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Alisha Smith — Director, Projects & Planning

Brandy McDow — Marketing & Outreach Manager

Atlanta Regional Commission

Daniel Studdard, Transportation Planning Administrator & Freight Program Manager

Project Funding Partners





Consultant Team



In Association With





Stakeholder Committee

DeVonne Baker — Prologis

Craig Camuso — CSX

Paul DeNard — GDOT District 7

Jeff Drobney — City of Kennesaw

Clay Foxworth — Atlanta Bonded Warehouse

Ned Green — GDOT Office of Planning

Kelly Gwin — GDOT Office of Planning

Joshua Higgins — GDOT

Joe Keith — Atlanta Bonded Warehouse

Sandy Lake — Georgia Center for Innovation of Logistics

JD Lorens — Cobb County DOT

Angie Luna — City of Acworth

Joseph Madison — Kennesaw State University

Brook Martin — Cobb County DOT

Seth Millican — Georgia Transportation Alliance

Jomar Pastorelle — GDOT Office of Planning

Landon Perry — GDOT

Gary Roberts — Great South Metals

Merishia Robinson — GDOT

Jeffrey Short — American Transportation Research

Lee Smith — CW Matthews

Stephen Spencer — Cobb County International Airport

Ricky Stewart — City of Kennesaw

Malcolm Wardlaw - Vulcan Materials

Megan Weiss — GDOT Office of Planning

Stephanie Williams — GDOT Office of Planning

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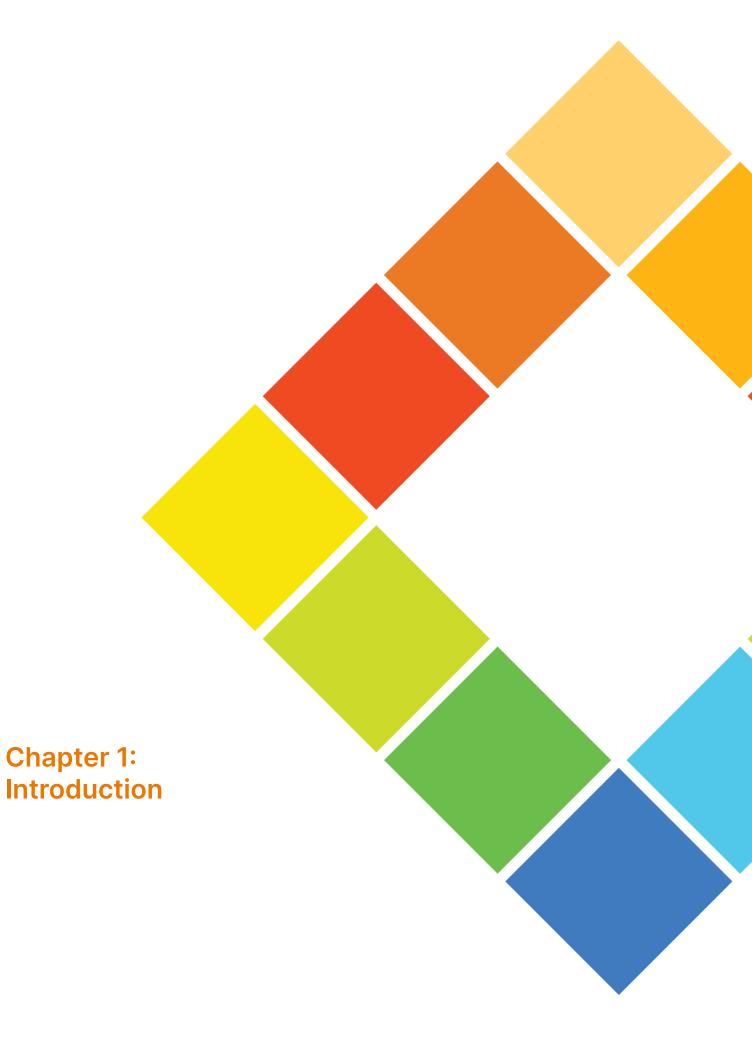
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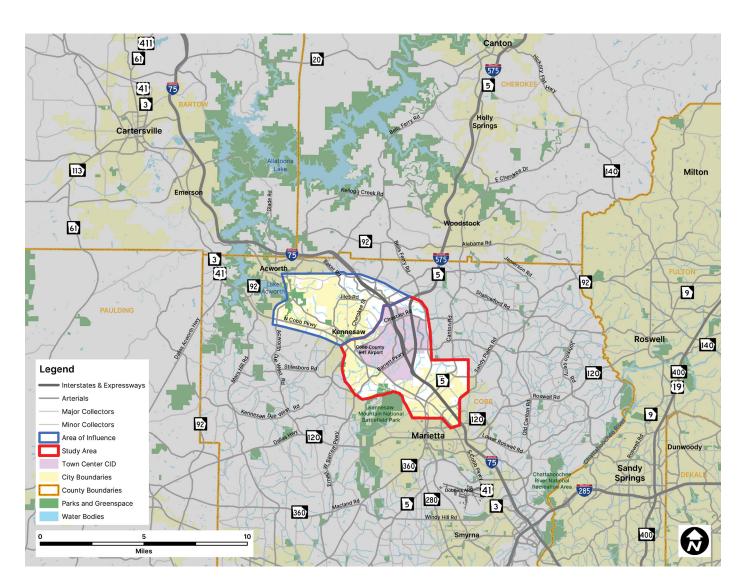
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Project Overview & Background

The Town Center Community Improvement District (the "Town Center Community" or "TCCID") is a major regional activity center which serves as a gateway for commuters, freight operations, and travelers to and from Metro Atlanta via Interstates 75 and 575. I-75 is one of the busiest corridors for freight movement in the nation and provides connectivity between Atlanta and Chattanooga. It is also home to a complex mix of retail, residential, office, university services, manufacturing, warehousing, and industrial uses. Service and access is provided to freight-oriented distribution centers and warehouses within and adjacent to the Town Center Community through arterials and state routes such as Barrett Parkway (SR 5 Connector), Cobb Parkway (US 41/SR 3), Canton Road Connector (SR 5 Spur), and Chastain Road/McCollum Parkway. There are also residential, civic, and educational uses, as well as numerous neighborhoods, that generate vehicular traffic and includes bicycle and pedestrian activity. As such, the Town Center Community needs a robust transportation network that can serve multiple modes of transportation.



Data Sources: Atlanta Regional Commission; Cobb County DOT

Figure 1. Town Center Locational Context Map

Why a Freight Cluster Plan?

The Town Center Community is developing a Freight Cluster Plan to understand freight-related needs, issues, challenges, and growth opportunities within the district and the northwest portion of the Atlanta region. This is to position the transportation system to support sustained growth for freight-generating businesses while addressing mobility needs for all users.

The study is supported by the Atlanta Regional Commission's (ARC) Freight Cluster Plan Program and is intended to complement local and regional Comprehensive Transportation Plans (CTP). The Freight Cluster Plan Program defines goals, needs, and priorities for moving goods, improving access to jobs, reducing traffic congestion, adapting to changes in the logistics industry, and improving safety, mobility, and access for all roadway users in the specific plan's study area. Project recommendations from freight cluster plans help position communities for future funding requests during ARC's Transportation Improvement Program (TIP) and Metropolitan Transportation Plan (MTP) update cycles, in addition to other funding sources.

The Freight Cluster Plan strives to understand freight-related needs, issues, challenges, and growth opportunities within the district and the northwest portion of the Atlanta region.

Locational Context

The Town Center Community Freight Cluster Plan focuses on two distinct areas in northern Cobb County – a study area and an area of influence.

The study area serves as the main focus of the Freight Cluster Plan, and a majority of recommendations are located within this portion of the County. This consists of the entire TCCID boundary as well as nearby freight operations which have a profound impact on traffic operations within the district.

The area of influence, located to the northwest of the study area, represents adjacent land uses and corridors that generate truck traffic and have an impact on freight operations and travel patterns in the study area. This area of influence includes portions of the City of Acworth, City of Kennesaw, and unincorporated Cobb County.

The study area and area of influence are shown from a wider locational context in **Figure 1** and in further geographic detail in **Figure 2**. Additional details on the study area and area of influence are included on the next page.



Warehouse & Distribution Center Within Town Center

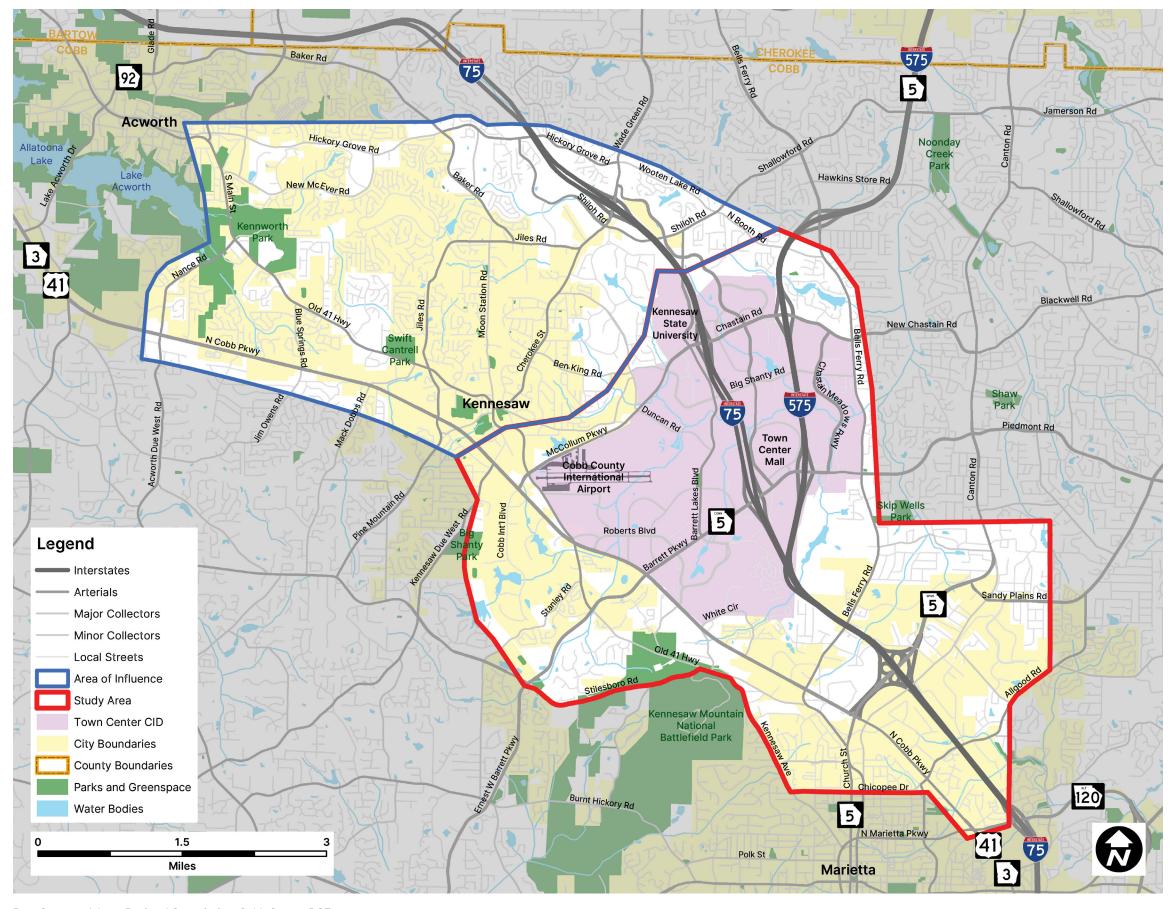
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Study Area

The study area consists of 21.8 square miles (13,952 acres) that contains the entire Town Center Community Improvement District (TCCID) as well as industrial and commercial land uses along the Canton Road Connector (SR 5 Spur) to the southeast of TCCID. The study area is predominantly within unincorporated Cobb County, although some portions fall Kennesaw. The boundary of the study area is roughly formed by Bells Ferry Road and Allgood Road to the east; North Marietta Parkway (SR 120 Alternate), Kennesaw Avenue, and Stilesboro Road to the south; a line stretching from the intersections of Barrett Parkway at Stilesboro Road to Cobb Parkway (US 41/SR 3) of McCollum Parkway and Chastain Road to the north. Points of attraction within the study area include the main campus of Kennesaw State University (KSU), Town Center Mall, Cobb County International Airport, and portions of Kennesaw Mountain National Battlefield Park. Freight generators within the study area include Vulcan Materials Company along Duncan Road, and several industrial/warehouse parks such as Cobb International Park, Kennesaw Mountain Business Park, and Kennestone Corners Business Park.

Area of Influence

The area of influence consists of 15.1 square miles (9,664 acres) immediately northwest of the study area, which largely falls within the City of Kennesaw and a portion of the City of Acworth. The boundary of the area of influence is formed by Hickory Grove Road and Wooten Lake Road to the northeast; Chastain Road and McCollum Parkway to the southeast; Cobb Parkway (US 41/SR 3) to the southwest; and Nance Road to the west. The area of influence includes retail shopping centers along Cobb Parkway (US 41/SR 3), Jiles Road, Cherokee Street, and Wade Green Road, along with industrial operations southeast of downtown Acworth such as Acworth Industrial Park. It also includes a former Amazon warehouse located on Jiles Road at Royal Drive.¹



Data Sources: Atlanta Regional Commission; Cobb County DOT

Figure 2. Town Center Community Freight Cluster Plan Study Area & Area of Influence

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Report Purpose

This report details the implementation strategy for the Town Center Community Freight Cluster Plan. It provides documentation of the freight cluster planning process and key issues that affect the Town Center study area and area of influence. Topics include freight movement, traffic operations, job access, and technological solutions to mobility challenges around the district.

While locally focused, the Freight Cluster Plan highlights the Town Center Community's unique character and regional significance. As one of the last concentrated economic centers in north Georgia before heading out of state, Town Center serves as a gateway for commuters, freight operations, and travelers to and from Metro Atlanta via I-75 and I-575. It is also home to a complex mix of retail, residential, university services, manufacturing, warehousing, and industrial uses.

Report Structure

The document begins with an overview of the Freight Cluster Plan process including the schedule and key tasks. In Chapter 2, the report presents key issues and themes related to existing conditions and performance of the study area's transportation system for freight movement, freight travel patterns in the study area, and best practices for Town Center to consider in freight planning, land use, truck parking and staging, and advancing technology.

This information is used to inform the project development and prioritization process detailed in Chapter 3. The outcomes of the project prioritization exercise along with cost estimation, revenue forecasting, and an exploration of funding strategies in Chapter 4 culminates in two sets of projects - a financially feasible short-term action plan and a long-term vision plan. The Recommendations Report concludes with an implementation strategy for the high priority projects which comprise the financially feasible short-term action plan.



Truck Turning Onto Chastain Road From Duncan Road Near Vulcan Materials Rock Quarry

Freight Cluster Planning Process

Process Overview

Schedule

Development of the Town Center Community Freight Cluster Plan consisted of six tasks spanning approximately 16 months between January 2023 and April 2024. This included five research and technical analysis tasks along with ongoing stakeholder engagement and outreach. A graphic depicting the project schedule is shown below in **Figure 3**.

Throughout the project timeline, the project team researched best practices on freight mobility and technology; evaluated existing conditions to identify needs for Town Center's freight network and other transportation infrastructure; and developed recommendations for projects, policies, and strategies to better enable freight connectivity and position Town Center for economic competitiveness and high quality of life in the coming years.

The following pages discuss major Freight Cluster Plan tasks and some of the key findings and takeaways stemming from each.



Truck Staging in Turn Lane Outside a Car Dealership Along Barrett Lakes Boulevard in the Study Area



Figure 3. Freight Cluster Plan Project Schedule

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Stakeholder Engagement& Outreach

Through the Freight Cluster Plan's stakeholder engagement and outreach efforts, stakeholders provided critical first-hand knowledge, feedback, and input into the process.

Specifically, the team used this input to pinpoint the study area's freight-related issues, needs, and challenges; identify priority areas for improvements; and develop recommendations.

The multi-faceted engagement process utilized a variety of techniques to connect with and engage with key freight and logistics industry stakeholders, economic development leaders, government agencies, potentially impacted property owners, and other community members. This chapter details the tools and techniques employed in the process, the stakeholders involved, and a summary of the key themes of feedback received. A summary of engagement activities is shown in **Table 1**.

Additional information, including supporting materials and presentations, is included in Appendix A of this Recommendations Report.

Tools and Techniques

Project Webpage

Shortly after the planning process commenced, a webpage for the Freight Cluster Plan was established on the Town Center Community's existing website (www.towncentercid.com/freight-cluster-plan) to serve as the digital hub for sharing project information, input opportunities, events, and activities. The webpage contains the project scope, major milestones, schedule, and contact information to submit questions and comments.

Community Pop-Up Event and Survey

On March 25, 2023, in conjunction with the Noonday Shanty 5 & 10K Race, project team members hosted a pop-up tabling event. The team handed out fliers announcing the kick-off of the study and invited the community to take a short online survey about how and when travelers in the study area interact with trucks. Twenty responses were received and assisted the team in understanding the impact of trucks on traffic in the study area; times of day the impact was seen; and areas with truck movement or parking issues.



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Freight Cluster Plan

Project Highlights

- Keen understanding of freight movement, timing, and the relationship to general district traffic
- Identification of infrastructure needs and opportunities
- Projection of future growth and support strategies
- > Mobility improvements for freight and general users
- Opportunity to create a positive regional impact on freight movement
- Funding awarded by Atlanta Regional Commission through Freight Cluster Plan Program

Table 1. Key Community and Stakeholder Engagement Activities

Activity	Date(s)	Description
Stakeholder Committee	March 30, 2023 June 14, 2023 October 3, 2023 February 6, 2024	A group consisting of representatives of local jurisdictions, agencies, TCCID, Cobb County, GDOT, ARC, and other major freight generators and employers to validate study findings, identify issues, needs, and opportunities, and provide input and feedback on draft recommendations.
Stakeholder Interviews	April - July 2023	One-on-one interviews with a wide variety of individuals and organizations related to freight that provided input on challenges, opportunities for improvements, technologies, and future trends regarding freight operations in the study area; and to establish relationships for future outreach.
Community Pop-Up Event & Survey	March 25, 2023	Pop-up table at annual TCCID-sponsored Noonday Shanty 5&10K to gather feedback on interactions with trucks on roads in and near the Town Center Community.
Project Webpage	January 2023 - April 2024	An accessible, online platform to share study information that is mobile-friendly and conveys plan progress.
Industrial Local Staff & Truck Driver Survey	July - September 2023	An online survey developed to gather user information from local staff and truck drivers on the conditions, challenges, and opportunities related to operating trucks and moving freight within the study area.
Freight Advisory Task Force (FATF)	May 4, 2023 November 9, 2023 May 2024	These meetings are convened by ARC on a quarterly basis and consist of presentations given to regional freight industry stakeholders beyond those within the study area or area of influence, providing project updates and opportunities for feedback.
TCCID Board Meeting & Project Video	March 26, 2024	A presentation to the TCCID Board of Directors and Viewing of the Freight Cluster Plan Project Video



FREIGHT CLUSTER PLAN

Plan Objectives:

Community Survey Flyer

- Gain understanding of freight movement, timing, and the relationship to other traffic in the study area
- Identify infrastructure related needs and opportunities
- Develop program of projects to improve mobility for freight and all users



Take Our Survey!

Visit Our Website www.towncentercid.com



Project Webpage on TCCID Website

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Interactive Mapping Exercise During Second Stakeholder Committee Meeting in June 2023

Stakeholder Committee

A Stakeholder Committee was established with representatives from public and private organizations with an interest in freight movement in the study area. The Stakeholder Committee was utilized to help identify and validate existing conditions and collect data; identify needs and opportunities for improvements; help distribute information about the study; and provide input and feedback on proposed improvements. The Stakeholder Committee met four times during the course of the study; two meetings were held in-person at the TCCID office and two were held virtually, or online. The following is the schedule and topic of each of the meetings.

- Stakeholder Committee #1: March 30, 2023
 Project Kickoff (TCCID Office)
- Stakeholder Committee #2: June 14, 2023 -Inventory & Assessment (Virtual)
- Stakeholder Committee #3: October 3, 2023
 Preliminary Recommendations & Project
 Prioritization (TCCID Office)
- Stakeholder Committee #4: February 6, 2024 - Draft Recommendations (Virtual)

The meetings were conducted with a mixed format of presentation and discussion time to allow for information to be shared with attendees, and for stakeholders to provide feedback and engage in discussion with the group. Input heard from the attendees was instrumental in rounding out the technical and traffic analysis and provided additional and historical context to issues and challenge areas not captured through existing data.

Membership of the committee included a variety of stakeholders from the freight-related private and public sectors, local government, and the project management team (PMT). **Table 2** lists the Stakeholder Committee members and their affiliations.

Table 2. Stakeholder Committee Membership

Name	Category	Organization	Title/Position
DeVonne Boler	Business (warehousing)	Prologis	Leasing Manager
Craig Camuso	Business (railroad)	CSX	Regional Vice President - State Government Affairs
Paul DeNard	Government agency (state)	GDOT	District 7 Engineer
Jeff Drobney	Government agency (municipality)	City of Kennesaw	City Manager
Clay Foxworth	Business (warehousing)	Atlanta Bonded Warehouse	GM Public Operations
Ned Green	Government agency (state)	GDOT	Transportation Planner II
Kelly Gwin	Government agency (state)	GDOT Office of Planning	Asst. Office Head, Policy & Freight Planning
Joshua Higgins	Government agency (state)	GDOT	District 7 Planning and Programming Engineer
Joe Keith	Business (warehousing)	Atlanta Bonded Warehouse	President
Sandy Lake	Business advocacy (transportation)	GA Center for Innovation of Logistics	Director of Logistics
JD Lorens	Government agency (municipality)	CCDOT	Deputy Director
Angie Luna	Government agency (municipality)	City of Acworth	Deputy City Manager - Operations
Joseph Madison	Education/Institution (state)	Kennesaw State University	Associate Director of Parking Operations
Brook Martin	Government agency (county)	CCDOT	Traffic Operations Division Manager
Seth Millican	Business advocacy organization (transportation)	Georgia Transportation Alliance	Executive Director
Jomar Pastorelle	Government agency (state)	rnment agency (state) GDOT	
Landon Perry	don Perry Government agency (state) GDOT		District 7 Pre-Construction Engineer
Gary Roberts	Business (metals)	Great South Metals	President
Merishia Robinson	Government agency (state)	GDOT	Program Manager
Jeffrey Short	Non-profit organization	American Transportation Research Institute	Vice President
Lee Smith	Business (construction)	CW Matthews	Vice President
Stephen Spencer	Government agency (county)	Cobb County International Airport	Airport Manager
Ricky Stewart	Government agency (municipality)	City of Kennesaw	Public Works Director
Malcolm Wardlaw	Business (construction aggregates)	Vulcan Materials	Plant Manager - Kennesaw Quarry
Megan Weiss	Government agency (state)	GDOT	Transportation Planner II
Stephanie Williams	Government agency (state)	GDOT	Transportation Planner

Town Center Community Freight Cluster Plan

Stakeholder Interviews

From April through July 2023, the project team conducted interviews with individuals who operate in freight and logistics industries and/ or have an interest in freight operations in the study area. The purpose of the interviews was to inform stakeholders about the Freight Cluster Plan; collect input on challenges, opportunities for improvements, technologies, and future trends regarding freight operations in the study area; and to establish relationships for future outreach.

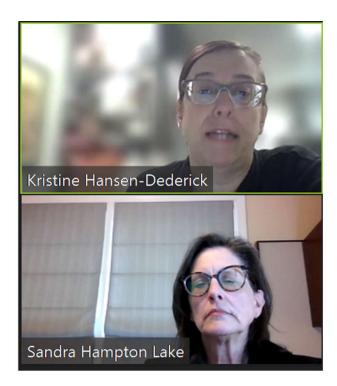
The stakeholders represented a wide variety of positions related to freight, and provided input from state, regional, local, private, and government perspectives. Their input helped to ground-truth data collected through the needs assessment and analysis and supplemented information from the Stakeholder Committee. A total of 12 interviews were conducted as shown in **Table 3**.

Industrial Local Staff & Truck Driver Survey

From July through September 2023, an online survey was developed through the platform Social Pinpoint to gather information from local staff and truck drivers on the conditions. challenges and opportunities related to operating trucks and moving freight within the study area. The survey included an interactive map for stakeholders to provide location-specific comments and a short questionnaire. The survey link was provided to the Stakeholder Committee and those in the stakeholder interviews, to distribute to employees, clients, and members of their organizations. The responses helped to confirm sentiment already expressed from other stakeholders about congestion hotspots and also the timing of increased congestion during peak commuting hours.

Freight Advisory Task Force

To keep ARC's Freight Advisory Task Force (FATF) well-informed of the study and its progress, the project team prepared and provided regular study presentations and updates. The presentations summarized the study's process to date, any outreach results and technical analysis, findings, and recommendations and provided opportunity for comment from the task force.



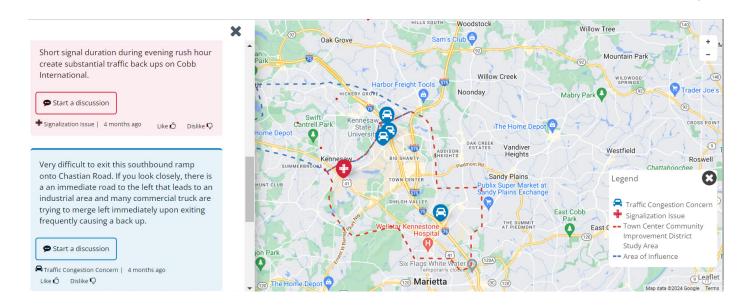
Screenshot of Stakeholder Interview with Georgia Center for Innovation of Logistics

The following lists the dates and topics of the FATF presentations.

- May 4, 2023 Study Overview & Preliminary Findings
- November 9, 2023 Inventory & Outreach Findings and Developing Recommendations Process
- May 2024 Final Recommendations and Plan Summary

Board Presentation and Project Video

To celebrate the completion of the Freight Cluster Plan, the project team gave a presentation at the TCCID Board of Directors meeting on March 26, 2024. The presentation summarized the overall study process along with key recommendations. To accompany the presentation, the project team prepared a short video summarizing the planning process and building momentum for future implementation. Following the board meeting, the project video was placed on the TCCID website as a resource to be shared with funding and implementation partners.



Sample Truck Driver Survey Feedback

Table 3. List of Stakeholder Interviews

Name	Category	Organization	Title/Position	Date
DeVonne Boler	Business (warehousing)	Prologis	Leasing Manager	April 10, 2023
Dana Johnson	Business advocacy organization	Cobb County Chamber of Commerce	Chief Operating Officer	April 18, 2023
Patrick Gamman	Government agency (federal)	National Park Service	Superintendent - Kennesaw Mountain National Battlefield Park	April 27, 2023
Sandy Lake	Business advocacy organization	GA Center for Innovation of Logistics	Director of Logistics	April 27, 2023
Malcolm Wardlaw	Business (construction aggregates)	Vulcan Materials	Plant Manager - Kennesaw Quarry	May 10, 2023
Clay Foxworth	Business (warehousing)	Atlanta Bonded Warehouse	GM Public Operations	May 12, 2023
Samantha Pettigrew	Nonprofit organization (clean fuels)	Clean Cities Georgia	Project Manager	May 15, 2023
Kelly Gwin	Government agency (state)	GDOT Office of Planning	Assistant Office Head, Policy & Freight Planning	May 19, 2023
William Westenberger	Government agency (municipality)	City of Kennesaw	Police Chief	June 15, 2023
Ricky Stewart	Government agency (municipality)	City of Kennesaw	Public Works	June 23, 2023
Seth Millican	Business advocacy organization	Georgia Transportation Alliance	Executive Director	June 28, 2023
Ed Crowell	Business advocacy organization (trucking)	Georgia Motor Trucking Association	President and CEO	July 6, 2023

Review of Best Practices

The Review of Best Practices Report is structured around several big-picture themes including freight planning, land use and development, and technology and innovation. Each section starts with a discussion of trends, challenges, and opportunities, includes one or more case studies, and summarizes lessons learned and best practices that are applicable and transferable to the Town Center Community.

The full report is included as Appendix B to this Recommendations Report.

Inventory & Assessment

The Inventory & Assessment Report evaluates existing conditions and assesses current and future needs for the freight transportation system within and adjacent to Town Center.

The report summarizes previous plans and studies (listed to the right), existing conditions, freight travel patterns, and available transportation funding mechanisms. It serves to help TCCID and the project team evaluate and assess the study area and area of influence for potential opportunities to improve conditions for freight and job access. The report touches on emerging trends, challenges, and opportunities related to moving goods and supporting sustainable industrial development, which were introduced in the Review of Best Practices. Alongside the Traffic Study, the outcomes of this assessment informed recommendations presented in Chapter 3 of this Plan to improve freight mobility in a way that minimizes negative impacts on nearby communities, as well as strategies to create and attract industrial businesses that provide quality jobs and contribute positively to the region's economy.

The Inventory & Assessment is included as Appendix C of this Recommendations Report.

