

US 52

BCDCOG
BERKELEY-CHARLESTON-DORCHESTER
COUNCIL OF GOVERNMENTS
PLANNING, PARTNERSHIP & PROSPERITY



BCDCOG US 52 Corridor Study *Final (Draft)*

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Berkeley and Charleston Counties, South Carolina

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1 Introduction

The US 52 corridor, shown below in **Figure 1-1**, provides a critical connection between the region’s major employment centers located in Charleston County and Berkeley County’s suburban and rural communities. This evolving 18-mile corridor between North Charleston, Goose Creek, and Moncks Corner has changed considerably over the last decade and is projected to continue experiencing significant residential and employment growth and development. Between 2020 and 2040, the corridor’s population of 21,414 is anticipated to increase by 70%, and the approximate 8,800 jobs currently supported within the corridor is projected to grow by as much as 42% during the same period.

The anticipated growth will undoubtedly place greater demand on the transportation network and other public infrastructure currently serving the corridor. If this infrastructure is not appropriately upgraded or expanded to keep pace with future development, it will soon be over capacity. The US 52 Corridor Study provides an opportunity to proactively plan for future needs of this corridor, as well as to reshape and revitalize the sustainability of the corridor for future generations.

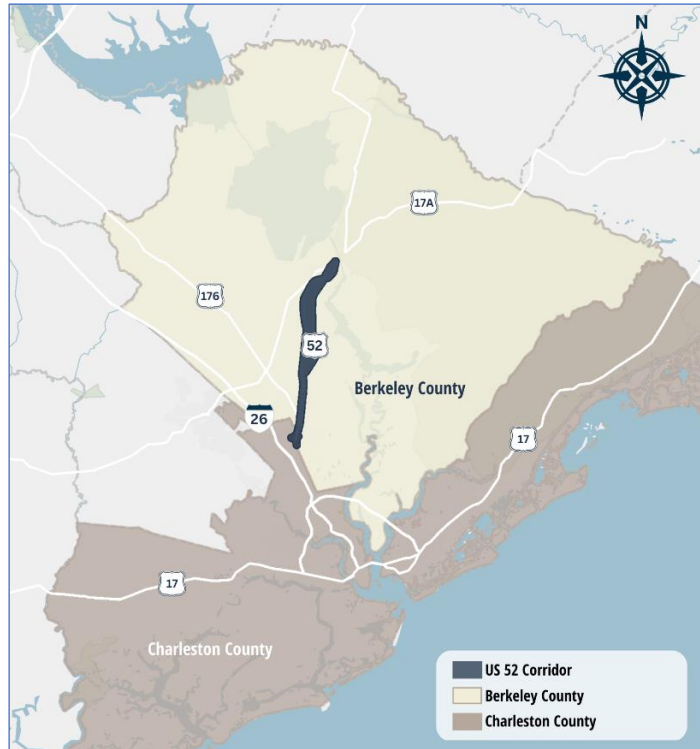


Figure 1-1: US 52 Corridor

The Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) and Charleston Area Transportation Study (CHATS) frequently assist member governments with the development of local and multi-jurisdictional plans within the tri-county region to support and improve the quality of life for residents. As such, the BCDCOG initiated the US 52 Corridor Study to:

- Collectively engage the communities of Goose Creek, Moncks Corner, and Berkeley County in developing a long-term vision for the US 52 corridor that meets both community and regional development and transportation needs;
- Explore the potential impacts of unmanaged growth and seek to optimize transportation investments that support desired future land use and travel patterns envisioned along the corridor, as well as identify future development patterns that would more productively support alternative transportation options such as transit, in an effort to better manage the travel demands placed on the network;
- Define the relationship or linkage between the roadway and adjacent land uses it supports, and identify transportation investments needed to deliver a multimodal corridor that accommodates all modes of travel for all system users, including vehicular and freight traffic, pedestrians, bicyclists, and transit riders; and



- Foster strong coordination among municipal, county, and state agencies, including CHATS, to successfully implement corridor recommendations resulting from the planning process.

The Corridor Study seeks to support the shared regional and local goals of the counties, municipalities and corridor communities that it serves. It provides recommendations to address roadway safety and operational deficiencies, increase needed travel capacity, and expand the range of travel options available to residents, including active transportation and high-capacity transit service, to provide a more balanced transportation system and reduce heavy reliance on single-occupancy vehicle travel. The Study also examines the interconnected relationship between land use and transportation decisions by evaluating a range of potential future development patterns along the corridor, including a shift to more mixed-use transit-supportive development, and evaluating its impact in accomplishing other community goals such as increasing the economic development potential of the study area, realizing environmental benefits, and building more sustainable communities.

US Highway 52 is identified as part of the planned High-Capacity Transit (HCT) network for the BCD region. The Lowcountry Rapid Transit (LCRT) Bus Rapid Transit (BRT) project under development currently will establish the first regional HCT corridor along US 78/Rivers Avenue connecting Ladson, North Charleston and Downtown Charleston. The US 52 Study integrates the BCDCOG's [*Regional Transit Framework Plan \(2018\)*](#) long-term vision for transit along the corridor and identifies right-of-way needs to implement a potential BRT project between Moncks Corner and North Charleston in the future.

Several in-depth technical analyses undertaken in the preparation of the corridor study are documented within the Plan's Appendices. Reference to these materials is made throughout this plan document where appropriate.

2 Vision & Goals

Vision: US 52 will function as a highly efficient intraregional transportation connector that supports a full range of well planned residential, commercial, and employment development.

The vision for US 52 directly supports existing transportation and land use plans of the communities and counties with jurisdiction along the corridor. As noted by BCDCOG objectives in the Introduction, the plan is focused on improving both existing and future operating conditions and safety along this regionally significant corridor, while ensuring that the transportation infrastructure is compatible with and effectively supports surrounding land uses.

The planning process identified several key goals that helped guide the development of transportation and land use recommendations herein. Goals are long-range, aspirational, reflect community values, and provide foundational direction for the plan. Based on an assessment of the corridor, as well as community input and stakeholder feedback, four (4) primary goals for enhancing functionality of the US 52 Corridor have been identified. These goals reflect consensus around the preferred future vision for US 52 as a vibrant mixed-use and multimodal corridor which meets residential, commercial, and daily travel needs safely, and provides critical connectivity for all modes of travel between North Charleston and Moncks Corner. Each goal is followed with several distinct and focused objectives which serve to help implement the goal.



Connected



Goal: Establish strong regional connectivity within the corridor by supporting an integrated transportation network that is comprised of a well-balanced mix of roadway, freight, bicycle, pedestrian, and transit facilities, including connections to the Lowcountry Rapid Transit (LCRT) Bus Rapid Transit (BRT) line between North Charleston and Downtown Charleston.

US 52 will be *Connected* by:

- Improving connectivity between the Goose Creek and Moncks Corner areas, by identifying and implementing measures to improve overall mobility for all users.
- Managing the number of access points allowed along the corridor and encouraging access through shared driveways to adjacent development where appropriate.
- Developing a plan for traffic control that supports the safe and efficient movement of people and goods in the corridor across all modes.
- Improving transit service in the corridor. The key to long-term success in addressing mobility needs by transit includes:
 - Educating the public on benefits of transit improvements in preserving local and regional mobility along the US 52 Corridor;
 - Upgrading transit by increasing frequency and reducing delays, adding amenities (bus shelters, real-time traveler information, etc.), and employing transit signal priority technology;
 - Upgrading and improving bus stops and transit facilities along the corridor, including improving pedestrian and bicycle connections to existing and future transit stops and facilities; and
 - Promoting the use of existing underutilized park-and-ride lots along the corridor as well as identifying future park-and-ride lots to support potential Bus Rapid Transit service.
- Strengthening bicycle and pedestrian connections to link land uses transit, and adjoining neighborhoods. As further described later in the Plan, recommendations are made to enhance links between local and regional systems, to fill gaps in the network to improve connectivity, and to set policy for walking and biking facilities in transit-supportive development locations.

Safe



Goal: Promote a safe roadway and freight network that is compatible with and reinforced by safe pedestrian and bicycle-friendly environment in a mixed-use multimodal corridor.

US 52 can be made *Safer* by:

- Implementing access management strategies.
- Applying appropriate design standards that improve safe transport of freight and goods throughout the corridor.
- Extending auxiliary lanes to the required acceleration & deceleration length, especially for trucks at approaches to industrial sites.
- Addressing existing at-grade railroad crossing deficiencies and conflicts.
- Maintaining the capacity of US 52 as a hurricane evacuation route.
- Adding crosswalks with protected bike connections.
- Adopting and implementing Vision Zero policies.

Sustainable and Resilient



Goal: Develop sustainable growth strategies to support the quality of life for corridor residents.

US 52 can be made more *Sustainable and Resilient* by:

- Strategically promoting mixed-use and transit-supportive development to reduce travel demand.
- Applying placemaking principles and strategies to ensure multimodal accessibility within and between communities along the corridor.
- Continuing to encourage diverse employment opportunities in the corridor, while concurrently providing workforce and other attainable housing options, thus reducing reliance on commuting to those opportunities from outside the study area.
- Considering appropriate methods for infrastructure hardening and resiliency to address potential effects of climate change particularly focused on stormwater management.
- Continuing to support the growing needs of existing truck and rail freight-reliant businesses in the corridor.

Green



Goal: Protect and enhance the corridor's environmental quality and natural assets.

US 52 can be made more *Green* by:

- Minimizing adverse impacts of development on natural features, air quality, water quality, and land degradation from transportation improvements.
- Promoting the preservation and conservation of Old US 52's rural character which includes several privately-owned plantations that are protected by easements owned by the Lord Berkeley Conservation Trust.
- Introducing landscaped medians and increasing tree canopy throughout the corridor where appropriate and feasible.
- Encouraging green infrastructure by leveraging Berkeley County's Green Infrastructure Model to support planning and design decisions that support and maintain the health of the corridor's watersheds and habitat cores.

3 Plan Process & Engagement

Critical to the success of the plan’s development was establishment of a Steering Committee made up of technical staff from Berkeley County, Moncks Corner, Goose Creek, local public transportation staff, and the South Carolina Department of Transportation (SCDOT). The Steering Committee worked with the project’s study team throughout the planning process to review analyses, provide feedback on improvement concepts and alternative growth scenarios, and vet major findings. The committee provided valuable input into the selection of a preferred corridor growth scenario and ensured that final recommendations were consistent with local plans and community aspirations. The committee also helped to encourage public participation at engagement events to ensure that community feedback was included in the planning process, and to help build local understanding and support for the final plan.

3.1 Planning Process

Development of the US 52 Corridor Plan consisted of four phases as shown in **Figure 3-1** below.

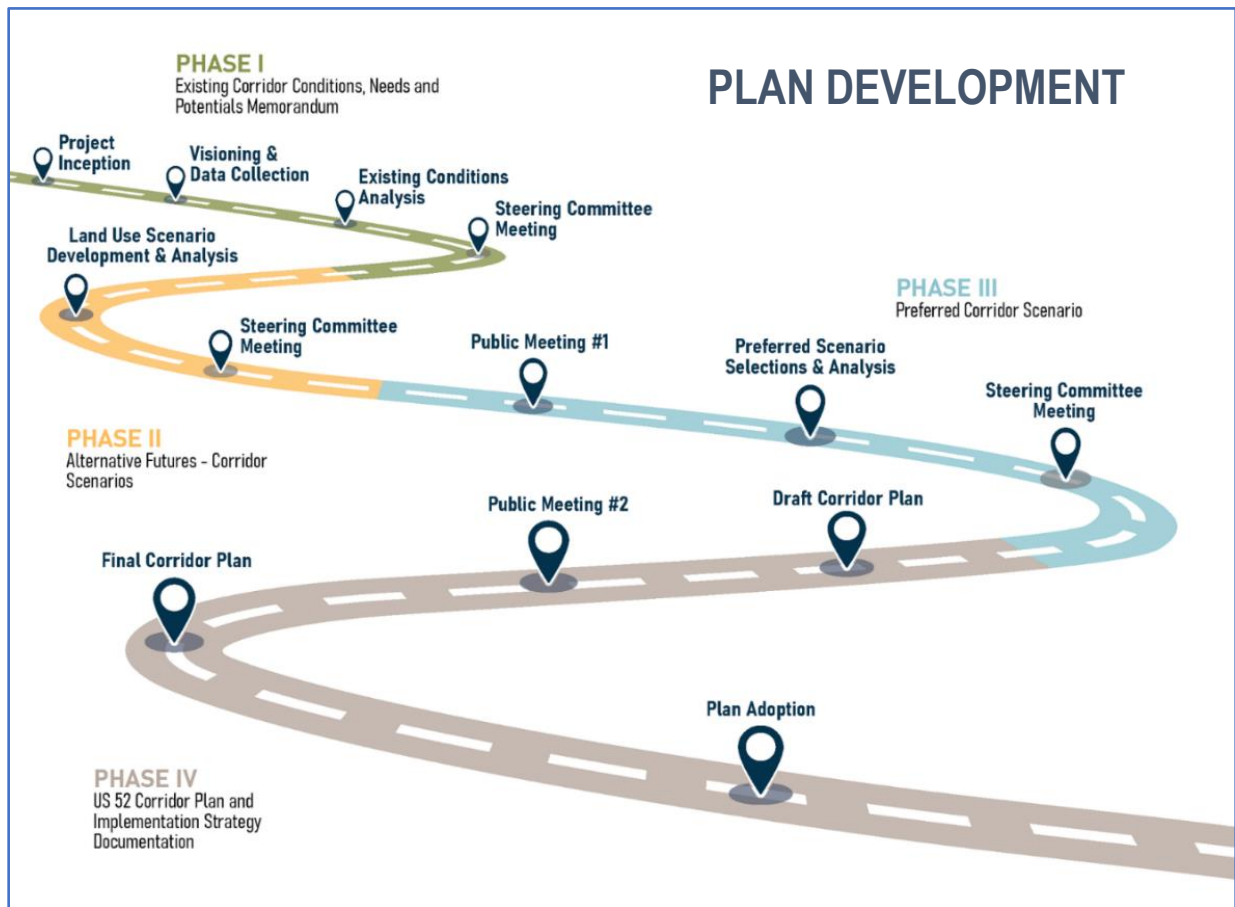


Figure 3-1: Plan Development Phases

An *Existing Conditions Report* was prepared during Phase I of the project and is provided in Appendix A. This report establishes the local context and baseline conditions of the study area and, through preliminary analysis, identifies existing corridor deficiencies and needs. The report also proposes short-term recommendations aimed at addressing more immediate operational issues identified in the corridor.

As outlined in the US 52 *Scenario Briefing Report*, included as Appendix B, Phase II of the US 52 Corridor Study seeks to establish a shared long-term vision for the corridor through the development and assessment of future corridor land use scenarios. Alternative land use **scenarios** were created and evaluated using the CommunityViz analysis tool, an extension of ESRI's ArcGIS software, which modeled three potential development alternatives with varying distributions of population and jobs growth that could be accommodated within the study area. Identifying the location of general development clusters or nodes along the corridor was a critical first step in building these alternatives. Nodes were defined as geographic areas with one-mile radii originating from select points located on the study corridor to which future development is directed. Eleven nodes were identified based on a review of existing and future land use plans, committed and planned developments, projected growth areas, and from supplemental input provided by local jurisdictions and project study team staff. All identified nodes were included in the following scenarios:

- The Base Scenario assumed current growth trends prevailing within identified nodes and served as a basis of comparison for existing development conditions; and
- The Growth Management and Transit-Oriented Development (TOD) Scenarios assumed targeted growth within identified nodes as areas accommodating more concentrated and intense development.

