

**CONSIDER OPTIONS FOR THE  
 FORDHAM BOULEVARD SIDEPATH PROJECT**  
 Prepared by Chapel Hill Planning and Parks & Recreation Departments

**Background:**

The [Fordham Boulevard Sidepath<sup>1</sup>](#) is a federally-funded project to upgrade the existing sidepath between Cleland Drive and Ridgefield Road and construct a new sidepath between Ridgefield Road and Willow Drive. Council approved funding in 2016. Design for the project started in early 2018. The design progressed to 30% plans and has been paused since summer 2018 in order to address concerns raised by residents of the Little Ridgefield neighborhood, directly adjacent to the proposed path.

**Overview of Options:**

There are currently three design alternatives for the segment of the project between Ridgefield Road and Willow Drive:

<u>Alternative</u>	<u>Features</u>	<u>Pros</u>	<u>Cons</u>
Option 1/2	<ul style="list-style-type: none"> <li>• 10’ multiuse path along Fordham Blvd.</li> <li>• Entirely within NCDOT right-of-way</li> <li>• Exact alignment of path will depend on safety mechanisms incorporated</li> </ul>	<ul style="list-style-type: none"> <li>• Most direct route for users</li> <li>• NCDOT-approved scope</li> <li>• ADA compliant</li> </ul>	<ul style="list-style-type: none"> <li>• Some loss of vegetative buffer</li> <li>• Potential conflict with turning vehicles</li> </ul>
Option 3	<ul style="list-style-type: none"> <li>• ‘Shared street’ through neighborhood</li> <li>• 10’ multiuse path along Ridgefield Rd.</li> <li>• No sidewalk on Hickory Dr.</li> </ul>	<ul style="list-style-type: none"> <li>• More cost effective than other options</li> <li>• Maintains vegetative buffer</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrians and bicyclists in the street</li> <li>• NCDOT funding not guaranteed</li> <li>• Not most direct route</li> <li>• Not ADA compliant</li> </ul>
Option 4	<ul style="list-style-type: none"> <li>• ‘Shared street’ through neighborhood</li> <li>• 10’ multiuse path along Ridgefield Rd.</li> <li>• Sidewalk on one side of Hickory Dr.</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrians have dedicated facility</li> <li>• Maintains vegetative buffer</li> <li>• ADA compliant</li> </ul>	<ul style="list-style-type: none"> <li>• No dedicated bicycle facility</li> <li>• NCDOT funding not guaranteed</li> <li>• Not most direct route</li> </ul>

<sup>1</sup> <https://www.townofchapelhill.org/town-hall/departments-services/parks-and-recreation/planning-and-development/fordham-boulevard-sidepath-project/-fsiteid-1>