Previous Plans & Studies

Statewide Plans

- Georgia Freight Plan (2023)
- Georgia State Rail Plan (2021)

Regional Plans

- Atlanta Metropolitan Transportation Plan (2022)
- ATL Regional Transit Plan (2020)
- Atlanta Regional Transportation System Management and Operations (TSM&O) Strategic Plan (2020)
- Atlanta Regional Freight Mobility Plan (2016)*
- Walk. Bike. Thrive! (2016)
- Atlanta Strategic Truck Route Master Plan (2010)

Countywide Plans

- Noonday Creek Trail Extension Study (Ongoing)
- Cobb County Safety Action Plan (2023)
- Cobb County 2040 Comprehensive Plan (2022)
- CobbForward Comprehensive Transportation Plan (2021)
- Cobb County Greenways & Trails Master Plan (2018)
- Northwest Transit Corridor Alternatives Analysis (2012)

Town Center CID Plans

- Electrification Livable Center Initiative (LCI) Study (Ongoing)
- Mall Visioning Study (2022)
- NC-04 Feasibility Study (2022)
- Town Center CID Master Plan (2022)
- Barrett Lakes Boulevard & Big Shanty Road Improvements Implementation Plan (2021)
- Bells Ferry Road LCI Operational Study (2021)
- TCCID Sidewalk Inventory and Gap Assessment (2021)
- Chastain Road LCI Corridor Study (2020)
- South Barrett Parkway Reliever Phase 4 Feasibility Study (2020)
- Noonday Creek Pedestrian Bridge Over US 41 LCI Study (2019)

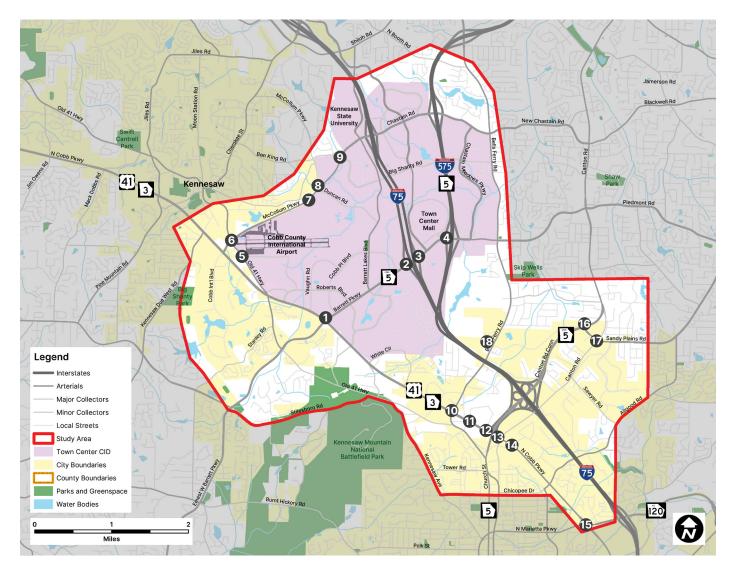
Local Plans

- City of Acworth Comprehensive Plan (2022)
- City of Kennesaw Comprehensive Plan (2022)
- City of Marietta Comprehensive Plan (2022)
- Kennesaw State University Campus Master Plan (2022)

Traffic Study

The Traffic Study focuses on 18 intersections primarily located within the study area, selected in consultation with ARC and the PMT. The intersections were selected through a network screening process that took into account traffic volume, truck traffic, crash history, inclusion in prior projects or studies, and area characteristics. Through a quantitative assessment, the team narrowed down from an initial list of 50 intersections to a subset of 25, which was further refined based on input from the PMT and project team. These are geographically depicted in **Figure 4**. The Traffic Study analyzes capacity, operations, and safety to identify deficiencies and recommend potential improvements.

The Traffic Study analyzes existing and future projected capacity at each intersection, along with levels of traffic congestion and delay. It also reviewed crash history and safety deficiencies at each location. To supplement this analysis, the project team visited each intersection and recorded observations about operations, infrastructure, signage, and other freight-related considerations. These analyses helped to identify potential projects that could mitigate these deficiencies.



Data Sources: Atlanta Regional Commission; Cobb County DOT; Town Center CID

Figure 4. Traffic Study Locations



The following intersections were analyzed as part of the Traffic Study. These are shown in **Figure 4**:

- 1. Cobb Parkway (US 31/SR 3) at Barrett Parkway (SR 5)
- 2. Barrett Parkway (SR 5) at I-75 Southbound Ramp
- 3. Barrett Parkway (SR 5) at I-75 Northbound Ramp
- 4. Barrett Parkway (SR 5) at I-575 Southbound Ramp
- 5. Old 41 Highway at Airport Road
- 6. McCollum Parkway at Old 41 Highway/South Main Street
- 7. McCollum Parkway at Big Shanty Drive/ Vulcan Materials Driveway
- 8. McCollum Parkway/Chastain Road at Duncan Road
- 9. Chastain Road at Big Shanty Road
- 10. Cobb Parkway (US 41/SR 3) at Bells Ferry Road
- 11. Cobb Parkway (US 41/SR 3) at EMC Parkway/Kennestone Circle
- 12. Cobb Parkway (US 41/SR 3) at Canton Road Connector Off-Ramp
- 13. Cobb Parkway (US 41/SR 3) at Canton Road Connector On-Ramp
- 14. Cobb Parkway (US 41/SR 3) at Industrial Park Drive
- 15. Cobb Parkway (US 41/SR 3) at North Marietta Parkway (SR 120 Alt)
- 16. Canton Road Connector at Sandy Plains Road
- 17. Canton Road at Sandy Plains Road
- 18. Canton Road Connector at Church Street Extension

Recommendations from the Traffic Study form the basis of the intersection improvements identified in the project list.

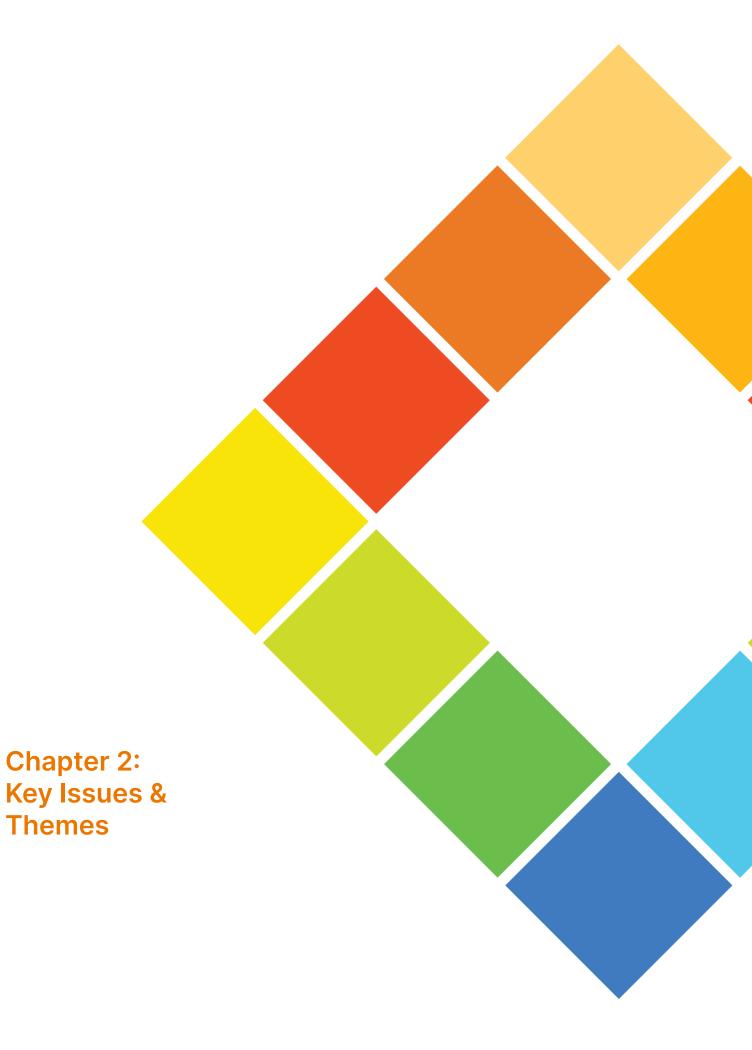
The Traffic Study is included as Appendix D of this Recommendations Report.

Recommendations & Documentation

Development of the Recommendations
Report took into account the key findings
from previous tasks, building on identified
needs, issues, and opportunities. The
Recommendations Report is the culmination of
the Freight Cluster Plan and summarizes the
planning process, key findings from research
and analysis tasks, as well as the process for
identifying and prioritizing recommendations.
It contains lists of recommended projects,
strategies, and policies, along with maps and
diagrams, where applicable.



Traffic Queuing Northbound Along Cobb Parkway (US 41/ SR 3) at Bells Ferry Road



Chapter Overview

Key themes presented here reflect the outcomes of tasks related to the development of this Freight Cluster Plan, including field observations, project team analysis, and stakeholder feedback.

Strategic Location

The Town Center Community study area and area of influence provide a diverse transportation network that accommodates freight through a variety of modes including air, truck, rail, and pipeline. In addition to interstate highways, most truck traffic in the area is located on state and US routes such as Cobb Parkway (US 41/SR 3), Canton Road Connector (SR 5 Spur), North Marietta Parkway (SR 120 Alt), and Barrett Parkway (SR 5 Connector). Generally, trucks in the study area traverse different subsets of the freight network, including local, state and US routes - these distinctions are important when considering how to fund and implement roadway improvements. Furthermore, the study area is home to Cobb County International Airport, a freight railroad line owned by CSX, a shortline railroad operated by Georgia Northeastern Railroad, and a pipeline operated by Atlanta Gas Light.

Numerous employers, such as FedEx, Prologis, and Vulcan Materials, find the strategic location of Town Center to be advantageous and a prime reason they have major operations and facilities in the area. Industrial jobs are largely concentrated on industrial parks in northern Marietta as well as adjacent to Cobb County International Airport.

Truck Route Network

There are three primary truck route networks within the study area: the National Highway Freight Network (NHFN), the GDOT Statewide Freight Network, and the Atlanta Strategic Truck Route Master Plan (ASTRoMaP). These truck route networks are geographically depicted in **Figure 5**.

The National Highway Freight Network (NHFN) in the study area consists of I-75 and I-575. The primary highway freight system (PHFS) is a subset of the NHFN and represents the most critical portions of the US freight roadway network. Interstate 75 is part of the PHFS, as it provides a continuous connection extending from Florida to Michigan. Interstate 575 provides a north-south connection to the north Georgia mountains and eventually becomes SR 515, functioning as an auxiliary highway spur between the Town Center Community and north Georgia.

Within the study area, GDOT's truck route network consists of I-75 and I-575. By default, trucks are also permitted to travel on US and state routes, which include Cobb Parkway (US 41/SR 3), Barrett Parkway (SR 5 Connector) between Cobb Parkway (US 41/SR 3) and I-575, Canton Road Connector (SR 5 Spur), and Church Street (SR 5). Barrett Parkway and the Church Street/Canton Road Connector (SR 5 Spur) generally travel on southwest to northeast paths, with interchanges at I-75 (both corridors) and I-575 (Barrett Parkway only).

To help better direct and manage freight movement, ARC developed a regional truck route network, the Atlanta Strategic Truck Route Master Plan (ASTRoMaP), in 2010. This network consists of a combination of interstate, US and state routes designed to serve as a grid for the north-south and east-west movement of freight vehicles. Additional "connectors," or those truck routes that allow access to freight generating clusters or activity nodes, are designated as secondary connections to freight-intensive activity nodes. Canton Road is designated as a regional truck route, as a north-south route (NS-W1). North Marietta Parkway (SR 120 Alternate) also serves a regional truck route - there is a small portion of the corridor at the southern end of the study area, designated as an east-west route (EW-N3).

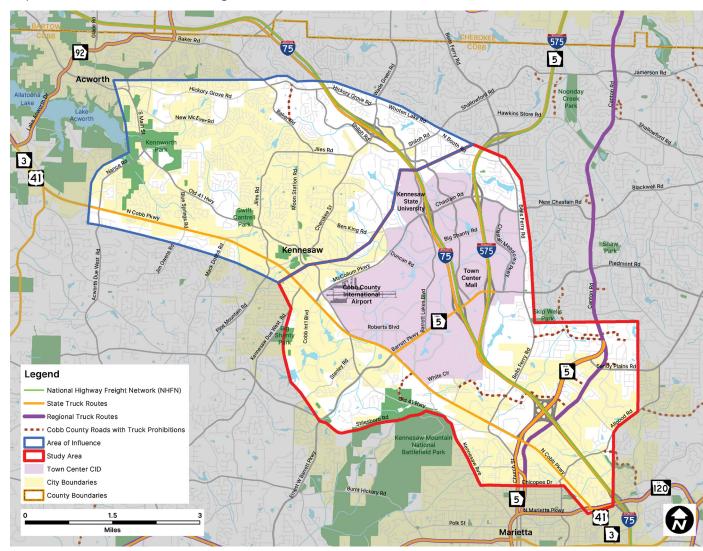
While they are not officially designated as truck routes, several other arterials, collectors, and local roadways carry truck traffic in the study area. These include roads that have interstate interchanges (such as Chastain Road and Bells Ferry Road) and that provide connectivity to freight-generating businesses (such as McCollum Parkway and Old 41 Highway).

Truck Route Restrictions and Signage

Cobb County has enacted truck prohibitions on select local roads to mitigate the impact of truck traffic in residential neighborhoods. Signage is placed in advance of these truck prohibitions to redirect truck traffic and prohibit both truck through-traffic and turnarounds, which can damage curbs and sidewalks, and create a safety hazard. Within the study area and area of influence, local jurisdictions have established several truck restrictions on local streets which are shown in **Figure 5**.

Most of the truck route prohibitions in the study area and area of influence are located in Marietta and primarily exist to reduce or minimize negative impacts from truck traffic in neighborhoods.

Truck travel can also pose a problem when traversing at-grade crossings, particularly in downtown areas, as trucks can get stuck on the tracks due to the change in elevation. Although signage is in place to redirect trucks away from at-grade crossings, there are currently no official truck prohibitions on corridors that intersect these at-grade crossings. Also, the presence of truck traffic is not conducive to the pedestrian-friendly environment that Kennesaw and Acworth aspire to create in their downtown areas. There are also some collectors and local roads that carry significant volumes of trucks, but trucks have difficulty navigating due to sharp turns or other roadway geometry; for example, Jiles Road between Main Street and Moon Station Road in Kennesaw as well as Old 41 Highway near Kennesaw Mountain National Battlefield Park.



Data Sources: Atlanta Regional Commission; Cobb County; Georgia Department of Transportation; Federal Highway Administration

Figure 5. Truck Route Network

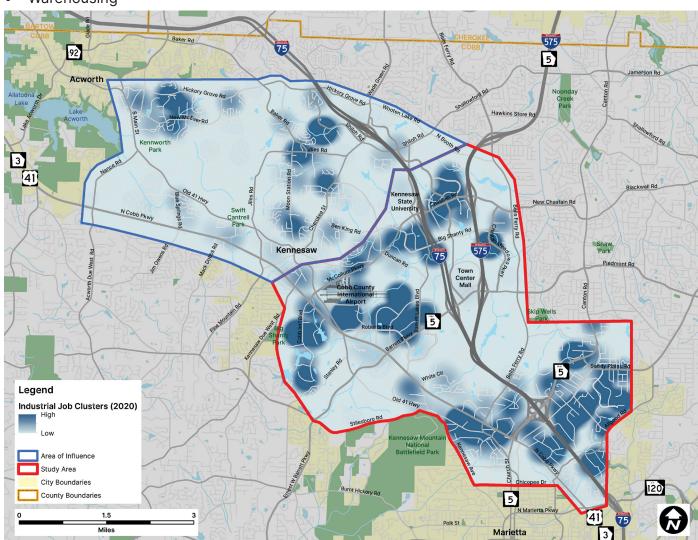
Industrial Job Clusters

Since there is no single category that encapsulates all industrial jobs, the project team opted to combine the following North American Industry Classification System (NAICS) categories to comprise industrial job clusters for the purposes of this analysis:

- Mining
- Utilities
- Construction
- Manufacturing
- Wholesale Trade
- Transportation
- Warehousing

The heat map in **Figure 6** shows the location of jobs falling under broader industrial categories. These industrial job clusters align with areas identified as having an industrial land use and zoning classification. Notably, the largest clusters are located along Canton Road and Cobb International Boulevard – with the latter encompassing the Cobb International Business Park in Kennesaw. By nature, industrial job clusters are likely to be significant sources of commercial freight traffic.

While there are many industrial employers in and around the Town Center Community, there is a labor shortage that continues to be a challenge for local industry.



Data Sources: U.S. Census Bureau 2020 Longitudinal Employer-Household Dynamics (LEHD) dataset

Figure 6. Industrial Employment Clusters Within the Study Area

Congestion & Bottlenecks

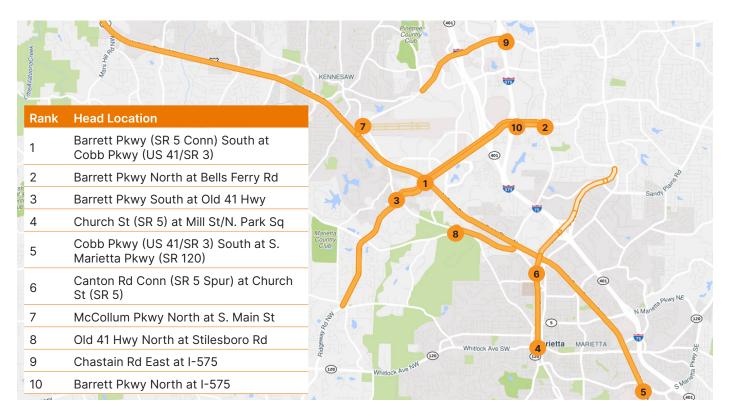
Freight-generating businesses in the study area are a vital component of the local economy and are anticipated to maintain or grow operations. The Town Center's strategic location along I-75 and proximity to other warehouses, distribution centers, and intermodal facilities, such as the Appalachian Regional Port, positions the area for long-term vitality. Because of these factors, truck traffic is expected to grow through 2050. While this is a positive outcome for local business, closer examination is needed to ensure freight mobility and mitigate negative impacts to surrounding uses.

Truck Bottlenecks

Data from the RITIS Probe Data Analytics (PDA) Suite was utilized to identify roadways with consistent bottlenecks, or areas of high traffic congestion, that affect all traffic, including trucks. This data is derived from sources such as mobile phones, navigation systems, and other portable, GPS-enabled devices.

Bottlenecks were analyzed for weekdays during the calendar year 2022 (January 1, 2022 – December 31, 2022) among arterials and major collectors in the project area. Bottlenecks are ranked by total delay, which the PDA Suite calculates based on a combination of free-flow travel time, observed travel time, average annual daily traffic (AADT), and a day-of-week factor. The top ten bottlenecks in the study area are displayed in **Figure 7**.

An analysis of truck travel patterns show that most truck trips that traverse surface streets in the study area are local or short-haul trips. The greatest congestion is on Cobb Parkway (US 41/SR 3) and roads that provide access to I-75, such as North Marietta Parkway (SR 120 Alt), Canton Road Connector (SR 5 Spur), Barrett Parkway (SR 5 Connector), and Chastain Road. Additional information on truck bottlenecks in the study area and area of influence is included in the Inventory & Assessment Report in Appendix C.



Data Source: RITIS

Figure 7. Top 10 Bottlenecks in the Study Area

ARC's Activity-Based Model

ARC has developed an activity-based travel demand model (ABM) to support regional transportation planning, enabling evaluation of existing and projected future traffic conditions. The travel demand model is a complex analysis based upon data and projections related to demographics, household and workforce characteristics, assumptions about mode share, and other key attributes. Thus, the outcomes are typically best considered at a broad scale, highlighting patterns and trends with regard to traffic volume and level-of-service (LOS).

For the purposes of the assessment, the latest ARC travel demand model was used to evaluate base year (2020) and projected future (2050) LOS on major roadways and expressways in the study area. LOS was evaluated for both the morning (AM) and afternoon (PM) peak periods. The following analysis highlights the worst congestion experienced in either direction along corridors within and near the Town Center Community.



Forecasted Truck Volume Growth

The Atlanta region, including the Town Center Community, has experienced growth in population, as well as vehicular and truck traffic, largely due to new commercial, residential, and mixed-use developments and the growth of e-commerce and warehousing. The latest ARC travel demand model was used to examine daily truck volumes and projected changes along roadways within the study area over time. In this model, 2020 serves the base year for the analysis, and 2050 is the future projection year.

It should be noted that the travel demand model provides a high-level projection of demand for traffic on area roadways. In particular, truck trips are assigned to area roadways based upon factors such as forecasted population and employment. The regional travel demand model does not generally consider truck prohibitions or truck routes along local roadways; therefore, the model may exhibit high truck volumes along local roadways with truck prohibitions. In addition to medium- and heavy-duty trucks, the model includes smaller commercial vehicle trucks (landscapers, plumbing services, etc.); as these types of services often work in residential areas, the model may point to an increase demand for these types of trucks on local streets.



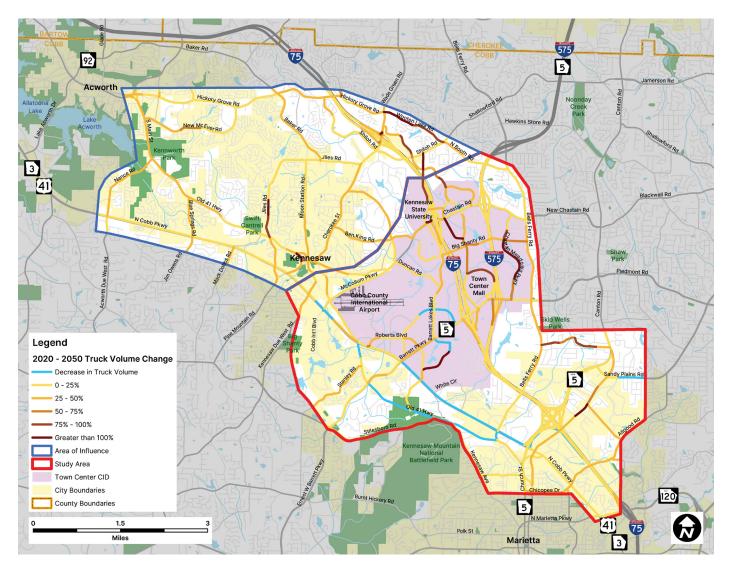
Vulcan Materials Company Rock Quarry Along McCollum Parkway Near Intersection with Duncan Road

These volumes reflect truck traffic traveling in both directions of traffic on each roadway segment. Percentage growth in truck traffic between 2020 and 2050 is shown in **Figure 8**. The largest percent truck volume increases between 2020 and 2050 are forecasted to occur along the following corridors:

- Canton Road between I-75 overpass and Canton Road Connector (SR 5 Spur)
- Jiles Road between Old 41 Highway and English Oaks Lane/McGuire Street
- Frey Road between Chastain Road and Shiloh Road
- Chastain Meadows Parkway between Barrett Parkway and Chastain Road

- Kurtz Road between Bells Ferry Road and Canton Road
- Busbee Drive between Chastain Road and George Busbee Parkway

Some corridors will expect up to a 40% decrease in truck volume within the study area, but there are select corridors which are forecasted to experience a 10% decrease such as Cobb Parkway (US 41/SR 3) between Bells Ferry Road and Barrett Parkway (SR 5 Connector), Old 41 Highway between Barrett Parkway and Church Street Extension/Bells Ferry Road, and Cobb Place Boulevard between Vaughn Road and Barrett Parkway (SR 5 Connector).



Data Source: Atlanta Regional Commission

Figure 8. 2020 - 2050 Truck Volume Change

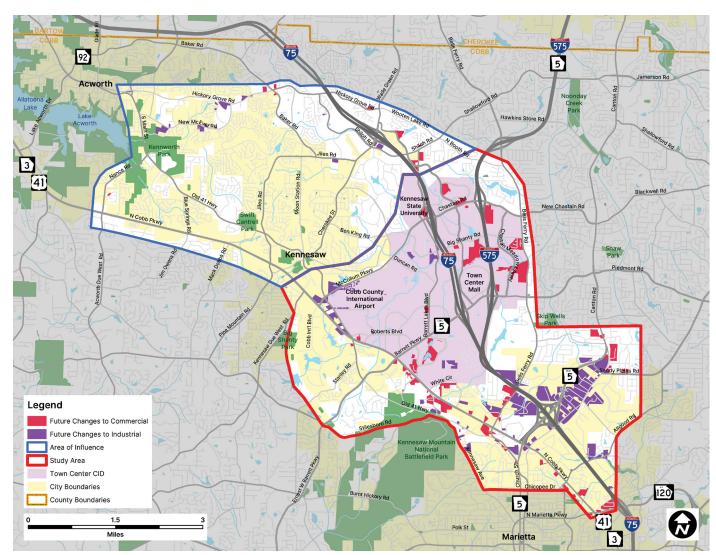
Commercial & Industrial Facility Access

Alongside improving connectivity and traffic flow on major corridors, coordinating with land uses, especially existing and proposed industrial and commercial parcels, will ensure that the Town Center Community remains an economically competitive location to live, work, and play. This includes examining changes to industrial or commercial uses in the future through 2040 and what this means for the roadway network within the study area and area of influence.

Forecasted Land Use Changes

The future land uses throughout the study area are anticipated to remain relatively consistent with the current uses. The project team identified areas where current land uses are forecasted to change to industrial or commercial (see Figure 9).

The major industrial growth is along Canton Road and Canton Road Connector (SR 5 Spur). There are existing single-family residential lots located behind warehouses and wholesale commercial locations. This area is expected to experience an increase in industrial properties as redevelopment occurs. The commercial area is expected to expand further out from TCCID into the more residential areas, particularly along the eastern border and Bells Ferry Road.



Data Sources: Atlanta Regional Commission; Cobb County; City of Marietta; City of Kennesaw; City of Acworth

Figure 9. Forecasted Changes to Industrial and Commercial Land Uses

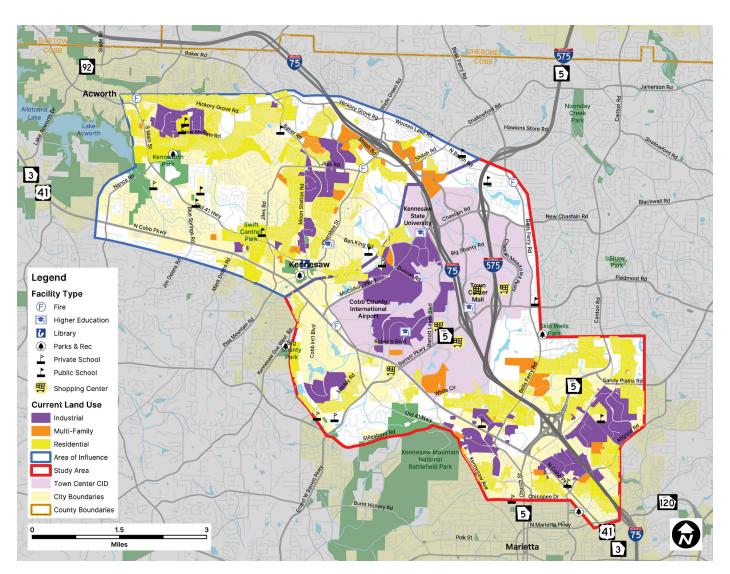
Land Use Conflicts

There are several portions of the study area and area of influence where the mix of industrial and residential land uses may pose a conflict. These locations are depicted below in Figure 10. Within the study area, there are a few areas with potentially conflicting land uses:

- An area bounded by Chastain Road, McCollum Parkway, and Big Shanty Road, consists of warehouses, heavy industry, an apartment complex, and KSU buildings.
- In Kennesaw, there are apartment complexes off of Cobb Parkway (US 41/SR 3) south of McCollum Parkway, located between Cobb International Airport and industrial uses on Cobb International Boulevard.

- Marble Mill Road, Kennesaw Avenue, and Loudermilk Drive in Marietta serve both industrial and residential developments.
- There is a mix of industrial and residential land uses between Cobb Parkway (US 41/ SR 3) and Sandy Plains Road, along Canton Road and Allgood Road, and with I-75 through the middle. Sawyer Road traverses an industrial area but also provides access to Sawyer Road Elementary School.

In the area of influence, industrial developments between New McEver Road and the railroad along Hickory Grove Road near downtown Acworth are surrounded by single-family developments. In Kennesaw, industrial properties along Moon Station Road and Jiles Road are adjacent to single-family residential areas.



Data Sources: Atlanta Regional Commission; Cobb County; City of Marietta; City of Kennesaw; City of Acworth

Figure 10. Potential Conflicts Between Industrial and Residential Uses

Roadway Improvements & **Maintenance**

Pavement Condition

While much of the roadway infrastructure, including bridges, are in good condition, there are roadway segments along truck intensive routes with pavement condition that ranges from fair to poor. Trucks can cause extensive pavement damage; there is pavement damage on some corridors like Cobb International Boulevard. The City of Kennesaw has a repaving program, and the city will often coordinate with Cobb County to repave/ repair roadways. Figure 11 shows pavement condition on all streets within the Town Center Community study area and area of influence.

