Cooperative Freight Mobility Planning in the Greater Charlotte Region

A Regional Models of Cooperation Peer Exchange Summary Report

Location: Charlotte, North Carolina
Date: November 13, 2015
Host Agency: Centralina Council of Governments (CCOG)
Peer Agencies: Ohio-Kentucky-Indiana Regional Council of Governments (OKI COG)
Broward County Metropolitan Planning Organization (Broward MPO)
Federal Agencies: Federal Highway Administration (FHWA)
U.S. DOT Volpe National Transportation Systems Center (Volpe Center)
# Cooperative Freight Mobility Planning in the Greater Charlotte Region: A Regional Models of Cooperation Peer Exchange Summary Report

**Title and Subtitle:** Cooperative Freight Mobility Planning in the Greater Charlotte Region: A Regional Models of Cooperation Peer Exchange Summary Report

**Authors:** Markiewicz, Alexandra; McCoy, Kevin

**Performing Organization:** Office of the Assistant Secretary of Transportation for Research and Technology

**Performing Organization Name:** Office of the Assistant Secretary of Transportation for Research and Technology

**Performing Organization Address:**
John A. Volpe National Transportation Systems Center
55 Broadway
Cambridge, MA 02142

**Sponsoring Agency:** Federal Highway Administration, Office of Planning U.S. Department of Transportation

**Sponsoring Agency Address:**
1200 New Jersey Avenue, SE
Washington, DC 20590

**Funding Numbers:** 51HW2LA400 PA307, PA309

**Performing Organization Report Number:** DOT-VNTSC-FHWA-16-15

**Sponsoring/Monitoring Agency Report Number:** FHWA-HEP-16-046

**Abstract:**
This report highlights key themes identified at the “Planes, Trains, & Semis: Keeping a Dynamic Economy on the Move: Greater Charlotte Regional Freight Mobility Plan” Peer Exchange held on November 13, 2015 in Charlotte, North Carolina. This event was sponsored by the Federal Highway Administration’s Regional Models of Cooperation program of its Every Day Counts 3 initiative. The event was hosted by the Centralina Council of Governments of Charlotte, North Carolina, the lead agency for the regional freight planning effort in the Greater Charlotte region.

**Subject Terms:**
Keywords: Freight planning, regional models of cooperation, regional cooperation, regional planning, metropolitan planning organization, transportation planning, state department of transportation, council of governments, cross-jurisdictional planning, multi-jurisdictional planning, every day counts, Charlotte, North Carolina

**Number of Pages:** 25

**Price Code:** No restrictions

<table>
<thead>
<tr>
<th>Security Classification of Report</th>
<th>Security Classification of This Page</th>
<th>Security Classification of Abstract</th>
<th>Limitation of Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclassified</td>
<td>Unclassified</td>
<td>Unclassified</td>
<td>Unlimited</td>
</tr>
</tbody>
</table>
# Contents

Foreword .................................................................................................................................................. iii
Acknowledgements ................................................................................................................................. iv
Introduction ........................................................................................................................................... 1
Workshop Overview ............................................................................................................................... 2
Workshop Summary .................................................................................................................................. 3

**OVERVIEW OF FREIGHT PLANNING IN THE GREATER CHARLOTTE REGION** ........................................... 3
**PEER EXAMPLES: PRESENTATIONS FROM OKI AND BROWARD MPO** ................................................. 4
**PANEL DISCUSSION AND BREAKOUT SESSIONS** ................................................................................. 5

**Key Themes and Strategies** ................................................................................................................... 8

**BUILD RELATIONSHIPS WITH STAKEHOLDERS AND PLANNING PARTNERS** ............................... 8
**COORDINATE PLANS AND TIE INTO PROJECT SELECTION** .............................................................. 11
**LOOK FOR PROJECTS WITH BROAD BENEFITS** .................................................................................. 11
**IDENTIFY ECONOMIC IMPACTS OF FREIGHT PLANNING AND PROJECTS** ........................................... 12

Conclusion ............................................................................................................................................. 13

Appendices ............................................................................................................................................. 14

**A. KEY CONTACTS** .................................................................................................................................. 14
**B. EVENT PARTICIPANTS** ................................................................................................................... 15
**C. WORKSHOP AGENDA** .................................................................................................................. 17
**D. ADDITIONAL RESOURCES** .......................................................................................................... 19
**E. ACRONYMS** ...................................................................................................................................... 20
Foreword

This report summarizes the presentations, key themes, and recommendations identified at a Regional Models of Cooperation peer exchange on November 13, 2015 in Charlotte, North Carolina. With support from the Federal Highway Administration (FHWA) Office of Planning, the Centralina Council of Governments (CCOG) hosted peers from the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) in Cincinnati and the Broward County Metropolitan Planning Organization (Broward MPO) in South Florida. The purpose of the peer exchange was to share best practices in cooperative regional freight planning in order to inform the development of the Greater Charlotte Freight Mobility Plan. Regional Models of Cooperation is a program of the FHWA Every Day Counts 3 (EDC-3) initiative, co-led by the FHWA Office of Planning and the Federal Transit Administration (FTA) Office of Planning.
Acknowledgements

The Regional Models of Cooperation program extends a special thank you to CCOG for hosting the workshop. It would also like to thank OKI and Broward MPO for attending the workshop and sharing their experiences with cooperative regional freight planning with their peers in Charlotte. The program would also like to thank the FHWA Resource Center and the U.S. Department of Transportation Volpe National Transportation Systems Center (Volpe Center) for their support in organizing, facilitating, and documenting the workshop. In addition, the program thanks the workshop participants, including representatives from the Charlotte region’s four metropolitan planning organization (MPOs), two rural planning organizations (RPOs), two state departments of transportation (State DOTs), local governments, and private sector stakeholders for their valuable contributions to discussions of regional cooperation and cross-jurisdictional collaboration in freight planning in the Greater Charlotte Region.
Introduction

Regional Models of Cooperation

The FHWA Office of Planning and FTA Office of Planning are implementing Regional Models of Cooperation, a program that is part of FHWA’s Everyday Counts Initiative. Through Everyday Counts, FHWA and FTA work with State DOTs, MPOs, and other stakeholders to identify innovative technologies and process that are deserving of accelerated deployment nationwide. Regional Models of Cooperation was selected for accelerated deployment in the third round of Everyday Counts (EDC-3), for calendar years 2015-2016.

