Above and beyond MAP-21: More bang for our transportation buck

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Outline

1. MAP-21 (Rob)
2. Exercise (James)
3. “Fails” & A Better Approach (Rob)
4. Above & Beyond (James)
5. Q & A (all)

**Warning: Interactive Late-Afternoon Session**
Part I: MAP-21

You probably already know this stuff.
“Performance management will *transform* the Federal-aid highway program and provide a means to the *most efficient investment* of Federal transportation funds by refocusing on national transportation goals, increasing the *accountability and transparency* of the Federal-aid highway program, and *improving project decision-making* through performance-based planning and programming.”

Source: 23 U.S.C. §150(a)
MAP-21: National Goals

1. **Safety**: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

2. **Infrastructure condition**: To maintain the highway infrastructure asset system in a state of good repair.

3. **Congestion reduction**: To achieve a significant reduction in congestion on the National Highway System.

4. **System reliability**: To improve the efficiency of the surface transportation system.

5. **Freight movement and economic vitality**: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

6. **Environmental sustainability**: To enhance the performance of the transportation system while protecting and enhancing the natural environment.

7. **Reduced project delivery delays**: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.

Source: 23 U.S.C. §150(b)
MAP-21: Performance Measures

Highways

- **National Highway Performance Program (NHPP):** condition of pavement & bridges; performance of Interstate System & National Highway System
- **Highway Safety Improvement Program (HSIP):** serious injuries & fatalities
- **Congestion Mitigation & Air Quality Program (CMAQ):** traffic congestion & emissions
- **National Freight Movement:** freight movement on the Interstate System

Public Transportation

- **Transit Asset Management:** condition assessment
- **Public Transportation Safety Program:** safety risk management & safety assurance

Source: 23 U.S.C. §150(c); 49 U.S.C. §§5326, 5329
MAP-21: Responsibilities

- **USDOT**
  - Establish performance measures

- **States**
  - Set targets (within 1 year)
  - Report progress (within 4 years and then every 2 years)

- **MPOs**
  - Set targets (within 1 year)
  - Report progress (within 4 years and then every 2 years)

Source: 23 U.S.C. §§150(d)–(e), 134(d)(2), 134(h)(2)
History of Guidance


2009: AASHTO. A Primer on Performance-Based Highway Program Management: Examples from Select States. RP-PBHB-1.


                                           GAO. Statewide Transportation Planning: Opportunities Exist to Transition to Performance-Based Planning and Federal Oversight. GAO-11-77.


                                            GAO. Surface Transportation: Financing Program Could Benefit from Increased Performance Focus and Better Communication. GAO-12-641.


FHWA. Supporting Performance-Based Planning and Programming through Scenario Planning. FHWA-HEP-16-068.
Part II: Exercise

Roll up your sleeves.
Part III: “Fails” & A Better Approach

Why performance measures alone won’t set you free.
Decision-Making

Regional Vision and Goals

Alternate Improvement Strategies
- Operations
- Capital

Evaluation and Prioritization of Strategies

Development of Transportation Plan (LRP)

Development of Transportation Improvement Programs (S/TIP)

Project Development

Systems Operations (Implementation)

Monitor System Performance (Data)

Source: FHWA & FTA
Performance Measure “Fails”
**Measure:** annual per capita vehicle miles traveled

- 2020: 18% below 2020 BAU projection
- 2035: 30% below 2020 BAU projection
- 2050: 50% below 2020 BAU projection

**Court Opinion:** “RCW 47.01.440 establishes statewide benchmarks to reduce annual per capita VMT. ... However, RCW 47.01.440 does not impose the statewide benchmark upon PSRC’s four-county region.”

**Plan:** regional vision, strategies, actions, funding, monitoring

Sources: Washington ESSHB 2815 §8; PSRC; WA Court
“Fail”: Oregon

**Measure:** annual greenhouse gas emissions from all sectors

- 2005: 20% below 1988 levels

1990 **Oregon Task Force on Global Warming**, Report to the Governor and Legislature


2008 **Climate Change Integration Group**, Final Report to the Governor: A Framework for Addressing Rapid Climate Change

2010: **Global Warming Commission**, Interim Roadmap to 2020

**Measure:** annual per capita greenhouse gas emissions from light vehicles

- 2010: 4.05 MTCO$_2$e
- 2035: 1.20 MTCO$_2$e

**Missing? (Transit) funding!**
Measure: annual greenhouse gas emissions from all sectors
- 2020: 1990 levels
- 2035: 25% below 1990 levels
- 2050: 50% below 1990 levels

Results: Reductions due to:
- Closing aluminum plants
- More precipitation (hence hydropower)
- Less driving during Great Recession

Plan: green economy, all sectors, land use, cap & trade, offsets

Source: Washington ESSHB 2815 §3, Dept. of Ecology
A Better Approach

- **Set SMART Goals**—Specific, Measurable, Actionable, Realistic & Time-bound—and tie to feasible actions.

- **Assign Responsibility** for achieving each goal to a specific agency, and engage in setting goals matching its capabilities.

- **Plan** feasible actions that are expected to achieve the goals.

- **Implement**, and ensure the responsible agency has sufficient authority and resources to be successful.

- **Monitor** progress regularly, and revisit future goals and efforts in light of past results.

Source: Lewis & Zako, NITC 789
Part IV: Above & Beyond

Better practices beyond MAP-21.
Part V: Q & A

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