



**METRO**

**Agenda**

MEETING: METRO COUNCIL  
DATE: November 13, 2008  
DAY: Thursday  
TIME: 2:00 PM  
PLACE: Metro Council Chamber

**CALL TO ORDER AND ROLL CALL**

- 1. INTRODUCTIONS**
- 2. CITIZEN COMMUNICATIONS**
- 3. METROPOLITAN EXPOSITION AND RECREATION COMMISSION UPDATE** Trotter
- 4. WASTE REDUCTION AND OUTREACH AUDIT** Flynn
- 5. CONSENT AGENDA**
  - 5.1 Consideration of Minutes for the November 6, 2008 Metro Council Regular Meeting.
- 6. PRESENTATION AND DISCUSSION OF TRANSPORTATION SCENARIOS** Ellis
- 7. CHIEF OPERATING OFFICER COMMUNICATION**
- 8. COUNCILOR COMMUNICATION**

**ADJOURN**

**Television schedule for November 13, 2008 Metro Council meeting**

<p><b>Clackamas, Multnomah and Washington counties, and Vancouver, Wash.</b>          Channel 11 – Community Access Network  <a href="http://www.tvctv.org">www.tvctv.org</a> – (503) 629-8534          2 p.m. Thursday, November 13 (Live)</p>	<p><b>Portland</b>          Channel 30 (CityNet 30) – Portland Community Media  <a href="http://www.pcmtv.org">www.pcmtv.org</a> – (503) 288-1515          8:30 p.m. Sunday, November 16          2 p.m. Monday, November 17</p>
<p><b>Gresham</b>          Channel 30 – MCTV  <a href="http://www.mctv.org">www.mctv.org</a> – (503) 491-7636          2 p.m. Monday, November 17</p>	<p><b>Washington County</b>          Channel 30 – TVC-TV  <a href="http://www.tvctv.org">www.tvctv.org</a> – (503) 629-8534          11 p.m. Saturday, November 15          11 p.m. Sunday, November 16          6 a.m. Tuesday, November 18          4 p.m. Wednesday, November 19</p>
<p><b>Oregon City, Gladstone</b>          Channel 28 – Willamette Falls Television  <a href="http://www.wftvaccess.com">www.wftvaccess.com</a> – (503) 650-0275          Call or visit website for program times.</p>	<p><b>West Linn</b>          Channel 30 – Willamette Falls Television  <a href="http://www.wftvaccess.com">www.wftvaccess.com</a> – (503) 650-0275          Call or visit website for program times.</p>

**PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times.**

Agenda items may not be considered in the exact order. For questions about the agenda, call Clerk of the Council, Chris Billington, (503) 797-1542. Public hearings are held on all ordinances second read and on resolutions upon request of the public. Documents for the record must be submitted to the Clerk of the Council to be considered included in the decision record. Documents can be submitted by e-mail, fax or mail or in person to the Clerk of the Council. For additional information about testifying before the Metro Council please go to the Metro website [www.oregonmetro.gov](http://www.oregonmetro.gov) and click on public comment opportunities. For assistance per the American Disabilities Act (ADA), dial TDD 797-1804 or 797-1540 (Council Office).

**METROPOLITAN EXPOSITION AND RECREATION  
COMMISSION UPDATE**

Metro Council Meeting  
Thursday, November 13, 2008  
Metro Council Chamber

# Economic and Fiscal Impact Analysis Metropolitan Exposition Recreation Commission



**Final Report  
October 21, 2008**

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October 21, 2008

Mr. David Woolson, CEO  
Metropolitan Exposition Recreation Commission  
1111 SW Broadway Street  
Portland, OR 97205

Dear Mr. Woolson:

Per our agreement dated April 3, 2008, Crossroads Consulting Services LLC (Crossroads Consulting) has completed its economic and fiscal impact analysis for event activity occurring at the Oregon Convention Center, the Portland Center for the Performing Arts, and the Portland Metropolitan Exposition Center during fiscal year 2008. The report presented herein includes the summary of findings and principal conclusions from our research.

The findings and assumptions contained in the report reflect analysis of primary and secondary sources including information provided by management at each facility. We have utilized sources that are deemed to be reliable but cannot guarantee their accuracy. In accordance with the terms of our original engagement letter, the accompanying report is restricted to internal use by the Metropolitan Exposition Recreation Commission and may not be relied upon by any third party for any purpose. Notwithstanding these limitations, it is understood that this document may be subject to public information laws and, as such, can be made available to the public upon request. We have no obligation, unless subsequently engaged, to update this report or revise this analysis as presented due to events or conditions occurring after the date of this report.



This analysis does not constitute an examination, compilation or agreed upon procedures in accordance with the standards established by the American Institute of Certified Public Accountants (AICPA). As such, we do not express an opinion or any other form of assurance on whether the analysis is presented in conformity with AICPA presentation guidelines or on whether the underlying assumptions provide a reasonable basis for the presentation.

You have authorized reports to be sent electronically for your convenience. However, only the final hard copy report should be viewed as our work product.

We have enjoyed working on this engagement and our on-going relationship with the Metropolitan Exposition Recreation Commission and look forward to the opportunity to provide you with continued service.

Sincerely,

*Crossroads Consulting Services LLC*



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# Introduction

The Metropolitan Exposition Recreation Commission (MERC) is a subsidiary of Metro, an elected regional government. MERC is governed by a Board of Commissioners who are appointed by Metro Council President upon recommendation from local area governments. Board members share a strong commitment to ensuring that the regional facilities they manage serve the public interest. The board composition includes seven members representing City of Portland (two), Metro (two), and one each for Clackamas, Multnomah, and Washington Counties. The Commissioners serve four year terms.

MERC works to promote the livability and economic vitality of the Portland metropolitan area through sound stewardship, management and creative development of three public facilities — the Oregon Convention Center (OCC), the Portland Center for the Performing Arts (PCPA), and Portland Metropolitan Exposition Center. (Expo Center). The mission of the OCC is to maximize economic benefit for the region and the State of Oregon while protecting public investment in the facility. As such, OCC management and marketing policies are aimed at attracting out-of-town visitors and creating new jobs to stimulate economic development while also accommodating local users. PCPA is a cultural hub for the metropolitan region hosting a variety of performances and entertainment events in its multiple theaters contributing to a vibrant and culturally rich region. The Expo Center is the region's primary destination for public events and consumer shows, some of which have been held there for 50 years. In aggregate, these venues hosted nearly 1,500 events/performances in fiscal year (FY) 2008 that attracted more than 1.9 million people and offered a wide range of experiences for visitors and citizens that contributed to the overall quality of life in metropolitan Portland and the State of Oregon. These venues benefit the community by:

- Hosting a diverse range of cultural activities and experiences
- Providing gathering places for celebrations and business events
- Generating significant economic return through conventions/tradeshows, cultural performances, consumer shows and other events that draw out-of-town visitors and generate spending and jobs within the region

## Introduction (cont'd)

MERC's role is to preserve these public facilities by managing maintenance of 1.5 million square feet of public event spaces and facilitate planning and major facility improvements to ensure these venues continue to meet the needs and expectations of event producers, performers, and audiences well into the future.

MERC manages a \$40 million annual budget and generates most of its financial resources through its business enterprise operations. Nearly 70% of operating revenue comes from services and activities such as facility rentals, event services, food/catering, and parking. The remaining 30% of operating funds are generated by lodging industry taxes, government contributions, and investment earnings.

MERC's professional, market-driven approach helps ensure that the facilities in its portfolio achieve long-term success. In addition, staff members offer the highest level of customer service to provide clients and visitors with a positive, enjoyable experience. In order to maintain long-term fiscal viability, MERC is pursuing the following strategies:

- Building alliances with community and business partners
- Effectively marketing MERC venues to retain existing customers and attract new business
- Working to secure a convention center headquarters hotel

## Introduction (cont'd)

The primary purpose of this study is to estimate the economic and fiscal impacts associated with the on-going operations of MERC venues to the regional economy. As such, the study also sought to obtain a better understanding of the impact that these facilities have on nearby businesses.

Specific research tasks conducted by Crossroads Consulting for the study include the following:

- Met with representatives of MERC and management from all three facilities
- Reviewed previous studies related to the economic impact of the arts to the Tri-County area
- Conducted interviews with event producers at the PCPA and the Expo Center to obtain a better understanding of the quantitative and qualitative impacts of their events to the region
- Conducted interviews with management at select hotels and restaurants located proximate to the PCPA theaters and the Expo Center
- Analyzed event-specific attendee and exhibitor surveys conducted by Expo Center staff at select consumer/trade shows
- Developed financial models to estimate economic and fiscal impacts for each of the three facilities
- Used event data and financial operating statements supplied by facility management at each facility as inputs to the financial model
- Summarized the analysis

# General Methodology for Calculating Economic and Fiscal Impacts Generated from Operations of MERC Facilities

An assessment of the economic benefits that could potentially accrue to area municipalities and the State of Oregon as a result of the on-going operations of the OCC, PCPA and Expo Center can be approached in several ways. The approach used in this analysis considers expenditures generated by facility operations from items such as personal services, goods and services, repairs and maintenance, contract services, marketing, utilities, insurance, etc. as well as spending by attendees, sponsoring organizations/event producers and exhibitors as an initial measure of economic activity within the marketplace. Once the amount for direct spending is estimated, a multiplier is applied to generate the total (direct, indirect and induced) spending, earnings and employment associated with facility operations. This "multiplier" effect is estimated in this analysis using a regional economic forecasting model provided by the Minnesota IMPLAN Group, Inc.

