



GATEWAY85
GWINNETT

Gateway85 Gwinnett CID Freight Cluster Plan

Executive Summary



prepared for

**GATEWAY85 GWINNETT
COMMUNITY IMPROVEMENT
DISTRICT**

prepared by

CAMBRIDGE SYSTEMATICS, INC.

with

**WSP USA
TRANSPORT FOUNDRY**



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Overview

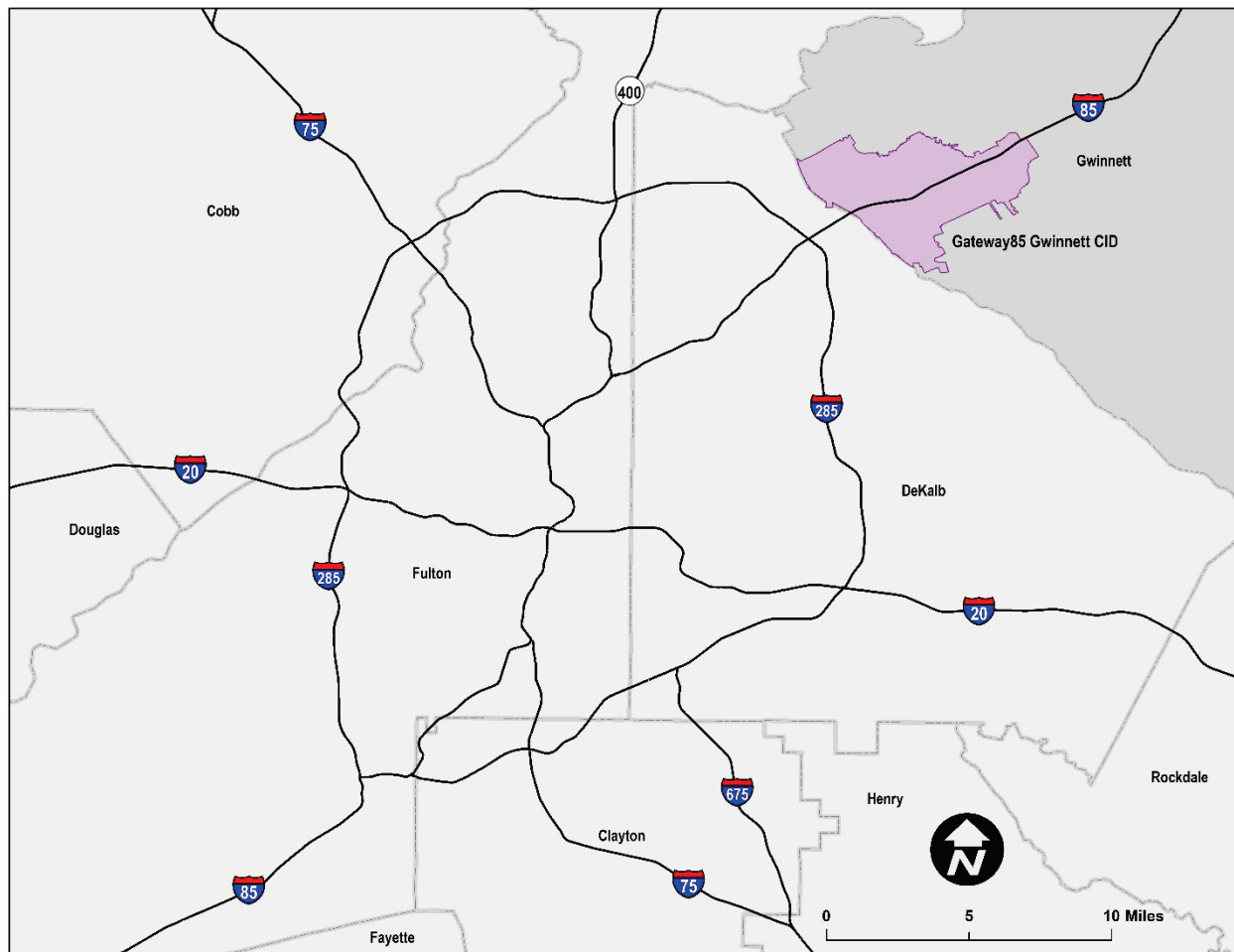
The Gateway85 Gwinnett Community Improvement District (CID) Freight Cluster Plan (FCP) is a planning study led by the Gateway85 Gwinnett CID and supported by the Atlanta Regional Commission (ARC). Unlike the CID's most recent planning initiatives, the FCP focuses exclusively on truck and freight-related considerations. Its purpose was to understand how the CID's transportation networks are being used for the handling of freight, how these uses are evolving, and what this means for the CID's priorities regarding goods movement.

