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Metro | *Agenda*

Meeting:	Joint MPAC/JPACT Meeting
Date:	Wednesday, November 12, 2008
Time:	5 to 7 p.m.
Place:	Oregon Convention Center, Portland Ballroom (Rm. 256)

MPAC and JPACT will meet jointly this fall to guide and shape the answers to some pivotal questions:

- What is the right mix of land use and transportation investments and strategies?
- What funding sources should the region focus on to pay for needed investments?
- How should limited dollars be prioritized?

No.	AGENDA ITEM	PRESENTER
1	Purpose and Context	Michael Jordan, Facilitator
2	Transportation Investment Scenario Results	Andy Cotugno, Metro Policy Advisor
3	Discussion and preference polling of transportation investment choices	Walt Roberts, The Performance Center
4	Summary and Next Steps	Michael Jordan, Facilitator

Upcoming Joint MPAC/JPACT Meetings:

1) Joint MPAC/JPACT Meeting scheduled for Wed., December 10th from 4 to 7 p.m. at the Oregon Convention Center, Portland Ballroom (Rm. 256). Discussion topic: Bringing It All Together – Land Use, Transportation and Investment Choices and Preference Polling

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: kelsey.newell@oregonmetro.gov.
To check on closure or cancellations during inclement weather please call 503-797-1700.

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Metro | *Memo*

Date:	November 5, 2008
To:	Metro Council, MPAC, JPACT and interested parties
From:	Kim Ellis, RTP Project Manager
Re:	Regional Transportation Plan (RTP) Update – Transportation Investment Scenarios

Overview

The 2035 Regional Transportation Plan (RTP) "cause and effect" transportation investment scenarios evaluated the effects of distinct transportation policy choices on the future of the Portland metropolitan region. The analysis followed direction provided by MPAC, JPACT and the Metro Council in April 2008 on what policy variables to test in each of the scenarios. In October, staff convened two TPAC/MTAC workshops to discuss preliminary results of the analysis. A discussion guide is being prepared that will highlight the results and raise policy questions for your discussion in November.

Action Requested

- Discuss the outcomes and policy implications of RTP "Cause and Effect" Transportation Investment Scenarios.

Purpose

The RTP investment scenarios analysis is intended to provide policy makers with better information about new 2035 RTP policies and the implications of different transportation policy choices. Major objectives of the analysis are to:

- Evaluate distinct transportation investment policy choices that frame the boundaries of the political landscape and public opinion.
- Test RTP policies to better understand the effect of different transportation investments packages on travel behavior and development patterns.
- Test proposed performance measures to determine which measures can best evaluate whether the transportation system is successful in meeting regional goals and policies.
- Evaluate the relative effect and cost of different transportation investments packages in order to recommend what combinations of investments, tools and strategies are needed to best support the 2040 Growth Concept and other regional goals and policies.
- Provide recommendations to guide development of recommended RTP Investment Strategy in 2009.

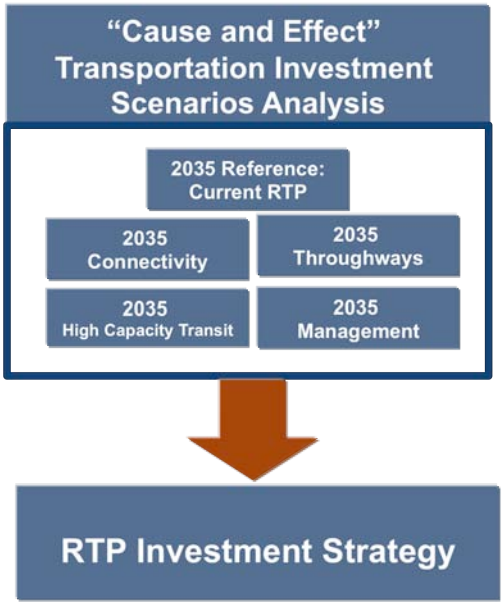
General Construct and Scope

A Reference scenario and four conceptual scenarios for their ability to serve forecast 2035 population and employment growth and support the 2040 Growth Concept. Each of the scenarios is based on a

"What if" policy-theme focus from the 2035 RTP, resulting in a distinct mix and level of transit service, motor vehicle system investments and system management strategies in each scenario. *All scenarios were built on the 2035 financially constrained system of investments in the current RTP, and assume current state law requirements for where future household and job growth would be directed*.

Figure 1 shows the general construct for this analysis.

Figure 1. RTP Investment Scenarios Analysis Construct



Each scenario was initiated by a "what if" question:

- *Reference (Current RTP)* – What if we implemented current land use and transportation plans?
- *Connectivity (Concept A)* - What if we focused our investments on increasing the number of street connections throughout the region for all modes of travel?
- *High Capacity Transit (Concept B)* - What if we focused our investments on building high capacity transit connections identified in the 2040 Growth Concept and local aspirations, and expanding regional transit service to complement the new HCT connections?
- *Throughways (Concept C)* - What if we focused our investments on adding new capacity and connections to the region's highway and freeway system?
- *Management (Concept D)* - What if we focused our investments on optimizing capital investments in Reference scenario and managing demand?

Methodology

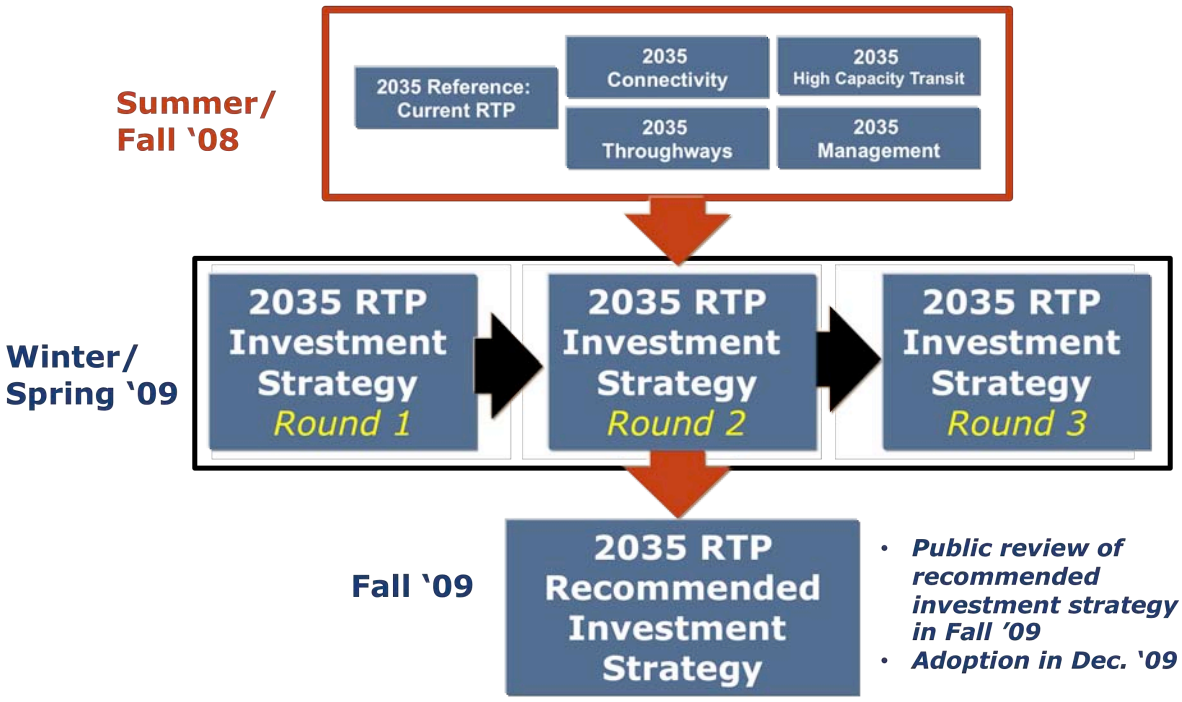
The RTP scenarios were developed with the regional travel demand model for the purpose of the analysis. The MetroScope model was used to evaluate the land use and economic effects of each of the transportation networks. This approach allowed a comprehensive analysis of the relative benefits and trade-offs of each scenario. The scenarios are for research purposes only, and do not necessarily reflect current or future policy decisions by Metro Council, Oregon Transportation Commission (OTC), TriMet or local governments.

Process and Products

The RTP Investment Scenarios Analysis will inform the *Making the Greatest Place* effort and state component of the RTP update. Recommendations for the *Making the Greatest Place* effort and RTP policy refinements will be developed based on what is learned through the analysis. The results and findings of the analysis will be summarized in a Transportation Investment Scenarios discussion guide for consideration at a joint JPACT, MPAC and Metro Council meeting on November 12, 2008.

Policy direction provided on November 12 and a subsequent meeting on December 10, 2008 - will give direction to Metro, ODOT, TriMet and local agency staff on the design and analysis of subsequent "RTP Investment Strategy" packages that will bear greater resemblance to realistic investment strategies in Winter/Spring 2009. This process is shown in Figure 2.

Figure 1. Relationship of RTP Investment Scenarios and RTP System Development Process



This work will be coordinated with the *Making the Greatest Place* local aspirations work and land use analysis as well as the development of the Regional High Capacity Transit (HCT) System Plan, Regional Freight and Goods Movement Action Plan and Regional Transportation System Management and Operations (TSMO) Plan in 2009.

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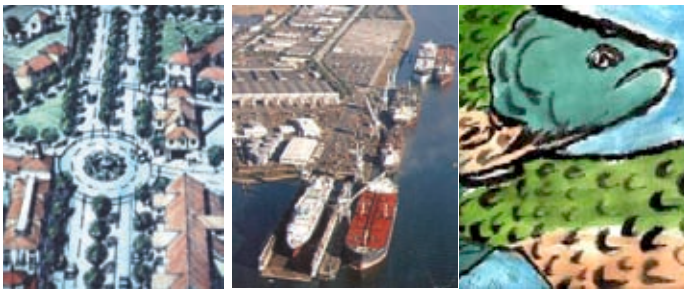
RTP "Cause and Effect" Scenarios

Linking Transportation to Land Use, the Economy and the Environment



Background Briefing Materials for JPACT, MPAC and the Metro Council

November 5, 2008

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MAKING THE GREATEST PLACE

Purpose of November 12

- Overview of results from transportation scenarios
- Discuss implications and choices for moving forward

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MAKING THE GREATEST PLACE

Our region is unique

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MAKING THE GREATEST PLACE

What does a successful region look like?

