



**TOWN OF DAVIDSON**  
**BOARD OF COMMISSIONERS**  
**2nd Tuesday Work Session**  
**Town Hall Board Room - 216 S. Main Street**  
**August 13, 2019**  
**6:00 PM**

**I. CALL TO ORDER - 5:00 P.M.**

**II. CLOSED SESSION**

- (a) **Consult with Attorney NCGS 143-318.11. (a) (3)**
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**III. ANNOUNCEMENTS - 6:00 P.M.**

**IV. CHANGES TO AGENDA**

**V. DISCUSSION**

- (a) **Public Hearing and Consider Approval of the sale of the Continuum Communication System**  
**Town Manager Jamie Justice**  
**Summary:** On March 18, 2019, the Davidson Board of Commissioners approved Resolution 2019-10 Approving Solicitation of Offers to Purchase Continuum. Should the commissioners vote to approve the sale, such approval will be subject to further approval by a majority of the eligible voters of the Town of Davidson who vote thereon at a referendum election expected to be held on November 5, 2019.  
The public hearing was advertised in the Charlotte Observer on August 3, 2019.
- (a) Overview
- (b) Public Hearing
- (c) Consider Approval of Resolution 2019-36 and Resolution 2019-37
- (b) **Consider Approval of Resolution 2019-35 Park at Beaty Conservation Easement Agreement and Budget Amendment 2020-07**  
**Parks and Recreation Director Kathryn Spatz and Town Attorney Cindy Reid**  
**Summary:** On March 26, 2019, the board of commissioners voted unanimously to adopt the recommendations of the Park at

Beaty Street Task Force, including permanently protecting all 6 parcels (20+acres) that make up the Beaty Property with a conservation easement. The Park at Beaty Leadership Committee, primarily Dave Cable, and staff have been working to develop easement language that addresses town, neighbor, and Davidson Land Conservancy (DLC) interests. Dave Cable and Kathryn Spatz presented the draft conservation easement to the board of commissioners on July 9.

Staff recommends the board approve Resolution 2019-35 to Convey the Conservation Easement as presented and Budget Amendment 2020-07 to appropriate \$30,000 to DLC for stewardship of the conservation easement.

The purpose and terms of the easement will be published in a local publication for 10 days and, after that, the conveyance can be finalized by the Mayor signing the easement agreement.

(c) **Consider Approval of Resolution 2019-33 adopting Public Facilities Bond Order and Resolution 2019-34 Setting G.O. Bond Referendum Date**

**Town Manager Jamie Justice**

**Summary:** The board of commissioners will consider using General Obligation (G.O.) Bonds for public facilities. If approved the G.O. Bond Referendum will be on the November 5, 2019 general election ballot for consideration by the voters of Davidson.

(d) **Consider Approval of Davidson Mobility Plan**

**Senior Planner Travis Johnson**

**Summary:** The Davidson Mobility Plan is a local comprehensive transportation plan that provides a town-wide vision and coordinated recommendations for multi-modal travel and access within and through town. These include specific project and policy recommendations. The Mobility Plan is a culmination of 18 months of public engagement and feedback.

(e) **River Run Phase VI Pre-Conditional Development Consultation**

**Planning Director Jason Burdette**

**Summary:** The applicant proposes to re-designate approximately 74.8 acres located east of Shearer Rd and south of E. Rocky River Rd. from a combination of Neighborhood Edge/Conditional Planning Areas to entirely Conditional Planning Area. The applicant is working with Epcon Communities to develop a 130-unit active adult (age-targeted) community. As part of the conditional request, the applicant is asking for a number of exceptions to the Davidson Planning Ordinance. These exceptions are detailed in the staff analysis.

The purpose of tonight's discussion is to determine if the board of commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (rezoning) process. No formal action will be taken.

- (f) **CFA Church Pre-Conditional Consultation**  
**Planning Director Jason Burdette**  
**Summary:** CFA Church proposes a Conditional Map Amendment (rezoning) for 261 Griffith Street (Sadler Square Shopping Center) from Village Commerce Planning Area to Conditional Planning Area. The purpose of the rezoning would be to permit a religious use in the space formerly occupied by Healthy Home Economist grocery store.
- The purpose of tonight's discussion is to determine if the Board of Commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (rezoning) process. No formal action will be taken.
- (g) **Consider Approval of Resolution 2019-38 to authorize the purchase of 211 Lakeside Drive, 145 Mock Road, 144 Mock Circle, and 202 Mock Road and approve Budget Amendment 2020-08 for \$820,000 plus related expenses**  
**Town Manager Jamie Justice**  
**Summary:** The Town of Davidson is purchasing four properties to be included in the town's affordable housing program.
- (h) **Miscellaneous/Open Discussion**  
**Summary:** This is an opportunity for commissioners to present or discuss any topics not previously listed on the agenda.

**VI. SUMMARIZE MEETING ACTION ITEMS**

**VII. ADJOURN**



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**Agenda Title: Consult with Attorney NCGS 143-318.11. (a) (3)**

**Summary:**

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**ATTACHMENTS:**

Description	Upload Date	Type
No Attachments Available		



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**Agenda Title: Public Hearing and Consider Approval of the sale of the Continuum Communication System  
Town Manager Jamie Justice**

**Summary:** On March 18, 2019, the Davidson Board of Commissioners approved Resolution 2019-10 Approving Solicitation of Offers to Purchase Continuum. Should the commissioners vote to approve the sale, such approval will be subject to further approval by a majority of the eligible voters of the Town of Davidson who vote thereon at a referendum election expected to be held on November 5, 2019. The public hearing was advertised in the Charlotte Observer on August 3, 2019.

(a) Overview

(b) Public Hearing

(c) Consider Approval of Resolution 2019-36 and Resolution 2019-37

**Summary:**

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**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
▣	Executive Summary of Asset Purchase Agreement 08.13.19	8/9/2019	Cover Memo
▣	Draft Resolution 2019-36 Authorizing APA for sale of Continuum 08.13.19	8/13/2019	Resolution Letter
▣	Draft Resolution 2019-37 Calling for Vote for Sale of Continuum 08.13.19	8/13/2019	Resolution Letter

## PROPOSED SALE OF CONTINUUM COMMUNICATIONS SYSTEM

### Executive Summary of Draft Asset Purchase Agreement\*

	Term
Parties	<ul style="list-style-type: none"><li>▪ Purchaser – Party to be named later.</li><li>▪ Seller Parties -- MI Connection Communications System (DBA Continuum), Town of Mooresville, Town of Davidson.</li></ul>
Transaction	<ul style="list-style-type: none"><li>▪ Seller Parties to sell to Purchaser substantially all assets relating to Continuum.</li></ul>
Purchase Price	<ul style="list-style-type: none"><li>▪ Purchase Price of \$80,000,000 payable in cash, subject to working capital adjustment, escrow amounts, and provisions obligating Seller Parties to indemnify Purchaser for certain losses caused by breaches of representations and warranties and covenants and for excluded liabilities.</li><li>▪ Working capital adjustment at the expense of Seller Parties if net working capital is less than \$(1,100,000) and for the benefit of Seller Parties if it is more than \$(1,100,000).</li></ul>
Use of Proceeds	<ul style="list-style-type: none"><li>▪ The net proceeds of sale will be used to satisfy the balance due on the installment financings of approximately \$59 million and all other obligations, and the remainder will go to the Towns of Mooresville and Davidson in accordance with their respective interests in Continuum.</li></ul>

\* This summary is provided by Seller Parties.

	Term
Representations and Warranty Insurance Policy (“ <b>R&amp;W Policy</b> ”)/Indemnity and Escrow Provisions	<ul style="list-style-type: none"> <li>▪ Purchaser is obtaining an R&amp;W Policy at its expense. The R&amp;W Policy would be Purchaser’s primary recourse for most breaches of representations and warranties by Seller Parties (if there are any such breaches). <ul style="list-style-type: none"> <li>○ <i>R&amp;W Policy</i>: \$8 million policy with a deductible of \$800,000 (with Purchaser generally responsible for the first \$400,000, and Seller Parties the second \$400,000).</li> <li>○ <i>Indemnification and Escrows</i>: Claims by Purchaser are subject to indemnification obligations of Seller Parties and escrows as provided in the agreement.</li> </ul> </li> </ul>
Employees	<ul style="list-style-type: none"> <li>▪ Purchaser will offer employment to substantially all of Continuum’s employees. Offers of employment to be contingent upon customary hiring criteria of Purchaser.</li> </ul>
Conditions to Closing	<ul style="list-style-type: none"> <li>▪ Town Voter Approval for Mooresville and Davidson (referendum scheduled for November 5, 2019).</li> <li>▪ Accuracy of representations and warranties.</li> <li>▪ Commercial arrangements between Purchaser and the Towns relating to the continued provision of fiber for INet use.</li> <li>▪ Absence of a Material Adverse Effect on Continuum.</li> <li>▪ Payoff of installment financings.</li> <li>▪ Other customary conditions.</li> </ul>
Termination Fee	<ul style="list-style-type: none"> <li>▪ Termination Fee of \$2,000,000 payable by Seller Parties if agreement is terminated and, within 2 years, Continuum enters into another transaction.</li> </ul>



## RESOLUTION 2019-36

### RESOLUTION APPROVING SALE OF THE CONTINUUM COMMUNICATIONS SYSTEM SUBJECT TO VOTER APPROVAL

#### Whereas:

- A. At its regularly scheduled meeting on March 18, 2019, the Board of Commissioners of the Town of Davidson (the "Town") adopted a resolution authorizing the Town Manager to explore the Town's strategic options with regard to the communication system now known as Continuum and related assets (the "System"), including a sale of the System;
- B. The Town, together with the Town of Mooresville ("Mooresville") (collectively, "the Towns"), as the "Operating Parties" in MI Connection Communications System, the "Joint Agency" formed pursuant to law to own and operate the System, is authorized to approve a sale of the entire System;
- C. Pursuant to the resolution of March 18, 2019, the Town and Mooresville engaged RBC Capital Markets LLC ("RBCCM") to act as the adviser and consultant in connection with a potential sale, and authorized the Town Manager to engage counsel and to carry out such functions as deemed necessary and appropriate to explore a sale;
- D. In addition, the Towns issued a joint press release dated March 18, 2019, concerning the intent to explore a sale of the System and identified RBCCM as the advisor for the sale;
- E. On March 19, 2019, RBCCM contacted 49 potential purchasers known to it through its extensive experience in the telecommunications industry, notifying those parties of the intended sale and inviting them to indicate initial interest and to sign nondisclosure agreements if they desired to obtain additional information;
- F. RBCCM prepared a Confidential Information Memorandum ("CIM"), which was approved by the Managers of the Towns, providing details concerning the System that it distributed to 31 companies that signed NDAs indicating their initial interest. On April 1, 2019, RBCCM provided this group of companies procedures for submission of initial nonbinding proposals by April 23, 2019;
- G. RBCCM received initial proposals from nine potential buyers on or about April 23, 2019, two of which subsequently increased their initial offers. From among this group, after consultation among the Managers and other representatives of the Towns, RBCCM and Continuum leadership, the six entities with the highest monetary initial offers were invited

to participate in a second round of the process, which included the opportunity to attend management presentations in Mooresville, have access to a virtual data room, and to conduct extensive due diligence on the System.

- H.** Management presentations then were held in the System's offices during the weeks of May 6, 13 and 20, 2019.
- I.** On May 13, 2019, RBCCM, after consultation with representatives of the Towns, provided the second round participants a draft asset purchase agreement and set a deadline of June 13, 2019, for markups to the draft asset purchase agreement and second round offers.
- J.** On or about June 13, 2019, RBCCM received six responses complying with the specified procedure, which included purchase prices ranging from \$60 million to \$80 million. Following detailed review of these six proposals by representatives of the Towns, and consultation with Continuum leadership and RBCCM, the Town Manager joined with Mooresville in determining to provide a final opportunity to the three interested parties who submitted the most favorable proposals to differentiate their proposals by price and terms. Each party was given a deadline of June 21, 2019, to respond with their most favorable proposals. Each of the parties then responded on or about that deadline with improved terms but no improvements of the price.
- K.** On July 1, the Town Manager, in consultation with other representatives of the Town, RBCCM, the Town Manager of Mooresville, other representatives of Mooresville, executive leadership of the System, and counsel, selected TDS Broadband Service LLC ("TDS") the party submitting the most favorable proposal in respect of its price of \$80 million as well as other terms and entered into a thirty-day exclusivity agreement to allow time for detailed negotiation of terms of the draft asset purchase agreement and during which the Towns agreed not to engage in further negotiations with any other party. Exclusivity was subsequently extended through August 13, 2019.
- L.** TDS is a subsidiary of a public company that owns and operates cable TV and broadband systems in multiple markets throughout the United States and is very interested in expanding into the rapidly growing geographic region served by the System. TDS has substantial capital resources with the capacity to grow the System and to provide advanced industry technology. TDS has agreed among other things that it will offer employment to substantially all of the employees of Continuum.
- M.** RBCCM has advised the towns that TDS's price and other terms represents fair market value for the System, and that the terms of escrow, adjustments, and indemnity are consistent with commercial terms it regularly sees in comparable sale and purchase transactions.
- N.** The Town Manager, in consultation with RBCCM and others, determined to proceed to negotiate final terms of sale with TDS based on concluding that TDS presented the most favorable and best value proposition to the Town and its residents.
- O.** The Towns have, through counsel and as approved by the respective Town Managers, reached final terms of agreement on the form of the asset purchase agreement (the "APA"), subject to approval by the Commissioners of both Towns.

- P.** Section 160A-321 of the General Statutes of North Carolina requires that the sale of the System must be approved by a vote of the eligible voters of the Town. The next date on which the required referendum may be held is November 5, 2019.
- Q.** The proceeds of a sale will be applied immediately after closing to satisfaction of the remaining balance due on the installment financings used to purchase and build out the System of approximately \$59.0 million. After any adjustments of the purchase price and indemnities, and payment of other costs of sale and other obligations, the remaining proceeds will be divided and paid to or for the benefit of the Towns in accordance with their respect interests in the Joint Agency, specifically 70% to Mooresville and 30% to Davidson.
- R.** A public hearing concerning the proposed sale was conducted following ten-day legal notice thereof during the regularly scheduled meeting of the Commissioners on August 13, 2019.

**NOW THEREFORE, BE IT RESOLVED BY THE TOWN DAVIDSON BOARD OF COMMISSIONERS AS FOLLOWS:**

1. Based upon the foregoing and other matters the Board deems material, the Board hereby finds as follows:
  - a. the Town has the power and authority, pursuant to Section 160A-321 of the General Statutes of North Carolina, and other authority under its charter, to enter into, perform its obligations under and, subject to approval of the voters, consummate the transactions contemplated by the APA, for itself and through the Joint Agency;
  - b. the price and other terms of the APA with TDS constitute fair market value for the System, and the terms of the APA (and the transactions contemplated by the APA) are otherwise advisable and fair to and in the best interests of Town and its citizens;
  - c. the execution, delivery, and performance by the Town of the APA (and the transactions contemplated by the APA) upon the terms and conditions in the draft submitted to the Board are for a public purpose and in the best interests of the Town and its citizens.
2. The APA substantially in the form submitted to the Board prior to and included in the minutes of this meeting in the Town records be and hereby is approved and authorized, with such changes thereto not inconsistent with these resolutions as the Mayor may approve;
3. The Mayor, pursuant to the authority granted in these resolutions, acting singly or together with the Town Manager, be and hereby is authorized to execute and deliver, in the name and on behalf of the Town, the APA, substantially in the form submitted to the Board prior to this meeting, with such changes thereto not inconsistent with these resolutions as the Mayor may approve, the Mayor's execution of such agreement with such changes being conclusive evidence of his approval thereof;
4. The Mayor, the Town Manager, and other officers of the Town, be and hereby are authorized to perform and cause the Town to perform all actions contemplated by these resolutions and the APA; to execute and deliver and cause the Town to perform such agreements, documents and

instruments contemplated by the APA; to execute and deliver and cause the Town to perform such further agreements, documents, and instruments; and to take and perform such further actions as such officers, or any of them, deem necessary or appropriate to further the intent of these resolutions and effect the sale of the System upon the terms and conditions set forth in the APA.

5. The Joint Agency, MI Connection Communications System, acting through its board of directors and officers, are likewise hereby authorized to execute and deliver the APA, substantially in the form submitted to this Board prior to this meeting, with such changes thereto not inconsistent with these resolutions as the Mayor may approve, the Town's execution of the APA with such changes being conclusive evidence of his approval thereof; and to perform all actions contemplated by these resolutions and the APA, to execute and deliver and cause the Joint Agency to perform such agreements, documents and instruments contemplated by the APA, and to execute and deliver and cause the Joint Agency to perform such further agreements, documents, and instruments, and to take and perform such further actions, as authorized by the Mayor, the Town Manager and other officers of the Town as provided herein.

This resolution is effective this \_\_\_\_\_, 2019.

Attest:

\_\_\_\_\_  
Rusty Knox, Mayor  
Town of Davidson

\_\_\_\_\_  
Elizabeth K. Shores, Town Clerk



## RESOLUTION 2019-37

### RESOLUTION CALLING FOR A VOTE OF THE ELIGIBLE VOTERS OF THE TOWN REGARDING SALE OF THE CONTINUUM COMMUNICATIONS SYSTEM TO TDS BROADBAND SERVICE LLC

#### Whereas:

- A. At its regularly scheduled meeting on August 13, 2019, the Board of Commissioners of the Town of Davidson (the "Town") adopted a resolution approving the sale of the Continuum communications system (the "System") and related assets on terms set forth in an Asset Purchase Agreement ("APA") to TDS Broadband Service LLC;
- B. Section 160A-321 of the General Statutes of North Carolina requires that the sale of the System must be approved by a majority vote of the eligible voters of the Town who vote thereon;
- C. The APA contains language that the parties agree to request the Boards of Elections use on the referendum ballot (the "Ballot Language");
- D. The next date on which the required referendum may be held is November 5, 2019.

#### NOW THEREFORE, BE IT RESOLVED BY THE TOWN DAVIDSON BOARD OF COMMISSIONERS AS FOLLOWS:

1. The sale of the System pursuant to the APA approved by the Board be submitted to a vote of the people on November 5, 2019, as authorized and required by section 160A-321 of the General Statutes of North Carolina;
2. The Town Manager is authorized to request that the Board of Elections of Mecklenburg County and the Board of Elections of Iredell County place the matter on the November 5, 2019, election ballot and use the Ballot Language set forth in the APA, or as it may be amended consistent with the APA, and to take such further actions consistent with these resolutions and the APA as the Town Manager determines to be necessary or appropriate in connection with such vote.

This resolution is effective this \_\_\_\_\_, 2019.

Attest:

\_\_\_\_\_  
Rusty Knox, Mayor  
Town of Davidson

\_\_\_\_\_  
Elizabeth K. Shores, Town Clerk

DRAFT



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**Agenda Title: Consider Approval of Resolution 2019-35 Park at Beaty Conservation Easement Agreement and Budget Amendment 2020-07**

**Parks and Recreation Director Kathryn Spatz and Town Attorney Cindy Reid**

**Summary:** On March 26, 2019, the board of commissioners voted unanimously to adopt the recommendations of the Park at Beaty Street Task Force, including permanently protecting all 6 parcels (20+acres) that make up the Beaty Property with a conservation easement. The Park at Beaty Leadership Committee, primarily Dave Cable, and staff have been working to develop easement language that addresses town, neighbor, and Davidson Land Conservancy (DLC) interests. Dave Cable and Kathryn Spatz presented the draft conservation easement to the board of commissioners on July 9.

Staff recommends the board approve Resolution 2019-35 to Convey the Conservation Easement as presented and Budget Amendment 2020-07 to appropriate \$30,000 to DLC for stewardship of the conservation easement.

The purpose and terms of the easement will be published in a local publication for 10 days and, after that, the conveyance can be finalized by the Mayor signing the easement agreement.

**Summary:**

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**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
□	Agenda Memo - Beaty Park Conversation Easement Agreement 08.13.19	8/8/2019	Cover Memo
□	Draft - Resolution 2019-35 Beaty Park Conservation Easement Agreement 08.13.19	8/8/2019	Resolution Letter
□	DRAFT - Budget Amendment 2020-07 Beaty Street Conservation Easement Agreement 08.13.19	8/8/2019	Budget Amendment



## Beaty Park - Conservation Easement

To: Davidson Board of Commissioners  
From: Cindy Reid, Town Attorney and Kathryn Spatz, Parks & Recreation Director  
Date: August 13, 2019  
Re: Beaty Park – Conservation Easement

### 1. OVERVIEW

At its March 26, 2019 meeting, the commissioners voted unanimously to adopt the recommendations of the Park at Beaty Task Force, including permanently protecting all 6 parcels (20+acres) that make up the Beaty Property with a conservation easement. Permanent conservation is the only way to ensure the land is kept open, undeveloped, and in the public realm, forever. The Park at Beaty Leadership Committee, primarily Dave Cable, and staff have been working to develop easement language that addresses town, neighbor, and Davidson Land Conservancy (DLC) interests. The Task Force Leadership Committee and staff met with neighbors May 30 to present information on the proposed conservation easement and respond to any questions or concerns. The information was positively received. Dave Cable and Kathryn Spatz presented the draft conservation easement to the BOC at its July 9 meeting.

### 2. RELATED TOWN GOALS

*Goal: The Town of Davidson will increase physical and mental health of Davidson citizens. Preserve open space. Provide ample opportunities for play and discovery (active and passive).*  
*Goal: Davidson will have inclusive engagement with the community to encourage substantive, respectful, and open dialogue, increase participation, and foster a sense of belonging.*

### 3. OPTIONS/PROS & CONS

Pros: conservation easements (CE) vs. deed restrictions vs. fee simple; easements are permanent, irrevocable, very difficult to amend; can only be undone by judicial action; 55 million U.S. acres preserved by CE; terms of the CE will be specific to Beaty Park, its conservation values, and park use; stewardship endowment fund & monitoring; legal defense fund & enforcement

Con: \$30,000 for stewardship could be used for something else

### 4. FYI or RECOMMENDED ACTION

We recommend the board of commissioners approve the Resolution to Convey the Conservation Easement as presented.

## 5. NEXT STEPS

The purpose and terms of the easement will be published in a local publication for 10 days and, after that, the conveyance can be finalized by the mayor signing the easement agreement. A celebration of the easement is scheduled October 5.



**RESOLUTION 2019-35**  
**APPROVING CONVEYANCE OF PROPERTY PURSUANT TO G.S. 160A-279**

**WHEREAS**, the Town of Davidson owns certain parcels of land containing approximately 20 acres, located on the south side of Beaty Street, known as Beaty Park; and

**WHEREAS**, North Carolina General Statute 160A-279 authorizes a town to convey real property by private sale to a nonprofit corporation, if the Town is authorized by law to appropriate funds to private organizations in order to carry out such program; and

**WHEREAS**, North Carolina General Statutes 160A-353 authorizes the Town to appropriate funds to establish parks; and

**WHEREAS**, the State of North Carolina has authorized the creation of conservation easements pursuant to the terms of the North Carolina Historic Preservation and Conservation Act, North Carolina General Statutes 121-34 et. seq. (the "Act") and North Carolina General Statute 160A-266 through 279, and 105-317, which provides for the enforceability of restrictions, easements, and covenants "appropriate to retaining land or water areas predominantly in their natural, scenic, or open condition; and

**WHEREAS**, the Town of Davidson has negotiated with the Davidson Land Conservancy [hereafter, DLC] to convey the 20 acre tract, described above, to DLC, in order that the property so conveyed may be preserved as a natural park through a conservation easement.

**THEREFORE, THE TOWN BOARD OF COMMISSIONERS RESOLVES THAT:**

1. The Mayor of the Town of Davidson is authorized to execute all documents necessary to convey conservation easement to the 20 acre tract of land (Parcel #s: 003-284-06; 003-263-02; 003-284-02; 003-284-04; 003-284-03; 003-263-03; 003-263-98), and as shown in the attached existing conditions survey, excluding parcel 003-282-21.
2. The consideration for the conveyance is the set of conditions, covenants, and restrictions, contained in the attached conservation easement that, DLC has agreed to uphold and enforce.
3. The Town of Davidson shall convey a conservation easement to DLC. The easement of DLC in the property shall be in perpetuity.
4. The Town Clerk shall publish a notice summarizing the contents of this resolution, and the property may be conveyed at any time after 10 days after publication of the notice.

Adopted \_\_\_\_\_, 2019

Attest:

\_\_\_\_\_  
Rusty Knox, Mayor  
Town of Davidson

\_\_\_\_\_  
Elizabeth K. Shores, Town Clerk

DRAFT

AMENDMENT TO THE BUDGET ORDINANCE

**BE IT ORDAINED** by the Governing Board of the Town of Davidson, North Carolina, that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2020:

**Section 1:** To amend the General Fund, the appropriations are to be changed as follows:

<u>Acct. No.</u>	<u>Account</u>	<u>Decrease</u>	<u>Increase</u>
10-80-6140-440	Contract Services		\$ 30,000.00

Budgeted expenditures will be used to complete the conservation easement of the Beaty Street property

**Section 2:** To amend the General Fund, the estimated revenues are to be changed as follows:

<u>Acct. No.</u>	<u>Account</u>	<u>Decrease</u>	<u>Increase</u>
10-00-3990-980	Fund Balance Appropriated		\$ 30,000.00

Unassigned fund balance will be used to complete the conservation easement of the Beaty Street property.

**Section 3:** Copies of this budget amendment shall be furnished to the Clerk of the Governing Board, and to the Budget Officer and the Finance Officer for their direction.

Adopted this 13th day of August, 2019



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**Agenda Title: Consider Approval of Resolution 2019-33 adopting Public Facilities Bond Order and Resolution 2019-34 Setting G.O. Bond Referendum Date  
Town Manager Jamie Justice**

**Summary:** The board of commissioners will consider using General Obligation (G.O.) Bonds for public facilities. If approved the G.O. Bond Referendum will be on the November 5, 2019 general election ballot for consideration by the voters of Davidson.

**Summary:**

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**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
▢	Agenda Memo - 2019 G.O. Bond Referendum 08.13.19	8/8/2019	Cover Memo
▢	Presentation - 2019 G.O. Bond Referendum 08.13.19	8/8/2019	Presentation
▢	DRAFT - Resolution 2019-33 adopting Public Facilities Bond Order	8/8/2019	Resolution Letter
▢	DRAFT - Resolution 2019-34 Setting GO Bond Referendum Date	8/8/2019	Resolution Letter



## 2019 General Obligation Bond Referendum

To: Davidson Board of Commissioners  
From: Piet Swart, Finance Director  
Date: August 13, 2019  
Re: GO Bond Referendum

### 1. OVERVIEW

The board of commissioners will consider using GO Bonds for public facilities. If approved the GO Bond Referendum will be on the November 5, 2019 general election ballot for consideration by the voters of Davidson.

### 2. RELATED TOWN GOALS

Goal 3: *The Town of Davidson will preserve our historically significant structures to retain our authenticity as a historic, small college town.*

Goal 8: *Davidson will maintain organizational excellence through sound financial management, training and retention of quality employees, and superior service to the community.*

**Priority 2-1:** Address facility needs of Police, Fire, Public Works, and Parks and Recreation, including community space.

### 3. OPTIONS/PROS & CONS

GO Bonds are cost efficient and require the approval of the voters

### 4. FYI or RECOMMENDED ACTION

To move forward with the GO Bond Referendum process the Board must:

1. Approve Resolution 2019-33 Adopting the Bond Order
2. Approve Resolution 2019-34 Setting the Special Bond Referendum

### 5. NEXT STEPS

Upon approval of Resolution 2019-33 and 2019-34, the Bond order will be placed on the November 5, 2019 ballot for consideration by the voters of Davidson.

**A GO Bond Schedule and a GO Bond Process Sheet follows as prepared by our bond attorneys:**

**TOWN OF DAVIDSON  
SCHEDULE FOR GENERAL OBLIGATION BOND REFERENDUM  
NOVEMBER 2019**

- 6/11/19 Board adopts (1) Resolution directing publication of notice of intent to apply to the Local Government Commission (the “LGC”); (2) Resolution authorizing the Finance Officer to apply to the LGC; and (3) Resolution making certain findings of fact
- 6/14/19 Publish Notice of Intent in *Newspaper of General Circulation* [have to wait 10 days after publication of Notice of Intent before applying to the LGC]
- 6/24/19 File Application with LGC and prepare Sworn Statement of Debt [receive letter from LGC confirming receipt of Application which must occur before the Bond Order is introduced]
- 7/9/19 File Statement of Estimated Interest
- 7/9/19 Board (1) Introduces the Bond Order at the Board Meeting; (2) adopts the Resolution setting a public hearing on the Bond Order on 7/23/19
- 7/16/19 File Notice with Joint Legislative Commission
- 7/16/19 Publish Notice of Public Hearing on the Bond Order in *Newspaper of General Circulation* [at least 6 days before public hearing]
- 7/16/19 File Sworn Statement of Debt with the City Clerk [before public hearing]
- 7/23/19 Board holds public hearings on adoption of the Bond Order
- 8/13/19 Board (1) adopts the Bond Order and (2) adopts the Resolution setting a Special Bond Referendum
- 8/14/19 City Clerk delivers certified copy of the Resolution setting a Special Bond Referendum to the County Board of Elections (Mecklenburg and Iredell)
- 8/16/19 Town publishes Bond Order as adopted in *Newspaper of General Circulation*
- by 9/27/19 Publish first Notice of Special Bond Referendum in *Newspaper of General Circulation* [Not less than fourteen days before last day to register to vote for Bond Referendum]
- by 10/04/19 Publish second Notice of Special Bond Referendum in *Newspaper of General Circulation* [Not less than seven days before last day to register to vote for Bond Referendum]
- 11/05/19 Referendum
- After  
11/05/19 Adoption of Certificate of Canvass by the County Board of Elections (Mecklenburg and Iredell)  
Board adopts Resolution Certifying and Declaring Results of Special Bond Referendum  
Publish Statement of Result in *Newspaper of General Circulation*

Prepared by:  
Scott Leo, Esq.  
Partner  
Parker Poe Adams & Bernstein LLP

## **GENERAL OBLIGATION BOND REFERENDUM INSTRUCTIONS (NORTH CAROLINA)**

### **Before 1<sup>st</sup> action by Governing Board**

If School Bonds, need resolution from School Board requesting referendum be held. (Counties only)

Bond Counsel needs to know how much the bond referendum will be for and for what purposes. Each purpose, per categories listed in NCGS 159-48, will need to be a separate ballot question (unless the purposes are “not unrelated” in which case they can be combined). Bond Counsel will draft all of the required actions based on this information.

Contact LGC and Board of Elections to let them know intention to go through referendum process. Let Bond Counsel know if jurisdiction is in two counties.

### **1<sup>st</sup> actions by Governing Board**

The following 3 items need to be adopted:

- 1) Resolution Directing the Publication of Notice of Intention to Apply to the Local Government Commission for Approval of Bonds
- 2) Resolution Authorizing the Finance Officer to Apply to the Local Government Commission for Approval of the Proposed General Obligation Bonds and to Submit Such Application to the Local Government Commission
- 3) Resolution Making Certain Statements of Fact Concerning Proposed Bond Issue

*Explanation of board actions:* These 3 items collectively are intended to direct staff to take the actions necessary to get the process started to put the bond question(s) on the ballot. The first item that the NC Statutes require is the publication of the notice of intention to apply to the LGC for approval of the bonds to be put on the ballot. These actions direct staff to do that and also directs the finance officer to make application to the LGC. The final item is intended to have the Board make the same findings that the LGC has to make in order to approve the bonds and, per LGC policy is being done to support the application that is being made to the LGC.

### **Between 1<sup>st</sup> actions and 2<sup>nd</sup> actions by Governing Board**

Notice of Intent to Apply to the LGC needs to be published in newspaper

Prepare LGC application; Submit LGC application 10 days after the Notice of Intent to Apply is published in newspaper – the application needs to be submitted and accepted by the LGC before the next set of actions can be taken by the governing board

Prepare Statement of Estimated Interest Amount; Statement of Estimated Interest Amount should be put on file with the Clerk on the day of the 2<sup>nd</sup> actions to be taken by the Governing Board and also sent to the LGC as part of the application

## **2nd actions by Governing Board**

The following 2 actions need to be taken by the Governing Board:

- 1) Introduction of the Bond Order(s) – note that the bond order(s) are only introduced and should be done so by a board member and reflected in the minutes that way. Usually they get read by title by the board member introducing them, but however that makes sense for your way of doing things.
- 2) Adopt the Resolution calling the public hearing

*Explanation of board actions:* The first action is to simply introduce the bond order or bond orders that will be submitted to a vote. The contents of the bond order are as required by the NC General Statutes. It sets forth what the governing board will hold a public hearing on and, presumably, approve at the next meeting after the public hearing is held. The second action is to call the public hearing and direct that the notice of the public hearing be advertised in the newspaper.

## **Between 2nd actions and 3rd actions by Governing Board**

You would have filled out the Sworn Statement of Debt as part of the LGC application – that needs to get filed with the Clerk and certified that it was filed by the Clerk.

Publish the Notice(s) of Public Hearing at least 6 days before the date for the public hearing; there is a public hearing notice for each bond order; there is information from the Sworn Statement of Debt and the Statement of Estimated Interest that needs to be filled in to the bottom paragraph of the notice

Send in the Notice to the Joint Legislative Commission. Bond Counsel prepares that for you. Needs to be signed and sent to the 3 addressees. Keep a copy for you and scan one to us. This needs to be done 45 days before the LGC will approve the application for the bonds.

## **3rd actions by Governing Board**

The following actions need to be taken by the Governing Board:

- 1) Hold public hearing(s), one for each bond order
- 2) Adopt both order(s);
- 3) Adopt the resolution setting the bond referendum.

*Explanation of board actions:* Holding a public hearing on each bond order is required by NC Statutes. After the public hearings are held, the governing board will be asked to adopt each bond order, without change, as introduced as the prior meeting. The governing board can reduce the amount of bonds or insubstantially change the purpose, but other than that any change will require restarting the process. After the bond order(s) are adopted, they adopt the resolution which directs the Board of Elections to put the bond order(s) on the ballot. The bond questions that are being requested are not in exactly the same form as the bond order(s), but instead are in the form that is set forth in the NC Statutes which incorporates the amount and the purpose of the bonds as set forth in the bond order(s).

Bond Counsel will provide you with an Extract of Minutes which basically lays out the script for holding the public hearing(s) and adopting the bond order(s). The Clerk completing these minutes and certifying them becomes our documentation that those actions were taken. We are not wed to the format of this, so if the Clerk has something else in mind, that is fine but we just need evidence that those actions were taken. .

### **After the 3rd actions by Governing Board**

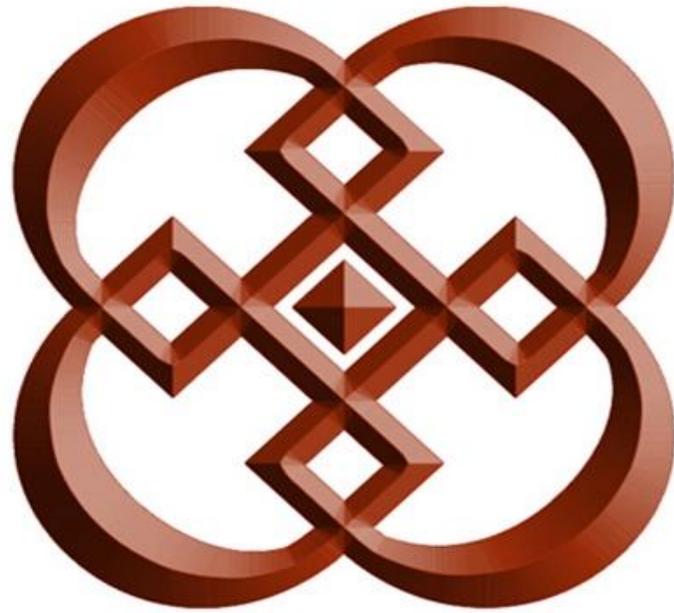
- 1) The day after, the Clerk should send a certified copy of the Resolution setting the bond referendum to the County Board of Elections. You should coordinate beforehand who that should go to so that you can confirm receipt and that they have what they need to get you on the ballot. Request that they send you a Sample Ballot when it is available so that you can check to make sure it is on there and done correctly.
- 2) Publish the Notice of Adoption of the Bond Order(s). Note that the date of publication is in the bottom paragraph of the notices, so needs to be filled in for that date. This is important because this notice starts the 30 day clock ticking for anyone to challenge the validity of the proceedings to get the referendum on the ballot.
- 3) Publish the Notice of Referendum. The same notice needs to be published twice, once at least 14 days before the last day to register to vote and once at least 7 days before the last day to register to vote. The last day to register to vote is 25 days before the election, so the notices need to be published two weeks ahead of that and one week ahead of that.

That will be the end of the formal legal process leading up to the vote.

### **After the Referendum**

- 1) The Board of Elections has to canvass the vote. They certify to that 10 days after the election. We will provide you with a Certificate of Canvass to have the Board of Elections give to us that shows will our official notice of the results.
- 2) At the next meeting after you receive that Certificate of Canvass, the governing board will adopt a Resolution that certifies the results of the election and directs the publication of notice(s) in the newspaper that declares the results.
- 3) Publish the notice(s) of the results of the election. Note that the date of publication is in the bottom paragraph of the notices, so needs to be filled in for that date. This is important because this notice starts the 30 day clock ticking for anyone to challenge the validity of the referendum.

If the voters authorized the bonds, once that 30 day period runs after the final publication, the bonds are eligible to be issued!



*The* **Town** *of*  
**Davidson**

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College Town. Lake Town. *Your Town.*

# 2019 GO Bond Public Facilities



College Town. Lake Town. *Your Town.*

Public Facilities GO Bond  
August 13, 2019

# Presentation Overview

- Project Overview
- GO Bond Calendar
- Funding the Project



# Project Overview

- Town community center at 251 South Street
  - Half community space/half town administrative offices
  - Preserves historic structure for the community to use
- Public safety renovation of current town hall
  - Provides adequate space for current and future police operations
  - Adds forensic evidence storage and secure exterior space
  - Adds living quarters and improves the restrooms and kitchen in Fire Station 1

# Bond Order

## **BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**

Provide funds to pay the capital costs of acquiring, constructing, expanding, renovating, equipping and furnishing public facilities to be used for municipal services, including town hall that incorporates community meeting space; police; firefighting; and other administrative services; and the acquisition of land, rights-of-way and easements therefor.



# G.O. Bond Calendar

- 8/13/19 Board (1) adopts the Bond Order and (2) adopts the Resolution setting a Special Bond Referendum
- 11/5/2019 Election Day



# Funding the Project

- The tax rate equivalent for the \$14.0 million is 3.5 pennies
- Combination of funds the Board has set aside for debt service and timing of the debt results in a projected 2 penny increase to the projected ad valorem tax rate
- If the Continuum sale proceeds as planned, staff recommends:
  - Dedicating the current \$1.0 million annual contribution for Continuum to public facilities debt service
  - Leaving the tax rate flat



# Board Considers Approval of Resolutions 2019-33 and 2019-34





**RESOLUTION 2019-33**

**RESOLUTION OF THE TOWN OF DAVIDSON, NORTH CAROLINA  
PROVIDING FOR THE ADOPTION OF A BOND ORDER AUTHORIZING  
THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC  
FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**

*WHEREAS*, the Board of Commissioners (the “*Board of Commissioners*”) of the Town of Davidson, North Carolina (the “*Town*”) held on July 23, 2019 a public hearing on the bond order entitled:

**“BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA;”**

*NOW, THEREFORE*, be it resolved by the Board of Commissioners of the Town of Davidson, North Carolina that the bond order entitled “**BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**” as introduced at the meeting of the Board of Commissioners held on July 9, 2019 be adopted without change or amendment.

*BE IT FURTHER RESOLVED* that the Town Clerk is hereby directed to publish a notice of adoption, as prescribed by The Local Government Bond Act, of the bond order entitled, “**BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**” adopted the date hereof.

Read, approved and adopted this 13th day of August, 2019.

By: \_\_\_\_\_  
Mayor

STATE OF NORTH CAROLINA            )  
  )  
TOWN OF DAVIDSON                    )            ss:

I, Elizabeth K. Shores, Town Clerk of the Town of Davidson, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a resolution entitled “**RESOLUTION OF THE TOWN OF DAVIDSON, NORTH CAROLINA PROVIDING FOR THE ADOPTION OF A BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**” adopted by the Board of Commissioners of the Town of Davidson, North Carolina, at a meeting held on the 13th day of August, 2019.

***WITNESS*** my hand and the corporate seal of the Town of Davidson, North Carolina, this the \_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Elizabeth K. Shores  
Town Clerk  
Town of Davidson, North Carolina

(SEAL)

DRAFT



## RESOLUTION 2019-34

### RESOLUTION SETTING A SPECIAL BOND REFERENDUM AND DIRECTING THE PUBLICATION OF NOTICE OF A SPECIAL BOND REFERENDUM AND NOTIFICATION OF THE MECKLENBURG COUNTY BOARD OF ELECTIONS AND THE IREDELL COUNTY BOARD OF ELECTIONS

*WHEREAS*, the Board of Commissioners (the “*Board of Commissioners*”) of the Town of Davidson, North Carolina (the “*Town*”) has adopted the following bond order and such bond order should be submitted to the voters of the Town for their approval or disapproval in order to comply with the constitution and laws of North Carolina:

#### **“BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA;”**

*NOW, THEREFORE*, be it resolved by the Board of Commissioners of the Town of Davidson, North Carolina, as follows:

(1) For the purpose of determining the question whether the qualified voters of the Town shall approve or disapprove (a) the indebtedness to be incurred by the issuance of the General Obligation Public Facilities Bonds of the Town authorized by said bond order, which indebtedness will be secured by a pledge of the Town’s full faith and credit and (b) the levy of a tax for the payment thereof, said bond order will be submitted to the qualified voters of said Town at a special bond referendum to be held in said Town on November 5, 2019.

(2) The Town Clerk is hereby authorized and directed to publish a notice of said referendum which will be in substantially the form entitled “**TOWN OF DAVIDSON, NORTH CAROLINA NOTICE OF SPECIAL BOND REFERENDUM,**” attached hereto. Said notice of referendum will be published at least twice. The first publication will be not less than 14 days, and the second publication will be not less than 7 days before the last day on which voters may register for the special bond referendum.

(3) The Mecklenburg County Board of Elections and the Iredell County Board of Elections are hereby requested to print and distribute the necessary ballots and to provide the equipment for the holding of said referendum and to conduct and to supervise said referendum.

(4) The ballots to be used at said referendum will indicate that it is being held on behalf of the Town of Davidson, North Carolina and will contain the following words:

“*SHALL* the order authorizing \$14,000,000 of bonds plus interest to provide funds to pay the capital costs of acquiring, constructing, expanding, renovating, equipping and furnishing public facilities to be used for municipal services, including town hall that incorporates community meeting space; police; firefighting; and other administrative services; and the acquisition of land, rights-of-way and easements therefor, and providing that additional taxes may be levied in an amount sufficient to pay the principal of and interest on the bonds be approved?”;

with squares labeled “**YES**” and “**NO**” beneath or beside such words in which squares the voter may record his or her choice on the question presented; and

(5) The Town Clerk will mail or deliver a certified copy of this resolution to the Mecklenburg County Board of Elections and the Iredell County Board of Elections within three days after this resolution is adopted.

***BE IT FURTHER RESOLVED*** that this Resolution will become effective on the date of its adoption.

Read, approved and adopted this 13th day of August, 2019.

By: \_\_\_\_\_  
Mayor

STATE OF NORTH CAROLINA            )  
  )  
TOWN OF DAVIDSON                    )        ss:

I, Elizabeth K. Shores, Town Clerk of the Town of Davidson, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a resolution entitled “**RESOLUTION OF THE TOWN OF DAVIDSON, NORTH CAROLINA PROVIDING FOR THE ADOPTION OF A BOND ORDER AUTHORIZING THE ISSUANCE OF \$14,000,000 GENERAL OBLIGATION PUBLIC FACILITIES BONDS OF THE TOWN OF DAVIDSON, NORTH CAROLINA**” adopted by the Board of Commissioners of the Town of Davidson, North Carolina, at a meeting held on the 13th day of August, 2019.

***WITNESS*** my hand and the corporate seal of the Town of Davidson, North Carolina, this the \_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Elizabeth K. Shores  
Town Clerk  
Town of Davidson, North Carolina

(SEAL)

DRAFT



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**Agenda Title: Consider Approval of Davidson Mobility Plan  
Senior Planner Travis Johnson**

**Summary:** The Davidson Mobility Plan is a local comprehensive transportation plan that provides a town-wide vision and coordinated recommendations for multi-modal travel and access within and through town. These include specific project and policy recommendations. The Mobility Plan is a culmination of 18 months of public engagement and feedback.

**Summary:**

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**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
□	Agenda Memo - Davidson Mobility Plan Adoption 08.13.19	8/9/2019	Cover Memo
□	Presentation - Davidson Mobility Plan 08.13.19	8/9/2019	Presentation
□	Attachment - Davidson Mobility Plan 08.13.19	8/9/2019	Backup Material



## Davidson Mobility Plan

To: Davidson Board of Commissioners  
From: J. Travis Johnson, Senior Planner  
Date: August 13, 2019  
Re: Davidson Mobility Plan

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### 1. OVERVIEW

The Davidson Mobility Plan is a local comprehensive transportation plan that provides a town-wide vision and coordinated recommendations for multi-modal travel and access within and through town. It is a continuation of Davidson's long history of multi-modal transportation planning that has allowed the town to develop as a place where people can drive, walk, access transit, and bicycle easily and comfortably — and where quality of life is one of the highest in the Charlotte metro area.

### 2. RELATED TOWN GOALS

#### Strategic Plan

Goal 7: *The Town of Davidson will enable citizens to move freely throughout town via transit, car, bicycle, and on foot.*

1. *Create Davidson Mobility Plan*
  - Continue work with consultants. Include town walks with citizens, charrette process and citizen input.
  - Fold Mobility Plan into Comprehensive Plan.

#### Vision

Davidson remains committed to controlling our own destiny as a distinct, sustainable, and sovereign small town. Our sense of community is rooted in citizens who respect each other; in racial and socioeconomic diversity; and in **pedestrian and bicycle orientation**; all in the presence of a small liberal arts college. Our history and character guide our future.

#### Core Values

- Davidson's traditional character is that of a small, historic college town, so land planning will reflect its historic patterns of village-centered growth including connection of neighborhoods, preservation of our historic resources, conservation of rural area, and provision of public spaces.

- Citizens need to move easily throughout the town and region, so government will provide a variety of options, such as sidewalks, bike paths, greenways, connected streets, and transit.

### 3. OPTIONS/PROS & CONS

**Pros:**

- Supports the community driven planning process that created this plan.
- Identifies projects, policies, and programs that will improve mobility in the Town.
- Sets clearly defined goals and objectives.
- Completes a project on the Strategic Plan.
- Positions the town to secure funding from CRTPO for identified projects in the plan.

**Cons:**

- Could lose CRTPO funding opportunities.

### 4. FYI or RECOMMENDED ACTION

Recommended Action: Consider for adoption.

### 5. NEXT STEPS

Begin implementation of the plan.

### 6. RESOURCES & ATTACHMENTS

[http://www.davidsonmobilityplan.com/wp-content/uploads/2019/06/DavidsonMobilityPlan\\_FinalReport\\_reduced-1.pdf](http://www.davidsonmobilityplan.com/wp-content/uploads/2019/06/DavidsonMobilityPlan_FinalReport_reduced-1.pdf)

The logo features three concentric, semi-circular arrows in black, grey, and red, pointing clockwise. The text 'Davidson Moves Mobility Plan' is positioned to the right of the arrows. 'Davidson' is in a smaller, black, sans-serif font above 'Moves'. 'Moves' is in a large, bold, black, sans-serif font. 'Mobility Plan' is in a smaller, black, sans-serif font, with 'Mobility' on a red rectangular background and 'Plan' on a grey rectangular background.

Davidson  
**Moves**  
Mobility Plan

A dark blue sign with a white border and a decorative top edge. The text is in various fonts and colors: 'WELCOME TO' in white on a red banner, 'TheTownof Davidson' in gold serif font, 'Established 1837' in white italicized serif font, and a bottom section in white italicized serif font. A gold dot is centered above a horizontal line.

WELCOME TO  
*TheTownof*  
**Davidson**  
*Established 1837*  
*We are a pedestrian  
& bicycle friendly  
community, please  
drive carefully*

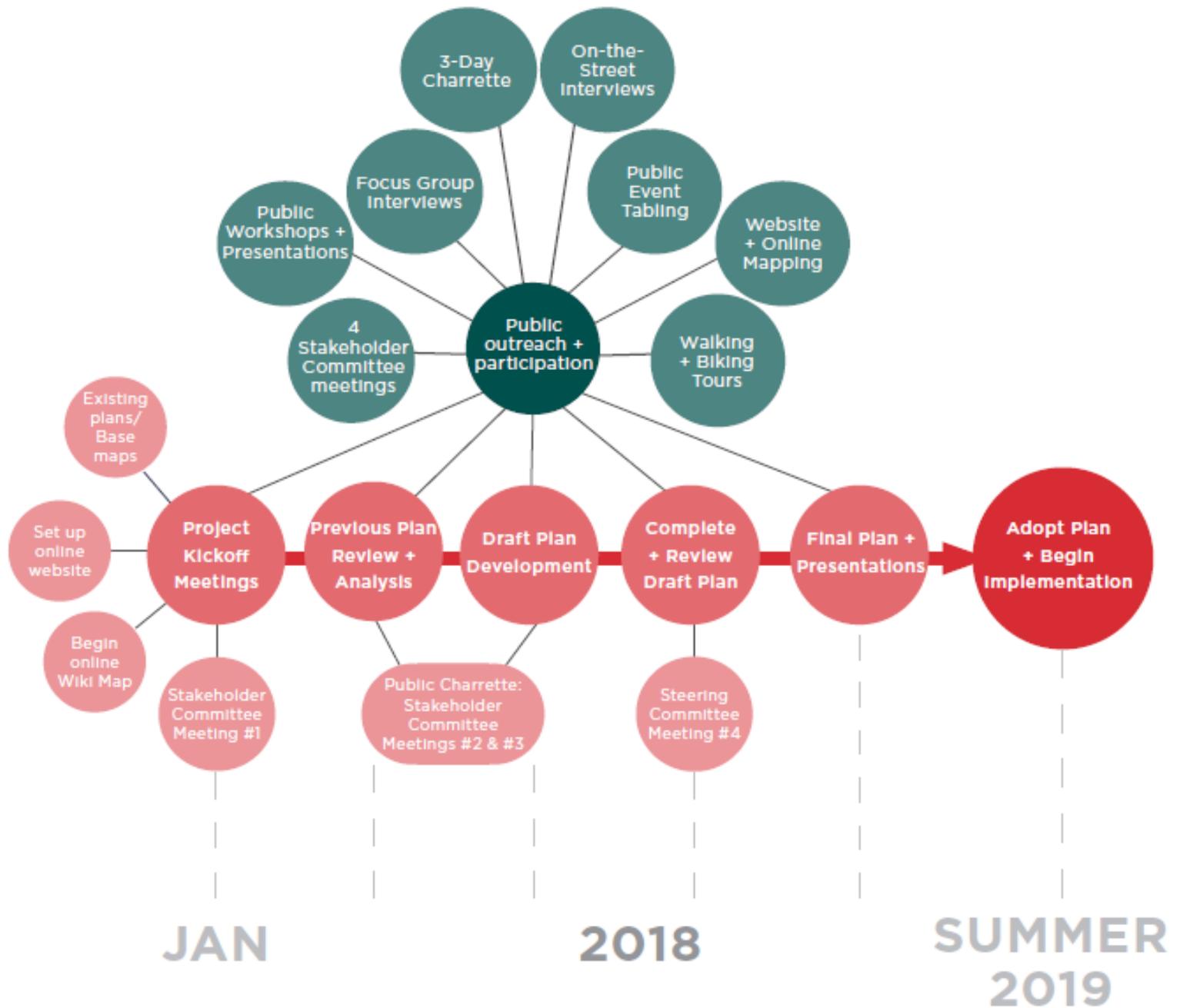
*We are a pedestrian  
& bicycle friendly  
community, please  
drive carefully*



# Comprehensive Transportation Plan



# PLANNING PROCESS TIMELINE





# DAVIDSON

MOBILITY PLAN

June 2019 | Final Report



- Projects
  - Policies
  - Programs
  - Implementation Plan
- 
- Priority List
  - Reviewed Yearly

# Corrections

## PROPOSED BEATY STREET SIDEPATH (N MAIN ST TO GRIFFITH ST)

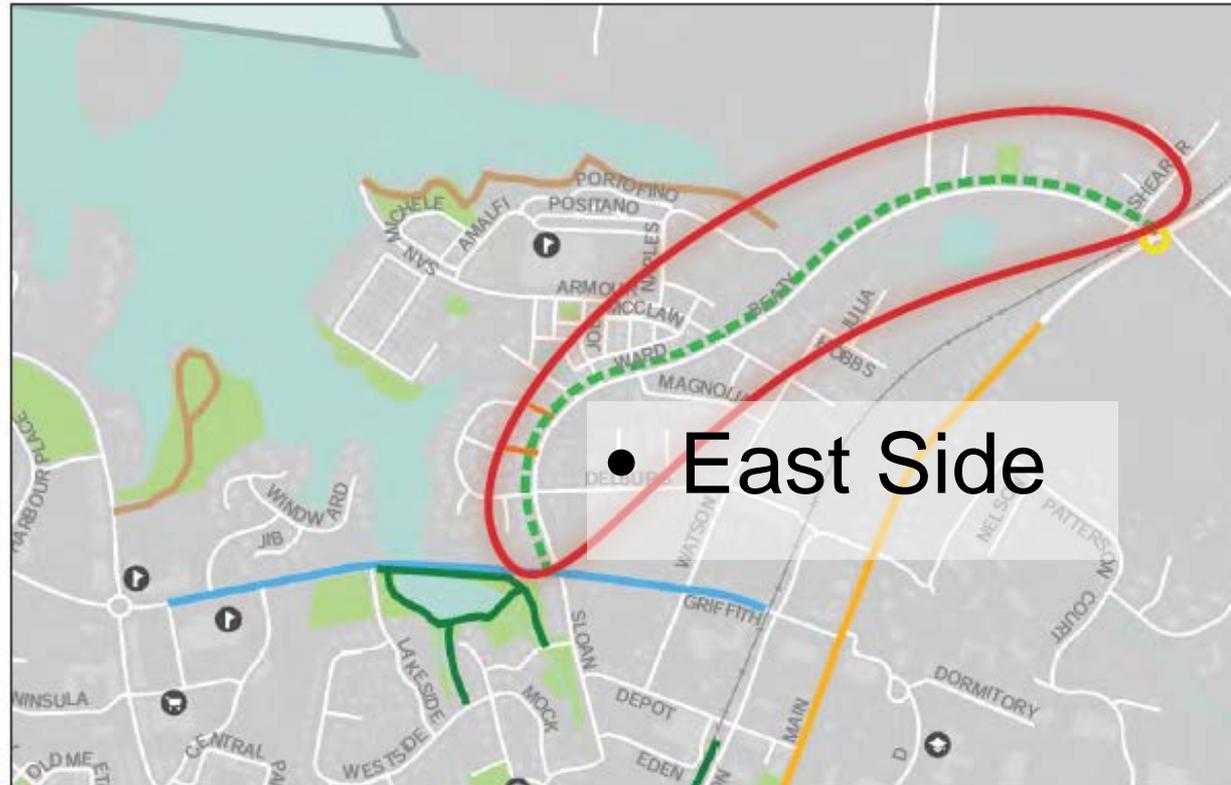
### ABOUT THIS PROJECT

- This project will complete the pedestrian network by connecting to existing sidewalks on N. Main Street and those already on Beaty Street.
- This sidepath will be part of the Mooresville-Charlotte Trail
- The side of the street that this facility will be installed on has yet to be determined. Major destinations to connect to include Ingersoll Rand, Community School of Davidson, Oakhill Apartments on the north side, and the future park on the south side.

### PED + BIKE PROJECTS



### PROPOSED IMPROVEMENTS



# Corrections



Davidson Land  
Conservancy

Add note about  
easement on  
property.

# Recommendations for approval

## **Livability Board**

Recommend for Approval: No modifications

## **Planning Board**

Recommend for Approval: Add Side Path to Concord Rd.

**August 13th**

Town Board Adoption

**2019**

Implement Plan

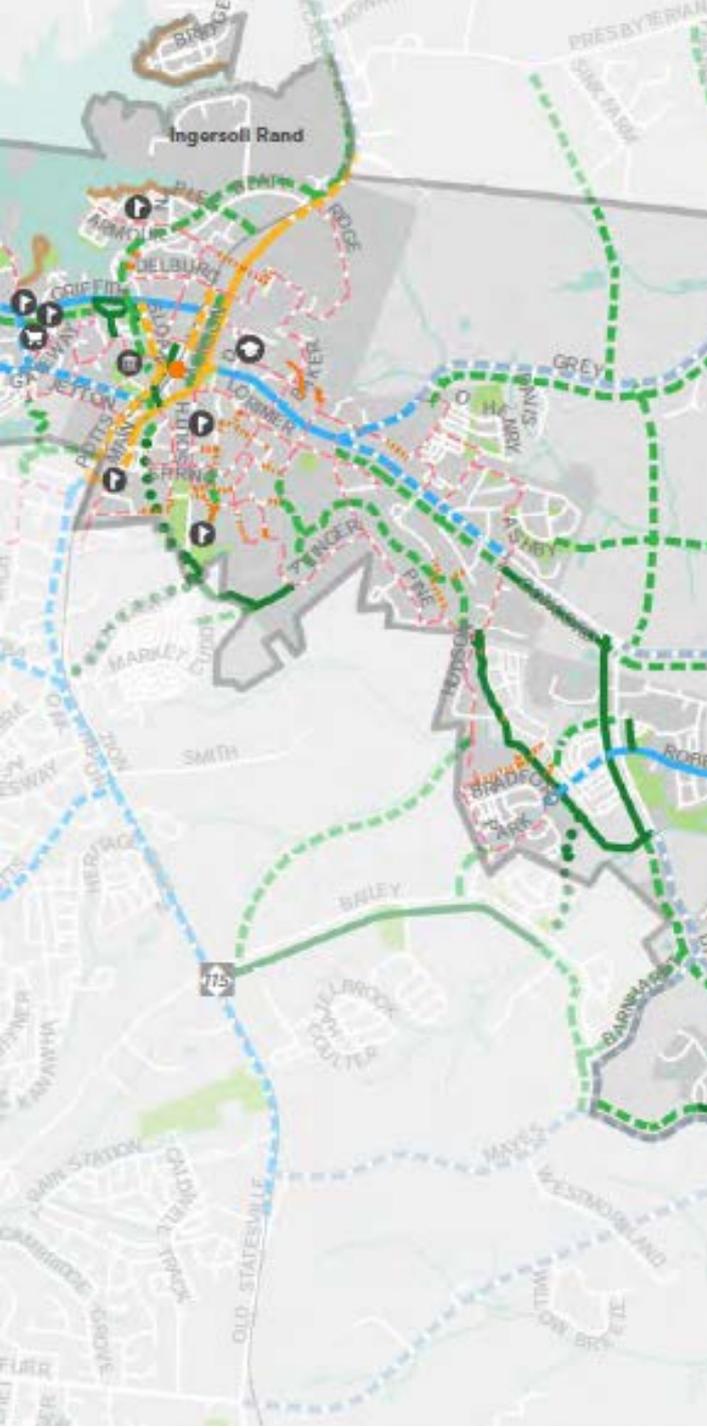
Comprehensive Plan

Call for Projects (CRTPO)

**2020**

Return to Town Board  
with Policies, Projects,  
and Programs.

**Next Steps**



# Discussion

## Questions?

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[tjohnson@townofdavidson.org](mailto:tjohnson@townofdavidson.org)

704.940.9639



# DAVIDSON

## MOBILITY PLAN

June 2019 | Final Report



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# ACKNOWLEDGMENTS

## THANK YOU **DAVIDSON.**

### **PUBLIC PARTICIPANTS**

Thank you to the residents of Davidson for their participation in this planning process and their passion for improving the place they call home.

### **STAKEHOLDER COMMITTEE**

Thank you to the engaged leaders of the Davidson community for their participation throughout the planning process and for their commitment to furthering the efforts of this plan.

James (Jamie) Justice, Town Manager

Jason Burdette, Planning Director

Travis Johnson, Senior Planner

Doug Wright, Public Works Director

Charlene Minor, Natural Assets and Sustainability Coordinator

Matt Dellinger, Planning Board Chair

George Berger, Livability Board Member

Yancey Fouché, Davidson College Director of Sustainability

Jason Lawrence, Charlotte Area Transit System

John A. (Andy) Bailey, NCDOT Regional Representative

Bill Thunberg, Executive Director Lake Norman Transportation Commission

Stuart Basham, NCDOT Division 10 Engineer

### **TOWN OF DAVIDSON MAYOR + BOARD OF COMMISSIONERS**

Mayor Rusty Knox

Commissioner Jim Fuller

Commissioner Jane Campbell

Commissioner Matthew Fort

Commissioner Autumn Rierson Michael

Commissioner David Sitton

Also, a special thanks to the former Town Board of Commissioners who were responsible for approving this study: John Woods, Stacey Anderson, Beth Cashion, Rodney Graham, and Brian Jenest.



ES

# EXECUTIVE SUMMARY

# WHAT IS THE MOBILITY PLAN?

The Davidson Mobility Plan is a local comprehensive transportation plan that provides a town-wide vision and coordinated recommendations for multi-modal travel and access within and through town. It is a continuation of Davidson's long history of multi-modal transportation planning that has allowed the town to develop as a place where people can drive, walk, access transit, and bicycle easily and comfortably — and where quality of life is one of the highest in the Charlotte metro area. Residents of Davidson feel strongly about maintaining the character and history of the community, and protecting the vision of what Davidson is and what it should become.

**This plan addresses the challenge before Davidson of maintaining its quality of life while dealing with the growth pressures of the region.**

Town leaders and staff understand that citizens want travel choices that are safe, convenient, and efficient, and that offer a choice of modes for any given trip. The Davidson Mobility Plan provides the framework that will help Davidson realize this vision.

## VISION + GUIDING PRINCIPLES

Davidson will provide a **balanced and connected** network of comfortable facilities for pedestrians, cyclists, transit riders, and drivers; where mobility options are **efficient, safe, and convenient**; and where Complete Street design is prioritized in all roadway and development projects. The vision's guiding principles are based on community input and noted below.



Make ALL Streets Pedestrian Friendly + Accessible to ALL



Connect Greenways to Popular Destinations in Town



Create Cycling Options Comfortable for ALL



New Street Connections + Roadways  
Traffic Calming + Enforcement



Provide for Local Transit Services + Access to Regional Transit



Make Parking Efficient + Well-Managed



Introduce New Technologies + Policies for New Mobility Options (golf carts, bike share, car share, AVs)

Education for ALL Roadway Users

# ACTION STEPS



## PEDESTRIAN MOBILITY

- 1.1. Include pedestrian and greenway improvement projects in the local Capital Improvement Program (CIP), increasing consistent year-to-year funding levels.
- 1.2. Evaluate a cost-share program for sidewalk maintenance to ensure sidewalk repair is implemented equitably.
- 1.3. Increase minimum sidewalk width on major roads (e.g., Main Street/NC-115, Griffith Street, Concord Road, etc; and future roadway types “Parkway” and “Urban Avenue/Boulevard” in the Planning Ordinance) and other arterial or collector type streets with at least 3,000 cars/day (e.g., Potts, Jetton, Beaty) to 6 feet minimum.
- 1.4. Develop/implement a sidewalk infill prioritization methodology.
- 1.5. Install more consistent crosswalk treatments throughout town, especially at priority crossings.
- 1.6. To increase readiness for grant funding, develop preliminary plans (30% construction drawings) for priority sidewalk projects. This action will also help leverage the recently approved bond monies to be used as an effective match for larger grants.
- 1.7. Update Planning Ordinance to reflect recommendations for advisory shoulder and sidepath design standards.



## BICYCLE MOBILITY

- 2.1. Include bicycle projects in the local Capital Improvement Program (CIP), increasing consistent year-to-year funding levels.
- 2.2. Conduct corridor studies along Griffith Street, Concord Road, and Main Street/NC-115 in order to assess feasibility of enhanced bicycle facilities along these key corridors.
- 2.3. Fund bicycle facility maintenance and consider funding additional maintenance equipment needed to adequately maintain a low-stress bikeway system.
- 2.4. To increase readiness for grant funding, develop preliminary plans (30% construction drawings) for priority bicycle projects.
- 2.5. Increase bicycle parking facilities (both short- and long-term, as defined by Planning Ordinance) at destinations.



## VEHICULAR MOBILITY

- 3.1. The Town can use the concepts and policies presented in this Plan to implement proposed improvements through regularly scheduled capital projects, such as streetscape projects, street resurfacing, or new public or private development projects.
- 3.2. Departments like Public Works can use their maintenance resources and staff to support programs, planning efforts, and infrastructure maintenance.
- 3.3. The Town will need to actively manage the list of projects in this plan and assign appropriate funding and staff time to implement them. It should also be flexible and opportunistic with funding and prioritization of projects to deliver projects as quickly as possible.
- 3.4. The Town should update its Planning Ordinance to include design standards for shared streets/festival streets/woonerfs, as a street classification that better accommodates all travel modes on low-speed, low-traffic-volume streets, such as Spring Street.
- 3.5. The Town should continue to work with regional partners to develop final alignments for the North-South Parkway that is anticipated to provide an alternative route to I-77 and NC-115 as well as for the Grey Road and Davidson-Concord Road extensions.



## PARKING ACCESSIBILITY

- 4.1. Adopt and implement a performance-based parking program.
- 4.2. Conduct a pilot application of pricing, using pay station meters, for on-street parking in the downtown retail district.
- 4.3. Establish for staff the administrative authority to set parking prices based on observed demand
- 4.4. Establish a regular monitoring and reporting schedule for parking utilization and enforcement in order manage its performance-based parking program
- 4.5. Create a shared parking program that will maximize the use of existing public and private parking spaces in and around the downtown retail district.
- 4.6. Invest in a parking wayfinding system to direct drivers to available parking spaces.



## TRANSIT MOBILITY

- 5.1. Continue to work with CATS and major employers in and around Davidson to expand transit services to all-day and weekends for local and express bus service.
- 5.2. Work with CATS and neighboring municipalities to implement fixed guideway regional transit station(s) in Davidson and complementary mobility hub services.
- 5.3. Work with CATS to improve bus stop amenities to make access and waiting for the bus more comfortable and attractive.
- 5.4. Work with CATS and local employers and schools to implement a local transit service that will provide connections within Davidson.



## NEW MOBILITY OPTIONS

- 5.1. Require the installation of Electric Vehicle (EV) charging capacity and/or infrastructure for all new construction.
- 6.2. Promote and encourage the installation of additional super-charging stations at key locations (e.g., Davidson Commons, MSC, Downtown).
- 6.3. Convert Town vehicle fleets to electric when practical.
- 6.4. Update the Town's Code of Ordinances to align with North Carolina General Statutes so as to clarify difference between recreational and transportation low-speed vehicles and how they may be used on Town roads.
- 6.5. Promote, encourage, and manage (through regulation) the continued expansion of dockless bike, scooter, and similar mobility solutions throughout the community, with particular attention to parking regulation. For guidance on how to develop policies to regulate shared-mobility services, refer to the [NACTO Guidelines for the Regulation and Management of Shared Active Transportation](#).
- 6.6. Investigate a partnership with ride-share services for trips that have their original or destination in the downtown.
- 6.7. Work with CATS to investigate ride-share service subsidies for town residents.
- 6.8. Conduct a feasibility study for the deployment of a driverless shuttle system in the Griffith Street, Concord Road, and Main Street corridors.



## NEW MOBILITY, CONTINUED

- 6.9. Work with CATS to develop Mobility Hub concepts for downtown and exit 30 that may combine transit access and shared/new mobility service options.
- 6.10. Pilot ride-share pick up/drop off and local delivery zones in the downtown. Consider dedicated on-street spaces near Summit and Kindred. Require new curb access zones with new development.
- 6.11. Investigate the potential for a geofenced area—consider the Jackson Street and Concord Road corridors as the highest priorities for 3D mapping and surveying.
- 6.12. Maintain a high level of awareness and education for autonomous technologies amongst the Town staff.
- 6.13. Ensure that all new street infrastructure projects have accommodations for fiber-optic through the placement of additional conduit for future expansion or the installation of cabling.
- 6.14. Install parking sensor technology and provide a mobile app or provide an Application Programming Interface (API) to facilitate third party usage (e.g., Google Maps) to broadcast parking availability.
- 6.15. Evaluate the installation of DSRC equipment in a connected corridor (e.g., Jackson Street, Concord Road, Main Street).

# PRIORITY PROJECTS

The Mobility Plan Stakeholder Committee identified top priority projects based a prioritization scoring and on input gathered during the course of the Mobility Plan study. The following Priority Project List highlights 13 projects that the Stakeholder Committee has put forward for consideration by the Town Board of Commissioners for near-term funding and implementation. These projects are mapped on pages 8 and 9.

RANK	PROJECT DESCRIPTION	SAFETY	REDUCED TRAVEL TIME	HEALTH/ENVIRONMENTAL QUALITY	CONNECTIVITY	COST	IMPLEMENTATION & USEFUL LIFE	PUBLIC SIGNIFICANCE	VALUE	REGIONAL SIGNIFICANCE	TOTAL SCORE
1	SIDEPATH along BEATY STREET from NORTH MAIN STREET to GRIFFITH STREET (see page 93 for details) <sup>1</sup>	3	0	2	3	0	2	2	2	1	15
2	WEST BRANCH ROCKY RIVER GREENWAY connecting the existing WEST BRANCH RR GREENWAY at FISHER FARM PARK to the funded GREENWAY west of NARROW PASSAGE	2	0	2	1	0	1	1	2	0	9
3	SIDEPATH along GREY ROAD from WOLFE STREET to SHEARERS ROAD (see page 94 for details) <sup>2</sup>	3	0	2	2	0	2	2	2	2	15
	GREENWAY from MCCONNELL NEIGHBORHOOD to FISHER FARM PARK (see page 95 for details) <sup>2</sup>	1	0	2	1	0	1	2	2	0	9
4	INTERSECTION IMPROVEMENT at N MAIN STREET, BEATY STREET, and RIDGE ROAD (see page 107 for details)	2	0	0	2	0	1	1	2	2	10
5	WALNUT STREET-to-VERNON DRIVE BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	EASTWAY STREET-to-SOUTH STREET BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	DOGWOOD LANE-to-CONROY AVENUE BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	HILLSIDE DRIVE-to-CATHEY STREET BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12

**NOTES:**

<sup>1</sup> Where denoted, detailed project cutsheets have been developed and can be found on referenced page.

<sup>2</sup> These two projects are ranked as one because they are two options that are interchangeable in terms of the what they provide and therefore only one would probably be built.

<sup>3</sup> These projects are ranked as one, as they similar projects that could be implemented individually or together as opportunity allows.

RANK	PROJECT DESCRIPTION	SAFETY	REDUCED TRAVEL TIME	HEALTH/ENVIRONMENTAL QUALITY	CONNECTIVITY	COST	IMPLEMENTATION & USEFUL LIFE	PUBLIC SIGNIFICANCE	VALUE	REGIONAL SIGNIFICANCE	TOTAL SCORE
6	SIDEWALK INFILL PROJECTS (various locations)	-	-	-	-	-	-	-	-	-	-
7	INTERSECTION IMPROVEMENT at SAM FURR ROAD/NC 73 and DAVIDSON-CONCORD ROAD (see page 108 for details)	2	1	0	0	0	1	1	1	3	9
8	INTERSECTION IMPROVEMENT at CONCORD ROAD, GREY ROAD, and PINE ROAD (see page 109 for details)	3	1	0	1	0	2	1	2	2	12
9	SIDEPATH along DAVIDSON-CONCORD ROAD from the existing sidepath to SAM FURR ROAD/NC 73 (see page 97 for details)	2	0	2	1	0	2	1	2	2	12
10	WEST BRANCH NATURE PRESERVE GREENWAY from the existing WEST BRANCH ROCKY RIVER GREENWAY to HELEN BENSON BOULEVARD	2	0	2	2	0	1	0	2	0	9
11	DAVIDSON EAST GREENWAY from JULEES WALK to BRADFORD REGIONAL PARK	2	0	2	2	0	1	1	2	2	12
12	DAVIDSON-CONCORD ROAD EXTENSION from CONCORD ROAD/ROCKY RIVER ROAD to PRESBYTERIAN ROAD (see page 110 for details)	2	1	2	2	0	1	1	2	2	13
13	BIKE LANES (various locations)	-	-	-	-	-	-	-	-	-	-

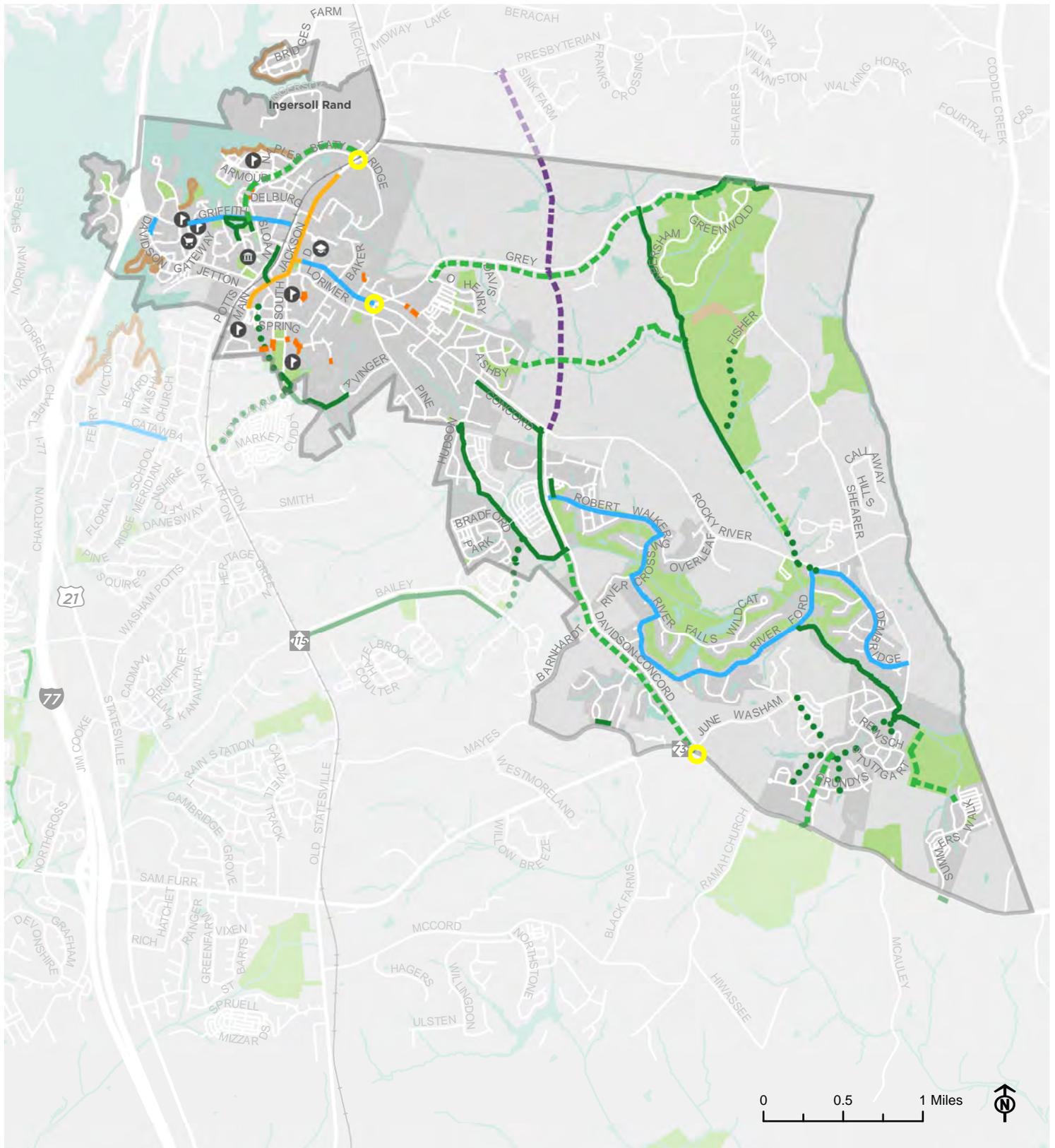
NOTES:

<sup>1</sup> Where denoted, detailed project cutsheets have been developed and can be found on referenced page.

<sup>2</sup> These two projects are ranked as one because they are two options that are interchangeable in terms of the what they provide and therefore only one would probably be built.

<sup>3</sup> These projects are ranked as one, as they similar projects that could be implemented individually or together as opportunity allows.





# PRIORITY PROJECTS

## Proposed Facilities

- Intersection Improvement
- Multi-Use Path
- Bike-Ped Connector
- New Roadway Connection

## Existing Facilities

- Greenway
- Greenway (Funded)
- Bike-Ped Connector
- Shared Lane Marking
- Bike Lane
- Unpaved Trail

- Davidson College
- Grocery Store
- School
- Community Center
- Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area

# 01

## INTRODUCTION

# WHAT IS THE MOBILITY PLAN?

The Davidson Mobility Plan is a local **comprehensive transportation plan** that provides a town-wide vision and coordinated recommendations for multimodal travel and access within and through town.

As a town, Davidson has done a commendable job of providing an environment where people can easily and comfortably drive, walk, access transit, and bicycle by taking a multimodal approach to mobility planning over the past decades. As Davidson and the Lake Norman region have continued to grow, however, certain kinds of trips have become more challenging: commuting on I-77 or sitting in

traffic on Main Street if there is a back-up on I-77; walking across busy intersections or trying to cross Concord Road; riding a bike to Fisher Farm or Downtown from one of the neighborhoods, just to name a few.

Throughout its planning history Davidson has linked land use and transportation, and as a result has developed into a place where quality of life is one of the highest in the Charlotte metro area. Residents of Davidson feel strongly about maintaining the character and history of the community, and protecting the vision of what Davidson is and what it should become.

**The challenge before Davidson now is how to maintain that quality of life while dealing with not only its own growth pressures, but growth pressures of the entire region.** From a mobility standpoint, the Town leaders and staff understand that citizens want travel choices that are safe, convenient, and efficient, and that offer a choice of modes for any given trip. The Davidson Mobility Plan provides the framework that will help Davidson realize this vision of mobility choices.

## MOBILITY IS...



WALKABILITY  
+ PEDESTRIAN  
ACCESS



MOTOR  
VEHICLE  
ACCESS



RELIABLE  
TRANSIT



BIKEABLE  
STREETS +  
CORRIDORS



CAR-FREE  
CORRIDORS  
(GREENWAYS)



NEW  
MOBILITY  
OPTIONS



PARKING  
OPTIONS

# VISION + GUIDING PRINCIPLES

The project's vision and guiding principles are outlined here and are based on public input, feedback from the Stakeholder Committee, and the three-day charrette, held May 22-24, 2018. The vision helps to ground the plan with an overarching purpose and intention. The guiding principles represent overarching strategies to help achieve the vision.

## VISION

Davidson will provide a **balanced and connected** network of comfortable facilities for pedestrians, cyclists, transit riders, and drivers; where mobility options are **efficient, safe, and convenient**; and where Complete Street design is prioritized in all roadway and development projects.

## GUIDING PRINCIPLES

The following principles are presented in the order of importance to Davidson residents and stakeholders based on the number of mentions specific topics received throughout the planning process. **The idea of maintaining and enhancing Davidson as a pedestrian-oriented community was by far the most mentioned topic by the public.**



Make ALL Streets Pedestrian Friendly + Accessible to ALL



Connect Greenways to Popular Destinations in Town



Create Cycling Options Comfortable for ALL



New Street Connections + Roadways  
Traffic Calming + Enforcement



Provide for Local Transit Services + Access to Regional Transit



Make Parking Efficient + Well-Managed



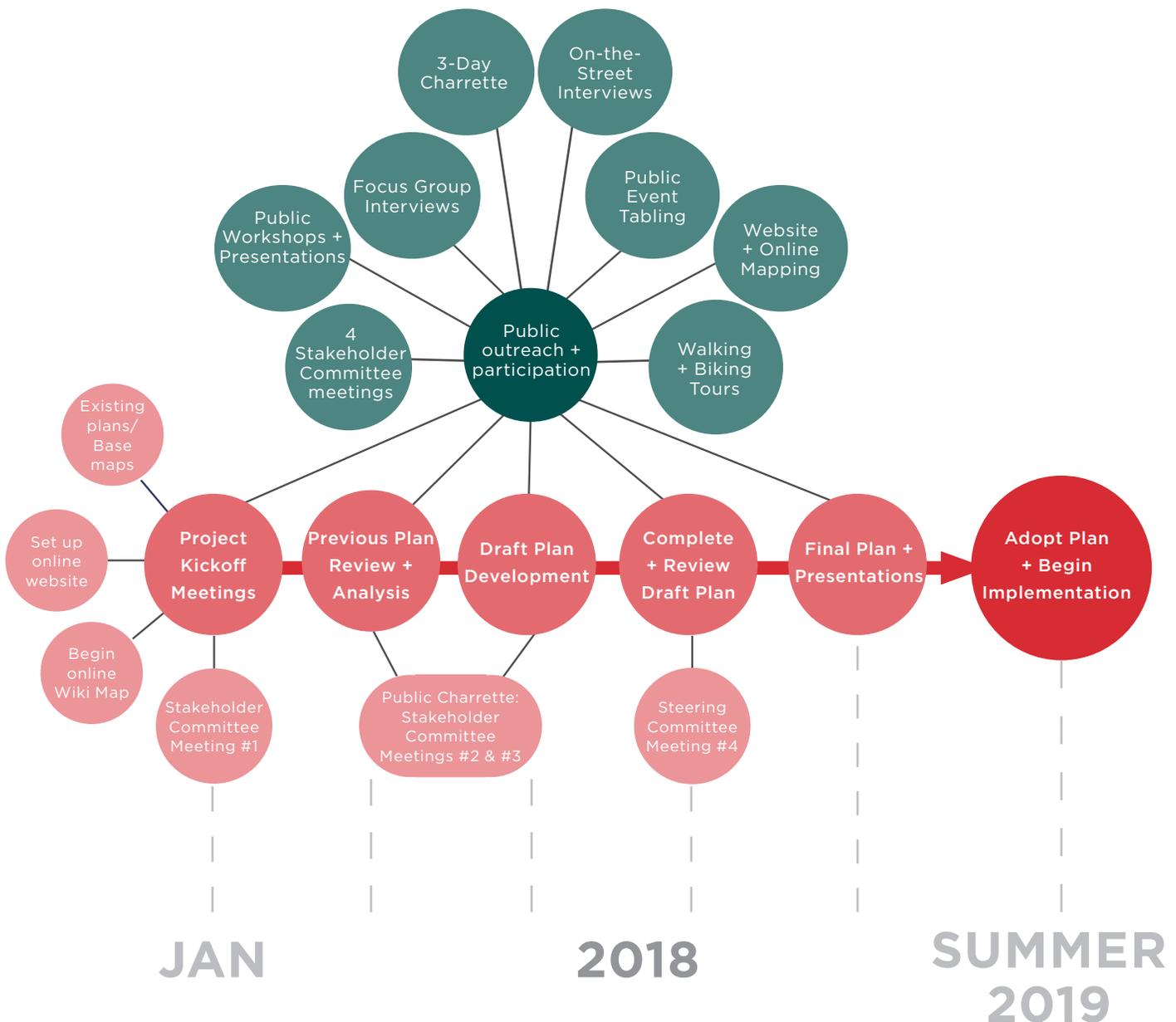
Introduce New Technologies + Policies for New Mobility Options (golf carts, bike share, car share, AVs)

Education for ALL Roadway Users

# THE PROCESS

The Mobility Plan is intended to build on the thoughtful work of the past planning efforts; provide new thinking and best practices with regard to guidelines, technologies, and modes that were not available in the past; and outline a mobility system that maintains and enhances the high quality of life that Davidson enjoys. **This Mobility Plan is intended to serve as the Comprehensive Transportation Plan for the Town of Davidson.** The project prioritization will serve to guide the Town in allocating resources to advance transportation initiatives and projects. By adhering to this Plan, Davidson residents and visitors will have choices for moving around the community safely, efficiently, and conveniently while maintaining the quality of life for which they come to live, work, and play in Davidson.

## PLANNING PROCESS TIMELINE



# PUBLIC INPUT

Davidson engaged its citizens as stakeholders and partners throughout the planning process. The Mobility Plan for Davidson was developed through a partnership with community residents and stakeholders, and utilized the various plans that the Town has completed since 2002 as its baseline. Throughout the process, **hundreds of citizens participated directly in the process** through stakeholder meetings, 4 walking tours, 1 biking tour, table sessions at Town Day and at Davidson College, 2 mobility topic education sessions, intercept surveys, and a three-day public planning and design workshop known as a “charrette.”



## ONLINE ENGAGEMENT

A project website and online Wiki map allowed the public to engage with the project at their convenience. The project website served as a clearinghouse of information about the progress of the project and upcoming public engagement events. The website also included a link to the Wiki map, where the community provided input on their mobility issues and needs.

## STAKEHOLDER COMMITTEE

Key tasks of the Stakeholder Committee included guiding the overall vision of the plan, identifying existing opportunities and constraints for mobility, leveraging resources for an expanded public outreach effort, and providing feedback on plan recommendations. Members included representatives of the following groups:

- Town Boards & Committee Members
- NCDOT
- Davidson College
- Parks & Recreation Department
- Public Works Department

## COMMUNITY ENGAGEMENT

This Plan directly reflects what the Town and planning team heard from Davidsonians who move around the community daily.

This Mobility Plan and its recommendations are a culmination of an extensive community engagement process. Not all of the projects and initiatives contained in subsequent chapters are new; some having been developed at some point in previous planning work. However, this process allowed for community vetting of projects to see if changing conditions influenced their validity or relevance, or if they needed to be modified to fit current needs. In many cases, citizens and stakeholders proposed new projects that had not been considered previously.

Additional information about the public engagement process is included in Chapter 3.

# COMMUNITY VOICES

During the various citizen engagements, a number of common concerns and desires emerged for how to improve mobility throughout town. These themes were echoed throughout the various community engagement efforts with a consistency that helped clearly define preferences and priorities. These themes are displayed here and reflect the priority topics voiced by the public.

**More  
GREENWAYS +  
SIDEPATHS!**

**A greenway  
connection to  
Fisher Farm Park.**

**Bike Facilities  
along Grey Road!**

**Make  
bicycling  
safer for ALL**

**We walk  
EVERYWHERE: we  
want to be able to do  
it SAFELY!**

**Traffic at Main +  
Concord Road  
needs to be  
fixed.**

**Need to prioritize  
filling sidewalk  
gaps + improve  
crossings**

**Beaty St,  
Concord Rd,  
and Grey Rd  
needs pedestrian  
facilities**



# 02

## EXISTING MOBILITY FRAMEWORK

# MOBILITY TODAY

The Mobility Plan team used many inputs to develop an assessment of the transportation system in Davidson. The assessment focused on previous planning efforts, current conditions, community interests, and an assessment of challenges and opportunities. The findings for each mode, summarized in this chapter, were used to inform and develop the recommendations for this plan.

**The core questions reviewed for the assessment** consider the completeness and conditions of the network for each mode, especially through the lens of the Mobility Plan’s Guiding Principles.



Are ALL Streets Pedestrian Friendly, with ADA Access?



Do Greenways Connect to Popular Destinations in Town?



Are Cycling Options Comfortable for ALL?



Are Roadways Safe for ALL Users?



What Local and Regional Transit Services are Available?



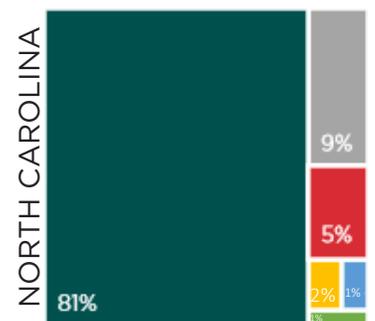
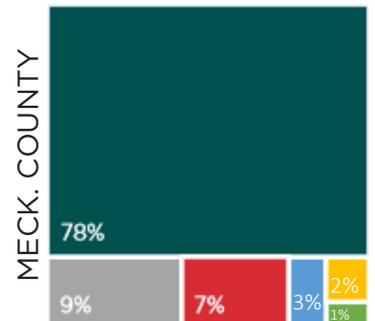
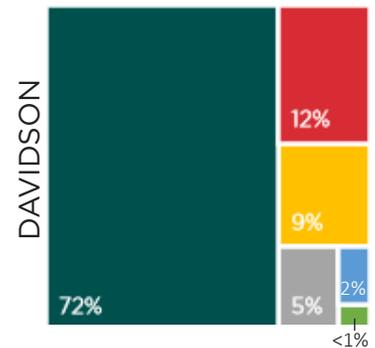
Is Parking Efficient + Well-Managed?



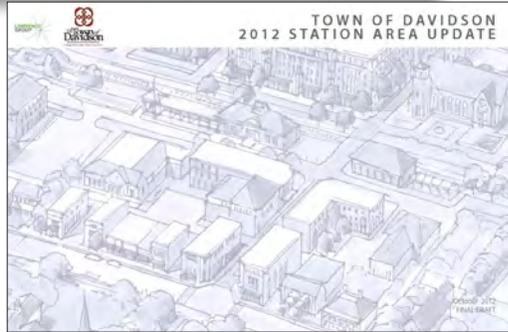
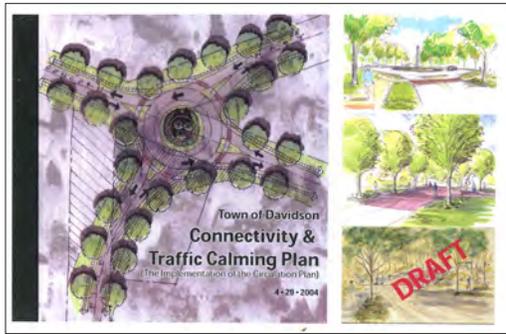
What New Technologies and Shared Mobility Options are Being Used?

## MODE SHARE

**How do Davidson’s mobility choices compare to surrounding communities?** The charts below show commute mode share from the 2016 American Community Survey (ACS).



# PREVIOUS PLANNING



Davidson has a rich history of transportation planning that aligns land use planning with transportation strategies. As part of the assessment for the Mobility Plan, the planning team reviewed and summarized the previous plans to understand what transportation facilities have been planned and recommended previously; which of those recommendations have been implemented; and which recommendations may no longer be valid. The team summarized previous plan initiatives in both written narrative and tabular form, and mapped their recommendations. The team noted if an initiative has been completed or is in the process of being implemented.

The purpose of this assessment is to give an overview of the myriad of planning efforts conducted over the past 15+ years and

to inform the development of the current Mobility Plan. The planning team reviewed the plans listed in the table below.

