



# GARRISON BOULEVARD CORRIDOR STUDY

## EXISTING CONDITIONS ANALYSIS



# CONTENTS

- Section 1 Introduction ..... 4**
- Section 2 Existing Conditions Assessment ..... 6**
- Section 3 Field Review .....16**
- Section 4 Existing Plan Review.....24**
- Section 5 Key Takeaways ..... 26**



**SECTION 1**  
**INTRODUCTION**

# SECTION 1

## INTRODUCTION

### Existing Conditions Study Limits & Purpose

This existing conditions analysis for the Garrison Boulevard Corridor Study evaluates roadway and land use characteristics to inform the development of recommendations for improving multimodal safety and accessibility. The study area limits for this analysis are along Garrison Boulevard from Lineberger Park to the intersection with New Hope Road. The two Census Tracts that run parallel to the study area are home to over 3,000 residents and 3,500 jobs (2020 Census).

### Overview

In the following pages, the project team has assembled information describing the following:

- Existing and Planned Pedestrian, Bicycle, and Greenway Network
- Intersection Treatments, Pedestrian Crossings, and Surface Parking
- Transit Service
- Funded Transportation Projects
- Public Property Ownership
- Existing Zoning and Future Lane Use
- Key Destinations

Conclusions are provided alongside each map. In addition, “Key Takeaways” from the existing conditions analysis are provided at the end of this memo to inform the next steps for developing potential concepts for multimodal improvements on Garrison Boulevard.



MUSEUM VISITOR PARKING NEXT LEFT

E Garrison Blvd 1500

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START CROSSING  
Watch For Vehicles  
DON'T START  
Finish Crossing  
If Started  
08  
TIME REMAINING  
TO FINISH CROSSING  
DONT CROSS  
TO CROSS

**SECTION 2**

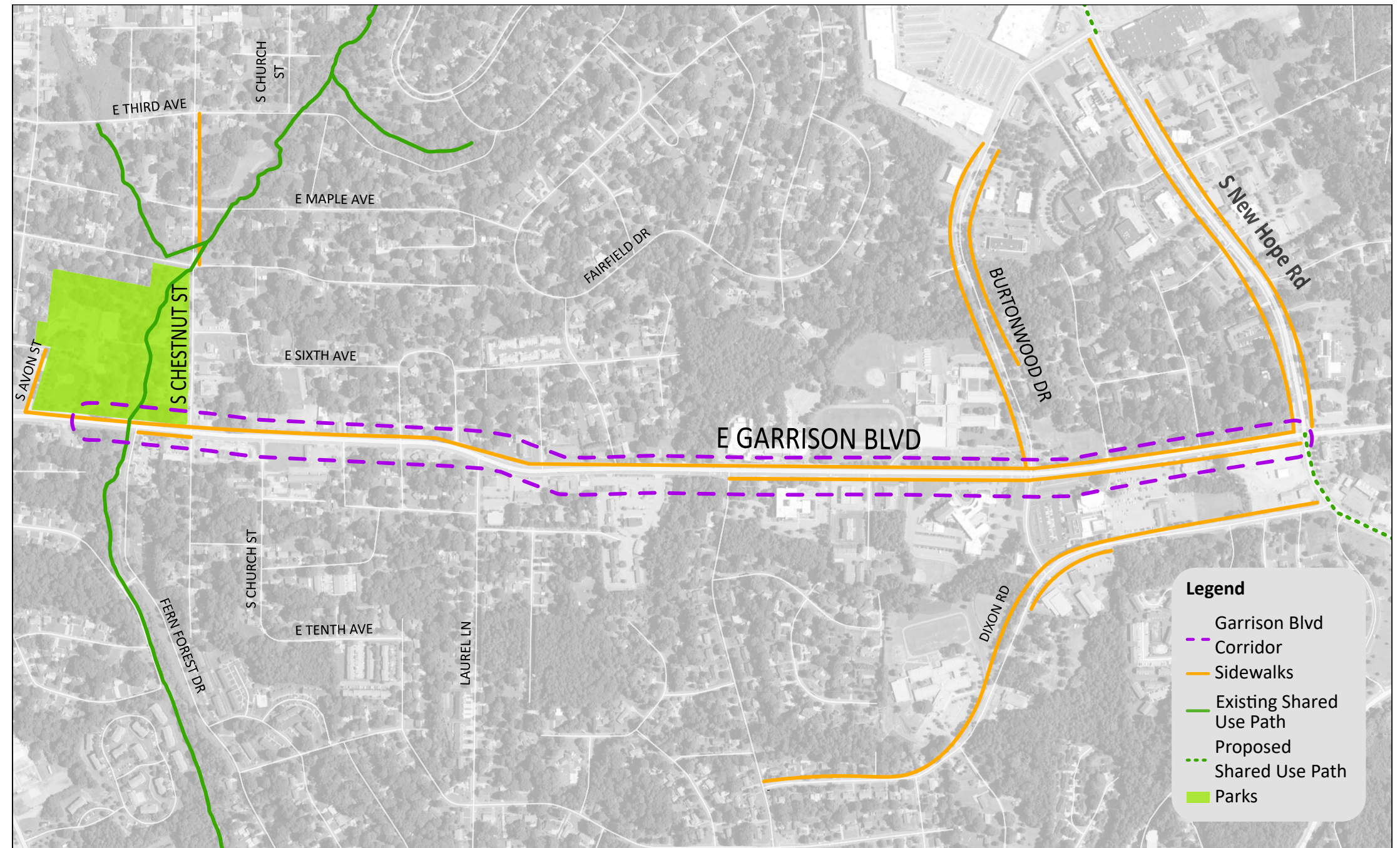
**EXISTING CONDITIONS  
ASSESSMENT**

# SECTION 2

# EXISTING CONDITIONS ASSESSMENT

## Existing and Planned Pedestrian Network

The project team reviewed the location of existing sidewalks and shared-use paths in the vicinity of the Garrison Boulevard Corridor study area. An existing sidewalk runs the length of Garrison Boulevard on the north side connecting notable sites within the study area including Lineberger Park, The Schiele Museum, Gaston County Public Library, and William P. Grier Middle School. Most intersecting streets do not have existing sidewalks. The Avon/Catawba Creeks Greenway provides connectivity to Lineberger Park and the study corridor for several neighborhoods. Although, the greenway underpass beneath Garrison Boulevard is frequently silted, wet, and impassable for most greenway users. (See the image on page 22.)