Regional Models of Cooperation describes enhanced processes for effective cooperation and communication between State DOTs, MPOs, transit agencies, and other transportation planning partners working across jurisdictions or traditional disciplines. When implemented, these techniques can improve collaboration, policy implementation, technology use, and performance management. Regional Models of Cooperation reach beyond traditional borders and bring together entities from multiple jurisdictions and disciplines to support common goals in transportation planning, such as congestion management, safety, freight, livability, economic development, and project delivery and efficiency.

Successful implementation of Regional Models of Cooperation in transportation planning can improve decision-making and save time and money through the sharing of resources or data, and help agencies achieve more by working together. Examples of regional cooperation include jointly developing transportation plans and programs, cross-jurisdictional corridor studies, and project planning across MPO and State boundaries. It also includes collaboration between State DOT(s), MPOs, and operators of public transportation on activities such as collecting, storing, and analyzing transportation data.

One way that FHWA and FTA are supporting States and MPOs to help them implement Regional Models of Cooperation is through peer exchange workshops. These workshops bring representatives from multiple jurisdictions within a region together with peers from other regions to share experiences and best practices that can help move specific, locally-driven priorities forward. The Regional Models of Cooperation implementation effort also hosts webinars and documents cooperation case studies and techniques to promote notable practices in a variety of topic areas.

For more information, please visit the FHWA Regional Models of Cooperation website and the EDC-3 initiative summary page.

Organization of this Report

This workshop summary report is organized in four sections:

1. Workshop Overview: an overview of the peer exchange goals and format
2. Workshop Summary: a summary of presentations, the panel discussion, and breakout sessions
3. Key Themes and Strategies: a synthesis and discussion of the key themes identified during the workshop
4. Conclusion: a summary of lessons learned and next steps

The Key Themes and Strategies section synthesizes and discusses four areas which the workshop participants identified as priorities for successful regional freight planning in a multi-jurisdictional context:

1. Building relationships with stakeholders
2. Developing consistent plans
3. Implementing plans and identifying champions
4. Identifying economic impacts of improvements to freight mobility
Workshop Summary: Cooperative Freight Mobility Planning in the Greater Charlotte Region

Workshop Overview

Peer Exchange Description

This peer exchange supported CCOG’s Regional Freight Mobility Plan project, which seeks to involve the region’s four MPOs, two RPOs, two State DOTs, numerous local governments, and private sector stakeholders in the Greater Charlotte area in a collaborative effort to develop a cooperative regional freight plan.

FHWA and CCOG worked together to identify external peers with experience in successful cooperative freight planning initiatives in similar contexts. FHWA and CCOG invited the following peers to attend the workshop and share their stories and advice with the workshop participants:

- Robyn Bancroft, Strategic Planning Manager, OKI
- Greg Stuart, Executive Director, Broward MPO

The workshop organizers defined the following goals for the peer exchange:

1. Share experiences of similar regions in performing and implementing joint freight planning as an economic development and global competitiveness tool.
2. Identify expected benefits of multi-jurisdictional coordination in freight planning in the Greater Charlotte region.
3. Discuss methods and techniques for implementing a cooperative freight planning approach which may be appropriate for the Greater Charlotte region.
4. Inform the development of the Greater Charlotte Regional Freight Mobility Plan.

Format and Agenda

The one-day peer exchange consisted of two parts, described below:

- The morning session included a large group of participants from the public and private sectors consisting primarily of presentations from the region and external peers.
- The smaller afternoon session included MPOs, State DOTs, and local governments from the region and consisted of facilitated panel and small group discussions.

The morning session included presentations from CCOG, North Carolina DOT (NCDOT), South Carolina DOT (SCDOT), OKI, and Broward MPO. This session served as a joint meeting of the Greater Charlotte Freight Mobility Plan coordinating and steering committees and was somewhat of a public kickoff for the planning process. Participants included representatives from local MPOs, RPOs, State DOTs, local transportation agencies, and private industry. Each presentation was followed by a brief question and answer period.

The afternoon session included a facilitated panel discussion and breakout sessions that focused on learning from the peers (OKI and Broward) and discussion among the participants about potential actions and next steps for freight planning in the region. A smaller group of representatives from CCOG, the MPOs, RPOs, State DOTs, and local governments attended this session.

The list of event participants can be found in Appendix B and the full agenda is available in Appendix C.
Workshop Summary

Overview of Freight Planning in the Greater Charlotte Region
What follows are brief summaries of the presentations from the morning session of the workshop. Presentation slides can be accessed via the CCOG website.

Opening Remarks
During the morning session, speakers representing the Charlotte region, NCDOT, and SCDOT provided context for past and planned freight planning initiatives, as well as the key issues affecting freight planning and economic development in the region.

Jim Prosser, Executive Director of CCOG shared context of the current goals and priorities for freight mobility, and the challenges CCOG is hoping to address with the freight plan. The Charlotte region’s population is growing, but the government has limited resources to expand infrastructure and address transportation needs. As the region’s growth is related to the expanding number of industrial and manufacturing jobs, the region has identified the movement of freight as a priority. Improvements to the efficiency of moving raw materials and finished goods will address the needs of existing businesses and help attract new businesses to the region, increasing economic development and prosperity. Through collaboration between local, state, and federal agencies, the Greater Charlotte region can improve freight mobility and support economic and jobs growth.

Ned Curran, the NCDOT Chairman of the Board and CEO of the Bissel Companies discussed the role of the freight mobility plan in growing the Charlotte region’s economy. With the growth of the manufacturing sector, freight logistics will play a vital role in meeting industry needs. The plan will lay the groundwork for a system that will improve the region’s efficiency and competitiveness in the freight industry by 2050. Such a planning initiative involves implementing a collaborative decision-making process and quantifying future needs in the short term so as to better guide investment decisions in the long term.

John Sullivan, Division Administrator of the North Carolina Division Office of the Federal Highway Administration, discussed FHWA’s four priorities: completing a federal funding reauthorization package to follow up from MAP-21, ensuring safety on highways, improving the efficiency of project development, and maximizing the use of innovation in our transportation system. Everyday Counts and Regional Models of Cooperation work towards the fourth priority by seeking out and raising awareness about innovative best practices occurring at the local, regional, and state level.