The International Roughness Index (IRI) is a widely used measure to assess pavement smoothness and ride quality. The FHWA's Highway Performance Monitoring System (HPMS) reports IRI for state routes in inches per mile. Higher values correspond to a rougher road surface and are an indication that the road should be considered for resurfacing. IRI is categorized as good, acceptable, and poor condition classes:

- Good (less than 95 inches per mile)
- Acceptable (between 95 and 169 inches per mile)
- Poor (170 or above inches per mile)¹

The funding programs presented in Chapter 4, such as LMIG, SPLOST, and federal programs sponsored through the IIJA, present opportunities for TCCID and its partners to make a committed investment into roadway operations and maintenance throughout northern Cobb County. Attention should be directed towards ensuring eligibility for these programs based on roadway functional classification and designations as regional, state, or national truck routes, especially for major Cobb County arterials adjacent to or near industrial land uses.



Curb Damage Present at the Intersection of McCollum Parkway and Big Shanty Drive

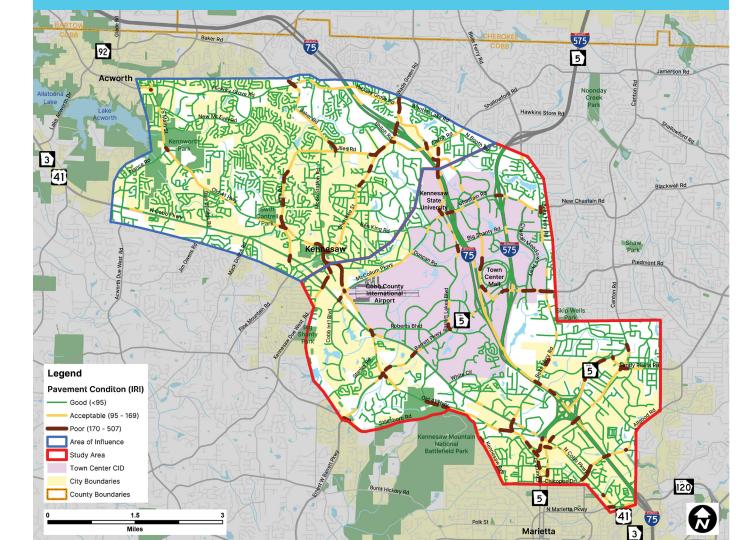


Truck Turning Right Onto Canton Road Connector from Guffin Lane/Sandy Plains Road

Pavement along most arterials and truck routes • Church Street from Chicopee Drive to Cobb corridors with acceptable or poor condition:

- Allgood Road from Chicopee Drive to study area boundary
- Baker Road from Jiles Road to area of influence boundary
- Barrett Parkway from I-575 to Bells Ferry
- Bells Ferry Road from I-75 to Kurtz Road
- Canton Road Connector (SR 5 Spur) from I-75 to Sandy Plains Road
- Cherokee Street (Kennesaw) from downtown Kennesaw to Jiles Road
- Cherokee Street (Marietta) from study area boundary to Church Street

- Parkway (US 41/SR 3)
- George Busbee Parkway from Barrett Parkway to Big Shanty Road
- Frey Road from Chastain Road to Shiloh Road
- Hickory Grove Road from Baker Road to Wade Green Road
- Jiles Road from Cobb Parkway (US 41/SR 3) to Cherokee Street/Wade Green Road
- Old 41 Highway from Swift Cantrell Park to downtown Kennesaw and from Barrett Parkway to McCollum Parkway
- Shiloh Road from Wade Green Road to North Booth Road/Wooten Lake Road
- Wade Green Road from Jiles Road to Hickory Grove Road/Wooten Lake Road



Data Sources: Georgia Department of Transportation; Federal Highway Administration

Figure 11. Pavement Condition (IRI)

Planned and Programmed Projects

Many of the plans summarized in this chapter include several recommendations for infrastructure improvements. Some of these projects have funding allocated for implementation, or are programmed by CCDOT or GDOT. This section provides an overview of each of these programmed projects, their scope of improvements, and freight implications within and around the Town Center study area.

GDOT Projects

Programmed Transportation Improvement Program Projects

There are several projects in the transportation improvement program (TIP) that fall within the study area, and this section provides a summary of each of the projects most relevant to the Freight Cluster Plan.²

- Big Shanty Road Widening Phase 4
 (CO-297B/PI 0019616): This project will involve widening approximately 0.5 miles of Big Shanty Road between Chastain Meadows Parkway and Bells Ferry Road. The project is currently in design and preliminary engineering, and construction is programmed for 2026. The total estimated cost is \$16.4 million.³
- South Barrett Reliever Phase 3 (CO-450B/ PI 0013239): The South Barrett Parkway Reliever will parallel Barrett Parkway (SR 5 Connector) between Cobb Parkway (US 41/SR 3) and I-75 to relieve traffic Barrett Parkway Phase 3 will extend from the intersection of Barrett Lakes Boulevard and Shiloh Parkway to the intersection of Barrett Parkway (SR 5 Connector) and Roberts Court/George Busbee Parkway. The new connector will be a four-lane divided roadway and include on-road bike lanes/ multi-use trail,, pedestrian and vehicular lighting, and five-foot sidewalks.4 This phase of the project is expected to cost \$36.7 million (out of a total cost of \$46.9 million) and is currently under construction and expected to be complete by Fall 2024.5 •

- Old 41 Highway Roundabouts & Realignment (CO-473/PI 0016410): This project will convert two existing intersections along Old 41 Highway to roundabouts – at Stilesboro Road and Kennesaw Avenue on either side of Kennesaw Mountain National Battlefield Park. Also, Old 41 Highway is proposed to be realigned and widened to include two travel lanes in each direction between these two intersections. The roundabout at Stilesboro Road will be a single-lane roundabout with a westbound through bypass lane and a dedicated northbound to eastbound lane. The roundabout at Kennesaw Avenue will also provide a dedicated westbound through bypass lane. 6 This project is included in the Cobb County 2016 SPLOST list (Project X2609). The project is currently in design and is expected to cost approximately \$16.4 million. Construction is programmed for 2026.7
- Cobb County ADA Compliant Sidewalk Improvements (CO-476/PI 0017984): This project is intended to fix sidewalks, curb ramps, and curb cuts along CobbLinc transit routes across unincorporated Cobb County, including within the Town Center study area. Approximately \$15.4 million in sidewalks will be constructed to improve ADA-compliance and last-mile connectivity to transit facilities along bus routes. Portions of this project are ongoing throughout the County.8
- Noonday Creek Trail Crossing (CO-481/PI 0017989): This project is the outcome of the Noonday Creek Pedestrian Bridge Over US 41 LCI Study. The project will construct an above-grade crossing which will carry the Noonday Creek Trail over Cobb Parkway (US 41/SR 3) approximately halfway between Barrett Parkway (SR 5 Connector) and Roberts Boulevard. The total project cost is approximately \$8.9 million and construction is programmed for 2025.9

Long-Range Projects

There are three long-range projects that fall within the study area, and this section provides a summary of each of the projects most relevant to the Freight Cluster Plan listed below.

- Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Connector) (PI 0018283): This is a series of proposed intersection improvements which consist of constructing additional left-turn lanes for the northbound and southbound approaches along Cobb Parkway (US 41/SR 3) to have triple leftturn lanes onto Barrett Parkway along with modified channelized raised islands on all corners.¹⁰
- Connect Cobb/Northwest Atlanta High Capacity Premium Transit Service (AR-475): This project consists of developing a 25-mile bus rapid transit (BRT) corridor between Midtown Atlanta and KSU. The first phase of the project will connect KSU to the Cumberland Activity Center along a dedicated guideway which follows Cobb Parkway (US 41/SR 3).¹¹
- Cobb Parkway (US 41/SR 3) at McCollum Parkway Grade Separation (CO-433): This project will grade separate Cobb Parkway (US 41/SR 3) and McCollum Parkway through a new interchange.¹²

Cobb County 2022 SPLOST

Cobb County's Special Purpose Local Option Sales Tax (SPLOST) was renewed in November 2020 via voter approval. SPLOST provides funding for a variety of public capital projects, such as transportation, public safety projects, and libraries, via a one-percent sales tax.¹³

Bells Ferry Road Bridge Over Noonday Creek

The current bridge facility along Bells Ferry Road over Noonday Creek immediately south of the Bells Ferry Trailhead is in fair condition. The current bridge is two lanes wide and lacks both shoulders and sidewalks. Both sides of the bridge feature short concrete barriers partially open in the center. Approximately \$2.8 million has been allocated for the bridge replacement.

The proposed design will include pedestrian facilities, and take into account a potential alignment for the Noonday Creek Trail extension beneath the bridge. The Bells Ferry Road LCI Operational Study made recommendations for the bridge replacement to include two lanes, with a northbound left-turn lane to access the trailhead driveway, with a ten-foot shared-use path on either side of the bridge. This project is currently in design.¹⁴

McCollum Airport Taxiway Improvements

Taxiway improvements at the Cobb County International Airport consist of safety enhancements in accordance with Federal Aviation Administration (FAA) regulations. These improvements are slated to cost approximately \$10 million with a local match of \$5 million.¹⁵

Corridor Improvements

The 2022 SPLOST project list earmarks funds for improvements to the following corridors:¹⁶

- Barrett Lakes Boulevard approximately \$7 million (local match \$1.4 million)
- Bells Ferry Road approximately \$15 million (local match \$3 million)
- Big Shanty Road approximately \$15 million (local match \$3 million)
- Cobb Parkway (US 41/SR 3) approximately \$40 million (local match \$8 million)
- George Busbee Parkway approximately \$15 million (local match \$3 million)

Cobb Parkway (US 41/SR 3) at McCollum Parkway/Kennesaw Due West Road & Old 41 Highway Realignment

This project will accommodate expansion of runway and taxiway facilities at Cobb County International Airport which will require certain roadways to be relocated. The 2022 SPLOST project list includes a local match of \$5 million to contribute towards an estimated total cost of approximately \$36 million.¹⁷

Denotes TCCID involvement in project.

Roadway Safety and Operations

Between 2018 and 2022, there were 13,904 reported crashes in the study area (see **Table 4**). There were 635 crashes involving a commercial vehicle. Roadway crashes within the study area decreased between 2018 and 2022 (see **Figure 12**), but there are still many streets that have crash rates which exceed the statewide average for their respective functional classifications.

In terms of crash density shown in **Figure** 13, the most crashes, including commercial crashes, occurred along Barrett Parkway, Cobb Parkway (US 41/SR 3), and Chastain Road. Collectively, crashes on these corridors account for approximately 45% of all crashes within the study area between 2018 and 2022.

The concentration of crashes involving commercial vehicles, however, was more pronounced near the Interstate 75 (I-75) interchanges on Barrett Parkway and Chastain Road as well as at Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5 Spur), Cobb Parkway (US 41/SR 3) at McCollum Parkway, and Cobb Parkway (US 41/SR 3) at Barrett Parkway.

When considering average annual daily traffic (AADT), the top five corridors with the highest crash rates are Frey Road, Kennesaw Due West Road, Barrett Lakes Boulevard, Cherokee Street, and Chastain Road.

Pedestrian and bicycle crashes (summarized in **Table 5**) were infrequent compared to overall crashes, but there were still several within the study area including along Barrett Parkway between Barrett Lakes Boulevard and Bells Ferry Road, Chastain Road in the vicinity of KSU and the intersection with George Busbee Parkway, and on Cobb Parkway (US 41/SR 3) near industrial areas adjacent to Canton Road.

Table 4. Crashes by Severity within the Study Area (2018 – 2022)

	Commercial Vehicle-Involved Crashes		All Other Crashes	
Crash Severity	No. of Crashes	Percent of Total	No. of Crashes	Percent of Total
Fatal Injury (K)	2	0.3%	10	0.1%
Suspected Serious Injury (A)	3	0.5%	126	0.9%
Suspected Minor or Visible Injury (B)	20	3.1%	662	4.8%
Possible Injury or Complaint (C)	83	13.1%	2,439	17.5%
No Apparent Injury (O)	527	83.0%	10,667	76.7%
Total	635	100.0%	13,904	100.0%

Table 5. Pedestrian and Bicyclist Crashes per Crash Severity Within the Study Area (2018-2022)

	All Other Bicycle & Pedestrian Crashes		Commercial Vehicle-Involved Bicycle & Pedestrian Crashes	
Crash Description	No. of Crashes	Percent of Total	No. of Crashes	Percent of Total
Fatal Injury (K)	3	4.7%	0	0.0%
Suspected Serious Injury (A)	4	6.3%	1	50.0%
Suspected Minor or Visible Injury (B)	15	23.4%	0	0.0%
Possible Injury or Complaint (C)	23	35.9%	1	50.0%
No Apparent Injury (O)	19	29.7%	0	0.0%
Total By Year	64	100.0%	2	100.0%

Crash History Within Study Area (2018 - 2022)

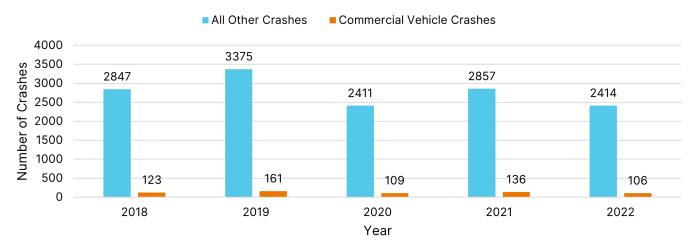
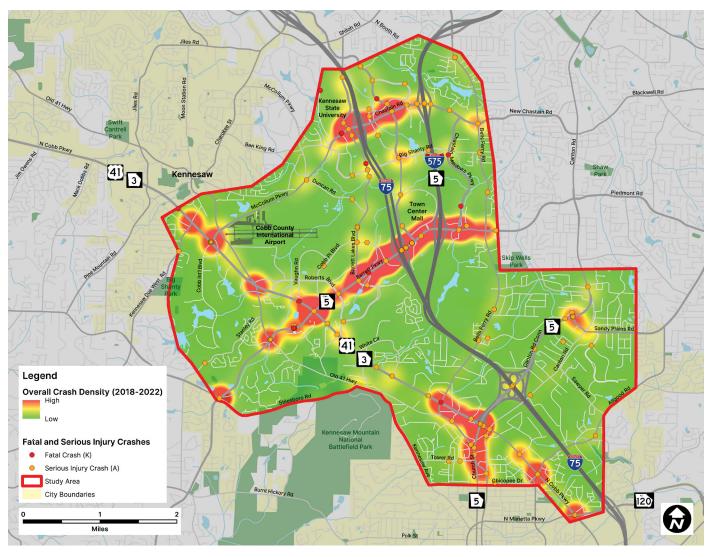


Figure 12. Crash History Within the Study Area (2018 - 2022)



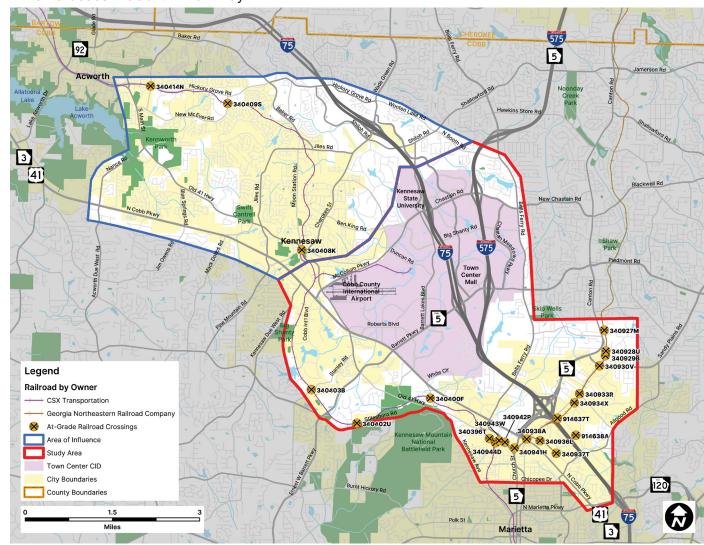
Data Source: Georgia Department of Transportation; Cobb County Department of Transportation

Figure 13. Overall Crash Density Within the Study Area (2018-2022)

Railroad Facilities and At-Grade Crossings

Railroad facilities within the study area and area of influence are shown in **Figure 14**. There is one Class I rail line operated by CSX Transportation and a shortline spur owned by the Georgia Northeastern Railroad (GNRR). Three additional shortline spurs extend southward from the GNRR rail line – these are located to the east of Cobb Parkway (US 41/SR 3), parallel I-75, and parallel Cobb Industrial Drive, respectively, and terminate at industrial businesses. There is also an abandoned shortline spur from the CSX rail line south of Kennesaw to the Vulcan Materials quarry and which crosses McCollum Parkway.

There are several at-grade railroad crossings throughout the study area, particularly along Sandy Plains Road and in Downtown areas. Some of these are the site of multiple incidents where trucks have gotten stuck on the tracks, often because of steep grades where tracks are elevated above the roadway. There may be opportunities to leverage federal funding to construct overpasses in some areas, eliminating the need for at-grade crossings and improving mobility and safety for all users. Just outside of the area of influence in downtown Acworth, the City is permanently closing an at-grade railroad crossing located on School Street due to numerous instances of trucks and trains colliding with one another.¹⁸



Data Sources: Atlanta Regional Commission; Federal Railroad Administration

Figure 14. Railroad Facilities

Unauthorized Truck Parking

While there are regulations which help to protect truck drivers and others on the roadway, as truck drivers approach Hours of Service (HOS) limits, finding truck parking can be a challenge. This issue is not unique to Town Center – metro Atlanta as a whole has a truck parking shortage, and it has been acknowledged as a problem nationwide.

Since the nearest facilities with truck parking are located north of the study area in Cartersville, Emerson, and Calhoun, many truck drivers looking for places to park in the study area often resort to utilizing retail parking lots or highway and ramp shoulders. In the study area, unauthorized truck parking has been observed along interstate ramps and roadways in industrial areas, such as Cobb International Boulevard.

Overnight truck parking has also been frequently observed in large parking lots serving commercial shopping centers, despite signage intended to prohibit overnight parking. Trucks have also been observed staging in unauthorized areas, or waiting to pick up or drop off a load before the facility is ready to accommodate the loading/unloading of cargo. This includes staging within turn lanes outside of car dealerships. Stakeholders from the City of Kennesaw noted that trucks once parked at a large property near the intersection of Cobb Parkway (US 41/SR 3) and Kennesaw Due West Road, prior to the development of The Columns office complex in 2008.

There may be opportunities to work with local jurisdictions to consider new truck parking facilities. In addition, recent initiatives at the statewide level may expand truck parking in other parts of the state, helping to mitigate unauthorized parking in Town Center. There are also new technologies that track incoming and outgoing freight at distribution centers and help minimize wait times for loading and unloading which could be employed in Town Center in the future



Unauthorized Overnight Truck Parking at Cobb Place Shopping Center Along Barrett Parkway (SR 5 Connector)

Multimodal Network

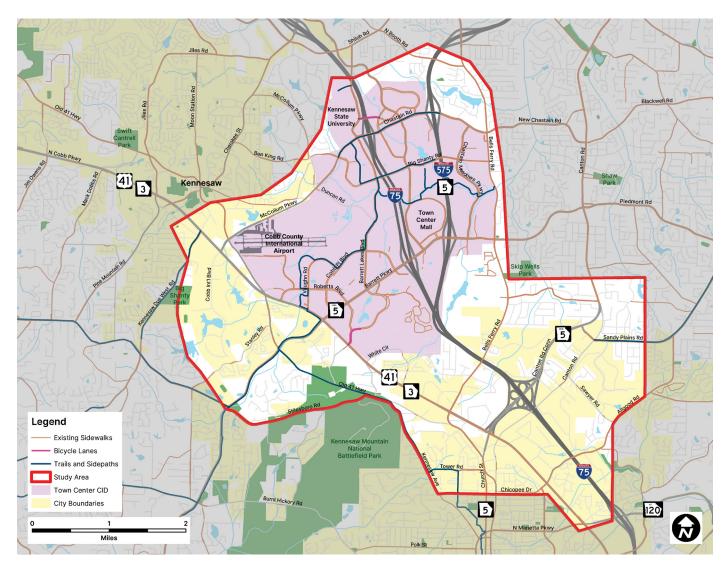
The Town Center Community has made investments in multimodal infrastructure as shown in **Figure 15**, particularly off-road trails, sidewalks, and sidepaths. Within the CID boundary, trails and sidewalks primarily serve commercial development, KSU, and student housing, aligning with the Town Center Community's themes of expanding its trail network and providing balanced transportation options.

There are a limited number of on-street bicycle facilities in the study area. The primary facilities include a bike lane on Chastain Road between I-575 and Big Shanty Road, and a wide shoulder on Sandy Plains Road east of Canton Road. On-street bicycle lanes, however, generally serve a limited number of cyclists who are comfortable riding in traffic, and therefore do not have a significant impact on workforce access. When on-street bicycle facilities coincide with routes that carry significant volumes of truck traffic, such as Chastain Road, it can pose a risk to cyclists, as a cyclist traveling to the right of a larger truck, such as a tractor trailer, may not be visible to a truck driver.

There are some sidewalks adjacent to light industrial uses, but there are some gaps on the periphery of the CID boundary, along major roads like Cobb Parkway (US 41/SR 3) and McCollum Parkway. While this limits access to the local workforce without a vehicle, there is currently not a significant demand for multimodal facilities to serve the local workforce. Paired with appropriate sidewalk facilities, transit routes have the potential to provide access to major employment centers in the study area, including employers with freight-related occupations in suburban environments such as Town Center where there is separation between freight-related job centers and residential uses.

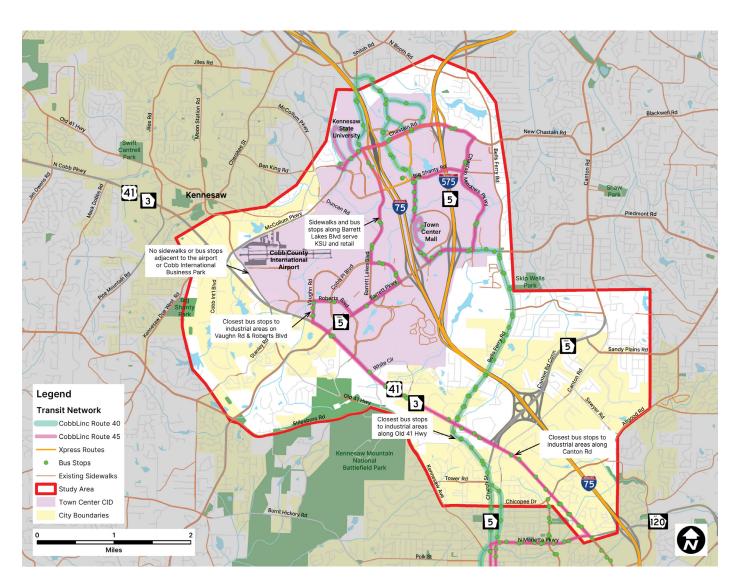
Figure 16 shows transit facilities within the study area and their location with respect to existing sidewalks. These include Xpress commuter service from Kennesaw to Atlanta, the KSU Big Owl Bus, and CobbLinc routes.

In industrial areas further south, outside of the CID boundary, the presence of nearby transit service warrants further examinations into last-mile improvements to improve access for the local workforce. This includes industrial areas along Canton Road, Vaughn Road, Roberts Boulevard, and Old 41 Highway. There are also opportunities to install sidewalks along local roads in these areas, although some may be on private property.



Data Sources: Cobb County, Atlanta Regional Commission, Town Center Community Improvement District

Figure 15. Bicycle and Pedestrian Facilities Within the Study Area



Data Sources: Cobb County, CobbLinc, Atlanta Regional Commission, Town Center Community Improvement District

Figure 16. Transit Facilities Within the Study Area

Research & Technological Advancements

The last major theme stemming from the Town Center Community Freight Cluster Plan pertains to technological advancement and collaboration with research partners such as Kennesaw State University and Chattahoochee Technical College to promote a competitive, but resilient future for freight transportation and operations. Research and technology can benefit electric vehicle charging infrastructure, truck parking and staging opportunities, traffic signal operations and safety, curbside management, and coordination between land uses.

Electric vehicle charging infrastructure is important for TCCID as the technology advances and uses of electric vehicles expands; however, the existing charging technology and infrastructure is not currently viable for trucks. Compressed natural gas and propane are currently more viable alternative fuels for long-haul freight traffic. Electric trucks may be appropriate for short-haul, local truck trips. The project team has coordinated with the LCI Electrification Study project team which did identify electric vehicle charging station opportunities within TCCID, but most of these are best suited for personal vehicles along with small- to mid-sized delivery vehicles rather than larger trucks.

There are 128 signalized intersections within the study area and area of influence - many of which are maintained by CCDOT and use the Sydney Coordinated Adaptive Traffic System (SCATS) for CCDOT to monitor traffic conditions and signal operations in real time.

Staff within GDOT's SigOps program work with state and local traffic engineers to optimize traffic operations along state routes through the latest technology and signal timing methodologies to provide a safe and efficient transportation network. Any signal phasing adjustments on state routes must be coordinated with GDOT. Working with GDOT to incorporate this technology into existing signalized

intersections both within the study area and area of influence is an opportunity to advance safe, efficient, and reliable transportation for multiple modes beyond vehicular travel.

The Regional Connected Vehicle Program is being implemented across the Atlanta region, including within Town Center, to implement new traffic signal technologies such as emergency vehicle preemption and freight signal priority on select corridors. The CID is an active partner in the program which includes 57 locations within TCCID along major corridors such as Chastain Road, McCollum Parkway, Barrett Lakes Boulevard, Barrett Parkway (SR 5 Connector), and Cobb Parkway (US 41/SR 3).¹⁹ The CID can leverage this program as well its partnerships with other agencies part of it to implement technologies that can not only improve traffic conditions overall, but benefit freight operations.

Truck parking availability largely consists of private facilities that can only be accessed by trucks making deliveries and pickups at those facilities, and there are currently few service facilities within the study area and area of influence. During staging at warehouses and distribution facilities, truck drivers may have to wait long hours when there are delays or issues with appointments to load or offload freight. Opportunities to expand truck parking availability through policy and technology should be explored to mitigate traffic and safety concerns. Automated scheduling technology is a tool that can help manage and prioritize pickups and deliveries at warehouses and distribution centers.

Curbside management is becoming increasingly important as cities, suburban areas, and regions grow and become more congested. Effective curb management can help reduce traffic congestion, improve safety for all road users, and support economic development. One challenge in Town Center is that regulations differ between Cobb County, local municipalities, and private businesses.

Preparing for future conditions through the use of technology and research applications will be vital to Town Center's success. Additional discussion on technological applications for freight can be found in the Best Practices Report included in Appendix B.



Chapter Overview

Building upon the inventory and assessment of existing conditions and assessment of needs, challenges, and opportunities, the project team followed an iterative process (see Figure 17) to identify potential projects, strategies, and policies to improve freight mobility in the Town Center Community and its immediate surroundings. Reviewing findings and recommendations from previous planning studies, the team documented ongoing issues, challenges, and opportunities. Stakeholder input helped pinpoint specific local challenges and consultation with stakeholders and the PMT revealed opportunities for improvements.

Key findings from technical reports produced for the Review of Best Practices, Inventory & Assessment, and Traffic Study, along with additional analysis, informed identification of potential projects, strategies, and solutions. This chapter briefly summarizes the process followed to identify and prioritize candidate projects, policies, and strategies.

In October 2023, the Stakeholder Committee was presented with initial ideas for categories of projects, specific project ideas, and potential metrics to evaluate and prioritize the projects. The Stakeholder Committee provided feedback on which project types and evaluation metrics are most important, and participated in small group discussions about corridors and areas with specific needs.

Following the Stakeholder Committee meeting, the project team consulted with the PMT to finalize the prioritization framework and evaluate the projects. This chapter summarizes the project evaluation and prioritization process.



Railroad Parallels Canton Road at Sandy Plains Road

Identify Needs & Opportunities	Review of Best Practices, Inventory & Assessment, Traffic Study, field observations, input from PMT, feedback from stakeholders
Draft Universe of Potential Projects	Develop potential projects, policies, and strategies to address identified needs
Evaluate & Prioritize Projects	Evaluate and score projects based on a range of factors and study goals
Refine Draft Project List	Refine projects and prioritization based on input from TCCID, implementing partners, and key stakeholders
Develop Cost Estimates	Prepare planning-level cost estimates using cost estimation tools, engineering judgment, and input from TCCID and Cobb County
Project Potential Revenue	Work with TCCID to project anticipated future revenue from District, and from sources such as the Cobb County TSPLOST, ARC, and other sources
Finalize Project List	Refine project descriptions and cost estimates, and developed a phased list of projects (short-term/financially constrained and long-term/visionary)

Figure 17. Process For Developing Recommendations

Project Identification

As shown in **Figure 18**, the project identification process took into consideration identified needs, approved plans and studies, and collaborative brainstorming to develop a universe of projects and refine the list into a Financially Feasible Short-Term Action Plan.

The first task for the Freight Cluster Plan was the Review of Best Practices. This review examined peer regions with similar land use and development characteristics to identify innovative ways that freight challenges are being addressed. Topics included local freight planning, commercial traffic flow and safety, incorporating freight-oriented businesses in mixed-use developments, creative use of warehousing space, curbside access management, freight signal priority, truck staging applications, and appointments and scheduling for warehouses and distribution facilities.