Plan Name	Adoption Date
Downtown Davidson Pedestrian and Bicycle Safety Plan	February 2002
Davidson Circulation Plan	April 2003
Town of Davidson Connectivity and Traffic Calming Plan	2003*
Davidson Transit Station Small Area Plan	September 2005
Potts-Sloan-Beaty Street Corridor Land Use Plan	May 2007
Bicycle Transportation Plan	October 2008
Davidson Comprehensive Plan	August 2010
Comprehensive Parking Study	2011*
Town of Davidson 2012 Station Area Update	2012*
Davidson Walks and Rolls: Active Transportation Master Plan	November 2013
Town of Davidson Circles @ 30 Small Area Plan	2013*
Town of Davidson Parks and Recreation Master Plan	November 2014
Rural Area Plan	September 2016

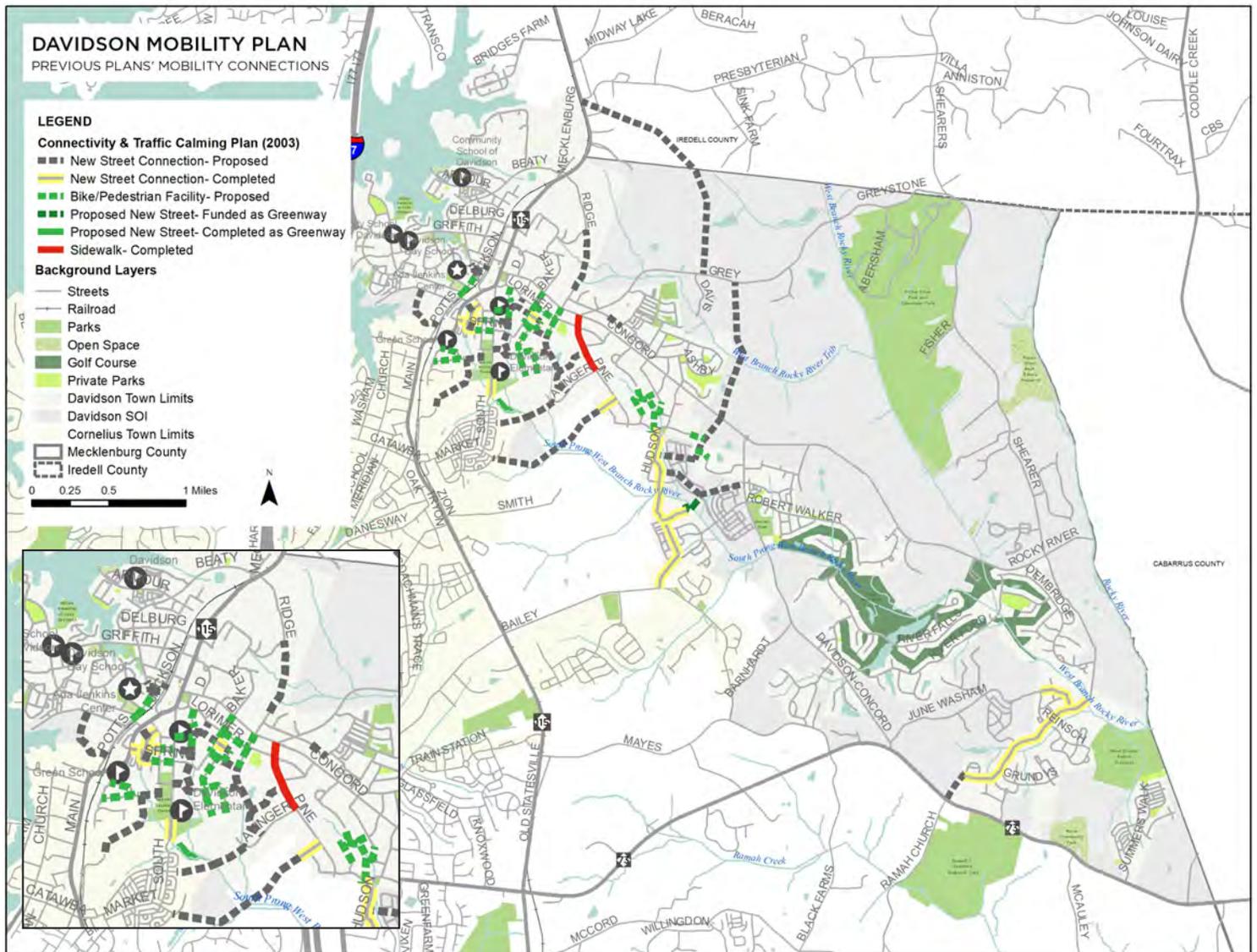
\*These plans have not been formally adopted by the Davidson Board of Commissioners, but they have been reviewed and summarized here to make sure that the Mobility Plan reflects a comprehensive understanding of previous planning efforts.

Davidson's earliest effort in mobility planning was the *Downtown Pedestrian Safety Enhancement Plan* of 2002, which called for pedestrian crossing improvements and bicycle facilities in order to protect the pedestrian- and bicycle-oriented character of central Davidson. The **crossing improvements, including curb bulb-outs at Main Street and Concord Road, and the bike lanes and multi-use path**

**along Concord Road were all implemented** according to this plan's recommendations.

The *Circulation Plan* and the *Connectivity and Traffic Calming Report* were a pair of plans in 2003 that aimed to improve circulation and mobility within town for vehicles, pedestrians, and bicycles. These efforts resulted in a comprehensive study of new roadway, sidewalk, and

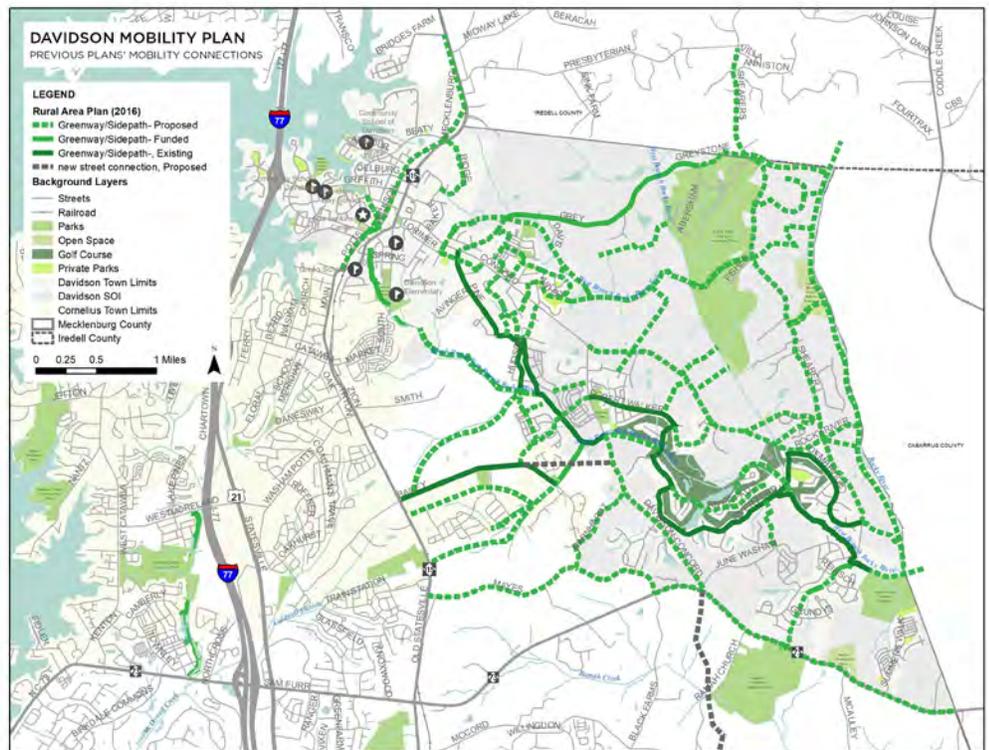
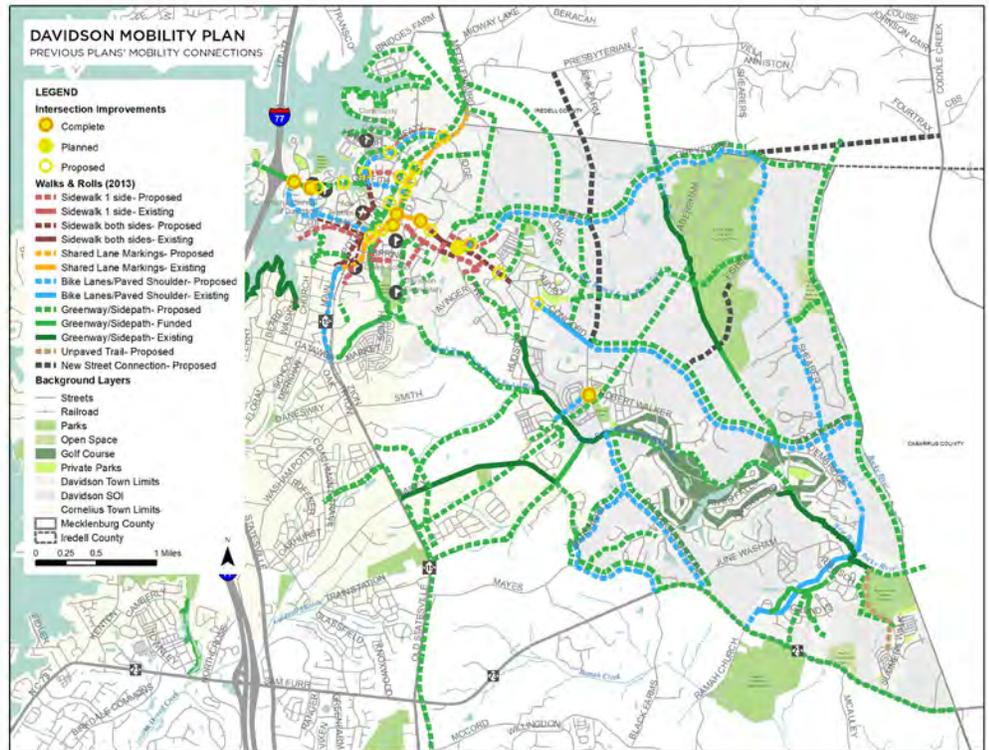
bicycle facilities that was prioritized with significant steering committee and public input. The recommendations that resulted from these efforts (see map below) have formed the basis of mobility recommendations that have been carried forward in many subsequent plans and studies conducted by the Town of Davidson.



This map shows the network recommendations from the 2003 *Connectivity and Traffic Calming Report*, which have formed the basis of Davidson's mobility recommendations in subsequent plans.

The comprehensive review of previous plans served as a way to consolidate and update the numerous recommendations, and to verify which projects had been completed, and of those that had not, which were still valid. In some cases, there were duplicate and/or competing recommendations in different plans, and this review provided the opportunity to get all the projects on one map in order to assess which ones were still appropriate to today's context. Public input, in addition to a thorough assessment of current mobility conditions (see Appendix B), was used to vet which projects were still valid.

The comprehensive review of all previous plans and their recommendations is summarized in detail in Appendix C.

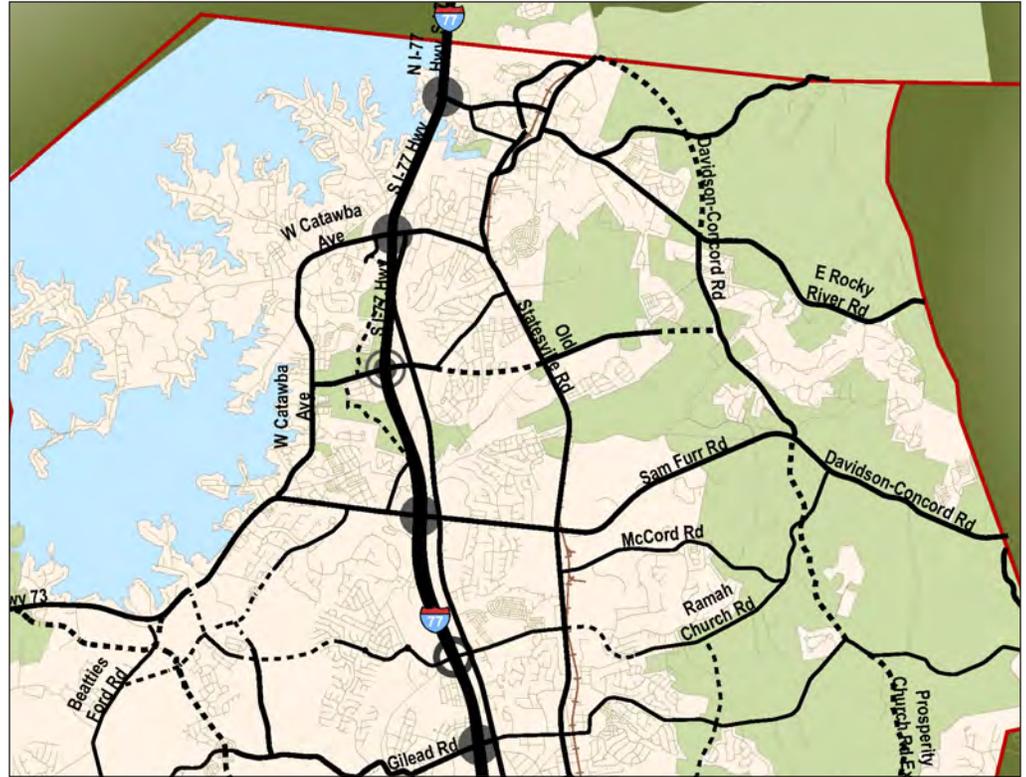


As an example from the comprehensive review of previous plans and their recommended projects, these two maps of projects from the Walks and Rolls Plan (2013) and the Rural Area Plan (2016) show different alignments for greenways, which were pared down based on feedback from the public input and charrette process.

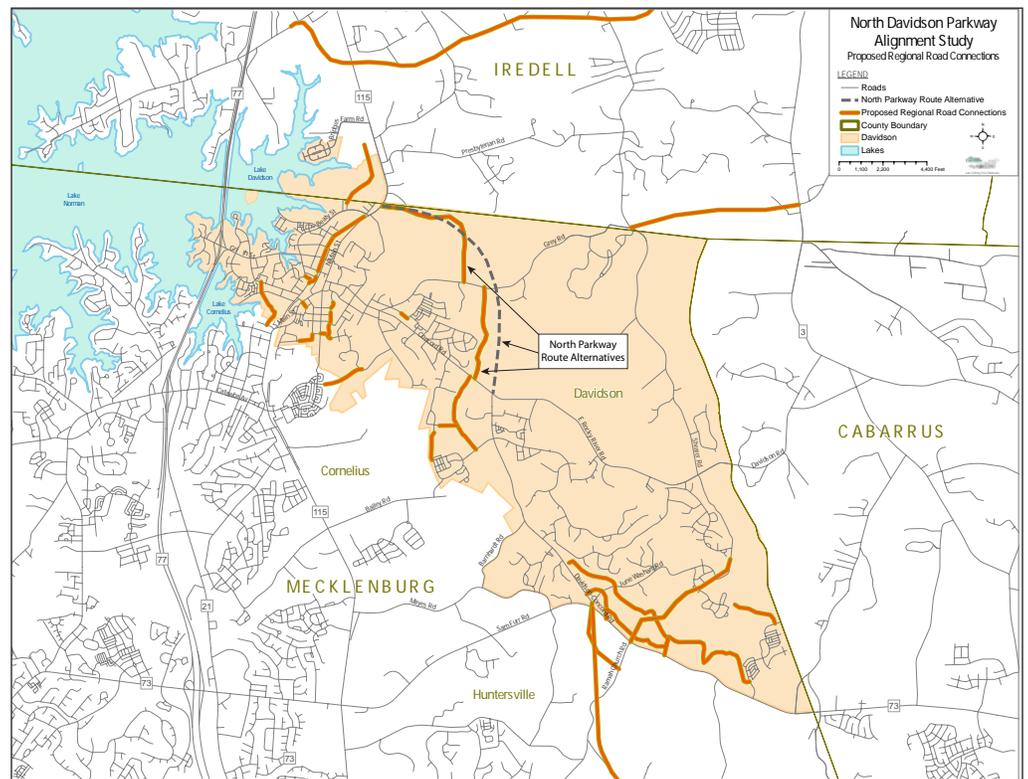
## REGIONAL PLANS

In addition to the local plans, the following regional plans were reviewed in order to understand the broader context of transportation planning projects in the surrounding areas:

- Charlotte Regional Transportation Planning Organization (CRTPO) *Comprehensive Transportation Plan* (CTP) (2017)
- Mecklenburg-Union Metropolitan Planning Organization *Thoroughfare Plan* (2004, updated 2012)
- Lake Norman *Transportation and Land Use Study* (2010) and *North Davidson Parkway Alignment Study* (2010)



This map shows the regional roadway connections proposed in the Thoroughfare Plan.



This map shows the regional roadway connections proposed in the North Davidson Parkway Alignment Study, which refined the alignment of a north-south connection that was recommended in the Urban Land Institute's 2010 Lake Norman Transportation and Land Use Study



# PEDESTRIAN MOBILITY

## WALKING IN DAVIDSON

Town residents have a strong interest in walking for transportation and recreation. This is reflected in the fact that Davidson is a designated **Bronze Walk Friendly Community** through the Pedestrian and Bicycle Information Center (PBIC) [Walk Friendly Community](#) program. Most of the town’s streets have sidewalks on either one or both sides. Davidson has **47 miles of existing sidewalks** and **12 miles of existing and funded multi-use paths—both greenways and sidepaths** (see maps on pages 26-27). However, there are some notable gaps in pedestrian connectivity. Some of the opportunities and challenges for walking in Davidson are highlighted below.



## OPPORTUNITIES

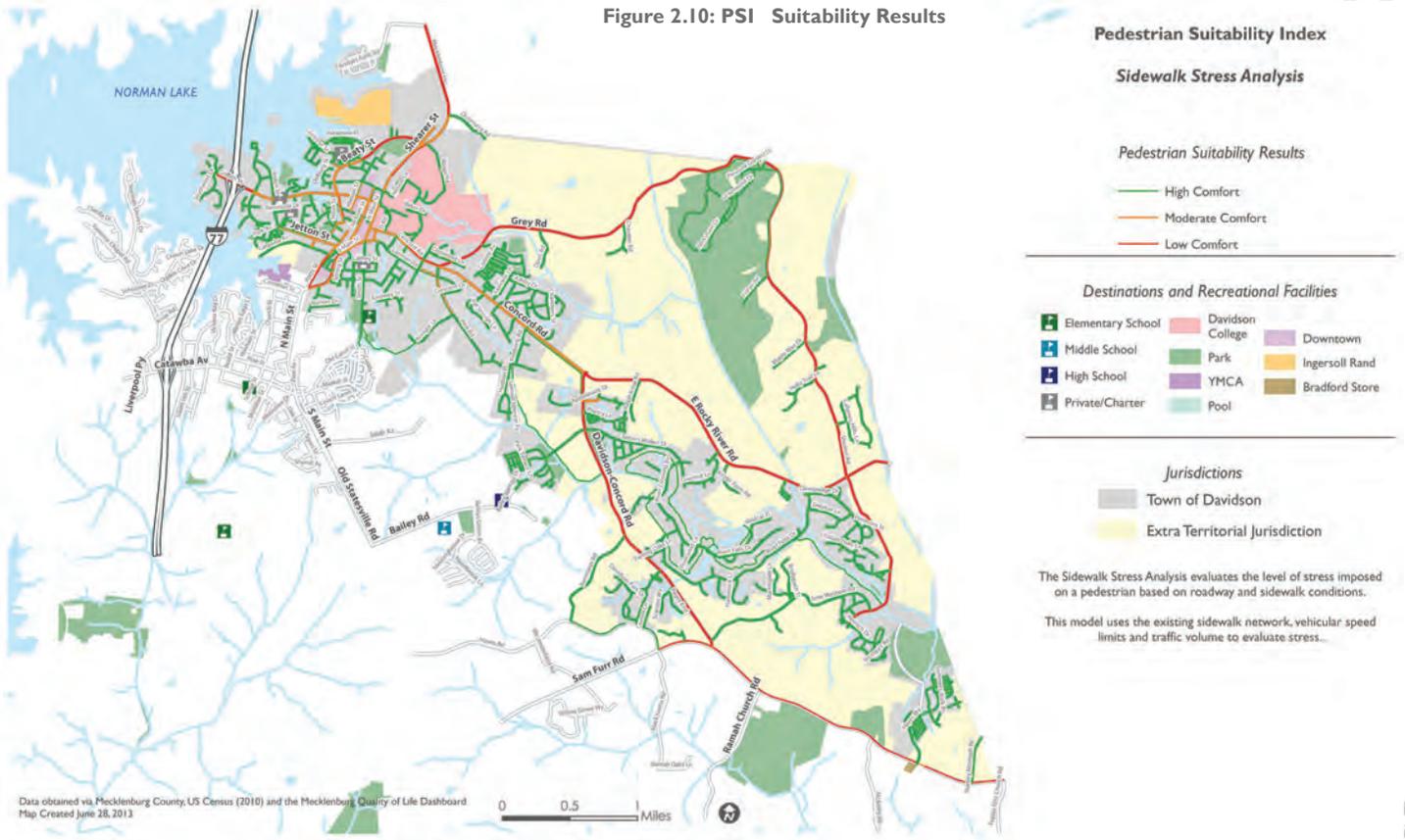
- **85% of households** responding to the 2017 Davidson National Citizen Survey **support Town funds being used for pedestrian and bicycle facilities.**
- Crossing improvements, such as high visibility crosswalks, mid-block crossings, and bulb-outs, could help facilitate pedestrian crossings.
- The *Davidson Walks and Rolls Active Transportation Plan* identified more than **8.5 miles of sidewalk needed** to increase connectivity and improve pedestrian safety.

## CHALLENGES

- While sidewalks are present in much of the town, there are some **critical sidewalk gaps**:
  - Grey Road
  - Beaty Street, north of Armour Street
  - Concord Road, north side
  - Potts Street, south end
- Some sidewalks **do not meet accessibility standards** due to narrow widths or lack of curb ramps.
  - Concord Road
  - Potts Street
  - S Main Street
  - Potts Street, south of Catawba Avenue
- **More high quality pedestrian crossings with better signage are needed** to allow people to safely reach destinations.
  - Spinnaker Cove Drive and Griffith St
  - Beaty Street and Delburg Street
  - Beaty Street and NC 115
  - Catawba Avenue and S Main Street
  - Grey Road and Concord Road
  - Depot Street and Jackson Street
  - Griffith Street and Jackson Street
- **Traffic speeds and distracted driving** add to pedestrian safety and comfort challenges.

**The combination of sidewalk network gaps, poor quality/accessibility issues, crossing difficulties, and unsafe driver behavior create an inconsistent and sometimes uncomfortable pedestrian environment.** Previous analysis of the pedestrian environment, completed for the Walks & Rolls Plan (2013), highlighted hotspots where conditions are not comfortable for walking. Public input received for the Mobility Plan corroborates many of these troublesome areas identified through quantitative analysis. These areas, which should form the basis for prioritized pedestrian projects, are highlighted in the following maps:

Figure 2.10: PSI Suitability Results

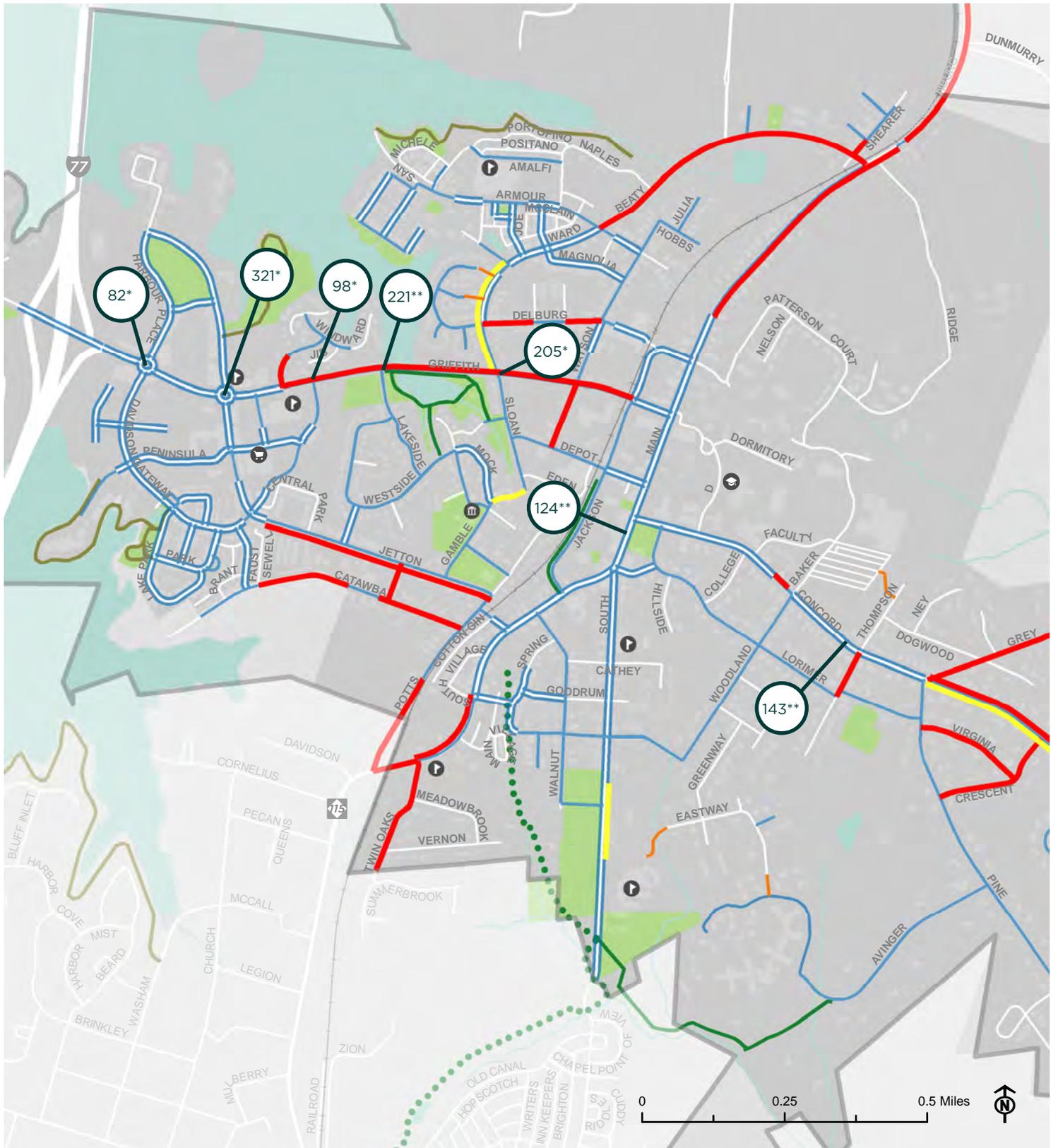


## WALKING BY THE NUMBERS

In May 2017, the Institute for Transportation Research and Education (ITRE) installed permanent bicycle and pedestrian count stations at three locations in Davidson: Griffith Street, Main Street, and Concord Road. Additionally, counts were available for the following locations along Griffith Street: Davidson Gateway Drive (west)/Harbour Place Drive, Jetton Street, Davidson Gateway Drive (east), and Beaty Street/Sloan Street. Data from these sources is shown on the map on the following page.

The **heaviest pedestrian movement was observed along Griffith Street**, especially at the intersections with Jetton Street, Lakeside Avenue, and Beaty Street/Sloan Street. Counts were lower at the eastern and western intersections with Davidson Gateway Drive.

Main Street counts were somewhat lower than expected; however, some counts were taken in the summer months when many of the students at Davidson College are gone for summer break.



## EXISTING CONDITIONS: PEDESTRIAN MOBILITY

### Existing Facilities

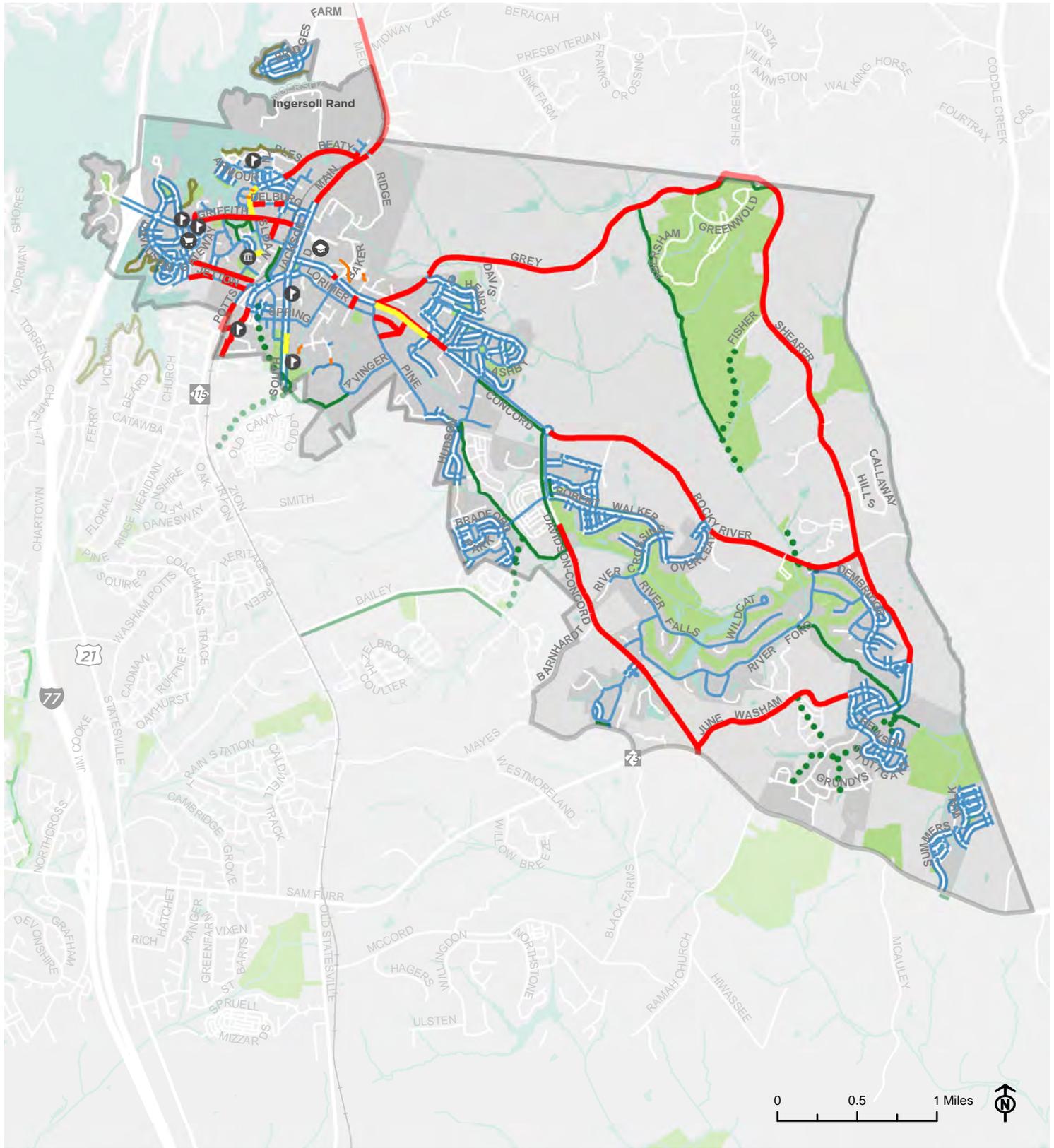
- Sidewalk
- Multi-Use Path
- ⋯ Multi-Use Path (Funded)
- Unpaved Trail
- Bike Ped Connector

- Missing Sidewalk
- Unsafe Sidewalk
- x Pedestrian Count

\* Counts reflect 8 hours on a single day in November 2016  
 \*\* Counts are a daily average calculated over the period between May and August 2017

- Davidson College
- Grocery Store
- School
- Community Center
- Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area



## EXISTING CONDITIONS: PEDESTRIAN MOBILITY

### Existing Facilities

- Sidewalk
- Multi-Use Path
- ⋯ Multi-Use Path (Funded)
- Unpaved Trail
- Bike Ped Connector

— Missing Sidewalk

— Unsafe Sidewalk

Davidson College

Grocery Store

School

Community Center

Railroad

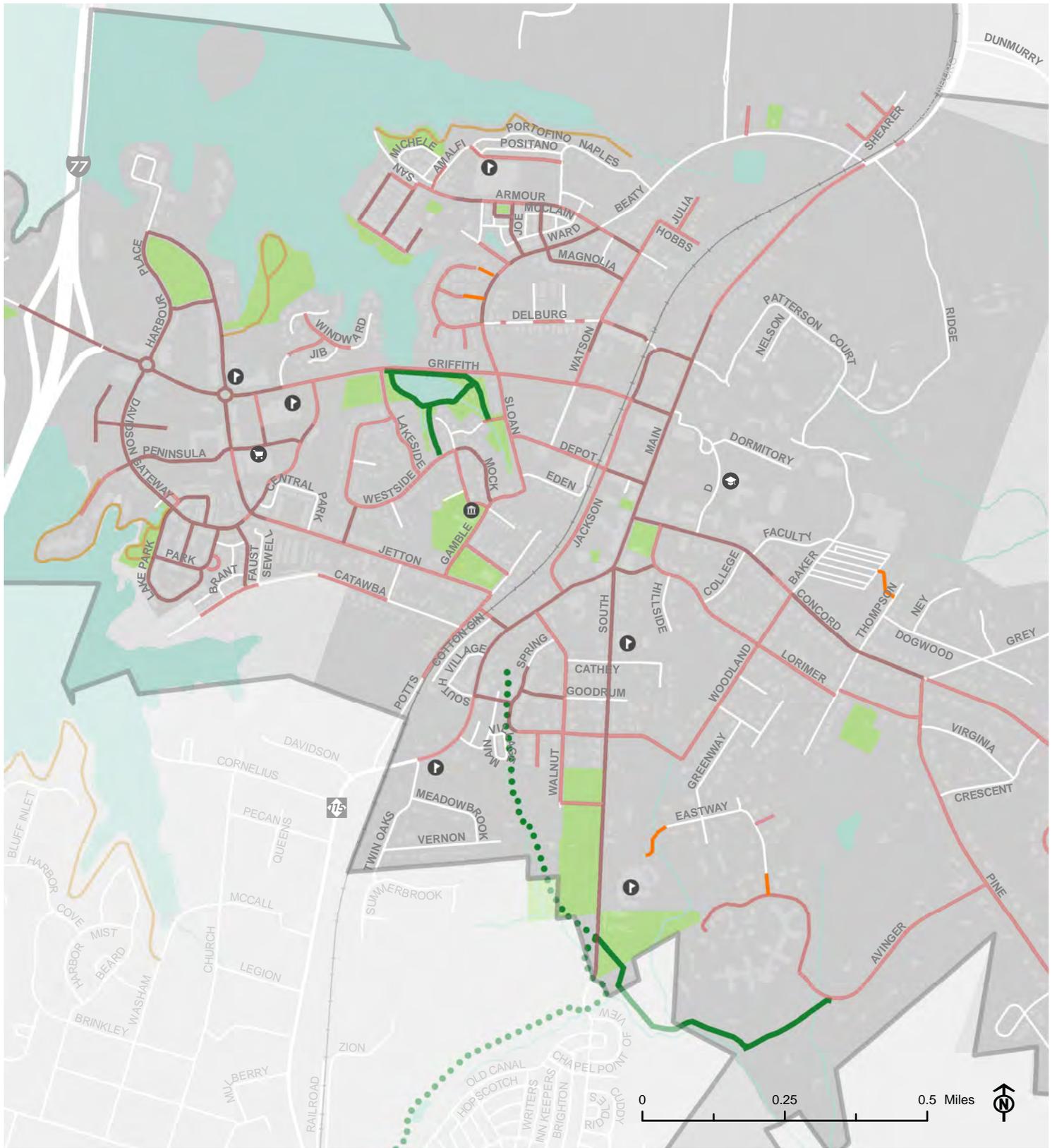
■ Parks & Open Space

■ Water Body

■ Davidson Town Limits

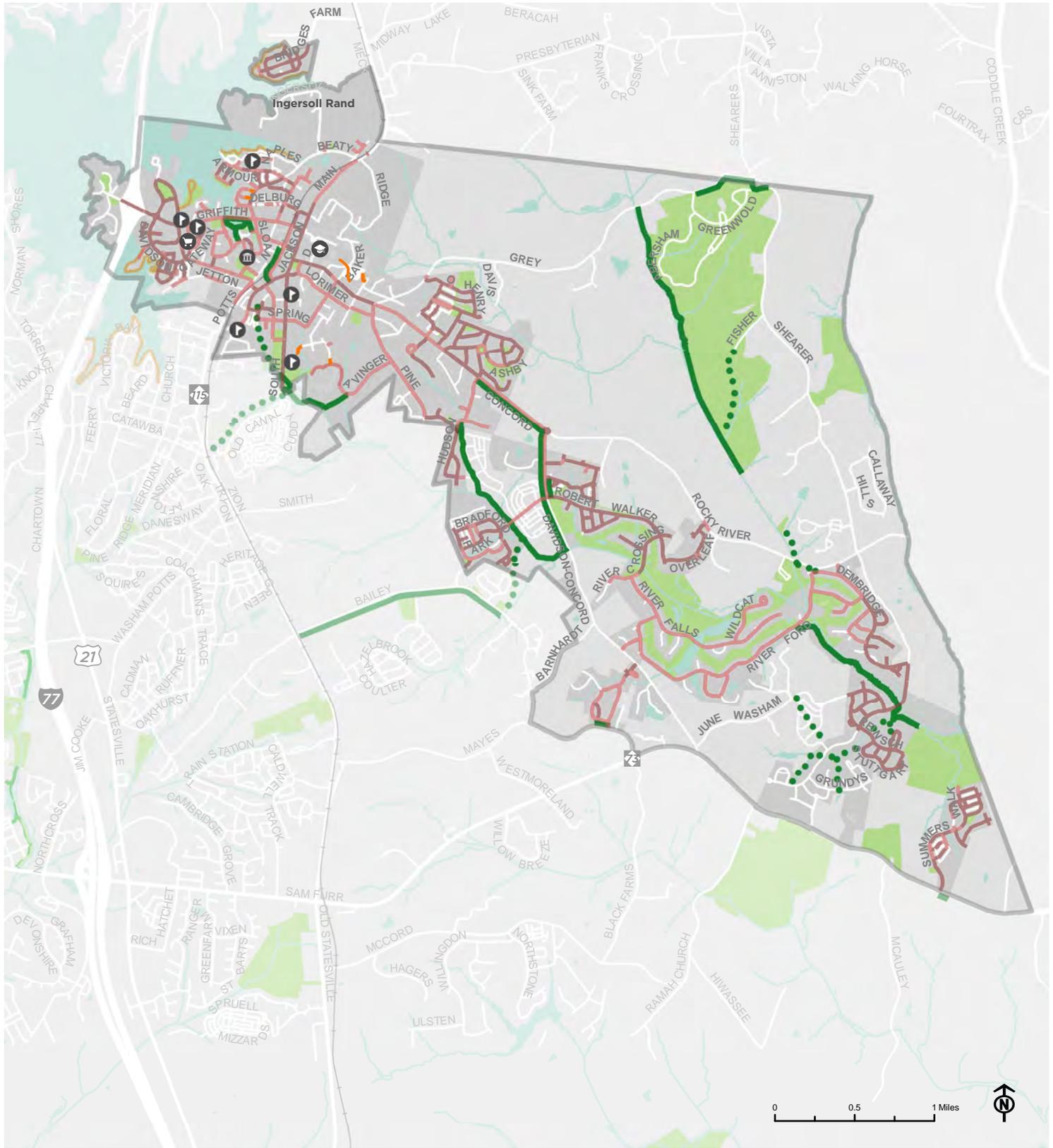
■ Davidson SOI

Study Area



## EXISTING CONDITIONS: PEDESTRIAN MOBILITY

- |                       |                         |                  |                      |
|-----------------------|-------------------------|------------------|----------------------|
| Sidewalk (One Side)   | Multi-Use Path          | Davidson College | Parks & Open Space   |
| Sidewalk (Both Sides) | Multi-Use Path (Funded) | Grocery Store    | Water Body           |
| Bike Ped Connector    | Unpaved Trail           | School           | Davidson Town Limits |
|                       |                         | Community Center | Davidson SOI         |
|                       |                         | Railroad         | Study Area           |



## EXISTING CONDITIONS: PEDESTRIAN MOBILITY

- |                       |                         |                  |                      |
|-----------------------|-------------------------|------------------|----------------------|
| Sidewalk (One Side)   | Multi-Use Path          | Davidson College | Parks & Open Space   |
| Sidewalk (Both Sides) | Multi-Use Path (Funded) | Grocery Store    | Water Body           |
| Bike Ped Connector    | Unpaved Trail           | School           | Davidson Town Limits |
|                       |                         | Community Center | Davidson SOI         |
|                       |                         | Railroad         | Study Area           |



# BICYCLE MOBILITY

## BIKING IN DAVIDSON

Davidson currently has nearly 7 miles of existing bike lanes and shared-lane markings, and an additional 7 miles of multi-use paths. The network can be expanded with higher quality bikeways to connect residents and visitors with more destinations, as shown on the maps on pages 30 through 31.



## OPPORTUNITIES

- Davidson has **7 miles of existing bike lanes and shared-lane markings and 12 miles of existing and funded greenways** and sidepaths.
- Town residents have a strong interest in bicycling for transportation and recreation.
- Davidson is a designated **Bronze Bicycle Friendly Community** through the League of American Bicyclists' (LAB) [designation program](#).
- Rural roadways and corridors provide opportunities for sidepaths and greenways to provide access to the areas surrounding the town, such as Fisher Farm.

## CHALLENGES

- Existing bike lanes and shared-use lanes are not comfortable for cyclists of all ages and abilities
- Comfortable biking connections for all ages and abilities are lacking between downtown and neighborhoods and destinations. Uncomfortable biking corridors include:
  - Potts-Sloan-Beaty Corridor
  - Jetton Street
  - Griffith Street, especially west of Harris Teeter
  - Grey Road
  - N Main Street
  - Concord Road
  - Davidson-Concord Road
  - Rocky River Road

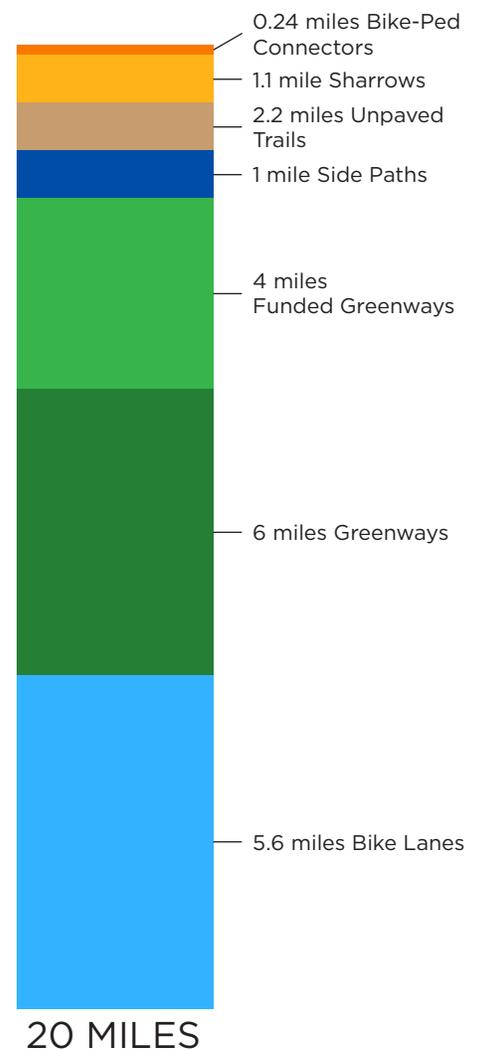
## BY THE NUMBERS

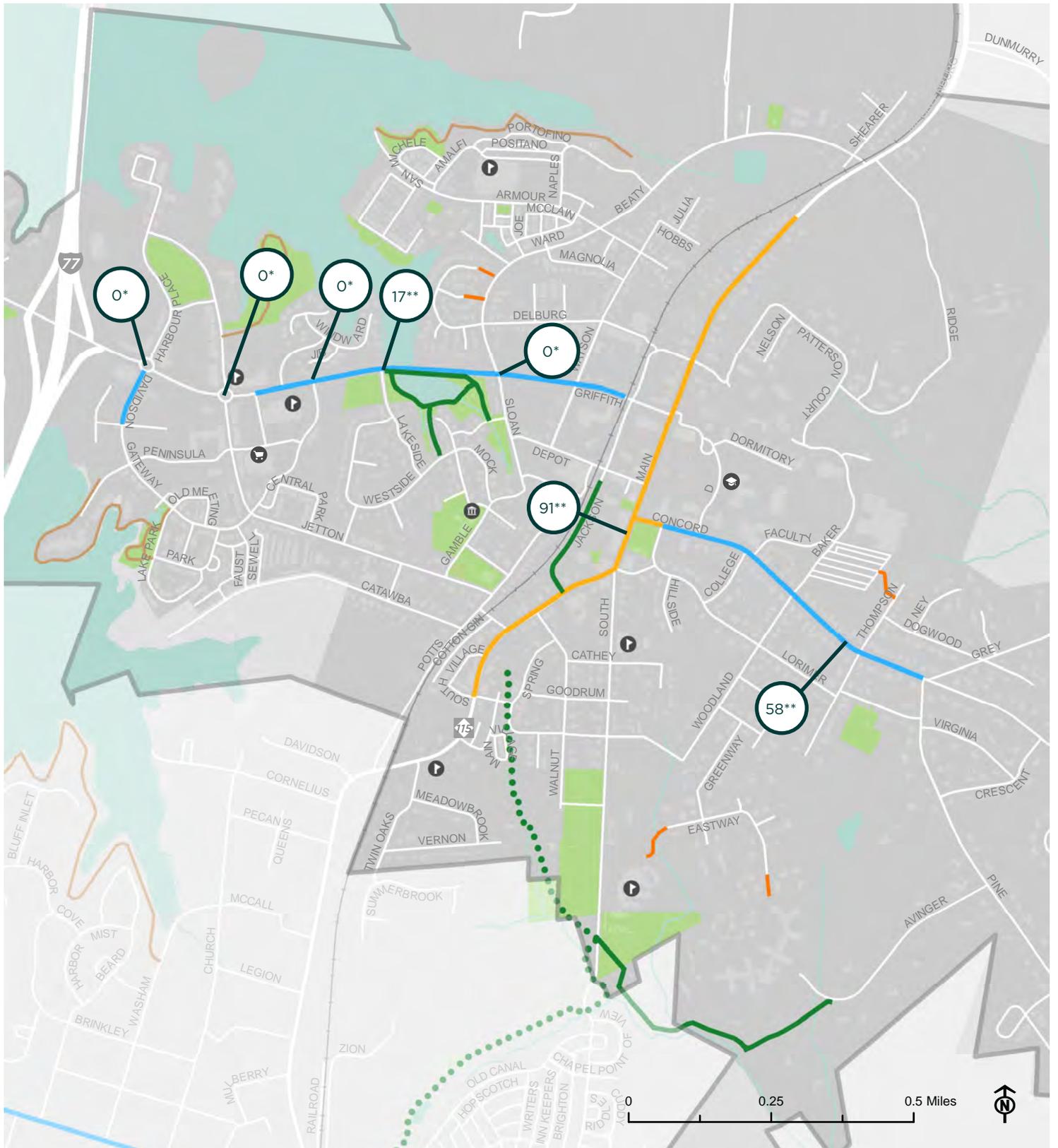
The maps on the following pages show bicycle counts collected by ITRE and the Davidson Mobility Plan project team. These counts highlight the importance of Main Street and Davidson-Concord Road as bicycle travel corridors.



## CHALLENGES, continued

- Bikeways need to connect residents with more destinations such as schools, workplaces, shopping, and entertainment.
- **Excessive motor vehicle speeds and distracted driving** make biking uncomfortable and unsafe in many areas, especially for less confident riders and families with children.
- In the downtown area, there is competition for pavement space between high quality bicycle facilities and parking needs.
- The Town of Davidson does not currently have a contract with any bike-share company, nor does it have any policies to manage bike-share programs (or other similar shared-mobility vehicles, such as electric scooters)

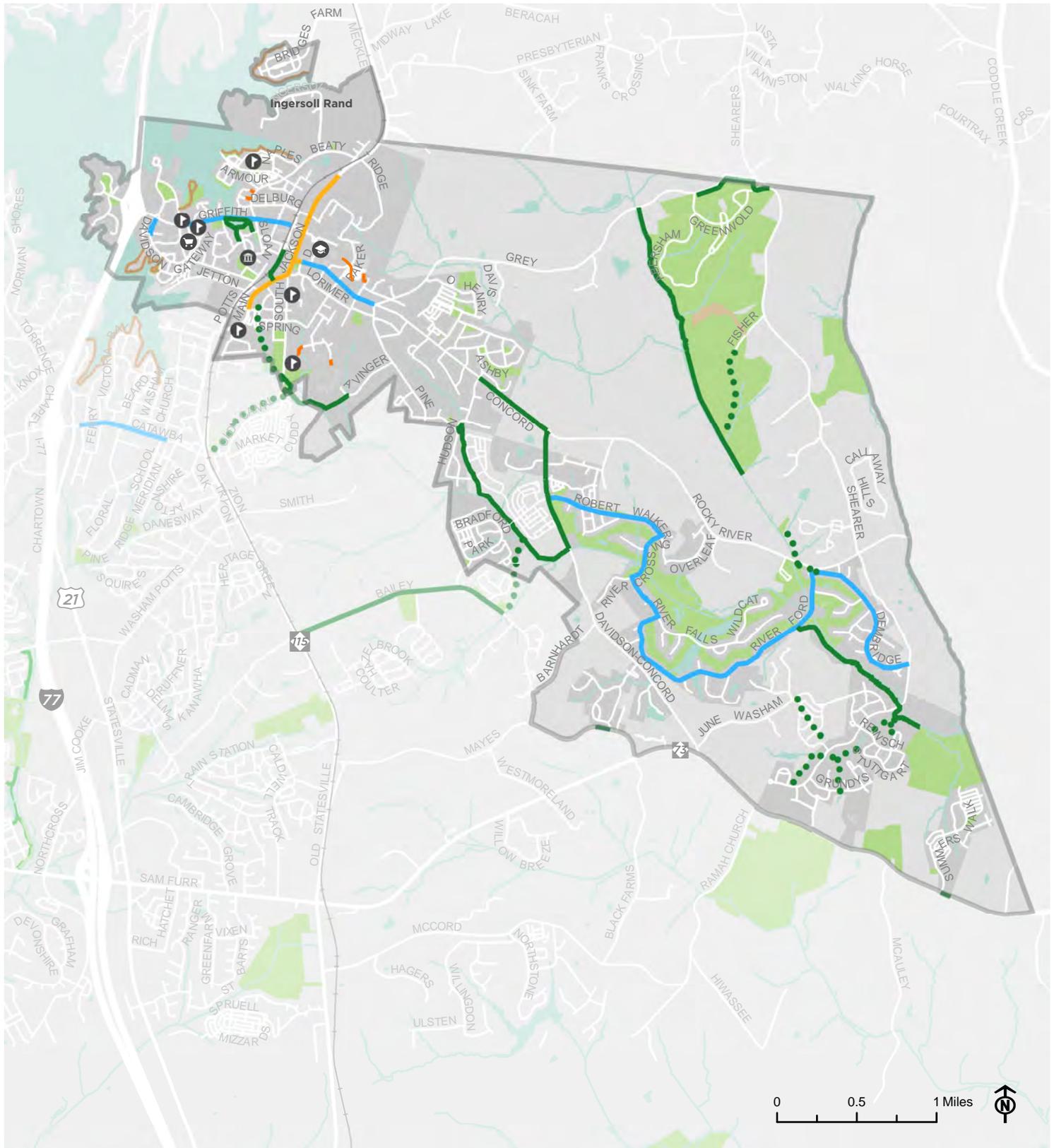




## EXISTING CONDITIONS: BICYCLE MOBILITY

- |                     |                         |                  |                      |
|---------------------|-------------------------|------------------|----------------------|
| Bike Lane           | Multi-Use Path          | Davidson College | Parks & Open Space   |
| Shared Lane Marking | Multi-Use Path (Funded) | Grocery Store    | Water Body           |
| Bike Ped Connector  | Unpaved Trail           | School           | Davidson Town Limits |
|                     | Mountain Bike Trails    | Community Center | Davidson SOI         |
| Bicycle Count       |                         | Railroad         | Study Area           |

\* Counts reflect 8 hours on a single day in November 2016  
 \*\* Counts are a daily average calculated over the period between May and August 2017



## EXISTING CONDITIONS: BICYCLE MOBILITY

- |                      |                         |                  |                      |
|----------------------|-------------------------|------------------|----------------------|
| Bike Lane            | Multi-Use Path          | Davidson College | Parks & Open Space   |
| Shared Lane Marking  | Multi-Use Path (Funded) | Grocery Store    | Water Body           |
| Bike Ped Connector   | Unpaved Trail           | School           | Davidson Town Limits |
| Mountain Bike Trails | Mountain Bike Trails    | Community Center | Davidson SOI         |
|                      |                         | Railroad         | Study Area           |



# STREET AND VEHICULAR MOBILITY

## DRIVING IN DAVIDSON

Driving is the most common travel mode in Davidson. As Davidson and the surrounding communities in the Charlotte metro area have continued to develop and grow, congestion and traffic safety are becoming even more important issues in the community.



Source: Town of Davidson



Source: The Charlotte Observer

## OPPORTUNITIES

- While new development can strain the existing network, it also provides opportunities to create new streets and improve connectivity.
- Currently, roads further from downtown, such as Grey Road, Rocky River Road, and Shearer Road are experiencing low levels of congestion.
- New roundabouts on Griffith Street have calmed traffic speeds in the busy corridor.
- There are currently several significant ongoing projects focused on improving vehicular mobility in the regions. These include:
  - Managed lanes on I-77 under construction
  - Potts/Sloan/Beaty Connector under design
  - NC 73 widening study underway
  - North-South Parkway Study (underway)

## CHALLENGES

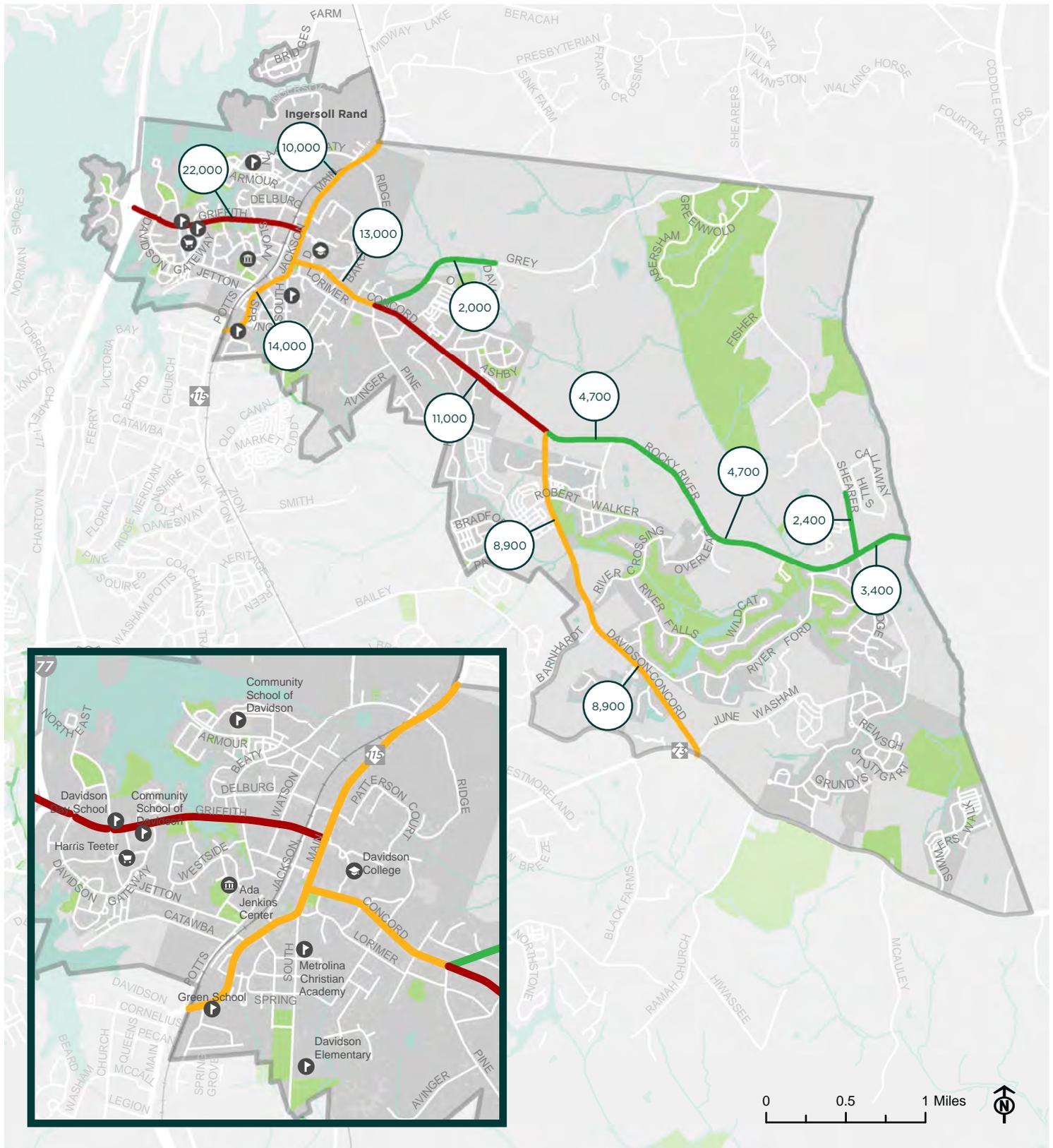
- **Only 44% of respondents to the 2017 Davidson National Citizen Survey rated “travel by car” positively.**
- Streets in Davidson serve local and regional pass-through traffic. Regional traffic patterns bring traffic in and out of town, especially on Highway 115, which provides relief to traffic on I-77.
- The town is lacking continuous north-south roadway corridors besides Main Street.
- Intersections such as Griffith and Beaty, and Main and Davidson-Concord, are often cited as unsafe for walking/crossing and challenging for all users regardless of their mode of travel.
- There are several areas in town where crashes are common. These are discussed further in the Safety Spotlight on pages 36 through 41.

## BY THE NUMBERS

The map to the right shows average daily vehicle counts for some of Davidson’s major roadways, collected by the North Carolina Department of Transportation (NCDOT) for 2016.

Using these vehicle counts and existing roadway capacity, a Level of Service (LOS) for motor vehicles was determined for each roadway. Level of Service A indicates a relatively congestion-free roadway with little travel delays, while Level of Service E indicated more congestion and higher delays.

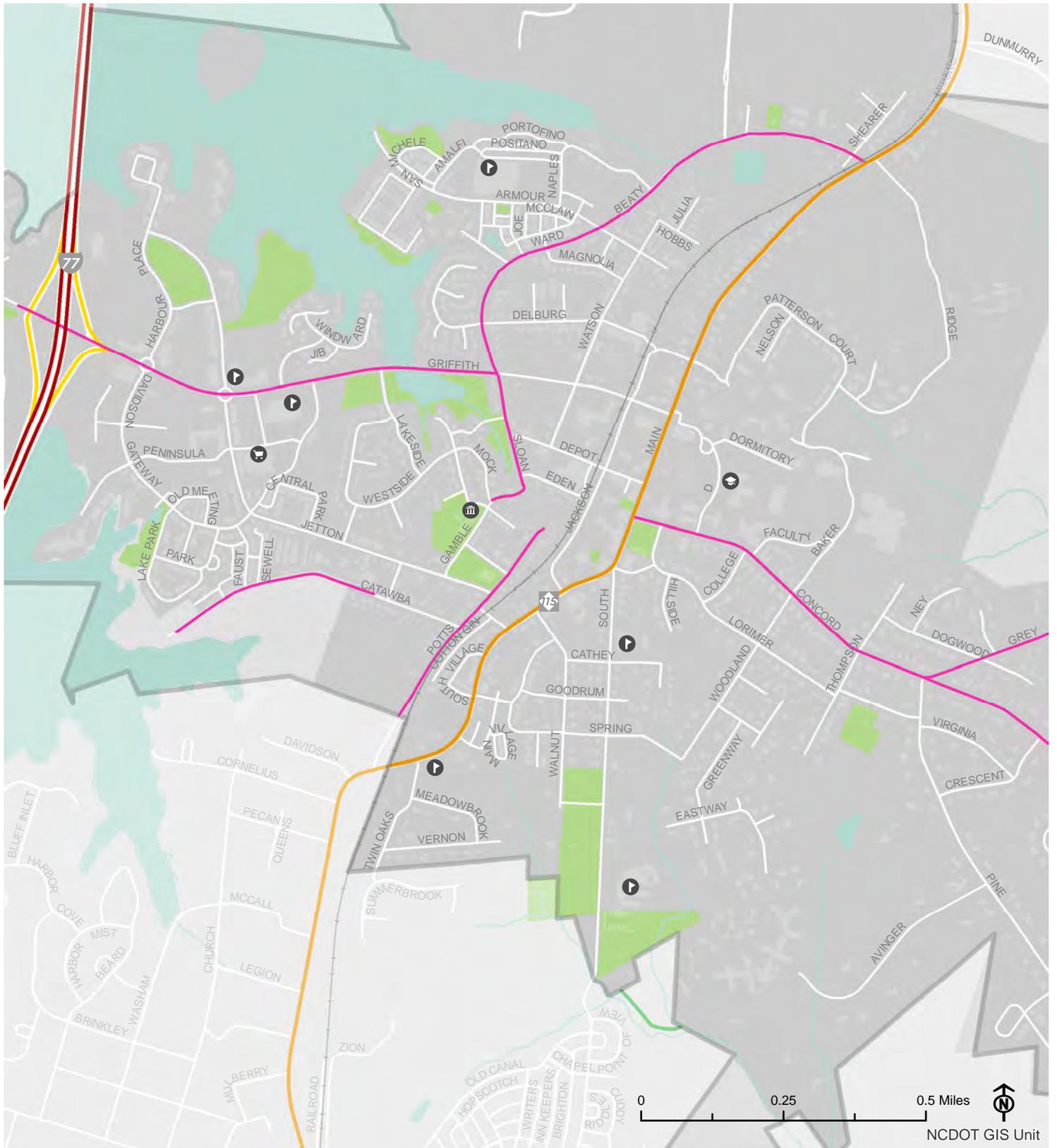
Based on the average annual daily traffic counts (AADT), **Griffith Street and Concord Road stand out as the most congested corridors** with an LOS of E. Other moderately congested areas include Main Street and Davidson-Concord Road, with an LOS of C. Currently, Rocky River Road and Grey Road have relatively few issues with congestion.



## EXISTING CONDITIONS: STREET AND VEHICULAR MOBILITY

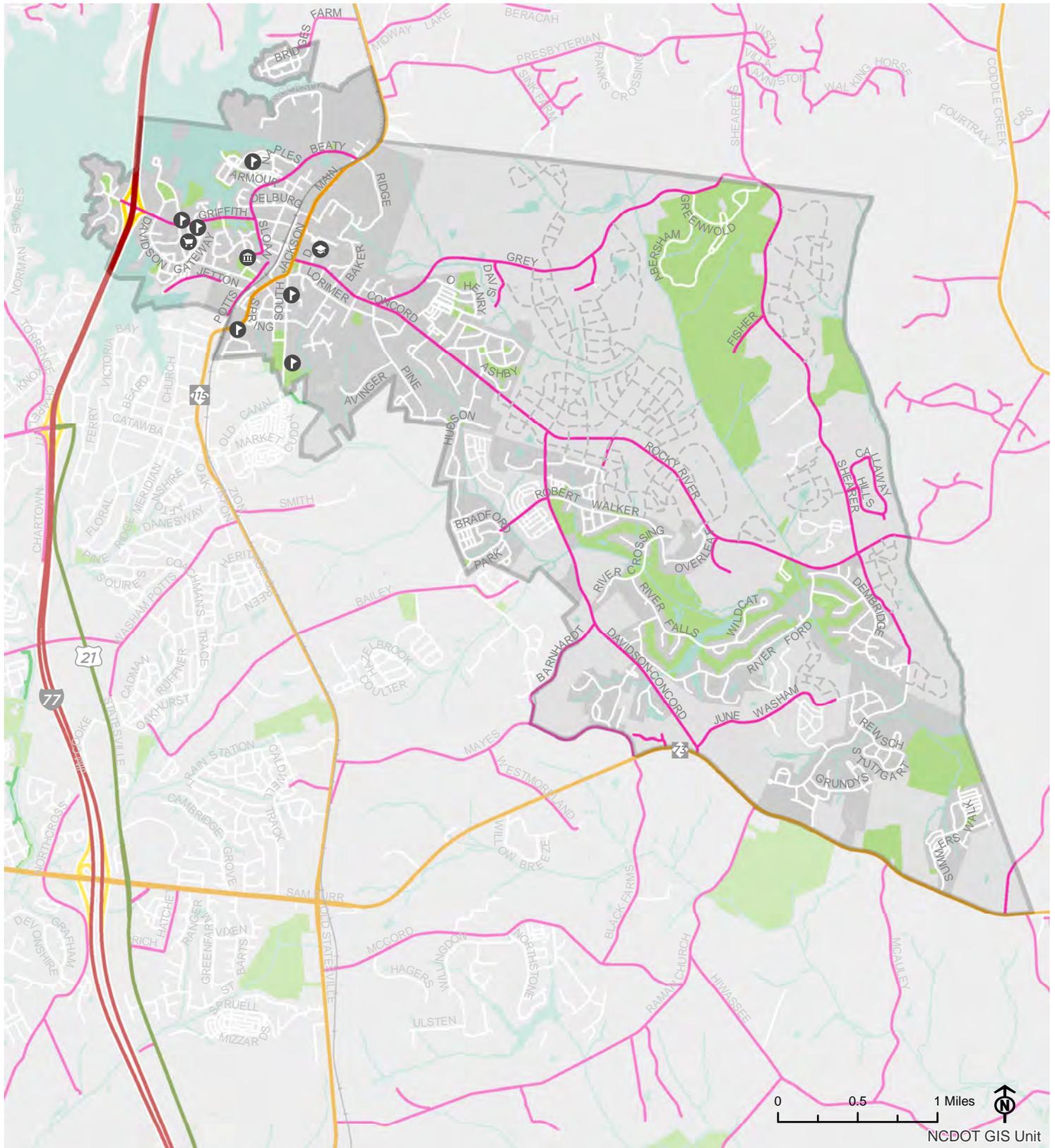
- Level of Service B
- Level of Service C
- Level of Service E
- xx Average Annual Daily Traffic (AADT)
- Davidson College
- Grocery Store
- School
- Community Center
- Railroad
- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area

Note: Level of Service is based on AADT



## NCDOT MAINTAINED ROADWAY NETWORK

- |                 |                          |                  |                      |
|-----------------|--------------------------|------------------|----------------------|
| Interstate      | Ramps                    | Davidson College | Parks & Open Space   |
| US Route        | Rest Areas               | Grocery Store    | Water Body           |
| NC Route        | Other State Agency Route | School           | Davidson Town Limits |
| Secondary Route |                          | Community Center | Davidson SOI         |
|                 |                          | Railroad         | Study Area           |



## NCDOT MAINTAINED ROADWAY NETWORK

- |                 |                          |                  |                      |
|-----------------|--------------------------|------------------|----------------------|
| Interstate      | Ramps                    | Davidson College | Parks & Open Space   |
| US Route        | Rest Areas               | Grocery Store    | Water Body           |
| NC Route        | Other State Agency Route | School           | Davidson Town Limits |
| Secondary Route |                          | Community Center | Davidson SOI         |
|                 |                          | Railroad         | Study Area           |



# SAFETY SPOTLIGHT

An assessment of the Town of Davidson crash data from 2013 to 2017 was conducted to identify “hot spot” areas. **Over the past five years, 842 crashes have occurred in Davidson.** These crashes have large impacts on the community, resulting in **238 injuries and one fatality** over the five year period measured. Notably, there has also been a sharp upward trend in crashes over the five year period.

Peak commuting period crashes also create unpredictable travel patterns related to congestion and travel delays. By creating safer streets for all users, the community can save time, money, and lives.

The maps on the following page show that there are high concentrations of crashes along I-77 (238 crashes in the past 5 years), Griffith Street (132 crashes), and Main Street / NC 115 (103 crashes). In addition to these corridors, several intersections with a high frequency of crashes were identified. Notably, **the four intersections with the highest number of crashes are all located along Griffith Street.**

## CRASH SUMMARY BY YEAR

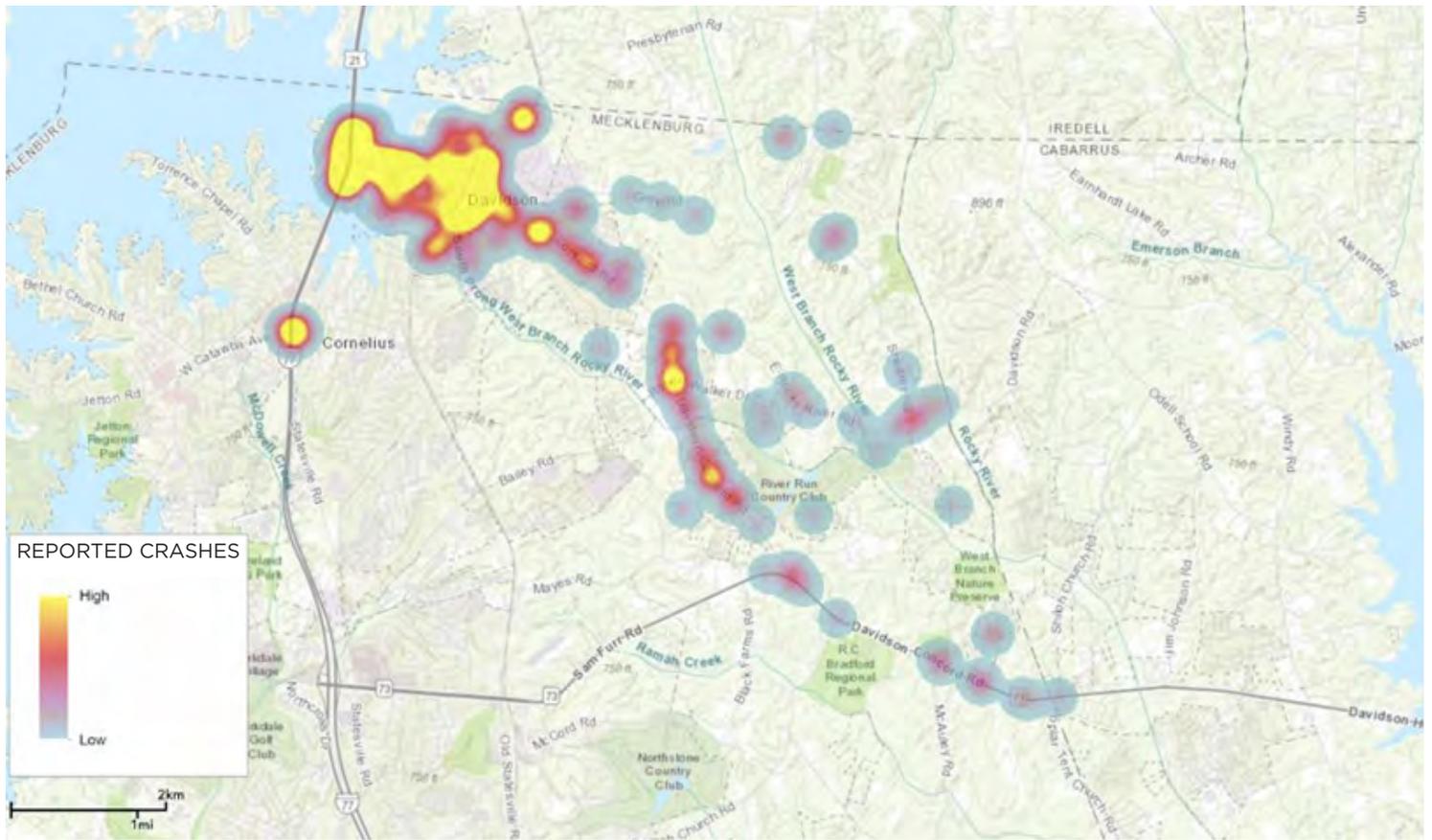
YEAR	TOTAL CRASHES	TOTAL FATALITIES	TOTAL INJURIES
2013	140	0	50
2014	130	0	35
2015	161	0	38
2016	220	1	57
2017	191	0	58
<b>TOTAL</b>	<b>842</b>	<b>1</b>	<b>238</b>

Source: Town of Davidson Police Department

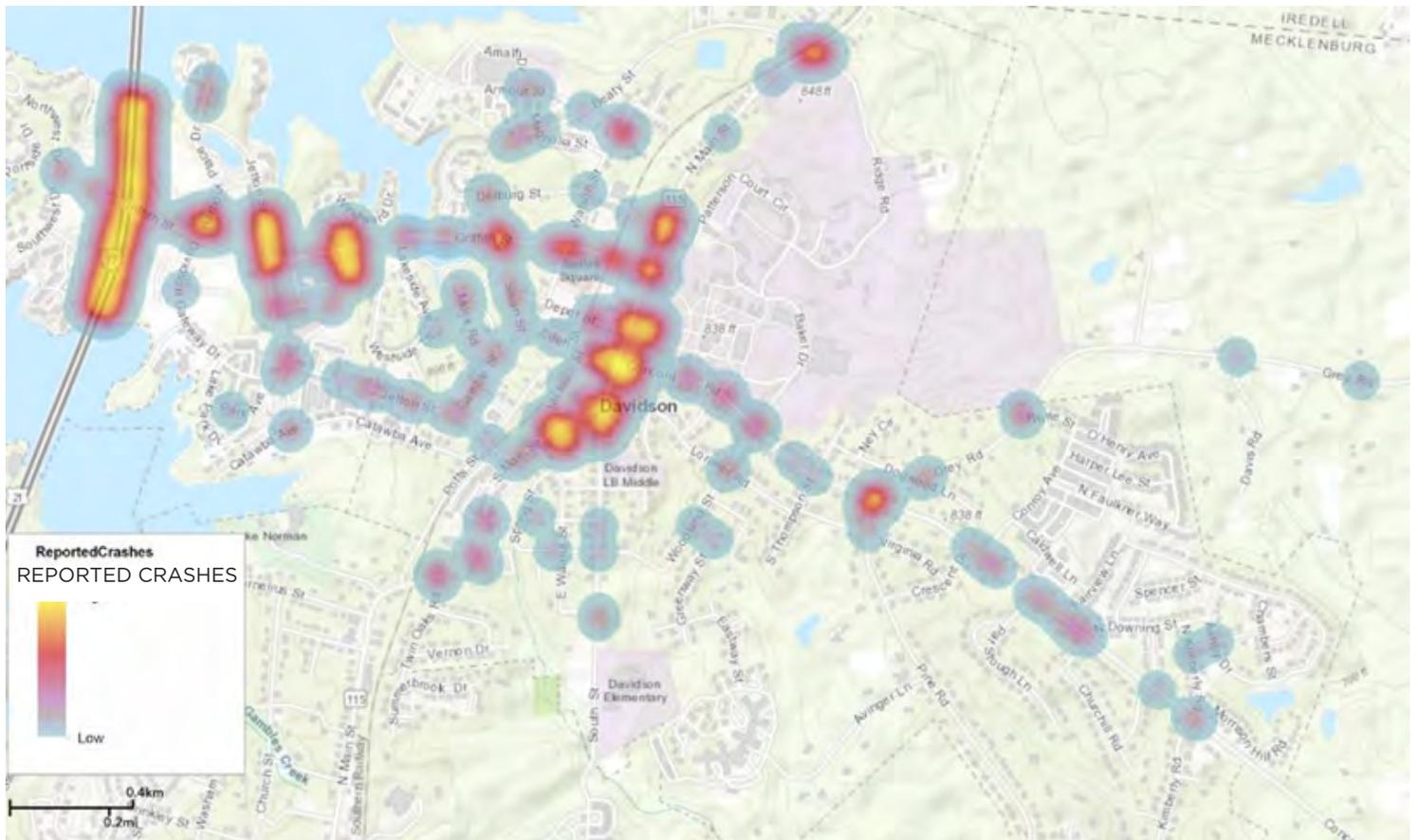
## HIGH FREQUENCY CRASH INTERSECTIONS

INTERSECTION	TOTAL CRASHES (2013 - 2017)
Griffith at I-77	59
Griffith at Harbour Place / Davidson Gateway	44
Griffith at Jetton	30
Griffith at Davidson Gateway	26
NC 115 / Main at Depot	22
NC 115 / Main at Concord	20
NC 115 / Main at Jackson	17
NC 115 / Main at Delburg / Glasgow	14
Griffith at Sloan / Beaty	12
Davidson-Concord at Robert Walker	11

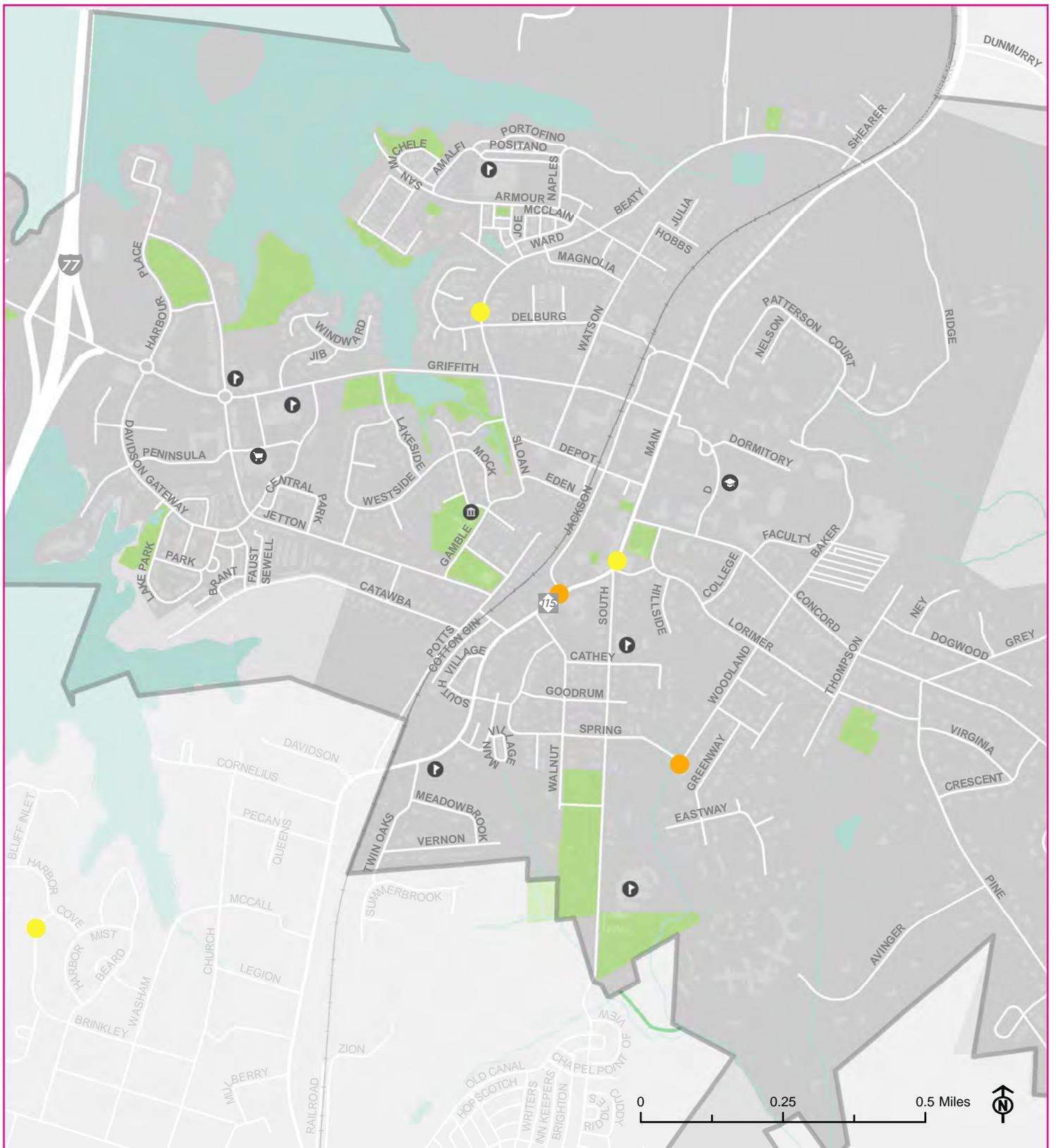
Source: Town of Davidson Police Department



EXISTING CRASH HOT SPOTS: TOWNWIDE (2013 - 2017)



EXISTING CRASH HOT SPOTS: DOWNTOWN (2013 - 2017)



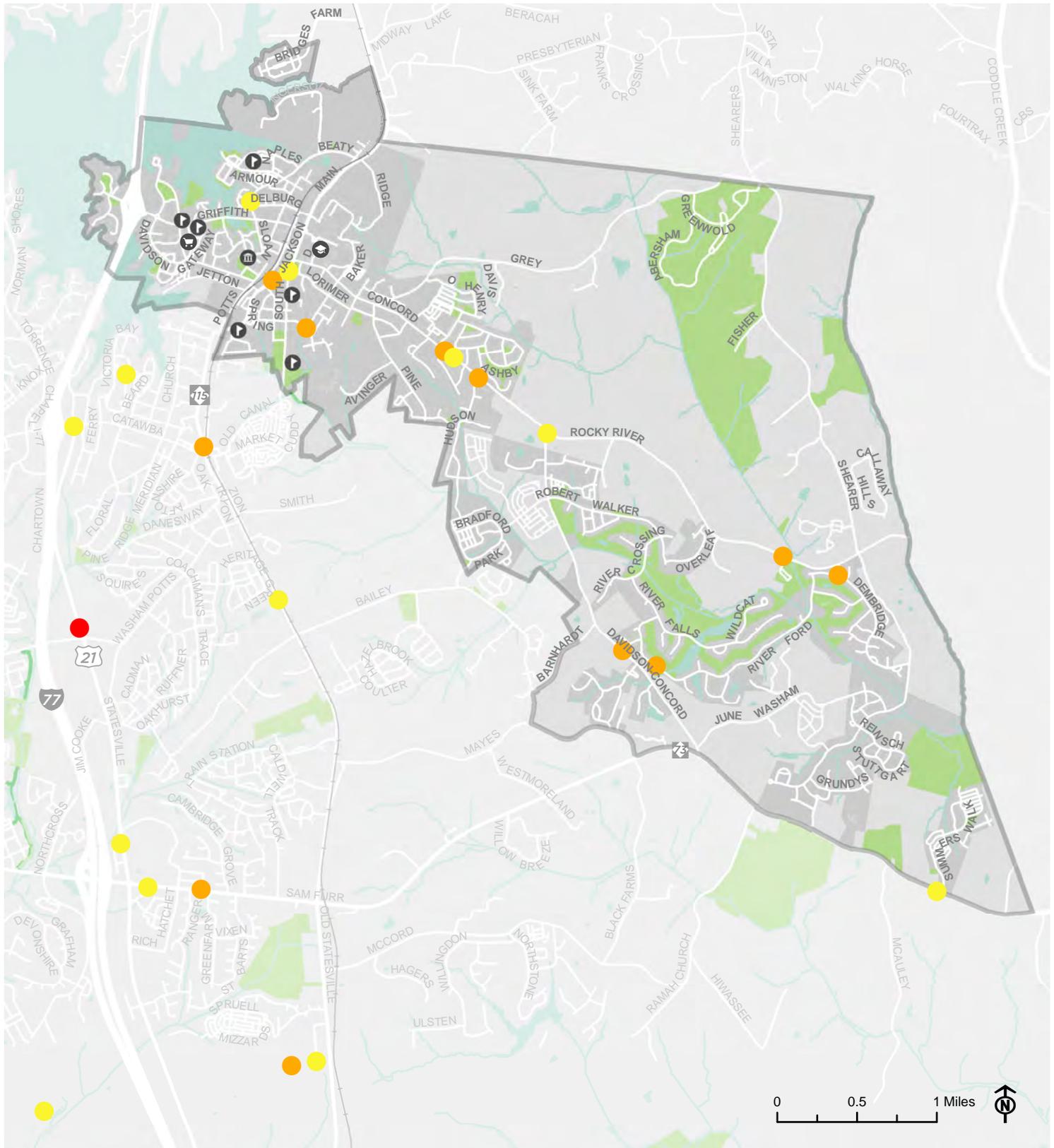
## EXISTING CONDITIONS: BICYCLE SAFETY

### Bicyclist-Involved Crashes (2007-2016)

- No/Possible/Unknown Injury
- Evident or Disabling Injury
- Fatality

-  Davidson College
-  Grocery Store
-  School
-  Community Center
-  Railroad

-  Parks & Open Space
-  Water Body
-  Davidson Town Limits
-  Davidson SOI
-  Study Area



## EXISTING CONDITIONS: BICYCLE SAFETY

### Bicyclist-Involved Crashes (2007-2016)

- No/Possible/Unknown Injury
- Evident or Disabling Injury
- Fatality

-  Davidson College
-  Grocery Store
-  School
-  Community Center
-  Railroad
-  Parks & Open Space
-  Water Body
-  Davidson Town Limits
-  Davidson SOI
-  Study Area



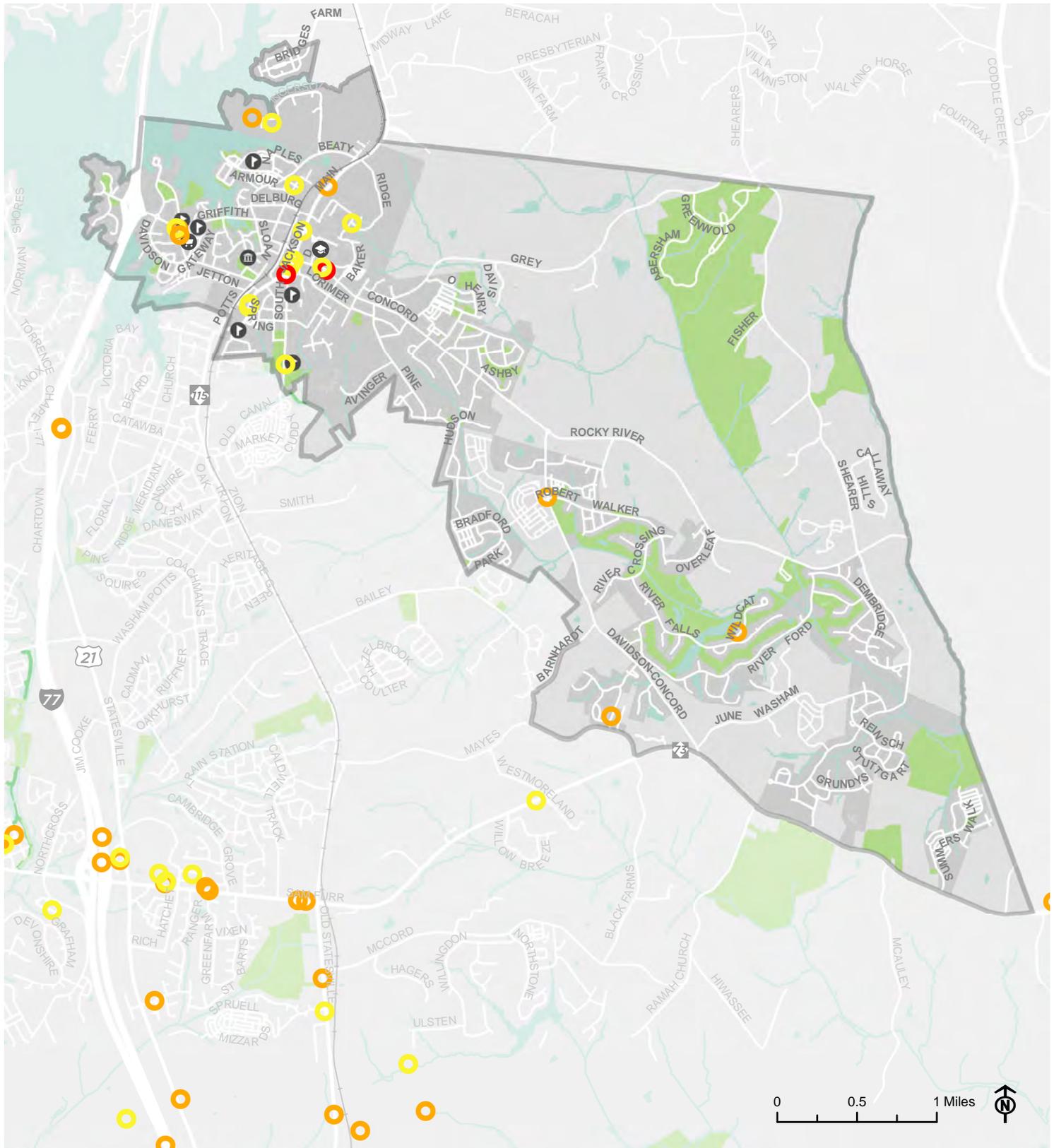
## EXISTING CONDITIONS: PEDESTRIAN SAFETY

### Pedestrian-Involved Crashes (2007-2016)

- No/Possible/Unknown Injury
- Evident or Disabling Injury
- Fatality

-  Davidson College
-  Grocery Store
-  School
-  Community Center
-  Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area



## EXISTING CONDITIONS: PEDESTRIAN SAFETY

### Pedestrian-Involved Crashes (2007-2016)

- No/Possible/Unknown Injury
- Evident or Disabling Injury
- Fatality

- Davidson College
- Grocery Store
- School
- Community Center
- Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area



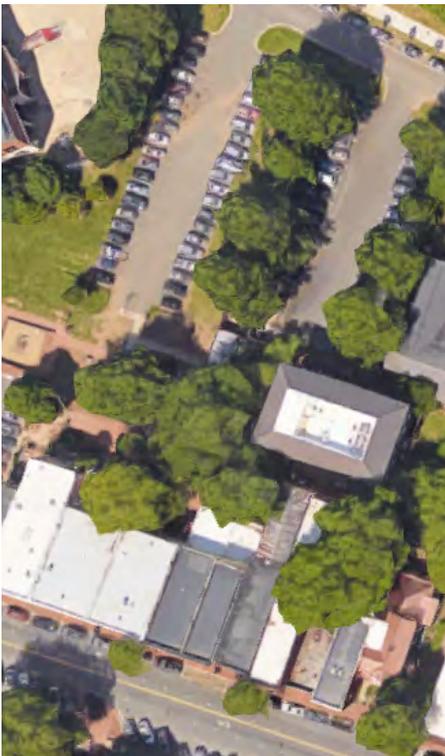
# PARKING

The Town performed a comprehensive parking study in 2011 and updated this study's data and findings in 2017. The 2017 parking study update surveyed **nearly 2,000 spaces downtown**, with approximately **700 of these spaces, or roughly one third, owned and managed by the Town** and fully available for public access. The remaining spaces are privately owned and generally reserved for employees or visitors of the establishments they support. This one-third-public ratio is not an unusual balance for a small downtown without

structured parking facilities and where regulated on-street parking is limited. However, it has potential implications for reliably available parking, especially for occasional visitors, as less than half of all existing parking can be centrally managed by one entity.

In addition to the detail on inventory, the 2017 parking study update surveyed parking occupancy to understand how parking is being used throughout the day. The diagrams on pages 44 through 47 illustrate this, and they show a core set of street parking and off-street public spaces in regularly high use during the day.

As a parking industry rule of thumb, **utilization rates of 85 to 90 percent are considered optimal efficiency**: there is always some space available to receive users, but not so much availability that significant amounts of parking supply are unused. The Town's 2017 parking study update showed that **several locations reach or even exceed this amount even multiple times of the day**. This suggests that current levels of regulating parking, which today include only two-hour time limits on around 180 of the public spaces, are not sufficiently encouraging turnover and availability.

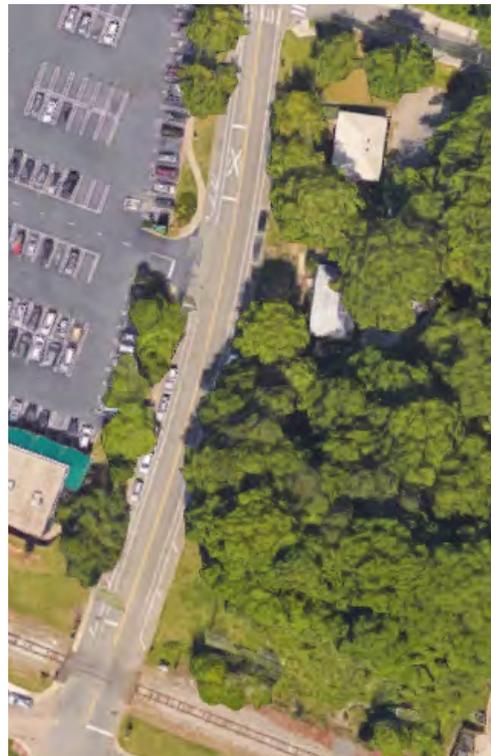
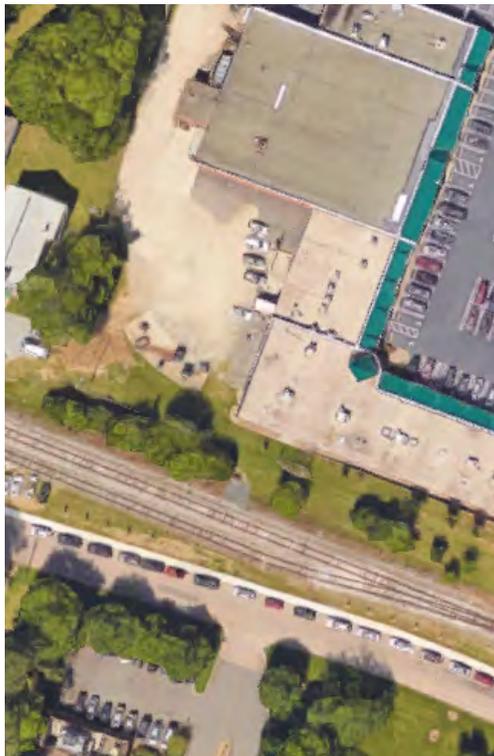


## OPPORTUNITIES

- Introducing parking fees for town-owned lots is one mechanism to consider in order to increase the availability of parking in downtown.
- Additional parking opportunities exist in close proximity to downtown, but are often underutilized. Wayfinding signage can help direct drivers to find these spaces more readily.