The Gateway85 Gwinnett CID is the largest CID in the state in size, representing just under 800 properties. As its name suggests, the CID is positioned at the northeastern gateway for Metro Atlanta. It sits at the

junction of I-85 and I-285, two of Metro Atlanta's primary interstate highways and major freight corridors. Other regionally significant corridors including SR 140/Jimmy Carter Boulevard, SR 141/Peachtree Industrial Boulevard, and SR 13/U.S. 23/Buford Highway traverse the CID. In addition to highways, the CID is located along Norfolk Southern's Crescent Corridor, the longest freight rail corridor in the eastern United States.¹

Gateway85 Gwinnett CID Freight Cluster Plan Vision

Promote sustainable economic growth and expansion within the Gateway85 Gwinnett CID by ensuring quality access and connectivity and safe and efficient mobility of people and goods on a shared multimodal network, while supporting the Atlanta Region's continued role as a global hub for goods, services, and enterprise.

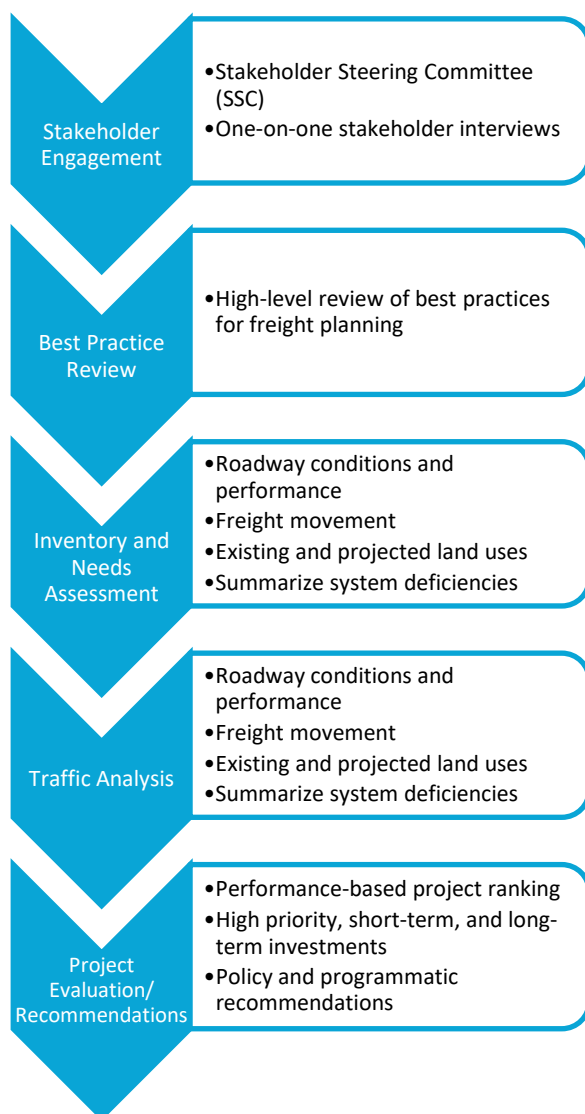


¹ GDOT, 2015 Georgia State Rail Plan, <http://www.dot.ga.gov/IS/Rail/StateRailPlan>.

Study Process

To address the complex mobility challenges in the study area, the FCP was guided by an integrated technical approach (see Figure 1) that considered current and projected multimodal network performance, system conditions, and evolving land use trends. In addition to the technical analysis, stakeholders were engaged throughout the study to ensure a comprehensive perspective on investment needs. This integrated process directly informed the identification and prioritization of projects and policies for the study area, as reflected in final study recommendations.

Figure 1 Gateway85 Gwinnett CID Freight Cluster Plan Study Process



Stakeholder Engagement

A Stakeholder Steering Committee (SSC) was formed to provide input throughout the FCP. SSC members included representatives from the Gateway85 Gwinnett CID Board of Directors, the City of Norcross, the City of Peachtree Corners, the City of Doraville, Gwinnett County Department of Transportation, DeKalb County Office of Planning, Gwinnett County Department of Transportation, the ARC, and the Georgia Department of Transportation (GDOT). Feedback was provided at key points during the process including existing conditions/trends, key investment needs, the project evaluation and ranking process, and proposed investments. SSC members were critical throughout the study for providing feedback on key investment proposals.

In addition to the SSC, multiple stakeholders throughout the CID study area participated in in-depth, one-on-one interviews. These interviews provided insight on the study area industries' use of the freight system, identified the challenges associated with goods movement within the study area, and opportunities for improvement. Major themes from those interviews were:

- **Congestion and Mobility** –Major corridors and access points in the CID study area (e.g., SR 140/Jimmy Carter Boulevard, SR 13/U.S. 23/Buford Highway, etc.) experience congestion and mobility challenges.
- **Multimodal Access** – Improved transit service was viewed as part of the solution for transportation challenges in the study area.
- **Truck Parking** – The CID area experiences truck parking challenges as drivers sometimes park in private lots, driveways, or in the public right-of-way.
- **Roadway and Intersection Design** – Several roadways and intersections in the CID area are too narrow or tight for truck traffic.
- **Aging Building Stock** – The CID area's existing stock of warehouses are not up to current standards for modern supply chains. Rehabilitating older buildings for e-commerce is an opportunity given the area's proximity to downtown Atlanta and other regional centers.

