



# Overview of Freight Plan Analysis

Presented to the  
Oregon Freight Plan Steering Committee

Presented by  
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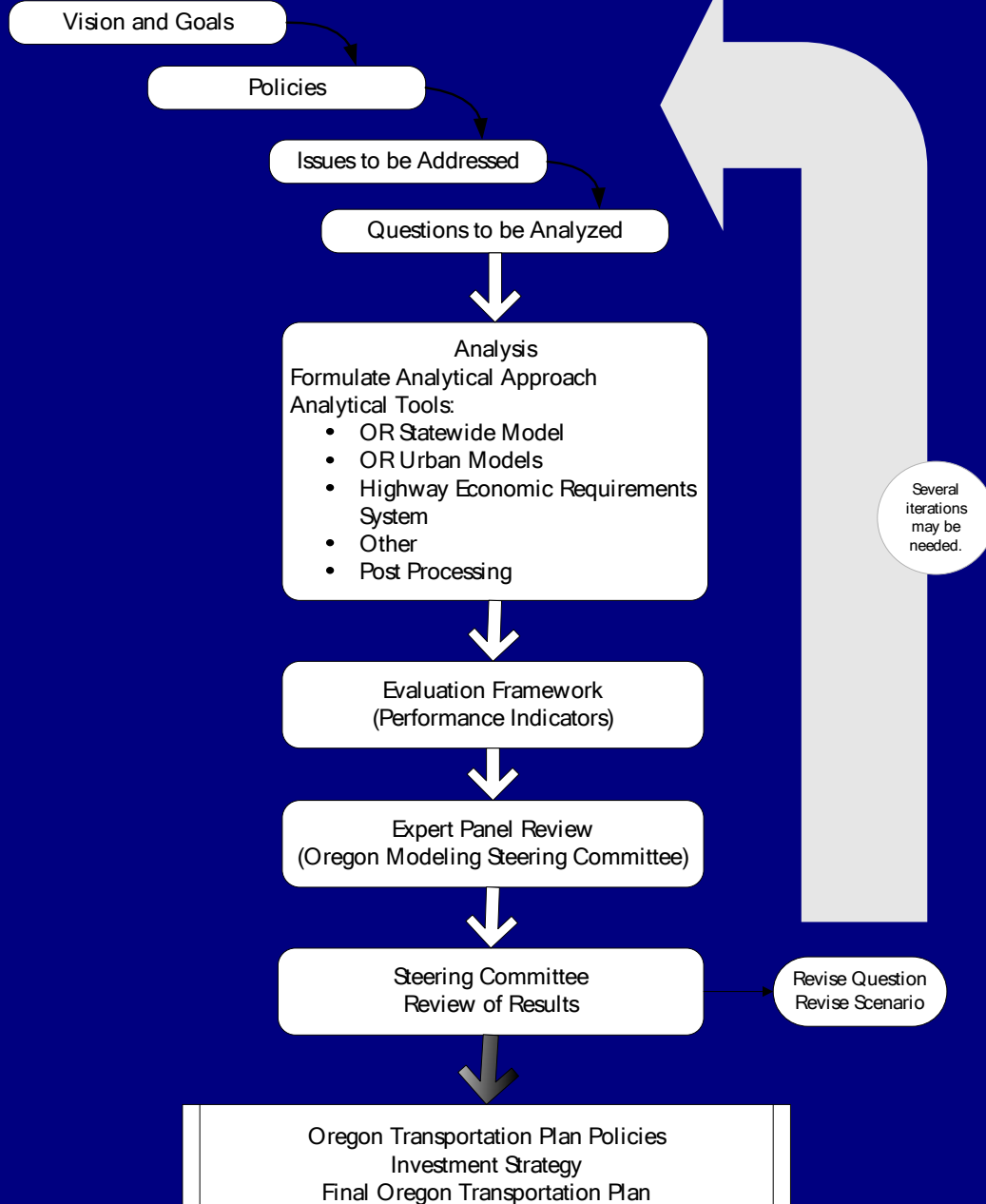


# Outline

- Overview of OTP Analysis
  - Importance of evaluation criteria
  - Qualitative vs. quantitative criteria
  - Analysis scenarios
    - Importance of Reference scenario
- Freight Plan Analysis Process
  - Freight Plan Framework
  - Areas of analysis
  - Example scenarios