The economic activity directly generated through the on-going operations of the OCC, PCPA, and Expo Center and the spending of their users affects more than just the facilities and immediately surrounding land uses. As this money ripples through the economy, several other economic sectors are impacted and jobs are created. For example, when a caterer purchases food for an event at a facility everyone from the wholesaler to the farmer that produced the food is impacted as well as local and State government entities that tax these economic transactions.

In addition to the economic impacts associated with spending, employment and earnings, fiscal benefits generated from on-going operations of these three MERC facilities were estimated. As mentioned earlier, the governmental entities considered in this fiscal analysis include Clackamas, Multnomah and Washington Counties as well as Metro and the State of Oregon. Revenues generated from transient lodging tax, excise tax, motor vehicle rental tax, business income tax and personal income tax were estimated. All amounts depicted in this report are presented in current dollars unless otherwise noted.

# Methodology – Economic Impact

The three categories of measurement used to assess the economic impact of each public assembly facility are spending, earnings and employment which are defined below:

- **Spending (output)** represents the total direct and indirect/induced spending effects generated by each facility. This calculation measures the total dollar change in spending (output) that occurs in the local economy for each dollar of output delivered to final demand.
- **Earnings** represent the wages and salaries earned by employees of businesses associated with or impacted by each facility's operations. In other words, the multiplier measures the total dollar change in earnings of households employed by the affected industries for each additional dollar of output delivered to final demand.
- **Employment** represents the number of full and part-time jobs supported by each facility. The employment multiplier measures the total change in the number of jobs supported in the local economy for each additional \$1.0 million of output delivered to final demand.

## Direct Spending

The first step in calculating economic impact is estimating the direct spending. Depending on the particular facility, direct spending can be generated from attendees, associations/event producers and/or exhibitors as well as from facility expenditures.

# Methodology – Economic Impact (cont'd)

## Attendee Spending

This category attempts to reflect the spending patterns of attendees outside the facility before and after the event. Based on the estimated mix of event activity, attendees at each facility were categorized as either high impact, defined as those generating hotel room nights, or low impact and were assigned different spending amounts based on primary and secondary research including, but not limited to, input from event producers, surveys of attendees and data from various industry resources. This per capita amount was then allocated among various categories of spending including hotel, eating and drinking places, retail, entertainment, and transportation.

## Sponsoring Organizations/Event Producers

Sponsoring organizations/event producers typically have substantial investments in the events that they host. These organizations purchase goods and services from either the facility, the food and beverage contractor, audio/visual companies, advertising agencies and/or other outside sources. Items such as exhibit space and equipment rental are typically provided by the facility, which are reflected as revenues for the provider. Since this spending is eventually reflected in the budgetary spending by the facility, these amounts are excluded to avoid double counting. Estimated spending amounts for sponsoring organizations/event producers outside the facility are based on primary and secondary research including, but not limited to, input from event producers and data from various industry resources.

# Methodology – Economic Impact (cont'd)

## Exhibitors

Exhibitors at events such as conventions, tradeshow and consumer/public shows typically spend more than attendees. Estimated spending amounts for exhibitors are based on primary and secondary research including, but not limited to, input from event producers, surveys of exhibitors and data from various industry resources. This category of direct spending is only applicable for the OCC and the Expo Center. Similar to spending estimated by sponsoring organizations/event producers, adjustments were made to these estimates to avoid double counting with items already reflected in each facility's budgetary spending.

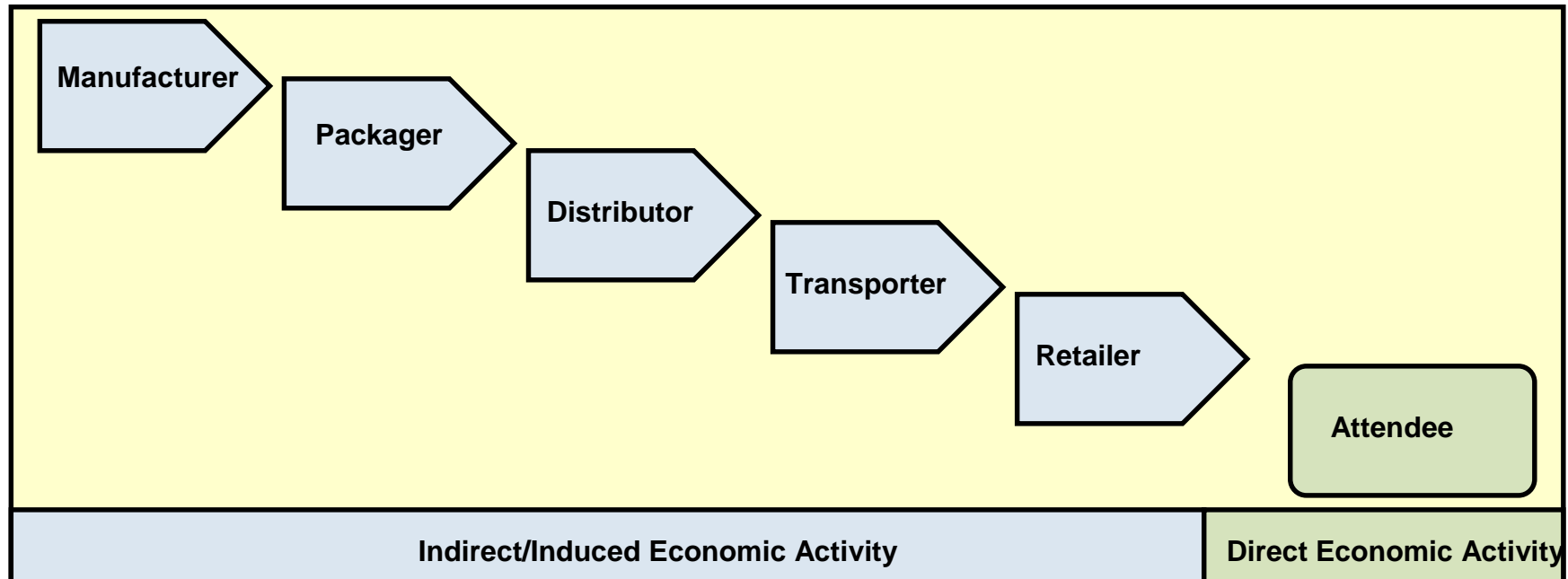
## Budgetary Spending

Budgetary spending refers to the “expense side” generated by facility operations as provided by management. Regardless of the source or magnitude of the revenues, this analysis focuses on the operating expenditures at each facility.

# Methodology – Economic Impact (cont'd)

## Induced/Indirect Spending

The economic activity generated through the on-going operations affects more than just the facilities. In preparation for new spending in the economy, several other economic sectors are impacted and jobs are created. It is a common misconception to assume that the indirect/induced spending occurs subsequent to the purchase of the good as an "after effect." To further illustrate this point, consider that advertising is purchased, labor is hired, and marketing materials are produced and mailed to a target audience before the attendee spending takes place. To yield direct spending, several intermediary levels of spending must occur first.





# Methodology – Economic Impact (cont'd)

## Multipliers

In an effort to quantify the inputs needed to produce the total output, economists have developed multiplier models. This “multiplier” effect is estimated in this analysis using a regional economic forecasting model provided by Minnesota IMPLAN Group, Inc., a private economic modeling company. One of the major advantages of this type of model is that it is sensitive to both location and type of spending. The multipliers used to calculate total spending represent the Tri-County Metropolitan Region which is MERC’s constituency. Depending on the venue, the majority of spending may occur in downtown Portland or Multnomah County given that many attendees, exhibitors, show producers and/or cast/crew choose to stay in hotels proximate to where the event is held.

As a final step, the direct spending amounts estimated for each facility were assigned to a logical category and applied to the multipliers in order to calculate estimates for total spending, total earnings and total employment (jobs). The multipliers used to calculate total spending are shown in the table below:

Tri-County Metropolitan Region Multipliers			
Category	Spending	Earnings	Employment*
Hotels	1.6757	0.5814	19.2
Eating & Drinking Places	1.6719	0.5644	23.8
Retail Trade	1.6652	0.6456	19.8
Entertainment	1.7818	0.7055	32.5
Transportation	1.7087	0.6393	12.7
Business Services	1.8490	0.8053	16.7

Note: \*Indicates the number of jobs per \$1 million in spending.

Source: IMPLAN.

# Methodology – Fiscal Impact

The estimated spending generated by the on-going operations of the OCC, PCPA and Expo Center creates tax revenues for the Tri-County Metropolitan Region. Experience in other markets suggests that while a significant portion of the direct spending likely occurs near the facility, additional spending occurs in other areas within the Tri-County Metropolitan Region, particularly spending on items such as business services and everyday living expenses of residents.