The population and employment levels accommodated in each of the modeled land use scenarios were evaluated to determine their relative impacts on the environmental resources, active transportation, transit service, and traffic levels within the corridor. Select performance measures were developed to quantify and more easily communicate the impacts of each growth alternative and allow the study's Steering Committee and the general public to compare the tradeoffs between scenarios.

3.2 Plan Engagement

Major outputs or results from analyses were shared with the public through facilitated in-person open house meetings, as well as using an online public engagement & survey tool (MetroQuest). The public feedback collected from these engagement efforts provided invaluable insight into what residents and businesses in the corridor deemed important, assessed support for a preferred growth alternative, and helped focus plan recommendations. Over 500 survey responses were collected, evaluated and summarized in the *MetroQuest Survey Summary Report* included as Appendix C.

Figure 3-2 illustrates several common issues and opportunities identified along the study corridor through the public engagement process. It is important to note that the comments collected covered all modes of travel and are reflective of the existing multimodal environment of the corridor.

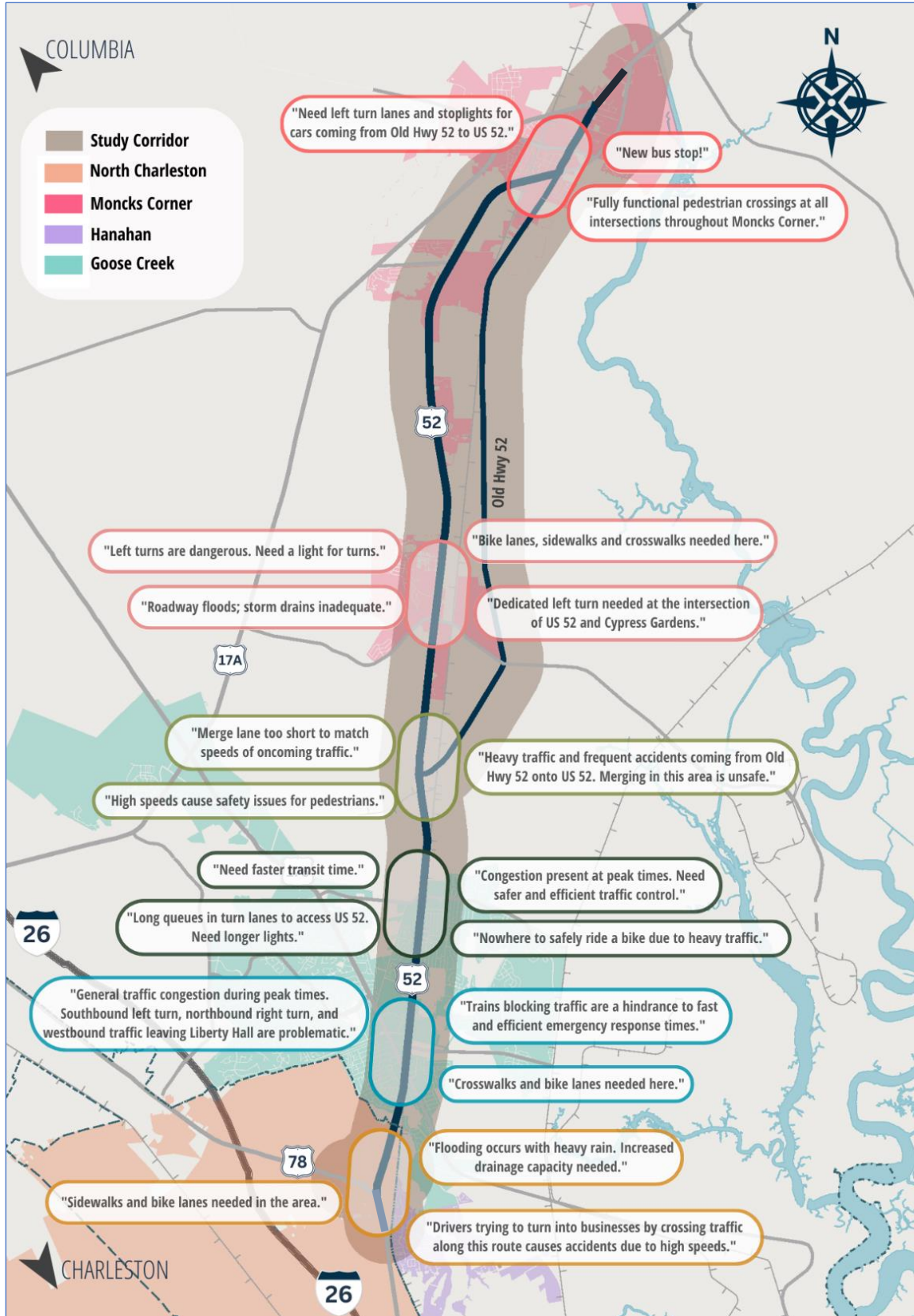


Figure 3-2: Major Corridor Issues and Opportunities

Participants were also asked to rank or prioritize issues that the study most needed to address through the planning process. An illustration of overall priorities identified by survey participants is provided in **Figure 3-3** below. Roughly 37% of the highest prioritized issues identified by survey participants were related to traffic congestion and traffic and pedestrian safety, 21% of issues were related to improving the livability and economic vitality of the corridor by supporting more diverse mixed-use communities (expanding housing, jobs, and recreational possibilities), 18% of issues were related to improving or expanding alternative transportation options such as bicycle and pedestrian facilities and transit service, 12% of issues were related to improving goods movement by truck and rail along the corridor, and 10% of issues were related to improving drainage and flooding.

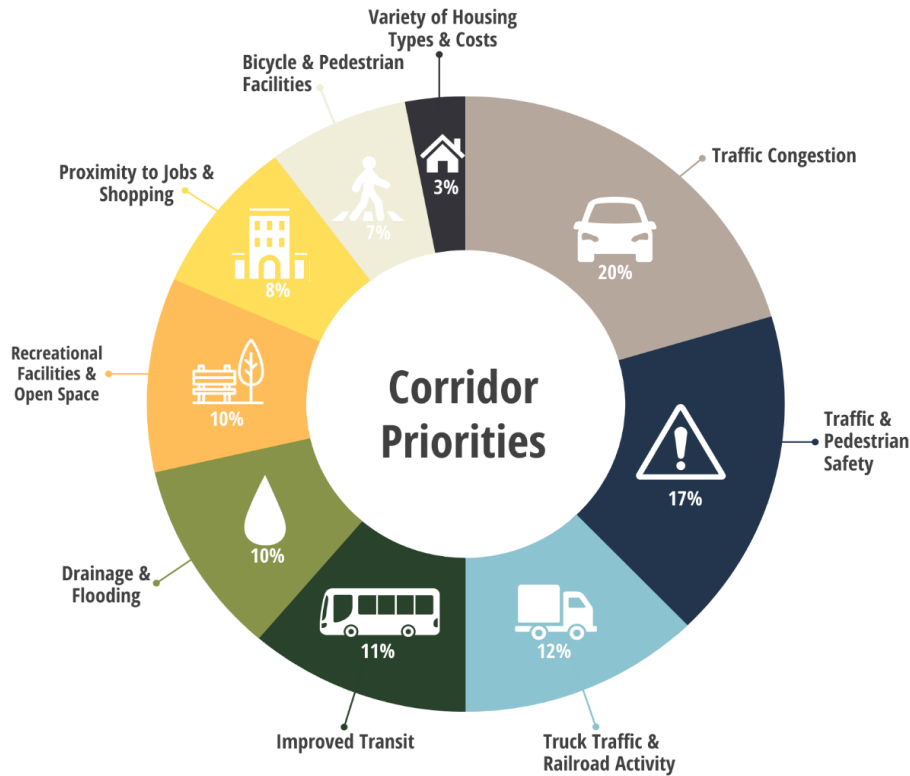


Figure 3-3: Stakeholder Identified Corridor Priorities

Several other engagement tools or strategies were used throughout the planning process to solicit input from as many stakeholders as possible, as follows:

- A [US 52 Corridor Study](#) project website was developed to provide update on the progress of the study, which provided an opportunity for the public to give feedback at major decision points in the Plan’s development. Study meeting materials, analyses and technical reports, project findings, and recommendations were posted to the project site for review and comment.
- The study’s Steering Committee was engaged at critical points in the planning process to provide technical feedback on study analyses and guidance on the Plan’s development.

- Stakeholder interviews were conducted with local planning and engineering staff and local public transportation providers.
- Public open-house meetings were held in Goose Creek & Moncks Corner.
- Introductory study presentations were made to County, Town, and City Councils:
 - Moncks Corner Town Council: January 19, 2021
 - Berkeley County Council: February 8, 2021
 - Goose Creek City Council: February 23, 2021
- Local media and social media outlets were used to advertise project public meetings and survey opportunities.



The information gathered at public open-house meetings, stakeholder interviews and the MetroQuest Survey results was critical in determining consensus around the future vision for development of the corridor, The resulting recommendations are outlined in the *Scenario Briefing Report* in Appendix B and the *Preferred Scenario Report* in Appendix D.

4 Corridor Context: Challenges & Opportunities

4.1 Corridor Overview

The US 52 Corridor Study Area shown in **Figure 4-1** is located in Berkeley and Charleston Counties, and extends approximately 18 miles between the intersection of US Highway 17 Alt. and Rembert C. Dennis Boulevard in Moncks Corner and Otranto Road in North Charleston. The study area also encompasses the approximately 12-mile parallel roadways of Old US 52 and Rembert C. Dennis Boulevard/US 52 Bypass in Moncks Corner.

Based on the roadway functional classification system, mainline US 52 is designated as a principal arterial which alternates in profile between an urban arterial in the denser populated areas through Goose Creek and Moncks Corner, and a rural arterial in the less dense unincorporated segments of the corridor. The typical section of the roadway varies along the corridor based on its urban-rural classification as well as the traffic demands of the roadway. A complete description of existing conditions can be found in the US 52 *Existing Conditions Report (Appendix A)*.

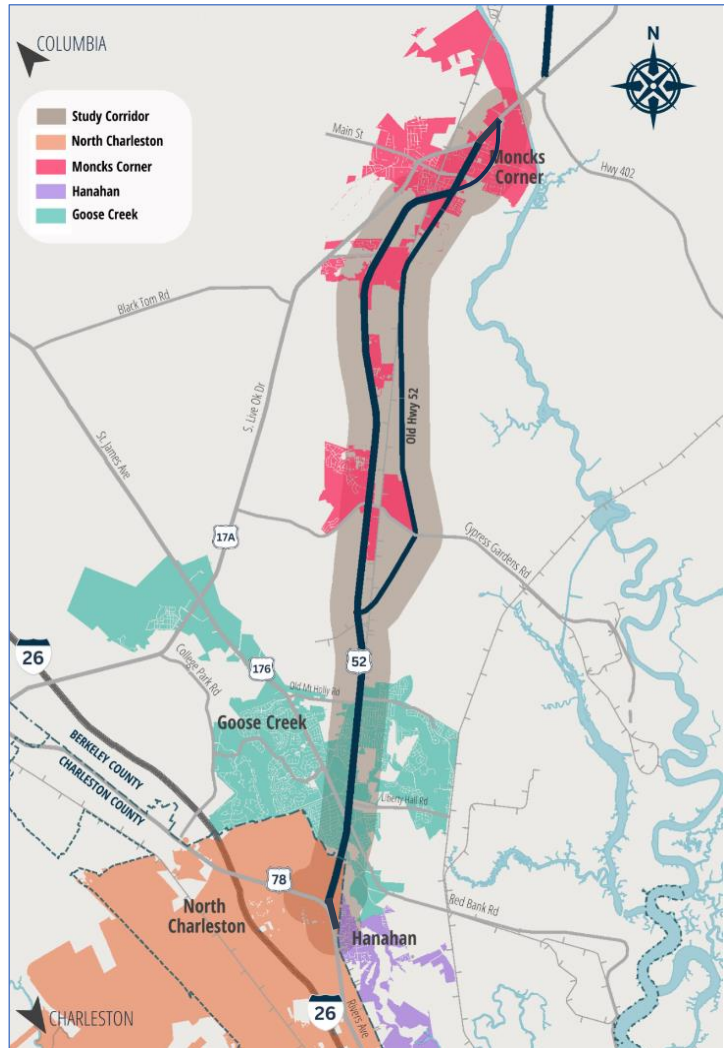


Figure 4-1: US 52 Study Corridor

4.2 Land Use

The US 52 corridor’s landscape is very diverse as it transitions between urban and rural contexts and, as shown in **Figure 4-2**, includes almost every type of land use along its extents. The corridor maintains significant opportunities for new development and redevelopment, particularly in its northern reaches. Throughout the corridor, there are many opportunities to create more compatible land use patterns and employ more robust placemaking strategies.

The southern end of the corridor primarily contains commercial and residential uses, although some office, conservation, planned development, and industrial uses punctuate the study area in North Charleston and Goose Creek.

The middle section of the corridor spanning from Pine Grove Road to Black Tom Road has large land areas devoted to industrial uses, planned development, and some commercial and agricultural land uses that abut US 52. There are also residential land uses in this portion of the study area which are offset further from the roadway.

The northern portion of the corridor contains a mix of land uses concentrated along both the US 52 and Old US 52 corridors. This variation in land uses is most prominent within Moncks Corner, where commercial, industrial, office, residential, and transitional uses all occur within close proximity to one another.

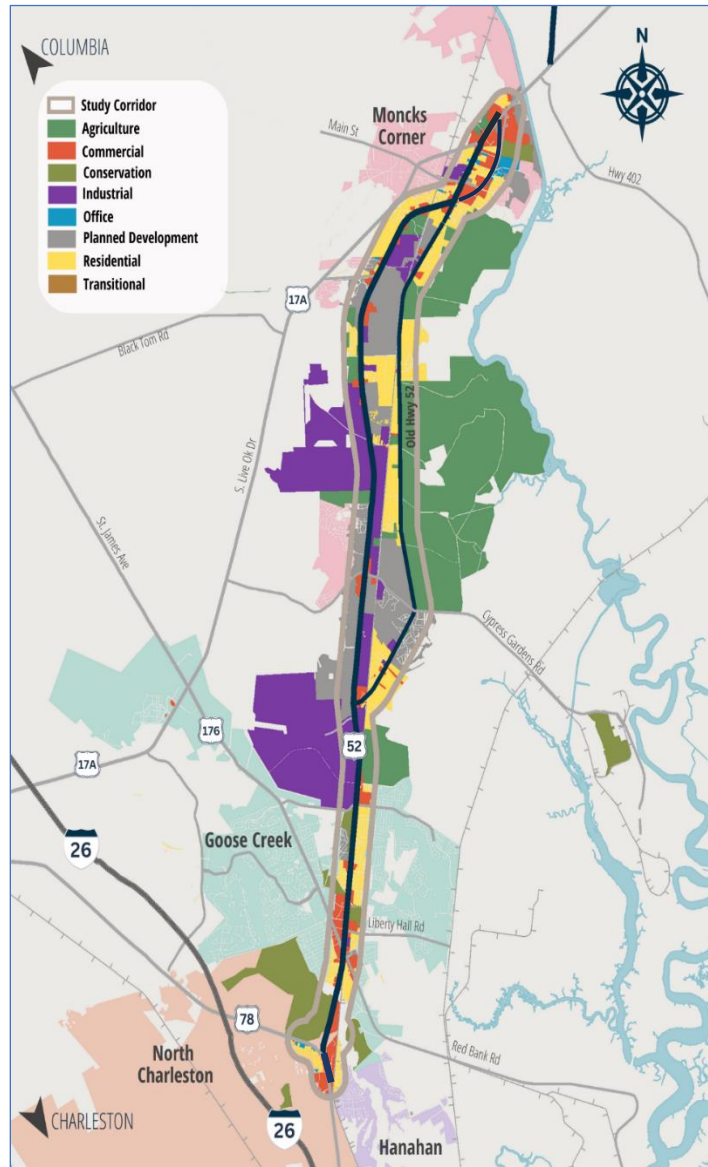


Figure 4-2: Existing Land Use

Figure 4-3 illustrates the corridor’s land use distribution.