One major finding stemming from this review was that there will continue to be "competing" interests in Town Center. The proximity to two major interstates, major roadways, an airport, and established industrial uses will continue to make it attractive to trucks and train traffic. Conversely, mixed-use development is projected to continue to grow, there is a major state university with plans for expansion, and there are new and planned trails that draw an increasing number of pedestrians and cyclists.

The next task, the Inventory & Assessment, included a comprehensive analysis of infrastructure, operations, and trends related to the freight network (e.g., truck routes and railroad crossings), multimodal network (e.g., trails, sidewalks, and transit service), traffic safety, land use, and demographics. The analysis also included a review of relevant plans and studies with findings and recommendations that have a bearing on freight operations in the study area. The findings from the Inventory & Assessment helped to inform the development of projects for the Freight Cluster Plan, as well as related policies and strategies.

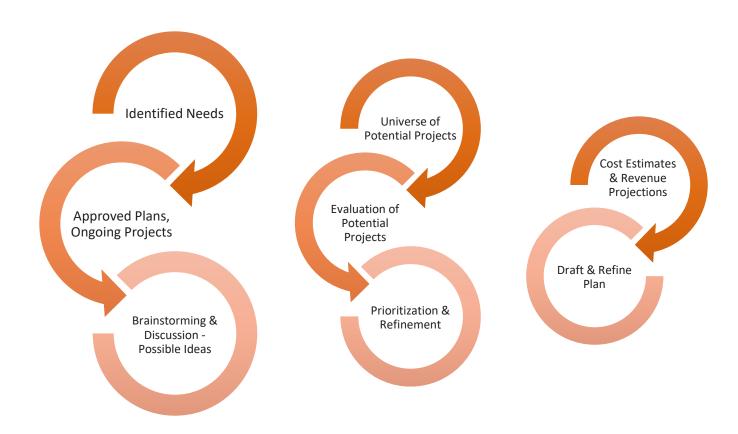


Figure 18. Project Evaluation Process, Considerations & Inputs



The project team also conducted a Traffic Study, with the intent of identifying more detailed infrastructure and operational needs and solutions at specific intersections where there is a concentration of truck activity. The study included an operational analysis, which assessed existing and projected level-of-service and delay, as well as field observations, where the project team visited the intersections firsthand and observed operations as well as infrastructure conditions. The Traffic Study recommended improvements at 18 intersections throughout the study area. These range from "quick fix" solutions like median repairs and new signage, to larger-scale capital projects like realigning and expanding intersections. The proposed improvements identified in the Traffic Study have been incorporated into the project list.

In addition to these technical analyses, stakeholders provided a variety of insights about freight operations in the study area, identified specific needs, and provided feedback on potential solutions. The Stakeholder Committee shared information on freight-related needs and challenges in Town Center, vetted ideas on potential ideas and solutions, and provided feedback on the draft list of projects, policies and strategies.

The project team also conducted 12 telephone interviews with stakeholders representing a variety of interests – the state transportation agency (GDOT), National Park Service, municipal public works staff, non-profit groups, state and county-level business advocacy organizations, and representatives of private businesses that generate freight, including warehousing companies and construction aggregates. Each interview provided a unique perspective on freight operations, challenges related to mobility and safety, and trends in their respective industries. This feedback helped to identify major needs and potential ideas for projects, policies, and strategies to address freight needs in Town Center.

The outcomes of the Review of Best Practices, Inventory & Assessment, and Traffic Study, and the feedback received from the Stakeholder Committee and stakeholder interviews, were used to develop the projects, policies and strategies for the Freight Cluster Plan.

Prioritization Framework

In order to evaluate the projects, the project team identified overarching prioritization categories related to goals and objectives of the Plan which are depicted in **Table 6**:

- Mobility and Safety Evaluates whether the project benefits freight mobility and/ or safety for trucks, other vehicles, and multimodal users
- State of Good Repair Evaluates whether the project repairs deficient facilities or involves maintenance or repair of facilities
- Access and Connectivity Evaluates
 whether the project improves access and
 connectivity between truck routes and/or
 improves access to freight-related nodes of
 employment
- Community Impact Evaluates whether
 the project addresses community needs
 as noted by stakeholders or the PMT,
 improves bicycle/pedestrian access for the
 local workforce, routes trucks away from
 residential areas, and/or coincides with a
 disadvantaged community
- Alignment with Vision for Town Center Community – Evaluates whether the project improves mobility for freight-generating businesses within the Town Center district or addresses an identified need in the Town Center Master Plan or other Town Centersponsored study

Within each category, multiple criteria were identified that correspond to overall goals, objectives, or otherwise desirable outcomes. For each criterion, the project team identified a measure and data sources that could be used to evaluate potential projects, including both quantitative and qualitative inputs. Selected categories, criteria, and measures are shown in **Table 6**. They are intended to be applicable to multiple project types and to help prioritize a series of projects that will provide a range of potential benefits and potential types of challenges.

Table 6. Project Prioritization Framework

Prioritization Category	Prioritization Measure	Measure Total	Total Score
	Addresses current or anticipated congestion	4	
	Addresses an existing bottleneck	4	
Mobility & Safety	Improves corridors with projected growth in truck traffic	4	20
	Reduces number/severity of crashes	4	
	Improves at-grade crossings	4	
State of	Coincides with roadway that currently has poor pavement condition OR repairs/rehabilitates pavement	10	
Good Repair	Addresses needed infrastructure repairs (guardrails, sidewalks, drainage structures, etc.)	10	20
	Improves or provides access to a truck route (interstate or state road)	5	
Access &	Improves first/last-mile freight connectivity	5	20
Connectivity	Addresses needs for future freight connectivity	5	
	Improves access for nodes of employment	5	
	Addresses need(s) noted by stakeholders or Cobb County staff OR in a local plan/study	5	
	Within 1 mile of a disadvantaged community	5	20
Impact	Improves bike/ped/transit access for local workforce	5	
	Re-routes trucks away from residential areas	5	
	Coincides with identified need in TCCID Master Plan or other TCCID-sponsored study	5	
Aligns with TCCID Vision	Fosters innovation	5	20
	Improves mobility for freight-generating businesses within the District	10	
		TOTAL	100

Methodology and Results

To evaluate projects for each measure, the project team compiled and assessed a range of geospatial and other data, assigning qualitative ratings along with a corresponding numeric values listed in **Table 6**. Each of the five categories were weighted equally, such that each had a possible maximum score of 20 points, with a total maximum score of 100 points. Within each category, the 20 points were divided equally among the different measures – for example, within Mobility and Safety, each of the five measures was worth four points, while within Community Impact, each of the four measures was worth five points.

The exception to this is for Alignment with Vision for Town Center Community – the metrics for fostering innovation and coinciding with an identified need were worth 5 points each, and the metric for improving mobility for freight-generating businesses was worth 10 points.

The weighted scores, projections for future available funding, and feedback from TCCID and the PMT were used to help determine the relative priorities and timeframes for project implementation. Based on these considerations, projects were placed in either the fiscally-constrained short-term action plan or the long-term vision plan. There are a total of 20 projects in the short-term action plan and 17 projects in the long-term vision plan. These are shown in **Table 7** and **Table 8**, respectively.

Table 7. Project Prioritization Results - Short-Term Action Plan Projects

Project Category	Project Name
Intersection Improvement	Canton Road Connector (SR 5 Spur) at Church Street Extension
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Connector)
Intersection Improvement	I-75 Southbound at Chastain Road
Intersection Improvement	McCollum Parkway-Chastain Road at Duncan Road
Intersection Improvement	McCollum Parkway at Big Shanty Drive-Vulcan Materials Driveway
Intersection Improvement	Old 41 Highway at Airport Road
Intersection Improvement	Barrett Parkway (SR 5 Connector) at I-75 Northbound
Intersection Improvement	Barrett Parkway (SR 5 Connector) at I-75 Southbound
Intersection Improvement	Barrett Parkway (SR 5 Connector) at Mall Boulevard
Study	Corridor Safety Studies
Lighting	Barrett Parkway Lighting
Intersection Improvement	Chastain Road at Big Shanty Road
Study	I-75 to I-575 Connector Feasibility Study
Study	Baker Road at Hickory Grove Road Signal Phasing
Signage	Marble Mill Railroad Crossing Signage
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp (Short-Term)
Study	Barrett Lakes Boulevard and Cobb Parkway Speed Studies
Signage	Enhanced Truck Prohibition Signage for City of Kennesaw
Signage	Wayfinding Signage for Trucks
Intersection Improvement	Canton Road Connector (SR 5 Spur) at Church Street Extension

Table 8. Project Prioritization Results - Long-Term Vision Plan Projects

Project Category	Project Name		
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Bells Ferry Road		
Intersection Improvement	Canton Road Connector (SR 5 Spur) at Sandy Plains Road		
Intersection Improvement	McCollum Parkway at Old 41 Highway/South Main Street		
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp (Long-Term)		
Intersection Improvement	McCollum Parkway at Cobb Parkway (US 41/SR 3)		
Intersection Improvement	Canton Road at Sandy Plains Road		
Intersection Improvement	Cobb Parkway (US 41/SR 3) at EMC Parkway/Kennestone Circle		
Lighting	Chastain Road Lighting		
Sidewalk Facilities	EMC Parkway Sidewalk		
Sidewalk Facilities	Industrial Park Drive Sidewalk		
Sidewalk Facilities	Loudermilk Drive Sidewalk		
Sidewalk Facilities	McCollum Parkway Sidewalk		
Study	Canton Road Small Area Study		
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) Off-Ramp		
Intersection Improvement	Cobb Parkway (US 41/SR 3) at Industrial Park Drive		
Sidewalk Facilities	White Circle Sidewalk		
Lighting	Big Shanty Drive Lighting		



Signalized Intersection at Chastain Road and Duncan Road





Chapter Overview

This chapter includes an overview of a variety of federal, state, regional, and local funding programs. This chapter will provide the latest available information regarding upcoming notices of funding opportunities (NOFOs) and calls for projects. The chapter then discusses a revenue forecast for TCCID to advance freight projects and inform the development of a Financially Feasible Short-Term Action Plan presented in Chapter 5. Lastly, this chapter presents a cost estimation methodology used to identify project costs for preliminary engineering, utilities, right-of-way acquisition, construction, and contingency.

Potential Funding Sources

While TCCID primarily relies on tax digest collections associated with properties that are within the CID, a variety of funding sources are potentially available to the Town Center CID and its partners to fund project recommendations included in this Freight Cluster Plan. Ranging from local and state to federal sources, TCCID will collaborate with partners to identify and pursue a variety of funding sources and opportunities, leveraging programmatic funds where possible, such as Cobb County's Special-Purpose Local Option Sales Tax (SPLOST), where appropriate. Community Improvement Districts are not qualified Local Public Agencies and therefore are not eligible to be Local Administered Project (LAP) certified, which would enable them to manage core activities for Federal-aid funded projects. As such, TCCID relies on partners at the County and city level to support funding for transportation and infrastructure projects.

The following sections provide brief summaries of a range of potential funding sources that are available, should TCCID choose to pursue them, as well as a summary of the revenue forecasting process undertaken to estimate reasonably available funding over the next ten years, which informed the Short-Term Action Plan.

Federal

Programs Administered by ARC

Transportation Improvement Program

The Transportation Improvement Program (TIP), administered by ARC, allocates federal funds for the planning, design, and construction of high-priority projects in the Metropolitan Transportation Plan (MTP), and represents the short-term, fiscally-constrained portion of the long-range plan.

As the federally-designated metropolitan planning organization (MPO) for the Atlanta Region, ARC is responsible for developing the TIP to meet federal planning requirements and to address local needs, including within the Town Center area. Both infrastructure and planning projects are eligible with an emphasis on projects that enhance mobility and access, equity, safety, and resiliency within the Atlanta region.¹ On December 15, 2022, ARC approved projects as part of the 2022 TIP solicitation which consisted of \$235 million in transportation investments across the Atlanta region.

The approved projects within the study area include the widening of Big Shanty Road from Chastain Meadows Parkway to Bells Ferry Road; Phase 3 of the South Barrett Reliever from Barrett Lakes Boulevard to Barrett Parkway (SR 5 Connector); and the extension of Noonday Creek Trail northward towards Noonday Creek Park.²

As funding becomes available, ARC solicits project applications from sponsors around the region. During the last round of TIP solicitations in 2022, CIDs could apply for studies, but were asked to coordinate with the appropriate local government entity to apply for infrastructure projects. If this guidance remains during the next TIP solicitation that will occur in Spring 2024, then TCCID will need to coordinate with Cobb County to apply for TIP project funding. TIP applications for the Spring 2024 application window open in March 2024 and will close in May 2024.³

Georgia Smart Communities Challenge

The Georgia Smart Communities Challenge is organized by the Georgia Institute of Technology in partnership with ARC and several other regional and state agencies. It offers up to \$50,000 in direct funding and technical assistance to enable visioning, exploration, and planning for "smart" futures. Since federal funding is involved through this program, a 20% local match is required among local partners.⁴

Livable Centers Initiative Program

ARC's Livable Centers
Initiative (LCI) Program
incentivizes local
jurisdictions and agencies
to re-envision their
communities as vibrant,
walkable places that offer
increased mobility options,
encourage healthy lifestyles,
and provide improved
access to jobs and services.



It allows for investments for various projects, including increasing a community's mobility options and providing increased access to jobs and services. Since 2000, the LCI program has invested \$312 million in more than 130 communities throughout the Atlanta region, helping to fund planning studies and the construction of transportation projects such as sidewalks and intersection improvements within LCI areas. Through 2050, ARC has allocated \$600 million for transportation projects stemming from adopted LCI plans and studies. LCI grants cover 80% of the cost of a study along with transportation projects stemming from the LCI study. Grant recipients are required to provide a 20% match.

Three LCI studies have been completed within the study area: The Bells Ferry Road LCI Operational Study, the Chastain Road LCI Corridor Study, and the Noonday Creek Trail Pedestrian Bridge Over US 41 Study.

ARC generally issues a call for new LCI projects, including studies and infrastructure improvements, on an annual basis.

Programs under the IIJA/BIL

The Infrastructure and Investment Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was signed into law by President Joe Biden on November 15, 2021. The IIJA is the largest transportation investment in the nation's history, with \$1.2 trillion allotted for the country's transportation, broadband, and energy infrastructure. Of this total, \$567 billion is designated for discretionary and formula programs within the U.S. Department of Transportation from fiscal year (FY) 2022 to FY 2026. Included within IIJA funding are existing programs that have been reauthorized, as well as new programs focusing on climate, sustainability, equity, and freight at both regional and community levels.

Existing Formula Programs

Based on formula funding alone, Georgia can expect to receive approximately \$9.2 billion over five years in Federal Highway formula funding for highways and bridges, which is a 27% increase over the previous Federal-aid Highway formula funding bill. Funds received from these programs are generally funneled through ARC.

National Highway Performance Program

The National Highway Performance Program (NHPP) provides support for transportation facilities that are part of the National Highway System (NHS). The NHPP provides support for the condition and performance of the NHS, for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.⁵

Metropolitan Planning Program

The Metropolitan Planning Program (MPP) is authorized through the IIJA and establishes the three C's framework (cooperative, continuous, and comprehensive) for transportation planning at the metropolitan level. This level of planning is carried out by a federally-funded MPO, which represents localities in all urbanized areas with a population over 50,000 people (such as ARC). The program is jointly administered by FHWA and FTA.⁶

Town Center Community Freight Cluster Plan

Congestion, Mitigation & Air Quality Improvement Program

The Congestion, Mitigation and Air Quality Improvement (CMAQ) Program provides funding for improvements that help reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and particulate matter. The IIJA expands project eligibility under CMAQ to include shared micro-mobility projects and clarifies eligibility of clean fuel vehicle replacement programs.⁷

Motor Carrier Safety Assistance Program

The Motor Carrier Safety Assistance Program (MCSAP) is a grant program that provides financial assistance to states to reduce the number of crashes, injuries, and fatalities involving commercial motor vehicles through consistent and effective commercial motor vehicle (CMV) safety programs and campaigns. MCSAP is administered by the Federal Motor Carrier Safety Administration (FMCSA) and supports state and local law enforcement agencies to increase safety activities and enforcement. The IIJA increased funding for this program by approximately 61%.

Railway-Highway Grade Crossings Program

The Railway-Highway Grade Crossing Program (RHCP) provides funds for safety improvements at public at-grade railroad crossings to reduce crashes, injuries, and fatalities at these locations. GDOT administers this program and plans to enhance its Railroad Safety Program, including development of the State Action Plan, as required by the Federal Railroad Administration (FRA), and the use of FHWA's Section 130 program to evaluate and fund railroad-highway grade crossing safety improvements at public at-grade railroad crossings throughout the state.8

Surface Transportation Block Grant Program

The Surface Transportation Block Grant Program (STBG) is the most flexible of all Federal-aid highway programs, as it can be used for a variety of projects. STBG funds can be used to preserve or improve conditions and performance on any federal-aid highway or bridge projects on any public road, facilities for non-motorized transportation, transit capital projects, and public bus terminals and facilities. The IIJA includes new eligible projects such as electric vehicle (EV) charging infrastructure and protective features to enhance resiliency.9

Highway Safety Improvement Program

The Highway Safety Improvement Program provides funding for infrastructure safety-related projects on public roads, including those owned by local governments. HSIP funding requires a data-driven strategic approach to improving highway safety and performance on all public streets. The HSIP consists of these components:¹⁰

- Strategic Highway Safety Plan (SHSP): A state-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. Georgia's current SHSP is the 2022-2024 Strategic Highway Safety Plan.¹¹
- The Georgia Highway Safety Improvement Program (HSIP) provides for a continuous and systemic procedure that identifies and reviews specific traffic safety issues around the state to identify locations with potential for improvement. The goal of the HSIP process is to reduce the number of crashes, injuries, and fatalities by eliminating certain predominant types of crashes through engineering solutions.¹²

Railway-Highway Crossing Program (RHCP): The RHCP provides funds for safety improvements to reduce the number of fatalities, injuries, and crashes at public railwayhighway grade crossings.¹³

National Highway Freight Program

The National Highway Freight Program (NHFP) is a more flexible funding program that provides for numerous freight-related projects on the National Highway Freight Network (NHFN), as specified in state freight plans. The IIJA increased the allowable number of miles within a state that can be classified as critical urban freight corridors, from 75 to 150 miles. Goals of the program include:

- Investments in infrastructure, including truck parking facilities, and operations in order to strengthen economic competitiveness, reduce congestion and transportation costs, and improve reliability and productivity of the system
- Improve the safety, security, efficiency, and resiliency of freight in both rural and urban areas
- Improve the state of good repair of the NHFN
- Improve the safety, security, efficiency, and resiliency of the NHFN through technology improvements
- Improve state flexibility to support multistate, regional corridor planning and freight connectivity
- Reduce overall environmental impacts of freight movement on the NHFN¹⁴



Railroad Track Parallels Canton Road at Sandy Plains Road Near Dow Chemical Company

Existing Discretionary Grant Programs

FHWA also awards discretionary grants, where the agency issues a solicitation for projects and makes project selections based on the applications received. In order to leverage these funds, TCCID would need apply through Cobb County or ARC.

Advanced Transportation Technologies and Innovative Mobility Deployment Program

Formerly known as the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Program, the Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program supports the development of deployment sites for large scale installation and operation of advanced technology to improve safety, efficiency, and system performance within all MPOs. Technological infrastructure enhancements and improvements that can be supported through the ATTIMD program include advanced traveler information systems, performance data collection, truck parking information and management systems, and vehicle-to-vehicle (V2V) and vehicle-toinfrastructure (V2I) communications.¹⁵

Consolidated Rail Infrastructure and Safety Improvement

Administered by FRA, the Consolidated Rail Infrastructure and Safety Improvement (CRISI) Program funds projects which improve safety, efficiency, and reliability of passenger and freight rail between cities. Specific projects that CRISI funds can be applied towards include improvements in railroad technology, at-grade crossings, regional rail and corridor service deployment plans, and environmental analysis. Eligible recipients include state and local governments, transit agencies, and Amtrak.¹⁶



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High Priority Grants

Administered by FMCSA, the High Priority (HP) Grant program is a discretionary grant program which provides federal assistance to enhance Commercial Vehicle Safety Plan (CVSP) activities and improve commercial motor vehicle (CMV) safety. State and local governments are eligible recipients for the following activities:

Town Center Community Freight Cluster Plan

- Supporting participation in performance and registration information systems management
- Conducting safety data improvement projects
- Increasing public awareness and education on CMV safety
- Targeting unsafe driving of CMV and non-CMV in areas identified as high-risk crash corridors
- Improving the safe and secure movement of hazardous materials
- Improving safe transportation of goods and persons in foreign commerce
- Demonstrating new technologies to improve CMV safety
- Improving CMV safety and compliance with CMV safety regulations¹⁷

Rebuilding American Infrastructure with Sustainability and Equity

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program supports surface transportation projects of local or regional significance. Eligible recipients of RAISE grants include state DOTs, local governments, special purpose districts with a transportation function, and multi-jurisdictional organizations. These grants are awarded based on a set of criteria including safety, environmental sustainability, quality of life, economic competitiveness and opportunity, state of good repair, partnership, and innovation. IIJA earmarks expanded funding in the amount of \$15 billion over five years.¹⁸

Infrastructure for Rebuilding America

Infrastructure for Rebuilding America (INFRA) grants offer needed aid to freight infrastructure by providing funding to state and local government for projects of regional or national significance. IIJA earmarks funding for the INFRA grant program in the amount of \$8 billion over five years and expands eligibility for highway, bridge, and freight projects on the National Highway Freight Network (NHFN). There is also a higher cap on multimodal projects at 30% of program funds.¹⁹



Westbound Vehicles Queuing at the Intersection of Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Connector)

New Formula Programs

Bridge Formula Program

Bridge Formula Program funds are intended for the replacement, rehabilitation, preservation, protection, and construction of bridges on public roads, based on the condition. These funds are apportioned based on a state's relative costs of replacing bridges classified as being in poor condition and rehabilitating bridges in fair condition. Replacement funds are to be utilized for bridges rated as being in poor condition, while rehabilitation funds are allocated for bridges classified as being in fair condition. Eligible bridges include Federal-aid highway bridges, as well as off-system bridges owned by a local government agency.²⁰

Carbon Reduction Program

The Carbon Reduction Program (CRP) provides funds for reducing transportation emissions, as well as developing strategies for carbon reduction stemming from on-road highway sources. Specific activities conducted using CRP are coordinated between states and MPOs. Eligible projects include, but are not limited to:

- The establishment or operations of traffic monitoring, management, and control
- Advanced congestion management activities
- Efforts to reduce community and environmental impacts of freight movement
- Deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-vehicle communications equipment
- Advanced truck stop electrification systems²¹

National Electric Vehicle Infrastructure Formula Program

The IIJA established the National Electric Vehicle Infrastructure (NEVI) Formula Program to provide funding for the strategic deployment of electric vehicle (EV) charging infrastructure and to establish a network to facilitate data collection, access, and reliability. This program supports freight movement by investing in EV charging infrastructure along major national highways and NHFN routes as well as at intermodal facilities, warehouses, and port facilities. Funding is limited to EV charging facilities that are open to the public or to authorized commercial motor vehicle operators from more than one company. Public projects that use NEVI funding should be located along a designated alternative fuel corridor. The IIJA also stipulates that NEVI funds can be used to contract with a private company to install public EV charging infrastructure and private companies can pay for the non-Federal share of this type of project.²²

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation Program

The Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) program is intended to increase the resilience of the nation's transportation system. Over the next five years through FY 2026, PROTECT will provide \$7.3 billion in formula funding to states and \$1.4 billion in competitive grants to eligible entities. This includes funding for highways, transit, intercity passenger rail, evacuation routes, coastal resilience, and efforts to move infrastructure to nearby locations not continuously impacted by extreme weather and natural disasters. Federal shares of funding are higher if the eligible agency develops a resilience plan and the MPO incorporates the project into its long-range transportation plan.²³

Town Center Community Freight Cluster Plan

New Discretionary Grant Programs

Bridge Investment Program

In addition to the Bridge Formula Program, there is a new Bridge Investment Program that provides funding to projects which improve bridge and culvert condition, safety, efficiency, and reliability. This program consists of \$12.5 billion in funding through fiscal year 2026 towards replacement, rehabilitating, and preservation of bridges on the National Bridge Inventory (NBI).²⁴

Charging and Fuel Infrastructure Grant Program

The Charging and Fuel Infrastructure (CFI) Grant Program provides funding to strategically deploy electric vehicle charging stations and the alternative fuel infrastructure that can be accessed by the public. The program focuses on both corridor charging along designated alternative fuel corridors and community charging in places such as parking facilities, schools, and parks. There is approximately \$2.5 billion in funding through fiscal year 2026.25

National Infrastructure Project Assistance Program

The National Infrastructure Project Assistance Program is a new \$5 billion discretionary grant program which provides funding for eligible large surface transportation projects with national significance and which generate national and regional economic and safety benefits. Eligible projects include highway or bridge projects carried out on the National Multimodal Freight Network, National Highway Freight Network, and the National Highway System. Other eligible projects include a freight intermodal or rail project that provides a public benefit as well as intercity passenger rail and grade separation projects.²⁶

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

The Natural Gas Distribution Infrastructure Safety and Modernization Program is a new \$1 billion discretionary grant program which provides funding towards the repair, rehabilitation, or replacement of natural gas distribution pipeline systems. One pipeline currently runs through the study area, spanning generally east-west through the central portion of the study areas. It crosses many of the major roads within the study area, including Canton Road, Bells Ferry Road, I-75 (just south of where I-75 and I-575 intersect), Cobb Parkway (US 41/SR 3), Old 41 Highway, and Barrett Parkway. This is the only pipeline within the study area or area of influence.27



Truck Route Signage and Restrictions on Williams Road at Guffin Lane in Marietta

State

GDOT-Administered Programs

Local Maintenance & Improvement Grant

The Local Maintenance and Improvement Grant program (LMIG) was developed with partner agencies to support a wide range of activities to allow local governments greater flexibility and quicker project delivery, while allowing GDOT to effectively administer the program with a reduced workforce and new funding match requirements. Eligible activities include, but are not limited to, preliminary engineering, construction, supervision and inspection, intersection improvements, turn lanes, bridge repair and replacement, sidewalk adjacent to public roads, signs, striping, quardrail installation, and signal installation or improvement. The amount of allocation is based on the total centerline road miles for local road systems and the total population of the county or city compared to statewide numbers.²⁸

Quick Response

The Quick Response (QR) Project Program is administered by GDOT and funds operation projects such as restriping, intersection improvements, and turn lane additions and extensions that can be implemented between three and four months for under \$200,000. GDOT's QR Program can be used for freight improvements such as widening turn radii and cutting back medians to reduce the likelihood of encroachment by trucks.



The Intersection of Cobb Parkway (US 41/SR 3) at McCollum Parkway is Among the Busiest Intersections for Trucks in the Study Area

Safe Routes to School

Safe Routes to School (SRTS) is a state program intended to improve health and well-being of children in grades K-8, including those with disabilities, by making it safe, convenient, and fun to walk or bike to school. Eligible applicants are state, regional, county, and city governments, and school districts. A school must be actively engaged in non-infrastructure activities (e.g., SRTS Plan, Education, Encouragement, and/or Enforcement activities) and enrolled in the Georgia SRTS Resource Center. Projects must be infrastructure projects within public right-of-way and a two-mile radius of a K-8 school. Eligible projects include sidewalk improvements, traffic calming and speed reduction, pedestrian and bicycle crossings, on- and off-street bicycle facilities, secure bicycle parking, and traffic diversion projects. Other project types may be eligible if they aim to reduce speeds and improve pedestrian and bicycle safety and access. Applications are limited to \$500,000 and no match is required.²⁹

Freight Operations Lump Sum Program

The Freight Operations (FO) Lump Sum Program, introduced in 2021, provides funding for small-scale, but critical, capital projects that will improve the efficiency and reliability of truck movements, and mitigate truck impacts on communities.30 Projects are awarded funds based on an annual set-aside in the Statewide Transportation Improvement Program (STIP).

Off-System Safety Program

GDOT established the Off-System Safety (OSS) Program in 2005 to reduce the severity and frequency of crashes on off-system routes (local roads – not part of the state route system). Funds are dispersed through a federal safety program to enhance safety on local routes through low-cost countermeasures, such as striping, sign replacement, rumble strips, and raised pavement marker installations within existing right-of-way. Local governments should contact the State Aid Coordinator for the local district if they are interested in receiving funds through the OSS.



Georgia **Transportation Infrastructure** Bank

Georgia Transportation Infrastructure Bank

The Georgia Transportation Infrastructure Bank (GTIB) is a grant and low-interest loan program administered by the State Road and Tollway Authority (SRTA). As of April 1, 2022, GTIB has leveraged approximately \$200 million in grants and loans to support over \$965 million in transportation improvements around Georgia.