Major tax sources impacted by facility operations were identified in order to estimate the taxable amounts to apply to each respective tax rate. Although other taxes, such as property taxes and gasoline taxes, may also be impacted by the on-going operations of MERC facilities, this analysis estimated revenues generated from the following taxes based on the direct and indirect/induced spending amounts previously defined:

## State of Oregon

- Personal Income Tax
- Transient Lodging (Hotel/Motel) Tax
- Corporate Excise and Income Tax

## Metro

- Excise Tax

## Clackamas County

- Transient Room Tax

## Multnomah County

- Transient Lodgings Tax
- Motor Vehicle Rental Tax
- Business Income Tax

## Washington County

- Lodging Tax

Other jurisdictions not shown in this analysis are also positively impacted by operations of MERC venues. For instance, the City of Portland receives a portion of the Multnomah County lodging tax and likely increased property tax revenue due to patron spending by PCPA attendees, cast/crew and OCC event attendees at City businesses.

# Methodology – Fiscal Impact (cont'd)

The following provides a brief description of the taxes estimated for this analysis.

## **State of Oregon**

*Personal Income Tax* – The State of Oregon imposes a personal income tax, which is calculated on a graduated scale. Personal income tax is the State of Oregon's largest source of revenue. Based on information from the State of Oregon Department of Revenue, the statewide effective tax rate for personal income is 5.7%. For purposes of this analysis, personal income tax was calculated by applying the effective tax rate of 5.7% to 53% of total earnings estimated to be generated by each individual facility, which represents the State's average taxable income as a percentage of total income.

*Transient Lodging Tax* – Effective in 2004, public and private lodging providers began paying a 1% State transient lodging tax. This tax is in addition to and not in place of any local transient lodging tax. This tax continuously appropriates funds to the Oregon Tourism Commission to promote tourism programs in the State. For purposes of this analysis, the 1% tax rate was applied to 100% of direct hotel spending estimated to be generated by each individual venue.

*Corporate Excise and Income Tax* – Corporate excise and income tax is the second largest source of revenue for the State. All corporations doing business in Oregon pay excise tax while corporations not doing business in the State but having income from an Oregon source pay income tax. The corporate tax rate is 6.6% of Oregon net income. For purposes of this analysis and based on information from the State of Oregon Department of Revenue, the 6.6% tax rate was applied to 5.5% of direct spending estimated to be generated by each facility in order to reflect net taxable income.

# Methodology – Fiscal Impact (cont'd)

## Metro

*Excise Tax* – Metro imposes an excise tax of 7.5% of total earned revenues of MERC facilities. The tax is remitted on a monthly basis to Metro and is a General Fund Revenue dedicated to the funding of general government activities as well as various planning, parks and green spaces activities. For purposes of this analysis, the actual excise tax amount paid by the OCC and the Expo Center was used. The PCPA does not remit excise tax.

## Clackamas County

*Transient Room Tax* – Clackamas County imposes a 6% transient room tax on hotels, defined as any structure or any portion of any structure which is occupied or intended or designed for transient occupancy for 30 days or less for dwelling, lodging or sleeping purposes. Revenues generated by this source are allocated as follows: two points are used for administration purposes, a flat fee is allocated to help fund the County Fair and the remaining amount goes to the Tourism Development Council Fund which is used to promote tourism. The flat fee allocated to the County Fair was originally set at \$250,000 per year and is adjusted by CPI annually. As a point of reference, the flat fee was approximately \$370,000 in FY 2008.

In addition to the 6% tax rate imposed by Clackamas County, several cities in the County also impose additional transient room taxes, which range from 3% to 5%. For purposes of this analysis, a tax rate of 9% was applied to 100% of direct hotel spending in the County. Although all tax revenue is generated within the County, the County only retains six of the nine points while the various cities within the County receive the remaining amount. This tax was only estimated for OCC related event activity given this venue's relatively higher room night generation and impact to surrounding counties.

# Methodology – Fiscal Impact (cont'd)

## Multnomah County

*Transient Lodging Tax* – Multnomah County imposes a tax of 11.5% of the rent charged by the operator of any structure or any portion of any structure which is occupied or intended or designed for transient occupancy for 30 days or less for dwelling, lodging or sleeping purposes. This tax is generally allocated as follows:

- Five points of the tax collected by Multnomah County within the City limits goes to the City of Portland General Fund
- One point of the tax is allocated to the City of Portland to contract with a not-for-profit agency to promote the destination (i.e. Travel Portland)
- A three point surcharge rate of the tax is allocated to the excise tax fund of which hotel operators can deduct 5% of the 3% for administrative costs. The remaining amount is dedicated to various projects such as the OCC, the Portland Center for the Performing Arts, and the Regional Arts and Culture Council
- A 2.5 point surcharge rate of the tax is allocated to the Visitors Facilities Trust Account (VFTA) of which hotel operators can deduct 5% of the 2.5% for administrative costs

For purposes of this analysis, the tax rate of 11.5% was applied to 100% of direct hotel spending estimated to be generated in Multnomah County by each facility's operation.

# Methodology – Fiscal Impact (cont'd)

## **Multnomah County (cont'd)**

*Motor Vehicle Rental Tax* – Multnomah County levies a tax on the rental of motor vehicles from a commercial establishment doing business in the County if the rental is for a period of 30 days or less. The total tax rate is 12.5% of the rental fee charged by the commercial establishment for the rental. The tax is remitted to the County on a quarterly basis. The collections from the base rate of 10% are allocated to the County's general fund while the remaining 2.5% is allocated to the Visitors Facilities Trust Account (VFTA). For purposes of this analysis, the tax rate of 12.5% was applied to 50% of direct local transportation spending in Multnomah County generated by OCC operations.

*Business Income Tax* – A business income tax is imposed on each business within Multnomah County equal to 1.45% of the net income from that business within the County. This tax is administered by the City of Portland. For purposes of this analysis, the business income tax rate of 1.45% was applied to 5.5% of total direct spending in order to reflect net taxable income estimated to be generated by each facility's operation.

# Methodology – Fiscal Impact (cont'd)

## **Washington County**

*Lodging Tax* – Washington County imposes a 9% tax on short term stays in hotels, motels and RV parks. For purposes of this analysis, a 9% tax rate was applied to direct hotel spending in Washington County. This tax was only estimated for OCC related event activity given this venue's relatively higher room night generation and impact to surrounding Counties. The allocation of collections is as follows:

- One point is retained by the County as an administrative fee
- One point is dedicated to the Fair Board to support the County Fair
- Two points are granted to the promotion of tourism and are no longer automatically given to the County's Visitor's Association; rather all interested parties must submit proposals to the County for an allocation of this portion, including the Visitor's Association
- The remaining five points are split between the County and cities and are primarily used to fund functions such as public safety, public health, transportation and other local government services.

## **Other Jurisdictions**

In addition to those jurisdictions previously described, other area governments could potentially benefit from MERC facility operations which generate patron spending at regional business establishments. Conversations with management at a sample of hotels and restaurants suggest event activity at MERC facilities positively impacts their business as well as that of other establishments nearby.

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# Summary of Event Activity at MERC Facilities in FY 2008

MERC facilities hosted a combined total of nearly 1,500 events/performances that attracted more than 1.9 million attendees in FY 2008. These events are diverse in nature and attract both residents and out-of-town attendees. This event activity occupied MERC facilities for more than 2,900 total use days which are defined as the actual number of days a particular event takes place as well as any necessary days required for move-in/move-out of the event.

Events hosted at OCC include national and international conventions/tradeshows, public shows, meetings and social functions. PCPA events include performing arts events, comedy/concerts, lectures, meetings and receptions. Expo event activity is comprised primarily of public shows and trade shows where regional businesses can exhibit their goods as well as meetings and social functions.

Summary of Event Activity at MERC Facilities in FY 2008				
	OCC	PCPA	Expo Center	Total
<b>Events/Performances</b>	588	802	107	1,497
<b>Total Use Days</b>	1,244	1,227	437	2,908
<b>Attendance</b>	614,900	817,100	510,100	1,942,100

Notes: Attendance figures rounded to the nearest hundred.  
 For PCPA, one event can have multiple performances.  
 Source: MERC management.

# Summary of Financial Operations at MERC Facilities in FY 2008

MERC facilities generated approximately \$30.4 million in operating revenues in FY 2008. Both OCC and PCPA generated an operating loss which is partially subsidized by non-operating revenues such as transient lodging tax and government support from the City of Portland. It is not unusual for convention centers and performing arts centers to operate at a loss given the mission of these venues to generate economic impact by attracting out-of-town visitors and to offer diverse cultural arts activities to area residents. While the Expo Center serves as the region's primary destination for public events and consumer shows which primarily attracts area residents, the facility realized a \$1.5 million gain in FY 2008. In aggregate, MERC facilities generated a net operating loss of \$7.1 million before non-operating revenues and expenses, transfers and capital.

Summary of Financial Operations at MERC Facilities FY 2008				
Category	OCC	PCPA	Expo Center	Total
<b>Total Operating Revenues</b>	\$16,862,107	\$7,470,745	\$6,078,469	\$30,411,321
<b>Total Operating Expenditures</b>	23,131,279	9,765,651	4,605,698	37,502,628
<b>Net Operating Results</b>	(6,269,172)	(2,294,906)	1,472,771	(7,091,307)
<b>Net Non-Operating</b>	9,450,452	3,050,710	167,958	12,669,120
<b>Capital</b>	(513,818)	(60,450)	37,007	(537,261)
<b>Transfers</b>	(18,349)	0	(1,189,932)	(1,208,281)
<b>Fund Balance Increase/(Decrease)</b>	<b>\$2,649,113</b>	<b>\$695,354</b>	<b>\$487,804</b>	<b>\$3,832,271</b>

Note: For purposes of this analysis, support and risk management costs are included in operating expenditures.

