

RIGHT-SIZING TRANSPORTATION FOR AN EVOLVING ECONOMY

(NCHRP 19-14 RIGHT-SIZING TRANSPORTATION INVESTMENTS--METHODS FOR PLANNING AND PROGRAMMING)

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Types of Right-Sizing Actions

Typical Decision	Right-Sizing Decision
<ul style="list-style-type: none"> Maintenance (to an <i>existing</i> standard) Repair/Replacement (to an <i>existing/current</i> design) Expansion (to an assumed <i>stable/certain</i> forecast or LOS standard) 	<ul style="list-style-type: none"> Defer/Disinvest Through Non-Action (in effect, relaxing or waiving a standard) Modify the Design Standard/Target (intentionally re-classify the asset & its role) Replace the Asset (make it smaller/more economical) De-Commission an Asset (allow for re-use of land) Change Jurisdictions (better align objectives & ownership)

Example Right-Sizing Cases and Economic Drivers

Chattanooga, TN Riverfront Parkway.
 Built as a waterfront highway and freight route; subsequent declines in manufacturing removed the original economic rationale for its configuration, while the economic importance of connecting downtown to the waterfront increased, leading the community to "right-size" the limited access at-grade highway to a boulevard.

Rochester, NY Inner Loop
 Right-sizing of an underutilized and oversized facility unlocked economic value by opening up new land for development in the CBD and supporting broader revitalization through better connections

New development already valued at 10 x the public investment

System Right-Sizing
Examples:
 Lowering maintenance standards on lower classes of road facilities in order to more efficiently use funding to achieve better system outcomes (e.g. aggregate benefits) overall.

Reconsidering network spacing or network ownership in response to changing development patterns and primary purpose.

Partnerships & Prerequisites to Right-Size

- Authority:** Leverage on land development & building process. Control of access to public facilities. Ability to raise & expend revenue. Enforcement.
- Intelligence:** Knowledge of local development trends. Awareness of "on the street" conditions. Measured performance outcomes. Knowledge of key private and stakeholder players.
- Resources:** Ownership of relevant assets and services. Budget to invest directly in infrastructure. Budget to invest in supportive infrastructure. Staff, data and systems to track development & outcomes.

Leverage authority, intelligence, and resources that may reside at different levels of government or between the public and private sector

Policy Context

Where, When, and How to Consider Right-Sizing?

Initiation is Key: Recognizing Potential Mis-Alignment

DOT Initiated:

- One-time or Project/Plan Specific:** For example - recognizing the upcoming end of life of a major asset (bridge, elevated highway), and taking the opportunity to reconsider the purpose and need as a function of the economy to determine whether replacement should be in-kind or different.
- Cyclical or Institutionalized Right-Sizing:** Pointedly (re)evaluating existing and planned infrastructure with respect to underlying needs at key junctures in the planning process – e.g. STIP development, Asset Management planning.

Outside Proponent Initiated Right-Sizing:

- Recognize that underlying factors that drive the need for right-sizing may be better identified by DOT partners: e.g. localities, MPOs, the private sector, community groups
- Provide an opportunity for other parties to request a right-sizing "audit" or "evaluation"
- Key economic factors: changing development context (observed or anticipated based on knowledge of local zoning, permitting, development starts)

Technical Methods Under Development

How Economic Methods Can Help an Agency Pinpoint and Respond to Changes as They Occur

Assessing Potential Mis-Alignment

Weigh Life Cycle Costs Against the Market Supported

- Understand where lifecycle costs are high relative to amount of traffic carried or other measures of supported activity
- Identify facilities with limited potential for overall systems benefit
- In a traditional maintenance world, need is defined by condition. This approach enforces a **broader definition of need**.
- Add additional screening to identify candidates for potential right-sizing
- Simplest screen is volume per maintenance costs. More advanced: e.g. travel shed/service area – population/employment.

Evaluating Options Seeking "Win-Win" Outcomes

Partner	Right-Size Criteria	Existing Facility Right-Size Score (5=Perfect Alignment)	Option A Score/\$	Option B Score/\$	Option C Score/\$
State DOT	LOS on State Facility				
	Crash Rate on State Facility				
	Access Management				
	% of Traffic truly state traffic (vs local)				
City Transportation Department	Taxable Land Value				
	Local Market Access				
	Support for Preferred Land Use/Zoning Support/Use of Municipal Facilities				
Private Developer/Land Owner	Consumer Market Access				
	Workforce Market Access				
	Incremental Land Value/Likelihood Parking Availability				
<i>(others may be considered)</i>					

Stratified Return on Investment: Different Perspectives

- Build on multi-criteria evaluation
- Evaluate different right-sizing options relative to criteria defined by key right-sizing partners
- Starts the conversation by understanding incentives

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