Statewide Context and Project Status
Following the opening remarks, presentations from NCDOT, SCDOT, and CDM Smith (CCOG’s consultant for work on the freight plan), discussed the status of freight planning in North Carolina, South Carolina, and the Greater Charlotte region.

Derry Schmidt of NCDOT discussed the plans for creating a statewide freight plan. NCDOT is conducting a two phase process: creating an interim MAP-21 compliant Freight Plan, which will take 6-9 months to develop, and creating a comprehensive multimodal statewide freight plan, which it expects to complete in 2017. The goals of the freight plans are to ensure MAP-21 compliance, outline the needs for freight improvements in North Carolina, and identify related investments and metrics to measure performance. A Freight Advisory Committee is overseeing the process, which includes seeking input from private industry stakeholders and local and regional agencies, defining and assessing the conditions of current freight infrastructure network, and estimating future freight travel demand.

Doug Frate of SCDOT discussed South Carolina’s approach to developing the recently completed statewide freight plan, which it developed in partnership with the South Carolina Ports, Department of Commerce, FHWA, 11 MPOs, and 10 Councils of Government. The plan is the foundation for the state’s first performance-based statewide long-range transportation plan: the 2040 Statewide Multimodal
Transportation Plan. Given increases in population, growth in the manufacturing sector, and stagnant revenues for accommodating such growth, South Carolina focused its attention on improving the transportation network for freight movement in the statewide freight plan. Stakeholder involvement included interviews, surveys, webinars, and listening sessions. The State did not limit input by approaching a single or a few private industry companies, but rather sough input from a broader audience by approaching industry associations related to freight. The plan also used a number of quantitative resources to model geographic and economic conditions and to develop a project prioritization ranking tool. An advisory council oversaw the planning process, and now focuses on plan implementation and monitoring projects. The plan’s outcomes include identifying the strategic freight network, producing a project prioritization tool, quantifying funding needs, determining projects that could qualify for an increased share of Federal funding and other flexible funding sources, and developing freight performance metrics. Most importantly, it marks a fundamental policy shift towards an increased focus on freight in transportation planning in South Carolina.

Pat Anater of CDM Smith discussed the planning process for the Greater Charlotte Regional Freight Mobility Plan. Through the development of the plan, the region aims to better understand the current economic impact of freight movement in the region, develop policies and determine investments that will bring economic benefits in the future, and create a plan that NCDOT can directly incorporate into the statewide freight plan. The region currently faces challenges to freight planning including the effects of roadway congestion on the movement of goods, which is exacerbated by a growing population; the complexities of planning across jurisdictional and state boundaries; and the management and preservation of rural land. During plan development, a coordinating committee will track and review the technical progress, while a steering committee will provide policy-level guidance and direction for the plan. A freight advisory committee, which will consist of some public and mostly private sector representatives, will act as a standing region-wide committee on issues involving freight. The plan will use data from three rounds of interviews and surveys, including interviews with freight truck drivers, to gain input on the current status and future needs of the freight industry, as well as congestion and traffic data from 10 North Carolina and 4 South Carolina counties and references to national best practices. CDM Smith is currently gathering and synthesizing these data for the region. The plan will provide recommendations and guidance for incorporating freight needs into project prioritization and identify opportunities to capitalize on an increased share of Federal funding for qualifying projects.

Peer Examples: Presentations from OKI and Broward MPO

The presentations from external peers described how they and their partners have successfully approached cooperative regional freight planning. Each presentation highlighted different ways in which the organizations addressed and overcame challenges to freight planning across multiple jurisdictions. What follows are brief descriptions of each presentation. Presentation slides can be accessed via the CCOG website. The Key Themes and Strategies section of this report provides examples and a more in-depth discussion of each approach.

Robyn Bancroft of OKI highlighted the MPO’s success with building trusting, lasting relationships with private industry partners and identifying funding for and implementing projects to improve freight mobility in the Greater Cincinnati region. OKI is the COG and MPO for eight counties across three states: Ohio, Kentucky, and Indiana. The Executive Director of OKI identified freight a priority in planning due to its role in sustaining and improving the region’s economic competitiveness. Bancroft assumed the role of freight planner for the organization (in addition to other responsibilities), invited a new representative from the freight industry to join the MPO board, and developed a freight working group to better connect with the region’s freight community. The working group developed a strong relationship with freight-related companies through visits to operating facilities and, eventually, company headquarters. Through these visits, OKI built trust and understanding of their mutual needs between itself and the private companies, which enables them to form strong relationships. OKI also worked with its board members to develop connections with other sectors of the freight industry. Because of these relationships, OKI was able to identify numerous potential freight improvement projects, several of which scored highly and were
OKI has funded a major freight rail project, projects that expanded the cargo facilities in and around the region’s major airport, and supported policy changes to expand freight movement along the Ohio River. In addition, OKI supports and attends a yearly statewide freight conference to make connections and share ideas with others.

Greg Stuart of Broward MPO highlighted the MPO’s successes cooperating with the two other MPOs in the Miami urbanized area on planning and project implementation and understanding of how freight needs reach beyond transportation infrastructure. Broward MPO, the Miami-Dade MPO, and Palm Beach MPO have worked collaboratively on a variety of topics for many years, and recently developed a joint MTP, the 2040 Regional Transportation Plan. The joint MTP includes a list of freight project priorities developed collaboratively by the three MPOs, spanning the entire region. The three MPOs meet quarterly to discuss freight investments and other topics, in order to facilitate regional cooperation and identify alternative Federal and private funding opportunities for freight projects. The region’s long history of coordination on freight and other topics has enabled the MPOs to build a level of trust and technical expertise where they can share planning responsibilities across the agencies, achieving greater efficiency than they could individually. They also have been able to work together to identify projects that are of the greatest significance to the overall region, and reach agreement on which projects should advance, regardless of which planning jurisdiction they are located in. Stuart also discussed the importance of understanding how the improvement to freight movement sometimes requires implementing non-transportation infrastructure projects, such as improving access to different types of storage facilities that are needed to support freight industries (e.g. cold storage), and the importance of establishing and maintaining close relationships with the private sector in order to identify the most important freight projects.