Key Investment Needs

The technical analysis along with stakeholder engagement revealed the key investment needs for freight mobility across the CID study area.

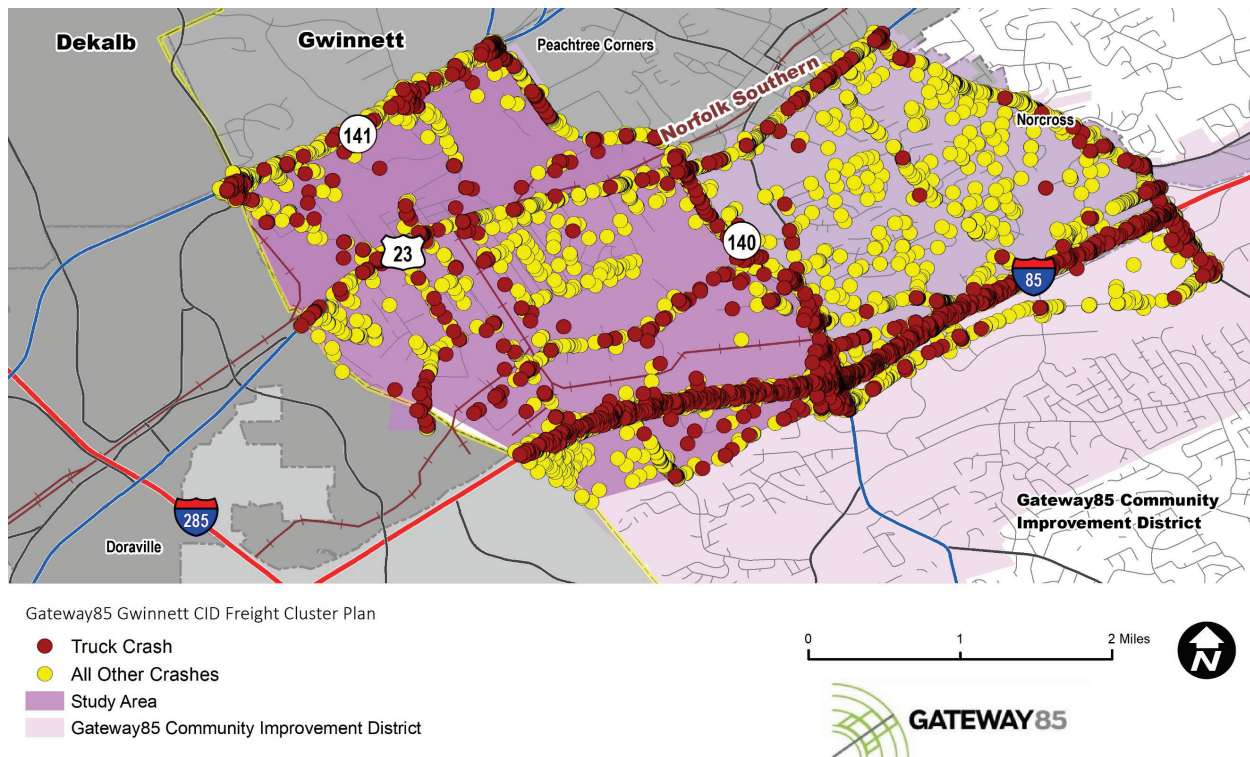
Safety Needs

Roadway safety represents an important measure of performance not only because of the potential loss of life and damage to property, but also because of the role it plays in congestion. There were 17,380 crashes in the CID study area over the 2014 to 2018 time period (see Figure 2). Many of those crashes, particularly those involving commercial vehicles, occurred on the major roadways traversing the CID study area: I-85, SR 13/U.S. 23/Buford Highway, SR 140/Jimmy Carter Boulevard, SR 141/Peachtree Industrial Boulevard, Best Friend Road, Oakbrook Parkway, and McDonough Drive. Altogether, these facilities accounted for about 60 percent of the crashes that occurred in the CID study area over the 5-year time period. Portions of those corridors also had crash rates that exceeded statewide averages for similar roadways.