## CHALLENGES

- Encouraging the use of available parking outside of the immediate downtown retail area will take coordinated efforts to educate and inform residents and visitors.
- Access to parking beyond the immediately adjacent lots in the downtown core can be improved through improved pedestrian facilities and safe crossings.



## BY THE NUMBERS

Within the historic downtown area and the immediate surrounding blocks, there are...

**371**

*Public On-Street  
Parking Spaces*

**328**

*Public Off-Street  
Parking Spaces*

**1,231**

*Private Off-Street  
Parking Spaces*

**74%**

*Maximum Parking  
Spaces Occupied on a  
Saturday*

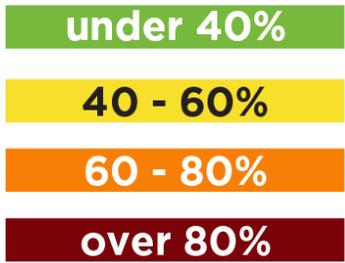
**59%**

*Maximum Parking  
Spaces Occupied on a  
Thursday*



THURSDAY, APRIL 6, 2017, 10:00 AM

EXISTING CONDITIONS: PARKING UTILIZATION





THURSDAY, APRIL 6, 2017, 12:00 PM

## EXISTING CONDITIONS: PARKING UTILIZATION





THURSDAY, APRIL 6, 2017, 6:00 PM

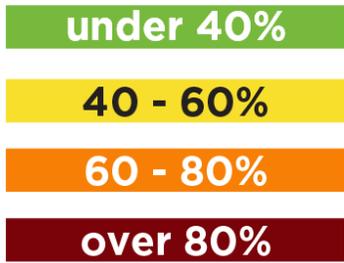
EXISTING CONDITIONS: PARKING UTILIZATION





SATURDAY, APRIL 1, 2017, 10:00 AM

EXISTING CONDITIONS: PARKING UTILIZATION





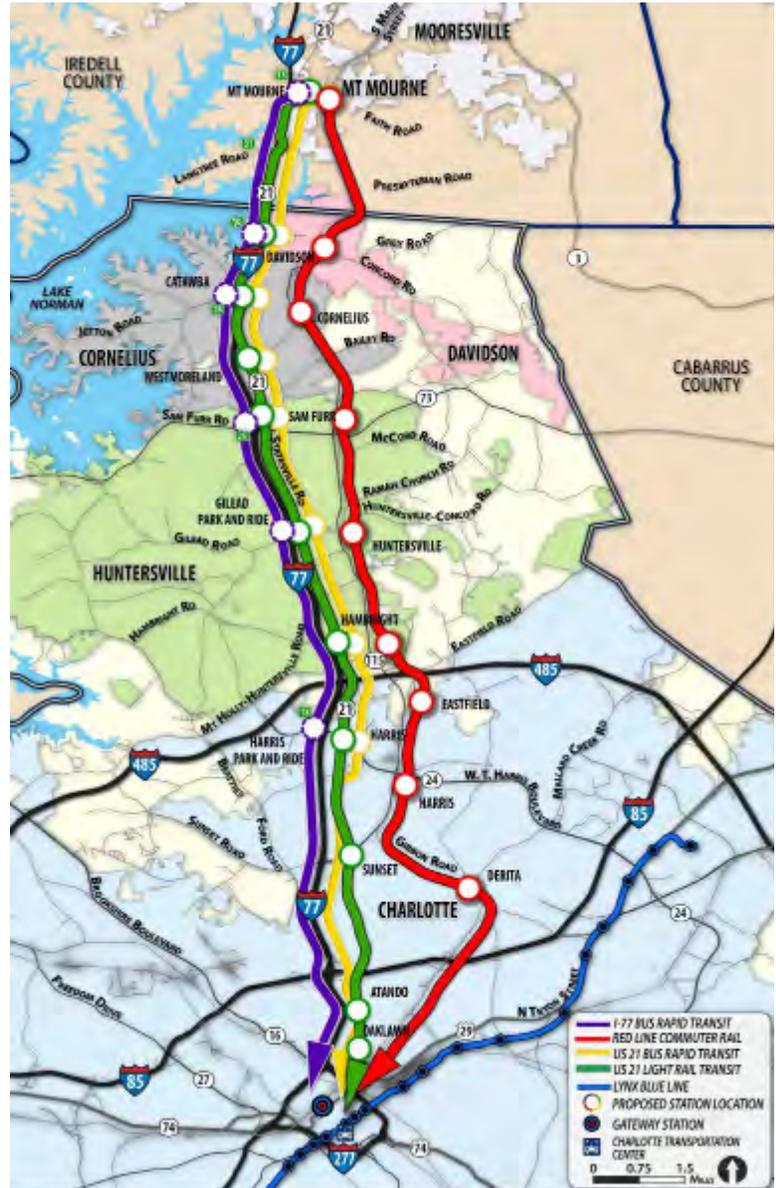
# TRANSIT MOBILITY

## OPPORTUNITIES

- The concurrent North Corridor Transit Alternatives study is looking at viable transit corridors in addition to the existing locally preferred alternative (LPA) that recommends commuter rail service along the Norfolk Southern rail line from Charlotte to Mooresville. Alternatives may include light rail or bus rapid transit (BRT) options.
- The pilot trolley service in Davidson in 2017 was well received by residents and may provide the template for a more formal trolley or local circulator service.
- Recent updates to the CATS bus routes 97 and 99 offer improved local service. 77x Express bus service will be improved with more direct routes to Charlotte with the opening of toll lanes on 77.

## CHALLENGES

- Current management's policy at Norfolk Southern Railroad does not allow passenger rail service on the existing tracks.
- Local bus services on routes 97 and 99 run daily from 6 am to 8 pm every only 30 minutes.
- Express service via the 77x route to Charlotte run at peak times only, 5 am to 9 am and 4 pm to 9 pm. Midday and weekend service is not currently available.



North Corridor Transit Alternatives. (Source: CATS)



## EXISTING CONDITIONS: TRANSIT MOBILITY

- |  |                  |                      |
|--|------------------|----------------------|
| <span style="color: orange;">●</span> CATS Bus Stops       | Davidson College | Parks & Open Space   |
| <span style="color: red;">—</span> Bus Route 77x (Express) | Grocery Store    | Water Body           |
| <span style="color: yellow;">—</span> Bus Route 99 (Local) | School           | Davidson Town Limits |
| <span style="color: blue;">—</span> Bus Route 97 (Local)   | Community Center | Davidson SOI         |
|  | Railroad         | Study Area           |



# TRANSIT MOBILITY

## BUS TRANSIT

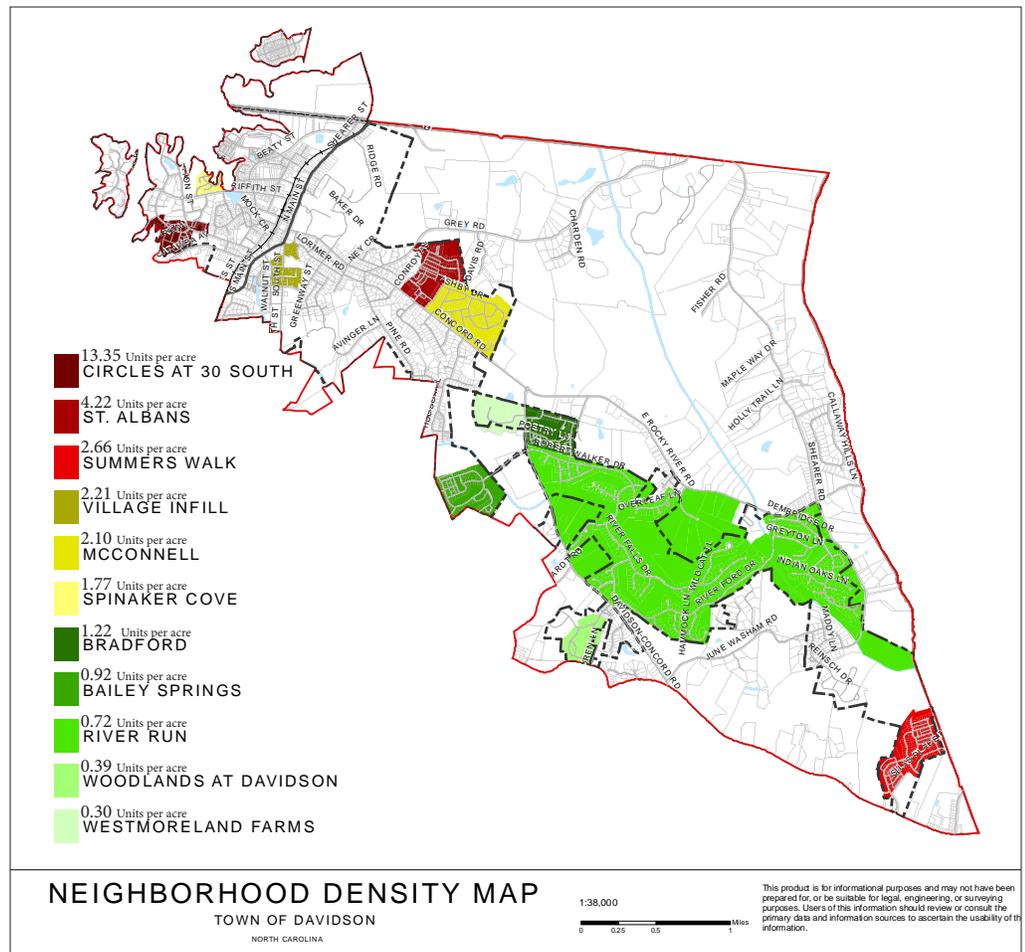
Current transit service in Davidson is provided by Charlotte Area Transit Service (CATS), and is a mix of local and express services. CATS Route 99 (the North Meck Village Rider) provides a circulator loop with all-day service through Davidson's historic downtown and the Gateway Village district, connecting to Cornelius and Huntersville and traveling further south to the Northlake Mall park-and-ride facility. Travel to central Charlotte on this route requires a transfer at Northlake to another CATS local route, although it does operate seven days per week (with weekend service ending in afternoons).

The town is also served by an express transit service, Route 77X (the North Mecklenburg Express), which provides peak-hour service to uptown Charlotte and makes multiple stops through the town before returning to the I-77 corridor. This route operates only on weekdays and in the peak hours. The main Park and Ride area is located at the on-street parking on Jetton Street near Davidson Gateway. When the I-77 toll lanes are completed (early 2019), the

77X bus will use these lanes for express service to Charlotte.

There are many residents of Davidson who could benefit from transit. As a largely residential community with a substantial portion of employment outside of the town, commuting alternatives to driving alone on the I-77/ NC 115 corridor have sufficient appeal and demand for an express bus service to serve the town. Low density development patterns have made traditional transit service more difficult to provide

efficiently within the Town. Residential densities in the town limits average around 2 dwelling units per acre or less in most neighborhoods, such as McConnell, Old Davidson, and River Run. The St. Albans neighborhood and Circles at 30 South are exceptions, at 4 and 13 dwelling units per acre, respectively (see map below for details). Seven dwelling units per acre has been used as a threshold density for supporting traditional bus service. However, transit providers are looking at new technologies and new vehicle



types for transit service *without* a) the adherence to minimum densities; and, b) the relatively high cost of traditional transit operations needed to provide a sufficient level of service.

## HIGH CAPACITY REGIONAL TRANSIT

CATS's 1998 transit system master plan called for a North Corridor commuter rail service operating on Norfolk Southern's track. This service would have included stops in Davidson and Cornelius. As that transit vision has evolved and faced unwillingness from the railroad owner, CATS and its partner agencies are considering other potential concepts and technologies for this corridor's transit, including a bus-based corridor service in the I-77 managed lanes serving similar functions to commuter rail.

CATS is currently conducting an ongoing study of the North Corridor transit options. Recommendations from the study will be incorporated into the 2030 Transit Corridor System Plan. In any scenario, Davidson is well positioned for a station location, with a variety of destinations and mix of land uses within a convenient distance of the town center and Exit 30.

## TRANSIT SHUTTLE SERVICE

In 2017, Davidson operated a pilot limited-service, fare-free shuttle on weekends (Friday and Saturday evenings and Saturday morning) that connected destinations primarily in its downtown. Although a popular service, this trolley was operated solely by the Town with no established long-term funding source. It did demonstrate the demand for short-distance transit service in the town, especially for connection to special events. The Town continues to contract out trolley services for Park and Ride and neighborhood pickup for special events such as Christmas in Davidson and Town Day.



Source: Town of Davidson



# NEW MOBILITY AND TECHNOLOGIES

Technology is quickly changing the way people travel, particularly in urban areas. Mobile devices are making it easier to check transit status in real-time, call-a-ride sharing service, or access a bike share system. These services also create opportunities to integrate modes, making it easier to use more than one mode to complete a trip. Additionally, autonomous vehicles will soon be a regular part of travel options for individuals and transit services. Where does Davidson stand today?

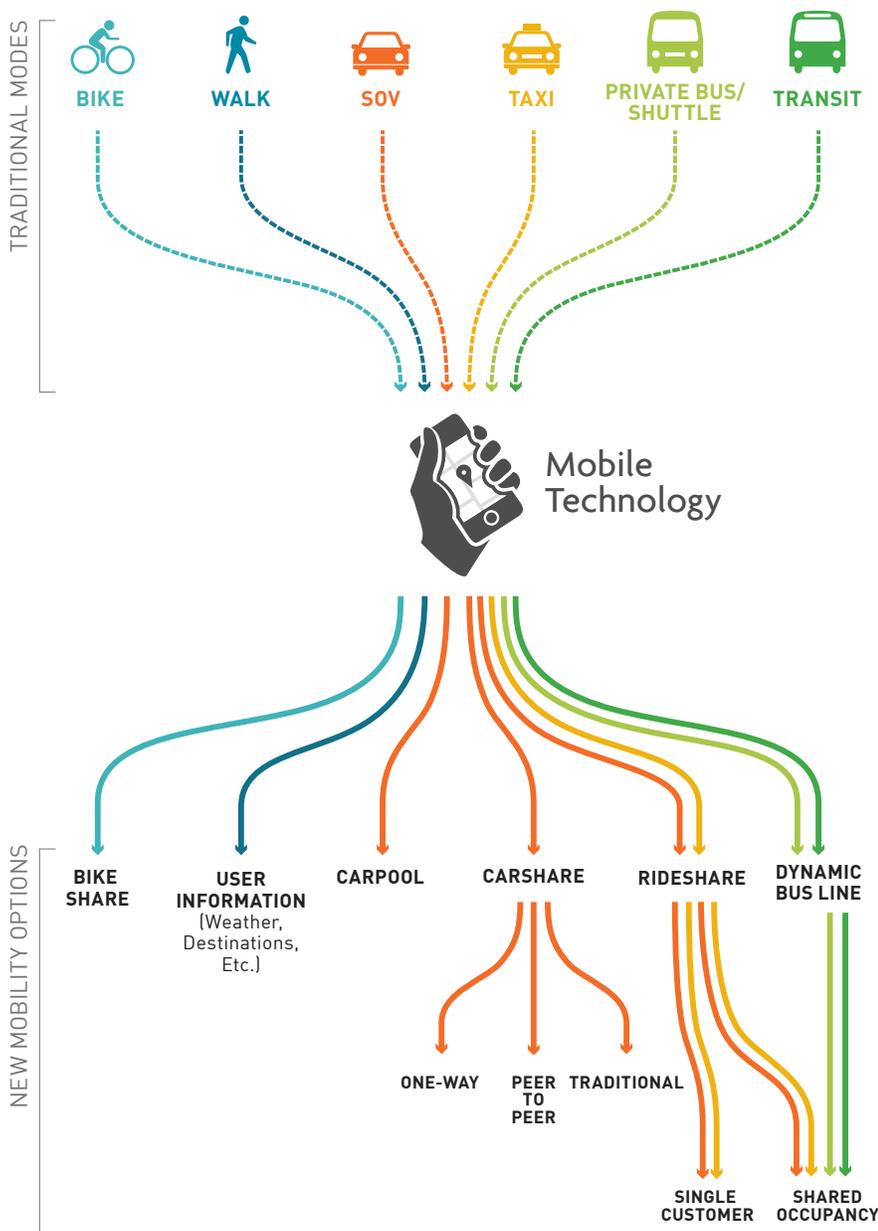
## RIDE-SHARING

Ride-sharing apps, such as Uber and Lyft, are becoming widely used. While ride-sharing has the potential to free up in-demand parking spaces, there are also potential congestion issues as many vehicles stop to pick up or drop off passengers. With no designated areas for drop offs, especially in downtown, oftentimes the vehicles stop within the travel way, which can lead to traffic congestion and unsafe maneuvers by both vehicles and pedestrians.

Ride-share has been a particularly attractive option for airport drop off and pick up for Davidson residents, as the fare each way is in the \$30-40 range, and on-site parking costs a minimum of \$10/day for the daily parking deck.

## CAR-SHARING

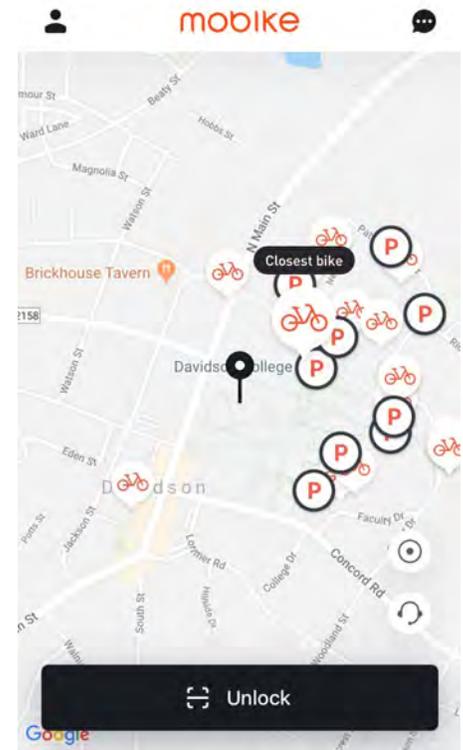
Car-sharing services such as Zipcar or car2go allow users to rent cars by the hour using a mobile app. Davidson College has a ZipCar program for students, faculty, and staff. However, There are currently no other formal car-sharing services or infrastructure in the town. However, peer-to-peer car sharing apps such as Turo are making car sharing widely available, including in the Lake Norman area.



## BIKE-SHARING

Davidson College recently implemented a pilot dockless bike sharing program through Mobike. Bike share users utilize their smart phones to scan a code on each bike, which automatically unlocks the bike. After the bike is locked, users are automatically charged for the time spent on the bike. Dockless bike share bikes do not have to be returned to a fixed bike share station. The College worked with Mobike to provide designated parking areas around campus. Davidson's program was notable for being the first partnership between Mobike and a higher education institution in the US. **The pilot program was discontinued in 2018.**

There are also four dockless VBike bike share bikes in Davidson, which are operated independently by a private company ([www.vbike.com](http://www.vbike.com)). VBikes are available for use by the public through the company's mobile application. Ingersoll Rand has also experimented with bike share bikes on their campus.



Mobike users can see where nearby bikes are located when they open the Mobike app. (Source: Mobike app)



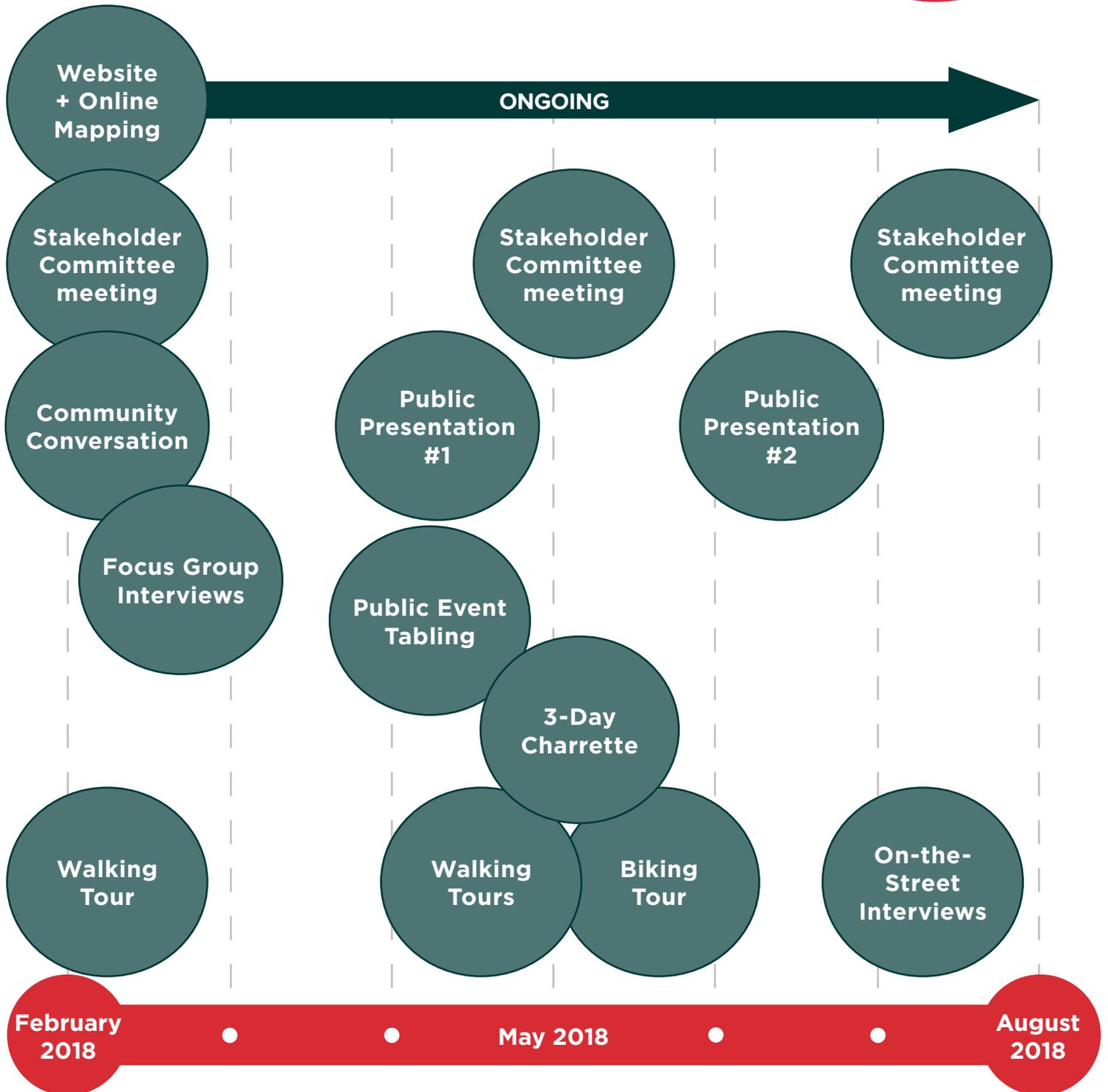
A Davidson College student uses a Mobike on campus. (Source: The Davidsonian)

# 03

## COMMUNITY ENGAGEMENT

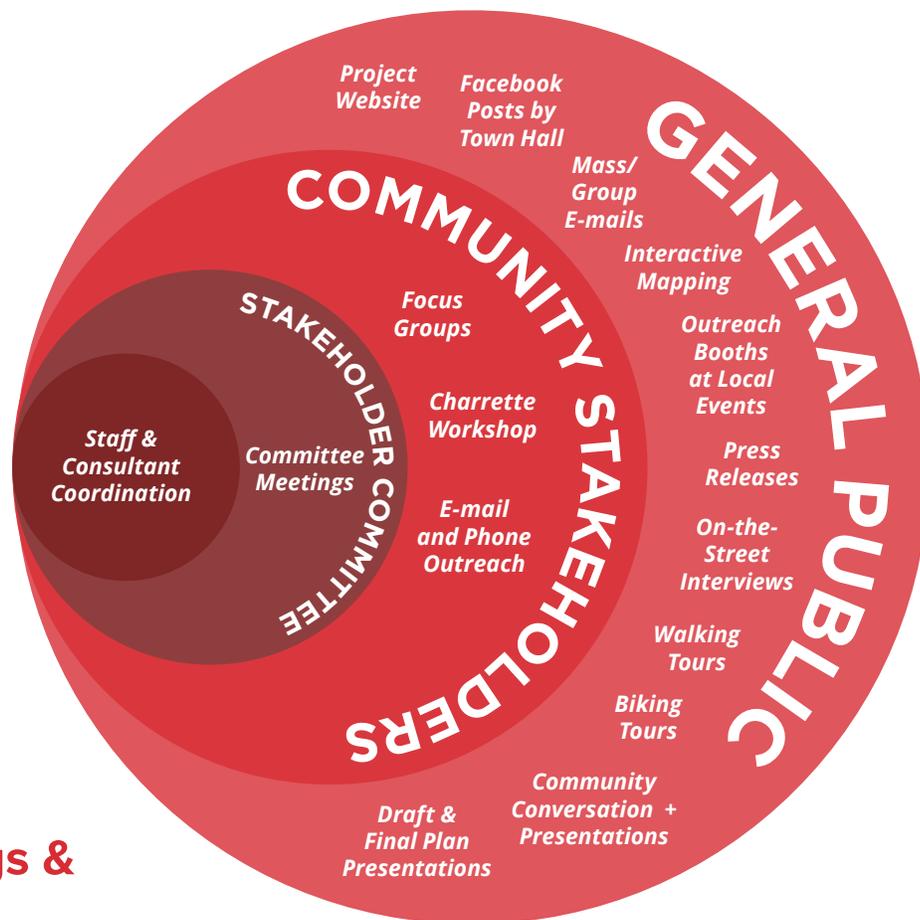
# OVERVIEW

Community input was a fundamental element of this plan and was used to develop project principles, recommendations, and priorities. Public outreach was conducted throughout the project through a variety of means including a **project website, online interactive Wiki-mapping, outreach at community events, a “community conversation” event, public presentations, focus group interviews, walking tours, biking tours, on-the-street interviews, and a 3-day public charrette.**



# ENGAGEMENT HISTORY

Public input was gathered through multiple avenues and outlets in order to gather a broad perspective on mobility issues and needs. This plan will not only affect those who reside in Davidson, but also those who work, own businesses, shop, attend school or college, and visit the town.

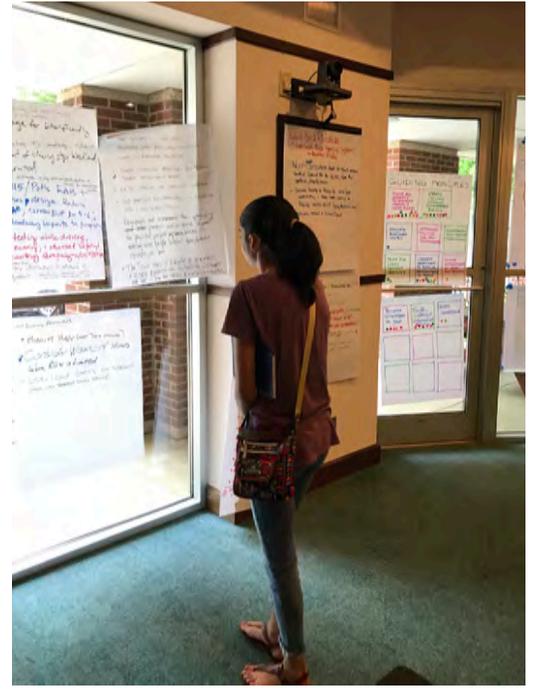


## Key Types of Meetings & Public Input:

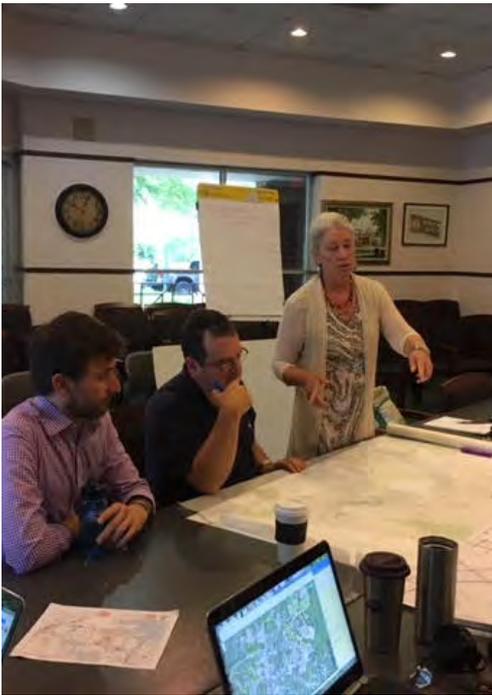
10	STAKEHOLDER COMMITTEE MEMBERS
4	STAKEHOLDER COMMITTEE MEETINGS
35+	FOCUS GROUP MEETING ATTENDEES
70+	ATTENDEES AT COMMUNITY CONVERSATION AND TWO MOBILITY TOPIC PRESENTATIONS
2	PUBLIC OUTREACH SESSIONS AT LOCAL EVENTS
3	DAY COMMUNITY CHARRETTE
100+	INTERACTIVE MAP COMMENTS SUBMITTED
5	WALKING + BIKING TOURS
1	DAY OF ON-STREET INTERVIEWS
4	DRAFT AND FINAL PLAN PRESENTATIONS

# COMMUNITY ENGAGEMENT PHOTO GALLERY

*Images from the public outreach events during the 2018 planning process. Over 300 people participated in the process through the charrette, emails to staff, walking and biking tours, on-street interviews, stakeholder meetings, and community events.*



# PUBLIC INPUT PHOTO GALLERY



Davidson residents discussed current mobility limitations and opportunities with consultant team during the 3-day charrette, held May 2018.

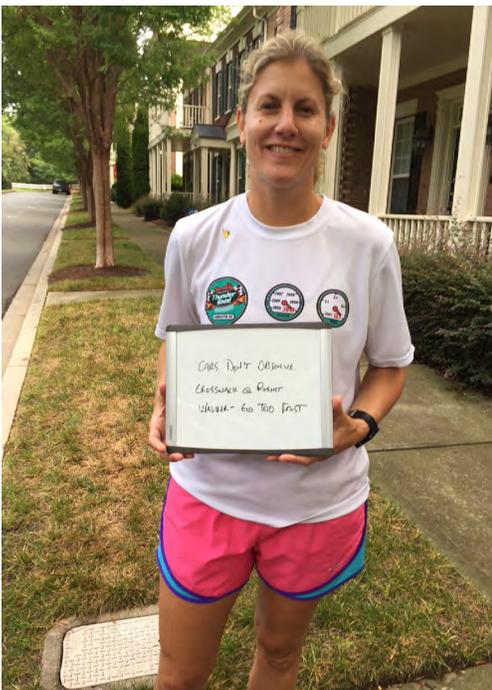
Community presentation on Roads and Greenways, held in May 2018.



Davidson residents on a downtown walking tour with consultant team and guest speaker, held February 2018.



Davidson resident participating in an "on-the-street interview". She reports that "Cars don't observe crosswalk @ Robert Walker- Go Too Fast"



Davidson residents discussing existing conditions and previous recommendations at a public workshop.



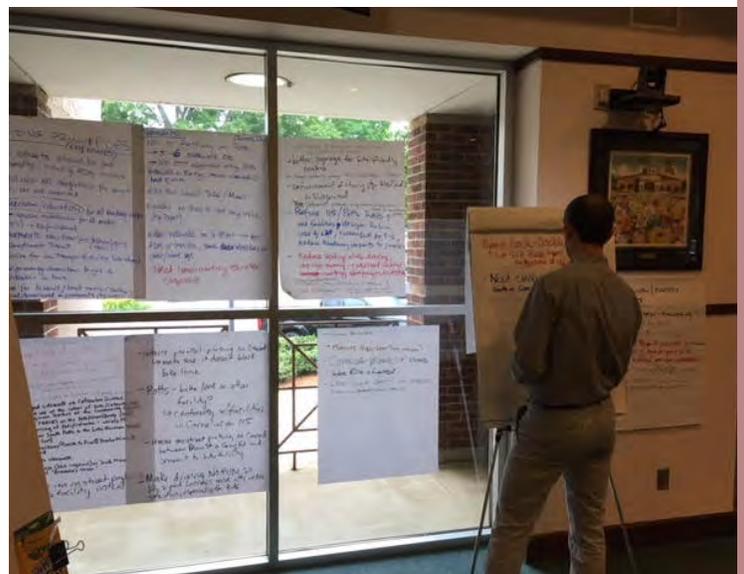
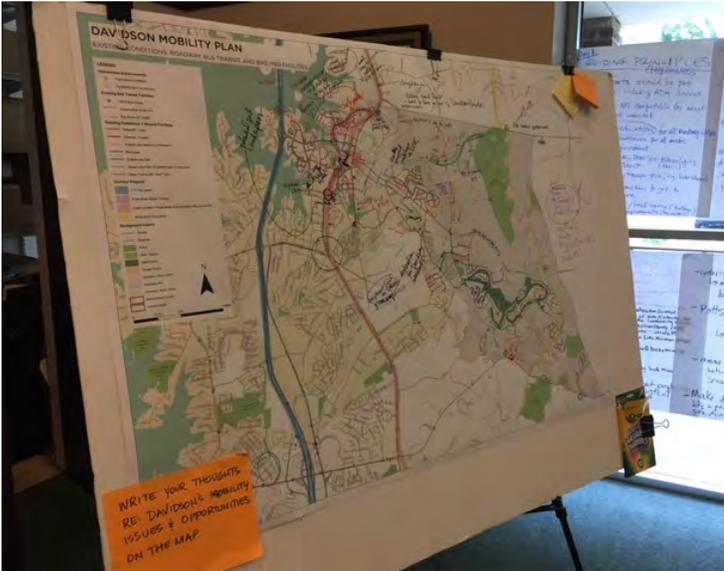
Davidson residents respond to draft mobility recommendations after the presentation held at the end of the charrette.



# THE CHARRETTE PROCESS

A three-day charrette was held May 22-24, 2018. This open-studio workshop was an opportunity for the consulting team to develop recommendations alongside the public, in a collaborative setting. A review of each day's progress was held each evening, with a final presentation and summary of the recommendations on the third day.

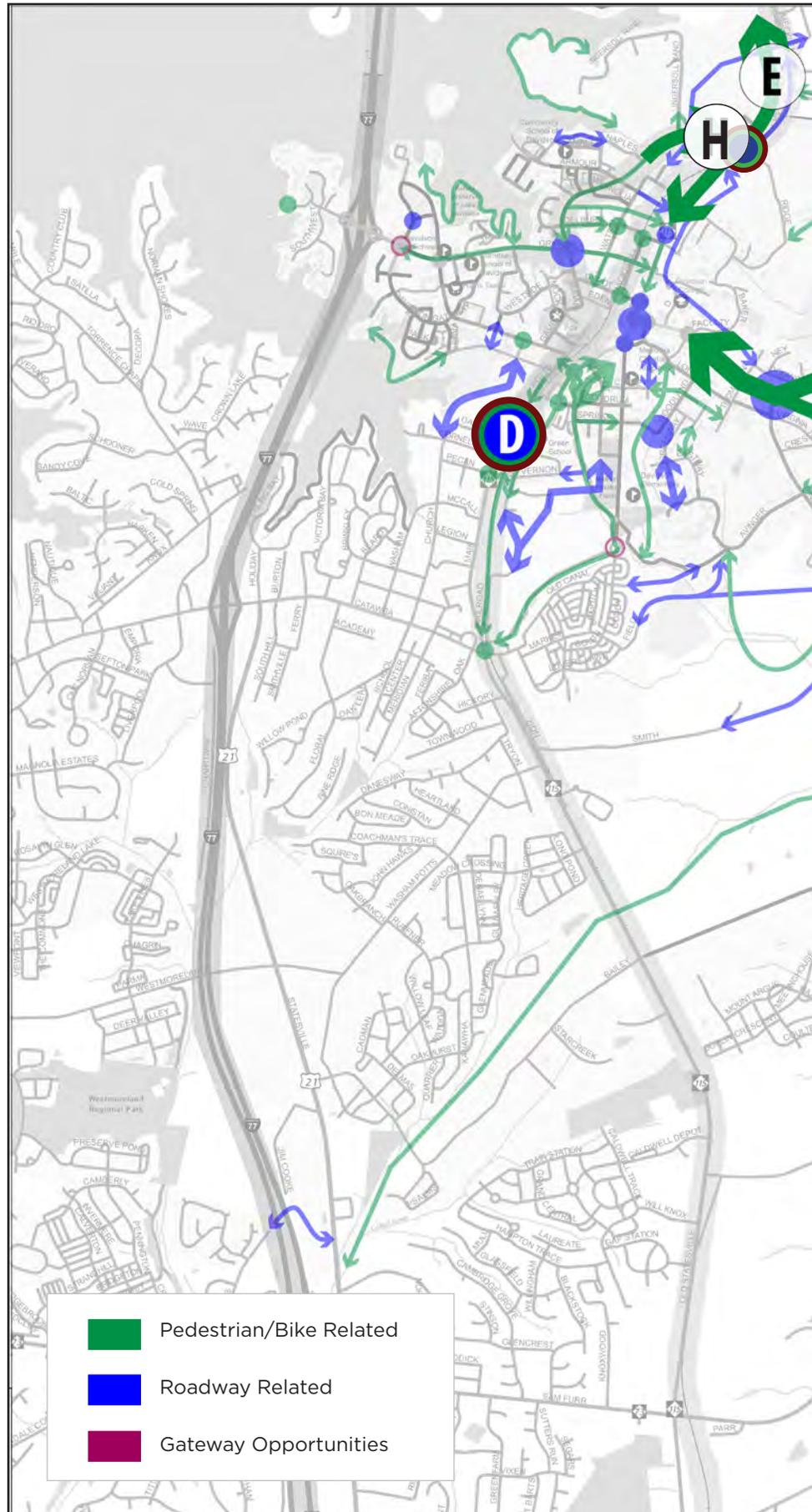
The project team set a goal to reach as many residents as possible and to hear from diverse constituents. The charrette gave the public multiple opportunities to participate, provided avenues for detailed project review, and produced draft recommendations that were reviewed by the steering committee.

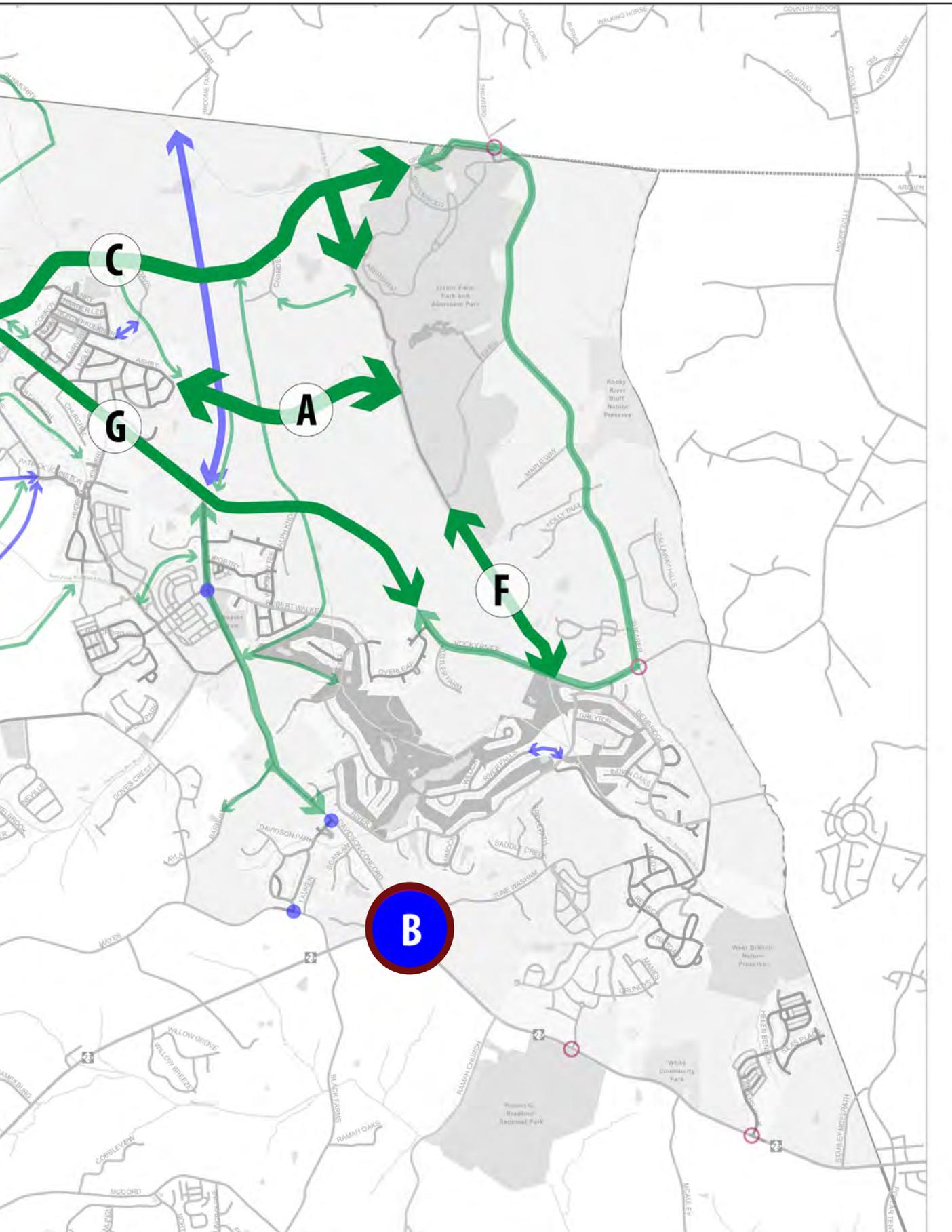


# PUBLIC INPUT MAP

This map depicts the most mentioned areas for improvements identified through public input.

- A: Greenway connection from Fisher Farm to McConnell neighborhood
- B: Intersection improvements at Sam Furr and Davidson-Concord Road
- C: Bike and pedestrian facilities along Grey Road - connecting Downtown and neighborhoods to Fisher Farm
- D: Intersection improvements at Main and Potts and Main and Davidson St. (YMCA entrance) - for cars, bikes, and people
- E: Bike and pedestrian facilities along N. Main Street (NC 115) - connecting downtown Davidson to northern neighbors
- F: Greenway connection from Fisher Farm to Rocky River Road
- G: Bike and pedestrian facilities along Concord Road
- H: Roadway and intersection improvements to Beaty Street/Main Street





# PUBLIC INPUT SUMMARY

The following is a summary of the public input statements that were received through the various forms of public input. This input provided both broad priorities for improving mobility, as well as identifying specific issues and problem areas. The number of comments in each category gives a sense of relative importance of topics to citizens who participated in the process. Providing a better walking and biking environment was a clear priority.

## PROVIDE MORE + ENHANCED PLACES TO WALK, BIKE, RUN

### Sidewalk Maintenance and Repair Issues:

- 10 year plan on sidewalks
- ADA [American Disability Act] accessibility on sidewalks/curb cuts
- Ability to walk to all major destinations
- Sidewalks broken by trees
- Sidewalks on Griffith Street are uneven/cracked
- Sidewalks are too narrow on NC-115 between railroad underpass and Catawba Avenue
- Sidewalks on Davidson-Concord Road are too narrow
- Sidewalk on S. Main Street: widen; make ADA accessible

### Sidewalk/Bikeway Gaps:

- Prioritize pedestrian infrastructure over bike infrastructure
- In Old Davidson, walking, biking, and transit as focus; connect inner town with greenways
- More sidewalks; close gaps
- 35 sidewalk gaps in Village
- Potts Street needs bike/pedestrian facilities (both sidewalks and multi-use path requested)
- Sidewalk and bike facility on Beaty Street; improve existing sidewalk; multi-use path
- Bike/walk path near or along NC-115 to Pine Lake Prep
- Bike/walk facility on NC-115 between Beaty Street/Ridge Road
- Safe crossing/sidewalk to

YMCA, Shops on 115

- Bike or walk access along Davidson-Concord Rd.; from Robert Walker Drive to entrance at River Run; connect to Woodland Street
- Sidewalk on Lorimer Road at library
- Catawba Avenue
- Extend sidewalk from Appolinaire Drive to Robert Walker Drive on west side of Davidson-Concord Road
- Twin Oaks Road needs a sidewalk
- Watson Street- gaps on east side of street
- Delburg Street- multiple gaps
- Jetton Street needs sidewalk on south side of street
- Bike lanes needed on loop consisting of Grey Road, Shearer Road, E. Rocky River Road, Concord Road

**Cultivate a bike-  
and walker-  
friendly town**

## PROVIDE MORE + ENHANCED PLACES TO WALK, BIKE, RUN (continued)

### Signals/intersections Improvements

- Potts Street/Catawba Avenue at community garden: low visibility at crossing
- NC-115/Railroad Underpass: no safe pedestrian or bike facilities
- Regulation needed at Baker Drive/Concord Road
- Crossing signals too short to cross safely in downtown
- Walk signals are confusing, esp. near Flatiron
- Crosswalks on Main Street are not visible (e.g., Depot Street)
- Ridge Road/Beaty Street needs crosswalks and/or signal/control
- Jackson Street/Depot Street needs crosswalks
- Signal at Flatiron is too long to wait as pedestrian: all-way ped-scramble?
- Better crossings on S. Main Street

### More Greenways

- “I love the multi-use paths proposed.”
- Need connection to Fisher Farm/Abersham
- Need path to Davidson Pointe
- Make nature preserve trail wider between Summers Walk and greenway
- Incentivize dirtways in advance of greenway development
- Create bike/pedestrian pathways where street easements exist
- Prioritize bike/ped accessways to Davidson Elementary School

### Bikeways

- Need signage for bike-friendly routes
- Emphasize family-friendly bike facilities (vs. provisions for routes for fitness/sport cyclists)
- Lorimer Road as a bikeway; no on-street parking
- Make sure parking does not block the bike lanes
- Bike lane or other bike facility on Potts? Continue with facilities from NC-115
- Separated bike lanes
- Davidson-Concord Road: traffic is too fast
- Eliminate parking on Concord Road, Main Street, South Street and use space for separated bike lanes

**Biking and walking  
is why I moved to  
Davidson.**

## CREATE MORE EFFICIENT/SAFER MOTOR VEHICLE MOVEMENT

### Invest in roadway projects

- Smith Road (Cornelius) to Pine Road
- Davidson-Concord Road to NC-115 to Presbyterian to Concord
- More roadway options around town

### Better Alternatives to Cars

- Remove on-street parking on Delburg Street to make safer for cyclists
- Prioritize bike/pedestrian investments vs. new roads in neighborhoods
- “Make driving NO FUN so walking and cycling becomes more attractive and safe and fun”
- Where are golf carts allowed in town? Allow LSEV [low-speed electric vehicles]/golf carts on local streets and greenways

### Need More Traffic Calming/ Reduced Speeds

- Beaty Street: speeding and curve it make unsafe for walking and biking
- Catawba Avenue
- Woonerf streets
- Potts Street
- Major roadways at pedestrian crossings: speed humps
- Lorimer Road
- Woodland Street

### Enforcement

- 3-way stop at Woodland Street/Ridgewood Avenue
- Enforce distracted driving
- Stop sign running
- No Trucks on Potts Street

### Intersections

- Turn lane on Main Street at Concord Road
- Refine intersection options at NC-115/Potts Street (reduce size of roundabout or consider signal and new underpass at railroad)
- 3-way stop at Catawba Avenue/Potts Street/Community Garden
- Manage left turns on Potts Street at Jetton Street
- Add left turn lane on Beaty Street at Griffith Street
- Add traffic light at Beaty Street and Armour Street

### Traffic

- CSD carpool traffic should circle through parking lot, not on street (too narrow)
- Consider converting Watson Street to one-way

### Parking

- There is enough parking downtown; people should walk more;
- Charge for parking
- Add parking for greenway and park access; include on maps
- Limit on-street parking on narrow streets (Depot Street, Chairman Blake Lane, Delburg Street)

**I avoid Main Street on foot & car b/c of traffic.**

## EXPAND TRANSIT OPTIONS

### More consistent transit

- A Train
- On evenings/weekends
- Make 99 bus (CATS) run more than once/hour

### Covered bus stops/benches

- Make bus stops more visible on Main Street: covered benches
- Can Davidson College students help design a bench for bus stop in front of the VAC [Belk Visual Arts Center]?

### Education on transit options (e.g., CLT Sprinter, Mall, etc.)

- CATS bus schedules available on campus (paper copies)

### Add Trolley schedule and location to Town app

## IMPLEMENT EDUCATION/ ENCOURAGEMENT/ ENFORCEMENT PROGRAMS

### Need education component

- Education programs on bike/car etiquette
- Courtesy campaign
- Pedestrian awareness campaign so people know it is a walking community and will look for pedestrians

### More bike share

- Use hybrid dock-based system; incentivize docking or locking to fixed objects
- I like Mobikes: visiting parents can use them

### Maps and wayfinding

- Include parking on maps of greenways
- Provide wayfinding for walking and biking routes
- Create a bike/pedestrian suitability map, especially for routes to schools and for seniors

**Restrict carpool traffic to school when buses available**

## OTHER

- Enhance community gateways into Davidson with iconic elements
- Toll lanes are great! Can't wait to reduce my commute time
- Preserve private property; reduce eminent domain
- Street lights

### Open Space

- Preserve greenspace in town
- Increase public access to the lake
- Davidson needs a skate park

**We need expanded transit service to Charlotte (midday, nights, weekends)**

# 04

## MOBILITY RECOMMENDATIONS

# FRAMEWORK FOR MOBILITY

The vision for mobility in Davidson is that the town will be a place where a **balanced and connected network of comfortable facilities for pedestrians, cyclists, transit, and private vehicles** is provided to all residents; where mobility options are efficient, safe, and convenient throughout Davidson; and where pedestrian-friendly design is prioritized in all development projects.

The recommendations in the plan are based on a mobility framework developed through the planning and community input process. This framework emphasizes the efficient movement of people and equitable allocation of street space to accommodate a wide range of users and activities, with **pedestrian access and mobility as the top community priority**.

Using this framework, recommendations for pedestrian, bicycle, transit, and vehicular mobility are presented in this chapter. All **recommendations are rooted in previous planning efforts and the public process** of this plan to reflect the needs and wants of the people of Davidson. The framework recognizes that NCDOT and developers will be primary partners for new roadway development.

Walking



Bicycling



Riding Transit



Driving



# PROJECT PRIORITIZATION

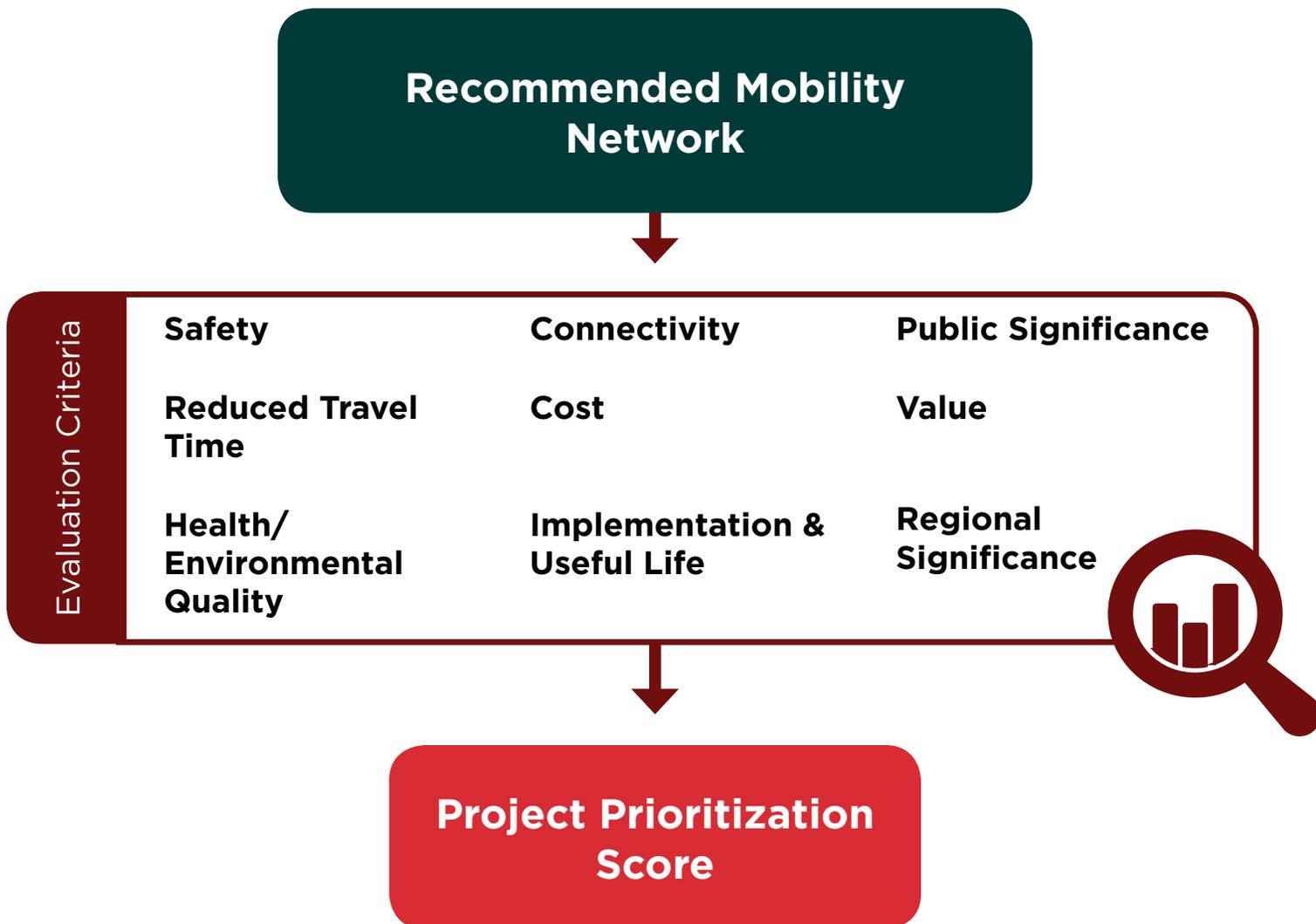
This plan is designed to serve as the Comprehensive Transportation Plan for the Town of Davidson, and as such its recommendations aim to help community members move around the community safely, efficiently, and conveniently while maintaining and enhancing the quality of life for which they come to live, work, and play in Davidson.

Full implementation of the recommended network improvements included in this plan will take many

years and require a significant amount of investment. In order to identify high priority initiatives, the project team developed a methodology to determine priority initiatives, as shown in the graphic below. The methodology can be used to revisit the priority project list on a regular basis to reevaluate a specific project's importance as the Town adjusts its goals and objectives (such as through the development and adoption of the new Comprehensive Plan). In this way the Town

can ensure that the priority list achieves the desired goals while responding to changes in the growth of the Town and funding availability over time.

Using the criteria shown below, the Stakeholder Committee created a prioritized list of projects for pedestrian, bicycle, intersection improvement, and roadway projects. This chapter outlines these priority projects, as well as related project recommendations for each travel mode.



The Stakeholder Committee and Planning Department developed the prioritization criteria in order to score projects on factors that collectively contribute to maintaining a high quality of life for residents and visitors. The table below details the

criteria on which each project was evaluated for each prioritization factor.

The prioritization process was used to score **sidepath, greenway, roadway, intersection, and bikeway projects** (sidewalk projects

have previously been prioritized in the 2013 Davidson Walks and Rolls: Active Transportation Master Plan and were not re-scored for this plan). The scored results of the prioritization process are summarized in Appendix D.

PRIORITIZATION FACTOR	CRITERIA
1. SAFETY (5 points)	<ul style="list-style-type: none"> <li>a. Within 1/4 mile of a crash</li> <li>b. Dedicated separate facility (bicycle or pedestrian)</li> <li>c. Adds traffic calming elements to new or existing street</li> <li>d. Improves intersection crossing for pedestrians and cyclists</li> <li>e. Increases/promotes education, awareness, or visibility (e.g., signage, unique design, frequency of presence leads to better anticipation)</li> </ul>
2. REDUCED TRAVEL TIME (2 points)	<ul style="list-style-type: none"> <li>a. Intersection improvement for managing vehicular traffic</li> <li>b. New connection parallel to congested collector / arterial corridor</li> </ul>
3. HEALTH/ ENVIRONMENTAL QUALITY (2 points)	<ul style="list-style-type: none"> <li>a. Active Transportation Project (Bike / Pedestrian / Transit Project)</li> <li>b. Mitigates against increasing pressure/needs for parking in downtown by reducing necessity or desirability of 1-2 occupant vehicles</li> </ul>
4. CONNECTIVITY (3 points)	<ul style="list-style-type: none"> <li>a. Commercial Connections: within 1/4 mile from a mixed-use land use (Apartment, non-residential, Office, Retail, Vertical Mixed Use, Commercial Node)</li> <li>b. School Connections: within 1/4 mile of school</li> <li>c. Park / Greenway Connections: <ul style="list-style-type: none"> <li>• Within 1/4 mile of park</li> <li>• Connects to existing greenway</li> <li>• Connects to an existing sidewalk</li> </ul> </li> </ul>
5. COST (1 point)	<ul style="list-style-type: none"> <li>a. Lower cost facility (e.g. bike lanes, side paths, multi-use paths, sidewalks, striping...) under \$800,000*</li> </ul>
6. IMPLEMENTATION & USEFUL LIFE (2 points)	<ul style="list-style-type: none"> <li>a. Over 70% right-of-way acquired</li> <li>b. Will not be eliminated or destroyed by development in fewer than 5 years after completed.</li> </ul>
7. PUBLIC SIGNIFICANCE (2 points)	<ul style="list-style-type: none"> <li>a. Included in at least two (2) previous plans or more</li> <li>b. Identified as a “most-mentioned” project through public input analysis</li> </ul>
8. VALUE (2 points)	<ul style="list-style-type: none"> <li>a. Grants and Public/Private Partnerships to share costs are available.</li> <li>b. Not currently addressed in other/third-party plans; or not reasonably anticipated to be constructed by others within five (5) years.</li> </ul>
9. REGIONAL SIGNIFICANCE (3 points)	<ul style="list-style-type: none"> <li>a. Connects to facility outside of municipal/Sphere of Influence (SOI) limits.</li> <li>b. Connects to NC and/or US highways or interstate highways.</li> <li>c. Anticipates and seeks to proactively address known or reasonably expected increased traffic volume and land development pressures from neighboring jurisdictions and/or transportation system plans.</li> </ul>

\*\$800,000 is assumed to be the threshold cost as projects under this cost are not recommended by the CRTPO for state/ federal funding due to the number of steps required to administer a state- and federally-funded project.

# PRIORITY PROJECT LIST

In addition to the quantitative prioritization scoring described on the previous pages, the Mobility Plan Stakeholder Committee identified top priority projects based on input gathered during the course of the Mobility Plan study. The following Priority Project List highlights 13 projects that the Stakeholder Committee has put forward for consideration by the Town Board of Commissioners for near-term funding and implementation. These projects are mapped on pages 72 and 73.

RANK	PROJECT DESCRIPTION	SAFETY	REDUCED TRAVEL TIME	HEALTH/ENVIRONMENTAL QUALITY	CONNECTIVITY	COST	IMPLEMENTATION & USEFUL LIFE	PUBLIC SIGNIFICANCE	VALUE	REGIONAL SIGNIFICANCE	TOTAL SCORE
1	SIDEPATH along BEATY STREET from NORTH MAIN STREET to GRIFFITH STREET (see page 93 for details) <sup>1</sup>	3	0	2	3	0	2	2	2	1	15
2	WEST BRANCH ROCKY RIVER GREENWAY connecting the existing WEST BRANCH RR GREENWAY at FISHER FARM PARK to the funded GREENWAY west of NARROW PASSAGE	2	0	2	1	0	1	1	2	0	9
3	SIDEPATH along GREY ROAD from WOLFE STREET to SHEARERS ROAD (see page 94 for details) <sup>2</sup>	3	0	2	2	0	2	2	2	2	15
	GREENWAY from MCCONNELL NEIGHBORHOOD to FISHER FARM PARK (see page 95 for details) <sup>2</sup>	1	0	2	1	0	1	2	2	0	9
4	INTERSECTION IMPROVEMENT at N MAIN STREET, BEATY STREET, and RIDGE ROAD (see page 107 for details)	2	0	0	2	0	1	1	2	2	10
5	WALNUT STREET-to-VERNON DRIVE BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	EASTWAY STREET-to-SOUTH STREET BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	DOGWOOD LANE-to-CONROY AVENUE BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12
	HILLSIDE DRIVE-to-CATHEY STREET BIKE-PED CONNECTOR <sup>3</sup> (see page 96 for details)	2	0	2	3	1	1	1	2	0	12

**NOTES:**

<sup>1</sup> Where denoted, detailed project cutsheets have been developed and can be found on referenced page.

<sup>2</sup> These two projects are ranked as one because they are two options that are interchangeable in terms of the what they provide and therefore only one would probably be built.

<sup>3</sup> These projects are ranked as one, as they similar projects that could be implemented individually or together as opportunity allows.

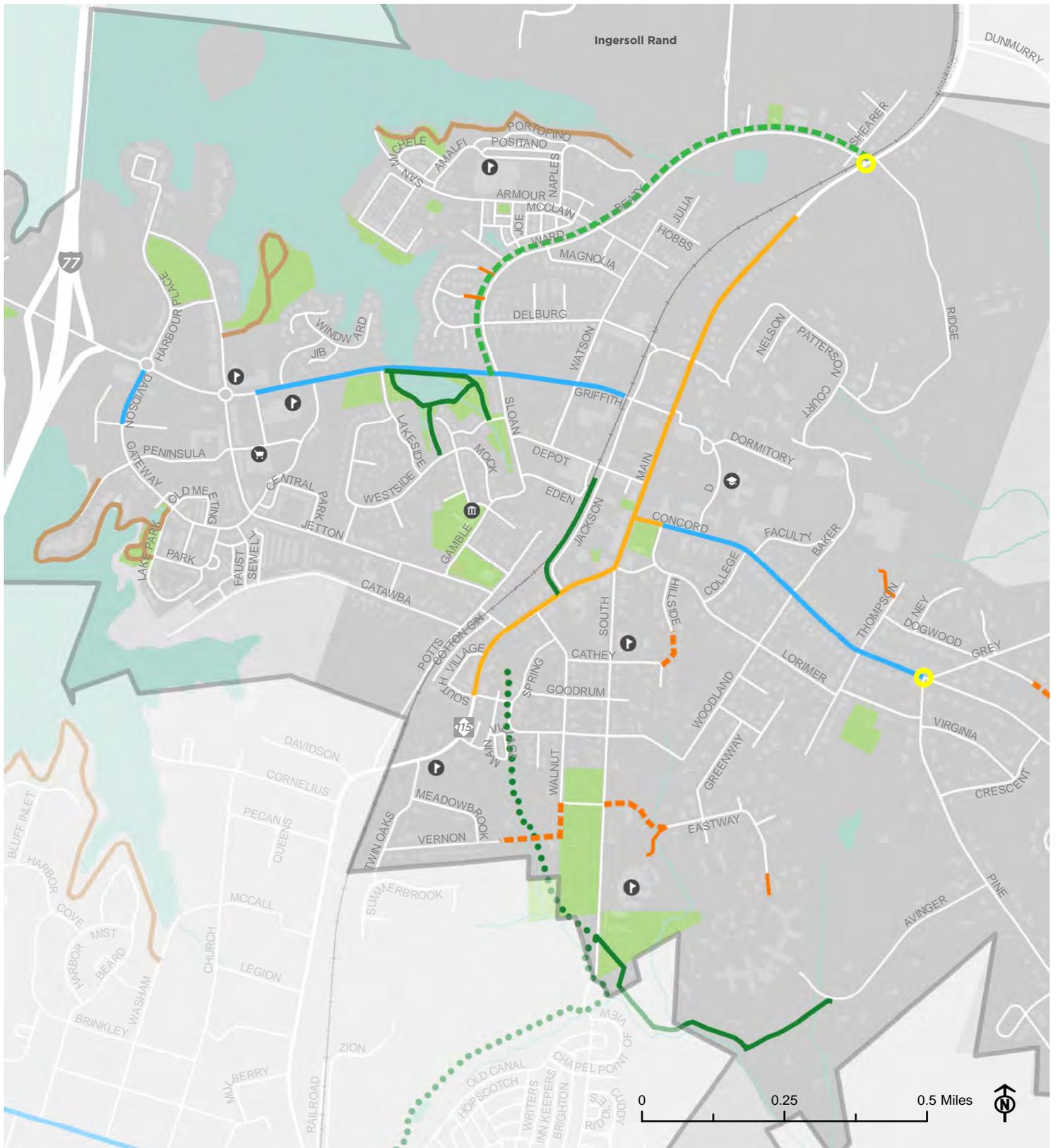
RANK	PROJECT DESCRIPTION	SAFETY	REDUCED TRAVEL TIME	HEALTH/ENVIRONMENTAL QUALITY	CONNECTIVITY	COST	IMPLEMENTATION & USEFUL LIFE	PUBLIC SIGNIFICANCE	VALUE	REGIONAL SIGNIFICANCE	TOTAL SCORE
6	SIDEWALK INFILL PROJECTS (various locations)	-	-	-	-	-	-	-	-	-	-
7	INTERSECTION IMPROVEMENT at SAM FURR ROAD/NC 73 and DAVIDSON-CONCORD ROAD (see page 108 for details)	2	1	0	0	0	1	1	1	3	9
8	INTERSECTION IMPROVEMENT at CONCORD ROAD, GREY ROAD, and PINE ROAD (see page 109 for details)	3	1	0	1	0	2	1	2	2	12
9	SIDEPATH along DAVIDSON-CONCORD ROAD from the existing sidepath to SAM FURR ROAD/NC 73 (see page 97 for details)	2	0	2	1	0	2	1	2	2	12
10	WEST BRANCH NATURE PRESERVE GREENWAY from the existing WEST BRANCH ROCKY RIVER GREENWAY to HELEN BENSON BOULEVARD	2	0	2	2	0	1	0	2	0	9
11	DAVIDSON EAST GREENWAY from JULEES WALK to BRADFORD REGIONAL PARK	2	0	2	2	0	1	1	2	2	12
12	DAVIDSON-CONCORD ROAD EXTENSION from CONCORD ROAD/ROCKY RIVER ROAD to PRESBYTERIAN ROAD (see page 110 for details)	2	1	2	2	0	1	1	2	2	13
13	BIKE LANES (various locations)	-	-	-	-	-	-	-	-	-	-

NOTES:

<sup>1</sup> Where denoted, detailed project cutsheets have been developed and can be found on referenced page.

<sup>2</sup> These two projects are ranked as one because they are two options that are interchangeable in terms of the what they provide and therefore only one would probably be built.

<sup>3</sup> These projects are ranked as one, as they similar projects that could be implemented individually or together as opportunity allows.



# PRIORITY PROJECTS

## Proposed Facilities

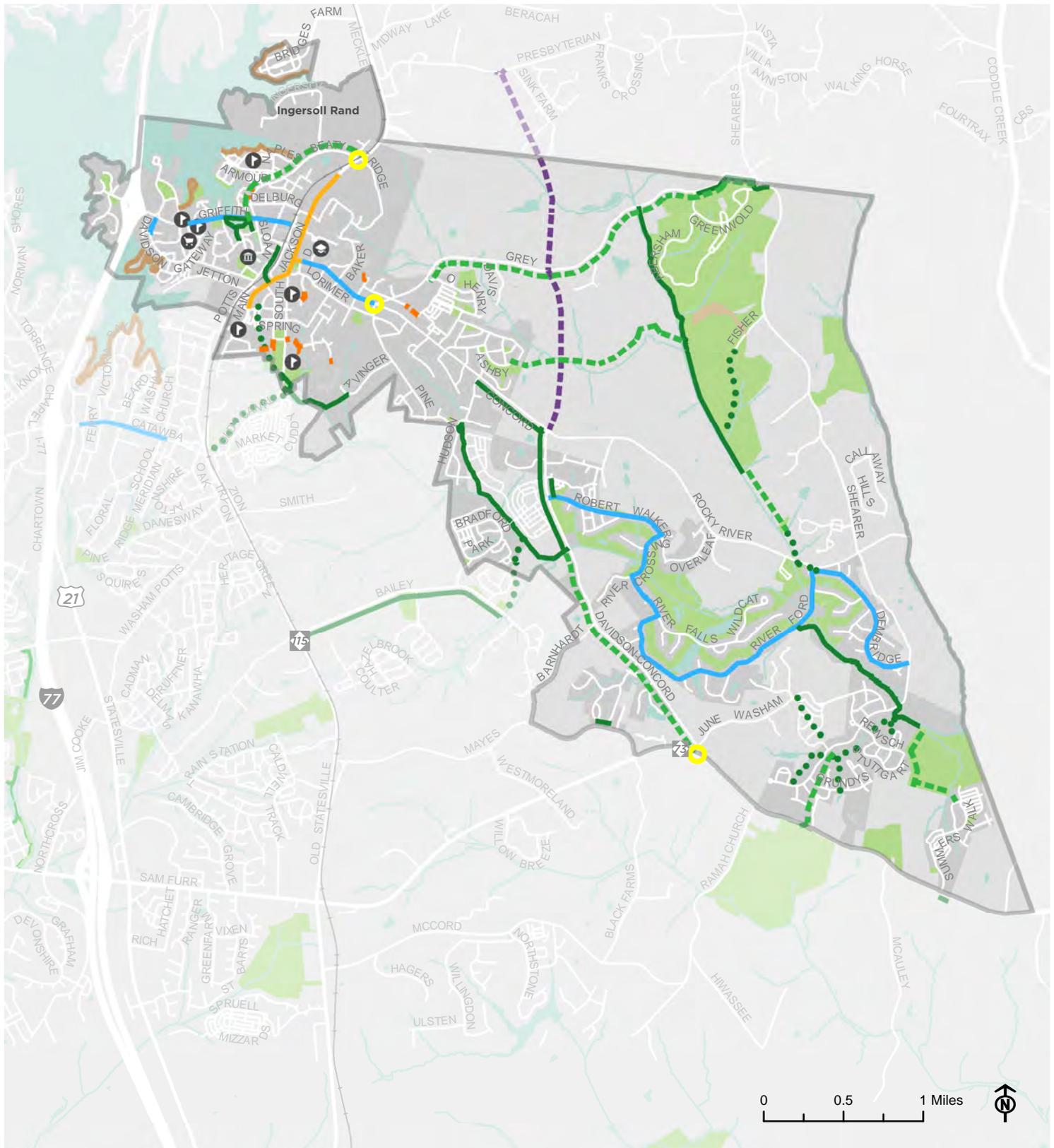
- Intersection Improvement
- Multi-Use Path
- Bike-Ped Connector
- New Roadway Connection

## Existing Facilities

- Greenway
- Greenway (Funded)
- Bike-Ped Connector
- Shared Lane Marking
- Bike Lane
- Unpaved Trail

- Davidson College
- Grocery Store
- School
- Community Center
- Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area



# PRIORITY PROJECTS

## Proposed Facilities

- Intersection Improvement
- - - Multi-Use Path
- - - Bike-Ped Connector
- - - New Roadway Connection

## Existing Facilities

- Greenway
- ● ● Greenway (Funded)
- Bike-Ped Connector
- Shared Lane Marking
- Bike Lane
- Unpaved Trail

- Davidson College
- Grocery Store
- School
- Community Center
- Railroad

- Parks & Open Space
- Water Body
- Davidson Town Limits
- Davidson SOI
- Study Area



# SIDEWALK PRIORITIZATION

## SIDEWALK PRIORITY PROJECTS

The 2013 *Davidson Walks and Rolls: Active Transportation Master Plan* provides a comprehensive list of sidewalk recommendations for the Town of Davidson. The Town has done an outstanding job of implementing these recommendations over the past 5 years with new or funded pedestrian projects built by the Town, NCDOT, or private developers (e.g., Jackson Street, I-77 bridge, Mock Circle/Mock Road, Grey Road, Watson Street, as well as pedestrian signal and crossing improvements). There remain many sidewalk gaps in Davidson’s network, however.

**Priority sidewalk sections from the Walks and Rolls plan that have not been completed or funded and remain priorities are highlighted in yellow** in the table at right.

This plan proposes that the Town formally adopt a sidewalk infill prioritization methodology in order to address these remaining gaps in a systematic and equitable fashion. Further details can be found on the following page.

Project Name	Feet	Miles	Recommendation	Priority
Beaty St (Griffith - N. Main)	3,726	0.71	Phase I: South side 5' sidewalk construction	High / Near-term
	5,229	0.99	Phase II: Replace existing north side sidewalk with 10' sidepath	
Main St (Beaty - South Town limits)	4,045	0.77	N Main: 5' sidewalk construction on east side (Ridge to existing sidewalk end)	High / Near-term
	1,850	0.35	S Main: Sidewalk replacement (Catawba to Twin Oaks/Town Boundary)	
Main St Sidepath (Glasgow to Chariman Blake)	2,000	0.38	Widen sidewalk between Griffith and Glasgow to 10'	High / Near-term
Griffith St (Spinaker Cove Dr-Beaty St)	1,755	0.33	5' sidewalk construction	High / Near-term
Concord Rd (N. Main - Dowling St) <sup>1</sup>	5,969	1.13	5' sidewalk construction on north side	High / Near-term
Potts St (S. Main - End of existing sidewalk)	1,855	0.35	5' sidewalk construction	High / Near-term
Watson (Delburg-Griffith)	601	0.11	5' sidewalk construction on east side	High / Near-term
DCR - Sidepath	4,299	0.81	10' sidepath construction on the south side of DCR.	High / Near-term
Jackson St (S. Main - Delburg)	2,430	0.46	Alternative 1: East side 5' sidewalk construction Alternative 2: 10' sidepath construction on East side	High / Near-term
Griffith St (Beaty St - Main St)	1,660	0.31	5' sidewalk construction	Medium / Medium-term
Griffith St (Portside - Spinaker Cove Dr)	3,300	0.63	5' sidewalk construction	Medium / Medium-term
	500	0.94	Bridge Retrofit	
Delburg (Beaty-Watson)	1,103	0.21	Sidewalk construction (side of the street TBD by City Public Works)	Medium / Medium-term
Jackson St (S. Main - Delburg)	2,430	0.46	5' sidewalk construction on West Side	Low / Long-term
Jetton St (Davidson Gateway - Potts)	3,666	0.69	Sidewalk construction on both sides	Low / Long-term
Grey Rd (Concord - Wolfe)	1,736	0.33	South side 5' sidewalk construction	Low / Long-term
Concord Rd (N. Main - Davidson Concord)	4,299	0.81	Sidewalk replacement to 10' sidepath between Kimberly & Pine	Low / Long-term
Main St Sidepath (Glasgow to Chariman Blake)	2,000	0.38	Widen path along entire length to 10-12' and enhance intersections and signage for bike/ped use	Low / Long-term

*Priority sidewalk projects from the Davidson Walks & Rolls Plan. Projects not constructed or funded are highlighted in yellow.*

## SIDEWALK INFILL PRIORITIZATION

While this plan identifies a few top priority projects, there are a number of sidewalk gaps that remain in Davidson's network. The Town should formally adopt a sidewalk infill prioritization methodology in order to address these remaining gaps in a systematic and equitable fashion (Action 1.4, see page 77).

The methodology can be similar to that used for prioritizing projects within

this plan as described in the pages above, the method used in the Walks and Rolls plan, or a simplified version as described in the graphic below.

The development of the sidewalk prioritization methodology should be informed by a public input process that will ensure that the prioritization criteria reflect the needs and values of Davidson residents. By formalizing this process, the Town will be able to develop a more transparent, systematic, and objective approach to identifying priority projects for implementation.

Some key considerations that should be addressed when developing the prioritization process will be:

- How to weigh competing demands (e.g., whether to install sidewalks on the second side of a high-pedestrian-traffic street that already has a sidewalk on one side or to install a sidewalk one side of a lower-pedestrian-traffic street)
- How to balance immediate needs related to safety and access (i.e., ADA compliance) against long-term network expansion.

### SIDEWALK INFILL PRIORITIZATION

The prioritization criteria are based upon best-practices and are used to score project recommendations. The prioritization process was designed to be an objective, data-driven process, using proximity to the criteria to assign scores. Using this method, projects that meet more criteria receive highest scores, corresponding to the highest priority projects



### CONNECTIONS TO ACTIVITY CENTERS

By increasing pedestrian accessibility to major activity centers (e.g. parks, major retail areas, employment centers, etc.), the Davidson Mobility Plan recommendations can reduce traffic congestion and support residents and visitors who choose to bicycle or walk for transportation. Projects that connect to these centers qualify for this prioritization criteria.



### PUBLIC INPUT

Davidson has engaged the public through public workshops, stakeholder meetings, and an online mapping exercise. Projects with demonstrated public endorsement qualify for this prioritization criterion.



### PROJECT COST

Sidewalk facilities range in project readiness and construction cost. Sidewalk and pedestrian projects that require minimal changes to the built environment score higher on this criterion.



### PROXIMITY TO SCHOOLS

To encourage more students to walk and bicycle to school, proposed facilities that connect to, or travel within a quarter mile of K-12 schools (public and private) qualify for this prioritization criterion.



### CONNECTIVITY TO EXISTING PEDESTRIAN FACILITIES

Extending the existing network to create longer continuous routes will result in a more connected system as it expands versus implementing isolated and disconnected projects. Facilities that connect to an existing trail or sidewalk qualify for this scoring criterion.



### EQUITY

Areas with high concentrations of seniors, youth, people with disabilities, and low income households or households without cars, typically have higher rates of walking and bicycling, and are usually more underserved when it comes to existing infrastructure. US Census data is used, and projects that serve areas with a high concentration of historically underserved populations score more points than areas with lower concentrations of these populations. Included data cover age, race, income, educational attainment, Limited English Proficiency (LEP), and access to a private vehicle.



### PEDESTRIAN AND BICYCLE CRASHES

Projects that include corridors or intersections with higher rates of pedestrian- and bicycle-involved crashes (according to data from the past five years) score higher than those where no crashes have occurred.

Example sidewalk infill prioritization methodology



# PEDESTRIAN MOBILITY

## BY THE NUMBERS

Davidson's Vision for Pedestrian Mobility, when fully realized, will include:

# 50+

*Miles of Sidewalks*

# 26

*Miles of Greenways and Trails*

# 21

*Miles of Sidepaths*

# 2

*Miles of Bike-Ped Connectors*

# 10

*Miles of new sidewalks and pathways in the Town by 2023*

## WALKING GOALS

**Maintaining and enhancing Davidson as a pedestrian-oriented community is the highest priority mobility goal for Davidson citizens.** The envisioned pedestrian network is guided by the Town's [Mission Statement](#) ("pedestrian and bicycle orientation"), Mobility Plan Guiding Principles, previous planning efforts, and public input to achieve the following goals & objectives:

- Make ALL streets pedestrian-friendly and accessible to all
- Connect greenways to popular destinations town destinations
- Reduce pedestrian-involved crashes
- Continue to implement the Walks & Rolls Plan
- Implement five high priority pedestrian projects by 2021
- Fill gaps in the sidewalk network
- Enhance existing sidewalks with streetscaping and maintenance
- Improve ADA accessibility
- Provide safer and more frequent crossings
- Enhance safe crossings through measures such as high visibility markings, RRFBS (rectangular rapid flash beacons) and HAWK (High-Intensity Activated crossWalk) signals where context-appropriate; and
- Improve and expand greenway and trail network for transportation, recreation, and exercise.



## PROJECT TYPES

To accomplish these goals, this plan identifies the following pedestrian project types:

- **Sidewalks** to fill key connectivity gaps identified in the 2013 Davidson Walks and Rolls and this plan.
- **Greenways** along key natural and off-road corridors.
- **Sidepaths** (multi-use pathways for walkers and cyclists) along major roads.
- **Bike-Ped Connectors** that connect pedestrian and bicycle facilities across short distances, usually a retrofit solution to connect two streets or pathways.
- **Intersection and Crossing improvements** for people walking.

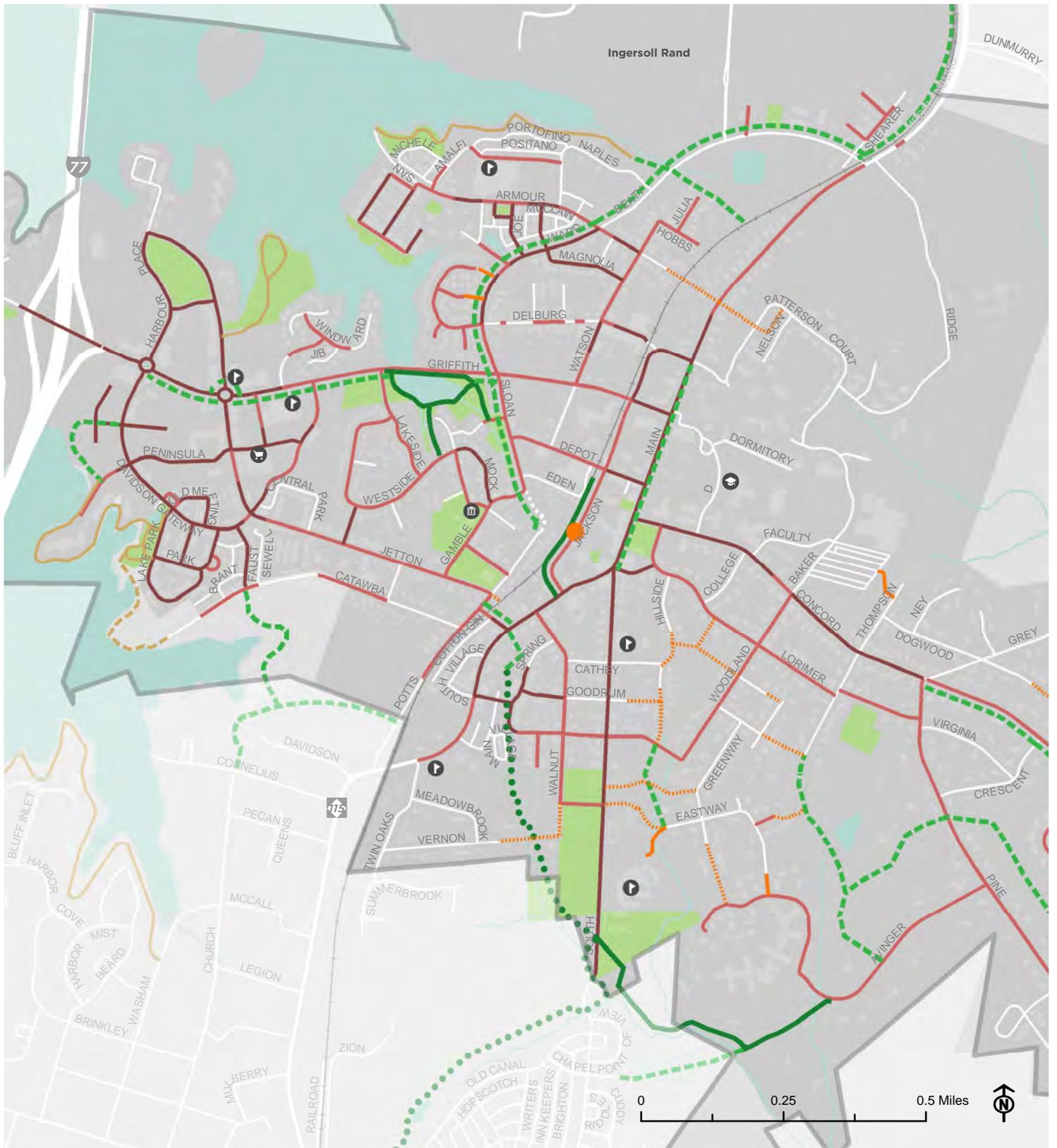


*Pedestrian infrastructure will include a variety of improvements from sidewalks to greenways and intersection improvements.*

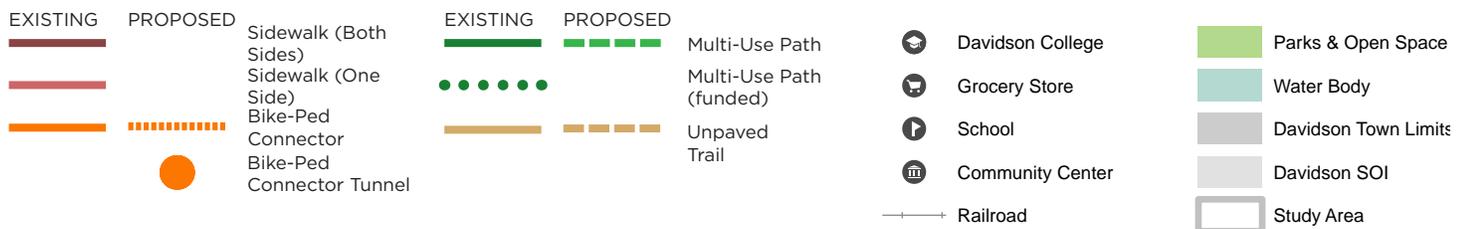
## ACTION STEPS

Constructing greenways and shared use paths, and retrofitting streets with sidewalks can have significant costs. Action steps for getting these projects built are outlined below.

- 1.1. Include pedestrian and greenway improvement projects in the local Capital Improvement Program (CIP), increasing consistent year-to-year funding levels.
- 1.2. Evaluate a cost-share program for sidewalk maintenance to ensure sidewalk repair is implemented equitably.
- 1.3. Increase minimum sidewalk width on major roads (e.g., Main Street/NC-115, Griffith Street, Concord Road, etc; and future roadway types “Parkway” and “Urban Avenue/Boulevard” in the Planning Ordinance) and other arterial or collector type streets with at least 3,000 cars/day (e.g., Potts, Jetton, Beaty) to 6-foot minimum.
- 1.4. Develop/implement a sidewalk infill prioritization methodology based on recommendations in this plan and previous plans (see page 75 for more details).
- 1.5. Install more consistent crosswalk treatments throughout town, especially at priority crossings identified on page 85.
- 1.6. To increase readiness for grant funding, develop preliminary plans (30% construction drawings) for priority sidewalk projects. This action will also help leverage the recently approved bond monies to be used as an effective match for larger grants.
- 1.7. Update Planning Ordinance to reflect recommendations for advisory shoulder and sidepath design standards as detailed on page 81 and 83, respectively.



## RECOMMENDED PEDESTRIAN NETWORK







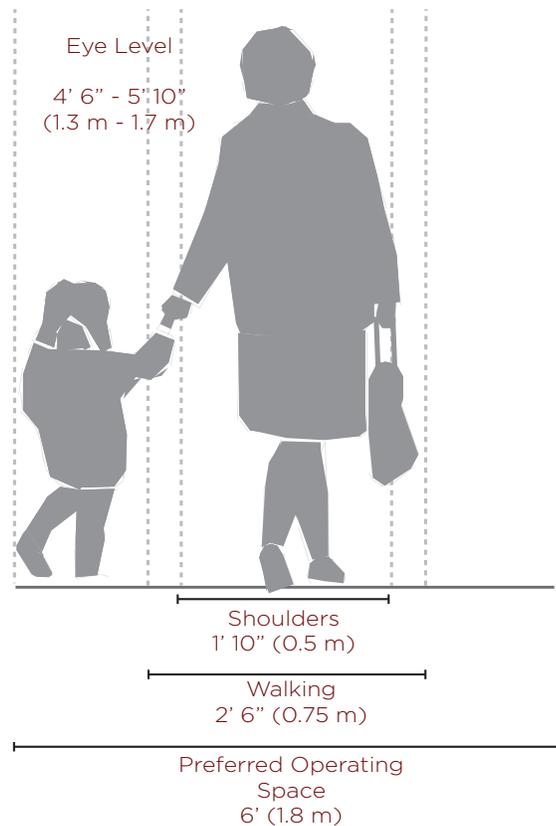
# PEDESTRIAN DESIGN GUIDANCE

## DESIGNING FOR ALL USERS

The transportation network should accommodate pedestrians with a variety of needs, abilities, and possible impairments. Age is one major factor that affects pedestrians' physical characteristics, walking speed, and environmental perception. Children have low eye height and walk at slower speeds than adults. Older adults walk more slowly and may require assistant devices to help with their walking stability, sight, and hearing. The table below summarizes common pedestrian characteristics for various age groups.

The Manual on Uniform Traffic Control Devices (MUTCD) recommends a normal walking speed of 3.5 feet per second when calculating the pedestrian clearance interval at traffic signals. The walking speed can drop to 3 feet per second for areas with older populations and persons with mobility impairments. The transportation system should accommodate these users to the greatest extent possible.

AGE	CHARACTERISTICS
<b>0-4</b>	Learning to walk Requires constant adult supervision Developing peripheral vision and depth perception
<b>5-8</b>	Increasing independence, but still requires supervision Poor depth perception
<b>9-13</b>	Susceptible to "darting out" in roadways Insufficient judgment Sense of invulnerability
<b>14-18</b>	Improved awareness of traffic environment Insufficient judgment
<b>19-40</b>	Active, aware of traffic environment
<b>41-65</b>	Slowing of reflexes
<b>65+</b>	Difficulty crossing street Vision loss Difficulty hearing vehicles approaching from behind



Source: AASHTO. *Guide for the Planning, Design, and Operation of Pedestrian Facilities, Exhibit 2-1. 2004.*



# PEDESTRIAN DESIGN GUIDANCE

## ADVISORY SHOULDER

Advisory shoulders create dedicated, usable space for pedestrians and bicyclists on a street whose right-of-way may be otherwise too narrow for sidewalks or other separated facility. The center lane functions as a two-way travel lane; vehicles may enter the advisory shoulders when no pedestrians or bicyclists are present and when passing oncoming traffic. The shoulders can be paved in contrasting materials and have dashed white lines along the edge.

This treatment is cost-efficient and can be applied without needing to widen the road. Advisory shoulders can fill gaps between important destinations in a community and may be a good interim treatment for neighborhood streets where sidewalk installation is not likely in the near term, for example:

- Virginia Road,
- Thompson Street,
- College Street, or
- Watson Street between Griffith Street and Depot Street.

For further design guidance on advisory shoulders, refer to the *Small Town and Rural Multimodal Networks* guide, available at [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/small\\_towns/fhwahep17024\\_lg.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf). This report is a design resource and idea book to help small towns and rural communities support safe, accessible, comfortable, and active travel for people of all ages and abilities.



Example of advisory shoulder in Hanover, NH.

## APPLICATIONS

### SPEED AND VOLUME

For use on roads with low volumes, and low-speed motor vehicle traffic. Roads with few driveways are preferred to reduce potential conflict points.

### NETWORK

For use on constrained connections between built-up areas.



### LAND USE

For use outside, between, and within built-up areas with bicycle and pedestrian demand and limited available paved roadway surface.





# PEDESTRIAN DESIGN GUIDANCE

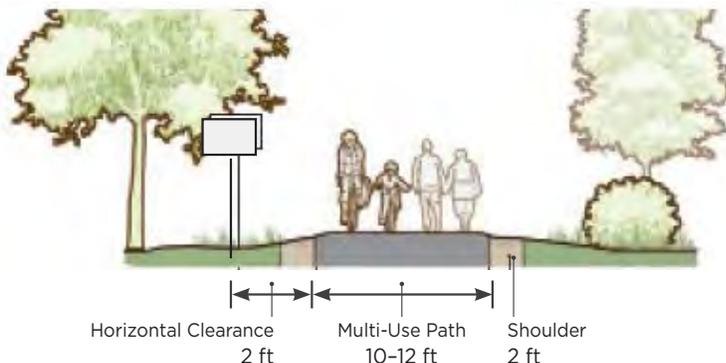
## MULTI-USE PATHS

Multi-use paths play an important role in Davidson’s pedestrian network, providing safe, enjoyable walking environments. This section provides guidance on multi-use path design that elaborates on the design standards that are already in Davidson’s Planning Ordinance and in the Walks and Rolls Plan of 2013. The Planning Ordinance currently uses the terms multi-use paths, multi-use trails, and greenways interchangeably, while the Walks and Rolls Plan describes greenways and sidepaths as two types of the broader category of multi-use paths. It also uses the term shared-use paths as a synonym for multi-use paths. **This plan recommends clarifying the language of the Planning Ordinance to follow the language of the Walks and Rolls Plan and to specify the design standards for these two types of multi-use paths—greenways and sidepaths—as defined and described below.**

### GREENWAYS AND TRAILS (OFF-ROAD)

A multi-use path that is off-road is referred to here as a greenway, and it provides a travel area separate from motorized traffic for bicyclists, pedestrians, skaters, wheelchair users, joggers, and other users. Greenways can provide a low-stress experience for a variety of users using the network for transportation or recreation. Greenways follow utility corridors, railroad alignments (both active and abandoned), and greenway/stream corridors.

