

# Speed Data Collection and Uniform Reporting Across State and Other Jurisdictional Boundaries

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# Presentation Outline

- 1: Why FHWA seeks to establish the program
- 2: FHWA's preliminary plan on data usages
- 3: What exactly FHWA is looking for
- 4: FHWA's thoughts on how the system can be developed and implemented
- 5: Preliminary proposal
- 6: Q and A

# Why FHWA Seeks the Program

- 1: Accountability
- 2: Performance measurement
- 3: Benefits and cost analysis

# Why FHWA Seeks the Program

## 1: Accountability

<b>SAFETEA - LU Guaranteed Funding - Millions of Dollars</b>						
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
<b>Discretionary Spending</b>						
FAH Obligation Limitation	34,423	36,032	38,244	39,585	41,200	189,484
<b>Mandatory Spending:</b>						
Emergency Relief	100	100	100	100	100	500
Equity Bonus	639	639	639	639	639	3,195
<b>TOTAL, Guaranteed Funding</b>	<b>43,550</b>	<b>46,582</b>	<b>49,175</b>	<b>51,294</b>	<b>53,547</b>	<b>244,148</b>

# Why FHWA Seeks the Program

## 2: Performance Measurements

- 1: Pre and post evaluation
- 2: Lesson learned
- 3: Do it better in the next round

# Why FHWA Seeks the Program

## 3: Benefits and Cost Analysis

a: Program level

b: System level

c: Project level

# FHWA's Preliminary Plan on Data Usages

- 1: Performance assessments on national significant routes and corridors – travel time reliability
- 2: Safety evaluation
- 3: Analyzing effectiveness of investment strategies and practices as related to travel time improvement, safety, and congestion.
- 4: Develop and research implementation strategies on performance measurements as related to funding mechanisms
- 5: Others, such as greenhouse gas ...

# FHWA's Initial Plan on Data Usages

- 1: VMT by region, by roadway functional class and speed.
- 2: Speed trends by roadway functional class and by region
- 3: Frequency of speed outliers by region and by roadway functional class
- 4: Reevaluate speed volume relationships under different conditions



# What FHWA is Seeking

Roadway link speed, but we ...

# What FHWA is Seeking

- 1: Data sources – public and private domain
- 2: Data format – uniform format
- 3: Timely reporting – meaningful reporting schedule

# FHWA's Preliminary Thoughts

- 1: Establish an uniform speed data format – reporting
- 2: Establish a minimum speed data quality standard
- 3: Using the current TMAS system for reporting
- 4: Potentially open TMAS up to MPOs, City and County agencies or any other public agencies dealing with traffic data collection

# FHWA's Preliminary Proposal

Unit

Miles per hour



# Reporting Frequency

every hour – 24 reporting period in a whole day

# Data Aggregation

Speed Bins



# Data Aggregation

by direction





# Data Aggregation

1: by lane or

2: by HOT, HOV and combination of remaining general purpose lanes or

3: by most inside lane and remaining lanes combined

# Bin Option

Step: 5 miles per hour

# Bin Option for Now

- 1: No mandatory first bin speed range
- 2: No mandatory last bin speed range

# Bin Option for Now

All speed bins must be divisible by 5



# Geographical Location

- 1: LAT/LONG
- 2: LRS
- 3: Others

# Know Our People

FHWA Office of Highway Policy Information  
David Winter, PE

**Recovery Act**

Chris Allen

**Highway Funding  
and  
Motor Fuel**

Ralph Erickson

**Highway System  
Performance**

Ralph Gillmann

**Travel Monitoring  
and  
Surveys**

Tianjia Tang, PE.

# Know Our People

## Travel Monitoring and Surveys Division

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graph TD; A[Travel Monitoring and Surveys Division] --> B[Travel Monitoring]; A --> C[Travel Analysis and Modeling]; A --> D[National Household Travel Survey];
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### **Travel Monitoring**

Steven Jessberger  
David Jones  
Danny Jenkins  
Vacant Position

### **Travel Analysis and Modeling**

Ron Erickson  
Patrick Zhang

### **National Household Travel Survey**

# Questions