Roadway Capacity and Operations Needs

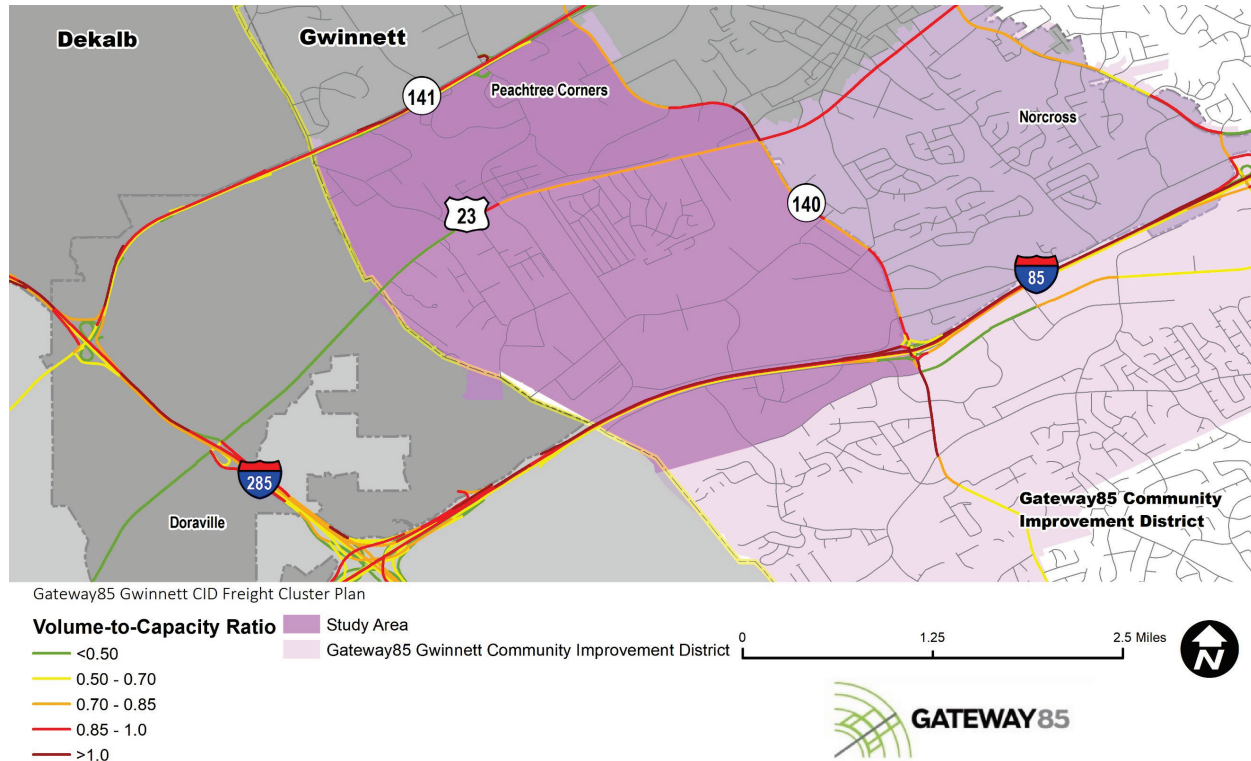
The performance of key intersections and roadways throughout the CID study area was measured via a level of service (LOS) analysis. Overall, the analysis found that many intersections and roadway segments exhibited capacity-constrained conditions with an LOS “D” or worse rating, indicating that roadway users are experiencing excessive levels of delay (see Figure 3). Several intersections along SR 140/Jimmy Carter Boulevard perform at an LOS “E” level or worse including those at SR 141/Peachtree Industrial Boulevard, SR 13/U.S. 23/Buford Highway, Pacific Drive, and Corley Road. The traffic analysis results indicated the entire SR 140/Jimmy Carter Boulevard corridor, as well as other major freight routes in the area, is generally capacity constrained.

Figure 2 Crashes by Vehicle Type (2014-2018)



Source: GDOT; Cambridge Systematics, Inc. analysis.

Figure 3 **2015 Volume-to-Capacity Ratio**
Morning Peak Period



Source: ARC Travel Demand Model; Cambridge Systematics, Inc. analysis.

Truck Parking Needs

Stakeholders stated that truck parking is a challenge for the CID study area. They noted that businesses sometimes find drivers not serving their business parked in their lots and driveways. Businesses in the Best Friend Road/Brook Hollow Parkway corridor in particular cited this as a challenge. In addition to driveways and parking lots, stakeholders noted that trucks sometimes park along Norcross Tucker Road and Pelican Drive. Unauthorized truck parking challenges in the CID study area are driven both by short-term staging needs and the region's lack of overnight parking capacity.

not have benches or shelters. Adding these amenities would significantly improve the experience of the study area's transit riders.

There are no bicycle facilities on any of the corridors in the study area. Sidewalks are present throughout most of the study area. However, there are gaps in the network with apparent demand for sidewalks. Bicycle facilities (e.g., shared lanes, bike lanes, and multi-use paths) and greater sidewalk coverage would improve the travel experience for cyclists and pedestrians and positively impact safety.

