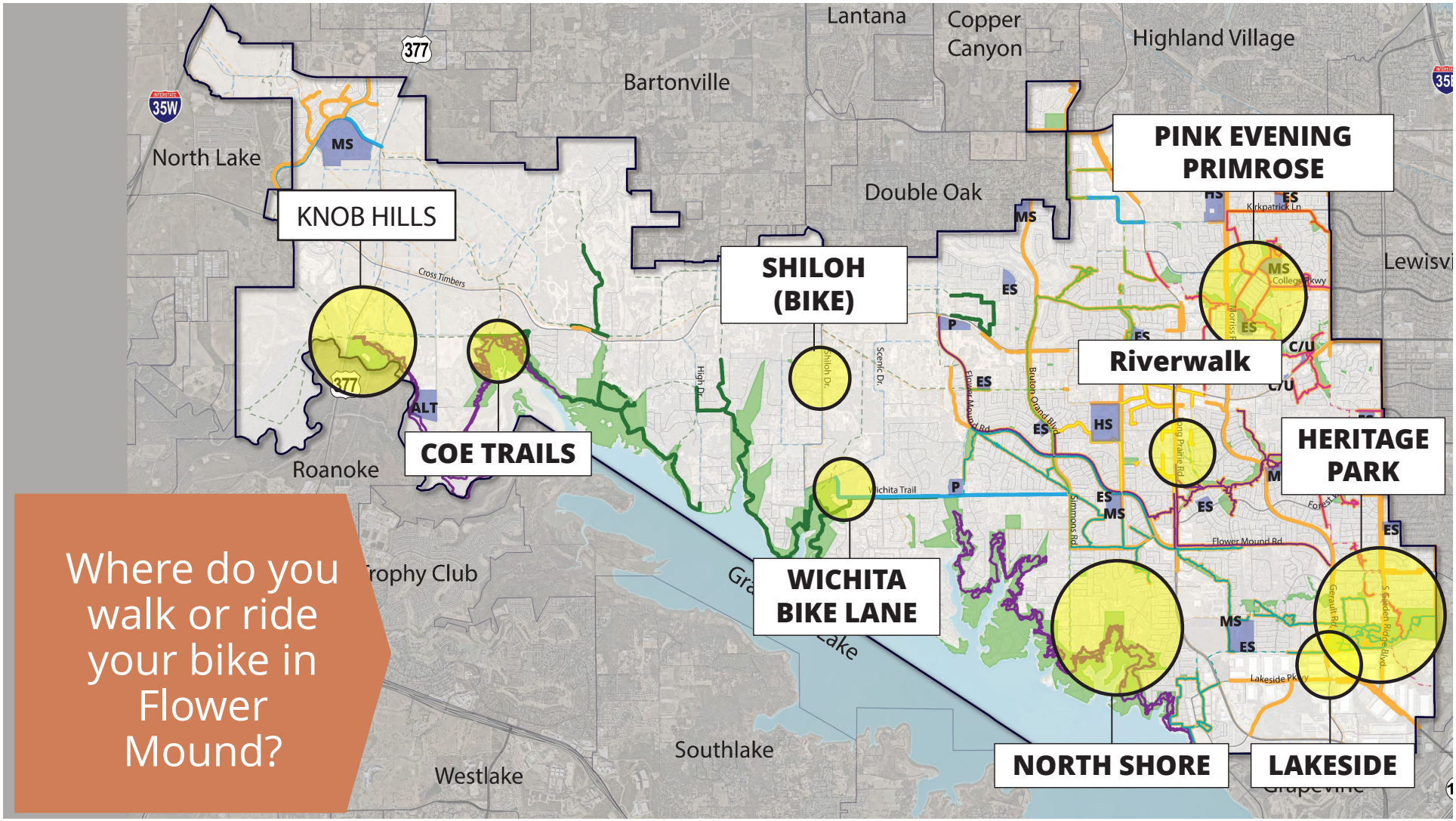


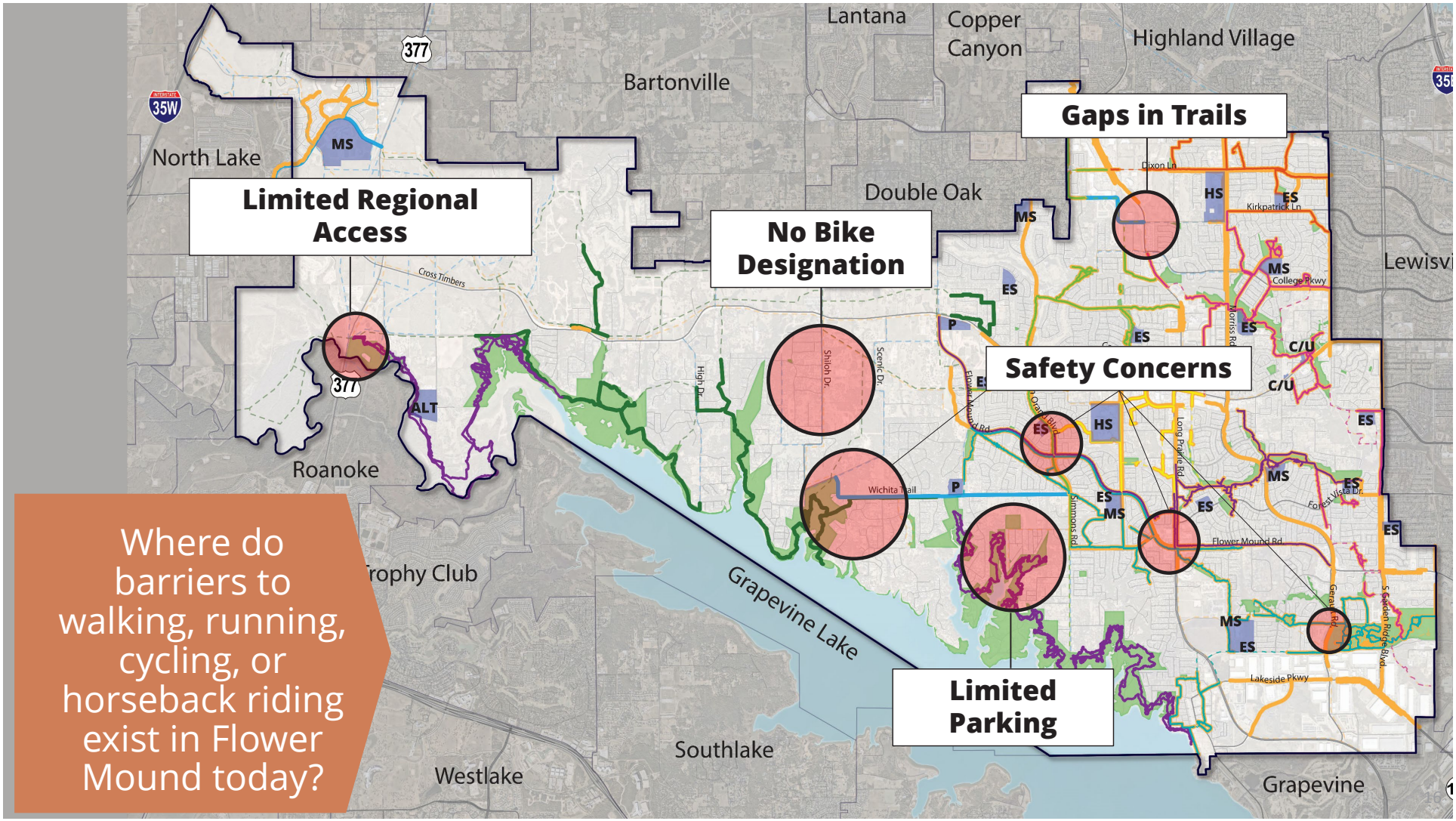
PARKING

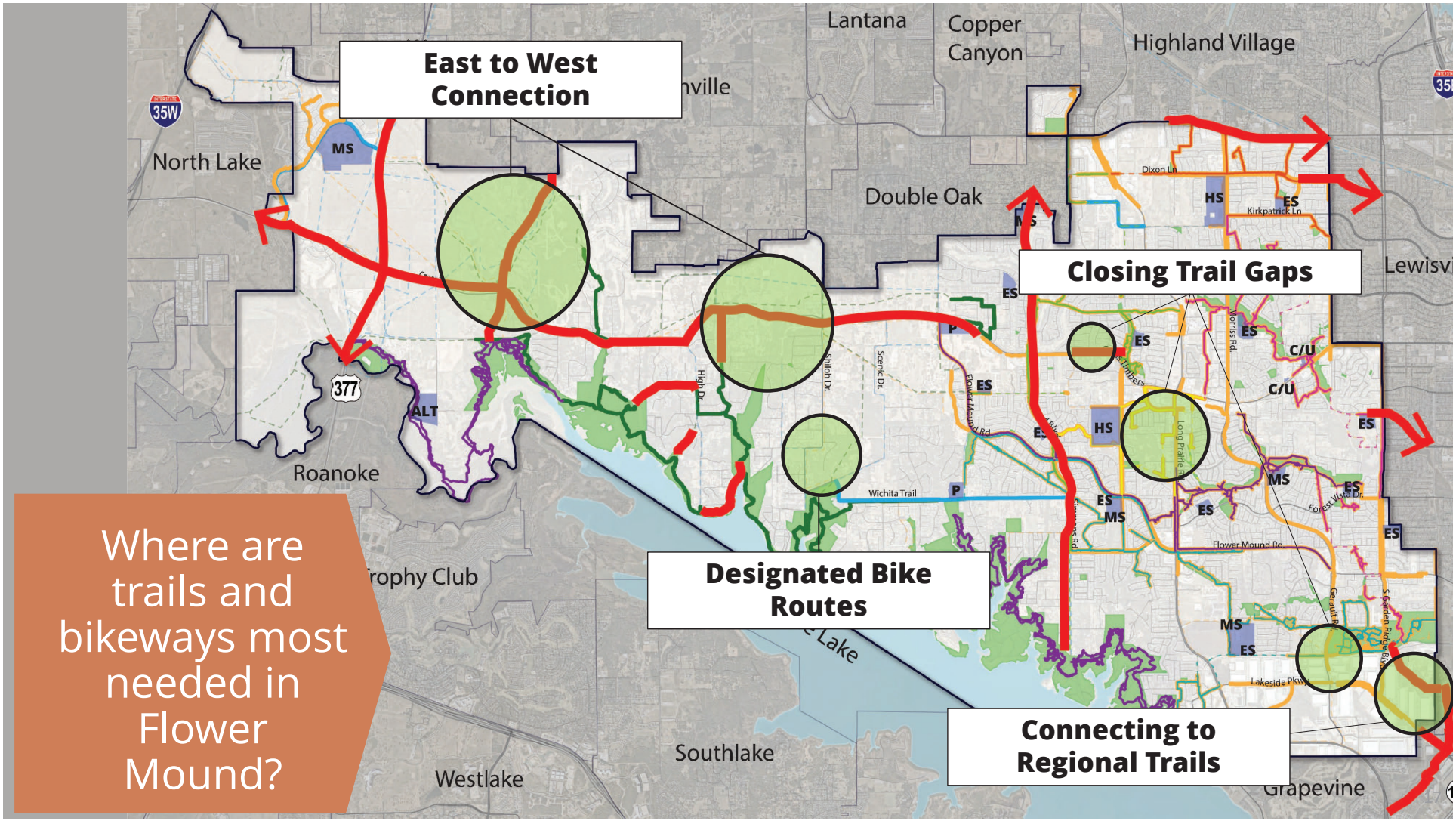


LIGHTING

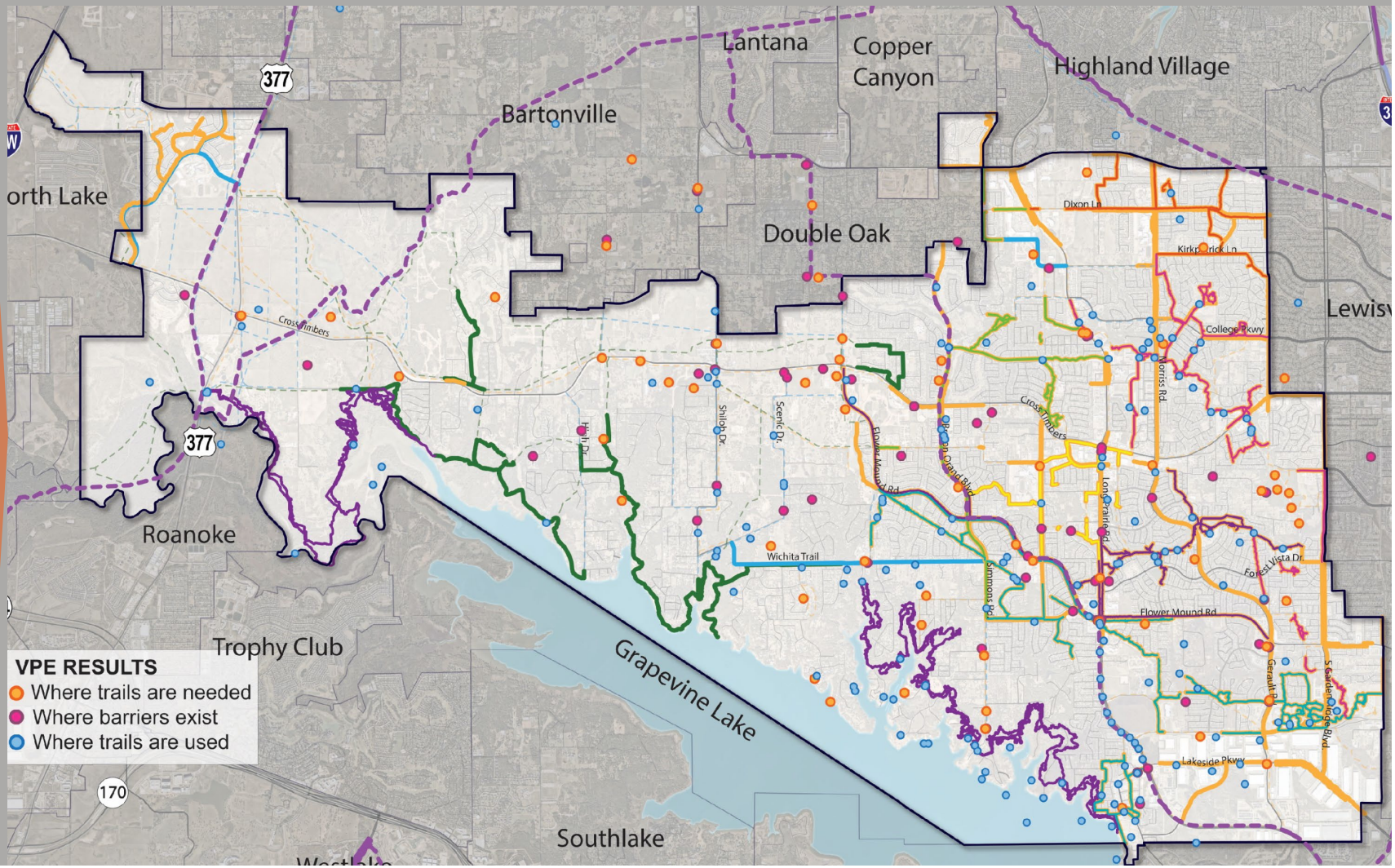



Where do you walk or ride your bike in Flower Mound?
KNOB HILLS
COE TRAILS
SHILOH (BIKE)
WICHITA BIKE LANE
PINK EVENING PRIMROSE
Riverwalk
HERITAGE PARK
NORTH SHORE
LAKESIDE
Lantana
Copper Canyon
Highland Village
Bartonville
North Lake
Double Oak
Roanoke
Trophy Club
Southlake
Westlake
Lewisville
Grapevine
377
35W
ALT
MS
ES
HS
P
C/U
Cross Timbers
Shiloh Dr.
Scenic Dr.
High Dr.
Wichita Trail
Simmons Rd
Flower Mound Rd
Bruton Grand Blvd
Kirkpatrick Ln
College Pkwy
Morriss Rd
Long Prairie Rd
Forest
Garden Ridge Blvd
Lakeside Pkwy


Lantana
Copper Canyon
Highland Village
Bartonville
North Lake
Double Oak
Lewisville
Roanoke
Trophy Club
Grapevine Lake
Southlake
Westlake
Grapevine
Limited Regional Access
No Bike Designation
Gaps in Trails
Safety Concerns
Limited Parking
Where do barriers to walking, running, cycling, or horseback riding exist in Flower Mound today?


East to West Connection
Closing Trail Gaps
Designated Bike Routes
Connecting to Regional Trails
Where are trails and bikeways most needed in Flower Mound?
Lantana
Copper Canyon
Highland Village
Double Oak
North Lake
Roanoke
Trophy Club
Southlake
Westlake
Grapevine
Lewisville
Wichita Trail
Flower Mound Rd
Dixon Ln
Kirkpatrick Ln
Morriss Rd
Shiloh Dr.
Scenic Dr.
High Dr.
Long Prairie Rd
Forest Vista Dr.
Lakeside Pkwy
S Garden Ridge Blvd
35W
377
ALT
MS
HS
ES
C/U
P

Virtual Public Open House Results



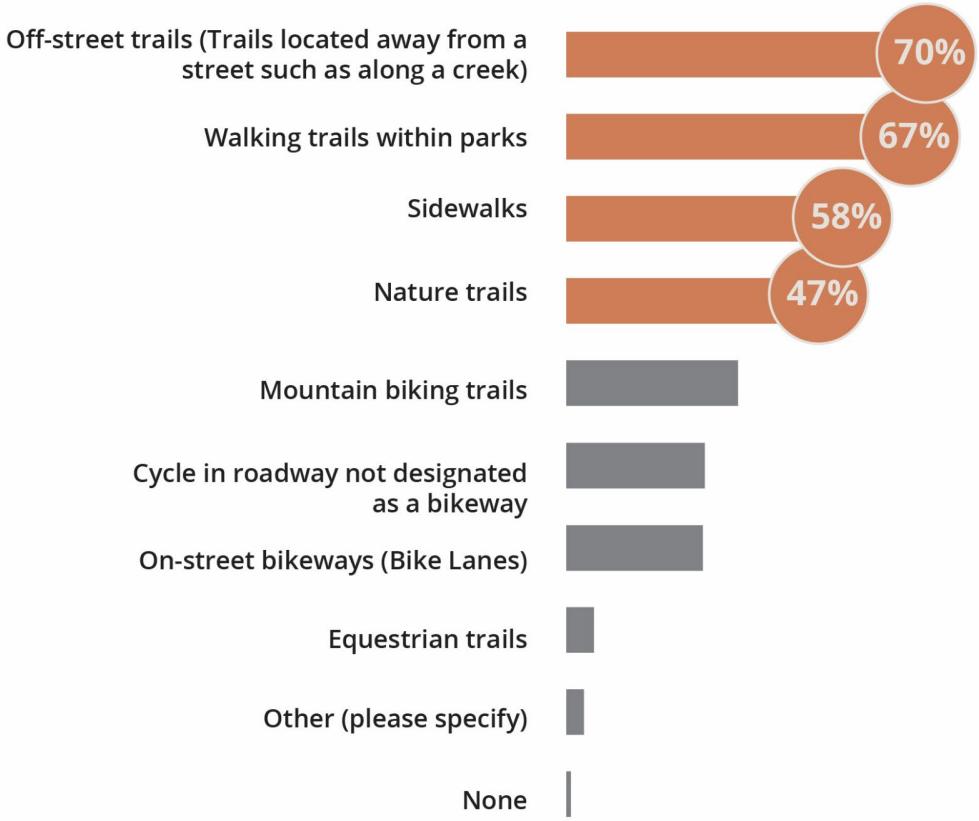
Engagement Results

Online Community Survey

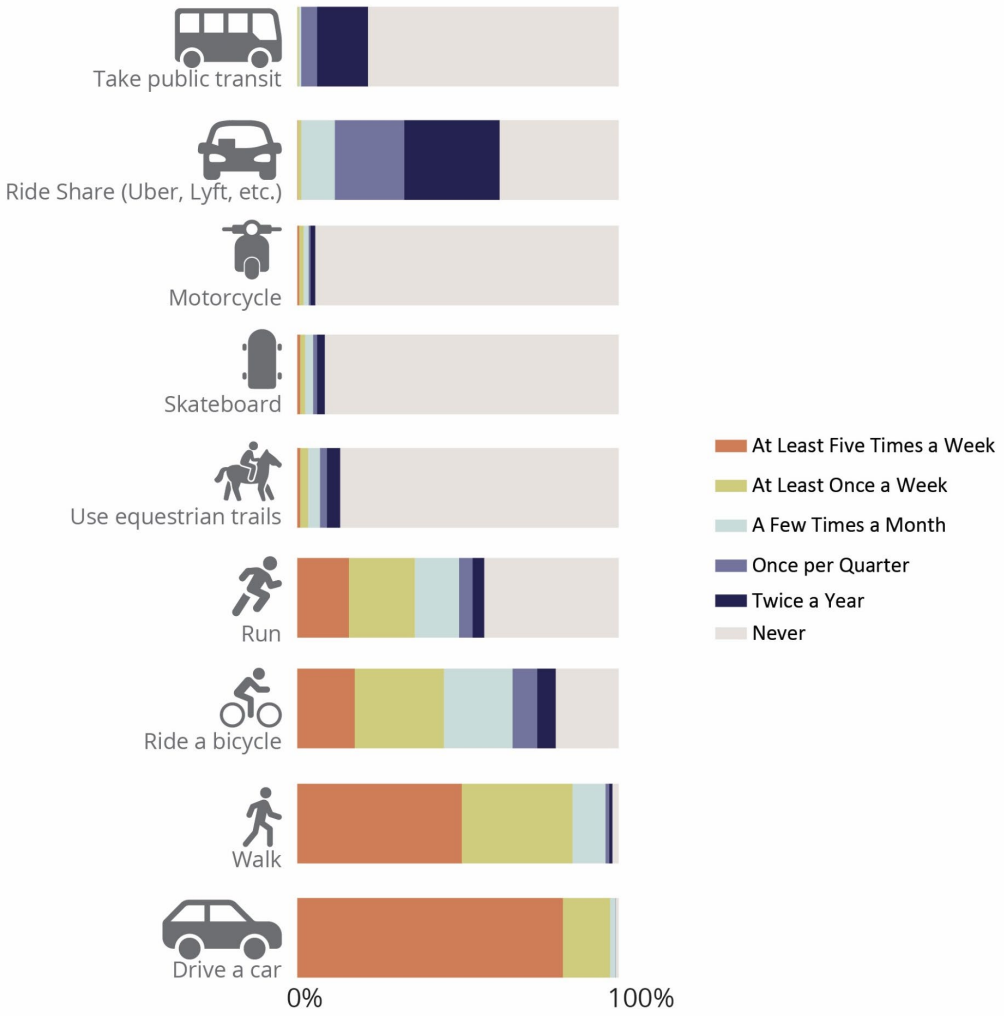
A total of 947 responses
Available from Early May to Mid June 2021



What type of trail or bikeway in Flower Mound do you generally use? (Select all that apply)



How often do you...



Please indicate to what extent you agree with the following statements.

81% Strongly agree or agree they would like to walk more than they do now.



I would like to walk more than I do now

78% Strongly agree or agree they would like to cycle more than they do now.