## Existing and Planned Bicycle Network

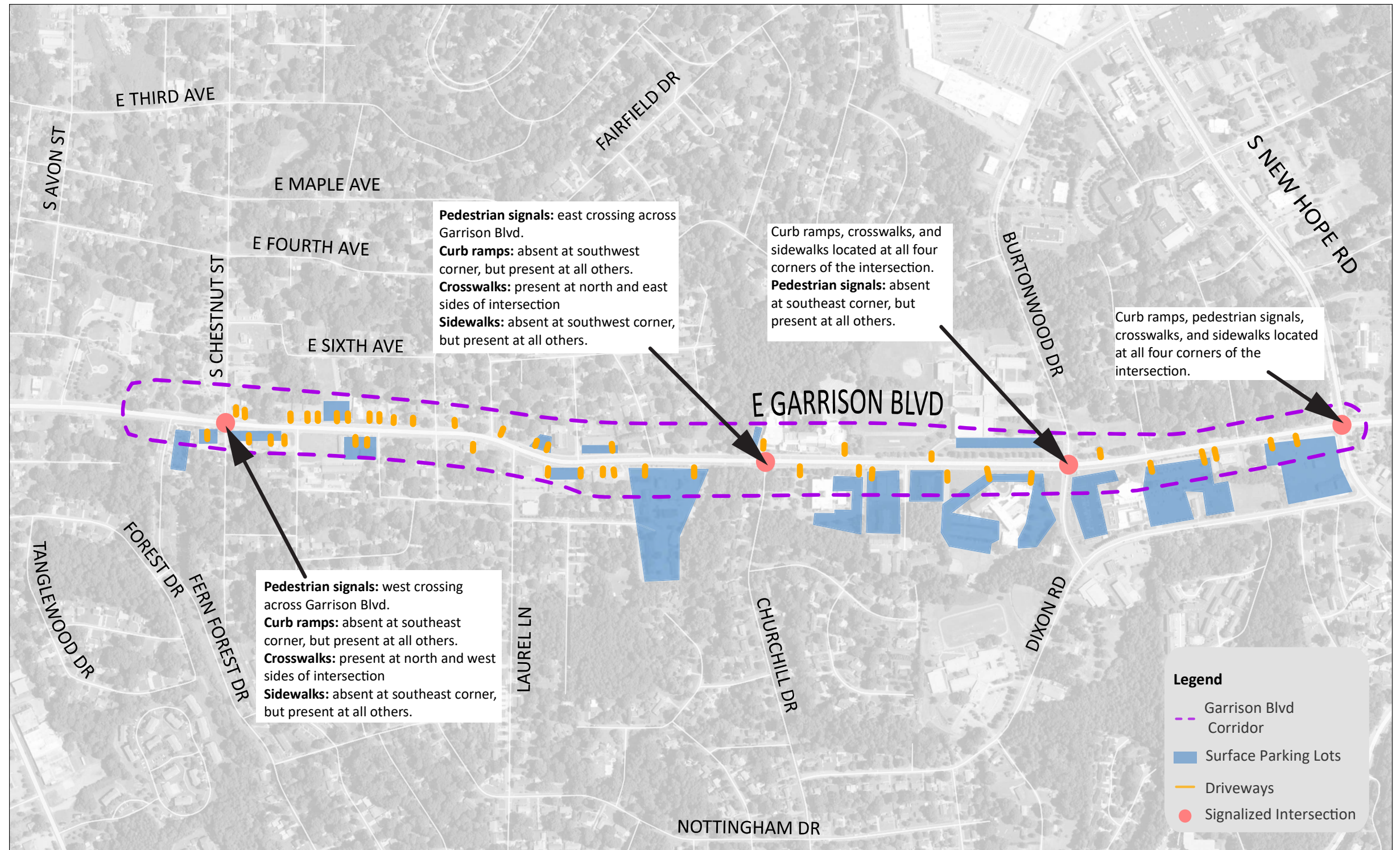
The absence of existing on-street bicycle facilities and limited shared-use paths provide an opportunity to increase bicycle connectivity within the Garrison Boulevard Corridor. The existing Avon/Catawba Creeks Greenway allows for access into and out of the study area and connects to Lineberger Park. There are two proposed facilities from the Gastonia Comprehensive Bicycle Plan within the study area - the proposed separated bicycle facility along Garrison Boulevard and a proposed shared use path on New Hope Road.





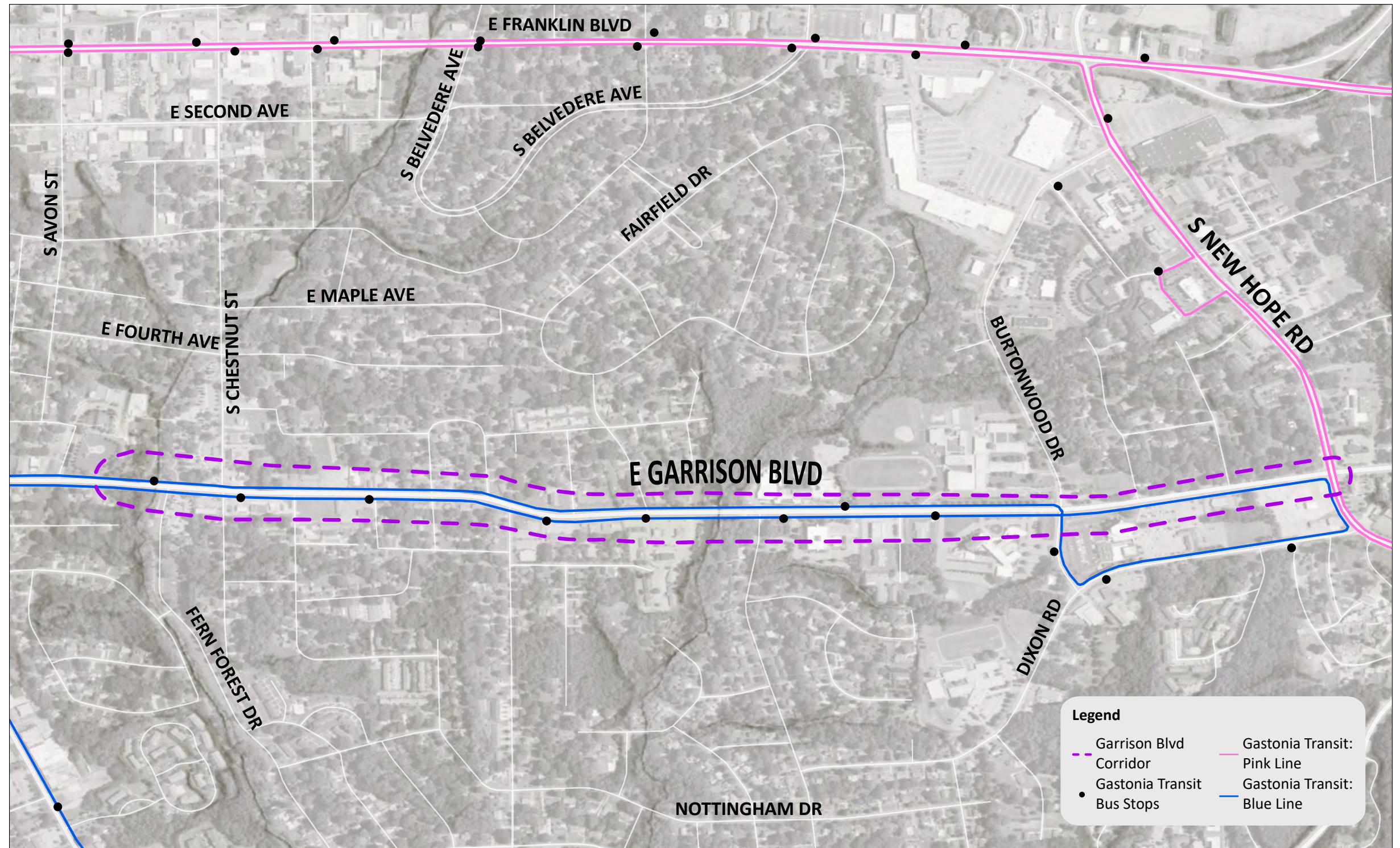
## Existing Driveways and Signalized Crossings