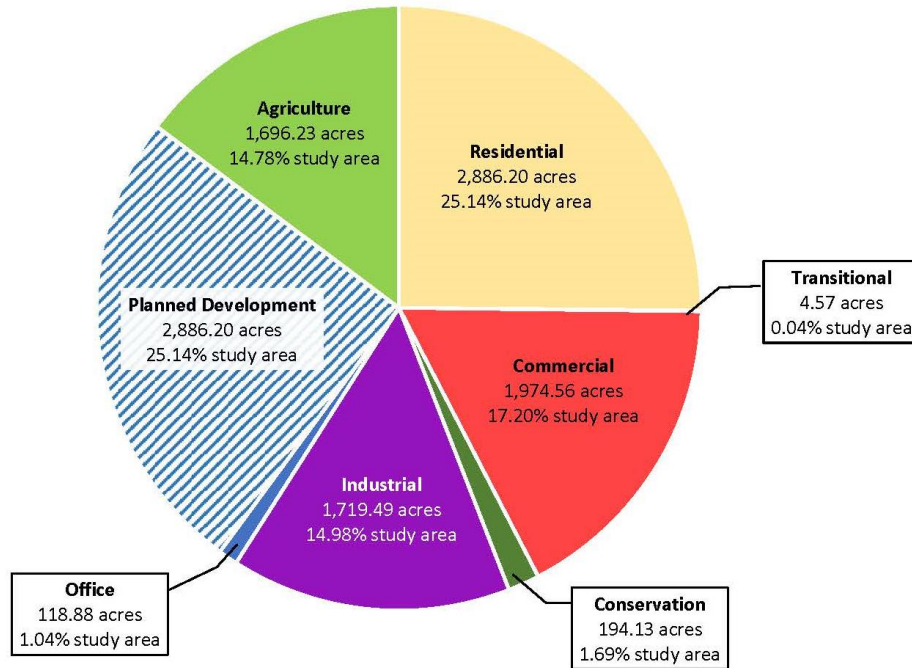


Figure 4-3: Distribution of Existing Land Uses

Study Focus – A key Land Use need of the study is to help local communities plan to manage growth and economic development in a way that improves land use compatibility, improves safety, and reduces trip demand. Plans for land use should respond to both market preferences for a location as well as support recommended transportation improvements.

4.3 Travel Trends

Journey to Work

Approximately 12,600 persons of working age reside within the corridor’s study area, based on 2019 US Census Bureau Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES) estimates. Of these residents, roughly 90% are employed outside the study area. By contrast, of the roughly 12,500 persons employed within the study area, 90% reside outside of the corridor. In other words, almost as many individuals are commuting TO the study area as are commuting FROM the study area to other areas of the region on a daily basis. Reducing this large jobs-housing imbalance, by encouraging and providing for residents to both live and work within the corridor, is key to improving travel times and reducing congestion.

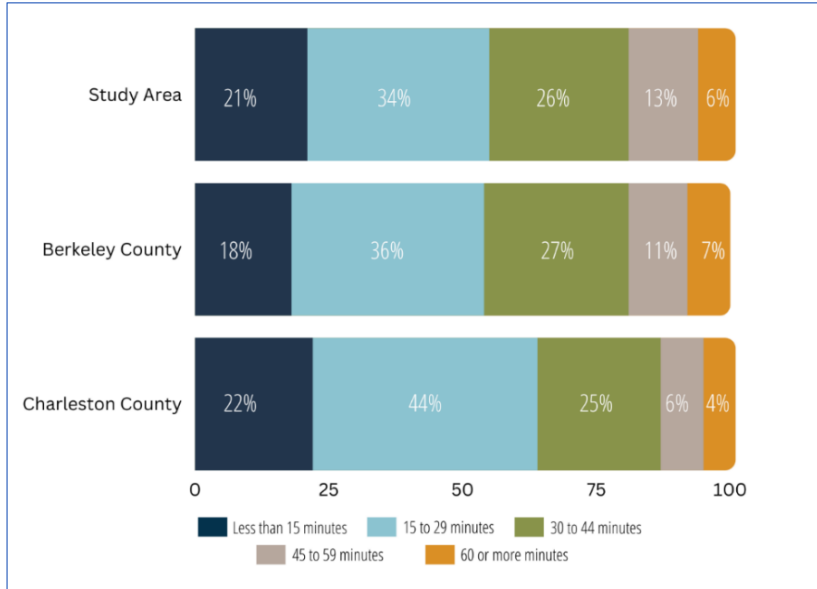


Figure 4-4: Commute Times

As shown in **Figure 4-4**, 79% of workers that live within the US 52 study area commute more than 15 minutes to work, while 45% commute 30 minutes or more. The distribution of commute times within the study area is comparable to that for all of Berkeley County. However, on average the commute time for workers living in the corridor (and Berkeley County) is slightly longer than that of workers in Charleston County.

Means of Transportation

Automobile travel is the predominant mode by which residents within the corridor commute to work. Roughly 89% of the corridor’s working population drive alone to work, which by comparison is slightly lower than levels reported for both Berkeley and Charleston County workers. Use of transit and walking within the corridor is minimal with mode shares reported at or below 1%. The study area’s lower than proportionate use of alternative modes is most likely due to the lack of active transportation facilities and transit service available for corridor residents to connect with jobs. A summary of the “means of travel” to work for residents within the corridor study area compared to Berkeley and Charleston Counties is provided in **Table 4-1** and **Figure 4-5** below.

Table 4-1: Means of Transportation Comparison (% of Working Population)

Travel Means	Study Area	Berkeley County	Charleston County
Car, truck, or van	98.0%	95.6%	93.2%
<i>Drove alone</i>	88.5%	85.7%	84.7%
<i>Carpooled</i>	9.5%	9.9%	8.5%
Public Transportation	0.5%	0.4%	1.3%
Walking	1.0%	2.8%	3.0%
Other means	0.5%	1.2%	2.5%
Total	100.0%	100.0%	100.0%

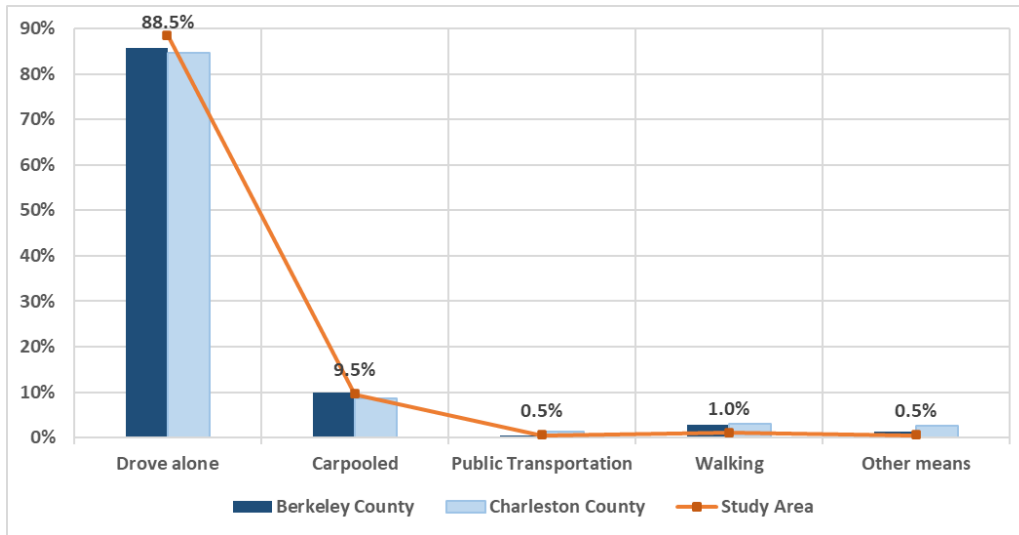


Figure 4-5: Means of Transportation (% of Working Population)

Study Focus – A key need identified by the study is to create the opportunity to balance housing and jobs within the study area and improve access and connectivity to jobs through alternative modes of travel to reduce commute times and improve quality of life.

4.4 Active Transportation

Bicycle and pedestrian infrastructure along the US 52 study area is mainly found within more urban segments of the corridor in Goose Creek and Moncks Corner. Pedestrian facilities are primarily standard 5-ft sidewalks located along major thoroughfares and within some neighborhoods abutting the corridor. Localized community sidewalk networks currently lack connectivity between neighborhoods, major activity centers, community facilities, transit service, and mainline US 52.

Sidewalks within the Town of Moncks Corner are located within the downtown area along the commercial corridors of US 52, US 17Alt, and SC 6/Main Street. However, there is little to no infrastructure and connectivity between these corridors and the residential, business, community and recreational areas located further south along US 52 and Rembert C. Dennis Blvd/US 52 Bypass. Park and historic sites such as the Old Santee Canal Park, Fort Fair Lawn, and Biggin Creek Bike Trail are not easily accessible to residents and visitors to the area by non-motorized means. There are no dedicated bicycle facilities in this segment of the study area. Although one of the state's Bicycle Touring Routes (Coastal Route) passes through the corridor along Gaillard Road, Old US 52, and US 52 Bypass, it is a signed on-street route which provides no separation between bicyclists and automobiles.

Feedback provided by the public, identified the need for more sidewalk and trail infrastructure in downtown Moncks Corner and the communities located along US 52 Bypass/Rembert C. Dennis Blvd and Old US 52 to the east of the Town, as well as improved connectivity between these areas. The public also identified the need for more and better-connected sidewalks, trails and bicycle facilities in existing development nodes around Mountain Pine Road (Moss Grove Community), Gaillard Road (Stoney Creek Community), and around Cypress Gardens Road (Foxbank Plantation and Strawberry developments). There is opportunity to fill in gaps in the existing active transportation network to provide better connection to community facilities including schools, parks, the Town's Recreational Complex, Town and County Offices, historic and recreational resources, and improve access to transit service that is currently operating along the corridor.

Similarly, sidewalk facilities in the City of Goose Creek are located along the major thoroughfares of US 52, Red Bank Road, Liberty Hall Road, and US 176/St. James Avenue, and in some of the communities adjacent to the study area. The City also has developed an approximate 7-mile trail system made up of a mix of on-street bike routes, sidewalks, and dedicated 8-10-ft paved asphalt paths. A portion of the City's dedicated multi-use path parallels US 52 for roughly 1.5-miles connecting the City's commercial core located around the US 52 and US 176 intersection to the Goose Creek Municipal Complex, Community Center and Recreational Complex. Public feedback gathered for this segment of the corridor



included improving and expanding the current sidewalk, bicycle and trail system throughout the Goose Creek area. Survey respondents also highlighted the need for safer crossings at major intersections along US 52 (US 176/Red Bank Road, Liberty Hall Road, Stephanie Drive/Windsor Mill Road, and Montague Plantation Road/Old Mt. Holly Road) to better connect the communities on either side of the corridor.

In 2021 the City of Goose Creek adopted the [City of Goose Creek Connectivity Master Plan](#), which creates a blueprint for integrating walking and bicycling into the community. This Connectivity Plan reflects the community’s priority and City’s commitment to creating an active, safe and attractive environment for residents, workers and visitors. This priority is also reflected in the region’s active transportation plan, [WalkBike BCD \(2017\)](#), which identifies a demand for enhanced bicycle and pedestrian facilities within the corridor and recommends strategies for improving active transportation infrastructure. The existing speed and volume of traffic, as well as the varied densities of driveways and curb cuts, along the corridor create potential conflicts and safety issues for bicycles, pedestrians, and automobiles. Thus, US 52 plan presents both a gap in active transportation connectivity and an opportunity for improvement.

As growth and development continue along the corridor, the need for safe and accessible bicycle and pedestrian connections across and along the corridor will increase. Because US 52 primarily serves vehicular traffic, connections that could provide easy movement for pedestrians and bicycles are limited. There is a need to fill gaps and expand the active transportation network of the corridor to achieve its vision of being a well-connected multimodal corridor, that links people with jobs, transit, and recreational opportunities.

Study Focus – Ensure that land use and transportation decisions for the corridor incorporate and build upon local and regional micromobility planning efforts and initiatives, such as WalkBike BCD Plan and the City of Goose Creek Connectivity Master Plan, to expand the active transportation network, improve access to and connectivity between the communities and businesses along the corridor, and improve safety for non-motorized users.

4.5 Transit

The US 52 corridor is served by the Tricounty Link (TCL) bus service which operates in rural portions of Berkeley, Charleston, and Dorchester counties. The TCL system is comprised of eleven (11) deviated local fixed routes and three (3) commuter routes. Although a few routes operate along various segments of the study area, only one commuter route and one local route operate along the full extent of the US 52 study corridor. Local bus routes follow a published schedule and operate as a “flag-stop” service, picking up customers between the scheduled stops along the fixed route alignment, provided it is safe to do so. Each route also offers a route deviation option that allows the driver to go off the route up to 3/4-mile to pick up customers that cannot meet the bus at designated stop locations. This is primarily a pre-scheduled curb-to-curb service, which allows TCL to serve customers meeting Americans with Disabilities Act (ADA) requirements. TCL uses cutaway buses exclusively which have a seating capacity of up to 32 passengers.



Tricounty Link (TCL) Cutaway Bus

The CS1: Moncks Corner - North Charleston commuter route offers 8 daily trips with 30–60-minute headways and services park-and-ride facilities located at the Santee Cooper Headquarters, Berkeley County Administration Building, Goose Creek Magistrate Office and North Charleston/Melnik park-and-ride lot, where transit riders can transfer to the region’s urban bus system (CARTA). The B102: Moncks Corner-Goose Creek local bus service is a loop route which offers a single AM and PM trip, each with a 3-hour trip length.

Current transit service along the US 52 corridor is not as competitive as automobile travel, and therefore is not utilized by residents and employees with other options. Roughly 60% of survey respondents identified the need to improve the overall quality of transit service on the corridor which included providing better transit stop amenities (benches and shelters), better and safer access to routes, more frequent service, as well as improving route travel times.

Study Focus – Improved transit options in the 18-mile corridor are essential for congestion reduction and improved safety and mobility. Corridor improvement alternatives considered how to leverage transit-supportive development as part of the corridor land use planning.

4.6 Freight

An understanding of existing and potential freight activity centers within and around the corridor helps to inform where roadway and pavement design improvements are needed to improve the efficiency and safety of goods movement. Truck volume and intersection turning movement counts, as well as current and future land use data, were used to identify existing freight generators and those facilities with rail freight access. **Table 4-2** below identifies the intersections along US 52 that have the highest truck-turning movements.

Table 4-2: US 52 Intersections with the Highest Truck Turning Movements

Intersection	Truck Turns AM	Truck Turns PM	Total Truck Turns	Rank
North Live Oak Drive	186	186	372	1
Cypress Gardens Road	154	72	226	2
Gaillard Road	138	46	184	3
Rembert C Dennis Blvd	112	66	178	4
Red Bank Road	89	58	147	5
Reid Hill Road	81	51	132	6

CSX owns and operates the major long-haul rail line that runs primarily parallel to the US 52 study corridor. According to Federal Railroad Administration's (FRA) Grade Crossing Inventory data, 5-6 trains run the corridor during the day, and 11-12 trains travel the corridor at night. The line is mostly single tracked with dual tracks running approximately 3.5 miles between Dennis Park (Dennis Drive) in Goose Creek and Charleston Steel and Metal just north of Tom Hill Road in Moncks Corner. There are 12 at-grade rail crossings within the study area located primarily on intersecting roadways immediately adjacent to US 52. Only one actual at-grade rail crossing of US 52 is located just south of Old US 52 where a rail spur line provides rail access to the Century Aluminum site.