The geometric design of greenways should support the speed and volume of expected user types. As recommended in the Walks and Rolls Plan, 10 ft -12ft width is recommended in most situations and will be adequate for moderate to heavy use.



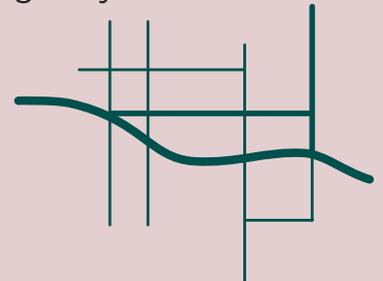
## APPLICATIONS

### SPEED AND VOLUME

Paths operating in independent corridors are fully separated from traffic. Facility provision is based on opportunity and connectivity rather than roadway context. In some cases, an independent corridor may offer similar connectivity and access to destinations as a nearby roadway.

### NETWORK

Serves connections independently of the street network. May function as a network alternative road and highway connections.



### LAND USE

Generally appropriate outside of built-up areas, and also as a corridor connection within urban areas.





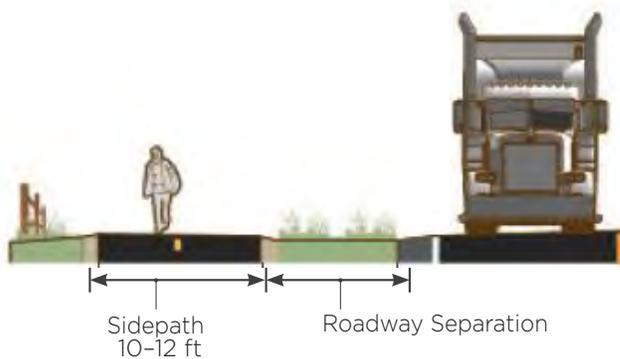
# PEDESTRIAN DESIGN GUIDANCE

## APPLICATIONS

### SIDEPATHS (ALONG ROADWAY)

A sidepath is a bidirectional multi-use path that is located immediately adjacent and parallel to a roadway. These trails can offer a high-quality experience for users of all ages and abilities as compared to on-roadway facilities in heavy traffic environments, allow for reduced roadway crossing distances, and maintain rural and small town community character.

A sidepath along the roadway can encourage bicycling and walking in areas where high-volume and high-speed motor vehicle traffic would otherwise discourage it.



- Sidepath width standards are similar to greenway dimensions, with a minimum of 10 feet recommended, and 12 feet recommended in areas that get heavy use.
- Separation from the roadway should be informed by the speed and configuration of the adjacent roadway and available right-of-way and engineering judgment. Preferred minimum separation width is 6.5ft. Minimum separation is 5ft. Separation narrower than 5ft is not recommended without the use of a physical barrier.
- Special consideration at intersections and driveways. For example, a high visibility crossing treatment has been implemented where the existing sidepath crosses Davidson-Concord Road, as shown in the photo below.



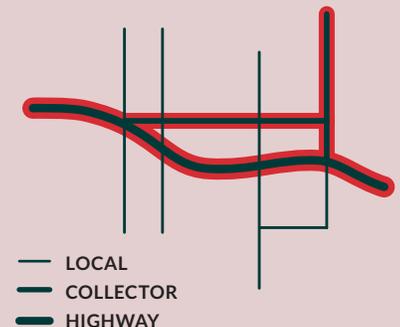
DAVIDSON | MOBILITY PLAN

### SPEED AND VOLUME

For use on roads with high volumes, and moderate-to high-speed motor vehicle traffic. Roads with few driveways are preferred to reduce potential conflict points.

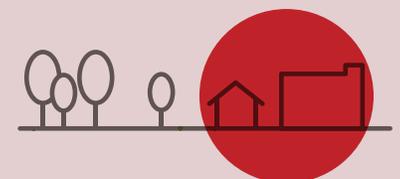
### NETWORK

For use on arterial links on the regional or local biking and walking network.



### LAND USE

For use inside of built-up areas to provide a dedicated space for pedestrians and bicyclists.





# PEDESTRIAN DESIGN GUIDANCE

## INTERSECTION + CROSSING TREATMENTS

The specific type of treatment at a crossing may range from a simple marked crosswalk to a full traffic signal or grade separated crossing. Before a marked crosswalk is installed, appropriate selection of crossing treatments should be evaluated in an engineering study, which

should consider number of lanes, presence of a median, distance from adjacent signalized intersections, pedestrian volumes and delays, average daily traffic (ADT), speed limit, geometry of the location, possible consolidation of crossing points, availability of street lighting, and other appropriate factors.

Davidson has already begun implementing improved crossing treatments using flags and high visibility crosswalks at minor crossing; Rectangular Rapid Flashing Beacons (RRFBs) at more heavily trafficked crossings; and High-Intensity Activated CrossWalk Beacons (HAWKS) at major crossings, such as the roundabouts at Griffith Street.



PEDESTRIAN CROSSING CONTEXTUAL GUIDANCE At Unsignalized Locations	Local Streets 15-25 mph		Collector Streets 25-30 mph			Arterial Streets 30-45 mph				
	2 lanes	3 lanes	2 lanes	2 lanes with median refuge	3 lanes	2 lanes	2 lanes with median refuge	3 lanes	4 lanes	4 lanes with median refuge
<b>1</b> Crosswalk Only (high visibility)	✓	✓	EJ	EJ	X	EJ	EJ	X	X	X
<b>2</b> Crosswalk with warning signage and yield lines	EJ	✓	✓	✓	✓	EJ	EJ	EJ	X	X
<b>3</b> Stop Sign Controlled	X	EJ	✓	✓	✓	✓	✓	✓	X	✓
<b>4</b> Active Warning Beacon (RRFB)	X	X	EJ	EJ	EJ	EJ	✓	✓	✓	✓
<b>5</b> Full Traffic Signal	X	X	EJ	EJ	EJ	EJ	EJ	EJ	✓	✓
<b>6</b> Grade Separation	X	X	EJ	EJ	EJ	X	EJ	EJ	✓	✓

Most Desirable
Engineering Judgment
Not Recommended



# PEDESTRIAN DESIGN GUIDANCE

## CROSSING TREATMENTS

The Town should endeavor to provide more consistent crosswalk treatments throughout town, based on guidance provided on previous page.

**The following locations have been identified as priorities for improved crossing treatments, based on existing conditions and traffic analysis, as well as public input:**

- Griffith Street & Spinnaker Cove Drive
- Jackson Street & Depot Street
- Jackson Street & Griffith Street
- Main Street & Depot Street
- Main Street at library bulb-out
- Delburg Street & Jackson Street
- Delburg Street & Watson Street
- Beaty Street & Lakeview Avenue
- Watson Street & Depot Street
- Jackson Street & S Main Street
- N Main Street at Ridge Road/Beaty Street
- S Main Street & Catawba Avenue
- S Main St at Railroad Underpass

Midblock crossings can provide legal crossings at locations where pedestrians want to travel, and can be safer than crossings at intersections because traffic is only moving in two directions. **Location criteria for where midblock crossings should be considered include:**

- Long blocks (longer than 400) with destinations on both sides of the street;
- Locations with heavy pedestrian traffic, such as schools or shopping centers; and
- Midblock transit stops, where transit riders must cross the street on one leg of their journey.
- For more guidance on the provision of midblock crossings, refer to Section 4.2.8 of the National Cooperative Highway Research Program's (NCHRP) 2018 report *Design Guide for Low-Speed Multimodal Roadways* or the Federal Highway Administration's (FHWA) 2005 report *Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations: Final Report and Recommended Guidelines*.

**Specific locations to consider for midblock crossings** that meet these criteria and have also received public interest for having improved crossings, are:

- Main Street at the bulb-out near the library
- Griffith Street at Spinnaker Cove Drive
- Griffith Street at Lakeside Drive
- Jetton Street at Hamilton Street



# BICYCLE MOBILITY

## BY THE NUMBERS

Recommendations, when implemented, will result in:

# 18

*Total Miles of Bike Lanes*

# 19

*Total Miles of Family Friendly Bike Routes*

# 27

*Total Miles of Wide Shoulders and Shared Use Markings*

# 49

*Total Miles of Greenways, Trails, and Shared Use Paths*

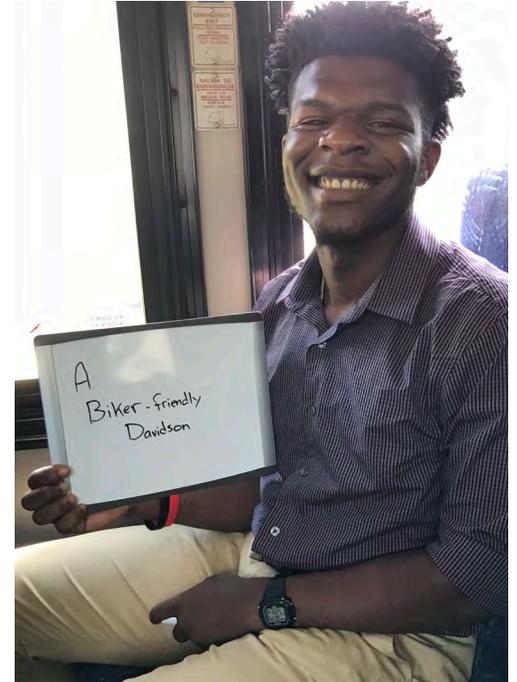
# 94

*Additional Miles of Bicycle Facilities in the Town*

## BICYCLING GOALS

Creating cycling options comfortable for all users was a key mobility theme identified during the planning process. The proposed bikeway network aims to fulfill this vision by addressing the following goals:

- Provide safe routes comfortable for bicyclists of all ages and abilities;
- Improve connectivity to commercial destinations and expand the role of cycling beyond recreation to a viable transportation mode for everyday trips;
- Provide neighborhood bikeway connections for families;
- Implement high-quality, low-stress bikeways;
- Improve connectivity to parks, greenways, and shared use paths;
- Install adequate bicycle parking as required in Planning Ordinance; and
- Implement five miles of new bikeways by 2023.



*Davidson resident (college student and transit rider) participating in an “on-the-street” interview says he would like “A biker-friendly Davidson.”*



## PROJECT TYPES

To accomplish these goals, the following bicycle project types were identified:

- **Family Friendly Bikeway Routes** along Spring Street, Lorimer Road, Woodland Street, Depot Street, Dogwood Street, and many other neighborhood roads to provide safe family biking environments;
- **Bike lanes** along Concord Road, Jetton Street, Griffith Street, and the Davidson Gateway to improve on-street bikeway connectivity;
- **Shared Lane Markings** along Potts Street, Sloan Street, and Main Street; and
- **Sidepaths and paved shoulders** along rural roads such as Concord Road, to provide transportation, recreation, and exercise options for different cyclists.

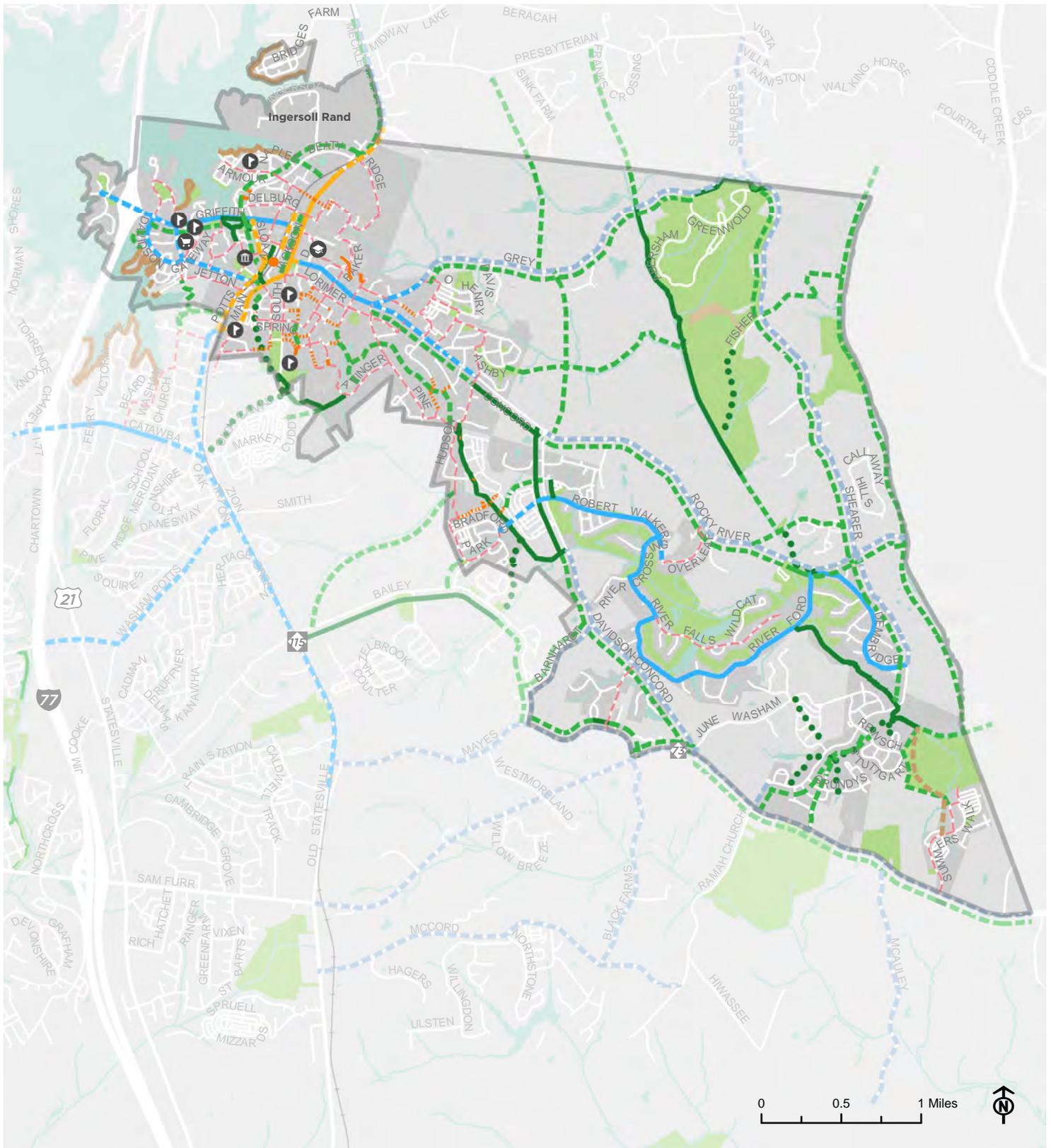


## ACTION STEPS

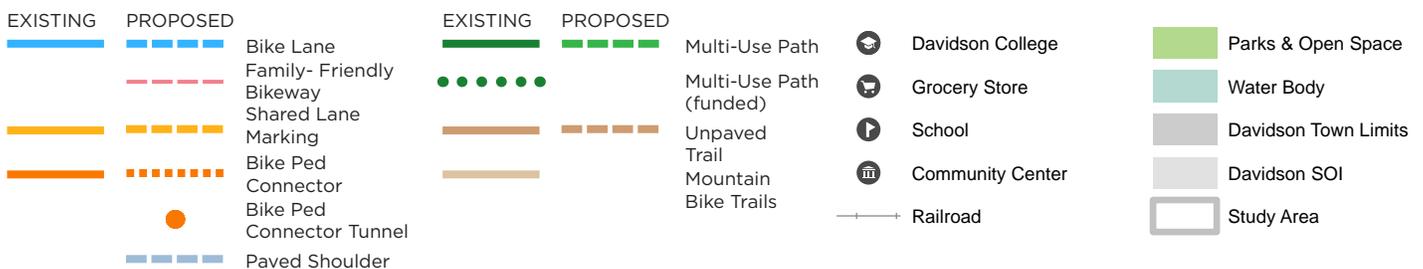
Bikeway funding can be leveraged to create a low-stress network that is comfortable for all users.

- 2.1. Include bicycle projects in the local Capital Improvement Program (CIP), increasing consistent year-to-year funding levels.
- 2.2. Conduct corridor studies along Griffith Street, Concord Road, and Main Street/NC-115 in order to assess feasibility of enhanced bicycle facilities along these key corridors.
- 2.3. Fund bicycle facility maintenance and consider funding additional maintenance equipment needed to adequately maintain a low-stress bikeway system.
- 2.4. To increase readiness for grant funding, develop preliminary plans (30% construction drawings) for priority bicycle projects.
- 2.5. Increase bicycle parking facilities (both short- and long- term, as defined by Planning Ordinance) by 50% by 2023 at destinations.





## RECOMMENDED BIKEWAY NETWORK





# BIKEWAY DESIGN

## DESIGNING FOR ALL USERS

The last decade has seen tremendous investment in bicycle infrastructure locally and across the United States. However, one key realization is now shaping how bicycle investments are made.

Although some bicyclists will ride on any road, regardless of an available bikeway (“strong and fearless”), a much larger portion of the population will ride only where there

**Designing for ages 8 to 80 will be the most effective way to reach the “Interested but Concerned” group**

is a high-quality bikeway (“interested but concerned” population). Understanding this concept has led us to design more low-stress bikeways that provide the high-quality experience the majority of cyclists desire.

**The chart on this page shows a “typical” distribution of bicyclists** while also capturing the general type of experience they prefer.

## DESIGNING FOR ALL CONTEXTS

Selecting the best bikeway facility type for a given roadway can be challenging since the selection must balance traffic conditions (speed and volume), land use context, and implementation cost.

Selecting a bikeway type is not a prescriptive process and other factors need to be considered beyond speed and volume. For instance, the types of traffic (transit, truck traffic, taxi zones, etc), on-street parking, available roadway or roadside space, intersection density, and surrounding land use all play a role in determining the best low-stress facility type.

Once a facility type is identified, the reference table on the next page provides additional high-level information regarding the design and implementation for each facility type.

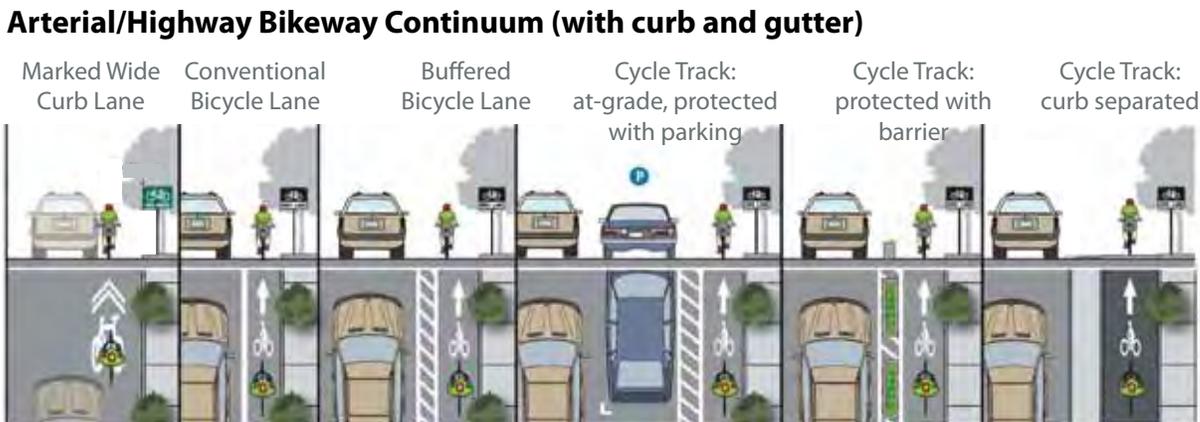
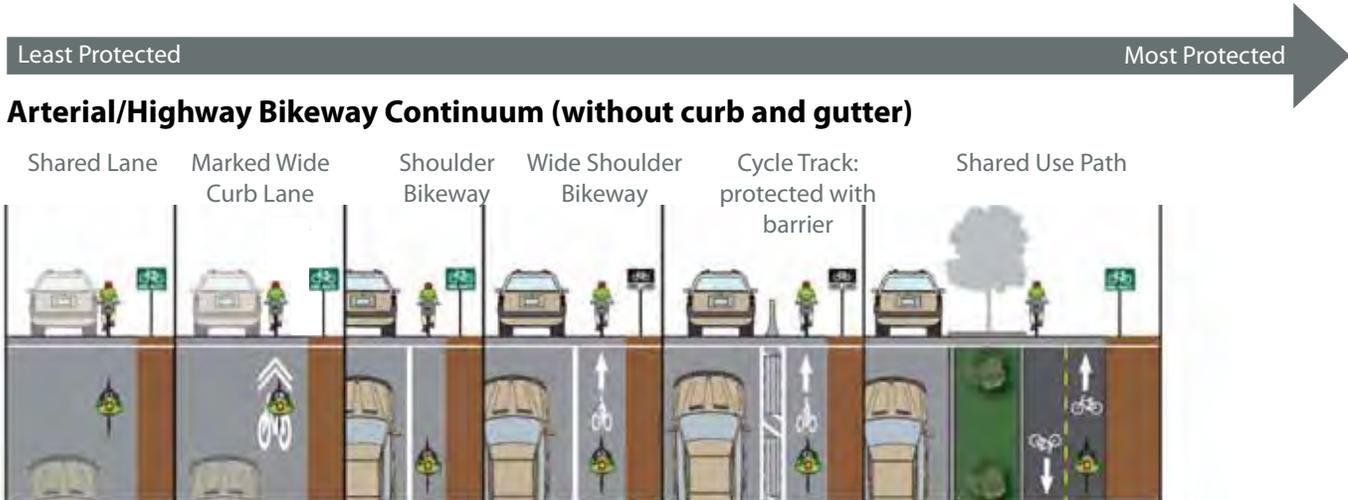


SOURCE: [www.portlandoregon.gov/transportation/article264746](http://www.portlandoregon.gov/transportation/article264746)

## BIKE FACILITY TYPES

The Davidson Walks and Rolls Active Transportation Mobility Plan already provides detailed design guidance for the bicycle facility types, as depicted below. These design standards should be referenced when implementing bicycle facility projects recommended in this plan.

For further design guidance on advisory shoulders, please refer to the *Small Town and Rural Multimodal Networks* guide. Additional guidance on bicycle facility treatments is also available in the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide and the Federal Highway Administration (FHWA) Separated Bike Lane Planning and Design Guide.



## BICYCLE PARKING

The Walks and Rolls Plan of 2013 (pages 5-47, 5-48; 6-1, 6-2) and Section 86 of the Planning Ordinance provide detailed guidance on bicycle parking design and recommendations for increasing the number and locations of bicycle parking facilities. The Town of Davidson should continue to implement these recommendations and standards that require the installation of bicycle parking in new non-residential and multi-family developments. Easily accessible and available bicycle parking can help encourage bicycling as a convenient travel mode around town and can also reduce the incidence of improperly parked bikes (e.g., within the pedestrian or roadway right-of-way) including shared bikes.



# PEDESTRIAN + BICYCLE PROJECT HIGHLIGHTS

The following pages highlight some of the pedestrian and bicycle projects that were identified as priorities during plan process. These project cutsheets include preliminary concepts and cost estimates that can be used to inform the Town's implementation of these projects.

# PROPOSED BEATY STREET SIDEPATH (N MAIN ST TO GRIFFITH ST)

## PED + BIKE PROJECTS



### ABOUT THIS PROJECT

- This project will complete the pedestrian network by connecting to existing sidewalks on N. Main Street and those already on Beaty Street.
- This sidepath will be part of the Mooresville-Charlotte Trail
- The side of the street that this facility will be installed on has yet to be determined. Major destinations to connect to include Ingersoll Rand, Community School of Davidson, Oakhill Apartments on the north side, and the future park on the south side.

### EXISTING CONDITIONS



### PROPOSED IMPROVEMENTS



### PRIORITY SCORE



### ESTIMATED COST\*

**\$1,513,687.50**

\*Detailed cost estimates are provided in the Appendix, reflecting 2017 prices; typically a 10% escalation in costs per year can be expected.

# PROPOSED GREY ROAD SIDEPATH (WOLFE ST TO GREENWOLD DR)

PED + BIKE PROJECTS



## ABOUT THIS PROJECT

- Multi-use path along the south/east side Grey Road provides critical bike/ped connection
- Functions as alternate active transportation route to Fisher Farm Park (see greenway recommendation, facing page)

## EXISTING CONDITIONS



## PROPOSED IMPROVEMENTS



## PRIORITY SCORE



## ESTIMATED COST\*

**\$3,960,000**

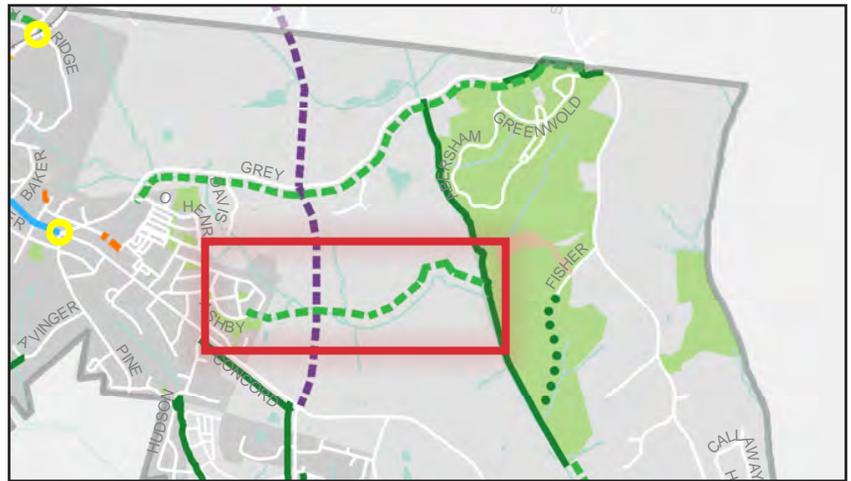
\*Detailed cost estimates are provided in the Appendix, reflecting 2018 prices; typically a 10% escalation in costs per year can be expected.

# PROPOSED McCONNELL-FISHER FARM GREENWAY



## ABOUT THIS PROJECT

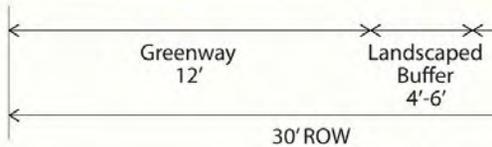
- This greenway connection was the most highly requested mobility recommendation as a result of the community engagement efforts
- Proposed greenway would connect dense residential McConnell and St Alban's neighborhood to Davidson's premier regional park destination
- It is assumed that this project will require some landowner involvement to acquire the space necessary for the alignment.



## PROPOSED IMPROVEMENTS



(Graphic source: Davidson Rural Area Plan)



## PRIORITY SCORE



## ESTIMATED COST\*

**\$3,880,000**

\*Detailed cost estimates are provided in the Appendix, reflecting 2018 prices; typically a 10% escalation in costs per year can be expected.

# PROPOSED BIKE-PED CONNECTORS



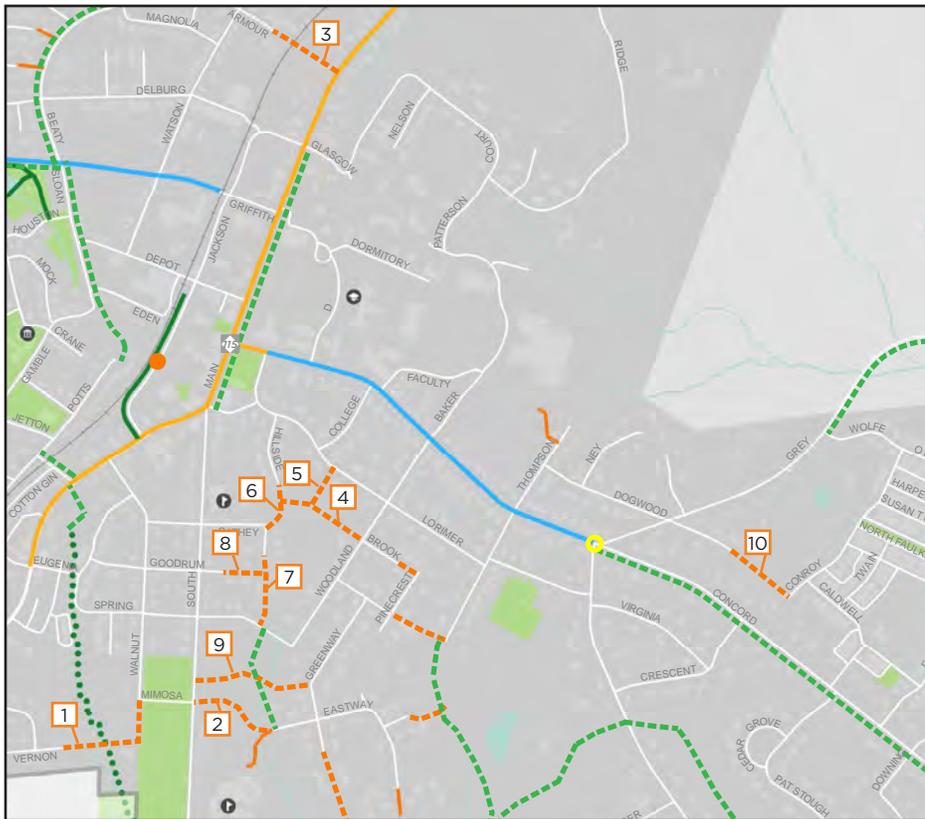
## ABOUT THESE PROJECTS

- Connectors serve bike and pedestrian access needs within the existing street network without allowing vehicular cut-through
- Connectors are ideally 10-foot asphalt paths, with a minimum of 6 feet where conditions are constrained. Treatment can be applied at dead-ends of residential street, such as Dogwood Lane, on the right (please see map below for map of some locations that the neighborhood connector treatment could be applied). A full list of connector projects is provided in the Appendix.

## POTENTIAL LOCATION



## APPLICABLE CONNECTOR LOCATIONS



1. Vernon Drive to Walnut Street\*
2. Eastway Street to South Street\*
3. Armour Street to N. Main Street
4. Brook Street to Hillside Drive
5. Lorimer Road to Brook Street connector
6. Hillside Drive to Cathey Street\*
7. Cathey Street to Spring Street
8. Goodrum Street to Cathey Street
9. South Street to Greenway Street
10. Dogwood Lane to Conroy Avenue\*

\*Stakeholder-Identified Priorities

## PRIORITY SCORE



## ESTIMATED COST

**Variable**

Cost will vary depending on which connections are identified for implementation. It is dependent on available right of way, length and materials used for the facility, as well as engineering costs.

# PROPOSED DAVIDSON- CONCORD ROADWAY

(SIDEPATH EXTENSION TO NC 73)

PED + BIKE PROJECTS



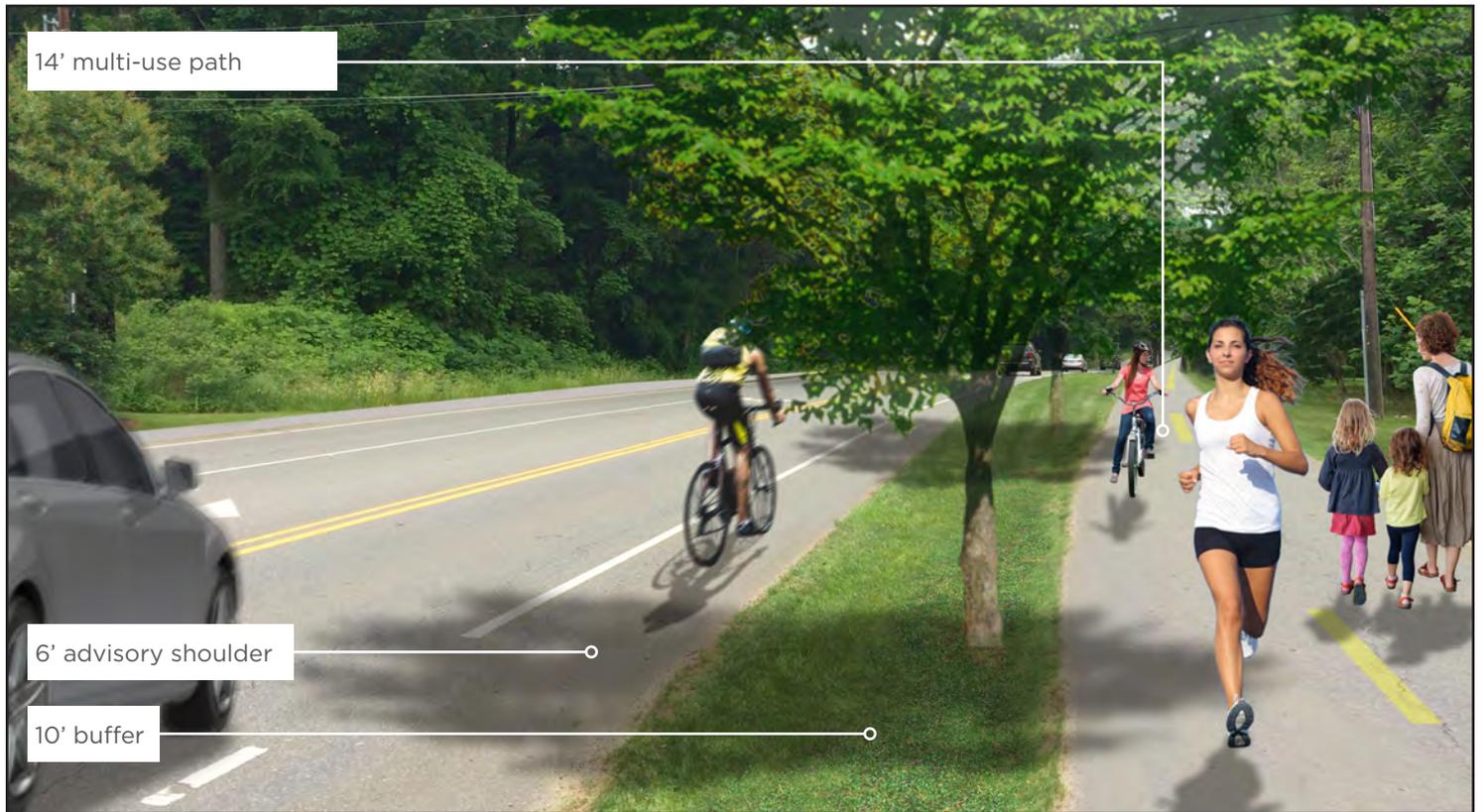
## ABOUT THIS PROJECT

- Sidepath would be a continuation of the existing facility along the south side of Davidson-Concord Road
- Sidepaths provide multimodal mobility along high-speed, high traffic-volume corridors
- Additional critical sidepath segments include: Concord Road (Kimberly Road to Crescent Drive), Beaty Street (Main Street to Griffith Street), and Griffith St (Main St to Davidson Gateway Dr)

## EXISTING CONDITIONS



## PROPOSED IMPROVEMENTS



## PRIORITY SCORE



## ESTIMATED COST\*

**\$3,220,000**

\*Detailed cost estimates are provided in the Appendix, reflecting 2018 prices; typically a 10% escalation in costs per year can be expected.



# STREET AND VEHICULAR MOBILITY

## BY THE NUMBERS

Recommendations, when implemented, will result in:

**5**

*Miles of Additional Town Street Connections*

**37**

*Miles of Rural Connections Recommended in the Rural Area Plan*

**2**

*Miles of Streets with New Developments*

**1**

*Shared Use Street Focus Project (Festival Street/Woonerf)*

**44**

*More Miles of Street Connections*

## ROADWAY GOALS

The plan first and foremost aims to create a Davidson where all users of the roadways are safe. The proposed improvements also aim to enhance vehicular mobility by providing convenient and efficient driving options. The proposed street network aims to fulfill this vision by addressing the following goals:

- Improve intersections to enhance capacity and promote safety;
- Provide additional roadway connections to provide local alternatives to thoroughfares such as I-77 and Highway 115; and
- Promote traffic calming to reduce speeding in residential areas.



## PROJECT TYPES

To accomplish these goals, several high priority street and roadway projects are identified:

- **Roadway extensions** for Concord Road and Grey Road;
- **Shared use streets** for low-speed, low-volume streets such as Spring Street;
- **Intersection improvements** at NC 73 and Davidson-Concord Road; Grey/Pine and Concord Road; North Main and Beaty/Ridge Road; and Main and Concord Road; and
- **New street connections** to be constructed with continuing development projects.



## ACTION STEPS

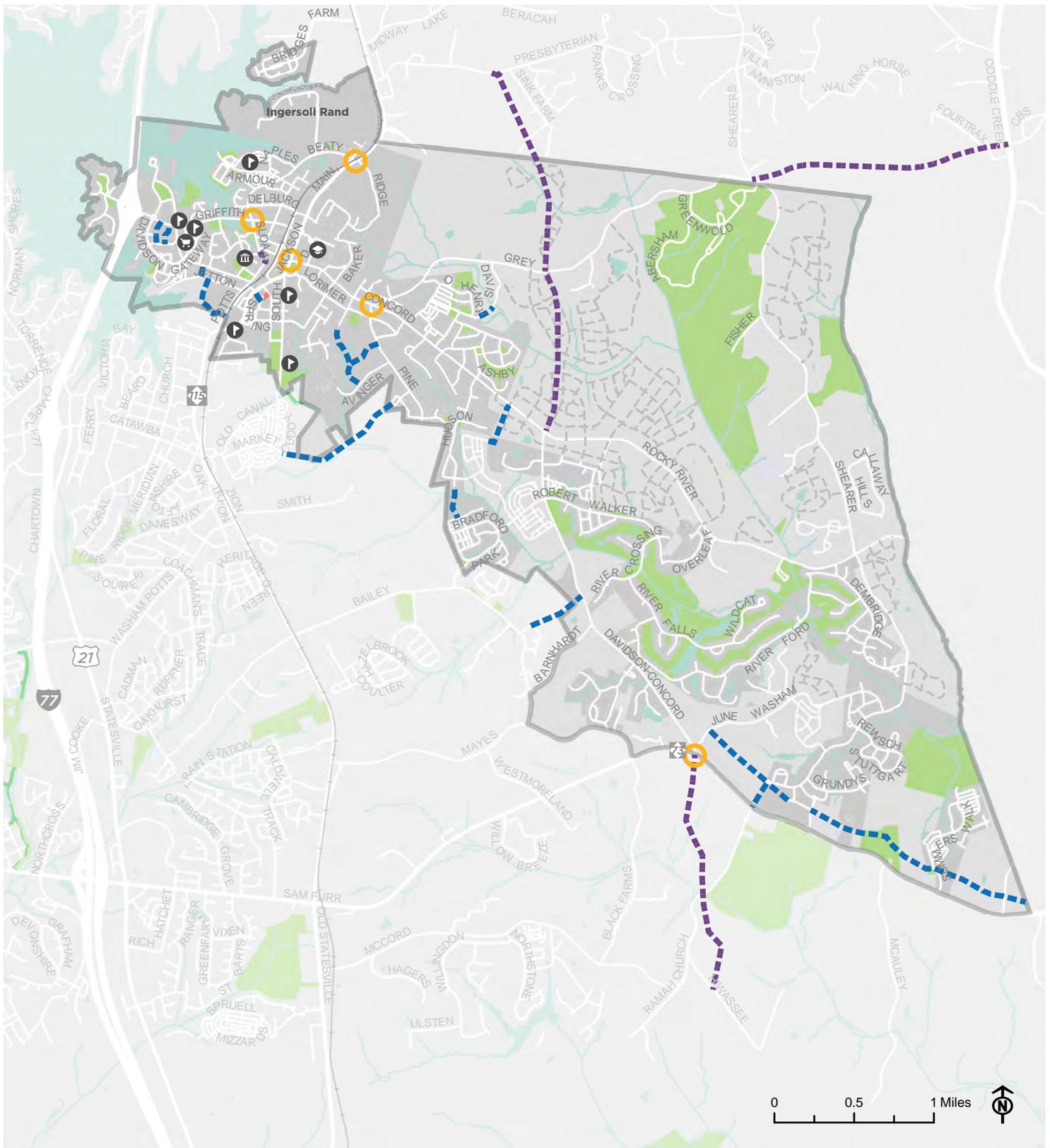
To create the street network outlined in this Plan, a variety of implementation strategies will need to be considered.

- 3.1. The Town can use the concepts and policies presented in this Plan to implement proposed improvements through regularly scheduled capital projects, such as streetscape projects, street resurfacing, or new public or private development projects.
- 3.2. Departments like Public Works can use their maintenance resources and staff to support programs, planning efforts, and infrastructure maintenance.
- 3.3. The Town will need to actively manage the list of projects in this plan and assign appropriate funding and staff time to implement them. It should also be flexible and opportunistic with funding and prioritization of projects to deliver projects as quickly as possible.
- 3.4. The Town should update its Planning Ordinance to include design standards for shared streets/festival streets/woonerfs, as a street classification that better accommodates all travel modes on low-speed, low-traffic-volume streets, such as Spring Street.
- 3.5. The Town should continue to work with regional partners to develop final alignments for the North-South Parkway that is anticipated to provide an alternative route to I-77 and NC-115 as well as for the Grey Road and Davidson-Concord Road extensions.



## RECOMMENDED STREET NETWORK

- |  |  |  |
|--|--|--|
|  Intersection Improvement; roundabout     |  Davidson College |  Parks & Open Space   |
|  New Roadway Connection                   |  Grocery Store    |  Water Body           |
|  New Street Connection (with Development) |  School           |  Davidson Town Limits |
|  Shared Use/Festival Street               |  Community Center |  Davidson SOI         |
|  Rural Area Plan Proposed Street Network  |  Railroad         |  Study Area           |



## RECOMMENDED STREET NETWORK

- |   |  |   |
|---|--|---|
|  Intersection Improvement                 |  Davidson College |  Parks & Open Space   |
|  New Roadway Connection                   |  Grocery Store    |  Water Body           |
|  New Street Connection (with Development) |  School           |  Davidson Town Limits |
|  Shared Use/Festival Street               |  Community Center |  Davidson SOI         |
|  Rural Area Plan Proposed Street Network  |  Railroad         |  Study Area           |



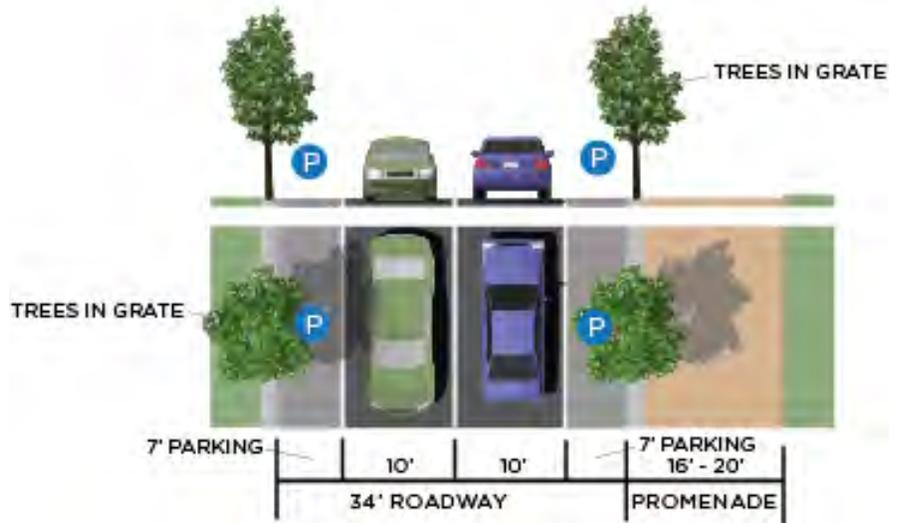
# STREET AND ROADWAY DESIGN

There is more than one way to configure a street. Some configurations prioritize motor vehicles, while others better accommodate all modes. The cross-section illustrations here display the hierarchy of alternative configurations options for different land use and transportation contexts in Davidson. Consider adding these typologies to the Planning Ordinance.

## SHARED-USE STREETS AND FESTIVAL STREETS

Shared-use streets, also known as [yield roadways](#), festival streets or woonerfs, use traffic calming techniques and a curbsless configuration to create a comfortable and safe shared environment for all users. This treatment is applicable on low volume and low speed streets. The graphics to the right show different possible cross-sections for a shared-use street depending on the context. This configuration is proposed for an extension of Spring Street (see facing page).

VILLAGE CONTEXT:  
MATERIALS DIFFER FOR ALL REALMS  
(TRAVEL, PARKING, WALKING)



NEIGHBORHOOD CONTEXT:  
NO PARKING



NEIGHBORHOOD CONTEXT:  
MIDBLOCK, PARKING-ALLOWED SECTION  
(YIELD CONDITION)



## SHARED-USE STREET CONCEPT APPLICATION: SPRING STREET

### EXISTING CONDITIONS



#### ABOUT THIS TYPE OF PROJECT

- Shared streets can be applied to a number of residential, low-speed (ideally, 20mph or less), low-volume streets (ideally, fewer than 1,000 vehicles/day; see [Yield Roadways](#) for info.)
- Pavers, signage, and other design elements prioritize functions beyond vehicular travel, such as space for recreating, socializing, and leisure

### PROPOSED IMPROVEMENTS

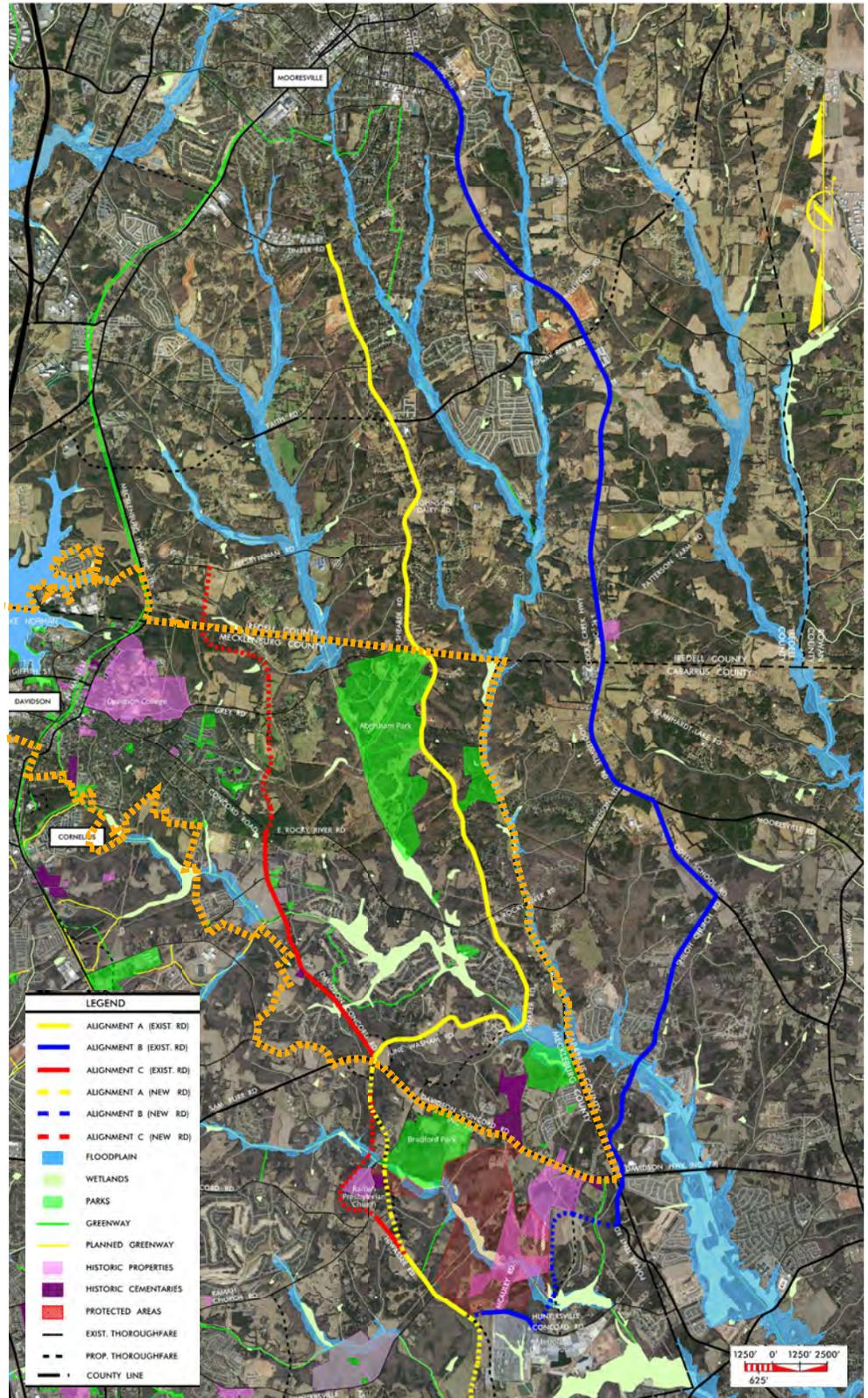




# REGIONAL ROADWAY CONNECTIONS

## NORTH-SOUTH PARKWAY SUB-AREA STUDY

- **A North-South Parkway Sub-Area Study is currently underway to identify new north-south connections that will span from Huntersville to Mooresville.**
- The study recommends identifying more than one connections/alignments that will distribute north-south traffic across existing facilities.
- Preliminary alignments include June Washam Rd and Shearer Rd (yellow line in map at right), Davidson-Concord Road and its extension north as described at right and on page 110 (red line in map at right), and Shiloh Church Rd and Odell School Rd (blue line in map at right).
- The cross-section through Davidson would adhere to the Town’s standards for a 2-lane road with parallel multi-use path (sidepath), as defined in the “Scenic Byway Overlay” section of the Ordinance.



*This is a map of the preliminary Recommended Alignments from the ongoing North-South Parkway Sub-Area Study. The Davidson town limits are shown with a dashed-orange line. For more details on this plan, see the project website at [www.Northsouthparkway.org](http://www.Northsouthparkway.org)*

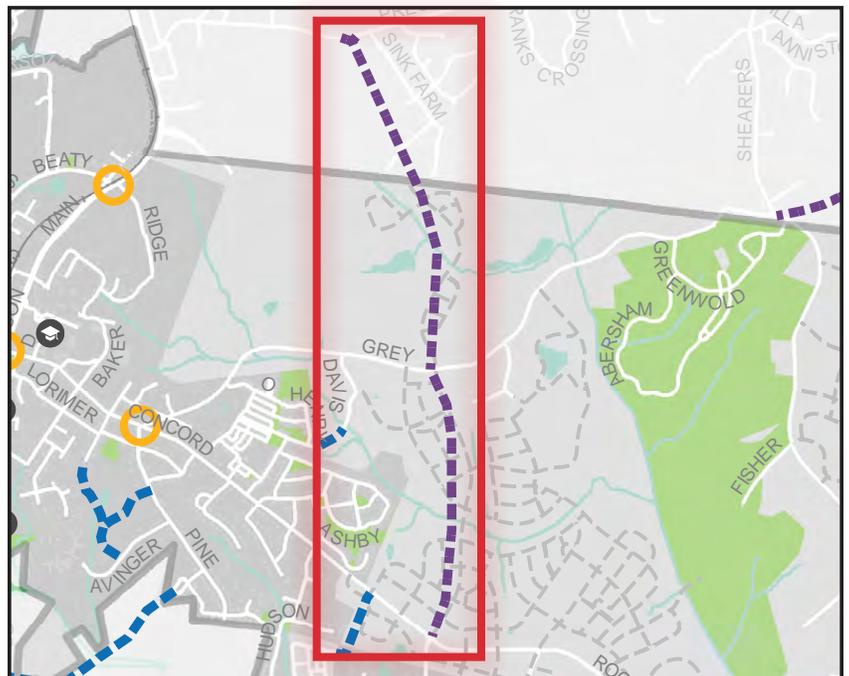
## GREY ROAD EXTENSION

- **This is a regional priority outside of Davidson and would require planning by CRTPO and Iredell Co.**
- One of several regional connections recommended in the North Davidson Parkway Alignment Study of 2010 and the Rural Area Plan
- New roadway connection between Shearers and Hwy 3/Coddle Creek Road
- Provides vital east-west traffic outlet for connection to Cabarrus
- Cross section would include 2-lane road and separated, shared-use path, as defined as “Scenic Byway Overlay”
- Reference Rural Area Plan for more details and design guidance



## DAVIDSON-CONCORD ROAD EXTENSION

- **This is a local and regional priority that extends into and would require coordination with Iredell County, as well as CRTPO**
- This connection has been recommended in multiple previous plans, including the Davidson Parkway Alignment Study of 2010 and the Rural Area Plan, and is part of one of the alignments proposed in the North-South Parkway Sub-Area Study
- New roadway connection between Concord Road and Presbyterian Road
- Provides vital north-south traffic outlet that bypasses downtown Davidson
- See project cutsheet on page 110, and Rural Area Plan for more details and design guidance





# ROADWAY PROJECT HIGHLIGHTS

The following pages highlight the roadway projects that were identified as priorities during public input process. These project cutsheets include preliminary concepts and cost estimates that can be used to inform the Town's implementation of these projects.

# PROPOSED N MAIN STREET + BEATY ST/RIDGE RD INTERSECTION IMPROVEMENT

INTERSECTION



## ABOUT THIS PROJECT

- Project normalizes the offset intersection that currently exists at this location, enhancing safety and crossing opportunity for pedestrians.
- Project will link with proposed sidepath on Beaty St.
- Signalization decreases delay and enhances safety for traffic leaving Ingersoll Rand and going to points north during the afternoon peak hour
- Opportunity to create northern entry to Town and reduce speeds of vehicles entering Davidson from the rural 55 mph segment of NC 115 to the north.
- Project will require coordination with Davidson College.

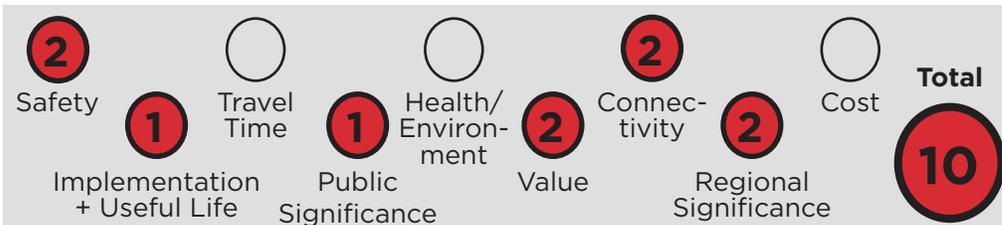
## EXISTING CONDITIONS



## PROPOSED IMPROVEMENTS



## PRIORITY SCORE



## ESTIMATED COST\*



# PROPOSED NC 73 + DAVIDSON-CONCORD ROAD INTERSECTION IMPROVEMENT

INTERSECTION



## ABOUT THIS PROJECT

- Addition of a southbound right turn lane is a near-term treatment that will relieve some of the traffic at this intersections at peak travel times and rectify the unsafe condition with vehicles traversing an unpaved shoulder to cut the corner.
- The long-term treatment will be a reconfigured intersection as part of the scheduled NC-73 upgrade (2025).
- The relatively low cost of adding a turn lane at this location may provide reduction in delay at this intersection in the interim until the above described project is completed.

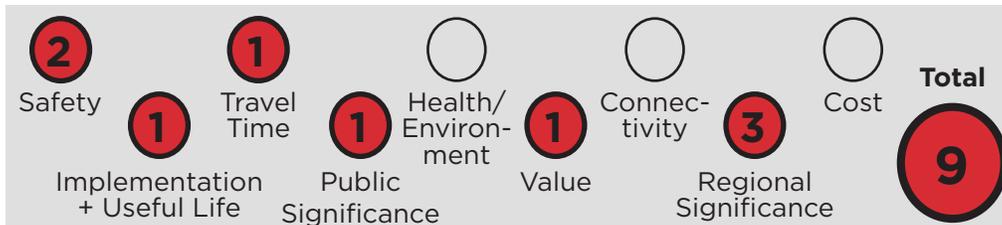
## EXISTING CONDITIONS



## PROPOSED IMPROVEMENTS



## PRIORITY SCORE



## ESTIMATED COST\*

**\$350,000**

\*Detailed cost estimates are provided in the Appendix, reflecting 2018 prices; typically a 10% escalation in costs per year can be expected.

# PROPOSED GREY ROAD/PINE INTERSECTION ROAD + CONCORD ROAD INTERSECTION IMPROVEMENT



## ABOUT THIS PROJECT

- A realignment of Grey Road and Pine Rd to be closer to 90 degrees will allow better visibility and traffic flow at this busy intersection.
- With the soon to be constructed sidewalk along the north segment of Grey Road this intersection will likely have more pedestrian traffic desiring to cross from Pine to Grey. Normalizing the intersection to a true 90 degrees will enhance pedestrian and vehicle safety.

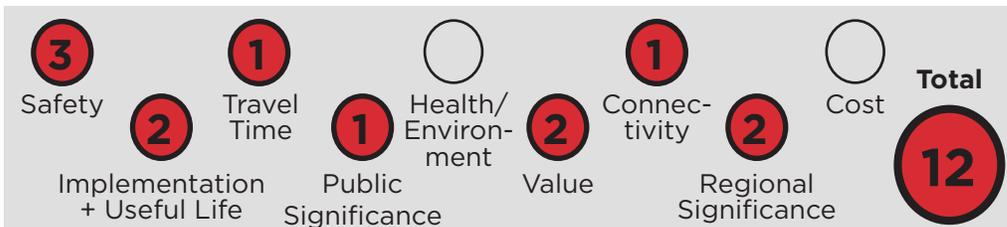
## EXISTING CONDITIONS



## PROPOSED IMPROVEMENTS



## PRIORITY SCORE



## ESTIMATED COST\*

**\$1,440,000**

\*Detailed cost estimates are provided in the Appendix, reflecting 2018 prices; typically a 10% escalation in costs per year can be expected.

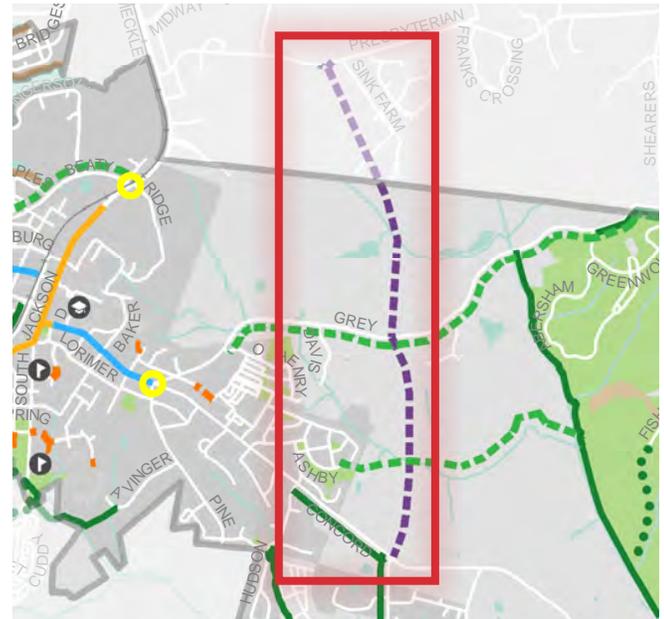
# PROPOSED DAVIDSON-CONCORD ROAD EXTENSION

NEW STREET

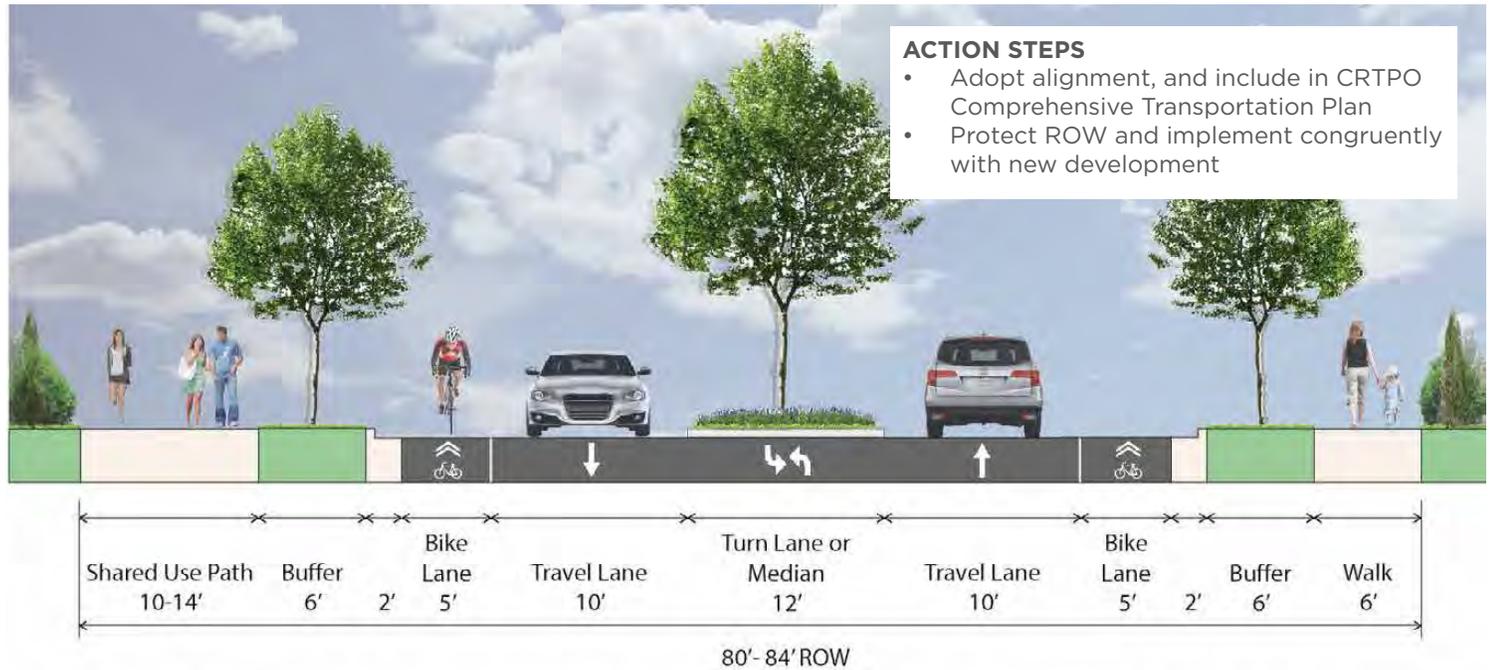


## ABOUT THIS PROJECT

- New roadway connection between Presbyterian Rd and the existing intersection of Davidson-Concord Rd, Concord Rd, and Rocky River Rd. Provides vital north-south traffic outlet for connection to Mooresville.
- This concept is currently under joint study as part of the North-South Parkway Study and is supported by Huntersville, Mooresville, and Davidson.
- Cross section will include 2-lane road, bike lanes, and sidewalks and or a separated, multi-use path, as described and illustrated in Action 5.5 of the Rural Area Plan.
- It is assumed that some of this project will be implemented with new development and in partnership with NCDOT, CRTPO, Mooresville, and Iredell County.



## PROPOSED ROADWAY



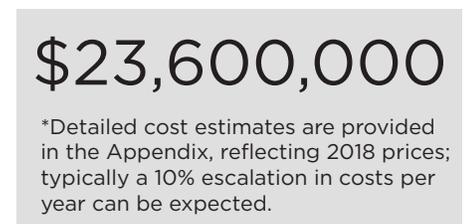
**ACTION STEPS**

- Adopt alignment, and include in CRTPO Comprehensive Transportation Plan
- Protect ROW and implement congruently with new development

## PRIORITY SCORE



## ESTIMATED COST\*





# PARKING RECOMMENDATIONS

## BY THE NUMBERS

**2,034**

*Parking Spaces  
Available within  
Downtown Core*

**1,699**

*Parking Spaces in  
Demand in Downtown  
Core*

**16%**

*Overall Parking Surplus  
in Downtown Core*

According to the *Comprehensive Parking Study* that was conducted for the Town of Davidson in 2017, **the town has an overall parking surplus of approximately 16 percent** (2,034 spaces available for a parking demand estimate of 1,699). However, there are areas within the downtown core that experience parking deficits during peak demand (e.g., lunchtime on weekdays). In order to address these deficits, a series of recommendations are offered below.

(For details on the parking analysis, see Appendix B and the full *Comprehensive Parking Study* available on the Town's website at <http://www.ci.davidson.nc.us/700/Comprehensive-Parking-Study>.)

## ACTION STEPS

To create the parking recommendations outlined in this Plan, a variety of implementation strategies will need to be considered. The Town should:

- 4.1. Adopt and implement a performance-based parking program.
- 4.2. Conduct a pilot application of pricing, using pay station meters, for on-street parking in the downtown retail district.
- 4.3. Establish the administrative authority for staff to set parking prices based on observed demand.
- 4.4. Establish a regular monitoring and reporting schedule for parking utilization and enforcement in order to manage its performance-based parking program.
- 4.5. Create a shared parking program that will maximize the use of existing public and private parking spaces in and around the downtown retail district.
- 4.6. Invest in a parking wayfinding system to direct drivers to available parking spaces.

## ACTION STEP 4.1 PERFORMANCE-BASED PARKING

The Town should adopt and implement a performance-based parking program. Performance-based management adjusts rates and regulations to make it as easy as possible to find a parking space. The two primary stages of regulation—time limits and price—should each take effect when downtown facilities reach an appropriate level of use, as described in Table 5.1 below. Consistent availability, not additional revenue, is the primary goal.

The “right price” is always the lowest price that will achieve an availability target. Adjusting rates over time—up where demand is higher and down where demand is lower—will allow Davidson to better distribute parking demand across its downtown and make more efficient use of existing spaces. In general, the Town should treat its on-street spaces as its most valuable, as these provide critical customer access to retail businesses in a manner that is convenient and desirable. Off-street parking should provide a cheaper, long-term option for visitors who still want convenience but wish to stay for longer periods.

Action steps 4.2 through 4.4 in the following subsections provide more detail on this program and are based on application of pricing to some of downtown’s spaces.

## ACTION STEP 4.2 PILOT BASED PRICING

Current management of on-street parking in downtown’s retail district is only on a time-limit basis, but observed parking utilization is still very high (and full in some locations). The Jackson Street surface lot shows similar characteristics, with consistently high rates of use throughout the day.

The study recommends a pilot application of pricing in these locations, using pay station meters to allow payment for an entire group of spaces at once. Cities using pay stations typically install one of these stations per uninterrupted block-face, meaning that each group of parking spaces separated by a driveway or cross street can have one meter.

Pay station meters can also be used for off-street locations as a lower-cost way of managing payment, and this

may be considered for the Jackson Street lot if the Town observes continued patterns of high use there.

In locations where pricing is applied, time limits should be eliminated. This is to allow price to function as an effective provider of parking availability and allowing customers wishing to pay for use of downtown’s most valuable spaces to do so. It is also intended as a way to counteract the imposition of price, which typically generates concern among stakeholders (especially businesses).

On-street parking in the core of downtown has a higher level of demand than parking in surrounding locations. Pricing should reflect this, and this means that on-street pricing on Main Street and South Street should be higher than pricing rates in off-street lots.

TABLE 5.1: THRESHOLDS FOR APPLYING PARKING REGULATIONS (TIME LIMITS AND/OR PRICE)

FACILITY TYPE	PROPOSED TIME LIMIT THRESHOLD	PROPOSED PRICING THRESHOLD
On-Street Parking	Utilization on an entire block surpasses 75% for at least 6 hours per day	Utilization on an entire block surpasses 85% for at least 6 hours per day
Off-Street Parking Lots	Utilization surpasses 75% for at least 8 hours per day	Utilization surpasses 85% for at least 8 hours per day
Off-Street Parking Garages	No threshold: time limits not used	Utilization in public spaces surpasses 85% for at least 8 hours per day

### **ACTION STEP 4.3** ESTABLISH AUTHORITY FOR PARKING CHARGES

This involves providing staff the administrative authority to set parking prices up to a certain amount that the Town determines appropriate. Since the Town currently has no pricing on any public parking, the Mobility Plan recommends an easily-understood and relatively affordable amount such as \$1.00 per hour as a maximum. Granting administrative authority would allow staff to make rate changes based on observed demand—including reducing rates if a price left some parking underutilized.

Creating an ordinance to codify this authority is an important first step to establish a price system. By then allowing administrative authority to change rates, the Town may react and adjust more quickly than if Council had to approve each rate change.

The Mobility Plan does not make specific recommendations on a type of parking revenue technology or a vendor to supply it, though it does recommend that the Town undertake a detailed feasibility and strategy study to identify this—which would include an assessment of potential pricing levels and the return on this investment for the Town in

terms of capital cost recovery and increased business activity due to more customers having available parking. This study does not need to be large or complex; it should use the basic parameters of the Mobility Plan’s recommendation on performance-based pricing to identify locations for applying the pilot pricing program and gathering information on required costs and infrastructure needs.

The Town should **consider the following best practices in parking pricing and technology**, understanding that the rapid pace of new technology being introduced might mean that new information should also be considered into the future:

- Parking meters that accept credit cards in addition to cash are a more customer-friendly form of technology and generally help to ensure greater compliance with payment requirements.
- Multi-space parking meters are generally more efficient for cash collection and maintenance, though depending on where they are being applied and how many are acquired for a system, they may not be less expensive to install. It is difficult to provide detailed price information in a general sense because the unit prices of different technologies vary greatly by product and the scale of an overall system application. Furthermore, there is no set industry standard for

how many individual parking spaces these may serve, although for on-street parking it is common practice to have at least one per block-face (one side of a street between two intersecting streets).

- Mobile payment programs that use smartphones and other mobile devices are increasingly popular, but typically provided by separate vendors and/or as separate contracts from those related to single-space or multi-space meters.

### **ACTION STEP 4.4** ESTABLISHING A MONITORING AND REPORTING SCHEDULE

The Town will need to update its data to understand when proposed management thresholds are met and when to apply them. The parking study recommends a regular review of parking utilization along with ongoing parking enforcement responsibilities to be able to periodically adjust its management schedule. This is detailed in Table 5.2 (following page).

### **ACTION STEP 4.5** CREATE A SHARED PARKING PROGRAM

Shared parking programs maximize use of existing parking facilities, reduce the overall need for additional parking, help reduce congestion, facilitate more walkable, safe, and

active downtowns, and ensure more efficient use of public dollars. Better use of existing and available facilities is important to downtown Davidson’s success and growth, and a shared parking program that begins downtown can later be expanded to other parts of the Town.

The Town should create and pilot a shared parking program based on a two-tiered approach: a first tier in which the Town uses its knowledge and regularly-updated parking count information to help offer or ‘broker’ shared parking agreements between private developments, and a second tier in which the Town or other entity manages private parking as “public” parking.

For the first tier, the Town would help development applicants and existing businesses searching for additional parking to find sharing agreements. Some private property owners may wish to share all or a portion of their parking, but would prefer to share with other private entities, such as a specific employer or business, and

have a third-party operator manage their parking. To support private-to-private agreements, the Town could proactively offer ongoing technical assistance to both parties.

**FIRST TIER: SHARED PARKING DATABASE**

**Action:** The Town develops a working database of its parking inventory, both private and public, on-street and off-street, and updates this at least twice per year with utilization information. This inventory is already substantially complete for Downtown Davidson and discussed in the 2011 and 2017 parking studies. The Town may opt to expand this inventory to other parts of its jurisdiction, and should update occupancy data a minimum of twice per year so that the shared parking database reflects current patterns. This would ideally be captured in a geospatial database (GIS) to facilitate spatial analysis and understanding the parking patterns of small areas around a particular location.

**How it is applied:** The Town would help development applicants and existing businesses

searching for additional parking to find potential sharing agreements. Some private property owners may wish to share all or a portion of their parking, but would prefer to share with other private entities, such as a specific employer or business, and have a third-party operator manage their parking. However, many development applicants or existing businesses may not be well positioned to seek out these arrangements themselves. To support private-to-private agreements, the Town could proactively offer ongoing technical assistance to both parties and can identify candidate sharing arrangements based on its database.

Other resources for the Town to consider providing in this tier:

- Educational materials about benefits of shared parking
- Sample language and agreements
- Cost and revenue sharing information

**SECOND TIER: PARKING MANAGEMENT AGENCY**

As downtown continues to develop, the Town or another entity that may be established in the future (such as a parking or development authority) could take an additional step and lease (or purchase) underutilized parking from

TABLE 5.2: MONITORING AND REPORTING SCHEDULE

FACILITY TYPE	COLLECT UTILIZATION	REVISIT REGULATIONS
On-Street Parking	Every 3 months	Every 6 months
Off-Street Parking Lots	Every 3 months	Every 6 months
Off-Street Parking Garages	Every 6 months	Every 12 months

private owners, making this available to the public similarly to the Town-owned lots and garages.

**Action:** The Town formally establishes this authority, whether as one of its administrative departments, a separate authority, or some other independent organization (such as a business improvement district).

**How it is applied:** Under such an approach, the Town or other entity would directly lease parking from a private facility for use as public parking. The entire facility, or portion of the facility, would be open for public use. Public use could be restricted to certain hours/days, depending on tenant needs.

To incentivize participation, the Town or other entity would collect revenue during the public hours. Any net revenue could also be shared as part of the agreement.

## **ACTION STEP 4.6** **INVEST IN PARKING & MULTI-MODAL WAYFINDING**

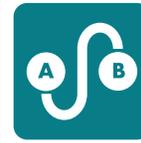
With the proposed performance-based program in Recommendation 1, signage and wayfinding will be especially important to communicating pricing, regulations, and parking availability.

Coordination of facilities serving major parking owners, such as the Town, the churches, and shopping centers should be a priority. At a minimum, the Town should work with these major partners to ensure that signage provides consistent information and functionality. With a majority of Davidson's off-street parking spaces on private properties, the full impact of a wayfinding program will be limited without private sector participation.

Signage and wayfinding is a core component of communicating the performance-based management program. For example, street signage should be used to display pricing tiers and level of availability for multiple parking options so that drivers can make an informed parking decision.

**Wayfinding is also critical for the walking, biking, transit, and driving systems in the town** and should be coordinated and enhanced concurrently with parking wayfinding. The

### WAYFINDING PRINCIPLES



#### 1. CONNECT PLACES

Facilitate travel between destinations and provide guidance to new destinations.



#### 2. KEEP INFORMATION SIMPLE

Present information simply, using clear fonts and simple designs, so that it can be understood quickly.



#### 3. MAINTAIN MOTION

Be legible and visible for people moving so that they can read the signage without stopping.



#### 4. BE PREDICTABLE

Standardize the placement and design of signs so that patterns are established and the signage becomes predictable.



#### 5. PROMOTE ACTIVE TRAVEL

Encourage increased rates of active transportation by helping people to realize they can use the bikeway and pedestrian network to access the places they want to go.

*Wayfinding signage guidance.*

Town currently has a wayfinding signage program for vehicles with some parking info, but does not offer wayfinding for pedestrians, bicyclists, or transit riders.

This action suggests that the Town develop a plan for and invest in these types of wayfinding signs to help to improve the overall legibility of Davidson's transportation system for motorists, pedestrians, cyclists and transit users in town.

The *Davidson Walks and Rolls Plan* provides wayfinding guidance that should be referenced when developing a multi-modal wayfinding signage program. See Chapter 5 for more information.



# TRANSIT RECOMMENDATIONS

Transit options in Davidson consists of three bus routes—one express route to Charlotte, and two local routes between Davidson, Cornelius, and Huntersville.

Opportunities to expand the options for public transit include a recent study to explore options for commuter rail, light rail, and or bus rapid transit service between northern Mecklenburg County, Mooresville, and Charlotte. The recommendations of that study have not been finalized as of the time of the Mobility Plan draft.

Other options for transit service in Davidson include an updated trolley service that was piloted in 2017. This section outlines recommendations for how to pursue these transit opportunities in the near- and long-term.

## ACTION STEPS

To improve transit options available in Davidson, the Town should take the following actions steps:

- 5.1. Continue to work with CATS and major employers in and around Davidson to expand transit services to all-day and weekends for local and express bus service
- 5.2. Work with CATS and neighboring municipalities to implement fixed guideway regional transit station(s) in Davidson and complementary mobility hub services.
- 5.3. Work with CATS to improve bus stop amenities to make access and waiting for the bus more comfortable and attractive
- 5.4. Work with CATS and local employers and schools to implement a local transit service that will provide connections within Davidson



*The 99 Village Rider- Huntersville bus provides local hourly service between 5:40 AM and 7:30 PM service between Davidson, Cornelius, Huntersville and Charlotte on week days, with more limited service on weekends.*





# TRANSIT RECOMMENDATIONS

## LOCAL TRANSIT STOPS

Bus transit service in Davidson, consisting of three existing routes (locals 97 and 99, and express 77x to Charlotte), could be made more attractive transportation choices for more people and more comfortable for those already use it by improving the bus stop environment. The Walks and Rolls Plan of 2013

outlines recommendations for improving bus shelter amenities. The Town should make an effort to implement the recommendations of the Walks and Rolls Plan, such as encouraging CATS to equip key bus stops with seating or a platform for waiting, and shelter or shade structures for stops that receive large amounts of traffic or do not have any protection from the sun. The Walks and Rolls Plan identifies the following priority bus stops with high usage

that should receive benches/shelters:

- Gateway Park-n-Ride
- Sadler Square (Watson Street and Griffith Street)
- Sloan Street

In addition, the bus stop at Griffith Street and Lakeside Avenue has been identified as requiring a formal pedestrian crossing treatment, including a pedestrian refuge median, signage, and crosswalk markings.



Davidson Gateway Park-n-Ride Bus Stop



Sloan Street Bus Stop at Depot Street



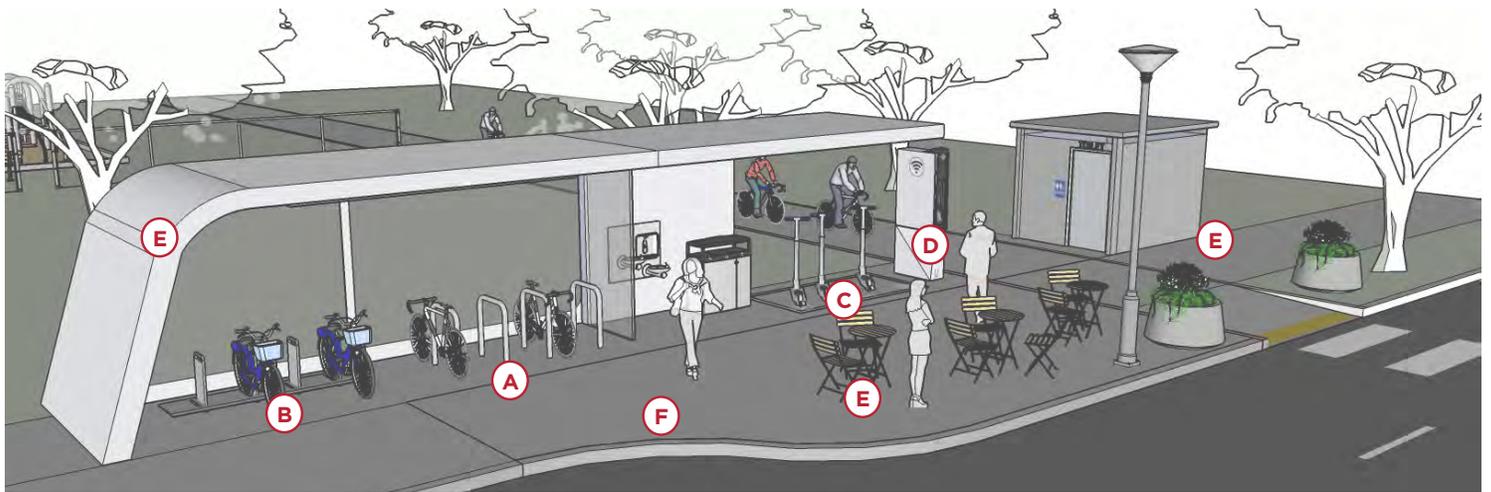
Sadler Square Bus Stop on Griffith Street



Griffith Street Bus Stop at Lakeside Avenue

## MOBILITY HUBS FOR DAVIDSON

Mobile technology has already expanded transportation options with private sector services such as ridesource/share, car share, bikeshare, and scootershare. Mobility hubs — next generation transit stops or park-n-rides — provide a central location for a variety of transport related services and amenities and strategic vehicle storage spaces. Key elements can be mixed and matched to create a mobility hub that's customized for the location. In addition to transit pick-up/drop-off and parking and access to shared mobility services, mobility hubs may include waiting areas, restrooms, remote package pick-up kiosks, micro/convenience retail or mobile retail, placemaking, public art, and green infrastructure. The Town should establish mobility hub elements around future regional transit stations (Exit 30 area in the near term) and in downtown for local mobility connections. The concepts below show some mobility hub elements that may be appropriate for Davidson.



**Next Generation Bus Stop/Micro Mobility Hub:** Elements could include (F) a bus stop, on-street parking/loading zone for ride share and/or parking for car share; (E) pedestrian-support infrastructure: water fountain, trash receptacle, shade structure, seating, public restroom; (D) wifi-hub/electronic ticketing/wayfinding kiosk/charging station for electric bikes or scooters, or mobile repair stand for bikes; (A, B, C) bike/bike share and scooter-share parking. Such a hub could also include electric car parking. Some or all of these elements at this scale would be appropriate in Downtown.



**Next Generation Park-n-Ride/Regional Transit Mobility Hub:** Elements could include (A) bus transfer station and/or (B) bus stops; (C) electric vehicle charging; (D) parking for car share, carpoolers, and commuters; (E) commuter support infrastructure: bike/scooter parking, water fountain, trash receptacle, shade structure, seating, public restroom, wifi-hub/electronic ticketing/wayfinding kiosk/charging station for electric bikes or scooters, mobile repair stand for bikes. Such a concept could be implemented as a retrofit of existing or future parking lots in cooperation with private development.

## LOCAL TRANSIT SERVICE OPTIONS

Davidson previously operated a pilot limited-service, fare-free shuttle on weekends that connected destinations primarily in downtown. Although a popular service, this trolley was operated solely by the Town with no established long-term funding source. It did demonstrate the demand for short-distance transit service in the town, especially for connection to special events.

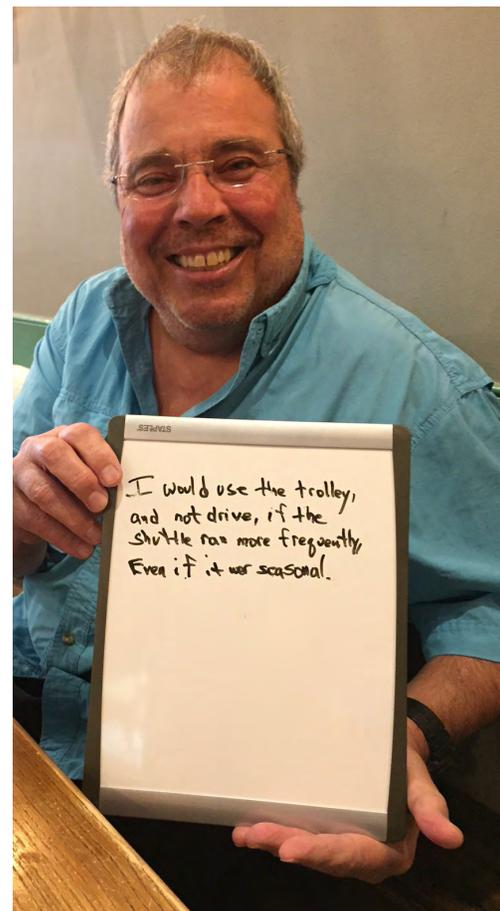
The Mobility Plan recommends two different approaches for restoring local transit service to Davidson. These involve a more conventional approach using **a fixed-route service** to connect to a larger part of the town than what is served by the CATS Village Rider but also **a hybrid service using “new mobility” options to supplement transit’s reach.**

This hybrid service provides the kind of last-mile connectivity and community transit options that service providers like CATS are increasingly beginning to explore as a cost-saving alternative to regular fixed routes. It acknowledges that Davidson has different markets for transit service, with a greater density of population and attractions around downtown than in the Town’s eastern neighborhoods. To this end,

regular shuttle service may only be part of a transit service district, with shared-ride providers working in a formal partnership with CATS providing service to the district.

The Town should work with CATS to identify funding for this service and whether any of the operating resources used on current transit service might be transferred to such a shuttle. The service concepts proposed here may supersede some or all of CATS’s fixed-route service in the area, potentially requiring no net increase in operating costs (and therefore no additional funding responsibility for either CATS or the Town). The advantage to the Town in having a more community-focused, demand-responsive service is that residents feel like transit fits their schedules and needs and does not follow timetables that may sometimes require long waits between vehicles. The advantage to CATS is that the agency actually be able to provide the same level of transit service (in terms of riders served) without the same level of fixed-route resources.

Such a service may be better suited for a community like Davidson, where transit dependency is low and nearly all of the community is currently accustomed to vehicle travel for commutes and other primary trips outside of the community, in that it allows transit providers to be more flexible with how service is deployed and to gather more direct information on potential ridership based on



*A Davidson resident participating in an “on-the-street” interview: “I would use the trolley and not drive, if the shuttle ran more frequently even if it was seasonal.”*

a known number of rides outside of a regular transit service area.

It is important to note that the planning for these service concepts did not perform a detailed ridership modeling or estimation exercise, and that the Town will need to continue working with CATS to tailor any transit service to the actual ridership being served. However, as the popular reception of the Town’s previous shuttle indicates, there is interest in having such a service in Davidson.



# CONCEPT 1

## FIXED ROUTE OPTION

This service option provides service through much of the Town’s planning area, extending beyond the current Village Rider’s reach and into the eastern residential neighborhoods along Davidson-Concord Road. The service connects the I-77 park-and-ride facility with a loop of Davidson-Concord and Rocky River Roads, and to maintain comparable operating costs and bus needs to the Village Rider, would operate on 30-minute headways.

### ***Service advantages and disadvantages.***

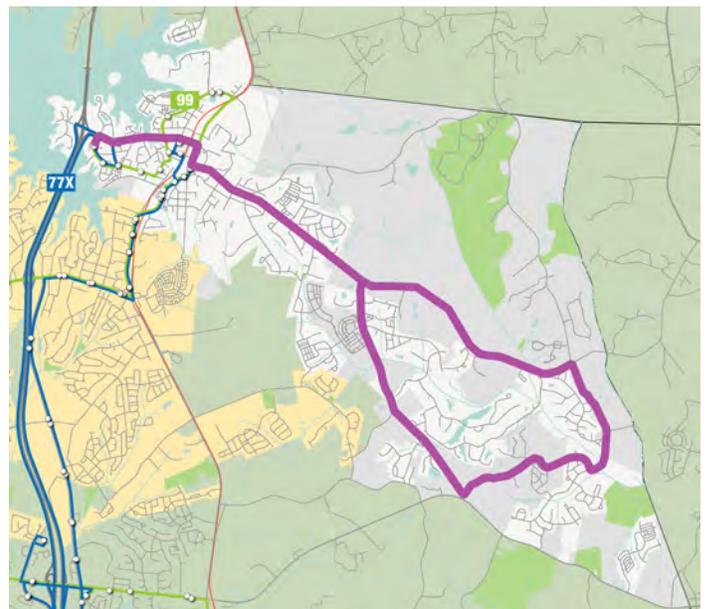
This is a similar model to the Village Rider, but tailored to more of Davidson’s Town limits and therefore covering a much larger service area. It would place more of the town within a walking reach of transit and would extend support services such as CATS’s Special Transportation Service (STS) paratransit, which the Americans with Disabilities Act requires be provided within three-quarters of a mile of either side of a fixed-route transit service, to more of the town. However, the eastern neighborhoods have a lower population density than other parts of the town and many locations are not readily transit-supportive. The Town should invest in pedestrian and bicycle enhancements to these streets and roads to ensure safe access to transit vehicles.

In addition, this service concept also covers an extensive route—over 13 miles— and a full trip along the route would take nearly 45 minutes to complete. Transit service providers generally have more difficulty maintaining schedules and on-time arrivals the longer a route, suggesting that in addition to the same frequency as today’s service, this service concept might also be less reliable for on-time performance.

### SHUTTLE CONCEPT 1: DETAILED OPERATIONS

PLANNING FACTOR	SERVICE FEATURE CONCEPTS
Service Length	13.8 miles (6.9 miles each way)
Assumed Travel Time	48.9 minutes (full round trip)
Peak Hour Service Spans	6:30 – 9:30 AM; 4:00 – 7:00 PM
Peak Hour Service Headway	30 minutes
Number of Vehicles Required to Operate Service	2
Annual Service Hours	3,556
Annual Service Cost	\$360,000

### SHUTTLE CONCEPT 1: ROUTE DIAGRAM





# CONCEPT 2

## FIXED ROUTE FREQUENCY OPTION

Instead of coverage, this service option focuses on providing frequent service in a part of the town with higher density of population, employment, and destinations. This is a strategic approach envisioned to partner with the Mobility Plan’s recommendations for greater sharing of parking, as frequent circulation within a larger district allows downtown and the Gateway Village district to function as more of a park-once area than they are today.

With a total route length of only 2.4 miles, a full trip on this route would take only 9 minutes, allowing greatly reduced time between buses for the same amount of operating resources as today’s Village Rider (as many as five buses per hour in peak periods, instead of the two in service today). Frequencies such as these begin to fall into a general transit industry definition of frequent service, in which schedules are less critical for users due to the shortened waiting time between buses.

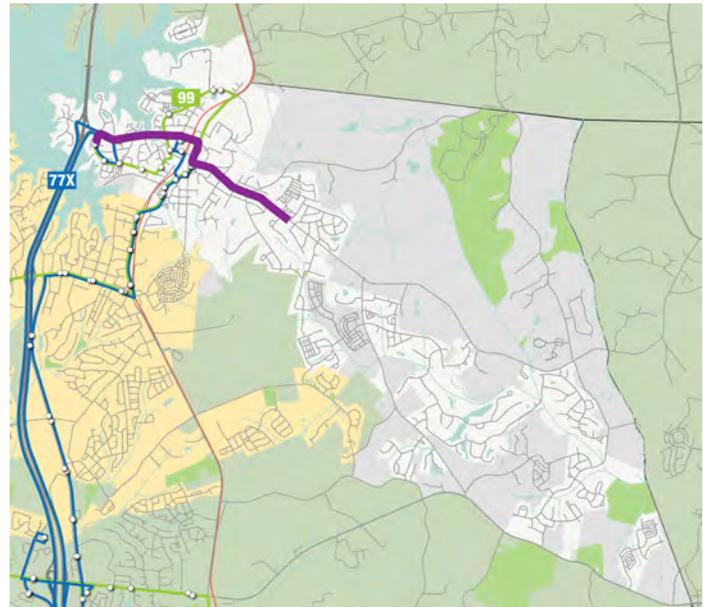
**Service advantages and disadvantages.** Although covering a less expansive area of the town, this service option provides among the most frequent service of any transit in the Charlotte region and provides a longer span of service (the hours of the day in which transit service operates) than the previous Saturday Shuttle. It also allows the general public to better understand a short extent of key thoroughfares as primary transit corridors for the town. Its connection to the Gateway Village and I-77 park-and-ride also take advantage of a broader supply of parking to serve downtown, especially to provide relief to parking facilities that are in heavy use throughout the day.

However, this concept provides significantly less coverage and limits mobility alternatives largely outside of downtown Davidson.

### SHUTTLE CONCEPT 2: DETAILED OPERATIONS

PLANNING FACTOR	SERVICE FEATURE CONCEPTS
Service Length	2.4 miles (each way)
Assumed Travel Time	9.2 minutes
Peak Hour Service Spans	6:30 - 9:30 AM; 4:00 - 7:00 PM
Peak Hour Service Headway	12 minutes
Number of Vehicles Required to Operate Service	2
Annual Service Hours	3,556
Annual Service Cost	\$360,000

### SHUTTLE CONCEPT 2: ROUTE DIAGRAM





# CONCEPT 3

## LAST-MILE CONNECTIVITY HYBRID OPTION

This service option recognizes the recent changes that have come to transit service planning. It engages mobile-device transportation network company services (TNCs, such as Uber and Lyft) and other new mobility technologies as part of transit’s broader mission to serve riders and promote personal independence through driving-free travel. This combines the shorter service of Service Option 2 with an on-demand ‘ride-hail zone’ in which CATS or another transit operator would subsidize the cost of rides that originate and terminate.