Applicants can be local, regional, and state governments and Community Improvement Districts. Projects must be motor-fuel tax eligible (e.g., highways and bridges), and funds can be used for preliminary engineering, traffic and revenue studies, environmental studies, right-of-way acquisition, legal and financial services associated with the development of the qualified project, construction management, facilities, and other costs necessary for the qualified project.³¹

Regional & Local

Community Development Assistance Program

The Community Development Assistance Program (CDAP) provides planning and technical support through ARC to metro Atlanta communities to improve quality of life. CDAP projects are chosen based on ARC staff availability and how proposed projects advance CDAP quiding principles:

- Access to Healthy Food
- Creative Placemaking
- Green Infrastructure
- Historic Preservation
- Housing Affordability
- Lifelong Communities
- 9
- Smart Communities
- Workforce Development³²

Neighborhood groups, nonprofits, communitybased organizations, or a group of committed neighbors can apply in partnership with a local government.

Cobb County

Special Purpose Local Option Sales Tax

The Special Purpose Local Options Sales Tax (SPLOST), a one-percent sales tax approved by Cobb County voters, may



be used for matching funds on state or federally funded projects. Funds can be utilized for a variety of needs, including repairing roadways and bridges, traffic congestion reduction efforts, and intersection safety improvements.

- Approximately \$21.2 million for operational and safety improvements at intersections and corridors throughout the County
- \$25 million for federal/state/local match improvements for projects including corridor capacity and safety improvements; interchange improvements; and lane additions³³
- \$11.5 million for sidewalk improvements, including construction of sidewalks where gaps currently exist; construction of pedestrian bridges; and improvements to existing sidewalks in the vicinity of schools, activity centers, multimodal facilities, and other congested areas
- Approximately \$23.1 million for traffic management and transportation technology improvements, including upgrades to the County's traffic signal infrastructure; installation of traffic signals; and improvements to the County's transportation technology systems

Cobb County's 2022 SPLOST program was renewed in November 2020 and includes several transportation projects in the study area. TCCID can coordinate with the county to add projects from the Freight Cluster Plan to a future SPLOST program.

Cobb Mobility SPLOST (MSPLOST) Referendum

CCDOT is currently pursuing a countywide Mobility Special Purpose Local Option Sales Tax (Mobility SPLOST or MSPLOST) which will serve as a \$10.9 billion transit investment to increase connectivity throughout the county, particularly between regional activity centers, including Town Center. The proposed program referendum is separated into several different project types including high-capacity transit such as bus rapid transit (BRT) and arterial rapid transit (ART); local, rapid, and commuter service; vehicle and facility maintenance, transit technology, micro-transit, bicycle and pedestrian access improvements, operational improvements, and aspirational unfunded projects.

This referendum is expected to be presented to Cobb County voters in November 2024. If it passes, MSPLOST tax collection for this program will begin on April 1, 2025, and end on March 31, 2055. Freight Cluster Plan projects will need to be modified to accommodate proposed transit improvements if the initiative is passed by voters.

A wide-ranging number of projects can utilize public-private partnership agreements and funding, including those involving highways, active transportation infrastructure, travel demand management, safety improvement projects, and freight accommodations. Specifically, projects that improve efficiency of freight and goods movement, and contribute to employment growth, improved job access, and new workforce development are particularly appropriate for these partnerships.

GDOT is responsible for the statewide program which facilitates project delivery through the public-private partnership program. The State of Georgia has a P3 framework that allows for the leveraging of existing funding, and improving project delivery rates through the private sector. In order to be considered for P3 implementation, projects must be included in the Statewide Transportation Improvement Program, after which the State Transportation Board determines which projects afford the greatest gains in congestion mitigation, or promote economic development for Georgia. Once projects are identified, they are then screened to determine their eligibility as a P3 Program project.34

Town Center Community Improvement District



As a self-taxing district, the TCCID funds projects through a fee paid by the commercial property owners within its jurisdiction. The 2022 Master Plan includes several projects related to placemaking, trails, smart technology, and intersection and operational improvements. For larger-scale projects, TCCID often leverages funds from a variety of partners, including Cobb County, GDOT, and ARC. TCCID may add projects from the Freight Cluster Plan to a future Master Plan, and will seek to leverage outside funding sources to maximize the CID's investment.

Public-Private Partnerships

Public-Private Partnerships (P3s) refer to agreements between public and private entities involving long-term contracts that may include development (design and construction) and operation and maintenance of a facility with some private financing. The private funding element of P3s enable faster implementation and shared risk between partners. Types of projects which can be funded through P3s include highways, active transportation projects, and freight accommodations.

Revenue Forecasting

One of the requirements of a Freight Cluster Plan under ARC's regional program is to develop a financially feasible (also sometimes referred to as fiscally constrained) short-term action plan for a ten-year planning horizon. Typically, this is based on planning-level cost estimates developed for recommendations as well as projections of anticipated future funding that may be allocated to transportation projects during that timeframe. TCCID relies on several sources of funding for transportation and infrastructure within the district, including money collected from property owners as part of the CID's tax digest. Other funds are provided through Cobb County and the SPLOST program, as well as Federal funding programs administered by ARC namely through the Transportation Improvement Program (TIP). However, sources like SPLOST funding are subject to voter approval every six years, while TIP applications are competitive and not guaranteed to be successful. In an effort to be conservative with future funding estimates, TCCID prefers to include only TCCID funding as part of the future revenue forecasting process.

Methodology and Projections

In order to reasonably estimate projected future funding that could be allocated to recommendations from the Town Center Community Freight Cluster Plan, the project team worked with the CID to review recent historical expenditures and develop reasonable forecasts for likely equivalent funding over the next ten years. Over the past six years, TCCID has expended roughly \$5 million in CID-only money on transportation projects, which equates to \$833,333 per year. Not all of this money was for projects from one specific plan or of one type - the CID pays for a range of projects throughout the district. Therefore, to be conservative, an assumption - in consultation with TCCID staff was made about the percentage of future annual expenditures towards freight related projects. Approximately 40% was the recommended contribution.

At the time of this plan, the United States has experienced extremely high and somewhat volatile rates of inflation, coming out of the tail end of the global COVID-19 pandemic. To estimate potential future rates of inflation, the project team consulted resources from the Federal Reserve Bank of New York, Center for Microeconomic Data.³⁵ In November 2023, expectations for inflation rates fell to their lowest level in three years, indicating a slow, but steady decline over the next five years, from nearly four percent at the one-year-ahead horizon to 2.5% at the five-year-ahead horizon. These figures were used along with an assumed rate of inflation based on predictions from the New York Fed to project reasonable estimates of potential future funding over a ten-year period, starting in calendar year 2025, as shown in Table 9. In total, it is estimated that TCCID will have approximately \$3.9 million to spend on recommendations from the Freight Cluster Plan over the next ten years. This amount serves as the basis for the Financially Feasible Short-Term Action Plan. In addition to this, the CID may be able to secure funding through outside partners, such as Cobb County, GDOT, and ARC, or through grants and other sources.

Along with the results of the project evaluation and prioritization process and input from TCCID and key stakeholders, these amounts were used as the basis for allocating projects into the Financially Feasible Short-Term Action Plan (see Chapter 5). The Financially Feasible Short-Term Action Plan represents an estimation of projects that can reasonably be anticipated to be funded over the ten-year-period following the completion of the Plan (through 2034), based on TCCID-only anticipated transportation expenditures and planning-level cost estimates for recommended projects. It is important to note that these projections only reflect the funding anticipated to be available from the Town Center CID over the next ten years for the purposes of funding Freight Cluster Plan recommendations. These funds may be used to cover the cost of projects in whole or in part, as matching contributions for state of federal funds, for example. TCCID may also benefit from additional future funding through a renewal of the Cobb County SPLOST, which could include some of the recommended projects in this Freight Cluster Plan.

Table 9. Estimated Revenue Projections for Ten-Year Planning Horizon

Horizon Year	Calendar Year	Assumed Inflation Rate	Projected Revenue
Base Year	-	-	\$ 333,333.33
Year 1	2025	3.60%	\$ 345,333.33
Year 2	2026	3.33%	\$356,815.67
Year 3	2027	3.05%	\$ 367,698.54
Year 4	2028	2.78%	\$377,902.18
Year 5	2029	2.50%	\$ 387,349.73
Year 6	2030	2.40%	\$ 396,646.13
Year 7	2031	2.30%	\$ 405,768.99
Year 8	2032	2.20%	\$ 414,695.91
Year 9	2033	2.10%	\$ 423,404.52
Year 10	2034	2.00%	\$ 431,872.61
		TOTAL	\$3,907,487.61

It is also important to note that these projections represent estimates; actual funding levels are likely to vary over time, and are subject to changes in property values, the expansion or contraction of the CID's tax digest, future program or project budgets, grants received, and other factors.



Noonday Creek Trail Parallels Barrett Parkway Between Old 41 Highway and Cobb Parkway (US 41/SR 3)

Cost Estimation Methodology

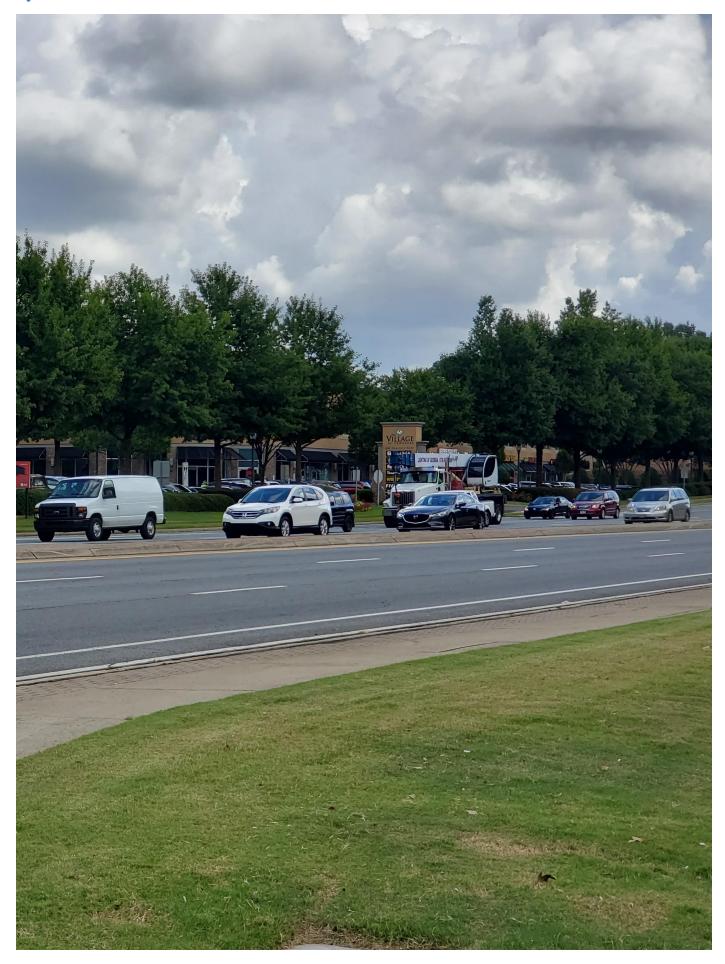
To assist TCCID in planning and budgeting for advancement and implementation of plan recommendations, the project team prepared planning-level cost estimates for recommended projects and studies. (Estimates were not prepared for recommended policies and strategies or coordination efforts, as those are likely to primarily involve staff time). Planninglevel cost estimates were developed using recent pay items where applicable, costs from recently approved cost estimates for other projects, and engineering judgment. They are based on an estimate of the cost of project construction – reflecting major project elements such as pavement, graded aggregate base (GAB), medians or islands, curb and gutter, traffic and pedestrian signals, lighting, walls, drainage structures, signing and marking, erosion control, and traffic control, where appropriate, among other factors as needed based on project descriptions. Estimates for anticipated project phases were calculated based on agreed-upon percentages of the estimated construction cost, as follows:

- Preliminary Engineering (PE): 20%
- Right-of-Way (ROW): 15%
- Utilities (UTL): 15%
- Construction Inspection (CEI): 10%

An additional 20% was added to the sum of all phases for contingency purposes. Cost estimates are prepared in current-year (2024) dollars and are subject to change over time, due to factors such as the cost of labor, materials, and inflation. It is anticipated that as each project is advanced into the next phases of implementation – through concept, preliminary engineering, final design – more details about the projects will be revealed, enabling more precise cost estimates.

Cost estimates developed for recommended projects are provided in tables throughout Chapter 5.







Chapter Overview

The Town Center Community Freight Cluster Plan recommends a suite of projects, studies, and strategies that aim to address the needs and challenges of the growing Town Center area. Identified through an assessment of existing conditions, current and projected future traffic volumes, a review of other plans and studies, and stakeholder consultation, these include increasing traffic volumes (including heavy-duty trucks, especially on certain roads), increases in industrial land uses, roadway safety issues, and an increasing mix of modes of travel.

As e-commerce continues to increase and more companies rely on warehouse and distribution facilities in this part of the Atlanta region, Town Center faces an increase in the mixing of freight and general-purpose traffic. Coupled with the growing population of Cobb County expected to pass one million residents by 2050 - the growth of Kennesaw State University, and housing affordability challenges, there is increasing pressure on area roadways to accommodate a mix of modes and travelers. Safety is also a growing concern. Cobb County's Safety Action Plan, completed in 2023, revealed a 57 percent increase in the number of fatal and serious injury crashes non-interstate roads between 2018 and 2022.

The Town Center
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recommendations to improve
safety and operations at
intersections, pedestrian
and transit rider access
to jobs, truck routing and
wayfinding, and interagency
coordination, among other
elements.

The Freight Cluster Plan recommends intersection improvements, pedestrian infrastructure improvements, projects to improve lighting and wayfinding signage, as well as additional studies, policies, and strategies to address these issues and more. The Plan builds upon the foundation laid by other plans and projects, including but not limited to Cobb County's Comprehensive Transportation Plan, the Town Center CID Master Plan, corridor studies, and ongoing or recently completed transportation projects. In partnership with the Town Center CID and key stakeholders. including but not limited to Cobb County, the Cities of Acworth, Kennesaw, and Marietta, and GDOT, the project team has developed a list of recommendations to improve freight mobility. The recommendations proactively address challenges related to the growth of the Town Center area, including the anticipated increase in warehouse and distribution centers along with other industrial and freight-related uses over the coming years. Through an iterative process of analysis, evaluation, discussion, and refinement, the project team developed a set of proposed recommendations in areas such as traffic operations and mobility, workforce access and pedestrian safety, wayfinding, safety, interagency coordination, studies, and other strategies.

The Plan serves as a framework for TCCID and its partners. It can help guide implementation of projects and strategies to improve freight mobility, support growth and development, and create a safer, more welcoming environment for all travelers.



Bicyclist Waiting to Cross Barrett Lakes Boulevard at Duncan Road

Design Guidance

Proven Safety Countermeasures

The Federal Highway Administration's (FHWA) Proven Safety Countermeasures initiative (PSCi) is a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries on our nation's highways.¹

The Town Center Community, in consultation with GDOT, CCDOT, and other partner transportation agencies, are strongly encouraged to consider the widespread adoption and deployment of the PSCi elements as part of an overall approach to roadway user safety. The countermeasures are designed for all road users on all road types and addresses at least one safety focus area, with many addressing multiple focus areas. They can be used reactively to address site-specific safety issues as well as proactively to address highrisk locations and systemic safety issues

Some measures which are relevant to the Town Center Community Freight Cluster Plan recommendations include the following:

- Appropriate Speed Limits for All Road Users: Establishing a speed limit for a roadway that is appropriate for the volume, adjacent land uses, and design of the street can mitigate crashes.²
- Crosswalk Visibility Enhancements:
 Visibility enhancements at crosswalks, such
 as improved lighting, enhanced signage
 and pavement markings, and patterns
 improve visibility of crosswalks as well as
 pedestrians who may be utilizing them.³
- Leading Pedestrian Interval: At a designated crosswalk for pedestrians, this is a period of time ranging from three to seven seconds where the pedestrian is permitted to cross before vehicular traffic signals turn green.⁴

- Medians and Pedestrian Refuge Islands in Urban/Suburban Areas: Providing space for pedestrians within the median of a divided roadway can help protect pedestrians while crossing the roadway and reduce the likelihood of a crash.⁵
- Backplates with Retroreflective Borders: Including a backplate with a retroreflective border on a traffic signal head improves the visibility of the signal and safety of the intersection.⁶
- Corridor Access Management: This consists
 of the design, spacing, application, and
 regulation of driveways and other access
 points into a property on a given roadway.⁷
- Dedicated Left- and Right-Turn Lanes at Intersections: Providing a separation between straight vehicles and turning vehicles can reduce crashes by as much as 48% and fatal crashes by 36%. Turn lanes especially help reduce the likelihood of head-on and rear-end crashes.8
- Yellow Change Intervals: The length of time that the yellow signal appears before the signal turns red. This is designed to reduce the number of vehicles running red lights as well as the risk of a crash stemming from this behavior.9
- **Lighting:** Adding lighting that is at or above minimum local and/or state standards provides a safety benefit to all users of a given roadway, regardless of mode. Research shows that intersections and pedestrian crossings benefit from lighting and improved visibility.¹⁰



Existing Truck Route Signage Along Church Street Extension Approaching Church Street in Marietta

Freight Vehicle Access

GDOT Design Policy Manual

The Design Policy Manual is the primary resource for design guidelines and standards adopted by GDOT for all modes of transportation, including freight. It is updated regularly and lives on GDOT's website for use by practitioners and decision-makers. It presents both recommended and required design criteria based on criteria from FHWA and the American Association of State Highway Transportation Officials (AASHTO).¹¹

Cobb County Development Standards

Cobb County's Development Standards were last revised in June 2018 and serve as a document that encourages quality growth and development across the County. The document includes provisions for CCDOT to review and approve transportation-related aspects of community development initiatives including, but not limited to, intersection design, lane widths, pavement specifications, slope and grade, signage, access to sidewalks and transit, and lighting.¹²



Tractor Trailer Traversing Parking Lot Near Warehouse Distribution Center

Truck Parking Facilities

FHWA Truck Parking Development Handbook

In September 2022, FHWA released the Truck Parking Development Handbook which presents the fundamentals of truck parking regulations, needs, and provisions, including hours-of-service (HOS) regulations. The handbook explores approaches used to determine the location of both permanent and temporary facilities which provide truck parking as well as services and amenities. These approaches include improving land use and zoning policies, incorporating truck parking into traffic impact assessments, and revising codes of ordinances and other related policies which relate to freight vehicle access and travel.¹³



Source: Federal Highway Administration (FHWA)

Other Guidance

Manual on Uniform Traffic Control Devices, 11th Edition

On December 18, 2023, FHWA released the 11th edition of the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD sets minimum national standards and provides guidance to ensure the uniformity of traffic control devices across states and different jurisdictions.

The newest edition of the MUTCD revises standards, guidance, and supporting information in multiple sections of the MUTCD - primarily to reflect technological advances and the latest trends and research in transportation.¹⁴

Any Freight Cluster Plan infrastructure recommendations that are advanced by Town Center and local partners should be designed in compliance with the latest MUTCD.

Manual on Uniform Traffic Control Devices for Streets and Highways 11th Edition December 2023 U.S. Department of Transportation Federal Highway Administration

Source: Federal Highway Administration (FHWA)

Americans with Disabilities Act Accessibility Standards

Accessibility standards issued under the Americans with Disabilities Act (ADA) apply to places of public accommodation, commercial facilities, and state and local government facilities in new construction, alterations and additions. Chapter 4 includes provisions for accessible routes touching on walking surfaces, ramps, curb ramps, and clearances.¹⁵

The Access Board has published new guidelines under the Public Rights-of-Way Accessibility Guidelines (PROWAG) that address access to sidewalks and streets, curb ramps, crosswalks, pedestrian signals, and other components of the public right-of-way which are consistent with infrastructure improvements recommended through this Freight Cluster Plan. The final rule was published on August 8, 2023.¹⁶

2024 Atlanta Regional Freight Mobility Plan

An upcoming resource for the design of facilities for freight is the ongoing 2024 update to the Atlanta Regional Freight Mobility Plan which is being led by ARC. This effort continues ARC's strategic focus on freight along with the Freight Cluster Plan Program and will explore how freight considerations can be integrated into policy and infrastructure to support reliable, safe, and sustainable opportunities for freight movement across the Atlanta region. The plan is expected to be complete in Fall 2024.¹⁷



Bicyclist Crossing Barrett Lakes Boulevard at the Intersection with Duncan Road

Recommendation Categories

As mentioned, the Freight Cluster Plan includes two main categories of recommendations: (1) infrastructure projects (including studies) and (2) policies and strategies. Projects focus on improvements to transportation infrastructure through intersection improvements, lighting, sidewalk facilities, signage, and studies. Policies and strategies focus more on coordination efforts and other actions staff can take to improve coordination among jurisdictions and advance initiatives that support improved freight mobility in the area. Within each of these categories, recommendations are further broken down into types, reflecting their respective topics or area of focus. In total, the Freight Cluster Plan recommends 36 projects and nine policies and strategies, as discussed in later sections of this chapter.

The Town Center
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to jobs, truck routing and
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coordination, among other
elements.

Infrastructure Projects

Intersection Improvements

Intersection improvements are based primarily on the Traffic Study conducted as part of the Freight Cluster Plan and designed to improve operations and safety at key intersections throughout the study area, as well as to provide needed signage, pedestrian crossing upgrades, pavement markings, lighting, and other elements as needed. They address a range of issues, including, but not limited to: rear-end crashes, angle crashes, and crashes due to weaving movements; missing pedestrian facilities or crossings in poor condition, poor projected future level of service (LOS), damaged infrastructure, and challenging intersection geometry.

Lighting Projects

Lighting recommendations were identified through the Traffic Study as well as stakeholder input and are intended to improve safety and reduce the likelihood of crashes by adding lighting to dark portions of select roads throughout the study area.

Sidewalk Facilities

These recommendations would design and construct new sidewalk to fill gaps or provide new segments of sidewalk in important areas. The Plan acknowledges that there are greater sidewalk needs beyond those identified in the Freight Cluster Plan; however, TCCID recently completed a sidewalk and walkability assessment, and Cobb County has buckets of funding in its SPLOST program to improve sidewalk throughout the County. Therefore, sidewalk project recommendations focus on areas where public transportation is provided in proximity to industrial and freight-related jobs, such as along corridors that are home to warehouse and distribution facilities.

Signage

Signage recommendations are intended to help clarify and reinforce prohibitions on truck traffic as well as to help truck drivers navigate the study area more easily, avoiding areas where they are not intended to be and to improve directional signage and wayfinding for better access to designated truck routes and interstate highways.

Studies

The Plan includes several recommended studies to take a closer look at identified needs along select corridors and in certain areas. These range from safety studies along corridors with higher-than-average crash rates to speed studies along corridors with a reported history of high speeds, and as well as to further analyze existing conditions, clarify project needs and purposes, and identify specific improvements at locations not studied as part of the Freight Cluster Plan Traffic Study.



CobbLinc Bus Along Bus Route 40 on Church Street Extension in Marietta

Policies and Strategies

Coordination

Recommendations identified as "coordination" strategies are intended to improve interagency coordination – between TCCID and other agencies – as well as to encourage participation by local agencies in ongoing regional and statewide freight planning efforts.

Strategies

This is a catch-all category for several types of initiatives that are intended to support and complement infrastructure improvements through coordination with local government agencies to pursue strategies that will assist with truck routing, staging and parking, as well as design of roads and intersections. Rather than recommend specific projects and improvements, these are strategies that can be first studied and discussed as well as actions that can be taken by staff members to advance the conversation.

Truck Prohibition

Recommendations for new truck prohibitions are intended to help reinforce that based on land use and development patterns and roadway configuration, certain roads are not really appropriate for large trucks, such as tractor trailers. Official prohibitions could be adopted into the local jurisdiction code of ordinances or signs could be used to direct trucks to more appropriate routes.

Financially Feasible Short-Term Action Plan

To guide project implementation, as required by ARC's Freight Cluster Plan Program, the project team prepared a Financially Feasible Short-Term Action Plan, consisting of projects and recommendations that are anticipated to be undertaken within the first ten years of the completion of this Plan. As discussed in Chapter 3 of this Recommendations Report, determination of what recommendations are included in the Financially Feasible Short-Term Action Plan is based on several factors, including planning-level cost estimates and the projected future available revenue and funding that is anticipated to be allocated to freight plan projects.

Additionally, the project team collaborated with TCCID to identify recommendations that are considered to be "quick wins:" those projects that are relatively low-cost and easy to implement that can be undertaken in the first several years following plan completion. Even though some of the "quick win" projects may not have scored as highly in the prioritization process, due to their lack of complexity or their focus on one transportation element (e.g., signage or lighting), there is still a significant benefit to implementing these projects in the short-term timeframe. Other projects in the Short-Term Action Plan include a range of types, from intersection improvements to new sidewalk facilities.

Community Improvement Districts (CIDs) can typically only spend funds on capital projects within their boundaries; however, they are able to partner with other agencies to fund projects outside of the district. That is part of the reason projects in the Short-Term Action Plan primarily focus on projects within the TCCID boundary.

Projects in the Financially Feasible Short-Term Action Plan are based on the anticipated expenditures by TCCID to cover project costs of projects that received relatively high scores in the prioritization exercise. Inclusion of projects in the Short-Term Action Plan represents an estimate of when a project can reasonably be funded or initiated, not necessarily when it is expected to be completed. At a minimum, this Plan assumes that funding for a project in the Short-Term Action Plan is reasonably likely to be allocated by TCCID within the first ten years of the planning horizon.

It is possible and even likely that some projects will carry over into the long-term timeframe, beyond the initial ten-year planning horizon. Project completion will depend highly on the availability of anticipated revenue from TCCID, funding from partner agencies, coordination, design timelines, permitting, and other factors. Furthermore, while the Short-Term Action Plan assumes some funding contributions by TCCID partners, it does not commit partners to any funding or specific amount - shares of project costs will be worked out by TCCID and partners on a project-by-project basis.

Ultimately, recommendations will be pursued and implemented by TCCID and its partners according to their priorities, inter-agency coordination efforts, available funding, staff resources, and the completion of ongoing projects and studies. Projects in the Short-Term Action Plan are listed in relative priority order based on the results of the prioritization exercise, anticipated funding availability, estimated project cost, and input from TCCID. It serves as a framework for feasible projects that stand a good chance of being implemented. In total, the Short-Term Action Plan consists of 19 projects - including three quick win projects - that are reasonably likely to be funded in a ten-year timeframe, as shown in Table 10 and in Figure 19.

Short-Term Action Plan Projects

Quick-Wins

Additional Study

Baker Road at Hickory Grove Road Signal Phasing (AS-1)

This project is in response to stakeholder input regarding the lack of a dedicated left-turn phase which can cause trucks to queue on Hickory Grove Road, especially when there is a crash or other type of incident along I-75. TCCID and the City of Acworth should coordinate with CCDOT to determine whether a left-turn phase is needed for left-turns from eastbound Hickory Grove Road to northbound Baker Road.

Signage

Marble Mill Road Railroad Crossing Signage (S-1)

Both the Inventory & Assessment Report and stakeholder input note that there is a concentration of incidents at and near the atgrade crossing along Marble Mill Road between Loudermilk Drive and Marr Avenue. Several of these incidents involve trucks getting stuck on the railroad crossing because landing gear was down. In response to these occurrences, the City of Marietta should consider adding "Low clearance" (W10-5) signage on Loudermilk Drive at the Marble Mill Road at-grade railroad crossing.

Enhanced Truck Signage for City of Kennesaw (S-2)

This project includes a series of truck signage additions intended to provide advanced or enhanced notice of existing truck prohibitions and directs truck drivers away from Downtown Kennesaw to access I-75. The City of Kennesaw should consider implementing the following recommendations for new signs:

- Add roadside signage on southbound Cobb Parkway (US 41/SR 3) before left-turn into Watts Drive noting that no tractor trailers are allowed to turn left on Watts Drive.
- On southbound North Main Street, just south of Lewis Street, add roadside signage prohibiting trucks from making a left-turn on Cherokee Street (would be located in advance of existing overhead signage at the Cherokee Street intersection).
- On northbound South Main Street, just north of Watts Drive, add roadside signage prohibiting trucks from making a right-turn on Cherokee Street and directing trucks to stay straight to access I-75.
- Consider supplementing with signage on North Main Street directing trucks to I-75 by turning right on Moon Station Road, and signage on Moon Station Road directing trucks to turn right onto Jiles Road to access I-75.
- On westbound Big Shanty Road, add a new roadside sign prohibiting trucks from turning left onto Cherokee Street.
- On McCollum Parkway north and south of Big Shanty Road, add signage for "No Thru Trucks" on Big Shanty Road west of McCollum Parkway, to give truck drivers advance notice that trucks may not cutthrough Downtown Kennesaw to access I-75.



Intersection Improvements

Barrett Parkway (SR 5 Conn) at I-75 Northbound Ramp (I-1)

This project is based on findings from the Traffic Study and is intended to address operational deficiencies and weaving movements within and near the intersection. These improvements can also reduce rear-end, sideswipe, and angle crashes at the intersection.

The project would rebuild the curb in the southeast corner of the intersection, enhance signage or add pavement markings on the ramps to better delineate lane assignments, convert the eastbound left protected/permissive signal phase to protected-only during peak hours, and add intersection lighting.