Rail Crossing at Liberty Hall Road

There are five (5) industrial sites with direct rail access that should be considered as major freight generators within the study area as follows:

- Century Aluminum
- Mundy Company
- Charleston Steel & Metal
- Vulcan Materials Company
- West Branch Commerce Park

Study Focus – Truck & rail freight were evaluated to ensure ways to move goods through the corridor safely and efficiently.

4.7 Traffic & Safety

Crash Analysis

Respondents to the study’s online survey cited Traffic & Safety as their top two priority areas of concern along the corridor. These concerns were also a common theme in the input collected from participants at both in-person public meetings.

An analysis of SCDOT crash data for the 5 ½ -year period January 1, 2015 to June 30, 2020, identified a total of 4,420 crashes along the study corridor, of which 12 were fatal and 51 were incapacitating or severe injury crashes. Of the 63 reported fatal and severe crashes, half occurred at or in the immediate vicinity of a signalized intersection. Table 4-3 provides a summary of crash types while Table 4-5 summarizes the severity of crashes.

Table 4-3: Corridor Crash Type

Crash Type	Frequency	Percent
Rear End	2,271	51.38%
Angle	1,036	23.44%
Side Swipe	598	13.53%
Not a Collision w/ Motor Vehicle	388	8.78%
Head On	55	1.24%
Backed Into	53	1.20%
Pedestrian/Bicycle	13	0.29%
Unknown	6	0.14%
Total	4,420	100%

Table 4-4: Corridor Crash Severity

Crash Severity	Frequency	Percent
No Injury	3,283	74.28%
Possible Injury	823	18.62%
Non-incapacitating	250	5.66%
Incapacitating Injury	51	1.15%
Fatality	12	0.27%
Unknown	1	0.02%
Total	4,420	100%

The study corridor was further broken down into five (5) segments, each approximately 3 to 4 miles in length to allow for more detailed analysis. Table 4-5 provides a summary of crash frequencies within each segment. The highest number of crashes occurred in Segment 1, south of Stephanie Drive in Goose Creek, which accounted for 63% of all crashes. The fewest number of crashes occurred in Segment 4 in Moncks Corner from just south of Gaillard Road to south of Rembert C. Dennis Blvd, which accounted for 5.2% of all crashes. Roughly 73% of all fatal and severe injury crashes occurred in Segment 1 (51%) and Segment 3 (22%), and 100% of pedestrian and bicycle crashes occurred in Segment 1 through Goose Creek.

Table 4-5: Crash Frequency by Corridor Segments

Corridor Segment*	Crash Frequency	% of Total
1	2,784	63.0%
2	686	15.5%
3	316	7.1%
4	231	5.2%
5	403	9.1%
Total	4,420	100.0%

*Note:

Segment 1 - Otranto Road to Stephanie Drive

Segment 2 - Stephanie Drive to North of Tom Hill Road

Segment 3 - North of Tom Hill Road to South of Gaillard Road

Segment 4 - South of Gaillard Road to South of Rembert C. Dennis Blvd

Segment 5 - South of Rembert C. Dennis Blvd to North of Reid Hill Road

Figure 4-6 illustrates the concentration of crashes or crash density throughout the corridor, as well as identifies the locations of fatal and bike/pedestrian crashes. Corridor crashes are most concentrated in Segments 1 and 2 through Goose Creek.

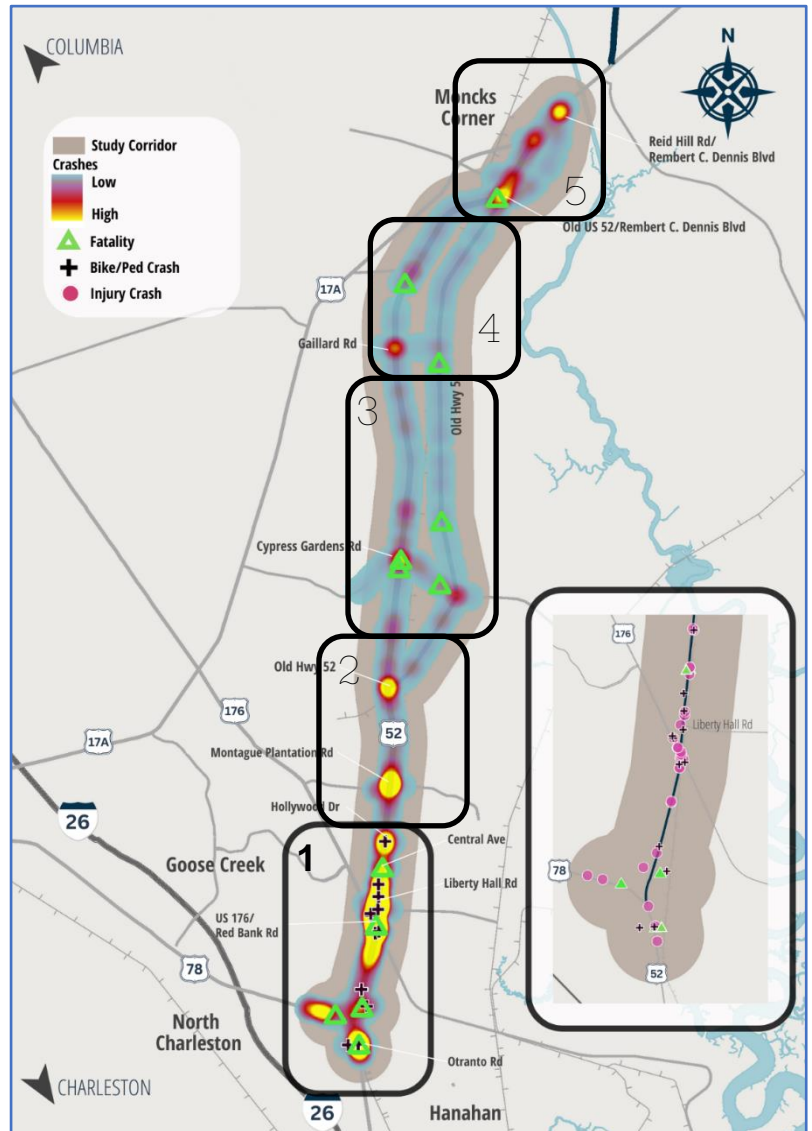


Figure 4-6: Crash Concentrations by Corridor Segments

Table 4-6 below, provides a more detailed breakdown of crash types as a percent of total crashes in each corridor Segments 1 – 5. Although rear end crashes made up the majority of crashes in both Segments 1 and 2, they were proportionally higher in Segment 2 and concentrated around two major intersections – US 52 at Montague Plantation Road and US 52 at Old US 52.

The majority of crashes in Segment 3 resulted from a collision not involving a motor vehicle (32%), but instead may have involved hitting an animal (deer), curb, ditch, tree or other moveable/immoveable objects. Compared to other segments, the majority of crashes in Segment 5 were angle crashes (45%).

Table 4-6: Crash Type as a Percent of Total Crashes by Segment

Crash Type	Corridor Segment*				
	1	2	3	4	5
Rear End	54.38%	62.54%	29.11%	39.83%	35.73%
Angle	22.38%	14.14%	26.27%	22.94%	44.67%
Side Swipe	15.59%	10.20%	9.18%	8.66%	11.17%
Not Collision w/Motor	4.81%	11.37%	31.65%	25.11%	4.47%
Head On	1.01%	0.58%	2.53%	2.60%	2.23%
Backed Into	1.22%	1.02%	0.95%	0.87%	1.74%
Pedestrian/Bicycle	0.47%	0.00%	0.00%	0.00%	0.00%
Unknown	0.14%	0.15%	0.32%	0.00%	0.00%
Total Crashes	2,784	686	316	231	403

According to the Federal Highway Administration, sites with a collision rate of 1.5 crashes per 1 million vehicles should be considered for further safety evaluation. **Table 4-7** identifies the number of reported crashes over the 5 ½ year period (2015-2020), for the eight (8) signalized intersections that had a crash rate that exceeds the threshold of 1.5 crashes per million vehicles, as well as six (6) additional signalized intersections with a crash rate above 1.0. These intersections should be prioritized for improvement to address existing safety concerns.

Table 4-7: Signalized Intersections with the Highest Crash Rates

Intersection	# of Crashes	Crash Rate
US 52 at Old US 52	132	2.20
US 52 at Montague Plantation Road	284	3.81
US 52 at Stephanie Drive	178	2.66
US 52 at Central Avenue	145	2.06
US 52 at Button Hall Avenue	192	2.88
US 52 at Liberty Hall Road	334	4.19
US 52 at US 176/Red Bank Road	672	5.81
US 52 at Otranto Road	332	2.62
US 52 at Reid Hill Road	76	1.36
US 52 at Old US 52/Rembert C. Dennis	55	1.19
US 52 at Gaillard Road	60	1.30
US 52 at Cypress Gardens Road	84	1.42
Old US 52 at Cypress Gardens Road	35	1.34
US 52 at Hollywood Drive	72	1.07

Study Focus – With increasing travel demand and the anticipated introduction of multimodal facilities in the corridor, roadway and operational investments are essential to improve safety throughout the corridor.

Intersection Analysis

Intersection Level of Service (LOS) is a quantitative measure of traffic operational conditions and is related to the amount of traffic demand at a given time as compared to the capacity of that type of roadway or intersection.

Figure 4-7 illustrates six levels of service (LOS) and defines their letter grade designations from A to F. LOS D or better is generally considered to be acceptable for intersections within urbanized or developed areas, while LOS C or better is generally acceptable for intersections located in rural areas. At LOS E, the facility is operating at its capacity, while LOS F is an indication that the traffic volume exceeds the capacity of the facility to accommodate the demand.

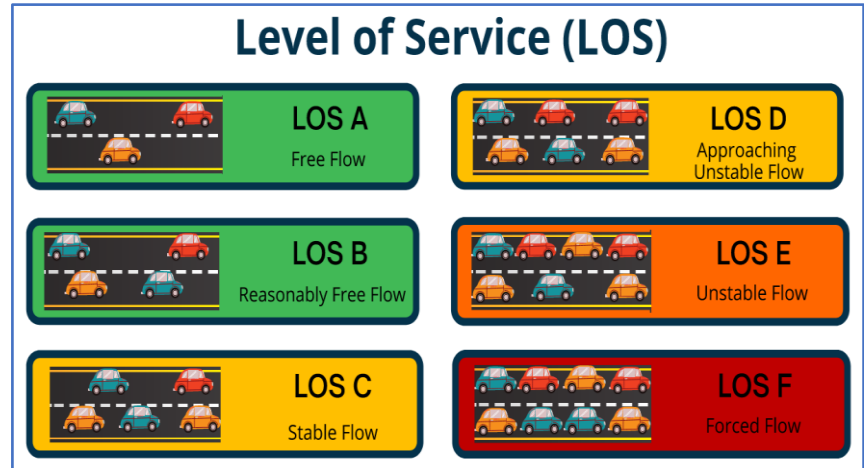


Figure 4-7: Level of Service (LOS) Defined

Capacity analyses were performed for twenty (20) signalized and four (4) unsignalized intersections along the study corridor to identify AM and PM peak hour levels of service and average intersection delays under existing conditions. Results for the fourteen (14) major signalized intersections are provided in **Table 4-7**. Most of the corridor’s major signalized intersections are performing relatively worse during the PM peak in comparison to the AM peak period. The intersections most constrained operating at LOS E or over capacity at LOS F, especially in the PM peak, include the US 52 at US 176/Red Bank Road and US 52 at Liberty Hall Road in Goose Creek, and Old US 52 at Cypress Gardens Road, and US 52 at Cypress Gardens Rd intersections in the middle of the corridor.

Table 4-8: 2020 Existing Intersection Level of Service

Intersection	2020 Existing Intersection Performance	
	AM Peak	PM Peak
	LOS	LOS
US 52 at Reid Hill Rd	B	C
US 52 at Old US 52/Rember C. Dennis Blvd	B	B
US 52 at Gaillard Rd	B	C
US 52 at Cypress Gardens Rd	D	E
Old US 52 at Cypress Gardens Rd	B	E
US 52 at Old US 52	A	A
US 52 at Montague Plantation Rd	C	D
US 52 at Stephanie Dr	B	A
US 52 at Hollywood Dr	B	C
US 52 at Central Ave	A	C
US 52 at Button Hall Ave	A	A
US 52 at Liberty Hall Rd	C	E
US 52 at US 176/Red Bank Rd	E	F
US 52 at Otranto Rd	C	D

4.8 Analysis of Future No-Build Conditions

A “No-Build” analysis looks at future traffic conditions based on the region’s current land use trends, development and transportation plans. It provides decision-makers a glimpse into what the future may look like without any suggested improvements. The CHATS Travel Demand Model (TDM) was used to develop traffic assignments for the US 52 study area and to assess the impact of growth in population, households, and employment. As expected, there is a noticeable difference between what the analysis shows for year 2020 traffic conditions in comparison to those forecasted for 2040, particularly as eight (8) of the corridor’s major intersections change from acceptable levels of service to either level of service of E or F during peak hours. **Table 4-9** represents the 2040 level of service under No-Build Conditions compared to Existing.

Table 4-9: 2020 Existing vs. 2040 No-Build Intersection Level of Service

Intersection	2020 Existing Intersection Performance		2040 No-Build Intersection Performance	
	AM LOS	PM LOS	AM LOS	PM LOS
US 52 at Reid Hill Rd	B	C	D	E
US 52 at Old US 52/Remember C. Dennis Blvd	B	B	B	D
US 52 at Gaillard Rd	B	C	F	D
US 52 at Cypress Gardens Rd	D	E	E	F
Old US 52 at Cypress Gardens Rd	B	E	D	C
US 52 at Old US 52	A	A	A	A
US 52 at Montague Plantation Rd	C	D	F	F
US 52 at Stephanie DR	B	A	B	C
US 52 at Hollywood Dr	B	C	C	C
US 52 at Central Ave	A	C	B	F
US 52 at Button Hall Ave	A	A	A	C
US 52 at Liberty Hall Rd	C	E	E	F
US 52 at US 176/Red Bank Rd	E	F	F	F
US 52 at Otranto Rd	C	D	E	E

Study Focus - With rising traffic volumes and the anticipated introduction of multimodal facilities in the corridor, existing and future intersection operations were examined to identify capacity constraints to be addressed as part of the land use scenarios.

5 Corridor Framework & Recommendations

The US 52 Corridor Plan builds on information and alternatives for improvement developed throughout the study process. It embodies the preferences of the public and local jurisdictions and provides recommendations for how improvements could be accomplished. It is a framework plan since it will require multiple agencies, including participating communities and counties, to champion its implementation over time, and as a result, will require many future decisions and actions to realize its success. A key strategy of the Plan is to focus on reducing transportation demand through a series of multimodal improvements while minimizing trip generation in the corridor through mixed-use development and an improved overall jobs and housing balance. More detailed information regarding the framework and recommendations are provided in the US 52 *Preferred Scenario Report* (Appendix D).

This “framework”, described below, illustrates key concepts of the Plan that are then supported by more specific recommendations. Plan recommendations are organized by travel mode including roadway, transit, active transportation (bicycle and pedestrian), freight, and access management.

