BCD REGIONAL FREIGHT MOBILITY PLAN

APPENDIX A

Technical Memorandum

Stakeholder & Public Engagement Summary

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November 2021

BCDCOG
BERKELEY-CHARLESTON-DORCHESTER
COUNCIL OF GOVERNMENTS

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1. INTRODUCTION

The three-county Berkeley-Charleston-Dorchester (BCD) region, is experiencing significant growth, with new industry and residents relocating to the area daily. With a U.S. Census population of roughly 775,000 as of 2019, the tri-county region is growing by an approximate 30 new residents each day. U.S Census data shows that between 2010-2019, the region's population grow by roughly 20 percent. By comparison, over the same period the populations of South Carolina and the United States grew by 11 and 6 percent, respectively. This regional growth was approximately three times the national average for the same period. This growth, however, has come with challenges as many roadways are operating at or near capacity. Growing congestion negatively impacts the movement of people and goods in the region, degrading quality of life factors. This can result in the loss of existing and potential businesses or residents, thus hurting the economic health of the area.

The region's economy benefits from a diverse economic base with industries ranging from hospitality and information technology to aeronautical and automotive manufacturing. Both multi-national corporations and fast-growing startup companies have been taking advantage of the globally competitive business environment of the region. The Charleston Regional Development Alliance, in FY 2018-2019, announced that corporate expansions and relocations to the area resulted in a $392 million economic impact and created 854 new jobs.

The Charleston region serves as a key trade gateway, linking the state and southeastern U.S. markets to the world. Freight mobility is an important aspect of the area's transportation system performance and a major driving force for the local economy. The region has direct access to two major interstates (I-26 and I-95), various U.S. highways (US 17, US 52, US 78), an International Airport, the Port of Charleston (named the most productive and fastest growing port in North America), two major Class I railways, intermodal facilities, and a diverse and growing mix of logistics companies and warehouse/distribution centers throughout the area. The presence of companies such as Boeing and Volvo have also supported a strong and growing manufacturing base.

There are several major freight-related projects, at various stages of planning and development, occurring in the area that would impact the freight transportation system. The South Carolina Ports Authority (SCPA), the State, and other partners have committed approximately $2.4 billion in port-related infrastructure to improve the operations and movement of goods at the Port and throughout the state. The planned SCPA infrastructure investments include the construction of inland port facilities, existing port terminal improvements, and new terminal and intermodal facility construction.

The Port of Charleston currently operates five cargo terminals, spanning three municipalities along the Cooper River, and generates freight movements to and from these locations that are primarily supported by truck and rail. The Port has recorded strong growth over the years, and the committed investments will support future trade demands and maintain the economic competitiveness of the trade gateway. SCPA is currently working to deepen the harbor channel of the Port of Charleston from 45 feet to 52 feet to accommodate the growing number of Post-Panamax and New Panamax vessels. When completed, the harbor deepening will make the Charleston harbor the deepest on the U.S. East Coast. Other infrastructure projects underway include the construction of the Hugh Leatherman Terminal (HLT), a new 286-acre container

terminal in North Charleston that will boost port capacity by roughly 50 percent when fully constructed, and the Port Access Road, currently under construction, that will connect the HLT container terminal directly to I-26. Palmetto Railways intends to develop a new intermodal transfer facility adjacent to the HLT facility to allow for near-dock rail service and will also include new rail and road alignments and improvements to existing roadways.

1.1 About The Freight Mobility Plan

The BCD Regional Freight Mobility Plan (Freight Plan) seeks to provide an in-depth evaluation of the area's freight conditions, trends, challenges, and opportunities, and guide freight investment in the region. The plan development process builds stakeholder engagement and fosters relationships with the freight community, both public and private.

The key objectives of the Freight Plan are to:

- Collect system freight data, across modes, that support an ongoing regional freight-planning function.
- Create a framework of analysis for freight performance measures and the identification of freight-specific issues on the transportation network to inform a set of strategic recommendations.
- Develop a framework for incorporating Intelligent Transportation System (ITS) efforts and emerging technologies into freight planning, modeling, and prioritization processes.
- Guide the prioritization and implementation of future investments, policies, and strategies in the short-, mid-, and long-term that improve the safety, security, mobility, operations and reliability of the freight transportation system and support the economic development goals of the region.

1.2 Purpose of Stakeholder & Public Engagement

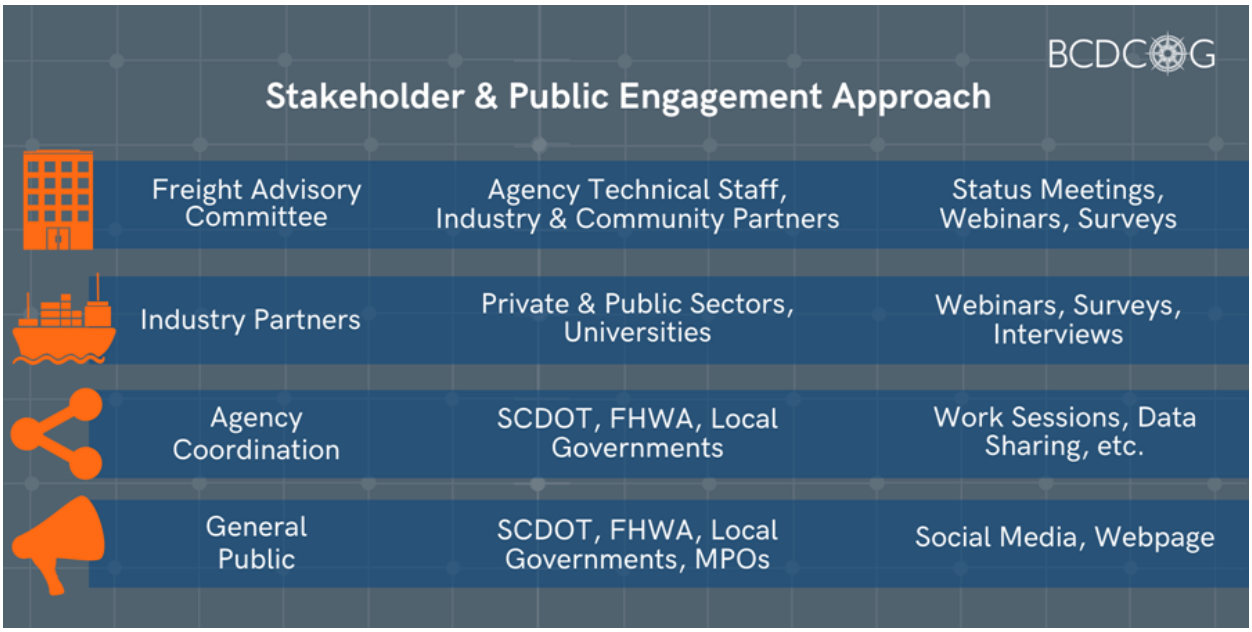
Developing and maintaining meaningful relationships between the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) and the public- and private-sector freight communities is critical for both the development and implementation of the Freight Plan. This Stakeholder and Public Engagement Summary outlines the tactics used for establishing and maintaining these relationships. **Stakeholders play a critical role in identifying freight transportation system deficiencies and opportunities, prioritizing projects, and generating buy-in for public policy and future investment in freight infrastructure.** This summary outlines the strategies used to engage the public and encourage participation in the transportation planning process, highlight the importance of planning for freight and goods movement, and inform the public of the essential role that freight plays in the regional economy.

2. STAKEHOLDER & PUBLIC ENGAGEMENT PROCESS

2.1 STAKEHOLDER & PUBLIC ENGAGEMENT APPROACH AND RESULTS

Developing meaningful relationships with private-sector freight industries and public-sector agencies supporting the freight transportation network is the basis for this stakeholder and public engagement approach. (**Figure 2-1**) This approach also includes high-level communication with the general public about the freight planning process and the role of freight in the economy. The methods of engagement are discussed further below.

