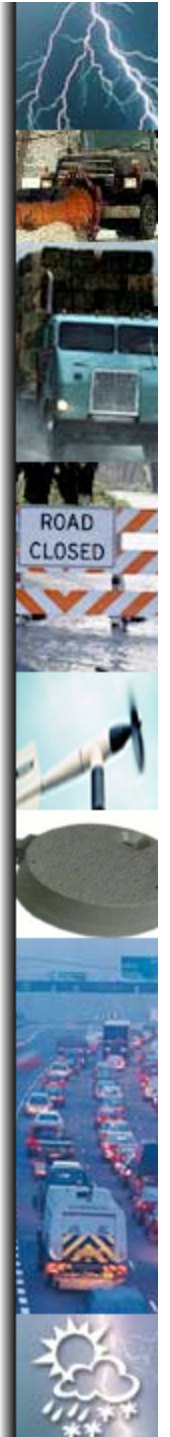


Clarus ICC Meeting #2

Flamingo Las Vegas Resort
March 2-3, 2005



Agenda

Welcome	Regina McElroy
Refresher & Overview	Paul Pisano
Executive Summary Review	James Pol
NOAA Surface Program	Mike Campbell
Canadian RWIN Program	Paul Delannoy
VII Program Update	James Pol
Update on Standards	Lynette Goodwin
Use Case Reviews and Breakout Launch	James Pol / Jeff Brummond



Introductions

- Name
- Organization



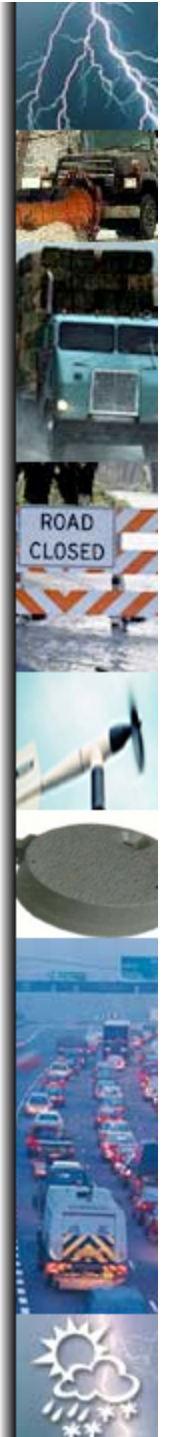
Welcome ICC Meeting #2

Regina McElroy
Director, FHWA Office of
Transportation Operations



ITS Initiatives

- Reorganization of the Federal ITS Program
- Coordination through the ITS Management Council
 - Top management from all the USDOT modal administrations
- Performance Tracking
 - Stakeholder Acceptance among leading indicators



USDOT ITS Initiatives

Integrated Vehicle
Based Safety
Systems

Cooperative
Intersection Collision
Avoidance Systems

Next Generation
9-1-1

Mobility Services for
All Americans

Integrated Corridor
Management
Systems

Clarus

Emergency
Transportation
Operations

Universal Electronic
Freight Manifest

Vehicle Infrastructure
Integration (VII)



Federal Activities

- Coordination with other ITS Initiatives
- Keeping Clarus aligned with other federal, state, and private-sector initiatives
 - Coordination with the Clarus Initiative Management Team
- Attracting broader representation of stakeholders



Reaching the Vision

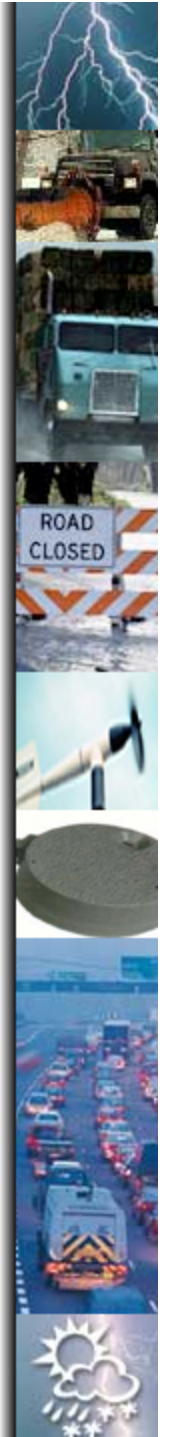
- Shape Clarus to make proactive management of transportation a reality
- Consider Clarus potential to transform how we travel and how we do business
- Our imagination is the limit



Clarus Refresher & Overview

Paul Pisano

Road Weather Program Manager
FHWA Office of Transportation Operations



Changing Current Practices

- Weather products today generally are insufficient for transportation operations
 - Too generalized
 - DOTs investment in road observations
- Surface weather forecasting benefits from more data from more sources
 - Ground observations are plentiful, but not managed to form coherent picture
- Managing all available ground data yields new products



What Travelers Typically Get

SPECIAL WEATHER STATEMENT

NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC

505 AM EST FRI DEC 10 2004

...FOGGY AND WET MORNING COMMUTE...