Transit, Bicycle, and Pedestrian Infrastructure Needs

The CID study area is served by two transit agencies, Gwinnett County Transit (GCT) and the Georgia Regional Transportation Authority (GRTA). GCT provides frequent service over major routes in the study area. However, there is no local bus service provided along Crescent Drive (which provides last-mile access to many businesses) and the CID area is generally lacking in transit amenities. Many of the CID area's bus stops do

Land Use Needs

Projections for employment and population for the CID study area indicate that jobs will continue to outnumber households. This implies that access for commuters will become increasingly important as population and job density both increase. It also implies that increased pressure will be placed on existing freight-intensive land uses for residential and other non-freight-related activities as more persons seek housing close to jobs and transit (as the Connect Gwinnett Transit Plan called for a multimodal transit hub in the CID study area). In the

scenario that jobs continue to outnumber households, conflicts and competing needs may arise that require the CID's stakeholders to develop strategies for freight-intensive industries to co-exist with other economic activities. Strategies may include prescriptive road design that specifically addresses trucks interacting with other roadway users, development guidelines that control the proximity of industrial land uses to residential areas, additional consideration for the routing of trucks through the CID study area and considering any current and future truck parking and staging needs.

Project Identification, Evaluation and Prioritization

Project Identification

Potential projects to address investment needs for the study area were first identified through an examination of completed state, regional, and local transportation plans. Once projects in past and current plans were identified, they were reviewed against investment needs identified as part of the FCP to assess if any refinements were needed to existing investment proposals. The project team also identified additional projects that could improve mobility in the CID study area based on insights gained from the technical analysis and needs articulated by study stakeholders.

Generally, projects identified for the CID study area support one of the following key themes for improving mobility:

- Increase capacity or improve operations on a primary freight roadway;
- Divert non-freight traffic away from freight corridors through new connections or improvements to alternate non-freight routes; and
- Improve the safety performance of the study area's roadways through improved intersection and roadway design, access management, and other operational enhancements.

In total, 149 different projects were identified, including intersection improvements, pedestrian upgrades,

roadway operational projects, new connections, and capacity expansions.

Evaluation and Prioritization

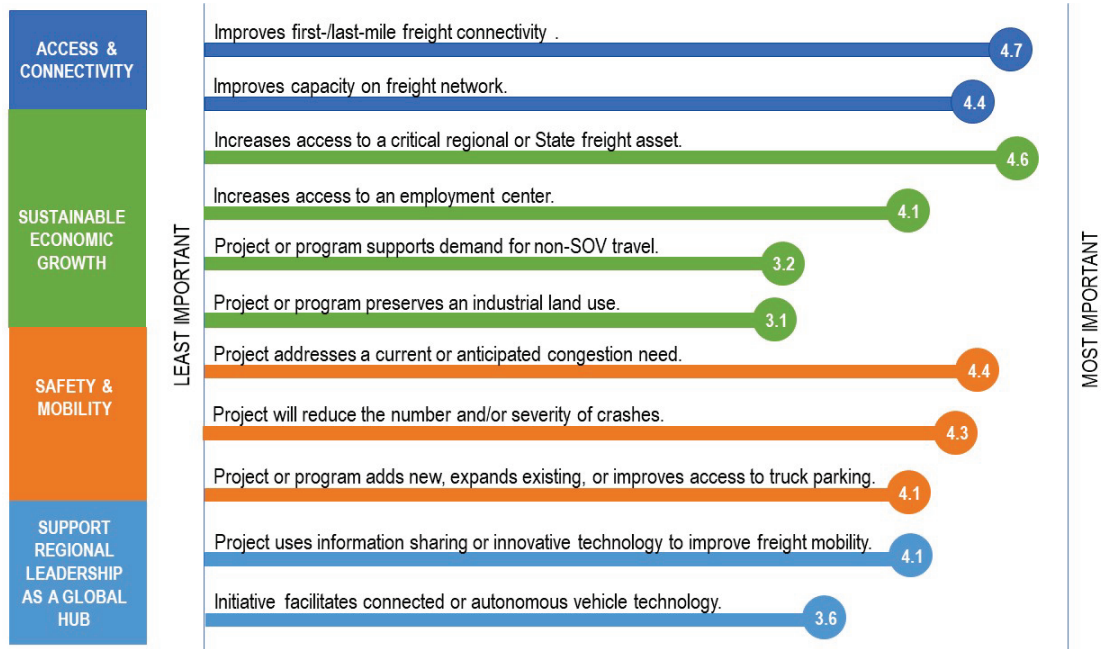
Projects were evaluated and prioritized based on their potential to contribute to the advancement of the study area's goals and objectives which were carefully defined to align with stated investment needs. Study goals focused on improved access and connectivity, sustainable economic growth and expansion, safety, and support of the Atlanta region's continued role as global business hub. The FCP's objectives comprised a broad set of strategies to guide investment decisions in a manner that aligned with the stated goals.