# OTP Process





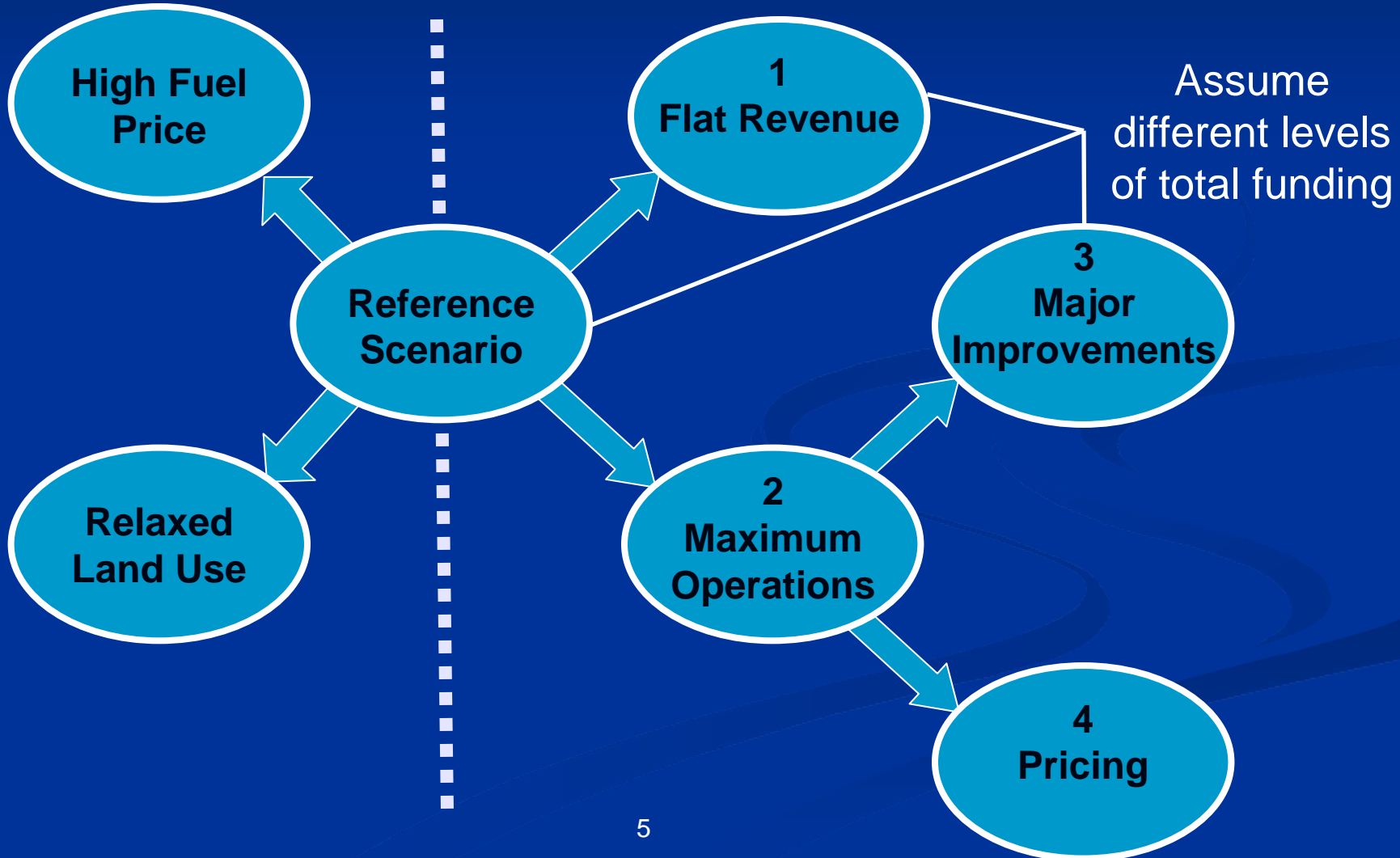
# OTP Evaluation Approach

- Identify performance criteria
- Identify alternatives
- Analyze how well each alternative satisfies performance criteria
- Judge the total effectiveness of each alternative in meeting each performance criterion





# OTP Scenarios





# Evaluation Matrix for OTP Alternative Scenarios

	Alternative Scenarios		
Performance Criteria	Alt. 1	Alt. 2	Alt. 3
Accessibility/ Mobility			
Economic Vitality	Designed to identify best alternatives for future transportation investment		
Efficiency & Cost Effectiveness			
Equity			
Reliability/ Responsiveness			
Safety	Criteria range from quantitative to qualitative		
Sustainability			
Public Support/Financial Feasibility			



## Example: Buying a Car Analyst Style

Performance Criteria	Model A	Model B	Model C
Price	++	+++	+
MPG	++	+++	++
Reliability	+	-	+++
Comfort	+++	++	+
Safety	++	+	++