WIDESPREAD FOG CONTINUES ACROSS THE REGION...WITH VISIBILITIES REDUCED TO **NEAR ZERO IN SOME LOCATIONS**. IN ADDITION...RAIN WILL CAUSE **PONDING OF WATER ON SOME ROADWAYS** ACROSS LOWER SOUTHERN MARYLAND AND ACROSS SOME COMMUNITIES EAST AND SOUTHEAST OF BALTIMORE AND THE DISTRICT...WHILE LIGHTER AND MORE ISOLATED SHOWERS ROAM THE REMAINDER OF THE REGION THROUGH THE MORNING COMMUTE.

MOTORISTS SHOULD SLOW DOWN AND USE CAUTION DURING THE MORNING COMMUTE DUE TO THE COMBINATION OF WET ROADWAYS AND LOW VISIBILITIES.

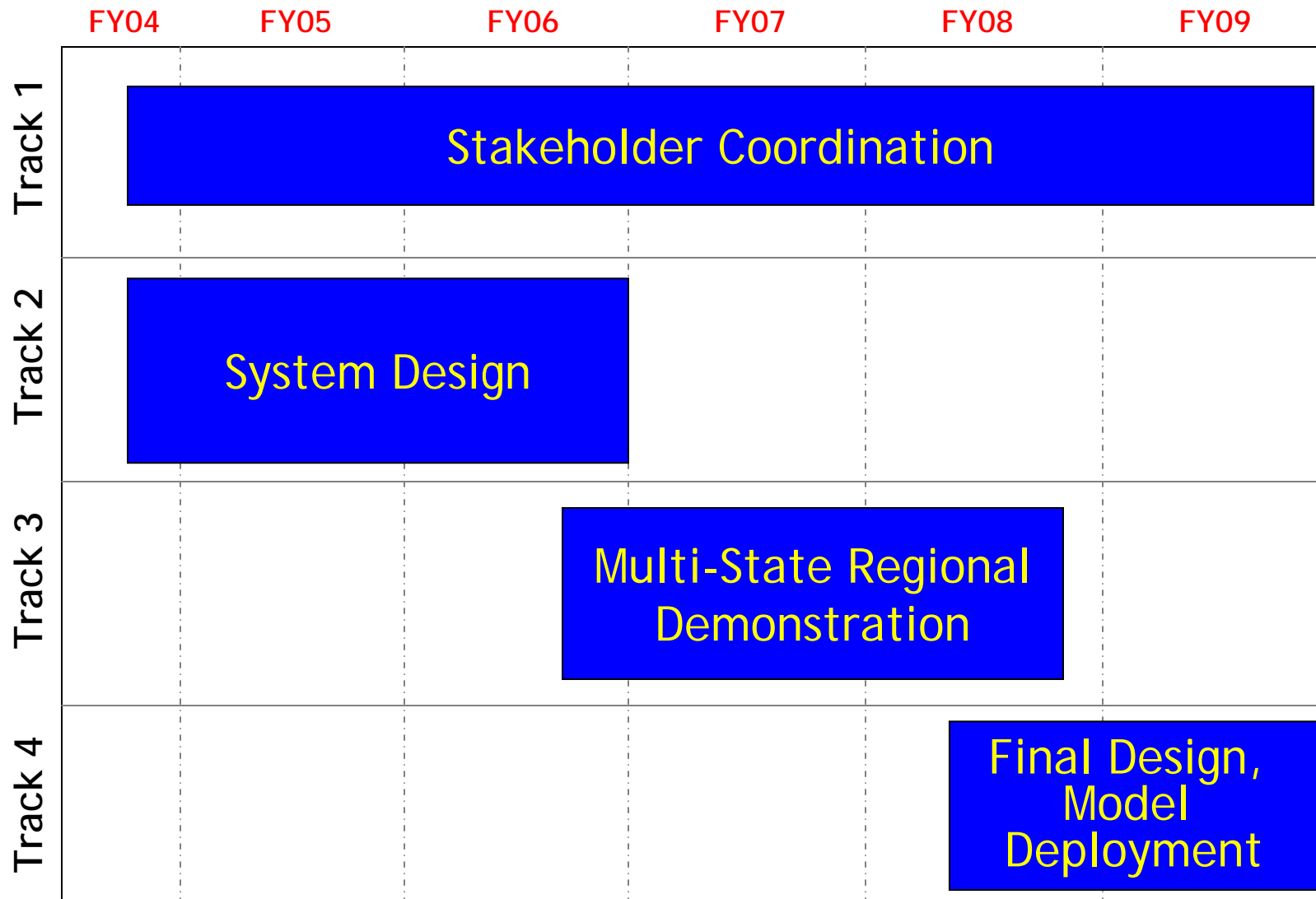


Two Development Components

- Clarus System
 - Network for sharing surface weather observations and relevant surface transportation conditions
- Clarus Initiative
 - Development of tools, models, decision support that leverage the Clarus System