Panel Discussion and Breakout Sessions

In the afternoon, attendees participated in a facilitated panel discussion where they were able to ask the peers questions regarding their experience with some of the issues the Greater Charlotte region faces. What follows is a brief summary of topics discussed in these sessions. The Key Themes and Strategies section of this report elaborates on the topics and ideas that emerged during this discussion.

The participants covered the following topics during the panel discussion:

- **Funding:** CMAQ funding and alternative funding sources for freight projects.
- **Climate:** Incorporating projected impacts of climate change into freight planning
- **Project Prioritization:** Balancing building relationships with stakeholders with using data and other tools to identify and support freight planning projects. Developing project prioritization rankings and cooperating across jurisdictions in project selection.
- **Freight and Other Transportation Users:** Identifying where freight projects can overlap with other transportation projects and where freight projects challenge the needs of other transportation users.
- **Freight as an Economic Development Tool:** Identifying the economic benefits of freight investments to a region and to private industry.
- **Private Sector Engagement:** Understanding the needs and priorities of private industry partners. Approaching private industry as a single entity, rather than as multiple jurisdictions.
- **Implementation:** Ensuring that a plan does not “sit on the shelf” and developing strategies to implement a plan’s projects.

Following the panel discussion the participants split up into two breakout groups, one with each of the external peers, to discuss topics raised during the peer exchange that could potentially be applied to the Greater Charlotte region, and to identify actions the region might consider to move these ideas forward during the development of the regional freight plan or to support implementation of the plan.
Following the breakout sessions, the small groups reported the following lists of lessons learned and potential future actions the group may consider while moving forward with the freight plan and its implementation. These lists constitute feedback from the breakout groups, but they do not necessarily constitute the consensus of the region or a commitment to future action.

**Lessons Learned**

- Presenting issues as a ‘crisis’ motivates regional decision-makers to take action.
- Hosting regional or statewide freight forums can be an effective way to share ideas and discuss ways to collaborate on plans and projects.
- Including a broad unconstrained list of potential projects in freight plans can help to better identify overarching needs and the highest regional priorities across jurisdictions.
- Consider including non-physical infrastructure projects and initiatives in freight plans, such as policy initiatives, goals, or limitations.
- Initiating policies that support regional freight mobility reduces implementation barriers across jurisdictions and shifts perspective about “ownership” of projects. In a truly regional approach, the location of projects (i.e., within one MPO or State boundary or another) is secondary to the benefits the project will have on regional freight mobility.
- Consider using flexible or non-traditional funding sources for freight projects, such as funds from the Congestion Mitigation and Air Quality Improvement Program (CMAQ). Projects may be eligible for CMAQ funds if they will have a measurable positive impact on air quality, such as projects that reduce the number of trucks on a roadway or improve freight mobility through congestion mitigation investments that decrease travel time.
- Leverage private sector funding to cover the local match for Federal funds whenever possible, particularly when a project will directly benefit a freight provider.
- Include freight mobility in the MPO Congestion Management Process (CMP) to identify and address freight congestion and bottlenecks.
- Establishing a regional ranking of potential freight projects helps identify how freight projects compare to other types of projects. If this is done across jurisdictions, it can help identify which projects are of highest priority for the greater region.
- Identifying board members who can champion freight projects better ensures that projects will move from planning to implementation.
- Creating plans that are project-specific and action-based are easiest to implement.

**Potential Actions for Future Consideration**

- Determine how and when to best incorporate freight project prioritization into the planning and programming process. Work on establishing a cross-jurisdictional approach to identifying the highest priorities.
- Identify stakeholders that can take ownership of projects and initiatives and work with freight plan steering committee members to define specific roles that will advance the planning process and implementation.
- Organize field trips to broaden understanding of the needs and priorities of private industry stakeholders in the region, for incorporation into the freight plan.
- Identify funding mechanisms that apply to multimodal projects.
- Evaluate the feasibility of developing a joint MTP for the region, with all MPOs working together.
• Communicate the congestion and economic competitiveness implications of freight investment decision-making in the region. Use the latest research to show the urgency of action in order to retain jobs and sustain region economic growth.

• Identify small projects and “low hanging fruit” that can be funded with flexible or alternative funding sources, in light of the North Carolina project prioritization formula. Demonstrate the value of freight improvements through small, but quick wins.

• Advocate for changes in the North Carolina project prioritization process to enable more cooperative planning across jurisdictions and to provide greater flexibility and emphasis for freight projects.

• Explore possible synergies between freight mobility needs and the transportation needs of the U.S. military facilities in the region, to further demonstrate the benefits of freight projects.
Key Themes and Strategies

This section synthesizes ideas and discussion from the workshop participants and attempts to summarize the sense of the group on how to best move forward with cooperative regional freight planning in a multi-jurisdictional context.

During the course of the workshop several key themes and strategies emerged, which are summarized and discussed below:

1. **Build relationships with stakeholders and planning partners:** Strong relationships with private industry stakeholders enable regions to better understand the needs of the freight community and to identify projects of mutual interest. Furthermore, cooperation between public sector agencies enables prioritization of freight projects based on broad regional goals and their expected impacts on freight mobility across the region as a whole.

2. **Coordinate Plans and Tie into Project Selection:** The nature of freight movement is that corridors and issues span multiple jurisdictions. To be successful, regional and statewide freight plans should be coordinated and consistent with each other. These priorities should translate to the project selection and programming process, where qualitative and quantitative data can be used to demonstrate the benefits of proposed projects.

3. **Look for Projects with Broad Benefits:** Identify projects that address freight and other regional transportation goals simultaneously. Identify project champions to advocate for funding and implementation.

4. **Identify Economic Impacts of Improvement to Freight Movement:** Increased efficiency in the movement of freight can bring important economic benefits to a region, including increased job opportunities and revenue from business relocating to a region.

Build Relationships with Stakeholders and Planning Partners

Several workshop participants noted the importance of building lasting, solid relationships with private and public sector freight stakeholders. They discussed a number of methods for developing and maintaining these relationships, including organizing regular meetings with private and public sector partners, visiting freight operations sites and company headquarters, conducting interviews, creating joint planning documents, and identifying mutual benefits in freight planning projects across jurisdictional boundaries. In particular, the external peers described how building relationships with freight stakeholders and planning partners in their regions enabled them to identify and program strategic freight projects that have had a significant impact on freight mobility in their regions.