5.1 Multimodal Network Framework and Coordinated Land Use Plan

The multimodal framework highlighted in **Figure 5-1**, identifies the type and general location of transportation improvements needed to support the envisioned mixed-use and transit-supportive land use focus areas on the corridor. Of the eleven (11) mixed-use activity nodes identified through the planning process, three (3) key TOD areas of influence are identified within a 2-mile radius of the following intersections of US 52:

- (1) Near Santee Cooper/Rembert C. Dennis Blvd intersection to the north,
- (2) At Cypress Gardens Road in the central section of the corridor, and
- (3) Just north of US 176 to the south of the study corridor.

These TOD nodes seek to build upon areas that have the base infrastructure and growth potential to support denser development given existing and committed development patterns. The proposed TOD and mixed-use nodes also seek to serve or connect to as many activity centers along the corridor, so that any major transit investment made in these nodes will maximize access to areas with high levels of potential ridership.

Providing competitive transit service, along with land use controls that encourage mixed-use development in a place-made context, is important to realizing successful transit-oriented development. In addition, improved roadway capacity, safety, and enhanced active transportation facilities will further improve the environment to support TOD. More details about how transit-oriented development helps to mitigate congestion and improve quality of life will be discussed in the next section.

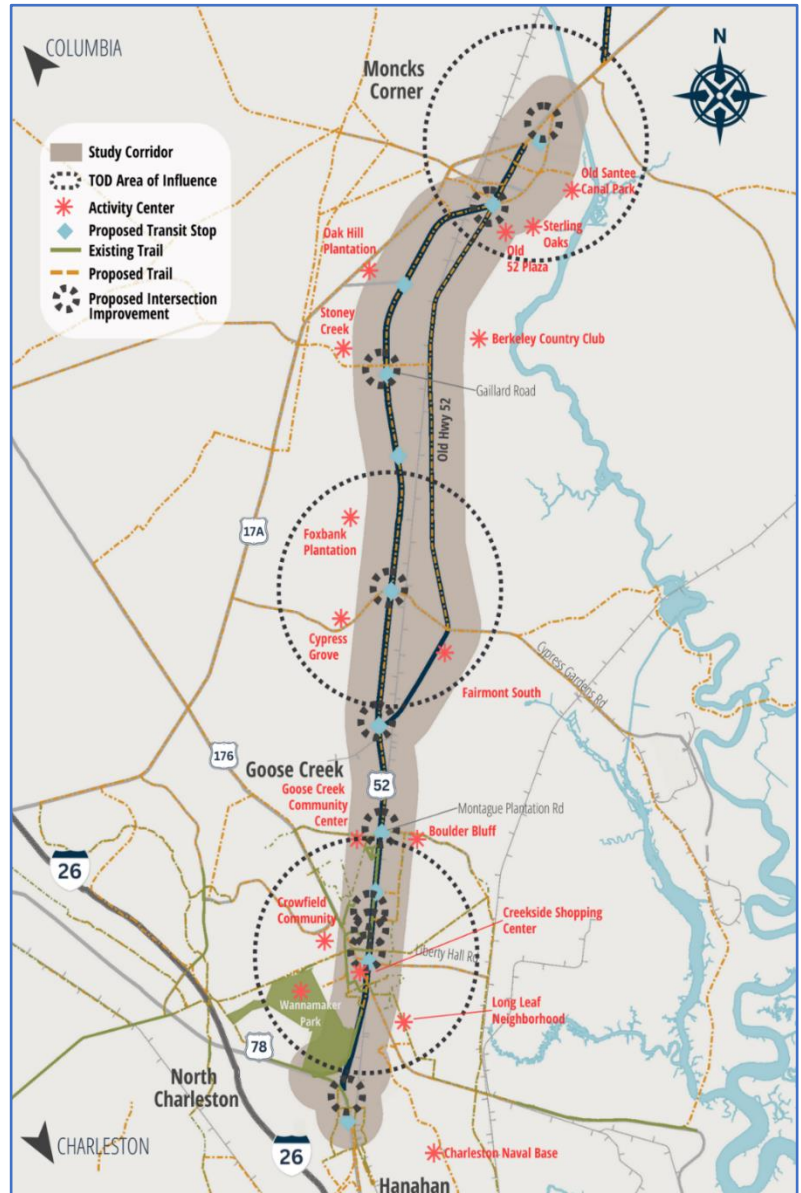


Figure 5-1: Multimodal Network Framework

5.2 Coordinated Land Use and Transit-Supportive Development

Through the planning process and working with the study's Steering Committee and local stakeholders, a new land use framework is proposed for the corridor. This framework is needed for the US 52 corridor for several reasons:

- (1) Each community and the County have established their own land use plans for portions of the corridor. The US 52 Corridor Plan builds upon these existing plans and resolves any differences between local land use plans to arrive at an agreed-upon development pattern.
- (2) To consider the land use relationships and opportunities created through proposed transportation improvements and access changes along the corridor.
- (3) To create compatible new land use areas that seek to improve the jobs-housing balance on the corridor, take advantage of new recommended transit services, and to minimize negative traffic and environmental impacts on the corridor.

A key feature of the framework is to concentrate mixed-use development areas at key nodes or major roadway intersections, where infrastructure already exists, premium transit stations or stops would be provided, and where land is available for more intensive development. A greater concentration of population and employment is recommended in these nodes because of their existing character and potential for transit-oriented development and placemaking. Increasing densities and mixing land uses can create the benefit of reduced trip-making and travel as well as provide housing proximate to employment within the corridor.

The proposed new land use framework shown in **Figure 5-2**, also builds upon the current or existing pattern of land uses and development areas in the corridor to help ensure long-term investment and land use stability. Key features of this framework include:

- The framework leverages the presence of existing and planned transportation improvements, especially in the case where there is a high degree of access to multiple modes.
- Environmentally sensitive assets are protected throughout the corridor.
- Mixed-use development is introduced in a variety of ways to support both placemaking and existing communities as well as reduce trip-making.
- Employment uses continue to have a strong role in the corridor and combined with housing, should assist in improving the jobs-housing balance.

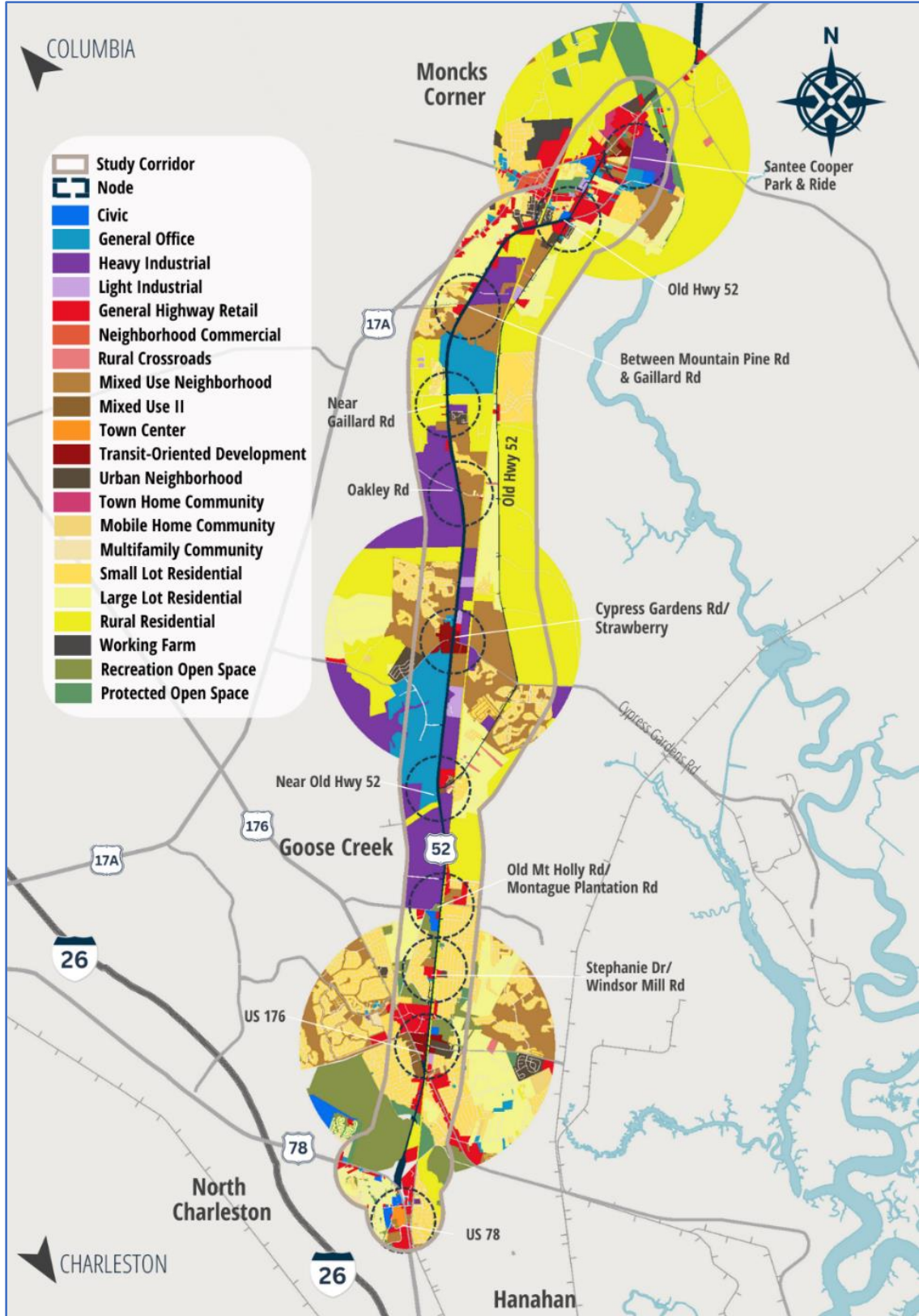


Figure 5-2: Proposed Land Use Framework

Table 5-1 below, illustrates differences between existing land use plans for the corridor and the US 52 Corridor Plan’s recommended land use framework. Noteworthy, and with the features described above, the new plan slightly increases residential densities overall, but places more housing and job opportunities adjacent to proposed transit stops or station locations – key ingredients to be able to create a more walkable mixed-use environment on the corridor.

Table 5-1: Existing Land Use vs. Proposed Land Use Performance

Objective	Performance Measure (s)	Existing Land Use Conditions	Recommended Land Use Conditions
Encourage increased residential densities along the corridor including future locations for transit-supportive land uses in association with future premium transit service.	Number of residential units per acre	1.09	1.15 (+0.06)
	Unit density within 1/2 mile of a proposed transit stop	1.39	2.13 (+0.74)
Provide a broader range of housing types and prices to meet area housing needs	Total Single Family Detached Units (Units within nodes)	20,335 (7,308)	20,434 (8,348)
	Total Single Family Attached Units (Units within nodes)	971 (510)	1,930 (1,529)
	Total Multifamily Units (Units within nodes)	1,449 (597)	2,609 (1,817)
Organize existing and new patterns of commercial, office, and industrial uses along US 52 in nodes compatible with adjacent uses	Number of retail jobs within ½ mile of transit stops	2,460	3,641
	Number of office jobs within ½ mile of transit stops	6,376	7,852
Protect unique environmental resources, including prime farmlands, wetlands, and Goose Creek (which is on the South Carolina 2018 303d list of impaired waterbodies) and several privately-owned protected plantations in the vicinity of Old US 52 that are under conservation easements.	Percent share of environmental features / protected lands within 1/2 mile of transit stops / study area	364 acres	364 acres
Continue to provide suitable locations for new development and redevelopment of appropriate employment land uses with which to grow the City of Goose Creek and Town of Moncks Corner’s employment and commercial base.	Number of jobs in the study area	20,246	21,407
	Number of jobs with access to transit	9,472	12,129

BCDCOG should work with communities along the corridor to develop master plans and implementation strategies for each of the eleven nodes, particularly the three (3) TOD areas of US 52 near Santee Cooper to the north, Cypress Gardens Road in the central section of the corridor, and surrounding US 176 in the south of the study area. It is recommended that station area plans consider “placetype” classifications provided and described in the TOD classification map that is included in the *Preferred Scenario Report (Appendix D)*. Plans should build upon the TOD planning framework that was development to support

the Lowcountry Rapid Transit (LCRT) BRT corridor, with modification to reflect the unique local land use conditions and preferences and focus on realistic mixed-use potential and ways development patterns can be made more walkable.

A preliminary conceptual plan was developed for the US 52 & US 176 node illustrating what the area might look like, in terms of building density, under the TOD Scenario. This concept is meant to illustrate TOD principles only and does not reflect community or County policy. The node is conceived of as a Town Center, in which residential uses make up 40% of land uses, and commercial uses make up 60%, suggesting the potential for 1,500 housing units and 1,200 jobs. **Figure 5-3** illustrates the potential form and nature of residential and non-residential development under the TOD Scenario, showing the ¼ - mile and ½ - mile walk sheds from the proposed transit station.

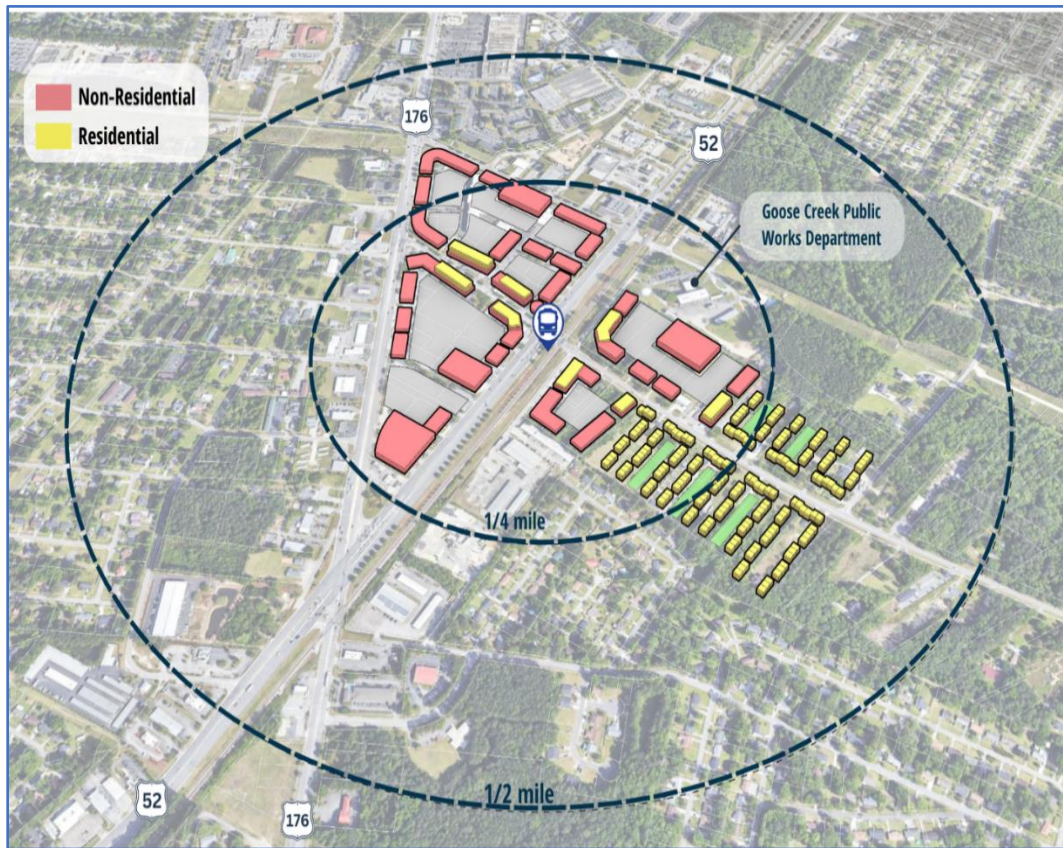


Figure 5-3: Illustrative TOD Land Use Typology (Town Center)

In addition, appropriate land use development regulations are very important to guide development patterns and offer flexibility for creative design. Recommendations for local jurisdictions to consider include:

- Zoning regulations should include a new overlay zone or potentially a form-based code that includes density minimums and provisions for mixed-use development. A form-based code might specify street typologies, the minimum number of floors, minimum lot coverage or façade frontage, and set standards for street furniture, street trees, or on-street parking.
- Offer incentives to developers to encourage proximity to a transit station, density, affordable housing, and public improvements such as bike lanes, sidewalks, paths, or bus shelters and park and ride facilities.