## Staff Memorandum

Council Meeting – 2/26/2020

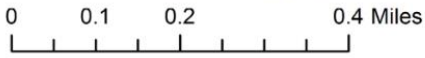
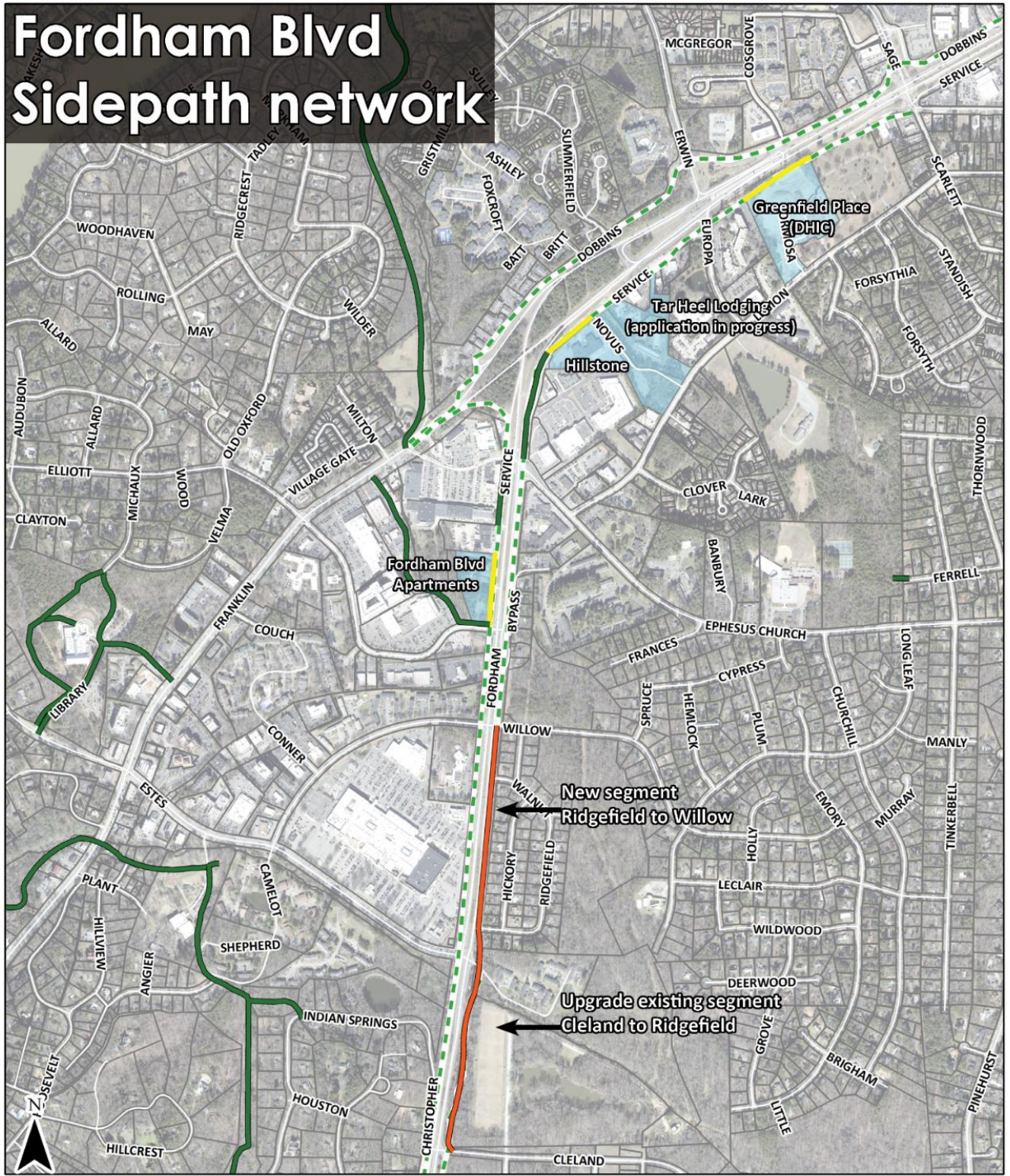
### **Connectivity:**

The Chapel Hill [Mobility and Connectivity Plan \(2017\)](#)<sup>2</sup> calls for multi-modal sidepaths along both sides of Fordham Boulevard from Europa Drive to South Columbia Street. Segments of this multi-modal path are being constructed as development occurs along the US 15-501 corridor. The NCDOT 2020-2029 State Transportation Improvement Plan (STIP) allocates federal funding in 2022 to design and construct sidepaths on both sides of Fordham to fill in the gaps between Willow Drive and Old Durham Road, completing the off-road network in that part of town. This project is an integral part of the larger bicycle/pedestrian network in this part of Town, providing connectivity and access where there currently is none.

The map below shows the Fordham Boulevard sidepath network, including the built segments, segments that are approved or under construction, and the segments that are planned but unfunded in the Mobility and Connectivity Plan. The second map shows all of the bike facilities and greenways in this general area of Town, intended to illustrate how this particular project fits into a much larger network.