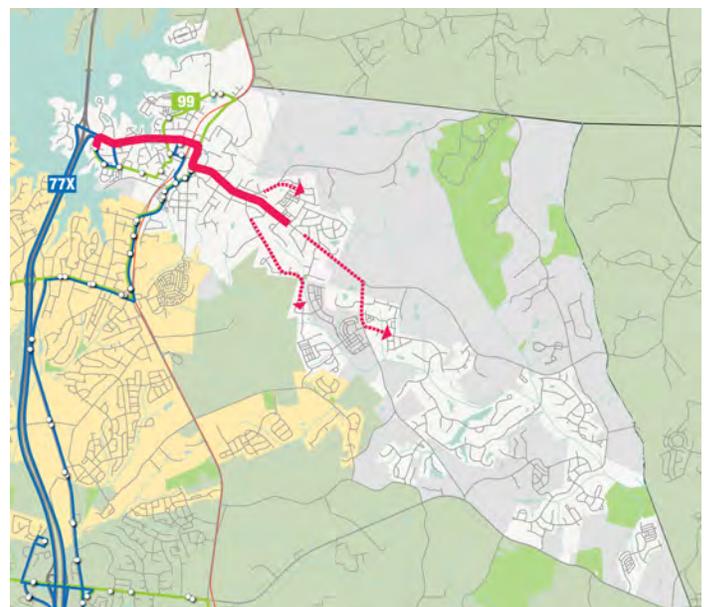
This option would allow the operating costs to be spent on the fixed-route portion of this service to be reduced but still maintain comparable frequencies to those in Shuttle Concept 2. Instead of providing fixed-route service to the other areas of the town, as in Option 1, CATS would reserve the amount for subsidies of ride-hail trips. If no riders used this service, the operating funds would not be spent, allowing CATS greater flexibility in deploying resources to serve travel demand.

**Service advantages and disadvantages.** Although covering a less expansive area of the town, this service option provides among the most frequent service of any transit in the Charlotte region and provides a longer span of service (the hours of the day in which transit operates). It also offers CATS to test new ridership markets in a much less costly way than offering fixed-route service. The eastern neighborhoods of the town are less immediately transit-supportive than the general downtown area, and although there may be potential for service, use of a partner-based solution allows CATS to understand this potential and tailor service accordingly. Cost sharing options with the College and other stakeholders could also be explored.

### SHUTTLE CONCEPT 1: DETAILED OPERATIONS

PLANNING FACTOR	SERVICE FEATURE CONCEPTS
Service Length	2.4 miles (each way)
Assumed Travel Time	9.2 minutes
Peak Hour Service Spans	7:00 – 9:00 AM; 4:30 – 6:30 PM
Peak Hour Service Headway	15 minutes
Number of Vehicles Required to Operate Service	2
Annual Service Hours	2,540
Annual Service Cost	\$256,000
<b>Operating Surplus from Concepts 1 and 2</b>	<b>\$104,000</b>
<b>Average Daily Surplus</b>	<b>\$423</b>
<b>Assumed Ride Hail Credit</b>	<b>\$4/ride</b>
<b>Potential Number of Riders Served per Day with Subsidy</b>	<b>100 - 105</b>

### SHUTTLE CONCEPT 3: ROUTE DIAGRAM





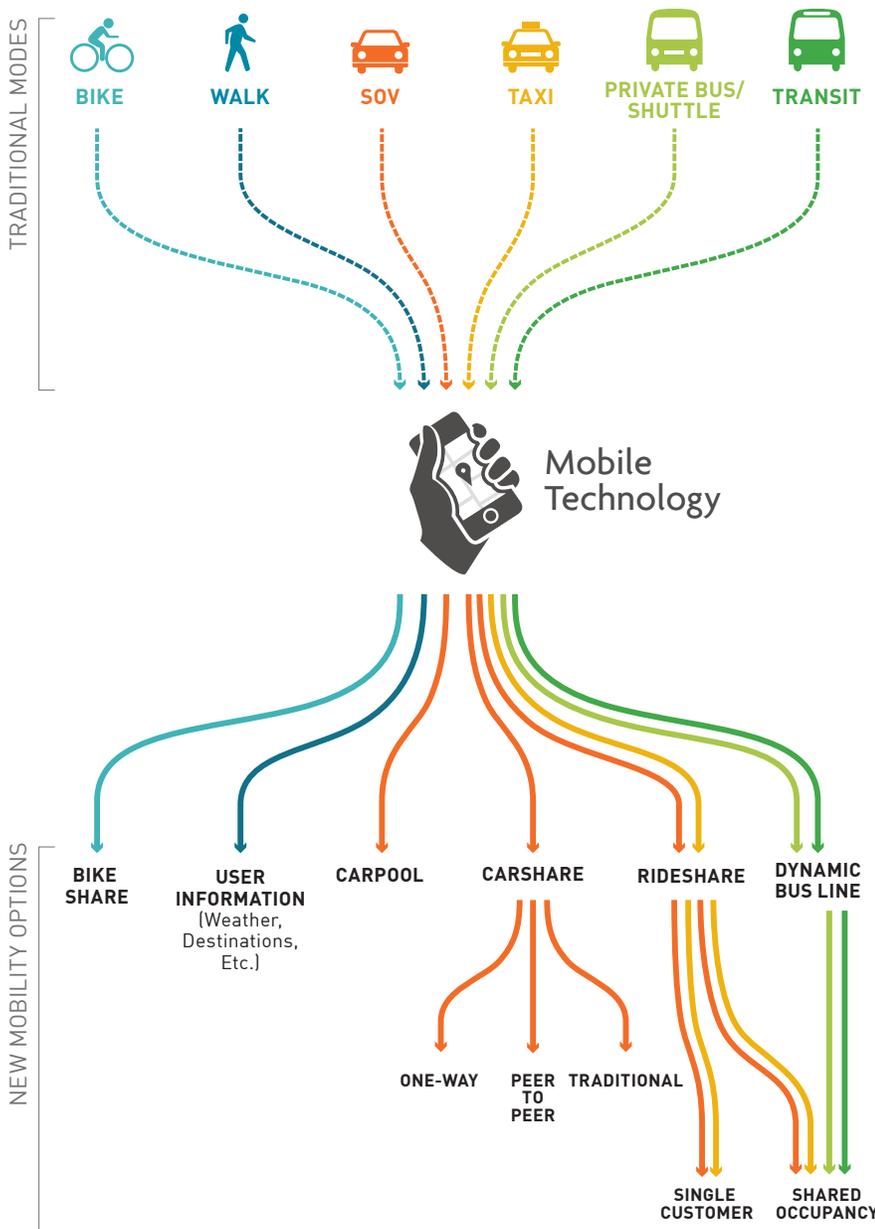
# NEW MOBILITY SOLUTIONS

As Davidson continues to be a leader in innovative solutions to enhance the community's quality of life, it will be important to stay abreast of new opportunities for enhancing mobility with new technology. Many believe that autonomous/

driverless cars are the panacea to our mobility ills (the heaven scenario), whereas others believe that congestion and sprawl will both increase (the hell scenario). As with all advancements in technology the future is much more likely to be much too nuanced to place into one bucket.

However, there are four key elements for Davidson to consider in preparing for the mobility evolution that is unfolding in the next decade.

The new and emerging mobility technologies and solutions that have developed in the market over the last ten years have come in **four principal categories: Autonomous, Connected, Electric, and Shared (ACES)**. While some solutions fall in all four categories, each has potential benefits for the Town to consider when evaluating its overall mobility system.



Davidson's quality of life has long been centered on the fact that it is a community that prioritizes the pedestrian in mobility and design. The next generation of transportation tools should facilitate better mobility but not at the expense of the pedestrian. Sidewalks are for pedestrians first and foremost; streets should be safe and easy to cross as a pedestrian; and **mobility investments should prioritize those that favor people over vehicles.**

## ACTION STEPS

To anticipate and accommodate new mobility options in Davidson, the Town of Davidson should take the following actions steps:

- 6.1. Require the installation of Electric Vehicle (EV) charging capacity and/or infrastructure for all new construction
- 6.2. Promote and encourage the installation of additional super-charging stations at key locations (e.g., Davidson Commons, MSC, Downtown)
- 6.3. Convert Town vehicle fleets to electric when practical
- 6.4. Update the Town's Code of Ordinances to align with North Carolina General Statutes so as to clarify difference between recreational and transportation low-speed vehicles and how they may be used on Town roads.
- 6.5. Promote, encourage, and manage (through regulation) the continued expansion of dockless bike, scooter, and similar mobility solutions throughout the community, with particular attention to parking regulation. For guidance on how to develop policies to regulate shared-mobility services, refer to the [NACTO Guidelines for the Regulation and Management of Shared Active Transportation](#).
- 6.6. Investigate a partnership with ride-share services for trips that have their original or destination in the downtown
- 6.7. Work with CATS to investigate ride-share service subsidies for town residents
- 6.8. Conduct a feasibility study for the deployment of a driverless shuttle system in the Griffith Street, Concord Road, and Main Street corridors
- 6.9. Work with CATS to develop Mobility Hub concepts for downtown and exit 30 that may combine transit access and shared/new mobility service options
- 6.10. Pilot ride-share pick up/drop off and local delivery zones in the downtown
- 6.11. Investigate the potential for a geo-fenced area—consider the Jackson Street and Concord Road corridors as the highest priorities
- 6.12. Maintain a high level of awareness and education for autonomous technologies amongst the Town staff
- 6.13. Ensure that all new street infrastructure projects have accommodations for fiber-optic through the placement of additional conduit for future expansion or the installation of cabling
- 6.14. Install parking sensor technology and provide a mobile app or provide an Application Programming Interface (API) to facilitate third party usage (e.g., Google Maps) to broadcast parking availability
- 6.15. Evaluate the installation of DSRC equipment in a connected corridor (e.g., Jackson Street, Concord Road, Main Street)



# NEW MOBILITY SOLUTIONS

In the near term, the categories of **Electric** and **Shared** mobility options will be most relevant for Davidson and are discussed first, followed by a discussion of **Autonomous** and **Connected** mobility technologies that will become more viable on a longer time-horizon.

## ELECTRIC + LOW SPEED VEHICLES

**Electric vehicles** (EVs) have long been a technology that transportation planners have embraced as a mean to reduce the negative impacts of air and noise pollution emanated by the internal combustion engine. To date, the limited range (under 120

miles per full charge) and high cost have limited their general acceptance. That has changed in the past two years as dramatic advances in battery storage have more than doubled the range potential (240-300 miles per charge). Further, production technologies are reducing costs such that industry experts recently estimated that the cost of delivering an automobile with an electric engine will be cheaper than a similar model with an internal combustion engine within five years (2023). The limiting factor in widespread adoption of electric vehicles will be the charging network. Tesla and some regional power companies, are leading the way with the construction of a network of super-charging

stations across North America, but a more fine-grained network of local charging stations will need to be constructed.

*What this means for Davidson:* The key to widespread adoption of electric vehicle technology will be a predictable network of electric charging stations. A number of jurisdictions are amending their ordinances to require that all new construction accommodate electric vehicle charging. In Atlanta, twenty percent (20%) of the parking spaces in new commercial and multifamily parking structures be EV ready and all new residential home must be pre-wired to accommodate install EV charging stations. There are a couple of public EV charging stations around Davidson, but more will be needed in the future.

### Key Actions:

- 6.1. Require the installation of EV charging capacity and/or infrastructure for all new construction
- 6.2. Promote and encourage the installation of additional super-charging stations at key locations (e.g., Davidson Commons, MSC, Downtown)
- 6.3. Convert Town vehicle fleets to electric when practical



Electric charging station

Coincident with the rise in popularity of electric vehicles, there is a growing interest in **low-speed vehicles** (such as golf carts) **as environmentally-friendly, economic alternatives to conventional vehicles.**

Davidson’s ordinances currently include language that define limited terms for driving golf carts and “similar vehicles” on public streets. Driving golf carts in Davidson is limited to the hours between 6:00 a.m. and 11:00 p.m. and to roads with speed limits of 35 mph or less. And golf carts are not to be used as an alternative means of transportation.

The Town’s definition of golf cart and “similar vehicles,” and its restrictions for their use, are not in sync with the North Carolina General Statutes. The discrepancy lies in the fact that the Town’s definition of golf carts does not distinguish between golf carts, whose maximum speed is 20 mph and primary purpose is recreation, and other “low-speed vehicles,” whose top speed is greater than 20 mph but less than 25 mph and whose primary purpose is transportation. Common uses for these low-speed vehicles include meter maids, campus security, and grounds keeping, but more recently they have gained popularity as an alternative to cars for short distance trips and commuting.

The North Carolina General Statutes allow for low-speed vehicles to be driven on streets and highways where the speed limit is 35 mph or less without any other restrictions, so long as the low-speed vehicle is registered, insured, and equipped with the necessary features to make it safe (head lights, brake lights, rear-view mirror, seat belts, etc.).

The Town ordinances’ ambiguous definition of golf carts and “similar vehicles” does not allow for the differences in the intended use of golf carts versus low-speed vehicles. Clarifying the difference between these two different types of vehicles and how they may be used on Davidson’s streets will be important as the popularity of low-speed vehicles for personal travel increases.

For more details on current Town and NC statutes, see the Town of Davidson’s Municipal Code of Ordinances, available at: [https://library.municode.com/nc/davidson/codes/code\\_of\\_ordinances](https://library.municode.com/nc/davidson/codes/code_of_ordinances), and the North Carolina General Statutes at: <https://www.ncleg.net/gascripts/statutes/Statutes.asp>

**Key Actions:**

- 6.4. Update the Town’s Code of Ordinances to align with North Carolina General Statutes so as to clarify difference between recreational and transportation low-speed vehicles and how they may be used on Town roads.



*Low-speed vehicle (Photo courtesy of dirtlegal.com)*



# NEW MOBILITY SOLUTIONS

## SHARED-VEHICLES

Shared mobility has historically taken the form of public transit – buses and trains – where many people share a vehicle to travel in similar directions. The great recession gave rise to a sharing economy that leveraged the power of social networking and mapping to rent out a variety of assets including extra bedrooms (AirBNB), office space (WeWork), and available car seats (Uber/Lyft). For vehicle trips, drivers share trips with a passenger through the use of a user-friendly app that rates both driver and passenger and simplifies the payment system. As of

summer, 2018, both Uber and Lyft were providing somewhat reliable services in the North Mecklenburg.

This network of rides has now extended in the Charlotte region to the **shared use of other mobility services including bicycles** (both docked and dockless) **and electric scooters**.

Additionally, manufacturers and service providers have been developing new vehicle technologies known as **micro-transit or driverless shuttles** to provide short distance connectivity – typically less than 2 miles in length – in business districts, office and college campuses, and in high tourist areas.

*What this means for Davidson:* In Spring, 2018, Davidson College became the first higher education institution in the country to partner with Mobike, the world's first and largest bike-sharing company. A few other shared-bikes have also appeared in Davidson. The current evolution of shared bikes provides a simple user interface for reserving, finding, and payment and handsome, durable equipment. As Davidson has long been a bike-friendly community, this additional network of bicycles spread through town further encourages bicycle use.

With regard to **shared-ride companies** (also referred to as Transportation Network Companies or TNCs), the Town's 2017 Parking Study suggested potential partnerships to encourage their use to travel to and from downtown to minimize parking demand. A number of other communities have partnered with TNCs to supply these services both to defray parking demand as well as to provide efficient on-demand transportation services.



Mobikes. Source: [Mobikes.com/us/](http://Mobikes.com/us/)

And finally, there are a number of manufacturers who are producing driverless shuttles. These shuttles are in operation across the globe and are ready for use in slow speed, low volume, mixed traffic corridors. A number of towns around the country are deploying these shuttles in pilot form to better understand the technology — its benefits and its challenges — and to explore consumer willingness to use it.

This plan recommends that the Town **explore a pilot driverless shuttle service** along Griffith Street corridor from Davidson College or downtown via Jackson Street out to Davidson Commons/Jetton Street. A pilot can last for a week to a year. As potentially the first community in the Charlotte region to deploy such technology there are a number of potential partners that will likely be interested in helping to defray the potential costs (e.g., telecoms, power utilities, transit service providers).

Other recommended action steps are noted below.

**Key Actions:**

- 6.5. Promote, encourage, and manage (through regulation) the continued expansion of dockless bike, scooter, and similar mobility solutions throughout the community, with particular attention to parking regulation. For guidance on how to develop policies to regulate shared-mobility services, refer to the [NACTO Guidelines for the Regulation and Management of Shared Active Transportation](#).
- 6.6. Investigate a partnership with ride-share services for trips that have their original or destination in

- the downtown
- 6.7. Work with CATS to investigate ride-share service subsidies for town residents
- 6.8. Conduct a feasibility study for the deployment of a driverless shuttle system in the Griffith Street, Concord Road, and Main Street corridors
- 6.9. Work with CATS to develop Mobility Hub concepts in downtown and exit 30 that may combine transit access and shared/new mobility service options. *(See Transit section in this chapter for more discussion of this topic.)*



*Rendering of a driverless shuttle in a campus setting*



# NEW MOBILITY SOLUTIONS

## CURB ACCESS ZONES

In the downtown area, there is increasing demand for use of the curb for parking, drop-off/pick-ups, and deliveries. As ride sharing services continue to grow in popularity, particularly those serving Davidson’s growing restaurant scene, there will be pressure to find dedicated locations along Main Street for safe and convenient drop off/pick up locations. This will put pressure on some existing on-street parking space in certain blocks.

As demand for ride-sharing to restaurants is typically off-peak (in the evening) the conversion of 1-2 on-street spaces may not be as critical to the overall supply. Signage will be important

as will increased education for others who might be using these zones (e.g., delivery trucks). In the future, these can be required with new commercial development.

### Key Actions:

6.10. Pilot ride-share pick up/drop off and local delivery zones in the downtown. Consider dedicated on-street spaces near Summit and Kindred. Require new curb access zones with new development.



*Curb access concept showing dedicated curb space for parking and pick-up/drop-off*



*Ride-share pick up/drop off loop*



*Ride-share pick up/drop off loop sign*

# AUTONOMOUS

Perhaps the most popular in terms of mainstream attention, autonomous vehicles are those that operate independent of the world around them and do not need a driver. Such vehicles depend on a sophisticated set of sensors and computing to construct a digital map of the world around them in real time and move accordingly. Trials and pilots of autonomous vehicles, particularly cars, have been occurring around the world for a number of years with millions of miles of successfully logged trips. Manufacturers include not just the legacy automobile manufacturers (e.g., General Motors, Ford, Volkswagen) but also include other technology-based firms including Google/Waymo, Uber, Lyft, and Apple who are developing fleets of cars, trucks, and even delivery vehicles to operate without a driver. Investment in autonomous technology has now become mainstream with billions of dollars in new investments being announced on a regular basis.

### What this means for Davidson:

As a wealthy, educated community in the Charlotte region, adoption of autonomous technology is likely to be higher per capita. In addition, because implementation of autonomous technology will likely begin in “geo-fenced” areas - geographies that can be easily managed (e.g., urban downtowns, campuses, regional corridors) - Davidson resident’s use of the

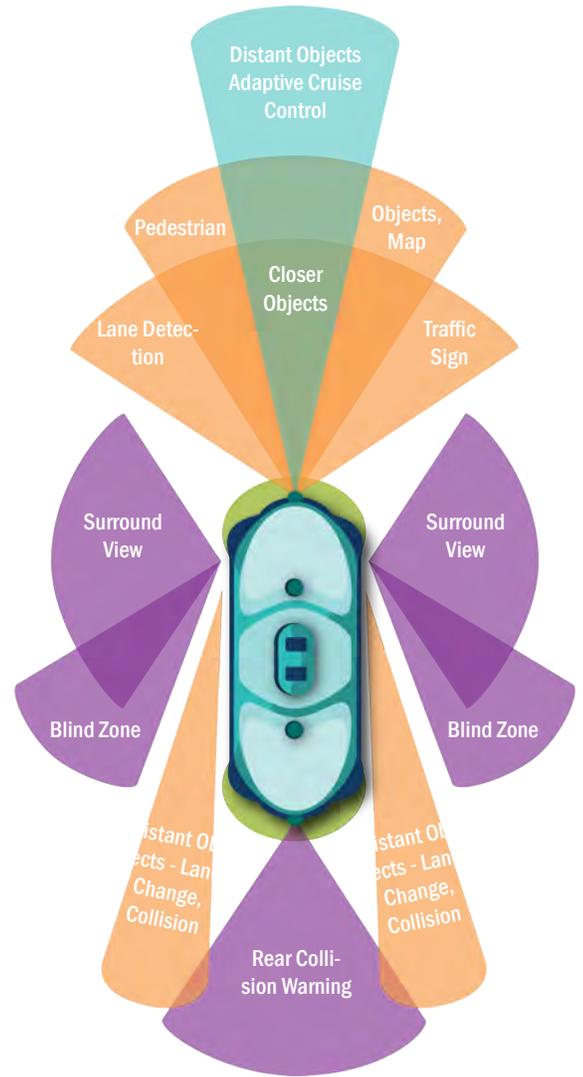


Diagram of an autonomous vehicle's sensor system



Rendering of a Smart Street



# NEW MOBILITY SOLUTIONS

## AUTONOMOUS, continued

Interstate-77 corridor could be one such location for early implementation. As the technology improves, other geographies will be added until there is an inflection point where autonomous will be the norm, if not the requirement in many areas. Davidson can be a leader through continued education and advocacy in the adoption of this technology and invest in the 3D mapping and surveying necessary to set up a geo-fenced network. Consider partnering with UNC Charlotte or another institution to develop the necessary three-dimensional mapping.” Mapping an area is a low cost and quick exercise with the largest part of the expense in the processing and cleaning up of the data once it is collected. This can be done by either a university or a consultant.

### **Key Actions:**

- 6.11. Investigate the potential for a geo-fenced area — consider the town core including the Exit 30 area as the highest priorities.
- 6.12. Maintain a high level of awareness and education for autonomous technologies amongst the Town staff



*Easy Mile's EZ10*



*Inside Local Motors' Olli*

## CONNECTED

The ability for a vehicle to speak to other vehicles (Vehicle to Vehicle - V2V), the surrounding infrastructure (Vehicle to Infrastructure - V2I), and to every other potential device (Vehicle to Everything - V2X) is made possible through a series of external devices and communications protocols. Connections provide additional information to the vehicle such as the location of potential accidents ahead, ride hailing by a passenger, location/availability of parking spaces, and location/availability of charging stations. At its most basic level, today's mapping applications on our phones are examples of how information is communicated through a connected system that pools information from other drivers to improve the experience for everyone. The infrastructure that permits this

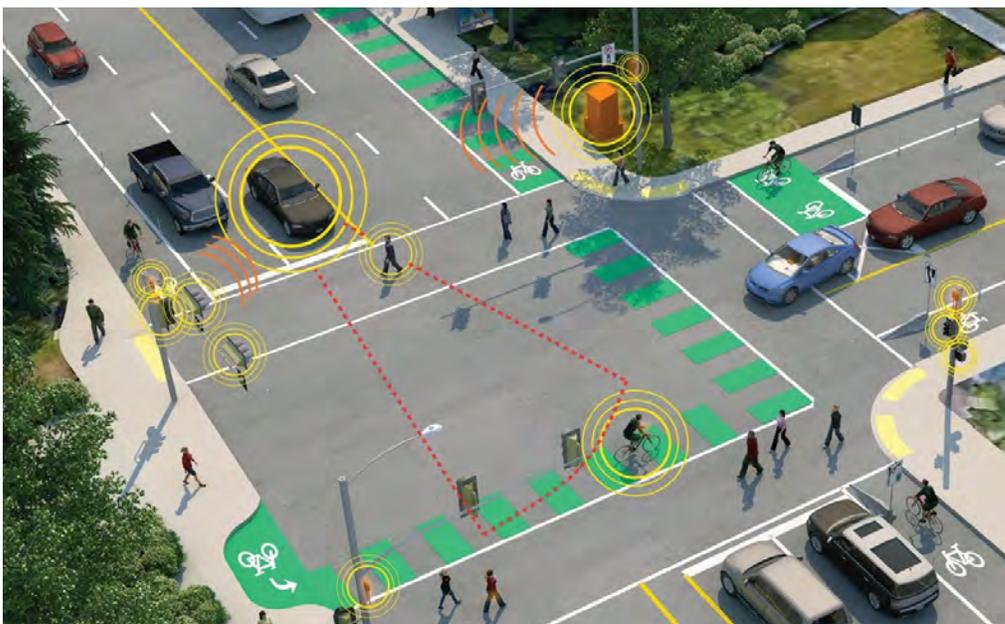
type of communication travels across the current 4G mobile networks, across local Wi-Fi, as well as with Dedicated Short-Range Communications (DSRC) devices mounted in the car and along the roadside. At present only, DSRC can provide fast enough communications for a car to react in real time – such as when the vehicle in front of you suddenly stops short. In the future, 5G mobile networks are expected to deliver similar if not faster communication speeds.

*What this means for Davidson:* The underlying backbone for connected communications is a fiber-optic network. At a minimum, **the Town should always plan for fiber optic capacity with every roadway project** with the installation of extra conduit. If possible, the Town should work with the local utilities to ensure that sure capacity is provided

throughout the community. As identified in the 2017 Parking Study, the Town can **begin researching and testing potential connected devices to transmit available parking information in the downtown area** to potential patrons. With experience, additional communications devices can be installed throughout the town to prepare for additional advances in vehicle technology, particularly for shared transit vehicles.

### Key Actions:

- 6.13. Ensure that all new street infrastructure projects have accommodations for fiber-optic through the placement of additional conduit for future expansion or the installation of cabling
- 6.14. Install parking sensor technology and provide a mobile app or provide an Application Programming Interface (API) to facilitate third party usage (e.g., Google Maps) to broadcast parking availability
- 6.15. Evaluate the installation of DSRC equipment in a connected corridor (e.g., Jackson Street, Concord Road, Main Street)



Rendering of a Connected system

# 05

## PROGRAMS + POLICIES

# OVERVIEW

Policies establish priorities for decision making about infrastructure design, mobility services and programs, and transportation investments. They provide guidance in decision-making that will lead to successful implementation and achievement of the goals for mobility in Davidson.

Programming supports changes in travel behavior, choices, and demand. These changes can be accomplished by focusing on education, encouragement, enforcement, and evaluation programs. Successful programs help expand travel choices, reduce transportation costs for consumers, improve travel

safety, improve access to jobs, businesses, and services, and help measure successful achievement of mobility outcomes.

## Programming + Policy Goals:

- Prioritize travel safety in Davidson
- Expand travel choices to get to, and around, Davidson
- Improve the predictability and reliability of traveling to, and around, Davidson

The following chapter details policy changes and programming recommendations for the Town of Davidson.

## PROGRAMS + POLICY AREAS COVERED:

- Traffic Impact Analysis
- Education Campaign
- Transportation Demand Management
- Wayfinding



Residents listen to a community presentation on transportation planning policy.

# REVISE TRAFFIC IMPACT ANALYSIS

Like most municipalities, Davidson requires an analysis of traffic impacts of new developments and redevelopments to assess if the existing mobility network can adequately accommodate new growth without undue impacts to the traveling public. Davidson diverges from most other communities in focusing not solely on motor vehicle impacts and mitigation such as road widenings and turn lanes to rectify, but on solutions focused on mode choices and land use mixtures and development patterns that result in less overall traffic impact than conventional suburban development.

The Town's TIA process includes utilizing Town-administered on-call traffic consultants to prepare TIA's. Developers will be "assigned" an on-call TIA consultant upon application.

Since the Town is beginning the process of revamping their Comprehensive Plan, it would be premature to conduct a comprehensive overhaul of the Traffic Impact Analysis (TIA) requirements (Section 6.10 of the Davidson Planning Ordinance) until future land use goals and vision are solidified in the Comprehensive Planning process, but

some best practices to be considered for Davidson from other communities are recommended in this Mobility Plan. The Town did incorporate several minor revisions in July of 2017, but **any substantial modifications should wait until the results of the Comprehensive Plan** set the direction for the next iteration of land use planning in Davidson.

The following are areas for consideration in a rewrite of the TIA requirements. The different types of impact analysis could be used independently or in conjunction with each other.

**1. Base decisions on increment of delay, not simply letter-grade level of service (LOS).** The City of Chattanooga, TN, now bases its decisions on the increment of additional vehicular delay resulting from a proposed development proposal. By focusing on the number of additional seconds a person may expect to spend waiting in traffic rather than a nebulous and rather misleading letter grade, the Town and the public can clearly see the impact a new development will have on their daily lives, and the Town can plan accordingly with mitigation measures.

**2. Use new available technologies to help validate or augment conventional traffic analysis.** Real-time trip making characteristics data is available from several sources, mined from cell phone data. The Town and/or its consultants can purchase such data to evaluate trip-making characteristics to determine average trip lengths, travel times, mode choices, pass-by propensity, and many other characteristics not available from conventional Institute of Transportation Engineer (ITE) methods of trip generation, distribution, and assignment. Using this data for the Town of Davidson would augment the analysis obtained from more conventional methods and allow evaluators to better determine forecasted traffic impacts rather than relying simply on methodologies based on outdated and often suburban context case studies that the ITE methodologies are based upon.

**3. Consider replacing LOS as the measure of traffic evaluation with vehicle-miles traveled (VMT).** A VMT-level approach better determines the impacts attributable to a specific development based on its particular land use plan (single use vs.

mixed use) and surrounding land use context (urban infill site vs. suburban greenfield). A VMT analysis also takes advantage of modal splits (% of trips by each mode of travel) due to a proposed development's proximity to transit or active transportation facilities such as trails or greenways. The Town should consider utilizing a VMT analysis at the discretion of the applicant as a means to better determine the ability of a proposed development to cover trips by other modes or to even shorten trip lengths due to the development pattern and surrounding context.

#### **4. The Town should consider using Multi-Modal Level of Service (MMLOS) as a measure of effectiveness.**

The Charlotte Department of Transportation (CDOT) currently requires a MMLOS analysis for their TIA's in addition to the conventional vehicular LOS analysis. Like Davidson, Charlotte must coordinate with NCDOT due to the number of state roads within their jurisdiction, but by understanding the MMLOS framework surrounding a particular development, the City is able to address shortfalls in the modal networks that would otherwise not be evaluated or considered in a conventional TIA process. The Town could develop an equivalency matrix among roadway (turn lanes, lane widenings, etc) and other mitigation items (transit shelter, multi-use path,

sidewalks, enhanced crossings, etc) through quantifying the cost of various mitigation measures and offering a "menu" based on the equivalent cost of a roadway item.

#### **5. The Town should allow applicants to take advantage of research focused on evaluating and documenting the differences in trip making characteristics of mixed-use environments.**

The National Cooperative Highway Research Project (NCHRP) published *Enhancing Internal Trip Capture Estimation for Mixed Use Developments* in 2011 to study the interrelationship of mixed land uses in a development to better determine trip origin and destination characteristics, particularly internal capture (trips that never leave the development and therefore do not impact the surrounding roadway network). The research was done as a response to the lack of an analysis method to determine the interaction among differing uses that could be trip producers and attractors within a single development. Previously, there was no mechanism (nor research) to adequately measure the lesser vehicle impacts on surrounding streets of having a mixture of land uses internal to a single site. For Davidson, the ability to evaluate development impacts in this manner would be particularly useful and informative in the decision-making process. In addition to the document, the

NCHRP project includes a spreadsheet to estimate trip capture for proximate land uses. It is recommended that this methodology should also be allowed for applicable mixed use development proposals within the town.

#### **6. Finally, the Town should formalize and adopt non-personal motor vehicle-related mitigation measures.**

For instance, if a development is located in proximity to a transit stop or greenway, the provision by the applicant of features intended to enhance use of these modes (such as transit passes, transit shelters on-site, or bikeshare/loaner bikes or other shared mobility devices) could count toward mitigating their development impact on traffic.

While it is important to provide adequate facilities for development within the town, it is equally or more important to make sure that the right facilities are provided to maintain and not detract from the quality of life that Davidson has and will continue to enjoy in the future. For those reasons, it is imperative that consideration of best practices in data collection, analysis, and mitigation can create a data-rich environment to inform decision-making for development in the future.

# EDUCATION CAMPAIGNS

Education for transportation system users (e.g., drivers, cyclists, pedestrians, transit riders) was noted as an overarching priority and principle by people who participated in the plan's public input process.

The Town already offers some education programs in the form of bicycle safety and training for children through the Parks and Recreation Department. A bike skills training course for children is offered twice a year and coincides with early-dismissal days for Charlotte-Mecklenburg Schools.

The Parks and Recreation Department also partners with the Town of Cornelius to host a Bike Expo once a year, where bicycle safety information and resources are provided. The Expo also includes a family-friendly bike tour around the two towns to help familiarize cyclists with navigating the towns' bike facilities and family-friendly routes.

The national "Walk with a Doc" program has recently been implemented in Davidson to encourage regular physical activity. The town's website describes the details of the program: "A doctor gives a brief presentation, on a pertinent health topic, and then leads



*An example of a multi-modal safety campaign*

participants on a walk, at their own pace, engaging walkers and answering questions."

To build off of these existing programs, the **Town should continue to implement the education recommendations outlined in the Walks and Rolls Plan of 2013.** These recommendations include:

- **Traffic Safety Village:** for primary-school age children to learn about road safety from the point of view of pedestrians, cyclists, and drivers.
- **Positive Media Campaign:** continue to use the NCDOT Watch For Me, NC materials ([www.watchformenc.org/](http://www.watchformenc.org/)) and other resources, such as those pictured at left, to encourage a culture of safety and respect for all travel modes.
- **Walking + Biking Maps:** updated maps of existing bicycle and pedestrian facilities can help inform and encourage residents to use active travel modes on a more regular basis.

In addition, the Town should consider developing a **Vision Zero plan** to eliminate roadway deaths and injuries through data-driven prevention strategies. Resources for developing such a program, which include education campaigns for pedestrians, bicyclists, and drivers alike, can be found at [NCvisionzero.org](http://NCvisionzero.org).

# TRANSPORTATION DEMAND MANAGEMENT

The Town should consider establishing transportation demand management (TDM) programs that promote transit, walking, bicycling, carpooling, ridesharing, telecommuting, and other options to increase accessibility and reduce dependence on single-occupancy vehicle travel. TDM efforts can reduce congestion, reduce parking demand, and reduce travel costs at the individual and community level. Successful TDM programs expand mobility for residents, commuters, and visitors so that they have the freedom of choosing between multiple options to meet their travel needs.



Overview of TDM framework

Many TDM programs already exist in town but need to be promoted more widely to increase awareness. Some **existing programs to consider promoting and/or expanding** include the following:

- **Safe Routes to School:** the Town already supports SRTS through is sponsorship of Walk to School Day in October and Bike to School Day in May. Expanded efforts to make carpooling, busing, walking and biking to schools in town can help relieve traffic congestion related to drop-off and pick-up times, while also establishing healthy lifelong habits of walking and biking and transit use.
- Charlotte Area Transit Service (CATS) provides express and local bus

service to Davidson and a **vanpool service** that allows 5 to 15 commuters from the same area to share their ride to work. For more information, visit <https://charlottenc.gov/cats/commuting/vanpool/Pages/default.aspx>

- CATS also encourages commuters to “Buddy Up” in a **carpool** by helping interested commuters find others in their area to carpool with through the SharetheRideNC ridematching website, available at: [www.sharetheridenc.com/](http://www.sharetheridenc.com/)
- **Bike-share** programs and programs that are currently available on the Ingersoll Rand corporate campus and Davidson College

campus can serve as models for expanded service throughout town.

- Likewise, the **car-share** service (ZipCar) that is available on Davidson College could be expanded to the town and other car-sharing apps (e.g., Turo) could be promoted.

Additional TDM programs that the Town might also explore include:

- **A town-sponsored TDM webpage** to promote local transport options and partners.
- **Events and competitions** that can encourage and challenge area employers and schools

# TDM, continued

to increase alternative travel modes.

- Town-lead outreach as expanded transit services (see Transit recommendations in Chapter 4) are implemented—e.g., geofenced social media & direct mail to people along the routes; encourage bike connections; a photo scavenger hunt or business passport promotion on or near launch to encourage people to use transit options.
- An Annual **Employer/School Commute Summit**. As major employers and schools contribute significantly to traffic in Davidson, convening these groups plus CATS and the Town each year to develop coordinated strategies for TDM will help create efficiencies and shared actions.
- A Developer **TDM ordinance** to assess increased Vehicle Miles Traveled (VMT) and allow developers to “buy down” their burden from a menu (e.g., see <https://sf-planning.org/transportation-demand-management-program>)
- A Town TDM ordinance that requires large employers to conduct an annual survey to determine their mode split and come up with plans to reduce single-occupancy trips and designate an Employee Transportation Coordinator (ETC).
- Bundle **TDM projects and benefits into new parking revenue** plans (see Parking recommendations in Chapter 4)
- **Open Streets Events**—the temporarily closure of streets to cars for a day—can help open town residents up to new ways of using their streets by encouraging walking, bicycling, skating, playing sports, and so on. These events have been very successful in cities across North America in encouraging alternative transportation modes on a more regular basis. For more information about open street events visit: [openstreetsproject.org/](http://openstreetsproject.org/) This type of event can be used as a incremental step towards larger TDM efforts.
- Incentives for businesses that implement measurable TDM programs that contribute to Town goals.
- Other TDM-related programs such as parking pricing and enhanced transit services are discussed in Chapter 4.

Thousands of workers and students (and their parents) come to Davidson each day to our many employers and our highly regarded public, private, and charter schools and preschools. Most of these people arrive in personal private vehicles. If even 5-10% of these trips could be diverted to other modes of travel (transit, carpooling, walking, biking, telework, etc.), there would be a measurable decrease in cars coming to Davidson in the peak travel times and potential increases in safety, air quality, and public health. For examples of TDM programs that have been implemented in other small communities see [Transportation Demand Management: A Small and Mid-Size Communities Toolkit](#).

# MULTI-MODALWAYFINDING

The Town in collaboration with NCDOT, local businesses (Downtown Davidson business group and Circles at 30 business group), and institutions (e.g., Davidson College), should develop and implement a multimodal wayfinding plan that complements the existing motor vehicle wayfinding system.

The Town has invested in a wayfinding sign program that helps direct motorists to the downtown retail district and other popular destinations. A similar wayfinding signage program for pedestrians and bicyclists can help promote the fact that many of the town's key attractions can be reached easily and quickly by foot and bicycle and transit.

The Walks and Rolls Plan of 2013 provides detailed recommendations for the development of bicycle signage that can form the basis of a bicycle and pedestrian wayfinding program. Adding these types of wayfinding signs can help to improve the overall legibility of our pedestrian and bicycle system in town and encourage residents and visitors to consider other transportation options.

DAVIDSON WALKS & ROLLS:  
ACTIVE TRANSPORTATION MASTER PLAN

**SIGN TYPES**

**Description**  
A bicycle wayfinding system consists of comprehensive signing and/or pavement markings to guide bicyclists to their destinations along preferred bicycle routes. There are three general types of wayfinding signs:

**Confirmation Signs**  
Indicate to bicyclists that they are on a designated bikeway. Make motorists aware of the bicycle route. Can include destinations and distance/time. Do not include arrows.

**Turn Signs**  
Indicate where a bikeway turns from one street onto another street. Can be used with pavement markings. Include destinations and arrows.

**Decisions Signs**  
Mark the junction of two or more bikeways. Inform bicyclists of the designated bike route to access key destinations. Destinations and arrows, distances and travel times are optional but recommended.

**Alternative Designs**  
A customized alternative design may be used to include pedestrian-oriented travel times, local city logos, and sponsorship branding.

**Discussion**  
There is no standard color for bicycle wayfinding signage. Section 1A.12 of the MUTCD establishes the general meaning for signage colors. Green is the color used for directional guidance and is the most common color of bicycle wayfinding signage in the US, including those in the MUTCD.

**Additional References and Guidelines**  
AASHTO. (2012). Guide for the Development of Bicycle Facilities.  
FHWA. (2009). Manual on Uniform Traffic Control Devices.  
NACTO. (2012). Urban Bikeway Design Guide.

**Materials and Maintenance**  
Maintenance needs for bicycle wayfinding signs are similar to other signs and will need periodic replacement due to wear.

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*Wayfinding signage recommendations from the Davidson Walks and Rolls Plan of 2013*

# 06

## IMPLEMENTATION

# OVERVIEW

This chapter defines a structure for managing the implementation of the Davidson Mobility Plan. Implementing the recommendations within this plan will require leadership and dedication to the Town's mobility vision by elected officials and citizens and a variety of agencies, organizations, and partners. The Town will not be able to accomplish the recommendations of this plan by acting alone; success will be realized through collaboration with state and federal agencies, neighboring communities, land owners, the private sector, and non-profit organizations. Equally critical, and perhaps more challenging, will be meeting the need for a recurring source of revenue. Even small amounts of local funding will be very useful and beneficial when matched with outside sources.

It is difficult to know what financial resources will be available at different time frames during the implementation of this plan. However, there are still important actions to take in advance of major investments, including key organizational steps, the initiation of education and safety programs, and the development of strategic, lower-cost infrastructure projects. Following through on these priorities will allow the key local and regional partners to implement the larger list of projects of programs over time while taking advantage of strategic opportunities, as they arise.

The **three main ways to improve mobility conditions in Davidson are through transportation facility construction and improvement, program implementation, and policy/regulatory changes and evaluation.** This chapter outlines the primary roles for key players in plan implementation and how they relate to one another. Specific action steps are provided in this chapter along with a suggested approach for evaluating and implementing priority projects in Chapters 4 & 5 over time.

## KEY PARTNERS IN IMPLEMENTATION

The recommendations in this plan will be implemented in collaboration with various local, regional, and state partners including, but not limited to the organizations in the list below. The roles of the primary entities responsible for plan implementation are described in the paragraphs on the following pages.

- Town of Davidson Board of Commissioners
- Planning Board
- Livability Board
- Planning Department
- Public Works Department
- Parks and Recreation Department
- NCDOT
- Police Department
- Charlotte Regional Transportation Planning Organization (CRTPO)
- Cabarrus - Rowan MPO
- Lake Norman Transportation Commission (LNTC)
- Developers
- Local Residents, Clubs, and Advocacy Groups
- Charlotte Area Transit System (CATS)
- Davidson College
- Neighboring Jurisdictions

## THE ROLE OF THE TOWN OF DAVIDSON'S BOARD OF COMMISSIONERS

The Town Board of Commissioners will be responsible for adopting this plan and approving future planning, prioritization, funding, and staff expenditures related to plan implementation. By adopting this plan, the Town Board of Commissioners is also signifying that they are prepared to support the efforts of other key partners in the plan's implementation, including the work of its own departments and state and regional partners.

If the Board of Commissioners adopts this plan, they will:

- Approve priority projects and ordinance updates related to the plan implementation.
- Include priority projects in upcoming local and regional project plans. Advocate for the plan's recommendations to CATS, the County, and CRTPO and neighboring jurisdictions and regional organizations such as the Cabarrus - Rowan MPO, the Lake Norman Transportation Commission (LNTC), and the Centralina Council of Governments.
- Consider bond referendums and other transportation funding mechanisms for plan implementation.

## THE ROLE OF THE TOWN OF DAVIDSON'S PLANNING BOARD

The Town of Davidson Planning Board serves as an advisory board to the Board of Commissioners on all matters of planning and zoning.

The Planning Board should be prepared to address the following items:

- Understand and incorporate mobility plan-related policy into public and private plan reviews and potential revisions to the Planning Ordinance.
- Become familiar with the recommendations of this plan, and be prepared to support its implementation.
- Participate in at least annual reviews of plan implementation and project prioritization.

## THE ROLE OF THE TOWN OF DAVIDSON'S LIVABILITY BOARD

The Livability Board has a primary role in providing recommendations related to greenways and bicycle and pedestrian mobility.

The board should be prepared to address the following items:

- Meet with staff from the Planning Department; evaluate progress of the plan's implementation and offer input regarding bicycling issues; assist staff in organizing pedestrian- and bicycle-related events and educational activities.
- Build upon current levels of local support for walking and bicycling issues and advocate for local project funding.
- Work with local advocacy groups and Town staff and partners to assist in organizing pedestrian- and bicycle-related events, educational activities, and enforcement programs.

## THE ROLE OF THE TOWN OF DAVIDSON'S PLANNING DEPARTMENT

The Planning Department staff will take primary responsibility for tracking the implementation of the plan.

The department will lead or participate in the following tasks:

- Pursue grants for funding priority projects and priority programs.
- Communicate and coordinate with the Town of Davidson Public Works Director and the Town of Davidson Parks and Recreation Director on priority projects for town-maintained roadways and greenway corridors/easements.
- Communicate and coordinate with local developers on adopted plan recommendations for all mobility related elements.
- Communicate and coordinate with the Parks and Recreation Department, Mecklenburg County, NCDOT, CATS, and neighboring municipalities (e.g., Kannapolis and Cabarrus County) on regional mobility projects; partner for joint-funding opportunities.
- Ensure that when NCDOT-maintained roadways in Davidson are resurfaced or reconstructed, that this plan's adopted recommendations are included on those streets.
- Meet with the Livability Board and Mobility subcommittee of the Planning Board; provide progress updates for plan implementation and gather input regarding mobility issues.
- Ensure that recommended programs are carried out by various partners.
- Maintain and update the list of proposed projects for the Town. They will manage planning projects and/or consultants to see that projects and policies are completed.
- Present mobility-related policy and policy revisions to the Planning Board and Town Board of Commissioners for their approval. Provide information to the Board of Commissioners regarding funding for plan implementation.

## THE ROLE OF THE TOWN OF DAVIDSON'S PUBLIC WORKS DEPARTMENT

The Public Works Department will take primary responsibility for the construction and maintenance of Town-owned and maintained roadways and sidewalks, as well as construction and maintenance of Town greenway trails.

The department will lead or coordinate with other partners the following tasks:

- Construct and maintain pedestrian and bicycle facilities (on Town roadways and greenways).
- Notify the Planning Department of all upcoming mobility related construction or resurfacing/restriping projects, no later than the design phase; provide sufficient time for comments; incorporate recommendations from the planning staff and others.
- Communicate and coordinate with NCDOT Division 10 on priority projects for NCDOT-maintained roadways.

## THE ROLE OF THE TOWN OF DAVIDSON'S PARK AND RECREATION DEPARTMENT

The Town of Davidson Parks and Recreation Department operates the recreation, athletic, and special event programs for the citizens of Davidson. They also maintain a variety of community, neighborhood, greenway, and natural park areas. This department also oversees the majority of greenway planning and greenway land acquisition, and is involved in construction of greenways.

The Parks and Recreation Department should be prepared to address the following items:

- Work with the Livability Board and the Town of Davidson Planning Department on review and development of priority greenway trails.
- Communicate and coordinate with the Town of Davidson Planning Department, Mecklenburg County, and neighboring municipalities on regional greenway corridors; partner for joint-funding opportunities.
- Work with local advocacy groups and the Livability Board to assist in organizing pedestrian- and bicycle-related events, educational activities, and enforcement programs.

## THE ROLE OF THE LOCAL NCDOT, DIVISION 10

Division 10 of the NCDOT is responsible for the construction and maintenance of NCDOT-owned and maintained roadways in the Town of Davidson (among all other NCDOT roadways in their five-county Division).

Division 10 should be prepared to address the following items:

- Become familiar with the recommendations for NCDOT roadways in this plan; take initiative in incorporating this plan's recommendations into the Division's schedule of improvements.
- Notify the Town of Davidson Planning Department of all upcoming roadway reconstruction or resurfacing/restriping projects in Davidson, no later than the design phase; provide sufficient time for comments from the planning staff.
- Seek guidance and direction from the NCDOT Division of Bicycle and Pedestrian Transportation on issues related to this plan and its implementation.

## THE ROLE OF THE TOWN OF DAVIDSON POLICE DEPARTMENT

The Town of Davidson Police Department is responsible for making Davidson a safe place to live, work, and raise a family.

The Police Department should be prepared to address the following items:

- Continue to be experts on mobility-related laws in North Carolina.
- Enforce laws that affect walking and bicycling, speeding, running red lights, aggressive driving, etc.
- Participate in motorist, pedestrian- and bicycle-related education programs.

## THE ROLE OF DEVELOPERS + LANDOWNERS

Developers and landowners in Davidson play a critical role in facility development whenever a project requires the enhancement, dedication, or construction of roadways or greenways.

Developers/landowners should be prepared to address the following items:

- Become familiar with the recommendations in this plan as it relates to the requirements of the Planning Ordinance.
- Work with Town staff and elected officials and the public to implement the recommendations in this plan as required by the Planning Ordinance.

## THE ROLE OF LOCAL RESIDENTS, CLUBS, + ADVOCACY GROUPS

Local residents, clubs, and advocacy groups, including, but not limited to the Davidson Village Network, Save Davidson, the Rocky River Road Bicycle Club, etc., play a critical role in the success of this plan.

They should be prepared to address the following items:

- Continue offering input regarding mobility issues in Davidson.
- Assist town staff and Livability Board by volunteering for mobility-related events and educational activities and/or participate in such activities.
- Assist Town staff and Livability Board by speaking at Town Board of Commissioners meetings and advocating for mobility project and program funding.

# PROJECT SELECTION + UPDATING OVERVIEW

The priority project list (Chapter 4) and action steps (Chapters 4 & 5 and in the table that follows) from this plan will be reviewed and updated annually and recommendations for new projects will be developed at that time. Further details about project development and implementation roles are noted above and in the table on the following pages. In general,

- The Priority Project List and recommended actions will be reviewed and modified as needed. **At least annually**, and prior to development of the town's capital improvement plan (CIP), Town staff will review project prioritization and actions and provide staff recommendations for the following fiscal year.
- An **annual joint Livability / Planning Board meeting** will be scheduled to review the recommended priority projects and proposed updates to the project list for the purpose of making a recommendation to the Town Board of Commissioners.
- Priority project and funding lists will be presented to the Town Board of Commissioners for Approval.
- Town Staff will pursue grants each year for priority projects based on the Town-board approved list of projects. For grant amounts under \$100,000 for priority projects or programs, prior board approval will not be required assuming no local match is required or that matching funds have been previously approved.
- **Every five years** a more comprehensive review of project status and prioritization should be considered.
- Every year an **Action Plan** for each annual list of priority projects will be developed by Town staff. The annual action plan should be populated with the current priority projects from the Mobility Plan. The action plan should include, but is not limited to the following elements:
  1. Project / Policy Name:
  2. Responsible Departments/Staff:
  3. Funding sources:
  4. Time Allocation:
  5. Partners needed:
  6. Board Action required:
  7. Process for approval and implementation:
  8. Timeline to complete:

# ACTION STEPS

The action steps in the following tables are integral to achieving the goals and vision of this plan. As guiding recommendations and the clearest representation of specific items to accomplish, they should be referred to often, but at least annually when developing Town budgets and work plans. Action numbers refer to action steps enumerated in Chapters 4 and 5 with the exception of action step numbers beginning with 8, which are administration and planning tasks noted for the first time in this chapter.

The action steps are provided in the following phases: Short-term (1-3 years), Medium-term (3-5 years), Long-term (5 years and beyond), and Ongoing.

ACTION STEPS				
ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
<b>PLAN ADMINISTRATION AND EVALUATION TASKS</b>				
8.1. Present plan to Town Board of Commissioners	Davidson Planning Department	Project consultant	Presentation to Town Board of Commissioners in summer 2019	Short-term
8.2. Adopt this plan	Davidson Town Board of Commissioners	Davidson Planning Department	Through adoption, the plan becomes a legal planning document of the Town. The plan is intended to be incorporated into the Comprehensive Plan, upon adoption of that plan. Projects will also be incorporated into regional planning lists.	Short-term
8.3. Designate staff	Davidson Town Board of Commissioners, Town Manager	Leadership of town departments	Designate staff to oversee the implementation of this plan and the proper maintenance of the facilities that are developed. It is recommended that a combination of existing Planning, Public Works, and Parks & Recreation staff oversee the day-to-day implementation of this plan.	Ongoing
8.4. Identify and secure specific funding for implementation	Davidson Planning Department	Town Manager, other town departments, Public Works, Park & Recreation	This plan contains a list of priority projects with cost estimates and a prioritized list of overall projects.	Ongoing
8.5. Complete top priority projects	Davidson Public Works, Park + Recreation staff, NCDOT Division 10 + developers	Davidson Planning Department, NCDOT Division 10, Developers, CATS	This plan contains ranked lists of projects by mode and type to mobility. The Town Board of Commissioners and departments will want to revisit priority projects in each budget cycle and as funding opportunities arise.	Ongoing

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
8.6. Continually support and evaluate implementation of this plan	Planning Board, Livability Board	Davidson Planning Department, Town Board of Commissioners, Public Works, Park & Recreation	These appointed boards should be updated on mobility topics bi-annually at least, and one of their meetings each year should be dedicated to evaluating the implementation of this plan. Annual meetings with staff should be focused on re-prioritizing	Ongoing
8.7. Present this plan to other local and regional bodies and agencies.	Planning staff	Planning Board, Livability Board	This plan should be presented to other local and regional bodies and agencies. Possible groups to receive a presentation might include the regional transportation and greenway planners, schools and youth organizations, civic organizations, major local employers including Davidson College, IR, and MSC, and large neighborhood groups.	Ongoing
8.8. Coordination with key project partners	Planning staff	Town/County departments, CATS, NCDOT, Livability Board, and local & regional stakeholders	Davidson Planning staff, the Town Board of Commissioners, members of appointed boards, and local and regional stakeholders should meet on an annual basis to coordinate on mobility plan implementation.	Ongoing
8.9. Seek multiple funding sources for facilities and programs	Planning staff, Park + Recreation staff	Finance Director, Livability Board	The project descriptions in this plan provide preliminary information, including some project cost estimates.	Ongoing
8.10. Ensure planning efforts are being integrated regionally	Planning staff	CRTPO, neighboring municipalities, Planning & Livability Boards, CATS	Combining resources and efforts with surrounding municipalities, regional entities, and stakeholders is mutually beneficial, especially with trail development. Communicate and coordinate with the regional partners on regional trails and bicycle facilities and partner on joint-funding opportunities. After adoption by the town, this document should also be recognized in regional transportation plans.	Long-term/ Ongoing
8.11. Develop a long term funding strategy	Town Manager + Finance Director	Planning staff & Board of Commissioners	To allow continued development of the overall system, capital funds for mobility projects and programs should be set aside every year. Funding for an ongoing maintenance program should also be included in the town's operating budget.	Short-term

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
<b>PLAN RECOMMENDATION ACTION ITEMS</b>				
<b>PEDESTRIAN MOBILITY (SEE CHAPTER 4)</b>				
1.1. Include pedestrian and greenway improvement projects in the local Capital Improvement Program (CIP)	Planning, Public Works, Park + Rec	Livability Board, Planning Board,	Increasing consistent year-to-year funding levels.	Annual; Ongoing
1.2. Evaluate a cost-share program for sidewalk maintenance	Planning, Public Works	Livability Board, Planning Board,	To ensure sidewalk repair is implemented equitably.	Short-term
1.3. Increase minimum sidewalk width on major roads	Planning, Public Works	Livability Board, Planning Board,	(E.g., Main Street/NC-115, Griffith Street, Concord Road, etc; and future roadway types “Parkway” and “Urban Avenue/Boulevard” in the Planning Ordinance) and other arterial or collector type streets with at least 3,000 cars/day (e.g., Potts, Jetton, Beaty) to 6 feet minimum	Short-term
1.4. Develop/ implement a sidewalk infill prioritization methodology	Public Works, Planning	Livability Board, Planning Board	See page 74-75 for more details	Short-term
1.5. Install more consistent crosswalk treatments throughout town	Public Works, NCDOT	Planning, Livability Board	Especially at priority crossings identified on page 85. See pages 84-85 for more info.	Short-term/ Ongoing
1.6. Develop preliminary plans (30% construction drawings) for priority sidewalk projects.	Public Works	Planning, Livability Board	This action will help determine accurate costs and also help leverage local capital funds to be used as an effective match for larger grants (e.g., from CRTPO).	Ongoing
1.7. Update Planning Ordinance to reflect recommendations for advisory shoulder and sidepath design	Planning	Planning Board, Livability Board	As detailed on page 81 and 83, respectively.	Short-term

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
<b>BICYCLE MOBILITY (SEE CHAPTER 4)</b>				
2.1. Include bicycle projects in the local Capital Improvement Program (CIP)	Planning, Public Works, Park & Rec	Livability Board, Planning Board,	Increasing consistent year-to-year funding levels.	Annual; Ongoing
2.2. Conduct corridor studies along Griffith Street, Concord Road, and Main Street/NC-115	Planning, Public Works	Livability Board, Planning Board,	In order to assess feasibility of enhanced bicycle (and multi-modal) facilities along these key corridors.	Short-term/ Medium-term
2.3. Fund bicycle facility maintenance	Public Works, Finance	Livability Board	Consider funding additional maintenance equipment or staff to sweep on-road bikeways, refresh striping, and other bikeway maintenance needs.	Ongoing
2.4. Develop preliminary plans (30% construction drawings) for priority bicycle projects.	Public Works	Planning, Livability Board	To increase readiness for grant funding,	Ongoing
2.5. Increase bicycle parking facilities	Public Works, Economic Development	Livability Board	(both short- and long-term parking, as defined by Planning Ordinance) by 50% by 2023 at destinations.	Medium-term
<b>STREETS AND MOTOR VEHICULAR MOBILITY (SEE CHAPTER 4)</b>				
3.1. Use the concepts and policies presented in this Plan to implement proposed improvements	Planning, Public Works	Livability Board, Planning Board	Through regularly scheduled capital projects, such as streetscape projects, street resurfacing, or new public or private development projects.	Ongoing
3.2. Use maintenance resources and staff to support programs, planning efforts, and infrastructure maintenance.	Public Works, Planning, Park & Recreation	Livability Board	Regular maintenance of roadways, multi-use paths, sidewalks, and bike-ways is essential to providing safe and accessible mobility choices.	Ongoing
3.3. Actively manage the list of projects in this plan and assign appropriate funding and staff time to implement them.	Public Works, Planning, Park + Recreation	Livability Board, Planning Board	Be flexible and opportunistic with funding and prioritization of projects to deliver projects as quickly as possible.	Ongoing

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
3.4. Update Planning Ordinance to include design standards for shared streets/ festival streets/ woonerfs.	Planning	Planning Board	These are street classifications that can accommodate all travel modes on narrow low-speed, low-traffic-volume streets, such as Spring Street.	Short-term
3.5. Continue to work with regional partners to develop final alignments for the North-South Parkway.	Planning	Planning Board	This roadway network is anticipated to provide an alternative route to I-77 and NC-115 as well as for the Grey Road and Davidson-Concord Road extensions.	Medium-term/Long-term

### PARKING RECOMMENDATIONS (SEE CHAPTER 4)

4.1. Implement a performance-based parking program.	Planning, Economic Development	Public Works	For the downtown area, specifically.	Short-term
4.2. Conduct a pilot application of pricing	Economic Development, Public Works	Planning, Police	Using pay station meters, for on-street parking in the downtown retail district.	Medium-term
4.3. Establish the administrative authority for staff to set parking prices based on observed demand.	Economic Development	Planning, Police	Ordinance change	Short-term
4.4. Establish a regular monitoring and reporting schedule for parking utilization and enforcement	Public Works, Economic Development, Police	Planning	In order to manage its performance-based parking program.	Short-term/ Ongoing
4.5. Continue shared parking program	Economic Development, Public Works	Planning	Maximize the use of existing public and private parking spaces in and around the downtown retail district	Short-term/ Ongoing
4.6. Expand parking & multi-modal wayfinding system	Economic Development, Public Works	Planning	To direct drivers to available parking spaces.	Medium-term
6.14. Install parking sensor technology	Economic Development, Public Works	Planning	And provide a mobile app or provide an Application Programming Interface (API) to facilitate third party usage (e.g., Google Maps) to broadcast parking availability	Medium-term/Long-term

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
<b>TRANSIT RECOMMENDATIONS (SEE CHAPTER 4)</b>				
5.1. Work with CATS and major employers in and around Davidson to expand transit services	Planning, CATS	Davidson College, major employers and schools	Expand to all-day and weekends for local and express bus service	Short-term
5.2. Support implementation of fixed guideway regional transit station(s) in Davidson and complementary mobility hub services.	CATS, Planning, developers/landowners	Planning Board	A BRT design study will begin in FY2020	Ongoing/ Medium-term/Long-term
5.3. Improve bus stop amenities to make access and waiting for the bus more comfortable and attractive.	Planning, Public Works	CATS	See also Walks & Rolls Plan recommendations	Medium-term
5.4. Implement a local transit service that will provide connections within Davidson	Planning, CATS	local employers and schools	Explore options suggested on pages 120-123	Short-term/ Medium-term
<b>NEW MOBILITY RECOMMENDATIONS (SEE CHAPTER 4)</b>				
6.1. Require the installation of Electric Vehicle (EV) charging capacity and/or infrastructure	Planning	Planning Board	For all new construction. Change to Ordinance	Short-term
6.2. Promote and encourage the installation of additional super-charging stations at key locations	Public Works	Planning, Economic Development	(E.g., Davidson Commons, MSC, Downtown, College)	Medium-term
6.3. Convert Town vehicle fleets to electric when practical	Public Works, Fire, Police, Park + Rec		As individual vehicles need replacing, they should be replaced with new electric.	Ongoing
6.4. Update Ordinances to align with NC Statutes regarding low-speed vehicles.	Planning, Legal/Admin	Planning Board	Clarify language to differentiate between recreational and transportation low-speed vehicles.	Short-term

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
6.5. Promote, encourage, and manage the continued expansion of dockless bike, scooter, and similar mobility solutions	Planning, Public Works, Economic Development	Davidson College, IR, schools and major employers and developers, Livability Board	With particular attention to parking regulation. For guidance on how to develop policies to regulate shared-mobility services, refer to the <a href="#">NACTO Guidelines for the Regulation and Management of Shared Active Transportation</a> .	Short-term
6.6. Investigate a partnership with ride-share services for trips that have their original or destination in the downtown	Planning	Economic Development	Facilitating ride-share services to/from downtown may be a strategy to help reduce the demand for parking downtown.	Short-term
6.7. Investigate ride-share service subsidies for town residents	Planning, CATS	Davidson College	How might the Town facilitate the use of ride-share services to fill gaps in regular transit services	Short-term
6.8. Conduct a feasibility study for the deployment of a driverless shuttle system	Planning, CATS	major employers	In the Griffith Street, Concord Road, and Main Street corridors	Medium-term
6.9. Develop Mobility Hub concepts for downtown and exit 30	Planning, CATS	Davidson College, major employers, developers	Combine transit access and shared/new mobility service options. See also Transit section.	Medium-term
6.10. Pilot ride-share pick up/drop off and local delivery zones in the downtown	Economic Development, Public Works	Planning	Consider dedicated on-street spaces near Summit and Kindred. Require new curb access zones with new development.	Short-term
6.11. Investigate the potential for a geo-fenced area	Planning	Public works	Consider the Jackson Street and Concord Road corridors as the highest priorities	Medium-term
6.12. Maintain a high level of awareness and education for autonomous technologies amongst the Town staff	Planning, Public Works, Police		Stay up-to-date with latest innovations through resources like the Shared-Use Mobility Center, available at <a href="http://sharedusemobilitycenter.org/">sharedusemobilitycenter.org/</a>	Ongoing
6.13. Ensure that all new street infrastructure projects have accommodations for fiber-optic	Planning, Public Works	NCDOT	Through the placement of additional conduit for future expansion or the installation of cabling	Ongoing

## ACTION STEPS

ACTION	LEAD AGENCY	SUPPORT	DETAILS	PHASE
6.15. Evaluate the installation of DSRC equipment in a connected corridor	Planning, Public Works	Davidson College	(E.g., Jackson Street, Concord Road, Main Street)	Medium-term/Long-term

### PROGRAMS AND POLICY RECOMMENDATIONS (CHAPTER 5)

7.1. Revise Traffic Impact Analysis (TIA) Requirements	Planning	Planning Board	Substantial modifications should be based on the outcomes of the Comprehensive Plan in regards to Land Use goals.	Short-term
7.2. Develop/Implement Education Campaigns	Police, Planning, Park + Rec	Livability Board	Continue to implement the mobility education recommendations outlined in the Walks & Rolls plan	Ongoing
7.3. Develop a Vision Zero Plan (see page 138 for more details)	Planning, Police	Livability Board	Implement data-driven prevention strategies to eliminate roadway deaths and injuries.	Medium-term
7.4. Develop a Transportation Demand Management (TDM) Action Plan (see pages 139-140 for more details)	Planning	Major employers, CATS, (Park & Rec for Safe Routes to School)	Coordinate with support agencies to promote programs (some already exist, e.g., Safe Routes to School, CATS carpooling) that encourage transit, walking, bicycling, carpooling, ridesharing, telecommuting, and other alternatives to single occupancy vehicle travel	Medium-term/ Ongoing
7.5. Implement Multi-modal Wayfinding	Economic Development, Public Works, Park + Rec	Planning, NCDOT, Livability Board	Develop a multi-modal wayfinding plan. See also Parking Recommendations.	Short-term

# FUNDING SOURCES

The Town will utilize to various fundings sources to accomplish the goals and recommendations set forth in this plan. The list of funding sources and their deadlines and requirements change frequently, so staff will need to review grant source information each year to confirm deadlines and requirements.

When considering possible funding sources for the Town of Davidson’s mobility projects, it may be necessary to consider multiple sources of funding, that when combined, will support full project completion.

Funding sources can be used for a variety of activities, including: programs, planning, design, implementation, and maintenance. This section outlines the many potential sources of funding from the federal, state, and local government levels as well as from the private and non-profit sectors. It should be noted that this section reflects the funding available at the time of writing. The funding amounts, fund cycles, and even the programs themselves are susceptible to change without notice.

Funding sources may include but are not limited to the following:

FUNDING SOURCE	PLANNING	PROGRAMMING	DESIGN/CONSTRUCTION
FEDERAL FUNDING			
FAST Act			x
Transportation Alternatives	x	x	x
Surface Transportation Program			x
Highway Safety Improvement Program		x	x
Congestion Mitigation/Air Quality		x	x
FTA Metropolitan Planning Program	x		
FTA Enhanced Mobility of Seniors and Individuals with Disabilities	x		x
Partnership for Sustainable Communities	x	x	x
Land and Water Conservation Fund	x		x
Rivers, Trails, and Conservation Assistance Program	x		
Federal Lands Transportation Program			x
Energy Efficiency and Conservation Block Grants	x		x
STATE/REGIONAL FUNDING			
CRTPO Unified Planning Work Program	x		
CRTPO Traffic Data Program	x		
NCDOT State Transportation Improvement Program*			x
Incidental Projects			x
Spot Safety Program (anywhere is eligible, but more likely in dense areas)			x
Pedestrian Funds			x
High Hazard Elimination Program (anywhere is eligible, but more likely in dense areas)			x

\*These funds are typically distributed through the CRTPO

FUNDING SOURCE	PLANNING	PROGRAMMING	DESIGN/CONSTRUCTION
NCDOT Contingency Fund			X
Small Urban Funds*			X
Spot Improvement Program			X
Small Construction Funds			X
Governor's Highway Safety Program			X
Bicycle and Pedestrian Planning Grant Initiative	X	X	
Road Resurfacing			X
Eat Smart, Move More North Carolina Community Grants		X	X
The North Carolina Division of Parks and Recreation			X
The North Carolina Parks and Recreation Trust Fund (PARTF)			X
Adopt-A-Trail Program			X
Powell Bill Funds			X
Community Development Block Grant	X	X	X
Clean Water Management Trust Fund (CWMTF)	X	X	X
Safe Routes to School Program	X	X	X
Urban and Community Forestry Grant	X		X
Watch for Me NC		X	
State Revolving Fund Loans			X
<b>LOCAL FUNDING</b>			
Capital Reserve Fund			X
Capital Project Ordinances			X
Local Improvement District (LID)			X
Municipal Service District			X
Tax Increment Financing			X
Installment Purchase Financing			X
Sales Tax	X		X
Property Tax	X		X
Occupancy Tax			X
Fees			X
Stormwater Utility Fees			X
Negotiated Voluntary Contributions			X
In-Lieu-Of Fees			X
Bonds and Loans			X
Revenue Bonds			X
General Obligation Bonds (cities, counties and service districts)			X
Special Assessment Bonds			X
<b>PRIVATE/ NON-PROFIT FUNDING</b>			
The Robert Wood Johnson Foundation	X	X	
North Carolina Community Foundation	X	X	
Carolina Thread Trail Grants	X		X
Walmart State Giving Program	X	X	X
The Rite-Aid Foundation Grant		X	X
Z Smith Reynolds Foundation			X

\*These funds are typically distributed through the CRTPO

FUNDING SOURCE	PLANNING	PROGRAMMING	DESIGN/CONSTRUCTION
Bank of America Charitable Foundation Inc	x	x	
Duke Energy Foundation		x	
The Trust for Public Land	x	x	
American Greenways Eastman Kodak Awards	x	x	x
National Trails Fund		x	x
The Conservation Alliance	x	x	
Blue Cross Blue Shield of North Carolina Foundation		x	x
National Fish and Wildlife Foundation	x	x	x
Bikes Belong Grant			x
Alliance for Biking and Walking Advocacy Grants			x
Local Trail Sponsors			x
Corporate Donations	x	x	x
Private Individual Donations	x	x	x
Fundraising/ Campaign Drives	x	x	x
Volunteer Work	x	x	x

## FEDERAL FUNDING SOURCES

Federal funding is typically directed through state agencies to local governments either in the form of grants or direct appropriations. Federal funding typically requires a local match of anywhere from five percent to fifty percent, but there are sometimes exceptions, such as the recent American Recovery and Reinvestment Act stimulus funds, which did not require a match. The following is a list of possible Federal funding sources that could be used to support construction of pedestrian and bicycle improvements.

### FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT

The largest source of federal funding for pedestrian and bicycle projects is the USDOT's Federal-Aid Highway Program, which Congress has reauthorized roughly every six years since the passage of the Federal-Aid Road Act of 1916. The latest act, FAST, was enacted in 2015. The Act

FAST authorizes funding for federal surface transportation programs including highways and transit. It is not possible to guarantee the continued availability of any listed FAST programs, or to predict their future funding levels or policy guidance. Nevertheless, many of these programs have been included in some form since the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, and thus may continue to provide capital for multimodal transportation projects and programs.

In North Carolina, federal monies are administered through the North Carolina Department of Transportation (NCDOT) and Metropolitan Planning Organizations (MPOs). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.

There are a number of programs identified within the FAST Act that are applicable to pedestrian and bicycle projects. These programs are discussed below.

For more information: <https://www.fhwa.dot.gov/fastact/>

## TRANSPORTATION ALTERNATIVES

Transportation Alternatives (TA) is a funding source under the FAST Act that consolidates three formerly separate programs: Transportation Enhancements (TE), Safe Routes to School (SR2S), and the Recreational Trails Program (RTP). These funds may be used for a variety of pedestrian, bicycle, and streetscape projects including sidewalks, bikeways, multi-use paths, and rail-trails. TA funds may also be used for selected education and encouragement programming such as Safe Routes to School.

Note that state DOT's may elect to transfer up to 50 percent of TA funds to other highway programs, so the amount listed on the website represents the maximum potential funding. Remaining TA funds (those monies not re-directed to other highway programs) are disbursed through a separate competitive grant program administered by NCDOT. Local governments, school districts, tribal governments, and public lands agencies are permitted to compete for these funds.

For funding levels and eligible activities, visit: <https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm>

## SURFACE TRANSPORTATION PROGRAM

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of bicycle and pedestrian improvements are eligible, including on-street bicycle facilities, off-street trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities.

Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity. Unlike most highway projects, STP-funded bicycle and pedestrian facilities may be located on local and collector roads which are not part of the Federal-aid Highway System. 50 percent of each state's STP funds are suballocated geographically by population to the MPOs; the remaining 50 percent may be spent in any area of the state.

For more information: <https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm>

## HIGHWAY SAFETY IMPROVEMENT PROGRAM

MAP-21 doubles the amount of funding available through the Highway Safety Improvement Program (HSIP) relative to SAFETEA-LU. HSIP provides \$2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. MAP-21 preserves the Railway-Highway Crossings Program within HSIP but discontinues the High-Risk Rural roads set-aside unless safety statistics demonstrate that fatalities are increasing on these roads. Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for non-motorized users in school zones are eligible for these funds.

For more information: <https://safety.fhwa.dot.gov/hsip/>

## CONGESTION MITIGATION/AIR QUALITY PROGRAM

The Congestion Mitigation/Air Quality Improvement Program (CMAQ) provides funding for projects and programs in air quality non-attainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions. States with no nonattainment areas may use their CMAQ funds for any CMAQ or STP eligible project. These federal dollars can be used to build bicycle and pedestrian facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible. Communities located in attainment areas who do not receive CMAQ funding apportionments may apply for CMAQ funding to implement projects that will reduce travel by automobile.

More Information: <https://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>

## FEDERAL TRANSIT ADMINISTRATION (FTA) METROPOLITAN PLANNING

This program provides funding for statewide and metropolitan coordinated transportation planning. Federal planning funds are first apportioned to State DOTs. State DOTs then allocate planning funding to MPOs. Eligible activities include pedestrian or bicycle planning to increase safety for non-motorized users, and to enhance the interaction and connectivity of the transportation system across and between modes.

For more information: <https://www.transit.dot.gov/funding/grants/metropolitan-statewide-planning-and-nonmetropolitan-transportation-planning-5303-5304>

## FEDERAL TRANSIT ADMINISTRATION ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES

This program can be used for capital expenses that support transportation to meet the special needs of older adults and persons with disabilities, including providing access to an eligible public transportation facility when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.

For more information: [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/grants/37971/5310-enhanced-mobility-seniors-and-individuals-disabilities-fact-sheet\\_1.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/grants/37971/5310-enhanced-mobility-seniors-and-individuals-disabilities-fact-sheet_1.pdf)

## PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

Founded in 2009, the Partnership for Sustainable Communities is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (US DOT). The partnership aims to “improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide.” The Partnership is based on five Livability Principles, one of which explicitly addresses the need for bicycle and pedestrian infrastructure (“Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health”).

The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an important effort that has already led to some new grant opportunities (including both TIGER I and TIGER II grants). North Carolina jurisdictions should track Partnership communications and be prepared to respond proactively to announcements of new grant programs. Initiatives that speak to multiple livability goals are more likely to score well than initiatives that are narrowly limited in scope to pedestrian improvement efforts.

For more information: <https://www.hud.gov/hudprograms/sci>

<https://www.epa.gov/smartgrowth/smart-growth-partnerships>

Resource for Rural Communities: [https://www.epa.gov/sites/production/files/documents/2011\\_11\\_supporting-sustainable-rural-communities.pdf](https://www.epa.gov/sites/production/files/documents/2011_11_supporting-sustainable-rural-communities.pdf)

## LAND AND WATER CONSERVATION FUND

The Land and Water Conservation Fund (LWCF) provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. The program is administered by the Department of Environment and Natural Resources as a grant program for states and local governments. Maximum annual grant awards for county governments, incorporated municipalities, public authorities, and federally recognized Indian tribes are \$250,000. The local match may be provided with in-kind services or cash.

More information: [http://www.ncparks.gov/About/grants/lwcf\\_main.php](http://www.ncparks.gov/About/grants/lwcf_main.php)

## RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM

(NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation funds available. Projects are prioritized for assistance based on criteria including conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments. This program may benefit trail development in North Carolina locales

indirectly through technical assistance, particularly for community organizations, but is not a capital funding source.

More information: <http://www.nps.gov/ncrc/programs/rtca/> or contact the Southeast Region RTCA Program Manager Deirdre “Dee” Hewitt at (404) 507-5691

## FEDERAL LANDS TRANSPORTATION PROGRAM

The FLTP funds projects that improve access within Federal lands (including national forests, national parks, national wildlife refuges, national recreation areas, and other Federal public lands) on federally owned and maintained transportation facilities. \$300 million per fiscal year has been allocated to the program for 2013 and 2014.

More information: <http://www.fhwa.dot.gov/map21/fltp.cfm>

## ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANTS

The Department of Energy’s Energy Efficiency and Conservation Block Grants (EE CBG) may be used to reduce energy consumptions and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways. Although the current grant period has passed, more opportunities may arise in the future.

More information: <https://www.energy.gov/eere/wipo/energy-efficiency-and-conservation-block-grant-program>

# STATE FUNDING SOURCES

The funding sources covered in this section were updated in the Fall of 2013 and reviewed for accuracy by NCDOT Division 8 staff as well as staff from the Division of Bicycle and Pedestrian Transportation. However, at the time of development of this plan, the Strategic Transportation Investment initiative was being reviewed by the Joint Legislative Transportation Oversight Committee. Therefore, the status of future funding sources is subject to change. The availability of these funding resources should be confirmed during the implementation of a project.

## CRTPO UNIFIED PLANNING WORK PROGRAM

The Unified Planning Work Program (UPWP) is a listing of the projects, priorities, and work tasks the Charlotte Regional Transportation Planning Organization (CRTPO) will undertake during the fiscal year. It provides details on funding sources, agencies responsible for completing the described work, and the expected products of that work. Most of the tasks outlined in the UPWP are required by either State or Federal law and are ongoing. This program may provide funding for projects that reflect the short-range planning needs

outlined in the Comprehensive Transportation Plan (CTP), developed by the MPO and required by law in the state of North Carolina.

Funding for transportation planning is a product of Federal, State and local funding sources with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) providing 80 percent of the funding for local planning. The remaining 20 percent is the required match for Federal funds and is provided by local jurisdictions.

More information: <http://crtpo.org/PDFs/UPWP/FY2019%20UPWP.pdf>

## CRTPO TRAFFIC DATA PROGRAM

Beginning in fiscal year (FY) 2016, the CRTPO launched the MPO Traffic Data Program. Each fiscal year, CRTPO issues a 21-day call for projects to be submitted for the annual Traffic Data Program. This program provides member jurisdictions with needed traffic data to be used to support transportation planning and research efforts that will advance initiatives and planning projects throughout the MPO planning area.

An allocation of \$100,000 will be applied to projects eligible for PL funds and that meet the criteria specified by the Traffic Data Program. Due to the federal funding type, a minimum 20% match is mandatory for all project submittals.

More information: <https://www.crtpo.org/resources/traffic-counts>

## NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STATE TRANSPORTATION IMPROVEMENT PROGRAM

Transportation Investments bill, signed into law in 2013. The Strategic Transportation Investments (STI) initiative introduces the Strategic Mobility Formula, a new way to fund and prioritize transportation projects to ensure they provide the maximum benefit to our state. It allows NCDOT to use its existing revenues more efficiently to fund more investments that improve North Carolina's transportation infrastructure, create jobs and help boost the economy.

The new Strategic Transportation Investments initiative is scheduled to be fully implemented by July 1, 2015. Projects funded for construction before then will proceed as scheduled under the current Equity Formula; projects slated for after that time will be ranked and programmed according to the new formula. The new Strategic Mobility Formula assigns projects for all modes into one of three categories: Statewide Mobility, Regional Impact, and Division Needs. All independent bicycle and pedestrian projects are placed in the "Division Needs" category, and are ranked on the following five criteria:

- Safety
- Access
- Demand or density
- Constructability
- Benefit/cost ratio

This ranking largely determines which projects will be included in the department's State

Transportation Improvement Program (STIP). The STIP is a federally mandated transportation planning document that details transportation improvements prioritized by stakeholders for inclusion in the Work Program over the next ten years. The STIP is updated every two years.

The STIP contains funding information for various transportation divisions of NCDOT including: highways, aviation, public transportation, rail, bicycle and pedestrians, and the Governor's Highway Safety Program. Access to many federal funds require that projects be incorporated into the STIP. The STIP is the primary method for allocating state and federal transportation funds. However, beginning July 1, 2015, state funds cannot be used to match federally funded projects. Only Powell Bill or local funds can be used as a match for federally funded bicycle and pedestrian projects.

For more information on STI: <https://www.ncdot.gov/initiatives-policies/Transportation/stip/Pages/strategic-transportation-investments.aspx>

To access the STIP: <https://connect.ncdot.gov/projects/planning/Pages/State-Transportation-Improvement-Program.aspx>

For more about the STIP process: <https://www.transit.dot.gov/regulations-and-guidance/transportation-planning/statewide-transportation-improvement-program-stip>

## INCIDENTAL PROJECTS

Bicycle and pedestrian accommodations such as bike lanes, sidewalks, intersection improvements, widened paved shoulders and bicycle and pedestrian-safe bridge design are frequently included as incidental features of highway projects.

In addition, bicycle-safe drainage grates are a standard feature of all highway construction. Most pedestrian safety accommodations built by NCDOT are included as part of scheduled highway improvement projects funded with a combination of federal and state roadway construction funds or with a local fund match.

Each of the 14 NCDOT Highway Divisions administers \$100,000 in pedestrian funds within its jurisdiction. These funds are used for new sidewalk construction. A written request should be submitted to the Division Engineer providing technical information such as justification, location, improvements being requested, timing, etc., for thorough review.

## SPOT SAFETY PROGRAM

The Spot Safety Program is a state funded public safety investment and improvement program that provides highly effective low cost safety improvements for intersections, and sections of North Carolina's 79,000 miles of state maintained roads in all 100 counties of North Carolina. The Spot Safety Program is used to develop smaller improvement projects to address safety, potential safety, and operational issues. The program is funded with state funds and currently receives approximately \$9 million per state fiscal year. Other monetary sources (such as Small Construction or Contingency funds) can assist in funding Spot Safety projects, however, the maximum allowable contribution of Spot Safety funds per project is \$250,000.

The Spot Safety Program targets hazardous locations for expedited low cost safety improvements such as traffic signals, turn lanes, improved shoulders, intersection upgrades, positive guidance enhancements (rumble strips, improved channelization, raised pavement markers, long life highly visible pavement markings), improved warning and regulatory signing, roadside safety improvements, school safety improvements, and safety appurtenances (like guardrail and crash attenuators).

A Safety Oversight Committee (SO C) reviews and recommends Spot Safety projects to the Board of Transportation (BOT) for approval and funding. Criteria used by the SO C to select projects for recommendation to the BOT include, but are not limited to, the frequency of correctable crashes, severity of crashes, delay, congestion, number of signal warrants met, effect on pedestrians and schools, division and region priorities, and public interest.

For more information: <https://connect.ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx>

## HIGH HAZARD ELIMINATION PROGRAM

The Hazard Elimination Program is used to develop larger improvement projects to address safety and potential safety issues. The program is funded with 90 percent federal funds and 10 percent state funds. The cost of Hazard Elimination Program projects typically ranges between \$400,000 and \$1 million. A Safety Oversight Committee (SO C) reviews and recommends Hazard Elimination projects to the Board of Transportation (BOT) for approval and funding. These projects are prioritized for funding according to a safety benefit to cost (B/C) ratio, with the safety benefit being based on crash reduction. Once approved and funded by the BOT, these projects become part of the department's State Transportation Improvement Program (STIP).

More information: <https://connect.ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx>

## NCDOT CONTINGENCY FUND

The Statewide Contingency Fund is a \$10 million fund administered by the Secretary of Transportation. The Division Engineer elicits written requests from municipalities, counties, businesses, schools, citizens, legislative members and NCDOT staff. The appeals are reviewed on their merits by the Contingency and Small Urban Funds Committee, which makes recommendations for funding to the Secretary. Written requests must provide technical information such as justification, location, improvements being requested, timing, etc., for thorough review.

More information: [https://connect.ncdot.gov/resources/safety/Tepp/Pages/Tepp-Topic.aspx?Topic\\_List=F19](https://connect.ncdot.gov/resources/safety/Tepp/Pages/Tepp-Topic.aspx?Topic_List=F19)

## SMALL URBAN FUNDS

Each NCDOT Highway Division administers \$2 million of funds for small-scale improvement projects in urban areas. Projects must be within 2 miles of city limits and have a maximum cost of \$250,000. Requests for small urban funds may be made by municipalities, counties, businesses, school and industrial entities. A written request should be submitted to the Division Engineer providing technical information such as justification, location, improvements being requested, timing, etc., for thorough review.

## SPOT IMPROVEMENT PROGRAM

The Division of Bicycle and Pedestrian Transportation (DBPT) budgets \$500,000 per year for “spot” safety improvements throughout North Carolina. Eligible improvements include drain grate replacement, bicycle loop detectors, pedestrian signals and other small-scale improvements. These funds are used for small-scale projects not substantial enough to be included in the STIP. Proposals should be submitted directly to the Division of Bicycle and Pedestrian Transportation.

## SMALL CONSTRUCTION FUNDS

Each of the 14 NCDOT Highway Divisions administers \$357,000 of small construction funds. The purpose of these funds is to finance improvements on the State System (US , NC, and SR routes) to be used for projects anywhere in the counties. These funds are used to fund a variety of transportation projects for municipalities, counties, businesses, schools, and industries throughout the state. There is a \$250,000 maximum amount per request per fiscal year. Any project with a total cost greater than \$150,000 requires a resolution or a letter of support for the project from the local jurisdiction. The former NCDOT Statewide Discretionary Funding program has been consolidated into this funding mechanism.

## GOVERNOR’S HIGHWAY SAFETY PROGRAM

The Governor’s Highway Safety Program (GHSP) funds safety improvement projects on state highways throughout North Carolina. All funding is performance-based. Substantial progress in reducing crashes, injuries and fatalities is required as a condition of continued funding. This funding source is considered to be “seed money” to get programs started. The grantee is expected to provide a portion of the project costs and is expected to continue the program after GHS P funding ends. State Highway Applicants must use the web-based grant system to submit applications.

More information: <http://www.ncdot.org/programs/ghsp/>

## BICYCLE AND PEDESTRIAN PLANNING GRANT INITIATIVE

The Bicycle and Pedestrian Planning Grant Initiative is a matching grant program administered through NCDOT that encourages municipalities to develop comprehensive bicycle plans and pedestrian plans. The Division of Bicycle and Pedestrian Transportation (DBPT) and the Transportation Planning Branch (TPB) sponsor this grant. All North Carolina

municipalities are eligible and are encouraged to apply. Funding allocations are determined on a sliding scale based on population. Municipalities who currently have bicycle plans or pedestrian plans, either through this grant program or otherwise, may also apply to update their plan provided it is at least five years old.

More information: <https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Planning-Grant-Initiative.aspx>

## ROAD RESURFACING

When space allows the inclusion of a bicycle lane onto a road without requiring significant drainage, Right-of-Way, or grading work, NCDOT can install the improvement during road resurfacing projects. If a project is feasible, the NCDOT can inform the affected community and offer them the opportunity to contribute to the marginal cost associated with these improvements.

## EAT SMART, MOVE MORE NORTH CAROLINA COMMUNITY GRANTS

The Eat Smart, Move More (ES MM) NC Community Grants program provides funding to local communities to support their efforts to develop community-based interventions that encourage, promote and facilitate physical activity. The current focus of the funds is for projects addressing youth physical activity. Funds have been used to construct trails and conduct educational programs.

More information: <http://www.eatsmartmovemorenc.com/Funding/CommunityGrants.html>

## THE NORTH CAROLINA DIVISION OF PARKS AND RECREATION

The North Carolina Division of Parks and Recreation and the State Trails Program offer funds to help citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking and horseback riding to river trails and off-highway vehicle trails.

More information: <http://www.ncparks.gov/About/grants/main.php>

## NC PARKS AND RECREATION TRUST FUND (PARTF)

The Parks and Recreation Trust Fund (PARTF) provide dollar-for-dollar matching grants to local governments for parks and recreational projects to serve the general public. Counties, incorporated municipalities and public authorities, as defined by G.S. 159-7, are eligible applicants.

A local government can request a maximum of \$500,000 with each application. An applicant must match the grant dollar-for-dollar, 50 percent of the total cost of the project, and may contribute more than 50 percent. The appraised value of land to be donated to the applicant can be used as part of the match. The value of in-kind services, such as volunteer work, cannot be used as part of the match.

For more information: [http://www.ncparks.gov/About/grants/partf\\_main.php](http://www.ncparks.gov/About/grants/partf_main.php)

## NC DEPARTMENT OF ENVIRONMENT - RECREATIONAL TRAILS AND ADOPT-A-TRAIL GRANTS

The State Trails Program is a section of the N.C. Division of Parks and Recreation. The program originated in 1973 with the North Carolina Trails System Act and is dedicated to helping citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking and horseback riding to river trails and off-highway vehicle trails. The Recreation Trails Program awards grants up to \$75,000 per project. The Adopt-A-Trail Program awards grants up to \$5,000 per project.

### POWELL BILL FUNDS

Annually, State street-aid (Powell Bill) allocations are made to incorporated municipalities which establish their eligibility and qualify as provided by G.S. 136-41.1 through 136-41.4. Powell Bill funds shall be expended only for the purposes of maintaining, repairing, constructing, reconstructing or widening of local streets that are the responsibility of the municipalities or for planning, construction, and maintenance of bikeways or sidewalks along public streets and highways. Beginning July 1, 2015 under the Strategic Transportation Investments initiative, Powell Bill funds may no longer be used to provide a match for federal transportation funds such as Transportation Alternatives.

### COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS

Community Development Block Grant (CDBG) funds are available to local municipal or county governments that qualify for projects to enhance the viability of communities by providing decent housing and suitable living environments and by expanding economic opportunities, principally for persons of low- and moderate-income. State CDBG funds are provided by the U.S. Department of Housing and Urban Development (HUD) to the state of North Carolina. Some urban counties and cities in North Carolina receive CDBG funding directly from HUD. Each year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects throughout the state. These community improvement projects are administered by the Division of Community Assistance and the Commerce Finance Center under eight grant categories. Two categories might be of support to pedestrian and bicycle projects in 'entitlement communities': Infrastructure and Community Revitalization.

### CLEAN WATER MANAGEMENT TRUST FUND (CWMTF)

This fund was established in 1996 and has become one of the largest sources of money in North Carolina for land and water protection, eligible for application by a state agency, local government, or non-profit. At the end of each year, a minimum of \$30 million is placed in the CWMTF. The revenue of this fund is allocated as grants to local governments, state agencies and conservation non-profits to help finance projects that specifically address water pollution problems. Funds may be used for planning and land acquisition to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits.

For more information: <http://www.cwmtf.net/#appmain.htm>

## SAFE ROUTES TO SCHOOL PROGRAM (MANAGED BY NCDOT, DBPT)

The NCDOT Safe Routes to School Program is a federally funded program that was initiated by the passing of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, which establishes a national SRTS program to distribute funding and institutional support to implement SRTS programs in states and communities across the country. SRTS programs facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. The Division of Bicycle and Pedestrian Transportation at NCDOT is charged with disseminating SRTS funding.

The state of North Carolina was allocated \$15 million in Safe Routes to School funding for fiscal years 2005 through 2009 for infrastructure or non-infrastructure projects. In 2009, more than \$3.6 million went to 22 municipalities and local agencies for infrastructure and non-infrastructure projects. All proposed projects must relate to increasing walking or biking to and from an elementary or middle school. An example of a non-infrastructure project is an education or encouragement program to improve rates of walking and biking to school. An example of an infrastructure project is construction of sidewalks around a school. Infrastructure improvements under this program must be made within 2 miles of an elementary or middle school. The state requires the completion of a competitive application to apply for funding.

For more information: <https://connect.ncdot.gov/projects/BikePed/Pages/Safe-Routes-To-School.aspx>

[https://www.ncdot.gov/divisions/bike-ped/Documents/NCDOT\\_SRTS\\_Description.pdf](https://www.ncdot.gov/divisions/bike-ped/Documents/NCDOT_SRTS_Description.pdf)

Or contact DBPT/NCDOT at (919) 807-0774.

## URBAN AND COMMUNITY FORESTRY GRANT

The North Carolina Division of Forest Resources Urban and Community Forestry grant can provide funding for a variety of projects that will help toward planning and establishing street trees as well as trees for urban open space. The goal is to improve public understanding of the benefits of preserving existing tree cover in communities and assist local governments with projects which will lead to a more effective and efficient management of urban and community forests. Grant requests should range between \$1,000 and \$15,000 and must be matched equally with non-federal funds. Grant funds may be awarded to any unit of local or state government, public educational institutions, approved non-profit 501(c)(3) organizations and other tax-exempt organizations. First-time municipal applicant and municipalities seeking Tree City USA status are given priority for funding.

For more about Tree City USA status, including application instructions, visit: [http://ncforestservice.gov/Urban/urban\\_grant\\_overview.htm](http://ncforestservice.gov/Urban/urban_grant_overview.htm)

## WATCH FOR ME NC

Watch for Me NC is a statewide program that aims to reduce pedestrian and bicycle injuries and deaths through a comprehensive, targeted approach of public education, community engagement, and high-visibility law enforcement. Eligible communities can apply to be

partners with the program. Partners receive a variety of program materials for distribution, free training for law enforcement, action planning workshops for community agencies, and technical support that aids in local decision-making.

More information: <https://www.watchformenc.org/about/participate/>

## LOCAL GOVERNMENT FUNDING SOURCES

Municipalities often plan for the funding of pedestrian and bicycle facilities or improvements through development of Capital Improvement Programs (CIP). In Raleigh, for example, the greenways system has been developed over many years through a dedicated source of annual funding that has ranged from \$100,000 to \$500,000, administered through the Recreation and Parks Department. CIPs should include all types of capital improvements (water, sewer, buildings, streets, etc.) versus programs for single purposes. This allows municipal decisionmakers to balance all capital needs. Typical capital funding mechanisms include the following: capital reserve fund, capital protection ordinances, municipal service district, tax increment financing, taxes, fees, and bonds. Each category is described below. A variety of possible funding options available to North Carolina jurisdictions for implementing pedestrian and bicycle projects are described below. However, many will require specific local action as a means of establishing a program, if not already in place.