- Offer an accelerated development review process for proposals that meet prescribed TOD requirements or have a taxable value above a determined threshold.
- Establish inter-jurisdictional coordination to achieve cohesive development regulations.
- Consider permitting new liner shops along the corridor edge to assist in the timely redevelopment of stagnant commercial strip centers.
- Modify local parking codes to prohibit over-parking of parcels within proximity of the corridor. Minimum parking requirements discourage the intensification of development and discourage public transit use.
- Modify parking codes to reduce urban runoff and to make more efficient use of land in the corridor.
- Update land use regulations to require the provision of cut-throughs linking cul-de-sacs so that bicyclists and walkers could have direct access to facilities, activity centers, services, and transit.

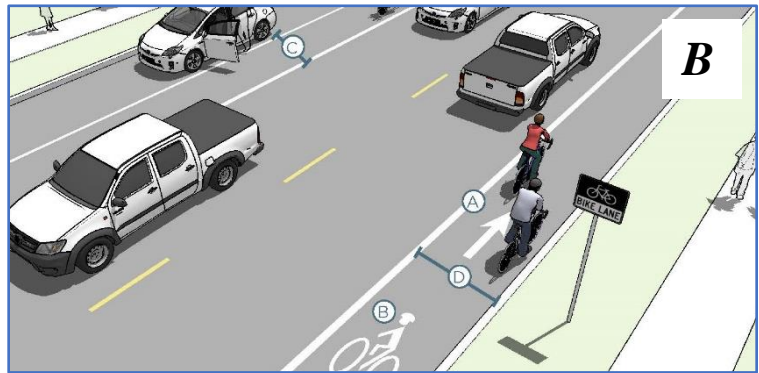
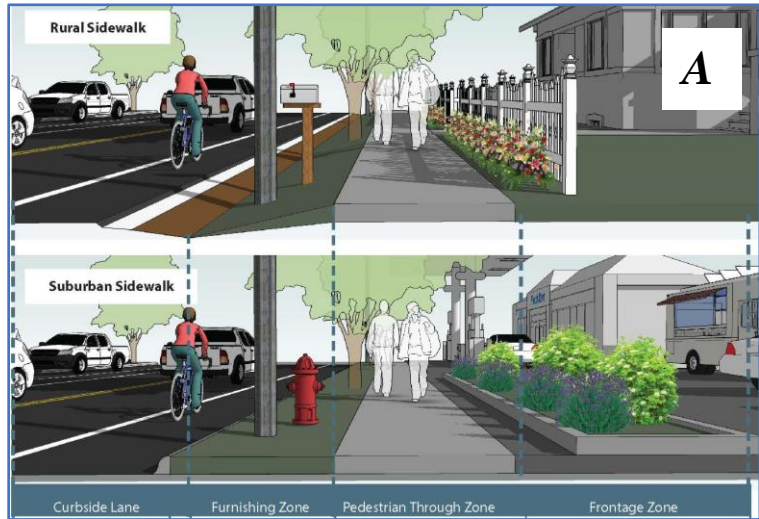
5.3 Active Transportation Facilities Recommendations

A key component of the US 52 Corridor Plan is to establish access to a strong multimodal transportation system that connects major activity generators or destinations and offers alternative travel options that can accommodate short trips typically be done by auto travel. To this end, strong urban design standards are needed to create the proper development context that integrates the pedestrian and bicycle facilities needed for success.

The *City of Goose Creek Connectivity Master Plan* and the regional *WalkBike BCD Plan* provide design guidance on various bicycle and pedestrian facilities and crossing treatments that are context-sensitive to urban, suburban and rural landscapes, all of which are found along the US 52 study corridor.

Recommended active transportation improvements are prioritized to fill gaps in the existing network, and strategically expand the network to better serve the eleven mixed-use and transit-supportive development nodes identified through the planning process. Longer-term recommendations seek to provide connections between development nodes as they are built out over time.

Strong and safe connections between developments, activity centers, transit facilities, and other regional bike and pedestrian facilities that allow greater mobility are equally important. The US 52 Corridor Plan identifies areas where there are gaps in the network or where new connections are proposed to support the new land use and transportation facilities recommendations as presented in Table 5-2.



Illustrative Active Transportation Assemblage and Minimum Design Guidelines (WalkBike BCD Plan)

A - Sidewalk: 6-8 Feet; B - Bike Lane: 5-6 Feet; 10 Feet; C - Multi-Use Path

Table 5-2: Active Transportation Project Recommendations

Project	To	From	Length (Miles)	Facility	Timeframe
Stoney Landing Rd/Rembert C. Dennis Blvd	Spruce Ivy Way	US 52/Old Hwy 52	1.38	Sidewalk	Short-Term
Rembert C. Dennis Blvd	Stoney Landing Rd	US 52/Reid Hill Rd	1.13	New East-West Connection	Mid-, Long-Term
Stoney Landing Rd	Rembert C. Dennis Blvd	US 52	0.46	New East-West Connection	Mid-, Long-Term
Grace St	US 52	Cooper St	0.31	New East-West Connection	Mid-, Long-Term
Barony St	Rembert C. Dennis Blvd	US 52	0.44	New East-West Connection	Mid-, Long-Term
Martin Luther King	US 52	US 17Alt/N Live Oak Dr	0.15	New East-West Connection	Mid-, Long-Term
Epson Plantation Dr	Rembert C. Dennis Blvd	US 52	0.23	New East-West Connection	Mid-, Long-Term
Altman St	US 52	Fairlawn Dr	0.19	Sidewalk	Short-Term
Riverwood Rd	Rembert C. Dennis Blvd	Santee Cooper PnR Lot	0.28	Sidewalk	Short-Term
1st Johns Dr	Old US 52	Rockville Rd	0.15	Sidewalk	Short-Term
Shannonwood Dr	Birchwood	Old US 52	0.16	Sidewalk	Short-Term
Bradley Rd	Bradley Rd	Shannonwood Dr	0.26	Sidewalk	Short-Term
Old US 52	Shannonwood Dr	Dennis Blvd	0.26	Sidewalk	Short-Term
US 52 Complete Streets Improvements	Old US 52	Reid Hill Rd/Rembert C. Dennis	1.87	Complete Streets Improvements	Short-, Mid-Term
Gaillard Rd	Stoney Creek Way	US 52	0.23	Sidewalk	Short-, Mid-Term
Woodland Lakes Rd	US 52	Sora Lane	0.19	Sidewalk	Short-, Mid-Term
Miracle Park Dr	E. Main St	Moncks Corner Rec Complex	0.05	Sidewalk	Short-, Mid-Term
Foxbank Plantation Blvd	US 52	Foxbank Town Ctr Dr	0.05	Sidewalk	Short-, Mid-Term
Robin Wood Blvd	US 52	Piney Branch Ct	0.28	Sidewalk	Short-, Mid-Term
Moss Grove Dr	US 52	Lake Shore Dr	0.06	Sidewalk	Short-, Mid-Term
Oakley Point Blvd	US 52	Silk Oak Dr	0.06	Sidewalk	Short-, Mid-Term
GC Hiker-Biker Trail Ext. #1	Montague Plantation Rd	Goose Creek Recreation Center	0.29	New Shared-Use Path	Mid-Term
Old Mt Holly Rd SUP	US 52	St James Ave	1.56	New Shared-Use Path	Mid-Term

5.4 Transit Recommendations

Improved transit service is a critical component of the Plan to ensure long-term stability of the US 52 corridor. Many of the land use and transportation assumptions cannot be realized without enhanced transit service to supplement the transportation capacity of the corridor and the potential for future development.

The recommended long-range land use pattern along US 52 will warrant frequent bus service along the corridor with designated stops, improved passenger amenities such as shelters and benches, and increased frequencies on feeder routes to the corridor. Frequent bus service could come in the form of a dedicated Bus Rapid Transit (BRT) guideway, with limited segments operating in mixed traffic, supported by pedestrian infrastructure such as sidewalks, pedestrian signals and marked crosswalks.

Premium bus service in the corridor should develop over time. As the corridor grows, it is important to create a transit supportive environment, strategically develop the local transit service and build ridership. A BRT or other premium service would then build off this more robust transit.

It is recommended that a new, more frequent trunk service that serves the entire length of the US 52 corridor study area, with TCL routes providing support by “feeding” passengers utilizing a transfer, be first introduced. Building off the trunk line service, other changes to TCL services could be appropriate including changes to routing and frequency of some of the feeder services as explained below. TCL is also interested in moving away from a flex route system with infrequent trips to an on-demand service model. Therefore, it is recommended that existing feeder routes in the study area that loop in the rural areas north and west of Moncks Corner be transformed into demand response routes; while in more urban areas, these routes eventually be changed into arterial routes to provide more direct and faster service.

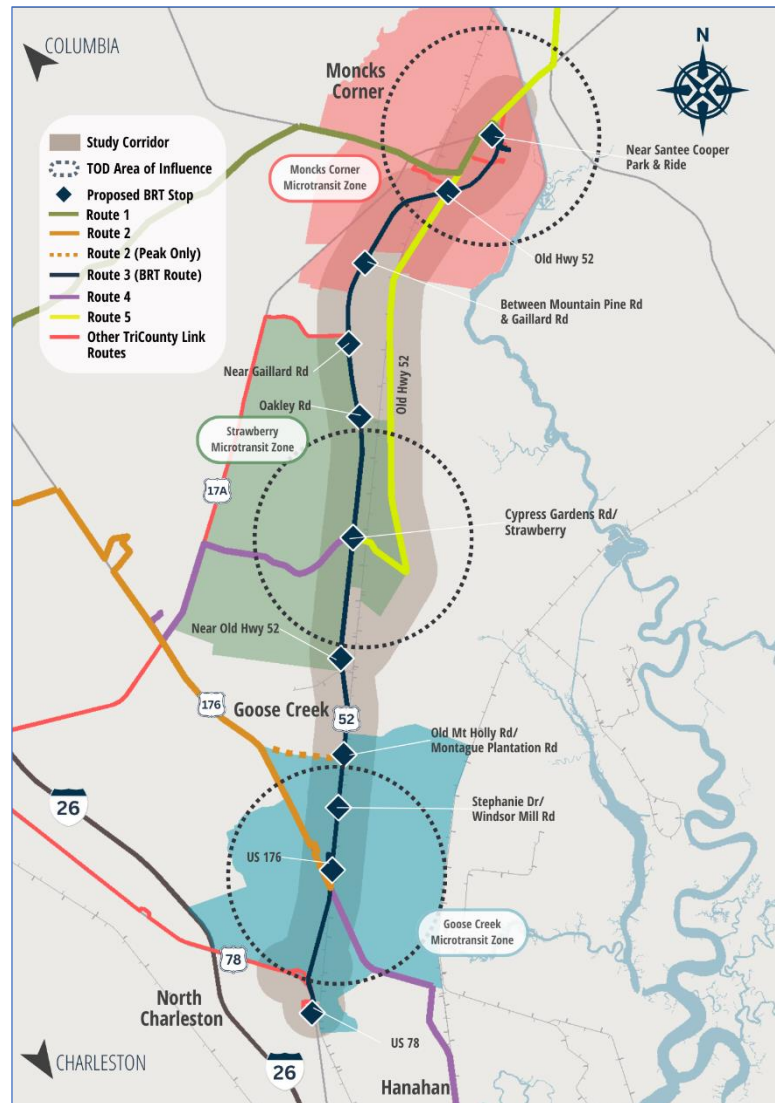


Figure 5-4: Transit Recommendations

As noted above, pedestrian facilities enabling riders to access transit stops from surrounding neighborhoods are critical to transit service success and should be implemented at each of the identified

development nodes. Park-and-ride facilities should be considered in the corridor, but carefully placed such that they are not disruptive to the overall walkability of each node. Park-and-ride facilities are particularly important at the termination of service near Santee Cooper/US 52 & Reid Hill Road TOD node.

Recommended transit service changes include the following, as illustrated in **Figure 5-4**:

- Short to Mid-Range Recommendations –
 - Streamline local TCL routes serving the corridor to be less circuitous (trunk line), improve bus stop locations (signage, benches, shelters, lighting, etc.) and increase the route's frequency/service span.
 - Increase the frequency/service span for other intersecting TCL routes.
 - Develop micro transit zones to serve more intense development along the corridor in the Moncks Corner, Cypress Gardens/Strawberry, and Goose Creek areas. Micro transit is a form of demand responsive transport. This transit service offers a highly flexible routing and/or highly flexible scheduling of minibus vehicles shared with other passengers.
 - Initiate a study for the corridor to determine what high-capacity transit service is most appropriate (BRT, BRT-Lite, etc.).
- Mid to Long-Range Recommendations –
 - Develop high-capacity transit line in a dedicated transitway along the corridor.
 - Median running north of Button Hall Avenue.
 - Mixed traffic south of Button Hall Avenue and along Rembert C. Dennis Blvd.
 - 11 station stops

5.5 Freight Recommendations

The 2040 Statewide Multimodal Transportation Plan designates US 52 as part of its Strategic Freight Network, and freight growth in South Carolina is expected to grow by 65% between 2016-2040. SCDOT's Statewide Rail Plan identifies several strategies to improve freight and goods movement across the State and through the region. These include the following that can be applied to the US 52 corridor:

- Reduce Congestion:
 - Eliminate bottlenecks; and
 - Explore technological solutions, such as Intelligent Transportation Systems (ITS) to reduce congestion:
 - Provide real-time and online travel time information from Moncks Corner and Goose Creek to US 78, I-26, I-526, and Downtown Charleston.
 - Implement smart signal technology for demand-responsive timing plans
- Improve the Average Speed on Congested Corridor:
 - Prioritize improvements along major truck corridors; and
 - Promote the use of real-time traffic information to support private sector routing decisions.
- Improve the Safety, Security, and Resilience of the Freight Transportation System:
 - Create a commercial vehicle crash database to identify particular patterns so that those situations can be addressed;
 - Develop proper signage where non-motorized transportation users and the freight network overlap; and
 - Partner with railroads to prioritize at-grade crossing improvements. Recommendations specific to the at-grade crossing within the corridor include:
 - Restriping existing railroad crossing pavement markings
 - Replacing and/or installing advance warning signs
 - Cutting back trees and vegetation to improve sightlines for motorists
 - Improving the existing roadway profile to eliminate low-ground clearance issues
 - Repairing the crossing surface and drainage systems
 - Reviewing current pre-emption and interconnection with adjacent intersection traffic signals
- Incorporate Freight-Related Land Uses in Local and Regional Planning Discussions.
- Increase or maintain pavement quality in good condition.

5.6 Roadway Recommendations

The CHATS Travel Demand Model was modified to reflect land use changes recommended by the Plan and then applied to develop annual growth rates in traffic to the year 2040. The resultant travel growth rates ranged from 2% to 4% annually, with the highest rates occurring in the central part of the corridor. The following recommendations are made to best accommodate this projected increase in traffic.