Connecting with Private Industry

Developing strong, trusting relationships with private industry stakeholders, freight providers, and consumers, enables regional agencies to better understand the needs of the freight community and industry trends. These connections allow agencies to better identify projects that may address industry needs as well as regional transportation goals. Freight companies may also be a source for local matching funds, particularly when projects will provide a direct benefit to them.

NCDOT, SCDOT, and CDM Smith all discussed the importance of steering and/or advisory committees or councils with representatives from private industry, in the freight planning process. SCDOT and CDM Smith both discussed involving private industry stakeholders in their plan-making processes through multiple rounds of interviews with representatives ranging from industry associations to freight truck drivers.
OKI built a relationship with the railroad industry by visiting and touring local rail yards to learn about operations on the ground. These initial visits later led to a fruitful, deeper relationship with the freight rail companies operating in their region through building trust and understanding between the organization and companies. OKI continued to build their relationship with the industry by visiting two railroad industry headquarters. In these visits, OKI and the industry representatives each introduced the type of work they do and why they are interested in cooperating on freight improvements. As the visit did not focus on a specific project or initiative, they were able to brainstorm general ideas about how OKI could conduct work to benefit the movement of freight via rail, and how partnerships could provide mutual benefits. OKI built a lasting relationship with the railroad industry by presenting companies with opportunities for partnership and by asking for help in identifying things the MPO could do to improve freight movement, as opposed to approaching them with needs or demands.

In the 2008 update to the 2030 Metropolitan Transportation Plan, OKI identified an opportunity to expand the Heartland Connector, a rail line connecting Cincinnati to the Heartland Corridor. The Heartland Corridor is a major rail corridor running from Chicago and Detroit to the Port of Virginia. However, through coordination with the freight rail companies, OKI learned that the Heartland Connector could not accommodate double-stacked trains, and that this resulted in a higher percentage of freight traveling via the region’s roads than would otherwise occur.

OKI coordinated with the Ohio Rail Development Commission and Norfolk Southern to fund and implement the Heartland Connector project, using CMAQ funds. The programming and construction of the project ran smoothly due to a number of factors:
- The relationship OKI had built with Norfolk Southern enabled OKI to demonstrate the economic benefits of such a project to the company and the region, even though the project had not initially been a priority for the company.
- Norfolk Southern had experience using CMAQ funds in previous projects and provided the local match.
- OKI collected data to calculate the correct metrics for CMAQ: estimated number of truck trips eliminated and regional truck mileage eliminated (Figure 1). These metrics translated to measures for the emission reductions for CMAQ criteria pollutants.

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Reductions (kg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>18,512.05</td>
</tr>
<tr>
<td>HC</td>
<td>3.19</td>
</tr>
<tr>
<td>NOx</td>
<td>126.57</td>
</tr>
<tr>
<td>PM2.5</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Figure 1. Estimated emission reductions of Heartland Connector Rail Project

SOURCE: OKI
In another case, OKI looked to their board members to initiate connections with the freight industry. A board member’s connection to DHL helped them establish a relationship with the company which helped the region advance an air freight expansion. The region had established growth in air freight as a priority and worked with DHL to make the Cincinnati International Airport (CVG) one of its “superhubs.” In support of the air freight expansion, OKI programmed the funds for the resurfacing of runways to better accommodate planes carrying freight, and advanced projects to expand the number of roadway connections to the airport. The construction of a new airport access road also opened up development possibilities for land near the airport for commercial facilities, expanding the economic impact potential of the airport and the DHL facility. CVG is now the entry point for 98% of all of DHL’s North American cargo.

Both Broward MPO and OKI stressed the importance of increasing the visibility of MPOs among companies that rely on freight. They suggested meeting with companies to learn why they chose to locate in the region and trying to learn about their freight needs, including need that extend beyond transportation infrastructure. Broward MPO noted that, in some cases, freight needs go beyond the transportation network itself. They include accessibility to specific services and facilities within the region or State which are important for a certain type of freight (e.g., cold storage facilities). In one case, Broward MPO described a business that had to ship products from to the other side of the state to access needed facilities not available in South Florida, resulting in increased freight traffic. The MPOs helped establish the Florida Perishables Trade Coalition, which has helped open up new markets in Southeast Florida. The coalition piloted a program to successfully cold treat grapes and blueberries from Peru and Uruguay, and then gained approval for additional products through a wider array of ports.

However, meaningful cooperation with private sector freight stakeholders is not always easy. Broward MPO cautioned that the private sector moves at a much faster pace and is focused on much shorter time horizons than public transportation agencies. In order for engagement with these companies to be meaningful and sustainable, the peers recommended that transportation agencies focus their interactions with the private sector on times when there are decisions to be made and near-term action is likely. If private sector stakeholders can’t see the value of cooperating, it may be difficult to sustain a meaningful relationship.

Public Sector Agency Cooperation
Both OKI and Broward MPO described strong relationships with neighboring MPOs, State DOTs, and local agencies, which enabled them to identify and advance the highest-priority regional freight projects and to exchange freight planning ideas and strategies. Given their different contexts, each agency pursued these relationships in different ways.

The three MPOs which cover the Miami urbanized area developed a formal venue for cooperation between the organizations: The Southeast Florida Transportation Council. Broward MPO and its neighboring MPOs have worked together to create multiple transportation plans which span all three jurisdictions, including the 2040 Southeast Florida Regional Freight Plan and the 2035 Regional Long Range Transportation Plan. In order to establish trust and ensure equal participation in the 2035 Regional Long Range Transportation Plan, each MPO was responsible for a different aspect of the plan and the MPOs rotate which MPO leads joint planning processes, accounting for staff capacity and funding.

Given the trusting, collaborative environment, the MPOs have been able to work together to select freight projects that will bring broad benefits to freight movement in the region. This means that the MPOs have agreed to support projects that are not within their jurisdictions, but elsewhere in the region, because the organizations have jointly agreed on which projects will realize the greatest regional benefits. And, because the MPOs have formed a strong relationship, they can trust that when projects within their jurisdiction rise to the top, their partners will support them as well.