Clarus Roadmap Overview



Review of Clarus ICC #1

- September 2004 at University of Oklahoma
- Over 60 Participants
- Validation on approach towards developing Concept of Operations
- Validation on management of the ICC
- Identification and launch of task forces



Progress Since Last Meeting

- Launched Web site:
www.clarusinitiative.org
- Concept of Operations Development
 - Identified user needs
 - Developing Operational Scenarios
- Concept of Operations refined
 - ConOps User Needs Task Force
(Charlene Wilder - FTA)
 - ConOps Use Cases Task Force
(Brenda Boyce - Mixon/Hill)



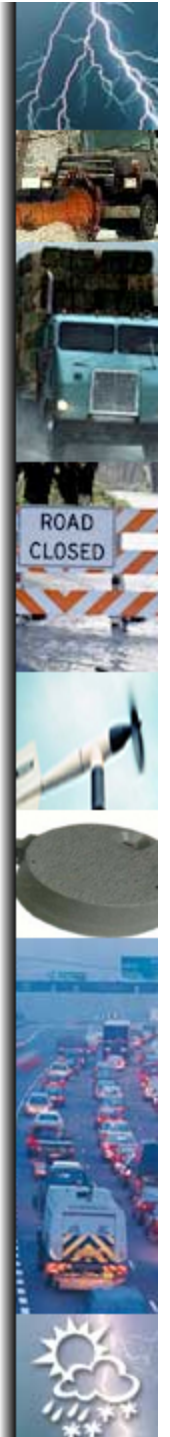
Progress Since Last Meeting

- System Design Procurement
 - Reviewing Proposals
 - Award anticipated in May
 - Completion within 20 months
- Proof-of-Concept Deployment
 - Evaluate data quality, interfaces, system components
 - Lead-in to Multi-State Deployment



Progress Since Last Meeting

- Clarus Initiative Management Team
 - US DOT (Pol, Pisano)
 - NOAA (Mike Campbell)
 - AASHTO (Lee Smithson)
 - AMS (Rich Wagoner)
 - TRB (Frank Lisle)
 - ITS America (Steve Kuciemba)
 - ITE (Les Jacobson)



Upcoming Activities

- Closed-Circuit TV
 - Extracting visibility and pavement condition data from CCTVs via image processing
- Vehicle Infrastructure Integration (VII)
 - Exploring the type, quality and ease of gathering data from vehicles
 - Direct and inferred data elements
- Collaborative Adaptive Sensing of the Atmosphere (CASA)
 - Exploring the gathering of surface / near-surface data from low-cost / low-power radar



Objectives for this Meeting

- Refine the Concept of Operations, especially the scenarios
- Open discussion on activities that affect the development of the Clarus Initiative



Executive Summary Review of Concept of Operations

James Pol, PE
Clarus Initiative Manager
USDOT ITS Joint Program Office



Why a Concept of Operations

- Provides a high-level definition of how the system works
- Establishes an understanding of the needs of the various stakeholders and how the Clarus System can be structured to meet the users' stated requirements
- Identifies connections and attributes among the pieces of the Clarus System and its external interfacing entities



Guiding Principles (1)

- The principal users whose needs are discussed in this Concept of Operations are users who directly interact with the Clarus System
- Service Providers are both public and private entities that provide basic and value-added weather support services to support the weather information needs of the broader surface transportation community



Guiding Principles (2)

- Service Provider Customers include those groups who are direct consumers of products generated by Service Providers and are generally not a direct user of Clarus data
- There are inherent time latencies to deliver data, so functions need to identify their latencies



Guiding Principles (3)

- A Concept of Operations is, foremost, a systems engineering document
 - Must enable systems developers to interpret high level requirements
- User communities need to see a reflection of themselves in a Concept of Operations
 - Document structured around Operational Scenarios



Two-fold Value to the Public Sector

- The Clarus System acts as an asset multiplier for state DOT's gaining ready access to additional sources of data that otherwise would not be integrated
- Quality data access lends to efficiency gains in a wide array of agency functions
 - QC Feedback to State DOT, data providers
 - Improved public perception from the tax payers
 - Market opportunities for private sector to draw out these efficiencies



Nine Defined Operational Scenarios

- Roadway Maintenance and Construction Operations Function
- Traffic Operations Function
- Traveler Information Function
- Transit Management Function
- Emergency and Public Safety Function
- Rail Operations Management Function
- Commercial Vehicle Operations Function
- National Oceanic and Atmospheric Administration Function
- Time Critical Weather Operations Function



Additional Information

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