Barrett Parkway (SR 5 Conn) at I-75 Southbound Ramp (I-2)

Similar to project I-1, this project is based on findings from the Traffic Study and is intended to address operational deficiencies, weaving movements, damaged infrastructure, and missing pedestrian facilities within and near the intersection. These improvements can also reduce rear-end, sideswipe, and angle crashes at the intersection.

The project would rebuild the curb in the northwest corner of the intersection, install "keep moving" signage for eastbound right-turning traffic onto the I-75 southbound on-ramp, install yield bar and signage, add pedestrian signage for the southbound right-turn lane in the off-ramp, restripe the on-ramp to better delineate lane assignments, restripe lane lines and crosswalks, and add intersection lighting.

Barrett Parkway (SR 5 Conn) at Mall Boulevard (I-3)

This project stems from the Traffic Study and can address weaving movements, especially conflicts between northbound right-turns at Mall Boulevard and eastbound through movements on Barrett Parkway (SR 5 Connector) approaching the junction with I-575 between right-turning traffic from Mall Boulevard and through traffic attempting to turn right to travel southbound on I-575.

Specific improvements recommended as part of this project include removing the raised island for channelized right-turns on the northbound leg of the intersection, extending the curb as needed, and bringing vehicles to the stop bar, and using the traffic signal to control northbound right turns. This would prohibit right-turns on red and require the implementation of signage indicating that right-turning traffic should yield to U-turns where appropriate. Lastly, pavement and crosswalk markings should be restriped where necessary.

With these improvements, the intersection level-of-service improves to LOS C in the AM peak period and LOS D in the PM peak period by 2033.

Canton Road Connector (SR 5) at Church Street Extension (I-4)

As part of the Traffic Study, the project team observed conflicting truck route signage at the intersection; the team reached out to the City of Marietta to point out the issue, which was promptly addressed by city staff. The remaining recommendations seek to address the general need for intersection upgrades and would include installing detectable warning pads in the southwest corner of the intersection, installing retroreflective backplates on all signal heads to improve visibility of the signals, and repaving and restriping the intersection.

Chastain Road at Big Shanty Road (I-5)

This project is based on findings from the Traffic Study and is intended to address intersection operations and improve pedestrian facilities within and near the intersection. These improvements would also benefit traffic congestion in the area that is associated with Kennesaw State University.

Improvements include installing retroreflective backplates on all signal heads, replacing eastbound and westbound signal heads with flashing yellow arrows (FYAs), upgrading ADA ramps in the northwest and northeast corners, and adding guide signs on westbound Chastain Road to direct trucks to proceed through the intersection to access the Yamaha truck entrance at the next signalized intersection with McCollum Parkway/Duncan Road.

Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Conn) (I-6)

This project is based on findings from the Traffic Study and is intended to address operational deficiencies and weaving movements along with missing pedestrian facilities within and near the intersection. These improvements can also reduce rear-end and angle crashes at and adjacent to the intersection.

Short-term improvements include improving signage and considering adding enhanced striping to delineate the westbound right-turn lane receiving lane on Cobb Parkway (US 41/SR 3) and the right-turn deceleration lane into the commercial driveway north of the intersection. Other improvements include restriping lane lines and crosswalks, upgrading ADA ramps in the southwest corner to include detectable warning pads, and adding intersection lighting. In the long-term, grade-separated ramps would help to improve mobility and facilitate access between these two principal arterial corridors.

Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp (Short-Term) (I-7)

This project is based on findings from the Traffic Study and is intended to address intersection operations and improve pedestrian facilities.

Specific improvements include installing pedestrian signal heads for the east leg crosswalk, restriping the intersection, and monitoring the intersection to determine if recently implemented signal improvements are improving safety. With these intersection improvements, the intersection level-of-service improves to LOS D in the AM peak period and LOS C in the PM peak period by 2033.

I-75 Southbound at Chastain Road (I-8)

Based on a review of traffic count data collected by GDOT in January 2023, there is a noticeable increase in peak-hour traffic as compared to counts collected for the Chastain Road LCI Corridor Study in February 2020. While this intersection was not part of the Traffic Study for the Freight Cluster Plan, it would be beneficial to collect traffic data at the intersections with the I-75 Southbound ramp, Barrett Lakes Boulevard, and Town Point Drive and identify more long-term solutions. Furthermore, based on a review of 2018-2022 crash data, there is evidence of sideswipe and angle crashes that could potentially be reduced by reconfiguration of turning lanes to reduce weaving movements on westbound Chastain Road by drivers trying to access Barrett Lakes Boulevard.

This project consists of conducting a traffic study to understand existing and projected future traffic volumes and turning movements. In the short-term, TCCID should work with CCDOT to examine traffic signal timing and phasing at the I-75 Southbound ramp as well as immediate adjacent intersections, and explore the possibility of a lead-lag cycle to provide more green time for southbound vehicles on I-75 to get into the far left-turn lane to access Barrett Lakes Boulevard. As an interim option, improvements include reconfiguring the I-75 Southbound ramp to convert the inside right-most left-turn lane to an "option lane" (for left- or right-turns onto Chastain Road), removing or shortening the raised channelized island, adjusting traffic signal phasing as appropriate, and signing the new "option lane" for access to southbound Barrett Lakes Boulevard. Collectively, these improvements aim to reduce weaving movements on Chastain Road between Barrett Lakes Boulevard and the I-75 Southbound ramp.

McCollum Parkway at Big Shanty Drive-Vulcan Materials Driveway (I-9)

This project is based on findings from the Traffic Study and is intended to improve turning movements for trucks, repair damaged infrastructure, and improve pedestrian facilities. Specific improvements include realigning and expanding the intersection for more storage on the southwest leg of McCollum Parkway, installing a raised island adjacent to the westbound channelized right-turn lane, reconstructing the northbound rightturn channelized island to include ADA ramps and detectable warning pads, rebuilding the southeast curb, replacing the eastbound and westbound signal heads with flashing yellow arrows, installing retroreflective backplates on signal heads, installing ADA ramps and detectable warning pads on the southwest, northwest, and northeast corners, repaving and restriping the intersection, and adding intersection lighting.

McCollum Parkway-Chastain Road at Duncan Road (I-10)

This project stems from findings from the Traffic Study and is intended to improve turning movements for trucks, improve intersection operations, and improve pedestrian facilities. In the past, Cobb County has received requests for additional lighting at this intersection. A portion of the intersection is within the City of Kennesaw while another portion is unincorporated and within TCCID boundaries.

Project components include reconstructing the northeast curb as a mountable curb and increasing the turning radius, reconstructing the southbound channelized right islands including ADA ramps and warning pads, applying split phasing to Big Shanty Drive and Vulcan Materials Driveway to allow for adequate time for both approaches, replacing eastbound and westbound signal heads with flashing yellow arrows, installing retroreflective backplates on signal heads, installing sidewalk along the north side of McCollum Parkway from the intersection to the existing segment 1,100 feet from the intersection, repaving and restriping the intersection, and adding intersection lighting.

Old 41 Highway at Airport Road (I-11)

This project is based on findings from the Traffic Study and is intended to improve turning movements for trucks and add new pedestrian facilities. There is a multi-use trail that is identified within the City of Kennesaw's Master Plan at this location.

This project includes offsetting the southbound left-turn lane to allow for wider turns, realigning the east leg to the south to increase turning radii for westbound movements, moving the southbound stop bar back to improve sight distance, replacing the southbound signal head with flashing yellow arrow, installing pedestrian accommodations, including pedestrian signal heads, crosswalks, and ADA ramps, and adding sidewalk/multi-use trail along Old 41 Highway. As the McCollum Parkway realignment project moves forward, these recommendations should be considered.

Signage

Wayfinding Signage for Trucks (W-3)

Wayfinding signage is a strategy that can help direct trucks away from non-truck friendly corridors, such as residential streets, and towards principal arterials and interstate highways to mitigate potential conflict with other forms of traffic as well as non-vehicular roadway users. As part of this project, TCCID should work with Cobb County to install signage to direct trucks to appropriate corridors to access interstates and major arterials.

Specific wayfinding signage suggestions include:

- Northbound Cherokee Street before right turn to McCollum Parkway ("To I-75", pointing straight/north); on Westbound McCollum Parkway before right turn to Cherokee Street ("To I-75", pointing right/north)
- Northbound George Busbee Parkway south of Busbee Drive ("To I-75", pointing straight/ north)
- Northbound George Busbee Parkway south of Chastain Road ("To I-75", pointing left/ west, "To I-575", pointing right/east)
- Eastbound Big Shanty Road, before Barrett Lakes Boulevard, directing trucks to turn left to access I-75, via Chastain Road ("To I-75", pointing left/west)
- Northbound Duncan Road, before McCollum Parkway directing trucks to turn right to stay on McCollum Parkway to access I-75, via Chastain Road ("To I-75", pointing left/west)
- Westbound Piedmont Road/Barrett Parkway before Chastain Meadows Parkway, directing trucks to stay straight for access to interstates, ("To I-75", "To I-575", pointing straight/west)
- Three new signs along Chastain Road:
 - Eastbound before I-75, move the sign for access to I-75 Southbound farther back (west) closer to Barrett Lakes Boulevard
 - 2. Eastbound traffic approaching I-75, add pavement markings in two left lanes for access to I-75 Northbound
 - 3. Eastbound traffic approaching I-575, add pavement markings in left lane for access to I-575 Northbound

Lighting

Barrett Parkway Lighting (I-1)

This project is intended to improve nighttime safety along a portion of the Barrett Parkway corridor where there is a concentration of crashes occurring in dark, unlit conditions. CCDOT should consider adding pedestrian scale lighting adjacent to Noonday Creek Trail and vehicular lighting on the other portion of the Barrett Parkway corridor between Old 41 Highway and Cobb Parkway (US 41/SR 3).

Additional Study

Barrett Lakes Boulevard and Cobb Parkway (US 41/SR 3) Speed Studies (AS-2)

The project team received feedback about vehicles that frequently speed and some that have exited the roadway. This is of particular concern along Barrett Lakes Boulevard due to Noonday Creek Trail being adjacent to the roadway for a portion of the route. TCCID should work with CCDOT to conduct a speed study along Barrett Lakes Boulevard between Chastain Road and Barrett Parkway (SR 5 Conn). This is also recommended on Cobb Parkway (US 41/SR 3) between McCollum Parkway and Barrett Parkway (SR 5 Connector) to determine if excessive speeding is occurring along the corridors; and if so, identify countermeasures to mitigate speeding. Additionally, consider recommendations from the Cobb County Safety Action Plan.¹⁸

Corridor Safety Studies (AS-3)

Because there are multiple corridors where crash rates exceed statewide averages for facilities of the same functional classification, there is a need to study these corridors further to identify safety deficiencies and potential countermeasures. TCCID should consider conducting corridor safety studies along the following routes to identify multimodal safety improvements:

- Barrett Parkway (SR 5 Connector): Old 41 Highway to Bells Ferry Road
- Barrett Lakes Boulevard: Cobb Place Boulevard to Chastain Road
- Chastain Road: Big Shanty Road to I-575 Northbound Ramp

Additionally, TCCID in consultation with CCDOT and GDOT, should consider implementation of recommendations identified in the Cobb County Safety Action Plan for Barrett Parkway (Projects 3-1 and 3-26), Chastain Road (Project 3-13), and Barrett Lakes Boulevard (Project 3-20). Project 3-1 spans between Crater Lake Drive to Mall Boulevard and was identified as a priority focus corridor as part of this planning process.¹⁹

I-75 to I-575 Connector Feasibility Study (AS-4)

This additional study was identified in the Chastain Road LCI Corridor Study to help alleviate freight congestion on local streets within the Town Center Community such as Chastain Road and Barrett Parkway (SR 5 Connector). Currently, there are signs on I-75 Southbound and I-575 Southbound that instruct drivers to utilize either of those roads for access to I-575 Northbound and I-75 Northbound, respectively.

TCCID should work with GDOT to conduct a study to determine the need for and feasibility of a system-to-system ramp between I-75 and I-575 to alleviate pressure on Chastain Road and Barrett Parkway (SR 5 Connector). This will provide southbound motorists on either I-75 or I-575 another option to access the complimentary interstate route in the northbound direction.



Some Retail Shopping Centers in the Study Area Explicitly Prohibit Overnight Truck Parking

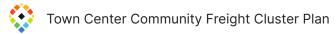


Table 10. Short-Term Action Plan Quick Win Projects

ID	Project Name	Project Description	Implementation Partners	Source	Cost
		Additional Study			
AS-	Baker Road at Hickory Grove Road Signal Phasing	Coordinate with Cobb County DOT to determine whether a left-turn phase is needed for left-turns from eastbound Hickory Grove Rd to northbound Baker Rd.	City of Acworth, Cobb County	Stakeholder Input	Staff time
		Signage			
S-1	Marble Mill RR Crossing Signage	City of Marietta should consider adding "Low clearance" (W10-5) signage on Loudermilk Dr at Marble Mill Rd RR crossing.	City of Marietta	Freight Cluster Plan Inventory & Assessment	\$2,000
S-2	Enhanced Truck Signage for City of Kennesaw	 City of Kennesaw should consider implementing the following recommendations for new signs: Add roadside signage on southbound Cobb Parkway before left-turn into Watts Dr noting that no tractor trailers are allowed to turn left on Watts Dr. On southbound N. Main St, just south of Lewis St, add roadside signage prohibiting trucks from making a left-turn on Cherokee St (would be located in advance of existing overhead signage at the Cherokee St intersection). On northbound S. Main St, just north of Watts Dr, add roadside signage prohibiting trucks from making a right-turn on Cherokee St and directing trucks to stay straight to access I-75. Consider supplementing with signage on N Main St directing trucks to I-75 by turning right on Moon Station Rd, and signage on Moon Station Rd directing trucks to turn right onto Jiles Rd to access I-75. On westbound Big Shanty Rd, add a new roadside sign prohibiting trucks from turning left onto Cherokee St. On McCollum Pkwy north and south of Big Shanty Rd, add signage for "No Thru Trucks" on Big Shanty Rd west of McCollum Pkwy, to give truck drivers advance notice that trucks may not cut-through Downtown Kennesaw to access I-75. 	City of Kennesaw	Freight Cluster Plan Inventory & Assessment	\$9,000

Table 11. Short-Term Action Plan Projects

ID	Project Name	Project Description	From	То	Length (ft)	Implementation Partners	Source	Cost
		Intersection Improvements			J. J			
I-1	Barrett Parkway (SR 5 Conn) at I-75 Northbound Ramp	Rebuild curb on SE corner; enhance signage or add pavement markings on ramps to better delineate lane assignments; add larger overhead signage for eastbound approach for lane assignments; convert eastbound left protected/permissive phase to protected-only during peak hours; add intersection lighting.	N/A	N/A	N/A	Cobb County, GDOT	Freight Cluster Plan Traffic Study	\$871,000
I-2	Barrett Parkway (SR 5 Conn) at I-75 Southbound Ramp	Rebuild curb on NW corner; install "keep moving" sign for eastbound right-turn to I-75 on-ramp; install yield bar, yield sign, and pedestrian signage for southbound right-turn lane; restripe I-75 on-ramp to better delineate receiving lane; restripe lane lines and crosswalks; add intersection lighting.	N/A	N/A	N/A	Cobb County, GDOT	Freight Cluster Plan Traffic Study	\$557,000
I-3	Barrett Parkway (SR 5 Conn) at Mall Boulevard	Remove the raised island for channelized right-turns on the NB leg, extend curb if needed, and bring vehicles to the stop bar, using the traffic signal to control NB right turns, prohibiting right-turns on red; install "Right Turns Yield to U-Turns" signs where appropriate; restripe lane lines and crosswalk as needed.	N/A	N/A	N/A	Cobb County, GDOT	Freight Cluster Plan Traffic Study	\$1,598,000
I-4	Canton Road Connector (SR 5 Spur) at Church Street Extension	Upgrade ADA ramps, including detectable warning pads, on SW corner; install retroreflective backplates on signal heads; repave and restripe intersection.	N/A	N/A	N/A	City of Marietta	Freight Cluster Plan Traffic Study	\$553,000
I-5	Chastain Road at Big Shanty Road	Install retroreflective backplates on signal heads; replace eastbound and westbound signal heads with flashing yellow arrows; upgrade ADA ramps on NW and NE corners; add guide signs on westbound Chastain Road to direct trucks to proceed through intersection to access Yamaha truck entrance at next intersection with McCollum Pkwy.	N/A	N/A	N/A	Cobb County	Freight Cluster Plan Traffic Study	\$172,000
I-6	Cobb Parkway (US 41/ SR 3) at Barrett Parkway (SR 5 Conn)	Improve signage and consider adding enhanced striping to delineate westbound right-turn lane receiving lane on Cobb Parkway and the right-turn deceleration lane into the commercial driveway north of the intersection; restripe lane lines and crosswalks; upgrade ADA ramps on SW corner to include detectable warning pads; add intersection lighting. In the long-term, consider constructing grade-separated ramps.	N/A	N/A	N/A	Cobb County, GDOT	Freight Cluster Plan Traffic Study	\$428,000
I-7	Cobb Parkway (US 41/ SR 3) at Canton Road Connector (SR 5) On- Ramp (Short-Term)	Install pedestrian signal heads for crosswalk on east leg; restripe intersection; monitor intersection to determine if recent signal improvements are improving safety.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$269,000

Table 11. Short-Term Action Plan Projects (continued)

ID	Project Name	Project Description	From	То	Length (ft)	Implementation Partners	Source	Cost
		Intersection Improvements						
I-8	I-75 Southbound at Chastain Road	Conduct a traffic study at this intersection to understand existing and projected future traffic volumes and turning movements. In the short-term, work with Cobb County DOT to examine traffic signal timing and phasing at the I-75 SB ramp as well as immediately adjacent intersections. Explore the possibility of a lead-lag cycle to provide more green time for SB vehicles on I-75 to get into the far left-turn lane to access Barrett Lakes Blvd. As an interim option, reconfigure SB I-75 to convert the inside right-most left-turn lane to an "option lane" (for left- or right-turns onto Chastain Road); remove or shorten the raised channelized island; adjust traffic signal phasing as appropriate; sign the new "option lane" for access to Barrett Lakes Blvd south.	N/A	N/A	N/A	Cobb County, GDOT	TCCID FCP Analysis, Stakeholder Input, Chastain Road LCI Corridor Study	\$1,126,000
I-9	McCollum Parkway/ Chastain Road at Duncan Road	Realign and expand intersection to provide more storage on southwest leg of McCollum Pkwy; install a raised island adjacent to the westbound channelized right-turn lane; reconstruct northbound right-turn channelized island including ADA ramps and detectable warning pads; rebuild curb on SE corner; replace eastbound and westbound signal heads with flashing yellow arrows; install retroreflective backplates on signal heads; install ADA ramps and detectable warning pads on SW, NW and NE corners; repave and restripe intersection; add intersection lighting.	N/A	N/A	N/A	Cobb County	Freight Cluster Plan Traffic Study	\$2,688,000
I-10	McCollum Parkway at Big Shanty Drive/Vulcan Materials Driveway	Reconstruct the NE curb as a mountable curb and increase turning radius; reconstruct southbound channelized right islands including ADA ramps and warning pads; apply split phasing to Big Shanty Drive and Vulcan Materials Driveway to allow for adequate time for both approaches; replace eastbound and westbound signal heads with flashing yellow arrows; install retroreflective backplates on signal heads; install sidewalk along the north side of McCollum Pkwy from intersection to the existing segment 1100 ft from the intersection; repave and restripe intersection; add intersection lighting.	N/A	N/A	N/A	Cobb County, City of Kennesaw	Freight Cluster Plan Traffic Study	\$1,645,000
I-11	Old 41 Highway at Airport Road	Offset southbound left-turn lane to allow for wider turns; realign east leg to the south to increase turning radii for westbound movements; move southbound stop bar back to improve sight distance; replace southbound signal head with flashing yellow arrow; install pedestrian accommodations, including pedestrian signal heads, crosswalks, and ADA ramps; add sidewalk/multi-use trail along Old 41 Hwy. As the McCollum Pkwy realignment project moves forward, these recommendations should be considered.	N/A	N/A	N/A	Cobb County, City of Kennesaw	Freight Cluster Plan Traffic Study	\$2,193,000
		Lighting Improvements						
L-1	Barrett Parkway Lighting	Add pedestrian scale lighting adjacent to Noonday Creek Trail and vehicular lighting on the other portion of the corridor.	Old 41 Hwy	Cobb Pkwy (US 41//SR 3)	3740	City of Kennesaw	Freight Cluster Plan Traffic Study - Crash Analysis	\$726,000

Table 11. Short-Term Action Plan Projects (continued)

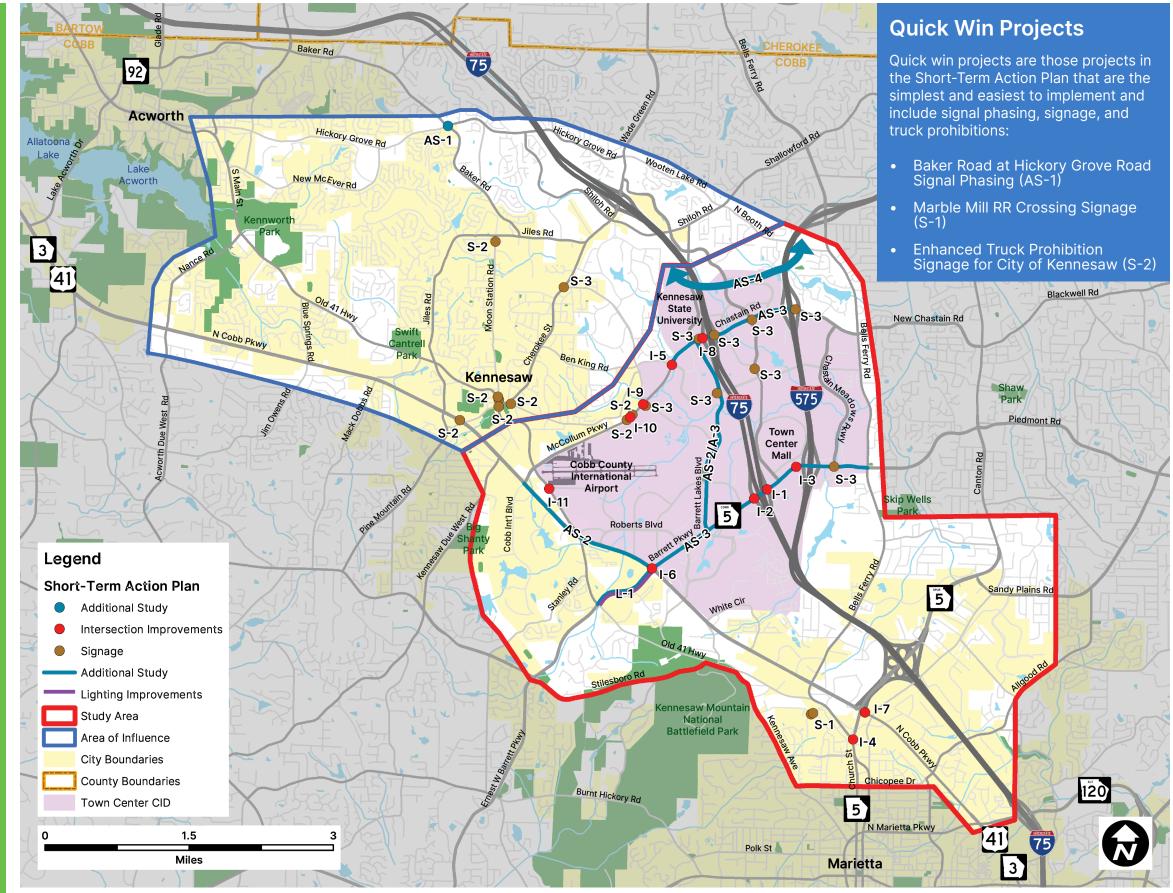
ID	Project Name	Project Description	From	То	Length (ft)	Implementation Partners	Source	Cost
		Signage						
S-3	Wayfinding Signage for Trucks	 Work with Cobb County to install signage to direct trucks to appropriate corridors to access interstates and major arterials. Specific suggestions include: NB Cherokee St before right turn to McCollum Pkwy ("To I-75", pointing straight/north); on WB McCollum Pkwy before right turn to Cherokee St ("To I-75", pointing right/north) NB George Busbee Pkwy south of Busbee Dr ("To I-75", pointing straight/north) NB George Busbee Pkwy south of Chastain Rd ("To I-75", pointing left/west, "To I-575", pointing right/east) EB Big Shanty Rd, before Barrett Lakes Blvd, directing trucks to turn left to access I-75, via Chastain Rd ("To I-75", pointing left/west) NB Duncan Rd, before McCollum Pkwy directing trucks to turn right to stay on McCollum Pkwy to access I-75, via Chastain Rd ("To I-75", pointing left/west) WB Piedmont Rd/Barrett Pkwy before Chastain Meadows Pkwy, directing trucks to stay straight for access to interstates, ("To I-75", "To I-575", pointing straight/west) Three new signs along Chastain Rd: 1) EB before I-75, move the sign for access to SB I-75 farther back (west) closer to Barrett Lakes Blvd; 2) EB traffic approaching I-75, add pavement markings in two left lanes for access to I-75 NB; 3) EB traffic approaching I-575, add pavement markings in left lane for access to I-575 NB. 	N/A	N/A	N/A	Cobb County	Stakeholder Input	\$11,000
AS-2	Barrett Lakes Boulevard and Cobb Parkway Speed Studies	Work with Cobb County to conduct a speed study along Barrett Lakes Blvd between Chastain Rd and Barrett Pkwy as well as Cobb Pkwy (US 41/SR 3) between McCollum Pkwy and Barrett Pkwy to determine if excessive speeding is occurring along the corridors; if so, identify countermeasures to mitigate speeding. Consider recommendations from Cobb County's Safety Action Plan	N/A	N/A	N/A	Cobb County	Stakeholder Input	\$20,000
AS-3	Corridor Safety Studies	Conduct corridor safety studies along routes with high crash rates - Barrett Pkwy, Chastain Rd, and Barrett Lakes Blvd - to identify multimodal safety improvements. Consider recommendations from Cobb County's Safety Action Plan.	N/A	N/A	N/A	Cobb County	Freight Cluster Plan Inventory & Assessment	\$96,000
AS-4	I-75 to I-575 Connector Feasibility Study	Conduct a study to determine the need for and feasibility of a system-to-system ramp between I-75 and I-575 to alleviate pressure on Chastain Rd and Barrett Pkwy. This will provide southbound motorists on either I-75 or I-575 another option to access the complimentary interstate route in the northbound direction.	N/A	N/A	N/A	GDOT	Freight Cluster Plan Inventory & Assessment, Stakeholder Input, Chastain Rd Corridor Study	\$350,000

Town Center Community Freight Cluster Plan

Financially Feasible Short-Term Action Plan

The Short-Term Action Plan includes a range of projects that are anticipated to begin in the first ten years following plan completion. They were identified through a combination of project prioritization, cost estimation, revenue projections, and consultation with TCCID and key stakeholders. This list is not meant to suggest a priority or implementation order, but rather a collection of projects recommended for implementation within approximately the next ten years. Ultimately, it is up to TCCID and its partners to decide which projects to pursue and how to fund them. Projects in the Short-Term Action Plan include:

- Barrett Parkway (SR 5 Conn) at I-75 NB Ramp (I-1)
- Barrett Parkway (SR 5 Conn) at I-75 SB Ramp (I-2)
- Barrett Parkway (SR 5 Conn) at Mall Boulevard (I-3)
- Canton Road Connector (SR 5 Spur) at Church Street Extension (I-4)
- Chastain Road at Big Shanty Road (I-5)
- Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Conn) (I-6)
- Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp Short-Term Intersection Improvements (I-7)
- I-75 Southbound at Chastain Road (I-8)
- McCollum Parkway/Chastain Road at Duncan Road (I-9)
- McCollum Parkway at Big Shanty Drive/ Vulcan Materials Driveway (I-10)
- Old 41 Highway at Airport Road (I-11)
- Barrett Parkway Lighting Improvements (L-1)
- Wayfinding Signage for Trucks (S-3)
- Barrett Lakes Boulevard and Cobb Parkway Speed Studies (AS-2)
- Corridor Safety Studies (AS-3)
- I-75 to I-575 Connector Feasibility Study (AS-4)



Data Sources: Atlanta Regional Commission; Cobb County DOT

Figure 19. Short-Term Action Plan Project Recommendations

Long-Term Vision Plan

Projects which are not anticipated to be funded in the ten-year short-term horizon are included in the Long-Term Vision Plan. Inclusion in the Long-Term Vision Plan does not mean these projects are not important or valuable - it is simply a result of the limited amount of funding available for Freight Cluster Plan implementation in a ten-year period.

In total, there are 17 projects in the Long-Term Vision Plan, which is divided into two tiers. The two tiers represent the relative priority based on the results of the prioritization exercise, input from TCCID and stakeholders, as well as the estimated project cost and share of funding to be covered by TCCID. Tier 1 represents projects that scored higher in the prioritization process and are believed to be more beneficial in the 10-20 year timeframe, whereas Tier 2 represents lower scoring or highly complex projects that are potentially better suited for a longer-term timeframe. As with the Short-Term Action Plan, the use of tiers in the Long-Term Vision Plan is not meant to suggest a ranking or priority order of implementation, but rather relative priority within the long-term timeframe.