Figure 2-1: Stakeholder & Public Engagement Approach



Because of the aggressive nature of the study schedule, the inherent overlap between the BCD Freight Plan, the SCDOT Statewide Freight Plan Update, and the I-26 Congestion Management Plan, and the uncertainty surrounding the COVID-19 pandemic, the Stakeholder and Public Engagement Plan emphasized online engagement (webinars, online meetings, and surveys). Each outreach element is identified in the schedule in **Figure 2-2**.

2.2 FREIGHT ADVISORY COMMITTEE

The Federal FAST Act encourages a regional Freight Advisory Committee be empaneled and continue to function outside of the plan development process. As such, the established CHATS Freight Advisory Committee (FAC) served as the FAC and **is responsible for championing the Freight Plan and its project, programmatic, and policy-level elements**. Members of the FAC are listed in **Table 2.1**.

Figure 2-2: Stakeholder & Public Engagement Schedule

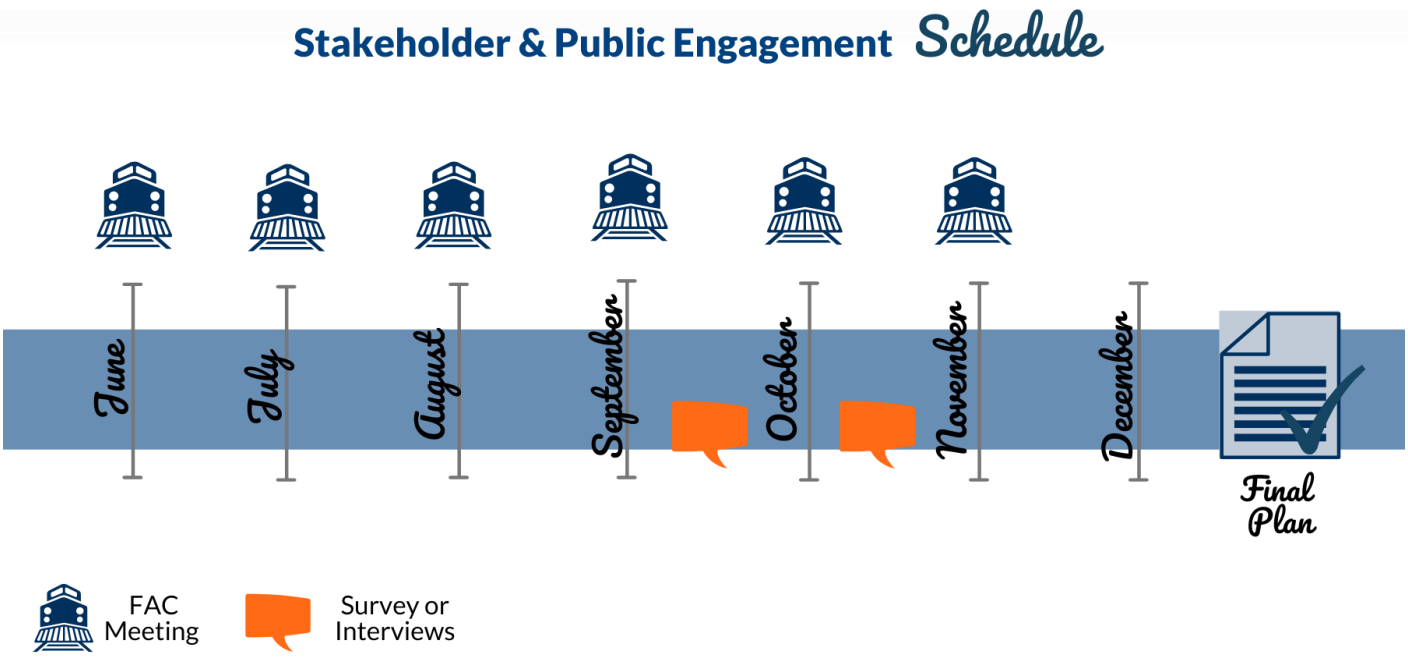


Table 2.1: CHATS FAC Members

Name	Organization
Kenny Skipper	City of North Charleston
Christopher Morgan	City of Charleston
Charles Drayton	City of North Charleston
Steve Thigpen	Charleston County
Jason Ward	Dorchester Country
Rick Todd	SC Trucking Association
Hampton Lee	SC State Ports Authority
Tarek Ravenel	Palmetto Railways
Coleman Thompson	Hunter Transportation Co. Inc.
Keith Johnson	HJ Trucking
DJ Mayer	Southeastern Freight Line, Inc.
Brad Morrison	Town of Mount Pleasant
John Truluck	Dorchester County Economic Development
David L. Gray	SCDOT
David Caimbeul	Joint Base Charleston

The FAC is responsible for the policy-level elements of the Freight Plan. The FAC met monthly during the development of the Freight Plan. The meetings were structured so the first hour was an educational lunch-and-learn on freight-related topics called the Palmetto Freight Series and the second hour was for study-specific updates and discussion. FAC meetings were held virtually using Adobe Connect throughout the duration of the project due to COVID-19 public health concerns and social distancing needs. (**Figure 2-3**) In-person meetings and activities were not scheduled, following the guidance from the Centers for Disease Control and Prevention and SCDHEC to ensure the safety of the committee members and project team. All meetings were recorded and published to the BCD Regional Freight Mobility Plan webpage following the meeting. A summary of the meetings held can be found in **Table 2.2**.

Figure 2-3: FAC Virtual Meeting

Table 2.2: Summary of FAC Meetings and Topics

Date	Topic	Attendees
June 4, 2020	Introduction to Freight Planning	19
July 16, 2020	Best Practices and Network Assessment	12
August 13, 2020	Land Use Analysis	14
September 10, 2020	Goals, Objectives, and Performance Measures	18
October 8, 2020	Economic Impact Analysis	15
November 12, 2020	Draft Plan Recommendations - Policies and Programs	12

Input was received from committee members in a variety of ways throughout the meetings. Open discussion, virtual polling, and interactive exercises were used to gather feedback. Detailed notes on the questions and conversation were taken during the meetings. A summary of each meeting's engagement is below.

June 4, 2020, Introduction to Freight Planning

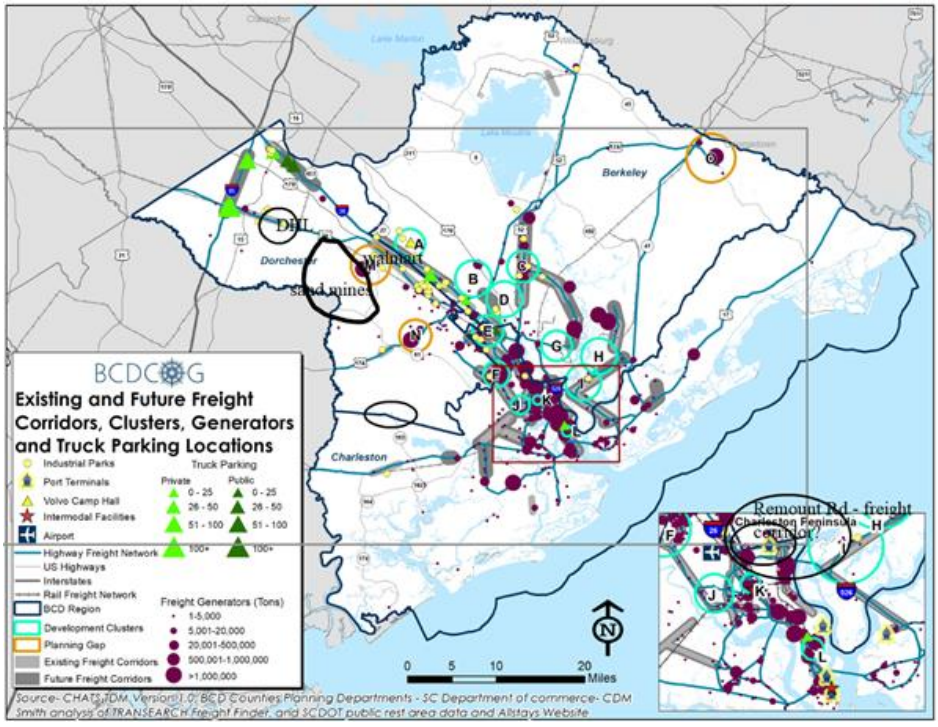
- Polling Question #1 – What is your interest in the development of a freight mobility plan?
  - The majority said they were technical planning professionals, or they were in advocacy representing an organization interested in the plan
- Polling Question #2 – Now that you know what this freight plan is, what are you most excited about?
  - The majority of people (50%) noted "fixing the condition and capacity of our highways" is what they are most excited about. "Integrating land use and transportation planning" and "understanding the economic impact of freight mobility" were also top choices. Questions and Comments
- Polling Question #3 – What other freight-related topics are of interest to you? Answers included:
  - Truck parking needs in region
  - How does Lowcountry Rapid Transit fit into the plan?
  - Truck platooning
  - Better communication of road blockage
  - Automation in the industry
  - Joint Base Charleston Air Base rear gate and Weapons Station Remount Road delivery is impacted by rail lines