There are a significant number of driveways accessing residential, commercial, and public properties along Garrison Boulevard. Vehicles accessing these driveways are likely to cause conflict with pedestrians and cyclists utilizing the corridor. The introduction of improved pedestrian and bicycle facilities along the corridor may improve pedestrian and bicycle visibility and improve safety. Additionally, pedestrian crossing opportunities of Garrison Boulevard are very limited. There are only four crossing locations for pedestrians. Each is located at a signalized intersection. That's an average spacing of 1,780 feet between pedestrian crossing opportunities within the study area. Incomplete sidewalks, curb ramps, crosswalks, and pedestrian signals at these intersections pose challenges to pedestrians attempting to safely navigate the corridor.



## Existing Gastonia Transit Network

Two Gastonia Transit bus routes provide direct access to the site. The Pink Line intersects with Garrison Boulevard along New Hope Road with the nearest bus stops along New Hope Road each approximately ½ mile from Garrison Boulevard. The Blue Line runs the length of the Garrison Boulevard Corridor providing service in both the eastbound and westbound directions. There are numerous Blue Line bus stops along Garrison Boulevard that provide access to key destinations including Lineberger Park, The Schiele Museum, Gaston County Public Library, and William P. Grier Middle School. Improved pedestrian and bicycle facilities along Garrison Boulevard and adjacent streets would provide safer connections to Gastonia Transit bus stops and improve connectivity around Gastonia for transit users.



# Funded Transportation Projects

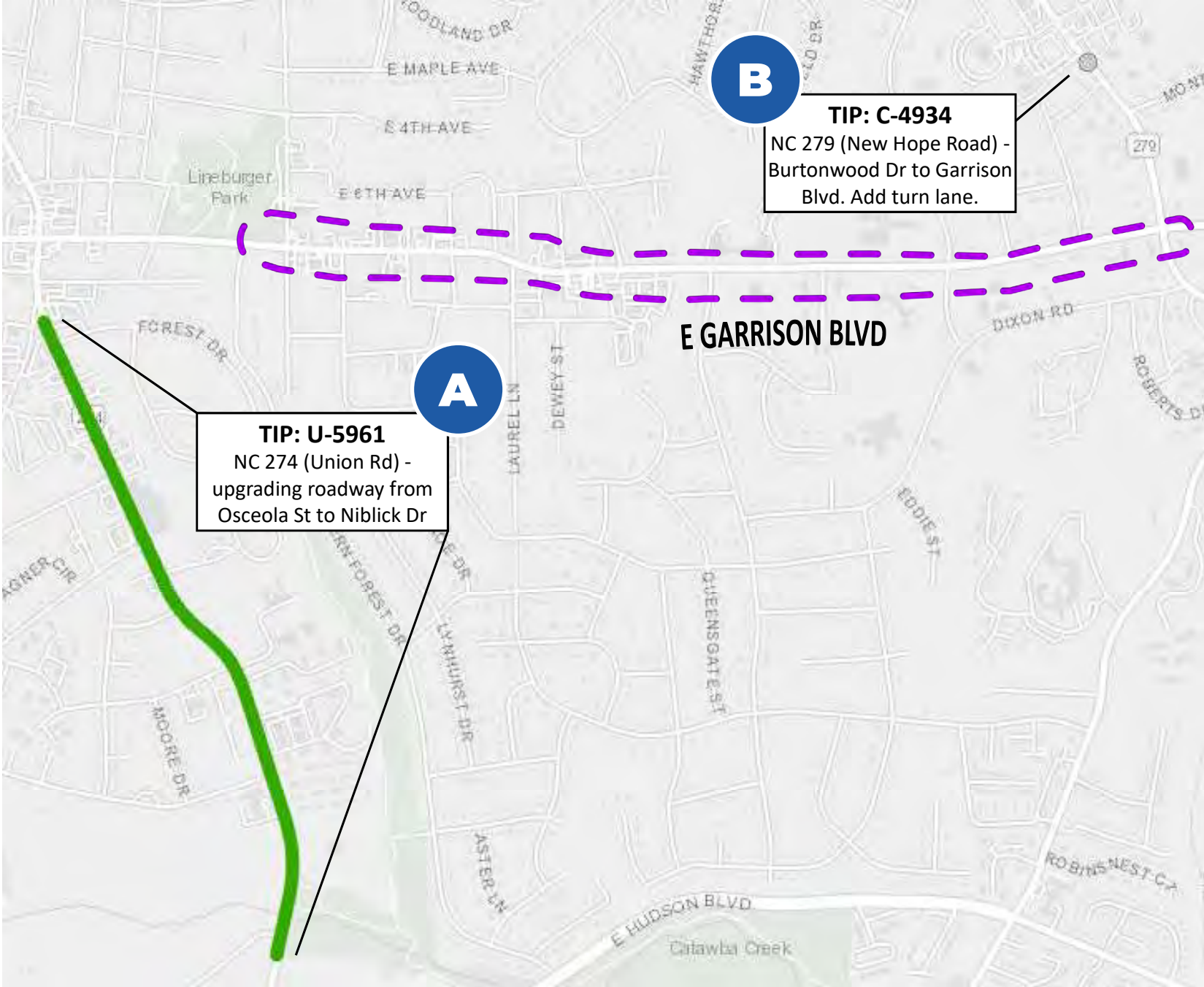
There are no funded transportation projects directly in the study area, but there are 2 in close proximity.

