How we got there

The story of sustainable planning in the Portland Metro region
The story
1973 – Senate Bill 100 land use law
1974 – reject urban freeway projects
1975 – Interim Transportation Plan
1982 – Light Rail System Plan
1986 – Banfield light rail opens
1995 – 2040 Growth Concept
2008 – High Capacity Transit System Plan
2010 – 2035 Regional Transportation Plan
2010 – Southwest Corridor priority
Reject urban freeway system
Convert existing highways

- Harbor Freeway removed in 1976 to make way for Tom McCall Waterfront Park
- Shift freeway money to multi-modal projects
Beginning of light rail
Mt. Hood Freeway canceled highway project

Freeway Plan

Neighborhood threatened
"There is a shameless threat to our environment and to the whole quality of life: unfettered despoiling of the land. Sagebrush subdivisions, coastal 'condomania'..."
The Oregon Story

“...and the ravenous rampage of suburbia in the Willamette Valley all threaten to mock Oregon's status as the environmental model for the nation.”

Tom McCall’s address to the Legislature, January 8, 1973
Senate Bill 100

- Legislature adopts pioneering 1973 statewide planning program to limit sprawl and protect forest and farms
- Legislation requires local plans to meet statewide goals; creates LCDC
- Urbanization now focused inside urban growth boundaries
2040 Concepts

- Base Case
- Concept A
- Concept B
- Concept C

2040 Growth Concept adopted in 1995
Urban Growth Boundary
The high capacity transit story

1982 - Light Rail System Plan
1986 - Banfield Light Rail
1998 - Westside Light Rail
2001 - Airport Light Rail
2004 - North Corridor Interstate MAX
2008 - Westside Express Service Commuter Rail
2009 - South Corridor I-205/Portland Mall Light Rail
The transit story: 90 miles by 2017

- 1986, Eastside MAX
- 1998, Westside MAX
- 2001, Airport MAX & Streetcar
- 2004, Interstate MAX
- 2008, WES
- 2009, I-205 & Mall MAX
- 2010, Portland Streetcar Loop
- 2016, Milwaukie MAX
- 2017, LO Rapid Streetcar (TBD) & CRC...
Leveraging federal transit dollars

Nearly $1.6 billion in federal funds for HCT projects
The transit story

- 99.4 million rides on transit in FY2010
- MAX light rail has 38% of boarding rides; 84 stations; 52 miles
- weekly transit ridership has increased every year but one since 1988
- carries more people than any other U.S. transit system its size.
- 23rd largest metro with 8th largest annual transit ridership per capita

Source: TriMet,
The story of a successful region

• Economic competitiveness and prosperity
• Vibrant, walkable communities
• Safe and reliable transportation choices
• Minimal contributions to global warming
• Clean air, clean water and healthy ecosystems
• Benefits and burdens of growth shared throughout the region
The story of the 2035 RTP

- Vibrant Communities and Efficient Urban Form
- Economic Competitiveness and Prosperity
- Transportation Choices
- Efficient Management of the System
- Safety and Security
- Environmental Stewardship
- Human Health
- Equity
- Fiscal Stewardship
Going places
REGIONAL HIGH-CAPACITY TRANSIT SYSTEM PLAN

Adopted July 9, 2009

Bi-state HCT corridors to be considered in conjunction with RTC

Portland Central City: To be determined through Central City Plan update

LEGEND
Priority HCT Corridors*
- Near-Term Regional Priority Corridors
- Next Phase Regional Priority Corridors
- Developing Regional Priority Corridors
- Regional Vision Corridors
- RTC HCT Corridors

Transit
- High Capacity Transit (2009)
- High Capacity Transit Corridors under advancement
- 2035 Conceptual Bus Network

- Railroad
- Major Arterials
- School
- Parks/Open Space
- County Boundary
- Urban Growth Boundary

*Lines are representative of general HCT corridors, buffers are 1 mile

Miles

20
The story of mobility corridors

- Achieve mobility through network of facilities and the adjacent land uses
- Integration of land use and transportation in determining regional system functions, needs, and investment strategies
- Satisfy state requirements for demonstrating the adequacy of the region’s transportation system and its planned land uses
The story of mobility corridors

- Interconnected system of multi-modal corridors that move people and goods
- Provide primary access to 2040 land uses
- Multi-jurisdictional
The story of mobility corridors
Transit & Land Use
Station Area Planning

• 1984 - Blue Line to Gresham was built instead of highway and had little initial station area planning.