July 16, 2020, Best Practices and Network Assessment

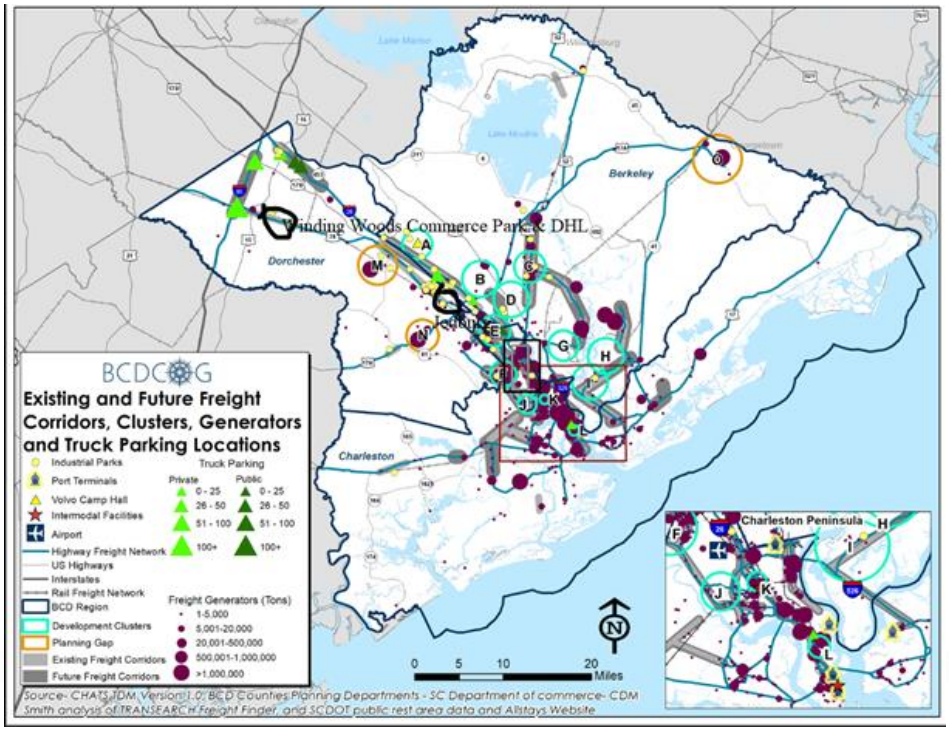
- Polling Question #1 – Do these overall truck and rail patterns look reasonable from your experience?
  - Yes, 100% said these patterns look reasonable
- Polling Question #2 – Do you have suggestions for additional routes that should be included in the draft freight network?
  - SC 41, US 52, and US 78 were the top responses
- Polling Question #3 – Which of these examples do you think is most applicable to the region?
  - Miami-Dade ITS Deployment and Golden Glades Travel Center were the top choices

August 13, 2020, Land Use Analysis

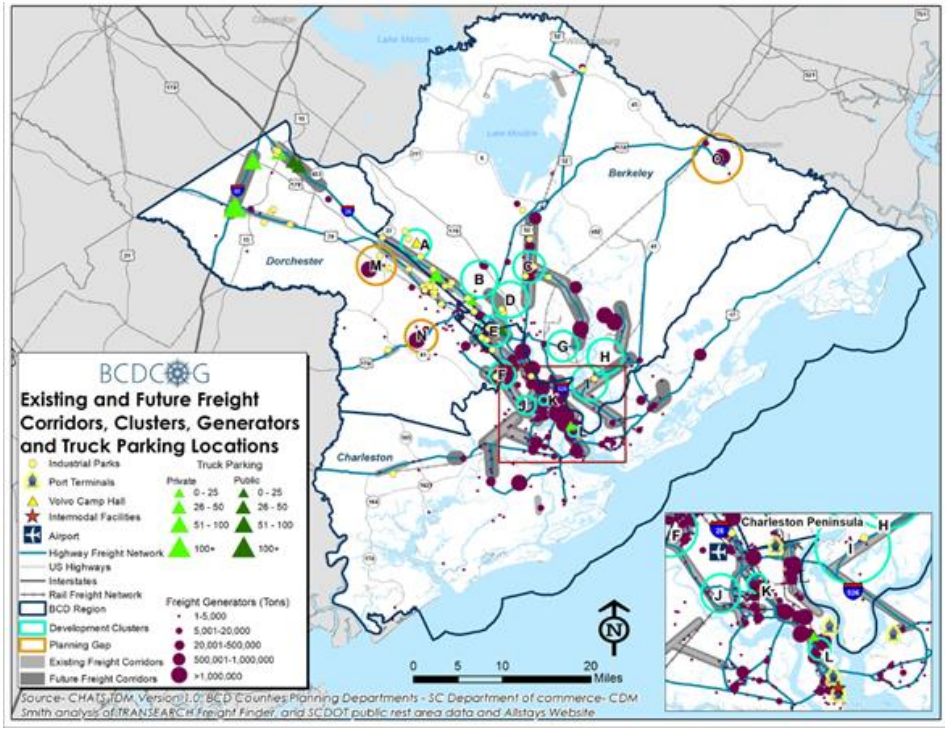
- Interactive exercise mapping locations of Freight Planning Corridors we may have missed:



- Interactive exercise mapping where freight related employment growth is anticipated:



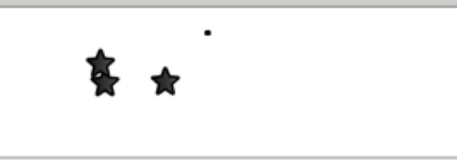
- Interactive exercise mapping cluster areas where freight facilities and infrastructure exist or are planned:



- Questions and Comments
  - Are sand mines included in the mining category? We have many sand mines that are used for construction and they generate a ton of truck traffic in the Ridgeville and Dorchester areas of Dorchester County.
  - Look at SC 27 between I-26 and US 78 that leads to the new Walmart DC. Both US78 and I-26 are included.
  - Consideration the need for truck parking, including wait times, traffic events, delays and detention.
  - Do not see this impacting 41 on any great level.