I would like to cycle more than I do now

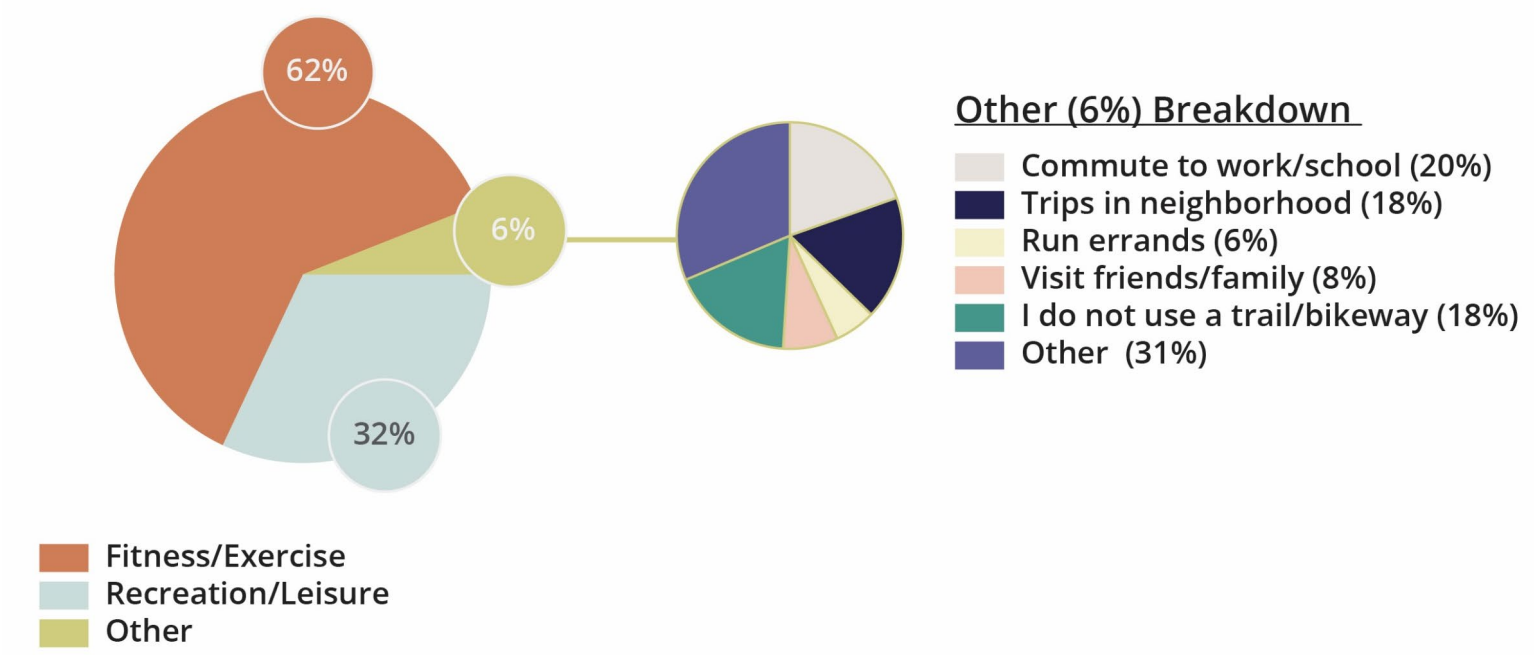


I would like to rely on my car less

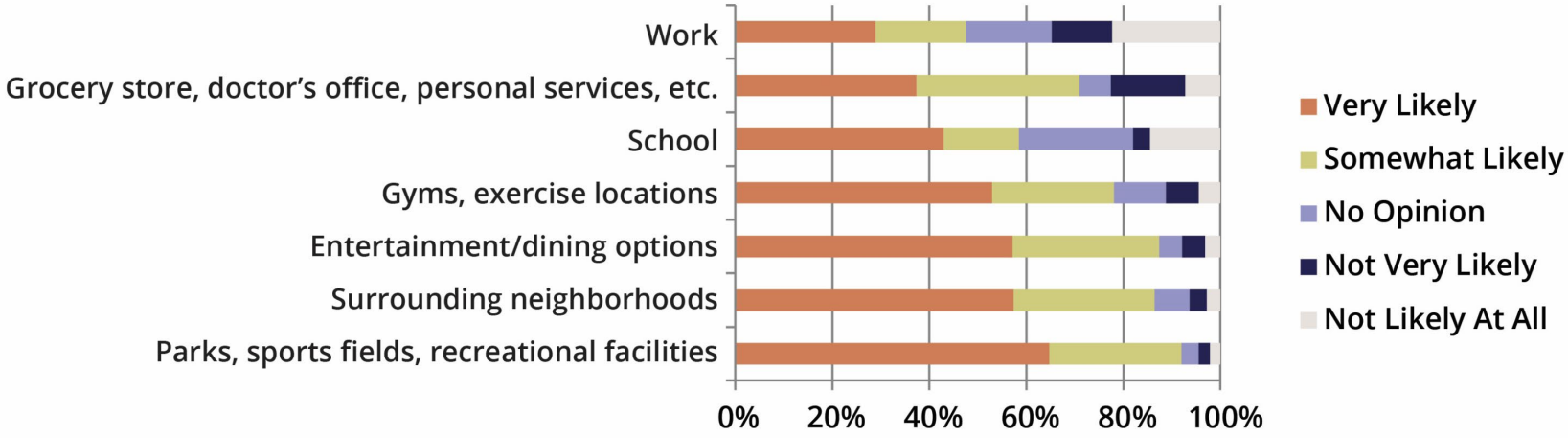
Strongly Agree
Agree
Neither Agree nor Disagree
Disagree
Strongly Disagree

65% Strongly agree or agree they would like to rely on their car less.

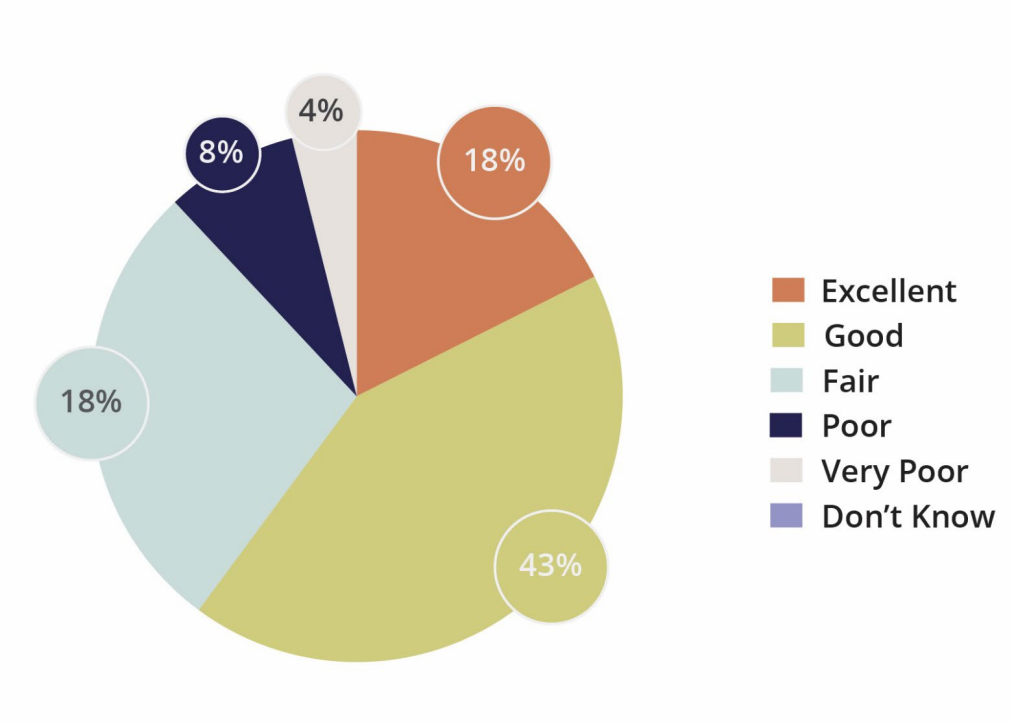
What is your primary purpose for using a trail or bikeway in Flower Mound?



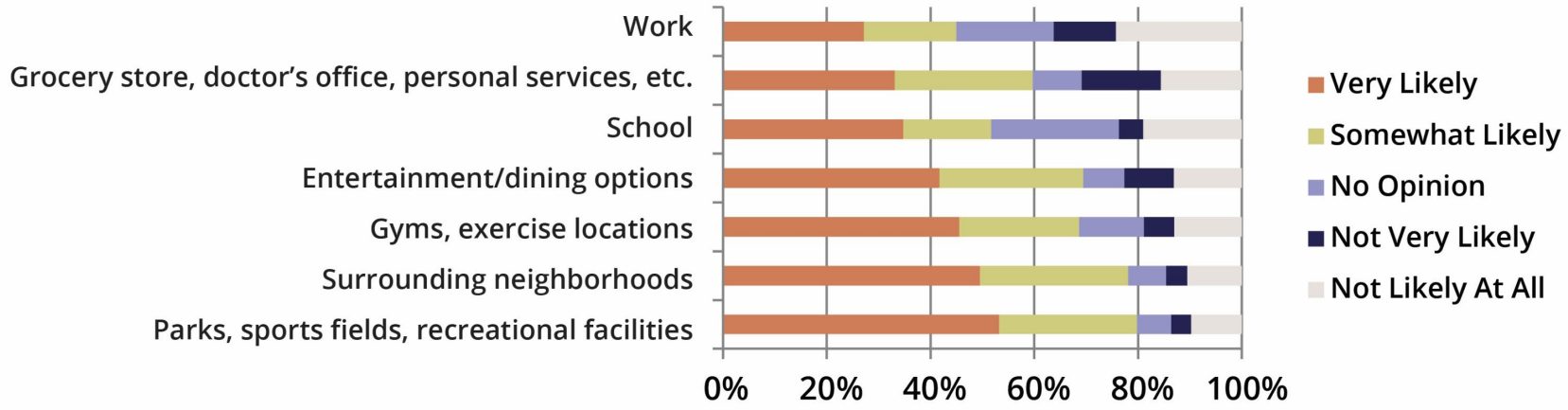
If sidewalks or trails connected your residence to the following destinations, what is the likelihood that you would **walk** to each for at least some of your trips?



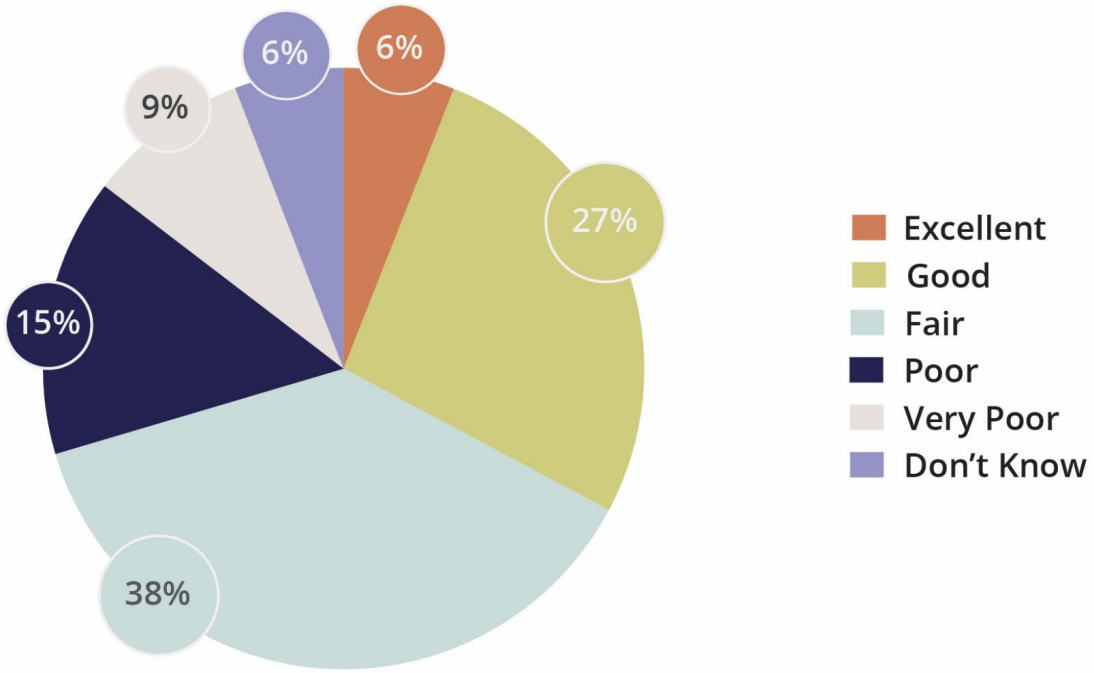
Overall, how would you rate where you live as a place to **walk**?



If on-street bike facilities or trails connected your residence to the following destinations, what is the likelihood that you would **cycle** to each for at least some of your trips?

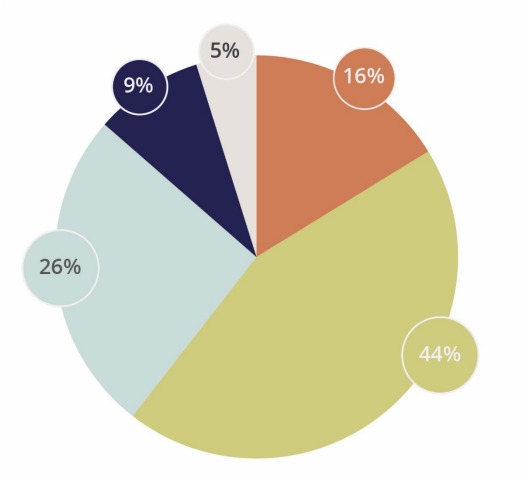


Overall, how would you rate where you live as a place to ride a **bicycle**?

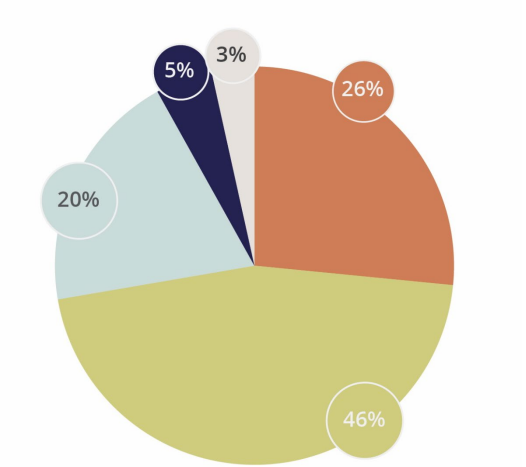


How often did you use trails or bikeways in Flower Mound...

PRE-COVID

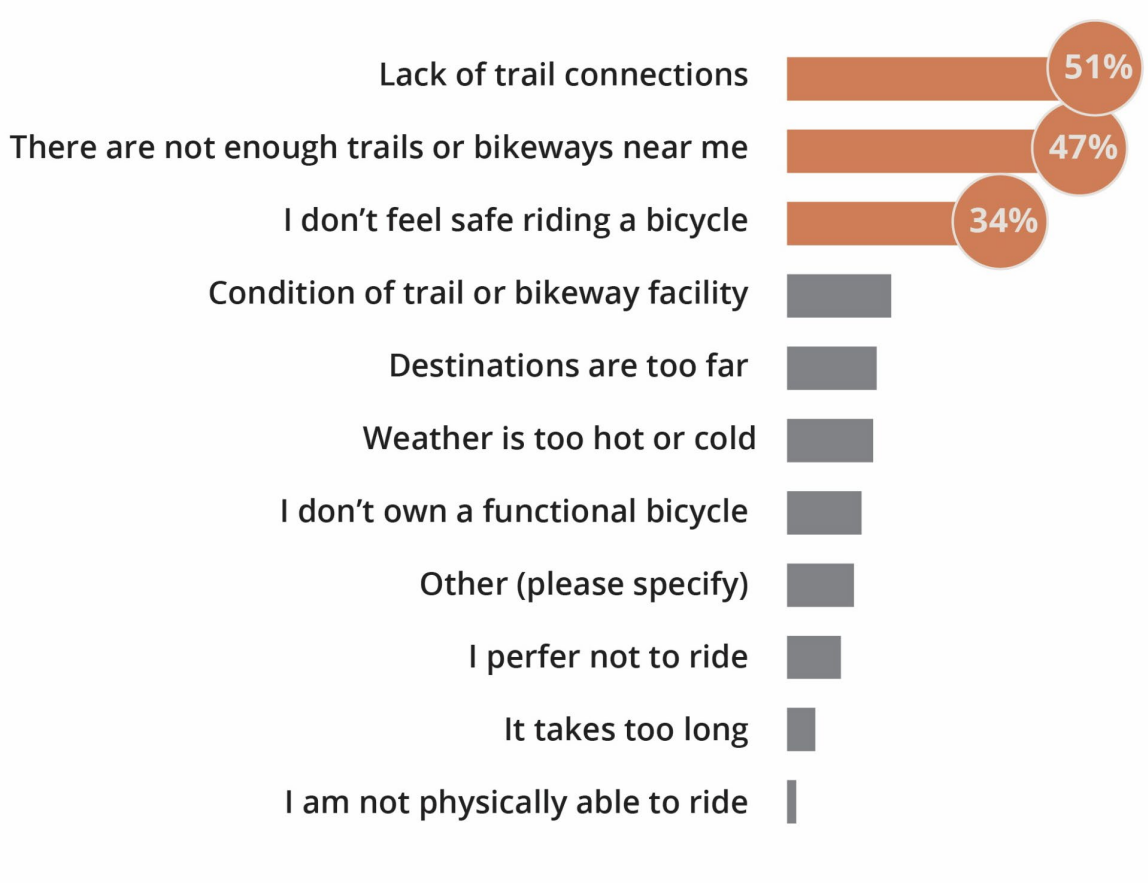


POST-COVID

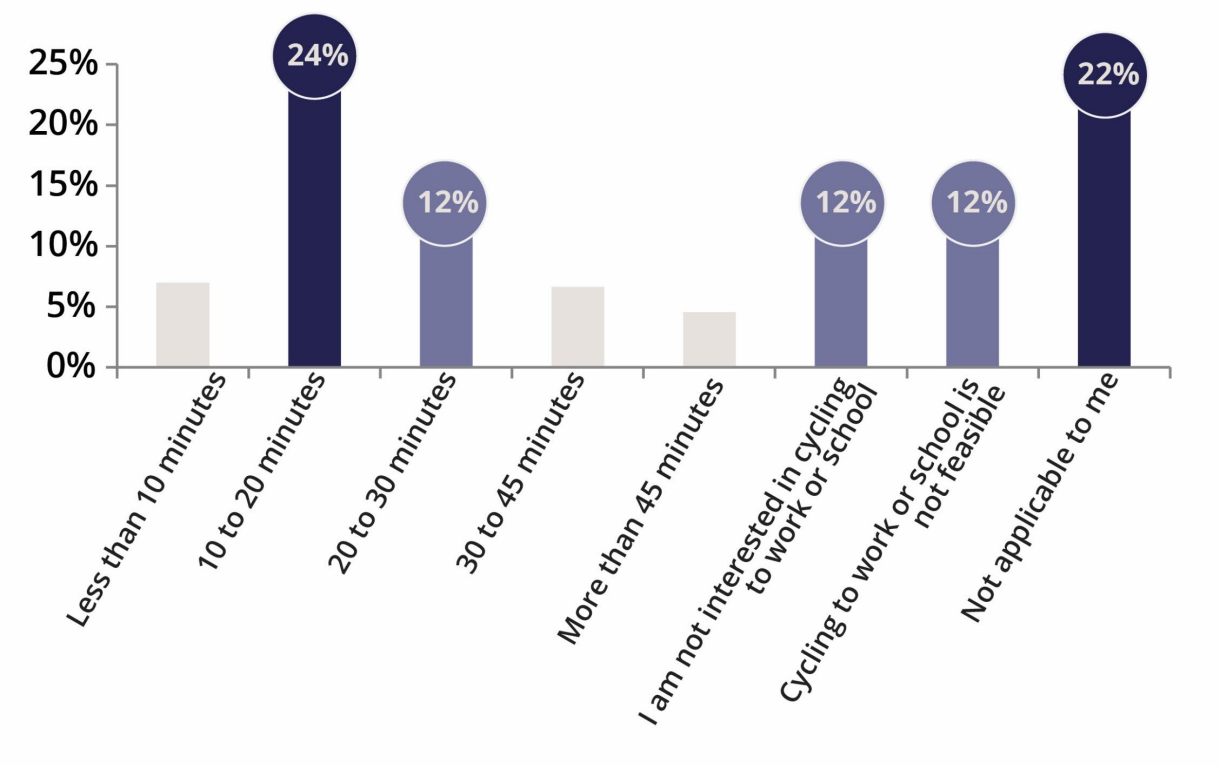


Daily | A few times a week | A few times a month | A few times a year | Never

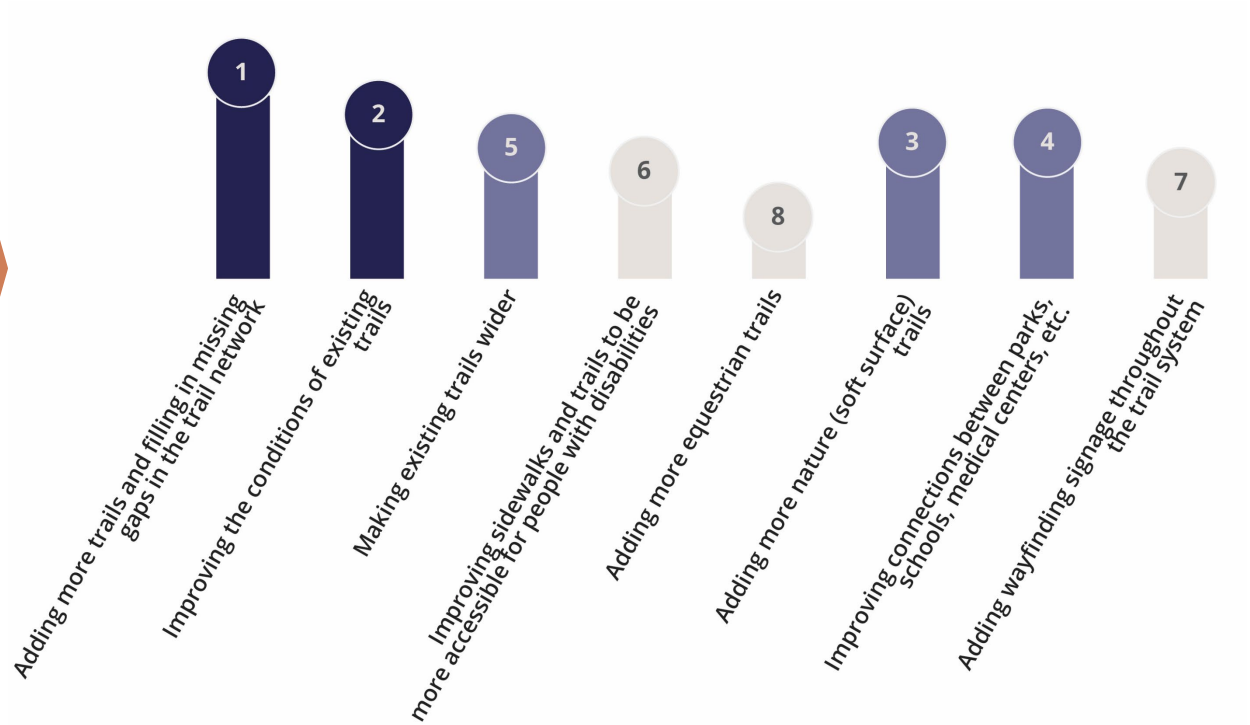
Do any of the following prevent you from riding a bicycle more often than you currently do? (Select all that apply)



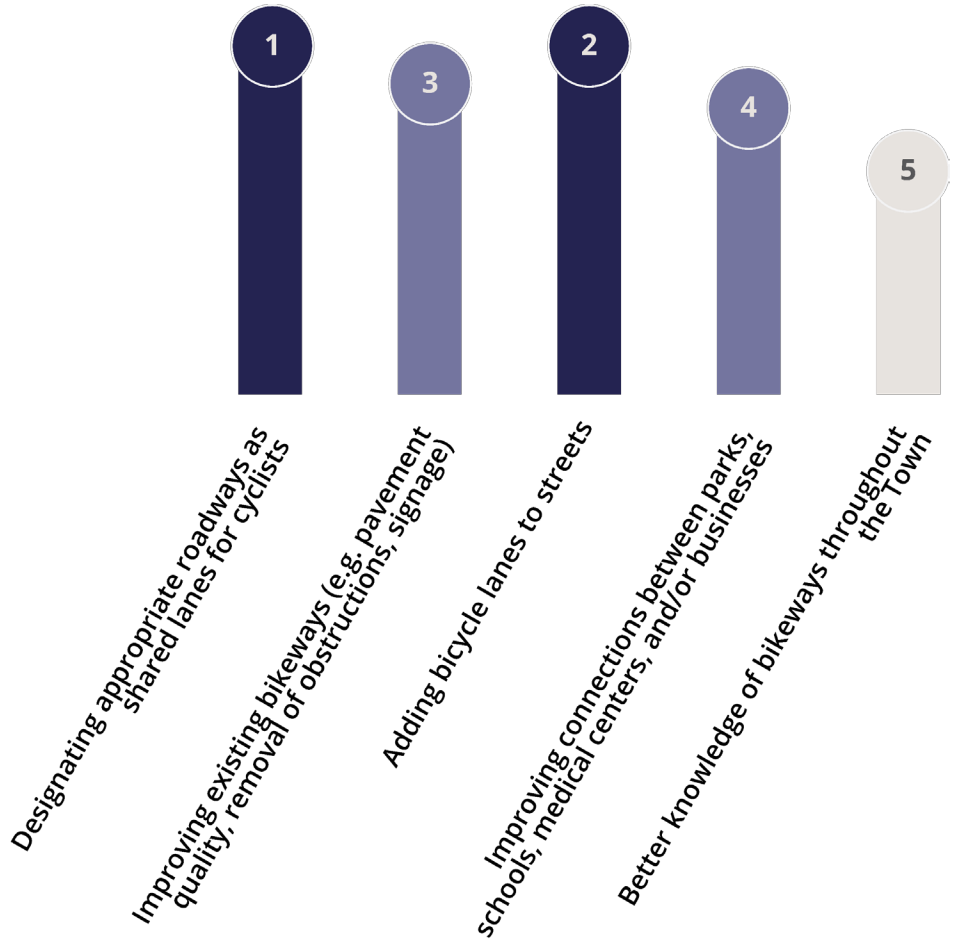
How much time would you be willing to spend cycling on your commute to work or school?