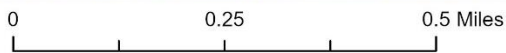
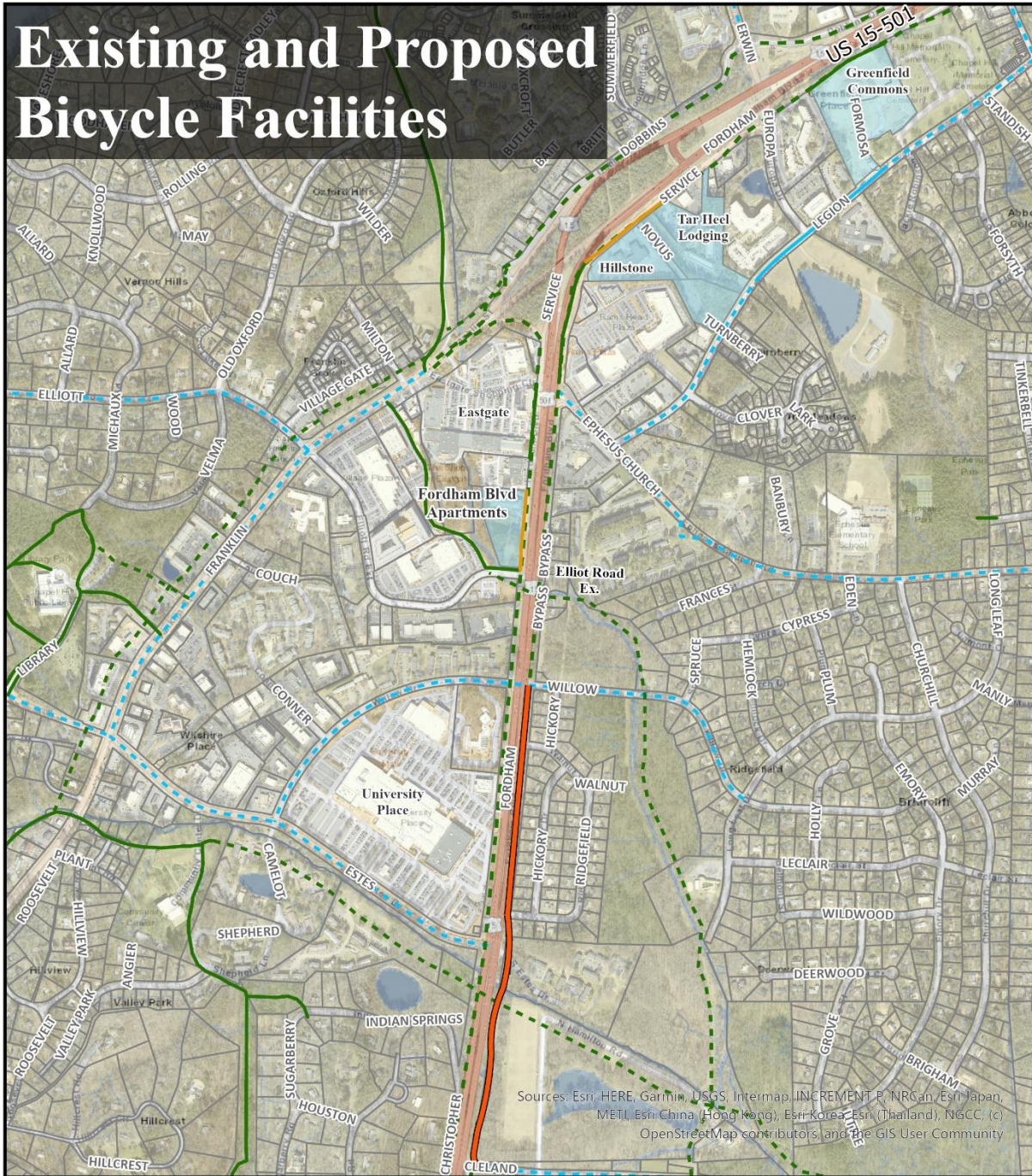
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<sup>2</sup> <https://www.townofchapelhill.org/residents/transportation/bicycle-and-pedestrian/chapel-hill-mobility-and-connectivity-plan>

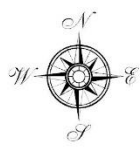


Map prepared by Planning and Development Services  
 Town of Chapel Hill  
 October 22, 2018

- Town Project: improve and extend sidepath
- Existing Greenways and sidepaths
- Sidepath: approved or under construction
- Planned Fordham Sidepath Network



Prepared 2/19/2020  
 GIS and Analytics  
 Town of Chapel Hill  
 Data sources: Town of Chapel Hill Transportation Planning,  
 Town of Chapel Hill Enterprise Geographic Information  
 System



- Town Project: improve and extend sidepath
- Sidepath: approved or under construction
- Existing Bike Lane
- Existing Greenway
- - - Proposed Bike Lane
- - - Proposed Greenway

### Proposed Design Alternatives:

The path currently has three potential designs– one that runs in the NCDOT right-of-way adjacent to Fordham Boulevard, and two that are variations of a ‘shared street’ concept that direct users onto low-volume Hickory Drive. For purposes of this memorandum and Council meeting we combined two slightly different designs for the Sidepath running along Fordham into one option, understanding that the design will need to be updated if we end up pursuing that option.

### Cleland Drive to Ridgefield Road:

The proposed reconstruction of the existing 1,800 ft. section of sidepath from Cleland Drive to Ridgefield Road is the same in all three options. This section would be widened and rebuilt to meet modern standards for design of multi-modal paths.



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## Ridgefield Road to Willow Drive Option 1/2:



### Features of Option 1/2

- 10 foot wide concrete path similar to the Town’s greenway trail sections and other sidepaths along Fordham Boulevard.
- Entirely within the NCDOT right-of-way.
- Crosses side streets either flush with Fordham Boulevard or some distance back (20-25 feet), whichever is ultimately deemed to be safest for users.
- Includes raised and/or painted crosswalks at Ridgefield Road and Walnut Street.
- Design may include additional traffic calming measures to reduce conflict points.