**A** **NC 274 (Union Road) Upgrading Roadway from Osceola Street to Niblick Drive**

- ROW Projected Schedule: 2024
- Construction Projected Schedule: 2027
- Total remaining funds needed: \$28,500,00 with \$5M provided by City of Gastonia

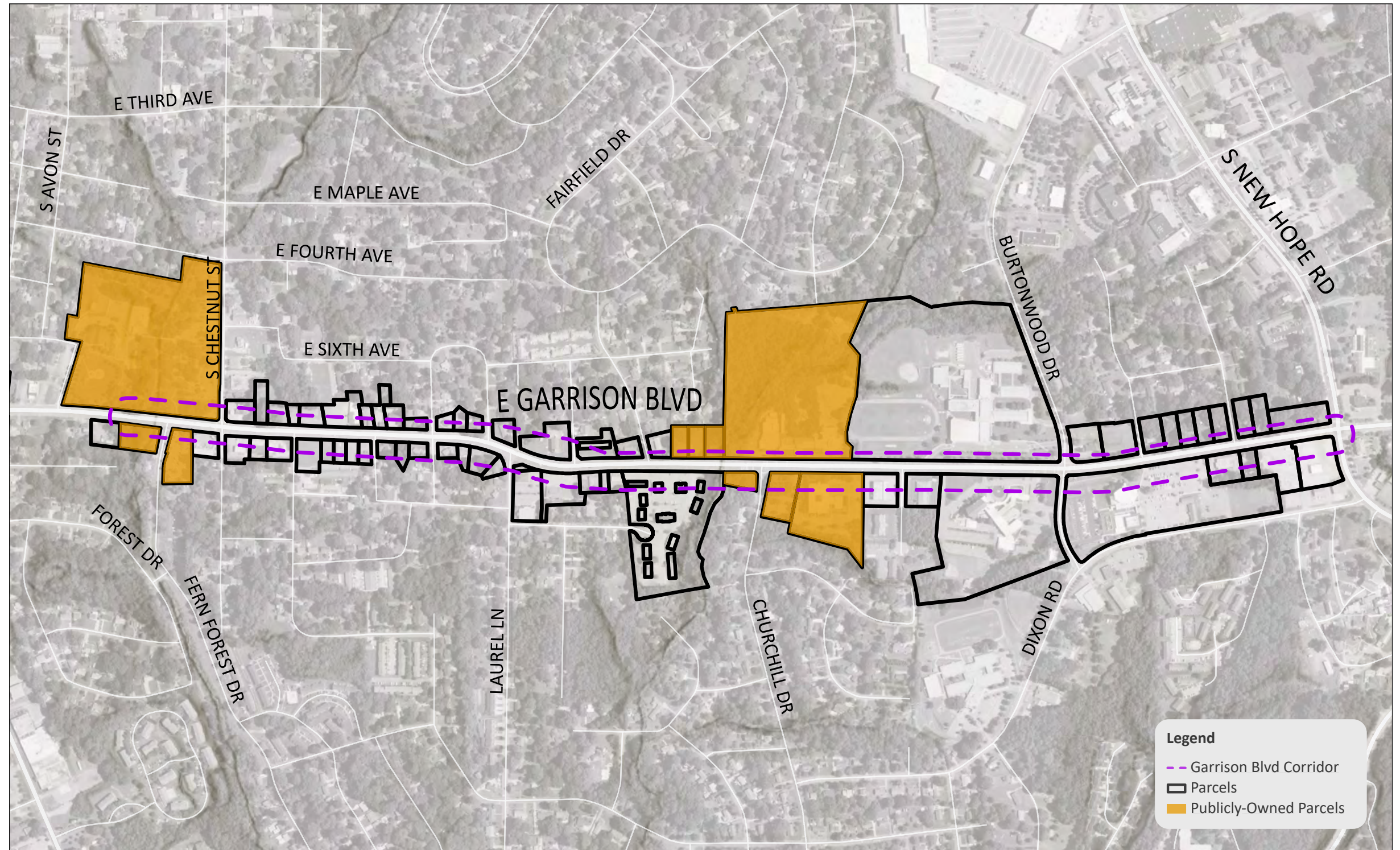
**B** **NC 279 (New Hope Road) Burtonwood Drive to Garrison Boulevard**