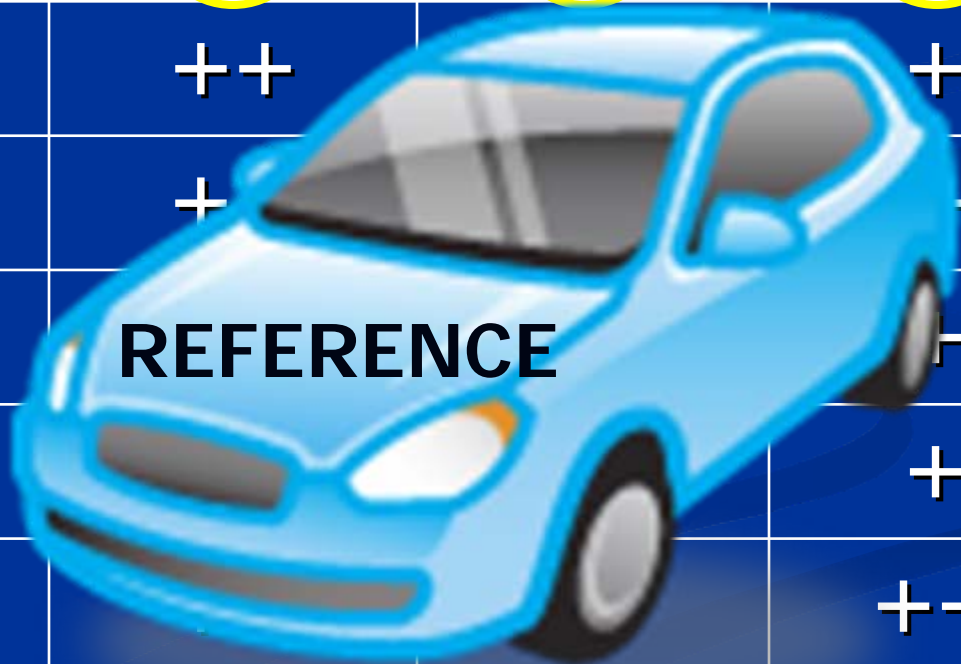
## New Car Evaluation Matrix

Performance Criteria	Model A	Model B	Model C
	10	8	9
Price	++	+++	+
MPG	++	+++	++
Reliability	+	-	+++
Comfort	+++	++	+
Safety	++	+	++



# New Car Evaluation Matrix

Performance Criteria	Model A	Model B	Model C
	11	7	12
Price	++		+
MPG	+		+
<b>Reliability</b>			++
Comfort			+
Safety			++





# Reference Scenario Elements

- Population and Economy
  - Forecast growth from DAS OEA
  - Rest-of-the-World grows at rates consistent with national forecasts
- Land Use Planning
  - Urban growth boundaries expand at post plan acknowledgement rates and maintain 20-year land supplies.



# Reference Scenario Elements, cont'd

- Transportation System
  - Projects in STIP and OTIA programs are built, but very little additional modernization will occur.
  - The system will be operated similar to today.
  - Transportation costs will remain stable

# Oregon Freight Plan Analysis Process

OTP Vision and Goals

Freight Plan Purpose Statement

Freight Plan Framework

- Economic
- Industry Logistics
- Freight Infrastructure
- Traffic Flows
- Org and Public Policy

Questions to be Analyzed

Analysis

Formulate Analytical Approach

Analysis Tools:

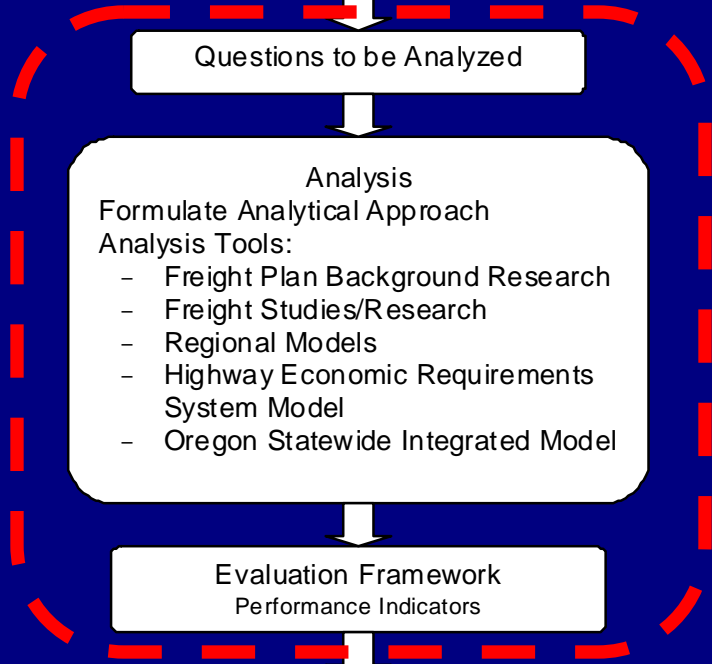
- Freight Plan Background Research
- Freight Studies/Research
- Regional Models
- Highway Economic Requirements System Model
- Oregon Statewide Integrated Model