Projects in the Long-Term Vision Plan include a range of intersection improvements, new sidewalk facilities, lighting, wayfinding and signage projects, and studies. While these projects may have scored lower in the prioritization process or may be too costly to be implemented in a short-term timeframe, they are still important and will convey benefits to travelers throughout the study area. Within each table of the Long-Term Vision Plan, projects are grouped by type.

As new funding sources become available and TCCID reviews future project lists, there may be opportunities to advance long-term recommendations sooner. Several of these projects may be eligible for competitive grants outside of TCCID's typical funding mechanisms for transportation projects, which could expedite implementation. Likewise, Long-Term Vision Plan projects may be advanced and implemented more quickly in accordance with TCCID and partner priorities, as funding and resources are available.

Tier 1 Tier 2 7 Intersection Improvements 2 Intersection Improvements 2 Lighting Improvements 5 New Sidewalk Projects 1 Additional Study

Long-Term Vision Plan Tier 1 Projects

Tier 1 consists of seven intersection improvements, which are listed in **Table 12** and mapped in **Figure 20**. Projects are presented in alphabetical order by project type. Brief descriptions of projects are provided in the following sections.

Intersection Improvements

Canton Road at Sandy Plains Road (I-12)

This project is based on findings from the Traffic Study and is intended to address general intersection maintenance as well as some safety and operational issues including a high proportion of rear end and left-angle crashes, missing backplates, and damaged curbs.

The project would upgrade curb ramps and detectable warning pads on all corners of the intersection, update traffic signals to include flashing yellow arrows where appropriate and retroreflective backplates, and would repave and restripe the intersection.

Canton Road Connector at Sandy Plains Road (I-13)

This project is intended to address intersection maintenance concerns including damaged curbs, missing pedestrian countdown timers and debris in the road, as well as a high proportion of rear-end crashes, and reported severe left-turning crashes. The intersection serves both residential neighborhoods (via Guffin Lane) as well as industrial sites (via Williams Drive).

This project would upgrade pedestrian facilities at the intersection, including countdown signals and a detectable warning pad in the southeast corner. It would also address the need for general intersection maintenance by replacing the eastbound and westbound signal heads to include flashing yellow arrows, adding retroreflective backplates to all signal heads, trimming vegetation in the northeast corner, removing debris from the intersection, and repaving and restriping the intersection.

Cobb Parkway (US 41/SR 3) at Bells Ferry Road (I-14)

This project is recommended to address heavy through movements and a high proportion (64%) of rear end crashes, several crashes attributed to red light running, and two reported pedestrian crashes between 2018 and 2022.

To improve pedestrian safety, this project would upgrade the detectable warning pads on all four corners, extend the medians on Cobb Parkway (US 41/SR 3) to provide better refuge for pedestrians, convert the striped westbound channelized right-turn markings to a raised, concrete island with a "Stop for Pedestrians" sign, and recommends implementing leading pedestrian intervals (LPIs) to give pedestrians the opportunity to enter the crosswalk at the intersection before vehicles are given a green indication.

For vehicular operational and safety improvements, the project recommends evaluating the yellow change intervals to determine if timing changes could reduce redlight running, adding retroreflective backplates on all signal heads, installing a "Signal Ahead" sign on the southbound approach, and repaving and restriping the intersection.

It is also recommended that as a long-range option, project partners should consider grade-separation of this intersection to improve safety and operations.



Bicyclist Waits to Cross as Traffic Queues Along Cobb Parkway (US 41/SR 3) at Bells Ferry Road

Town Center Community Freight Cluster Plan

Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp (Long-Term) (I-15)

Building upon the short-term recommendations for this intersection (project I-7), this long-term project would require coordination between Marietta and GDOT to address a projected future need for additional southbound left-turn capacity. The Traffic Study projects an acceptable LOS in the 2033 No-Build scenario; however, based on queue lengths and likely increases in traffic beyond 2033, the capacity of the single left-turn lane is likely to become an issue in the future - the southbound left-turn queue backs up to the off-ramp during the morning peak period.

This recommended project would add a second southbound left-turn lane on Cobb Parkway (US 41/SR 3) and an additional receiving lane on Canton Road Connector On-Ramp. If needed, options to narrow travel lanes, narrow the raised median, and/or widen the bridge over Cobb Parkway (US 41/SR 3) should be considered. In initial discussions, Marietta staff supported the idea for this long-term recommendation.

Cobb Parkway (US 41/SR 3) at EMC Parkway/Kennestone Circle (I-16)

While current LOS is acceptable at this intersection, the project is intended to address a higher than average (for the study area) proportion of crashes that result in injuries (26%), including two fatal collisions, one of which involved a pedestrian. Transit service is provided along this section of Cobb Parkway (US 41/SR 3) and there is a homeless shelter nearby, which may indicate a higher likelihood of pedestrians walking in the area. Likewise, there are nearby industrial land uses and a relatively high proportion of trucks.

Recommendations for this intersection seek to address safety concerns and general intersection maintenance. They include extending medians on Cobb Parkway (US 41/SR 3) to provide better refuge for pedestrians, evaluating the yellow change intervals to determine if adjustments could reduce red-light running and improve safety, and adding retroreflective backplates to all signal heads, along with repaving and restriping the intersection. Elsewhere in this report, it is noted that this is among the intersections which should be considered for potential emergency vehicle pre-emption as part of the Regional Connected Vehicle Program.

Northbound Traffic Queuing on Cobb Parkway (US 41/SR 3) Between Canton Road Connector (SR 5 Spur) and Kennestone Circle/EMC Parkway

McCollum Parkway at Cobb Parkway (US 41/SR 3) (I-17)

Knowing there is a longer-term project to realign McCollum Parkway at Cobb Parkway (US 41/SR3), the Traffic Study did not analyze this intersection; however, it was discussed with the stakeholder committee and PMT that it may be beneficial for TCCID and its partners to consider some shorter-term and interim improvements that could address concerns before that project is fully implemented. Therefore, recommendations for this project should be considered as the McCollum Parkway Realignment project moves forward.

The recommendations for this intersection seek to repair the median, curb ramps, and guardrail, as well as to improve pedestrian safety with a new landing pad and signage in the northwest corner. It is also recommended to investigate signal timing to determine if timing adjustments may address challenges heavy trucks face accelerating uphill on Cobb Parkway (US 41/SR 3) at the intersection.

McCollum Parkway at Old 41 Highway/ South Main Street (I-18)

This intersection provides access to several industrial land uses in the area, including the adjacent FedEx facility. Although the overall number and severity of crashes at this intersection is low compared to other study area intersections, roughly 13% of crashes involved trucks, which is higher than average for the study area. Additionally, the intersection was observed to be lacking key pedestrian facilities and to have damaged medians and signs, and malfunctioning pedestrian signals.

This project is recommended to address damaged signals and signs as well as to address operational, safety, and intersection maintenance concerns noted during the Traffic Study. Specifically, it would replace damaged and malfunctioning pedestrian signal heads, upgrade traffic signals to include flashing yellow arrows where appropriate, and add retroreflective backplates to all signal heads. It would also add median nose delineators to make drivers more aware of medians present along the road, replace a damaged sign in the west leg median, and reconstruct channelized right turn islands in the eastbound and westbound directions, along with new ADA ramps and detectable warning pads in the southeast and northwest corners.



View of Trucks Mixing with Other Traffic on Cobb Parkway (US 41/SR 3) at McCollum Parkway/Cobb International Boulevard from Southeast Corner of Intersection

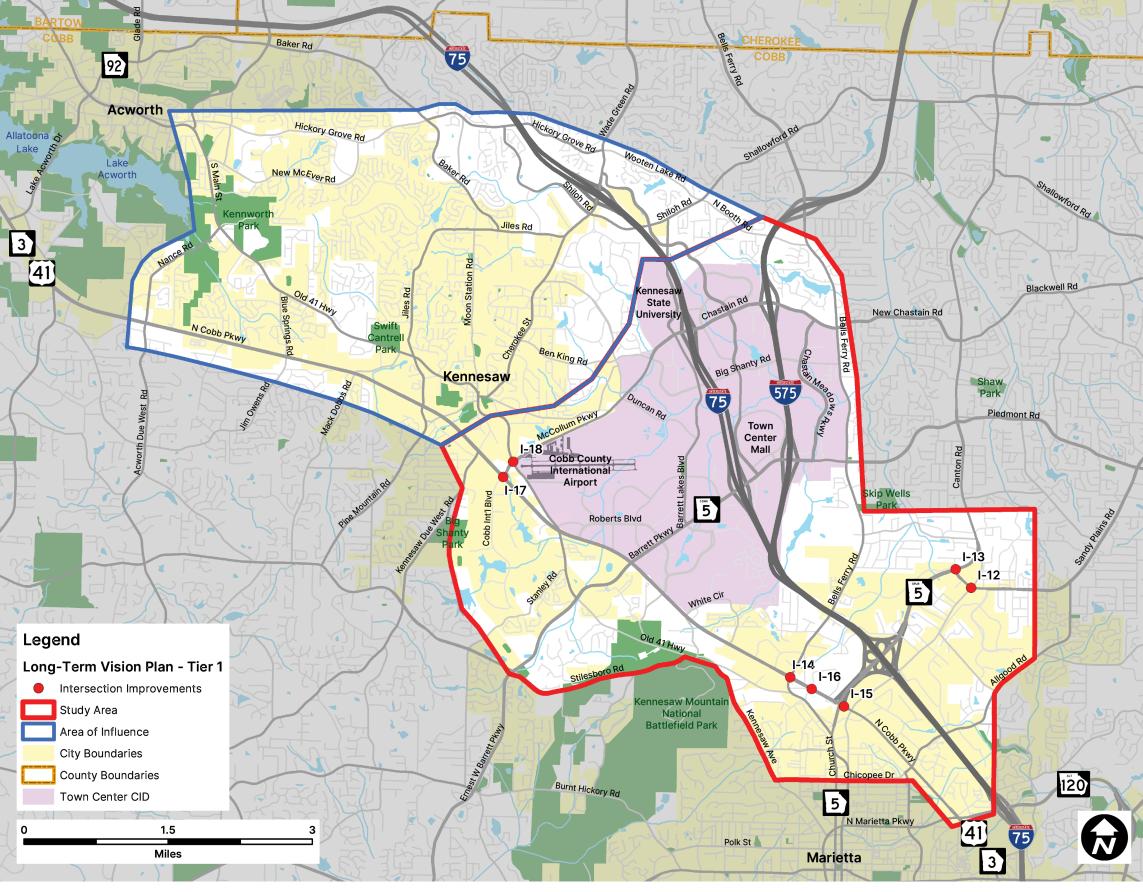
Table 12. Long-Term Vision Plan Projects - Tier 1

ID	Project Name	Project Description	From	То	Length (ft)	Implementation Partners	Source	Cost
		Intersection Improvements						
I-12	Canton Road at Sandy Plains Road	Upgrade ADA ramps, including detectable warning pads; install flashing yellow arrows and retroreflective backplates on signal heads; repave and restripe intersection.	N/A	N/A	N/A	City of Marietta, Cobb County	Freight Cluster Plan Traffic Study	\$556,000
I-13	Canton Road Connector (SR 5 Spur) at Sandy Plains Road	Upgrade pedestrian signal heads; install ADA ramps with detectable warning pad on SE corner; install flashing yellow arrows on eastbound and westbound signal heads; install retroreflective backplates on signal heads; trim back vegetation on NE corner; repave and restripe intersection.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$1,359,000
I-14	Cobb Parkway (US 41/ SR 3) at Bells Ferry Road	Install raised island adjacent to westbound channelized right-turn lane and install "Stop for Pedestrians" sign (R560-5); extend medians on Cobb Pkwy to serve as pedestrian refuge islands; implement leading pedestrian interval; evaluate yellow change intervals for Cobb Pkwy approaches to determine if modifications can improve safety and reduce red-light running, and adjust yellow phase timing accordingly; install ADA ramps with detectable warning pads; install retroreflective backplates on signal heads; install "signal ahead" sign (W3-3) on the southbound approach; repave and restripe intersection.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$1,792,000
I-15	Cobb Parkway (US 41/ SR 3) at Canton Road Connector (SR 5) On- Ramp (Long-Term)	In the long-term, evaluate the need for a second SB left-turn lane from Cobb Pkwy to Canton Rd Conn on-ramp. If needed, consider options to narrow travel lanes, raised median, and/or bridge widening to accommodate an additional southbound left-turn lane, install a second receiving lane on Canton Rd Conn on-ramp, and adjust signal phasing, striping, and signage as needed. Note: this project may require the widening of the bridge over Cobb Pkwy.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$3,058,000
I-16	Cobb Parkway (US 41/ SR 3) at EMC Parkway/ Kennestone Circle	Extend medians on Cobb Pkwy to serve as pedestrian refuge islands; evaluate yellow change intervals for Cobb Pkwy approaches to determine if modifications can improve safety and reduce redlight running, and adjust yellow phase timing accordingly; install retroreflective backplates on signal heads; repave and restripe intersection; add intersection lighting.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$483,000
I-17	McCollum Parkway at Cobb Parkway (US 41/ SR 3)	In advance of the longer-term realignment of the intersection, implement short-term improvements such as repairing median, curb ramps, and guard rail, adding landing pad for pedestrians on the NW corner, and re-installing signage. Investigate and adjust signal phasing as needed to address heavy vehicles accelerating uphill on Cobb Pkwy. As the McCollum Pkwy realignment project moves forward, these recommendations should be considered.	N/A	N/A	N/A	Cobb County, GDOT	Freight Cluster Plan Traffic Study	\$2,290,000
I-18	McCollum Parkway at Old 41 Highway/South Main Street	Reconstruct eastbound and westbound channelized right-turn islands, including ADA ramps and warning pads; replace northbound and eastbound signal heads with flashing yellow arrows; install retroreflective backplates on signal heads; replace damaged pedestrian signal heads; install median nose delineators; replace damaged sign in median of west leg; add intersection lighting. As the McCollum Pkwy realignment project moves forward, these recommendations should be considered.	N/A	N/A	N/A	Cobb County, City of Kennesaw	Freight Cluster Plan Traffic Study	\$940,000

Long-Term Vision Plan: Tier 1

Tier 1 of the Long-Term Vision Plan includes a range of intersection improvement projects that will improve freight mobility, safety for all travelers, wayfinding and signage, and generally improve transportation for everyone in the Town Center area. These projects are somewhat lower in priority and/or more costly or more complex than projects in the Short-Term Action Plan Projects in Tier 1 of the Long-Term Vision Plan include:

- Canton Road at Sandy Plains Road Intersection Improvements (I-12)
- Canton Road Connector (SR 5 Spur) at Sandy Plains Road Intersection Improvements (I-13)
- Cobb Parkway (US 41/SR 3) at Bells Ferry Road Intersection Improvements (I-14)
- Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) On-Ramp Long-Term Intersection Improvements (I-15)
- Cobb Parkway (US 41/SR 3) at EMC Parkway/Kennestone Circle Intersection Improvements (I-16)
- McCollum Parkway at Cobb Parkway (US 41/ SR 3) Intersection Improvements (I-17)
- McCollum Parkway at Old 41 Highway/South Main Street Intersection Improvements (I-18)



Data Sources: Atlanta Regional Commission; Cobb County DOT

Figure 20. Long-Term Vision Plan Project Recommendations - Tier 1

Long-Term Vision Plan Tier 2 Projects

Tier 2 consists of ten projects, including a combination of intersection improvement, lighting projects, sidewalk projects, and additional studies. These are listed in **Table 13** and mapped in **Figure 21**. They are presented in alphabetical order by project type. Brief descriptions of each Tier 2 project are provided below.

Intersection Improvements

Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) Off-Ramp (I-19)

This intersection performs at an acceptable level of service in the projected 2033 No-Build scenario and although it experiences a slightly higher than average number of crashes per year compared to other study area intersections, most collisions are rear end and do not result in injuries. Traffic was observed queuing from the Canton Road Connector on-ramp, blocking the off-ramp intersection along with drivers observed cutting over beneath the bridge to access the left-turn lane for the on-ramp.

To address these issues, the project recommends extending the inside left lane (which is a through-lane at the off-ramp, but becomes the left-turn lane to access the northbound on-ramp past the traffic signal) and installing "Don't Block the Box" pavement markings and signage. It also recommends restriping the off-ramp and adding intersection lighting to improve safety.

Cobb Parkway (US 41/SR 3) at Industrial Park Drive (I-20)

Recommendations at this intersection are intended to address intersection maintenance issues - outdated signal heads and faded crosswalks, as well as a higher proportion of injury crashes as compared to other study area intersections (29%). Also, as shown in the Traffic Study, the intersection is projected to operate at LOS E during the morning peak hour without any improvements.

There are also some issues associated with westbound trucks encroaching on the throughlane to make right turns, but due to the proximity of the existing business at that corner, no recommendations are made at this time. However, there is a recommended strategy to contemplate opportunities to reconfigure this intersection should the site redevelop in the future. Similarly, trucks were observed stopping in the roadway east of the signal waiting to the bottling plant in the northeast quadrant of the intersection; working with the property owners to improve circulation on-site may help alleviate this issue.

This project aims to improve safety by adding "No U Turn" signs for the northbound left-turn lane, adding flashing yellow arrows to signal heads where appropriate (northbound, southbound, and eastbound), and adding retroreflective backplates to signal heads. It would also repave and restripe the intersection.

Lighting Improvements

Big Shanty Drive Lighting (L-2)

This project would address a lack of lighting along a portion of Big Shanty Drive, between McCollum Parkway and Ivey Park Drive in the City of Kennesaw. The project was discussed among the Stakeholder Committee and it was noted the Cobb County DOT has received numerous requests for lighting along the corridor. While there is lighting near the intersection of McCollum Parkway and Big Shanty Drive, as you travel west along Big Shanty Drive, there is no lighting provided.



Curb Damage at the Northeast Corner of Intersection of McCollum Parkway at Big Shanty Drive

Chastain Road Lighting (L-3)

This project would address a concentration of crashes along Chastain Road which occurred in dark, unlit conditions, including three commercial vehicle crashes. Additionally, Chastain Road serves as the gateway entrance to KSU and there are regularly pedestrians along the road. The need for lighting along this stretch of Chastain Road was also identified during the Chastain Road LCI Corridor Study, completed in 2020.

The project would install vehicular and pedestrian-scale lighting along Chastain Road between Town Pointe Drive and the I-575 On-Ramp. While seemingly simple, the project would require significant coordination between TCCID, Cobb County, and GDOT; therefore, while it scored moderately well in the prioritization exercise, it was allocated into the Long-Term Vision Plan.

Sidewalk Facilities

EMC Parkway Sidewalk (SW-1)

This project would install approximately 700 linear feet of sidewalk along the north side of EMC Parkway, within an area that is near public transportation service (along Cobb Parkway (US 41/SR 3)) and which serves industrial and freight-related jobs. The project would help increase access and last-mile connectivity for the local workforce.

Industrial Park Drive Sidewalk (SW-2)

This project would install more than 4,000 linear feet of sidewalk along both sides of Industrial Park Drive in an industrial area that employs many local workers. Bus service is provided along Cobb Parkway (US 41/SR 3), so adding sidewalk along Industrial Park Drive would help increase last-mile connectivity and provide options for how people get to and from work.

Loudermilk Drive Sidewalk (SW-3)

This project would add more than 2,300 linear feet of sidewalk to the west side of Loudermilk Drive, which is home to a number of warehouse and industrial facilities. Loudermilk Drive connects to Church Street Extension, where bus service is provided, therefore, adding sidewalk to Loudermilk Drive would help improve access to jobs and last-mile connectivity for local workers.

McCollum Parkway Sidewalk (SW-4)

This project would complement other recommended projects in the area by adding nearly 3,000 linear feet of sidewalk along the north side of McCollum Parkway between Big Shanty Drive and the existing sidewalk west of Big Shanty Road. It would help improve access and connectivity for local workers at adjacent industrial facilities, as well as for students and staff at nearby KSU.

White Circle Sidewalk (SW-5)

This project would install more than one mile of sidewalk along both sides of White Circle to improve access to both freight-related jobs and residential communities.

Additional Study

Canton Road Small Area Study (AS-5)

It is anticipated that the area around this portion of Canton Road will change significantly in the coming years. The Freight Cluster Plan's inventory and analysis looked at areas where there is likely to be an increase in industrial land uses in the future based on future land use data, and this area stood out as one with a high potential for change in the future. The purpose of the study would be to better understand the projected future uses, what types of developments are allowable based on current zoning, and to identify needed improvements to help handle potential future growth in traffic and industrial development. This may include intersection, operational, and safety analyses, as well as measures to mitigate against the impact of truck traffic in residential areas, as well as routing and wayfinding options.

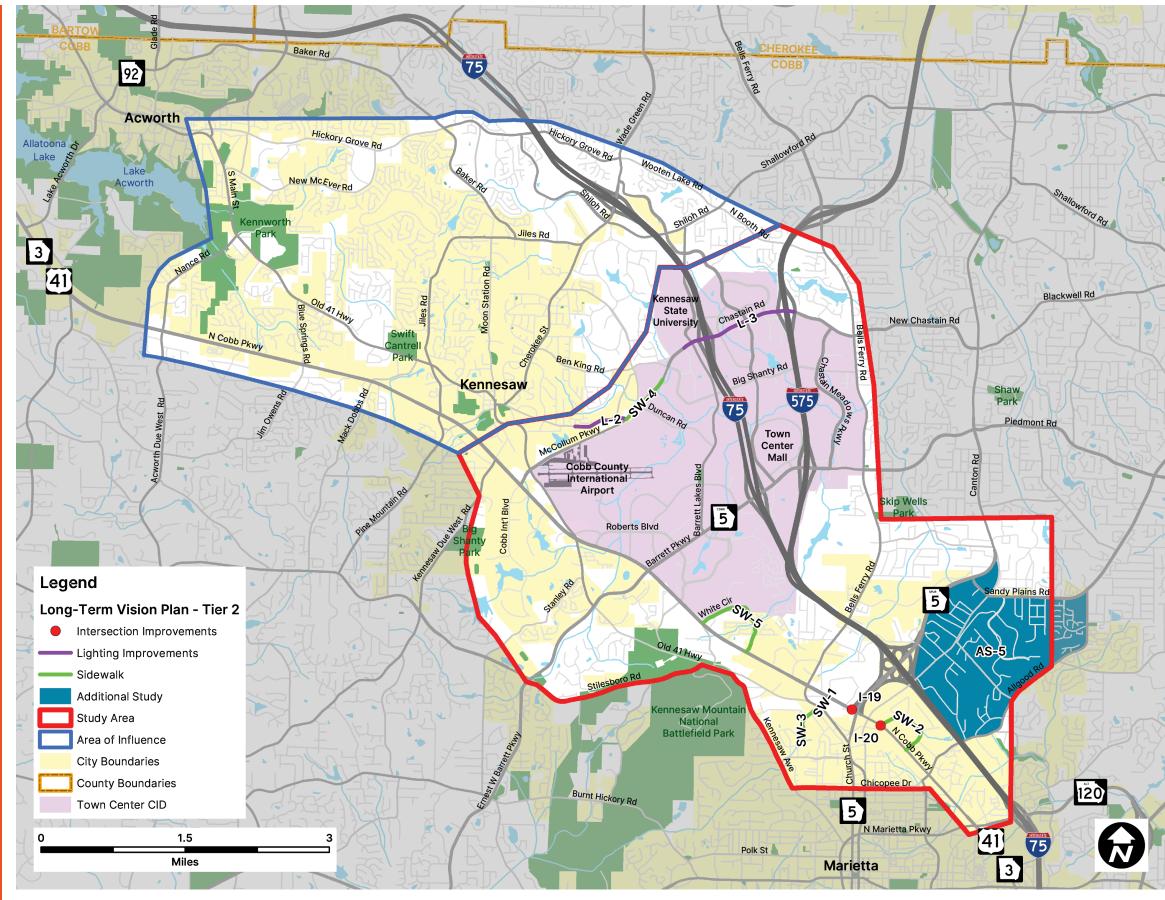
Table 13. Long-Term Vision Plan Projects - Tier 2

ID	Project Name	Project Description	From	То	Length (ft)	Implementation Partners	Source	Cost
	Tojectiume	Intersection Improvements	110111		Longth (It)	i di di ci 3	Course	
I-19	Cobb Parkway (US 41/ SR 3) at Canton Road Connector (SR 5) Off- Ramp	Extend northbound left-turn lane; install "Don't Block the Box" pavement markings and signage; restripe Canton Rd Conn off-ramp; add intersection lighting.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$1,619,000
I-20	Cobb Parkway (US 41/ SR 3) at Industrial Park Drive	Add "No U-Turn" signage for southbound left-turn lane; install flashing yellow arrows on northbound, southbound and eastbound signal heads; install retroreflective backplates on signal heads; repave and restripe intersection.	N/A	N/A	N/A	Cobb County, GDOT, City of Marietta	Freight Cluster Plan Traffic Study	\$754,000
		Lighting Improvements						
L-2	Big Shanty Drive Lighting	Install vehicular-scale lighting on Big Shanty Dr west of McCollum Pkwy.	McCollum Pkwy	Ivey Park Dr	2920	City of Kennesaw	Stakeholder Input	\$575,000
L-3	Chastain Road Lighting	Add vehicular- and pedestrian-scale lighting on Chastain Rd.	Towne Pointe Dr	I-575 NB On- Ramp	6530	Cobb County, TCCID	Freight Cluster Plan Traffic Study - Crash Analysis	\$1,254,000
		New Sidewalks						
SW-1	EMC Parkway Sidewalk	Install sidewalk on the north side of EMC Pkwy.	Church St Ext	Cobb Pkwy	700	City of Marietta	Freight Cluster Plan Inventory & Assessment	\$396,000
SW-2	Industrial Park Drive Sidewalk	Install sidewalk on both sides of Industrial Park Dr.	Cobb Pkwy	Cobb Pkwy	4010	City of Marietta	Freight Cluster Plan Inventory & Assessment	\$3,448,000
SW-3	Loudermilk Drive Sidewalk	Install sidewalk on the west side of Loudermilk Dr.	Cul-de-Sac	Church St Ext	2320	City of Marietta	Freight Cluster Plan Inventory & Assessment	\$1,283,000
SW-4	McCollum Parkway Sidewalk	Install sidewalk on the north side of McCollum Pkwy between Big Shanty Drive and existing sidewalk west of Big Shanty Road.	Big Shanty Dr	Existing sidewalk west of Big Shanty Rd	2980	Cobb County	Freight Cluster Plan Inventory & Assessment	\$2,547,000
SW-5	White Circle Sidewalk	Install sidewalk on both sides of White Cir to improve access to both freight-oriented jobs and residential communities.	Cobb Pkwy (S)	Cobb Pkwy (N)	5290	City of Marietta	Freight Cluster Plan Inventory & Assessment	\$3,393,000
		Additional Study						
AS-5	Canton Road Small Area Study	Conduct a small area study of the Canton Rd, Allgood Rd, Sandy Plains Rd, and Sawyer Rd corridors, and surrounding areas, in anticipation of projected growth in industrial development and truck traffic. Outcomes may include intersection improvements, alternate corridors or routing options for trucks, and measures to mitigate against the impact of truck traffic on surrounding residential communities.	N/A	N/A	N/A	City of Marietta, Cobb County	Freight Cluster Plan Inventory & Assessment	\$180,000

Long-Term Vision Plan: Tier 2

Tier 2 of the Long-Term Vision Plan includes several projects ranging from intersection improvements to sidewalk facilities. These projects are somewhat lower in priority and/or more costly or more complex than projects in Tier 1 of the Long-Term Vision Plan. Projects in Tier 2 of the Long-Term Vision Plan include:

- Cobb Parkway (US 41/SR 3) at Canton Road Connector (SR 5) Off-Ramp Intersection Improvements (I-19)
- Cobb Parkway (US 41/SR 3) at Industrial Park Drive Intersection Improvements (I-20)
- Big Shanty Drive Lighting Improvements (L-2)
- Chastain Road Lighting Improvements (L-3)
- EMC Parkway Sidewalk (SW-1)
- Industrial Park Drive Sidewalk (SW-2)
- Loudermilk Drive Sidewalk (SW-3)
- McCollum Parkway Sidewalk (SW-4)
- White Circle Sidewalk (SW-5)
- Canton Road Small Area Study (AS-5)



Data Sources: Atlanta Regional Commission; Cobb County DOT

Figure 21. Long-Term Vision Plan Project Recommendations - Tier 2

High Priority Projects

Among the project recommendations, the project team, in consultation with TCCID and the PMT, identified five projects which should be high priorities within the Financially Feasible Short-Term Action Plan. Additional information beyond what is provided in this section of the Recommendations Report is included in Appendix E.

Additional Study

Project AS-4: I-75 to I-575 Connector Feasibility Study

Project Description

Conduct a study to determine the feasibility of a system-to-system ramp between I-75 and I-575 which could help alleviate pressure on Chastain Road and Barrett Parkway (SR 5 Connector). If feasible, a connector ramp could provide southbound motorists on either I-75 or I-575 another option to access the complimentary interstate route in the northbound direction.