- Vibrant, walkable communities
- Sustained economic competitiveness and prosperity
- Safe and reliable transportation choices
- Minimal contributions to global warming
- Clean air, clean water, healthy ecosystems
- Benefits and burdens of growth shared throughout the region

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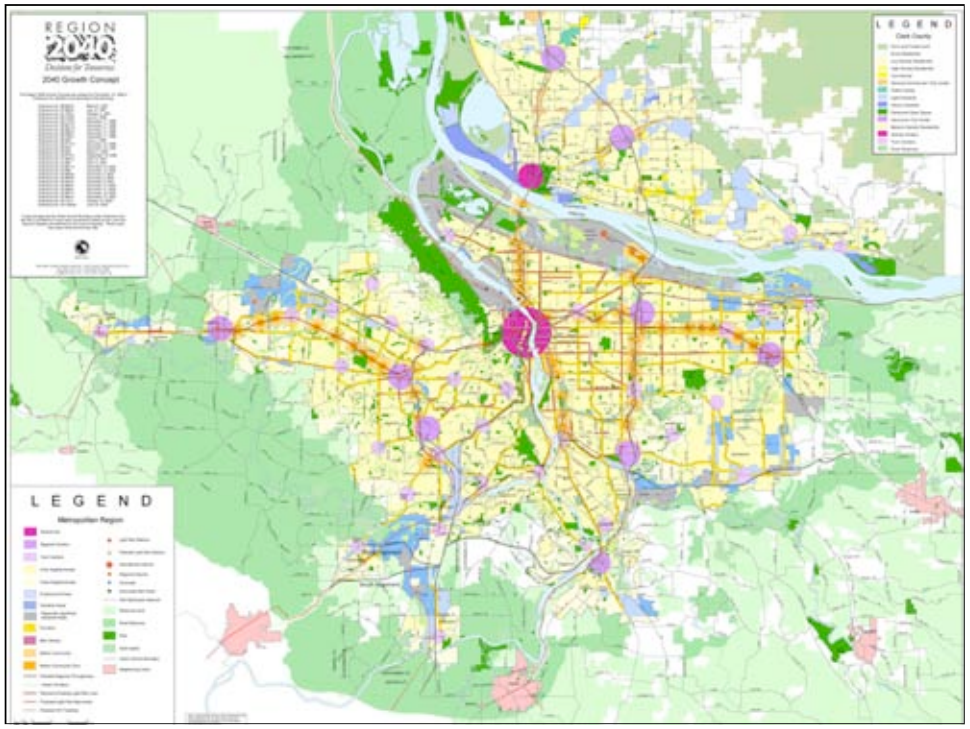

MAKING THE GREATEST PLACE

We've come a long way since 1995

- 250,000 more people
- Much of growth has been absorbed in existing communities
- Many main streets and downtowns seeing increased activity
- Transit ridership outpaced population growth
- Important decisions about the future lie ahead

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MAKING THE GREATEST PLACE

A Rapidly Changing Landscape

Local And Regional Challenges

- Growing population
- Changing demographics
- Globalizing economy
- Growing congestion
- Changing climate
- Rising energy costs

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MAKING THE GREATEST PLACE

Rising Costs, Stagnant Revenues

Local And Regional Challenges

Estimated RTP Maintenance Funding Gap

Source: 2035 Regional Transportation Plan (Dec. 13, 2007)

- Significant deferred maintenance backlog
- Maintenance consumes more than 60% of funding
- Shift of funding burden to local governments
- Transit demand outpacing revenues
- 20k + acres added to UGB; little developed

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MAKING THE GREATEST PLACE

Choices for the Future

Urban Form – local aspirations, urban & rural reserves

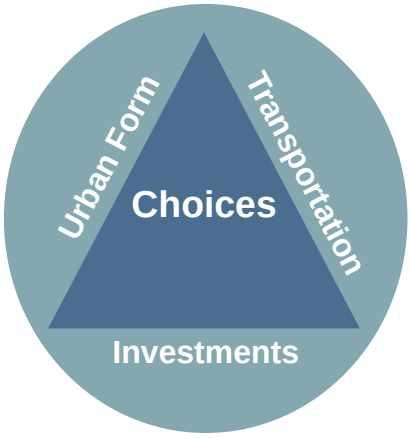
How and where do we grow?

Transportation - RTP

How do we travel?

Investments - infrastructure

How do we prioritize needed investments?



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MAKING THE GREATEST PLACE

Key decisions ahead

Regional

- Local and Regional Aspirations → Urban Growth Report - 2009
- Regional Transportation Plan - 2009
  - Freight and Goods Movement Action Plan – Winter 2009
  - High Capacity Transit Plan – Spring 2009
  - Transportation System Management and Operations Plan – Summer 2009
- Urban and Rural Reserves - 2009
- Infrastructure and Investment Decisions - 2009

Local

- Comprehensive Plans
- Transportation System Plans

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2035

REGIONAL TRANSPORTATION PLAN

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2035 REGIONAL TRANSPORTATION PLAN

New RTP Direction To Respond

- Dec. '07 - Adopted new policy direction and projects the region can afford
- Summer '08 – Tested new policies
- Nov. 12, '08 – Report back on results

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Metro | *Joint Policy Advisory Committee on Transportation*

2035 REGIONAL TRANSPORTATION PLAN

RTP Goals and Outcomes

- Vibrant Communities and Efficient Urban Form
- Economic Competitiveness and Prosperity
- Transportation Choices
- Efficient Management of the Transportation System
- Safety and Security
- Environmental Stewardship
- Human Health
- Equity
- Fiscal Stewardship
- Accountability

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2035 REGIONAL TRANSPORTATION PLAN

Old and New

Performance Measures

Current Measures

- Highway capacity
- Transit ridership
- Mode share
- Vehicle miles traveled
- Air quality

New Measures

- Greenhouse gas emissions
- Rural land consumption
- Household growth
- Job growth
- Housing/transportation affordability
- Cost of freight delay
- Travel time

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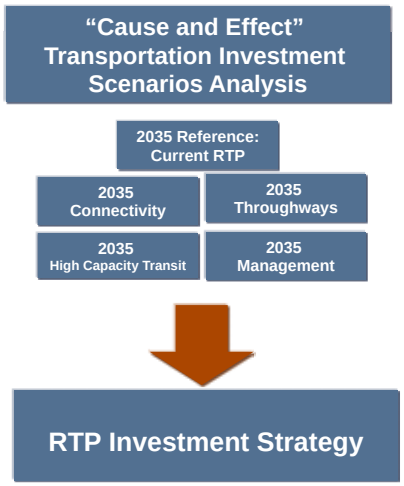
2035 REGIONAL TRANSPORTATION PLAN

Transportation Scenarios Analysis

- Tests RTP policies
- Tests proposed performance measures
- Frames financial trade-offs
- Sets the stage for System Development in 2009



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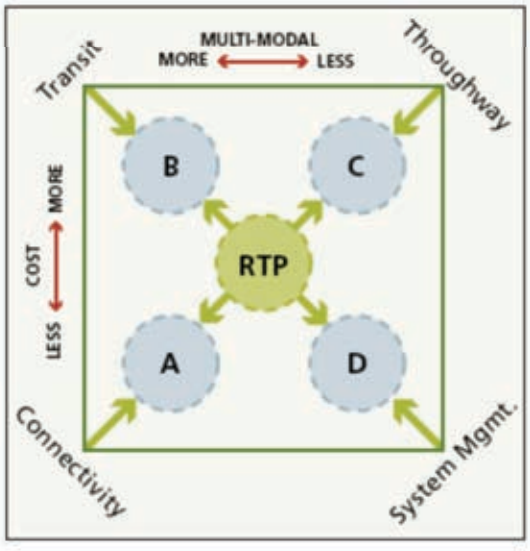
2035 REGIONAL TRANSPORTATION PLAN

Transportation Scenarios Analysis



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WHAT WE TESTED AND WHAT WE LEARNED

TRANSPORTATION SCENARIOS

RTP "Cause and Effect" Investment Scenarios

Assumptions Overview

WHAT WE EVALUATED

- Policy themes agreed to by MPAC, JPACT, Council in April
- Households and jobs held constant in travel model
- All scenarios add to the Reference scenario
- Travel effects using EMME/2
- Land use effects using Metroscope
- Air quality effects using MOBILE 6

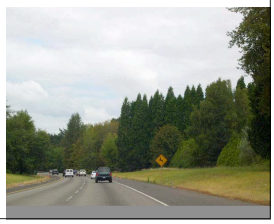
WHAT WE DID NOT EVALUATE
(but will in next phase of process)

- Corridor-level effects
- Effects of Metroscope allocation on scenarios' transportation networks
- Effects on environmental justice communities
- Effects on Goal 5 resources

REFERENCE SCENARIO

CURRENT PLANS & RTP



KEY ASSUMPTIONS – REFERENCE SCENARIO

Reference Scenario – Current Plans

Theme	Purpose	Key Assumptions
Reference: Current RTP *Current path if current local and regional plans are followed through 2035*	Rely on current adopted plans and policies to serve future needs	• Adopted Financially Constrained System • Current land use plans • New funding sources(1)

Notable assumptions:

- Sunrise from I-205 to 122nd
- Milwaukie light rail
- Lake Oswego Streetcar
- All day service for WES commuter rail

(1) Assumes 1 cent per year gas tax increase for maintenance and $15 vehicle registration fee increase every 8 years

Projects not included in analysis:

- Columbia River Crossing
- I-5/99W connector
- I-5/I-84 interchange

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PRELIMINARY RESULTS – REFERENCE SCENARIO

Reference Scenario – Current Plans

Notable Travel Effects (compared to 2005)

- Decreased VMT/capita by 5% but increases overall VMT by 37%
- Increased walking and biking by more than 70% and more than doubles transit ridership
- Increased rush hour congestion by 6 times and mid-day congestion by 8.5 times
- Increased mid-day truck delay by 12 times and rush hour truck delay by 5 times

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Transportation data reflects trips that begin and end in the urban growth boundary. Congestion data is for facilities with volume/capacity ratio >=1.0.