### CAPITAL RESERVE FUND

Municipalities have statutory authority to create capital reserve funds for any capital purpose, including pedestrian facilities. The reserve fund must be created through ordinance or resolution that states the purpose of the fund, the duration of the fund, the approximate amount of the fund, and the source of revenue for the fund. Sources of revenue can include general fund allocations, fund balance allocations, grants and donations for the specified use.

### CAPITAL PROJECT ORDINANCES

Municipalities can pass Capital Project Ordinances that are project specific. The ordinance identifies and makes appropriations for the project.

### LOCAL IMPROVEMENT DISTRICT (LID)

Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation.

### MUNICIPAL SERVICE DISTRICT

Municipalities have statutory authority to establish municipal service districts, to levy a property tax in the district additional to the town-wide property tax, and to use the proceeds to provide services in the district. Downtown revitalization projects are one of the eligible uses of service districts, and can include projects such as street, sidewalk, or bikeway improvements within the downtown taxing district.

## TAX INCREMENT FINANCING

Project Development Financing bonds, also known as Tax Increment Financing (TIF) is a relatively new tool in North Carolina, allowing localities to use future gains in taxes to finance the current improvements that will create those gains. When a public project (e.g., sidewalk improvements) is constructed, surrounding property values generally increase and encourage surrounding development or redevelopment. The increased tax revenues are then dedicated to finance the debt created by the original public improvement project. Streets, streetscapes, and sidewalk improvements are specifically authorized for TIF funding in North Carolina. Tax Increment Financing typically occurs within designated development financing districts that meet certain economic criteria that are approved by a local governing body. TIF funds are generally spent inside the boundaries of the TIF district, but they can also be spent outside the district if necessary to encourage development within it.

## OTHER LOCAL FUNDING OPTIONS

- Bonds/loans
- Taxes
- Impact fees
- Exactions
- Installment purchase financing
- In-lieu-of-fees
- Partnerships

## PRIVATE AND NON-PROFIT FUNDING SOURCES

Many communities have solicited greenway funding assistance from private foundations and other conservation-minded benefactors. Below are several examples of private funding opportunities available.

### LAND FOR TOMORROW CAMPAIGN

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals and community groups committed to securing support from the public and General Assembly for protecting land, water and historic places. The campaign was successful in 2013 in asking the North Carolina General Assembly to continue to support conservation efforts in the state. The state budget bill includes about \$50 million in funds for key conservation efforts in North Carolina. Land for Tomorrow works to enable North Carolina to reach a goal of ensuring that working farms and forests; sanctuaries for wildlife; land bordering streams, parks and greenways; land that helps strengthen communities and promotes job growth; and historic downtowns and neighborhoods will be there to enhance the quality of life for generations to come.

For more information: <http://www.land4tomorrow.org/>

## THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation was established as a national philanthropy in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

For more specific information about what types of projects are funded and how to apply, visit: <http://www.rwjf.org/applications/>

## NORTH CAROLINA COMMUNITY FOUNDATION

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and other foundations to build endowments and ensure financial security for nonprofit organizations and institutions throughout the state. Based in Raleigh, North Carolina, the foundation also manages a number of community affiliates throughout North Carolina, that make grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and preservation of historical, cultural, and environmental resources. The foundation also manages various scholarship programs statewide.

For more information: <http://nccommunityfoundation.org/>

## CAROLINA THREAD TRAIL GRANTS

The Carolina Thread Trail is a regional trail funding initiative that aims to connect 15 counties and 2.3 million people in south-central North Carolina. The initiative is led by the Catawba Lands Conservancy and a collection of local partners who help to fund trail projects throughout the region. There are currently 117 miles of trail in place. The Town of Davidson should consider partnering with the Carolina Thread Trail to connect local greenway projects to the surrounding region and for funding assistance with planning, design, land acquisition efforts.

## WALMART STATE GIVING PROGRAM

The Walmart Foundation financially supports projects that create opportunities for better living. Grants are awarded for projects that support and promote education, workforce development/economic opportunity, health and wellness, and environmental sustainability. Both programmatic and infrastructure projects are eligible for funding. State Giving Program grants start at \$25,000, and there is no maximum award amount. The program accepts grant applications on an annual, state by state basis January 2nd through March 2nd.

Online resource: <https://walmart.org/>

## THE RITE-AID FOUNDATION GRANTS

The Rite-Aid Foundation is a foundation that supports projects that promote health and wellness in the communities that Rite-Aid serves. Award amounts vary and grants are awarded on a one year basis to communities in which Rite-Aid operates. A wide array of activities are eligible for funding, including infrastructural and programmatic projects.

Online resource: <https://www.riteaid.com/about-us/rite-aid-foundation>

## Z SMITH REYNOLDS FOUNDATION

This Winston-Salem-based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. They have two grant cycles per year and generally do not fund land acquisition. However, they may be able to offer support in other areas of open space and greenways development.

For more information: [www.zsr.org](http://www.zsr.org)

## BANK OF AMERICA CHARITABLE FOUNDATION INC.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low and moderate income communities and serves to encourage entrepreneurial business development.

For more information: <http://www.bankofamerica.com/foundation>

## DUKE ENERGY FOUNDATION

Funded by Duke Energy shareholders, this non-profit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have:

- An internal Duke Energy business “sponsor”
- A clear business reason for making the contribution

The grant program has three focus areas: Environment and Energy Efficiency, Economic Development, and Community Vitality. Related to this project, the Foundation would support programs that support conservation, training and research around environmental and energy efficiency initiatives.

For more information: <http://www.duke-energy.com/community/foundation.asp>

## AMERICAN GREENWAYS EASTMAN KODAK AWARDS

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities.

For more information: <http://www.conservationfund.org>

## NATIONAL TRAILS FUND

American Hiking Society created the National Trails Fund in 1998, the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

Projects the American Hiking Society will consider include:

- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects - including volunteer recruitment and support.

For more information: <http://www.americanhiking.org/national-trails-fund/>

## THE CONSERVATION ALLIANCE

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. Grants are typically about \$35,000 each. Since its inception in 1989, The Conservation Alliance has contributed \$4,775,059 to environmental groups across the nation, saving over 34 million acres of wild lands.

The Conservation Alliance Funding Criteria:

- The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation.

- The Alliance does not look for mainstream education or scientific research projects, but rather for active campaigns.
- All projects should be quantifiable, with specific goals, objectives and action plans and should include a measure for evaluating success.
- The project should have a good chance for closure or significant measurable results over a fairly short term (one to two years).
- Funding emphasis may not be on general operating expenses or staff payroll.

More information: <http://www.conservationalliance.com/grants>

## NATIONAL FISH AND WILDLIFE FOUNDATION (NFWF)

The National Fish and Wildlife Foundation (NFWF) is a private, nonprofit, tax-exempt organization chartered by Congress in 1984. The National Fish and Wildlife Foundation sustains, restores, and enhances the Nation's fish, wildlife, plants and habitats. Through leadership conservation investments with public and private partners, the Foundation is dedicated to achieving maximum conservation impact by developing and applying best practices and innovative methods for measurable outcomes.

The Foundation awards matching grants under its Keystone Initiatives to achieve measurable outcomes in the conservation of fish, wildlife, plants and the habitats on which they depend. Awards are made on a competitive basis to eligible grant recipients, including federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Project proposals are received on a year-round, revolving basis with two decision cycles per year. Grants generally range from \$50,000-\$300,000 and typically require a minimum 2:1 non-federal match.

Funding priorities include bird, fish, marine/coastal, and wildlife and habitat conservation. Other projects that are considered include controlling invasive species, enhancing delivery of ecosystem services in agricultural systems, minimizing the impact on wildlife of emerging energy sources, and developing future conservation leaders and professionals.

For more information: <https://www.nfwf.org/whatwedo/grants/Pages/home.aspx>

## THE TRUST FOR PUBLIC LAND

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and well-being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities.

More information: <http://www.tpl.org>

## BLUE CROSS BLUE SHIELD OF NORTH CAROLINA FOUNDATION (BCBS)

Blue Cross Blue Shield (BCBS) focuses on programs that use an outcome approach to improve the health and well-being of residents. The Health of Vulnerable Populations grants program focuses on improving health outcomes for at-risk populations. The Healthy Active Communities grant concentrates on increased physical activity and healthy eating habits. Eligible grant applicants must be located in North Carolina, be able to provide recent tax forms and, depending on the size of the nonprofit, provide an audit.

For more information: <http://www.bcbsncfoundation.org/>

## ALLIANCE FOR BIKING AND WALKING: ADVOCACY ADVANCE GRANTS

Bicycle and pedestrian advocacy organizations play the most important role in improving and increasing biking and walking in local communities, states, and provinces. Advocacy Advance Grants enable state and local bicycle and pedestrian advocacy organizations to develop, transform, and provide innovative strategies in their communities. Thanks to remarkable support from SRAM, Planet Bike, and Bikes Belong, the Alliance for Biking & Walking has awarded more than \$500,000 in direct grants, technical assistance and scholarships to advocacy organizations across North America since the Advocacy Advance Grant program's inception. In 2009 and 2010, these one-year grants were awarded twice annually to startup organizations and innovative campaigns to dramatically increase biking and walking. Through the Advocacy Advance Partnership with the League of American Bicyclists, the Alliance also provided necessary technical assistance, coaching, and training to supplement the grants.

More information: <http://www.peoplepoweredmovement.org>

## BIKES BELONG GRANTS

The Bikes Belong Grant program funds important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include greenways and rail trails accessible by pedestrians and bicyclists. Applicants can request a maximum amount of \$10,000 for their project, and priorities are given to areas that have not received Bikes Belong funding in the past three years. Community Partnership Grants are a new Bikes Belong opportunity. These grants are designed to foster and support partnerships between city or county governments, non-profit organizations, and local businesses to improve the environment for bicycling in the community. Grants will primarily fund the construction or expansion of facilities such as bike lanes, trails, and paths. The lead organization must be a non-profit organization with IRS 501(c)3 designation or a city or county government office.

More information: <https://peopleforbikes.org/our-work/community-grants/>

## LOCAL TRAIL SPONSORS

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

## CORPORATE DONATIONS

Corporate donations are often received in the form of liquid investments (i.e. cash, stock, bonds) and in the form of land. Municipalities typically create funds to facilitate and simplify a transaction from a corporation's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented.

## PRIVATE INDIVIDUAL DONATIONS

Private individual donations can come in the form of liquid investments (i.e. cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented.

## FUNDRAISING/CAMPAIGN DRIVES

Organizations and individuals can participate in a fundraiser or a campaign drive. It is essential to market the purpose of a fundraiser to rally support and financial backing. Often times fundraising satisfies the need for public awareness, public education, and financial support.

## VOLUNTEER WORK

It is expected that many citizens will be excited about the development of a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs.

# 07

## APPENDICES

# APPENDIX A - Community Engagement

## STAKEHOLDER COMMITTEE

A stakeholder committee was convened at the beginning of the planning process. Community members representing a variety of interests and constituencies were represented on the committee, including the Town Planning Department, Public Works Department, Parks and Recreation, the Planning Board, the Livability Board, Charlotte Area Transit System (CATS), NC Department of Transportation (NCDOT), and Davidson College. The stakeholder committee was convened for a total of four meetings to review the progress of the plan and provide guidance and feedback on the recommendations contained therein.

## PROJECT WEBSITE

The project website, [www.davidsonmobilityplan.com](http://www.davidsonmobilityplan.com), was launched at the beginning of the project in February 2018, as a central clearinghouse for all information and events related to the Davidson Mobility Plan. The website was accessible through the Town of Davidson's main website, and was used on all public outreach materials, press releases, and social media posts to in order to spread awareness and promote public outreach events related to the plan. The website included links to a summary of the project, the interactive mapping website (described below), the events calendar, materials shared at Davidson Mobility Plan public events, and a blog covering related events and information from throughout the life of the project.

## INTERACTIVE WIKIMAP

The **interactive Wikimap** was a mobile-friendly web interface that provided the opportunity to crowd-source ideas on where people were experiencing mobility issues and where improvements were needed. The tool was structured to enable users to provide feedback in the form of points, lines, and pictures for different modes of travel (walking, biking, driving, and public transit). The information was be used to assess system needs, develop network recommendations, and prioritize projects.



Search the site

[MAP](#) [ABOUT](#) [EVENTS](#) [DOCUMENTS](#) [BLOG](#) [CONTACT](#)



THE TOWN OF DAVIDSON  
**Davidson Mobility Plan**

*DavidsonMobilityPlan.com was a central clearinghouse of information about the plan.*

## COMMUNITY CONVERSATION

A Community Conversation was held in February 2018 to kick off the Davidson Mobility Plan. The event was well attended, with more than 50 people participating. The event consisted of a presentation on planning for livable transportation from a leading industry expert, followed by a polling exercise and mapping activity. These activities helped the consulting team gather input on stakeholders interests, concerns, and priorities for mobility improvements.

## FOCUS GROUP INTERVIEWS

Six focus group interviews were conducted on February 20, 2018, in an effort to gather input from different segments of our community, including the many schools around town;

the surrounding municipal jurisdictions; business owners and non-profit organizations; and neighborhood and homeowner associations. These focus groups were an opportunity to have in-depth conversations around mobility issues particular to these groups' concerns, such as commuting, carpooling, regional traffic patterns, and neighborhood traffic concerns.

Two public presentations were provided in April and May 2018 on the topics of Future Transportation and Transit; and Roads, Bicycles, and Pedestrians. These presentations, led by the consultant team, Town staff, and CATS representatives, covered current and emerging practices in mobility planning as a way to familiarize town residents with the process. These presentations are available through the project website.

## PUBLIC EVENT TABLING

The consultant team conducted outreach tables on Davidson College's campus on May 3, and at Davidson's Town Day on May 5. These tabling events were an opportunity to collect input from a broad cross-section of the community, especially those who are under-represented at other public outreach events, such as college students and families with small children. The tabling events offered the opportunity to review maps of existing facilities, provide feedback on where new facilities are needed, learn more about the project, spread the word about the project website and online mapping activity, and provide general comments on what is needed to help people move throughout town. The table events were well attended, with over 50 visitors providing comments and input to the maps and comment board.



*Residents attended a community presentation on "Roads, Bicycles, + Pedestrians"*

## WALKING + BIKING TOURS

A preliminary walking tour of downtown Davidson was held before the Community Conversation in February 2018. This walking tour provided town residents a demonstration of and opportunity to participate in the existing conditions assessment of the downtown area. Given the large turnout at this walking tour, and requests for tours of other areas in town, four additional walking tours and a biking tour were added during the charrette week. These additional walking tours covered Westside Davidson, South Main Street, Potts Street, and the Exit 30 area. The biking tour covered a loop around the Westside, the greenway, and Old Davidson.

## ON-THE STREET INTERVIEWS

Interviews on the street were conducted to capture candid opinions and feedback on mobility and commuting issues. These impromptu interviews, which were done on Main Street, the greenway, at Harris Teeter, and on the bus, provided a personal and human connection to inform the policy recommendations.

# APPENDIX B- Existing Conditions



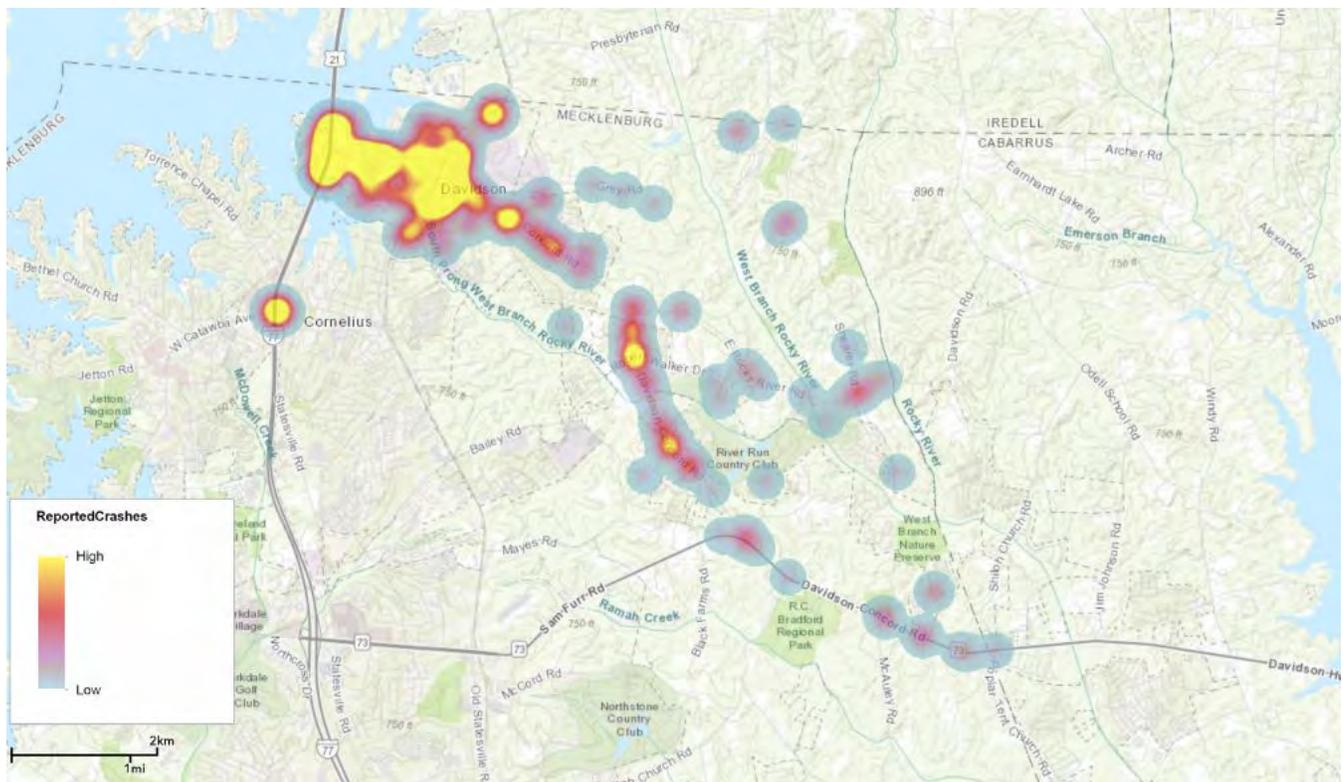
Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

This memo contains a summary of the existing mobility assessment for the Town of Davidson.

## SAFETY AND CRASH DATA

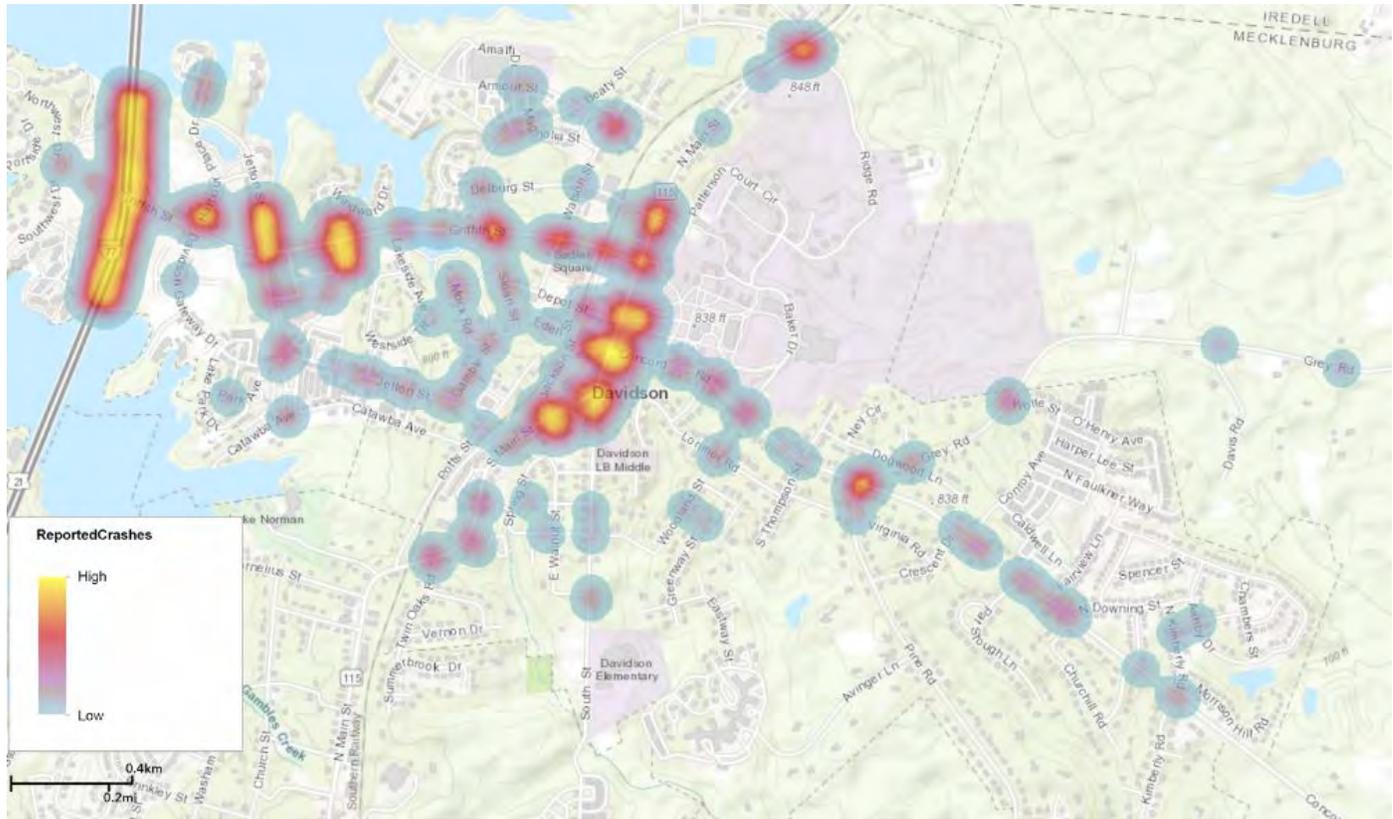
A high-level assessment of the Town of Davidson crash data from 2013 through 2017 (5 years) was conducted in order to identify “hot spot” areas. **Figure 1** shows a heat map of the crash locations throughout the Town of Davidson, while **Figure 2** shows the heat map for a zoomed-in portion near downtown.

Figure 1: Existing Crash Hotspots – Town-wide



Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

Figure 2: Existing Crash Hotspots – Downtown Davidson & Surrounding Area



The maps show that there are high concentrations of crashes along I-77 (238 crashes in the past 5 years), Griffith Street (132 crashes), and Main Street / NC 115 (103 crashes). **Table 1** shows a summary of the crashes in the Town of Davidson by year and severity. **Table 2** summarizes the high-frequency crash locations in Davidson. A spreadsheet containing all of the crash data, as well as a map with crashes plotted individually are included in the memo attachments.

Table 1: Crash Summary by Year

Year	Total Crashes	Total Fatalities	Total Injuries
2013	140	0	50
2014	130	0	35
2015	161	0	38
2016	220	1	57
2017	191	0	58
<b>Totals</b>	<b>842</b>	<b>1</b>	<b>238</b>

Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

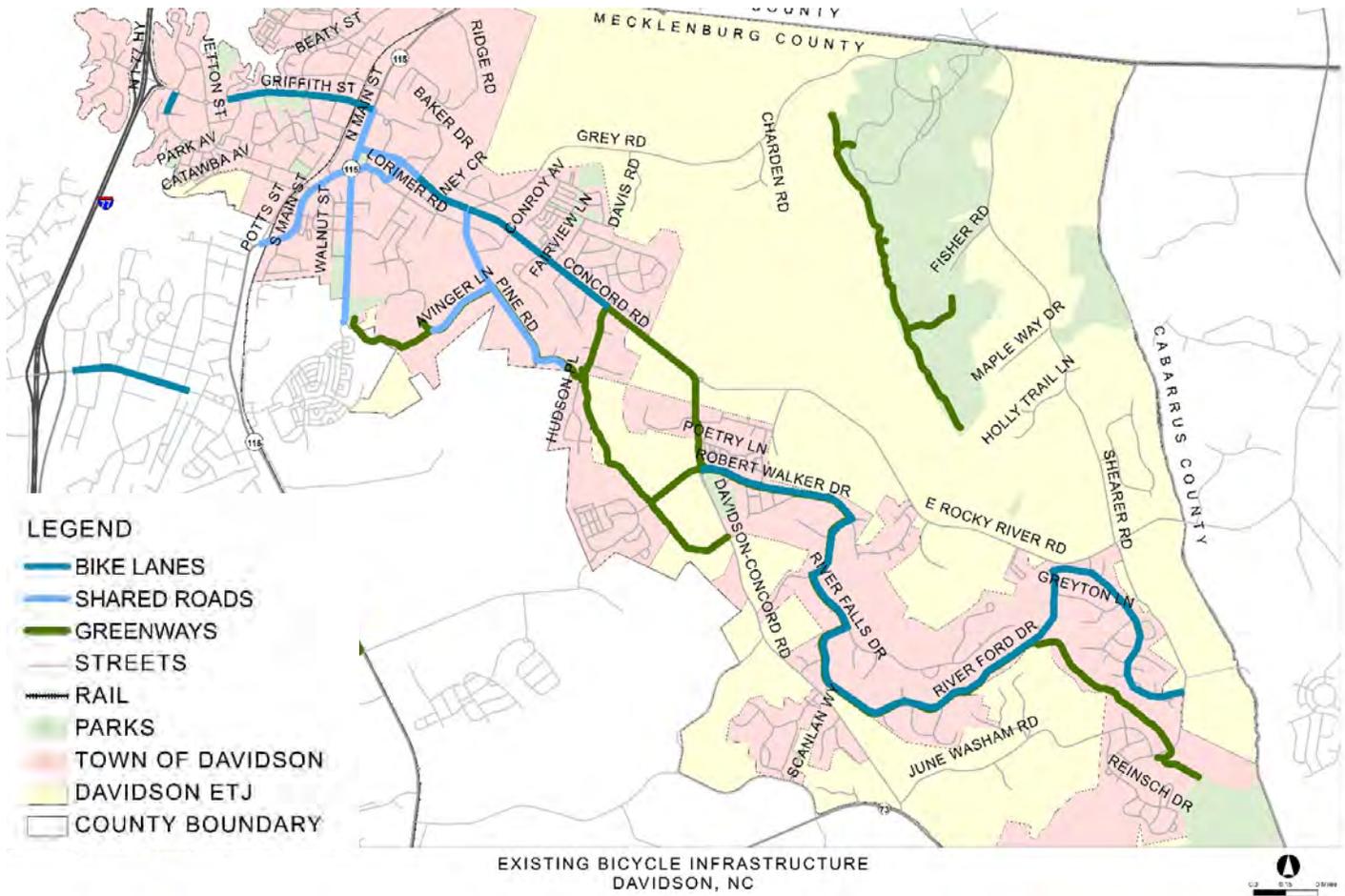
**Table 2: High Frequency Crash Intersections**

Intersection	# of Crashes (2013-2017)
Griffith at I-77	59
Griffith at Harbour Place / Davidson Gateway	44
Griffith at Jetton	30
Griffith at Davidson Gateway	26
NC 115 / Main at Depot	22
NC 115 / Main at Concord	20
NC 115 / Main at Jackson	17
NC 115 / Main at Delburg / Glasgow	14
Griffith at Sloan / Beaty	12
Davidson-Concord at Robert Walker	11

## DEDICATED BICYCLE AND PEDESTRIAN INFRASTRUCTURE

The Town of Davidson currently has several dedicated facilities for bicycles and pedestrians. **Figure 3** shows a map of the dedicated bicycle facilities Town-wide and the different types provided for each roadway. **Figure 4** shows a zoomed-in section of the area near downtown with bicycle counts at several locations along Griffith Street, Main Street, and Concord Road. **Figure 5** shows a map of dedicated pedestrian infrastructure town-wide and **Figure 6** shows a zoomed-in section near downtown with pedestrian counts along the same roadways noted above. Additional high-resolution maps showing zoomed-in sections of the Town are included in the memo attachments.

Figure 3: Existing Bicycle Infrastructure



Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

Figure 4: Existing Bicycle Infrastructure and Counts – Downtown Davidson

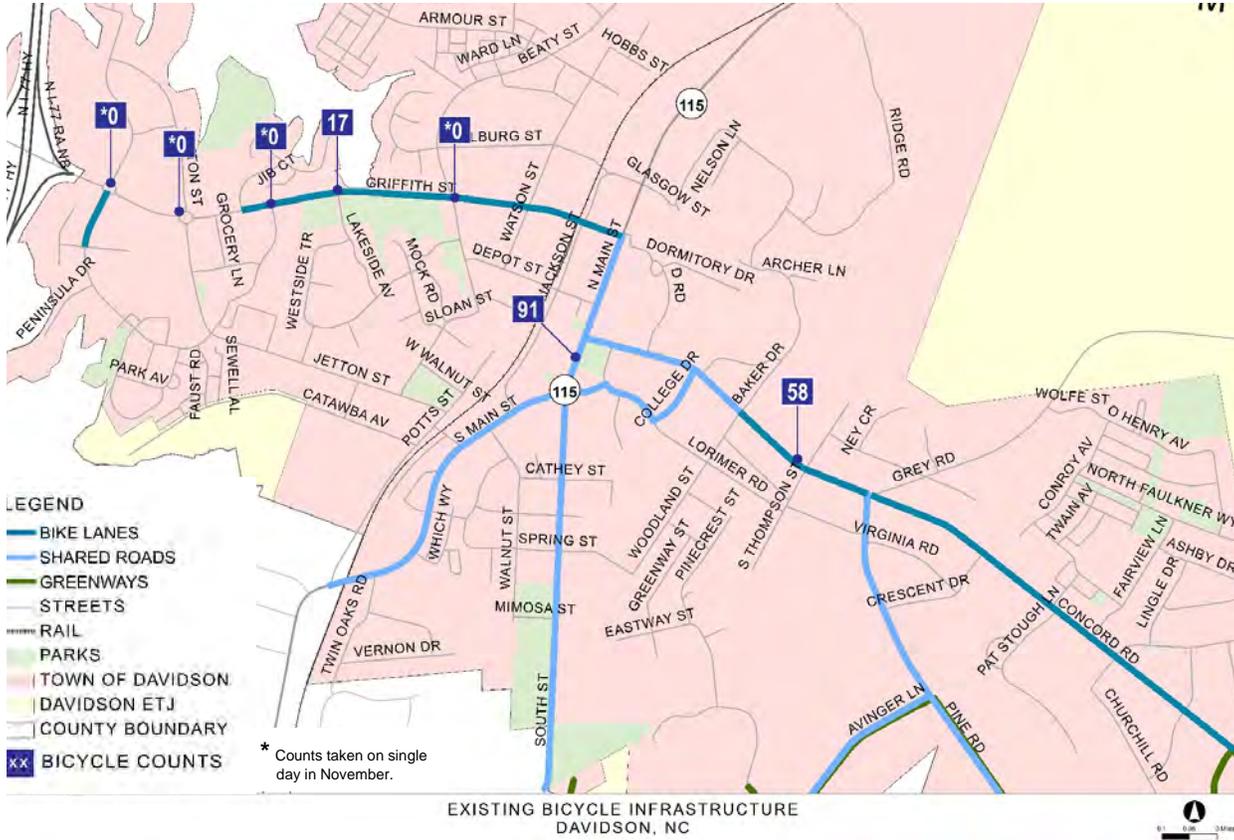


Figure 5: Existing Pedestrian Infrastructure

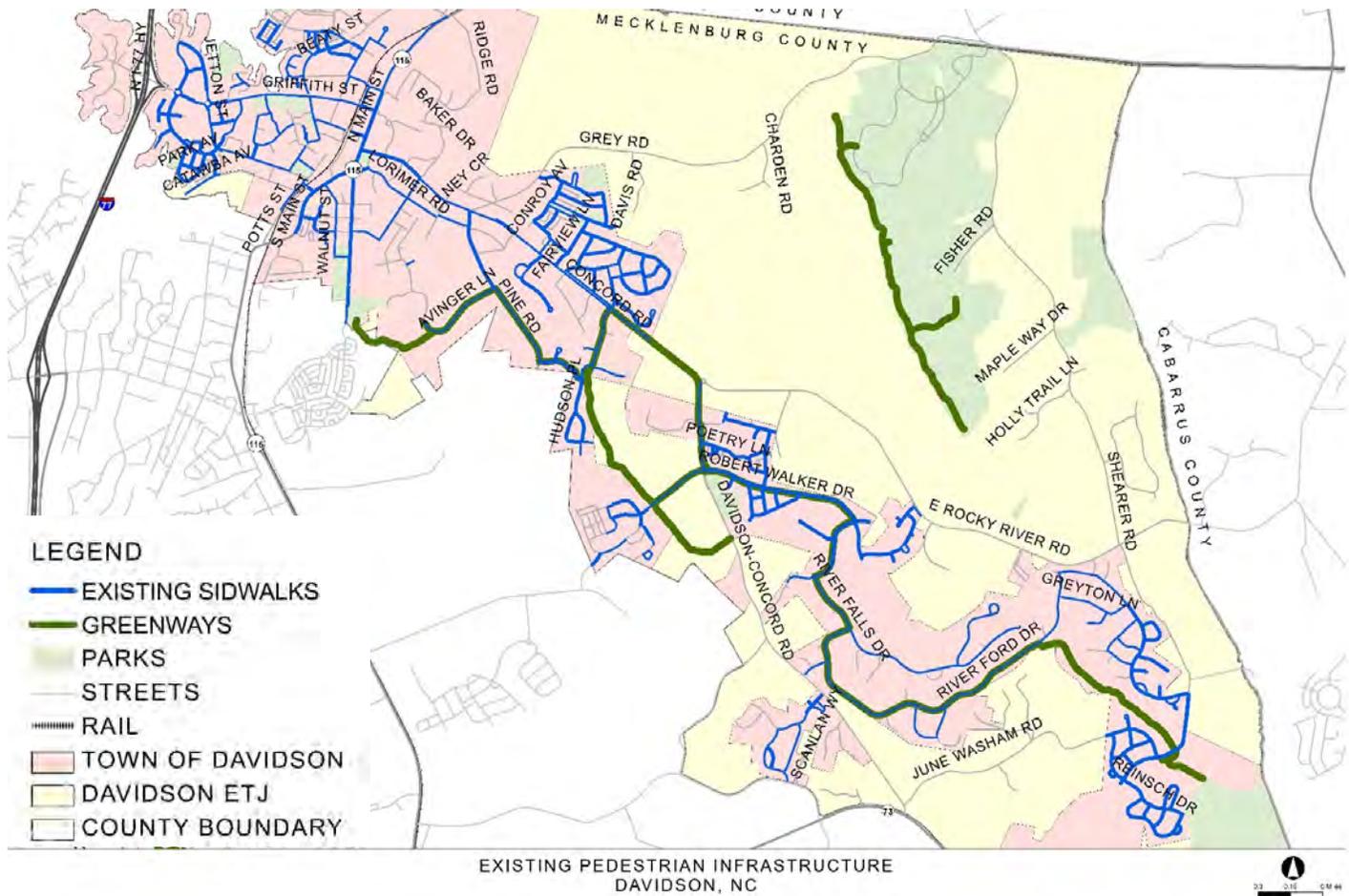
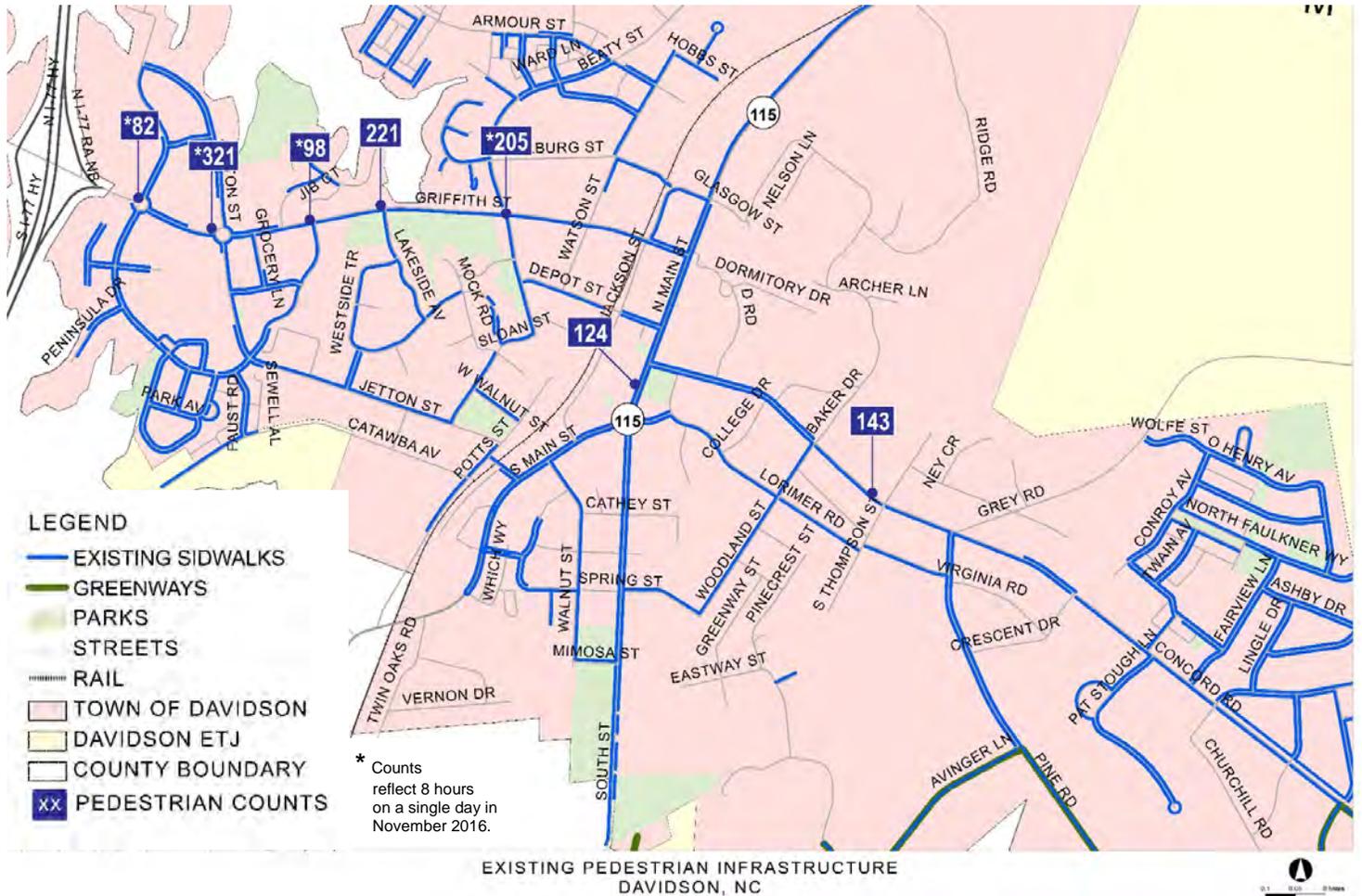


Figure 6: Existing Pedestrian Infrastructure and Counts – Downtown Davidson



**Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment**

The figures show that sidewalks can be found on most Town streets, but there are notable gaps in connectivity. The *Davidson Walks and Rolls Active Transportation Plan*<sup>1</sup> indicates that Davidson currently has 42.22 miles of sidewalk, but that an additional 8.5 miles is required in order to increase connectivity and improve pedestrian safety.

The bicycle and pedestrian counts noted in the figures are discussed further in the “Existing People Capacity” section below.

## EXISTING PEOPLE CAPACITY

### PEDESTRIANS AND BICYCLES

The Institute for Transportation Research and Education (ITRE) installed permanent bicycle and pedestrian count stations at three locations in Davidson in May 2017. Raw, preliminary, unadjusted data was obtained by the project team for these locations in order to determine the existing usage of the bike and pedestrian facilities on Griffith Street, Main Street, and Concord Road.

Additionally, traffic counts (including vehicles, bikes, and pedestrians) were available for morning, afternoon, and evening peak periods in November 2016 at the following locations along Griffith Street:

- Davidson Gateway Drive (west) / Harbour Place Drive
- Jetton Street
- Davidson Gateway Drive (east)
- Beaty Street / Sloan Street

The data from all of the available counts is shown graphically at each available location in **Figures 4 and 6** above. It should be noted that the ITRE data is shown as a daily average, calculated over the period between May and August 2017, and only reflects pedestrian and bicycle movements along Griffith Street itself (not crossing Griffith). The counts at the Griffith Street intersections listed above are shown to represent an 8-hour period on a single-day in November 2016, and reflect all movements at the intersection; not just those along Griffith Street. It is likely that the counts taken between May and August would be higher than an average over the course of an entire year. May through August is one of the warmest periods of the year, which is more inviting for walkers and bike-riders than a cold February, for example. Conversely, the bicycle and pedestrian counts taken in November are likely lower than what one would expect over the course of an entire year, as November is typically one of the colder months, and the counts were only taken on one day.

Overall, the data indicates that some of the heaviest pedestrian movement is along Griffith Street. Perhaps one of the most surprising points was along Main Street, which had one of the lowest pedestrian counts, and the lowest of the three May thru August data collection sites.

### VEHICLES

Average Annual Daily Traffic (AADT) data for the year 2016<sup>2</sup> was obtained from NCDOT was used to evaluate the existing road capacity for vehicles within the Town of Davidson. Based on Generalized Volume Level of Service tables

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<sup>1</sup> Davidson Walks and Rolls Active Transportation Master Plan. (2013). Retrieved from <http://www.townofdavidson.org/774/Davidson-Walks-Rolls-Active-Transportati>

<sup>2</sup> NCDOT Traffic Survey Group. (n.d.). Interactive Traffic Volume Map. Retrieved from <http://ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=5f6fe58c1d90482ab9107ccc03026280>

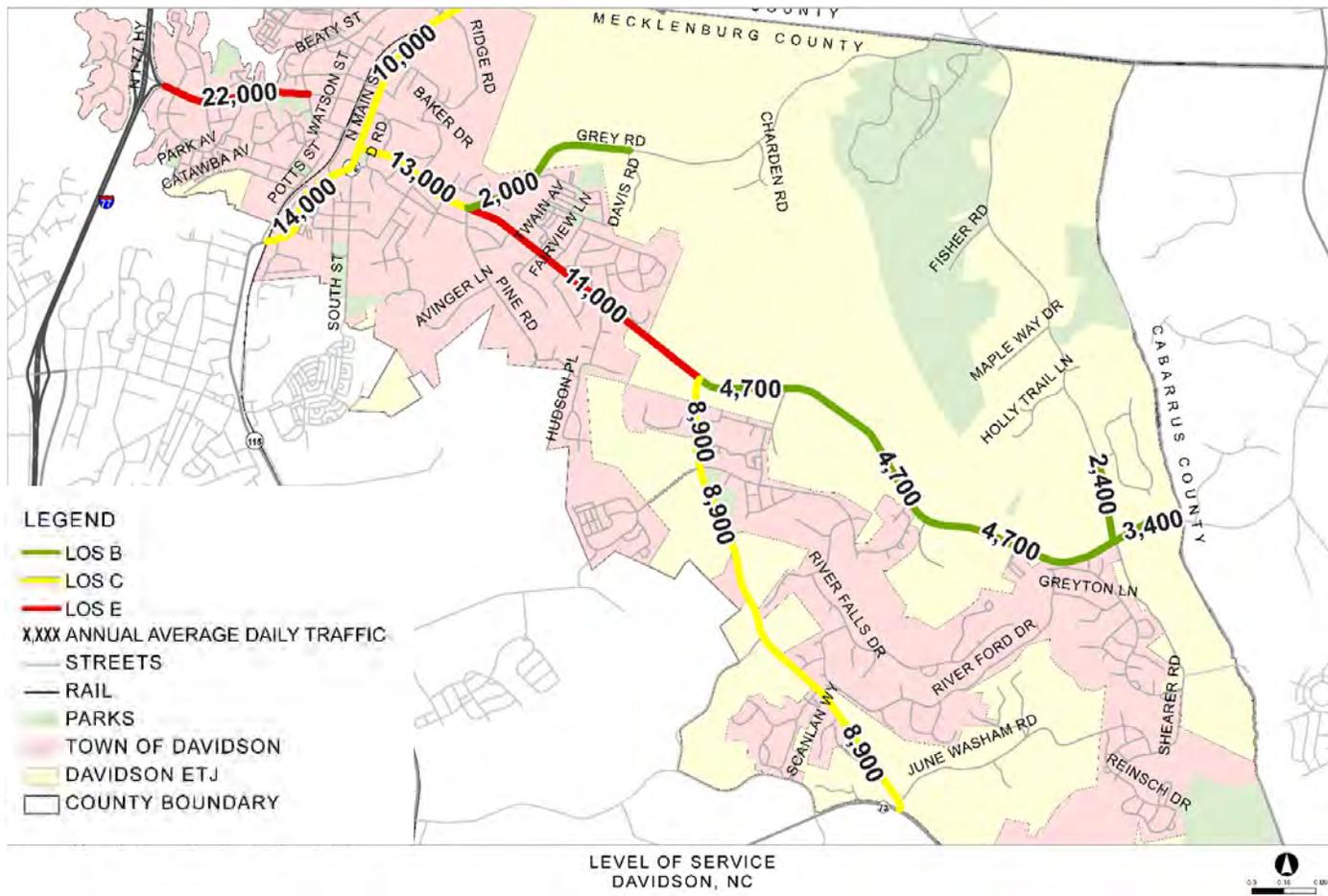
**Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment**

provided in the *Florida Department of Transportation's (FDOT) Quality / Level of Service Handbook*<sup>3</sup>, a level of service was determined for each roadway. **Figure 7** shows the daily traffic volumes which were available for the Town of Davidson, and the associated level of service for that roadway segment.

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<sup>3</sup> FDOT Systems Planning Office. (2009). *Generalized Annual Average Daily Volumes for Florida's Urbanized Areas*. Page 1.

Figure 7: Level of Service and Average Annual Daily Traffic (AADT) Data



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 Design with community in mind

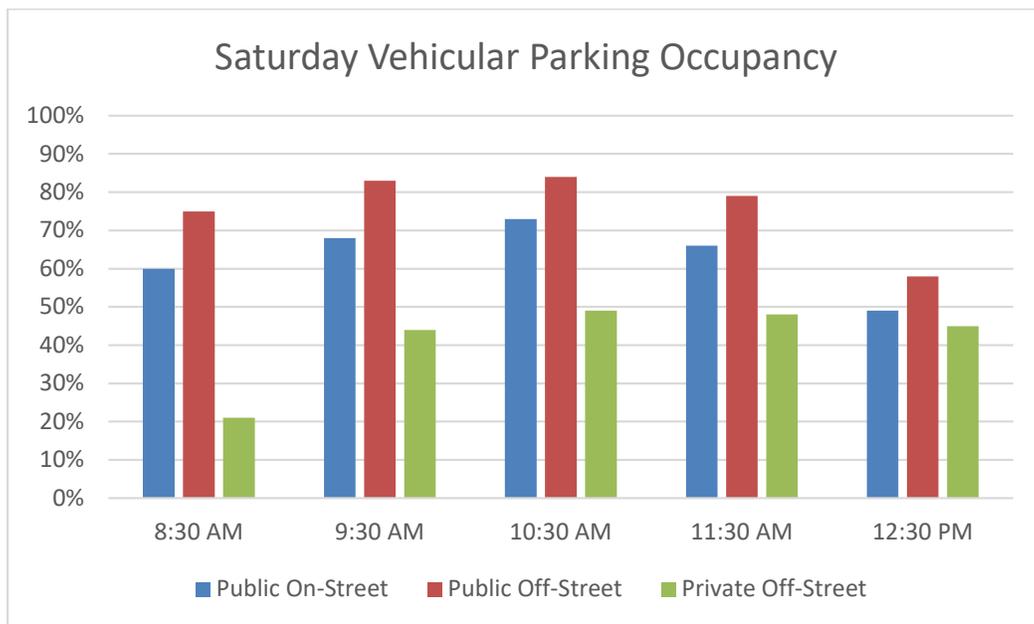
Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

## EXISTING VEHICULAR AND BICYCLE PARKING

### VEHICULAR PARKING

Based on the *Comprehensive Parking Study*<sup>4</sup> conducted for the Town of Davidson in 2017, there are 371 existing public on-street parking spaces, 328 off-street parking spaces, and 1,231 private off-street parking spaces within the historic downtown area and the immediate surrounding blocks. The occupancy study portion of the report indicated that a maximum of 515 spaces out of 694 spaces were utilized on a Saturday, an occupancy of 74 percent. **Figure 8** shows the occupancy rates for each parking type on the Saturday when the observations were conducted. On a Thursday, a maximum of 1,210 spaces out of 2,044 spaces were occupied, which equates to an occupancy rate of 59 percent. **Figure 9** shows a summary of the occupancy rates for each parking type on the Thursday when the observations were conducted.

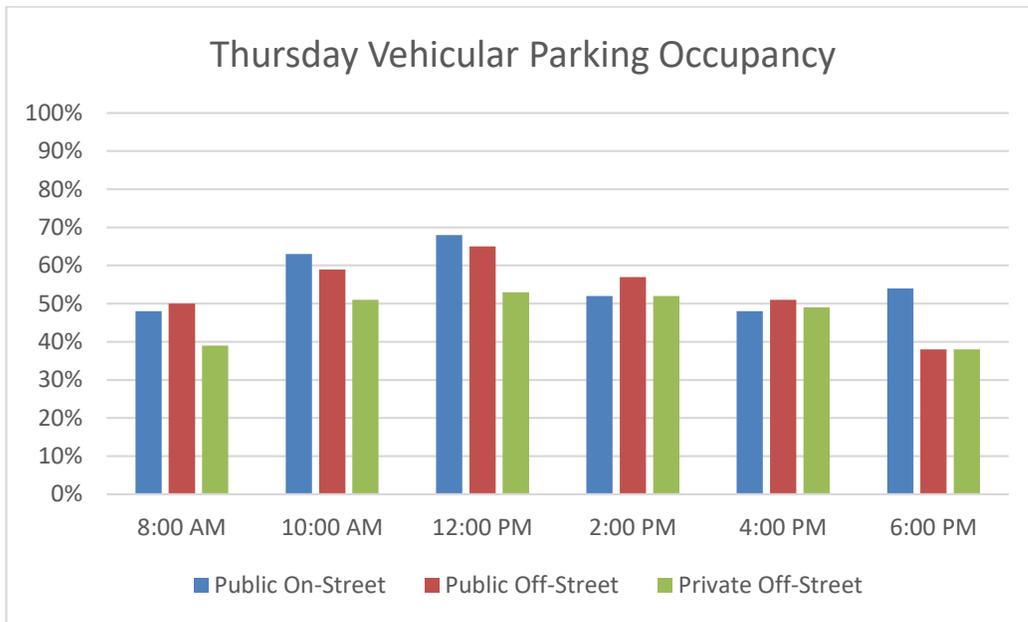
**Figure 8: Saturday Occupancy Chart**



<sup>4</sup> Stantec, & Town of Davidson. (2017). Comprehensive Parking Study.

Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment

Figure 9: Thursday Occupancy Chart



Overall, the area studied showed a parking demand of 1,699 compared to a supply of 2,034. While this does indicate an overall parking surplus of approximately 16 percent, there were areas within the downtown core which experienced parking deficits.

There are other major dedicated parking areas along Griffith Street that are primarily associated with schools, hotels, multi-family housing, or retail. These areas are mainly served by surface parking lots, but several streets adjacent to Griffith Street provide on-street parallel or angle parking options for residents and patrons. Recent parking studies do not contain data for parking outside of the immediate downtown area, so it is difficult to estimate the supply and demand of parking in other areas of town, namely along Griffith Street.

**BICYCLE PARKING**

The Town of Davidson does not keep records of the placement and availability of bike racks and other bicycle parking infrastructure. Short of completing a thorough field survey to count the number of dedicated bicycle parking fixtures, which is not included in the scope of work, we are not able to determine this based on the data available. If this data is important to the Town for the purposes of this study, we recommend performing a field survey and subsequently mapping the areas in ArcGIS. Bike parking in general is a critical component in encouraging active transportation and understanding the existing supply is important. This parking data, combined with the existing bike count data above, would allow us to identify areas where there is currently a bike parking shortage or excess.

**EXISTING RIDE-SHARING, CAR-SHARING, AND BIKE-SHARING INFRASTRUCTURE**

There is very little sharable infrastructure in the Town of Davidson currently. Ride-sharing apps, such as Uber and Lyft, are becoming widely used, particularly by college students through the week and by restaurant and retail patrons on Friday evenings and weekends. Town and Stantec staff have observed many vehicles stopping to pick up or drop off passengers in the downtown area. With no designated area for this to be facilitated, often times the vehicles will stop within the travel way, which can lead to traffic congestion and unsafe maneuvers by both vehicles and pedestrians.

**Reference: Town of Davidson Mobility Plan – Existing Conditions Assessment**

Based on recent research, there is no car-sharing infrastructure or availability in the Davidson area at this time.

The only bike-share program in Davidson is on the campus of Davidson College, where they have recently implemented the use of 50 “Mobikes”. Mobikes are mobile bikes that can be locked and left anywhere and do not require use of traditional bike racks or dedicated storage.

**STANTEC CONSULTING SERVICES INC.**

**Kellie Reep, PE**

Transportation Engineer

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Kellie.Reep@stantec.com

Attachments:      Crash Heat Map – Entire Davidson (Figure 1)  
                          Crash Heat Map – Downtown Davidson (Figure 2)  
                          Crash Heat Map – South Davidson  
                          Plotted Crash Data Points  
                          Town of Davidson Raw Crash Data (Excel format)  
                          Existing Bicycle Infrastructure – Entire Davidson (Figure 3)  
                          Existing Bicycle Infrastructure – Downtown Davidson with Bike Counts (Figure 4)  
                          Existing Bicycle Infrastructure – Concord Road  
                          Existing Bicycle Infrastructure – South Davidson  
                          Existing Pedestrian Infrastructure – Entire Davidson (Figure 5)  
                          Existing Pedestrian Infrastructure – Downtown Davidson with Ped Counts (Figure 6)  
                          Existing Pedestrian Infrastructure – Concord Road  
                          Existing Pedestrian Infrastructure – Davidson-Concord Road  
                          Existing Pedestrian Infrastructure – South Davidson  
                          Vehicular Level of Service and AADT's (Figure 7)

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# APPENDIX C- Previous Plans Summary

**To:** Travis Johnson, Town of Davidson  
**From:** Wade Walker & Heather Seagle, Alta Planning + Design  
**Date:** April 30, 2018  
**Re:** Davidson Mobility Plan- DRAFT Technical Memorandum #1- Summary of Previous Transportation Planning Efforts (Revised)

Davidson has a rich history of transportation planning that aligns land use planning with transportation strategies. As part of the assessment for the Mobility Plan, these previous planning efforts have been reviewed and summarized to understand what transportation facilities have been planned and recommended previously, which of those recommendations have been implemented, and which recommendations may no longer be valid. The previous plan initiatives are summarized in both written narrative and in tabular and/or mapping format consistent with their recommendations, and it has been noted if an initiative has been completed or is in the process of being implemented. This assessment is intended to give the reader an overview of the myriad of planning efforts conducted over the past 15+ years and to inform the development of the current Mobility Plan.

The following prior plans have been reviewed and a summary of mobility and connectivity recommendations from each is summarized below:

Table 1. List of Previous Plans Included in Analysis

Plan Name	Adoption Date
Downtown Pedestrian Safety Enhancement Plan	February 2002
Circulation Plan	April 2003
Connectivity and Traffic Calming Report	2003*
Davidson Transit Station Small Area Plan	September 2005
Potts-Sloan-Beaty Street Corridor Land Use Plan	May 2007
Bicycle Transportation Plan	Oct 2008
Davidson Comprehensive Plan	August 2010
Comprehensive Parking Study	2011*
Station Area Plan Update	2012*
Davidson Walks and Rolls: Active Transportation Master Plan	November 2013
Circles at 30 Small Area Plan	2013*
Parks and Recreation Master Plan	November 2014
Rural Area Plan	September 2016

\* These plans have not been formally adopted by Davidson Board of Commissioners, but they have been reviewed and summarized here to make sure that the Mobility Plan reflects a comprehensive understanding of previous planning efforts.

## Downtown Pedestrian and Bicycle Safety Enhancement Plan (2002)

Adopted in February 2002, this plan outlines pedestrian crossing improvements and bicycle facility improvements in order to protect the pedestrian- and bicycle-oriented character of central Davidson. The crossing improvements, which generally consist of curb bulb-outs and new or realigned bricked crossings, are recommended at the intersections of Main Street and Concord Road, Main Street and Depot Street, Concord Road and Lorimer Road, and Concord Road and College Street. All of the crossing improvements proposed in this plan have been implemented.

The bicycle facility improvements called for are the installation of bicycle lanes along Concord Road, from Lorimer Road to Kimberly Lane, to improve safe bicycle access between downtown, residential neighborhoods, and Davidson's greenway trails. The proposed bike lanes have been installed from Lorimer Road to Pine Road.

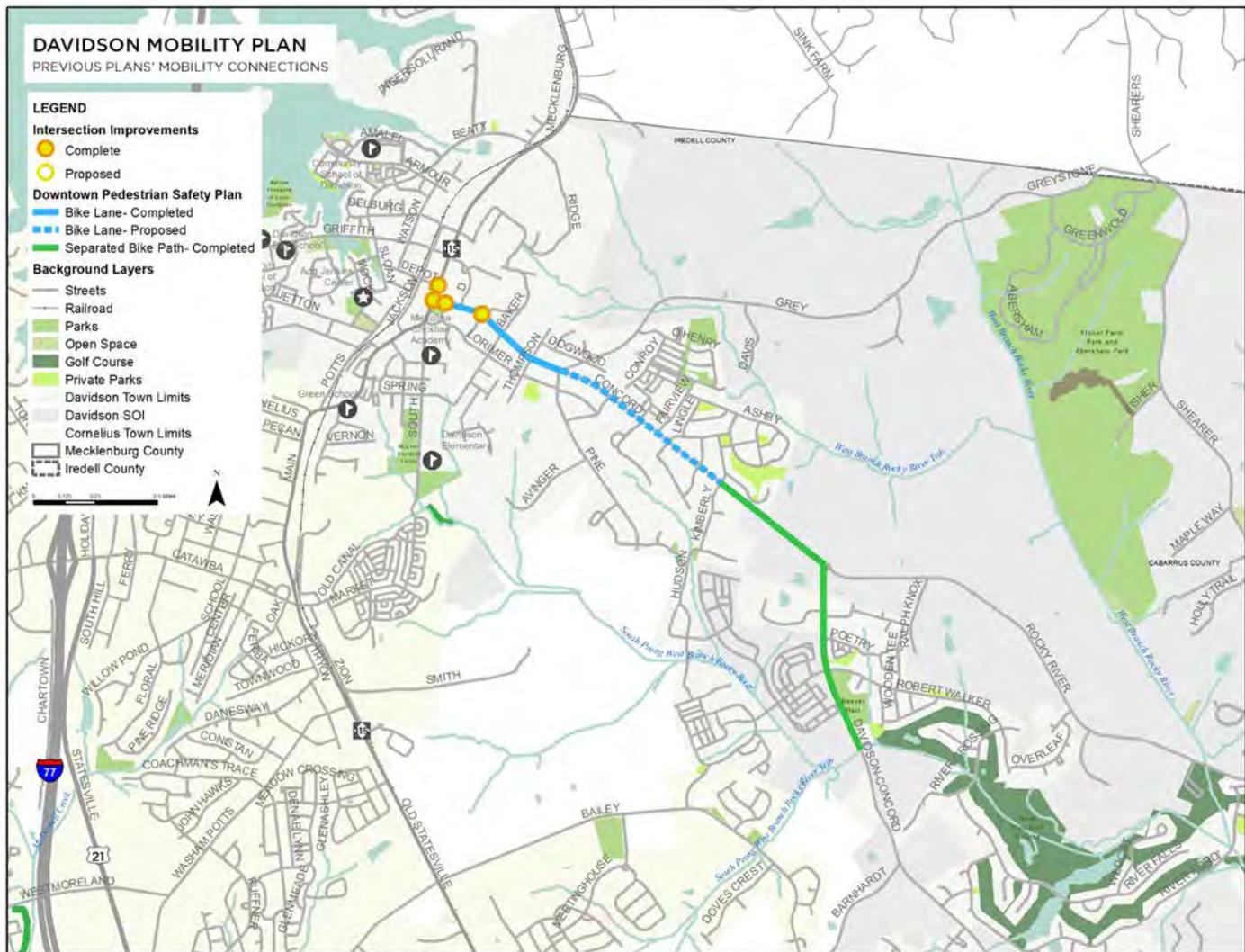


Figure 1. Downtown Pedestrian and Bicycle Safety Plan Recommended Connections

Table 2. Downtown Pedestrian and Bicycle Safety Plan Projects

Proposed Facility Type	Status	Project Corridor	From_	To_
bike lanes	Completed	Concord Rd	Lorimer Rd	Grey Rd
bike lanes	Proposed	Concord Rd	Grey Rd	Kimberly Rd
sidewalks both sides	Proposed	Concord Rd	Woodland St	Downing St
trail/path	Completed	Concord Rd	Kimberly Ln	Rocky River Rd
trail/path	Completed	Davidson-Concord Rd	Rocky River Rd	South Prong Branch Rocky River

### Circulation Plan (2003)

This plan, adopted in April 2003, summarizes the results of an extensive connectivity study of how to improve circulation and mobility, as well as pedestrian and bicycle connectivity. The recommendations and priorities established were based on citizen stakeholder input, as well as input from Town staff and consultant research. The following roadway connections were identified and described in the report, along with accompanying maps. A prioritization score was calculated for the projects by a group of twenty-one stakeholders. Stakeholders scored the potential connections on their ability to 1) relieve traffic congestion on major thoroughfares and at primary intersections, 2) enhance movement safety in the area, and 3) maintain and enhance quality of life in Davidson. Projects were scored based on a scale of -2 to 2, with -2 representing a significant negative impact and +2 representing a significant positive impact. (Some projects were not scored. It is unclear from the report why this is the case.) The resulting prioritized list of connection is as follows:

Table 3. Proposed Connections from the Circulation Plan of 2003

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
bike/ped connector	--	Proposed	Ardley Cir connector	Ardley Cir	Pat Stough Ln
bike/ped connector	--	Proposed	Churchill-Woody connector	Churchill Rd	Woody Ln
bike/ped connector	--	Proposed	Hudson Pl eastern extension	e. terminus	new street connection
bike/ped connector	--	Proposed	Lynbrook Dr extension	Patrick Johnston Ln	Churchill Rd
bike/ped connector	--	Proposed	Westmoreland Farm Rd	<Null>	<Null>
greenstreet	--	Proposed	Woodland St	Brook St	Lorimer Rd
greenstreet; sidewalks	--	Proposed	Lorimer Rd	Woodland St	Thompson St
new street connection	new street connection	Completed	Brook St extension	Woodland St	east of Woodland
new street connection	--	Proposed	Brook St extension	e. terminus of Brook St	Pinecrest St
new street connection	--	Proposed	Catawba Ave extension	S. Main St	Spring St extension
new street connection	--	Proposed	Cathey St extension	current s. terminus of Cathey St	Eastway St
new street connection	--	Proposed	Goodrum St extension	e. terminus of Goodrum	Cathey St

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
new street connection	new street connection	Completed	Goodrum St extension	Walnut St	South St extension
new street connection	--	Proposed	Grey to NC 115	Grey Rd	NC 115
new street connection	--	Proposed	Hillside Dr extension	s. terminus of Hillside Dr	Cathey St
new street connection	--	Proposed	Hudson Pl-Westmoreland connector	Hudson Pl	Westmoreland Farm
new street connection	--	Proposed	N. Thompson extension	N. Thompson St	Beaty St (via Ridge Rd)
new street connection	new street connection	Proposed	new street connection	Hudson Pl	<Null>
new street connection	--	Proposed	new street connection	<Null>	<Null>
new street connection	--	Proposed	new street connection	<Null>	<Null>
new street connection	--	Proposed	new street connection	Spring St	Goodrum ST
new street connection	new street connection	Completed	Patrick Johnston Ln	Hudson Pl	<Null>
new street connection	--	Proposed	Peters Pl extension	Peters Pl	Thompton St extension
new street connection	--	Proposed	Potts St-to-Catawba Ave connector	Potts St	Catawba Ave
new street connection	--	Proposed	Ridgewood Ave extension	Pinecrest St	Thompson St
new street connection	new street connection	Completed	South St	southern terminus	Antiquity neighborhood
new street connection	new street connection	Completed	Spring St extension	Eugenia St	Walnut St
new street connection	--	Proposed	Walnut-Vernon connector	Walnut St	Vernon Dr
new street connection	--	Proposed	West Rail St	Armour St	Potts-Sloan Connector
new street connection	--	Proposed	Wyatts Way Extension	Pine St	South St
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Proposed	Brookhollow	Bradford Park	Hudson Pl extension
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Proposed	Eugenia St	Spring St	S. Main St
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Proposed	June Washam to Shearer Rd	June Washam Rd	Shearer Rd
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Proposed	new development	Park Terrace	greenway connection
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Proposed	Wyatts Way	Pine St	Patrick Johnston Ln
new street connection*; Shared Road	new street connection	Proposed	Spring St	Eugenia St	James Alexander Way
new street connection*; trail/path	new street connection, sidewalks, bike lanes	Proposed	Bailey to Davidson Concord connector	Bailey Rd	Davidson-Concord Rd
new street connection*; trail/path	new street connection	Completed	Hudson Pl	<Null>	<Null>

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
new street connection*; trail/path	new street connection	Completed	Samuel Spencer Pkwy	Hudson Pl	s. terminus of Samuel Spencer
new street connection; bike lanes	new street connection; bike lanes	Completed	Shearer Rd extension	Dembridge Dr	White Quartz Ln
new street connection; bike lanes	--	Proposed	Shearer Rd extension	White Quartz Ln	NC 73
new street connection; bike lanes; sidewalk	--	Proposed	Potts St-to-Sloan St connector	Potts St	Sloan St
new street connection; bike lanes; sidewalk	--	Proposed	Samuel Spencer Pkwy extension	s. terminus of Samuel Spencer	<Null>
new street connection; paved shoulder; trail/path	--	Proposed	Avinger-Chapel connection	Chapel Way	South Prong Rocky River Greenway
new street connection; Shared Road	--	Proposed	Pine Rd-to-Thompson St connector	Pine Rd	Thompson St extension
new street connection; Shared Road	--	Proposed	Thompson St extension	Ridgewood extension	Avinger Ln
new street connection; trail/path*	trail/path	Partially Completed	South Prong Rocky River Greenway	Avinger Ln	South St
new street connection; trail/path	--	Proposed	Brook St extension	Hillside Dr	Woodland
new street connection; trail/path	--	Proposed	Concord to Grey connection	Concord Rd	Grey Rd
new street connection; trail/path	--	Proposed	Dogwood Ln extension	Dogwood Ln	Conroy Ave
new street connection; trail/path	--	Proposed	Eastway-South connection	Eastway St	South St
new street connection; trail/path	--	Proposed	Greenway St-to-South St connector	Greenway St	South St
new street connection; trail/path	--	Proposed	Greenway St-to-The Pines extension	Greenway St	The Pines
new street connection; trail/path	--	Proposed	Lorimer Rd-to-Brook St connection	Lorimer Rd	Brook St extension
new street connection; trail/path	--	Proposed	new street connection	Davidson-Concord Rd	<Null>
new street connection; trail/path	--	Proposed	Walnut-Vernon connector	Walnut St	future Kincaid Greenway
new street connection; trail/path*	trail/path	Partially Completed	Eastway-The Pines	Eastway St	The Pines
new street connection; trail/path*	--	Funded	new street connection	Westbranch Pkwy	new development road
new street connection; trail/path*	--	Funded	new street connection	Westbranch Pkwy	new development road
sidewalks	--	Proposed	Eastway St	w. terminus of Eastway	s. terminus of Eastway
sidewalks	--	Proposed	Goodrum St	South St	Walnut Rd
sidewalks	--	Proposed	Greenway St	Ridgewood Av	southern terminus of Greenway St
sidewalks	--	Proposed	Hillside Dr	Lorimer Rd	s. terminus of Hillside Dr
sidewalks	--	Proposed	Meadowbrook Ln	Vernon Dr	Twin Oaks Rd
sidewalks	--	Proposed	Pincrest sidewalk	Ridgewood Ave	Brook St
sidewalks	--	Proposed	Potts St	n. terminus of Potts	Catawba Ave

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
sidewalks	--	Proposed	Ridgewood Ave	Woodland St	Pinecrest St
sidewalks	--	Proposed	Spring St	James Alexander Wy	South St
sidewalks	--	Proposed	Thompson St	Concord Rd	s. terminus of Thompson St
sidewalks	--	Proposed	Vernon Dr	Twin Oaks Rd	Meadowbrook Ln
sidewalks	--	Proposed	Woodland St	Concord Rd	Spring St
sidewalks*; trail/path	Sidewalks	Partially Complete	Hudson Pl	Kimberly Rd	Patrick Johnson Ln
sidewalks; Shared Road	--	Proposed	Cathey St sidewalk	South St	Walnut St
sidewalks; Shared Road	sidewalks; Shared Road	Completed	Pine Rd	Concord Rd	Patrick Johnston Ln
sidewalks; trail/path	Sidewalks	Partially Complete	Kimberly Rd	Concord Rd	Hudson Pl
trail/path	--	Proposed	Cathey St greenway	Hillside Dr	South Prong Rocky River Greenway
trail/path	--	Proposed	greenway connection	Patrick Johnston Ln	Pat Stough Ln



- Vehicular capacity is maximized with speeds of 25-30 mph so Davidson should limit design speeds and posted speed limits to maximize efficiency and pedestrian and bicyclist safety.
- Designing for lower speeds will allow for shorter sight distances that allows for more roadside treatments, such as street trees, lighting, and other pedestrian amenities.
- Traffic calming measure can lower design speeds to match sight distance, which will decrease the potential severity of accidents while also enhancing quality of the environment.

Priority projects outlined in the report are:

- Potts-Sloan connection *[funded; in planning/design phase]*
- Davidson-Concord Road to Bailey Road connection *[implemented]*
- Concord Road to Grey Road and Grey Road to N. Main Street (near Beaty Street)
- Shearer Road to NC 73

The report also recommends policy and funding mechanisms that should be considered in order to ensure that these projects can be implemented. These include:

- Identifying prioritized projects in the MPO's Long-Range Transportation Needs Plan and have them placed within the Region's Thoroughfare Plan
- Updating Davidson's Adequate Public Facilities Ordinance (APFO) to establish an annexation fee policy in the Davidson ETJ (rural area) to be applied to all residential developments that wish to annex into the town limits.
- Determining universal impact areas for which new development impacts, and establish a per unit fee that would pay for transportation improvements to these areas that are impacted by development, no matter what the location. Potential universal impact areas include the Elementary school walk zone, Main/Concord intersection, Bailey Middle School Area.

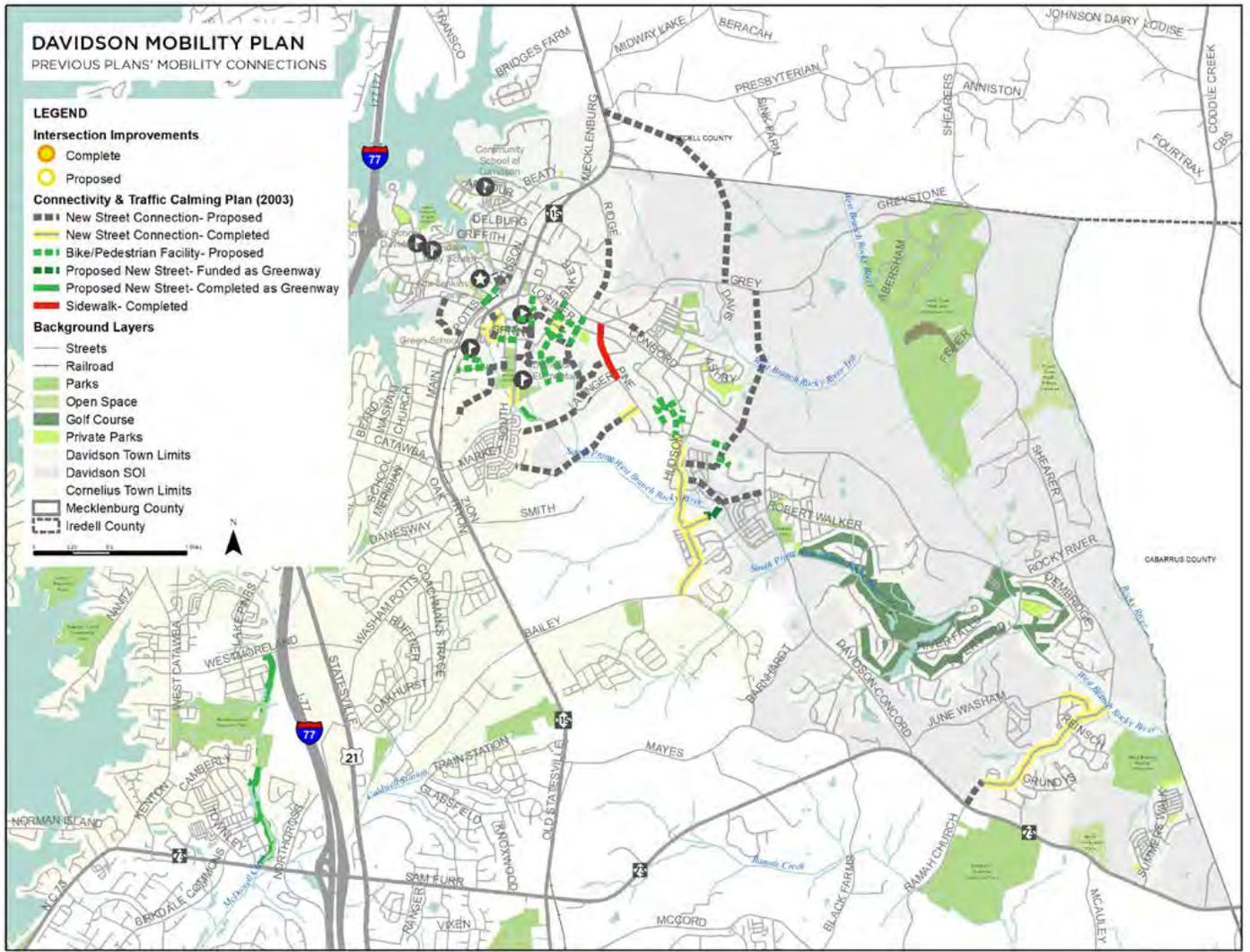


Figure 3. Connectivity & Traffic Calming Plan Recommended Connections

Table 4. Projects from the Connectivity & Traffic Calming Report

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
bike/ped connector	--	Proposed	Ardley Cir connector	Ardley Cir	Pat Stough Ln
bike/ped connector	--	Proposed	Churchill-Woody connector	Churchill Rd	Woody Ln
bike/ped connector	--	Proposed	Hudson Pl eastern extension	e. terminus	new street connection
bike/ped connector	--	Proposed	Lynbrook Dr extension	Patrick Johnston Ln	Churchill Rd
bike/ped connector	--	Proposed	Westmoreland Farm Rd extension	new street connection	w. terminus of Westmoreland Farm Rd
greenstreet	--	Proposed	Woodland St	Brook St	Lorimer Rd
greenstreet; sidewalks	--	Proposed	Lorimer Rd	Woodland St	Thompson St
new street connection	new street connection	Completed	Brook St extension	Woodland St	east of Woodland

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
new street connection	--	Proposed	Brook St extension	e. terminus of Brook St	Pinecrest St
new street connection	--	Proposed	Catawba Ave extension	S. Main St	Spring St extension
new street connection	--	Proposed	Cathey St extension	current s. terminus of Cathey St	Eastway St
new street connection	--	Proposed	Goodrum St extension	e. terminus of Goodrum	Cathey St
new street connection	new street connection	Completed	Goodrum St extension	Walnut St	South St extension
new street connection	--	Proposed	Grey to NC 115	Grey Rd	NC 115
new street connection	--	Proposed	Hillside Dr extension	s. terminus of Hillside Dr	Cathey St
new street connection	--	Proposed	Hudson Pl-Westmoreland connector	Hudson Pl	Westmoreland Farm
new street connection	--	Proposed	N. Thompson extension	N. Thompson St	Beaty St (via Ridge Rd)
new street connection	new street connection	Proposed	new street connection	Hudson Pl	Westbranch Pkwy
new street connection	--	Proposed	new street connection	Vernon Dr	Zion Ave
new street connection	--	Proposed	new street connection	Concord Rd	Westmoreland Farm Rd
new street connection	--	Proposed	new street connection	Spring St	Goodrum ST
new street connection	new street connection	Completed	Patrick Johnston Ln	Hudson Pl	<Null>
new street connection	--	Proposed	Peters Pl extension	Peters Pl	Thompton St extension
new street connection	--	Proposed	Potts St-to-Catawba Ave connector	Potts St	Catawba Ave
new street connection	--	Proposed	Ridgewood Ave extension	Pinecrest St	Thompson St
new street connection	new street connection	Completed	South St	southern terminus	Antiquity neighborhood
new street connection	new street connection	Completed	Spring St extension	Eugenia St	Walnut St
new street connection	--	Proposed	Walnut-Vernon connector	Walnut St	Vernon Dr
new street connection	--	Proposed	West Rail St	Armour St	Potts-Sloan Connector
new street connection	--	Proposed	Wyatts Way Extension	Pine St	South St
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	Brookhollow	Bradford Park	Hudson Pl extension
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	Eugenia St	Spring St	S. Main St
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	June Washam to Shearer Rd	June Washam Rd	Shearer Rd
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	new development	Park Terrace	greenway connection

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	Wyatts Way	Pine St	Patrick Johnston Ln
new street connection*; Shared Road	new street connection	Partially Complete	Spring St	Eugenia St	James Alexander Way
new street connection*; trail/path	new street connection, sidewalks, bike lanes	Partially Complete	Bailey to Davidson Concord connector	Bailey Rd	Davidson-Concord Rd
new street connection*; trail/path	new street connection	Completed	Hudson Pl	<Null>	<Null>
new street connection*; trail/path	new street connection	Completed	Samuel Spencer Pkwy	Hudson Pl	s. terminus of Samuel Spencer
new street connection; bike lanes	new street connection; bike lanes	Completed	Shearer Rd extension	Dembridge Dr	White Quartz Ln
new street connection; bike lanes	--	Proposed	Shearer Rd extension	White Quartz Ln	NC 73
new street connection; bike lanes; sidewalk	--	Proposed	Potts St-to-Sloan St connector	Potts St	Sloan St
new street connection; bike lanes; sidewalk	--	Proposed	Samuel Spencer Pkwy extension	s. terminus of Samuel Spencer	<Null>
new street connection; paved shoulder; trail/path	--	Proposed	Avinger-Chapel connection	Chapel Way	South Prong Rocky River Greenway
new street connection; Shared Road	--	Proposed	Pine Rd-to-Thompson St connector	Pine Rd	Thompson St extension
new street connection; Shared Road	--	Proposed	Thompson St extension	Ridgewood extension	Avinger Ln
new street connection; trail/path*	trail/path	Partially Complete	South Prong Rocky River Greenway	Avinger Ln	South St
new street connection; trail/path	--	Proposed	Brook St extension	Hillside Dr	Woodland
new street connection; trail/path	--	Proposed	Concord to Grey connection	Concord Rd	Grey Rd
new street connection; trail/path	--	Proposed	Dogwood Ln extension	Dogwood Ln	Conroy Ave
new street connection; trail/path	--	Proposed	Eastway-South connection	Eastway St	South St
new street connection; trail/path	--	Proposed	Greenway St-to-The Pines extension	Greenway St	The Pines
new street connection; trail/path	--	Proposed	Lorimer Rd-to-Brook St connection	Lorimer Rd	Brook St extension
new street connection; trail/path	--	Proposed	new street connection	Davidson-Concord Rd	<Null>
new street connection; trail/path	--	Proposed	Walnut-Vernon connector	Walnut St	future Kincaid Greenway
new street connection; trail/path*	trail/path	Partially Complete	Eastway-The Pines	Eastway St	The Pines
new street connection; trail/path*	--	Funded	new street connection	Westbranch Pkwy	new development road
new street connection; trail/path*	--	Funded	new street connection	Westbranch Pkwy	new development road

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
sidewalks	--	Proposed	Eastway St	w. terminus of Eastway	s. terminus of Eastway
sidewalks	--	Proposed	Goodrum St	South St	Walnut Rd
sidewalks	--	Proposed	Greenway St	Ridgewood Av	southern terminus of Greenway St
sidewalks	--	Proposed	Hillside Dr	Lorimer Rd	s. terminus of Hillside Dr
sidewalks	--	Proposed	Meadowbrook Ln	Vernon Dr	Twin Oaks Rd
sidewalks	--	Proposed	Pinecrest sidewalk	Ridgewood Ave	Brook St
sidewalks	--	Proposed	Potts St	n. terminus of Potts	Catawba Ave
sidewalks	--	Proposed	Ridgewood Ave	Woodland St	Pinecrest St
sidewalks	--	Proposed	Spring St	James Alexander Wy	South St
sidewalks	--	Proposed	Thompson St	Concord Rd	s. terminus of Thompson St
sidewalks	--	Proposed	Vernon Dr	Twin Oaks Rd	Meadowbrook Ln
sidewalks	--	Proposed	Woodland St	Concord Rd	Spring St
sidewalks; Shared Road	sidewalks; Shared Road	Completed	Pine Rd	Concord Rd	Patrick Johnston Ln
trail/path	--	Proposed	Cathey St greenway	Hillside Dr	South Prong Rocky River Greenway
trail/path	--	Proposed	greenway connection	Patrick Johnston Ln	Pat Stough Ln

## Davidson Transit Station Small Area Plan (2005)

This plan, adopted in September 2005, summarizes the findings of a study to select the locations of a transit station and parking lot in anticipation of the extension of rail transit and enhanced bus services from Charlotte to Mooresville. The Station Area includes the land on either side of the railroad tracks, between Delburg Street and the back of Town Hall. Three station platform opportunities were examined (see graphic at right):

- North of Griffith Street,
- Between Griffith and Depot Street, and
- South of Depot St. The locations were evaluated for proximity to the town core, proximity to parking, ease of access to the platform.

The goals outlined in the report are to:

1. Select the station platform and parking locations for the transit system,
2. Identify and reevaluate the infrastructure issues that will affect the station plan and will be affected by the transit system, and
3. Discuss options for development in five areas around the proposed Station Area.

An evaluation of platform locations advantages and disadvantages produced the following conclusions:

- Option 1- North of Griffith- was discarded due to considerable distance from the town core
- Option 2- Between Griffith and Depot St.- was considered in more detail because of the Sadler Square Property, which is a potential parking site.
- Option 3- South of Depot St.- was decided upon as the best location because it is closest to the heart of downtown Davidson and has the potential access to parking along Jackson St. and the Metrolina Warehouse parking location.

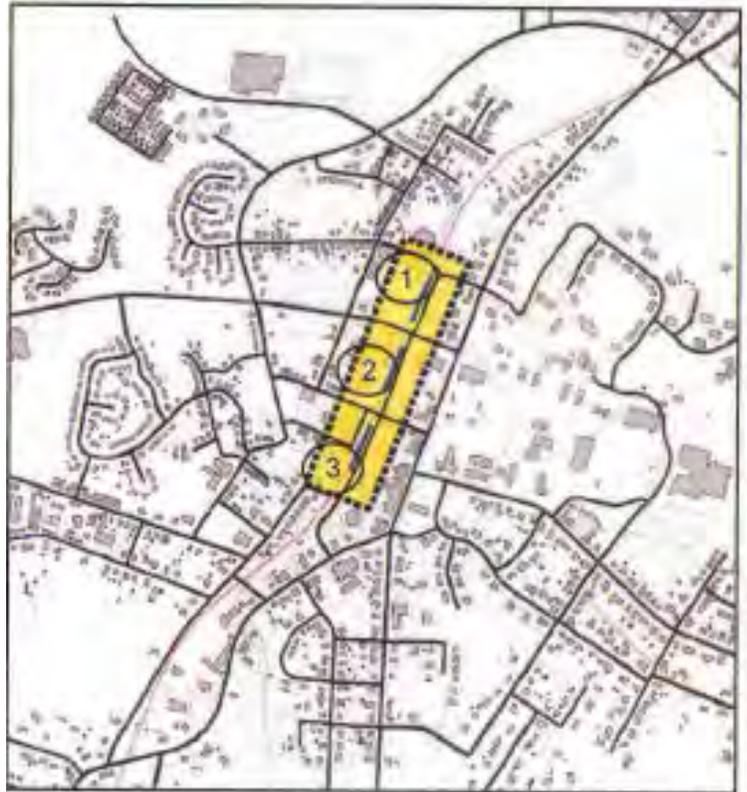


Fig. 1.3- Platform Proposal Locator Map of Davidson

The five areas of future development opportunities around the proposed Station Areas, shown in the graphic at right, are based on a market study performed by Robert Charles Lesser. These sites include:

1. Town Hall and Jackson Street Area
2. Metrolina Warehouse
3. Sadler Square (South of Griffith St.)
4. Sadler Property (north of Griffith St.)
5. Wachovia Property

A recommendation was made to adopt a Transit Oriented Development Zoning Classification to support mixed-use development around the future station.

In addition to the location assessment, the surrounding area was assessed for whether the land uses and street pattern/connectivity supported transit. Maps are provided

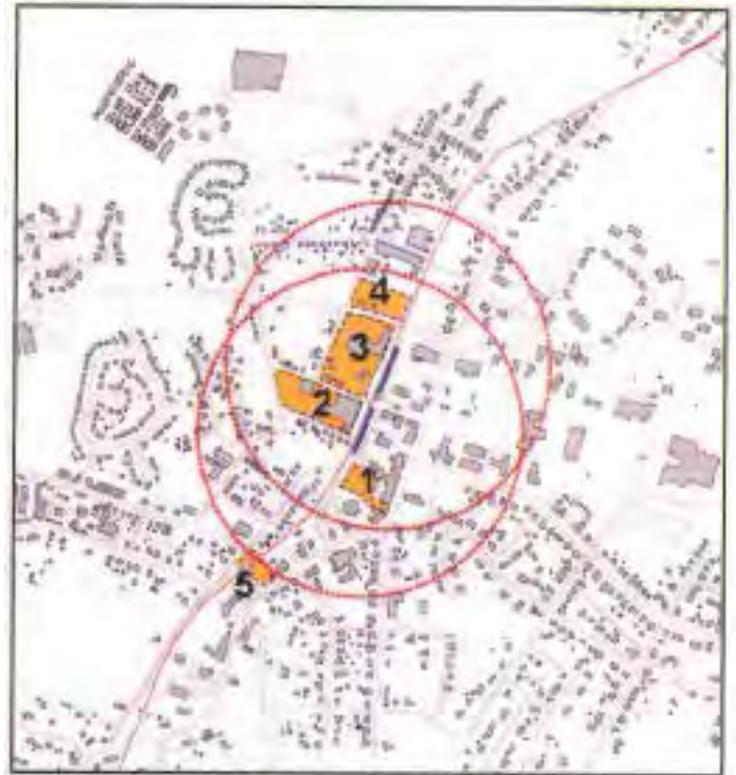


Fig. 5.2- Five Development Opportunity Sites in Davidson, NC



Fig. 4.8- Transit Supportive Land Use

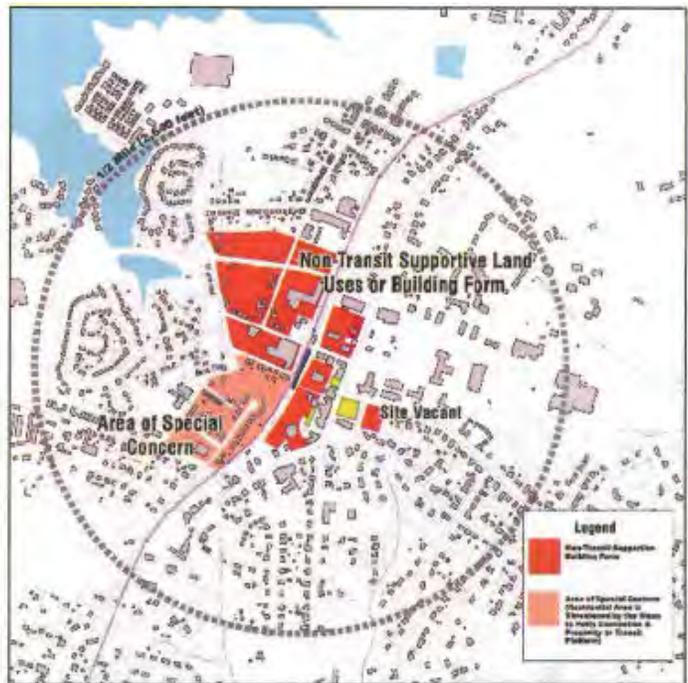


Fig. 4.9- Unsupported Transit Land Use Areas

identifying “Transit Supportive Land Uses” and “Non- Transit Supportive Land Uses or Building Form.”

Other maps identify connectivity opportunities to mitigate barriers to active transport access to the station location. The connectivity recommendations include:

- Improved pedestrian access

- Intersection improvements
  - Concord Rd. & Main St
  - Depot St. & RR tracks
  - Sloan St. & Griffith St.
  - South St. & Main St.
- Sidewalks on both sides of the road within a 10-minute walk from the platform
- New connecting Streets
  - New “West Rail St.”- between Eden St. and Armour St (no signal at Griffith)
  - Potts St-Sloan St connection
  - Extend Concord Rd to Jackson St
  - Crane St-Potts St connection
  - Realign Jetton St./Catawba Ave. intersection with Main St.