Source: MERC Management

# Summary of Estimated Economic Benefits Generated from Operations of MERC Facilities in FY 2008

The table below summarizes the estimated economic impacts generated from MERC facilities in FY 2008 in terms of total direct and indirect/induced spending, employment and earnings based on the methodology and assumptions outlined in this report. As shown, MERC facilities were estimated to generate approximately \$534.5 million in total spending within the region and 5,810 full-time equivalent (FTE) jobs. As a point of reference, there are currently 165 total FTEs at these three MERC facilities: OCC (107.3); PCPA (44.4) and Expo Center (13.3).

Summary of Estimated Economic Benefits Generated from Operations of MERC Facilities in FY 2008				
Category	OCC	PCPA	Expo Center	Total
<b>Total Economic Benefits:</b>				
Direct Spending (Output)	\$252,763,000	\$32,748,000	\$21,883,000	\$307,394,000
Indirect/Induced Spending	\$188,749,000	\$23,034,000	\$15,290,000	\$227,073,000
Total Direct and Indirect/Induced Spending	\$441,512,000	\$55,782,000	\$37,173,000	\$534,467,000
Total Direct and Indirect/Induced Employment (Number of FTE jobs)	4,760	630	420	5,810
Total Direct and Indirect/Induced Earnings	\$171,453,000	\$20,842,000	\$13,654,000	\$205,949,000

Notes: (1) Amounts are presented in current dollars and rounded to the nearest thousand.

(2) FTE denotes full-time equivalent employees.

(3) Earnings represent the wages and salaries earned by employees of businesses associated with or impacted by the facility.

# Summary of Estimated Fiscal Benefits Generated from Operations of MERC Facilities in FY 2008

Based on the event activity and financial operating data provided by MERC as well as other assumptions outlined in this report, MERC facilities were estimated to generate approximately \$18.4 million in tax revenues in FY 2008. For purposes of this analysis, fiscal benefits associated with the on-going operations of MERC facilities are estimated for the following jurisdictions: the State of Oregon, Metro, Clackamas County, Multnomah County and Washington County.

Summary of Estimated Fiscal Benefits Generated from Operations of MERC Facilities in FY 2008				
Category	OCC	PCPA	Expo Center	Total
<b>State of Oregon</b>				
Personal Income Tax	\$5,180,000	\$630,000	\$412,000	\$6,222,000
Corporate Excise and Income Tax	\$918,000	\$119,000	\$79,000	\$1,116,000
Transient Lodging Tax	\$584,000	\$51,000	\$50,000	\$685,000
Subtotal	\$6,682,000	\$800,000	\$541,000	\$8,023,000
<b>Metro</b>				
Excise Tax	\$1,264,000	see note 1	\$451,000	\$1,715,000
<b>Clackamas County</b>				
Transient Room Tax	\$431,000	see note 2	see note 2	\$431,000
<b>Multnomah County</b>				
Transient Lodgings Tax (see note 3)	\$5,204,000	\$588,000	\$575,000	\$6,367,000
Motor Vehicle Rental Tax	\$934,000	see note 4	see note 4	\$934,000
Business Income Tax	\$150,000	\$26,000	\$17,000	\$193,000
Subtotal	\$6,288,000	\$614,000	\$592,000	\$7,494,000
<b>Washington County</b>				
Lodging Tax	\$752,000	see note 2	see note 2	\$752,000
<b>Total Tax Benefits</b>	<b>\$15,417,000</b>	<b>\$1,414,000</b>	<b>\$1,584,000</b>	<b>\$18,415,000</b>

- Notes: (1) No excise tax is collected from PCPA as part of the intergovernmental agreement with the City of Portland.  
 (2) Transient lodging tax associated with event activity at the PCPA and Expo Center is only estimated for Multnomah County because it is assumed that most benefits occur in this jurisdiction.  
 (3) Although Multnomah county collects the Transient Lodging Tax, a portion of this tax is distributed to the City of Portland for 1) its general fund and 2) to fund Travel Portland.  
 (4) Motor vehicle rental tax was only calculated for event activity at the OCC.

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# General Overview of the OCC

OCC's mission is to maximize economic benefit for the region and the State while protecting public investment in the facility. Originally opened in September of 1990 and expanded in April of 2003, the OCC currently offers the following components:

- *Exhibit Space:* 255,000 square feet of contiguous space divisible into six exhibit halls
- *Ballroom Space:* 59,400 square feet of total space, which includes a 25,200-square foot ballroom and a 34,200-square foot ballroom
- *Meeting Space:* 50 rooms totaling 52,330 square feet of meeting space
- *Skyview Terrace:* 7,000 square feet
- *Parking:* 800-space underground parking garage on-site and 2,500 parking spaces within walking distance

Over the last several years, the Portland Development Commission (PDC), in conjunction with MERC and Travel Portland, has actively sought the development of a headquarters hotel adjacent to the OCC. A Development Team was selected, Phase 1 of the project has been completed, and several consultants have been engaged to prepare pro formas, impact reports, employment numbers and costs of the headquarters hotel. Currently, a funding plan is being assembled and it is anticipated that the decision to move forward or not on the headquarters hotel will be rendered in December 2008. If the project moves forward, the anticipated opening of the headquarters hotel would be mid-2012.

## General Overview of the OCC (cont'd)

Portland's lack of a headquarters hotel in conjunction with factors such as the development of the headquarters properties in competitive cities, the relatively small room block available proximate to the OCC, the distance to convention-quality hotels and high occupancy rates at Portland hotels during prime convention/tradeshows seasons are eroding the OCC's convention/tradeshows business. These factors have caused the OCC to lose the bid for 41 conventions/tradeshows during the first 10 months of 2008 based on lost business reports provided by Travel Portland. These events represented groups that were planning events between 2009 and 2015 that were anticipated to attract nearly 95,000 in attendance and generate an estimated 198,000 room nights.

The Tri-County Metropolitan Region benefits from the on-going operations of the OCC in a number of ways, including such tangible and intangible benefits as:

- Enhancing the area's image as a business, meetings and tourist destination
- Receiving regional and national exposure through destination marketing and visitation
- Providing a first-class meeting venue for area residents and out-of-town delegates/attendees
- Unifying the market area and creating a more distinct identity
- Serving as a catalyst for urban redevelopment initiatives
- Generating additional economic activity and enhanced fiscal revenues

While the value of some of these benefits is difficult to measure, the economic activity generated by the OCC within the Tri-County Metropolitan Region can be quantified in terms of spending, employment and earnings. Based on information from a variety of sources including, but not limited to, representatives from area municipalities, OCC management and its advisors, this analysis summarizes the estimated direct, indirect and induced economic benefits and tax benefits to the entire Tri-County Metropolitan Region as well as to each individual county from the OCC's operations in FY 2008.

# Summary of OCC Event Activity in FY 2008

In FY 2008, the OCC hosted 588 events which drew total attendance of approximately 615,000.

Summary of OCC Event Activity in FY 2008								
Event Type	Events		Total Attendance		Average Attendance	Total Attendee Days		Average Attendee Days
Conventions/Tradeshows	92	16%	171,154	28%	1,860	469,851	47%	5,107
Meetings	329	56%	96,713	16%	294	169,997	17%	517
Other	167	28%	347,071	56%	2,078	360,431	36%	517
<b>Total</b>	<b>588</b>	<b>100.0%</b>	<b>614,938</b>	<b>100%</b>		<b>1,000,279</b>	<b>100%</b>	

Note: Other events include public shows and food and beverage functions.

Source: OCC Management

The number of attendee days is an important component in the methodology used to calculate economic impact. For conventions/tradeshows, meetings as well as food and beverage events, an attendee day is defined as total attendance multiplied by the event length. For example, a three-day convention with 600 delegates equates to 1,800 attendee days which reflects that the same delegates return to the event each of the three days. Conversely, attendee days for public shows are assumed to be the same as total attendance since most attendees generally attend a public show only once during the event. As shown in the table above, the OCC generated more than one million attendee days in FY 2008.



# Summary of OCC Event Activity in FY 2008 by Scope

When estimating economic impact, different spending amounts were applied to attendees based on whether they are attending State/local or national/regional/international events. Although approximately 88% of all events hosted at the OCC in FY 2008 were State/local in scope, approximately 41% of conventions/tradeshows and 52% of related attendee days were generated from national/regional/international events. In addition, approximately 14% of attendee days at meetings were national/regional/international in scope suggesting that OCC management has been successful in booking more high impact meetings as the convention/tradeshow business continues to be competitive.

Because State/local events are typically booked within a shorter timeframe than regional/national/international activity, it is a common strategy for convention centers to book these in order to positively influence revenues.

Summary of OCC Event Activity in FY 2008										
Event Type	Events					Attendee Days				
	State/Local		National/Regional/International		Total	State/Local		National/Regional/International		Total
Conventions/Tradeshows	54	59%	38	41%	92	224,017	48%	245,834	52%	469,851
Meetings	306	93%	23	7%	329	146,010	86%	23,987	14%	169,997
Other	156	93%	11	7%	167	319,695	89%	40,736	11%	360,431
<b>Total</b>	<b>516</b>	<b>88%</b>	<b>72</b>	<b>12%</b>	<b>588</b>	<b>689,722</b>	<b>69%</b>	<b>310,557</b>	<b>31%</b>	<b>1,000,279</b>

Source: OCC Management.