CONNECTIVITY SCENARIO

CONCEPT A

KEY ASSUMPTIONS – CONCEPT A

Connectivity Scenario

Theme	Purpose	Key Assumptions
Concept A - Connectivity *Aggressive implementation of RTP connectivity policies*	Rely on a dense network of major streets to spread out traffic and serve future needs	• Same transit as Reference Scenario • Adds all arterials in current plans and widens existing streets to 4 lanes to meet 1-mile arterial spacing • Bike, pedestrian and trail networks completed • 12 new river crossings • Throughway overcrossings every 2 miles

Notable assumptions:

- I-5/99W connector as 4-lane arterial
- 4-lane river crossings - Columbia River (2 bridges), Willamette River (3 bridges), Tualatin River (3 bridges) and Clackamas River (3 bridges)

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SCENARIO RESULTS – CONCEPT A

Connectivity Scenario

Notable Travel Effects (compared to Reference Scenario)

- Increased overall VMT and VMT/capita by 2%
- Decreased overall rush hour congestion the most (by 28%)
- Decreased highway congestion by 10% and arterial rush hour congestion by 30%
- Decreased truck delay during mid-day and rush hour by 21% and 23%

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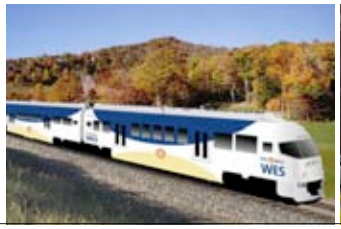
Transportation data reflects trips that begin and end in the urban growth boundary. Congestion data is for facilities with volume/capacity ratio >=1.0.

HIGH CAPACITY TRANSIT SCENARIO

CONCEPT B


KEY ASSUMPTIONS – CONCEPT B

High Capacity Transit Scenario

Theme	Purpose	Key Assumptions
Concept B – High Capacity Transit *Bold expansion of HCT and frequent bus service, beyond current RTP policy*	Rely on a high capacity transit oriented system to meet future needs	• Same roads as Reference Scenario • HCT to all regional centers, some town centers • All HCT modeled as LRT • New park-and-ride lots • Frequent bus on all major arterials • Portland Streetcar Plan

Notable assumptions:

- Portland Central City to Washington Square via Barbur Blvd.
- Extensions to Oregon City, Forest Grove and Mt. Hood Community College
- Clackamas to Washington Square light rail via I-205
- Clark County HCT loop, connecting to Expo and Gateway
- Commuter rail to Columbia, Marion, Hood River and Yamhill counties

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SCENARIO RESULTS – CONCEPT B

High Capacity Transit Scenario

Notable Travel Effects (compared to Reference Scenario)

- Decreased overall VMT and VMT/capita the most (by 3%)
- Increased non-SOV mode share the most (by 2%)
- Increased ridership the most (by 21%)
- Least efficient with 21% fewer originating riders per revenue hour
- Decreased truck delay during mid-day and rush hour by 5% and 3%

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Transportation data reflects trips that begin and end in the urban growth boundary.
Congestion data is for facilities with volume/capacity ratio >=1.0.

THROUGHWAYS SCENARIO

CONCEPT C



KEY ASSUMPTIONS – CONCEPT C

Throughways Scenario

Theme	Purpose	Key Assumptions
Concept C - Throughways *Bold expansion of throughway system, beyond current RTP policy*	Rely on highway-oriented transportation system to serve future needs	• Same transit as Reference Scenario • Up to 10 lanes assumed in most congested Reference Scenario corridors • Number of through lanes tied to congestion • Two new Columbia River crossings

Notable assumptions:

- 10-lane freeways - I-5 and I-205 bridges and sections of I-5 south and I-205 north
- 8-lane highways – I-84, US 26, OR 217, I-5 north and I-205 south
- New 4-lane highways - I-5/99W, Sunrise Corridor, I-84/US 26 connector and new river crossings in Rivergate and Camas
- C2 version includes high-occupancy toll (HOT) lanes on I-5, I-405, I-205, I-84, OR 217 and US 26

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SCENARIO RESULTS – CONCEPT C1 (NO HOT LANES)

Throughways Scenario – No HOT Lanes

Notable Travel Effects (compared to Reference Scenario)

- Increased overall VMT and VMT/capita the most (by 6%)
- Increased trip length for all trips and commute trips the most (by 7% and 6%)
- Decreased rush hour congestion by 18%
- Decreased highway rush hour congestion by 56%, arterial rush hour congestion by 12%
- Decreased mid-day and rush hour truck delay the most (by 60% and 47%)

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Transportation data reflects trips that begin and end in the urban growth boundary. Congestion data is for facilities with volume/capacity ratio >=1.0.

SCENARIO RESULTS– CONCEPT C2 (WITH HOT LANES)

Throughways Scenario - With HOT Lanes

Notable Travel Effects (compared to C1)

- Increased overall VMT and VMT/capita by 1%
- Increased trip length for all trips by 1%
- Decreased rush hour congestion by 1%
- Decreased rush hour and mid-day delay on freight network by 2%
- Decreased rush hour truck delay by 10% and mid-day truck delay by 1%

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Transportation data reflects trips that begin and end in the urban growth boundary. Congestion data is for facilities with volume/capacity ratio >=1.0.

SYSTEM MANAGEMENT SCENARIO

CONCEPT D

KEY ASSUMPTIONS – CONCEPT D

System Management Scenario

Theme	Purpose	Key Assumptions
Concept D – Management *Aggressive implementation of RTP management policies*	Rely on aggressive system management to optimize capital investments in the transportation system	• Same transit and road system as Reference Scenario • Parking management and reduced transit fares in all centers • Access control and interchange removals • Arterial corridor traffic management

Notable assumptions:

- Parking costs increased and transit fare costs decreased in 2040 centers, mainstreets and employment areas
- 26 interchange ramps closed to meet ODOT spacing standards
- D2 version adds pricing of all lanes of capacity on I-5, I-405, I-205, I-84, OR 217 and US 26

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SCENARIO RESULTS – CONCEPT D1 (NO TOLLS)

System Management Scenario – No Tolls

Notable Travel Effects (compared to Reference Scenario)

- Decreased overall VMT and VMT/capita by 1%
- Increased transit ridership by 9%
- Most efficient with 10% more originating transit riders per revenue hour
- Decreased highway rush hour congestion by 10%
- Increased arterial rush hour congestion by 13%
- Decreased mid-day truck delay by 10%

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Transportation data reflects trips that begin and end in the urban growth boundary. Congestion data is for facilities with volume/capacity ratio >=1.0.

SCENARIOS RESULTS – CONCEPT D2 (+TOLLS)

System Management Scenario + Tolls

Notable Travel Effects (compared to D1)

- Decreased VMT by less than 1%
- Increased transit trips by 1%
- Decreased rush hour congestion by 4% and delay by 12%
- Decreased rush hour and mid-day delay on freight network by 22% and 29%
- Decreased rush hour and mid-day truck delay by 26% and 19%

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SCENARIOS RESULTS – HOW THE COMPARE

Notable Household Effects

- Household assumptions in Reference scenario influences results of other scenarios
- Scenarios with decreased congestion in UGB show more growth outside UGB
- HCT scenario allocates least amount of housing outside UGB and most to centers and corridors, including Damascus

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SCENARIOS RESULTS – HOW THE COMPARE

Notable Job Effects

- Job assumptions in Reference scenario influences results of other scenarios
- Reference scenario allocates the most jobs to Clark County
- Connectivity scenario allocates the most new jobs in Rivergate and Washington Square

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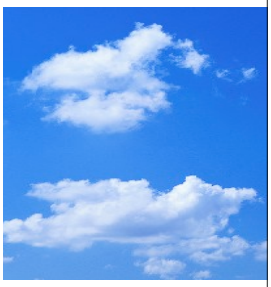
SCENARIOS RESULTS – HOW THE COMPARE

Notable Air Quality Effects

- All scenarios show air quality that continues to improve from today
- HCT scenario shows greatest decrease in air pollutant levels, compared to Reference scenario
- Connectivity and Throughway scenarios show increase in all emissions levels, compared to Reference scenario



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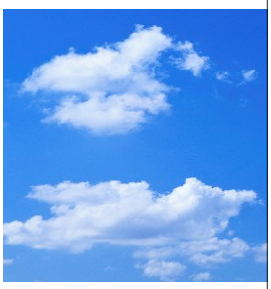
SCENARIOS RESULTS – HOW THE COMPARE

Notable Greenhouse Gas Effects

- Residential GHGs static across all scenarios, but increase from today
- Transportation GHGs increase in all scenarios compared to today
- Scenarios that focus on road and highway capacity experience greatest increase in GHGs, compared to Reference scenario
- HCT scenario experienced only decrease in GHGs, compared to Reference scenario



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2035 REGIONAL TRANSPORTATION PLAN

Moving Forward to 2009

Summer/
Fall '08

- 2035 Reference: Current RTP
- 2035 Connectivity
- 2035 High Capacity Transit
- 2035 Throughways
- 2035 Management

Winter/
Spring '09

2035 RTP Investment Strategy *Round 1* → 2035 RTP Investment Strategy *Round 2* → 2035 RTP Investment Strategy *Round 3*

Fall '09

2035 RTP Recommended Investment Strategy

- *Public review of recommended investment strategy in Fall '09*
- *Adoption in Dec. '09*

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2035 REGIONAL TRANSPORTATION PLAN

Making Choices in 2009

- How do we measure success?
- What is the right mix of investments and strategies?
- How should limited dollars be prioritized?
  - *How do we protect what we have?*
  - *What areas & outcomes are priorities for investments?*
  - *How much revenue is the region willing to raise?*





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Materials following this page were distributed at the meeting.

