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Safety Service Patrol Idea Sharing Network – Session II: Performance Measures

Why Measure TIM Performance?

- Increase transparency and accountability
- Justify funding under resource constraints
- Drive improvements and outcomes
- Improve communication, coordination, and relationships with TIM partners
- Make progress toward the achievement of national goals

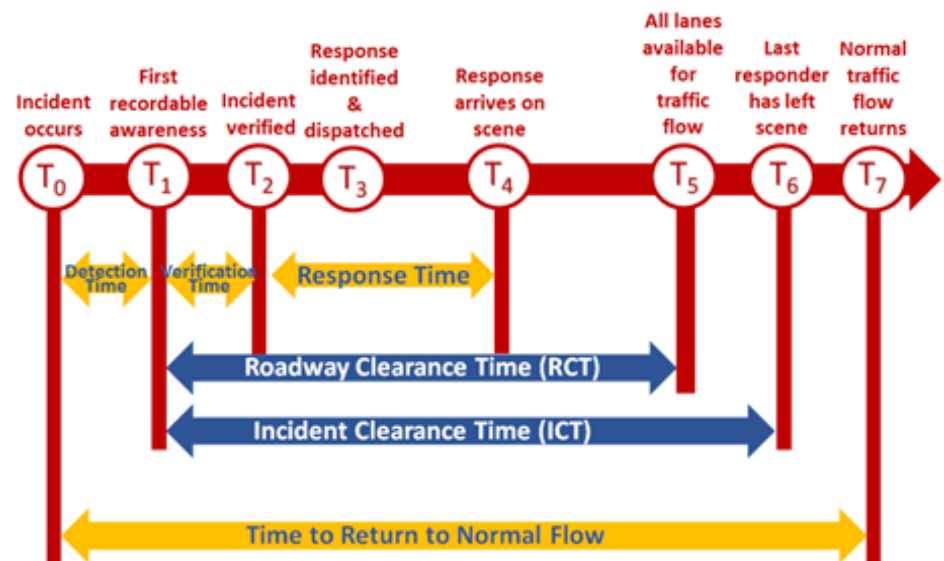
...What gets measured, gets performed!

National TIM Performance Measures

Roadway Clearance Time (RCT): Time between the first recordable awareness of an incident by a responsible agency and the first confirmation that all lanes are available for traffic flow.

Incident Clearance Time (ICT): Time between the first recordable awareness of an incident by a responsible agency and the time at which the last responder has left the scene.

Secondary Crashes: The number or percentage of unplanned crashes beginning with the time of detection of the primary incident, where a crash occurs as a result of the original incident either within the incident scene or within the queue in either direction.



Sources of Incident Data

- Transportation
 - Traffic management/operations centers
 - Freeway Service Patrols

- Law enforcement
 - Crash reports
 - Incident reports
 - Computer-aided dispatch (CAD) systems

- Fire department & emergency medical services CAD systems

- Towing companies

- Social media/crowd sourcing (e.g., WAZE)

The screenshot shows a web-based form titled "Add New Incident". It includes fields for "Time Stamp" (8/7/2014 2:29 PM), "Incident Type", "Corridor" (CC-215 EB), "Location" (past Rainbow, (Southern B...)), "Roadway ID" (507), "Segment ID" (1), "Which Lanes Blocked", "Number of Lanes", "Estimated Duration (Minutes)" (60), "Message" (8/7/2014 2:29 PM, on CC-215 Eastbound past Rainbow, (Southern Beltway)), "Tow Truck Arrived", "Lane Cleared", "Shoulder Available", "Severity", "Truck Involved", and "Secondary". There are also checkboxes for "Quick Clearance", "Veh Moved by Itself", and "Injury/Ambulance". Buttons for "Alert All", "GovDelivery", "Add", and "Close" are at the bottom.

