

Effectiveness of Funding Mechanisms and Performance Measures for Achieving Transportation Goals

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RESEARCH QUESTIONS

How effectively are transportation goals integrated into state and metropolitan transportation funding decisions? How do funding mechanisms and performance measures influence state and metropolitan governments' ability to achieve transportation goals?

CONTEXT

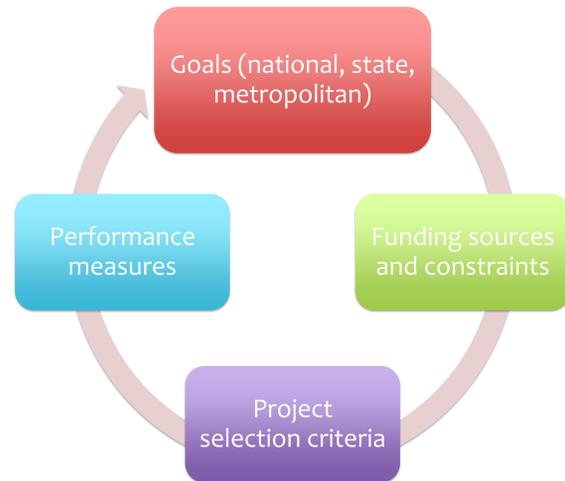
- The Moving Ahead for Progress in the 21st Century Act (MAP-21) (2012) and the Fixing America's Surface Transportation Act (FAST Act) (2015) established national performance goals for Federal-aid highways in seven areas. (Federal Highway Administration, n.d.) MAP-21 and the Fast Act require states and metropolitan planning organizations (MPOs) to establish performance-based planning processes, set targets (performance measures), and link planning and funding to these targets.
- States and MPOs have different mechanisms for allocating funding from various sources to transportation projects and programs: the Federal Highway Trust Fund, state gas and sales taxes, etc. Many funding sources are dedicated to particular uses. In some states transportation commissions allocate funding; in others the legislature or governor decides.
- This project examines how transportation goals are embedded in funding processes and the opportunities and constraints for using transportation investments to achieve goals.

CASE STUDIES



REFERENCES

- (1) Federal Highway Administration (n.d.) Moving Ahead for Progress in the 21st Century. www.fhwa.dot.gov/map21
- (2) Puentes, R. & Price, R. (2003.) Fueling Transportation Finance: A Primer on the Gas Tax. www.brookings.edu/es/urban/publications/gastax.pdf



GOALS

MAP 21 national performance goals:

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

State and metropolitan long range transportation plans (LRTPs) adopt performance measures to achieve national goals.

- Do state and regional goals align?
- Are the goals internally consistent?

CALIFORNIA

- Enforceable climate performance measures and targets
- Cap-and-trade funding for transportation

MTC

- Robust performance evaluation comparing over 900 projects

TENNESSEE

- Only one state transportation fund
- Complex legislative gas tax distribution formula

NASHVILLE AREA MPO

- Sets formula for use of federal STP funds

MASSACHUSETTS

- PSAC is developing cross modal selection criteria

PIONEER VALLEY MPO

- Project selection criteria and performance measures aligned with goals

UTAH

- Increased state gas tax revenues
- State aid to local governments for match funding

WFRC

- Local option sales taxes for transportation in Salt Lake and Weber counties

MINNESOTA

- Funding alternative modes despite highway use gas tax constraint

METRO COUNCIL

- Local sales tax for transit in 5 of 7 counties

VIRGINIA

- No constraints on state revenues
- Projects competing in rural vs. urban areas are weighted differently

HAMPTON ROADS MPO

- Dedicated regional funding for highway and local projects

FUNDING SOURCES

Federal aid to states and MPOs.

- Primary revenue source is the federal gas tax.
- Multiple federal funding programs with varying purposes and constraints.
- Surface transportation program (STP), Congestion mitigation and air quality (CMAQ), etc.

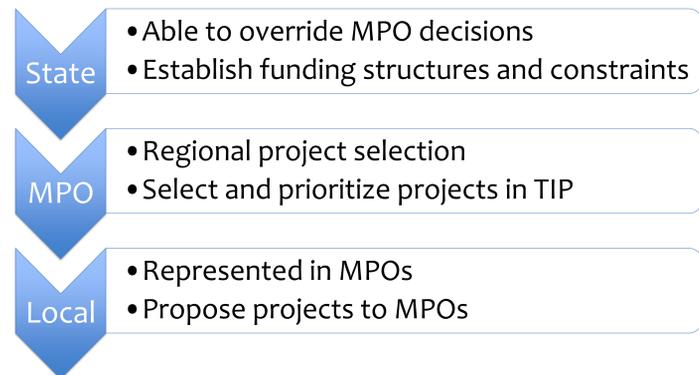
States supplement federal aid with **state revenues**.

- State gas tax, vehicle registration fees, state sales taxes, local option sales taxes, other.

State funding is often constrained.

- Gas tax revenues limited to highway uses?
- Do legislative formulas determine geographic allocations or mode splits?
- Does demand drive mode split of spending?
- Do state or metropolitan goals drive mode split of spending?

GOVERNANCE STRUCTURE



- State
 - Able to override MPO decisions
 - Establish funding structures and constraints

- MPO
 - Regional project selection
 - Select and prioritize projects in TIP

- Local
 - Represented in MPOs
 - Propose projects to MPOs

PROJECT SELECTION

Both states and MPOs share responsibility for planning and programming projects, depending on jurisdictional authority. States typically select projects of interregional importance, while MPOs along with local governments select local and regionally significant projects.

The **planning** process:

- MPOs call for projects for regional transportation plans (RTPs).
- Locals submit proposals from their local transportation plans based on local need
- MPOs select projects for fiscally constrained RTPs.

The **programming** process:

- Projects listed in RTPs are eligible for funding in Transportation Improvement Programs (TIPs).
- Selection of projects for the TIP is based on criteria used to rank projects.
- Funding is matched with the highest scoring projects in the TIP.

Methods of project selection vary widely.

PERFORMANCE

MEASURES AND TARGETS

- States and MPOs use measures and targets to monitor how successful they are in achieving goals.
- Performance measures sometimes match with an individual goal.
 - E.g. minutes of delay for the goal of reducing congestion
- Others measure success towards more than one goal
 - E.g. bike/ped/transit mode share for the goals of livable neighborhoods and reducing GHG emissions.
- Performance measures can be linked with scenario planning to allow decision makers to evaluate the relative costs and benefits of different target levels.
- States and MPOs are trying to figure out how performance measures can help decision makers recalibrate funding levels to better align funding and goals.