

RE-AIM Perspectives on Built Environment Strategies: Definitions, Challenges, and Metrics

RE-AIM Dimension	Definition	Questions & Challenges	Built Environment-Specific Metrics
<i>Reach</i>	The number of people and percent of the target population that are impacted, and the extent to which those reached are representative and include those most at risk?	If space is re-designed to improve accessibility to the community, how to calculate whether persons who live and work nearby come?	<ul style="list-style-type: none"> <li>• Estimate persons reached based on the population who live or work within a specific distance of the change.</li> <li>• Observe, count and describe people at varied times and days of the week.</li> <li>• Conduct intercept surveys to see if people who come are from the surrounding neighborhoods.</li> <li>• Use setting-level proxies such as sales receipt volume or daily usage.</li> </ul>
<i>Effectiveness</i>	A measure of the impact on health behavior, including positive, negative and unanticipated consequences.	Visitors/users of the space may demonstrate both desirable and undesirable behaviors. Does the change produce equal impact across subgroups?	<ul style="list-style-type: none"> <li>• Observe and map population behaviors (both positive and negative) occurring before and after the environmental change.</li> <li>• Document how robust or consistent the outcomes are across key subgroups.</li> <li>• Observe for any unanticipated consequences, including BOTH positive or negative behaviors.</li> <li>• Enlist adopters/agencies to help describe and quantify behaviors (e.g., food purchases, park attendance) before and after the change.</li> <li>• Identify public data sources, such as crime or accident data to quantify change.</li> </ul>

***Adoption  
(Inclusion &  
Approval)***

The number and percent of settings that participate.

Extent to which the settings selected are representative of settings that the target population will use or visit.

Since settings do not “adopt” built environment changes, who are the adopters? (e.g., target population as well as business owners and city council may be involved).

Key adopters often change from the planning to approval/implementation stages.

- Assess representativeness of those making decisions with regard to selection of the setting and design of the change.
- Assess inclusion of those needed to *approve* the project (city council; neighborhood association), those needed to implement the change (public works) and maintenance of the space (parks and recreation; police).
- Planning stage—what percent of the key stakeholders are involved?
- Implementation stage—(qualitative) is the agency or group approving the change viewed positively and able to maintain the change?

***Implementation  
(Installation)***

Level of adherence to implementation principles or guidelines. Extent that all vs. selected elements are implemented.

Cost of change.

- When the environmental project is completed does it meet established design principles (e.g., Universal design principles) and/or plans for attracting visitors from the target population?
- Are the ongoing costs sustainable?

- Are standards or guidelines for implementing or installing the built environment change followed or only partially implemented?
- Do barriers or deterrents to use remain (use intercept surveys and observation)?
- Cost of the change- where incurred.
- Document other changes needed to support the change, such as law enforcement or traffic engineering

***Maintenance  
(Sustainability)***

*Individual level:* individuals continue to exhibit the desired health behavior change(s).

*Setting level:* change is maintained and deterioration or development of new barriers to use is prevented or mitigated.

- What agencies or groups are in a position to monitor individual behavior and setting maintenance over time?
  - Is there a policy or program in place that will support ongoing improvements and maintenance to sustain use and address evolving issues not initially anticipated?
  - *Individual level*—long-term impact on health behaviors above as novelty wears off (6 months or more following installation)
  - *Setting level*—does approving/enforcing agency continue to provide upkeep and necessary support (e.g., lighting, trash/graffiti clean-up, police patrol)
-