Source: Freeway and Arterial System of Traffic

Florida Highway Patrol Electronic Crash Reporting System

The screenshot shows the "Florida Highway Patrol Electronic Crash Reporting System" interface. It has a top navigation bar with tabs like "Vehicles", "CMV", "Hit & Run", "Motorists", "Non-Motorists", "Witnesses", "Other Persons", "Injured", "Fatalities", "Violations", "Businesses", "Drugs/Medication/Alcohol", "Driver(s)", "NonMotorist(s)", and "Crash Severity". Below are tabs for "General", "Vehicles", "Persons", "Businesses", "Narratives", "Diagrams", and "Non-Vehicle Property Damage". The main form area includes "Crash Identifiers & Roadway", "Crash Information", "Violations", "Pictures", "Attachments", and "Approval". Fields include "Form Type", "County" (DUVAL), "City" (JACKSONVILLE), "Crash Date/Time", "Reported to Agency Date/Time", "Dispatched Date/Time", "On Scene Date/Time", "Cleared Scene Date/Time", "Report Date/Time" (02/16/2012 03:07 PM), "Investigation Complete Date/Time", "Reason Investigation not Complete", "Source of Information" (LAW ENFORCEMENT AGENCY), "Law Enforcement Source ORI", "Crash Sequence Order" (SECONDARY), and "Latitude" (N 30 17.8374). There are also checkboxes for "Roadway Blocked by Crash" and "Roadway Cleared Date/Time".

NCHRP 07-20: Guidance on the Implementation of TIM Performance Measures



- Sponsored by TRB and completed in November 2015
- **Two primary objectives:**
 - Develop **concise guidance** on the implementation of TIM performance measurement that is applicable to a broad spectrum of transportation and incident responding agencies.
 - Develop a **model database** (including schema) for the data elements and performance measures suitable for eventual aggregation of performance measures at a State and national level.
- **Two products:**
 - Written guidance document
 - TRB-formatted version downloadable or for purchase from TRB.org
 - Version submitted to TRB in November 2014 (currently available via download from TIM PM website)
 - Online guidance tool – TIM PM
 - Contains the same information as the written document but it is easy to access and more user friendly

SSP-BC Tool

- Web-based
- User-friendly
- Assist
 - State and local engineers
 - Decision-makers

The screenshot displays the SSP-BC Tool interface for a project named "SSP Project". The interface is divided into several sections:

- Segment:** Includes a dropdown menu for "Segment" (set to "Segment 1"), a text input for "Enter Segment Name", and a dropdown for "Harrisonburg, VA".
- Roadway Geometry:** Contains input fields for "SEGMENT LENGTH IN MILES" (10), "NUMBER OF RAMPS" (5), "NUMBER OF TRAFFIC LANES BY DIRECTION" (2), "GENERAL TERRAIN" (Flat - 0), and "HORIZONTAL CURVATURE" (Straight).
- SSP Program Information:** Features checkboxes for "OPERATION TIME" (AM Peak, PM Peak, Weekday Off Peak, Weekend), "INCIDENT DURATION SAVINGS" (Average Duration, By Lane Blockage), and "ENTER AVERAGE DURATION SAVINGS (Minutes)" (20).
- Incident Information:** Shows a table for "AM Peak" with columns for "Incident Blockage Severity", "Average Incident Duration (Minutes)", and "Number of Managed Incidents". The table includes rows for "Shoulder Blockage" (25, 30) and "One Lane Blockage" (30, 50). Below the table is a field for "PERCENTAGE OF ESTIMATED SECONDARY INCIDENTS (enter as 0-100)" (3).
- Traffic Information:** Includes a field for "POSTED MAINLANE SPEED LIMIT (MPH)" (65) and a table for "Traffic Volume (VEH/H/Lane)" and "Truck Percentage (0-25)".

Buttons for "Calculate Ratio" and "Reset Information" are located at the bottom left of the interface.

- Evaluate and compare the monetary value of SSP programs
- An expansion will be complete in August 2015
 - Cover 8 additional traffic incident management (TIM) strategies

TMC Operator/Dispatcher TIM Training

- Purpose of this training is to ensure that:

Dispatchers and Transportation Management Center (TMC) operators are fully aware of and integrated into, the traffic incident management (TIM) process.

- Intended to supplement, not replace, site/function-specific training.
- Promotes responder understanding of the roles and responsibilities of dispatchers and TCM operators.

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