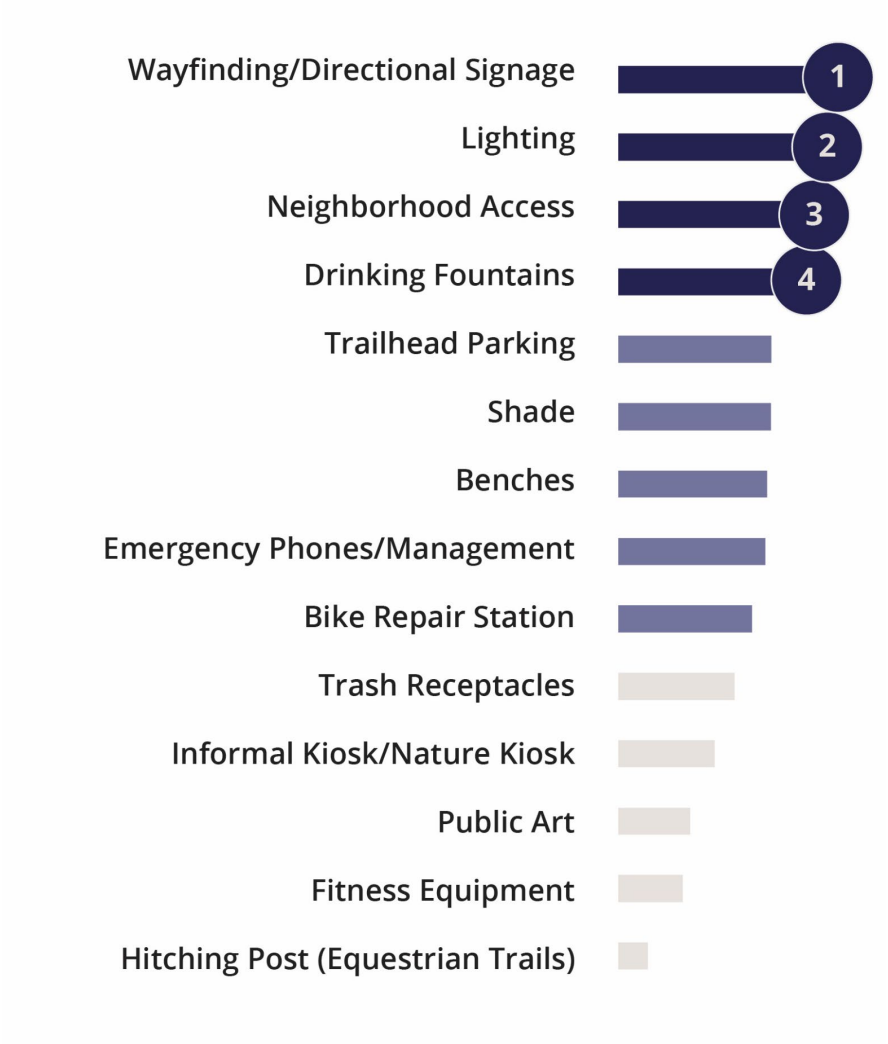
Please rank the following potential improvements to **trails** in Flower Mound. (1 is most important, 8 is least important).



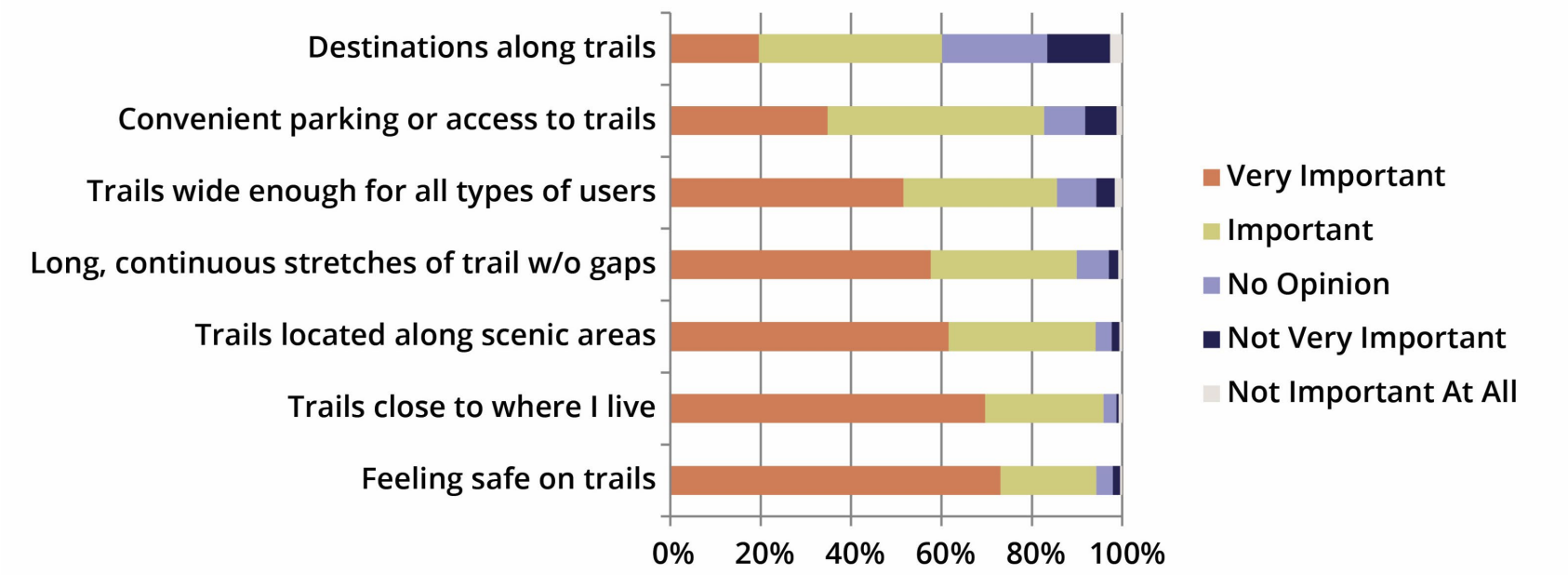
Please rank the following potential improvements to **bikeways** in Flower Mound. (1 is most important, 5 is least important).



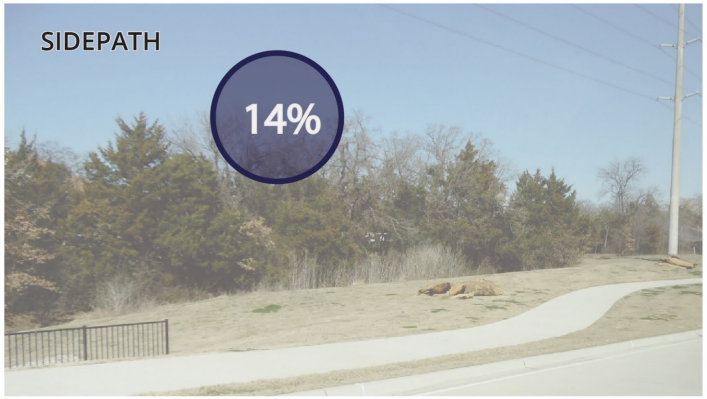
Trail amenity ranking
(1 is most important)



How important are each of the following features of trail facilities?

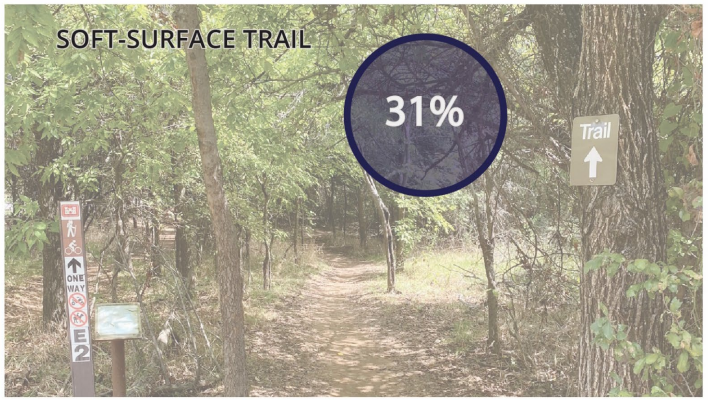


In your opinion, what type of trail is most needed in Flower Mound?





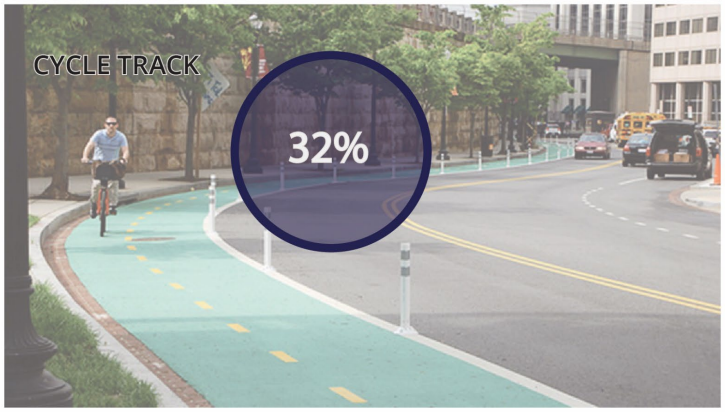




In your opinion, what type of on-street bikeway is most needed in Flower Mound?

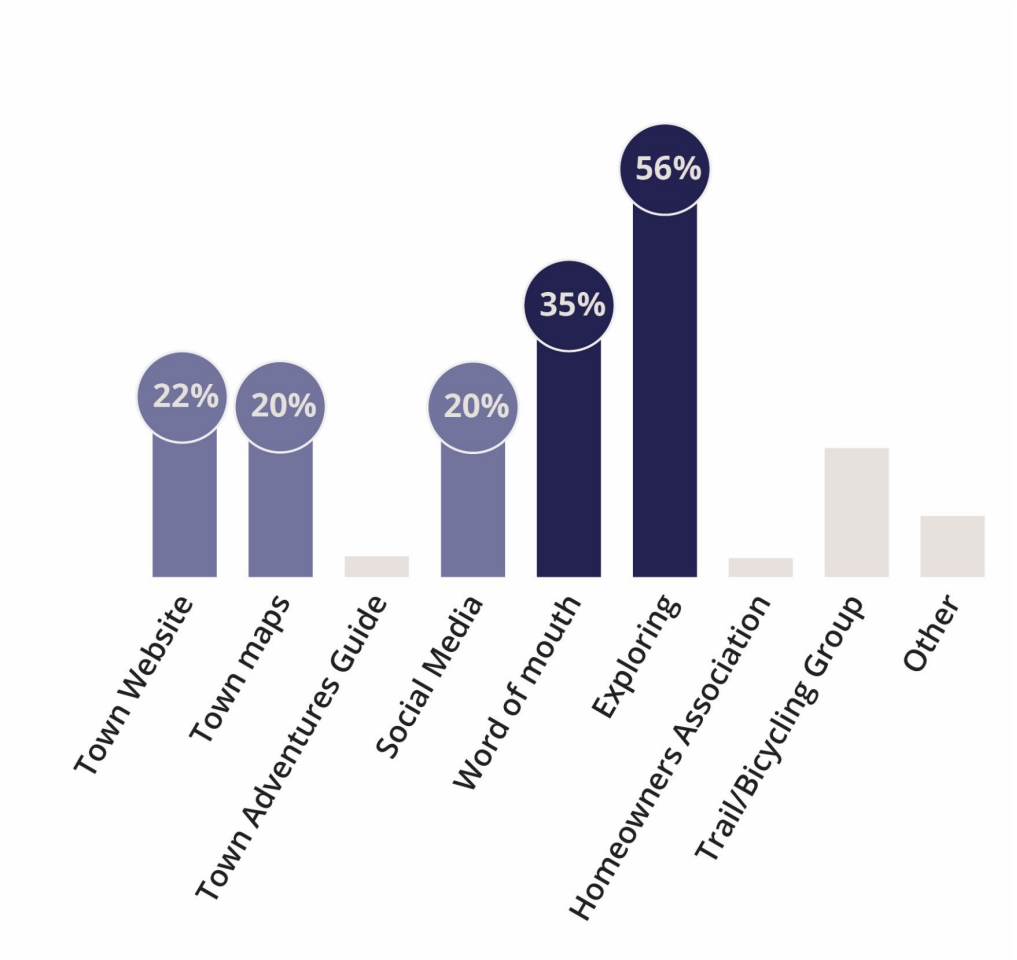




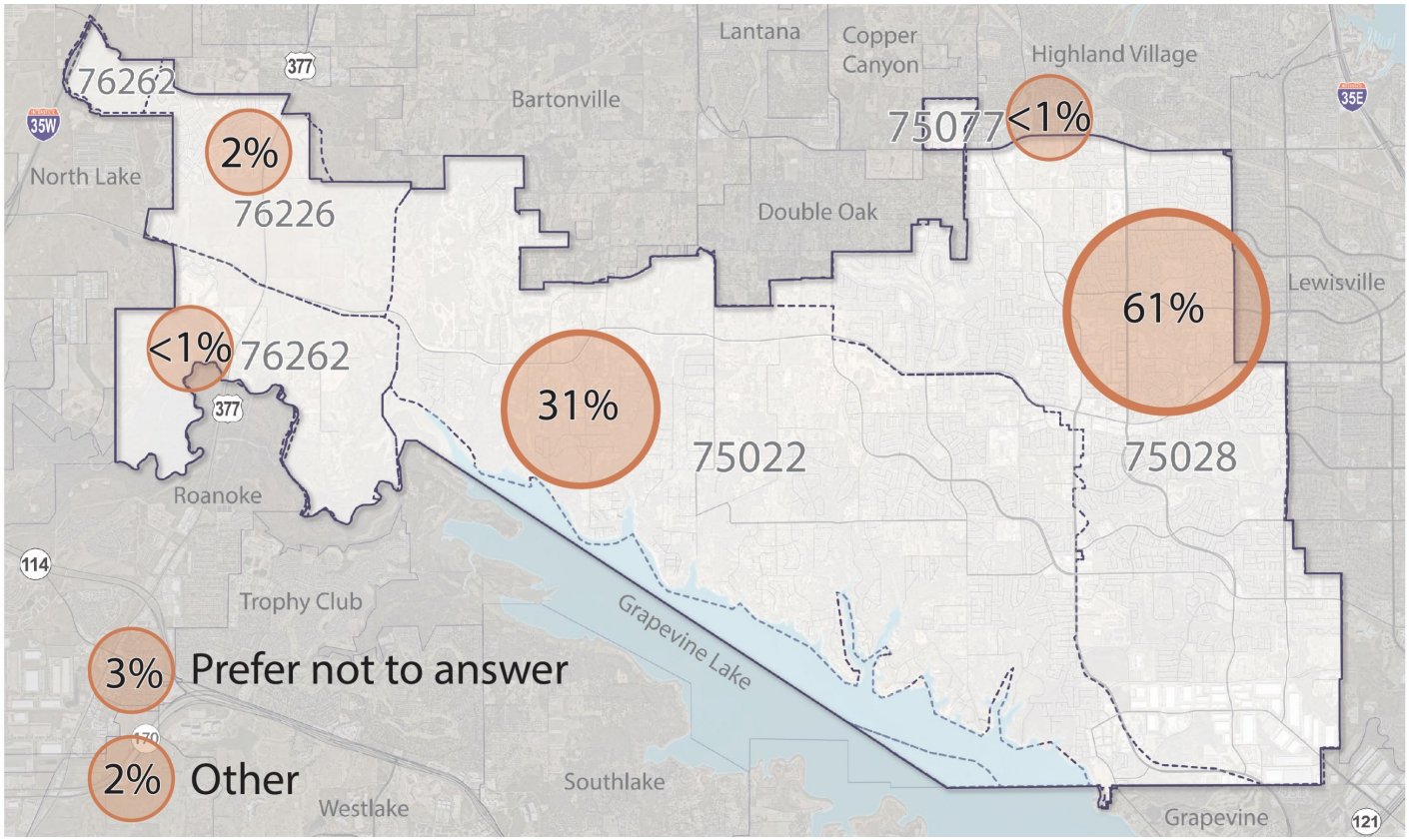




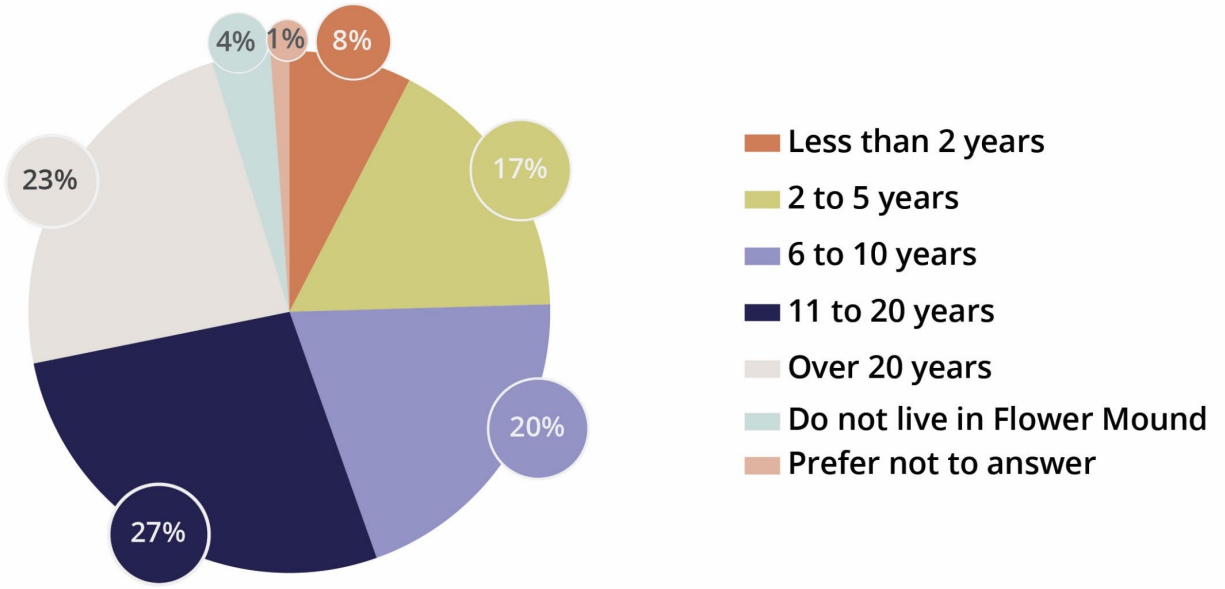
How did you learn about the trails and bikeways that you currently use in Flower Mound? (Select all that apply)



In which zip code do you live?



How long have you been a resident of Flower Mound?



What is your gender?