September 10, 2020, Goals, Objectives, and Performance Measures

- Interactive dot exercise, where committee members were asked to put 3 stars on the draft goals and objectives that they viewed as most important:

Berkeley Charleston Dorchester Regional Freight Mobility Plan	
Goals & Objectives	**Dot Placement**
Mobility and System Reliability • Increase travel time reliability for highway and freight corridors • Encourage land development and travel patterns that support freight modes	
Safety • Reduce the number and rate of crashes, fatalities, and serious injuries across all modes of travel • Collaborate with SCDOT to improve roadway safety in the rural areas of Berkeley, Charleston, and Dorchester Counties • Identify hazardous corridors and intersections in the rural areas of Berkeley, Charleston, and Dorchester Counties	
Infrastructure Condition • Maintain regionally significant roadways and bridges in a state of good repair	
Economic and Community Vitality • Create a resilient network by encouraging improvements and access to redundant roadways on the network • Provide a regional transportation system that supports the efficient movement of people and freight by addressing freight specific bottlenecks • Adopt and apply Complete Streets policy that specifies steps to identify community context, needs, and recommended design criteria for each transportation project, potential user, and every mode of travel	
Environmental • Encourage land use planning that supports and promotes the efficient movement of freight • Objective: Minimize or mitigate project impacts on the region's natural resources	
Equity • Improve or maintain broad-based public participation into all planning and project development processes • Incorporate freight mobility needs of all modes into prioritization processes • Engage typically under-engaged groups such as emergency response and freight movement stakeholders during transportation planning processes	

- Questions and Comments
  - Is time of day tied to this data? and are at-fault determinations considered?
  - What is the importance of using bridge deck area vs number of bridges?
  - Equity might mean "equal access" for all users. Personal vehicles outnumber trucks, but trucks outweigh personal vehicles. So accordingly, 80% of truck/personal vehicle crashes responsibility is assigned to the personal vehicle, yet trucks are "considered the problem" How should we address that?
  - Equity for freight transportation would be providing lanes throughout the designated freight network that are optimally designed for freight and possibly designated to freight exclusively.

October 8, 2020, Economic Impact Analysis

- Polling Question #1 – What freight direction has the greatest economic significance?
  - Inbound/Outbound – outbound is dependent upon inbound.
- Polling Question #2 – What industry sector employs most in the region?
  - Government/ Retail trade and accommodations and food service
- Polling question #3 – How will COVID-19 change freight?
  - Increased reshoring, shorter supply chains, shifting international trade partners

- Questions and Comments
  - What about fuel sales, other trade and activities from thru traffic?

November 12, 2020, Draft Plan Recommendations - Policies and Programs

- Questions and Comments
  - Can you clarify what "20 minutes to clear an accident" means?
    - Part of SCDOT incident management measure so their goal is to clear incidents in their incident management region within 20 minutes.
  - Warehouses often restrict trucks from parking on their facilities or queuing up in advance of opening. Shopping centers often prohibit trucks from parking except for un-loading.
    - That is why the policy that we're looking at is trying to encourage warehouses and others to allow truck parking. Part of this is due to public perception. People seem to think that allowing trucks to do so will cause more littering and require 24/7 security. Public education could encourage more places to allow parking for trucks.
  - The 511SC system is a good system with inadequate camera coverage, clarity, regular connection issues, and intentional turning off of cameras. I-526 from Daniel Island to I-26 regularly has connection issues. With the ITS systems, who will make decisions regarding visibility, clarity and other issues?
    - At this time, we cannot say with confidence. That would be part of the decision-making process, but this is a conversation that would be a critical piece of the design and implementation of a system.

3. STAKEHOLDER OUTREACH

The stakeholder outreach planned for the development of the Freight Plan includes a series of webinars, interviews and online surveys. One round of industry interviews and one online survey was administered during the course of the Freight Plan development. Stakeholders were identified through contacts within BCDCOG, the FAC, and the consulting team. The outreach activities are further described below based on audience.

3.1 INDUSTRY PARTNER OUTREACH

Industry partners include the private and non-profit sectors (universities, research partners, etc.). A series of interviews and an online survey were conducted to better understand the perceived deficiencies in the current freight transportation network and identify potential solutions (both project and policy-based).

3.1.1 One-on-One Interviews & Online Surveys

Online Survey

The online survey included 16 questions designed to gain feedback on or identify participants' needs and needs and priorities for the regional freight system. A summary of the responses can be found in Appendix A.

Industry Survey GOAL:

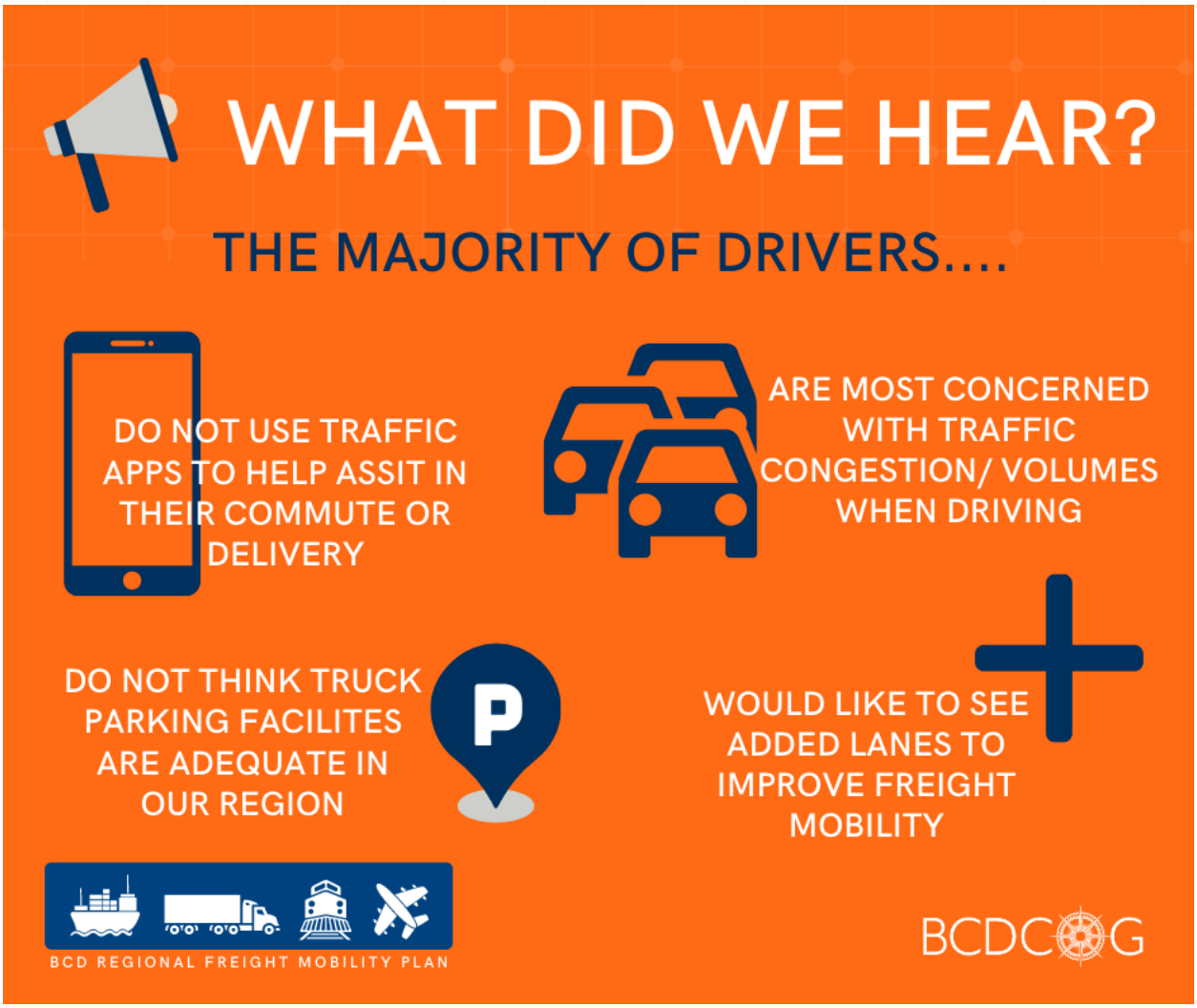
Understand the Current Condition & Performance of the Freight Transportation Network

Individual Stakeholder Interviews

Industry Interviews GOAL:

Better define the issues and evaluate potential solutions

Outreach included interviews with freight industry representatives to solicit input on the current condition and performance of the freight transportation network. Companies and organizations interviewed for the BCD Freight Plan represent four industry sectors in the region: multimodal transportation and logistics, automotive, advanced materials, and marine manufacturing. These interviews were conducted by the project team as one-on-one phone interviews. Questions were tailored to the particular interviewee based on their mode, geographic reach, size, etc. Four recurring themes emerged from the interviews: Coronavirus (COVID-19) impacts, traffic challenges and opportunities, multimodal transportation, and issues facing trucking and logistics.