Gateway85 Gwinnett CID Freight Cluster Plan Goals

1. *Improve access and connectivity within the CID and between the CID and Metro Atlanta.*
2. *Support sustainable economic growth and expansion.*
3. *Improve safety and mobility for people and goods.*
4. *Support the Atlanta region's continued role as global hub for goods, services, and enterprise by identifying future transportation opportunities and innovative solutions.*

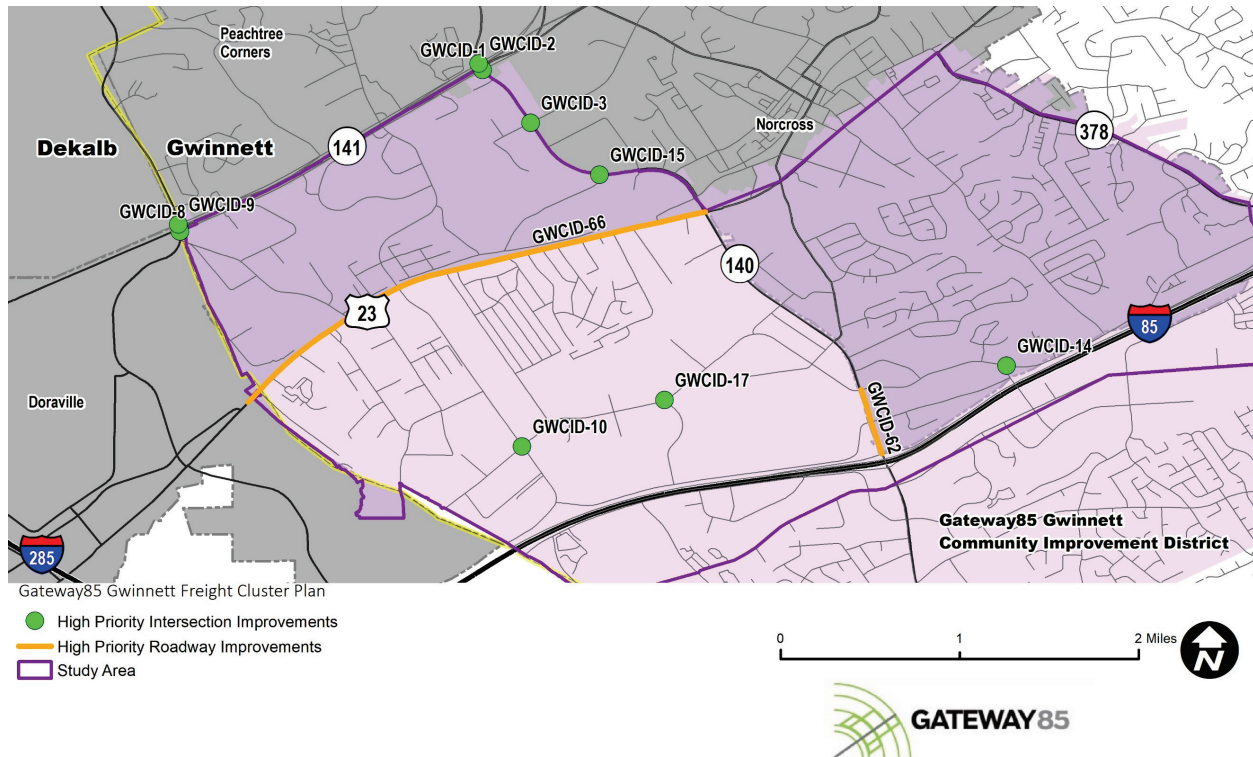
A set of 11 performance measures were used to evaluate each project's relative ability to advance the CID's goals/objectives. The performance framework was presented to the SSC and members were asked to rank each performance measure from 1 (least important) to 5 (most important) based on its importance to advancing the goals of the FCP. The results of the SSC rankings are presented in Figure 4. The performance measure rankings were translated into available points that a project may receive during the evaluation process.

Figure 4 Performance Measure Prioritization



Source: Cambridge Systematics, Inc.

Figure 5 High Priority Projects



Source: Cambridge Systematics, Inc.

Fiscally Constrained Short-Term Action Plan

million. The fiscally constrained short-term action plan projects are depicted in Figure 6.

The fiscally constrained short-term action plan is a ten-year fiscally constrained set of projects and action steps that can be taken by the CID given currently available funding sources. The CID can anticipate approximately \$35 - \$50 million over a 10-year time frame to support capital and operational transportation improvements based on historical funding trends. Projects included in the short-term action plan are further divided into High Priority projects and general short-term action plan projects, policies, and programs.

High Priority Short-Term Action Plan Projects

High priority projects represent those improvements that have the biggest impact to freight mobility within the time and fiscal constraints of the short-term action plan. Generally, these projects are located on the CID study area's primary freight corridors and last-mile connectors (see Figure 5 and Table 1). The high priority project list is a combination of costly, high-impact projects and less costly, but still impactful projects. The strategy behind this approach is to provide the CID with a group of projects that are able to take advantage of the full range of funding opportunities available to the CID. As high priority projects, these will advance to implementation first as either fully or partially funded projects.

