INCORPORATING SAFETY INTO THE PLANNING PROCESS
Session Learning Objectives

1. Understanding TSP

2. Integrating Safety into the Transportation Planning Process

3. Resources
Objective 1
Understanding TSP

• Definition
• Scope of the Problem
• MAP-21
Reducing transportation fatalities and serious injuries by supporting comprehensive, system-wide, multimodal, data-driven, and proactive regional and statewide transportation planning processes that integrate safety into surface transportation decision-making.
2012 Fatalities: 33,561
2012 Fatal Crashes: 30,800
Crashes were the leading cause of death in those under 30

Over 33,000 people died in a crash

About 90 people died each day on U.S. roads

10,322 people died due to alcohol-impaired drivers

Crashes cost $99 billion in medical care, rehabilitation and lost wages
Roadway Fatalities 2000-2012

Data Source:
USDOT, NHTSA, Traffic Safety Facts
Roadway Injuries 2000-2012

Data Source:
USDOT, NHTSA, Traffic Safety Facts
Fatalities
Average 2010-2012

- Roadway Departure Only Crashes, 51%
- Intersection Only Crashes, 18%
- Pedestrian Only Crashes, 9%
- Rwd, Ped, Int Crashes, 10%
- Other Crashes, 13%
- RwD + Int, 4.4%
- Int + Ped, 3.9%
- RwD + Ped, 1.1%
- All, 0.2%

RwD: Roadway Departure
Int: Intersections
Ped: Pedestrians
On July 6, 2012, President Obama signed into law P.L. 112-141, the *Moving Ahead for Progress in the 21st Century Act* (MAP-21)
Major Themes of MAP-21

• Strengthens America’s highway & public transportation systems & economy.
• Establishes a performance-based Federal program.
• Supports USDOT’s safety agenda.
• Simplifies & focuses the Federal program.
• Accelerates project delivery & promotes innovation.
National Goal Areas

[$\$$1203; 23 USC 150(b)]

• Safety
• Infrastructure condition
• Congestion reduction
• System reliability
• Freight movement and economic vitality
• Environmental sustainability
• Reduced project delivery delays

**Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on public roads
Key Safety-Related Features of MAP-21

Metropolitan & Statewide plans must:
- Integrate performance goals, measures and targets.

Highway Safety Improvement Plan (HSIP)
- Increases size of existing HSIP.
- Requires Secretary to establish measures and States to set targets for number and rate of serious injuries & fatalities.
- Strengthens links between HSIP & NHTSA programs.
State Highway Safety Improvement Program (HSIP)

• Advances capabilities of States to conduct safety data collection, analysis, and integration.
Strategic Highway Safety Plan (SHSP)

- Expands consultation (County transportation officials, State reps of non-motorized users, & other major Federal, State, tribal & local safety stakeholders).
- Requires adoption of strategic & performance-based goals.
- Considers additional data and safety factors.
- Requires regular (SHSP) updates.
Objective 2
Integration of Safety into the Transportation Planning Process

- Overview
- Identify Opportunities
- Practical Approaches
The Comprehensive 4E Approach
Integrating Safety

- Multidisciplinary
- Multimodal
- System-wide
- Collaborative
- Proactive
Traditional Transportation Planning Process
Performance-Based Transportation Planning Process
Engage Safety Stakeholders in the initial planning process

Identify safety as a major organizational goal

Identify existing safety concerns in the system, set targets to correct safety issues
Integrating Safety into the Process

- Collect and analyze safety data
- Use data to identify locations for safety treatments

Use safety policies from other planning documents as a guide for inclusion in the LRTP

Include safety-related scoring and ranking in the LRTP to establish safety as a factor in project selection
Integrating Safety into the Process

- Design standalone safety projects
- Integrate safety elements into other TIP projects
Integrating Safety into the Process

- Continually revise strategies to meet safety goals and objectives
- Periodically assess progress toward safety performance measures
- Evaluate successes in safety initiatives
Strategic Direction

Engage the community and develop a vision for the future during early planning stages.

• Develop materials to illustrate existing safety problems across modes.

• Identify potential benefits of a comprehensive safety strategy.

• Integrate safety into vision statements and visioning exercises.
Goals and Objectives

Develop key outcomes for the planning process.

- **Generate** strategic, measurable, agreed-upon, realistic, time-bound objectives related to safety.
- **Ensure** measurable goals and objectives that reflect important safety-related issues.
- **Set** goals identifying desired safety improvement outcomes.
Performance Measures

Develop metrics as a basis for comparing improvement strategies.

- **Identify** potential safety performance measures.

- **Prepare** performance measures reflecting safety goals and objectives in the jurisdiction.

- **Refine** performance measures based on data collection feasibility.
Analysis

Determine strategies based on an objective process such as criteria comparison, weighted scores, or cost/benefit analysis.

- **Utilize** performance measures to analyze and prioritize various strategies.

- **Perform** scenario analysis to assess various strategies and consider funding levels.
Programming

Make safety a priority in LRTP and integrate safety into the S/TIP

- **Design** standalone safety projects.
- **Integrate** safety elements into S/TIP projects.
- **Utilize** project Selection Criteria that emphasize safety.
Implementation & Evaluation

Implement strategies, evaluate program and policy effectiveness.

- **Monitor** actual conditions and improvement.
- **Communicate** safety measure effectiveness; obtain feedback from stakeholders.
- **Analyze** safety information from system performance to identify improvements.
Objective 3

Resources
Resources

FHWA Office of Safety
http://safety.fhwa.dot.gov/tsp/

FHWA Office of Planning, Environment, & Realty Planning
http://www.fhwa.dot.gov/planning/transportation_safety_planning
Final Thoughts

• Work collaboratively to identify safety integration opportunities.

