First... a little bit of history
The Greater Charlotte Regional Freight Mobility Plan - 2016

To provide an efficient, reliable, safe, and sustainable freight transportation system.
Prioritization of Recommendations

INFRASTRUCTURE PROJECTS to improve the freight truck, rail and air networks

REGIONAL PROGRAMS to improve how freight systems operate

LOCAL POLICIES to encourage location efficiencies and promote region’s assets
Spring 2017 Activities
Freight ITS & TIM
Champion Group

“to assess the region’s current ITS and TIM systems, identify peers, and recommend approaches to improve these two regional systems.”
Region’s ITS & TIM Challenges

**ITS**

- **Integration & interoperability** - Local, Regional & State Systems
- **Life-cycle Planning**— full costs planning, deployment, maintenance & replacement
- **Deployment** – keeping up with vehicle technology and availability of infrastructure (broadband)
- **Plan** - 2001 Metrolina ITS Plan

**TIM**

- **Communication**- Cross-jurisdictional
- **Training** - Bridge interests of “Protect the Scene” with “Clear the Scene”
- **Culture** - top down support, personnel that champion TIM, grow credibility within first responder community
- **Investments**- Personnel, incentives, & coordination
CAV Task Force

Mission

✓ Identify and affirm immediate actions that can be implemented regionally

✓ Direct investigation into long-term strategies (e.g.- research, resources, policy, etc.)

✓ Prepare our communities, region and organizations for ACVs
Now let’s chat about ITS
Intelligent Transportation Systems (ITS)

- Is an operational system of various technologies that, when combined and managed, improve the operating capabilities of the overall system.
- Improves safety and mobility by integrating advanced communications-based information and electronic technologies into the transportation infrastructure and vehicles.
Value of ITS

- In 2014, the total cost of congestion for the Charlotte NC-SC region was $770M.
  - Truck congestion cost was $131M
- High return on investment
  - Benefit-cost analysis:
    - Wireless Communications w/ GPS tracking 4.9:1
    - Advanced signal systems 62:1
    - Ramp metering 15:1
What is an ITS SDP?

A Strategic Deployment Plan:
• Provides a shared framework for deployment
• Guides interoperability of systems
• Identifies technology solutions
• Identifies coordination & training solutions
• Considers life-cycle of deployments
Why is this Needed?
And Why Now?

• Region’s Growth
• Changing Vehicle Technologies
• Congestion
• Cost
• Safety

• Required to receive federal funds for ITS
Fall / Winter 2018-19 Activities

- Hosted 3 ITS Roundtable discussions
- Formed a subgroup to develop
  - scope,
  - cost estimate, and
  - funding strategy
- Submitted SPR funding requests to NCDOT & SCDOT
ITS Roundtable & Scope Working Group

- **Purpose:** to discuss, evaluate, and develop a draft scope, cost estimate, and funding strategy for a regional, bi-state ITS Strategic Deployment / Master Plan for the greater Charlotte region.

- **Members:** staff from NCDOT Division 10 & 12, NCDOT ITS, NCDOT TMC, CRTPO, CDOT, RFATS, SCDOT ITS, SCDOT, CATS, SCDOT TMC, NC Broadband Office, and a Freight Advisory Committee Rep.
Peer Region Comparisons

ITS Scope Working Group Identified and Evaluated 8 Peer Region’s ITS SDP

- Triad, NC
- Triangle, NC
- Dallas/Fort. Worth, TX
- Atlanta, GA
- Orlando, FL
- Philadelphia, PA

Topics included:
- Funding sources
- Type of plan
- Key deliverables
- Geography
- Cost
Greater Charlotte Region TSMO / ITS Strategic Deployment Plan

Proposed Geography
Proposed **Scope** & Estimated **Cost**

- ITS Architecture & Deployment Plan
- ITS Deployment Guide
- Maintenance and Operations
- Data Governance
- Interoperability
- Project Prioritization & Performance Metrics
- Pilot Projects
- Local Agency Action Plans

Cost ~$600,000
Next Steps

• Reassess funding strategy on Monday with ITS Roundtable members
• Identify other funding sources
Thank You

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