Fig. 4.3 - At-Grade Rail Crossings

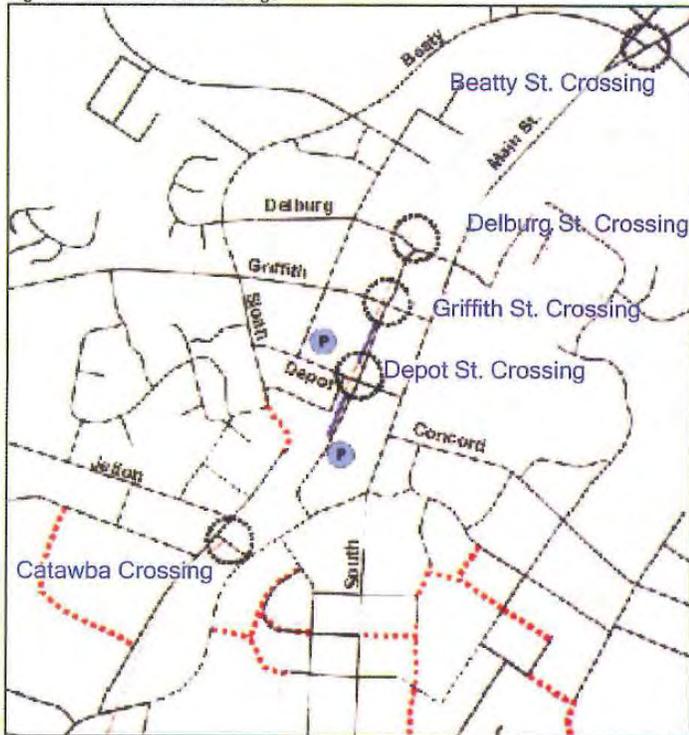
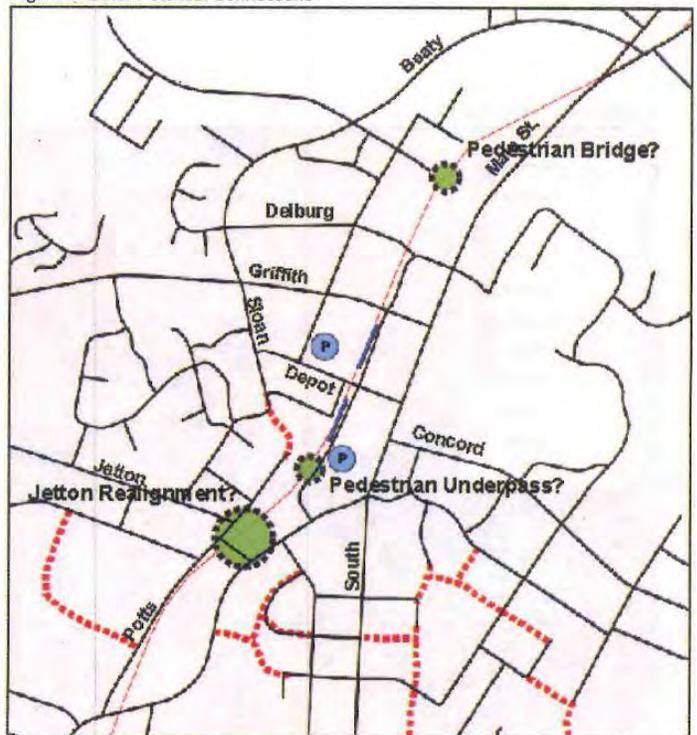


Fig. 4.4 - Other Potential Connections



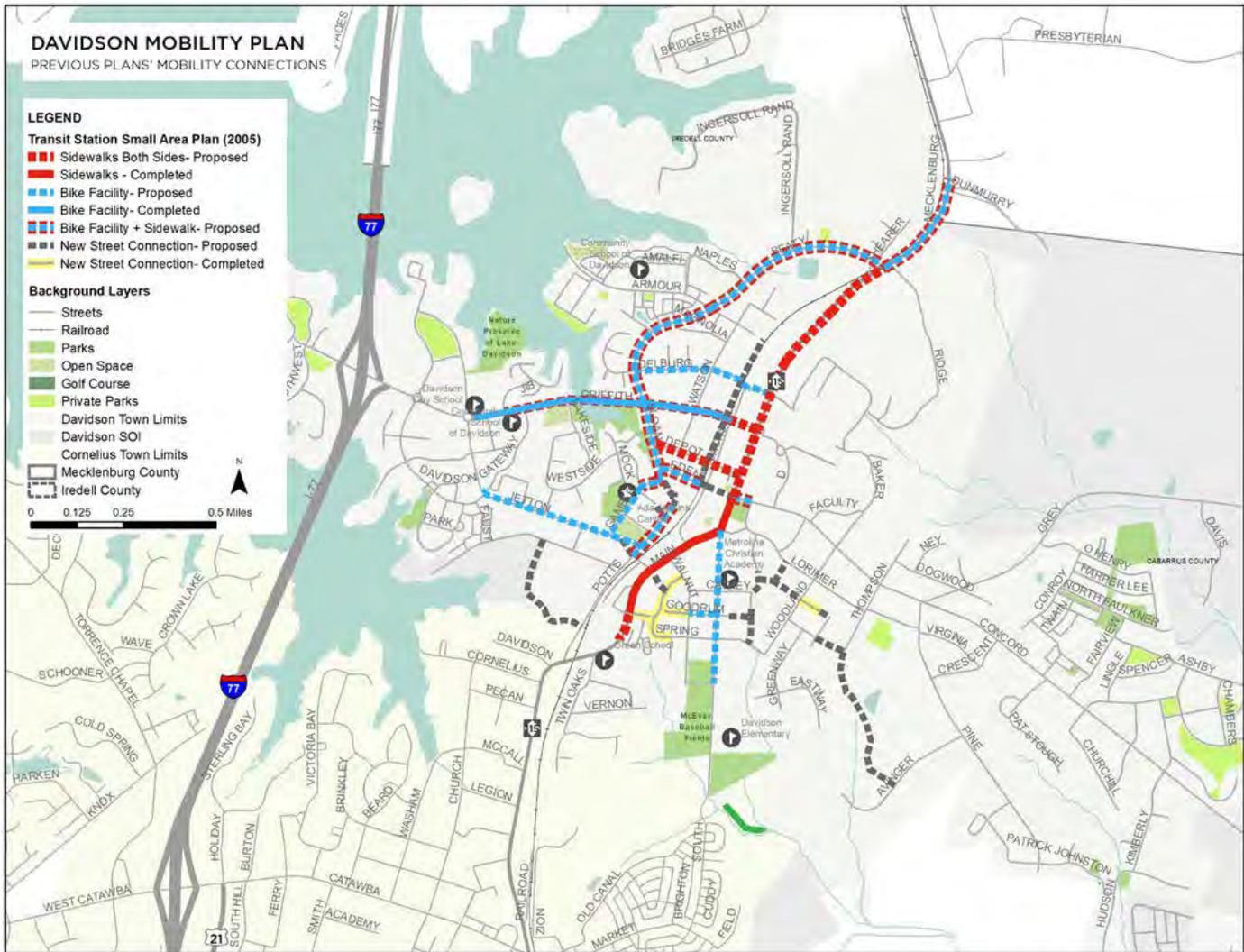


Figure 4. Transit Station Small Area Plan Recommended Connections

### Potts-Sloan-Beaty Street Corridor Land Use Plan (2007)

Adopted in May 2007, this report details the analysis and planning of an alternative north-south corridor to Main St./NC-115 along Beaty St., Sloan St., and Potts St., including a new street connection between Sloan St and Potts St. in order to alleviate current and future traffic along NC-115. The report details the findings of a SWOT (Strengths-Weaknesses-Opportunities-Threats) analysis, and the desired characteristics of the corridor, based on public input. Detailed aerial maps with callout boxes provide details of the opportunities and proposed changes to the corridor, including bicycle & pedestrian connections, development opportunities, landscaping, intersection improvements, and roadway cross section descriptions.

The overall corridor plan consists of:

- Potts Street
  - Rural Vernacular & Village-Like character
  - Sidewalk on west side of street from Main to Jetton Street and on east side of street from Jetton Street to proposed Potts-Sloan connector
  - Drainage swales abutting auto-lanes
  - New intersection treatment at S. Main St (2 preliminary alternatives provided- signaled or roundabout)
- Sloan Street
  - Mixed-use development around station area
  - Sidewalks:
    - on both sides of Sloan right-of-way between Griffith St to Eden St,
    - on east side of Potts-Sloan connector between Eden St and Jetton St
  - Shared use path along Sloan St, from Eden St to Depot St
  - Curb and gutter streets
  - Green buffer between street and sidewalk
  - Tree canopy to screen residential and commercial areas
  - Bike lanes to be integrated with auto-lanes (shared-lane markings, since right-of-way is not wide enough for separate bike lanes)
- Beaty Street
  - Parkway character
  - Landscaped median/turn-lanes
  - Tree canopy and green buffer
  - Sidewalks on both sides
  - Bike lanes to be integrated with auto-lanes (shared-lane markings)

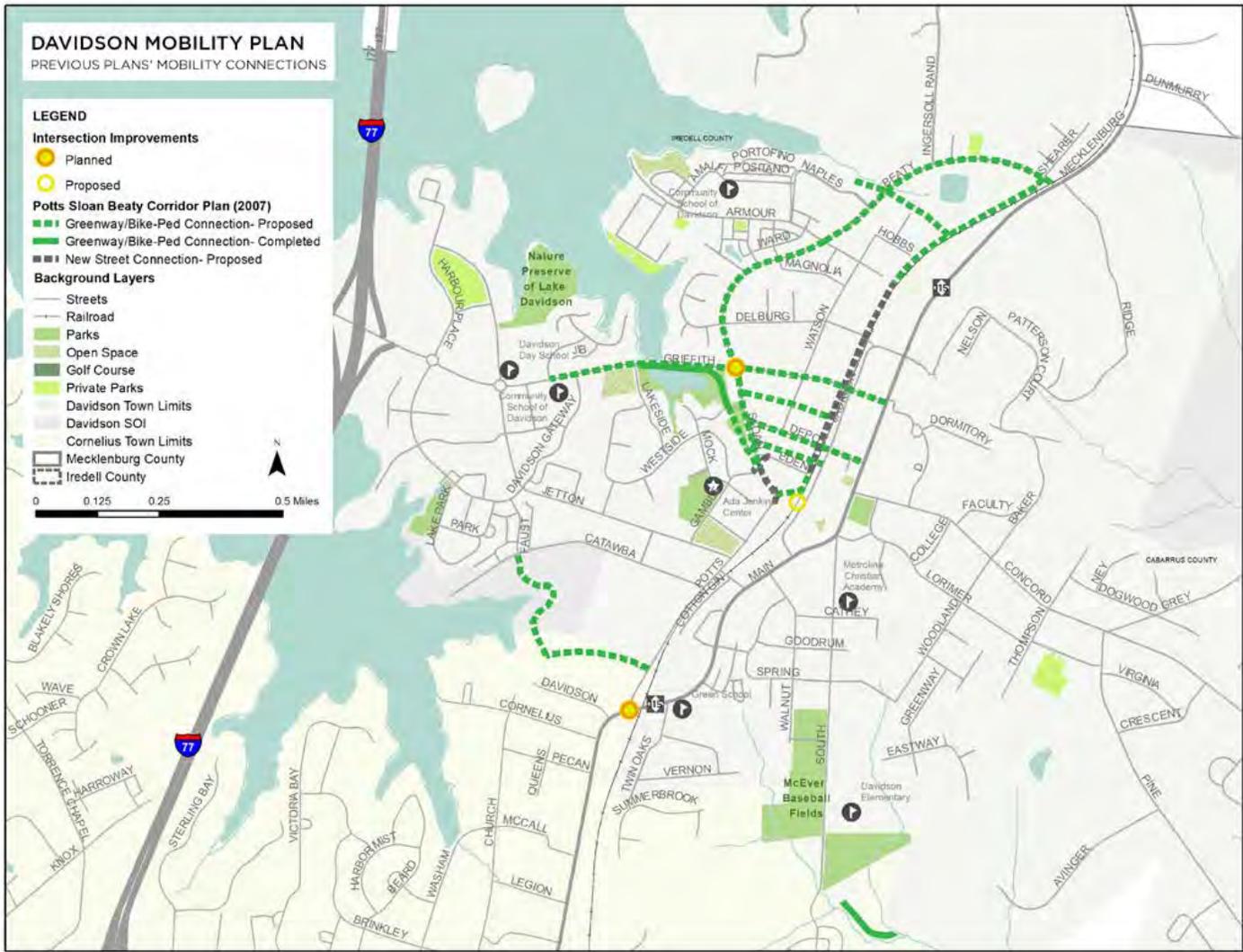


Figure 5. Potts Sloan Beaty Corridor and Land Use Plan Recommended Connections

### Bicycle Transportation Plan (2008)

The 2008 Davidson Bicycle Transportation Plan was designed to enhance and promote the Town as a destination for bicyclists and a livable community for local residents. It was adopted in October of 2008. A significant length of bicycle facilities, including multi-use paths, are included in the network of recommendations. These types of paths strengthen the pedestrian facility network as well and enhance active living as well. The Recommended Bicycle Facility Network Map is shown below:

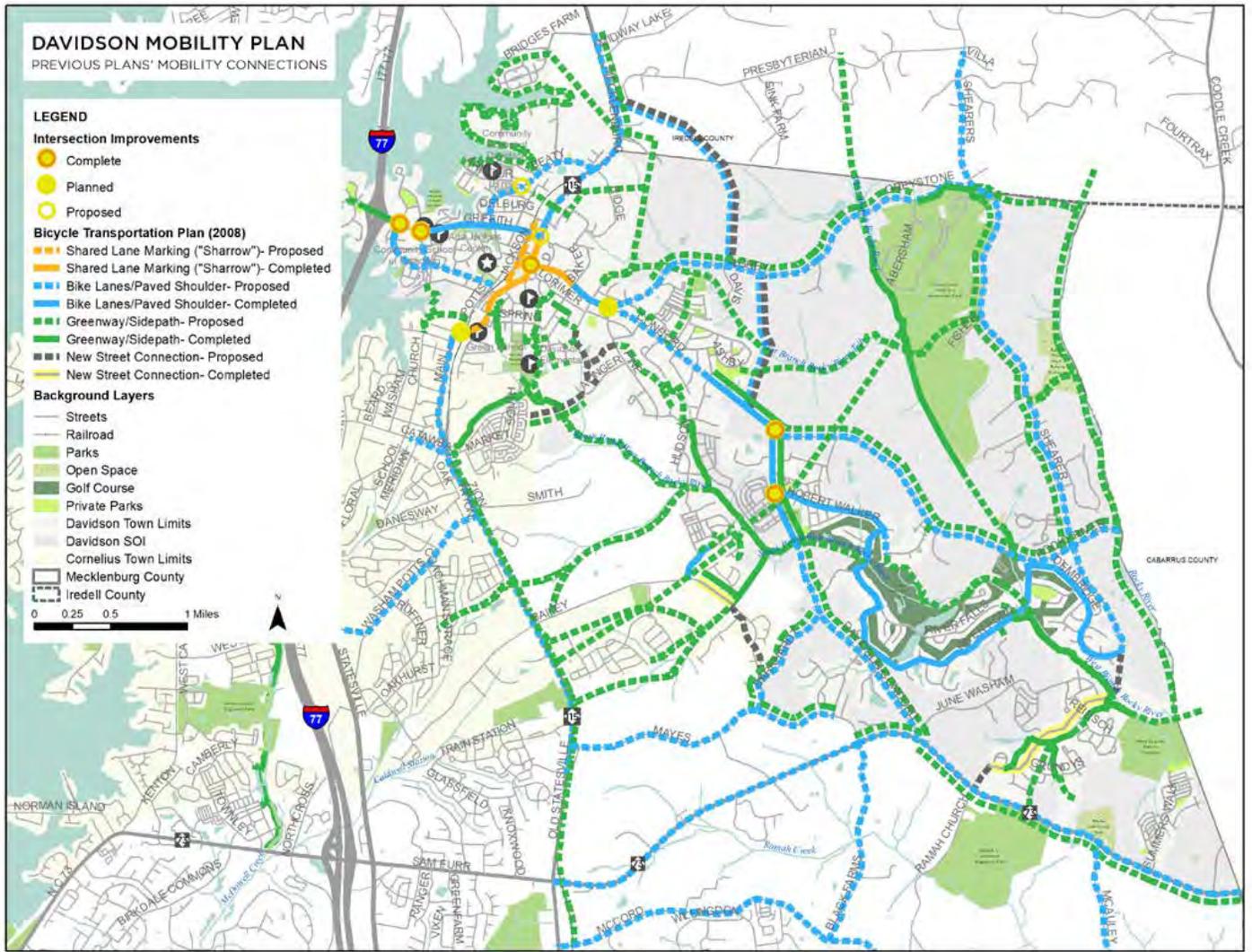


Figure 6. Bicycle Transportation Plan Recommended Connections

Table 5. Bicycle Network recommendations from the Bicycle Transportation Plan of 2008

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
bike lanes	--	Proposed	Beaty St	N. Main St	Griffith St
bike lanes	bike lanes	Completed	Concord Rd	Lorimer Rd	Grey Rd
bike lanes	bike lanes	Proposed	Concord Rd	Grey Rd	Kimberly Rd
bike lanes	--	Proposed	Davidson Gateway	Gateway Crossing Ct	Jetton St
bike lanes	--	Proposed	Grey Rd	Concord Rd	Wolfe St
bike lanes	--	Proposed	Jetton St	Griffith St	Potts St
bike lanes	Shared-Lane Markings ("Sharrows")	Proposed	Main St	Beaty St	Concord Rd
bike lanes	--	Proposed	NC-115 (Cornelius)	Potts St	Will Knox Rd
bike lanes	--	Proposed	Potts St	n. terminus of Potts	S. Main St

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
bike lanes	bike lanes	Completed	River Run neighborhood	Davidson-Concord Rd	Shearer Rd
bike lanes	--	Proposed	Robert Walker Dr	River Crossing Blvd	Overleaf Ln
bike lanes	--	Proposed	Sloan St	Griffith St	Gamble St
bike lanes*; sidepath	bike lanes	Partially Complete	Davidson Gateway	Griffith St	Gateway Crossing Ct
bike/ped connector	--	Proposed	Ardley Cir connector	Ardley Cir	Pat Stough Ln
bike/ped connector	--	Proposed	greenway connection	<Null>	<Null>
bike/ped connector	--	Proposed	Lynbrook Dr extension	Patrick Johnston Ln	Churchill Rd
family friendly bike route; Shared Road	Shared Road	Partially Complete	South St	Main St	Mimosa St
greenstreet	--	Proposed	Thompson St	n. terminus of Thompson St	Lorimer Rd
greenstreet	--	Proposed	Woodland St	Brook St	Lorimer Rd
greenstreet; sidewalks	--	Proposed	Lorimer Rd	Woodland St	Thompson St
new street connection	new street connection	Completed	Bailey Rd	Baileys Glen Blvd	Barnhardt Rd
new street connection	new street connection	Completed	Brook St extension	Woodland St	east of Woodland
new street connection	--	Proposed	Brook St extension	e. terminus of Brook St	Pinecrest St
new street connection	--	Proposed	Cathey St extension	current s. terminus of Cathey St	Eastway St
new street connection	--	Proposed	Grey to NC 115	Grey Rd	NC 115
new street connection	--	Proposed	Hillside Dr extension	s. terminus of Hillside Dr	Cathey St
new street connection	--	Proposed	Ridgewood Ave extension	Pinecrest St	Thompson St
new street connection	--	Proposed	Walnut-Vernon connector	Walnut St	Vernon Dr
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	Brookhollow	Bradford Park	Hudson Pl extension
new street connection*; bike lanes; sidewalk*	new street connection; sidewalks	Partially Complete	Eugenia St	Spring St	S. Main St
new street connection*; Shared Road	new street connection	Partially Complete	Spring St	Eugenia St	James Alexander Way
new street connection*; trail/path	new street connection, sidewalks, bike lanes	Partially Complete	Bailey to Davidson Concord connector	Bailey Rd	Davidson-Concord Rd
new street connection; bike lanes	new street connection; bike lanes	Completed	Shearer Rd extension	Dembridge Dr	White Quartz Ln
new street connection; bike lanes	--	Proposed	Shearer Rd extension	White Quartz Ln	NC 73

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
new street connection; bike lanes; sidewalk	--	Proposed	Potts St-to-Sloan St connector	Potts St	Sloan St
new street connection; paved shoulder; trail/path	--	Proposed	Avinger-Chapel connection	Chapel Way	South Prong Rocky River Greenway
new street connection; Shared Road	--	Proposed	Pine Rd-to-Thompson St connector	Pine Rd	Thompson St extension
new street connection; Shared Road	--	Proposed	Thompson St extension	Ridgewood extension	Avinger Ln
new street connection; trail/path*	trail/path	Partially Complete	South Prong Rocky River Greenway	Avinger Ln	South St
new street connection; trail/path	--	Proposed	Brook St extension	Hillside Dr	Woodland
new street connection; trail/path	--	Proposed	Concord to Grey connection	Concord Rd	Grey Rd
new street connection; trail/path	--	Proposed	Dogwood Ln extension	Dogwood Ln	Conroy Ave
new street connection; trail/path	--	Proposed	Eastway-South connection	Eastway St	South St
new street connection; trail/path	--	Proposed	Greenway St-to-South St connector	Greenwya St	South St
new street connection; trail/path	--	Proposed	Greenway St-to-The Pines extension	Greenway St	The Pines
new street connection; trail/path	--	Proposed	Lorimer Rd-to-Brook St connection	Lorimer Rd	Brook St extension
new street connection; trail/path	--	Proposed	Walnut-Vernon connector	Walnut St	future Kincaid Greenway
new street connection; trail/path*	trail/path	Partially Complete	Eastway-The Pines	Eastway St	The Pines
paved shoulder	--	Proposed	Black Farms Rd	Sam Furr Rd	McCord Rd
paved shoulder	trail/path	Partially Complete	Greystone Rd	town limits	Shearer Rd
paved shoulder	--	Proposed	Mayes Rd	NC-115	Barnhardt Rd
paved shoulder	--	Proposed	Sam Furr Rd	NC-115	e. town/ETJ limits
paved shoulder	--	Proposed	Shearer Rd	Presbyterian Rd	Dembridge Dr
paved shoulder + sidepath	--	Proposed	Barnhardt Rd	Mayes Rd	Davidson Concord Rd
paved shoulder + sidepath	--	Proposed	Davidson-Concord Rd	South Prong WEST Branch Rocky River	Sam Furr Rd

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
paved shoulder + sidepath	trail/path	Proposed	Grey Rd	Wolfe St	Greystone Rd
paved shoulder + sidepath	--	Proposed	Mayes Rd	Barnhardt Rd	Sam Furr Rd
paved shoulder + sidepath	--	Proposed	NC-115 (Iredell Co.)	Bridges Farm Rd	Dunmurry Rd
paved shoulder + sidepath	--	Proposed	Rocky River Rd	Concord Rd	e. town/ETJ limits
paved shoulder + sidepath	--	Proposed	Shearer Rd	Greystone Rd	Rocky River Rd
Shared Lane Marking ("Sharrow")	sidewalks	Proposed	Concord Rd	Main St	Lorimer Rd
Shared Lane Marking ("Sharrow")	--	Proposed	Griffith St	Harbour Place	Jetton St
Shared Lane Marking ("Sharrow")	--	Proposed	Jackson St	Delburg St	Main St
Shared Lane Markings	Shared-Lane Markings ("Sharrows")	Completed	Main St	Concord Rd	Beaty St
Shared Lane Markings; sidewalks both sides	sidewalk 1 side	Partially Complete	Main St	Eugenia St	Griffith Village Ln
Shared Lane Markings; sidewalks both sides	--	Proposed	Main St/NC-115	Beaty St	Dunmurry Rd
sidepath	--	Proposed	Griffith St	Portside Dr	I-77 southbound ramps
sidewalk 1 side; Shared Road	--	Proposed	Delburg St	Beaty St	proposed West Rail St
sidewalk both sides	--	Proposed	Delburg St	proposed West Rail St	Main St
sidewalk both sides	--	Proposed	Lorimer Rd	Thompson St	Pine Rd
sidewalk both sides; Shared Road	--	Proposed	Eden St	RR tracks	Sloan St
sidewalks	sidewalks	Completed	Avinger Ln	Pine Rd	s. terminus of Avinger
sidewalks	--	Proposed	Eastway St	w. terminus of Eastway	s. terminus of Eastway
sidewalks	--	Proposed	Greenway St	Ridgewood Av	southern terminus of Greenway St
sidewalks	--	Proposed	Potts St	n. terminus of Potts	Catawba Ave
sidewalks	--	Proposed	Ridgewood Ave	Woodland St	Pinecrest St
sidewalks	--	Proposed	Spring St	James Alexander Wy	South St
sidewalks	--	Proposed	Vernon Dr	Twin Oaks Rd	Meadowbrook Ln
sidewalks	--	Proposed	Woodland St	Concord Rd	Spring St
sidewalks both sides	bike lanes	Proposed	Concord Rd	Woodland St	Downing St
sidewalks both sides	bike lanes	Proposed	Griffith St	Spinnaker Cove Dr	Jackson St

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
sidewalks both sides	Shared-Lane Markings; SW both sides	Completed	Main St	cemetery	Eugenia St
sidewalks both sides; festival street	--	Proposed	Depot St	Sloan St	Main St
sidewalks*; trail/path	sidewalks	Proposed	Hudson Pl	Kimberly Rd	Patrick Johnson Ln
sidewalks, on-street parking	--	Proposed	Watson St	Griffith St	Depot St
sidewalks; Shared Road	sidewalks; Shared Road	Completed	Pine Rd	Concord Rd	Patrick Johnston Ln
sidewalks; trail/path	sidewalks	Proposed	Kimberly Rd	Concord Rd	Hudson Pl
trail/path	--	Proposed	Amalfi Dr	Beaty St	Armour St
trail/path	--	Proposed	Armour St	Watson St	Main ST
trail/path	new street connection; trail/path	Completed	Bailey Rd	NC-115	South Prong Rocky River Tributary
trail/path	new street connection	Proposed	Bailey Rd	South Prong Rocky River Tributary	Barnhardt Rd
trail/path	--	Proposed	Bridlepath Trail	n. terminus	Saddle Creek Ct
trail/path	--	Proposed	Catawba Ave extension	Main St	Spring St
trail/path	--	Proposed	Cathey St greenway	Hillside Dr	South Prong Rocky River Greenway
trail/path	trail/path	Completed	Concord Rd	Kimberly Ln	Rocky River Rd
trail/path	--	Proposed	Conroy Ave	Caldwell Ln	Dogwood Ln extension
trail/path	trail/path	Completed	Davidson-Concord Rd	Rocky River Rd	South Prong Branch Rocky River
trail/path	trail/path	Completed	greenway connection	Avinger Ln extension	South St
trail/path	--	Proposed	greenway connection	YMCA parking lot	Faust Rd
trail/path	--	Proposed	greenway connection	Potts St	YMCA parking lot
trail/path	--	Proposed	greenway connection	YMCA parking lot	Cornelius St
trail/path	--	Proposed	greenway connection	Davidson Pointe	<Null>
trail/path	--	Proposed	greenway connection	Ashby Dr	Grey Rd
trail/path	--	Proposed	greenway connection	Ashby Dr	West Branch Rocky River
trail/path	--	Proposed	greenway connection	NC-115	greenway corridor
trail/path	--	Proposed	greenway connection	Patterson Court	new greenway
trail/path	--	Proposed	greenway connection	new greenway	Grey Rd
trail/path	--	Proposed	greenway connection	Davidson Pointe	NC-115
trail/path	--	Proposed	greenway connection	new greenway	Concord Rd

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
trail/path	--	Proposed	greenway connection	new greenway	new greenway
trail/path	--	Proposed	greenway connection	Ashby Dr	new greenway
trail/path	--	Proposed	greenway connection	Old Statesville Rd (Cornelius)	West Branch Rocky River
trail/path	--	Proposed	greenway connection	Thompson St extension	Eastway
trail/path	--	Proposed	greenway connection	Overleaf Ln	Rocky River Rd
trail/path	--	Proposed	greenway connection	Old Statesville Rd (Cornelius)	West Branch Rocky River
trail/path	--	Proposed	greenway connection	Old Statesville Rd (Cornelius)	West Branch Rocky River
trail/path	--	Proposed	greenway connection	greenway corridor	Thompson St
trail/path	--	Proposed	greenway connection	Patrick Johnston Ln	Pat Stough Ln
trail/path	trail/path	Completed	Grey Rd	Greenwold Dr	Shearer Rd
trail/path	--	Funded	Griffith St	I-77 southbound ramps	Davidson Gateway Dr
trail/path	--	Proposed	Ingersoll Rand	Davidson Pointe	Beaty St
trail/path	--	Funded	Old Canal	Zion	South St
trail/path	--	Proposed	Sam Furr Rd	Mayes Rd	Davidson-Concord Rd
trail/path	--	Funded	Multiple greenway connections	<Null>	<Null>
trail/path	--	Proposed	Multiple greenway connections	<Null>	<Null>
trail/path	trail/path	Completed	Multiple greenway connection	<Null>	<Null>

Table 6. Priority Intersection improvements from the Bicycle Transportation Plan of 2008

Rank	Intersection Street 1	Intersection Street 2	Intersection Street 3	Recommendation	Status
1	Main St	Concord Rd	n/a	<b>Signage &amp; Detector Loops</b>	Completed
2	Main St	Griffith St	n/a	<b>Signage &amp; Detector Loops</b>	Completed
3	Davidson-Concord Rd	Concord Rd	E. Rocky River Rd	<b>Roundabout</b>	Completed
4	Concord Rd	Grey Rd	Pine Rd	<b>Roundabout</b>	Proposed
5A	Griffith St	Jetton St	n/a	<b>Signage &amp; Education</b>	Proposed
5B	Griffith St	Davidson Gateway Dr	Harbour Place Dr	<b>Signage &amp; Education</b>	Proposed
6	Davidson-Concord Rd	Robert Walker Dr	n/a	<b>Crossing Improvements</b>	Completed

### Davidson Comprehensive Plan (2010)

Adopted in August 2010, the Davidson Comprehensive Plan was a community-based effort that was led by a team of consultants, but the citizens of Davidson were actively involved in the various topic area committees that drafted the

Plan. While a Comprehensive Plan is by nature not as project-focused as a small area plan or a comprehensive transportation plan, it does contain goals, policies, and objectives that guide future planning efforts related to mobility.

Within the Mobility Study Group, there was a clear direction that the Plan must “provide a transportation network that is consistent with the land use context, safe and efficient for all types of users, meets basic regional needs, and bears minimal impact on the natural environment.”

Specific goals and recommendations related to transportation and mobility include the following, cited by the Vision Statement, Goal number and specific initiatives in the Comprehensive Plan:

- Provide Sustainable and Healthy Choices for Transportation, Food, and Energy Use
  - Goal 1: Encourage more bicycle and pedestrian travel
  - Goal 2: Promote carpooling, vehicle share programs, and public transit as viable modes of transportation
- Continue to Provide Effective and Efficient Public Services
  - Goal 4: Continue to provide excellence in recreation, public works, and planning
    - Short Term
      - Repair uneven gutters, pavement, potholes, and brush in the roadways, bikeways, and sidewalks
      - Create a local transportation improvement plan (*this Mobility Plan serves part of that purpose*)
      - Prepare construction documents for priority transportation needs to ensure funding readiness
      - Consider requiring a Traffic Impact Analysis for commercial development (*this has been implemented*)
  - Goal 5: Establish good working relationships and firm priorities with regional agencies, utility providers, and adjoining jurisdictions
    - Identify feasible alternatives for north-south travel with neighboring jurisdictions
    - Support widening I-77 but not at the expense of pedestrian safety or sense of place
    - Continue to work closely with neighboring towns to manage regional traffic concerns and the design of new roads and improvements
- Maintain Quality Design and Sound Planning Principles
  - Goal 1: Prioritize infill and mixed-use development within or near already-developed areas
    - Prepare construction documents and seek funding for a parking deck in the Downtown area
    - Make construction of Downtown and surrounding road connections or improvements a top priority
  - Goal 3: Preserve the rural landscape

- Reevaluate the alignment of planned roads in the rural area
- Increase road connectivity in developed areas in order to minimize the need for new rural roads

### Comprehensive Parking Study (2011)

The Town conducted a comprehensive parking study in 2011 to examine existing parking deficiencies, to help plan for future parking needs, and to develop a funding strategy to allow the Town to make enhancements to parking in Downtown over time. This plan has not been formally adopted. The consultant conducted space count and utilization surveys, and projected parking demand for a five and ten-year horizon. The study indicated that in those time periods, assuming that recommendations were implemented, Downtown would not experience a parking deficit.

Categories of recommendations fell along the following broad types:

- Operational
- Management
- Configuration of existing parking
- Pricing of parking
- Increasing efficiency of supply

The following table, taken from the executive summary of the report, summarizes each recommendation by timeframe, category, order of magnitude cost/budget, and jurisdictional responsibility. As a result of this plan, many 2-hour time limits have been implemented and are now being enforced both on-street and in various lots. In addition, wayfinding related to parking has also been installed at various public lots. One item not specifically called out in this report but that has been implemented is the agreement with Davidson Presbyterian Church on Depot Street to allow for shared off-peak public parking in their lot, which has added around 30 spaces to the downtown parking pool.

Table 7. Summary of Parking Recommendations

Implementation Time Frame	Category	Recommendation	Status
Mid term	Pedestrian Enhancements	Repair loose and missing bricks along Knox Court and make all entrances barrier free.	
Short term	Pedestrian Enhancements	Add pedestrian wayfinding along Knox Court to facilitate pedestrian movement.	
Short term	Pedestrian Enhancements	At Main St. and Concord Dr. it is recommended that right turning movements on red not be allowed.	
On-going	Lighting	Clean older light fixtures that have a yellowed tint. Replace if lenses cannot be cleaned.	

Short term	Lighting	Add lighting to the Town lot next to the Fire Department and small lot at corner of Depot and Jackson.	
Short term	Lighting	Knox Court should be well lighted to encourage pedestrian use.	
On-going	Lighting	Trim all trees around light fixtures, both along sidewalks and in lots.	
Mid term	Lighting	Once all lighting recommendations are completed hire a lighting specialist to consult on lighting levels.	
Mid term	Add Bicycle Racks to Downtown	Add additional bicycle racks in the downtown.	On-going; some new racks installed
Mid term	Add Bicycle Racks to Downtown	Consider adding a few bicycle lockers near businesses known to have bicycle commuters.	
Mid term	Add Bicycle Racks to Downtown	Consider placing a bicycle shelter in one of the municipal lots near Knox Court.	
On-going	Add Bicycle Racks to Downtown	Regulate and require new businesses to adhere to Davidson's bicycle parking requirements.	On-going
Short term	Add Bicycle Racks to the Downtown and Encourage Bicycle Ridership	Create a marketing program to promote bicycle use as an alternative to driving.	
Short term	Signage	Develop a family of signs for direction/location, identification and vehicle wayfinding.	Completed
Short term	Signage	There is a need for additional directional/location signs in the downtown.	Completed
Short term	Signage	Name all parking lots and place identification signs at the entrance to all public parking lots.	
On-going	Signage	Monitor tree growth and trim foliage blocking signage in lots and on-street.	
Short term	Signage	Install pedestrian wayfinding along Knox Way and in parking areas.	
Short term	Signage	Install at least two kiosks in the downtown with a map, business listings, and parking locations.	Completed
Short term	Signage	All signs should be a height where the sign cannot be blocked by a parked vehicle in both on-street and off-street parking locations.	
Short term	Signage	One-way entrance into the parking lot between The Davidson Village Inn and Bonsai needs better signage.	
Short term	Marketing	The Town's web site should be modified to have a tab on the main page for parking.	
Short term	Marketing	Include hours and days of enforcement, parking regulations and where to pay a ticket if one is received on the parking page of the web site.	
On-going	Marketing	Businesses should be encouraged to have a link to the Town's parking page.	
On-going	Marketing	Create a downtown marketing flyer that lists the downtown businesses included with a map of parking in the downtown.	
Short term	Marketing	Develop a marketing plan to encourage alternative forms of transportation.	
Short term	Marketing	Specific marketing initiatives can be aimed at businesses that inform employees of the importance of keeping on-street parking available for customers and visitors.	

Mid term	Special Events Parking Plan	Develop a plan for parking during special events that includes a remote lot location and if necessary an agreement with the lot owner as well as a shuttle service.	
On-going	Discourage the Development of Any New Private Parking Lots in the Downtown	Minimize surface lots and large breaks between buildings to promote walking in the downtown.	
On-going	Discourage the Development of Any New Private Parking Lots in the Downtown	Work with private parking owners to allow for public shared use of private parking where possible.	Completed with Davidson Presbyterian Church lot
On-going	Discourage the Development of Any New Private Parking Lots in the Downtown	Davidson should entertain any proposals for a privately developed parking structure especially if there is the possibility for a public/private joint venture to provide additional public parking.	
On-going	Parking Duration/Allocation	Two hour parking should be the dominant duration for on-street parking.	Completed
Mid term	Parking Duration/Allocation	Fifteen minute to thirty minute parking should be located on street for use as customer loading and unloading spaces or very short-term parking.	
Mid term	Parking Duration/Allocation	In areas where there is little or no demand for customer-visitor parking, long term on-street parking can be used to add to the overall long-term parking supply.	
Short term	Parking Duration/Allocation	Convert recommended areas of on-street parking from all-day to two hour parking.	Completed
Short term	Parking Duration/Allocation	The two hour parking in lots should be changed to three hour parking to accommodate the customer/visitor wanting to spend more time in the downtown.	
Short term	Parking Duration/Allocation	The lot in front of Town Hall should be changed to half employee long term parking and half two hour parking.	Completed
Short term	Parking Duration/Allocation	Work with the Post Office to change half of the 21 two hour parking spaces (opposite the 18 Post Office only parking spaces) to long term parking.	
Short term	Parking Duration/Allocation	Consider the possibility of creating a truck delivery loading area on the west side of Main Street that would be signed delivery trucks only in the space(s) for specific hours in the morning (7:00 AM to 10:00 A.M. for example).	
Short term	Parking Duration/Allocation	Consider changing the compact parking only signs to "Compact Cars only No Crossovers or SUV's". Only vehicles under 5'.	
Mid term	Barrier Free Parking	Rich and Associates encourage the development of on- street barrier free stalls to ensure the downtown is accessible to everyone.	
Short term	Barrier Free Parking	The Town Hall long term lot is short one barrier free space and the public long term lot next to the Fire Department has no barrier free parking spaces and two spaces are recommended.	

## Station Area Plan Update (2012)

This plan is an update to the Transit Station Small Area Plan of 2005. This updated plan was completed in 2012 but has not been approved by the Davidson Board of Commissioners. Within the report, there is a thorough review of previous plans in Davidson, with a detailed synopsis and map for the following plans:

- 1996 Beaty Street Plan
- 1998 Town Center Plan
- 2002 Griffith Street Plan
- 2006 Station Area Plan
- 2009 North of Griffith Plan
- 2009 Eco-Industrial Plan
- 2010 Comprehensive Plan

The report also reviews the zoning, land-use, open space opportunities.

A Connectivity and Parking assessment was conducted as part of this study, which included a review of the 2003 Circulation Plan, the 2004 Connectivity & Traffic Calming Plan, the 2005 Davidson Transit Station Small Area Plan, the 2007 Potts-Sloan-Beaty Street Corridor Land Use Plan, and the 2008 Bicycle Master Plan (all of which are summarized above in this report). The findings of this review include a recommendation that some street connections recommended within the Circulation Plan of 2003 be replaced with off-road bicycle and pedestrian routes.

Connections that may need to be removed from consideration include:

- 3-4 connections east of South Street and south of Lorimer Road
- Parallel connection to South Street behind the 2 schools (replace with bike-ped path from Cathey-Hillside connector to the Kincaid Trail Greenway)

Table 8. Station Area Plan Update Recommended Connections

Proposed Facility Type	Existing Facility	Status	Project Corridor	From_	To_
bike lanes	bike lanes	Existing	Griffith St	Jetton St	Jackson St
sidepath	bike lanes (partial-see entry above)	Proposed	Griffith St	Harbor Place Dr	Main St
trail/path	--	Funded	greenway connection	New development roadway	Westbranch Pkwy
trail/path	--	Proposed	greenway connection	n. terminus of Shearer St	RR tracks
trail/path	--	Proposed	greenway connection	Jackson St	Jetton St
trail/path	--	Proposed	Mimosa St	Walnut St	South St
trail/path	--	Proposed	RR tracks	n. terminus of Shearer St	Bridges Farm Rd
trail/path	--	Proposed	Shearer St	Beaty St	n. terminus

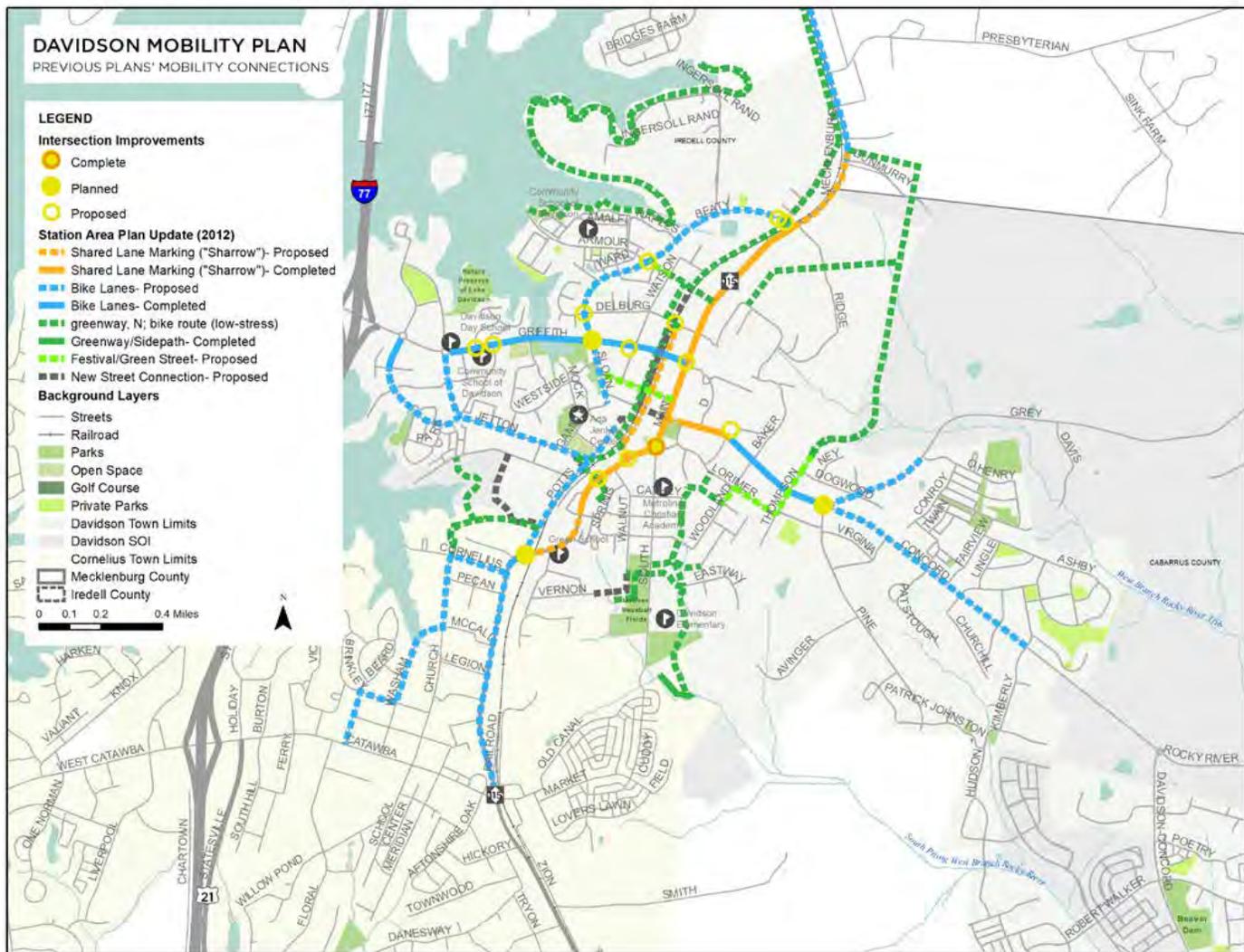


Figure 7. Station Area Plan Update Recommended Connections

### Davidson Walks and Rolls: Active Transportation Master Plan (2013)

Adopted in November 2013, the Davidson Walks & Rolls is an active transportation master plan that focuses on pedestrian mobility, but also addresses complementary forms of transportation like bicycle and transit. The plan’s intent is to create a vision for an improved walking and bicycling environment in Davidson. Much of the reasoning behind improving these networks is to aid in bettering the health and increasing activity for the residents of Davidson. Other reasons include energy conservation and independence, economic development, and quality of life.

This plan brings forward some of the recommendations of previous plans, such as the Davidson Comprehensive Plan, Carolina Thread Trail, and Lake Norman Regional Bike Plan. In addition, with much of a bicycle and pedestrian network also being part of the parks and recreation system (for example greenways), there is and should be a great

deal of overlap between recommendations of the Walks and Rolls Plan and recommendations of a parks and recreation master plan. Much of this plan helps to create a vision for how to link parks, open space, and greenways with residents.

The plan recommends the following facilities connections (also outlined in Tables 8 & 9, on following page):

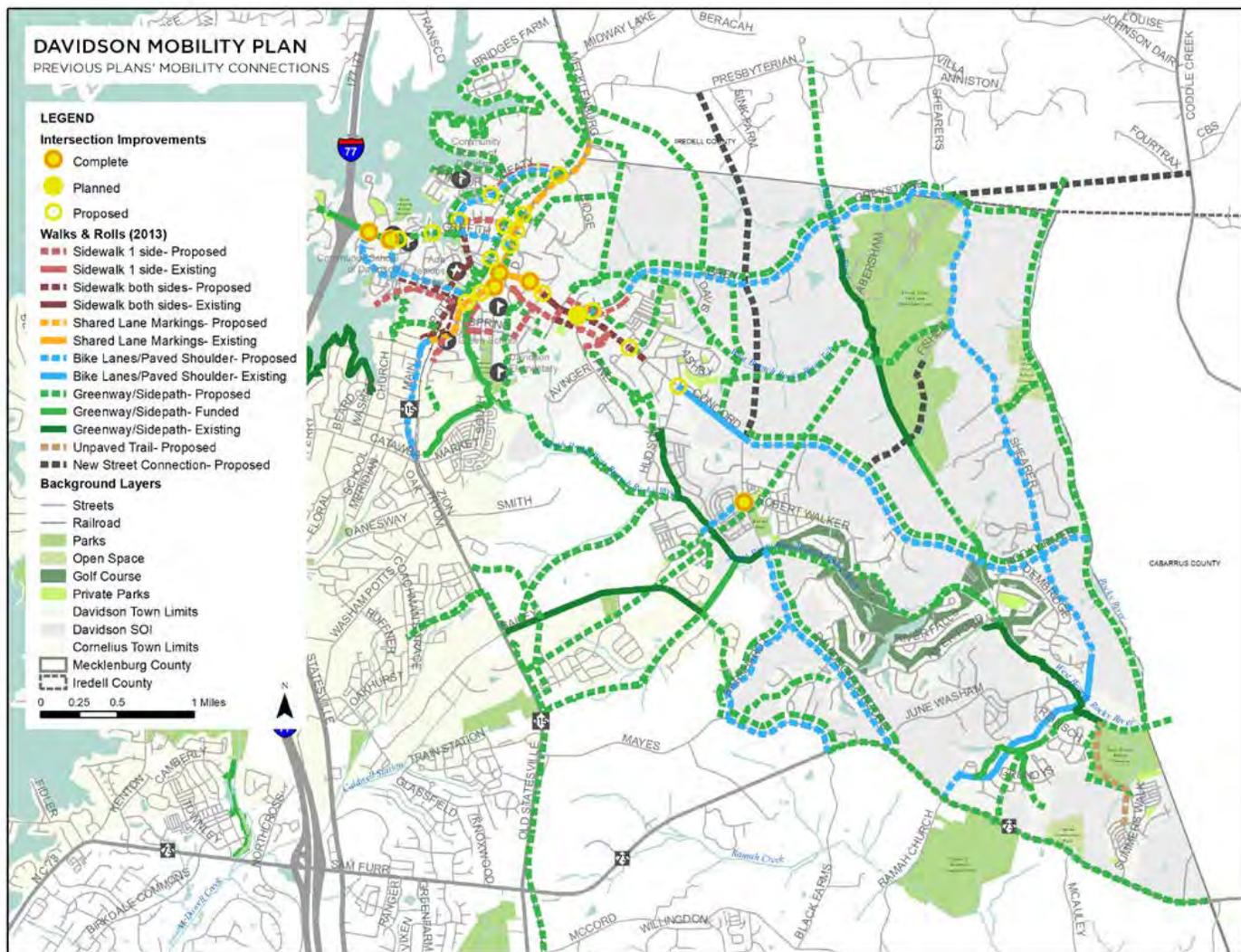


Figure 8. Davidson Walks & Rolls Active Transportation Master Plan Recommended Connections

Table 9. Priority Sidewalks/Side Path Recommendations from Walks & Rolls Plan

Proposed Facility Type	*Existing Facility	Status	Project Corridor	From_	To_
bike lanes	--	Proposed	Robert Walker Dr	Davidson-Concord Rd	Bradford Park Dr
new street connection	--	Proposed	Grey Rd extension	Shearer Rd	Coddle Creek Rd
new street connection	--	Proposed	new street connection	Presbyterian Rd	Grey Rd
new street connection	--	Proposed	new street connection	Grey Rd	Concord Rd
sidewalk 1 side	--	Proposed	Catawba Ave	w. terminus	Main St

sidewalk 1 side	--	Proposed	Crescent Dr	Pine Rd	Virginia Rd
sidewalks both sides	--	Proposed	Hamilton St	Jetton St	Catawba Ave
<b>Proposed Facility Type</b>	<b>*Existing Facility</b>	<b>Status</b>	<b>Project Corridor</b>	<b>From_</b>	<b>To_</b>
trail/path	--	Funded	greenway connection	Vernon St extension	South St
trail/path	--	Proposed	greenway connection	Evening Primrose Dr	Mayes Rd
trail/path	--	Proposed	greenway connection	NC-115 near Meadow Crossing Ln	NC-115 south of Treynorth Dr
trail/path	--	Proposed	greenway connection	Summerbrook Dr	Zion Ave
trail/path	--	Proposed	greenway connection	Chairman Blake Ln	Glasgow St
trail/path	--	Proposed	RR tracks	Armour St	Potts St
trail/path	--	Proposed	West Branch Nature Preserve	Summers Walk	West Branch Rocky River Gwy
unpaved trail	--	Proposed	West Branch Nature Preserve	Summers Walk	West Branch Rocky River Gwy

Table 10. Priority Greenway Recommendations from Walks & Rolls Plan

Name	Feet	Miles	Estimated cost (\$1M/mile)	Priority	Status
Dogwood Lane/Conroy Avenue Connector	535	0.10	\$40,000	High / Near-term	Proposed
Randall Kincaid Greenway Extension (South St to Spring St) <sup>2</sup>	7,205	1.36	\$1,360,000	High / Near-term	Funded
McConnell to Fisher Farm Greenway	10,611	2.00	\$2,000,000	High / Near-term	Proposed
Jackson Street/Sloan Street Connector <sup>3</sup> Tunnel (see inset below)	514	0.10	\$100,000 \$ 200,000 - 800,000	Medium / Medium-term	Proposed
River Run to Summers Walk Greenway	5,221	0.99	\$990,000	Medium / Medium-term	Partially Complete
Bailey Road/Davidson-Concord Road Connector <sup>4</sup> (Primarily a Town of Cornelius Project, with links to Davidson system)	4,271	0.81	\$810,000	Medium-term	Proposed
Main Street/Downtown Greenway ( Mooresville-Charlotte Trail Segment S. Main to Jackson Street)	1,056	0.2	\$200,000	Low / Long-term	Proposed
Davidson College Greenway	1,985	0.38	\$380,000	Low / Long-term	Proposed

Table 11. Priority Intersection Recommendations from the Walks & Rolls Plan

Intersection Street I	Intersection Street II	Intersection Street III	Recommendation	Status
Davidson-Concord	Grey	Pine	High-visibility crosswalks, ped/bike crossing signs, rectangular rapid flashing beacon (RRFB)	Proposed
Davidson Concord	Robert Walker	N/a	High-visibility crosswalks, HAWK signal or RRFB, ped/bike crossing signs	Completed
N Main	Griffith	N/a	High-visibility crosswalks, pedestrian signal	Completed
N Main	Beaty	Ridge	High-visibility crosswalks, rapid flashing beacons	Proposed
S Main	South	N/a	High-visibility crosswalks, pedestrian signals, shared use condition on Main St sidewalk, relocate signal control boxes off of sidewalks	Partially Complete

## Circles @ 30 Small Area Plan (2013)

The Circles @ 30 Small Area Plan was conducted in 2013 to focus on the area adjacent to Griffith Street between I-77 and just east of Davidson Gateway Drive. This plan has not been formally adopted by the Davidson Board of Commissioners. The area is a major gateway to Davidson, and has historically had the greatest potential for new development in Davidson proximate to the current nucleus of Town and served by existing infrastructure. The purpose as stated in the Plan is “to provide a vision for the development of the Circles @ 30 area that results in a vibrant, sustainable mixed-use environment within the context of Davidson’s small town atmosphere.” The plan addressed specific development areas, with the land use and architectural components integrated with a series of infrastructure enhancements.

Transportation infrastructure recommendations are as follows:

- I-77 Bridge Area
  - Construct roundabouts at I-77 ramp terminals, widen Griffith to four lanes across bridge, construct multi-use path across new bridge [***UNDER CONSTRUCTION as part of the I-77 Toll Lanes project***]
  - Install HAWK (pedestrian-activated beacon) signal at Griffith Street/Spinnaker Cove Drive to enhance pedestrian crossing [***design for rectangular rapid-flashing beacon has been designed, not yet constructed***]
  
- Davidson Gateway West/Davidson Commons East
  - Construct waterfront trail connection to Parham Gateway Park to provide continuous waterfront access.
  - Incorporate on street parking the entire length of Davidson Gateway Drive [***complete***]
  - Modify Griffith Street in the area around Davidson Commons to include on street parking, a widened sidewalk, and street trees on the south side.
  
- Davidson Commons/Jetton Street area
  - Continue development of on street parking on both sides of Davidson Gateway Drive for its entire length.
  - Install HAWK (pedestrian-activated beacon) signal at Griffith Street/Jetton Street to enhance pedestrian crossing at Davidson Day School [***rectangular rapid-flashing beacon/RRFB has been designed and installed along with enhanced crosswalks at the roundabout***]
  - Construct multi-use path along the north side of Griffith Street to connect the area to the nature preserve and Lake Norman.
  - Complete connection of Gateway Crossing Drive between Davidson Gateway Drive and Jetton Street with cross section to include sidewalks, street trees, and on street parking.



Figure 9. Circles @ 30 Plan Recommended Connections

## Parks and Recreation Master Plan (2014)

This plan was adopted in November 2014. It recommends improvements to a number of parks facilities, including the following facility updates:

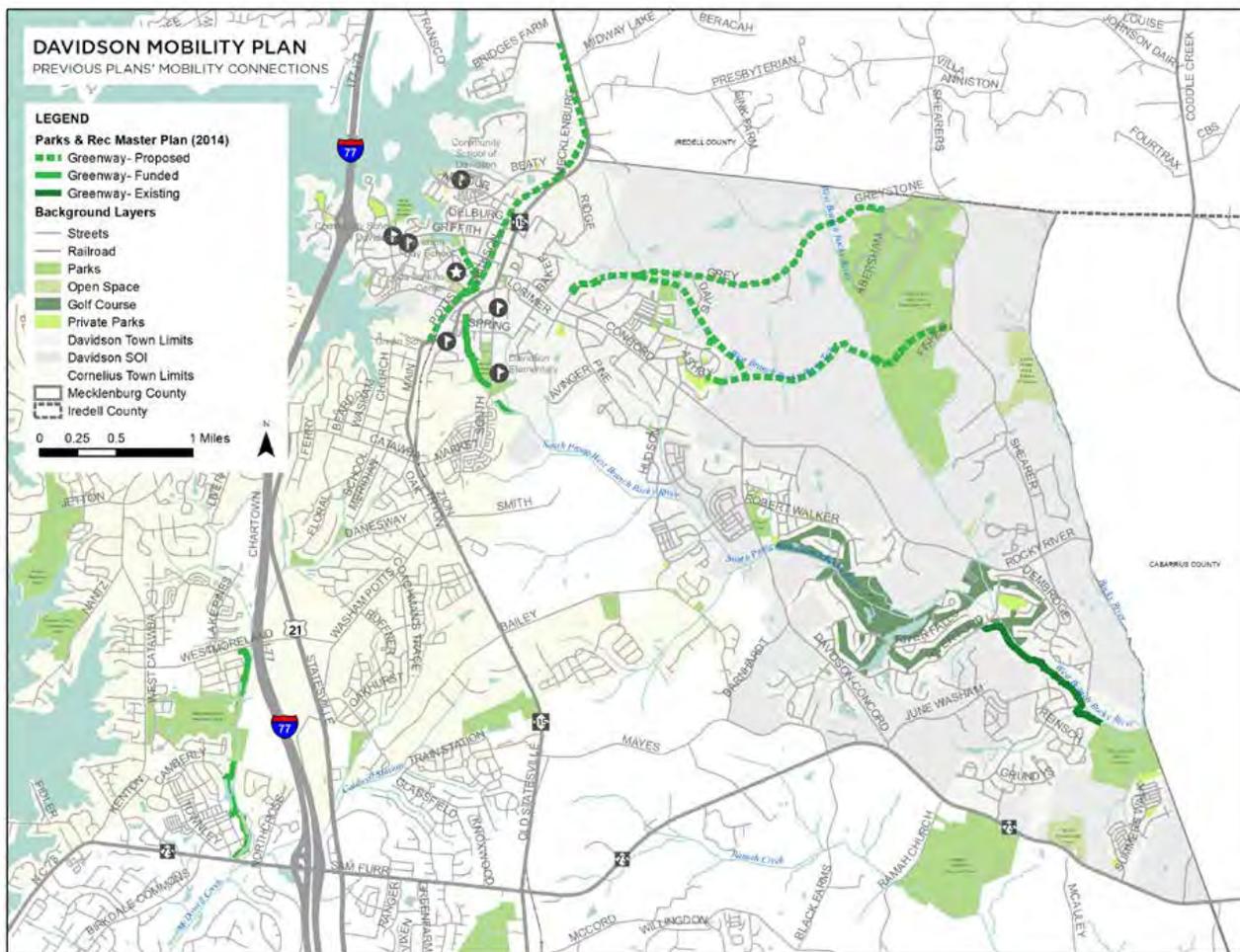


Figure 10. Parks & Recreation Master Plan Recommended Connections

Some specific facility recommendations in the plan related to connectivity and mobility include:

- Design and construction of the Kincaid Trail Greenway extension (**currently underway**);
- Design and construction of the Summer's Walk Greenway connection to River Run;
- Securing of land, design, and construction of a greenway from Downtown to Fisher Farm/Abersham/Allison Park;
- Design and construction of the Mooresville to Charlotte Trail through downtown to connect to Roosevelt Wilson Park.

In addition to facilities, the plan has a number of corresponding policy and program recommendations to support and encourage the use of parks and recreation facilities. The plan also includes a comprehensive inventory of the parks and

recreation facilities in town and has example policies, e.g., Joint Use Agreements, that can serve as templates for Davidson’s ordinances. Finally, the plan includes a thorough summary of the public input received for the plan. The number one priority facility recommendation based on public input is to “continue to expand the greenway (multi-use trail) system to provide access within a ¼ mile of all households”. This recommendation received 10 priority votes, compared to only 3 for the next highest recommendations. Greenways and trails were also the most highly rated facility type selected for the question “If additional facilities were to be provided, which ones do you believe would be most beneficial for you and the Davidson community?”

## **Rural Area Plan (2016)**

The Rural Area Plan was adopted in September of 2016. Davidson’s Planning Ordinance specifies that approximately 50% of the Rural Planning Area must be preserved as open space, and 25% of the land has already been preserved as such. The Rural Area Plan lays out policies and strategies to conserve the remaining 25%. These include zoning strategies, development regulations, conservation easements, and other strategies.

In addition to the open space conservation goals, this plan outlines recommendations for improving mobility and the health of the community by providing transportation choices to and within the Rural Planning Area in the form of new roadway connections, sidewalks, and greenways. Chapter 5 of the plan outlines potential vehicular connections in the Rural Planning Area, drawing on *planned* routes from the Charlotte Regional Transportation Planning Organization’s (CRTPO) Comprehensive Transportation Plan (CTP), and adding a few new *proposed* roadway connections (see Figure 12, page 38). In addition to the major connections identified in the map on the following page, Map 5.2 in the plan (and Figure 12 on page 38) illustrates the area’s envisioned network of interconnected streets—with Action Items 5.5-5.9 identifying additional connections of importance. Graphics showing the cross-sections and multi-modal facilities for major streets/roads are also included.

Likewise, the plan also delineates various greenway and trail connections. Map 5.3 from the plan shows recommended trail connections that reflect *planned* greenways and trails from previous planning efforts, along with newly *proposed* connections (see map 2 pages below). Cross-sections throughout the Chapter 5 depict possible street, greenway, and trail facility components, with Map 5.5 identifying potential “way stations” as part of the extended West Branch Rocky River Greenway—an uninterrupted stretch of pathway envisioned to run tow mile between East Rocky River and Grey Roads, adjacent to Fisher Farm and West Branch Rocky River Parks.

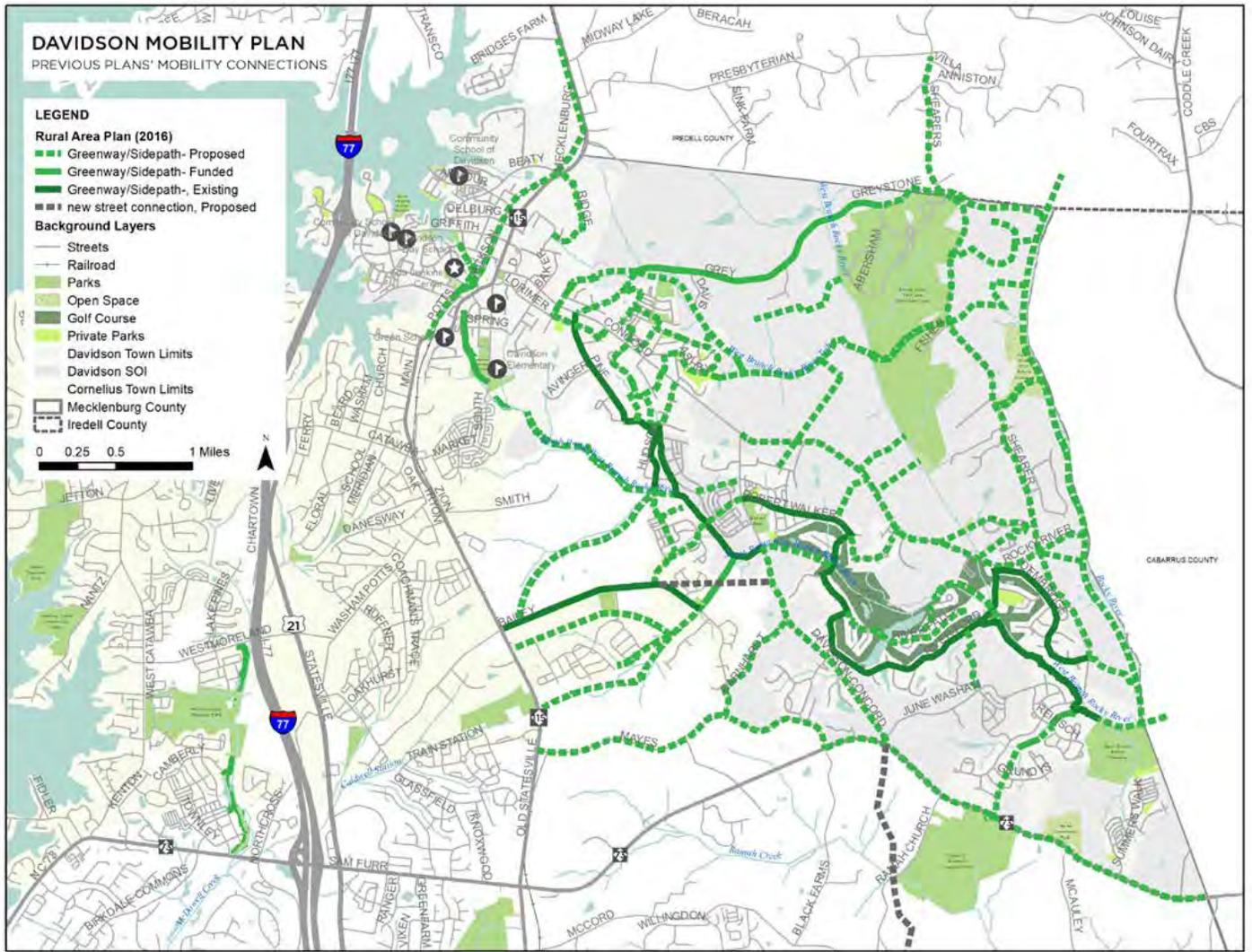


Figure 11. Rural Area Plan Recommended Connections

MAP 5.1 REGIONAL VEHICULAR INFRASTRUCTURE

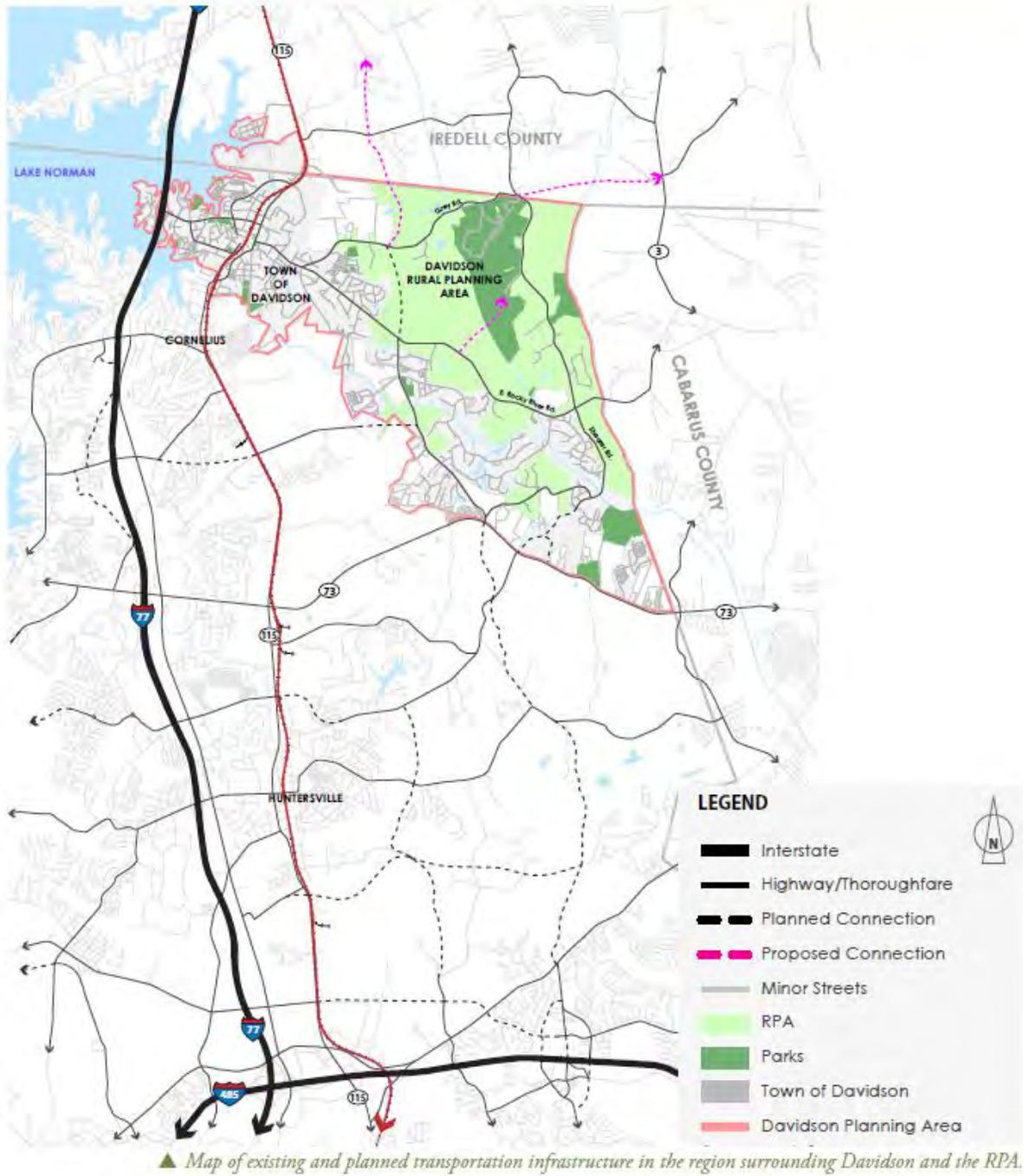
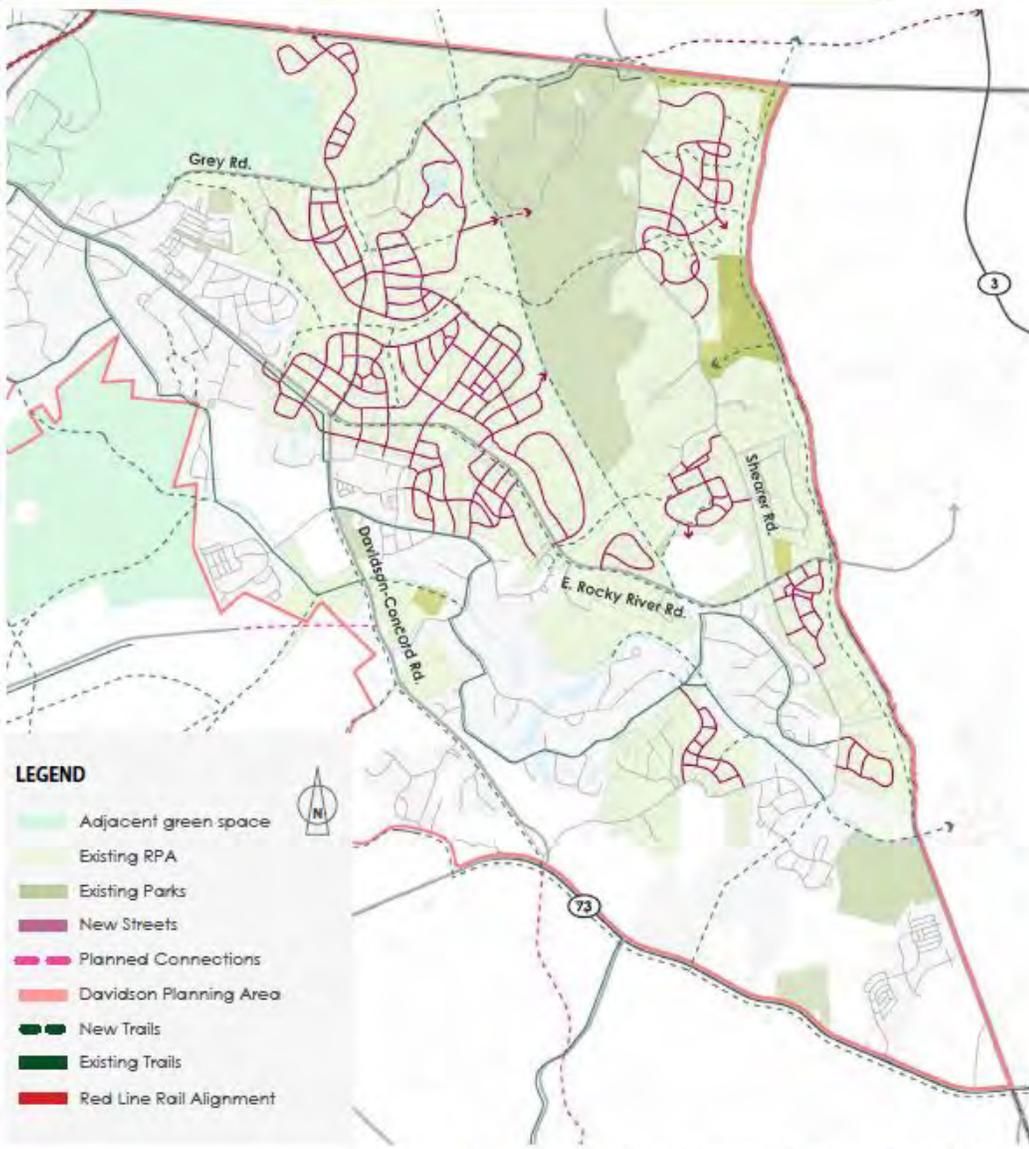


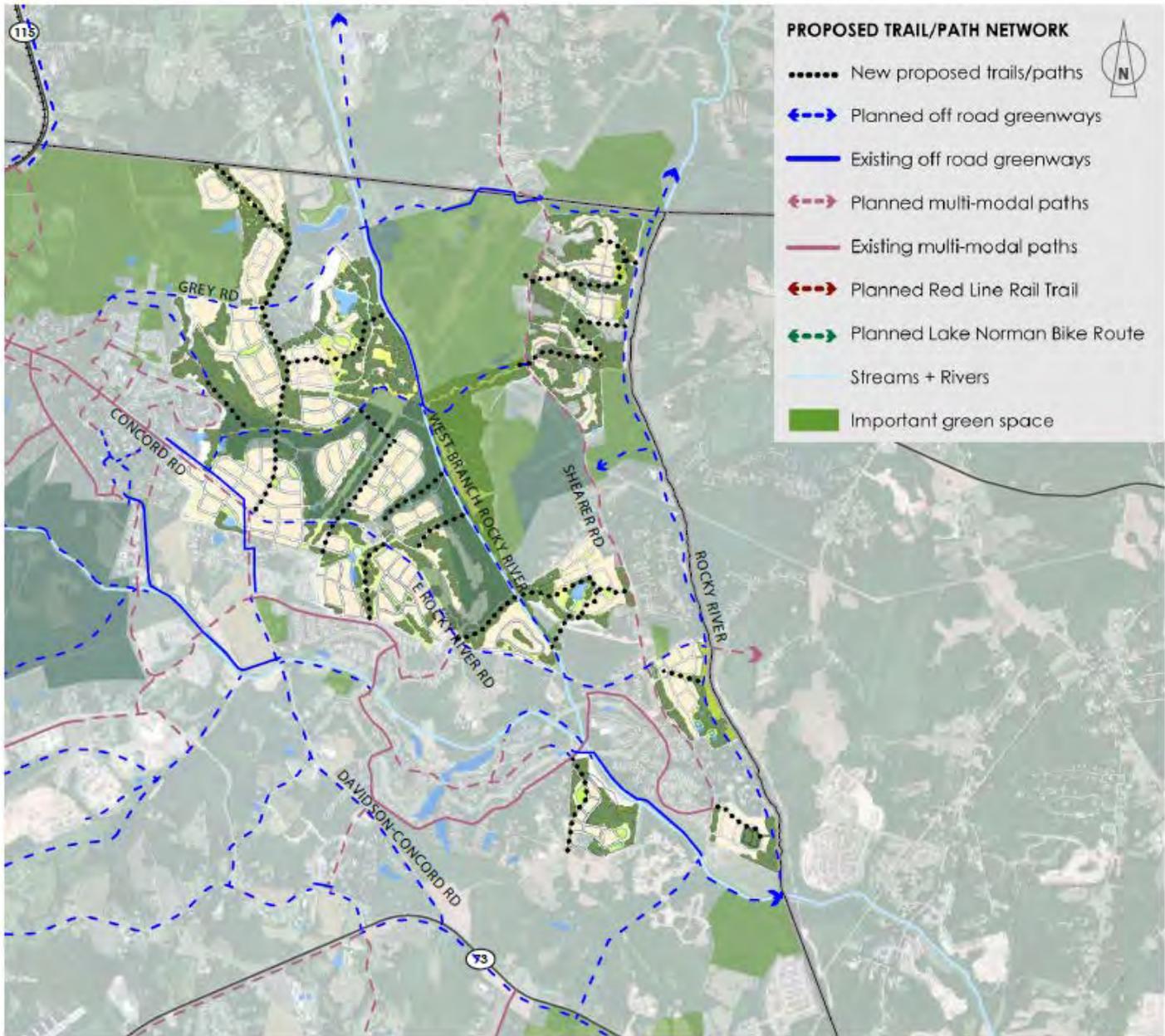
Figure 12. Map 5.1 from the Rural Area Plan showing existing and planned street connections

MAP 5.2 CONCEPTUAL STREET NETWORK AT BUILD-OUT



▲ The map above depicts the conceptual street network at build-out showing how neighborhoods can be planned to connect and create a variety of mobility choices consistent with the way the traditional core of Davidson has built out over time. Preferred stream crossings and trail systems are also depicted.

Figure 13. Map 5.2 from the Rural Area Plan showing a potential future street network



▲ Map 5.3 of proposed greenways and multi-use paths in the RPA

Figure 14. Map 5.3 from the Rural Area Plan showing a proposed greenway and multi-use path connections

## Findings & Conclusion

As can be seen from the preceding summaries, there is a significant amount of overlap in the recommendations from these 13 plans and studies. Many of the recommendations from earlier plans have been refined and modified by later plans. For instance, the generic “bike facility” recommendations from the *Transit Station Small Area Plan* of 2005 were refined into specific bike lanes or shared-lane marking recommendations in the *Walks & Rolls Plan* of 2013. Some connections have been recommended in just one plan, while others have been recommended in five or six plans. Below, the recommendations are mapped according to facility type, and are labeled with the number of times that that

segment has been recommended in a previous plan or study. There is also a summary map annotated with every project segment annotated with how many times it has been recommended (Figure 19 on page 46).

**The Potts-Sloan-Beaty Connector segment between Potts St and Sloan St. is the most highly recommended connection of any type from previous plans (8 different plans).** Many of the early connections that were recommended as part of the *Circulation Plan* of 2003 also rank highly in terms of the number of times they have been identified in previous plans, which is a reflection of both their enduring importance in connecting people between their homes and popular destinations in town and the area over the time span of these many plans, as well as the priority given to them by the extensive public input that was put into the prioritization evaluation that was completed as part of that *Circulation Plan*.

A complete inventory of project recommendations from previous plans is attached as an appendix to this memorandum in table form, detailing the project corridor, its end points, recommended facility type, the plans in which it was recommended, and the total number of times it was recommended.

# Proposed & Completed Projects by Facility Type

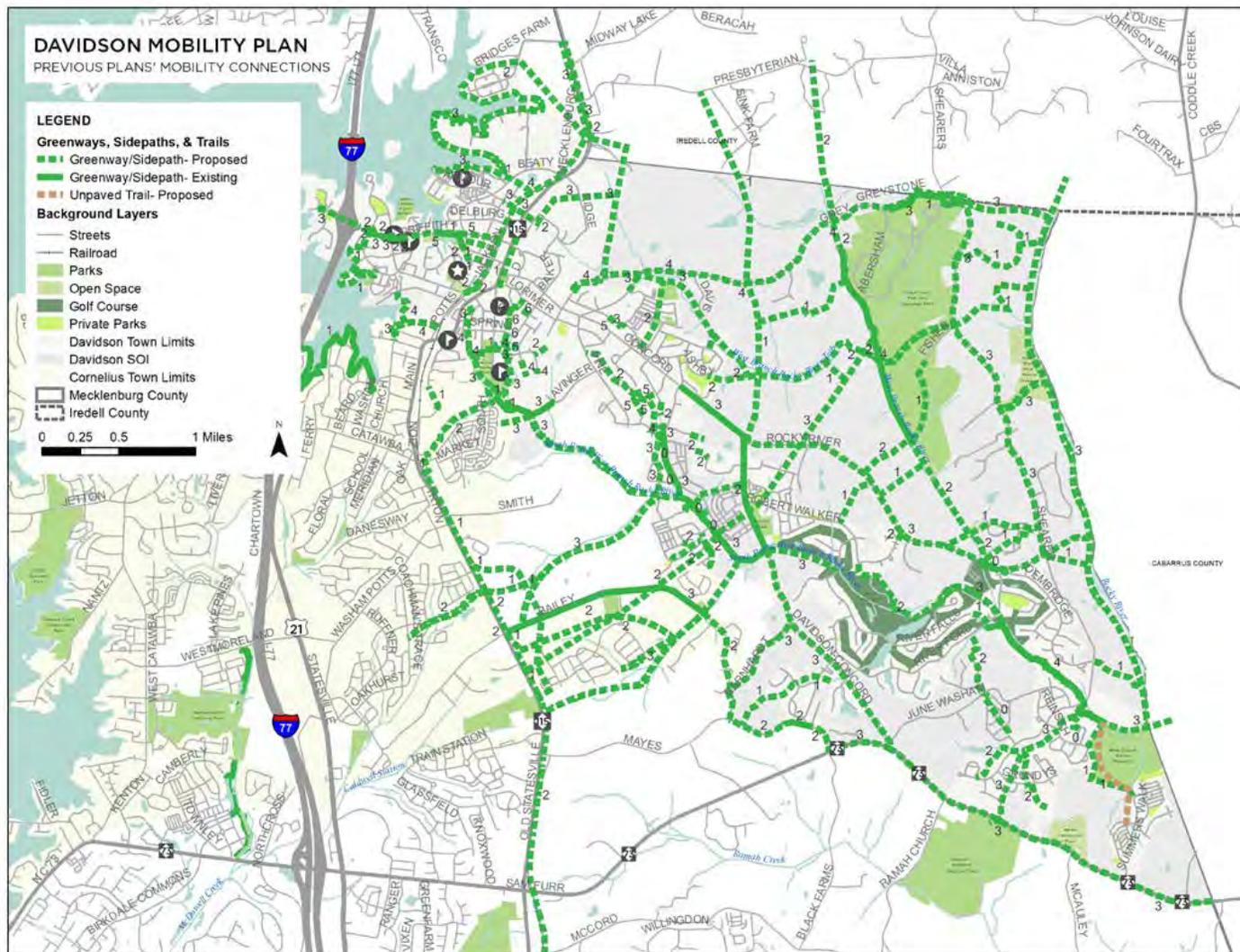


Figure 15. Greenway and multi-use path connection recommendations from previous plans

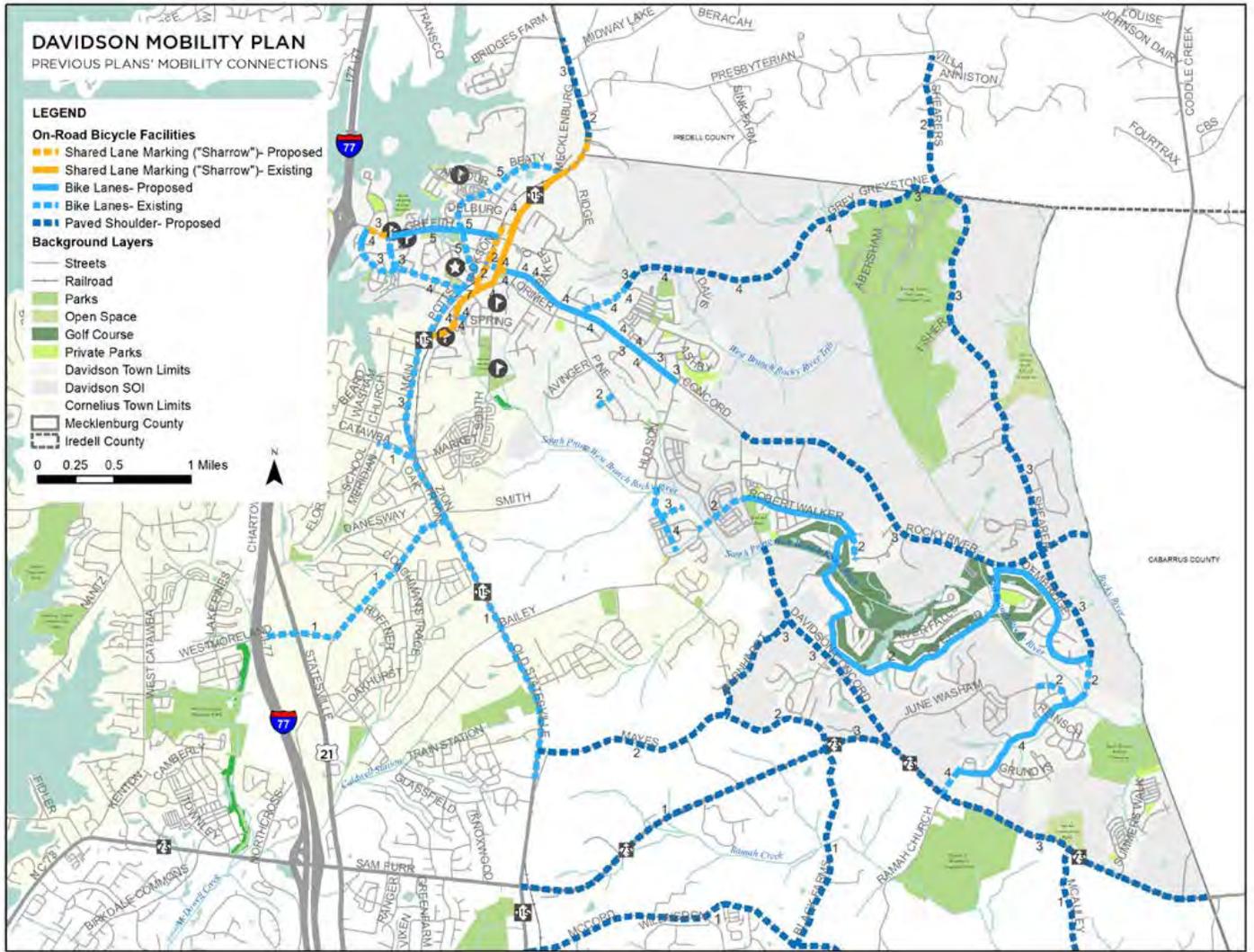


Figure 16. On-road bicycle facility connection recommendations from previous plans

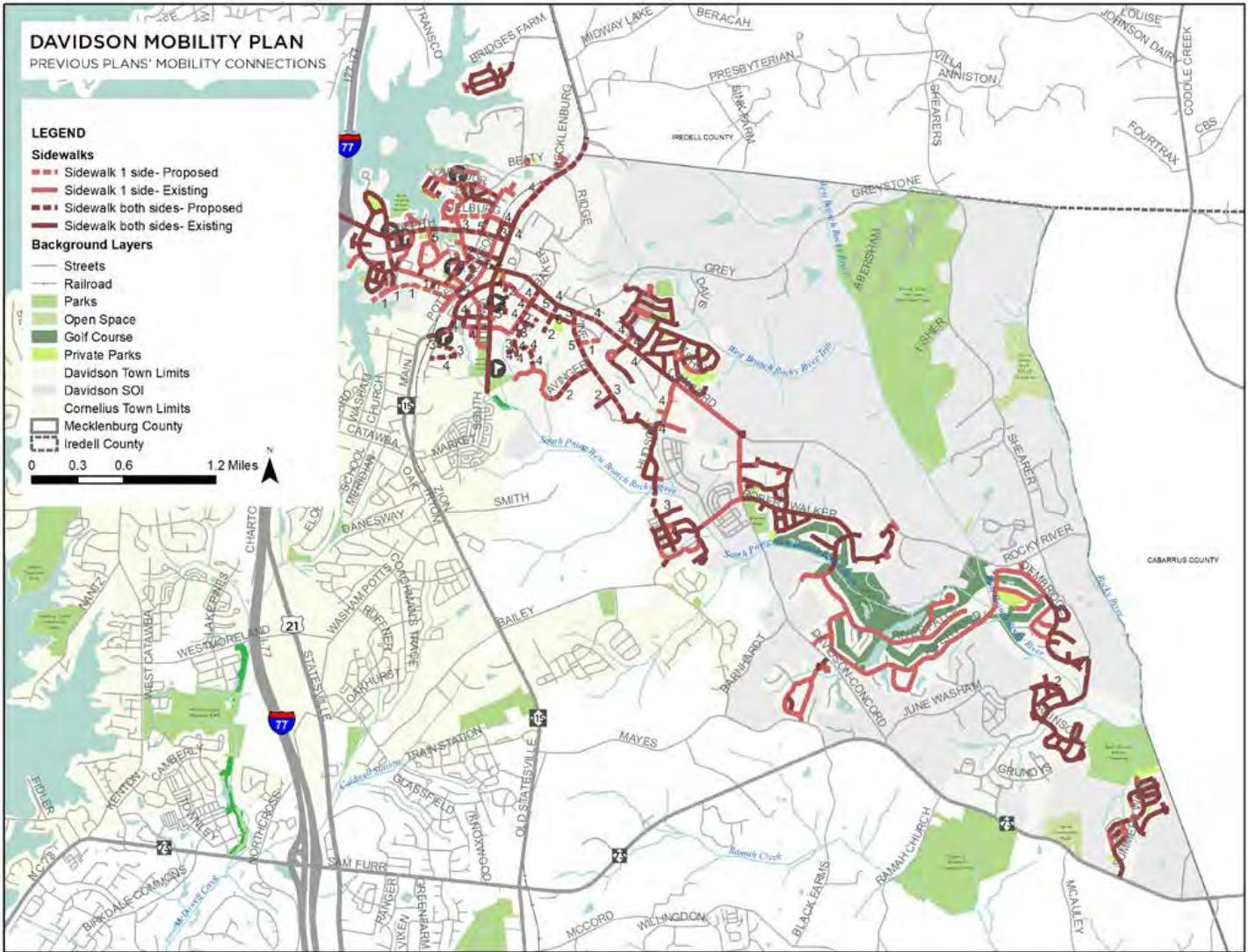


Figure 17. Sidewalk connection recommendations from previous plans

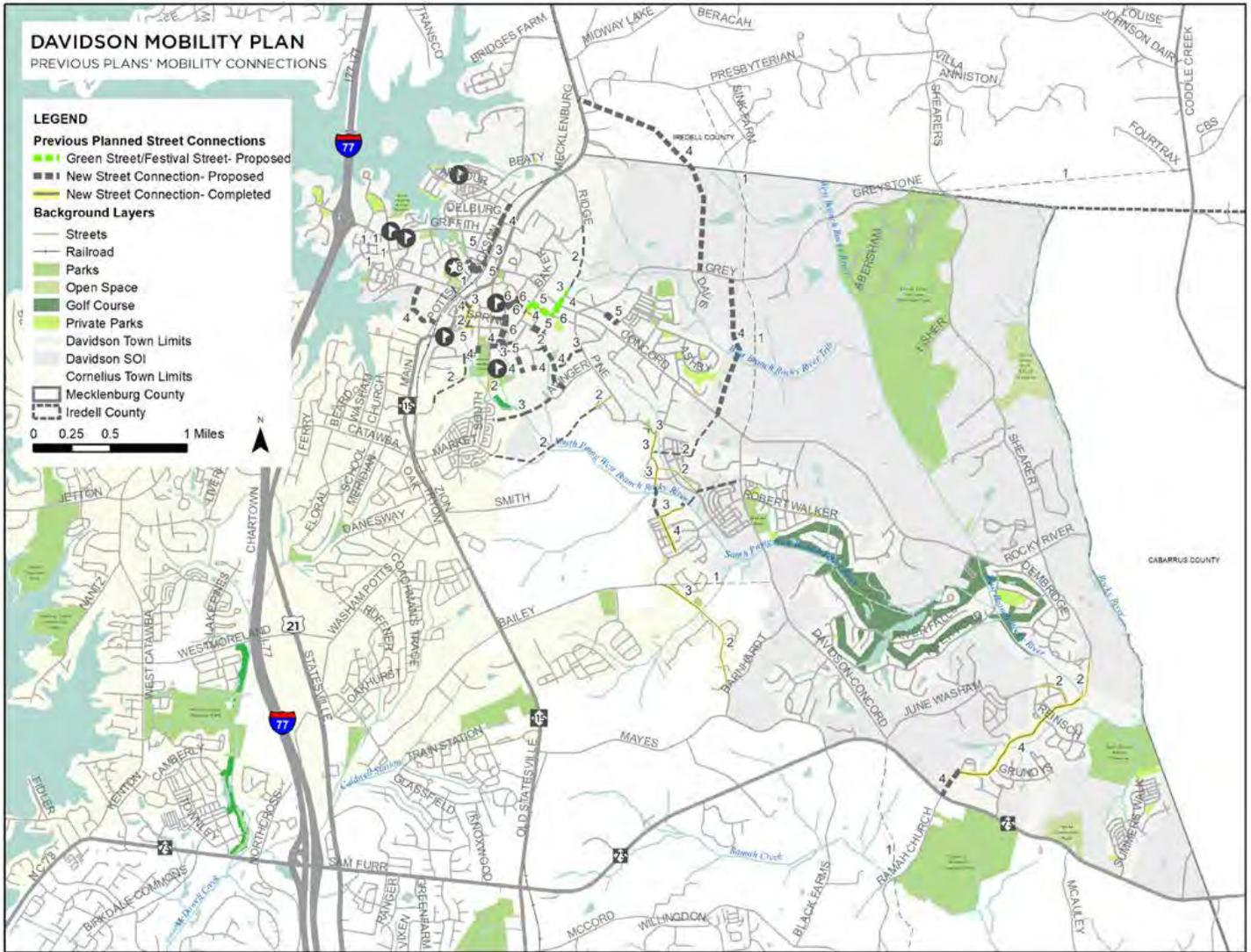


Figure 18. New street connection recommendations from previous plans

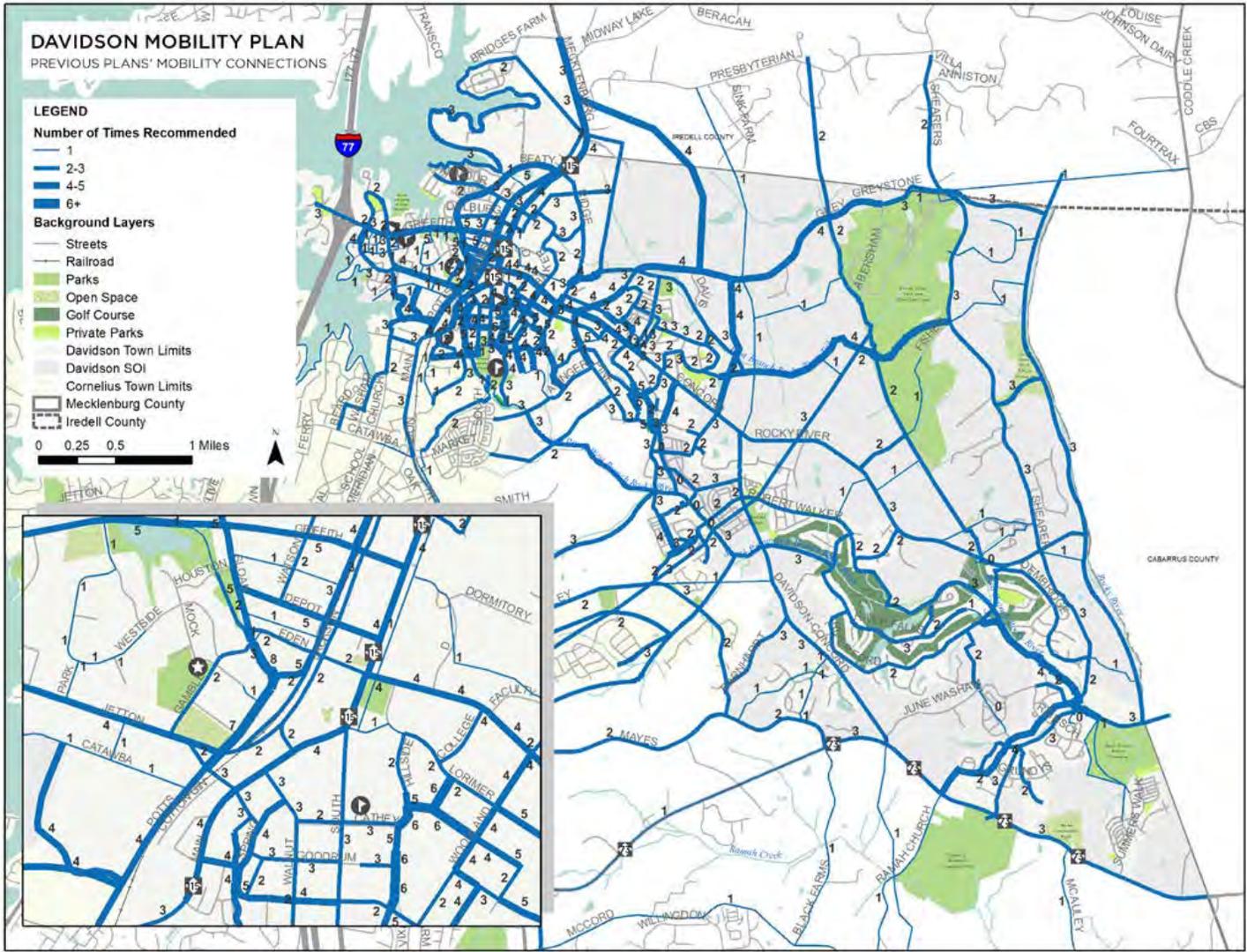


Figure 19. All facility type connection recommendations from previous plans, labeled and graduated based on the number of plans in which it was recommended as a connection of any type

# APPENDIX D - Prioritized Project Lists

PRIORITIZATION FACTOR	CRITERIA
1. SAFETY (5 points)	<ul style="list-style-type: none"> <li>a. Within 1/4 mile of a crash</li> <li>b. Dedicated separate facility (bicycle or pedestrian)</li> <li>c. Adds traffic calming elements to new or existing street</li> <li>d. Improves intersection crossing for pedestrians and cyclists</li> <li>e. Increases/promotes education, awareness, or visibility (e.g., signage, unique design, frequency of presence leads to better anticipation)</li> </ul>
2. REDUCED TRAVEL TIME (2 points)	<ul style="list-style-type: none"> <li>a. Intersection improvement for managing vehicular traffic</li> <li>b. New connection parallel to congested collector / arterial corridor</li> </ul>
3. HEALTH/ ENVIRONMENTAL QUALITY (2 points)	<ul style="list-style-type: none"> <li>a. Active Transportation Project (Bike / Pedestrian / Transit Project)</li> <li>b. Mitigates against increasing pressure/needs for parking in downtown by reducing necessity or desirability of 1-2 occupant vehicles</li> </ul>
4. CONNECTIVITY (3 points)	<ul style="list-style-type: none"> <li>a. Commercial Connections: within 1/4 mile from a mixed-use land use (Apartment, non-residential, Office, Retail, Vertical Mixed Use, Commercial Node)</li> <li>b. School Connections: within 1/4 mile of school</li> <li>c. Park / Greenway Connections:               <ul style="list-style-type: none"> <li>• Within 1/4 mile of park</li> <li>• Connects to existing greenway</li> <li>• Connects to an existing sidewalk</li> </ul> </li> </ul>
5. COST (1 point)	<ul style="list-style-type: none"> <li>a. Lower cost facility (e.g. bike lanes, side paths, multi-use paths, sidewalks, striping...) under \$800,000*</li> </ul>
6. IMPLEMENTATION & USEFUL LIFE (2 points)	<ul style="list-style-type: none"> <li>a. Over 70% right-of-way acquired</li> <li>b. Will not be eliminated or destroyed by development in fewer than 5 years after completed.</li> </ul>
7. PUBLIC SIGNIFICANCE (2 points)	<ul style="list-style-type: none"> <li>a. Included in at least two (2) previous plans or more</li> <li>b. Identified as a “most-mentioned” project through public input analysis</li> </ul>
8. VALUE (2 points)	<ul style="list-style-type: none"> <li>a. Grants and Public/Private Partnerships to share costs are available.</li> <li>b. Not currently addressed in other/third-party plans; or not reasonably anticipated to be constructed by others within five (5) years.</li> </ul>
9. REGIONAL SIGNIFICANCE (3 points)	<ul style="list-style-type: none"> <li>a. Connects to facility outside of municipal/Sphere of Influence (SOI) limits.</li> <li>b. Connects to NC and/or US highways or interstate highways.</li> <li>c. Anticipates and seeks to proactively address known or reasonably expected increased traffic volume and land development pressures from neighboring jurisdictions and/or transportation system plans.</li> </ul>

\*\$800,000 is assumed to be the threshold cost as projects under this cost are not recommended by the CRTPO for state/federal funding due to the number of steps required to administer a state- and federally-funded project.