Fiscally Constrained Short-Term Projects

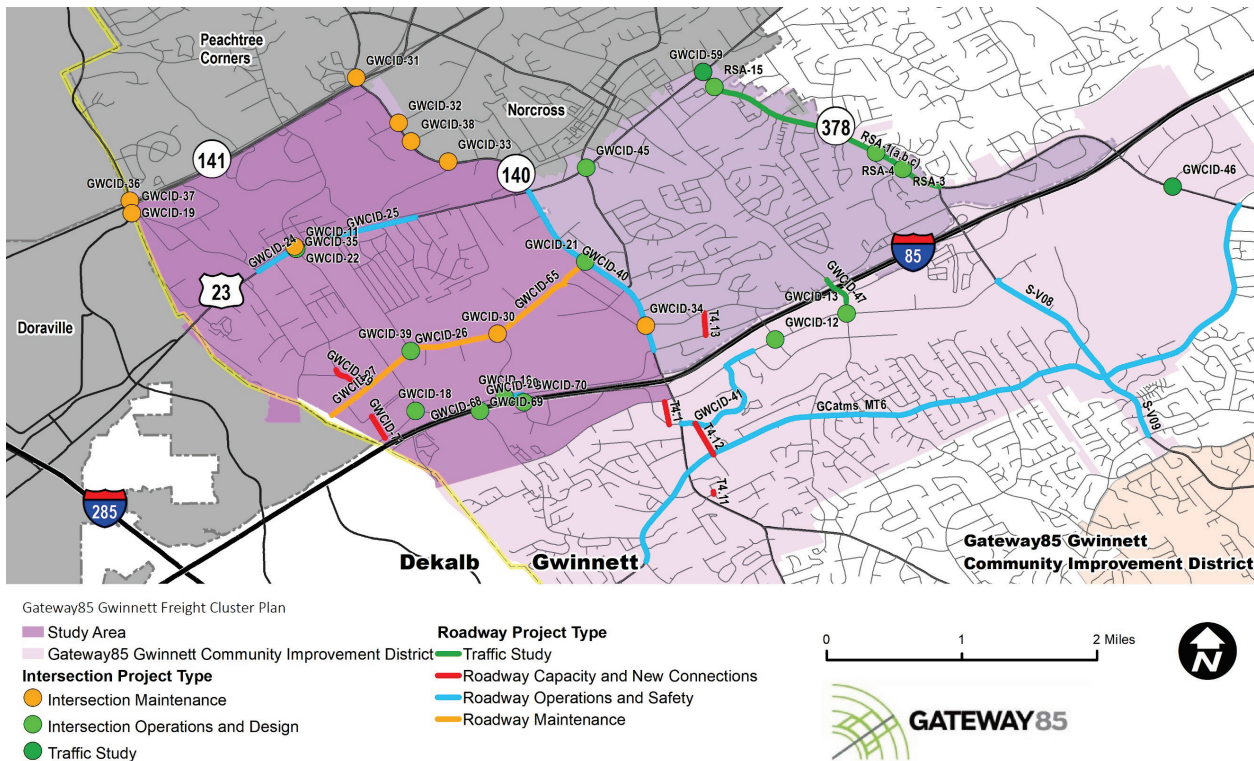
Along with the high priority project list, the short-term action plan project list is comprised of those projects that can be funded only if the upper range of estimated funding is realized. As such, the short-term action plan projects represent the highest ranked projects within the CID boundary after the high priority projects, resulting from the evaluation process developed with the SSC as part of the study, that still fall within funding constraints. The total cost of the short-term project list is about \$49