Key Information

- Total Cost \$350,000
- It is likely that this study could be funded through a grant or the Transportation Improvement Program (TIP).
- If funding is received, the CID would only be responsible for a portion of the total cost (roughly 20%).
- Opportunities include improving circulation in the vicinity of the I-75 and I-575 junction, relieving congestion along major arterials such as Barrett Parkway (SR 5 Connector) and Chastain Road, and improving multimodal safety near commercial retail and Kennesaw State University's main campus.

Intersection Improvements

Project I-1 & I-2: Barrett Parkway (SR 5 Connector) at I-75 Southbound & Northbound Ramp

Northbound Ramp Improvements (I-1)

Project elements include rebuilding the curb on the southeast corner; enhancing signage or add pavement markings on ramps to better delineate lane assignments; adding larger overhead signage for eastbound approach for lane assignments; converting the eastbound left protected/ permissive phase to protected-only during peak hours; and adding intersection lighting.

Southbound Ramp Improvements (I-2)

Project elements include rebuilding the curb on the northwest corner; installing "keep moving" signage for the eastbound right-turning vehicles onto the I-75 on-ramp; installing yield bar, yield sign, and pedestrian signage for southbound right-turn lane; restriping I-75 on-ramp to better delineate receiving lane; restriping lane lines and crosswalks; and adding intersection lighting.

Key Information

- Total Cost \$871,000 (Northbound);
 \$557,000 (Southbound)
- It is likely that these intersection improvements could be funded through a grant or the Transportation Improvement Program (TIP).
- If funding is received, the CID would only be responsible for a portion of the total cost (roughly 20%).
- These improvements could also be bundled together as one project.
- Opportunities include reducing rear-end, sideswipe, and angle crashes, updating worn pavement markings, improving pedestrian safety, and addressing operational deficiencies and weaving movements.

Project I-6: Cobb Parkway (US 41/SR 3) at Barrett Parkway (SR 5 Connector)

Description

Improve signage and consider adding enhanced striping to improve delineation of westbound right-turn lane receiving lane on Cobb Parkway (US 41/SR 3) and the right-turn deceleration lane into the commercial driveway north of the intersection; restripe lane lines and crosswalks; upgrade ADA ramps on the southwest corner to include detectable warning pads; add intersection lighting.

In the long-term, consider constructing gradeseparated ramps.

Key Information

- Total Cost \$428,000
- It is likely that this intersection improvement could be funded through a grant.
- This location has among the highest crash rates throughout the CID. As the project is developed, there may be additional methods for improving intersection safety beyond what is listed in the project description.
- Opportunities include reducing rear-end and angle crashes at and near the intersection, addressing operational deficiencies and weaving movements, and implementing pedestrian facilities which are currently missing.



Truck Turning Right from Cobb Parkway (US 41/SR 3) to Travel Westbound on Barrett Parkway

Project I-8: I-75 Southbound at Chastain Road Intersection Improvements

Description

Conduct a traffic study at this intersection to understand existing and projected future traffic volumes and turning movements. In the short-term, work with Cobb County DOT to examine traffic signal timing and phasing at the I-75 Southbound ramp as well as immediately adjacent intersections. Explore the possibility of a lead-lag cycle to provide more green time for southbound vehicles on I-75 to get into the far left-turn lane to access Barrett Lakes Boulevard.

As an interim option, reconfigure the I-75 Southbound ramp to convert the inside rightmost left-turn lane to an "option lane" (for left-or right-turns onto Chastain Road); remove or shorten the raised channelized island; adjust traffic signal phasing as appropriate; sign the new "option lane" for access to Barrett Lakes Boulevard south.

Key Information

- Total Cost \$1,126,000
- Based on a review of traffic count data collected by GDOT in January 2023, there is a noticeable increase in peak-hour traffic as compared to counts collected for the Chastain Road LCI Corridor Study in February 2020. While this intersection was not part of the Traffic Study, it would be beneficial to collect traffic data at the Chastain Road intersections of I-75 Southbound, Barrett Lakes Boulevard, and Town Point Drive and identify more longterm solutions.
- Given this project is within the CID boundaries and intersects with I-75, which is managed by GDOT, the CID would likely be responsible for the preliminary engineering (PE) stage.
- Opportunities include reducing sideswipe and angle crashes, addressing operational deficiencies and weaving movements, and facilitating safer access to Barrett Lakes Boulevard.

Policies & Strategies

In addition to infrastructure projects and studies, the Town Center Community Freight Cluster Plan also includes a small number of initiatives that focus on coordination with other agencies and actions staff can take to improve and advance freight mobility in the area. These include actions that can be undertaken in coordination with Cobb County, GDOT, adjacent cities, and other implementation partners to support workforce development, truck parking, connected vehicle and signal technology, and other efforts. Suggestions are provided for partners that might be involved or included.

Research and assessment of overall mobility patterns, existing conditions, and consultation with stakeholders helped pinpoint ideas for potential policies and strategies. These are grouped into three overarching categories and further described in the following sections, and listed in Table 14. Policies and strategies are not mapped, as most of them are either not location-specific or represent area-wide strategies that apply broadly to the Town Center area or local jurisdictions. In addition to the specific ideas suggested in this Plan, TCCID should continue to support the development of policies and practices that allow the growth and development of freight-related jobs and industries within the area, so long as it supports the overall vision of the CID and a strong quality of life for residents, workers, and visitors.

Strategies

Truck Parking & Staging

There is an overarching need in Metro Atlanta and throughout the state for more places for truck drivers to safely stop and rest in order to meet their hours-of-service requirements, as well as for overnight or longer-term parking. TCCID can work with partners to facilitate additional research to identify areas that may be suitable for such uses and to develop policies that require or incentivize the creation of parking or staging areas in the future.

Future Truck Stop

This recommendation is aimed at working with Cobb County and other partners to identify potential locations that may be suitable or appropriate for temporary and overnight truck parking within the study area or area of influence. Sites should be strategically selected to allow for easy access to major roads and interstate highways, away from residential areas, and which can accommodate amenities and safety features.

Truck Staging

It is also recommended that TCCID should work with Cobb County to develop a policy that would require new developments in industrially zoned areas to provide space where commercial vehicles can temporarily park to help keep trucks off of local streets while awaiting pick-ups and drop-offs. This work may include researching case studies, talking with peers, and/or drafting language for consideration in the zoning ordinance.

Street Design for Trucks

These recommendations are intended to support future design and development of roads and other facilities that can specifically accommodate larger freight vehicles, such as tractor-trailers, especially in an increasingly multimodal area such as Town Center.

Monitor Cobb Parkway (US 41/SR 3) at Industrial Park Drive

The intersection of Cobb Parkway at Industrial Park Drive was identified as an opportunity to improve truck turning movements with some geometric changes; however, given the configuration of the roadway and property boundaries, it would be challenging without negative impacts to the private business located in the northwest corner of the intersection. It is recommended that if an opportunity arises to redevelop this property, consideration be given to reconfiguring the intersection in a way that provides more room for trucks making a westbound right turn.

Truck-Friendly Complete Streets Standards

In light of the anticipated increase in truck traffic traveling around and through the Town Center area over the next couple of decades, it is recommended that TCCID work to develop design guidance for roads that are heavily traveled by trucks where there is also an existing or planned trail/sidepath or high levels of pedestrian or bicyclist activity, such as around the KSU campus. The design guidance would provide recommendations for the placement and spacing of multimodal facilities in relation to travel lanes, recommendations for buffers and separation of modes of travel as needed, as well as design at intersections to improve safety.

Signal Technology

Emergency Vehicle Pre-Emption

During the course of the Traffic Study, the project team observed a relatively high number of emergency vehicles traveling through several of the study intersections. As part of the rollout of the regional connected vehicle program, it would be beneficial to make sure these intersections are included or considered for future emergency-vehicle pre-emption. These locations include:

- Cobb Parkway (US 41/SR 3) at Bells Ferry Road
- Cobb Parkway (US 41/SR 3) at Industrial Park Drive
- Cobb Parkway (US 41/SR 3) at EMC Parkway - Kennestone Circle

Truck Prohibitions

Prohibit Trucks on Watts Drive

Watts Drive in Kennesaw has narrow lanes and is designed to be a pedestrian-friendly facility, approaching Downtown. It is not conducive to large trucks and there are other available routes in the area; therefore, it is recommended that the City of Kennesaw consider prohibiting large trucks on this road. As an alternative, in lieu of an official prohibition, consideration should be given to putting up signs that direct thru-trucks away from Watts Drive.

Additional Coordination

Recommendations in this area are intended to help facilitate inter- and cross-jurisdictional coordination between TCCID and other partners. The idea is to assist with implementation of this Freight Cluster Plan as well as other plans, studies, and projects to reduce potential duplication or gaps in communication.

Regional Freight Plan Update

The Atlanta Regional Commission is in the process of completing an update to the Regional Freight Mobility Plan, last updated in 2016. It is anticipated there will be a continued need for coordination with ARC and other agencies to support and facilitate plan implementation.

Regular Coordination with GDOT

To assist with implementation of recommendations in this Plan as well as with other projects throughout the Town Center area, it is recommended that TCCID establish regular standing meetings with representatives of GDOT, including the Office of Planning as well as the District Office. Meetings could occasionally include adjacent/neighboring jurisdictions and public sector stakeholders.

TCCID Freight Advisory Committee

Similar to the strategy above, it would be beneficial to TCCID to establish a local freight advisory committee of sorts to discuss ongoing planning and development as well as transportation projects, issues, and other related matters. As the Town Center area continues to grow, it is anticipated that more freight and industrial-related developments will come to the area, and this will help local jurisdictions plan accordingly.

Table 14. Recommended Policies and Strategies

ID	Project Name	Project Description	Implementation Partners	Source	Cost
		Coordination			
C-1	Coordination with Regional Freight Plan Update	Participate in any regional initiatives stemming from the Regional Freight Plan Update.	ARC	Freight Cluster Plan, ARC	Staff time
C-2	Regular Coordination with GDOT	Establish regular standing meetings with GDOT to discuss both future planning efforts as well as roadway projects that are planned, programmed, or under construction that have a bearing on transportation operations within the District. Consider acting as a convenor, including public sector stakeholders in the immediate vicinity of the CID, such as Kennesaw, Acworth, and Cobb County. Coordination should consist of communication with both GDOT district staff as well as the GDOT Office of Planning.	GDOT	Stakeholder Input	Staff time
C-3	TCCID Freight Advisory Committee	Establish a standing TCCID Freight Advisory Committee, which will convene twice a year to discuss freight-related concerns or opportunities in light of ongoing freight activity within the District.	Private sector stakeholders	Freight Cluster Plan, ARC	Staff time
		Policies & Strategies			
P-1	Emergency Vehicle Pre-emption	Emergency Vehicle Pre-emption should be considered as part of the rollout of the Regional Connected Vehicle Program within appropriate recommended intersection improvements, where applicable.	Cobb County, GDOT	Freight Cluster Plan Traffic Study	Staff time
P-2	Future Truck Stop	Coordinate with Cobb County Departments of Economic Development and Community Development to attract and identify an optimal location for truck stop in the study area, to include overnight truck parking and amenities for drivers. Identify opportunities to utilize federal funds to construct a future truck stop. Sites for a potential future truck stop and/or truck parking should exhibit characteristics that allow for easy access, accommodate overnight parking (including appropriate facility amenities), and are not directly adjacent to residential areas.	Cobb County	Stakeholder Input	Staff time
P-3	Monitor US 41/SR 3/Cobb Parkway at Industrial Park Drive	Monitor development/redevelopment at the intersection of US 41/ SR 3/Cobb Pkwy at Industrial Park Dr; if an opportunity arises to redevelop the property in the NW corner, work with Cobb County to encourage considerations of options to reconfigure the intersection to provide more room for trucks making a WB right turn (from Industrial Park Dr to northbound Cobb Pkwy).	Cobb County, GDOT, City of Marietta	TCCID Traffic Study	Staff time
P-4	Truck Staging	Coordinate with Cobb County Department of Community Development to require new developments in industrial zones to provide space where commercial vehicles can temporarily park, or stage, while awaiting pickup or dropoff of loads.	Cobb County	Stakeholder Input	Staff time
P-5	Truck-Friendly Complete Streets Standards	Establish Complete Streets guidance or standards for truck-intensive corridors where there is an existing or planned sidepath or high levels of pedestrian/cyclist activity. Example corridors may include Barrett Lakes Blvd or Big Shanty Rd.	Cobb County	Freight Cluster Plan Inventory & Assessment	Staff time
TP-1	Watts Drive Truck Prohibition	Prohibit trucks on Watts Dr.	City of Kennesaw	Freight Cluster Plan Inventory & Assessment	Staff time

Conclusion

Implementation and Next Steps

This Freight Cluster Plan represents an important step for TCCID - it is the first time the CID has studied freight mobility, truck traffic, and goods movement. With an eye towards the future, the CID knew it was important to be proactive in addressing anticipated issues with the growth and development of warehouses and distribution centers.

Home delivery services and e-commerce continue to grow in popularity, with fulfillment and distribution centers seeking space closer to population and job centers. The Atlanta area continues to experience substantial growth in construction of industrial space and related uses. As the pressure of limited supply and increasing prices drive businesses out of central Atlanta, they are likely to continue to seek locations with easy access to the city, such as in Town Center, which boasts access to two interstate highways.

As the northern "gateway" to Metro Atlanta, Town Center can expect to see a lot more truck traffic - not just along I-75 and I-575, but on state routes and local roads as well. The study area contains several pockets of industrial land uses as well as areas that are anticipated to accommodate future industrial or related businesses or even be converted into industrial land uses. At the same time, the area is home to KSU - the third largest university in Georgia, with over 43,000 students as of 2024 - and a number of residential neighborhoods and mixed-use or commercial areas. This mixing of modes of travel means more potential for conflicts between vehicles and pedestrians, cyclists, and other more vulnerable road users. While the Town Center area is not fully built out, competition for limited space and constrained public rights-of-way is growing, challenging road designers and engineers to accommodate more modes of traffic in constrained areas.

The Town Center Freight Cluster Plan is consistent with TCCID's vision of being forward thinking and leading the region in terms of addressing challenges related to the mobility of people and goods. The Plan offers a variety of infrastructure projects, studies, and other recommendations to improve freight mobility and support the continued growth of the area, in a manner that is consistent with TCCID's vision for the area. These recommendations are intended to support the continued growth of business and industry within the area while also providing a high quality of life and community for people who live, work, and play in Town Center. Recommended projects will help improve mobility, operations and safety, as well as increase access to jobs and public transportation. New signs and wayfinding will help drivers who are not as familiar with the area better navigate, avoiding areas where large trucks are not desirable and accessing the interstate highways more quickly. They will also streamline project delivery by improving coordination between the CID and its partners.

It will be imperative for TCCID to work with Cobb County, GDOT, and with the Cities of Acworth, Kennesaw, and Marietta to advance implementation of this Plan. While the identified needs are greater than the likely available short-term funding, there are a variety of potential grants and other sources that can help fund key projects. Working together will make funding applications stronger.

This Plan is meant to serve as a framework, providing recommended projects and strategies that can help TCCID and its partners improve travel, mobility, and the quality of life within the study area. While there is no rank-order in which projects should be implemented, the Short-Term Action Plan is a good place to start. Higher priority projects in the Long-Term Vision Plan should also be considered as future planning gets underway for future Cobb County SPLOST referenda, TIP solicitations, and other funding opportunities. The Plan is intentionally flexible to allow TCCID and its partners to determine the order of implementation, based on their evolving priorities and resources.

Town Center Community Vision Statement

Through thoughtful and creative development, connectivity, trails, and green space, the Town Center Community works to make the Town Center area a vibrant, accessible community that integrates natural assets into a prosperous business center, creating an inviting regional destination.

The following illustrates how the Freight Cluster Plan aligns with the Town Center Community 2022 Master Plan vision, especially when it comes to improving the mobility of both people and goods and collaborating with local and regional partners in making Town Center a desirable destination.

1. FORWARD THINKING. The Town Center CID should continue to be forward thinking in its goals and aspirations as it continues to lead the region in terms of innovation, imagination, and coordinated projects that enhance quality of life for the district's constituents (businesses, employees, and stakeholders).

The Freight Cluster Plan looks towards the future to identify solutions that will contribute to a safer and more efficient freight network that supports existing and future freight-oriented businesses.

2. BEING THE VOICE. The Town Center CID should continue to advocate for the district's growth and evolution, highlighting the district's assets while maintaining open dialogue and coordination with County leaders.

As part of the planning process, Town Center CID has engaged with Cobb County, the Georgia Department of Transportation and local municipalities to identify infrastructure improvements for the benefit of freight traffic as well as other roadway users.

3. LEADING THE REGION. The Town Center CID should continue to lead the region by bringing innovative projects to the area and partnering with community cornerstones like Kennesaw State University and Cobb County International Airport, as well as regional attractions such as Truist Park, The Battery, and Lakepoint Sports Park.

The Town Center CID has engaged a diverse group of private freight-oriented stakeholders, such as Prologis, Vulcan Materials, and Great South Metals, to identify innovative projects that will help improve to freight mobility and safety.

4. CULTIVATING UNIQUE PROJECTS AND PLACES. The Town Center CID should continue to build and support unique projects and placemaking efforts that help enhance the Town Center community's identity and bolster economic development.

The projects identified in the Freight Cluster Plan will help not only to improve freight mobility and safety, but will also help to mitigate the impact of trucks on local traffic, and support a transportation network for use by pedestrians, cyclists, and other trail and sidewalk users.



Town Center Community Freight Cluster Plan

References

Chapter 1 Endnotes

1 Kanell, M.E. (2022) Amazon closing 219-worker Kennesaw fabric warehouse. Atlanta Journal-Constitution. https://www.ajc.com/news/atlanta-news/amazon-closing-219-worker-kennesaw-fabric-warehouse/SIEMLHRDP5HQXE6FVX6SHCXOHU/

Chapter 2 Endnotes

1 Federal Highway Administration (2018). Conditions, Performance & Safety. https://www.fhwa.dot.gov/ohim/onh00/onh2p7.htm

2 Atlanta Regional Commission (2023). Transportation Improvement Program.

https://atlantaregional.org/transportation-mobility/transportation-planning/transportation-improvement-program/

3 Atlanta Regional Commission (2023). CO-297B Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-297B.PDF

4 Town Center CID (2023). South Barrett Reliever. https://www.towncentercid.com/south-barrett-reliever

5 Atlanta Regional Commission (2023). CO-297B Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-450B.PDF

6 Georgia Department of Transportation (n.d.). Old 41 Highway Road Widening and Operational Improvements. https://old-41-hwy-widening-0016410-gdot.hub.arcgis.com/

7 Atlanta Regional Commission (2023). CO-473 Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-473.PDF

8 Atlanta Regional Commission (2023). CO-476 Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-476.PDF

9 Atlanta Regional Commission (2023). CO-481 Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-481.PDF

10 Georgia Department of Transportation (n.d.). SR 3/US 41 @ SR 5.

https://www.dot.ga.gov/applications/geopi/Pages/Dashboard.aspx?ProjectId=0018283

11 Atlanta Regional Commission (2023). AR-475 Project Fact Sheet. https://documents.atlantaregional.com/transportation/quarterlyfactsheets/AR-475.PDF

12 Atlanta Regional Commission (2023). CO-433 Project Fact Sheet.

https://documents.atlantaregional.com/transportation/quarterlyfactsheets/CO-433.PDF

13 Cobb County, GA (2020). 2022 Cobb SPLOST Renewal. https://s3.amazonaws.com/cobbcounty.org.if-us-east-1/s3fs-public/2020-07/SPLOST_2022_Booklet_06-03-2020_final_no_exhibit.pdf

14 Ibid, p. 13.

15 Ibid, p. 21.

16 lbid, p. 22.

17 Ibid, p. 23.

18 Marietta Daily Journal (2023), Acworth permanently closing School Street railroad crossing.

https://www.mdjonline.com/news/local/acworth-permanently-closing-school-street-railroad-crossing/article_e6298736-e08a-11eda989-9762207d21b8.html

19 Town Center Community (2022). Regional Connected Vehicle Program.

https://www.towncentercid.com/regional-connected-vehicle-program

Chapter 3 Endnotes

Chapter 4 Endnotes

1 Atlanta Regional Commission (2021). Project Evaluation Framework, p. 13. https://cdn.atlantaregional.org/wp-content/uploads/tip-cookbook-2024.pdf

2 Atlanta Regional Commission (2023). FY 2020-2025 TIP Project List.

https://documents.atlantaregional.com/transportation/TIP23/Q2/TIP%20Project%20List%20-%20ARCID%20-%2006.01.2023.pdf

3 Atlanta Regional Commission (2024). TIP Project Solicitations.

https://atlantaregional.org/what-we-do/transportation-planning/transportation-improvement-program/tip-project-solicitations/

4 Georgia Institute of Technology (2023). Georgia Smart Program Overview. https://smartcities.gatech.edu/georgia-smart

5 Federal Highway Administration (2022). Fact Sheet - National Highway Performance Program (NHPP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nhpp.cfm

6 Federal Highway Administration (2022). Metropolitan Planning Program (MPP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/metro_planning.cfm

7 Federal Highway Administration (2022). Congestion Mitigation and Air Quality (CMAQ) Improvement Program.

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/cmaq.cfm

8 Georgia Department of Transportation (2021). 2021 Statewide Strategic Transportation Plan: 2050 Statewide Transportation Plan, p. 53. https://www.dot.ga.gov/InvestSmart/SSTP/GDOT_FINAL_2021SSTP.pdf

9 Federal Highway Administration (2022). Fact Sheet - Surface Transportation Block Grant (STBG)

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/stbg.cfm

10 Federal Highway Administration (2022). Highway Safety Improvement Program (HSIP). https://highways.dot.gov/safety/hsip

11 Federal Highway Administration (2023). Strategic Highway Safety Plan (SHSP). https://highways.dot.gov/safety/hsip/shsp

12 Federal Highway Administration (2022). Highway Safety Improvement Program (HSIP). https://highways.dot.gov/safety/hsip/shsp

13 Federal Highway Administration (2022). Railway-Highway Crossings Program (RHCP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/rhcp.cfm

14 Federal Highway Administration (2022). Fact Sheet - National Highway Freight Program (NHFP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nhfp.cfm

15 US Department of Transportation (2022). Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD). https://www.transportation.gov/rural/grant-toolkit/advanced-transportation-technologies-and-innovative-mobility-deployment

16 Federal Railroad Administration (2022). Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program.

https://railroads.dot.gov/grants-loans/competitive-discretionary-grant-programs/consolidated-rail-infrastructure-and-safety-2

17 Federal Motor Carrier Safety Administration (2021). High Priority (HP) Grant Program.

https://www.fmcsa.dot.gov/grants/mcsap-high-priority-grant/motor-carrier-safety-assistance-program-mcsap-high-priority-grant

18 US Department of Transportation (2022). Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program. https://www.transportation.gov/RAISEgrants

19 US Department of Transportation (2023). Infrastructure for Rebuilding America (INFRA) Grant Program.

https://www.transportation.gov/grants/infra-grant-program

20 Federal Highway Administration (2022). Bridge Formula Program (BFP). https://www.fhwa.dot.gov/bipartisan-infrastructure-law/bfp.cfm

21 Federal Highway Administration (2022). Fact Sheet - Carbon Reduction Program (CRP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

22 Federal Highway Administration (2022). Fact Sheet - National Electric Vehicle Infrastructure (NEVI) Formula Program. https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

23 Federal Highway Administration (2022). Fact Sheet - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program. https://www.fhwa.dot.gov/bipartisan-infrastructure-law/protect_fact_sheet.cfm

24 Federal Highway Administration (2022). Fact Sheet - Bridge Investment Program (BIP).

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/bip_factsheet.cfm

25 Federal Highway Administration (2023). Charging and Fueling Infrastructure Grant Program. https://www.transportation.gov/rural/grant-toolkit/charging-and-fueling-infrastructure-grant-program

26 US Department of Transportation (2023). The National Infrastructure Project Assistance Program (Mega Program). https://www.transportation.gov/grants/mega-grant-program#:~:text=The%20Mega%20Program%20(the%20National,%2C%20mobility%2C%20or%20safety%20benefits

27 Pipeline and Hazardous Materials Safety Administration (2023). Natural Gas Distribution Infrastructure Safety and Modernization Grants. https://www.phmsa.dot.gov/about-phmsa/working-phmsa/grants/pipeline/natural-gas-distribution-infrastructure-safety-and-modernization-grants

28 Georgia Department of Transportation (n.d.). Local Maintenance & Improvement Grant (LMIG). https://www.dot.ga.gov/GDOT/Pages/LMIG.aspx

29 Georgia Department of Transportation (n.d.). Safe Routes to School. Safe Routes to School. https://saferoutesga.org/

30 Georgia Department of Transportation (2021). Statewide Strategic Transportation Plan.

https://www.dot.ga.gov/InvestSmart/SSTP/GDOT_FINAL_2021SSTP.pdf

31 Georgia Transportation Infrastructure Bank (2023). https://srta.ga.gov/gtib/

32 Atlanta Regional Commission (2023). Community Development Assistance Program.

https://atlantaregional.org/community-development-assistance-program

33 Cobb County Government (2023). Special Purpose Local Option Sales Tax.

https://www.cobbcounty.org/board/splost#:~:text=What%20is%20SPLOST%3F,and%20participating%20qualified%20municipal%20governments

34 Georgia Department of Transportation (2022). Public Private Partnerships (P3) Program. https://www.dot.ga.gov/GDOT/Pages/P3.aspx

35 Federal Reserve Bank of New York (2023). Center for Microeconomic Data, Survey of Consumer Expectations. https://www.newyorkfed.org/microeconomics/sce#/

Chapter 5 Endnotes

1 Federal Highway Administration (2023). Proven Safety Countermeasures. https://highways.dot.gov/safety/proven-safetycountermeasures

2 Federal Highway Administration (2021). Proven Safety Countermeasures - Appropriate Speed Limits for All Road Users. https://highways.dot.gov/sites/fhwa.dot.gov/files/App%20Speed%20Limits_508.pdf

3 Federal Highway Administration (2021). Proven Safety Countermeasures - Crosswalk Visibility Enhancements. https://highways.dot.gov/sites/fhwa.dot.gov/files/Crosswalk%20Visibility%20Enhancements_508.pdf

4 Federal Highway Administration (2021). Proven Safety Countermeasures - Leading Pedestrian Intervals. https://highways.dot.gov/sites/fhwa.dot.gov/files/Leading%20Pedestrian%20Interval_508.pdf

5 Federal Highway Administration (2021). Proven Safety Countermeasures - Medians and Pedestrian Refuge Islands in Urban and Suburban Areas. https://highways.dot.gov/sites/fhwa.dot.gov/files/Medians%20and%20Pedestrian%20Refuge%20Islands_508.pdf

6 Federal Highway Administration (2021). Proven Safety Countermeasures - Backplates with Retroreflective Borders. https://highways.dot.gov/sites/fhwa.dot.gov/files/Backplates%20with%20Retroreflective%20Borders_508.pdf

7 Federal Highway Administration (2021). Proven Safety Countermeasures - Corridor Access Management. https://highways.dot.gov/sites/fhwa.dot.gov/files/Corridor%20Access%20Management_508.pdf

8 Federal Highway Administration (2021). Proven Safety Countermeasures - Dedicated Left- and Right-Turn Lanes at Intersections. https://highways.dot.gov/sites/fhwa.dot.gov/files/Left-%20and%20Right-Turn%20Lanes_508.pdf

9 Federal Highway Administration (2021). Proven Safety Countermeasures - Yellow Change Intervals. https://highways.dot.gov/sites/fhwa.dot.gov/files/Yellow%20Change%20Intervals_508.pdf

10 Federal Highway Administration (2021). Proven Safety Countermeasures - Lighting. https://highways.dot.gov/sites/fhwa.dot.gov/files/Lighting_508.pdf

11 Georgia Department of Transportation (2023). GDOT Design Policy Manual. https://www.dot.ga.gov/PartnerSmart/DesignManuals/DesignPolicy/GDOT-DPM.pdf

12 Cobb County, GA (2018). Cobb County Development Standards. https://s3.amazonaws.com/cobbcounty.org.if-us-east-1/2018-07/2018Development-Standards-Complete-7.3.18.pdf

13 Federal Highway Administration (2022). Truck Parking Development Handbook.

https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/docs/Truck_Parking_Development_Handbook.pdf

14 Federal Highway Administration (2023). Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition. https://mutcd.fhwa.dot.gov/pdfs/11th_Edition/mutcd11thedition.pdf

15 United States Access Board (2014). ADA Accessibility Standards. https://www.access-board.gov/ada/

16 United States Access Board (2023). Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way. https://www.federalregister.gov/documents/2023/08/08/2023-16149/accessibility-guidelines-for-pedestrian-facilities-in-thepublic-right-of-way

17 Atlanta Regional Commission (2024). 2024 Atlanta Regional Freight Mobility Plan. https://atlantaregional.org/what-we-do/transportation-planning/freight-transportation/2024-atlanta-regional-freight-mobility-plan/

18 Cobb County, GA (2023). Cobb County Safety Action Plan, p. 145. https://s3.amazonaws.com/cobbcounty.org.if-us-east-1/s3fs-public/2023-07/Cobb%20Safety%20Action%20Plan_Technical%20Report.pdf 19 lbid, p. 152.