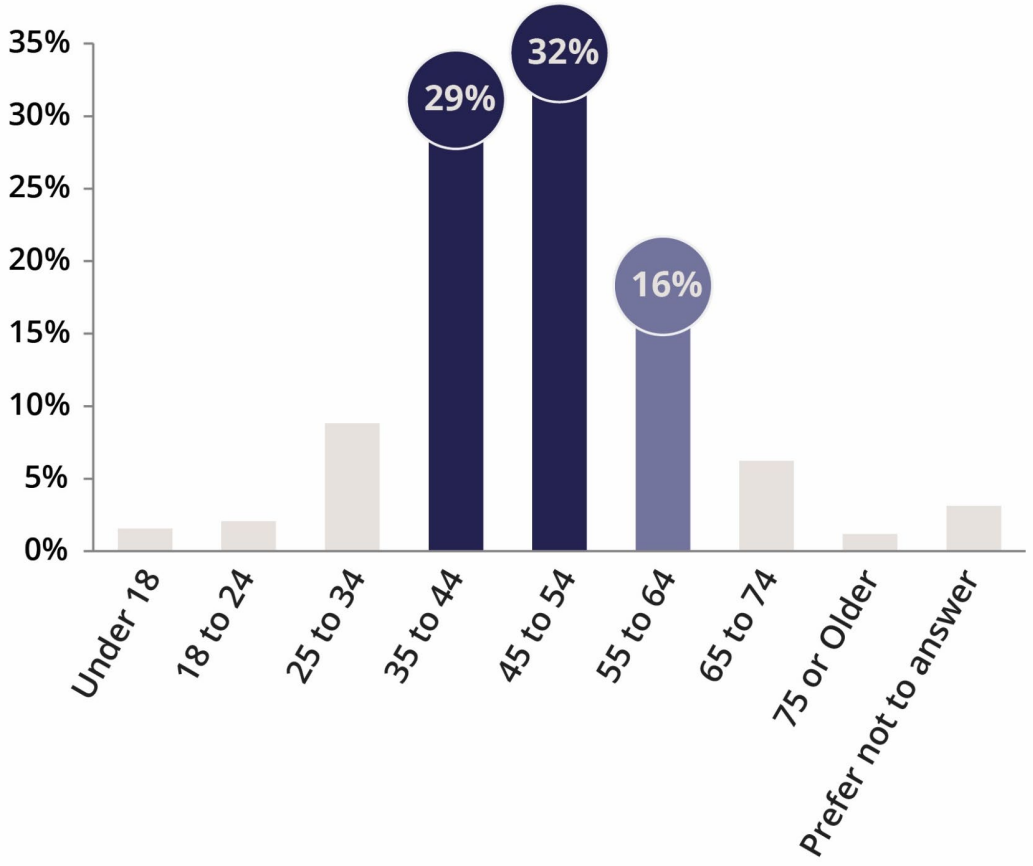


Male

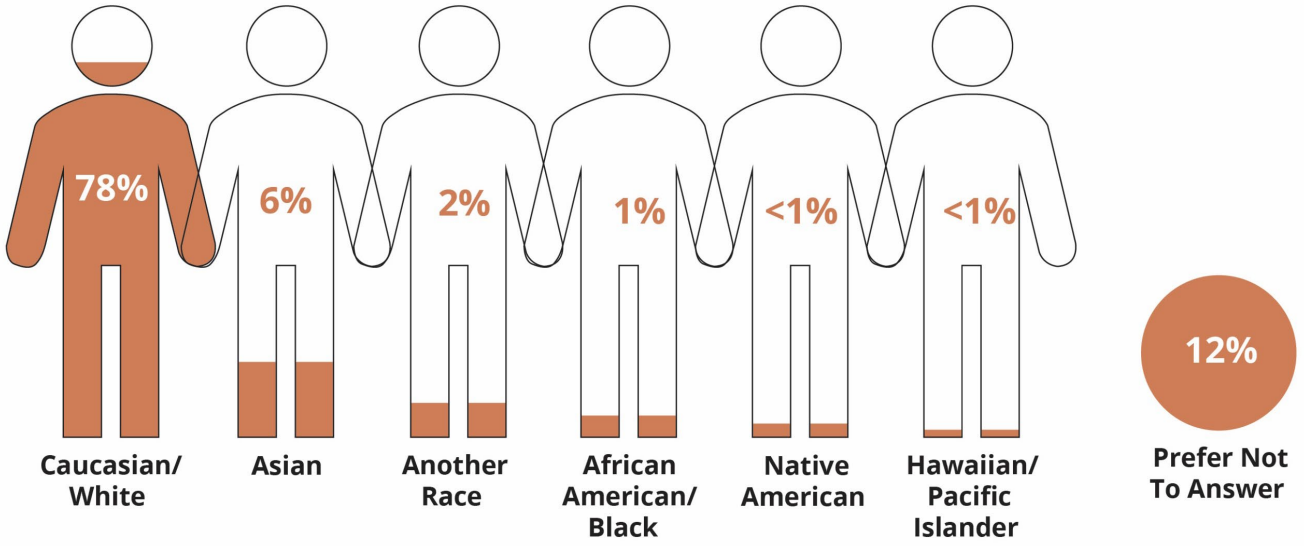
Female

4% Prefer not to answer

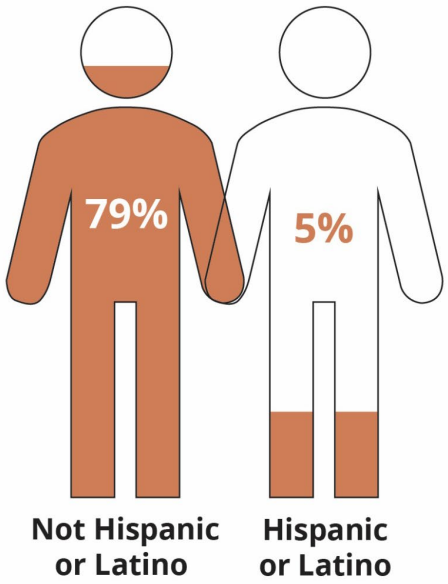
In what age group do you fall?



What is your race?



What is your ethnicity?

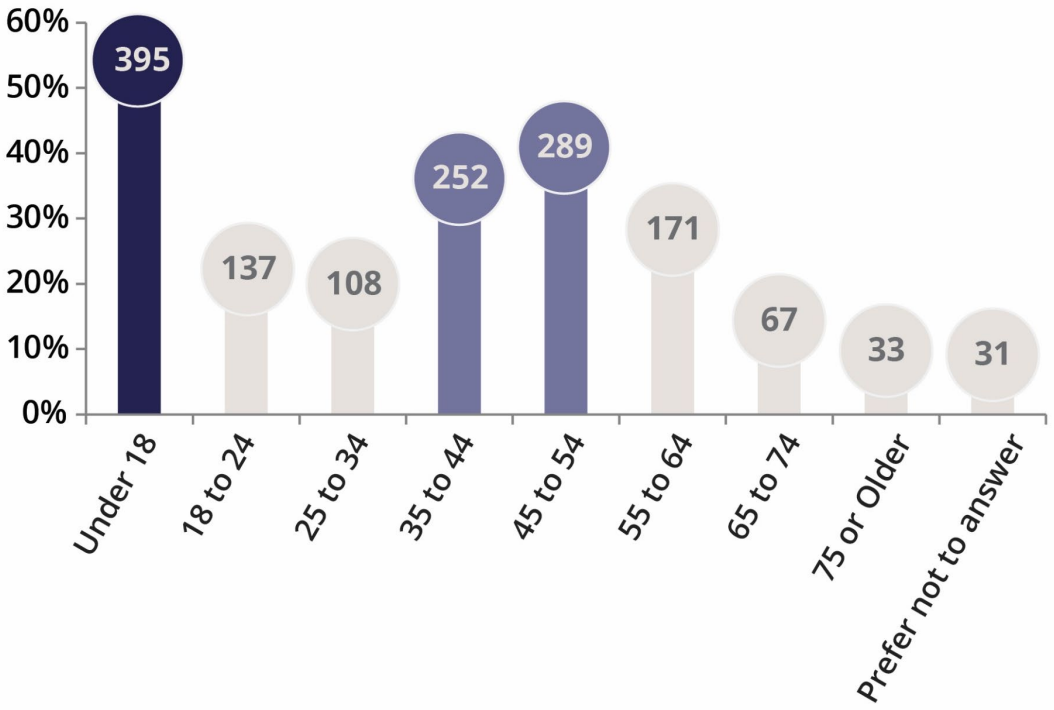




Including yourself, how many people live in your household?



Including yourself, what age groups are represented in your household?



APPENDIX D - FEASIBILITY CORRIDORS

INTRODUCTION

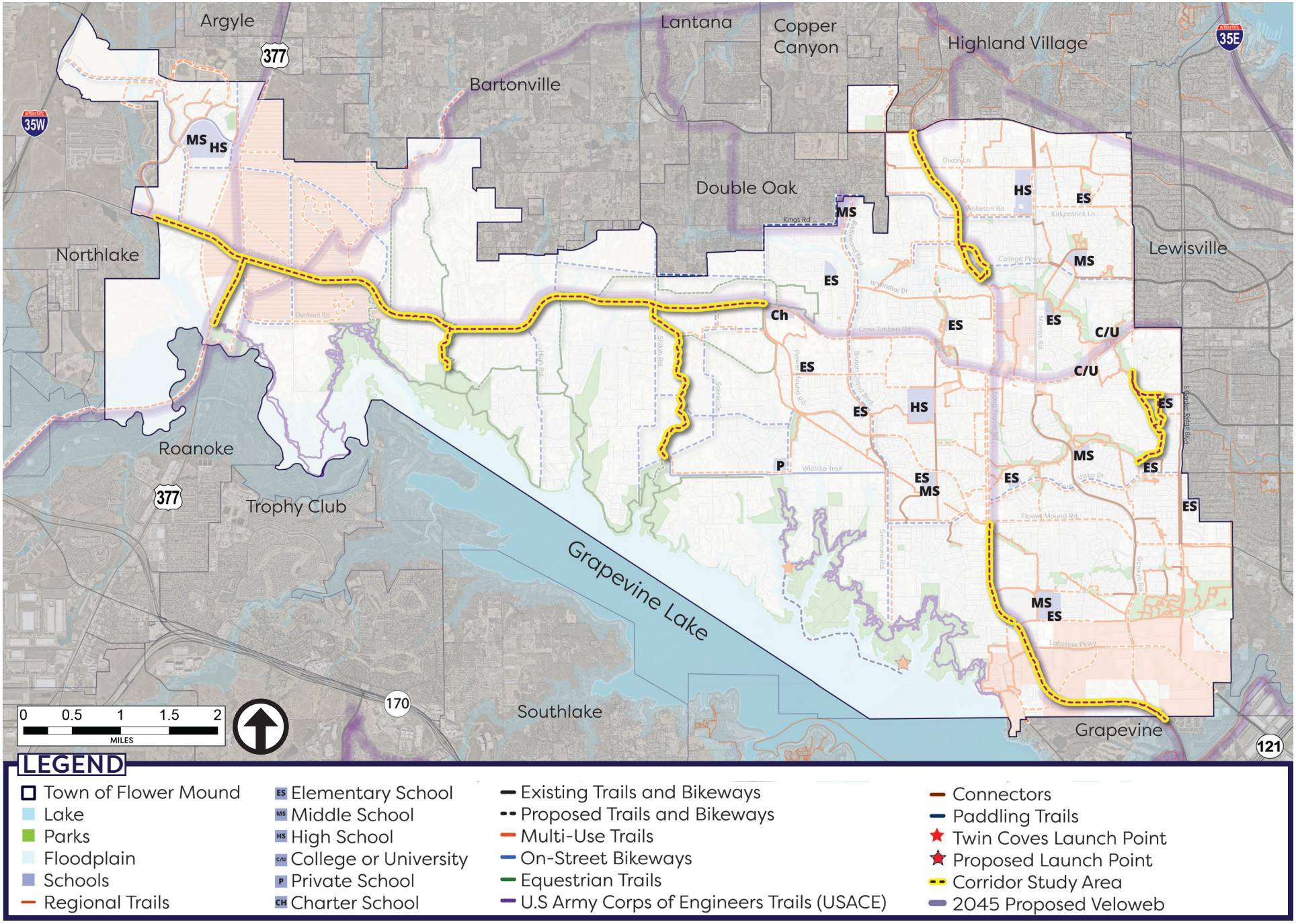
As part of the master plan assessment, a series of key corridors were assessed in greater detail to determine if a trail or bikeway accommodation would be feasible in the future.

- Corridor 1: Cross Timbers East/West Connection
- Corridor 2: Shiloh Road
- Corridor 3: Long Prairie Road
- Corridor 4: Gaston Park/Long Prairie Road
- Corridor 5: Timber Creek

Based on the existing conditions, need for connectivity, and considerations for implementation, a conceptual alignment and associated cost estimates were developed for each of the five corridors. The intent is that upon adoption of this master plan, the Town can move forward on design, securing funding, and implementation of these corridors.



FIGURE 7.1: TRAIL FEASIBILITY CORRIDORS



CORRIDOR 1: CROSS TIMBERS EAST/WEST CONNECTION

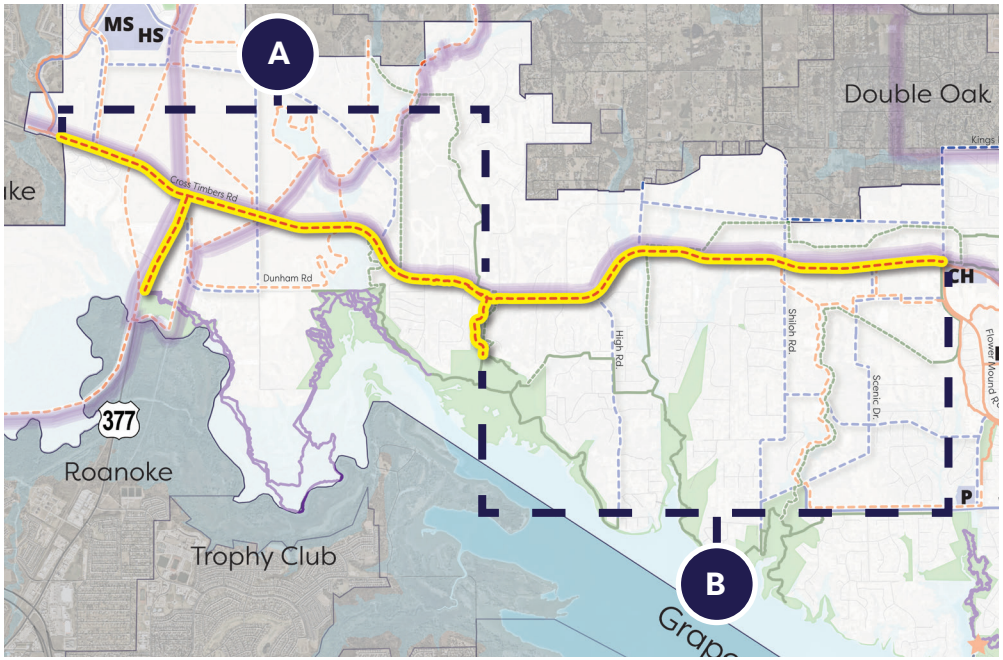
1171 corridor from Flower Mound Road to western town boundary

8.3 total miles

CORRIDOR NEED

The majority of existing development in Flower Mound is in the eastern part of the Town, with the central portion being primarily sparsely developed. There has been some recent development in the far western portion including some large master development plans. Therefore, as that area continues to grow, it is important to provide a connection from the east to the west. This corridor area would provide a critical east-west connection for the Town, create an inter-jurisdictional connection to Northlake, connect to Argyle and Roanoke via the Regional Veloweb, and connect to the North Shore trailhead.

FIGURE 7.2: CROSS TIMBERS EAST/WEST CONNECTION KEY MAP



EXISTING CONDITIONS

In order to determine whether a trail is feasible for the entirety of the corridor, on-the-ground assessments were conducted as well as a desktop review of pertinent corridor conditions data.

Property Ownership:
Through this part of Flower Mound, FM 1171 is a six-lane divided major arterial that is owned and maintained by TxDOT. The right-of-way (ROW) width varies but, in most areas, ends at the curb on either side of the roadway. Therefore, there are a multitude of privately held parcels that abut the roadway. Some parcels have been developed as single-family subdivisions with trails along FM 1171 as required by the current trails master plan. Developing a continuous trail along the roadway will be difficult to do all at once given the different ownership along the corridor and the timing of development.

Topography:
There are changes in topography along the corridor that may pose challenges for trail implementation. Elevations are higher on the eastern and western ends of the corridor; elevations vary from approximately 550' to 670' above sea level. There are also more steep elevation changes associated with the creeks that traverse the corridor.

Floodplain:
Only a limited amount of area within the corridor study boundary is located within the 100-year floodplain. These areas are located within the Sharps Branch and Whites Branch creek corridors. Floodplain areas do not necessarily preclude a trail from being constructed, there are just other considerations such as elevated trail segments and routine maintenance after flood events that need to be addressed in the design of the trail.

Vegetation:
Immediately adjacent to the corridor there is not much tree canopy coverage, which makes trail construction more feasible. However, along US 377 headed to the Knob Hills trailhead there is more vegetation present. There is also more dense vegetation located near the two creeks that intersect with the corridor area.

IMPLEMENTATION CONSIDERATIONS

As shown in the conceptual alignment maps on the following pages, a continuous trail is recommended for the north side of FM 1171 and the east side of US 377 to connect to the Knob Hills trailhead. Given that this is such an extensive corridor, there are several considerations related to conflict points, bridge crossings, and the environment that should be considered if and when this corridor is moved to implementation.

Conflict Points:
Conflict points are areas along the corridor that would make it more difficult for trail implementation. **Figures 7.3** and **7.4** depicts the various conflict points located along this first corridor. There are some sections where there is limited ROW along the corridor, which may necessitate acquiring an easement from adjacent property owners. Other areas along the trail need an extension to the existing culvert to be able to accommodate a trail. There are also some areas along the corridor with grading challenges that would need to be addressed before a trail can be constructed. Finally, on the far western part of the corridor there is a railroad crossing; significant coordination is needed with the railroad operator to ensure a safe crossing that is compliant with the railroad standards. The transition from the FM 1171 east/west corridor to the US 377 north/south corridor is also a conflict point as safe intersection crossings features would be needed and coordination with TxDOT will be important.

Bridge Crossings:
As shown in **Figures 7.3** and **7.4**, a total of three bridge crossings are likely needed along the corridor. There are other areas along the corridor where extending the culvert would suffice. Bridge structures are a significant cost but help to make an overall continuous trail corridor possible.

Environmental Considerations:
In a preliminary review of environmental features, it was determined that there are no designated historic structures and no critical habitats for threatened or endangered species located within the corridor area. There is one historical cemetery (Shiloh Cemetery) located just to the west of Shiloh Road on the north side of the corridor. Additional coordination with various environmental agencies is likely needed before the project can move forward.


BRIDGE UNDERPASS



BRIDGE CROSSING ALONG 1171

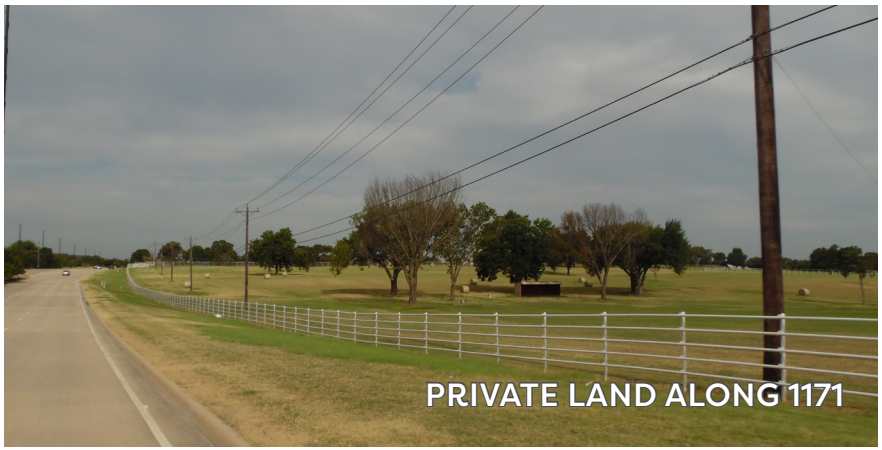
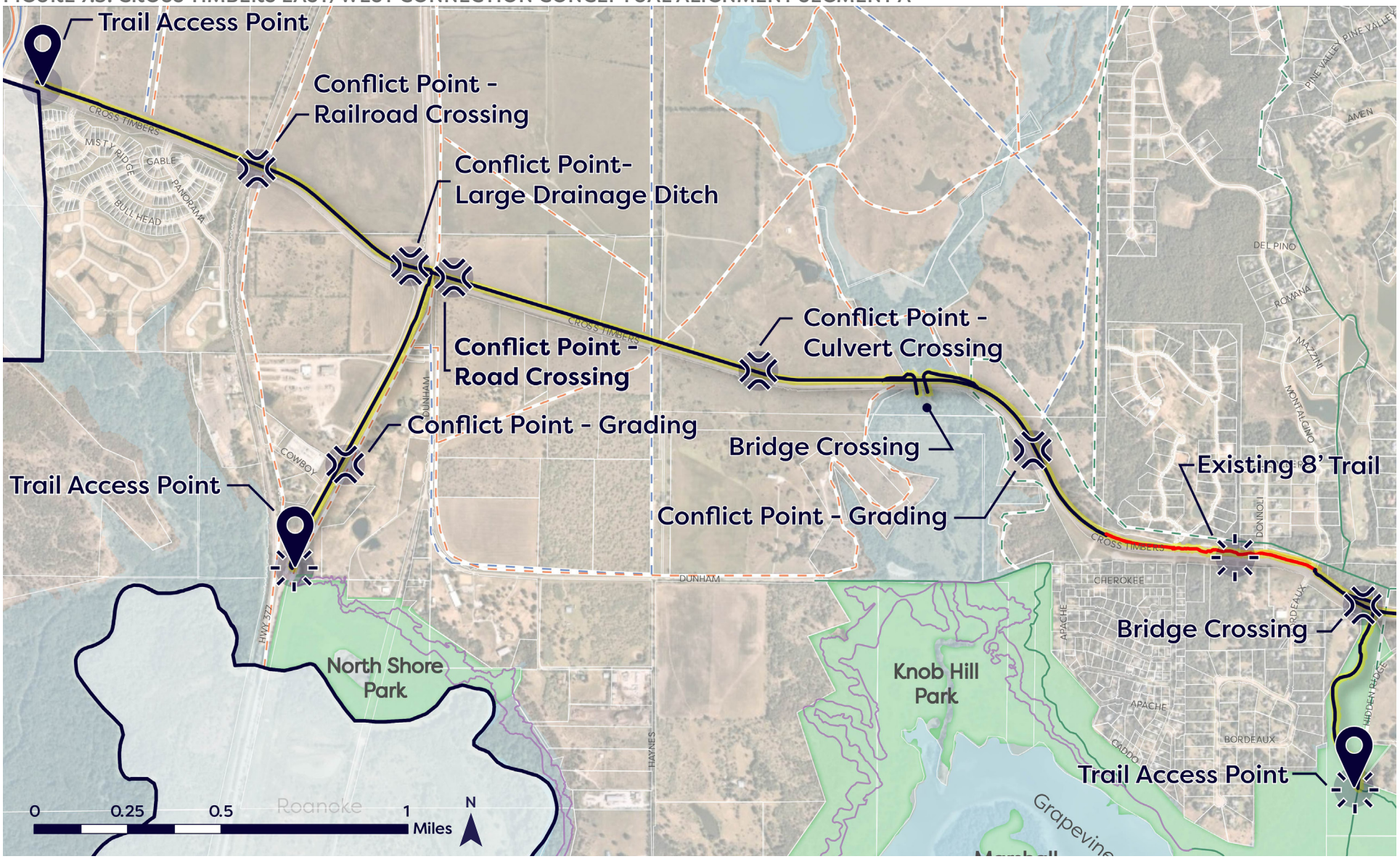