- Provide for and identify right-of-way necessary for a two-lane BRT transitway in the median from north of Old US 52/Rembert C. Dennis Blvd. to Button Hall Avenue, including station platforms at the 11 station stops as illustrated in **Figure 5-1**.
- Widen approximately 6 ½ miles of US 52 to a six-lane cross-section from north of Button Hall Avenue to the north of Foxbank Plantation Blvd. It is further recommended to add one through lane in each direction through the intersection of Gaillard Road. The example shown in **Figure 5-5** illustrates the proposed widening of US 52 to a six-lane roadway at Montague Plantation Road, along with the addition of a BRT transitway and associated station platform in the median.



Figure 5-5: US 52 & Old Mt. Holly Rd/Montague Plantation Rd

- The second major improvement recommended is reconstruction of the US 52 and US 176 / Red Bank Road intersection to either an at-grade Superstreet or a grade-separated interchange.

In the Superstreet configuration, through traffic on US 176 / Red Bank Road traveling across US 52 is required to turn right then make a left turn at new northern and southern crossovers, which then connect back to US 176 to the north or Red Bank Road to the south. This configuration eliminates the current seven-phase signal at the main intersection and replaces it with dual two-phase signals in each direction on US 52, allowing for improved operations. **Figure 5-6** illustrates this at-grade Superstreet concept.



Figure 5-6: US 52 & US 176/Red Bank Road (At-Grade Superstreet Alternative)

- In the Grade-separated Interchange configuration shown below, through traffic on US 52 is separated from the major turning movements to and from US 176 and Red Bank Road, eliminating the traffic signal at US 176/Red Bank Road and Red Bank Road is elevated over the railroad. Through movements along US 176 and Red Bank Road would be redirected to a new northern crossover intersection. Northbound right and westbound left movements, however, would be prohibited. It may be possible to accommodate the northbound right turn, though this would include an at-grade rail crossing. It is shown as an option in Figure 5-7.



Figure 5-7: US 52 & US 176/Red Bank Rd (Grade-Separated Alternative)

- At US 52 at Rembert C Dennis Boulevard / Reid Hill Road, redirect eastbound Reid Hill Rd left turns and southbound US 52 right turns to use Anglers Drive as part of a modified Quadrant Roadway configuration as illustrated in **Figure 5-8**. Eastbound Reid Hill Rd left turns would enter northbound US 52 using a median acceleration lane at signalized southbound US 52. Southbound double left turn lanes would be added to turn onto Rembert C. Dennis Blvd. In addition, the northbound right turn from Rembert C. Dennis Blvd would be modified to signal controlled dual right turn lanes.



Figure 5-8: US 52 at Rembert C. Dennis Boulevard /Reid Hill Road

In addition to these major improvements, other intersection improvements along the corridor are summarized in **Figure 5-9**:

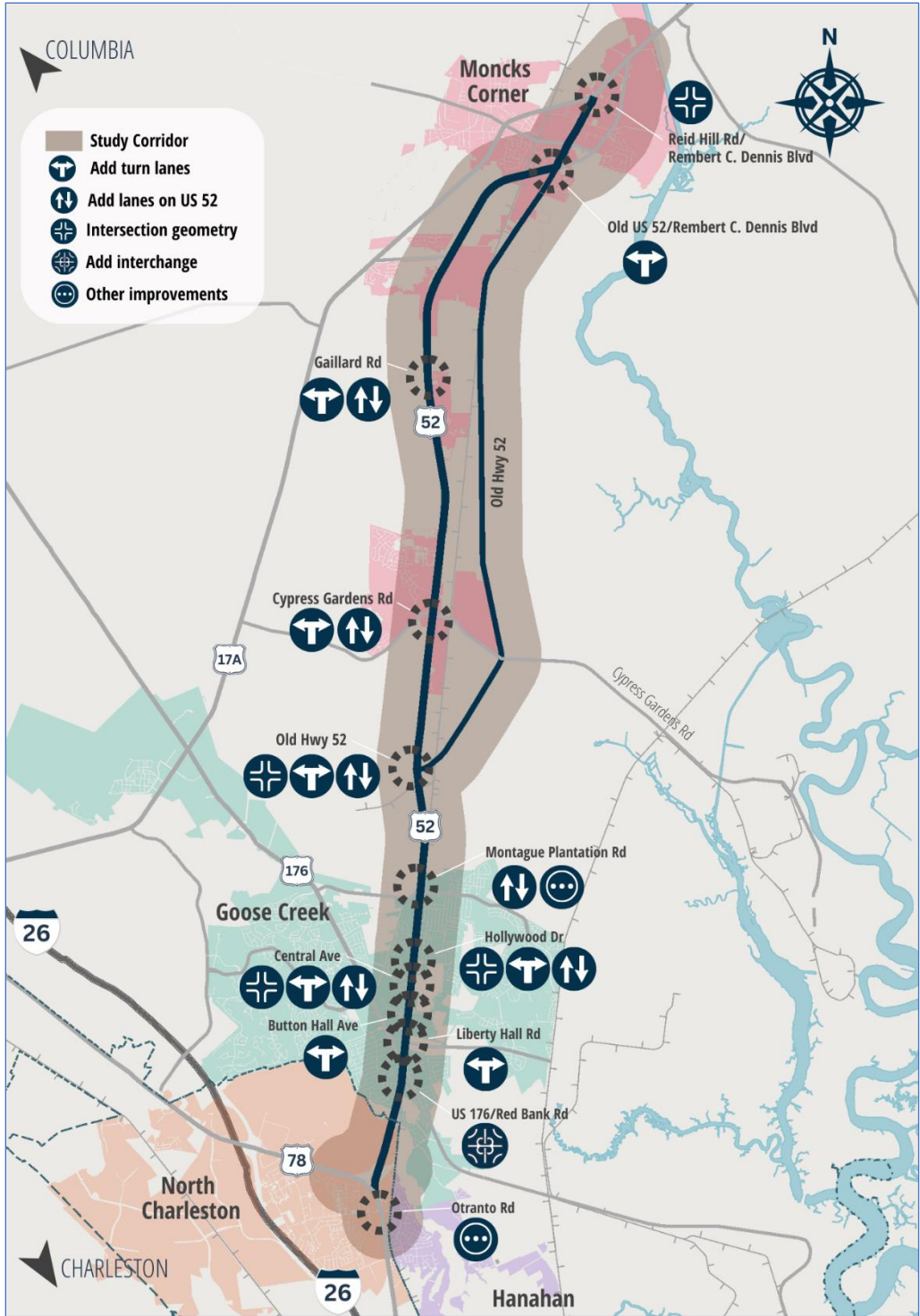


Figure 5-9: Recommended Intersection Improvements

Table 5-3 represents the 2040 level of service (LOS) incorporating the various intersection improvements described, compared to the Existing and 2040 “No-Build” scenarios. Note that several intersections through Goose Creek degrade during the AM peak hour under the Superstreet configuration due to improvements upstream, releasing traffic to travel downstream. Widening US 52 to add a 4th southbound through lane to improve these levels of service does not completely resolve the deficiencies. In fact, since a wider road increases the time required for pedestrians to cross, the full benefit of the additional lanes is not realized. Further, the railroad right-of-way limits widening to the east, so additional right-of-way must come from businesses on the west side of the road.

Table 5-3: 2020 Existing vs. 2040 No-Build & Build Level of Service

Intersection	Existing		2040 No-Build		2040 Superstreet		2040 Echelon	
	AM	PM	AM	PM	AM	PM	AM	PM
US 52 at Reid Hill Rd.	B	C	D	E	B	C	B	C
US 52 at Old US 52/Rember C. Dennis Blvd.	B	B	B	D	B	C	B	C
US 52 at Gaillard Rd.	B	C	F	D	D	C	D	C
US 52 at Cypress Gardens Rd.	D	E	E	F	D	E	E	E
Old 52 at Cypress Gardens Rd.	B	E	D	C	B	B	B	B
US 52 at Old 52	A	A	A	A	C	B	C	B
US 52 at Montague Plantation Rd.	C	D	F	F	D	D	C	D
US 52 at Stephanie Dr.	B	A	B	C	F	B	C	B
US 52 at Hollywood Dr.	B	C	C	C	F	A	E	A
US 52 at Central Ave.	A	C	B	F	F	D	D	D
US 52 at Button Hall Ave.	A	A	A	C	F	E	D	D
US 52 at Liberty Hall Rd.	C	E	E	F	F	F	E	F
US 52 at US 176/Red Bank Rd.	E	F	F	F				
US 52 at Northern Connector					F	C	C	C
US 52 SB at US 176					F	C		
US 52 NB at Red Bank Rd.					B	D		
US 52 at Southern Connector					C	E		
US 52 at Otranto Rd.	C	D	E	E	D	E	D	E

As shown, since the grade-separated interchange improvement results in much-improved levels of service over the Superstreet and eliminates the existing at-grade rail crossing of Red Bank Road, it is the recommended improvement at this location.

5.7 Proposed Transitway Design Approach

Implementing reliable high-capacity BRT transit service along the US 52 Corridor requires a dedicated transitway where feasible, while accommodating operations in mixed traffic segments through traffic signal priority and/or preemption. The preferred design for a US 52 Corridor premium transit system is to add two dedicated bus lanes along much of the corridor, in coordination with other necessary improvements to improve traffic operations & safety.

Mixed-traffic – Along Rembert C. Dennis Blvd and along US 52 south of Button Hall Avenue, the BRT is shown to operate with vehicular traffic.

Dedicated Transitway – Between Rembert C. Dennis Blvd/Old US 52 and Button Hall Avenue, the BRT is recommended to operate in dedicated transit lanes within the roadway median. **Figure 5-10** and **Figure 5-11** illustrate typical section concepts integrating a median dedicated transitway for a 4-lane or 6-lane

section. Considerations include improvements at non-signalized intersections along the route and the elimination of some median breaks to maintain transit lane continuity.

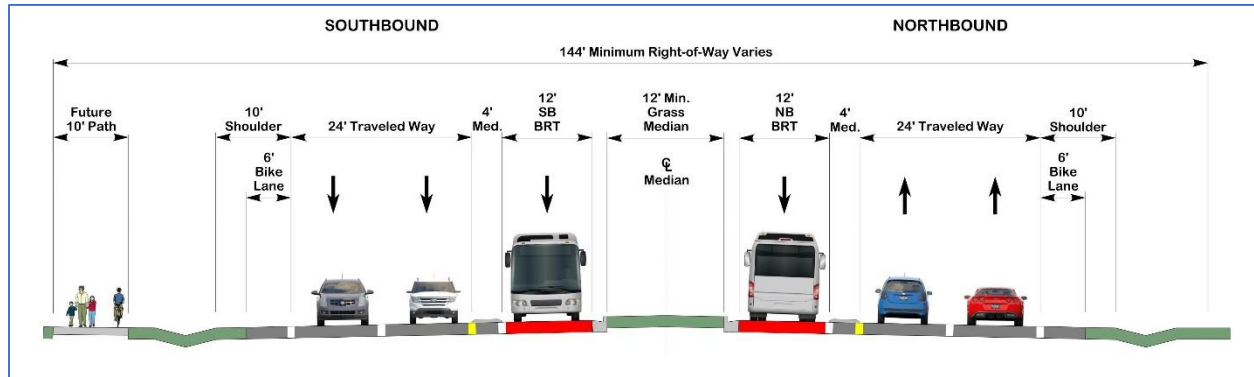


Figure 5-10: Proposed BRT Alignment within a 4-Lane Typical Section

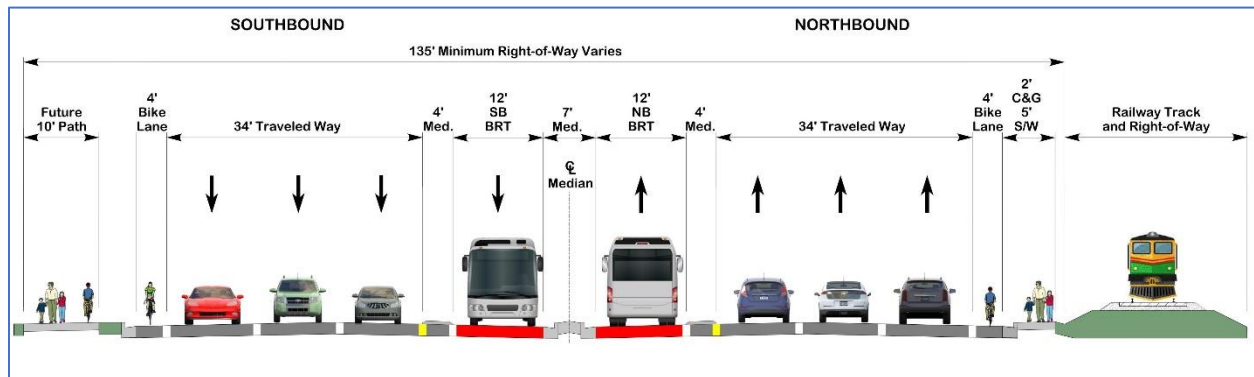


Figure 5-11: Proposed BRT Alignment within a 6-Lane Typical Section

Operation of BRT service in the corridor would rely on signal priority and/or preemption, to either extend the green signal phase for an approaching bus or provide enough advanced detection to preempt the signal, allowing the bus to proceed without delay. At locations where buses must transition from the dedicated transitway to mixed traffic, a queue jump phase would be provided to facilitate the bus movement between the median and the right side of the roadway.

5.8 Access Management

The Federal Highway Administration (FHWA) provides Access Management techniques that state and local governments can apply to control access to highways, major arterials, and other roadways. Access management includes several techniques that are designed to increase the capacity of these roads, manage congestion, and reduce crashes. These include

- Increasing spacing between signals and interchanges;
- Driveway location, spacing, and design;
- Use of exclusive turning lanes;
- Median treatments, including two-way left turn lanes (TWLTL) that allow turn movements in multiple directions from a center lane or raised medians that prevent movements across a roadway;

- Use of service and frontage roads; and
- Land use policies that limit right-of-way access to highways.

For urban segments of the US 52 corridor, regardless of transit implementation, change of access is expected as new SCDOT approved projects are constructed along the corridor. Improvements may include intersection modifications, additional through lanes along the corridor, consolidated driveways to increase separation distances, and restricting left turn maneuvers to improve efficiency. These changes provide a safer corridor and meet the SCDOT Access and Roadside Management Standards (ARMS Manual) for reconstruction projects

A closed median within Goose Creek is recommended to improve safety and efficiency of the through movement but may require accommodations for U-turn movements and potential right-of-way impacts. Like recent modifications to US 176 in Goose Creek, the existing two-way left turn lane (TWLTL) median could be modified to a raised median along US 52 to reduce left turn movements and associated angle and left turn crashes.

The divided highway segment with a depressed median north of Button Hall Avenue to Old US-52 in Moncks Corner will require fewer access management retrofits and the limited access points should be retained. The exception is the potential to close median breaks for the two-lane transitway and to address driveway spacing requirements associated with other proposed intersection improvements.

Any new construction will need to meet or require an exception to the Access and Roadside Management Standards (ARMS Manual), which recommends a minimum spacing of 400 feet between full operational drives or intersections with an AADT greater than 2,000 and a minimum design speed of 50 mph (ARMS: Figure 3-7) or 150 feet for a right-in/right-out driveway (ARMS: Figure 3-9). Also, an approximately 10-mile segment between the two Old US 52 intersections is a controlled access facility in accordance with construction documents (SCDOT File No. 8.431) dated June 11, 1969. The arterial designation provides no legal right to access except for those points identified in the plans, which were generally existing driveways and intersections at the time of right-of-way acquisition. Any changes to this designation are handled through the SCDOT process for a new Application for Encroachment Permit, thereby requiring SCDOT review and approval of any land use changes, adjacent property subdivisions, and/or redevelopment along the corridor.

