

Delaware Valley Regional Planning Commission: Utilizing Investment Scenarios to Enhance Transportation Performance

Identifying Priorities with Investment Scenarios

The Delaware Valley Regional Planning Commission (DVRPC) has found that tracking their performance progress is vital to maintaining a strong transportation system. DVRPC updates their Long-Range Plan every 4 years. The plan update is driven by the analysis of system performance data. Based on this data the 2040 plan focuses on a state of good repair for transportation facilities.

DVRPC's data revealed that the Metropolitan Planning Organization (MPO) has one of the largest inventories of substandard bridges in the country. These bridges serve the Greater Philadelphia region, which includes nine counties within the States of Pennsylvania and New Jersey. Many structures are reaching the end of their service life and need significant repairs or replacement. With present funding, DVRPC is unable to address all of the needs, to determine their priorities they completed an in-depth needs assessment and assessed the projects utilizing a life-cycle analysis program. This information then fed into their funding decisions.

In order to make the most of their limited funding DVRPC decided to dig deeper with their assessments by utilizing investment scenarios to see how various investment situations would affect their performance. Investment scenarios look at options to see how spending money in different ways impacts transportation performance. When running investment scenario, having a good data collection is key.

For their investment scenarios, DVRPC reviewed financial options such as low, medium, and high

KEY ACCOMPLISHMENTS

- Utilized Investment Scenarios to maximize fund allocation.
- Created an evaluation process to determine project viability.
- Successfully used the *Choices and Voices* program to gain community feedback on performance based investment scenarios.

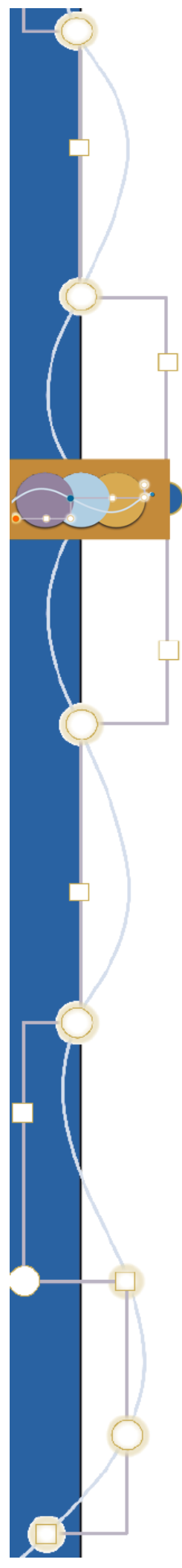
funding levels. Current funding levels were projected to determine the medium baseline; the high scenario was built on potential pre-MAP-21 projected funding amounts; the low-scenario was based on forecasted gas tax receipts in the Highway Trust Fund that were being discussed on the Federal level at the time. This gave DVRPC a basis for potential funding to feed into their investment scenarios.

Previously, DVRPC had conducted a scenario exercise that looked at various growth patterns: sprawl; trend expected based on anticipated growth and employment; and recentralization of the communities to the region's core communities. Both scenario exercises considered the impacts on factors such as congestion, greenhouse gas emissions, and transit ridership.

Project Viability

DVRPC developed evaluation criteria to assess the degree to which potential projects met Long-Range Plan goals. These criteria ensure that projects fit within DVRPC's transportation performance goals and overall transportation vision, making effective use of their limited funding. The projects must pass the following questions to continue on in the evaluation: Is





it in an existing developed area or an area planned for future growth? If it is a highway project, is it consistent with the Congestion Management Process and appropriate for widening? Projects that successfully make it through this first phase are then rated by highway criteria:

- Will it help the regional hours of delay?
- Is it located near or within a regional center?
- What is the project's priority level within the State DOT database?
- Is it located within the priority Congestion Management Process?
- What is the truck Average Annual Daily Traffic (AADT)?
- What are the impacts to environmental factors, such as wetlands or green space corridors?

Each of the criteria have different weights and values to help prioritize the projects that will enhance transportation performance. The evaluations are used during the project selection process, however transit projects are reviewed by different criteria.

To help create their project scoring system, including the criteria and how to weight the criteria, DVRPC used a consensus building software, *Decision Lens*. Pennsylvania DOT already had a license for the software so it was relatively inexpensive for them to expand their licensing for this project. DVRPC chose this evaluation and reviewing process because it was effective, helped them to include all stakeholders, and make the process transparent.

Public Outreach

To further engage the public in their transportation performance, DVRPC created an interactive website, [Choices and Voices](#), where the public is able to see current transportation issues and help formulate investment scenarios. The purpose was to gain public participation in furthering the vision for growth and development in the Greater Philadelphia area between now and 2040. This website allowed the public develop a transportation investment budget,

select the community type, and then decide how to spend the limited funds available for infrastructure. They then could submit their selections with their zip code and compare to others, as part of a crowd sourcing component.

Results

Through the use of investment scenarios, DVRPC has enhanced their transportation performance. They have gained increased stakeholder buy-in for their 2040 regional plan. In addition, with their in-depth analysis and investment scenarios, DVRPC was able to gain a better understanding of where to concentrate their efforts and quantify which projects were most viable to best meet their vision and enhance transportation performance.

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