# Estimate of Economic Benefits Generated From On-Going Operations of the OCC in FY 2008

The table to the right summarizes the estimated economic impacts generated from OCC operations in FY 2008 in terms of total direct and indirect/induced spending, employment and earnings for the entire Tri-County Metropolitan Region as well as the allocation of this spending among the three individual counties.

The estimated \$441.5 million in total spending and 4,760 jobs are significant impacts to the surrounding region's economy.

The pages that follow discuss each component in more detail.

<b>Estimated Economic Benefits To the Tri-County Metropolitan Region From OCC Operations in FY 2008</b>	
<b>Total Economic Benefits: Tri-County Region</b>	
Direct Spending (Output)	\$252,763,000
Indirect/Induced Spending	\$188,749,000
Total Direct and Indirect/Induced Spending	<u>\$441,512,000</u>
Total Direct and Indirect/Induced Employment (# of FTE jobs)	4,760
Total Direct and Indirect/Induced Earnings	\$171,453,000
<b>Total Economic Benefits: Clackamas County</b>	
Direct Spending (Output)	\$28,890,000
Indirect/Induced Spending	\$21,748,000
Total Direct and Indirect/Induced Spending	<u>\$50,638,000</u>
Total Direct and Indirect/Induced Employment (# of FTE jobs)	540
Total Direct and Indirect/Induced Earnings	\$19,834,000
<b>Total Economic Benefits: Multnomah County</b>	
Direct Spending (Output)	\$188,700,000
Indirect/Induced Spending	\$140,756,000
Total Direct and Indirect/Induced Spending	<u>\$329,456,000</u>
Total Direct and Indirect/Induced Employment (# of FTE jobs)	3,550
Total Direct and Indirect/Induced Earnings	\$127,788,000
<b>Total Economic Benefits: Washington County</b>	
Direct Spending (Output)	\$35,173,000
Indirect/Induced Spending	\$26,244,000
Total Direct and Indirect/Induced Spending	<u>\$61,417,000</u>
Total Direct and Indirect/Induced Employment (# of FTE jobs)	660
Total Direct and Indirect/Induced Earnings	\$23,830,000

- Notes: (1) FTE denotes full-time equivalent employees.  
 (2) There may be slight differences due to rounding.  
 (3) Earnings represent the wages and salaries earned by employees of businesses associated with or impacted by the facility.

# Summary of Direct Spending Inputs

The first step in calculating economic impact is estimating the direct spending. The benefits generated at the local level result from the impact of direct spending both by attendees and activities that support events held at the OCC. Direct spending impacts from operations are annually recurring in nature. The direct spending categories quantified in this analysis are:

- Attendee spending, including out-of-town delegates and local attendees
- Association spending
- Exhibitor spending
- Budgetary spending by the OCC

Per capita attendee spending amounts were estimated based on the Convention Expenditure and Impact Study conducted by Destination Marketing Association International (DMAI), which reflects the spending patterns of thousands of convention and meeting delegates from a broad base of meeting types. The 2005 Convention Expenditure and Impact Study Update provided the spending attributes for regional/national/international business and these amounts were inflated by a 3% annual rate to reflect current dollars. However, according to DMAI, State/local spending attributes were unavailable due to an inadequate sample for their most recent survey conducted in 2003 (77 event organizers responded representing primarily regional/national/international events). As such, and for purposes of this analysis, amounts from the 2002 Convention Income Survey were inflated by a 3% annual inflation rate to reflect spending generated by State/local events in current dollars.

# Summary of Direct Spending Inputs (cont'd)

## Attendee Spending

Based on information provided by management, OCC events were analyzed to distinguish attendees at regional/national/international events from those at State/local events. For purposes of this analysis, high impact attendees were defined as those that stay overnight in a hotel room. In general, low impact attendees are local patrons attending consumer shows, civic events and meetings. As such, adjustments were made to the DMAI spending amounts to account for low impact spending. For purposes of this analysis, all attendees at regional/national/international events were classified as high impact. In addition, 30% of State/local convention/tradeshow attendees and 5% of attendees at all other State/local events were assumed to be high impact. All remaining attendees were classified as low impact.

The following table presents the spending characteristics per delegate per day for State/local and regional/national/international events.

Per Day Spending	State/Local Events		Regional/ National/ International Events
	High Impact	Low Impact	High Impact
Delegate	\$256.71	\$29.25	\$316.88

Note: In 2008 dollars.

Source: DMAI.

# Summary of Direct Spending Inputs (cont'd)

## Association & Exhibitor Spending

Sponsoring organizations have substantial investments in the events that they host. These organizations purchase goods and services from either the convention center, food and beverage contractor or from outside sources. Items such as exhibit space and equipment rental are typically provided by the convention center, which are reflected as revenues for the provider. Since this spending is eventually reflected in the budgetary spending by the convention center, these amounts are excluded from association spending to avoid double counting. The estimated association spending amounts used in this analysis were from the DMAI Convention Expenditure and Impact Study and were based on spending amounts per delegate day.

The DMAI Convention Expenditure and Impact Study also estimates spending for exhibitors per attendee day. Similar to association spending, adjustments were made to these estimates to avoid double counting. Based on conversations with DMAI representatives, exhibitor spending at State/local events can be higher than that at regional/national/international events since these exhibitors are more likely from the local area. Thus, they tend to spend a greater portion of their exhibit-related expenses within their own community. Conversely, exhibitors attending regional/national/international events are likely to spend a greater portion of their expenses where they are based as opposed to the event location.

Association and exhibitor spending estimates per delegate per day by scope of event are shown below.

Per Day Spending <sup>1</sup>	Regional/ National/ International	
	State/ Local	International
Association	\$16.04	\$16.88
Exhibitor	\$124.97	\$79.09

Note: <sup>1</sup> Amounts are for 2008 spending per delegate.

Source: DMAI.

# Summary of Direct Spending Inputs (cont'd)

## Budgetary Spending by the OCC

Budgetary spending refers to the “expense side” generated by the OCC. Regardless of the source or magnitude of the revenues that the building produces, this analysis focused on the operating expenditures occurring in the Tri-County economies. Based on information provided by management, operating expenditures for the OCC were approximately \$23.1 million in FY 2008.

## Summary of Direct Spending Inputs

Based on information provided by facility management and DMAI spending estimates, the total direct spending related to OCC operations generated from attendees, associations and exhibitors as well as operating expenditures was estimated to be approximately \$252.8 million in FY 2008. Attendee and association/exhibitor spending amounts are directly related to the number of convention/tradeshow attendee days. The table below shows the breakdown of estimated direct spending among these three categories.

Category	FY 2008
Attendee Spending	\$138,798,000
Association/Exhibitor Spending	90,832,000
OCC Budgetary Spending	23,133,000
<b>Total</b>	<b>\$252,763,000</b>

Notes: Amounts are rounded to the nearest thousand.

## Summary of Direct Spending Inputs (cont'd)

Once the total economic impact for the Tri-County Metropolitan Region was estimated, a percentage of the total was allocated to each of the three counties. Allocations for hotel spending were based on the historical transient lodging tax receipts for each county as a percentage of the total collections within the Tri-County Metropolitan Region. Allocations for all other spending were calculated in the same manner based on historical information on travel spending as provided by Dean Runyan Associates to the Oregon Tourism Commission. The table below summarizes the allocations for hotel and all other spending used in this analysis.

County	% Allocation	
	Hotel Spending	All Other Spending
Clackamas	8.2%	12.4%
Multnomah	77.5%	73.8%
Washington	14.3%	13.8%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Dean Runyan Associates.

# Estimate of Fiscal Benefits Generated From On-Going Operations of the OCC in FY 2008

Tax revenues generated from OCC operations and related spending in FY 2008 were estimated to be approximately \$15.4 million.

Estimated Fiscal Benefits From OCC Operations	
FY 2008	
<b>State of Oregon</b>	
Personal Income Tax	\$5,180,000
Corporate Excise & Income Tax	918,000
Transient Lodging Tax	584,000
Subtotal	\$6,682,000
<b>Metro</b>	
Excise Tax	\$1,264,000
Subtotal	\$1,264,000
<b>Clackamas County</b>	
Transient Room Tax	\$431,000
Subtotal	\$431,000
<b>Multnomah County</b>	
Transient Lodging Tax	\$5,204,000
Motor Vehicle Rental Tax	934,000
Business Income Tax	150,000
Subtotal	\$6,288,000
<b>Washington County</b>	
Lodging Tax	\$752,000
Subtotal	\$752,000
<b>GRAND TOTAL</b>	<b>\$15,417,000</b>

Notes: (1) Amounts are presented in current dollars and rounded to the nearest thousand.

(2) Although Multnomah County collects the Transient Lodging Tax, a portion of this tax is distributed to the City of Portland for 1) its general fund and 2) to fund Travel Portland.



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# General Overview of the PCPA

The PCPA is home to Portland's finest music, theatre, dance, lectures and more which are held each year in one of its three separate buildings: the Keller Auditorium, the Arlene Schnitzer Concert Hall, and the Antoinette Hatfield Hall (formerly called the New Theatre Building) which houses the Newmark Theatre, the Dolores Winningstad Theatre and Brunish Hall. MERC began overseeing the PCPA in the 1980s. Since that time, these facilities have undergone significant renovation and improvement, in part due to generous private support.