### Pros of Option 1/2

- Raised crosswalks would force drivers to decelerate as they enter the neighborhood from Fordham Boulevard. Design may include additional traffic calming measures.
- Designed landscape buffer would replace some of the vegetation lost during construction.
- Fences can be installed along property lines for those property owners who want them.
- ADA compliant.

### Cons of Option 1/2

- Construction of the path would require removal of some existing vegetation within the NCDOT right-of-way. As much as possible would be replanted around the path.
- A portion of the landscape buffer would be permanently lost and replaced with trail.

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## Ridgefield Road to Willow Drive Option 3:



### *Features of Option 3*

- Approximately 170 feet of 10 foot wide concrete multiuse path along Ridgefield Road between Fordham Boulevard and Hickory Drive to allow a safe transition from the existing sidepath on Fordham Boulevard to Hickory Drive.
- Bicyclists and pedestrians would share the street with vehicles on Hickory Drive from Ridgefield Road to Willow Drive, including a short segment of Walnut Street.
- Signage and street paint (sharrows) would indicate that Hickory Drive and Walnut Street are shared streets.

### *Pros of Option 3*

- Overall project could be built at a significantly lower cost than the other options.
- Existing landscape buffer along Fordham Boulevard would remain intact.

### *Cons of Option 3*

- All pedestrians and bicyclists walk or ride in the street.
- Federal funding may be lost if the project is not completed as originally scoped. At a minimum the Town would have to renegotiate the municipal agreement and return some funding if the project scope is reduced.
- Not most direct route - users would add about 400 feet to their route in order to walk from Ridgefield Road to Willow Drive.
- Not ADA compliant.

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### Ridgefield Road to Willow Drive Option 4:



#### *Features of Option 4*

- Approximately 170 feet of 10 foot wide concrete multiuse path along Ridgefield Road between Fordham Boulevard and Hickory Drive to allow a safe transition from the existing sidepath on Fordham Boulevard to Hickory Drive.
- Approximately 1,700 feet of sidewalk on one side of Hickory Drive and Walnut Street from the intersection of Ridgefield Road to Willow Drive.
- Signage and street paint (sharrows) would indicate that Hickory Drive and Walnut Street are shared streets.

#### *Pros of Option 4*

- The overall project could be built at a lower cost than Option 1/2.
- Pedestrians would have a dedicated facility through the neighborhood.
- ADA compliant.
- Existing landscape buffer would remain intact.

#### *Cons of Option 4*

- No dedicated bicycle facilities along 'shared street'.
- Requires ~1,700 feet of sidewalk, estimated to cost approximately \$443,000.
- Federal funding may be lost if the project is not completed as originally scoped. At a minimum the Town would have to renegotiate the municipal agreement and return some funding if the project scope is reduced. It is unlikely that federal funding would be approved for the sidewalk portion.
- Not most direct route - users would add about 400 feet to their route in order to walk from the intersection of Ridgefield Road to Willow Drive.



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## Public Outreach:

- *Summer 2018* – first public input session
  - A number of residents from the Little Ridgefield neighborhood attended the meeting and expressed concern about the design.
- *January 2019* – Staff met with residents of the neighborhood
- *September 2019* – public meeting with ~50 attendees
- *October & December 2019, January 2020* – TCAB meetings, public comment

Following are the top concerns raised by the Little Ridgefield residents:

- Safety of path users crossing side streets
- Loss of vegetative buffer
- Noise pollution from Fordham Blvd.

## Addressing Resident Concerns:

Our consultant created several alternatives to the original design, and we expanded the design contract scope in order to include analyses to address concerns.

### Safety of path users crossing side streets

- Concern: This concern is related to the perceived danger to path users when crossing Ridgefield Road and Walnut Street. Residents note that cars turn off of Fordham Boulevard at high speeds and would not see bicyclists or pedestrians crossing the road on the trail. Residents recommended a ‘[shared street](#)<sup>3</sup>’ on Hickory Drive, where bicyclists and pedestrians would be diverted away from Fordham and share the street with vehicles. Hickory Drive is a low-volume, low-speed road.
- How addressed: The consultant created two concepts for the ‘shared street’ idea along Hickory Drive. One has all users sharing the road (Option 3 above), and the other has a sidewalk along one side of Hickory (Option 4). Staff has presented these at all subsequent public input sessions. In addition, the consultant decreased the radii of the corners of the side streets to force vehicles to slow down while turning, and proposed adding raised/colorful crosswalks to increase visibility of path users. Additional traffic calming measures are also being considered.