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RTP "Cause and Effect" Scenarios

Linking Transportation to Land Use, the Economy and the Environment

Andy Cotugno, Metro Policy Advisor

Nov. 12, 2008 | MPAC, JPACT and Metro Council Discussion

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Recent & upcoming MPAC & JPACT events

October 8	**Global trends**
October 22	**Land use and investment choices**
November 12	**Transportation choices**
December 10	**Guidance on mix of strategies and elements to carry forward**
Spring '09	**Evaluation and direction on recommended strategies and elements**
December '09:	**Adopt RTP, UGR and Reserves**

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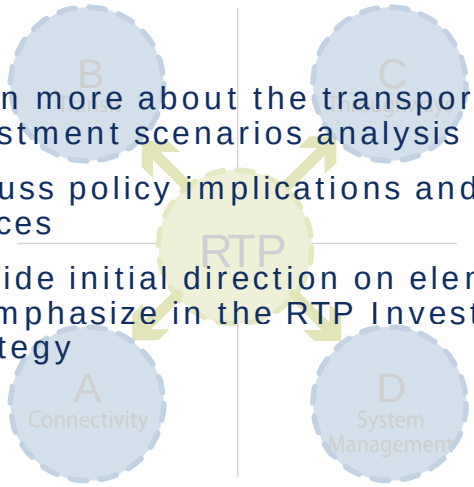
MAKING THE GREATEST PLACE

Purpose of today

- Learn more about the transportation investment scenarios analysis
- Discuss policy implications and choices
- Provide initial direction on elements to emphasize in the RTP Investment Strategy



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MAKING THE GREATEST PLACE

Choices for the Future

Urban Form

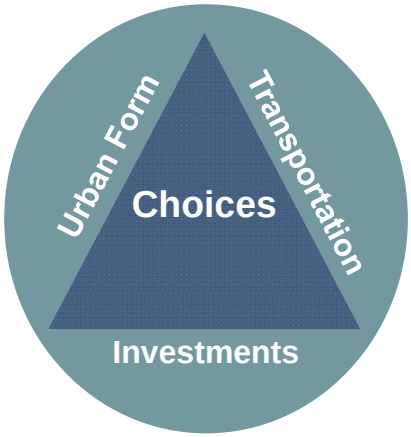
How and where do we grow?

Transportation

How do we travel?

Investments

How do we prioritize needed investments?



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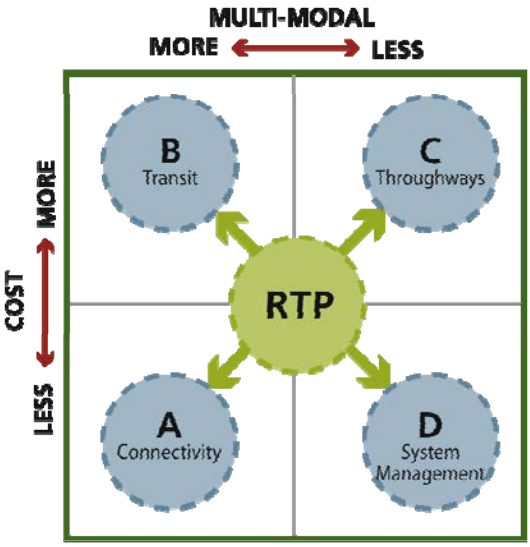
CHOICES FOR THE FUTURE: MOVING FORWARD TO 2009

RTP Investment Strategy Direction



Trade-offs

- Financial
- Political
- Environmental
- Community
- Economic

What elements should be emphasized in the RTP investment strategy, considering these trade-offs, your community aspirations and the 2040 Growth Concept vision?

WHAT WE TESTED AND WHAT WE LEARNED

TRANSPORTATION SCENARIOS

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MORE PLACES
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TRANSPORTATION INVESTMENT SCENARIOS ANALYSIS

Assumptions Overview

WHAT WE EVALUATED

- Cost and feasibility
  - financial & political
- Housing and job locations
- Vehicle emissions
- Travel behavior
- Mobility
  - Access to industry and freight and goods movement
  - Commuting

WHAT WE DID NOT EVALUATE
(but will in next phase)

- Corridor-level effects
- Bike, ped and trail connections
- Effect on environmental justice communities
- Effect on built and natural environment

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REFERENCE SCENARIO

CURRENT PLANS & RTP



KEY ASSUMPTIONS – REFERENCE SCENARIO

Reference Scenario – Current Plans

Theme	Purpose	Key Assumptions
Reference: Current RTP *Current path if current local and regional plans are followed through 2035*	Rely on current adopted plans and policies to serve future needs	• Adopted Financially Constrained System • Current land use plans • New funding sources(1)

Notable assumptions:

- Sunrise from I-205 to 122nd
- Milwaukie light rail
- Lake Oswego Streetcar
- All day service for WES commuter rail

Projects not included in analysis:

- Columbia River Crossing
- I-5/99W connector
- I-5/I-84 interchange

(1) Assumes 1 cent per year gas tax increase for maintenance
(2) $15 vehicle registration fee increase every 8 years for expansion

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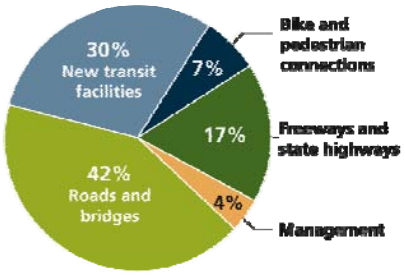
KEY ASSUMPTIONS – REFERENCE SCENARIO

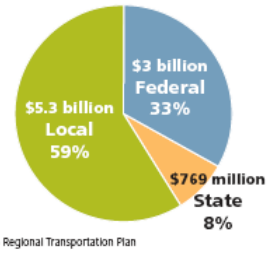
Reference Scenario – Finance

Capital cost assumption in 2035 RTP = $9.07 billion



(1) Assumes 1 cent per year gas tax increase for maintenance
(2) $15 vehicle registration fee increase every 8 years for expansion
(3) Federal funding continues at historic rates.

Cities and counties are funding an increasing share of the transportation infrastructure
(Capital revenue by source)



Source: 2035 Regional Transportation Plan

CONNECTIVITY SCENARIO

CONCEPT A

KEY ASSUMPTIONS – CONCEPT A

Connectivity Scenario

Theme	Purpose	Key Assumptions
Concept A - Connectivity *Aggressive implementation of RTP connectivity policies*	Rely on a dense network of major streets to spread out traffic and serve future needs	• Same transit as Reference Scenario • Adds all arterials in current plans and widens existing streets to 4 lanes to meet 1-mile arterial spacing • 12 new river crossings • Arterial overcrossings of throughways every 2 miles

Notable assumptions:

- I-5/99W connector as 4-lane arterial
- New arterial river crossings - Columbia River (2 bridges), Willamette River (3 bridges), Tualatin River (3 bridges) and Clackamas River (3 bridges)

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HIGH CAPACITY TRANSIT SCENARIO

CONCEPT B

KEY ASSUMPTIONS – CONCEPT B

High Capacity Transit Scenario

Theme	Purpose	Key Assumptions
Concept B – High Capacity Transit *Bold expansion of HCT and frequent bus service, beyond current RTP policy*	Rely on a high capacity transit oriented system to meet future needs	• Same roads as Reference Scenario • HCT to all regional centers, some town centers • All HCT modeled as LRT • New park-and-ride lots • 15-minute or better service on all major arterials • Portland Streetcar Plan

Notable assumptions:

- Enhancements to existing system to improve efficiency and speed, including a subway through downtown
- Portland Central City to Washington Square via Barbur Blvd.
- Extensions to Oregon City, Forest Grove and Mt. Hood Community College
- Clackamas to Washington Square light rail via I-205
- Clark County HCT loop, connecting to Expo and Gateway
- Commuter rail to Columbia, Marion, Hood River and Yamhill counties

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THROUGHWAYS SCENARIO

CONCEPT C

KEY ASSUMPTIONS – CONCEPT C

Throughways Scenario

Theme	Purpose	Key Assumptions
Concept C - Throughways *Bold expansion of throughway system, beyond current RTP policy*	Rely on highway-oriented transportation system to serve future needs	• Same transit as Reference Scenario • Up to 10 lanes assumed in most congested Reference Scenario corridors • Number of through lanes tied to congestion • Two new Columbia River crossings

Notable assumptions:

- 10-lane freeways - I-5 and I-205 bridges and sections of I-5 south and I-205 north
- 8-lane highways – I-84, US 26, OR 217, I-5 north and I-205 south
- New 4-lane highways - I-5/99W, Sunrise Corridor, I-84/US 26 connector and new river crossings in Rivergate and Camas
- Second version includes high-occupancy toll (HOT) lanes on I-5, I-405, I-205, I-84, OR 217 and US 26

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SYSTEM MANAGEMENT SCENARIO

CONCEPT D



KEY ASSUMPTIONS – CONCEPT D

System Management Scenario

Theme	Purpose	Key Assumptions
Concept D – Management *Aggressive implementation of RTP management policies*	Rely on aggressive system management to optimize capital investments in the reference scenario	• Same transit and road system as Reference Scenario • Parking management and reduced transit fares in all centers • Access control and interchange removals • Arterial corridor traffic management

Notable assumptions:

- Parking costs increased and transit fare costs decreased in 2040 centers, mainstreets and employment areas
- 26 interchange ramps closed to general purpose travel to reduce exit/entry merging conflicts
- A second version adds pricing of all lanes of capacity on I-5, I-405, I-205, I-84, OR 217 and US 26

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SCENARIOS RESULTS – HOW THEY COMPARE

Overall System Cost

System costs

Scenario	Total system cost (billions)	Annual cost per household
Reference	$26.9	$1,100
Connectivity	$35.8	$1,500
High Capacity Transit	$66.7	$2,800
Throughways	$50.3	$2,100
Throughways + Tolls	$50.3	NA
Management	$28.2	$1,200
Management + Tolls	$28.2	NA

Costs are in 2007 dollars and are not adjusted for inflation. Costs include capital construction and operations, maintenance and preservation. HCT cost estimates were more rigorously developed than throughway estimates, and assume light-rail transit for all connections.