PCPA's mission is to provide responsibly managed performance spaces fostering a diverse performing arts environment. Located seven blocks southeast of the other theatres, the Keller Auditorium hosts diverse events such as grand opera, rock, western and jazz concerts, ballet and modern dance performances, and national tours of Broadway musicals and plays. The original building was constructed in 1917 and was totally renovated in 1968 with substantial technical improvements made in 1993. Keller Auditorium features seating for 2,992 people, a 107 x 41-foot stage, excellent acoustics and sight lines, orchestra pit for 70 musicians, dressing rooms and a rehearsal room.

Opened in 1984, the beautifully restored Arlene Schnitzer Concert Hall was originally the Portland Public Theatre which was built in 1928. The Italian Rococo Revival architecture was said to be the national showcase of Rapp & Rapp, renowned Chicago theatre architects. Portland residents Arlene and Harold Schnitzer contributed generously to the completion of this phase of the PCPA. The one-year, \$10 million renovation involved repairing, recasting or replacing much of the theatre's ornate interior as well as making it comfortable and safe for today's audiences and performers. The Concert Hall hosts a variety of events including classical, jazz, pop, rock, folk and gospel music, dance, theatre, travel films, conferences, and weddings. Features include seating for 2,776, a 94 x 32-foot stage, an orchestra pit for 15; a choir loft, dressing rooms and a portable, flexible acoustical shell.

## General Overview of PCPA (cont'd)

Located in the heart of downtown Portland, the 127,000 square foot Antoinette Hatfield Hall includes two theatres; a multi-purpose space suitable for recitals, receptions or other events; a small restaurant, box office, administrative offices for PCPA , and executive offices for MERC.

The Newmark Theatre was designed primarily for drama productions. It is also suitable for opera, dance, ballet, chamber orchestra, recitals, conferences and films. The theatre features continental-style seating for 880 people. The Dolores Winningstad Theatre is a high-tech, updated version of a Shakespearean courtyard theatre, designed to be a multi-purpose space, providing maximum flexibility for drama, dance, chamber music, recitals, lectures and receptions. The Dolores Winningstad Theatre features flexible seating for 292 patrons. Brunish Hall is a 3,150 square-foot multi-purpose space that is simple in its design yet features amenities that allow it to be used as a performance space, meeting and or banquet space.

PCPA is home to several performance companies including, but not limited to, the following:

- Oregon Ballet Theatre
- Oregon Children's Theatre
- Oregon Symphony Orchestra
- Portland Opera
- Portland Youth Philharmonic
- Tears of Joy

## General Overview of PCPA (cont'd)

The PCPA is located in the Cultural District downtown which includes other institutions dedicated to fine and performing arts such as the Oregon Historical Society, Portland Art Museum and the Northwest Film Center. The PCPA's three unique properties contribute to the vibrancy of Portland's center city and its cultural identity.

The region benefits from the on-going operations of the PCPA in a number of ways, including such tangible and intangible benefits as:

- Supporting the vibrancy of downtown Portland by attracting residents and visitors to business establishments
- Contributing to arts educational institutions including children's theater
- Providing a venue for lectures, symposiums and other unique speaking engagements
- Generating public awareness and funding of arts organizations
- Providing an alternative entertainment option for both residents and visitors, including OCC convention attendees and business travelers
- Enhancing business for other area companies involved in related services purchased by arts organizations (e.g. advertising, transportation, printing, etc.)
- Attracting in-kind and cash contributions from local arts supporters
- Generating additional economic activity and enhanced fiscal revenues

While the value of some of these benefits is difficult to measure, this analysis summarizes the estimated direct, indirect and induced economic benefits and tax benefits from PCPA's operations in FY 2008 based on information from several primary and secondary sources including, but not limited to, representatives from area municipalities, PCPA management, producers of events and the *2007 Arts & Economic Prosperity* report published by Americans for the Arts.

# Summary of PCPA Event Activity in FY 2008

In FY 2008, PCPA hosted just over 800 performances that accounted for more than 1,200 total use days and attracted approximately 817,000 attendees. Approximately 63% of performances, 71% of total use days and 58% of total attendance were generated from performing arts related events. Lectures, meetings and banquets represented 29% of events in FY 2008. Nine (9) Broadway shows accounted for approximately 20% of total attendance. These shows contribute to the economic impact by attracting overnight attendees as well as cast, crew and production members from out-of-town that generate spending on items such as lodging, restaurants, entertainment and transportation.

Summary of Event Activity at the PCPA in FY 2008				
Event Type	Performances	Total Use Days	Total Attendance	Average Attendance Per Performance
Performing Arts	506	876	477,506	944
Broadway	80	75	160,117	2,001
Lectures	38	38	36,036	948
Meetings/Receptions	61	65	9,298	152
Concerts	82	97	113,494	1,384
Miscellaneous Event	27	49	20,613	763
Miscellaneous Non-Event	8	27	83	10
<b>Total</b>	<b>802</b>	<b>1,227</b>	<b>817,147</b>	

Notes: (1) Miscellaneous events include film festivals, symphony rehearsals and graduations.

(2) Miscellaneous non-events include film shoots and symphony auditions.

Source: PCPA Management

# Estimate of Economic Benefits Generated From On-Going Operations of the PCPA in FY 2008

As shown in the table below, it is estimated that PCPA event activity generated approximately \$55.8 million in total spending and 630 jobs in FY 2008 which are considerable impacts to the region's economy.

<b>Estimated Economic Benefits From PCPA Operations</b>	
<b>Category</b>	<b>FY 2008</b>
<b>Spending</b>	
Direct Spending (Output)	\$32,748,000
Induced/Indirect Spending	\$23,034,000
Total Spending	\$55,782,000
<b>Total Earnings</b>	\$20,842,000
<b>Total Employment (number of FTEs jobs)</b>	630

- Notes: (1) Amounts are presented in current dollars and rounded to the nearest thousand.  
 (2) FTE denotes full-time equivalent employees.  
 (3) Earnings represent the wages and salaries earned by employees of businesses associated with or impacted by the facility.

The pages that follow discuss each component in more detail.

# Summary of Direct Spending Inputs

## Attendee Spending Outside PCPA

Based on information provided by management, input from event producers as well as the *2007 Arts & Economic Prosperity Report* commissioned by Americans for the Arts, the Regional Arts & Culture Council and Northwest Business for Culture & the Arts, attendees were categorized as high impact, defined as those staying overnight in a hotel room, or low impact which generally include local patrons. This report collected 905 surveys from attendees at a range of arts events in Portland to gain an understanding of where they were from, their level and distribution of spending. In 2006, 76% of respondents indicated they were residents of the Tri-County region while the remaining 24% were considered non-residents. For purposes of this analysis, we assumed 12% (or one-half the estimated percentage of non-residents) of attendees at performing arts events, Broadway shows and concerts were high impact. In addition, spending estimates from the *Arts & Economic Prosperity Report* were adjusted to avoid double counting spending that was accounted for in budgetary spending and inflated to reflect current dollars. Based on these assumptions, the following table outlines per day attendee spending figures applied to estimates of high and low impact attendees. Spending by attendees inside PCPA venues is taken into account by the facility's budgetary spending.

Per Day Spending	High Impact	Low Impact
Attendee	\$102.00	\$18.00

# Summary of Direct Spending Inputs (cont'd)

## **Cast/Crew and Producer Personnel Spending Outside PCPA**

Cast and crew members involved in a Broadway production come from out-of-town and as such generate spending on lodging, food/beverage, retail, entertainment and transportation. Based on discussions with event producers, an estimate of cast/crew personnel per event attendee was calculated and applied to estimated spending per cast/crew per day.

Broadway show producers make substantial investments in the events that they host. These organizations purchase goods and services from either PCPA or from outside sources. Items such as facility rental and various event services are typically provided by PCPA which are reflected as revenues for the venue. Since this spending is eventually reflected in the budgetary spending by the PCPA, these amounts are excluded from event producer spending to avoid double counting. Further, producer spending with external vendors that takes place before or during a show such as advertising, printing, security, transportation, etc. is considered part of the induced/indirect spending that is generated by PCPA operations.

The estimated event producer spending amounts used in this analysis are limited to company personnel spending on items outside PCPA such as lodging, food/beverage, retail and transportation. Based on surveys with production companies representing Broadway shows, an estimate of producer personnel per event attendee was calculated. Event producer spending amounts were applied to the estimated personnel per day.



# Summary of Direct Spending Inputs (cont'd)

Cast/crew and event producer spending per personnel per day for Broadway shows are shown below.

Per Day Spending	High Impact	Low Impact
Producer Personnel	\$125.00	n/a
Cast & Crew	\$125.00	\$18.00

## Budgetary Spending

Based on information provided by management, operating expenditures for PCPA were approximately \$9.8 million in FY 2008.

## Summary of Direct Spending Inputs

Based on information provided by PCPA management, event producers, attendees and the *2007 Arts & Economic Prosperity* report, the total direct spending related to PCPA attendees, event producers and cast/crew as well as PCPA operating expenditures was estimated to be approximately \$32.7 million in FY 2008. The table below summarizes the breakdown of estimated direct spending.

