

# Coordinated Freeway and Arterial Operational Plans and Procedures

University of Tennessee

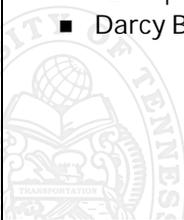
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University of Virginia  
TransCore  
Darcy Bullock  
June, 2002



## The UT Team

- University of Tennessee
  - Tom Urbanik PI
  - Matt Cate
- University of Virginia
  - Brian Smith
- TransCore
  - Steve Levine
  - Greer Gillis
  - Stephanie Kolb
- Darcy Bullock



# Technical Approach

- Task A. Literature Review and Synthesis
- Task B. Produce Technical Reference Document
- Task C. Communications Plan, Outreach Material and Tri-fold Brochure
- Task D. Recommendations for Further Research, Training and Technology Transfer



# Task A1: Kick-off Meeting

- Today's Activity



## Task A2: Lit. Review, Sampling Plan, and Anno. Bibliography

- "Case studies" (TransCore)
- TRB Committee Input (Urbanik)
- List servs (Urbanik)
- TMC Pooled-fund (Discuss process)
- Literature review (UV)
- Issue: Proactive lessons learned



## Task A3: Annotated Outline and Synthesis of Practice

- Review first cut outline for missing elements
- Review first cut content for missing elements.



## Technical Reference Content

- Part I: Overview of Coordinated Freeway and Arterial Operations
- Part II: Coordinated Management and Operations Concepts, Strategies, Plans, and Procedures
- Part III: Supporting Technologies and ITS Elements
- Part IV: Application of Procedures to Typical Scenarios

## Part I: Overview

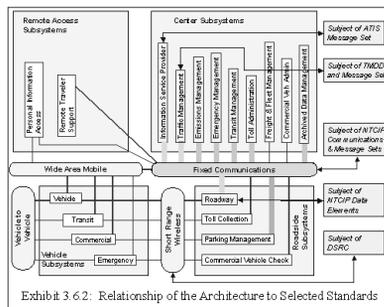
- Introduction
- Planning, Stakeholder Coordination and Institutional Issues
- Managing Travel and Controlling Traffic In Freeway Corridors
- Performance metrics
- Monitoring, Management and Evaluation Infrastructure

## Part II: Coordinated Management and Operations

- Day-to-Day Management of Travel and Control of Traffic
- Strategies to Continuously Improve Freeway and Arterial Plans and Procedures
- Freeway and Arterial Coordination
- Traffic Incident Mgmt Coordination
- Planned Special Event Mgmt Coordination
- Emergency & Evacuation Mgmt Coordination
- Major Reconstruction and Maintenance

## Part III: Supporting Technologies and ITS Element

- Electronic Infrastructure and Interfaces between Freeway and Arterial Control Systems
- Detection and Surveillance Sharing
- Control Center Coordination
- Data and Information Sharing and Regional Integration
- Relationship to National Architecture



## Part IV: Application of Principles to Typical Scenarios

- Freeway and Frontage Road
- Freeway and Parallel Arterial(s)
- Freeways and Multi-jurisdictional Arterial
- Public Transit and Commercial Vehicle Considerations



## Possible Chapter Format

- Introduction
- Current Practices, Methods, Strategies & Technologies
- Implementation & Operational Considerations
- References



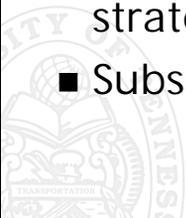


## Introduction

- High level overview of module subject/definitions/key topics
  - Module scope and objectives
  - Relation to other chapters
  - Relation to national architecture
  - Major/key references
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## Current Practices, Methods, Strategies & Technologies

- Basic summary of issues for unfamiliar reader
  - Relationship to program development process
  - Overview of current practices, strategies and technologies
  - Subsections providing more details
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## Implementation and Operational Considerations

- Lessons Learned
- Specific Examples (if available)
- Evolving issues



## References

- As appropriate
  - Freeway Operations Handbook
  - Incident and Special Event Handbook
  - Communications Handbook
  - Traffic Control Systems Handbook



## "Case Study Locations

Location	Initial Contact	Lead
INFORM	Emilio Sosa, NYSDOT	Levine
Milwaukee	John Corbin, WISDOT	Urbanik
LA Smart Corridor	Anson Nordby, LADOT	Kolb
Northern Virginia	Kamal Suliman, VDOT NOVA	Smith
CHART	Mike Zezeski	Smith/Gillis
NYC	Lai, NYSDOT/Galgano, NYCDOT/Edelman, Transcom	Levine
Seattle	Pete Briglia, WSDOT	Kolb
Hampton Roads	Stephany Hanshaw, VDOT Hampton Roads	Smith
Minneapolis	Dennis Eyer, SRF Consulting	Bullock
Atlanta	Randy Bundy, City of Atlanta	Kolb
Houston	Jack Whaley, TranStar	Urbanik
Phoenix	Henry Wahl, Kimley-Horn	Urbanik

## Task B: Produce Technical Reference Document

- B1: Technical Reference Mockups
  - TOL Presents Two Alternatives
  - COTM Selects/Requests Revision
- B2: Draft Technical Document
- B3: Final Technical Document

## Task C: Comm. Plan, Outreach Material, and Tri-fold Brochure

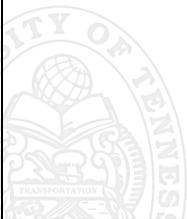
- C1: Project Fact Sheet, Presentation and Outreach Material
  - Evolving material
  - Two alternative versions: Tracking and Public
  - Final Capstone Presentation
- C2: Tri-fold Brochure (Decision-maker oriented)
- C3: Communications Plan

## C3: Communications Plan

- Audiences
  - Traditional
  - Non-traditional: City Mgrs and Elected Officials
- Support
  - AASHTO
  - ITE
- Profession Capacity Building
  - Universities

## Task D: Recommendations for Further Research, Training & T<sup>2</sup>

- A Brief White Paper
- Presentation to TRB Committees
  - Freeway Operations
  - Traffic Signal Systems



## The Schedule

Task Area	Product	Due Date
Task A.1: Kickoff Meeting	PowerPoint Presentation 1	June 24, 2002
Task A.2: Literature Review, Sampling Plan, and Annotated Bibliography	Annotated Bibliography Sampling Plan	August 9, 2002
Task A.3: Annotated Outline and Synthesis of Practice	Annotated Outline Synthesis of Practice	October 8, 2002 Proposed November 7, 2002
Task B.1: Technical Reference Document Markups	Two Technical Reference Document Markups	December 7, 2002
Task B.2: Draft Technical Document	Draft Technical Reference Document	March 7, 2003
Task B.3: Final Technical Document	Final Technical Reference Document	July 5, 2003
Task C.1: Project Fact Sheet, Presentation, and Outreach Material	Project Presentations Project Fact Sheet Technical Presentation	As needed As needed June 5, 2003
Task C.2: Tri-fold Brochure	Tri-fold Brochure Draft Final Tri-fold Brochure	June 5, 2003 21 Days after receipt of comments
Task D.1: Draft White Paper	Draft White Paper	June 5, 2003
Task D.2: Final White Paper	Final White Paper	August 4, 2003

# Questions:

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