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Housing Reacts to Congestion & Access

- Scenarios with decreased congestion in UGB show more housing growth outside UGB
- HCT scenario allocates the most to centers and corridors and least amount of housing outside UGB
- Throughway scenario shows the most housing growth in Clark County and UGB expansion areas

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Jobs React to Congestion & Access

- Scenarios with decreased congestion in UGB show more job growth in UGB
- All scenarios show fewer jobs in Clark County compared to reference
- Connectivity scenario shows the most new jobs in Rivergate, Clackamas industrial area and Washington Square
- HCT scenario shows largest increase in jobs in Sunset industrial area, but fewest in Tualatin industrial area

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Air Quality Improves

- All scenarios show air quality that continues to improve from today
- HCT scenario shows greatest decrease in air pollutant levels, compared to reference
- Connectivity and Throughway scenarios show increase in all emissions levels, compared to reference

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Greenhouse Gas Emissions Grow

- Residential GHGs static across all scenarios, but increase from today
- Transportation GHGs increase in all scenarios compared to today
- Scenarios that focus on road and highway capacity show greatest increase in GHGs compared to reference
- HCT scenario shows only decrease in GHGs compared to reference

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Congestion and Delay Grow

- More congestion and delay than today in all scenarios
- Connectivity reduces delay and improves transit travel times the most
- Extensive highway investment encourages longer and more trips; but reduces congestion and truck delay
- Scenarios with more highway capacity and management show larger increases in daily trips on state highways at UGB

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TRANSPORTATION SCENARIOS RESULTS – HOW THEY COMPARE

Walking, Biking and Transit Trips Grow

- All scenarios show continued decline in VMT per person from today except the throughway scenario
- Portland central city and all regional centers meet RTP mode share targets in all scenarios
- Extensive transit investment and higher parking costs increase transit use, walking and biking the most
- All scenarios show transit trips more than doubling from today, with HCT showing greatest increase

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IMPLICATIONS FOR MOVING FORWARD TO 2009

Financial and Political Considerations

- All have strengths and unintended consequences
- All have different public agency implementation "leads" and potentially different funding sources
- All require significant commitment and action

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IMPLICATIONS FOR MOVING FORWARD TO 2009

Environmental Considerations

- None of the scenarios meet state adopted GHG targets
- Extensive transit investment reduces VMT, air pollutants and GHGs the most compared to reference
- Reductions in VMT help reduce greenhouse gas emissions
- Other environmental implications not evaluated

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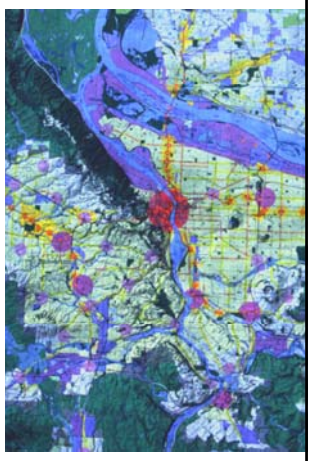
IMPLICATIONS FOR MOVING FORWARD TO 2009

Community Considerations

- Infrastructure alone not sufficient to achieve land use objectives
- Jobs and housing react differently to congestion
- Extensive transit serving centers and corridors triggers growth in these areas the most
- Effects of increased arterial and highway capacity highlight pressure for housing outside UGB



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IMPLICATIONS FOR MOVING FORWARD TO 2009

Economic Considerations

- Need better measures to evaluate
- More efficient transportation system expected to benefit economy
- Increased industry access and reduced truck delay expected to support goods movement and job creation
- Increased downtown and main street access and activity expected to support commerce and job creation
- Spending less of household budgets on transportation expected to allow people to spend money on other things

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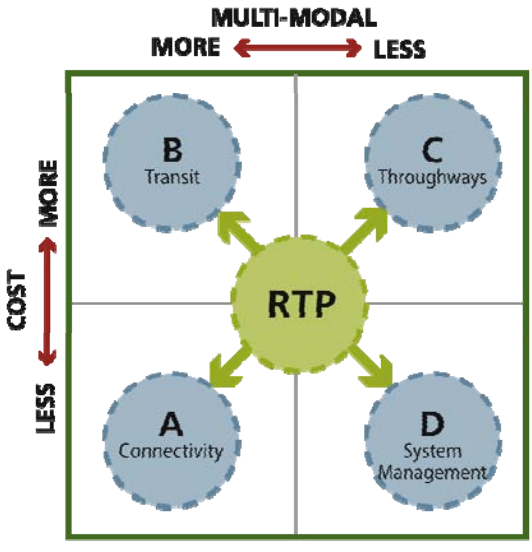
CHOICES FOR THE FUTURE: MOVING FORWARD TO 2009

RTP Investment Strategy Direction



Trade-offs

- **Financial**
- **Political**
- **Environmental**
- **Community**
- **Economic**

What elements should be emphasized in the RTP investment strategy, considering these trade-offs, your community aspirations and the 2040 Growth Concept vision?

Discussion and Keypad Polling Worksheet (Questions 4-8 and 9-10)

November 12, 2008

Evaluating the Scenarios

This meeting will help us get a quick and preliminary read on how we might direct our energy and resources to accomplish the region's desired outcomes as we begin developing the RTP Investment Strategy in 2009.

We now want you to evaluate all scenarios by their level of difficulty to implement and their ability to achieve local and regional goals for air quality, greenhouse gases, community development and the economy.

4. Financial Feasibility: Consider existing and possible funding mechanisms and rate each scenario from 1-5 in terms of the relative ease of acquiring the needed funds.

(1=Very Difficult 2=Somewhat Difficult 3= Don't Know 4=Somewhat Easy 5=Very Easy)

- 4.1 Reference Scenario
- 4.2 Connectivity Scenario
- 4.3 High Capacity Transit Scenario
- 4.4 Throughways Scenario
- 4.5 Management Scenario

5. Political Feasibility: Consider the political challenge and current level of public support for each and rate each scenario from 1-5 in terms of its ability to gain public support and your ability to publically support it.

(1=Very Difficult 2=Somewhat Difficult 3= Don't Know 4=Somewhat Easy 5=Very Easy)

- 5.1 Reference Scenario
- 5.2 Connectivity Scenario
- 5.3 High Capacity Transit Scenario
- 5.4 Throughways Scenario
- 5.5 Management Scenario

6. Environment Considerations: Consider the effects of each scenario on air pollution and greenhouse gas emissions and rate the scenarios from 1-5 in terms of its ability to help the region reduce the amount people drive and corresponding vehicle emissions.

(1=Very Negative 2=Somewhat Negative 3= Don't Know 4=Somewhat Positive 5=Very Positive)

- 6.1 Reference Scenario
- 6.2 Connectivity Scenario
- 6.3 High Capacity Transit Scenario
- 6.4 Throughways Scenario
- 6.5 Management Scenario

7. Community Considerations: Consider your community's aspirations and rate the scenarios from 1-5 in terms of its ability to support those aspirations.

(1=Very Negative 2=Somewhat Negative 3= Don't Know 4=Somewhat Positive 5=Very Positive)

- 7.1 Reference Scenario
- 7.2 Connectivity Scenario
- 7.3 High Capacity Transit Scenario
- 7.4 Throughways Scenario
- 7.5 Management Scenario

8. Economic Considerations: Consider the effects of each scenario on the growth of jobs and access to the region's centers and employment and industrial areas and rate the scenarios from 1-5 in terms of their ability to support local and regional goals for job creation, centers of commerce and efficient goods movement?

(1=Very Negative 2=Somewhat Negative 3= Don't Know 4=Somewhat Positive 5=Very Positive)

- 8.1 Reference Scenario
- 8.2 Connectivity Scenario
- 8.3 High Capacity Transit Scenario
- 8.4 Throughways Scenario
- 8.5 Management Scenario

Evaluating Actions and Strategies

There are a number of actions and strategies that could help protect the investments we have already made and move us closer to achieving the vision embodied in the 2040 Growth Concept.

Question 9. Using your understanding of the Reference scenario as the base, please give us your view of how the region should adjust our emphasis for each activity to better address transportation issues and needs.

(1=Much Less Emphasis 2=Somewhat Less 3= Don't Know 4=Somewhat More 5=Much More Emphasis)

9.1. Land use strategies: Change zoning and provide more amenities to allow more growth and transit-oriented development in centers and corridors served by transit.
9.2. System operations and maintenance strategies: Keep current infrastructure in good condition and eliminate the growing funding gap in highway, transit, and road and bridge-related operations and maintenance.
9.3. Transit Service: Improve operations and efficiency of the existing transit system and address transit service expansion needs.
9.4. Intelligent Transportation System (ITS) strategies: Implement the regional ITS architecture plan that calls for arterial signal coordination, transit signal priority at intersections, and expansion of incident and travel time information on throughway system to optimize existing and future investments.
9.5. Access management strategies: Regulate access to arterial corridors and throughways to optimize existing and future investments.
9.6. Trip reduction and traveler information strategies: Implement the Regional Travel Options (RTO) program strategic plan that calls for employer-based trip reduction programs, vanpool and carpool programs, investments to reduce the need to drive and expanded trip planning information.
9.7. Tolling strategies: Give greater consideration of the use of tolls and further evaluate the potential application of this strategy in the region.
9.8. Parking management and pricing strategies: Implement parking management and pricing programs in centers, downtowns, main streets and station communities.
9.9. Bike, pedestrian and trail connections: Complete gaps in sidewalks, bike facilities and the regional trail system and improve bike and pedestrian access to transit to provide more travel options.
9.10. High Capacity Transit: Expand the existing high capacity transit system to include more suburban-to-suburban connections to provide more travel options across the region.
9.11. Road and bridge capacity: Expand arterial system and address freight bottlenecks to mitigate congestion and provide more routes for community travel.
9.12. Throughway capacity: Expand throughway system and address freight bottlenecks to mitigate congestion, improve reliability for interstate and regional travel, and increase access to industrial areas and intermodal facilities.
9.13. Freight rail connections: Remove existing freight rail bottlenecks and upgrade rail tracks and services to facilitate goods movement in and through the region.

Evaluating Actions and Strategies (continued)

There are a number of actions and strategies that could help protect the investments we have already made and move us closer to achieving the vision embodied in the 2040 Growth Concept.

Question 10. Using your understanding of our current level of effort as the base, please give us your view of how we might adjust our emphasis for each strategy.

(1=Much Less Emphasis 2=Somewhat Less 3= Don't Know 4=Somewhat More 5=Much More Emphasis)

10.1. Focus on Local Ability to Fund Transportation: Implement or improve the region's authority/ability to raise local revenues for transportation.
10.2. Focus on Regional Ability to Fund Transportation: Implement or improve the region's authority/ability to raise regional revenues for transportation.
10.3. Pursue More Public Private Funding Partnerships: Aggressively develop public/private funding and development partnerships (e.g., Airport light rail example, transit-oriented development, regional travel options (RTO) program activities such as the Drive Less Save More campaign).
10.4. Leverage State Legislative Delegation and State Lobbying Efforts: Work with and encourage the state legislators representing this region to be more effective at making the case for and procuring state funds and changes in state law to address regional transportation needs.
10.5. Leverage US Congressional Team and Federal Lobbying Efforts: Work with and encourage the US congressional delegation representing this region, to be more effective at making the case for federal funds and changes in federal law to address regional transportation needs.