- Add turn lane
- Currently under construction at time of STIP



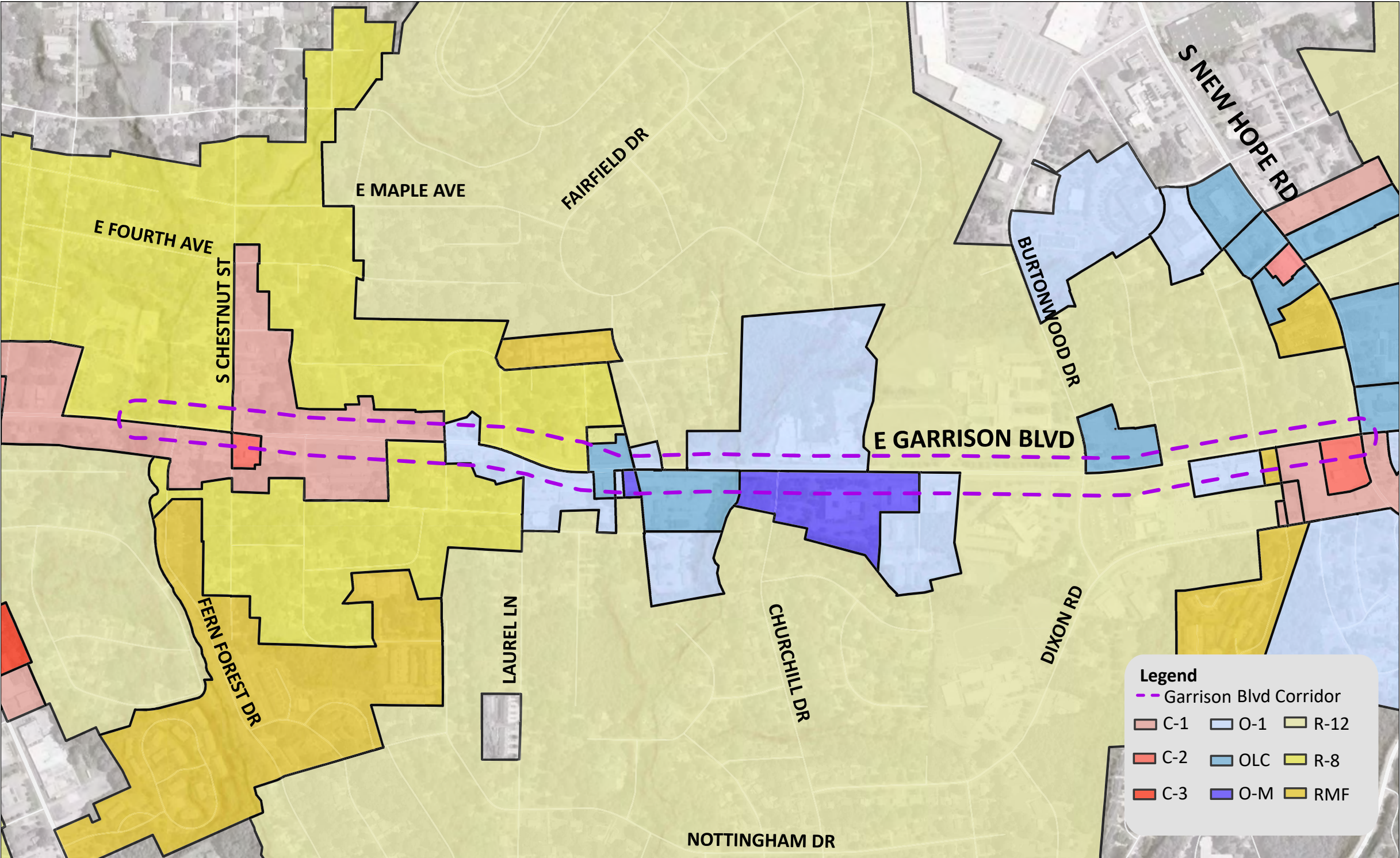
## Public Property Ownership

There are several publicly-owned parcels adjacent to Garrison Boulevard on both the north and south sides of the corridor. These parcels include Lineberger Park, the Avon/Catawba Creeks Greenway and its adjacent parking, the Schiele Museum, and Gaston County Public Library. Leveraging these parcels may ease right-of-way acquisition for behind-the-curb pedestrian and bicycle facilities.



# Existing Unified Development Ordinance Zoning

The City of Gastonia's Unified Development outlines the existing zoning districts throughout the City and their permitted uses. There are three general zones within the Garrison Boulevard Corridor – commercial, residential, and office. It is important to note that commercial and office zones are most directly adjacent to Garrison Boulevard, but moderate- to low-density residential zones are widespread within a ½-mile of the corridor. The commercial and office zones that abut Garrison are likely to generate trips that could easily be served by walking and biking from residential areas.

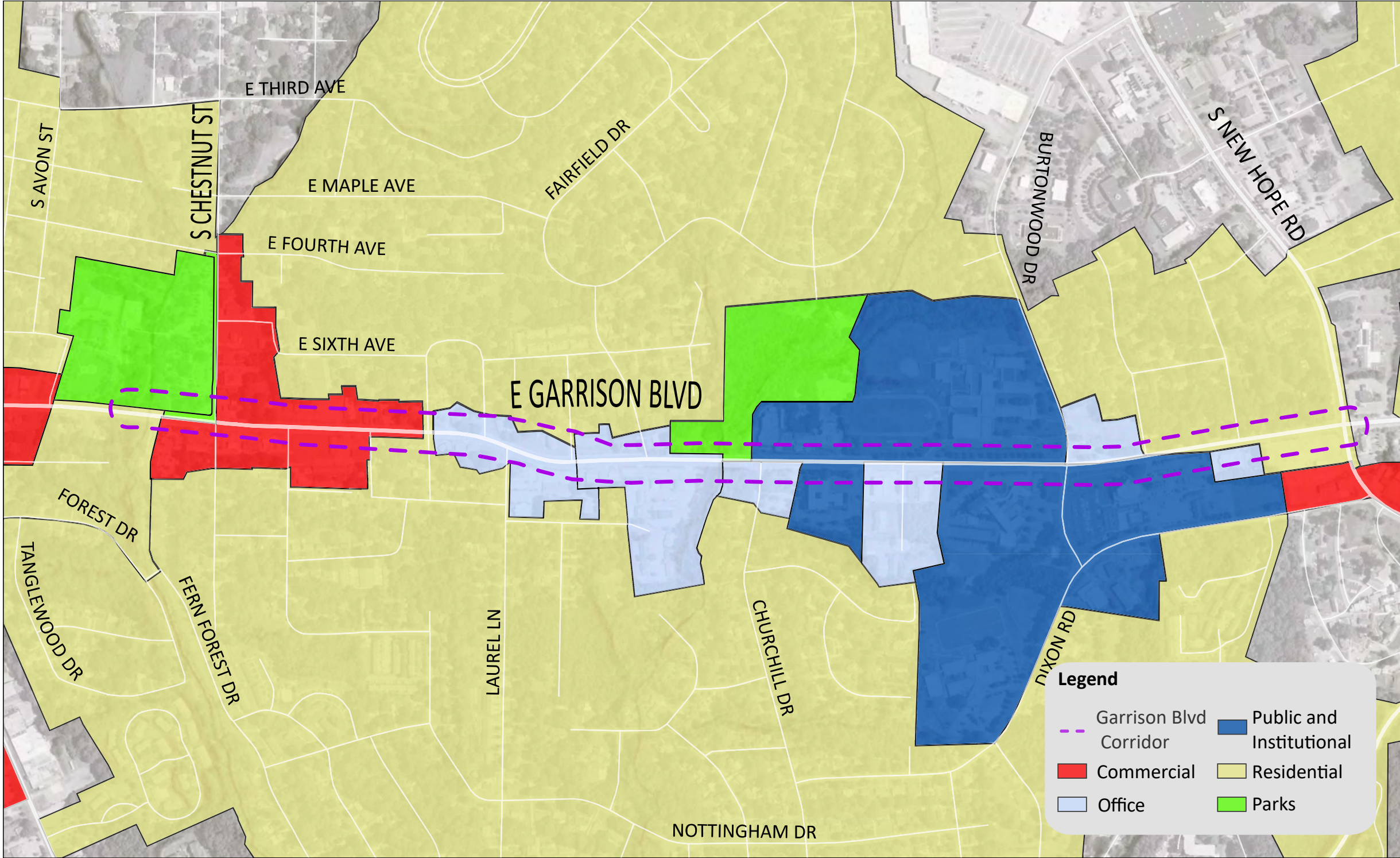


**Legend**

- - - Garrison Blvd Corridor
- C-1
- C-2
- C-3
- O-1
- OLC
- O-M
- R-12
- R-8
- RMF

