

# TAM - The North Carolina DOT Experience

State Level Implementation of TAM

April 16, 2012

*Presented by*

*Shobna Varma*



*Starlsis Corporation*

9th National Conference on Transportation Asset Management  
Making Asset Management Work in Your Organization  
San Diego, California

# NCDOT Mission

*Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity.*

- Make our transportation network **safer**.
- Make our transportation network move people and goods more **efficiently**
- Make our infrastructure **last longer**.
- Make our organization a place that **works well**.
- Make our organization a **great place** to work.



# NCTAM Philosophy

- TAM and Agency Mission are linked
- The TAM Philosophy
  - Proactive Maintenance, Preservation and Improving the condition of Infrastructure
  - Act to sustain the condition and performance of assets
  - Plan and designate funds for the wave of bridges and interstates that are reaching “end-of-life”
  - Work iteratively to extend the productive life of assets
  - Be accountable to the public and stakeholders
  - Be transparent



# Measures and Mechanisms for Success of TAM

- Performance Measures
  - based upon level of service
  - Indicators ensure long-term good condition and performance of transportation assets
- Mechanisms
  - Develop, enhance and implement management systems
  - Decentralized decision-making
  - Centralized data repositories
  - Easier access via use of web technologies
- Data driven trade-off analysis to Optimize use of limited funds



# New Vision for Transportation-2009

- In prioritization and selection of projects *use measurable criteria such as safety, congestion and system condition*
- In delivering strategic decisions, actively engage and seek input from transportation partners and technical experts
- In Project selection process, include priorities of local and regional
- Incorporate extensive public outreach to both inform and get public input
- In delivering projects, use design-build-financing, an innovative financing strategy, and
- Have a cohesive and integrated organization that
  - is involved in decision-making,
  - takes ownership and
  - collaborates across silos to deliver the targeted results.



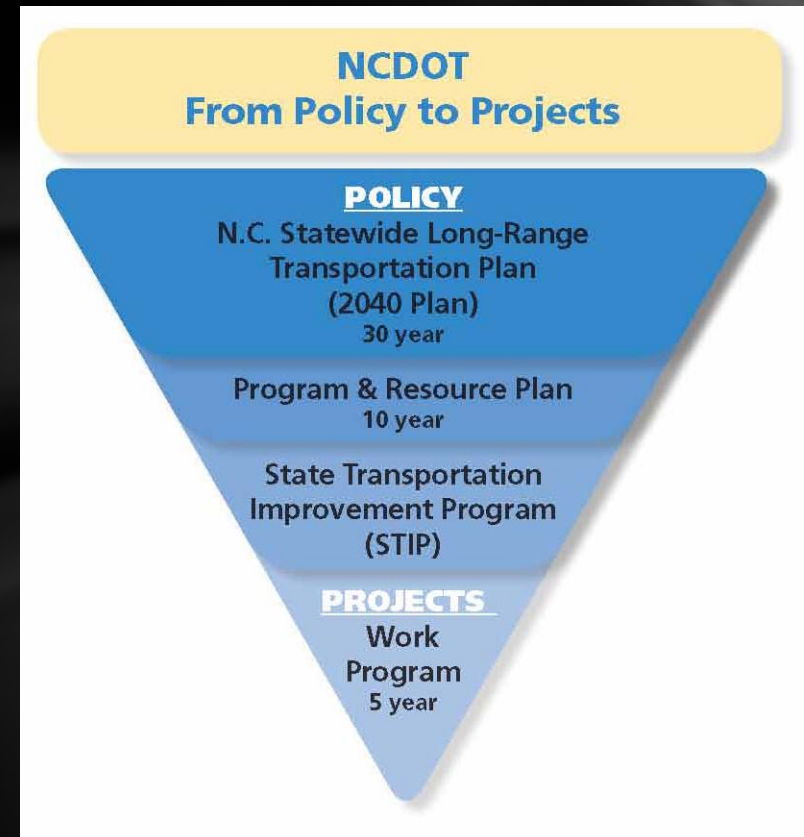
# New Vision for Transportation-2009 cont'd

- Have the right performance measures and the right targets- (Measures are not an end in themselves)
- Align organizational activities and employee activities
  - Link performance measures within and across business units as well as with resource agencies
  - Engage and ensure collaboration within and across business units
  - Tie employee performance to agency performance (Performance Appraisal Dashboard)
  - Encourage business units to take ownership to deliver desired outcomes



# TAM and Long Term Strategic Plan

- Link policy to projects
- Have projects that address high priority programs
- Develop a performance management framework to deliver transportation infrastructure that
  - Moves people and goods more efficiently
  - Lasts longer
  - Links short term activities to achieve long-term goals
  - Higher priority to more used assets
  - Integrates public and stakeholder input in prioritization



# Organizational components

- Align employee goals to agency goals
- Empower Employees
- Centralize select common activities
  - Data processing,
  - Technology and tools management
  - Finance
- Decentralize and Facilitate decision making at all levels
- Use multi-pronged communication strategy to share information and obtain feedback





# Factors Conducive to Success of TAM

- Provide tools, technologies, and training to empower employees to make decisions without fear of failure
- Indecision is expensive and institutionalizing knowledge management and decision-making is important to sustain long-term performance of the business
- Have incremental achievable goals trending in the right direction
- Be discriminating in what needs to be perfect
- Communicate using all the tools available both internally and externally
- Make data available to all employees from a single data source



# Lessons learned

- TAM is a journey and it is important to start the journey
- Active engagement of leadership is essential to institutionalize TAM in an agency
- Measuring the right things and establishing the right targets is very important
- In establishing long-term Performance Measures- Periodically correlate customer expectations and engineering judgment
- Business units buy-in on desired outcomes makes achieving agency goals easier
- Make innovating easy and inclusive
- Over a period of time the employee Performance Dashboard Appraisal (PDA) forced conversations between managers and employees
- Persistence and patience will help address employee fears to the PDA and result in a more informed and innovative workforce



# Results of the TAM Efforts in NC DOT

- A culture of innovation
- Data driven decisions
- Well thought and logical trade-offs in decision-making
- Expedited decision making
- Larger pool of more knowledgeable workers
- Sustainable plan for managing assets
- Accountable and transparent process that makes it easier to answer legislators and the stakeholders





Thank You

Shobna Varma

[svarma@starisis.com](mailto:svarma@starisis.com)



StarI sis Corporation