Metro | Draft Discussion Guide

CLICK HERE FOR REPORT

Choices

Transportation Investment Scenarios

The Portland metropolitan region is an extraordinary place to live. Our region has vibrant communities with inviting neighborhoods. We have a diverse economy and a world-class transit system. The region features an exciting nightlife and cultural activities as well as beautiful scenery, parks, trails and wild places close to home.

Over the years, the communities of the Portland metropolitan area have taken a collaborative approach to planning that has helped make our region one of the most livable in the country. We have set our region on a wise course – but times are changing. Climate change, rising energy costs, aging infrastructure, population growth and other economic challenges demand thoughtful deliberation and action.




MAKING THE GREATEST PLACE

November 2008

Transportation Investment Scenario Concept Maps

1. Click here for the Reference Scenario map
2. Click here for the Concept A: Multimodal Connectivity map
3. Click here for the Concept B: High Capacity Transit map
4. Click here for the Concept C: Throughways map
5. Click here for the Concept D: System Management and Pricing Strategies map

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Metro | *Memo*

Date:	October 30, 2008
To:	Metro Councilors, MPAC, JPACT, MTAC
From:	Sherry Oeser, Planning and Development Department
Re:	Joint MPAC/JPACT October 22 Meeting Polling Summary

On October 22, 2008, MPAC and JPACT held a joint meeting to consider land use and investment policy choices for future development in the region. More than 100 people attended the session including local government staff and non-government partners. Seventy-nine people voted using electronic polling devices. The results are broken down by all participants as well as by particular groups including "policymakers" which includes MPAC and JPACT members and alternates and other elected officials, government staff (Metro staff did not participate), and non-government partners. This summary highlights key findings of the voting. Graphs showing the results of each question by each participant group are attached.

Participants were asked their preference for where future growth would go. In priority order, they responded (participants could choose up to three; total responses are in parentheses):

1. Centers/corridors (75)
2. Existing neighborhoods (59)
3. Future expansion areas (35)
4. Neighboring communities (34)

Sixty-one percent of policymakers (i.e., MPAC and JPACT members and alternates and other elected officials) believe their jurisdiction will upzone in certain areas in the next 20 years.

Participants were asked when local and regional partners will find infrastructure funding for the 2002 UGB expansion areas. The two top responses were "don't know" (27%), and 2020 (18%).

There is strong support (79%) for redevelopment to occur in commercial/mixed use centers and corridors and policymakers support increasing infrastructure spending in centers and corridors. The vast majority of policymakers (78%) also intend to target investments to attract more development in centers and corridors.

When asked what prevents them from investing more in centers and corridors, participants said:

Policymakers (top 4 in order of priority):

1. Lack of financial resources
2. Market
3. Parcel ownership barriers
4. Traffic

The results were the same when all participants are included.

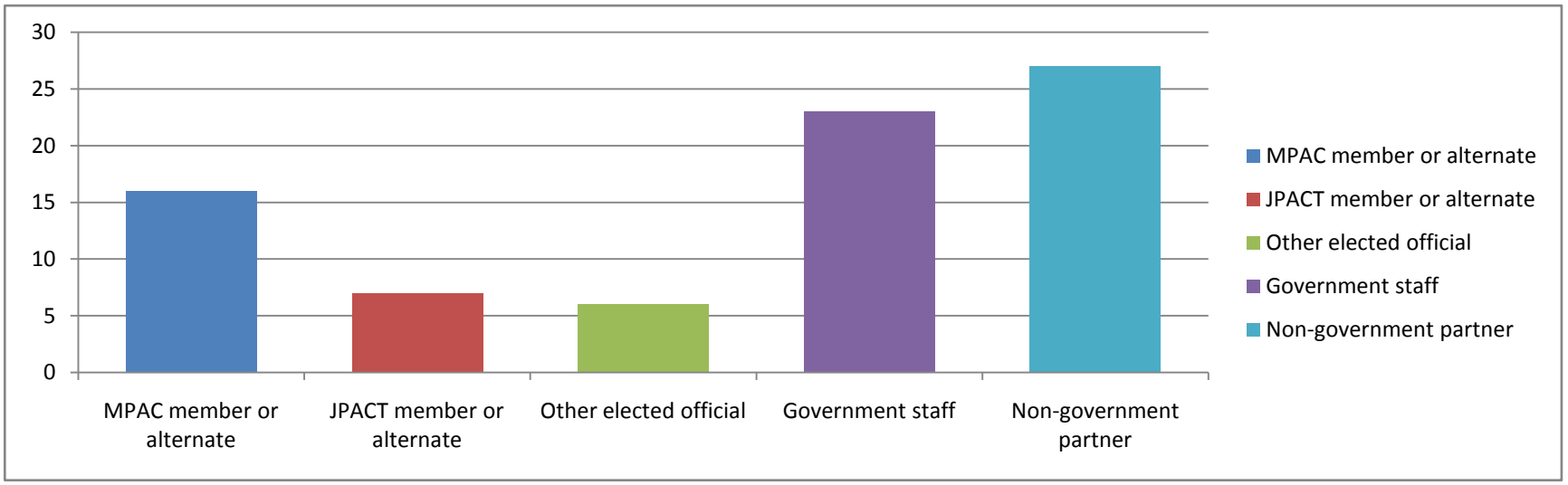
The majority of policymakers (56%) said their highest priority for public investments was both centers and corridors.

To develop centers and corridors, a strategy based on investing to make centers and corridors attractive was favored by 49% of policymakers, followed by limiting UGB expansions areas at 29% and eliminating UGB expansion areas at 25%.

Land Use and Investment Scenarios

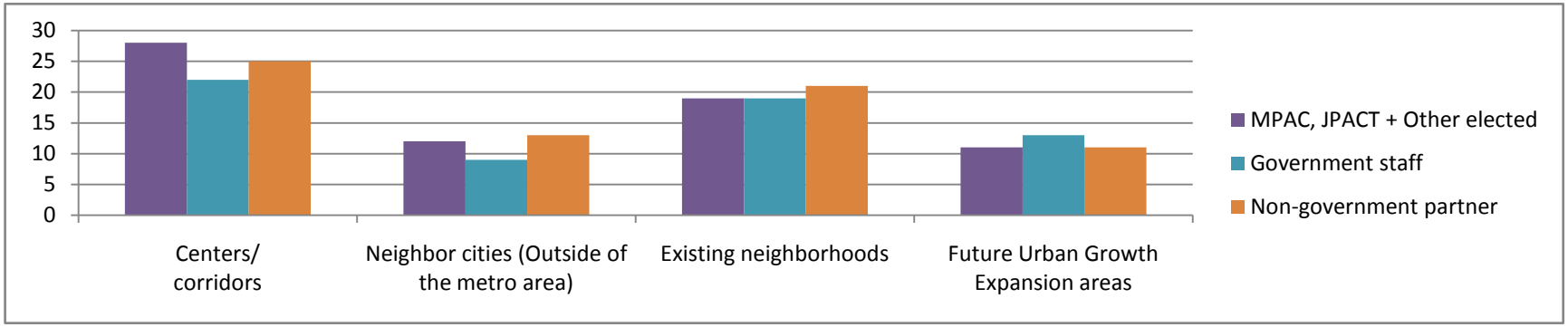
Session: 10-22-2008

1.) What best describes your role this evening?



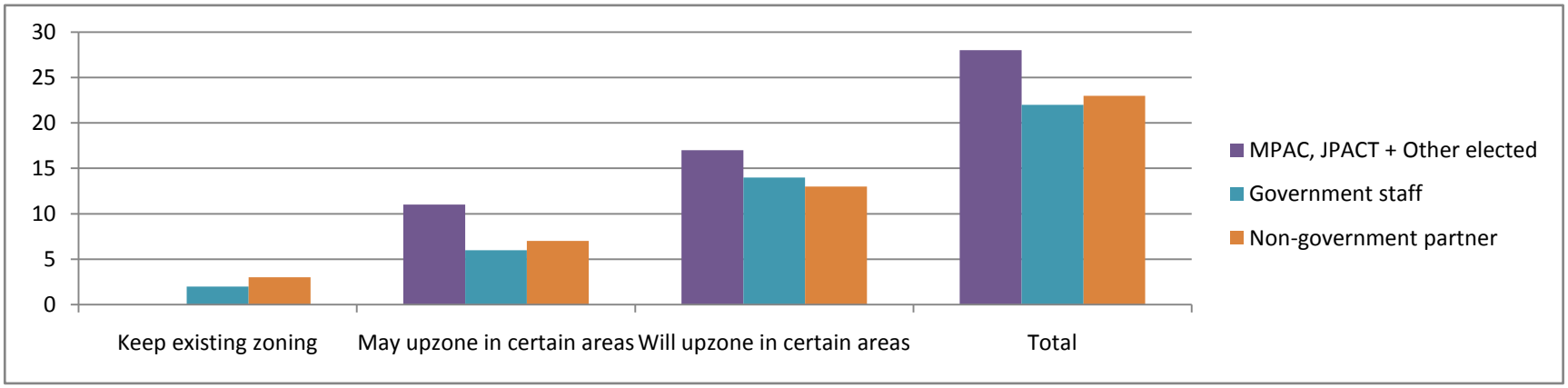
	MPAC member or alternate	JPACT member or alternate	Other elected official	Government staff	Non-government partner	Total
MPAC member or alternate	16	0	0	0	0	16
JPACT member or alternate	0	7	0	0	0	7
Other elected official	0	0	6	0	0	6
Government staff	0	0	0	23	0	23
Non-government partner	0	0	0	0	27	27

2.) Where would you like to see most growth occur? (Select top three)



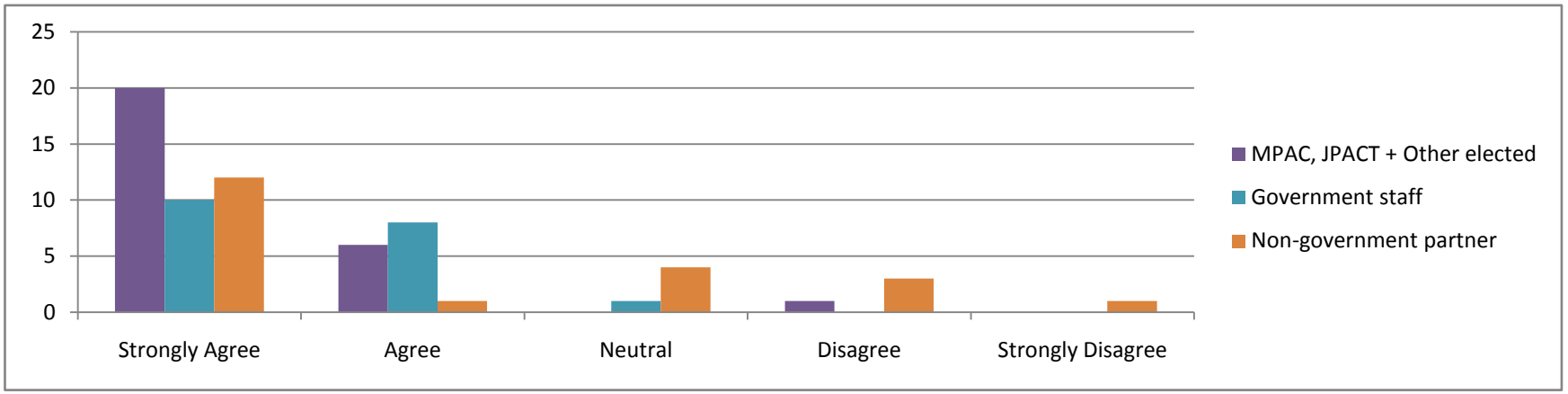
	Centers/ corridors	Neighbor cities (Outside of the metro area)	Existing neighborhoods	Future Urban Growth Expansion areas	Total
MPAC, JPACT + Other elected	28	12	19	11	70
Government staff	22	9	19	13	63
Non-government partner	25	13	21	11	70

3.) The reference case assumes existing zoning: Is this a correct assumption in your community for the next 20 years?