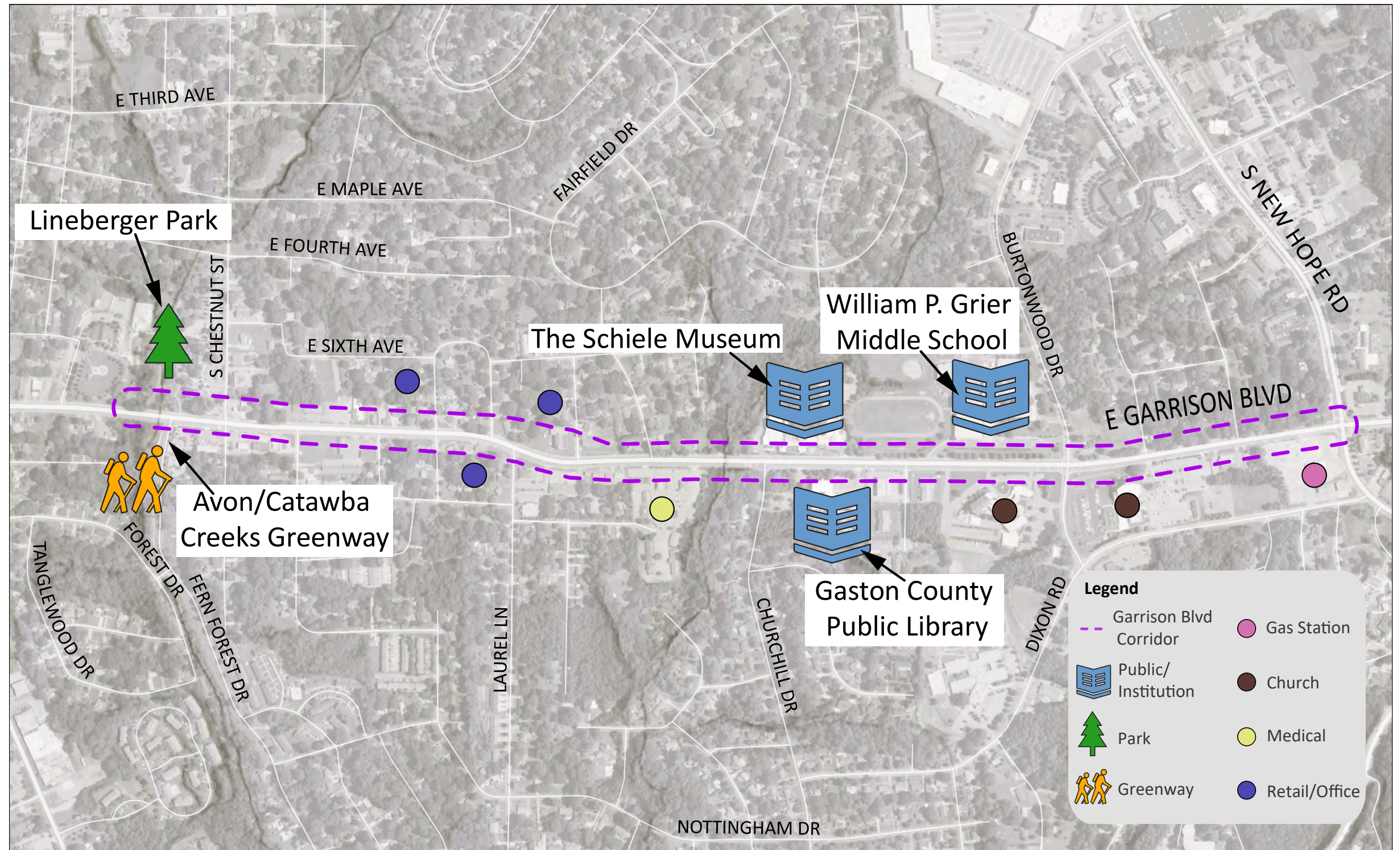
# Future Land Use

Gastonia's Future Land Use Map, created for the *Gastonia 2025 Comprehensive Plan*, was developed to build upon "the City's existing land use patterns and provides a generalized guide for development." Future land use planning in Gastonia makes the distinction for local parks and public/institutional uses that are not included in the City's existing Unified Development Ordinance. These additional land uses are important considerations for the Garrison Boulevard Corridor study area which includes Lineberger Park, The Schiele Museum, Gaston County Public Library, and William P. Grier Middle School. The presence of multiple active land uses within the corridor necessitates safe connectivity between these destinations for pedestrians and cyclists. Multimodal improvements could serve as a catalyst for future redevelopment of Garrison Boulevard as an emerging mixed-use corridor anchored by major civic uses.



## Key Destinations along Corridor

Several of Gastonia's notable destinations are located throughout the Garrison Boulevard study area. These destinations include Lineberger Park, the Avon/Catawba Creeks Greenway, the Schiele Museum, William P. Grier Middle School, two churches, and several clusters of retail, office, and medical offices. The proximity of these destinations to each other within the corridor promotes walking and bicycling and reduces reliance on automobiles. Multimodal improvements to pedestrian and bicycle facilities may help to connect residents and visitors to the key destinations throughout the Garrison Boulevard corridor. Major anchors are located on both sides of the Garrison Boulevard corridor. As such, no matter what changes are ultimately recommended to the typical cross section and design of Garrison Boulevard, more frequent and comfortable pedestrian crossings of Garrison Boulevard should be a focus of future improvements.



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**SECTION 3**  
**FIELD REVIEW**



# SECTION 3

## FIELD REVIEW

The project team conducted a field review of the study corridor on Thursday, May 18, 2023. The date and time of the field review was scheduled to coincide with the afternoon bell time for William P. Grier Middle School, which is among the busiest documented peak conditions for vehicular traffic on Garrison Boulevard.