WHAT DID WE HEAR?
THE MAJORITY OF DRIVERS....
DO NOT USE TRAFFIC APPS TO HELP ASSIT IN THEIR COMMUTE OR DELIVERY
ARE MOST CONCERNED WITH TRAFFIC CONGESTION/ VOLUMES WHEN DRIVING
DO NOT THINK TRUCK PARKING FACILITES ARE ADEQUATE IN OUR REGION
P
WOULD LIKE TO SEE ADDED LANES TO IMPROVE FREIGHT MOBILITY
BCD REGIONAL FREIGHT MOBILITY PLAN
BCDCOG

4. PUBLIC OUTREACH

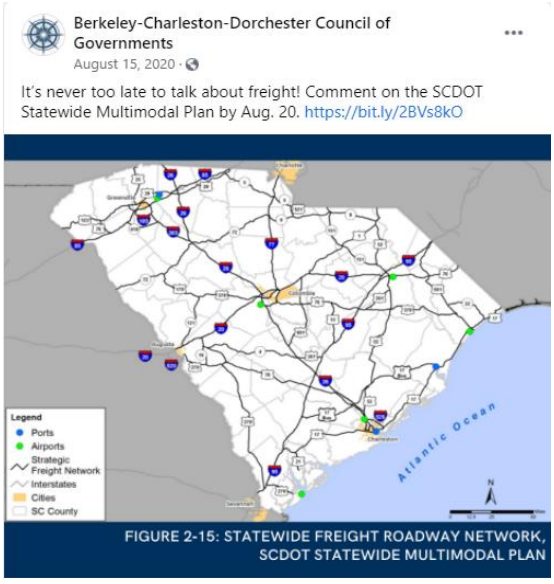
4.1 SOCIAL MEDIA

Social media is an effective, low-cost tool to inform a wide range of constituents about a project and invite them to participate. BCDCOG used its established social media platforms (Facebook, Twitter, Instagram, etc.) as a vehicle for public information about the Freight Plan. The project team crafted social media campaigns on the following for BCDCOG to deploy on their social media platforms:

- Project-specific updates and announcements
- Educational topics such as:
  - Importance of freight to the regional economy, daily lives
  - What is freight?
  - What is the freight network planning process?
- Opportunities for participation and feedback

Social media posts with suggested text, graphics, and hashtags were developed monthly for the BCDCOG that included a series of educational components and highlights from the monthly Committee Meetings (**Figure 4-1**). These posts were then published through the already-established BCDCOG social media channels.

Figure 4-1: Graphic Examples of Social Media Campaign

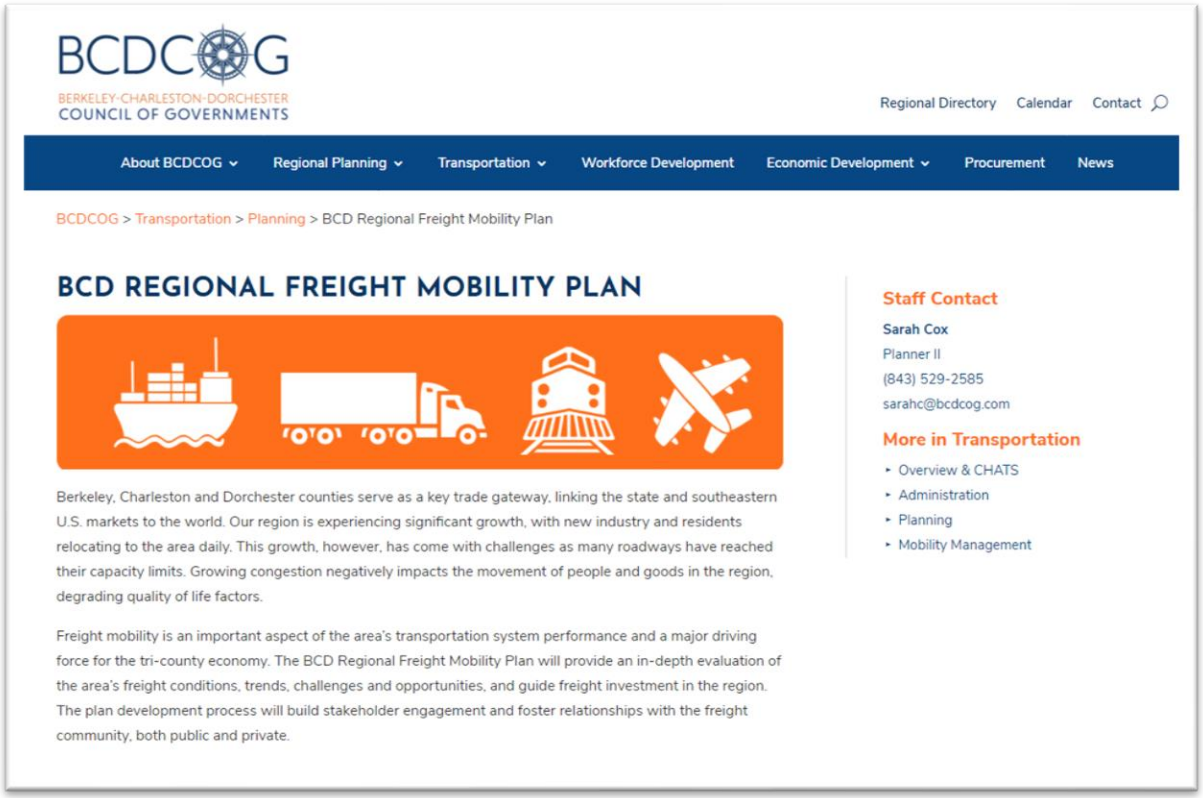


4.2 PROJECT WEBPAGE

A project-specific webpage was created and maintained on the BCDCOG's website (bcdcog.com/) for the duration of the project. The webpage is updated regularly with overall project information and scheduling, frequently asked questions, meeting announcements, educational resources developed as part of the Palmetto Freight Series and advisory committee meeting materials and recordings.

The website is responsive in design ensuring the growing number of mobile users can view and interact with its various functions. The website also offers the ability to select a language utilizing the Google translate function, which allows the website to be converted to Spanish.

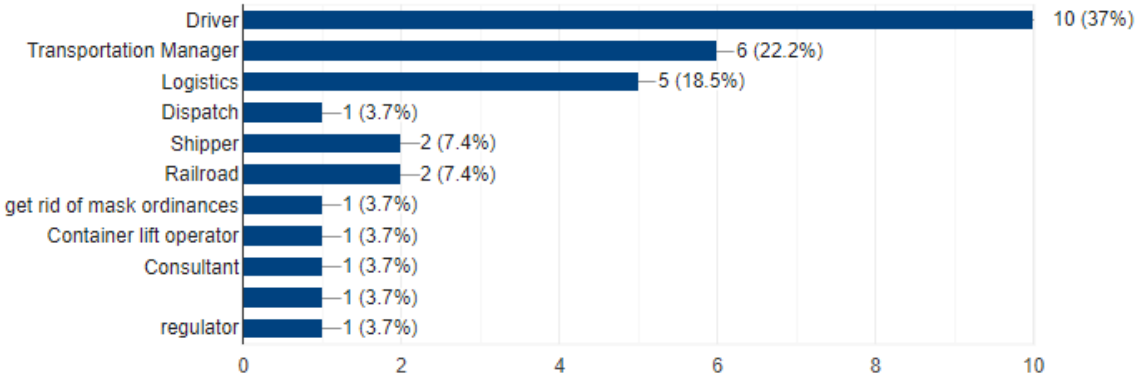
Figure 4-2: BCD Regional Freight Mobility Plan Webpage