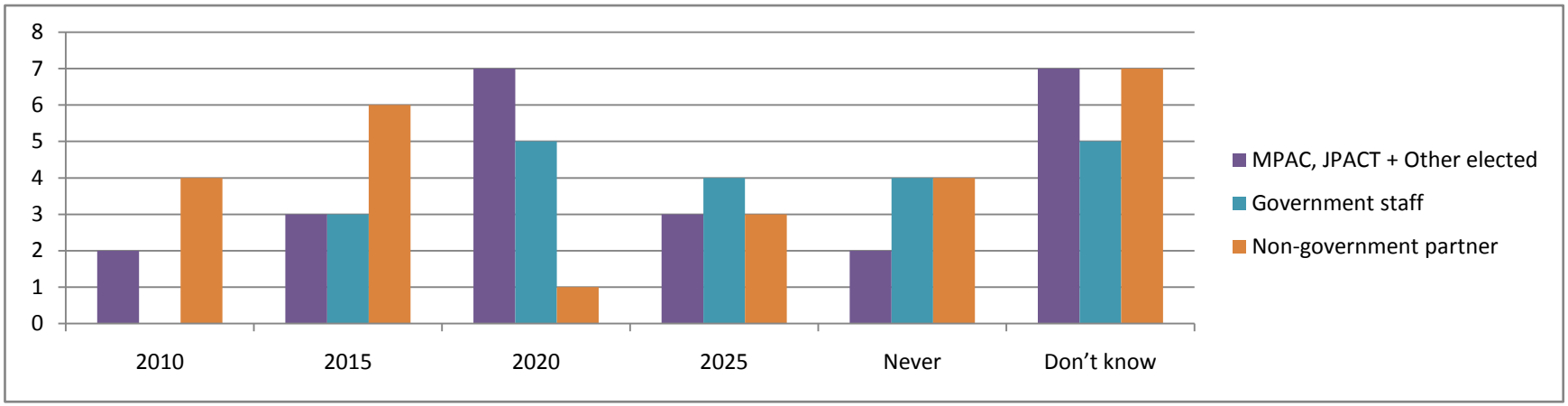
	Keep existing zoning	May upzone in certain areas	Will upzone in certain areas	Total
MPAC, JPACT + Other elected	0	11	17	28
Government staff	2	6	14	22
Non-government partner	3	7	13	23

4.) I intend to increase the number of centers or corridors with targeted public investments over what I have today



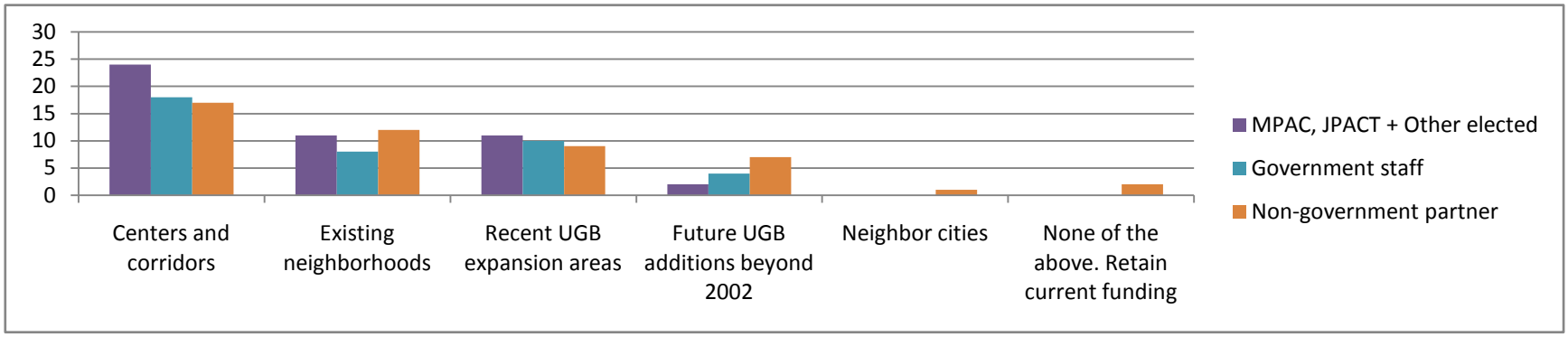
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
MPAC, JPACT + Other elected	20	6	0	1	0	27
Government staff	10	8	1	0	0	19
Non-government partner	12	1	4	3	1	21

5.) Is it a reasonable assumption that local and regional partners will find infrastructure funding for UGB expansion areas added in 2002 by…



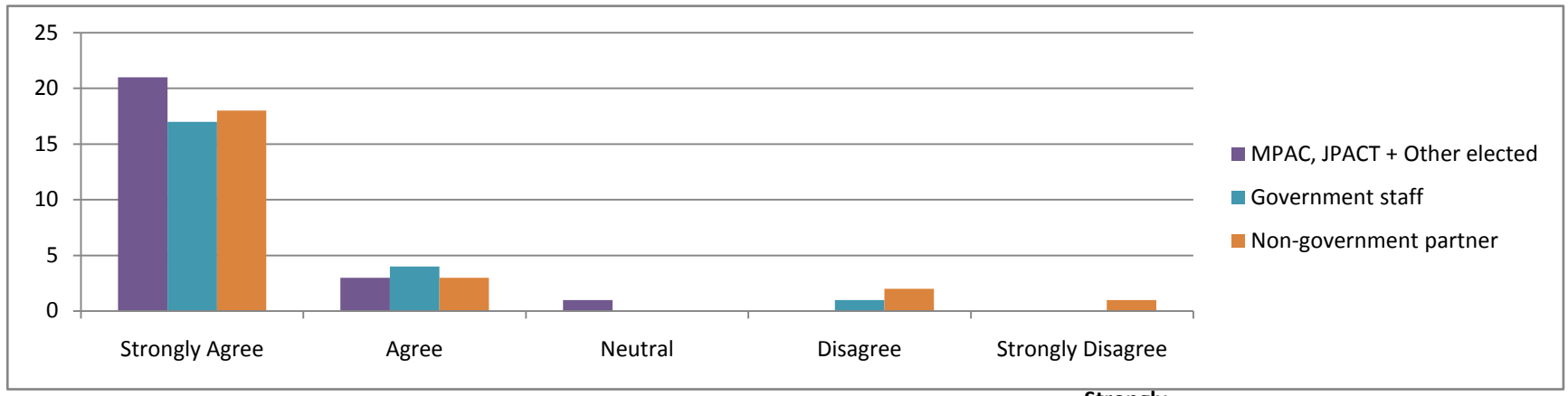
	2010	2015	2020	2025	Never	Don't know	Total
MPAC, JPACT + Other elected	2	3	7	3	2	7	24
Government staff	0	3	5	4	4	5	21
Non-government partner	4	6	1	3	4	7	25

6.) To support growth, which are your top two priorities for increasing infrastructure spending?



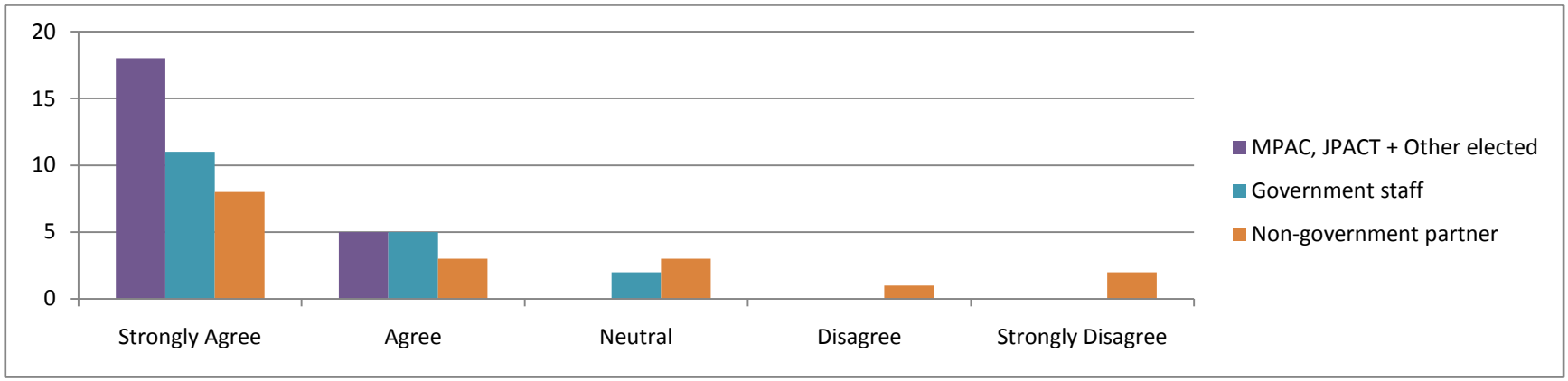
	Centers and corridors	Existing neighborhoods	Recent UGB expansion areas	Future UGB additions beyond 2002	Neighbor cities	None of the above. Retain current funding	Total
MPAC, JPACT + Other elected	24	11	11	2	0	0	48
Government staff	18	8	10	4	0	0	40
Non-government partner	17	12	9	7	1	2	48