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## BIKEWAY PROJECTS PRIORITIZATION TABLE

Project Corridor	From	To	Recommended Facility Type
Main St/NC-115	Beaty St	n. town limits	Shared Lane Marking (“Sharrow”)
Concord Rd	Grey Rd	Kimberly Rd	bike lanes
Main St	Potts St	Griffith Village Ln	Shared Lane Marking (“Sharrow”)
Grey Rd	Concord Rd	Wolfe St	bike lanes
Jetton St	Griffith St	Potts St	bike lanes
Twin Oaks-Vernon-Summerbrook	Main St	S. terminus of Summerbrook,Vernon	family friendly bike route
Concord Rd	Main St	Lorimer Rd	Shared Lane Marking (“Sharrow”)
Jackson St	Delburg St	S Main St	Shared Lane Marking (“Sharrow”)
Greystone Rd	Wolfe St	Shearers Rd	paved shoulder
Griffith St	Portside Dr	I-77 southbound ramps	bike lanes
Davidson Gateway	Gateway Crossing Ct	Jetton St	bike lanes
GambleSt-Sloan St	new Potts-Sloan connection	Jetton St	family friendly bike route
Potts St	Jetton St	n. terminus of Potts	Shared Lane Marking (“Sharrow”)
Walnut St	Main St	Mimosa St	family friendly bike route
Eugenia St-Spring St	S. Main St	Woodland St	family friendly bike route
Woodland St	Brook St	Lorimer Rd	family friendly bike route
Lorimer-Chairman Blake	Main St	Thompson St	family friendly bike route
Dogwood Ln	Thompson St	e. terminus of Dogwood	family friendly bike route
Delburg St	Beaty St	N Main St	family friendly bike route
Depot St	Sloan St	Main St	family friendly bike route
Watson St	Armour St	Depot St	family friendly bike route
St Albans neighborhood	Grey Rd	Concord Rd	family friendly bike route
Concord Rd	Kimberly Ln	Rocky River Rd	bike lanes
Sloan St	Griffith St	Potts-Sloan Connector	Shared Lane Marking (“Sharrow”)
Griffith St	I-77 southbound ramps	Davidson Gateway	bike lanes
Griffith St	Harbour Place	Jetton St	bike lanes
Harbour Place	Jetton St	Griffith St	family friendly bike route
Jetton St	Harbour Place	Griffith St	family friendly bike route
Davidson Gateway	Jetton St	Griffith St	family friendly bike route
Faust Rd	Davidson Gateway Dr	Catawba Ave	family friendly bike route
Lakeside-Westside Tr-Park-Mock	Griffith St	Mock Cir	family friendly bike route
South St	Main St	Mimosa St	family friendly bike route
Pine Rd sidewalk	Concord Rd	Patrick Johnston Ln	family friendly bike route
Virginia Rd	Pine Rd	Crescent Rd	family friendly bike route
Thompson St	n. terminus of Thompson	Concord Rd	family friendly bike route
Ridge Rd	Main St	soccer fields	family friendly bike route
Armour St	w. terminus	e. terminus	family friendly bike route
Robert Walker Dr	Davidson-Concord Rd	Bradford Park Dr	bike lanes
Shearer Rd extension	Shearer Rd	NC 73	bike lanes



## BIKEWAY PROJECTS PRIORITIZATION TABLE, CONTINUED

Project Corridor	From	To	Recommended Facility Type
Summers Walk neighborhood	Rose Glen	Davidson Concord	family friendly bike route
Shearer Rd extension	Dembridge Dr	greenway connection	bike lanes
Catawba Ave	Faust Rd	Potts St	family friendly bike route
Ridgewood-Greenway	Woodland St	S. terminus of Greenway St	family friendly bike route
Eastway St	Peter's	Pinecrest	family friendly bike route
NC-115 (Iredell Co.)	Bridges Farm Rd	Presbyterian Rd	paved shoulder
Kimberly Rd	Concord Rd	S. terminus of Samuel Spencer Pkwy	family friendly bike route
Davidson-Concord Rd	South Prong WEst Branch Rocky River	Sam Furr Rd	paved shoulder
Robert Walker Dr	River Crossing Blvd	Overleaf Ln	bike lanes
Overleaf Ln-East Rock	Robert Walker Dr	Rocky River Rd	family friendly bike route
Rocky River Rd	Concord Rd	e. town/ETJ limits	paved shoulder
Shearer Rd	Greystone Rd	Dembridge Dr	paved shoulder
Davidson Place neighborhood	Davidson-Concord Rd	Mayes Rd	family friendly bike route
Lorimer Rd	Thompson St	Pine Rd	family friendly bike route
Hamilton St	Jetton St	Catawba Ave	family friendly bike route
Avinger Ln	Pine St	Terminus of Avinger	family friendly bike route
new bike connection on campus	Thompson St	Dormitory Rd on Davidson College	family friendly bike route
Bradford Park neighborhood streets	Crabapple Ct	Robert Walker Dr	family friendly bike route
Barnhardt Rd	Mayes Rd	Davidson Concord Rd	paved shoulder
Mayes Rd	Barnhardt Rd	Sam Furr Rd	paved shoulder
River Falls Dr	River Crossing Blvd	e. terminus	family friendly bike route
Potts St-to-Sloan St connector	Potts St	Sloan St	Shared Lane Marking ("Sharrow")
Sam Furr Rd	Mayes Rd	Davidson-Concord Rd	paved shoulder
Shearers Rd	Presbyterian Rd	Greystone Rd	paved shoulder
Samuel Spencer Pkwy extension	S. terminus of Samuel Spencer Pkwy	Crabapple Ct	family friendly bike route

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	Total
1	0	0	0	1	0	0	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	13
1	1	1	0	1	0	0	1	1	0	0	1	0	1	1	1	0	1	1	0	1	0	13
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1	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	0	1	1	1	1	0	10
1	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	9

## MULTI-USE PATH PROJECTS PRIORITIZATION TABLE

Project Corridor	From	To	Recommended Facility Type
Concord Rd	Grey Rd	Kimberly Rd	sidepath
Beaty St	N. Main St	Griffith St	sidepath
Greystone Rd	Wolfe St	Shearers Rd	sidepath
Griffith St	Davidson Gateway	Beaty St/Sloan St	sidepath
Rail Trail to Mooresville	n. terminus of Shearer St	Bridges Farm Rd	greenway
Sloan St	Griffith St	Potts-Sloan Connector	sidepath
Griffith St	Harbour Place	Jetton St	sidepath
Davidson Pointe greenway connection	Davidson Pointe	NC-115	greenway
Shearer Rd extension	Dembridge Dr	greenway connection	sidepath
Davidson-Concord Rd extension	Presbyterian Rd	Grey Rd	sidepath
Armour-Main Street Connector	e. terminus of Armour	Main St	bike/ped connector
Kincaid Greenway Extension	Main St	Spring St	greenway
Catawba Ave	Potts St	Main St	sidepath
Walnut-Vernon connector	Walnut St	Vernon Dr	bike/ped connector
Hillside extension	s. terminus of Hillside Dr	Cathey St	bike/ped connector
Brook St extension	Woodland St	Hillside Dr extension	bike/ped connector
Lorimer-Brook connector	Lorimer Rd	Brook St extension	bike/ped connector
Cathey St extension	Goodrum St	Spring St	bike/ped connector
Greenway St-to-South St connector	Greenway St	South St	bike/ped connector
Eastway-South connection	Eastway St	South St	bike/ped connector
Dogwood Ln-Conroy connector	Dogwood Ln	Conroy Ave	bike/ped connector
greenway connection allong Main St	Chairman Blake Ln	Glasgow	sidepath
Bailey Springs Dr	Bailey Rd	Bradford Park Rd	sidepath
Bailey Rd	Rocky Branch River	Ayla	sidepath
Davidson-Concord Rd	South Prong WEst Branch Rocky River	Sam Furr Rd	sidepath
Rocky River Rd	Concord Rd	e. town/ETJ limits	sidepath
Davidson-Concord Rd extension	Grey Rd	Concord Rd	sidepath
greenway connection- Davidson East	NC 73	Julees Walk	greenway
Shearer Rd	Greystone Rd	Dembridge Dr	sidepath
Goodrum extension	e. terminus of Goodrum	Cathey St	bike/ped connector
Brook St extension	e. terminus of Brook St	Pinecrest St	bike/ped connector
Ridgewood extension	Pinecrest St	Thompson St	bike/ped connector
Greenway St-to-The Pines extension	Greenway St	The Pines	bike/ped connector
Peters Pl extension	Peters Pl	Thompton St extension	bike/ped connector
Thompson St greenway	S. terminus of Thompson	Avinger Ln	greenway
greenway connection	Rocky River	Bailey	greenway
Barnhardt Rd	Mayes Rd	Davidson Concord Rd	sidepath
Mayes Rd	Barnhardt Rd	Sam Furr Rd	sidepath
Potts St-to-Sloan St connector	Potts St	Sloan St	sidepath
greenway connection	YMCA parking lot	Faust Rd	greenway
Ingersoll Rand	Davidson Pointe	Beaty St	unpaved trail

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	
1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	17
1	1	1	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	15
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1	1	1	0	0	0	0	1	1	1	1	1	0	1	1	1	0	1	1	0	1	0	14
1	1	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	14
1	0	1	0	1	0	0	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	14
1	0	1	0	1	0	0	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	13
1	1	0	0	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1	1	1	0	13
1	1	1	0	1	0	0	1	1	0	0	1	0	1	1	1	0	1	1	0	1	0	13
1	1	0	0	0	0	1	1	1	0	1	1	0	0	1	1	0	1	1	1	0	1	13
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	13
1	1	0	0	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	12
1	1	1	0	0	0	0	1	1	1	0	1	0	1	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	0	0	0	0	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	12
1	1	1	0	0	0	0	1	1	1	1	1	0	0	1	0	0	1	1	0	1	0	12
0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0	1	1	1	1	0	12
1	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0	1	1	1	0	0	12
1	0	1	0	0	0	0	1	1	0	0	1	0	1	1	1	0	1	1	1	1	0	12
1	1	0	0	0	0	0	1	1	1	0	0	1	0	0	1	1	0	1	1	0	1	12
1	1	0	0	0	0	0	1	1	1	0	0	1	0	0	1	1	0	1	1	0	1	12
1	1	0	0	0	0	0	1	1	1	0	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	1	0	1	1	0	1	1	0	1	1	0	0	0	11
1	1	0	0	0	0	0	1	1	1	1	1	0	0	1	1	0	1	0	0	1	1	11
1	1	0	0	0	0	0	1	1	1	0	1	0	0	1	1	0	1	1	1	0	0	11
1	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1	1	0	0	11

## MULTI-USE PATH PROJECTS PRIORITIZATION TABLE, CONTINUED

Project Corridor	From	To	Recommended Facility Type
Rocky River greenway	Grey Rd extension	West Branch Nature Preserve	greenway
greenway connection	Davidson Gateway	Peninsula	greenway
Pine-Thompson connector	Pine Rd	Thompson St extension	greenway
Lynbrook extension	Patrick Johnston Ln	Churchill Rd	bike/ped connector
Ardley Cir connector	Ardley Cir	Pat Stough Ln	bike/ped connector
Sam Furr Rd	Mayes Rd	Davidson-Concord Rd	sidepath
new bike/ped connection	Jackson St	under RR tracks	bike/ped connector (tunnel)
Avinger-Chapel connection	Chapel Way	South Prong Rocky River Greenway	greenway
Cathey St extension	Spring St	Eastway	greenway
Rocky River- Overleaf connection	Overleaf Ln	Rocky River Rd	bike/ped connector
northern greenway connection	Grey Rd near Allison Farm Reg. Park	Presbyterian Rd	greenway
Meck Co.- Iredell Co. line	Shearer Rd	Rocky River/Cabarrus Co. line	greenway
greenway connection	Pine Rd	Patrick Johnston Ln	greenway
greenway connection	Existing greenway	Claire's Creek Lane	bike/ped connector
bike/ped connection	South Prong Rocky River Greenway	future Westbranch Pkwy	bike/ped connector
new development	Park Terrace	greenway connection	bike/ped connector
greenway connection	Rocky River Rd	Shearer Rd	greenway
greenway connection	River Falls Dr	River Ford	bike/ped connector
greenway connection	Robert Walker Dr	River Ford	greenway
West Branch Nature Preserve	Summers Walk	West Branch Rocky River Gwy	greenway
West Branch Nature Preserve	Summers Walk	West Branch Rocky River Gwy	unpaved trail
greenway connection	Western Branch Nature Preserve	Existing Greenway	greenway
greenway connection	Davidson-Concord Rd	River Crossing	greenway
McConnell-Fisher Farm Greenway	Ashby Dr	West Branch Rocky River	greenway
Fisher Farm greenway connection	West Branch Rocky River Gwy	Shearer Rd	greenway
Fisher Farm southern greenway connection	s. end of Fisher Farm Park	s section of funded WBRR greenway	greenway
new street connection	South Prong Rocky River Greenway	Westbranch Pkwy	bike/ped connector
greenway connection	Riverford	Bridle Path	bike/ped connector
bike/ped connection	Proposed Greenway	Existing Greenway	bike/ped connector
new street connection	Davidson-Concord Rd	Proposed bike ped connector	greenway
greenway connection	Shearer	Fisher Rd	greenway
RR Bluff Nature Preserve greenway connection	Shearer Rd	Rocky River greenway	greenway

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	0	11
1	1	0	0	0	0	0	1	1	1	1	1	0	0	1	0	0	1	1	0	0	0	10
1	1	0	0	0	0	1	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	10
1	1	0	0	0	0	0	1	1	0	0	1	1	0	1	1	0	1	1	0	0	0	10
1	0	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	1	1	0	10
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1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	1	0	0	0	9
1	1	0	0	0	0	0	1	1	0	0	1	1	0	1	0	0	1	1	0	0	0	9
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1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	9
1	1	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	1	1	0	0	0	9
1	0	0	0	0	0	0	1	1	1	0	1	1	0	1	0	0	1	1	0	0	0	9
0	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	1	0	0	9
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	9
0	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1	1	1	0	0	0	9
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	9
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	9
0	1	0	0	0	0	0	1	1	0	0	1	1	0	1	1	0	1	0	0	0	0	8
0	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	8
1	1	0	0	0	0	0	1	1	0	0	1	1	0	1	0	0	1	0	0	0	0	8
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	0	0	0	0	8
1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	1	0	0	0	8
0	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	8

## ROADWAY PROJECTS PRIORITIZATION TABLE

Project Corridor	From	To	Recommended Facility Type
Davidson-Concord Rd extension	Presbyterian Rd	Grey Rd	new street
Davidson-Concord Rd extension	Grey Rd	Concord Rd	new street
Spring St extension	Eugenia St	Walnut St	festival street
Potts St-to-Catawba Ave connector	Potts St	Catawba Ave	new street connection with development
Thompson St greenway	S. terminus of Thompson	Avinger Ln	if developed
Catawba Ave extension	S. Main St	Spring St extension	new street connection with development
Potts St-to-Sloan St connector	Potts St	Sloan St	new street
Pine-Thompson connector	Pine Rd	Thompson St extension	if developed
Samuel Spencer Pkwy extension	S. terminus of Samuel Spencer Pkwy	Crabapple Ct	new street connection with development
new street near Rushco	Griffith St	Peninsula Dr	new street connection with development
new street near Exxon	Griffith St	Peninsula Dr	new street connection with development
Grey Rd extension	Shearer Rd	Coddle Creek Rd/NC 3	new street
Catawba-Potts Connector	Jetton St	Catawba Ave	new street connection with development
Davidson-Concord Rd extension	Sam Furr Rd	Ramah Church Rd	new street
Wyatts Way Extension	Antiquity (Cornelius)	Matthew McClure Cir	new street connection with development
new street connection	Concord Rd	Westmoreland Farm Rd	new street connection with development

## INTERSECTION IMPROVEMENT PROJECTS PRIORITIZATION TABLE

Road 1	Road 2	Recommended Treatment
Main St	Concord Rd	add southbound left turn lane
Griffith St	Main St	crossing improvement
Jackson St	Main St	crossing improvement
Potts St	Main St	Roundabout
Beaty St	Delburg St	pedestrian xing improvement
Griffith St	Spinnaker Cove Dr	pedestrian xing improvement
Main St	new Armour St extension	pedestrian xing improvement
Griffith St	Lakeside Ave	pedestrian xing improvement
Griffith St	Grocery Ln	pedestrian xing improvement
Jackson St	Potts St	pedestrian underpass
Griffith St	Davidson Gateway Dr	pedestrian improvement
Main St	Catawba Ave	pedestrian improvement; bike station
Concord Rd	St Albans Ln/Pat Stough Ln	intersection improvements

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	Total
1	1	0	0	0	0	1	1	1	0	1	1	0	0	1	1	0	1	1	1	0	1	13
1	1	0	0	0	0	1	1	1	0	0	1	0	0	1	1	0	1	1	0	1	1	12
1	0	1	0	1	0	1	0	1	1	1	1	0	1	1	1	0	0	1	0	0	0	12
1	0	0	0	0	0	1	0	0	1	1	1	0	0	1	1	0	1	1	1	0	1	11
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1	1	0	0	0	0	1	1	1	0	0	1	0	0	1	1	0	1	1	0	0	0	10
1	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	9
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0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	1	1	0	1	8
1	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	1	0	0	1	8

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	Total
1	0	1	1	0	1	0	0	0	1	1	1	0	1	1	1	0	1	1	0	1	1	14
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	1	1	14
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	1	1	14
1	1	1	1	0	1	0	0	0	1	1	0	0	1	0	1	0	1	0	1	1	1	13
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	1	13
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	1	13
1	1	1	1	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	0	1	1	13
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	1	13
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	1	13
1	1	1	1	0	0	0	1	0	1	0	1	0	1	1	0	0	1	1	0	1	1	13
1	1	1	1	0	0	0	1	0	1	0	1	0	1	1	0	0	1	1	0	1	1	13

## INTERSECTION IMPROVEMENT PROJECTS PRIORITIZATION TABLE, CONTINUED

Road 1	Road 2	Recommended Treatment	
Concord Rd	Grey Rd	realignment	
Griffith St	I-77 NB ramp	Roundabout	
Griffith St	Sloan St	Roundabout	
Depot St	RR tracks	crossing improvement	
Beaty St	Armour St	pedestrian xing improvement	
Main St	Glasgow St	pedestrian xing improvement	
Dogwood Ln	Grey Rd	pedestrian xing improvement	
Armour St	RR tracks	pedestrian bridge	
Concord Rd	Baker Dr/Woodland St	pedestrian improvement	
Delburg St	RR tracks	pedestrian xing improvement	
S. Main St	Catawba Ave/Jetton St	pedestrian xing improvement	
Beaty St	N. Main St	pedestrian xing improvement	
Concord Rd	Kimberly Rd	intersection improvements	
Shearer Rd	Rocky River Rd	crossing improvement	
Griffith St	I-77 SB ramp	Roundabout	
Davidson-Concord Rd	Robert Walker Dr	crossing improvements	
N Main St	Beaty St/Ridge Rd	realign Ridge + Beaty	
Griffith St	w. of Jackson St	bike station	
Concord Rd	Faculty Dr	bike station	
Griffith St	Davidson Gateway Dr	create Transit/Mobility Hub	
Sam Furr Rd / NC 73	Davidson-Concord Rd	right turn lane- short term fix	
Beaty St	w. of Main St/NC-115	bike station	

Prioritization Criteria (see Table on page 214 for definitions)																						Total
1.a	1.b	1.c	1.d	1.e	2.a	2.b	3.a	3.b	4.a	4.b	4.c	5.a	6.a	6.b	7.a	7.b	8.a	8.b	9.a	9.b	9.c	
1	0	1	1	0	1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	1	1	12
1	1	1	1	0	1	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	1	12
1	1	1	1	0	1	0	0	0	1	1	1	0	1	0	1	0	1	0	0	0	1	12
1	1	1	1	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	0	12
0	1	1	1	0	0	0	1	0	1	1	0	0	1	1	1	0	1	1	0	0	1	12
1	1	1	1	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	0	0	1	12
1	1	1	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	1	0	1	1	12
1	1	1	1	0	0	1	1	0	1	1	0	0	0	1	0	0	1	1	0	0	1	12
1	1	1	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	1	0	1	1	12
1	1	1	1	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	0	0	0	11
1	1	1	1	0	0	0	1	0	1	0	1	0	1	1	0	0	1	1	0	0	0	11
0	1	1	1	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	0	0	1	11
1	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	1	1	0	1	1	11
1	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	1	1	0	1	1	11
1	1	1	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	1	10
1	1	1	1	0	0	0	1	0	0	0	1	0	1	0	0	0	1	0	0	1	1	10
0	0	1	1	0	0	0	0	0	1	1	0	0	0	1	0	1	1	1	0	1	1	10
1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	0	9
1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	0	9
1	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	0	1	0	1	9
0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	1	9
0	0	0	0	0	0	0	1	0	1	1	0	0	1	1	0	0	1	1	0	0	0	7

# APPENDIX E - Cost Estimates

## DAVIDSON-CONCORD ROAD EXTENSION

<b>Name</b>	Concord Road Extension	
<b>Description</b>	New Roadway connection between existing intersection of Concord and Rocky River Road to Presbyterian Road. Cross-section will include 2-lane road and separated, shared use path	
<b>Total Length</b>	2.4 miles	
<b>Estimated Project Cost*</b>	\$	23,600,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

	Description	Quantity	Unit	Unit Price	Amount
<b>Roadway</b>	2-Lane Shoulder Section W / Paved Shoulder	2.36	per mile	\$3,700,804.91	\$ 8,733,899.59
	Miscellaneous			30%	\$ 2,620,169.88
<b>Bike Ped Facilities</b>	Shared Use Path	2.36	per mile	\$ 1,250,000.00	\$ 2,950,000.00
	Construction Cost Unadjusted				\$ 14,304,069.46
	Construction Contingency			25%	\$ 3,576,017.37
	<b>Construction Cost Estimate with Contingency</b>				<b>\$ 17,880,086.83</b>
	<b>Design</b>			12%	<b>\$ 2,145,610.42</b>
	<b>ROW</b>			20%	<b>\$ 3,576,017.37</b>
	<b>Construction Admin and Inspection</b>			15%	<b>\$ 2,682,013.02</b>
	<b>Total Project Cost</b>				<b>\$ 23,601,714.62</b>

## SPRING STREET SHARED STREET/WOONERF

<b>Name</b>	Spring Street Shared Street	
<b>Description</b>	Conversion of gravel street to Woonerf connection with pavers	
<b>Total Length</b>	0.14 miles	
<b>Estimated Project Cost*</b>	\$	670,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

Description	Quantity	Unit	Unit Price	Amount
Paver Street construction	1158.9	SY	\$350	\$ 405,611.11
Construction Cost Unadjusted				\$ 405,611.11
Construction Contingency			25%	\$ 101,402.78
<b>Construction Cost Estimate with Contingency</b>				<b>\$ 507,013.89</b>
<b>Design</b>			12%	<b>\$ 60,841.67</b>
<b>ROW</b>			20%	<b>\$ 101,402.78</b>
<b>Construction Admin and Inspection</b>			15%	<b>\$ 76,052.08</b>
<b>Total Project Cost</b>				<b>\$ 669,258.33</b>

## DAVIDSON-CONCORD ROAD / NC-73 INTERSECTION IMPROVEMENT

<b>Name</b>	NC 73/Davidson Concord Road Intersection Project	
<b>Description</b>	Addition of southbound right turn lane	
<b>Estimated Project Cost*</b>	\$	350,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

	Description	Quantity	Unit	Unit Price	Amount
<b>Roadway</b>	Add turn lane	350	LF	\$465.59	\$ 162,956.50
	Miscellaneous			30%	\$ 48,886.95
	Construction Cost Unadjusted				\$ 211,843.45
	Construction Contingency			25%	\$ 52,960.86
	<b>Construction Cost Estimate with Contingency</b>				<b>\$ 264,804.31</b>
	<b>Design</b>			12%	<b>\$ 31,776.52</b>
	<b>ROW</b>			20%	<b>\$ 52,960.86</b>
	<b>Construction Admin and Inspection</b>			15%	<b>\$ 39,720.65</b>
	<b>Total Project Cost</b>				<b>\$ 349,541.69</b>

## GREY RD/PINE RD/CONCORD RD INTERSECTION IMPROVEMENT

<b>Name</b>	Grey/Pine and Concord Road Intersection Project	
<b>Description</b>	Realignment of Grey Road and Pine Road, sidewalks, high visibility crosswalks at all four legs, RRFBs on Concord Road for future sidepath	
<b>Estimated Project Cost*</b>	\$	1,440,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

	Description	Quantity	Unit	Unit Price	Amount
<b>Roadway</b>	2-Lane Curb and Gutter	0.21	per mile	\$3,263,075.29	\$ 673,627.29
	Miscellaneous (sidewalks, high visibility crosswalks)			30%	\$ 202,088.19
<b>Bike Ped Facilities</b>	RRFB	1	pair	\$15,000	\$ 15,000.00
	Construction Cost Unadjusted				\$ 875,715.47
	Construction Contingency			25%	\$ 218,928.87
	<b>Construction Cost Estimate with Contingency</b>				<b>\$ 1,094,644.34</b>
	<b>Design</b>			12%	<b>\$ 131,357.32</b>
	<b>ROW</b>			20%	<b>\$ 218,928.87</b>
	<b>Construction Admin and Inspection</b>			15%	<b>\$ 164,196.65</b>
	<b>Total Project Cost</b>				<b>\$ 1,444,930.53</b>

## N. MAIN ST/BEATY ST/RIDGE ROAD INTERSECTION IMPROVEMENT

<b>Name</b>	North Main/Beaty/Ridge Intersection Project
<b>Description</b>	Road realignment, dedicated turn lanes, median refuge, high visibility cross walks, signalization
<b>Estimated Project Cost*</b>	\$ 980,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

	Description	Quantity	Unit	Unit Price	Amount
<b>Roadway</b>	2-Lane Shoulder Section	0.09	per mile	\$3,700,804.91	\$ 315,409.51
	Add turn lane (westbound on Main)	150	LF	\$465.59	\$ 69,838.50
	Add turn lane (eastbound on Main)	150	LF	\$465.59	\$ 69,838.50
	Miscellaneous (median refuge, sidewalks, crosswalks)			30%	\$ 136,525.95
	Construction Cost Unadjusted				\$ 591,612.46
	Construction Contingency			25%	\$ 147,903.12
	<b>Construction Cost Estimate with Contingency</b>				<b>\$ 739,515.58</b>
	<b>Design</b>			12%	<b>\$ 88,741.87</b>
	<b>ROW</b>			20%	<b>\$ 147,903.12</b>
	<b>Construction Admin and Inspection</b>			15%	<b>\$ 110,927.34</b>
	<b>Total Project Cost</b>				<b>\$ 976,160.56</b>

## GREY ROAD SIDEPATH

<b>Name</b>	Grey Road Sidepath
<b>Description</b>	Shared use path along Grey Road from O'Henry to Greenwold Drive
<b>Total Length</b>	1.92 miles
<b>Estimated Project Cost*</b>	\$ 3,960,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

Description	Quantity	Unit	Unit Price	Amount
Shared Use Path	1.92	per mile	\$ 1,250,000.00	\$ 2,400,000.00
Construction Cost Unadjusted				\$ 2,400,000.00
Construction Contingency			25%	\$ 600,000.00
<b>Construction Cost Estimate with Contingency</b>				<b>\$ 3,000,000.00</b>
<b>Design</b>			12%	<b>\$ 360,000.00</b>
<b>ROW</b>			20%	<b>\$ 600,000.00</b>
<b>Construction Admin and Inspection</b>			15%	<b>\$ 450,000.00</b>
<b>Total Project Cost</b>				<b>\$ 3,960,000.00</b>

## McConnell TO FISHER FARM GREENWAY

<b>Name</b>	New Greenway
<b>Description</b>	Greenway from McConnell Neighborhood to Fisher Farm Park with 12' asphalt path and 8' equestrian path
<b>Total Length</b>	1.13 miles
<b>Estimated Project Cost*</b>	\$ 3,880,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

Description	Quantity	Unit	Unit Price	Amount
Shared Use Path	1.13	per mile	\$ 2,083,333.33	\$ 2,354,166.67
Construction Cost Unadjusted				\$ 2,354,166.67
Construction Contingency			25%	\$ 588,541.67
<b>Construction Cost Estimate with Contingency</b>				<b>\$ 2,942,708.33</b>
<b>Design</b>			12%	<b>\$ 353,125.00</b>
<b>ROW</b>			20%	<b>\$ 588,541.67</b>
<b>Construction Admin and Inspection</b>			15%	<b>\$ 441,406.25</b>
<b>Total Project Cost</b>				<b>\$ 3,884,375.00</b>

## GREY ROAD EXTENSION

<b>Name</b>	Grey Road Extension
<b>Description</b>	New Roadway connection between Shearers and Highway 3/Coddle Creek. Cross-section will include 2-lane road and separated, shared use path
<b>Total Length</b>	2.4 miles
<b>Estimated Project Cost*</b>	\$ 15,800,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

Description	Quantity	Unit	Unit Price	Amount
<b>Roadway</b>				
2-Lane Shoulder Section W / Paved Shoulder	1.58	per mile	\$ 3,700,804.91	\$ 5,847,271.76
Miscellaneous			30%	\$ 1,754,181.53
<b>Bike Ped Facilities</b>				
Shared Use Path	1.58	per mile	\$ 1,250,000.00	\$ 1,975,000.00
Construction Cost Unadjusted				\$ 9,576,453.29
Construction Contingency			25%	\$ 2,394,113.32
<b>Construction Cost Estimate with Contingency</b>				<b>\$ 11,970,566.61</b>
<b>Design</b>			12%	<b>\$ 1,436,467.99</b>
<b>ROW</b>			20%	<b>\$ 2,394,113.32</b>
<b>Construction Admin and Inspection</b>			15%	<b>\$ 1,795,584.99</b>
<b>Total Project Cost</b>				<b>\$ 15,801,147.92</b>

## DAVIDSON-CONCORD ROAD SIDEPATH

<b>Name</b>	Davidson Concord Road Sidepath
<b>Description</b>	Shared use path to continue existing facility from Rocky River Greenway to NC 73
<b>Total Length</b>	1.56 miles
<b>Estimated Project Cost*</b>	\$ 3,220,000

\*Includes Design Fees, Right of Way Acquisitions, and Construction Administration and Inspection. Estimates are in 2018 dollars. Add 10% escalation per year.

Description	Quantity	Unit	Unit Price	Amount
<b>Bike Ped Facilities</b>				
Shared Use Path	1.56	per mile	\$ 1,250,000.00	\$ 1,950,000.00
Construction Cost Unadjusted				\$ 1,950,000.00
Construction Contingency			25%	\$ 487,500.00
<b>Construction Cost Estimate with Contingency</b>				<b>\$ 2,437,500.00</b>
<b>Design</b>			12%	<b>\$ 292,500.00</b>
<b>ROW</b>			20%	<b>\$ 487,500.00</b>
<b>Construction Admin and Inspection</b>			15%	<b>\$ 365,625.00</b>
<b>Total Project Cost</b>				<b>\$ 3,217,500.00</b>

## BEATY STREET SIDEPATH

POTTS SLOAN BEATY Multi Use Trail			Costs in year of Construction (15% increase)	
2 Phase Project	Phase 1 Costs	Phase 2 Costs	Phase 1 Costs w/ Increases	Phase 2 Costs w/Increases
Preliminary engineering/design	\$ 75,000.00	\$ 125,000.00	\$ 86,250.00	\$ 143,750.00
ROW acquisition	\$ 350,000.00	\$ 100,000.00	\$ 402,500.00	\$ 115,000.00
Construction	\$ 440,000.00	\$ 750,000.00	\$ 506,000.00	\$ 862,500.00
<b>Total Construction Costs:</b>	<b>\$ 865,000.00</b>	<b>\$ 975,000.00</b>	<b>\$ 994,750.00</b>	<b>\$ 1,121,250.00</b>
NCDOT Management Costs (10%)	\$ 86,500.00	\$ 97,500.00	\$ 99,475.00	\$ 112,125.00
Contingency (10%)	\$ 86,500.00	\$ 97,500.00	\$ 99,475.00	\$ 112,125.00
CEI Administration (15%)	\$ 129,750.00	\$ 146,250.00	\$ 149,212.50	\$ 168,187.50
<b>Total Project Costs</b>	<b>\$ 1,167,750.00</b>	<b>\$ 1,316,250.00</b>	<b>\$ 1,342,912.50</b>	<b>\$ 1,513,687.50</b>
TOD Costs (20% min)	\$ 233,550.00	\$ 263,250.00	\$ 268,582.50	\$ 302,737.50
Funding Requested	\$ 934,200.00	\$ 1,053,000.00	\$ 1,074,330.00	\$ 1,210,950.00
<b>Total Project Cost</b>	<b>\$ 2,484,000.00</b>	<b>\$ 2,856,000.00</b>		
<b>TOD Costs (20% Min)</b>	<b>\$ 496,800.00</b>	<b>\$ 571,320.00</b>		
<b>Funding Requested</b>	<b>\$ 1,987,200.00</b>	<b>\$ 2,285,280.00</b>		

The Beaty Street sidepath is "Phase 2" of the project.

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**Agenda Title: River Run Phase VI Pre-Conditional Development Consultation  
Planning Director Jason Burdette**

**Summary:** The applicant proposes to re-designate approximately 74.8 acres located east of Shearer Rd and south of E. Rocky River Rd. from a combination of Neighborhood Edge/Conditional Planning Areas to entirely Conditional Planning Area. The applicant is working with Epcon Communities to develop a 130-unit active adult (age-targeted) community. As part of the conditional request, the applicant is asking for a number of exceptions to the Davidson Planning Ordinance. These exceptions are detailed in the staff analysis.

The purpose of tonight's discussion is to determine if the board of commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (rezoning) process. No formal action will be taken.

**Summary:**

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**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
□	Agenda Memo - River Run Phase 6, Conditional Planning Area Map Amendment 08.13.19	8/9/2019	Cover Memo
□	Attachment - Site Plan River Run Phase 6 07.15.19	8/9/2019	Backup Material
□	Presentation - River Run Phase 6, Conditional Planning Area Map Amendment 08.13.19	8/9/2019	Presentation



## STAFF ANALYSIS

Date: August 13, 2019  
To: Board of Commissioners  
From: Jason Burdette, Planning Director  
Re: River Run Phase 6, Conditional Planning Area Map Amendment

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### 1. INTRODUCTION

#### APPLICANT INFO

- **Owner:** River Run Limited Partnership
- **Contractor:** Dieter Crago (Sepi Engineering); Homebuilder: Epcon Communities
- **Location:** 18500 Shearer Rd. (Parcel IDs: 00749104, 00749196, 00749106)
- **Planning Area(s):** Neighborhood Edge Planning Area, Conditional Planning Area
- **Area:** +/- 74.8 acres

#### REQUEST

The applicant proposes to re-designate approximately 74.8 acres located in east of Shearer Rd and south of E. Rocky River Rd. from a combination of Neighborhood Edge/Conditional Planning Areas to entirely Conditional Planning Area. The applicant is working with Epcon Communities to develop a 130-unit active adult (age-targeted) community. As part of the conditional request, the applicant is asking for a number of exceptions to the Davidson Planning Ordinance. These exceptions are detailed below.

### 2. PLANNING STAFF PRELIMINARY REVIEW

#### OVERVIEW

The applicant proposes a Conditional Planning Area Map Amendment for +/-74.8 acres currently zoned Neighborhood Edge (+/-49.8 acres) and Conditional (+/-24.87 acres). Per the DPO, the Conditional Planning Area is an option for developers to ask for exceptions from the ordinance in a manner that is mutually agreeable to the developer and the Town of Davidson. River Run Ltd.'s proposal includes 130 age-targeted homes on 52'-wide lots with +/-41.4 acres (55.7 percent) open space. The purpose of tonight's discussion is to determine if the Board of Commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (rezoning) process.

#### NEIGHBORHOOD EDGE PLANNING AREA

The Neighborhood Edge Planning Area (NE) was established to provide a transition between Davidson's urban areas and its rural periphery (DPO 2.2.11). Development in this planning area is low-density residential consisting primarily of single-family homes. Transportation systems, with an emphasis on

greenways and bicycle or multi-use paths, should be evaluated to improve connectivity without jeopardizing sensitive natural features or viewsheds.

The Neighborhood Edge Planning Area permits both detached homes (single-family and duplex) and attached homes (triplex and quadplex) as approved building types (DPO 2.2.11.C). There are a range of development standards specific to each respective planning area, and some requirements pertain to building type. For instance, NE Planning Area requires that no more than 90 percent of the units in each new development to be single-family detached (excluding duplexes), and no more than 30 percent of the units in each new development shall be duplex detached houses or attached house (triplex and quadplex building types).

Similarly, the NE Planning Area also requires that in developments of greater than 50 units, a minimum of three different lot sizes are required with a minimum of 15' variation in lot width (DPO 2.2.11.E). Each lot size must comprise a minimum of 20 percent of the total lots. Also, a minimum of 35 percent of the lots must be 60' or less (requiring rear alley access).

The purpose of these building type variation requirements and lot width variation standards is to ensure that each new development provides a range of housing options for citizens. Many of these concepts have long been part of the ordinance (c. 2001); others were recently reinforced with the adoption of the Rural Area Plan (2016). Above all, the intent is to ensure that new development reflects Davidson core values and planning principles.

#### **TIMELINE**

Staff has been working with River Run Ltd. Partnership and SEPI since early 2018 as part of the informal conceptual design phase of the development proposal (DPO 14.3) ahead of a formal application submittal. Initial schematic concepts assumed NE Planning Area for all of the parcels. In June 2018, staff made the determination (based upon information from River Run Ltd. Partnership and consultation with the town attorney) that the existing parcel with the Conditional designation needed to be acknowledged. This required that the entire development proposal come under some "non-conditional" designation (i.e. NE Planning Area), or that the entire proposal come under a Conditional Planning Area. Both scenarios would require a rezoning. River Run Ltd. Partnership questioned this determination until September 2018.

In November 2018, the applicant expressed interest in pursuing a Conditional Rezoning of the entire property. Per development protocol, staff provides the opportunity for a pre-conditional consultation during a work session with the Board of Commissioners. The purpose of this consultation is for staff to provide a summary of the applicant's requested deviations from the ordinance so the board can make an informed decision as to whether or not the project has support to move forward. It also allows the applicant time to describe their project.

The Board of Commissioners discussed this project at their January 2019 work session. They continued the project formally (included on the agenda) at their February 2019 work session. In the months since, staff and the development team have met several times to formalize their conditional request. Additional information was solicited from the applicant.

#### **PROPOSED CONDITIONS**

With any conditional proposal, any deviation from the ordinance needs to be formally requested from the Board of Commissioners. An underlying zoning must be assumed to reference all deviations from the ordinance. In this case, Neighborhood Edge is the assumed underlying zoning.

The development team has augmented the required list of exemptions from the ordinance based upon staff feedback since the proposal was last discussed in February 2019. Some have been removed while others have been added.

Staff has summarized the exemptions below.

**PREVIOUS EXEMPTIONS WHICH THE DEVELOPER HAS ADDRESSED**

1. **Mix of Building Types.** Adjusted plans reflect requirement that no more than 90 percent of the units may be single-family detached and nor more than 30 percent of the units shall be duplex detached or attached. *Current detached homes: 80%*
2. **Small Lots.** Plans reflect DPO requirement that a minimum of 35% of the lots shall be 60’ or less. *All lots are 60’ or less.*
3. **Setbacks.** DPO specifies minimum 10’ front setback, 3’ side setback, and 20’ rear setback. Developer intends to comply with DPO setbacks.
4. **Berms.** Plans reflect the DPO prohibition of berms.
5. **Garage Location.** DPO Section 4.5.2.F.3 requires garages to be recessed from the front façade with specific dimensions. The applicant has expressed an intent to comply with this requirement. If this proposal moves forward, staff recommends adding a condition to ensure compliance.
6. **Affordable Housing.** The developer plans to provide a payment-in-lieu of affordable housing.
7. **Maximum Block Length.** The DPO limits maximum block length to 600’. The revised plan appears to comply with the requirement.
8. **Greenway Connections.** The DPO requires greenway connections every 600’.

**EXISTING AND NEW EXEMPTIONS REQUESTED**

	<b>DPO STANDARD</b>	<b>Condition Requested</b>
1.	<b>Mix of Lot Sizes.</b> <i>NE Planning Area requires that in developments of greater than 50 units, a minimum of three different lot sizes are required with a minimum of 15’ variation in lot width. Each lot size must comprise a minimum of 20 percent of the total lots.</i>	Two lot sizes proposed: Detached – 104 units (80%) Duplex – 26 units, 13 lots (20%)
2.	<b>Alley Access.</b> <i>DPO Section 6 requires that all lots less than 60’ be rear-accessed via an alley.</i>	No lots with alley access
3.	<b>Lot Frontage.</b> <i>DPO Section 4 requires that all developments that include or front on an existing street integrate that street into the development.</i>	Plans do not incorporate existing Shearer Rd. into design. Developer has highlighted preservation and enhancement of wooded frontage.
4.	<b>Garage Location.</b> <i>DPO Section 4.5.2.F.3 requires garages to be recessed from the front façade with specific dimensions. The applicant has expressed an intent to comply with this requirement. If this proposal moves forward, staff recommends adding a condition to ensure compliance.</i>	N/A
5.	<b>Driveway Curb Cuts.</b> <i>DPO Section 8.5.C.2 limits the width of driveways at the curb to 12’.</i>	Submitted drawings show driveways double the size.
6.	<b>Number of Driveways:</b> <i>Per DPO Section, only one driveway shall be permitted per lot except that a duplex quadplex on a corner lot may have one driveway on each fronting street.</i>	Submitted duplex plans show two driveways fronting the same street.

7.	<b>Driveway Separation.</b> <i>DPO Section 8.7.2, all driveways must maintain at least 15' separation from another driveway.</i>	Submitted drawings show driveways closer than this dimension.
8.	<b>External Connectivity.</b> <i>DPO Section 6 requires external vehicular connections every 600'.</i>	The plan shows one vehicular connection to the north when two are required. The plan shows a pedestrian connection.
9.	<b>Affordable Housing.</b> <i>The applicant has expressed an intent to provide payment-in-lieu. If this proposal moves forward, staff recommends adding a condition to ensure compliance with specified amount noted.</i>	N/A
10.	<b>Mid-Block Connections.</b> <i>The DPO requires mid-block connections on blocks greater than 300'.</i>	Revised plans show additional mid-block connections, but not full compliance.
11.	<b>Greenway Infrastructure.</b> <i>DPO Section 6 requires construction of greenway infrastructure as depicted on approved plans (specifically the Davidson Walks &amp; Rolls Active Transportation Plan). Adopted plans show key north/south routes, east/west routes, and connections to existing facilities.</i>	The plan depicts some greenway infrastructure, vital connections to adjacent parcels are not shown. The applicant proposes a \$500,000 contribution in lieu of construction.

## **RELATED TOWN GOALS**

There are several parts of the adopted Planning Principles, Comprehensive Plan, and Strategic Plan that address the proposed rezoning. These include:

### *PLANNING PRINCIPLES*

- **Principle 1 Character/Community:** *We must preserve Davidson's character and sense of community (compact developments with community open space; neighborhoods welcoming to all citizens; and neighborhoods as integral parts of town).*
- **Principle 3 Mobility:** *We must encourage alternative means of transportation (development and redevelopment in walkable, connected neighborhoods).*
- **Principle 4 Natural Resources:** *We must use our scarce land resources wisely*
- **Principle 5 Diversity:** *We must create an environment that fosters diversity (provide a mix of housing types and prices in each neighborhood).*
- **Principle 6 Growth Management:** *We must manage growth so that the town can provide public facilities and services apace with development (A healthy diversity of uses in walkable, compact neighborhoods; alternative transportation options between destinations).*
- **Principle 7 Quality of Life:** *We must enhance our quality of life through architecture and design (well-designed buildings; the design of public spaces to encourage social interaction).*

### *COMPREHENSIVE PLAN (2010)*

#### Theme: Promote Cultural, Socioeconomic, & Age Diversity

- **Goal – Encourage Development and Activities that Attract a Variety of Age Groups:** The town should require housing and commercial development appropriate for occupants of all ages and abilities.
- **Goal – Provide a Full Range of Services and Opportunities for All Socioeconomic Groups:** The town should continue requiring affordable housing in all new residential developments.

#### Theme: Maintain Quality Design & Sound Planning Principles

- **Goal - Prioritize Infill and Mixed-Use Development Within or Near Already Developed Areas:** The town should establish [areas identified in the Targeted Growth Plan] as the highest priority for infill development, redevelopment, and mixed-use.

Theme: Enable Faithful Stewardship of Natural and Historic Assets

- **Goal: Protect and Create Meaningful Open Space:** An open space plan should describe priority natural areas for preservation and enhancement.

Theme: Maintain Quality Design and Sound Planning Principles

- **Goal: Insure Compatibility and Connectivity of New Development with Surrounding Context**

### *STRATEGIC PLAN (2018)*

Land Use Strategy: The Town of Davidson will align land use policies... to manage residential growth and reduce the scale of future development.

### 3. FYI OR RECOMMENDED ACTION

The purpose of tonight’s discussion is to better understand the viability of the Map Amendment (i.e. rezoning) request prior to initiating the official Map Amendment process. Board feedback is integral to this process.

Staff has conducted a preliminary review based upon information provided by the development team. At this time, staff would not recommend that this development move forward with the map amendment process. The applicant is asking for a significant number of exceptions to the ordinance. Many of these requested exceptions stand in stark contrast to some of the basic tenets of the ordinance and planning principles – a variety of housing options, pedestrian-centric design, connectivity, well-defined central public spaces, and accessible open space. On-site greenway connections are a baseline. Off-site greenway connections are potential benefits of the Conditional Planning process. Both are missing.

The purpose for the Conditional Planning Area is to create additional controls outside the ordinance to allow for innovative planning/design. Insuring quality development is integral to this process. It is staff’s determination that this proposal falls short of this expectation.

### 4. PROCESS/NEXT STEPS

TBD.

### 5. RESOURCES & ATTACHMENTS

Resources: Links to referenced policy documents.

- Davidson Planning Ordinance (2015): <http://www.ci.davidson.nc.us/DocumentCenter/View/8499>
- Comprehensive Plan (2010): <http://www.townofdavidson.org/340/Davidson-Comprehensive-Plan>

Site Plans/Building Renderings:

- Proposed Schematic Concept Plan (SEPI)



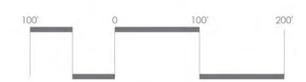
Site Data		07-01-2019
Site Area		+/- 74.8 ac
Lots		+/- 130 du
	▪ Detached Homes - 104 Homes (80%)	
	▪ Duplex Homes - 26 Homes / 13 Lots	
Density		+/- 1.73 du/ac
Open Space Required (45%)		+/- 33.6 ac
Open Space Provided (55.7%)		+/- 41.7 ac
<b>Lot Sizes</b>		
	▪ Detached Homes: 52' Minimum Lot Width	
	▪ Duplex Homes: 104' Minimum Lot Width/Duplex	
<b>Lot Setbacks</b>		
	▪ Front: 20'	
	▪ Side: 5'/side	
	▪ Rear: 20'	
	▪ Side (Corner Lot): 10'	

THIS PLAN IS PRELIMINARY AND IS SUBJECT TO CHANGE

CONCEPT PLAN

RIVER RUN PHASE VI | DAVIDSON, NC

DATE: JULY 15, 2019





# RIVER RUN PH. 6

## CONDITIONAL PLANNING AREA

### MAP AMENDMENT

# PRE-DEVELOPMENT CONSULTATION



College Town. Lake Town. *Your Town.*

River Run Ph. 6 Conditional Map Amendment  
Board of Commissioners Work Session  
Jason Burdette, Planning Director  
August 13, 2019



# RR6 CONDITIONAL MAP AMENDMENT

## **PRESENTATION OVERVIEW**

- 1. Request/Overview:** General Plan Details
- 2. Background:** Neighborhood Edge Planning Area/Comparisons
- 3. Timeline:** Evolving Plans
- 4. Proposed Conditions:** Developer-Requested Exemptions
- 5. Related Town Goals:** Planning Principles
- 6. Process Options/BOC Direction:** Alternatives Overview
- 7. Questions:** Follow Up + Discussion



# SITE CONTEXT



# SITE CONTEXT





# RR6 CONDITIONAL MAP AMENDMENT

## REQUEST / OVERVIEW

- **Applicants:** River Run Limited Partnership
  - Additional Partners: Sepi Engineering, EPCON Communities
- **Acreage/Parcels:** +/- 74.8 Acres (3 Parcels, NEPA/CPA Zoning)
- **Number of Units:** 130
- **Target Buyers:** Active Adult
- **Details:**
  - Lots: 104 Single-Family Detached; 13 Duplex (26 d/u)
  - Open Space: 55% Provided; 45% Required (Caveats: Main Parcel, Floodplain)

# PROPOSED PLAN



**Site Data** 07-01-2019

Site Area	+/- 74.8 ac
Lots	+/- 130 du
<ul style="list-style-type: none"> <li>• Detached Homes - 104 Homes (80%)</li> <li>• Duplex Homes - 26 Homes / 13 lots</li> </ul>	
Density	+/- 1.73 du/ac
Open Space Required (45%)	+/- 33.6 ac
Open Space Provided (55.7%)	+/- 41.7 ac
<b>Lot Sizes</b>	
<ul style="list-style-type: none"> <li>• Detached Homes: 51' Minimum Lot Width</li> <li>• Duplex Homes: 101' Minimum Lot Width/Duplex</li> </ul>	
<b>Lot Setbacks</b>	
<ul style="list-style-type: none"> <li>• Front: 20'</li> <li>• Side: 5'/side</li> <li>• Rear: 20'</li> <li>• Side (Corner Lot): 11'</li> </ul>	

Shearer Rd

# PROPOSED ELEVATIONS



# PROPOSED ELEVATIONS



# PROPOSED ELEVATIONS



# PROPOSED ELEVATIONS



# PROPOSED ELEVATIONS





# NEIGHBORHOOD EDGE PLANNING AREA

## STANDARD REQUIREMENTS

- **Transition Area:** Primarily Residential (DPO 2.11.1)
  - Housing Mix: 90% Single-Family Max., 10% 2-4 Unit Min.
  - Lot Diversity: Min. 3 Diff. Lots/50+ Units, Min. # Alley Lots
  - Reflects Planning Principles, RAP
- **Transportation:** Interconnectivity/Greenways Emphasized
- **Open Space:** Min. 45% Req.
- **Environmental:** Viewshed/Natural Corridor Protection



# COMPARISON – SAME SITE





# RR6 CONDITIONAL MAP AMENDMENT

## PROCESS HIGHLIGHTS / PLAN EVOLUTION

- **Initial Meeting:** February 2018
- **Incomplete Application:** March 2018 [NEPA Req. Not Met]
- **Initial Concept Plan Submitted:** May 2018
- **Iterative Review/Revisions:** May - September 2018 [Reqs. Nearly Met]
  - **Conditional Planning Area Identified:** June 2018
- **Full Conditional Rezoning Interest Expressed:** November 2018
- **Initial BOC Work Session Planning:** January 2019 [Incomplete Materials]
- **BOC Work Session:** February 2019 [Complete Materials Provided Jan. 2019]
- **Developer/Staff Meetings:** March-July 2019



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River Run Ph. 6 Conditional Map Amendment  
Board of Commissioners Work Session  
Jason Burdette, Planning Director  
August 13, 2019



# RR6 CONDITIONAL MAP AMENDMENT

## DEVELOPER-REQUESTED EXEMPTIONS

1. **Mix of Lot Sizes:** 2 Provided, 3 Req.
2. **Alley Access:** None provided; Req. on lots <60
3. **Street Fronting Buildings:** Req., Shearer Lots Non-Compliant
4. **Driveway Curb Cuts:** Limits to 12'; Non-Compliant
5. **Number of Driveways:** One per lot, Duplex lots have 2
6. **Driveway Separation:** 15' Separation Req.; Non-Compliant
7. **Connectivity:** Missing Req. Road
8. **Mid-Block Connections:** Cannot exceed 300'; Partial compliant
9. **Greenway Infrastructure:** DPO req. construction; Partial construction and \$500k PIL proposed



# GREENWAY CONTEXT



PROPOSED SITE

Cabarrus

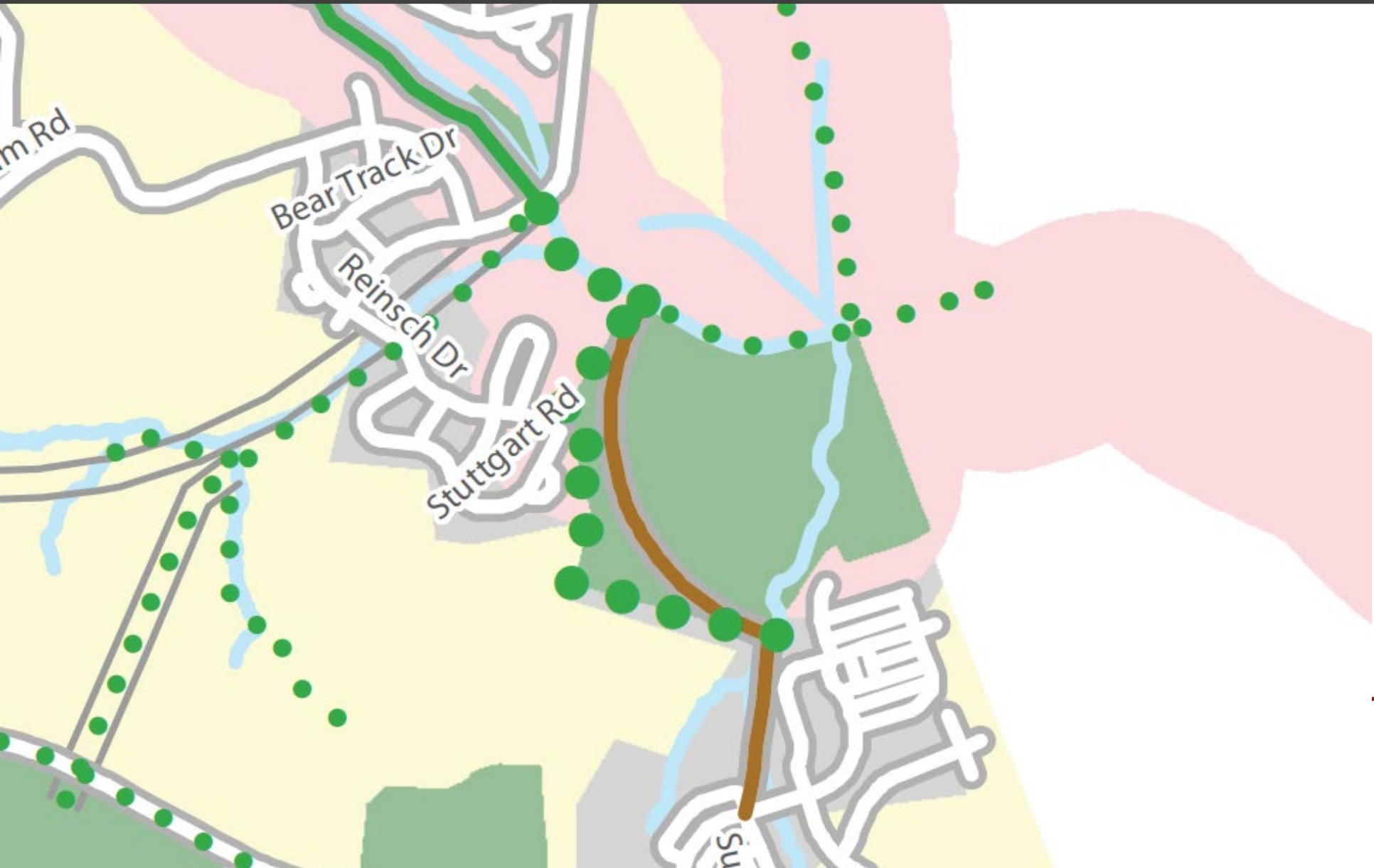
Davidson

RIVER RUN PHASE 5

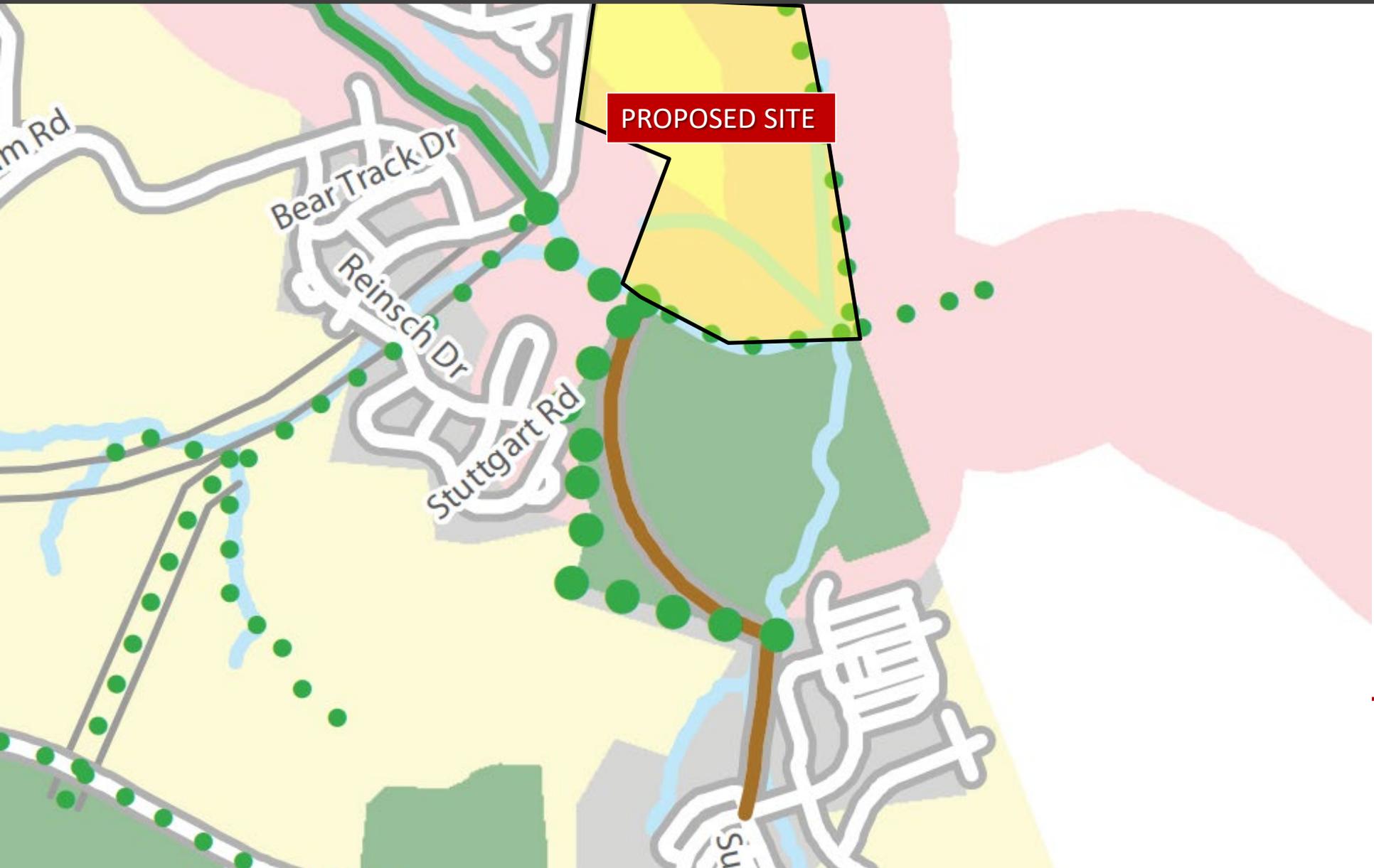
WEST BRANCH NATURE PRESERVE

SUMMERS WALK

# GREENWAY CONTEXT



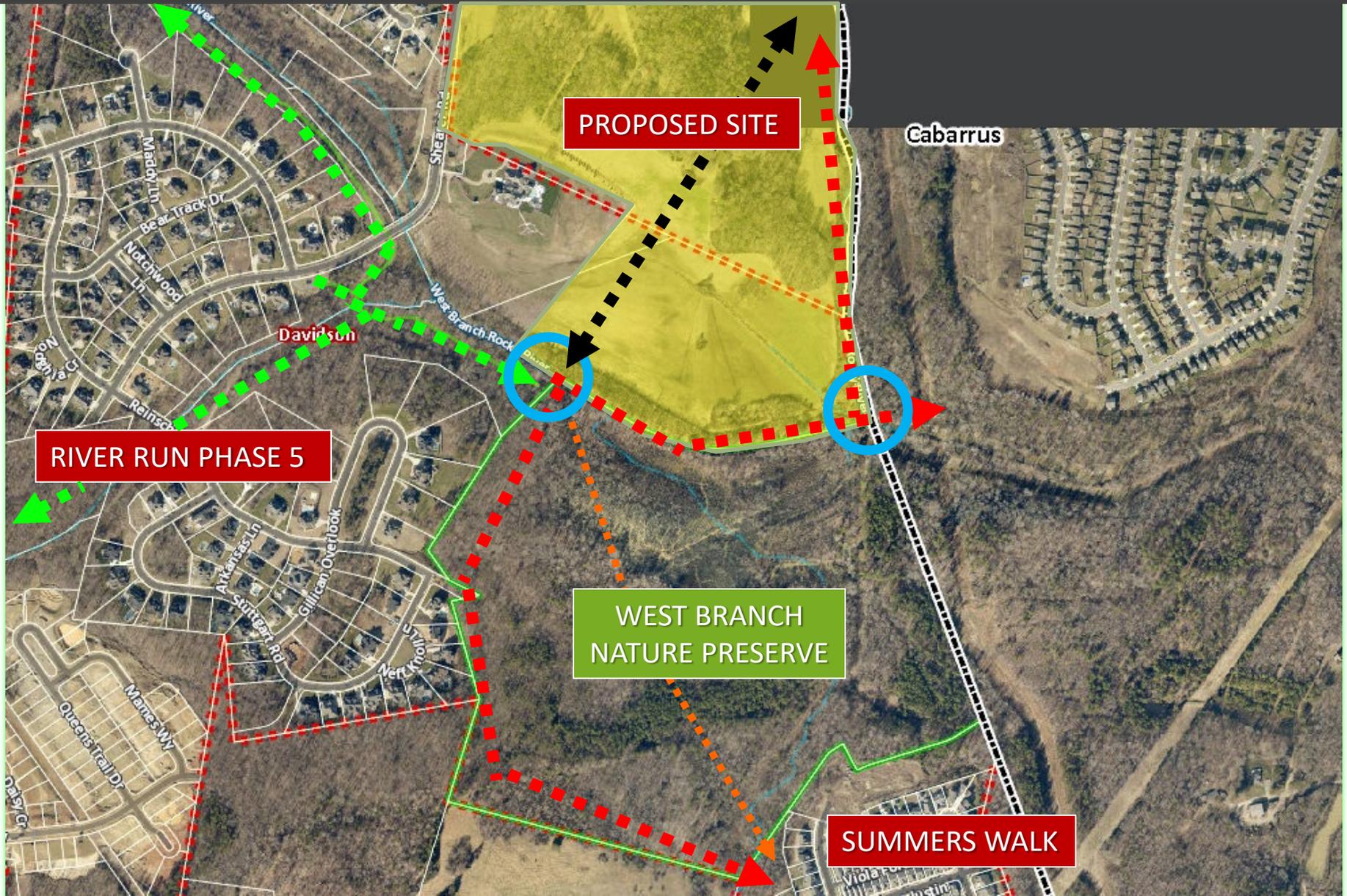
# GREENWAY CONTEXT



# FUTURE GREENWAY CONTEXT



# FUTURE GREENWAY CONTEXT





# TOWN RELATED GOALS

## PLANNING PRINCIPLES

- **PP1 Character/Place:** Compact Dev., Community Open Space);
- **PP3 Mobility:** Encourage Alt. Means of Transportation – Walkable, Interconnected Neighborhoods);
- **PP4 Land Resources:** Use Wisely (Preserve Views, Trees)
- **PP 5 Diversity:** Housing/Price Mix
- **PP6 Manage Growth:** Provide Adequate Services/Facilities;
- **PP 7 Quality of Life:** Buildings/Places Encourage Interaction



# PROCESS OPTIONS

## BOC DIRECTION REQUESTED

### ▪ **Option A (Conditional Map Amendment):**

- Based on Proposed Plan or Modified Plan
- Master Plan Requests Exemptions, Requires Rezoning of NEPA to CPA
- Extensive Negotiations Required + Process (Public Input, Planning Board Rec., TIA)
- Conditions require BOC approval

### ▪ **Option B (Do Not Develop):**

- Development of this site does not have support to move forward in CPA process

### ▪ **Option C (Develop Neighborhood Edge Parcel Exclusively):**

- No rezoning required
- Administrative approval (Public Input, Planning Board Rec., TIA, etc.)





# QUESTIONS



College Town. Lake Town. *Your Town.*

River Run Ph. 6 Conditional Map Amendment  
Board of Commissioners Work Session  
Jason Burdette, Planning Director  
August 13, 2019



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**Agenda Title: CFA Church Pre-Conditional Consultation  
Planning Director Jason Burdette**

**Summary:** CFA Church proposes a Conditional Map Amendment (rezoning) for 261 Griffith Street (Sadler Square Shopping Center) from Village Commerce Planning Area to Conditional Planning Area. The purpose of the rezoning would be to permit a religious use in the space formerly occupied by Healthy Home Economist grocery store.

The purpose of tonight's discussion is to determine if the Board of Commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (rezoning) process. No formal action will be taken.

**Summary:**

---

**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
▢	Agenda Memo - CFA Church Pre-Conditional Consultation 08.13.19	8/9/2019	Cover Memo
▢	Attachment - Site Plan CFA Church 04.01.19	8/9/2019	Backup Material
▢	Presentation - CFA Church Pre-Conditional Consultation 08.13.19	8/9/2019	Presentation



## STAFF ANALYSIS

Date: August 13, 2019  
To: Board of Commissioners  
From: Jason Burdette, Planning Director  
Re: CFA Church, Conditional Planning Area Map Amendment

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### 1. INTRODUCTION

#### APPLICANT INFO

- **Owner(s):** Sadler Square Davidson Limited Partnership
- **Applicant:** CFA Church
- **Site Designer:** LS3P; Cole Jenest & Stone
- **Location(s):** 261 Griffith Street (Parcel ID: 00325506)
- **Planning Area(s):** Village Commerce
- **Area:** +/- 3.71 acres

#### REQUEST

The applicant proposes to re-designate approximately 3.71 acres located on Griffith Street (Sadler Square Shopping Center) from Village Commerce to Conditional Planning Area.

### 2. PLANNING STAFF PRELIMINARY REVIEW

#### OVERVIEW

The applicant proposes a Conditional Planning Area Map Amendment for +/- 3.71 acres currently zoned Village Commerce Planning Area. The Davidson Planning Ordinance (DPO) allows the Conditional Planning Area as an option for developers/property owners to ask for exceptions from the ordinance in a manner that is mutually agreeable to the developer and the Town of Davidson.

The request includes one parcel, 261 Griffith Street (Sadler Square Shopping Center). The applicant proposes to renovate the currently vacant space previously occupied by the Healthy Home Economist grocery store (+/-20,000 sf). The proposed renovation includes an auditorium with seating for 350, classrooms for children and youth, offices, and potentially a kitchen to provide meals to those in need.

The purpose of tonight's discussion is to determine if the Board of Commissioners would like to see this proposed conditional rezoning move through the formal Conditional Planning Area Map Amendment (i.e. rezoning) process.

## BACKGROUND

CFA Church began leasing space from Our Town Cinema at Sadler Square. Religious institutions are not a permitted use in the Village Commerce Planning Area. However, the church is operating under a temporary use permit which identifies the use as secondary to the primary use and requires annual renewal. Religious institutions are permitted by the DPO within eight of the town's 16 standard planning areas with additional requirements.

Per the DPO, these additional requirements pertain to those uses which fall under the "Places of Assembly" definition and are specific to elementary schools, secondary schools, and religious institutions. No point of property used for a Place of Assembly shall be located nearer than 1,320 feet (1/4 mile) from any other substantially similar Place of Assembly.

There are three existing religious institutions located within 1,320 feet of the proposed CFA Church. All were located at their current sites prior to the adoption of the separation requirement and the current zoning.

Per the DPO, the Village Commerce Planning Area is established to create a strong emphasis on development and redevelopment of commercial, retail, and residential land uses. Development should generate a dense mix of retail frontage. Provisions for pedestrians, bicyclists, and transit riders are essential to the success of the Village Commerce Planning Area.

## REQUESTED CONDITIONS

CFA Church requests a conditional map amendment for the following reasons:

- **Allowing the Religious Institution use at 261 Griffith Street.** This parcel is located in the Village Commerce Planning Area which does not allow religious institutions.
- **Allowing the Place of Assembly to be located within 1,320 feet of similar Places of Assemblies.** When religious institutions are permitted by the DPO, they are permitted with additional requirements. As described above, these additional requirements mandate a ¼ mile separation between similar uses.
- **Additional conditions to consider?** Through the Conditional Planning Area Map Amendment process, the Board of Commissioners may attach additional conditions to an approval. These could include transit amenities, tree plantings, sidewalk improvements, among others.

## RELATED TOWN GOALS

### PLANNING PRINCIPLES

- **Principle 1 Character/Community:** *We must preserve Davidson's character and sense of community* (compact developments with community open space; neighborhoods welcoming to all citizens; and neighborhoods as integral parts of town).
- **Principle 2 Unique Downtown:** *We must preserve and enhance Davidson's unique downtown* (social and civic center; provide a variety of retail and services; mixed uses; maintain and increase walkability/bikability).

### COMPREHENSIVE PLAN (2010)

**Chapter 3 Goals and Recommendations:** Goal 5 (Page 56) Provide Support and Space for Churches, Religious Institutions, Childcare Services, and Community Centers

**Chapter 3 Goals and Recommendations:** Goal 1 (Page 65) Prioritize Infill and Mixed-Use Development Within or Near Already Developed Areas

### 2018-2019 STRATEGIC PLAN

Historic Preservation Strategy: The Town of Davidson will preserve our historically significant structures to retain our authenticity as a historic, small college town.

Economic Development Strategy: The Town of Davidson will use existing assets and manage growth to encourage an appropriate mix of residential and commercial development. Focus on commercial growth.

### **STAFF CONCERNS**

While recognizing that religious institutions are a valuable component of Davidson, the applicant's request is specific to a site specifically identified as commercial/retail. Numerous plans, visioning exercises, and ordinances speak to the need for vibrant retail centers that enhance the pedestrian realm. This proposal falls short of those expectations. Committing the space to a religious use for the long-term would limit future commercial/retail opportunities on the site.

### **3. FYI OR RECOMMENDED ACTION**

The applicant is meeting with the board of commissioners to understand the viability of the Map Amendment (i.e. rezoning) request prior to initiating the official Conditional Map Amendment process. The purpose of tonight's discussion is to determine whether the board of commissioners would like to see this proposed rezoning move through the formal Map Amendment (i.e. rezoning) process. The board of commissioners should provide direction to the applicant as to whether they believe the proposed rezoning to Conditional Planning Area to be a reasonable request worth pursuing further.

### **4. PROCESS/NEXT STEPS**

Assuming affirmative responses at each point in the process:

- **BOC Pre-Development Consultation:** August 2019
- **Conditional Map Amendment Application:** Fall 2019
- **Rezoning Process/BOC Approval:** Winter/Spring 2020
  - Includes Public Hearing and Planning Board Recommendation

### **5. RESOURCES & ATTACHMENTS**

#### **RESOURCES**

- Davidson Planning Ordinance (2015): <http://www.ci.davidson.nc.us/DocumentCenter/View/8499>
- Comprehensive Plan (2010): <http://www.townofdavidson.org/340/Davidson-Comprehensive-Plan>

#### **ATTACHMENTS**

- Proposed Site Plan (LS3P, Cole Jenest & Stone)

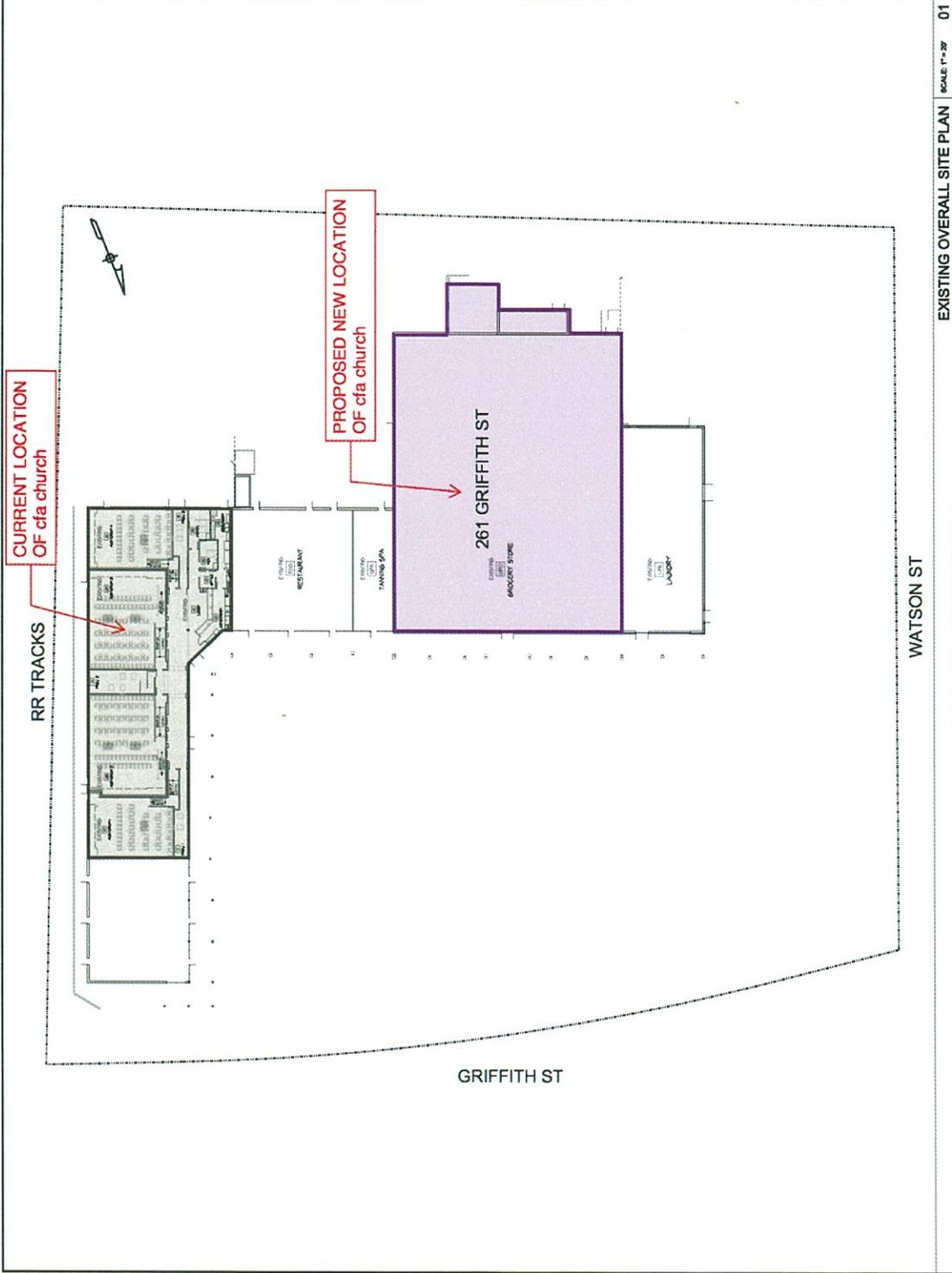


# SADLER SQUARE SHOPPING CENTER

281 GRIFFITH STREET  
DAVIDSON, NC

EXISTING OVERALL SITE PLAN

29 MAY 2019



EXISTING OVERALL SITE PLAN SCALE 1" = 20' 01

29,000 sf.



# CFA CHURCH DAVIDSON

## CONDITIONAL PLANNING AREA

### MAP AMENDMENT

## PRE-DEVELOPMENT CONSULTATION



College Town. Lake Town. *Your Town.*

CFA Church Davidson Conditional Map Amendment  
Board of Commissioners, Work Session  
Jason Burdette, Planning Director  
August 13, 2019

# SITE CONTEXT

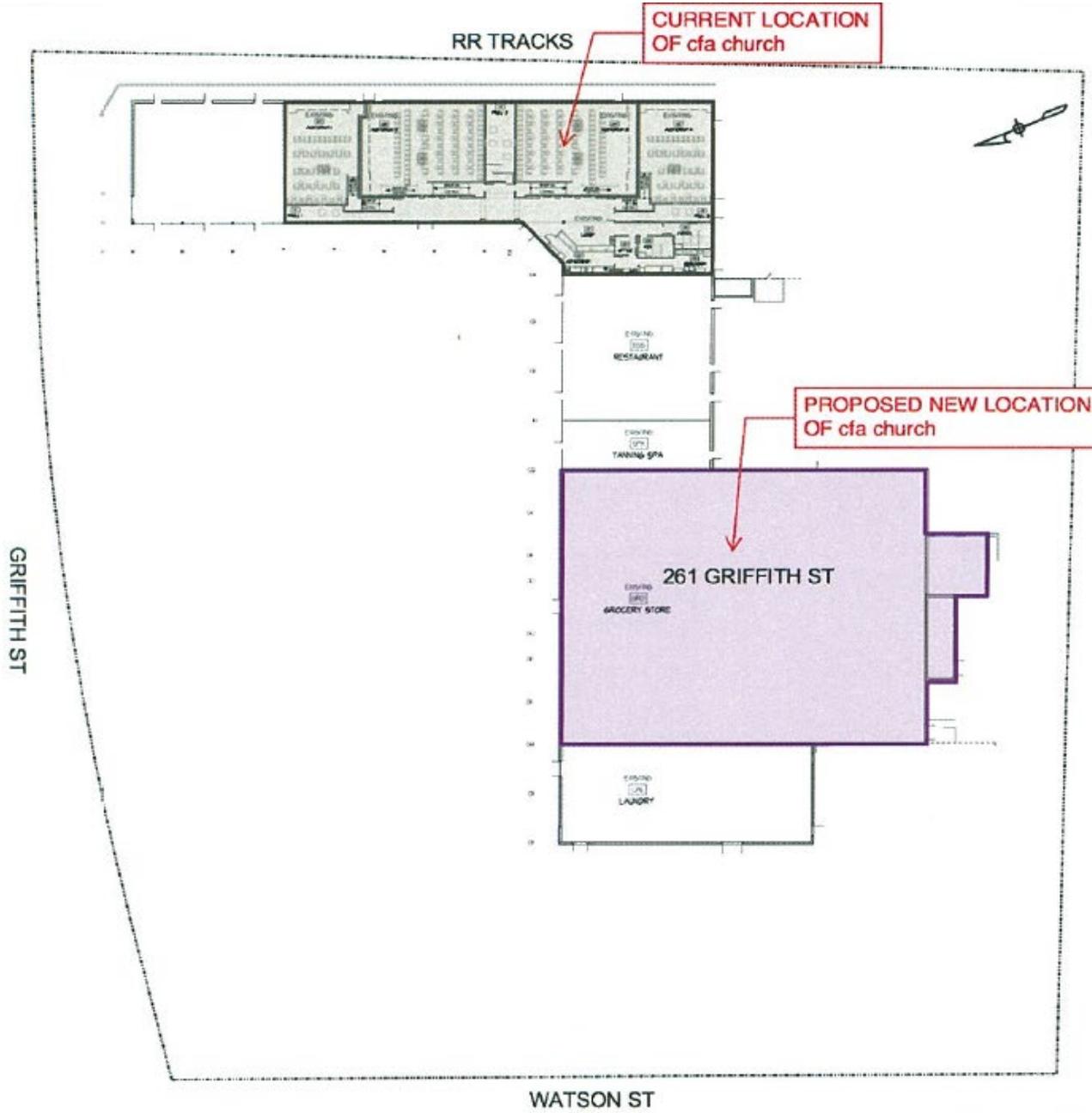


# CFA CHURCH CPA

## REQUEST / OVERVIEW

- **Current Owner(s):** Sadler Square Ltd.
  - Applicant: CFA Church
  - Site Designer: LS3P, Cole Jenest & Stone
- **Acreage/Parcels:** +/- 3.71 Acres (1 Parcel)
- **Zoning:** Village Commerce Planning Area
- **Existing Context:**
  - \* +/-37,300 sf commercial center
  - \* CFA leases space from Our Town Cinema on Sundays
  - \* +/-20,000 sf vacant grocery space

# PROPOSED PLAN



SADLER  
SQUARE  
SHOPPING  
CENTER

261 GRIFFITH STREET  
DAVIDSON, NC

EXISTING  
OVERALL SITE PLAN

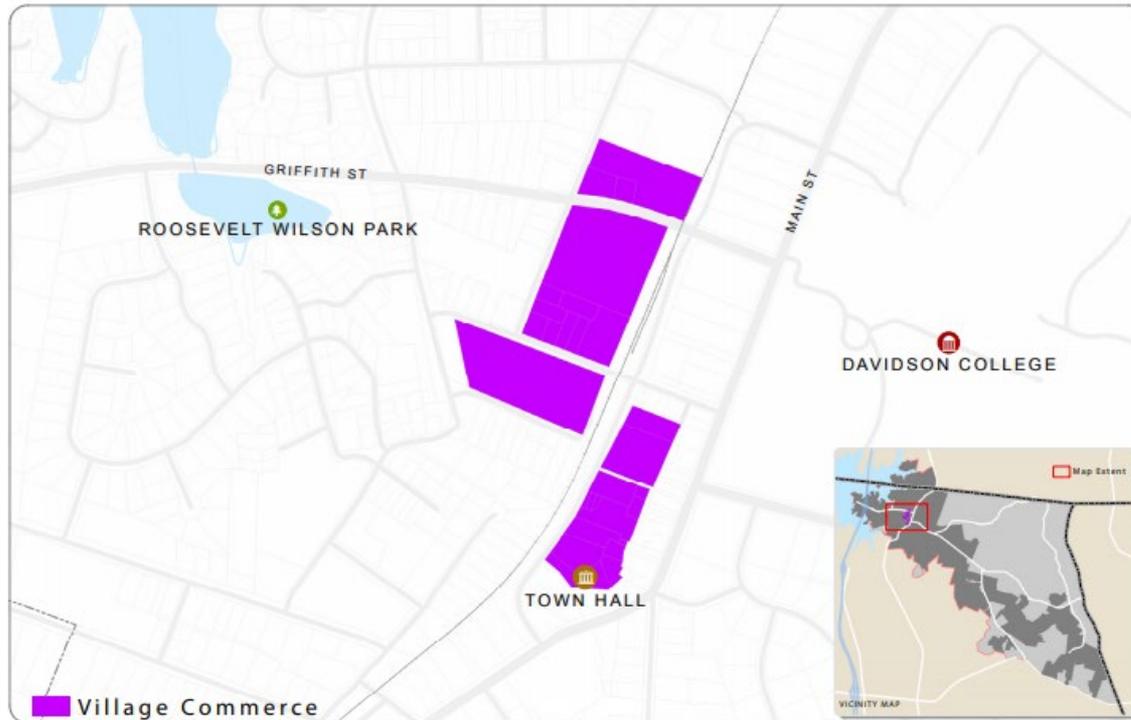
29 MAY 2019

# CFA CHURCH CPA

## REQUESTED CONDITIONS

- **Religious Institution Use in Village Commerce Planning Area:**
  - Condition to allow the religious institution use in the Village Commerce Planning Area
- **Religious Institution Separation Requirement (DPO 3.2.31):**
  - Condition to allow a religious institution to locate within ¼ mile of another religious institution (three located within ¼ mile)
- **Others to Consider?**

# VILLAGE COMMERCE PLANNING AREA



- Strong emphasis on redevelopment of commercial/retail
- Dense mix of retail frontage
- Provisions for pedestrians, bicyclists, and transit

## 2.2.2 VILLAGE COMMERCE PLANNING AREA

# QUESTIONS



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**Agenda Title:** Consider Approval of Resolution 2019-38 to authorize the purchase of 211 Lakeside Drive, 145 Mock Road, 144 Mock Circle, and 202 Mock Road and approve Budget Amendment 2020-08 for \$820,000 plus related expenses  
**Town Manager Jamie Justice**

**Summary:** The Town of Davidson is purchasing four properties to be included in the town's affordable housing program.

**Summary:**

---

**ATTACHMENTS:**

	<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
□	Agenda Memo - Purchase of 4 homes for affordable housing 08.13.19	8/9/2019	Cover Memo
□	Draft - Resolution 2019-38 Purchase of 4 homes for affordable housing 08.13.19	8/9/2019	Resolution Letter



## Purchase of homes for affordable housing

To: Davidson Board of Commissioners  
From: Cindy Reid  
Date: August 13, 2019  
Re: Purchase of homes for affordable housing

---

### 1. OVERVIEW

The Town Board of Commissioners desires to purchase four homes for the purpose of preserving those homes as affordable. The addresses are 202 Mock Road, 145 Mock Road, 144 Mock Circle, and 211 Lakeside. The purchase price for all four homes is \$820,000. The sellers have asked that we schedule a closing date before August 27, 2019.

### 2. RELATED TOWN GOALS

The Town of Davidson will preserve existing affordable housing,\* and other indicia of inclusion, and work with a variety of partners to create new available, affordable workforce and elderly housing.

\*Affordable housing for the Town of Davidson is defined as incomes between 50% and 120% AMI.

Davidson's historic mix of people in all income levels and ages is fundamental to our community, so town government will encourage opportunities, services, and infrastructure that allow people of all means to live and work here.

These homes will be rented or sold to households with incomes between 50% and 80% AMI.

### 3. OPTIONS/PROS & CONS

Pro- preserves four homes as affordable.

Con- ties up a significant amount of PIL funds until the homes are re-sold.

### 4. FYI or RECOMMENDED ACTION

Approve the Resolution authorizing purchase.

### 5. NEXT STEPS

If approved, closing is on or before August 27, 2019.



**RESOLUTION 2019-38**

**RESOLUTION APPROVING THE PURCHASE OF REAL ESTATE FOR THE PURPOSE OF PRESERVING THE PROPERTY AS AFFORDABLE HOUSING**

**Whereas**, the Town Board of Commissioners desires to purchase and acquire real estate located at 202 Mock Road, 145 Mock Road, 144 Mock Circle, and 211 Lakeside Avenue, for the purchase price of \$820,000.00 plus closing costs; and

**Whereas**, the Town Board of Commissioners is authorized by N.C.G.S. 160A-456(b) to exercise directly those powers granted by law to a housing authority;

**Whereas**, acting under the powers granted to it, the Town may undertake any activity that is undertaken by a housing authority; and

**Whereas**, housing authorities may purchase, develop, maintain, and preserve property for affordable housing; and

**Whereas**, the properties being purchased by the Town are for the purpose of maintaining and preserving homes as affordable housing.

**NOW THEREFORE, BE IT RESOLVED BY THE TOWN BOARD AS FOLLOWS:**

1. The purchase of property located at 202 Mock Road, 145 Mock Road, 144 Mock Circle, and 211 Lakeside Avenue is approved for the price of \$820,000.00 plus closing costs; and
2. The Town Manager is authorized to execute any documents necessary for these transactions.

**This resolution is effective this \_\_\_\_\_, 2019.**

Attest:

\_\_\_\_\_  
Rusty Knox, Mayor  
Town of Davidson

\_\_\_\_\_  
Elizabeth K. Shores, Town Clerk



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**Agenda      Miscellaneous/Open Discussion**

**Title:**      **Summary:** This is an opportunity for commissioners to present or discuss any topics not previously listed on the agenda.

**Summary:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
No Attachments Available		