• Leverage the planning process to impact safety.

• Engage transportation planners & committees.

• Build consistency between LRP/MTP and safety plans.

• Use data and analysis to benchmark and measure safety concerns.
Audience Specific Modules
Select modules appropriate for audience.

• Federal Level (i.e. FHWA)
• State Level (i.e. DOTs)
• MPOs
• RPOs
• Local Elected & Appointed Officials
Applying TSP to Federal Level Planning

• How does transportation safety planning impact your work?

• Ways to better integrate safety

• Tools and resources
How does Transportation Safety Planning Impact your Work?

• Lead implementation of the MAP-21 provisions including incorporating safety into transportation planning.

• Guide development of performance-based planning through education and training.

• Monitor state and metropolitan transportation planning process.
Ways to Integrate Safety into the Planning Process

Proactively **promote**, **educate** and **communicate** ways for State DOTs and planning organizations to integrate safety in transportation planning.
Tools and Resources

• Transportation Planner’s Safety Desk Reference – Companion to NCHRP Report 500  
  http://tsp.trb.org/assets/FR1_SafetyDeskReference_FINAL.pdf

• Making the Case for Transportation Safety – Ideas for Decision Makers  
  http://tsp.trb.org/assets/Briefing%20Book%20hi-res.pdf

• A Primer on Safety Performance Measures for the Transportation Planning Process  

• FHWA Websites
  – Office of Planning, Environment & Realty  
    https://www.fhwa.dot.gov/planning/
Applying TSP to State Level Planning

• How does transportation safety planning impact your work?

• Ways to better integrate safety

• Tools and resources
How does Transportation Safety Planning Impact your Work?

- Safety is a National Goal and MAP-21 priority.
- Planning process should integrate safety goals, objectives, and strategies.
- Performance-based planning requires greater coordination across agencies and between functional areas (i.e., safety, congestion, asset condition, etc.).
Ways to Integrate Safety into the Planning Process

• Use crash and GIS data to identify safety concerns and facilitate development of engineering safety strategies.
• Work with enforcement at the corridor-level.
• Engage a safety planning “champion” to support safety initiatives.
• Integrate safety goals, objectives, and strategies in transportation planning process.
Tools and Resources

• *Incorporating Safety Into Long-Range Transportation Planning*


• *Transportation Planner’s Safety Desk Reference*
  http://tsp.trb.org/assets/FR_Safety%20Planner_1_17_07FINAL.pdf

• *Performance Based Planning and Programming Guidebook*

• *A Primer on Safety Performance Measures for the Transportation Planning Process*
Applying TSP to MPO Planning

• How does transportation safety planning impact your work?
• Ways to better integrate safety
• Tools and resources
How does Transportation Safety Planning Impact your Work?

• Under MAP-21 there will be more projects competing for limited flexible funding.

• It is essential that MPO planners understand MAP-21 funding categories and requirements to identify monies and work with the State and the regional MPO(s).
Ways to Integrate Safety into the Planning Process

• Educate local elected officials and public.
• Demonstrate the economic impact of improving transportation safety.
• Allocate funding for low cost safety projects.
• Work with private/public entities.
• Pursue a 4E approach to safety.
Tools and Resources

- **Incorporating Safety Into Long-Range Transportation Planning**

- **Performance Based Planning and Programming Guidebook**

- **A Primer on Safety Performance Measures for the Transportation Planning Process**

- **Making the Case for Transportation Safety – Ideas for Decision Makers**
  http://tsp.trb.org/assets/Briefing%20Book%20hi-res.pdf
Applying TSP to Regional Transportation Planning

- How does transportation safety planning impact your work?
- Ways to better integrate safety
- Tools and resources
How does Transportation Safety Planning Impact your Work?

- MAP-21 recognizes regional transportation planning organizations apart from other planning entities.
- Participate with MPOs; integrate rural safety concerns into the planning process.
- Align with State Plans to capture state funding for safety.
Ways to Integrate Safety into the Planning Process

- Educate local elected officials and the public.
- Demonstrate the economic impact.
- Leverage local funds.
- Identify low-cost safety improvements.
- Consider impact fees around new developments.
- Improve local agency safety data collection.
Tools and Resources

• *Growing Smart Legislative Guidebook*, Chapter 6, Regional Planning
  [http://www.planning.org/growingsmart/guidebook/six01.htm](http://www.planning.org/growingsmart/guidebook/six01.htm)

• *Incorporating Safety Into Long-Range Transportation Planning*

• *Performance Based Planning and Programming Guidebook*

• A Primer on Safety Performance Measures for the Transportation Planning Process
Applying TSP to the work of Elected & Appointed Officials

• How does transportation safety planning impact your work?

• Ways to better integrate safety

• Tools and resources
How does Transportation Safety Planning Impact your Work?

- Laws passed by legislatures impact transportation safety (i.e., helmet laws).
- Judicial decisions in traffic safety cases.
- Elected/appointed officials influence initiatives that achieve safety goals through behavior modification.
Ways to Integrate Safety into the Planning Process

• Encourage local planners to prioritize for safety.
• Set-aside funding to advance safety projects and initiatives.
• Promote the importance of safety.
Tools and Resources

• *Incorporating Safety Into Long-Range Transportation Planning*

• ICMA publications like *Working Together: A Guide for Elected and Appointed Officials Training Workbook*

• The Transportation Planning Process: Key Issues A Briefing Book for Transportation Decisionmakers, Officials, and Staff