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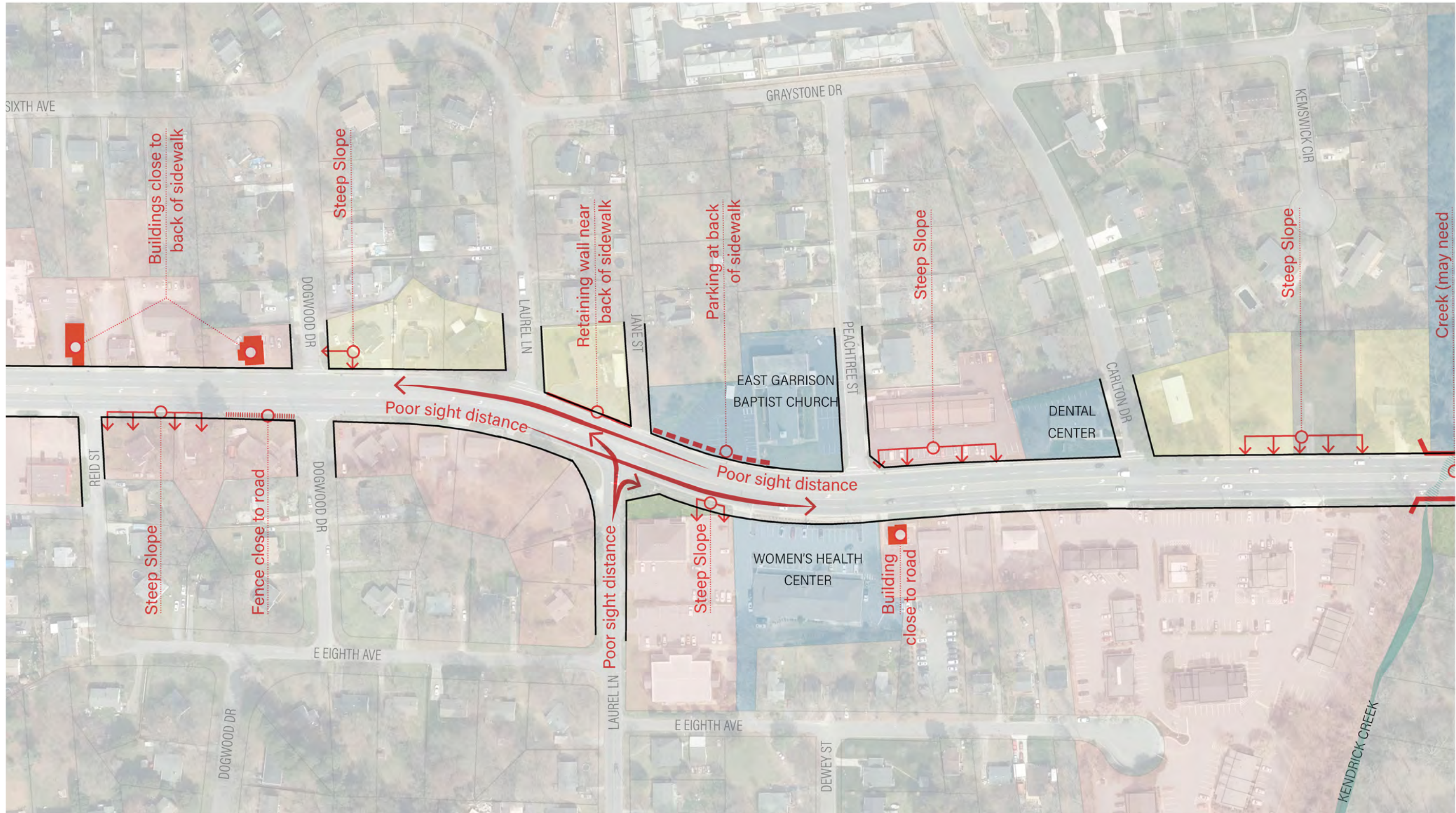
The conditions reviewed include:

- Potential constraints for ped/bike improvements – especially potential future ped/bike improvements that may be located behind the curb.
  - Intersection queuing at critical locations – especially the intersection of Garrison Boulevard and Burtonwood Drive.
  - Connecting ped/bike facilities.
  - Existing multimodal safety concerns.
  - Existing curb-to-curb dimensions to help inform potential road space reallocation scenarios.
-



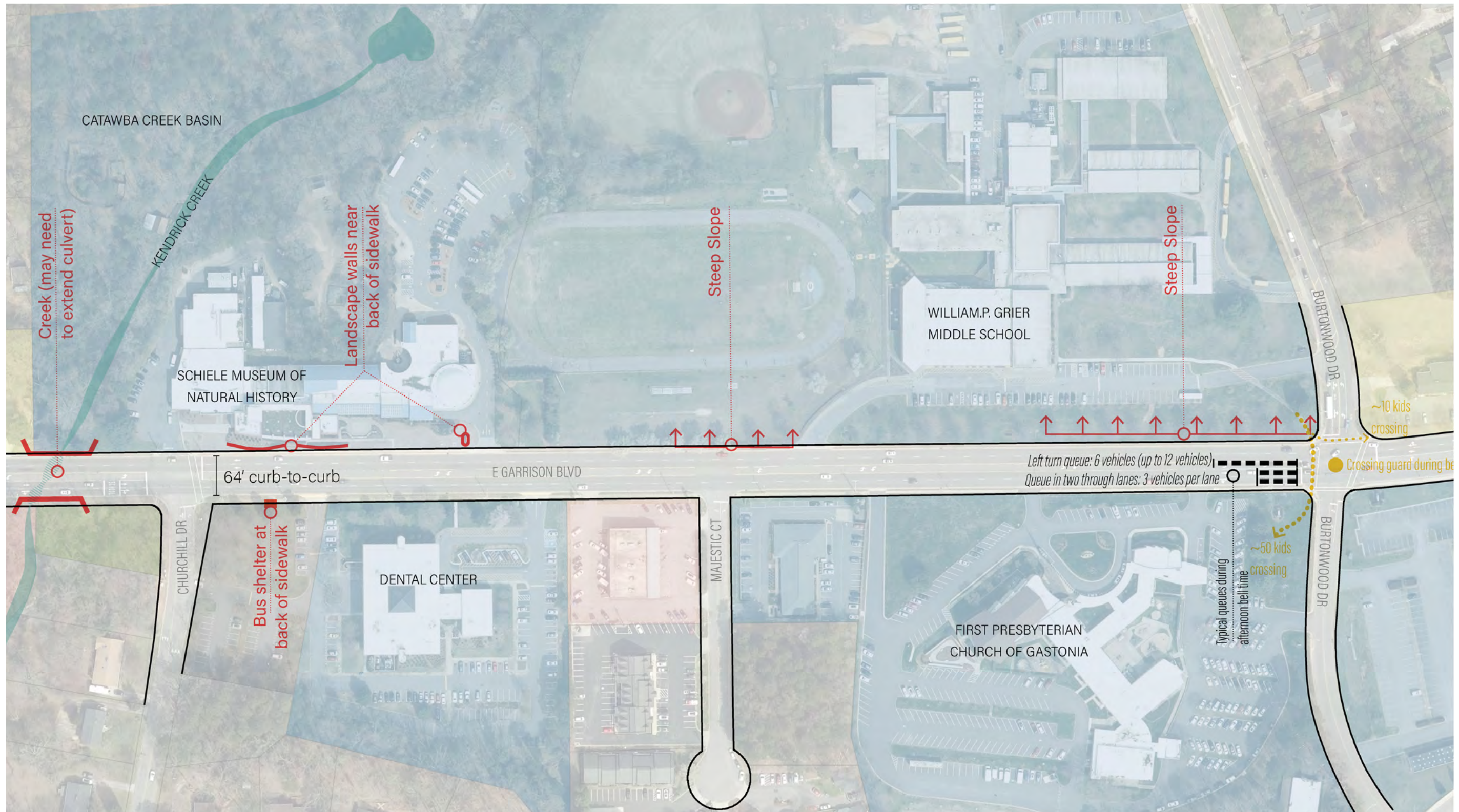
## Garrison Boulevard | Fern Forest Drive to Reid Street

General Note: Utility poles run the entire length of the corridor on the south side. They create a difficult tradeoff between utility relocation and ROW acquisition for installing a sidewalk or SUP on the south side.