6 Implementation & Next Steps

Implementation of the US 52 Corridor Plan is the shared responsibility of state, regional, local and private sector partners, and will require a sustained commitment of all stakeholders to successfully achieve the long-term vision of the thoroughfare as a complete well-connected mixed-use corridor that serves both the mobility needs of the region and supports the livability and economic needs of the communities and businesses that call the corridor home.

The Plan's recommendations' stress the linkage between land use and transportation decisions by including a mix of both land use policy recommendations that will help shape the corridor's preferred development patterns, and a range of complementary transportation recommendations that seek to effectively serve the corridor's communities, improve the safety and operational efficiency of all modes of travel and expand transportation options for all users including motorists, freight providers, pedestrians, bicyclists, and transit riders.

6.1 Steps for Implementation

Implementation of the Plan can be achieved through:

- Zoning and Land Use Changes – Land use and zoning changes are the responsibility of the local corridor jurisdictions of Goose Creek, Moncks Corner and Berkeley County. New land use categories to encourage mixed-use and non-residential categories should be considered for local plan inclusion as well as related zoning and land development regulations. TOD typologies adopted for the Lowcountry Rapid Transit (LCRT) corridor should be considered as frameworks for application to identified nodes.
- Bike and Pedestrian Strategies – Consider revisions to zoning ordinances, subdivision regulations, and local street design standards under the responsibility of the local municipalities of Goose Creek, Moncks Corner and Berkeley County to encourage or require a Complete Streets approach to planning and designing transportation improvements projects and implement bicycle and pedestrian facilities concurrent with other roadway and development projects. Examples include trail development ordinances and residential street layout requirements that ensure continuity between adjacent developments to ensure bicyclists and walkers are provided with through-routes.
- Access to Transit - Transit access improvements are relatively low-cost strategies that both promote public transit and lengthen distances for a walk or bike trip. Examples include a bike-on-transit program or planning for a bicycle storage facility. Source: NACTO [Transportation-Planning-Handbook-Bicycle-and-Pedestrian-Facilities.pdf \(nacto.org\)](#)
- Rail Safety - Heighten rail safety awareness to reduce the likelihood of collisions between people /vehicles through safety rail education through South Carolina Operation Lifesaver: [South Carolina Operation Lifesaver](#)

Partner with SCDOT to create a statewide initiative aimed at educating the public about the dangers of being on and around the railroad tracks, similar to NCDOT's BeRailSafe program. [BeRailSafe.org | Respect the Crossing. Respect the Track. \(ncbytrain.org\)](#)

- Coordinate with municipal, County and the CHATS MPO Long-Range Transportation Planning Process – Of the 138 ranked projects prioritized by CHATS in its 2040 LRTP, seven are within the US 52 Corridor Study limits. Subsequent versions of the LRTP should add the improvements projects recommended below (short/immediate, near, and long-term recommendations).

6.2 Timeline & Costs

Developer-funded improvements expected at US 52/Gaillard Road and at US 52/Cypress Gardens Road intersections should provide some relief in the near term, but additional measures will be required across the corridor to accommodate future traffic volume. Improvements proposed at US 52/Montague Plantation Road as part of the Henry Brown Blvd. project will address anticipated congestion, but additional through lanes on US 52 are required in the future to address the demand. Changes are also anticipated at the US 52/Otranto Road intersection when the Lowcountry Rapid Transit project is constructed, so nothing additional is recommended. The remaining intersections north of Otranto Road are not currently programmed for improvements, so many will continue to degrade without some added capacity.

Table 5-3 recommends Short Term / Immediate Projects (0 to 5 years) that are more easily implemented to address current capacity constraints and safety, Near Term Projects (5 to 10 years) requiring additional funding, right-of-way acquisition, and final design, and Longer-Term Projects (greater than 10 years) required to be in place closer to the design year of 2040 or that may require additional Planning, Design and NEPA approvals as well as major funding. Cost categories for the various projects are included in the Implementation Matrix of recommended projects below.

6.3 Funding Sources & Strategies

Implementation of the US 52 Corridor Plan will require an assortment of funding mechanisms, which may evolve over time. However, there are several sources of funding typically available and used within the region to fund infrastructure improvements identified with the Plan. The following provides an overview of the most common funding sources:

State-Federal Funding

The South Carolina Department of Transportation receives funding from state and Federal sources to finance eligible transportation programs that advance both national goal areas as well as the state's strategic transportation priorities. The State's primary source of transportation revenue comes from the state motor fuel tax and other vehicle-related fees. For many years the fuel tax remained stagnant at 16 cents per gallon; however, in 2017 the South Carolina State Legislature passed a highway bill (Act 40) or the "Roads Bill", that increased the state gasoline tax by 12 cents and imposed fee increases on taxpayers when they lease, buy, register, obtain license tags for, and pay property taxes on items that were not previously taxed. These funds are deposited into a new trust fund called the Infrastructure Maintenance Trust Fund (IMTF), which is mandated under Act 40, to be used exclusively for repairing, maintaining, and improving South Carolina's existing roadways and bridges. At full implementation, the state's fuel tax now equals 28 cents per gallon and is projected to provide roughly \$800 million in additional annual revenue.

The state also receives Federal formula funding apportioned through the Federal-Aid Highway Program (FAHP) which, under the 2021 Bipartisan Infrastructure Legislation (BIL), re-authorizes the core federal surface transportation program areas such as the National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STBG), Highway Safety Improvement Program (HSIP), Congestion Mitigation and Air Quality Improvement Program (CMAQ), and the National Highway Freight Program (NHFP), as well as expands core programs to include the Carbon Reduction and PROTECT Formula Programs. Implementation of these programs are the responsibility of the state department of transportation (SCDOT) and further requires the state to provide the necessary matching funds. The estimated FAHP apportionment to South Carolina for the five-year funding period under BIL is estimated at \$4.6 billion through 2026.

SCDOT's Strategic 10-year Transportation Asset Management Plan (STAMP) sets the state's investment priorities for both state and Federal formula funding to systematically improve the transportation system's safety and performance and maintain SCDOT's assets in a state of good repair. While US 52 Corridor Plan projects cannot directly compete for these funds, partners will need to stay abreast of any roadway improvement projects that may have been identified as a state priority, ensure project scoping includes the recommendations identified through the corridor planning process.

"C" Fund Program: County Transportation Committee (CTC)

The "C" Fund program is a partnership between the South Carolina Department of Transportation (SCDOT) and counties in the state to fund improvements of state roads, local, county and city roadways which are not on the state highway system, and other local transportation projects provided for under South Carolina Code of Laws. Funding for the program is derived from a portion of the state gasoline tax and distributed to each of South Carolina's 46 counties based on population, land area, and rural mileage. The State's Act 40 of 2017 includes authorization of additional funding for the "C" program, which increases the portion of the State gasoline fee dedicated to the program from 2.66 cents-per-gallon to 3.99 cents-per-gallon once fully phased in by 2021. Beginning fiscal year 2021-2022, each county is required to dedicate 33.3% of their "C" funds to improvement of the State highway system. State law further requires that the additional funds derived from Act 40 are used exclusively for repairs, maintenance, and alterations to the State's highway system. Beyond these restrictions, CTCs can use funds for local road improvements including paving or improvements to county roads or streets, traffic sign improvements, and other road and bridge projects, as well as carry forward uncommitted funds from one year to the next provided the carryover amount does not exceed 300% of the county's "C" fund apportionment for the most recent year.

Berkeley County's "C" Fund Program is administered by the Berkeley County Transportation Committee (BCTC), which is comprised of nine members appointed by the Berkeley County Legislative Delegation. The BCTC includes representation of all municipalities and unincorporated areas within the county. The county's BCTC Transportation Plan further defines the use of "C" funds for local funding categories to include State paving and resurfacing projects, local paving and resurfacing projects, enhancement projects consisting of construction, repairs, or replacement of sidewalks, bikeways, or trails within a dedicated right-of-way easement, public road projects that promote economic development and job growth in Berkeley County, and other projects that do not clearly fit within a prescribed category or fit within multiple categories. The BCTC accepts project requests from citizens, local governments, SCDOT and other groups, and evaluates, prioritizes and selects eligible projects based on the targeted funding level of the various funding categories.

Charleston County's "C" Fund Program is administered by the Charleston County Transportation Committee (CCTC). Allocation of funds are prioritized to the preservation, rehabilitation and reconstruction of local and State secondary road and bridge systems (Priority 1 - 80% of funding); new construction projects which may include building new roadways or paving and/or rocking earth roads, improving community access, safety improvement projects such as sidewalk construction, road or street intersection improvements, roadway restriping and signage projects (Priority 2); and funding reserve which holds funds in reserve for possible project cost overruns, highway bond funds, matching funds, or emergency funds during the fiscal year (Priority 3). Projects can be requested by or through governmental agencies (State, County, or Municipal), school or public educational entities, business groups or agencies, citizen groups, or other interested parties.

Approximately \$4.4 million and \$4.8 million in "C" funds were apportioned to Berkeley County and Charleston County respectively, to plan and develop projects for fiscal year (FY) 2022.



MPO Regional Mobility Program (formally Guideshare Program)

The state allocates a portion of Federal Surface Transportation Block Grant Program (STBG) funds to the CHATS MPO to facilitate the urban long-range transportation planning process. The CHATS Long-Range Transportation Plan (LRTP) identifies needed transportation improvements in the region and prioritizes them for implementation as funding becomes available. The LRTP is comprehensively updated every 5 years but can be amended at any time if a significant project not previously considered has been identified. CHATS' annual apportionment from the Regional Mobility Program is approximately \$33 Million.

Local Funding Opportunities

Berkeley County Transportation Sales Tax

In 2022 Berkeley County voters enacted a one-cent sales tax for the benefit of roadway improvement projects that would produce \$587 million in revenue over seven years. Improvements could include capacity projects, major resurfacing projects, local street resurfacing, intersection improvements, and other transportation projects. Improvements to the US 52 corridor and US 52 and US 176 intersection were specifically cited as capacity projects as part of the County legislation approving and obligating funds.

Charleston County Transportation Sales Tax

Charleston County voters agreed in 2004 to create an additional half-cent sales tax on local purchases to fund a specified set of greenbelt and transportation projects. Administered by the Charleston County Transportation Development Department, the original funding is now fully obligated to specific projects across the county, but in the future funds could be allocated to improvements on the southern section of US 52.

Federal Discretionary Grants

Funding for significant infrastructure improvements can also be secured through discretionary federal grant opportunities. The current Infrastructure Investment and Jobs Act (IIJA), passed in 2021, will invest \$110 billion of new funds for roads, bridges, and other major transportation related infrastructure, and reauthorize the surface transportation program for the next five years through 2026. **Error! Reference source not found.**, provides summary of grant programs that may be pursued to fund recommended improvements in the US 52 Corridor Plan.

Table 6-1: Summary Improvement Recommendations

ID	Project Name	Improvement	Description	Corridor Challenge / Potential Benefit	Project Type	Cost Range	Timeframe	Potential Funding Source
Roadway Improvements								
1	Old US-52 & Cypress Gardens Rd	Signal Timing Adjustment	Adjust traffic signal timing to improve PM Level of Service (LOS) and reduce the average delay at the intersection	Operational/Traffic Signal Timing	Intersection	> \$1 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
2	US-52 & Cypress Gardens Rd	Turn-Lane Improvements	Add turn lanes on both approaches of Cypress Gardens Rd	Capacity	Intersection	> \$1 M	Short-Range	Developer Contributions, Berkeley County CTC
3	US-52 & Liberty Hall Rd	Signal Timing Adjustment	Install northbound & westbound right-turn overlap signal phase	Capacity	Intersection	> \$1 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
4	US-52 & US-176/Redbank Rd	Turn-Lane Improvements	To improve PM Level of Service and reduce intersection's average delay: * Install a third northbound turn lane * Prohibit westbound left turns from Red Bank Rd and convert westbound left turn lane to a second through lane. * Install a Red Bank Rd westbound right turn overlap signal phase	Capacity	Intersection	> \$1 M	Short-Range	Berkeley County TST, CHATS RMP/STBG, INFRA, MEGA, RCE,
5(a)	US-78/University Blvd & Old University Blvd	New Traffic Signal	Consider if these two unsignalized intersections should be signalized in light of: * Proximity to the US-52 interchange * Proximity of N.A.D Rd/N. Park Ext to at-grade rail crossing * Anticipated changes to the Old University Blvd intersection with the construction of LCRT	Capacity	Intersection	> \$1 M		Charleston County CTC, Charleston County TST, CHATS RMP/STBG
5(b)	Goose Creek Rd & N.A.D Rd/N. Park Ext	New Traffic Signal						
6	US-52 & Central Ave	Acceleration Lane Improvement	Extend median acceleration lane from Central Ave to northbound US-52 to satisfy SCDOT Design Criteria	Safety	Intersection	> \$1 M		Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
7	US-52 & Old US-52	Acceleration Lane Improvement	Extend median acceleration lane from Old US-52 to southbound US-52, though ending the taper before the at-grade rail crossing	Safety/Operational	Intersection	< \$5 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
8	US-52 & Otranto Rd	Turn-Lane Improvements	Extend existing storage and taper length on Otranto Rd eastbound left turn lane to northbound US-52	Capacity	Intersection	> \$1 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
9	US-52 & Button Hall Ave	Turn-Lane Improvements	Extend existing storage and/or taper length on: * Button Hall Ave eastbound left turn lane to northbound US-52 * US-52 northbound left turn lane to Button Hall Ave	Capacity	Intersection	> \$1 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
10	US-52 & US-17A/N. Live Oak Dr	Turn-Lane Improvements	Extend existing taper length on US-52 northbound left turn lane to US-17A/N. Live Oak Dr	Capacity	Intersection	> \$1 M	Short-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
11	US-52 (Mainline) Widening	Capacity Improvement	Widen US-52 from a 4-lane to 6-lane cross-section for a distance of ~6 miles from north of Button Hall Ave to north of Foxbank Plantation Blvd, including impacted side street improvements	Capacity	Widening	< \$50 M	Mid-Range	Berkeley County TST (Future), CHATS RMP/STBG, RAISE
12	US-52 & Gaillard Rd	Capacity Improvement	Widen Intersection - *Add additional through lane in each direction on US-52	Capacity	Intersection	< \$10 M	Mid-Range	Berkeley County TST, CHATS RMP/STBG,

13	US-52 & Old US-52 & Rembert C Dennis Blvd	Capacity Improvement	Widen intersection -	Capacity	Intersection	< \$10 M	Mid-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
14	US-52 & Reid Hill Rd/Rembert C Dennis Blvd	Capacity Improvement	Modified Quadrant Roadway Improvement	Capacity/Safety	Intersection	< \$5 M	Long-Range	Berkeley County CTC, Berkeley County TST, CHATS RMP/STBG
15	US-52 & US-176/Red Bank Rd	Capacity Improvement	At-Grade Solution -	Capacity/Safety	Intersection	< \$50 M	Mid-, Long-Range	Berkeley County TST, CHATS RMP/STBG, RCE,
			Grade-Separated Solution -			< \$100 M	Mid-, Long-Range	Berkeley County TST, CHATS RMP/STBG, RCE,

6.4 Looking Ahead

The US 52 Corridor Plan sets the stage for how corridor stakeholders, including communities, state and local governments and BCDCOG can work together to achieve its transformation. The time is right for action. Real estate market interests in the corridor are strong and can be shaped to reflect the local desires expressed in the Plan and supported by a safe and efficient multimodal transportation system. The key to success will be continued collaboration and support among the Plan's sponsors to policies and initiatives to drive implementation and realization of its Vision for the future.