PRIVATE LAND ALONG 1171

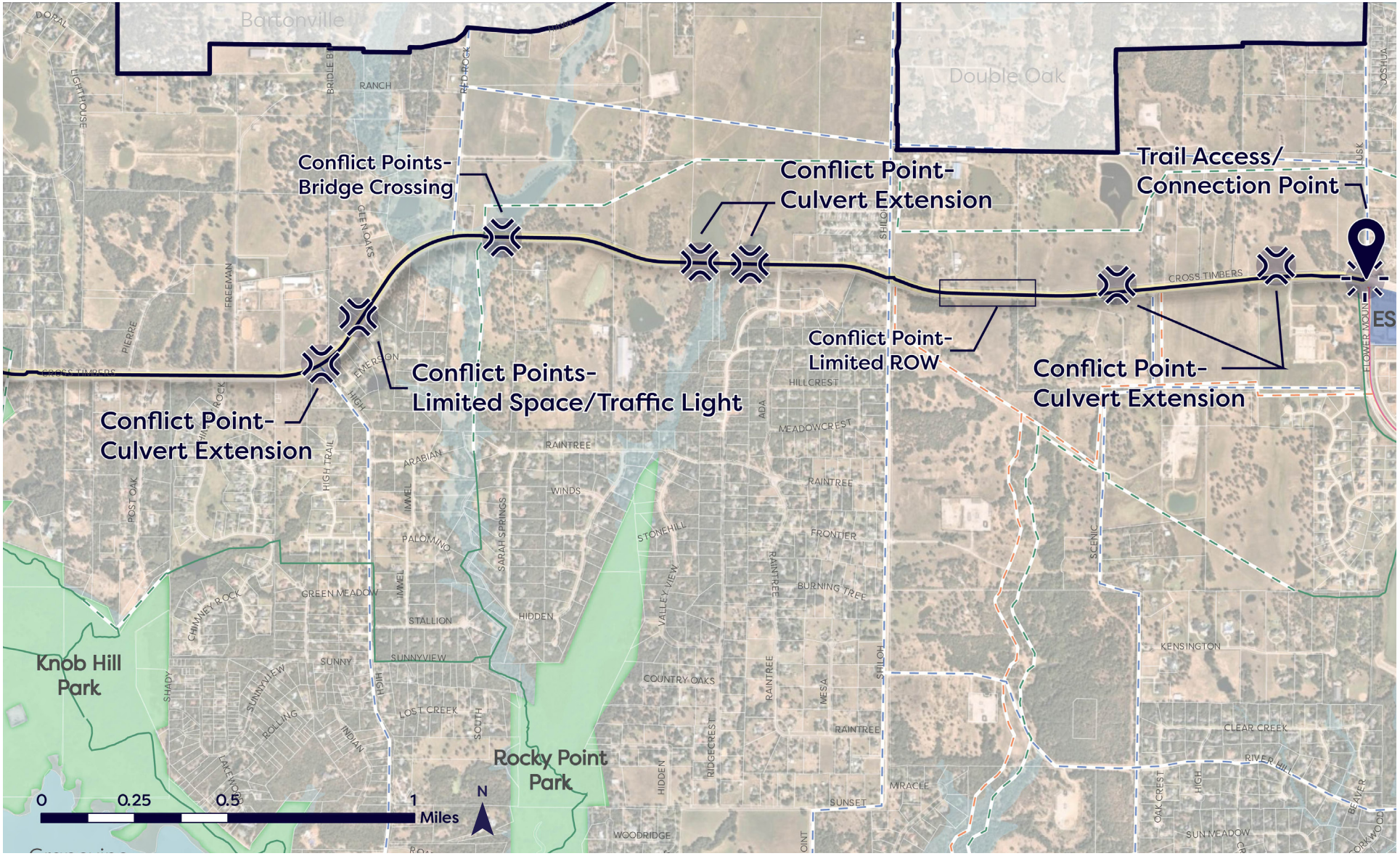
FIGURE 7.3: CROSS TIMBERS EAST/WEST CONNECTION CONCEPTUAL ALIGNMENT SEGMENT A



LEGEND

- Flower Mound town limits
- Parks
- Floodplain
- Schools
- Existing Trails and Bikeways
- Proposed Trails and Bikeways
- Multi-Use Trails
- On-Street Bikeways
- U.S Army Corps of Engineers (USACE)
- Equestrian
- Corridor Study Area
- Access Points
- Opportunities
- Conflict Points
- 8'-10' Trail

FIGURE 7.4: CROSS TIMBERS EAST/WEST CONNECTION SEGMENT CONCEPTUAL ALIGNMENT SEGMENT B



LEGEND

- Flower Mound town limits
- Parks
- Floodplain
- Schools
- Existing Trails and Bikeways
- Proposed Trails and Bikeways
- Multi-Use Trails
- On-Street Bikeways
- U.S Army Corps of Engineers (USACE)
- Equestrian
- Corridor Study Area
- Access Points
- Opportunities
- Conflict Points
- 8'-10' Trail

ESTIMATES OF PROBABLE COST

The costs shown in **Table 7.1** are at a pre-design and engineering level and are intended to be used as preliminary budgeting estimates. As additional details are determined in future planning, design, and engineering phases, these costs will likely change. See page 226 for a description of each of the categories.

Table 7.1: Corridor 1, Cross Timbers East/West Connection Estimate of Probable Cost

Category	Estimate of Probable Cost
General	$622,300
Demolition	$1,436,600
Utilities	$129,500
Transportation	$148,000
Grading and Earthwork*	$116,300
Paving	$2,974,700
Structures	$1,593,800
Erosion Control	$101,300
Landscaping	$486,600
Lighting and Electric	$46,600
Irrigation	$185,200
Subtotal	**$7,840,900**
Contingency (20%)	**$1,568,200**
Base Bid Total	**$9,409,100**
Estimated Annual Trail Maintenance (2%)	**$188,200**

Notes: Represents a preliminary cost estimate. Amounts are subject to change with additional planning, design, and engineering. Costs do not include land acquisition or site amenities.

**Grading and Earthwork are preliminary and subject to change based on future performance of in-field survey.*



KNOB HILLS TRAIL CONNECTION

CORRIDOR 2: SHILOH ROAD

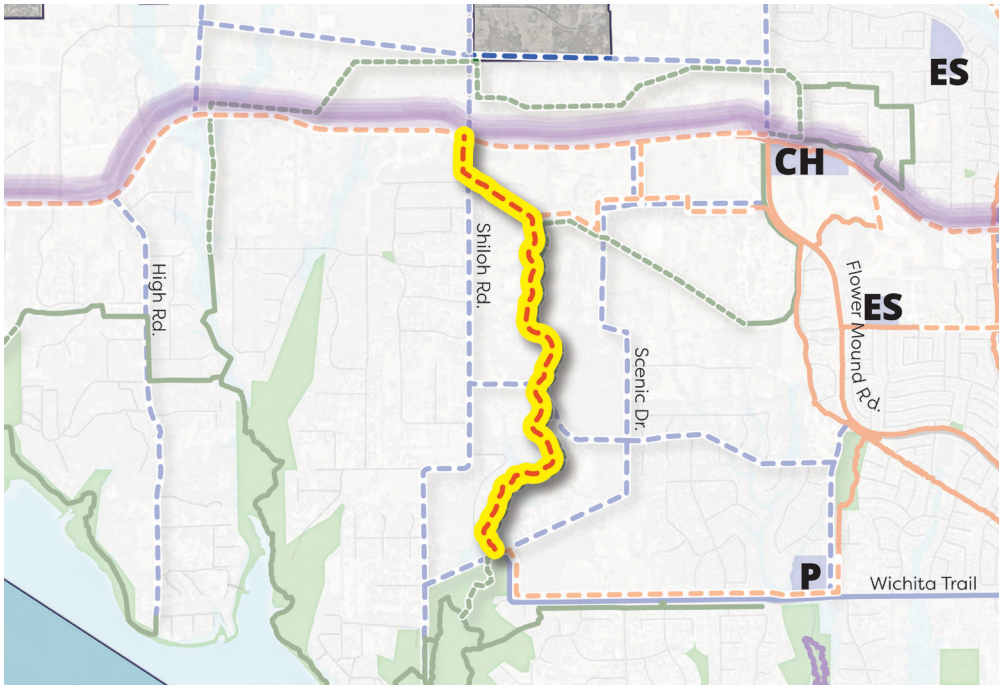
Shiloh Road from Wichita Trail to northern town boundary

2.5 total miles

CORRIDOR NEED

During the public engagement process, Shiloh Road was noted as a well-traveled corridor by avid cyclists but that the existing conditions are dangerous due to hills and lack of visibility. The corridor connects to the existing bike lane on Wichita Trail and travels north to the town boundary with Double Oak. In order to establish this corridor as a preferred bikeway corridor, the potential for an on-street bikeway accommodation or trail was evaluated as part of this feasibility corridor assessment. This would create a safer route for cyclists already using the corridor and potentially encourage less experienced riders to use the corridor. This corridor would also provide connectivity to the major east/west corridor along Cross Timbers (Corridor 1).

FIGURE 7.5: SHILOH ROAD KEY MAP



EXISTING CONDITIONS

In order to determine whether a pathway is feasible for the entirety of the corridor, on-the-ground assessments were conducted as well as a desktop review of pertinent corridor conditions data.

Property Ownership:
Shiloh Road is a two-lane undivided roadway without curb and gutters. The proposed trail alignment utilizes an existing utility easement before turning south through private property. Due to the property not being owned by the Town, challenges to development of the trail exist unless an easement is acquired or until the property is developed.

Topography:
The topography along the corridor is relatively flat, which makes the corridor ideal for cyclists commuting or recreating.

Floodplain:
The southern extent of the trail, where it connects to Cardinal Rd is within the 100-year floodplain.

Vegetation:
While the trail alignment is generally located through undeveloped land, the vegetation is limited due to the existing land use.



IMPLEMENTATION CONSIDERATIONS

After evaluation of the corridor, it was determined that there was not enough pavement to add a designated bike lane today, and in order to provide a better experience, the trail location is proposed through the undeveloped property on the east side of Shiloh Road. However, if the roadway is reconstructed in the future, a bike lane should be included to provide more separation between cyclists and other trail users, along with a connector sidewalk. There are several considerations related to conflict points and the environment that should be considered if and when this trail is moved to implementation.

Conflict Points:
Conflict points are areas along the corridor that would make it more difficult for trail implementation. **Figure 7.4** depicts the various conflict points located along the Shiloh Road corridor. There are some utility obstructions located along the corridor that would make it difficult to widen the roadway in parts. Additionally, where Sunset Trail turns into Shiloh Road there is a 90 degree turn with limited space on either side of the roadway. Finally, there are a couple of culvert crossings and a drainage swale pipe on the eastern side of the corridor.

Bridge Crossings:
There are no bridge crossings recommended for this corridor as part of the conceptual alignment.

Environmental Considerations:
In a preliminary review of environmental features, it was determined that there are no designated historic structures, no historical cemeteries, and no critical habitats for threatened or endangered species located within the corridor area.

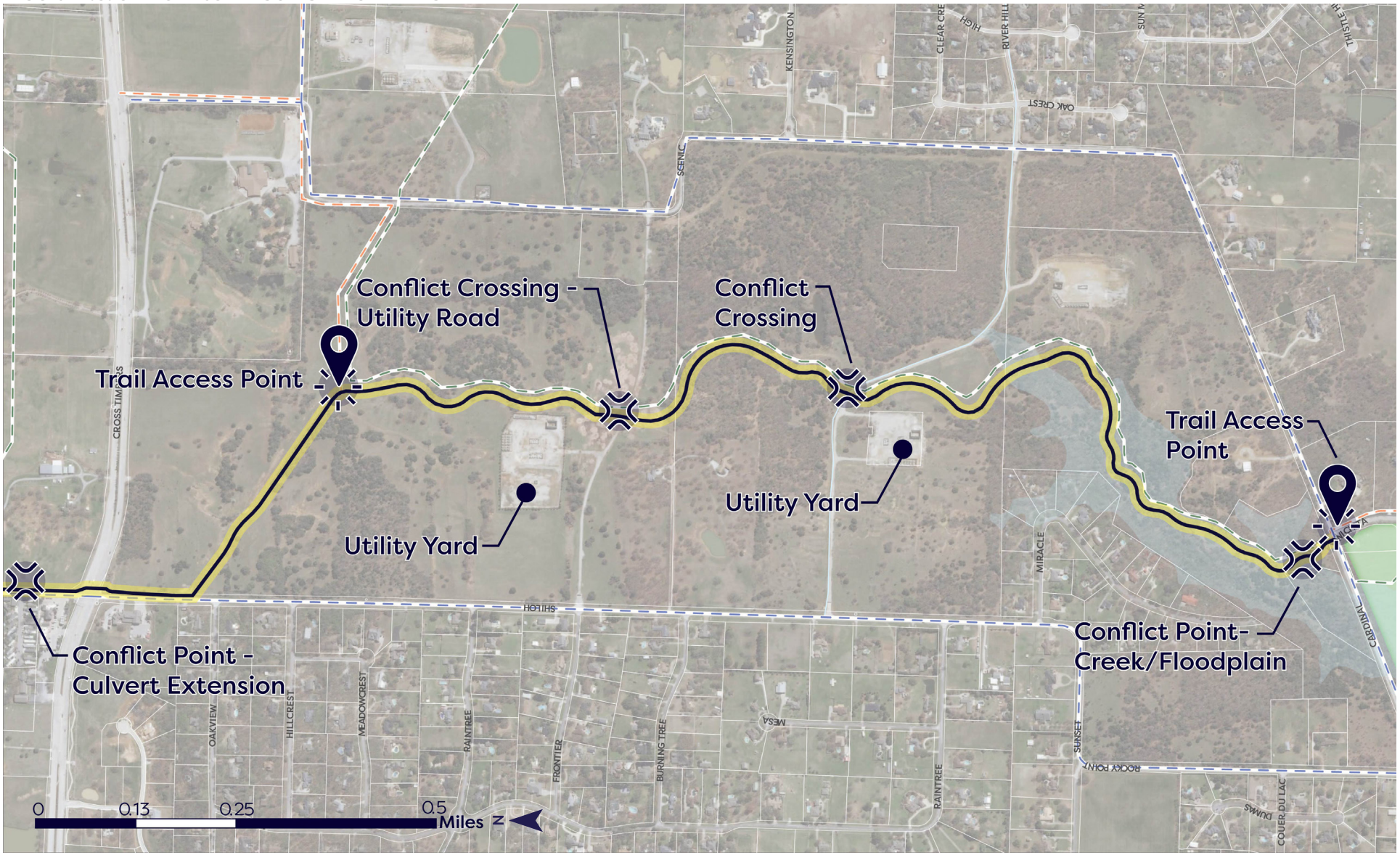

CULVERT CROSSING


UNDEVELOPED LAND ON SHILOH RD



SHARE THE ROAD SIGN

FIGURE 7.6: SHILOH ROAD CONCEPTUAL ALIGNMENT



LEGEND

- Flower Mound town limits
- Parks
- Floodplain
- Schools
- Existing Trails and Bikeways
- Proposed Trails and Bikeways
- Multi-Use Trails
- On-Street Bikeways
- Equestrian
- Corridor Study Area
- Access Points
- Opportunities
- Conflict Points

ESTIMATES OF PROBABLE COST

The costs shown in **Table 7.2** are at a pre-design and engineering level and are intended to be used as preliminary budgeting estimates. As additional details are determined in future planning, design, and engineering phases, these costs will likely change. See page 227 for a description of each of the categories.

Table 7.2: Corridor 2, Shiloh Road Estimate of Probable Cost

Category	Estimate of Probable Cost
General	$256,500
Demolition	$446,800
Utilities	$220,800
Transportation	$27,300
Grading and Earthwork*	$86,500
Paving	$880,200
Erosion Control	$30,600
Landscaping	$153,900
Irrigation	$54,800
Subtotal	**$2,157,400**
Contingency (20%)	**$431,500**
Base Bid Total	**$2,588,900**
Estimated Annual Trail Maintenance (2%)	**$51,800**

Notes: Represents a preliminary cost estimate. Amounts are subject to change with additional planning, design, and engineering. Costs do not include land acquisition or site amenities.

**Grading and Earthwork are preliminary and subject to change based on future performance of in-field survey.*



CORRIDOR 3: LONG PRAIRIE ROAD

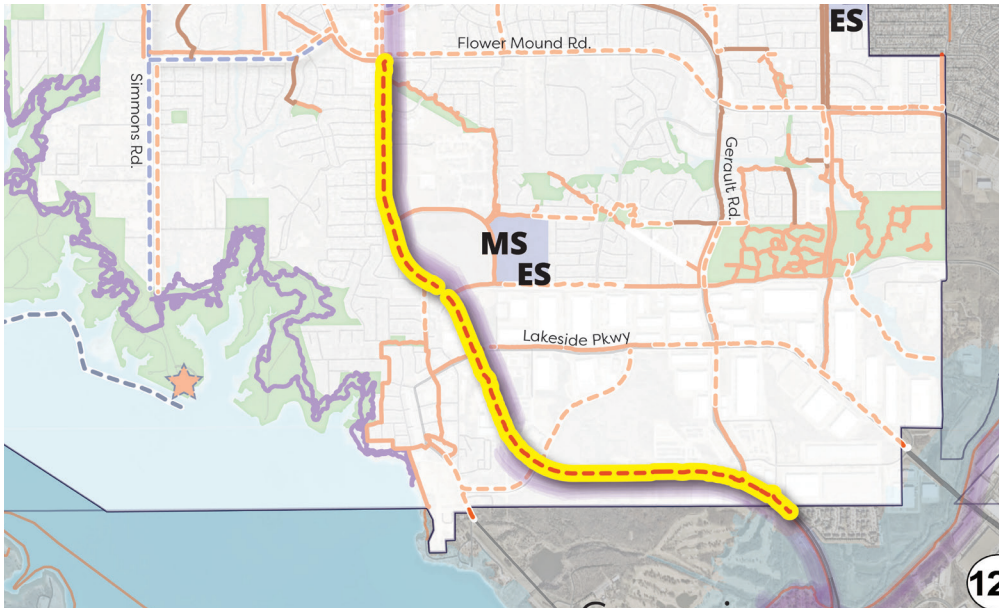
Long Prairie Road from border with Grapevine to Flower Mound Road

3.2 total miles

CORRIDOR NEED

Long Prairie Road is identified on NCTCOG's Regional Veloweb, so it has already been identified as an important regional connection to connect Flower Mound with Grapevine and other communities to the south. This corridor segment also travels by the Lakeside DFW mixed-use area and a major employment hub. Both are destinations for Flower Mound residents and visitors from outside the community. Regional standards stipulate that corridors along the Veloweb should be at least 12' in width to allow for multiple user types in a safe manner. Existing trail segments along this corridor have been built in conjunction with new development but the width of these segments is only 8'. Therefore, this corridor evaluation considered whether there was enough right-of-way throughout the corridor to be able to construct a wider trail as stipulated by the Regional Veloweb.

FIGURE 7.7: LONG PRAIRIE ROAD KEY MAP



EXISTING CONDITIONS

In order to determine whether a trail is feasible for the entirety of the corridor, on-the-ground assessments were conducted as well as a desktop review of pertinent corridor conditions data.

Property Ownership:
Long Prairie Road is a six-lane divided road with curb and gutter that runs north – south. There is an existing sidewalk on the west side of Long Prairie Road that backs up to existing subdivisions and development so there is limited ROW for expanding the sidewalk. From Sherri Lane to Aberdeen Drive on the east side of the corridor there is a privately owned parcel of land. Future standards regarding trail and sidewalk width will help create a continuous trail through the corridor. However, most of the east side of the corridor has excessive public ROW making it the ideal side for a future trail.

Topography:
The northern section of this corridor is flat. However, on the west side of Long Prairie Road starting at Spinks Road and moving south there are some challenges with topography. Elevations vary from approximately 530' to 600' above sea level. Although the terrain in this section of the corridor has more elevation than the others, the east side of Long Prairie Road is still the ideal opportunity for a trail.

Floodplain:
None of the corridor is located within the 100-year floodplain.

Vegetation:
The most northern portion of the corridor has little to no vegetation. Most of this section has trees along existing sidepaths. In the southern portion of the corridor where development does not exist starting from Aberdeen Drive there is dense brush, however it is located at least 20 feet away from the road.

IMPLEMENTATION CONSIDERATIONS

As shown in the conceptual alignment map, a trail is recommended on the north and east side of Long Prairie Road to fill in existing trail gaps in the southern part of the corridor and to connect up to Flower Mound Road. There are several considerations related to conflict points, bridge crossings, and the environment that should be considered if and when this corridor is moved to implementation.

Conflict Points:
Conflict points are areas along the corridor that would make it more difficult for trail implementation. **Figure 7.8** depicts the various conflict points located along the Long Prairie Road corridor. There are some utility lines located along the northern portion of the corridor that would make it difficult to build a new trail or expand the existing sidepath. Also, limited ROW that is privately owned contribute to barriers for future implementation. Additionally, the intersection of Long Prairie Road and Lakeside Parkway is a large road crossing that acts as a barrier for a continuous safe trail.

Bridge Crossings:
There are no bridge crossings recommended for this corridor as part of the conceptual alignment.

Environmental Considerations:
In a preliminary review of environmental features, it was determined that there are no designated historic structures, no historical cemeteries, and no critical habitats for threatened or endangered species located within the corridor area.



EXISTING PATHWAY ON LONG PRAIRIE ROAD

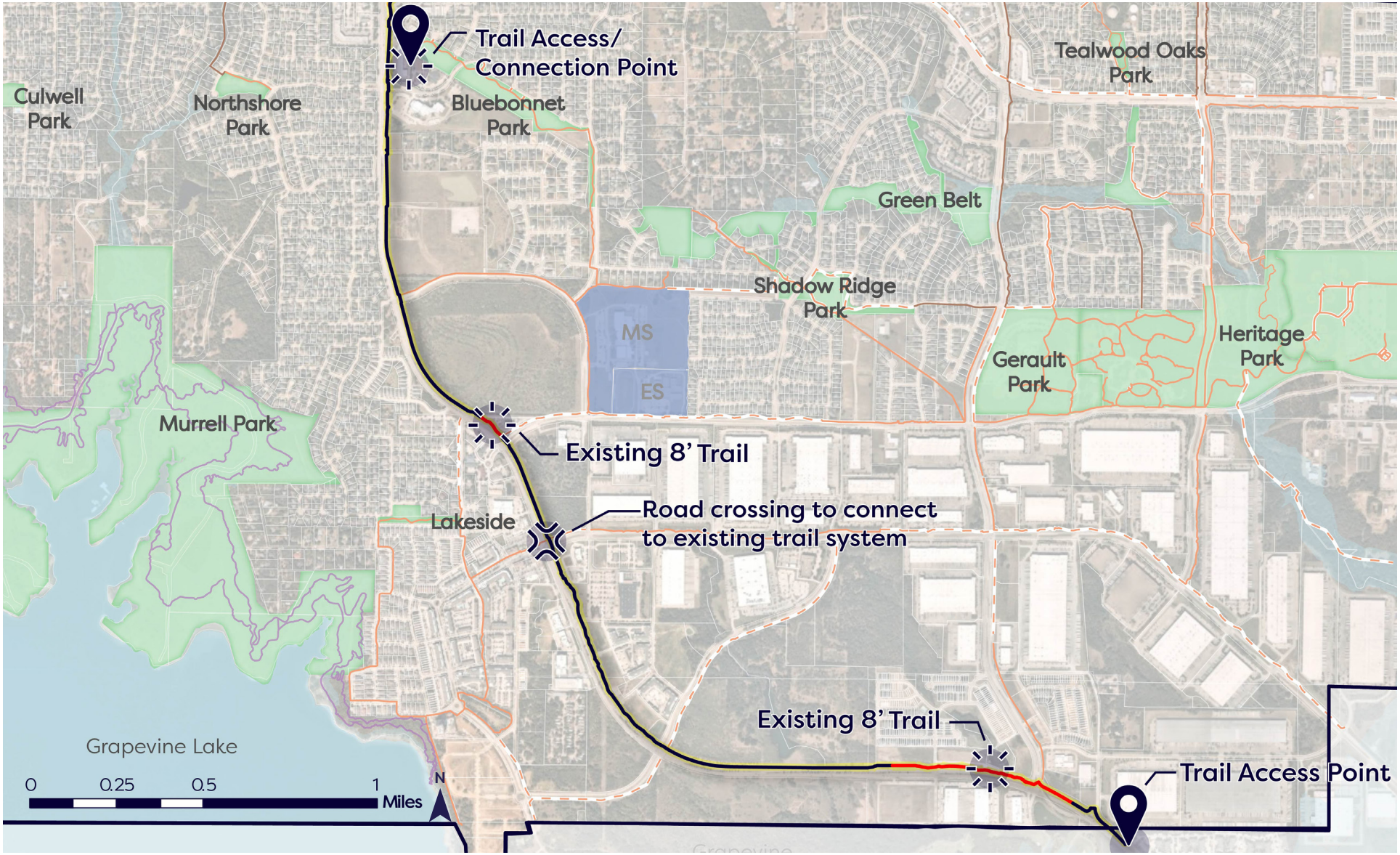


TRAIL MARKER BY FOUNDERS SQUARE



RIGHT-OF-WAY ALONG LONG PRAIRIE ROAD

FIGURE 7.8: LONG PRAIRIE ROAD CONCEPTUAL ALIGNMENT



LEGEND

- Flower Mound town limits
- Parks
- Floodplain
- Schools
- Existing Trails and Bikeways
- Proposed Trails and Bikeways
- Multi-Use Trails
- On-Street Bikeways
- U.S Army Corps of Engineers (USACE)
- Equestrian
- Corridor Study Area
- Access Points
- Opportunities
- Conflict Points
- 8'-10' Trail

ESTIMATES OF PROBABLE COST

The costs shown in **Table 7.3** are at a pre-design and engineering level and are intended to be used as preliminary budgeting estimates. As additional details are determined in future planning, design, and engineering phases, these costs will likely change. See page 227 for a description of each of the categories.