7.) I see redevelopment in commercial/mixed use corridors and centers in my community as highly desirable



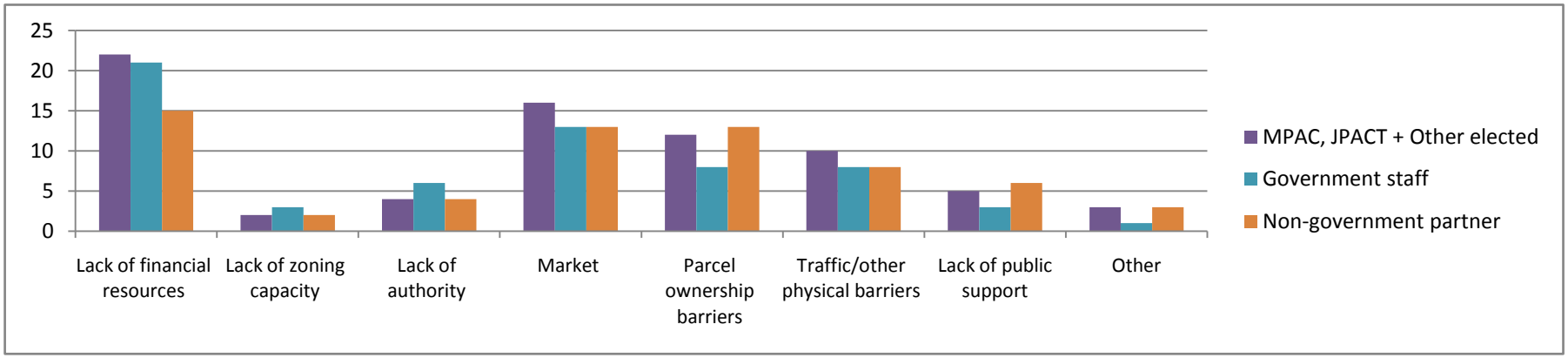
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
MPAC, JPACT + Other elected	21	3	1	0	0	25
Government staff	17	4	0	1	0	22
Non-government partner	18	3	0	2	1	24

8.) I intend to target public investments to attract more development to centers and corridors



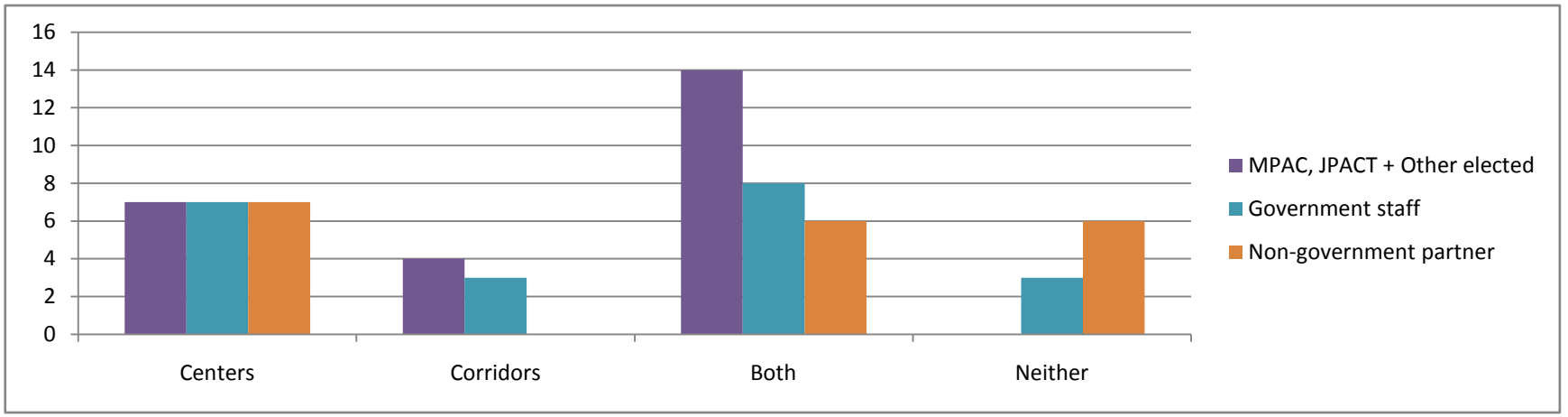
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
MPAC, JPACT + Other elected	18	5	0	0	0	23
Government staff	11	5	2	0	0	18
Non-government partner	8	3	3	1	2	17

9.) What prevents you from investing more in centers and corridors? (Select 4)



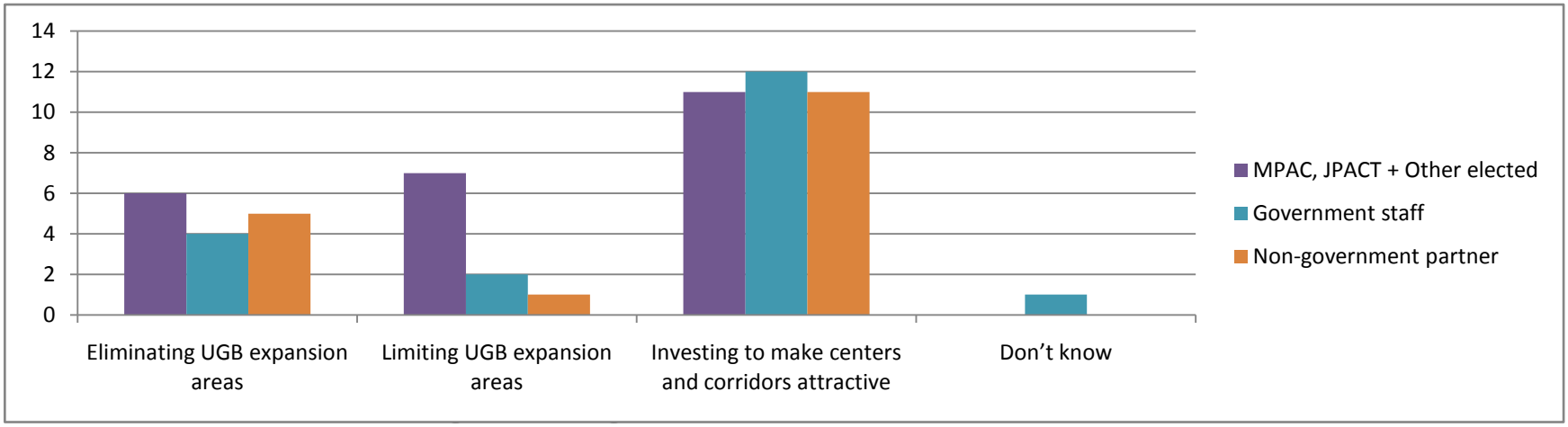
	Lack of financial resources	Lack of zoning capacity	Lack of authority	Market	Parcel ownership barriers	Traffic/other physical barriers	Lack of public support	Other
MPAC, JPACT + Other elected	22	2	4	16	12	10	5	3
Government staff	21	3	6	13	8	8	3	1
Non-government partner	15	2	4	13	13	8	6	3

10.) What is your highest priority for your public investments?



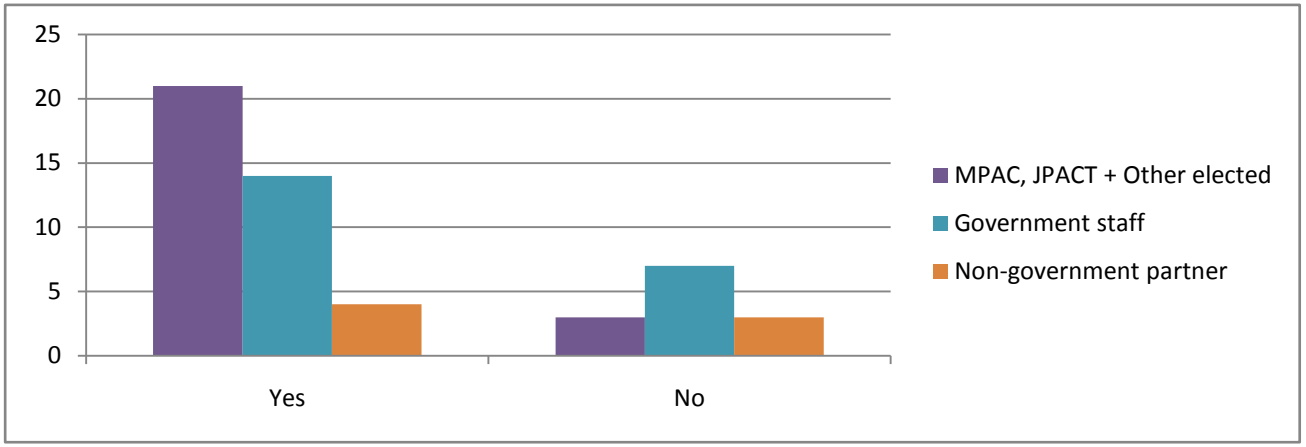
	Centers	Corridors	Both	Neither	Total
MPAC, JPACT + Other elected	7	4	14	0	25
Government staff	7	3	8	3	21
Non-government partner	7	0	6	6	19

11.) To develop centers and corridors I support a strategy based on…



	expansion areas	expansion areas	attractive	Don't know	Total
MPAC, JPACT + Other elected	6	7	11	0	24
Government staff	4	2	12	1	19
Non-government partner	5	1	11	0	17

12.) Was the meeting useful?



	Yes	No	Total
MPAC, JPACT + Other elected	21	3	24
Government staff	14	7	21
Non-government partner	4	3	7

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Choices

Land Use and Investment Scenarios

The Portland metropolitan region is an extraordinary place to live. Our region has diverse communities with inviting neighborhoods. We have a robust economy and a world-class transit system. The region features an exciting nightlife and cultural activities as well as a variety of beautiful scenery, parks, trails and wild places close to home.

Over the years, the diverse communities of the Portland metropolitan area have taken a collaborative approach to planning that has helped make our region one of the most livable in the country. We have set our region on a wise course – but times are changing. Climate change, rising energy costs, economic globalization, aging infrastructure, population growth and other urgent challenges demand thoughtful deliberation and action.