Table 1 High Priority Projects

Project ID	Location	Description	Cost
GWCID-66 (CTpnd_005a)	SR 13/U.S. 23/Buford Highway from Gwinnett-DeKalb County Line to SR 140/Jimmy Carter Boulevard	Widen Buford Highway from 4 to 6 lanes by adding one through lane in each direction. This project coincides with CTpnd_005a in the Gwinnett CTP. <u>Note that only the initial scoping and preliminary engineering components could advance as part of the short-term action plan.</u>	\$25,000,000
GWCID-62	SR 140/Jimmy Carter Blvd. at Crescent Dr./Goshen Springs Rd.	Add a fourth southbound through lane on Jimmy Carter Blvd. extending back to Brook Hollow Pkwy. This will also require the installation of a fourth southbound receiving lane exiting the intersection and extending to the I-85 interchange.	\$3,040,000
GWCID-2	SR 140/Jimmy Carter Blvd. at SR 141/Peachtree Ind. Blvd. SB	Add westbound through lane on Peachtree Industrial Blvd. Collector-Distributor at Jimmy Carter Blvd. This project could potentially be combined with project GDT_02 from the 2017 Peachtree Corners Comprehensive Transportation Plan.	\$2,400,000
GWCID-1	SR 140/Jimmy Carter Blvd. at SR 141/Peachtree Ind. Blvd. NB	Add eastbound left turn lane on Peachtree Ind. Blvd. Collector-Distributor and a northbound left turn lane on Jimmy Carter Blvd. This project could potentially be combined with project GDT_02 from the 2017 Peachtree Corners Comprehensive Transportation Plan.	\$1,630,000
GWCID-8	SR 141/Peachtree Industrial Blvd. NB and Winters Chapel Rd.	Change the eastbound approach on Peachtree Industrial Blvd. NB Collector-Distributor to 2 left turn lanes, 2 through lanes, and 1 right turn lane.	\$3,000,000
GWCID-9	SR 141/Peachtree Industrial Blvd. SB and Winters Chapel Rd.	Change westbound approach on Peachtree Industrial Blvd. Collector-Distributor to 2 left turn lanes, 1 through lane, and 1 right turn lane; add a southbound through lane, change the southbound through/right lane to right turn only, and add a southbound left turn lane on Winters Chapel Rd.	\$1,350,000
GWCID-14	Brook Hollow Parkway and Center Way	Change westbound approach on Brook Hollow Pkwy. to 2 left turn lanes, 1 through lane, and 1 through/right lane; widen EB approach on Brook Hollow Pkwy. to add right turn lane and change existing right turn lane to through lane; remove NB median on Center Way to create new receiving lane for the WB left turn and remove the channelized NB right turn; implement split phasing for the northbound and southbound phases; relocate the stop bar on the Brook Hollow Pkwy. WB approach to accommodate left-turning trucks from the SB Center Way approach. This project supports project GCint_053 in the Gwinnett County CTP.	\$1,010,000
GWCID-10	Button Gwinnett Dr. and Best Friend Rd.	Implement dual left turn lanes on Best Friend Rd. WB; relocate the stop bar on the NB/WB approach of Button Gwinnett Dr. farther from the intersection.	\$750,000
GWCID-17	Best Friend Rd. and Nancy Hanks Dr.	Add a northbound right turn lane on Nancy Hanks Dr; increase the turning radius to accommodate right-turning heavy trucks from Best Friend Rd. EB to Nancy Hanks Dr. SB.	\$530,000
GWCID-15	SR 140/Jimmy Carter Blvd. and Corley Rd.	Add a northbound right turn lane on Corley Rd; increase turning radius to accommodate right-turning trucks from SR 140 EB to Corley Rd. SB.	\$480,000
GWCID-3	SR 140/Jimmy Carter Blvd. at Atlantic Blvd. SB	Add right turn lane on Atlantic Blvd. westbound approach; install a mountable curb or increase turning radius to accommodate right-turning trucks from SR 140 NB to Atlantic Blvd. EB. This project further supports project CTP_37 in the Peachtree Corners CTP as extending Atlantic Blvd. to Jones Mill Rd. would likely increase WB through movements on Atlantic Blvd.	\$450,000

Source: Cambridge Systematics, Inc. analysis.

Figure 6 Fiscally Constrained Short-Term Action Plan Projects



Source: Cambridge Systematics, Inc.

Policy and Programmatic Recommendations

In addition to project recommendations, the FCP also identified a set of policy and program recommendations to address the various freight-driven challenges faced by the CID. These policy and program recommendations are intended to compliment proposed transportation investments and support sustainable performance outcomes for the study area.

Policy Recommendations

Policy recommendations represent guiding principles for how the CID addresses its freight needs. There are four main recommendations:

- **Designate Critical Urban Freight Corridors** – Petition the ARC and GDOT to have major freight routes added to the Critical Urban Freight Corridor network.

- **Freight as a Good Neighbor** – Establish buffer zones and transitional land uses to serve as barriers between freight-intensive and residential land uses.
- **Complete Streets Considerations for Freight** – Partner with the Gwinnett County DOT to develop prescriptive road designs that specifically address trucks interacting with other roadway users.
- **Help Implement the Gwinnett County Truck Parking Study** – Gwinnett County is in the final stages of completing a county-wide truck parking study that will identify the county's truck parking needs and challenges. The CID should work with Gwinnett County to implement the recommendations of the truck parking study once it is finalized.

Program Recommendations

Program recommendations represent sets of related activities for addressing freight needs. There are three main program recommendations:

The Long-Term Vision Project List represents the projects needed to achieve the CID's freight mobility goals beyond the short-term horizon. They are not constrained by time or cost and are divided into two tiers: Tier 1 and Tier 2. Tier 1 projects are the highest-scoring recommendations that could not be included in the short-term action plan. They should be elevated to the short-term action plan should the CID secure additional funding. Tier 2 projects are moderate- to low-scoring recommendations that should be pursued opportunistically as funding opportunities arise. Tier 1 projects are shown in Figure 7.