Table 7.3: Corridor 3, Long Prairie Road Estimate of Probable Cost

Category	Estimate of Probable Cost
General	$281,700
Demolition	$605,700
Transportation	$93,100
Grading and Earthwork*	$46,800
Paving	$1,374,400
Erosion Control	$38,600
Landscaping	$194,400
Irrigation	$71,900
Subtotal	**$2,706,600**
Contingency (20%)	**$541,300**
Base Bid Total	**$3,247,900**
Estimated Annual Trail Maintenance (2%)	**$65,000**

Notes: Represents a preliminary cost estimate. Amounts are subject to change with additional planning, design, and engineering. Costs do not include land acquisition or site amenities.

**Grading and Earthwork are preliminary and subject to change based on future performance of in-field survey.*



PEDESTRIAN CROSSING AT LAKESIDE

CORRIDOR 4: GASTON PARK/LONG PRAIRIE ROAD

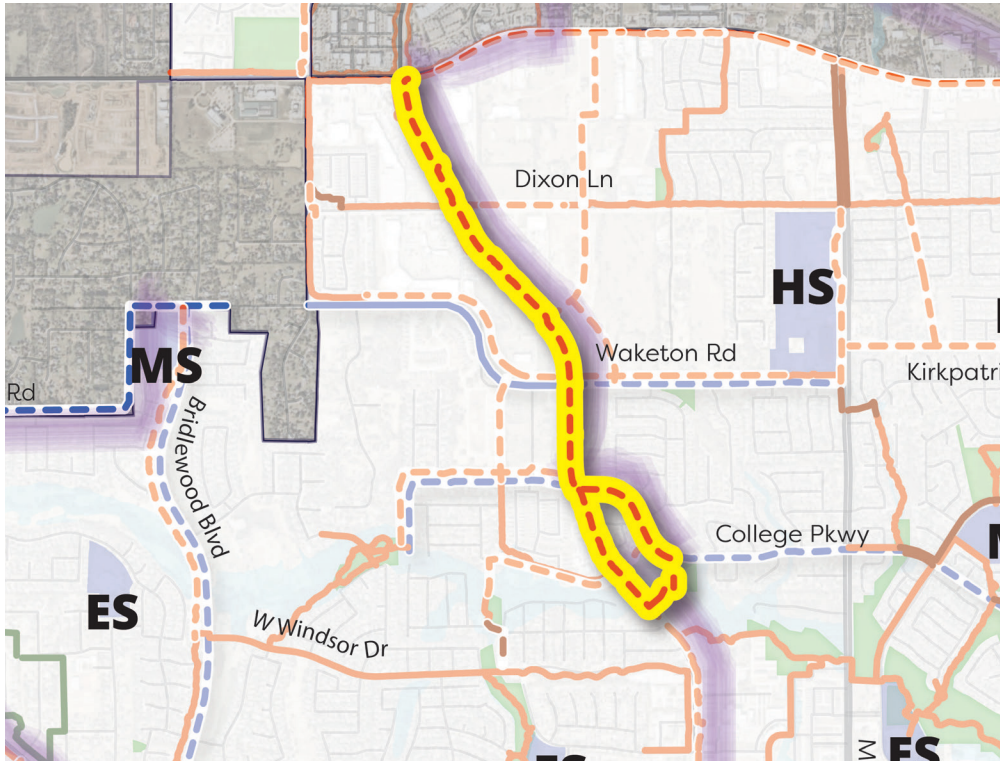
Long Prairie Road from Gaston Park to Justin Road

2.3 total miles

CORRIDOR NEED

The Town is currently in the process of constructing a pedestrian bridge over Timber Creek within Gaston Park. This proposed corridor would provide a connection from that future bridge to Long Prairie Road, which connects to the Riverwalk development to the south and to Highland Village to the north. There are quite a few residential and commercial areas adjacent to the corridor that would benefit from additional bicycle/pedestrian connectivity.

FIGURE 7.9: GASTON PARK/LONG PRAIRIE ROAD KEY MAP



EXISTING CONDITIONS

In order to determine whether a trail is feasible for the entirety of the corridor, on-the-ground assessments were conducted as well as a desktop review of pertinent corridor conditions data.

Property Ownership:
Long Prairie Road is a six-lane divided road with curb and gutter that runs north – south. Part of this corridor also includes a segment of College Parkway that starts at the intersection of Long Prairie Road to Gaston Park. This segment of College Parkway is a divided four-lane road with curb and gutter. Most of the northern section of the corridor has development on both sides of the road; the east side of the road has more public ROW for expansion of the existing pathway and opportunities for a new trail making it more ideal than the west side. Near Gaston Park between Long Prairie Road and College Parkway is publicly owned land which makes it ideal for a future trail connection.

Topography:
The corridor along the east side of Long Prairie Road poses little to no grading issues. The areas that do have some changes in elevation are gentle slope changes. Additionally, the segment along College Parkway is primarily flat. The segment between College Parkway and Long Prairie Road has the most changes in elevation, however it is generally gentle slope change. Elevations vary from approximately 530' to 600' above sea level.

Floodplain:
There is a very small portion of the corridor segment located off of College Parkway that is located in the 100-year floodplain. Otherwise, the majority of the corridor is located outside of the 100-year floodplain.

Vegetation:
There is little vegetation located on the Long Prairie Road and College Parkway segments of this corridor. Where existing sidepaths exist, there are some trees. The segment between College Parkway and Long Prairie Road has dense vegetation.

IMPLEMENTATION CONSIDERATIONS

As shown in the conceptual alignment map, a trail is recommended for the east side of Long Prairie Road from Justin Road to Gaston Park to connect to the future bridge to the RiverWalk Flats. There are several considerations related to conflict points, bridge crossings, and the environment that should be considered if and when this corridor is moved to implementation.

Conflict Points:
Conflict points are areas along the corridor that would make it more difficult for trail implementation. **Figure 7.10** depicts the various conflict points located along the corridor. There are some sections where there is limited ROW on Long Prairie Road, which may require additional easements from adjacent property owners. The north side of the corridor along Long Prairie Road near the commercial development is a drainage swale that could provide a barrier to future expansion of the existing pathway. Moving south along Long Prairie Road there are few conflict points which make it an ideal location for a future trail. The segment along College Parkway has few conflicts points other than vegetation near the existing pathway and the vegetation that covers the future connection between College Parkway and Long Prairie Road.

Bridge Crossings:
As shown in **Figure 7.10**, there are a total of two bridge crossings that are likely needed along the corridor. While bridge structures are costly, they ultimately help to make an overall continuous trail corridor possible. Near the RiverWalk Flats, additional considerations for the bridge include retaining walls to ensure safe crossing for trail users.

Environmental Considerations:
In a preliminary review of environmental features, it was determined that there are no designated historic structures, no historical cemeteries, and no critical habitats for threatened or endangered species located within the corridor area.

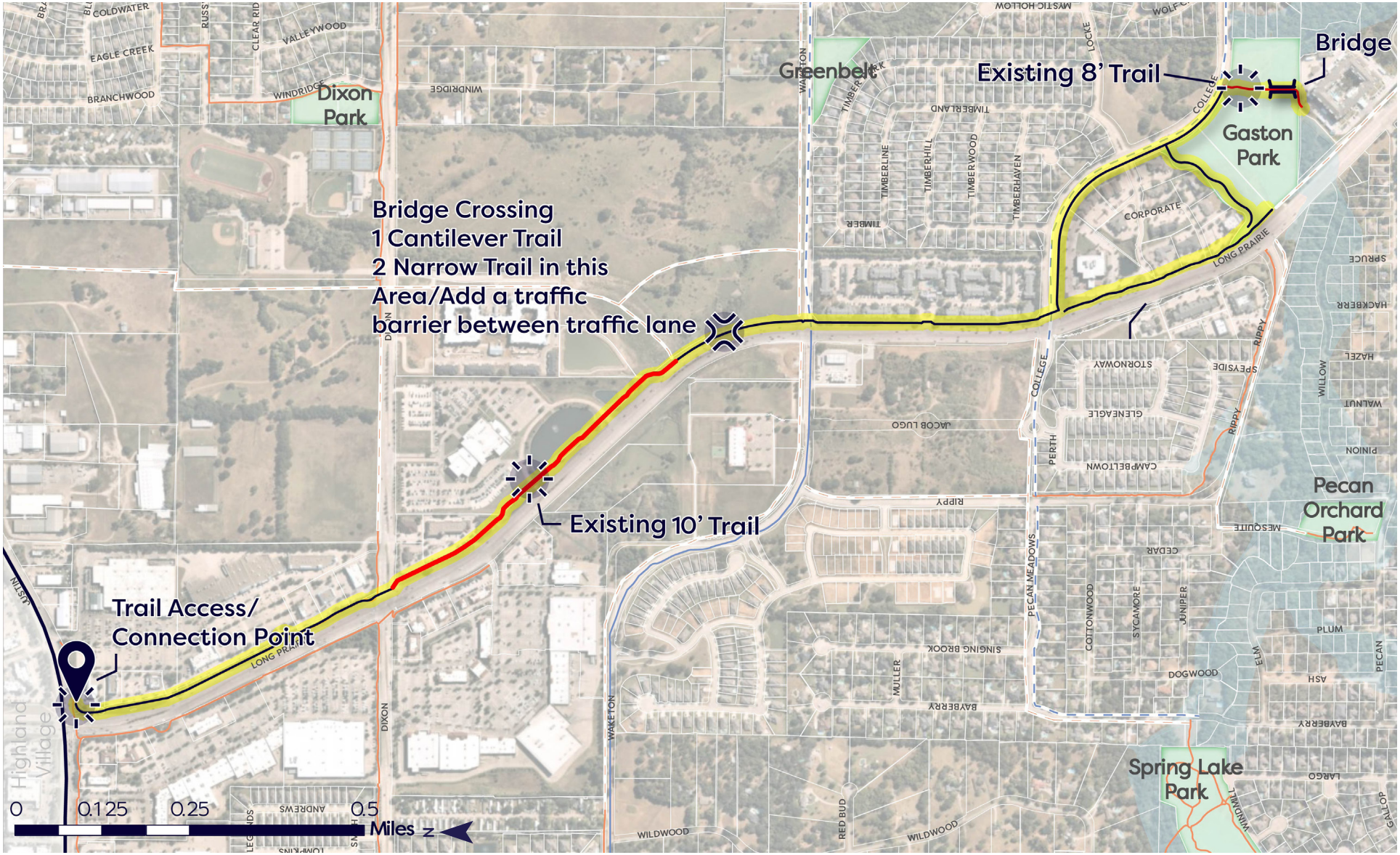


GASTON PARK SIGNAGE


VEHICLE BRIDGE ON LONG PRAIRIE ROAD


FUTURE CONNECTION POINT

FIGURE 7.10: GASTON PARK/LONG PRAIRIE ROAD CONCEPTUAL ALIGNMENT



LEGEND

- Flower Mound town limits
- Parks
- Floodplain
- Schools
- Existing Trails and Bikeways
- Proposed Trails and Bikeways
- Multi-Use Trails
- On-Street Bikeways
- U.S Army Corps of Engineers (USACE)
- Equestrian
- Corridor Study Area
- Access Points
- Opportunities
- Conflict Points
- 8'-10' Trail

ESTIMATES OF PROBABLE COST

The costs shown in **Table 7.4** are at a pre-design and engineering level and are intended to be used as preliminary budgeting estimates. As additional details are determined in future planning, design, and engineering phases, these costs will likely change. See page 227 for a description of each of the categories.

Table 7.4: Corridor 4, Gaston Park/Long Prairie Road Estimate of Probable Cost

Category	Estimate of Probable Cost
General	$173,200
Demolition	$399,900
Grading and Earthwork*	$132,000
Paving	$608,100
Structures	$610,000
Erosion Control	$22,500
Landscaping	$114,000
Irrigation	$38,000
Subtotal	**$2,097,700**
Contingency (20%)	**$419,500**
Base Bid Total	**$2,517,200**
Estimated Annual Trail Maintenance (2%)	**$50,300**

Notes: Represents a preliminary cost estimate. Amounts are subject to change with additional planning, design, and engineering. Costs do not include land acquisition or site amenities.

**Grading and Earthwork are preliminary and subject to change based on future performance of in-field survey.*



PATHWAY BY HIGHLAND RANCH SHOPPING CENTER

CORRIDOR 5: TIMBER CREEK

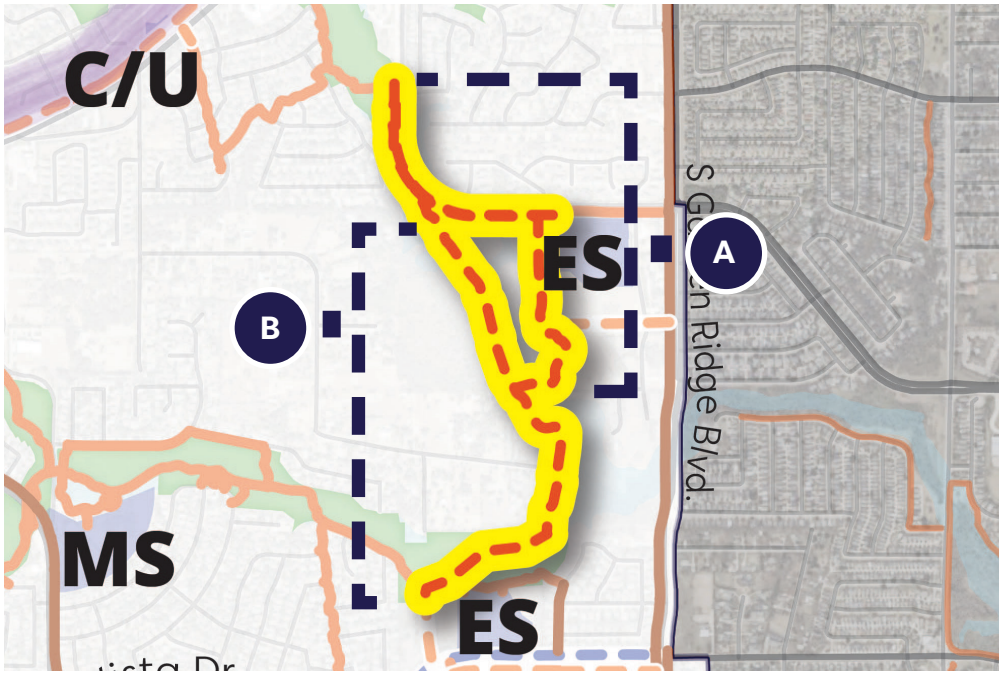
Rustic Timbers Park to Lawson Park

1.8 total miles

CORRIDOR NEED

Overall, the Pink Evening Primrose Trail in Flower Mound is fairly disjointed. There are some connected segments in the north but then several disjointed segments in the south. The Timber Creek corridor area would provide a connection from Rustic Timbers Park to the north, along the future Kirkpatrick Lane extension, through a utility easement, through the Flower Mound Tree Farm, and end at Lawson Park. This connection would create a much more continuous stretch of trail along the Pink Evening Primrose and also connect two elementary schools and several parks. There are also opportunities to connect into the Lewisville trail system along this corridor. Option A would follow more closely to the elementary school and Option B would follow the utility easement to the south. Only one option would be necessary to make the connection.

FIGURE 7.11: TIMBER CREEK KEY MAP



EXISTING CONDITIONS

In order to determine whether a trail is feasible for the entirety of the corridor, on-the-ground assessments were conducted as well as a desktop review of pertinent corridor conditions data.

Property Ownership:
This corridor is located near Timber Creek on the east side of Flower Mound and is located away from any roadways. The parcels this corridor would run through are a mix of public and privately owned. Due to not all the land being publicly owned, it poses a challenge for development of this corridor unless easements are acquired.

Topography:
The topography along the corridor map poses challenges for future trail implementation. Near Vickery Elementary School there is some gentle elevation change. Elevations vary from approximately 520' to 540' above sea level. There are peak rings dispersed throughout that represent more steep elevation changes. Most of these elevation changes are near Timber Creek that runs through the corridor.

Floodplain:
Most of this corridor is located in the 100-year floodplain since it is adjacent to Timber Creek. The segment that starts at Kirkpatrick Lane near the elementary school is the only segment that is not within the 100-year floodplain.

Vegetation:
Majority of this corridor has dense vegetation as much of the area is undeveloped.

IMPLEMENTATION CONSIDERATIONS

As shown in the conceptual alignment map, Option A shows a trail along the west side of the future Kirkpatrick Lane extension and then through the utility easement on the western side of the creek. Connections will be made to Rustic Timbers Park, Vickery Elementary School, and Lawson Park. Option B goes behind Vickery Elementary School and connects to Garden Ridge and Forest Vista Drive to connect back to the tree farm. There are several considerations related to conflict points, bridge crossings, and the environment that should be considered if and when this corridor is moved to implementation.

Conflict Points:
Conflict points are areas along the corridor that would make it more difficult for trail implementation. **Figure 7.12** depicts the various conflict points located along the Timber Creek Corridor. The new road extension on Kirkpatrick Lane in the northern part of the trail corridor could result in a bridge connection for users. The rest of the conflict areas include the corridor near Timber Creek that has existing dense vegetation, steep slopes, parcels that are privately owned, and parcels that are located in the 100-year floodplain.

Bridge Crossings:
As shown in **Figure 7.12**, one bridge is needed in Option A and one bridge is needed in Option B. Bridge structures in this corridor are necessary to ensure a safe continuous trail corridor that is comfortable for users. Although bridges are a costly amenity, they are necessary for the success of this corridor.

Environmental Considerations:
In a preliminary review of environmental features, it was determined that there are no designated historic structures, no historical cemeteries, and no critical habitats for threatened or endangered species located within the corridor area.

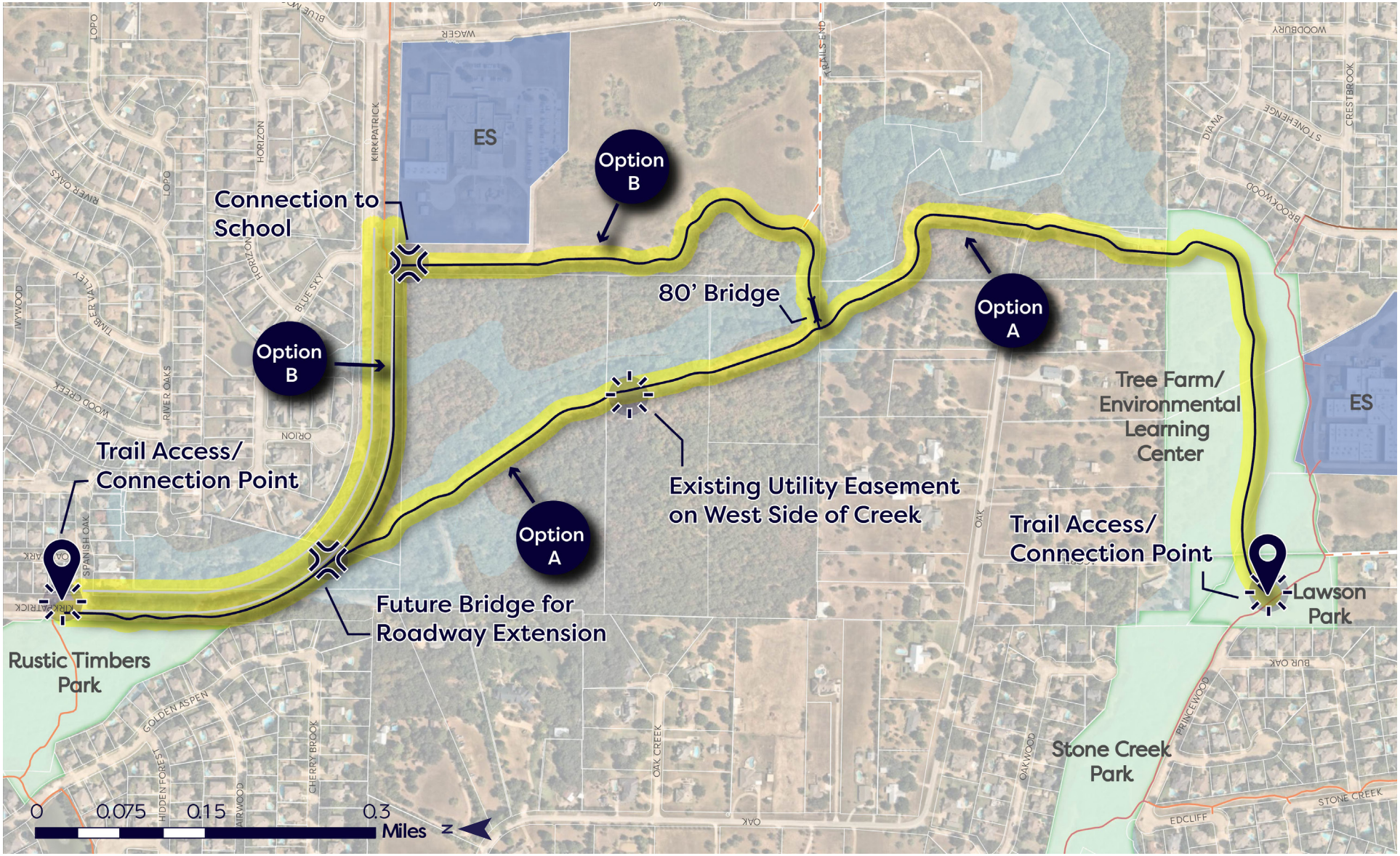


UPPER TIMBER CREEK


VEGETATION IN OPTION B


VIEW OF EASEMENT IN OPTION B

FIGURE 7.12: TIMBER CREEK CONCEPTUAL ALIGNMENT



ESTIMATES OF PROBABLE COST

The costs shown in **Table 7.5** are at a pre-design and engineering level and are intended to be used as preliminary budgeting estimates. As additional details are determined in future planning, design, and engineering phases, these costs will likely change. See page 227 for a description of each of the categories.

Table 7.5: Corridor 5, Timber Creek Estimate of Probable Cost

Category	Estimate of Probable Cost	
	Option A	**Option B**
General	$141,000	$141,000
Demolition	$201,500	$241,800
Transportation	n/a	$2,500
Grading and Earthwork*	$92,200	$92,200
Paving	$440,600	$523,600
Structures	n/a	$245,000
Erosion Control	$35,000	$40,000
Landscaping	$89,200	$101,500
Irrigation	$27,500	$32,700
Subtotal	**$1,027,000**	**$1,420,300**
Contingency (20%)	**$205,400**	**$284,000**
Base Bid Total	**$1,232,400**	**$1,704,300**
Estimated Annual Trail Maintenance (2%)	**$24,600**	**$34,100**

Notes: Represents a preliminary cost estimate. Amounts are subject to change with additional planning, design, and engineering. Costs do not include land acquisition or site amenities.