## Garrison Boulevard | Reid Street to Kendrick Creek

General Note: Utility poles run the entire length of the corridor on the south side. They create a difficult tradeoff between utility relocation and ROW acquisition for installing a sidewalk or SUP on the south side.



## Garrison Boulevard | Kendrick Creek to Burtonwood Drive

General Note: Utility poles run the entire length of the corridor on the south side. They create a difficult tradeoff between utility relocation and ROW acquisition for installing a sidewalk or SUP on the south side.



## Garrison Boulevard | Burtonwood Drive to New Hope Road

General Note: Utility poles run the entire length of the corridor on the south side. They create a difficult tradeoff between utility relocation and ROW acquisition for installing a sidewalk or SUP on the south side.



*Curb Width is 64 Feet Across the Entire Corridor*



*Bicyclist Riding on Sidewalk along Garrison Boulevard*



*Multiple Constraints Making Behind-the-Curb Options Difficult*



*Avon/Catawba Creeks Greenway Underpass*



*Sight Distance Limitations*



*Multiple Constraints Making Behind-the-Curb Options Difficult*

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**SECTION 4**  
**EXISTING PLAN REVIEW**



# SECTION 4

## EXISTING PLAN REVIEW

### **Gastonia 2025 Comprehensive Plan Audit**

The *Gastonia 2025 Comprehensive Plan* – completed in 2011 – identified Garrison Boulevard and the Catawba Creeks Greenway as an important “node of redevelopment and connectivity.” In 2018 the City of Gastonia completed an audit of projects identified in the *Gastonia 2025 Comprehensive Plan*. The audit noted ongoing projects to “accelerate the development of the greenway system in order to increase the number of bicycle and pedestrian trips.” These projects included a street connection to Loray Village from the Avon-Catawba trailhead at Lineberger Park which lies adjacent to Garrison Boulevard. While this street connection from Loray Village to the Avon-Catawba Creeks Greenway is outside the study area, it would provide an important connection into the study area and greenway system. Construction of this street connection was scheduled to begin in 2018.

### **City of Gastonia Comprehensive Bicycle Plan**

The City’s Comprehensive Bicycle Plan was completed in February 2023 with Garrison Boulevard identified by community members as a key route of safety concerns for cyclists. Proposed projects in the bicycle plan were evaluated against plan goals to identify high priority projects. Garrison Boulevard was identified as a high priority project for on-street bike facilities. Additionally, the plan identifies Garrison Boulevard as a potential demonstration project for a road diet and notes that “a road diet along Garrison Boulevard would reduce the number of vehicle travel lanes and provide space for separated bicycle facilities” along a key east-west route in Gastonia. The demonstration project proposes that the existing five vehicular lanes be reduced to either three or four lanes and separated bike lanes be installed on both sides of the street. Additionally, intersection improvements and new or expanded sidewalks are recommended to increase safety for all road users, especially bicyclists and pedestrians.

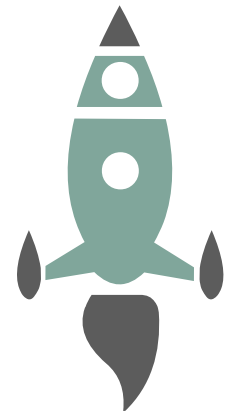


**SECTION 5**

**KEY TAKEAWAYS**

# SECTION 5

## KEY TAKEAWAYS



### **Opportunity to Demonstrate What's Possible**

The limits selected for this study offer an opportunity to develop multimodal safety and accessibility improvements within the civic heart of the Garrison Boulevard corridor – connecting Lineberger Park and Avon/Catawba Creeks Greenway to Grier Middle School, the Schiele Museum, and the Gaston County Library. These improvements may ultimately serve as “proof of concept” for additional improvements that extend further along Garrison Boulevard and Armstrong Park Drive.



### **Opportunities for Road Space Reallocation**

The Garrison Boulevard corridor is a consistent 64 feet from face-of-curb to face-of-curb within the study limits. This simplifies the development of typical sections for potential improvements involving road space reallocation scenarios. Consideration of road space reallocation (i.e., “road diet”) options will be guided by the Traffic Operations and Safety Assessment memo and guidance from City and NCDOT staff.



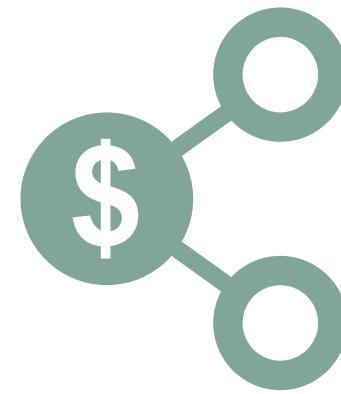
### **Opportunities for Ped/Bike Improvements Behind the Curb**

Widening the existing sidewalks on the north side of Garrison Boulevard likely offers the simplest and most cost-effective opportunity for improvements behind the curb (outside the existing roadway). There are utility poles along the south side of Garrison Boulevard for the entire length of the study limits that create a significant challenge for ROW acquisition and/or utility relocation which would be necessary for installing a new shared-use path on the south side. Widening the north-side sidewalk to a shared-use path is still a challenging and expensive proposition due to the variety of documented constraints that would have to be addressed.



### **Opportunity to Connect to Other Ped/Bike Facilities**

The Avon/Catawba Creeks Greenway is the most significant connecting ped/bike facility. The culvert that carries the greenway under Garrison Boulevard is typically silted, wet, and impassable for most greenway users. This places extra importance on ped/bike improvements at the intersection of Chestnut Street and Garrison Boulevard as the primary opportunity for greenway users travelling across Garrison Boulevard and greenway users connecting to future facilities along Garrison Boulevard. Installing a shared-use-path, or separated bike lanes + sidewalk improvements, along Garrison Boulevard offers an opportunity to extend the Avon/Catawba Creeks greenway system and develop a signature ped/bike connection to Grier Middle School, the Schiele Museum, and the Gaston County Library. Other connecting facilities include sidewalks on New Hope Road and sidewalk and sharrows (bicycle shared lane marking) on Burtonwood Drive.



### **Opportunity to Support Active Land Uses & Future Redevelopment**

Multiple civic anchors and active land uses along the Garrison Boulevard could benefit from safer and more comfortable pedestrian and bicycle connections. Multimodal improvements could serve as a catalyst for future redevelopment of Garrison Boulevard as an emerging mixed-use corridor anchored by major civic uses.