Category	FY 2008
Attendee Spending	\$22,285,000
Event Producer/Cast & Crew Spending	697,000
Budgetary Spending by Facility	9,766,000
<b>Total</b>	<b>\$32,748,000</b>

Note: Amounts are rounded to the nearest thousand.

# Estimate of Fiscal Benefits Generated From On-Going Operations of the PCPA in FY 2008

Based on the effective tax structure previously discussed, tax revenues generated from PCPA operations and related spending in FY 2008 were estimated to be approximately \$1.4 million, approximately 57% of which represented State of Oregon taxes compared to 43% by Multnomah County sources. As mentioned previously, the City of Portland also benefits from PCPA operations by hotel stays within the City and the resulting portion of the transient lodging tax that is allocated to its general fund.

<b>Estimated Fiscal Benefits From PCPA Operations</b>	
<b>FY 2008</b>	
<b>State of Oregon</b>	
Personal Income Tax	\$630,000
Corporate Excise & Income Tax	119,000
Transient Lodging Tax	51,000
Total	\$800,000
<b>Multnomah County</b>	
Transient Lodging Tax	\$588,000
Business Income Tax	26,000
Total	\$614,000
<b>GRAND TOTAL</b>	
<b>\$1,414,000</b>	

- Notes: (1) Amounts are presented in current dollars and rounded to the nearest thousand.  
 (2) No excise tax is collected from the PCPA.  
 (3) Although Multnomah County collects the Transient Lodging Tax, a portion of this tax is distributed to the City of Portland to its general fund and to fund Travel Portland.

# Benefits of a Downtown Location for the PCPA

It should be noted that cast and crew members involved in Broadway productions are required to stay within four blocks or one-quarter mile of their performance venue based on their labor agreement. Based on this and input from several downtown hotels, PCPA event activity generates room nights and spending on food/beverage at their properties. Further, downtown restaurants indicated PCPA patrons contribute to their business' success as well as the overall health of downtown, particularly during the City's off-season.

Travel Portland has established an Arts & Culture Division to market this unique genre of tourism to visitors. One strategy they have employed involves working with area arts and cultural organizations to package their attractions (e.g. a group of garden tours or art galleries). While PCPA's venues are dispersed in downtown, this provides an added benefit to generating awareness of downtown if marketed properly. Packaging tours of PCPA venues with other Cultural District offerings can contribute to more exposure for downtown businesses and enhance visitation.

In addition to education, business and employment, retail, restaurants and other community facilities, the PCPA is a key attribute to the downtown. These compatible land uses comprise a central city and thrive from their co-location creating a destination, sense of place and exciting urban environment for visitors, residents and employees alike. In addition, the PCPA generates a critical mass of patrons in downtown which produce economic and fiscal impacts to the region.

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# General Overview of the Expo Center

The Expo Center is a multi-purpose exhibition facility that has served as the region's primary destination for public events and consumer shows. As far back as 1921, the Expo Center site has presented some of the largest exhibitions in the Northwest. In 1994, MERC took over management of the aging complex from Multnomah County. With the initial support of the Intel Corporation, funding and construction of a new exhibition hall was enabled which opened in 1997. Subsequent to expansion, several event producers were able to expand and enhance their offerings. By 2001, the modernization of the campus continued with an additional facility offering meeting rooms, a spacious lobby and a full-service commercial kitchen.

The campus currently includes a complex of five interconnected buildings offering the following components:

- 333,000 square feet of multi-use exhibition space
- 11 meeting rooms
- Professional catering facilities
- On-site parking for 2,500 vehicles
- Acres of outdoor exhibition space
- Convenient access to mass transit including the TriMet Interstate Max Light Rail

The modernization and expansion of the Expo Center have allowed the venue to continue to accommodate a variety of consumer shows, some of which have been serving the public for over 50 years. These events exemplify the unique business-to-consumer relationship that is made possible by the Expo Center. In addition, the facility also hosts corporate events, banquets, concerts, community events and serves as the home venue for the Rose City Rollers roller derby team.

# General Overview of the Expo Center (cont'd)

The region benefits from the on-going operations of the Expo Center in a number of ways, including such tangible and intangible benefits as:

- Providing a means for Statewide wholesale and retail businesses to showcase their merchandise in an efficient manner
- Supporting smaller, local businesses by bringing a critical mass of buyers together to see their products
- Providing a venue for show producers to supply related industry educational sessions that are often funded by local municipalities elsewhere
- Enhancing show spin-off spending on related items (e.g. fuel, life-jackets and trailers for boat sales)
- Generating public awareness and funding of non-profit organizations' missions for related industries (e.g. several show producers spend a portion of their gate revenue on related non-profit groups and/or educational scholarships)
- Providing an alternative venue within Portland and the State of Oregon for larger consumer shows indirectly freeing exhibition space and dates at the OCC for conventions/tradeshows which generate more economic impact
- Providing an alternative entertainment option for residents and visitors, including OCC convention attendees
- Promoting the industries that host their events at the venue as well as enhancing business for other area companies involved in related services (e.g. advertising, transportation, printing, security, etc.)
- Generating additional economic activity and enhanced fiscal revenues

## General Overview of the Expo Center (cont'd)

Similar to the OCC and the PCPA, while the value of some of these benefits is difficult to measure, the economic activity generated by the Expo Center can be quantified in terms of spending, employment and earnings. Based on information from a variety of sources including, but not limited to, representatives from area municipalities, Expo Center management, producers of events, exhibitors and attendees, this analysis summarizes the estimated direct, indirect and induced economic benefits and tax benefits from the Expo Center's operations in FY 2008.

# Summary of Expo Center Activity in FY 2008

Expo Center's mission is to provide facilities and services to host consumer and trade shows as well as generate maximum financial return and economic benefits. In FY 2008, the Expo Center hosted 107 events that drew more than 510,100 people. Consumer/public shows account for approximately 44% of events, 65% of total use days and 84% of total attendance. Miscellaneous/other events which include Rose City Rollers derbies and corporate marketing events comprise 38% of total events and 14% of total attendance.

Summary of Event Activity at the Expo Center in FY 2008						
Event Type	Events	Move-in/ Move-out days	Event Days	Total Use Days	Total Attendance	Average Attendance
Consumer/Public	47	137	146	283	429,124	9,130
Miscellaneous/Other	41	54	65	119	72,012	1,756
Meeting	9	0	10	10	720	80
Tradeshow	5	9	6	15	5,323	1,065
Food & Beverage/Catering	5	3	7	10	2,962	592
<b>Total</b>	<b>107</b>	<b>203</b>	<b>234</b>	<b>437</b>	<b>510,141</b>	

Note: Miscellaneous/Other includes events such as Roller Derby, Ride & Drive and Adidas Clearance Sale.

Source: Expo Center Management



# Estimate of Economic Benefits Generated From On-Going Operations of the Expo Center in FY 2008

The table below summarizes the estimated economic impacts generated from Expo Center operations in FY 2008 in terms of total direct and indirect/induced spending, employment and earnings. As shown, Expo Center event activity was estimated to generate approximately \$37.2 million in total spending and 420 jobs.

<b>Estimated Economic Benefits From Expo Center Operations</b>	
<b>Category</b>	<b>FY 2008</b>
<b>Spending</b>	
Direct Spending (Output)	\$21,883,000
Induced/Indirect Spending	\$15,290,000
Total Spending	\$37,173,000
<b>Total Earnings</b>	\$13,654,000
<b>Total Employment (number of FTEs jobs)</b>	420

- Notes:
- (1) Amounts are presented in current dollars and rounded to the nearest thousand.
  - (2) FTE denotes full-time equivalent employees.
  - (3) Earnings represent the wages and salaries earned by employees of businesses associated with or impacted by the facility.

The pages that follow discuss each component in more detail.

# Summary of Expo Center Survey Process

In order to assist with developing an estimate of direct spending generated by Expo Center events, surveys were conducted with event attendees, exhibitors and producers to obtain input on their spending patterns both inside and outside of the facility. This research does not represent a statistically valid survey effort.

## **Attendee and Exhibitor Surveys**

During FY 2008, on-site surveys were conducted during five consumer shows. Hard copy surveys were distributed to attendees and exhibitors at the following shows:

- Rose City Gun & Knife Show
- Northwest Fire & Rescue Expo
- Portland Auto Swap Meet
- Log Home & Timber Frame Expo
- America's Largest Antique & Collectible Show

A total of 618 attendees and 445 exhibitors completed the survey. Results were tabulated using a web-based survey system and analyzed to gain an understanding of where respondents reside, their length of stay in Portland, travel party size, where overnights stay (e.g. hotel, private residence, etc.) as well as estimated daily spending inside and outside Expo Center.

## **Consumer Show Producer Surveys**

Direct interviews were also conducted with 11 event producers representing 21 consumer shows, one tradeshow and the Rose City Rollers. Each of these events is held annually at Expo Center. Combined these events accounted for 55% of FY 2008 attendance. Discussions with producers sought to understand the origin and daily spending of production personnel, exhibitors and attendees.

Key findings of these discussions were used to estimate the spending generated by Expo Center event activity and are included, where relevant, on the pages that follow.

# Summary of Direct Spending Inputs

The three categories that comprise direct spending are attendee spending, event producer/exhibitor spending and budgetary spending by the Expo Center.

