Current State of Partnerships

- 2019 FHWA DBP Workshop
- 2020 Regional TSMO/ITS Architecture Update Coordination - Strategic Initiatives & Data Governance & Best Practices Report
- 2020 GDOT Data Purchasing Pooling effort (Eastern Transportation Coalition)
- 2020 State Road & Tollway Authority (SRTA) Enterprise Data Business Plan
2019 FHWA DBP Workshop Identified Key Needs

- Data inventory/catalog to document who has what and where it resides and how to access it
- Coordinate on data purchases
- Define and agree on common definitions (e.g., Mobility as a Service)
- Standards to share data across region
- Data maintenance to keep track of data ownership, consistency, and updating the system.
- Agreement between the agencies on their role and responsibilities to share their own portion and keep it updated.
2020 TSMO - Strategic Initiatives

**Foundational Elements**
- Strengthen TSMO Planning & Institutions
- Enhance Data Sharing & Management
- Encourage TSMO Innovation

**Deployment Focused Initiatives**
- Deploy Connected & Automated Vehicle Technologies
- Advance Regional Coordination & Network Communications
- Strengthen Work Zone & Event Management
- Enhance Transit Operations
- Advance Mobility as a Service
### 2020 TSMO - Regional Data Governance

<table>
<thead>
<tr>
<th>Step</th>
<th>Activities</th>
</tr>
</thead>
</table>
| **Step 1 - Engagement** | • Identify stakeholders (completed)  
• 2019 FHWA DBP workshop (completed) |
| **Step 2 – Data Scope**   | • Short term action plan (completed)  
• Develop data catalog (in progress) |
| **Step 3 – Stewardship Strategies** | • Develop data priorities and standards (not started)  
• Publish data catalog (online) |
| **Step 4 – Establish Governance** | • Develop charter with organizational structure, roles, and responsibilities (in progress) |
Identifies data gaps and aims to avoid duplication between ARC, SRTA, & GDOT

Peer review shows centralized joint data programs saves millions of dollars in other states

Would establish a joint working group to identify shared data needs

Would expand beyond ARC & GDOT over time
<table>
<thead>
<tr>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000,000</td>
<td>Statewide trip, commercial vehicle, volume estimation, multimodal, and demographics analytics</td>
</tr>
<tr>
<td>$1,100,000</td>
<td>Statewide speed, travel time, congestion, user delay cost, and bottleneck analytics</td>
</tr>
<tr>
<td>$700,000</td>
<td>Statewide connected vehicle applications - commercial vehicle safety, dangerous slowdown, hazard warning, and mass messaging alerts</td>
</tr>
<tr>
<td>$700,000</td>
<td>Geodata and enhanced roadway attribute</td>
</tr>
<tr>
<td>$500,000</td>
<td>Software and data storage enhancements</td>
</tr>
</tbody>
</table>
2020 SRTA Enterprise Data Plan

- A 2 to 3-year roadmap with short and long-term initiatives
- Moves from the current “tactical” state of data usage to a mature, “data-driven” future state
- Addresses all facets of data organization and governance, business intelligence (BI) strategy, organization, resources, culture, technology, process, and knowledge management
2020 SRTA Enterprise Data Plan (Steps towards Maturity)

- **Data-Driven**
  - Analytical culture
    - BI is pervasive in business processes and organizational culture
    - Information used at all levels of organization
    - Results are measurable
    - Value chain aligned with analytics
  - Trusted data
    - BI strategy with broad management sponsorship
    - Easily-accessed self-service data and BI products
    - Aligning strategic goals with BI measures and operational decisions
    - Centralized data under constant stewardship

- **Strategic**
  - Achieving some success
    - Limited use, basic functions
    - Beginning business sponsorship
    - Management dashboards

- **Focused**
  - “Silos”
    - Some BI investment
    - Some Departmental metrics, using mostly lagging indicators to track performance
    - Data trust issues, systems of record unclear and difficult to access
    - Not leveraging full technological capacity of BI and reporting tools

- **Tactical**
  - “Information anarchy”
    - Inconsistent data
    - High dependency on disconnected spreadsheets to store data
    - Systems of record undefined
    - Few performance metrics with limited connect to decision making
    - Little devotion to BI

- **Unaware**
2020 SRTA Enterprise Data Plan (“Tactical” Pre-Condition)

- **Decentralized Data Siloes by Program Area**
  - Decentralized & Unsocialized
  - Data Governance & Quality Management
  - Unclear or Duplicative Roles & Responsibilities

- **Highly Manual Data Blending & Siloed Transformations**
  - Routine Reporting & Ad-Hoc Analytics
  - Emerging BI Tools by Program Area

- **Discrete and High-Level Targets by Program Area**
2020 SRTA Enterprise Data Plan ("Focused" Outcome)

Design and Build a Stable, Centralized Data Architecture *(Build the House)*

Streamline and Automate Data Processing *(Tank the Crank)*

Clarify and Socialize Data Governance & Data Stewardship Roles & SOPs *(Cut the Scramble)*

Develop a Comprehensive Business Intelligence (BI) Environment and Enterprise Knowledge Library to Enable Self-Service Analytics & Research across All Program Areas *(Open More Gates)*
Trending Challenges and Obstacles

- It’s never NOT overwhelming
- On-going cataloguing of existing data inventory and future data needs
- Development and implementation of a centralized data hub/platform
- Forecasting direct and in-direct costs (and savings) of all of this, even in the short-term
- Delineating championship roles
- CV data management
- Micromobility data access and real-time trip planning (MaaS/MoD)
Contact Info

Kofi Wakhisi
470-378-1500 (direct line)
kwakhisi@atlantaregional.org