Both Broward and OKI also regularly maintain communications and share information with MPOs within and outside of their respective states. In Ohio, MPOs gather yearly for a statewide freight planning conference to share ideas and discuss initiatives and opportunities. OKI hosted the 2015 conference, which was expanded to a broader Midwest States focus due to OKI’s location in three Midwest States.
OKI noted that these annual gatherings have been important venues for advancing freight planning in Ohio, and for networking with freight stakeholders. Broward MPO also regularly shares information and communicates with agencies across Florida and nationally.

Coordinate Plans and Tie into Project Selection

The workshop participants discussed the importance of creating state freight plans and developing project selection tools to support decision-making.

Several presenters mentioned the importance of coordination with other jurisdictions and partners when developing freight plans. Broward MPO discussed how the three MPOs in South Florida work together to develop a joint plan that better identifies the highest regional priorities. OKI discussed their work to bring three States and many local jurisdictions together with private rail companies, air freight shippers, public agencies, and Ohio River freight terminals to improve the overall coordination of freight movement in the region. CDM Smith stressed the goal of developing a freight plan for the Greater Charlotte region that can be “plugged in” to the state freight plans for North Carolina and South Carolina. This reflects the nature of freight movement. Because freight issues are rarely confined to one jurisdiction or geography, improving the transportation of freight requires a greater level of engagement and cooperation across jurisdictions and with a wide variety of stakeholders.

The importance of implementing regional freight plans through the project prioritization and programming processes was discussed. Participants noted the challenges of elevating the needs of the freight community in project prioritization, mentioning that coordination with private sector stakeholders is important to identify projects that are timely and which have broad support to move forward. They also discussed the importance of working to better reflect the value of freight projects in regional and statewide project prioritization and programming process.

OKI discussed using qualitative and quantitative freight data complementarily. OKI uses a project selection scoring tool for their MTP that ranks projects based on a set of criteria, which multiple stakeholders were involved in developing. Using such a quantitative approach enables OKI to justify and support each decision with data. However, by building relationships with stakeholders in the freight community, OKI was able to gain more insight to the needs of the freight community and incorporate those needs into the criteria. Freight projects are therefore able to potentially score higher in the project selection ranking and more likely to be included in the project list.

Look for Projects with Broad Benefits

OKI and Broward MPO discussed how the successful implementation of their freight plans relied on including projects that had broad support and community champions. Broward MPO discussed the benefits of projects that address multiple goals and needs – “two for ones.” For example, Broward MPO programmed a rail improvement project that benefited freight providers who use the corridor between Miami and West Palm Beach, as well as passenger rail services that also use the corridor. Florida DOT’s South Florida Freight and Passenger Rail Enhancement received $13.75 million in TIGER funding to improve linkages between the CSX and Florida East Coast Railway (FEC) rail lines. Another example could be projects that improve at-grade rail crossings, reducing traffic congestion for motorists and improving rail freight movement efficiency. By identifying projects that present co-benefits in non-freight goal areas, MPOs can gather broader support for freight projects while also making progress with other goals and priorities.

One method OKI uses to advance freight project implementation is to identify champions on the MPO board or in the community for specific projects, as they select projects to include in the plan. When there is not a clear leader who will champion the project, make sure that it is submitted for consideration in the TIP, and lead the construction of the project when funded, projects are less likely to be implemented.
In the Greater Charlotte region, workshop participants identified coordinating freight improvements with the transportation needs of U.S. military installations in the region as a possible “two for one” opportunity. They also noted that proceeding with smaller freight projects in order to demonstrate quick successes could be a strategy for building broader support for freight improvements in the region.

**Identify Economic Impacts of Freight Planning and Projects**

The workshop participants identified way in which conducting freight planning activities and implementing freight projects brought positive economic impacts.

Producing a Regional Freight Plan and prioritizing freight planning in a region can yield specific economic development benefits that a regular transportation planning process would not necessarily yield. For example, all the speakers noted how a freight plan identifies projects that would improve freight movement through analyzing data pertaining specifically to freight, such as freight routes and networks and freight truck parking, as well as developing performance metrics specific to freight movement. Fiscally constrained regional transportation plans might otherwise not include freight specific analysis and therefore overlook such projects, as their scope is greater than the scope of the freight plan. These plans serve multiple purposes: demonstrating to industry stakeholders the importance of freight in a region’s transportation planning initiatives and laying the framework for implementing projects that will reduce the cost and increase the efficiency of moving freight. Both these purposes work to encourage existing freight industry stakeholders to expand their business in and region and attract new businesses that rely on freight to a region.

Furthermore, including a section for freight projects in a project prioritization scoring tool can help draw attention to the economic, as well as other, benefits of these projects to the transportation. OKI’s project prioritization tool includes a question regarding general economic benefits of a project, no matter the type of project, which is tied to the number of jobs the project will produce. Freight projects have scored well on OKI’s project prioritization tool, in part due to the economic benefits they demonstrate.

The peers also illustrated how implementing projects identified in a regional freight plan brings direct economic benefits to a region. For example, as discussed above, the expansion of the freight cargo facilities at CVG in Cincinnati, as well as the construction of the new airport road, contributed to DHL’s growth in the region. DHL, which employs more than 2,300 people at CVG, have spent more than $105 million on capital development. Paired with the transportation improvements, these investments have contributed to increasing cargo tonnage by 130% since 2010. In addition, the CVG roadway improvements reduce travel miles around the airport and open up more than 250 acres of undeveloped commercial and industrial land for development. The demonstrated, measureable economic successes from these projects help support the implementation of future projects that can bring similar benefits.
Conclusion

Improvements to the efficiency of freight movement can yield positive economic impacts such as attracting new businesses to a region and enabling existing businesses to grow. Freight movement is a transportation planning issue that necessitates working across jurisdictional lines. By nature, freight moves goods across municipal, regional, and state boundaries along roads, rail, waterways, and by air. Private companies that move or consume freight manage networks that cross these boundaries. They seek to use routes and locate in regions that provide for the efficient movement of goods. However, regions often face challenges in moving freight efficiently due to traffic congestion, land use regulations, concerns about truck routes, and other issues. Approaching freight planning using Regional Models of Cooperation can result in creative solutions to address such challenges that would be difficult to come to without cooperating across jurisdictional boundaries. EDC-3 has identified ways in which regions across the nation have successfully cooperated to plan for freight and, as a result, improve the efficient movement of goods and reap economic benefits.