APPENDIX A: ONLINE SURVEY RESULTS

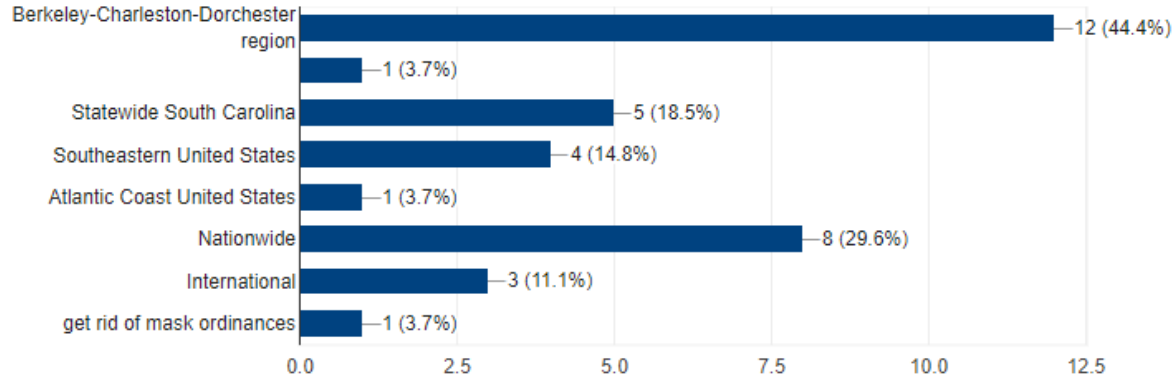
What is your role in the freight industry?

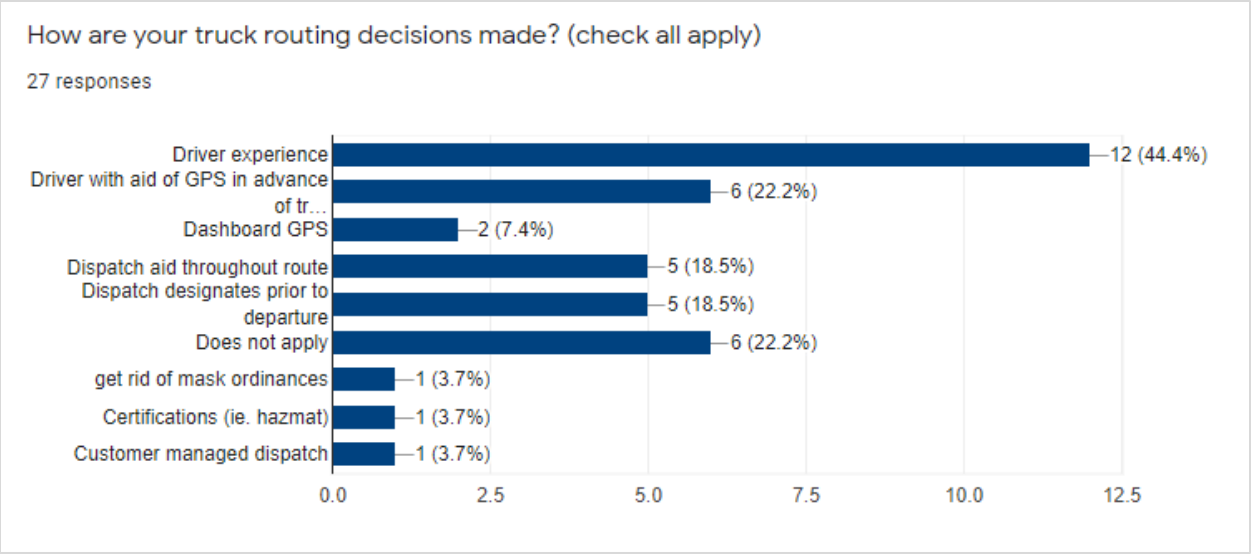
27 responses

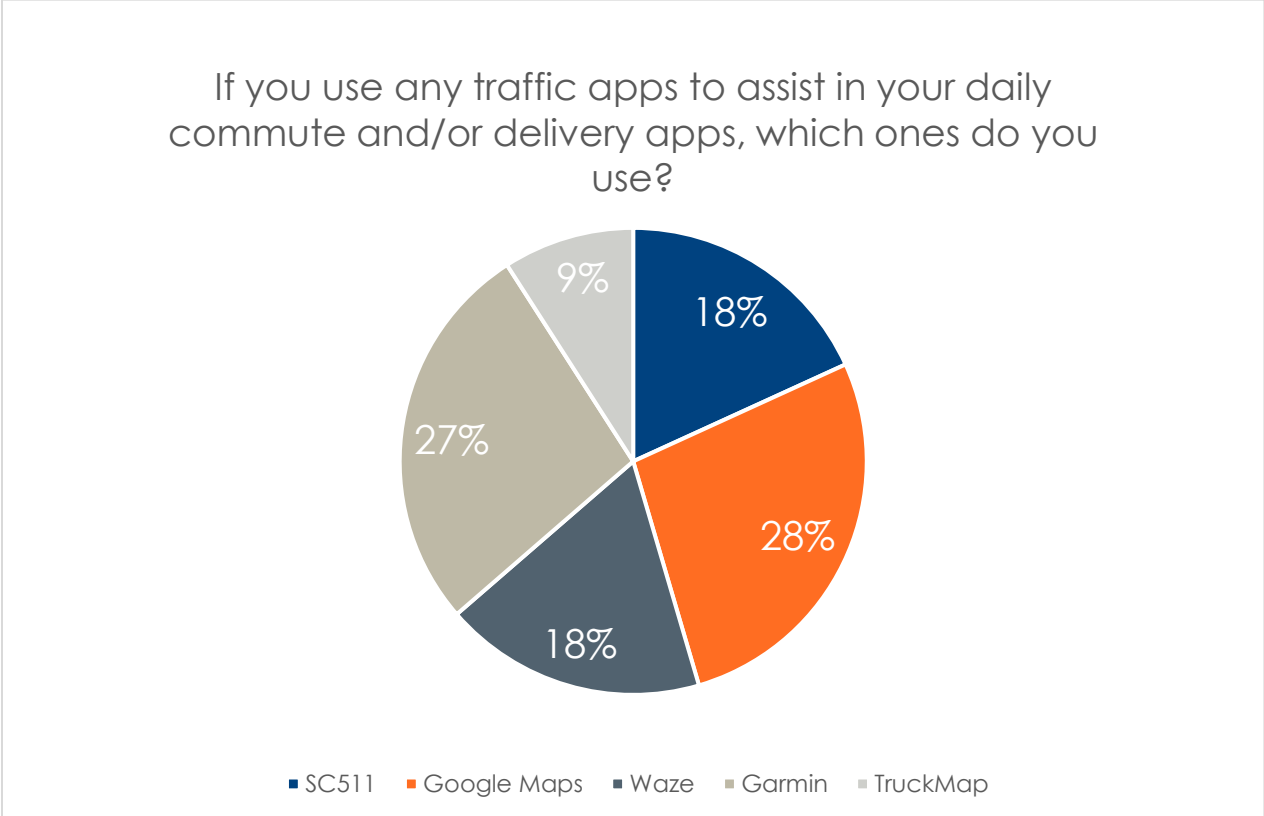


What best describes your operational coverage? (check all that apply)