Evaluation Framework

Performance Indicators

Review of Results

Oregon Freight Plan





Questions to be Analyzed



**Analysis**  
Formulate Analytical Approach  
Analysis Tools:  
-Freight Plan Background Research  
-Freight Studies/ Research  
-Regional models  
-Highway Economic Requirements System model  
-Oregon Statewide Integrated Mod

Analysis can assess areas of future risk

Models provide an experimental environment to test specific factors



Evaluation Framework  
Performance Indicators



# Freight Plan Analysis

## Freight Plan Framework

- Economy
- Industry logistics
- Freight Infrastructure
- Traffic flows
- Organizational/Public Policy

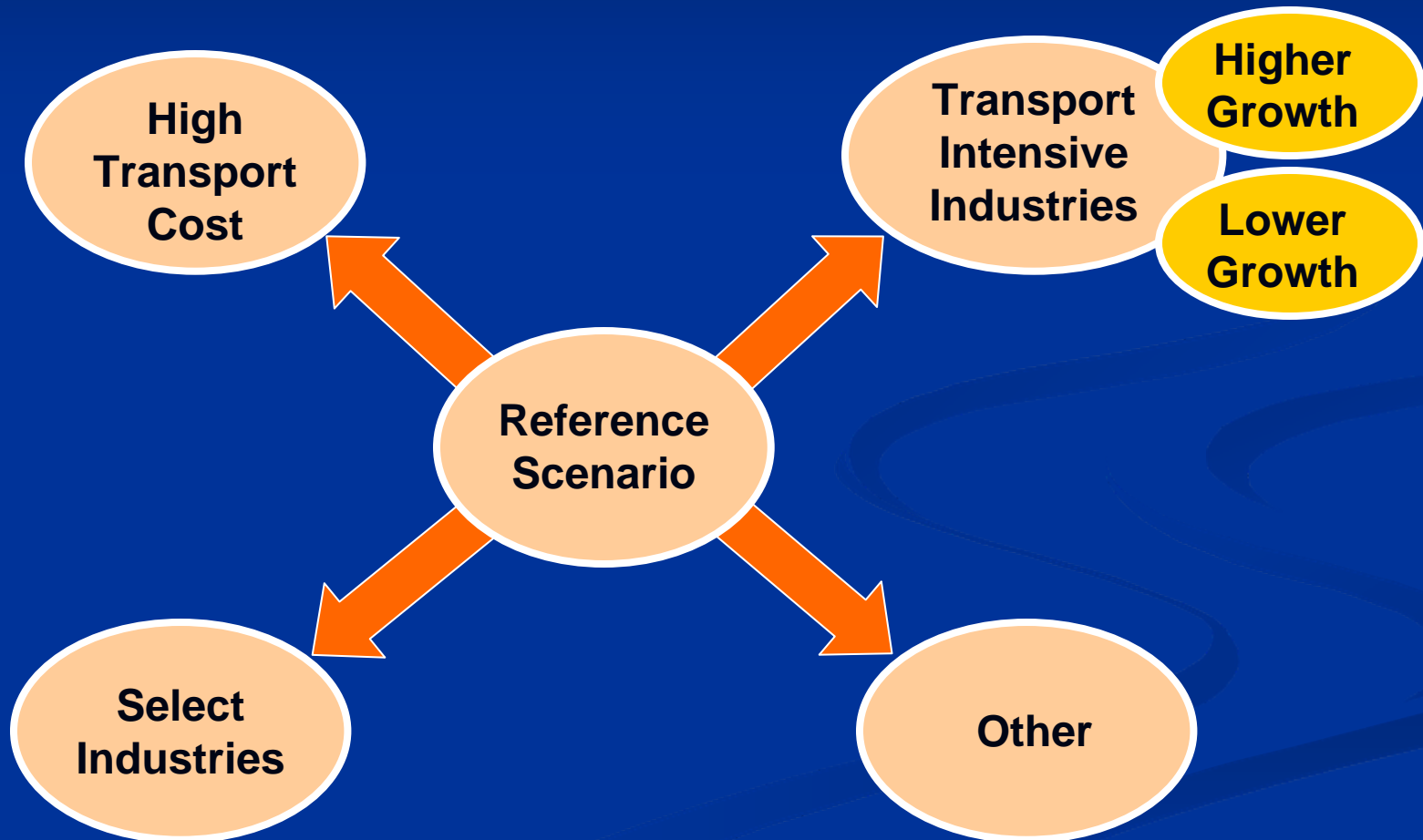


## Identify Areas of Analysis

- Rising transport cost
- economy, industry mix



# Example Freight Scenarios





# Summary

- Freight Plan Analysis Steps
  - Identify questions and areas of inquiry
  - Compare analysis scenarios to one reference scenario
  - Evaluate analysis results using performance indicators derived from Freight Plan Framework



# Questions?

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