Throughout the Charlotte peer exchange workshop, representatives from NCDOT and SCOT who are working on statewide freight plans, peers from Broward MPO in South Florida and OKI in Cincinnati, facilitators, and participants from the Charlotte region explored several approaches to freight planning across jurisdictional boundaries. As the region prepares to develop a regional freight plan, the workshop presented an opportunity for key stakeholders to learn from peer regions that have successfully implemented measure to improve the movement of freight.

Key themes that emerged through the presentations and discussion include building relationships with private industry and public sector stakeholders, coordinating plans and tying in project selection, and identifying projects with broad benefits. The representatives from the region and the peers has built strong relationships through interviews with a variety of stakeholders ranging from industry associations to truck drivers, visiting industry operations facilities and companies headquarters, selecting MPO board members that have a connection to the freight industry, meeting regularly with other MPOs and transportation agencies in the region, and developing joint planning documents. All these tactics better ensured that an MPO or regional planning organization had a comprehensive understanding of the issues and viewpoint regarding freight and that plans and projects addressed the needs of public and private stakeholders. The peers and regional representatives also emphasized the importance of developing coordinated plans that exhibit region-wide priorities and that could easily adapt to statewide plans. Such plans should include project prioritization schemes that are supported by both qualitative and quantitative data. Finally, the peers and regional representatives discussed looking for projects with broad benefits, such as projects that address both freight and residential needs or small projects that quickly address particular issues with freight movement. Together, using these strategies and approaches to freight planning in a multi-jurisdictional context has the potential to bring broad reaching, long lasting economic benefits to a region.

The Regional Models of Cooperation Initiative looks forward to following up with CCOG and its partners to determine how the ideas generated at the workshop influenced their freight planning process.
Appendices

A. Key Contacts

Host Agency

Michelle Nance
Planning Director
Centralina Council of Governments
525 North Tryon Street, 12th Floor
Charlotte, NC 28202
(704) 348-2709
mnance@centralina.org

Jessica Hill
Senior Planner
Centralina Council of Governments
525 North Tryon Street, 12th Floor
Charlotte, NC 28202
(704) 348-2731
jhill@centralina.org

FHWA

Tom Kearney
FHWA Resource Center
518-431-8890
Tom.Kearney@dot.gov

Jody McCullough
Federal Highway Administration
Office of Planning
(202) 366-5001
Jody.McCullough@dot.gov

Peer Agencies

Robyn Bancroft
Strategic Planning Manager, Ohio-Kentucky-Indiana Regional Council of Governments
720 E Pete Rose Way #420
Cincinnati, OH 45202
(513) 619-7662
rbancroft@oki.org

Greg Stuart
Executive Director
Broward MPO
100 West Cypress Creek Road,
8th Floor, Suite 850
Fort Lauderdale, Florida 33309
(954) 876-003
Stuartg@browardmpo.org
### B. Event Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamal Alavi</td>
<td>NCDOT</td>
</tr>
<tr>
<td>Patrick Anater</td>
<td>CDM Smith</td>
</tr>
<tr>
<td>Robyn Bancroft</td>
<td>OKI</td>
</tr>
<tr>
<td>Douglas Banez</td>
<td>InterVISTAS Consulting</td>
</tr>
<tr>
<td>Loretta Barren</td>
<td>FHWA NC Division Office</td>
</tr>
<tr>
<td>Stuart Basham</td>
<td>NCDOT</td>
</tr>
<tr>
<td>Paul Black</td>
<td>Capital Area MPO</td>
</tr>
<tr>
<td>Matt Blackwell</td>
<td>Cleveland County Economic Development Partnership</td>
</tr>
<tr>
<td>Jeff Boothby</td>
<td>Gaston County</td>
</tr>
<tr>
<td>Dominique Boyd</td>
<td>NCDOT</td>
</tr>
<tr>
<td>Neil Burke</td>
<td>Charlotte Regional Transportation Planning Organization</td>
</tr>
<tr>
<td>Phil Conrad</td>
<td>Cabarrus-Rowan MPO</td>
</tr>
<tr>
<td>Robert Cook</td>
<td>Charlotte Regional Transportation Planning Organization</td>
</tr>
<tr>
<td>Grant Cothran</td>
<td>Norfolk Southern Corporation</td>
</tr>
<tr>
<td>Mark Cramer</td>
<td>Greater Gaston Development Corporation</td>
</tr>
<tr>
<td>Ned Curran</td>
<td>Bissell Companies</td>
</tr>
<tr>
<td>Joe Davis</td>
<td>GGDC-Transportation Access Committee</td>
</tr>
<tr>
<td>Franklin Deese</td>
<td>Town of Marshville</td>
</tr>
<tr>
<td>Bill Dillon</td>
<td>CPCC</td>
</tr>
<tr>
<td>Linda Dosse</td>
<td>NCDOT</td>
</tr>
<tr>
<td>Nastasha Earle-Young</td>
<td>NCDOT</td>
</tr>
<tr>
<td>Doug Frate</td>
<td>SCDOT</td>
</tr>
<tr>
<td>Phil Geary</td>
<td>NCDOT-Transportation Planning Branch</td>
</tr>
<tr>
<td>Timothy Gibbs</td>
<td>City of Charlotte DOT</td>
</tr>
<tr>
<td>Hank Graham</td>
<td>Gaston-Cleveland-Lincoln MPO</td>
</tr>
<tr>
<td>Andrew Grzymski</td>
<td>Charlotte Department of Transportation</td>
</tr>
<tr>
<td>Stuart Hair</td>
<td>Charlotte Douglas International Airport</td>
</tr>
<tr>
<td>Fredrick Haith</td>
<td>Winston-Salem DOT</td>
</tr>
<tr>
<td>Bjorn Hansen</td>
<td>Gaston-Cleveland-Lincoln MPO</td>
</tr>
<tr>
<td>Jessica Hekter</td>
<td>FHWA SC Division Office</td>
</tr>
<tr>
<td>Michael Herron</td>
<td>Village of Misenheimer, NC</td>
</tr>
<tr>
<td>Donnie Hicks</td>
<td>Gaston County Economic Development Commission</td>
</tr>
<tr>
<td>Jessica Hill</td>
<td>Centralina Council of Governments</td>
</tr>
<tr>
<td>David Hooper</td>
<td>Rock Hill-Fort Mill Area Transportation Study</td>
</tr>
<tr>
<td>Max Hopper</td>
<td>Town of Earl</td>
</tr>
<tr>
<td>Jenny Humphreys</td>
<td>CDM Smith</td>
</tr>
<tr>
<td>Tom Kearney</td>
<td>FHWA Resource Center</td>
</tr>
</tbody>
</table>
John Kim  PART
Durwood Laughinghouse  Norfolk Southern
Candice Leonard  Charlotte Regional Transportation Planning Organization
Joe Lesch  Union County
Andy Lucas  Stanly County
Chris Lukasina  Capital Area MPO
Mary Mackson  North Carolina State Ports
Mike Manis  Centralina Council of Governments
Alexandra Markiewicz  USDOT Volpe Center
Sarah McAulay  CRTPO TAC Member - Town of Huntersville
Kevin McCoy  USDOT Volpe Center
Jody McCullough  FHWA Office of Planning
Robby Moody  Catawba Regional COG
Virginia Morgan  Town of Marshville
Yolanda Morris  SCDOT
Michelle Nance  CCOG
Sushil Nepal  Town of Huntersville
Felix Nwoko  DCHC MPO
Danny Pleasant  City of Charlotte
Jim Prosser  CCOG
Mushtaqur Rahman  Baseline Mobility Group
Victoria Rittenhouse  CCOG
Julie Roper  PSNC Energy
Michael Sandy  Stanly County
Derry Schmidt  NCDOT
Fern Shubert  Town of Marshville
Scot Sibert  WSP Parsons Brinckerhoff
Dana Stoogenke  Rocky River RPO
Greg Stuart  Broward MPO
John Sullivan  Federal Highway Administration
Jason Wager  Centralina Clean Fuels Coalition
Robert Wardell  Wells Fargo
Vernia Wilson  NCDOT
Kenneth Withrow  North Carolina Capital Area Metropolitan Planning Organization
C. Workshop Agenda