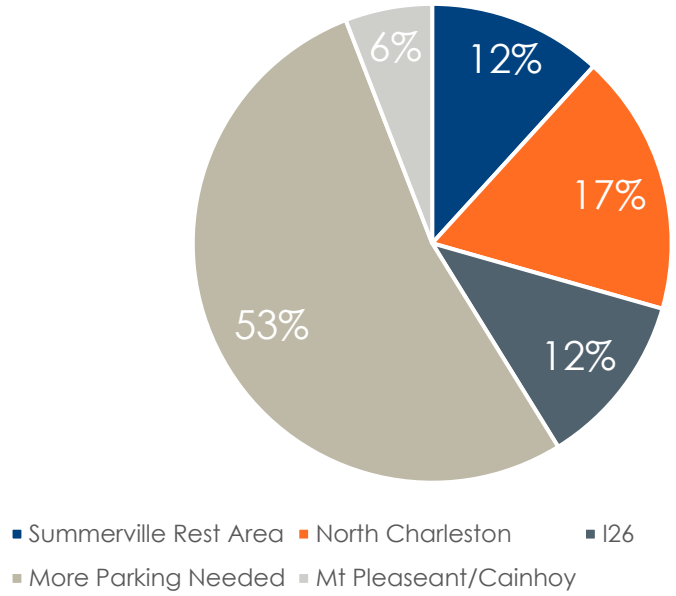
27 responses



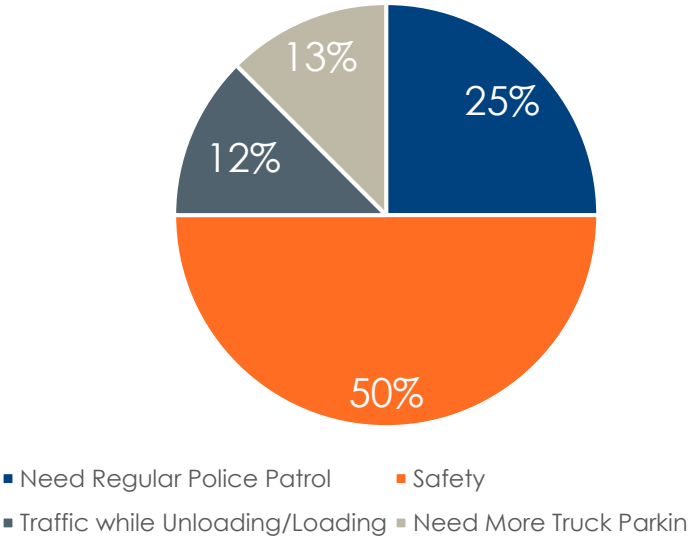

How are your truck routing decisions made? (check all apply)
27 responses
Driver experience
Driver with aid of GPS in advance of tr...
Dashboard GPS
Dispatch aid throughout route
Dispatch designates prior to departure
Does not apply
get rid of mask ordinances
Certifications (ie. hazmat)
Customer managed dispatch
12 (44.4%)
6 (22.2%)
2 (7.4%)
5 (18.5%)
5 (18.5%)
6 (22.2%)
1 (3.7%)
1 (3.7%)
1 (3.7%)
0.0
2.5
5.0
7.5
10.0
12.5


If you use any traffic apps to assist in your daily commute and/or delivery apps, which ones do you use?
18%
28%
18%
27%
9%
SC511
Google Maps
Waze
Garmin
TruckMap

If truck parking is insufficient, which parking areas need to improve?

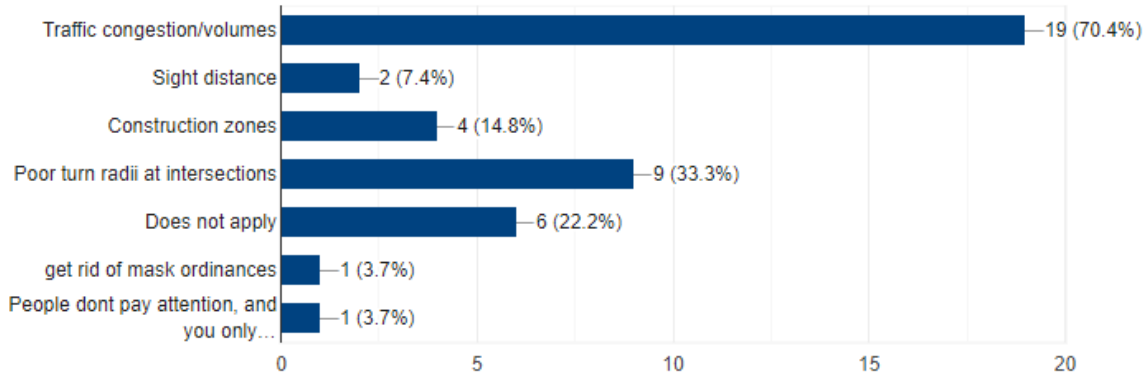


If you have any concerns when parked/resting/waiting for deliveries in your truck, please describe the concern, location, and potential remedy.



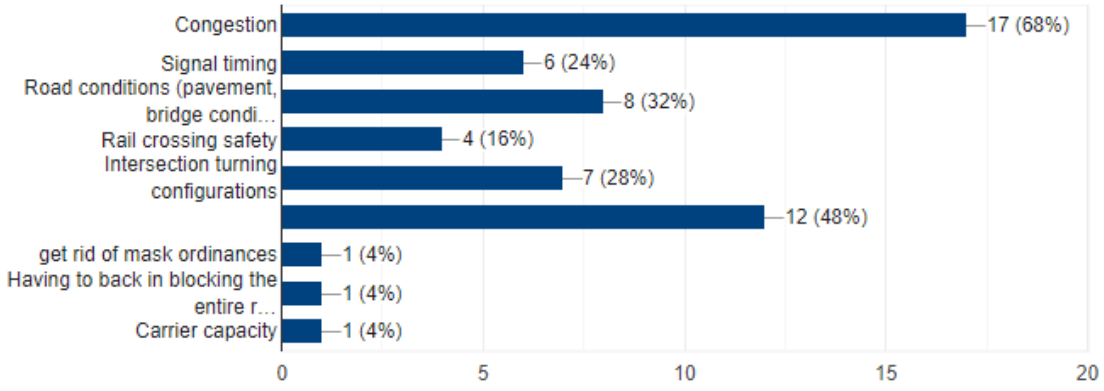
What are the greatest safety concerns you face while driving?