**Grading and Earthwork are preliminary and subject to change based on future performance of in-field survey.*



ESTIMATES OF PROBABLE COST CATEGORY DESCRIPTIONS

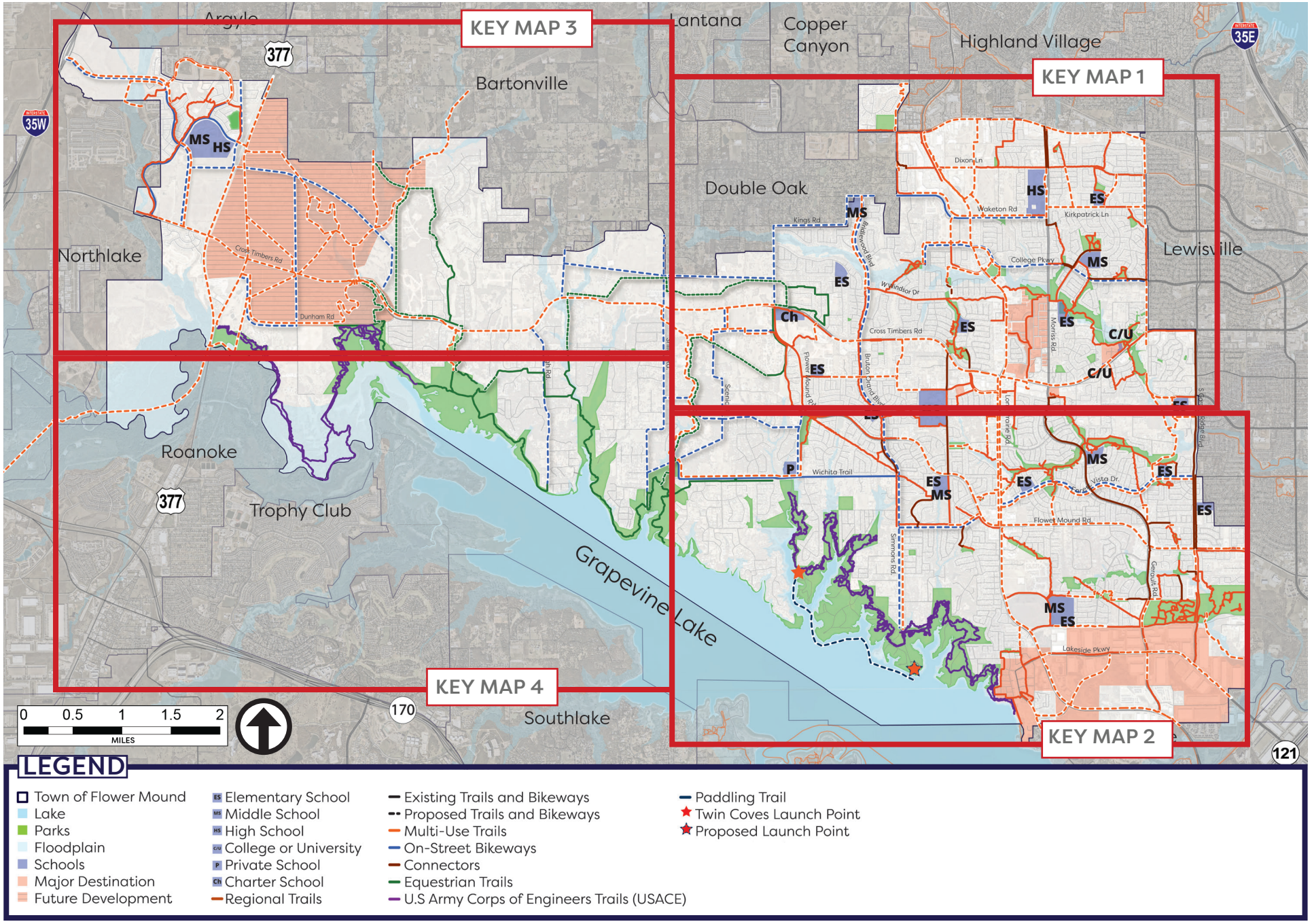
The following table includes descriptions of each of the categories included in the feasibility corridor estimates of probable cost. Not all of the elements listed in each category are applicable for each corridor.

Cost Estimate Category Descriptions

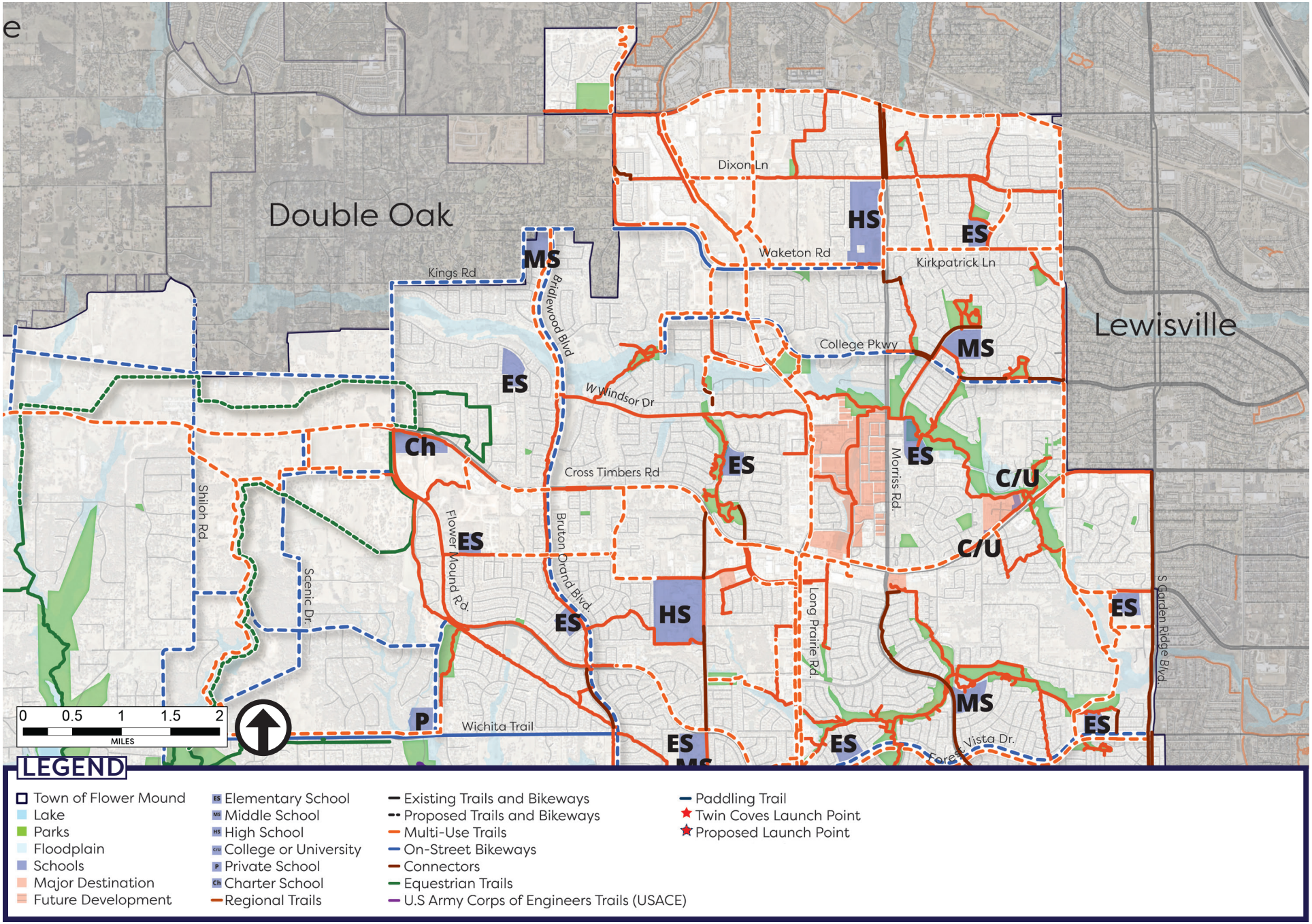
Category	Description
General	Mobilization, SWPPP Controls and Maintenance, Barricades, Signs and Traffic Handling, Aluminum Trail Signage and Posts, Emergency Signage (1/4 mile increments)
Demolition	Tree Protection, Preparing ROW, Removal of Concrete/Gravel/Concrete Embankment, Debris Removal, Relocate Small or Large Utility, Adjust Small or Large Utility, Relocate Existing Signs
Utilities	Culvert Pipe, Box Culvert Pipe, Headwalls
Transportation	Crosswalks, ADA Curb Ramps, Signage
Grading and Earthwork	Excavation, Embankment, Import/Export of Fill, Floodplain Mitigation Excavation, Backfilling Pavement Edges
Paving	Concrete Paving (6” Thickness), Concrete Curb and Gutter (6” Reinforced), 4” Solid White Pavement Markings (Surface Preparation, Sealer, Complete in Place)
Structures	Prefabricated Steel Truss Span Bridge, Cast-in-Place Cantilever Retaining Wall, Pedestrian Bridge Concrete Abutment, Boardwalk Concrete Abutment, Permatrak Precast Concrete Boardwalk, Permatrak Concrete Drill Shaft Boardwalk Piers
Erosion Control	Silt Fence (Install and Remove), Erosion Control Logs, Temporary Construction Entrance/Exit (Install and Remove)
Landscaping	Enhanced Planting Areas (Shade Trees, Ornamental Trees, and Shrubs), Area of Revegetation, Plant Maintenance
Lighting and Electric	Type B Solar Collector, Battery, Pole, Type B Remote Luminaire, Ground Box with Apron, Wiring, Disconnect Switch
Irrigation	Temporary/Permanent Irrigation

APPENDIX E: DETAILED MAPS

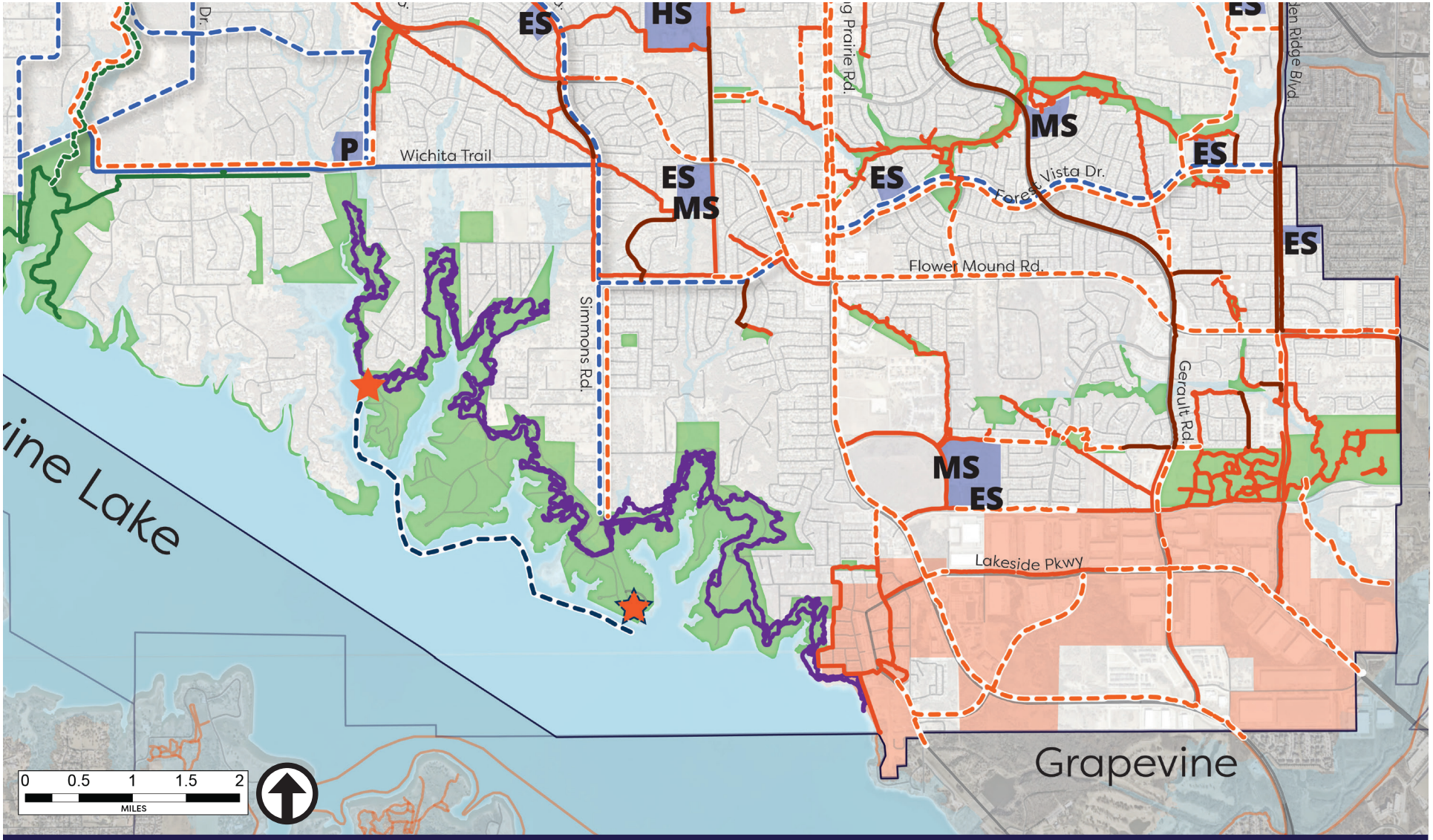
FLOWER MOUND EXISTING AND PROPOSED KEY NETWORK MAP



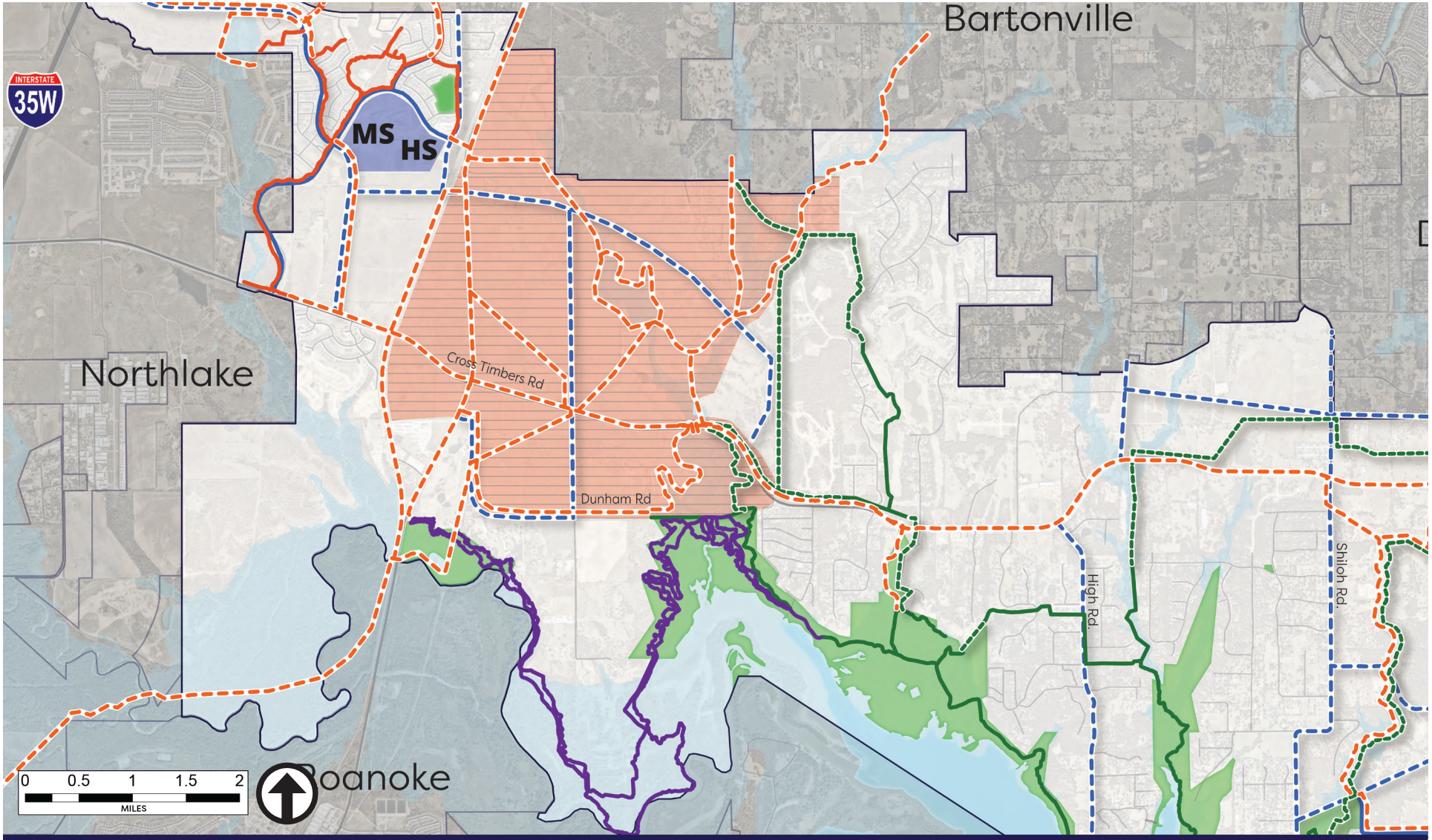
FLOWER MOUND EXISTING AND PROPOSED NETWORK: KEY MAP 1



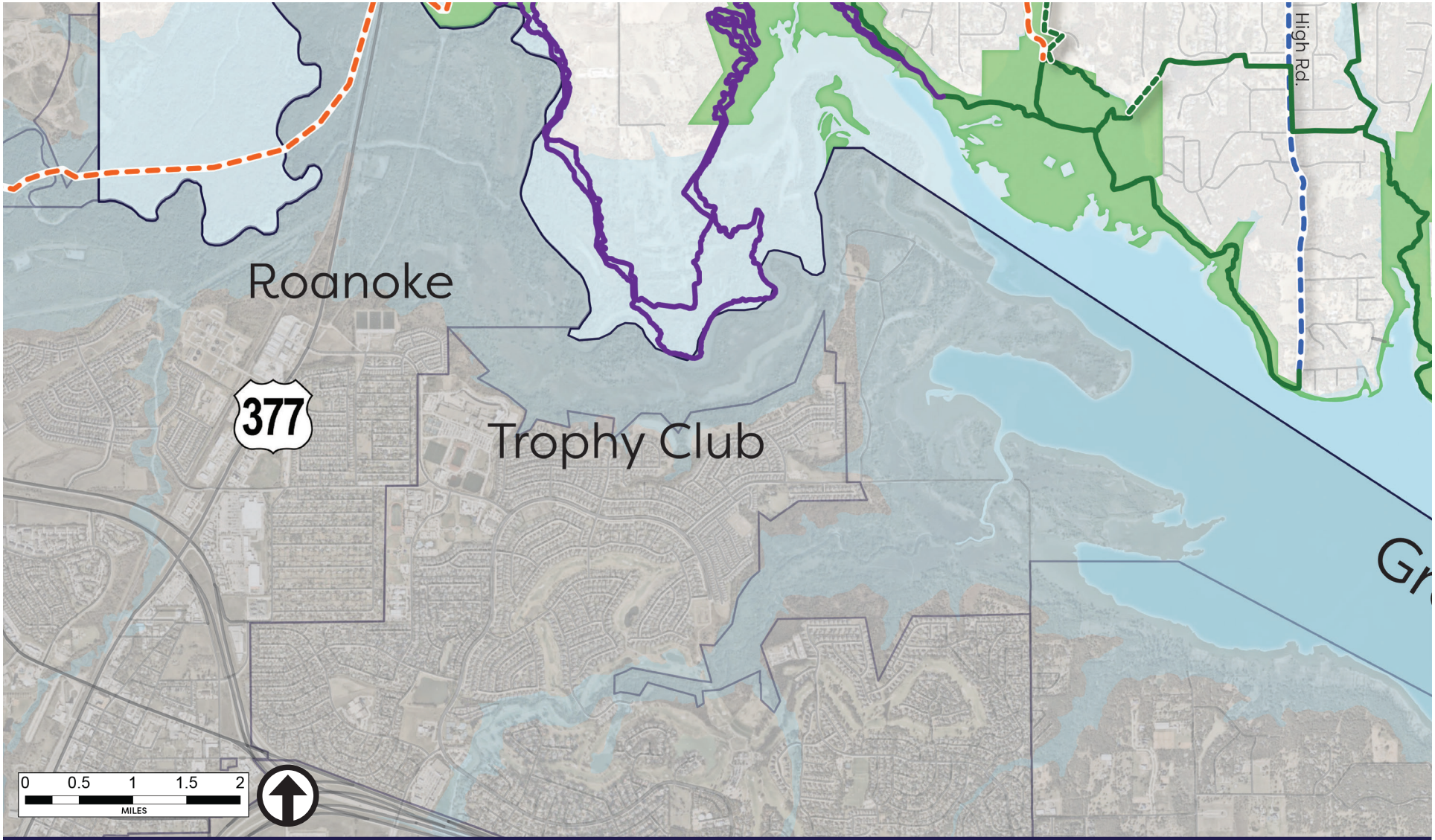
FLOWER MOUND EXISTING AND PROPOSED NETWORK: KEY MAP 2



FLOWER MOUND EXISTING AND PROPOSED NETWORK: KEY MAP 3



FLOWER MOUND EXISTING AND PROPOSED NETWORK: KEY MAP 4





THE TOWN OF FLOWER MOUND TEXAS
Parks & Recreation

HALFF

TOWN COUNCIL AGENDA ITEM NO. 15
REGULAR ITEM

DATE: July 18, 2022

FROM: Andy Kancel, Chief of Police

ITEM: **Consider recommendation to increase School Crossing Guard compensation and/or adopt attendance incentive pay.**

BACKGROUND INFORMATION: This agenda item is to consider a recommendation to increase the School Crossing Guard hourly compensation rate and/or adopt attendance incentive pay compensation. The purpose of this request is to remain competitive in the "difficult to staff" part-time job market and attract a larger pool of potential candidates for employment in effort to staff all crosswalks.

The Flower Mound Police Department School Crossing Guard Program is currently responsible for the staffing of 41 crossing sites consisting of 106 crosswalks. The program requires no less than 49 personnel to operate at minimum. The program currently employs 34 crossing guard personnel out of an authorized 60 positions.

The recommended increases to compensation, and addition of incentive pay for attendance will attract a wider range of applicants, reduce the deficit of vacant positions, and provide safe roadway crossings for Flower Mound school students. A current School Crossing Guard Index staffing study data recognized opportunities to increase safety and create a more efficient program, offsetting costs associated with the proposed new compensation proposal.