Planes, Trains, & Semis: Keeping a Dynamic Economy on the Move
Greater Charlotte Regional Freight Mobility Plan
Joint Committee Meeting
November 13, 2015
Harris Conference Center
3216 CPCC Harris Campus Dr., Charlotte, NC 28208

8:15 am Networking & Registration Check-in
  • Coffee will be provided

9:00 am Welcome and Overview
  • Jim Prosser, Centralina Council of Governments
  • Ned Curran, North Carolina DOT Chairman and CEO of The Bissel Companies
  • John Sullivan, Federal Highway Administration, North Carolina Division Office

9:30 am Statewide Freight Planning in North Carolina and South Carolina
  • Derry Schmidt and Terry Arellano, North Carolina DOT
  • Doug Frate, South Carolina DOT

10:00 am 15-Minute Break

10:15 am Greater Charlotte Regional Freight Mobility Plan
  • Pat Anater, CDM Smith
  • Q&A

10:55 am Freight Planning Cooperation in the Greater Cincinnati Region
  • Robyn Bancroft, Ohio-Kentucky-Indiana Regional Council of Governments
  • Q&A

11:25 am Freight Planning Cooperation in South Florida
  • Greg Stuart, Broward County Metropolitan Planning Organization
  • Q&A

12:00 noon Closing Remarks*
  • Jim Prosser, Centralina Council of Governments

***Please join us for lunch following the conclusion of the meeting***

Agenda – Part 2: Technical Peer Exchange

1:00pm Introductions and Overview
  • Michelle Nance, Centralina Council of Governments
  • Jody McCullough and Tom Kearney, Federal Highway Administration

1:15pm Facilitated Panel Discussion (topics below)
Peer Panelists:
  • Robyn Bancroft, OKI Regional COG
  • Greg Stuart, Broward County MPO
Facilitators:

- Tom Kearney, Federal Highway Administration, Resource Center
- Jody McCullough, Federal Highway Administration, Office of Planning
- Kevin McCoy, U.S. Department of Transportation, Volpe Center

Topics:

- Economic development potential of cooperative freight planning
- Cooperative engagement with private sector providers and consumers of freight
- Overcoming jurisdictional challenges during the planning process
- Strategies for prioritizing freight in programming and project selection?
- Methods to sustain cooperative freight planning into implementation

2:45pm 15-Minute Break

3:00pm Breakout Sessions

Participants will break into small group discussions with each peer. Groups will rotate after 30 minutes. Participants will be asked to note key insights to share with the group at the end.

1. Lessons from the Greater Cincinnati Region

2. Lessons from the South Florida Region

4:00pm Wrap-up, next steps, and closing remarks

- Insights from breakouts (FHWA Facilitators, CCOG, and Participants)
- Closing thoughts and next steps (Michelle Nance, CCOG)

4:30pm Adjourn
D. Additional Resources

Planes, Trains, & Semis: Keeping a Dynamic Economy on the Move
Centralina Council of Governments

Regional Models of Cooperation
Federal Highway Administration

Every Day Counts
Federal Highway Administration
E. Acronyms

CCOG  Centralina Council of Governments
CMAQ  Congestion Mitigation and Air Quality Improvement
CMP   Congestion Management Plan
CVG   Cincinnati International Airport
DOT   Department of Transportation
EDC   Every Day Counts
FHWA  Federal Highway Administration
FTA   Federal Transit Administration
MAP-21 Moving Ahead for Progress in the 21st Century
MPO   Metropolitan Planning Organization
MTP   Metropolitan Transportation Plan
NCDOT North Carolina Department of Transportation
OKI   Ohio Kentucky Indiana Regional Council of Governments
RMOC  Regional Models of Cooperation
RPO   Rural Planning Organization
SCDOT South Carolina Department of Transportation
TIP   Transportation Improvement Program
USDOT U.S. Department of Transportation