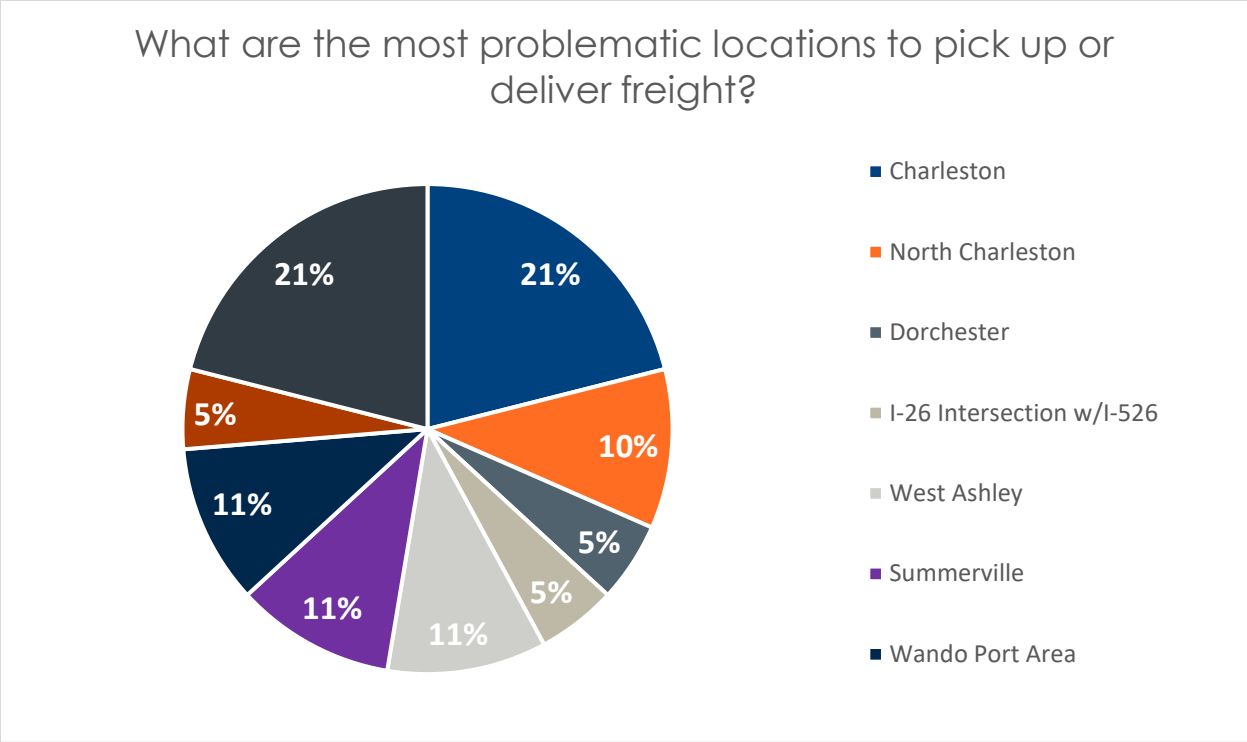
27 responses

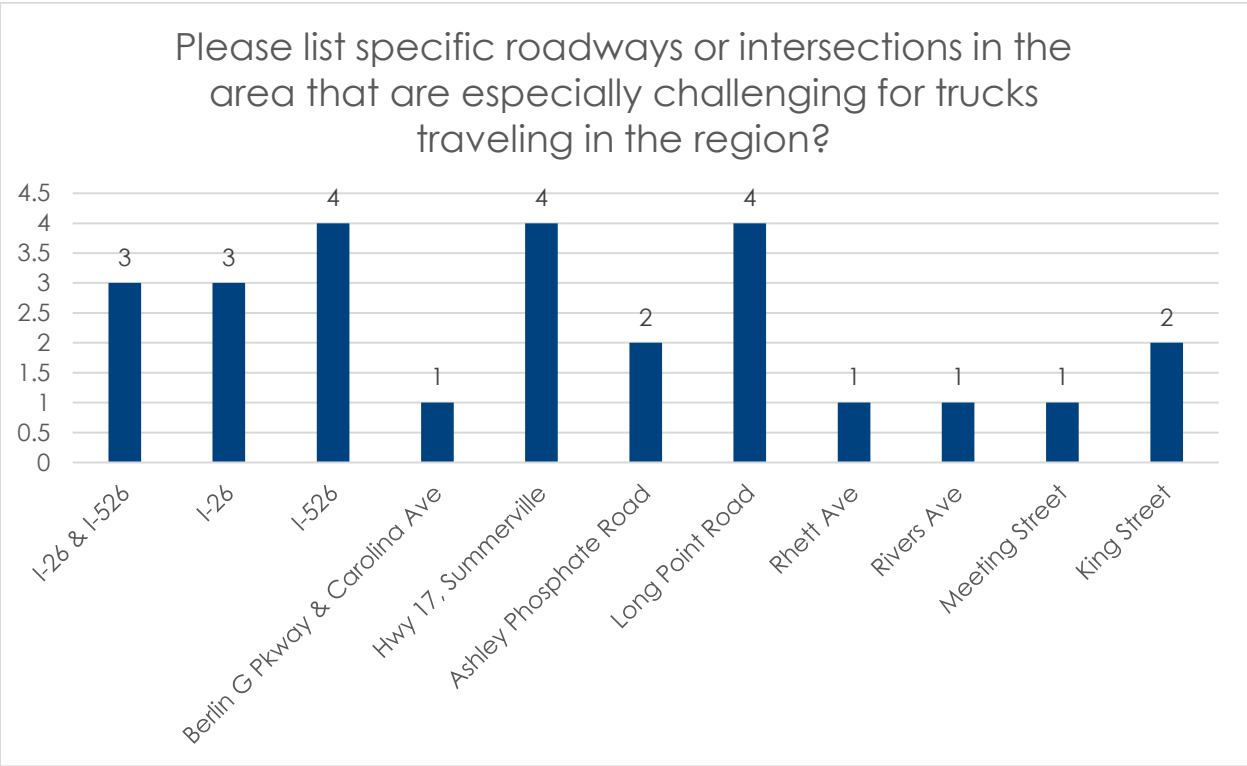


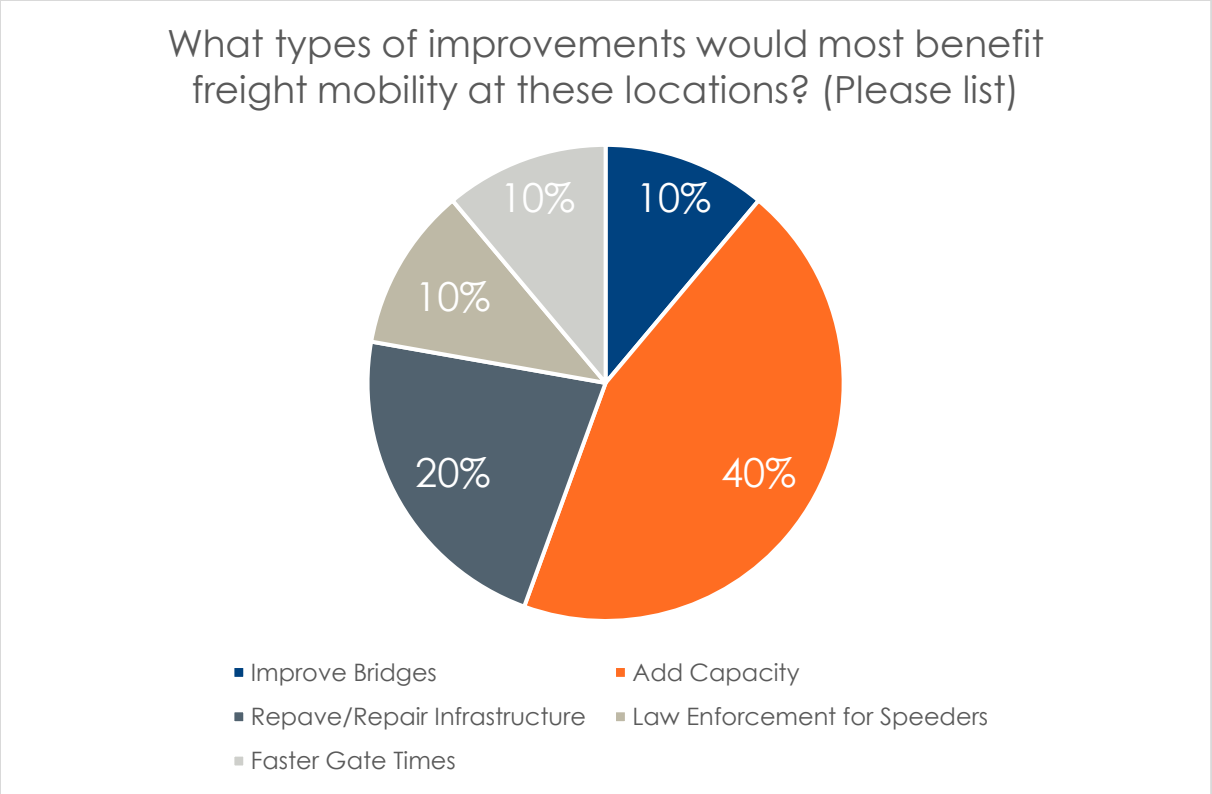
What are the biggest challenges you face in delivering freight to and within the Berkeley-Charleston-Dorchester region? (Check all that apply)

25 responses




What are the most problematic locations to pick up or deliver freight?
21%
10%
5%
5%
11%
11%
11%
5%
21%
Charleston
North Charleston
Dorchester
I-26 Intersection w/I-526
West Ashley
Summerville
Wando Port Area


Please list specific roadways or intersections in the area that are especially challenging for trucks traveling in the region?
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
3
3
4
1
4
2
4
1
1
1
2
I-26 & I-526
I-26
I-526
Berlin G Pkway & Carolina Ave
Hwy 17, Summerville
Ashley Phosphate Road
Long Point Road
Rhett Ave
Rivers Ave
Meeting Street
King Street


What types of improvements would most benefit freight mobility at these locations? (Please list)
10%
40%
20%
10%
10%
Improve Bridges
Add Capacity
Repave/Repair Infrastructure
Law Enforcement for Speeders
Faster Gate Times

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