

BETTER DECISIONS UNDER UNCERTAINTY

MAKING SCENARIO PLANNING WORK IN TRANSPORTATION



OVERVIEW

Transportation agencies make decisions with incomplete information every day. Funding assumptions shift. Weather, growth, and operational conditions change. Yet plans, programs, and investments still need to move forward. Scenario planning provides a practical way to account for these uncertainties. It helps agencies structure the “what if” questions they already consider and use them to choose strategies that perform well across a range of future conditions.

WHY SCENARIO PLANNING?

Scenario planning is a structured way to identify key factors that could change, explore multiple plausible future conditions, and test decisions, investments, and strategies across those conditions.

The goal is not to predict the future, but to identify strategies that perform well under a range of future conditions. When applied in a practical way, scenario planning helps agencies:

- Make clearer, more defensible decisions
- Reduce unexpected outcomes
- Clarify tradeoffs for leadership and partners
- Improve coordination across departments
- Document decisions in a way that supports continuity over time

TELL US HOW YOU PLAN FOR UNCERTAINTY



Transportation agencies already use elements of scenario planning in many forms. In support of **NCHRP 20-44(57): Implementing Scenario Planning Across Transportation Agencies** this study builds on that experience to make scenario planning easier to apply, repeat, and integrate into everyday transportation work. Be part of the conversation shaping how transportation agencies plan, prioritize, and act under uncertainty.

Scan the QR Code to take the 5-minute survey or join a short follow-up conversation.

Disclaimer: This is an uncorrected draft as submitted by the research team for NCHRP Project 20-44(57): Implementing Scenario Planning Across Transportation Agencies. This material is based upon work supported by the FHWA under Agreement No. 693JJ32350025. Any opinions, findings, and conclusions or recommendations expressed or implied in this document are those of the researchers who performed the research and are not necessarily those of the Transportation Research Board; the National Academies of Sciences, Engineering, and Medicine; the FHWA; or the program sponsors.

OBJECTIVES

1

Advance scenario planning as a practical, widely used approach for managing uncertainty in transportation decisions.

2

Clarify what agencies need for scenario planning to work in practice.

3

Develop and test practical approaches and resources that fit existing transportation workflows.

4

Share transferable examples showing how agencies have integrated scenario planning into routine decision-making.