• 1998- Blue Line to Hillsboro - Leaders choose a railroad alignment base on its potential for development and re-development.

• 2001- Airport MAX was a private/public partnership with large station area planning at Cascade Station.

• 2003- Yellow Line- station area planning has been completed after line was built.

• 2016 opening- Portland-Milwaukie – station area planning in progress.

• 2025 potential opening- Southwest Corridor – station area planning now.
Why Station Planning Matters

- Four transit-oriented developments in the Portland metro region, Orenco/NW 231st Station, Elmonica/SW 170th Avenue Station, Beaverton Central and The Merrick/Convention Center MAX: 23 to 33 percent of residents take transit to work or school and 15 percent of riders are 65 years old or older.

- The San Francisco Bay Area Rapid Transit (BART) – most cost effective ways to reduce greenhouse gas emissions.

- High capacity transit has prompted more than $6 billion of development and transit-oriented development in centers, corridors and station areas in the Portland metropolitan area.

- TriMet research shows that the majority of riders access transit by walking. However, sidewalks connect only 69 percent of the stops.
System land use densities

Annual vehicle miles travelled per household

Households/residential acre

- San Francisco
- Los Angeles
- Chicago
Access to transit
Land use and transit modes

Density

Transit Mode Characteristics

<table>
<thead>
<tr>
<th>Density</th>
<th>Land Use</th>
<th>Transit Mode</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5 housing / acre</td>
<td>Frequent Bus</td>
<td>15 emp. / acre</td>
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<tr>
<td>Moderate</td>
<td>10 housing / acre</td>
<td>Bus Rapid Transit</td>
<td>20 emp. / acre</td>
</tr>
<tr>
<td>High</td>
<td>20 housing / acre</td>
<td>Commuter Rail</td>
<td>25 emp. / acre</td>
</tr>
<tr>
<td>Very High</td>
<td>30 housing / acre</td>
<td>Light Rail</td>
<td>50 emp. / acre</td>
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</tbody>
</table>

- Light Rail
- Rapid Streetcar
- Commuter Rail
- Bus Rapid Transit
- Frequent Bus
Greenhouse gas reductions

Figure ES-1 Cost per Metric Ton of CO₂ Emissions Abatement (by Strategy)

- Off-peak Frequency Enhancements
- Structured Parking
- Surface Parking
- TOD with Full Replacement Parking
- BART Extension
- Attended Parking
- Unattended Ride Pass
- Renewable Energy
- Kids Ride Free
- Feeder Shuttle Service
- Train Efficiency Improvements
- TOD with Partial Replacement
- TOD without Replacement
- Universal Transit Pass
- Travel/Choice
- Station Area Planning*
- Indirect Source Review Policy
- Employee paid Parking
- Fundraising
- Market Priced Carb Parking

Legend:
1 = Lower Potential (<70,000 Tons)
2 = Moderate Potential (70,001 - 50,000 Tons)
3 = High Potential (50,000 - 100,000 Tons)
4 = Very High Potential (>100,000 Tons)
BART Strategies
Other Strategies
Energy Strategies

*Includes planning for land use change; does not include public or private infrastructure investment
Transportation GHG Reduction Potential

<table>
<thead>
<tr>
<th>GHG Emission Reduction Options</th>
<th>GHG Emission Goal Reduction Potential</th>
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<tbody>
<tr>
<td>Transit Vehicles/Greener Fuels</td>
<td>Low</td>
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<tr>
<td>Green Transportation Programming</td>
<td>Med</td>
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<tr>
<td>Fleet Fuel Efficiency/Greener Fuels</td>
<td>High</td>
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<tr>
<td>Smart Growth/Smart Streets</td>
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<tr>
<td>Demand Management (Pricing)</td>
<td></td>
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<tr>
<td>Incorporating all the Above</td>
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</tr>
</tbody>
</table>

Source: California Transit Association
Cost Effectiveness of Station Area Planning

Source: Nelson\Nygaard from BART Climate Action Plan
Household Location and Density

High capacity transit scenario

Legend
- More households
- Less households
- No change
Thank you!

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