BOARD REVIEW/CITIZEN FEEDBACK: Presentation and review/input by Transportation Commission was accomplished at the July 12 meeting. The meeting can be viewed at:
https://flowermoundtx.swagit.com/play/07132022-993/5/

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT:
Increase Option 1: $13.00+Incentive = $89,820.00
Increase Option 2: $15.00+Incentive = $131,556.00
Increase Option 3: $18.00+Incentive = $212,672.00

Proposed Expenditure/(Revenue):	Account Number(s):
$19,179-$142,030 salary and/or $70,641incentive	100-640-43900-1xxx

Finance Review by: Tammy Wilson, Chief Financial Officer tw

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Crossing Guard Proposal

DRAFT MOTION: Adopt the recommended increase in compensation and/or attendance incentive pay as written in the agenda caption

Attachment 1

Name	Primary Title	Current Rate	Current Budget	New Rate Prop 1: $13	Prop 1 Budget	New Rate Prop 2: $15	Prop 2 Budget	New Rate Prop 3: $18	Prop 3 Budget	$50 Incentive Budget
Position 1	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 2	School Crossing Guard	17.75	8,641	18.62	9,065	18.75	9,128	18.75	9,128	1,195
Position 3	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 4	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 5	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 6	School Crossing Guard	13.91	6,772	14.78	7,196	15.00	7,303	18.00	8,763	1,195
Position 7	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 8	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 9	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 10	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 11	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 12	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 13	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 14	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 15	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 16	School Crossing Guard	14.33	6,976	15.20	7,400	15.33	7,463	18.00	8,763	1,195
Position 17	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 18	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 19	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 20	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 21	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 22	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 23	School Crossing Guard	14.91	7,259	15.78	7,682	15.91	7,746	18.00	8,763	1,195
Position 24	School Crossing Guard	14.76	7,186	15.63	7,609	15.76	7,673	18.00	8,763	1,195
Position 25	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 26	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 27	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 28	School Crossing Guard	14.33	6,976	15.20	7,400	15.33	7,463	18.00	8,763	1,195
Position 29	School Crossing Guard	18.00	8,763	18.87	9,187	19.00	9,250	19.00	9,250	1,195
Position 30	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 31	School Crossing Guard	14.35	6,986	15.22	7,410	15.35	7,473	18.00	8,763	1,195
Position 32	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 33	School Crossing Guard	13.27	6,460	14.14	6,884	15.00	7,303	18.00	8,763	1,195
Position 34	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 35	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 36	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 37	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 38	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 39	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195

Attachment 1

Name	Primary Title	Current Rate	Current Budget	New Rate Prop 1: $13	Prop 1 Budget	New Rate Prop 2: $15	Prop 2 Budget	New Rate Prop 3: $18	Prop 3 Budget	$50 Incentive Budget
Position 40	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 41	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 42	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 43	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 44	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 45	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 46	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 47	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 48	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 49	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 50	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 51	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 52	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 53	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 54	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 55	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 56	School Crossing Guard	12.50	6,086	13.00	6,329	15.00	7,303	18.00	8,763	1,195
Position 1	School Crossing Guard Coordinator	19.40	25,199	20.27	26,297	20.40	26,461	20.90	27,092	1,309
Position 1	School Crossing Guard-Lead	13.93	7,369	14.80	7,792	15.50	8,133	18.50	9,593	1,195
Position 2	School Crossing Guard-Lead	13.39	7,106	14.26	7,529	15.50	8,133	18.50	9,593	1,195
Position 1	School Crossing Guard-Sub	13.27	-	14.14	-	15.00	-	18.00	-	-
Position 2	School Crossing Guard-Sub	12.50	-	13.00	-	15.00	-	18.00	-	-
Position 3	School Crossing Guard-Sub	12.50	-	13.00	-	15.00	-	18.00	-	-
Position 4	School Crossing Guard-Sub	12.50	-	13.00	-	15.00	-	18.00	-	-
Position 5	School Crossing Guard-Sub	12.50	-	13.00	-	15.00	-	18.00	-	-
	Total		395,838		415,017		456,752		537,868	70,641
	Rate Proposal Cost				19,179		60,914		142,030	
	Rate Proposal Cost plus Incentive				89,820		131,556		212,672	

TOWN COUNCIL AGENDA ITEM NO. 16
REGULAR ITEM

DATE: July 18, 2022

FROM: Tommy Dalton, Assistant Town Manager

ITEM: **Consider approval of a request (MISC22-0002) for a variance to Section 34-182(b)(5), entitled "Construction work," of the Code of Ordinances to allow extended hours for construction of the Lakeside Village development.**

BACKGROUND INFORMATION: The purpose of this request is to allow concrete placement associated with the construction of the Lakeside Village development to occur outside of the Town's normal construction hours (Section 34-182(b)(5)). The Town's normal construction hours are Monday through Friday between 7:00 a.m. and 7:00 p.m., and Saturday and Sunday between 9:00 a.m. and 5:00 p.m. A working hour variance was approved by Council on June 19, 2017, for the Lakeside condo tower project due to very similar circumstances.

Development of the southern end of Lakeside Village includes Lakeside Terranea (SP21-0013) which is a 16-story 646,208 square foot mixed-use building. The Lakeside Terranea site plan was approved by the Planning and Zoning Commission on May 23, 2022. The building permit is currently under review. Staff is currently reviewing a site plan (SP22-0006) for a six-story office building attached to a 13-story hotel, with condos, totaling 764,660 square feet. Additional development associated with those two projects include two underground parking garages, a wedding chapel, and six restaurants. Overall, over 9 acres of vertical construction is about to commence in Lakeside Village.

On May 2, 2022, Town Council approved a Chapter 380 incentive agreement for the development of the hotel, office, restaurants, parking garages and related improvements. The private capital investment is estimated to be more than $500 million.

The development of these projects does not easily fit within the Town's normal working hours. In this instance, the building process necessitates repeated concrete pours over an extended timeframe. The applicant has requested a blanket approval for allowing extended work hours, starting once construction begins with Lakeside Terranea and continuing for a minimum of three years.

Details of the applicant's request is provided as attachment 1. Town Code allows working hour variances to be granted administratively on the basis of undue hardship (Section 34-154) in cases where:

1. The sound source will be of short duration and the activity cannot be conducted in a manner as to comply with this article.
2. Additional time is necessary for the applicant to alter or modify their activity or operation to comply with this article.
3. No reasonable alternative is available to the applicant.
4. An automatic variance will be granted without the payment of permit fees for the purpose of conducting parades or other public events, provided that any noise disturbance created by such activity will be abated when such request is made by a town official authorized to enforce this article.
5. The town manager or designated representative may prescribe any reasonable conditions or requirements deemed necessary to minimize adverse effects and may suspend any permit issued for violating any provisions prescribed in the permit of variance.

The applicant's request is not of short duration, and there is no clear modification to their activity where they can comply with the Town's normal working hours. Historically, staff has granted variances for smaller scale projects where work outside of normal working hours is limited to a specific activity that is completed in one day.

Given the nature of the request for extended working hours over a prolonged timeframe, the applicant is appealing to Town Council to grant the variance.

In considering this variance request, staff recommends the following conditions be part of the permit in addition to the conditions outlined in Attachment 1 (included below for convenience).

1. Work is to commence no earlier than 4:00 am and no later than 7:00 pm on the weekdays, 5:00 pm on the weekends.
2. Contractors to work outside normal construction hours no more than four times per week.
3. All contractors on the related projects will monitor noise levels closely to ensure there is no impact to the surrounding neighborhood.
4. Each contractor's contact information will be posted onsite if they need to be reached.
5. The trucks will follow the route as shown on the attached construction traffic plan.
6. No trucks or construction traffic is allowed to queue on Lakeside Parkway.
7. Advanced written notice will be given prior to commencing concrete pours.
8. The variance is limited to outside work associated with concrete pours for the projects mentioned above.
9. Unless violations of the variance occur, the variance will automatically renew every two years, following the initial three-year approval, until construction is completed within the construction zone.
10. The variance may be suspended by staff if any condition of the permit is violated.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: Town Council may approve, approve with modified conditions, or deny the variance request.

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Variance Request

DRAFT MOTION: Move to approve as presented in the agenda caption.

Attachment 1: Variance Request

June 30, 2022

Town of Flower Mound

2121 Cross Timbers Road

Flower Mound, TX 75028

RE: Construction Working Hours Variance

The purpose of this letter is to request an approval for extended work hours, starting with the groundbreaking of the first building within the "construction zone" and continuing for a period of three years. The construction zone encompasses multiple projects which include – Lakeside Hotel/Office, Terranea Residential Tower, two underground parking garages, a wedding chapel, and multiple restaurants. A similar working hour variance was approved by Town Council in 2017 for the construction of the Lakeside Tower.

The reasons for the request are listed below:

1. Help reduce construction related traffic during peak commuting times in Lakeside.
2. Cooler climate to help ensure structural integrity of the concrete.
3. Early pours allow for better control of the placing and curing process of the concrete which is critical in high-rise construction with multiple post tension floor decks.

Concrete Pour Information:

- Work to commence no earlier than 4 am and no later than 7 pm on the weekdays, 5 pm on the weekends.
- Contractors to work outside normal construction hours no more than four times per week.
- The closest residential unit is ~900 away from the construction zone.
- All contractors on the related projects will monitor noise levels closely to ensure there is no impact to the surrounding neighborhood.
- Each contractor's contact information will be posted onsite if they need to be reached.
- The trucks will follow the route as shown on the attached construction traffic plan.
- No trucks or construction traffic is allowed to que on Lakeside Parkway.

Our goal is to be a good neighbor to the residents throughout this process. If there are any questions, please feel free to contact me.

Thank you,

Rebecca Everitt

Realty Capital Management

713-492-7332

Attachment 1: Variance Request

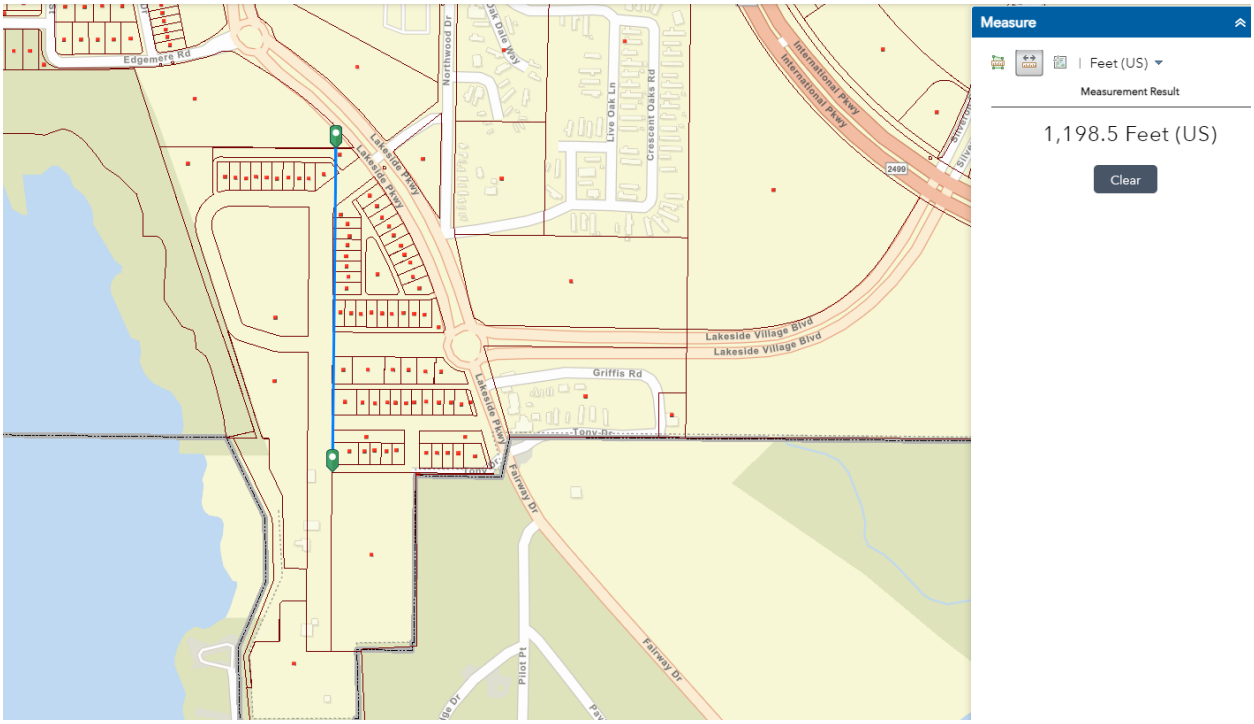
Construction Zone

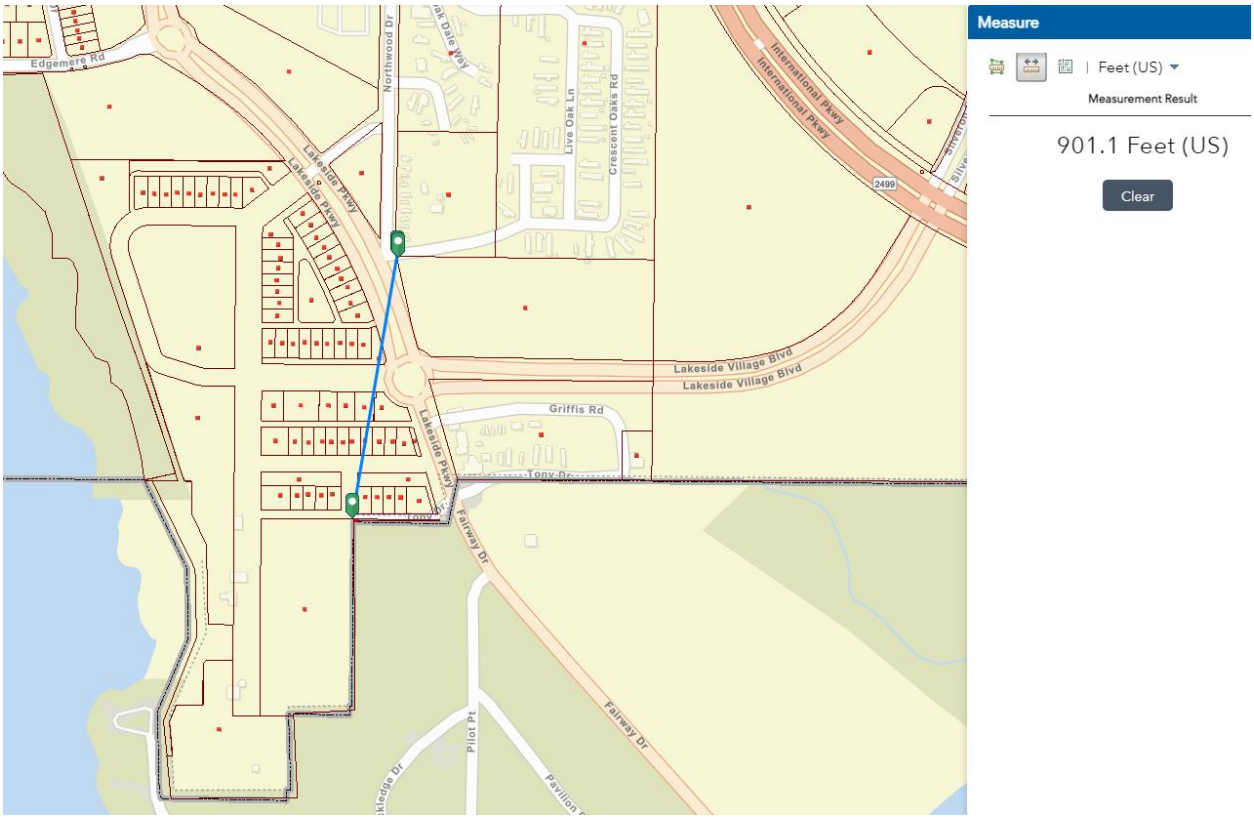


1 Area of noise variance request

Attachment 1: Variance Request

Distance from Existing Residences





Attachment 1: Variance Request

Construction Traffic Plan



Town Council Future Agenda Items

SCHEDULED	**8/8/2022**	Consent	Consider approval of the purchase of a Pierce Air and Light Unit (Enforcer Rescue Body) for the Fire and Emergency Services Department from Siddons-Martin Emergency Group, through the BuyBoard Contract #651-21, in the total amount of $483,542; and authorization for the Mayor to execute same on behalf of the Town.
		Consent	City Works Migration and Implementation Services
		Consent	Town Council acting as the Board of Directors for the Town of Flower Mound Fire Control, Prevention, and Emergency Medical Services District to schedule a public hearing for August 22, 2022, on the Flower Mound Fire Control, Prevention, and Emergency Medical Services District budget and to schedule a meeting for September 19, 2022, to take action on the proposed budget; with each meeting to be held at 6:00 PM, at Town Hall, located at 2121 Cross Timbers Road.
		Consent	Consider proposing a maximum tax rate of $0._____ per $100 valuation for the fiscal year beginning October 1, 2022, and ending September 30, 2023; and scheduling August 22, 2022, public hearing on the budget, scheduling September 19, 2022, public hearing on the tax rate, and scheduling the September 19, 2022, adoption of said budget and tax rate; with each meeting to be held at 6:00 PM, at Town Hall, located at 2121 Cross Timbers Road.
		Consent	Consider accepting the submission of the notice of a no-new-revenue tax rate of $_____ per $100 assessed valuation and a voter-approval tax rate of $_____ per $100 assessed valuation for the fiscal year beginning October 1, 2022, and ending September 30, 2023.
		Consent	Consider accepting the submission of the certified collection rate of 100 percent for the fiscal year beginning October 1, 2022, and ending September 30, 2023.
		Consent	Consider approval of an ordinance establishing the 2022 certified appraisal roll.
		Consent	Town Council serving as the Board of Directors for the Crime Control and Prevention District (CCPD) and Fire Control, Prevention, and Emergency Medical Services (EMS) District to consider approval of an order ordering a special election to be held on the 8th day of November, 2022, for the purpose of submitting to the qualified voters of the District a ballot proposition on whether to continue the CCPD and Fire Control, Prevention, and EMS District sales tax at the rate of one-fourth of one percent for each district; providing for election officers; designating the places and manner of holding said election; and providing for the posting and publication of notice.
		Consent	2021 - 2022 CIP Amendment No.6

SCHEDULED	**8/8/2022**	Consent	Town Council acting as the Board of Directors for the Town of Flower Mound Crime Control and Prevention District to schedule a public hearing for August 22, 2022, on the Flower Mound Crime Control and Prevention District budget and to schedule a meeting for September 19, 2022, to take action on the proposed budget; with each meeting to be held at 6:00 PM, at Town Hall, located at 2121 Cross Timbers Road.
		Consent	Consider approval of an ordinance amending Chapter 66, Article V, Section 66-214 of the Code of Ordinances of the Town of Flower Mound, Texas, adding a reduced school speed zone for Argyle Independent School District for Elementary School Number 3.
		Consent	Consider Approval of the purchase of traffic signal adaptive system software, traffic controllers, and traffic related products, in the estimated annual amount of $400,000.00, from Paradigm Traffic Systems, Incorporated, through the BuyBoard Cooperative Purchasing contract.
		Consent	Lopo Road Reconstruction - Construction Award
		Consent	Consider approval of an ordinance ordering a special election to be held on the 8th day of November, 2022, for the purpose of submitting to the qualified voters of the Town of Flower Mound, Texas, a ballot proposition to reauthorize the Street Maintenance Sales and Use Tax at the rate of one-fourth of one percent; providing for election officers; designating the places and manner of holding said election; and providing for the posting and publication of notice.
		Consent	Consider approval of a resolution authorizing the adoption of the Program Year 2022 Action Plan for the Community Development Block Grant Program and authorizing the Mayor to execute same on behalf of the Town and submit to the U.S. Department of Housing and Urban Development.
		Consent	Consider approval of Change Order No. 5 for drainage adjustments for the Canyon Falls Park project, amending the contract with MSB Contractors, Inc., to provide for an increase to the contract in the amount of $21,489.53; and authorization for the Mayor to execute same on behalf of the Town.
		Regular	Consider a request for a Site Plan (SP21-0008 – McIver Flower Mound) to develop an office, warehouse and distribution facility with an exception to the access management policy and criteria, regarding driveway spacing, contained in the Town's Engineering Design Criteria and Construction Standards adopted through Chapter 32 of the Code of Ordinances. The property is generally located north and west of Lakeside Parkway and Enterprise Road. (PZ recommended approval/denial by a vote of 0 to 0 at its July 11, 2022, meeting.)
		Regular	Rippy Road - Construction Award
	8/18/2022	Consent	Hold a discussion and provide direction regarding the FY 2022-2023 Proposed Budget, including Community Support funding.
	8/22/2022	Consent	Consider approval of a Service Agreement for Demand Response Transit Service with SPAN, Inc., in an amount not-to-exceed $??,???.??, to provide transportation service for Town citizens who are age 65 or older and Town citizens with verifiable disabilities that prevent them from driving; and authorization for the Mayor to execute same on behalf of the Town.

SCHEDULED	**8/22/2022**	Consent	Public Hearing by the Town Council acting as the Board of Directors for the Town of Flower Mound Fire Control, Prevention, and Emergency Medical Services District to consider the Flower Mound Fire Control, Prevention, and Emergency Medical Services District proposed budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023.
		Consent	Public Hearing by the Town Council acting as the Board of Directors for the Town of Flower Mound Crime Control and Prevention District to consider the Flower Mound Crime Control and Prevention District proposed budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023.
		Consent	Consider and approve annual update to the River Walk Public Improvement District No. 1 (PID) Service and Assessment Plan (SAP) and Assessment Roll.
		Consent	Lopo Road & Melody Court Reconstruction - Construction Award
		Consent	Public Hearing to consider the proposed budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023.
		Consent	2022 Street Reconstruction - Timber Crk Rd @ College Pkway Intersection - Construction Award
		Regular	Public Hearing to consider an ordinance granting Specific Use Permit No. 480 (SUP22-0003 – Stay N' Play) to permit an amusement and recreation (indoors) facility. The property is generally located west of Yucca Drive and south of Churchill Drive. (PZ recommended approval/denial by a vote of 0 to 0 at its July 25, 2022, meeting.)
	9/13/2022	Regular	Placeholder: Board & Commission Interviews/Appointments (1 of 2)
	9/15/2022	Regular	Placeholder: Board & Commission Interviews/Appointments (2 of 2)
	9/19/2022	Consent	Town Council acting as the Board of Directors for the Town of Flower Mound Fire Control, Prevention, and Emergency Medical Services District to consider approval of a resolution adopting the Town of Flower Mound Fire Control, Prevention, and Emergency Medical Services District budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023.
		Consent	Consider approval of an ordinance adopting the 2022 tax rolls and fixing and levying municipal ad valorem taxes for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023, and for each fiscal year thereafter until otherwise provided, at the rate of $0._____ per $100 assessed valuation on all taxable property within the corporate limits of the Town of Flower Mound as of January 1, 2022.
		Consent	Consider approval of an ordinance adopting the budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023, and making appropriations for each fund and department.
		Consent	Public Hearing to consider a tax rate of $0._____ per $100 assessed valuation.

SCHEDULED	**9/19/2022**	Consent	Town Council acting as the Board of Directors for the Town of Flower Mound Crime Control and Prevention District to consider approval of a resolution adopting the Town of Flower Mound Crime Control and Prevention District budget for the fiscal year beginning on October 1, 2022, and ending on September 30, 2023.
		Regular	(caption forthcoming)
		Regular	High Road Water Line Phase II - Construction Award
	10/3/2022	Consent	Morriss Road Water Line Phase III - Construction Award
		Consent	Timber Creek Water & Sewer Replacement
	10/17/2022	Consent	Timber Creek Water & Sewer Replacement - Testing Award
		Consent	Morriss Road Water Line Phase III - Testing Award
		Consent	2022 Street Reconstruction -Timber Creek Rd @ College Pkway Intersection - Testing Award