Staff installed the StealthStat to collect vehicular speed and volume data on Ridgefield Road between Fordham Boulevard and Hickory Dr. for four days in October 2019. In those four days there were **217 vehicles** (average 54 per day), traveling at an average speed of **15mph**. This data does not indicate that there is a speeding problem on Ridgefield Road. The data summary is attached to the agenda item.

### Loss of vegetative buffer

- Concern: Constructing the sidepath would require removing a significant amount of the vegetative buffer between the Fordham Boulevard and the backs of Hickory Drive

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<sup>3</sup> <https://nacto.org/publication/urban-street-design-guide/streets/residential-shared-street/>

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properties. This is perceived to result in increased noise and pollution from Fordham Boulevard, as well as loss of privacy for the adjacent residents. Other Chapel Hill residents are concerned about losing existing trees.

- How addressed: While we cannot eliminate the need to clear vegetation to construct the path, we are committed to replacing as much vegetation as possible on both sides of the sidepath. The consultant has prepared a landscaping plan that includes evergreens, understory trees, canopy trees, and screening shrubs. The consultant also produced maps of the approximate clearing limits for the sidepath construction so that staff and residents are able to visualize the impacts. Ultimately some existing mature vegetation would remain and new landscaping would be added between the path and Fordham Blvd., and between the path and the property lines.

Staff has also included fencing in the project budget and will offer to construct a wood, noise dampening privacy fence for any resident who wants one.

## Noise Pollution

- Concern: This concern is related to the loss of vegetative buffer. Residents of the Little Ridgefield neighborhood have expressed a concern that the noise from Fordham Boulevard will increase if the trees and vegetation are removed.
- How addressed: The consultant performed a noise analysis for two locations along Fordham Boulevard. Noise was monitored for 24 hours in mid-January. One monitor was located behind the vegetative buffer on the Little Ridgefield side of Fordham Boulevard and the other was located in front of University Place at the same distance from edge of pavement. The monitor on the Little Ridgefield side recorded slightly higher average noise during the study. This could be due to the device being located five feet higher than the other device, and/or more northbound traffic during the test period.

The consultant also provided some general information about noise that is relevant to this project. According to the Federal Highway Administration, vegetation is only able to decrease traffic noise if it is dense enough, long enough, and tall enough that it cannot be seen through. The existing vegetative buffer along Fordham Boulevard in this location is approximately 35 feet wide and in several locations it is possible to see the private fences along the right-of-way. This indicates that the vegetation does not currently have an impact on the noise.

As noted above, as much of the vegetation as possible will be replaced. Staff will offer to install noise dampening fences along the abutting property lines for those residents who want them. The consultant provided information on a noise absorbing product that can be installed with fencing that reduces the impact of noise pollution.

## Budget:

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The total budget for the project is \$1,058,000, with \$846,400 (80%) federal and a local match of \$211,600 (20%) from 2015 Transportation bonds. Of this amount the Town has already spent \$98,000 for design fees and the public input process.

A question that has come up multiple times throughout the public outreach is whether we will lose the federal funds if we opt for the shared street design. At this point we do not have a clear answer. NCDOT does not give answers to hypothetical questions. NCDOT Municipal Agreements state that if projects are not completed then local jurisdictions are responsible for repaying the funds that have already been spent. Approximately \$98,000 have been spent so far on the design phase.

What we do know is that if we want to change the scope of the project we will need NCDOT approval. Experience with NCDOT funding in the past leads us to believe that they would not be inclined to fund the shared street or the sidewalk along Hickory Drive (Options 3 & 4). We have submitted sidewalk projects on Martin Luther King Jr. Boulevard, Seawell School Road, and Homestead Road to the NCDOT prioritization process in the past and they have not received funding.

TCAB members asked for cost estimates for the following in case we lose our federal funding and the Town becomes responsible for the costs:

- Upgrade the existing sidepath between Cleland Dr. and Ridgefield Road - **\$377,000**
- Construct sidewalk along Hickory Dr. from Ridgefield Road to Willow Drive - **\$443,000**

It is important to note that the Town has only \$211,600 available in bond funds and does not have excess funding to cover construction costs for non-NCDOT approved project elements. This amount of funding is not adequate to construct any portion of the project, with the exception of the signage and pavement markings associated with the ‘shared street’.

### **Next Steps:**

We will return to Council on March 4, 2020 to receive guidance on which design to pursue for the project. If Council authorizes staff to proceed with the sidepath along Fordham, staff will continue to work with the consultant to advance the sidepath design with the goals of maximizing safety for path users, minimizing vegetative loss, and maximizing noise abatement. If Council authorizes the shared street concept, staff will engage with NCDOT about changing the scope of the project and determine what impact on funding that change will have.