## Attendee Spending Outside Expo Center

Based on information provided by management, input from event producers as well as on-site surveys conducted at Expo Center events, attendees were categorized as high impact, defined as those that stay overnight in a hotel room, or low impact, generally local patrons attending events. The following outlines a summary of responses from direct producer interviews as well as the on-site survey.

Attendee Attributes	Show Producer Interviews	On-Site Surveys
Percent from Oregon	88%	58%
Percent Overnight <sup>1</sup>	12%	41%
Average travel party size	1.7	2.7
Average daily spending/attendee outside Expo	\$90.72	\$52.60
Average length of stay	1.0	2.6
Percent Day-trippers	88%	59%
Average travel party size	n/a	2.3
Average daily spending/attendee outside Expo	n/a	\$17.39

Note: <sup>1</sup>Show producer overnight represent those staying in a hotel whereas on-site surveys include attendees staying in a private residence.

On-site attendee survey responses included a number of overnights who stayed with family or friends weighing down the average “overnight” spending per day. For purposes of our analysis, we placed more weight on consumer show producer survey responses for high impact per day spending as we were able to ask more detailed questions and clarify that their responses included spending only for those staying in hotels.

# Summary of Direct Spending Inputs

For purposes of this analysis, approximately 15% of attendees at consumer shows, 10% of attendees at miscellaneous/other events and 5% of tradeshow attendees were estimated to be high impact and the remaining attendees were assumed to be low impact.

Based on on-site surveys conducted by Expo Center management as well as interviews with production companies discussed previously, the following table outlines per day attendee spending figures applied to estimates of high and low impact attendees. Spending by attendees inside the Expo Center is taken into account by the facility's budgetary spending.

Per Day Spending	High Impact	Low Impact
Attendee	\$75.00	\$17.00

# Summary of Direct Spending Inputs (cont'd)

## Event Producer/Exhibitor Spending

Consumer and trade show producers make substantial investments in the events that they host. These organizations purchase goods and services from either the Expo Center or from outside sources. Items such as exhibit space and various event services are typically provided by the Expo Center which are reflected as revenues for the venue. Since this spending is eventually reflected in the budgetary spending by the Expo Center, these amounts are excluded from event producer spending to avoid double counting. Further, producer spending with external vendors that takes place before or during a show such as advertising, printing, security, transportation, etc. is considered part of the induced/indirect spending that is generated by Expo Center operations.

The following outlines a summary of responses from direct producer interviews as well as the on-site survey.

Producer Attributes	Show Producer Interviews	On-Site Surveys
<i>Day-tripper spending/personnel outside Expo</i>	\$37.58	n/a
<i>Overnighter Attributes</i>		
Average daily spending/personnel outside Expo	\$85.71	n/a
Average length of stay	3.5	n/a
Exhibitor Attributes		
Percent from Oregon	n/a	55%
<i>Percent Overnight<sup>1</sup></i>	n/a	61%
Average travel party size	2.0	2.4
Average daily spending/personnel outside Expo	\$89.30	\$35.25
Average length of stay	4.3	2.0

Note: <sup>1</sup>Show producer overnight represent those staying in a hotel whereas on-site surveys include exhibitors staying in a private residence.

## Summary of Direct Spending Inputs (cont'd)

Based on the on-site surveys of Expo Center exhibitors and interviews event producers, an estimate of exhibitor personnel per event attendee was calculated and applied to estimated spending per exhibitor personnel per day. Similar to event producer spending, estimates were made for spending by exhibitors outside the facility to avoid double counting of items purchased inside the Expo Center.

Event producer and exhibitor spending per personnel per day for consumer/trade shows are shown below.

<b>Per Day Spending</b>	<b>High Impact</b>	<b>Low Impact</b>
Producer Personnel	\$90.00	\$38.00
Exhibitor Personnel	\$90.00	\$17.00

# Summary of Direct Spending Inputs (cont'd)

## Budgetary Spending

Budgetary spending refers to the “expense side” generated by the Expo Center. Regardless of the source or magnitude of the revenues that the building produces, this analysis focused on the operating expenditures occurring in the Multnomah County economy. Based on information provided by management, operating expenditures for the Expo Center were approximately \$4.6 million in FY 2008.

## Summary of Direct Spending Inputs

Based on the previously described assumptions, the total direct spending related to Expo Center attendees, event producers and exhibitors outside the facility as well as Expo Center operating expenditures was estimated to be approximately \$21.9 million in FY 2008. The table below summarizes the breakdown of estimated direct spending among these groups.

Category	Amount
Attendee Spending	\$12,839,000
Event Producer/Exhibitor Spending	4,438,000
Budgetary Spending by Facility	4,606,000
<b>Total</b>	<b>\$21,883,000</b>

Note: Amounts are rounded to the nearest thousand.

# Estimate of Fiscal Benefits Generated From On-Going Operations of the Expo Center in FY 2008

Based on the effective tax structure presented previously, tax revenues generated from Expo Center operations and related spending in FY 2008 were estimated to be approximately \$1.6 million with approximately 34% generated by State of Oregon taxes, 28% by the Metro excise tax, and 37% by Multnomah County sources. As mentioned previously, the City of Portland may also benefit from Expo Center operations by hotel stays within the City and the resulting portion of the transient lodging tax that is allocated to its general fund.

Estimated Fiscal Benefits From Expo Center Operations	
FY 2008	
<b>State of Oregon</b>	
Personal Income Tax	\$412,000
Corporate Excise & Income Tax	79,000
Transient Lodging Tax	50,000
Total	\$541,000
<b>Metro</b>	
Excise Tax	\$451,000
Total	\$451,000
<b>Multnomah County</b>	
Transient Lodging Tax	\$575,000
Business Income Tax	17,000
Total	\$592,000
<b>GRAND TOTAL</b>	<b>\$1,584,000</b>

Note: (1) Amounts are presented in current dollars and rounded to the nearest thousand.  
 (2) Although Multnomah County collects the Transient Lodging Tax, a portion of this tax is distributed to the City of Portland to its general fund and to fund Travel Portland.



Agenda Item Number 4.0

**WASTE REDUCTION AND OUTREACH AUDIT**

Metro Council Meeting  
Thursday, November 13, 2008  
Metro Council Chamber



**Waste Reduction and Outreach:**  
*Shift in strategy recommended*

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November 2008  
A Report by the Office of the Auditor

Suzanne Flynn  
*Metro Auditor*

Audit Team: Kristin Lieber, Sr. Management Auditor  
Brian Evans, Sr. Management Auditor  
Kathleen Taylor, Sr. Management Auditor



## National Awards for Auditing

### **Metro Audit Winner of ALGA 2007 Award**

The Office of the Auditor was awarded with the Gold Award for Small Shops at the annual conference of the Association of Local Government Auditors (ALGA) this year. The award was presented for the Natural Areas audit completed October 2007

### **Metro Ethics Line**

The Metro Ethics Line gives employees and citizens an avenue to report misconduct, waste or misuse of resources in any Metro or Metropolitan Exposition Recreation Commission (MERC) facility or department.

The ethics line is administered by the Metro Auditor's Office. All reports are taken seriously and responded to in a timely manner. The auditor contracts with a hotline vendor, EthicsPoint, to provide and maintain the reporting system. Your report will serve the public interest and assist Metro in meeting high standards of public accountability.

*To make a report, choose either of the following methods:*

**Dial 888-299-5460 (toll free in the U.S. and Canada)**

**File an online report at [www.metroethicsline.org](http://www.metroethicsline.org)**



SUZANNE FLYNN

*Metro Auditor*

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Portland, OR 97232-2736

(503)797-1892 fax: (503)797-1831

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## MEMORANDUM

November 6, 2008

To: David Bragdon, Council President  
Rod Park, Councilor, District 1  
Carlotta Collette, Councilor, District 2  
Carl Hosticka, Councilor, District 3  
Kathryn Harrington, Councilor, District 4  
Rex Burkholder, Councilor, District 5  
Robert Liberty, Councilor, District 6

From: Suzanne Flynn, Metro Auditor

**Subject: Audit of the Waste Reduction and Outreach Division**

The attached report covers our audit of the Waste Reduction and Outreach Division as it existed in the Department of Solid Waste and Recycling. The program we audited has stayed intact, although it now resides within the Sustainability Center. This audit was included in our FY07-08 Audit Schedule.

Rather than complete a more traditional audit and review the historical performance of this program, our audit took note of the changing environment and we are recommending a strategic shift in resources. Since the program's inception, understanding of waste reduction and prevention has increased. The urgency of reducing waste has intensified with growing concern about global warming. In addition, the Metro Council introduced sustainability as an agency goal for Metro.

Although a leader in Oregon for recycling, Metro is unlikely to meet its waste recovery goal. Further, residents in the Metro region are producing more waste than ever before, even as the recycling rate has improved. We analyzed program expenditure by activity and found that about half of the resources from FY03 to FY07 were spent on recycling, while about one-third was spent on prevention and reuse. While it appears that activities aligned with prevention and reuse goals are more expensive and that there are few proven models to replicate, we suggest the program develop a strategy to work in this direction.

We have discussed our findings and recommendations with Scott Robinson, Deputy COO, Jim Desmond, Director, Sustainability Center, and Matt Korot, Program Director, Resource Conservation and Recycling Program. A formal follow-up to this audit will be scheduled within 1-2 years. We would like to acknowledge and thank the management and staff in the Department who assisted us in completing this audit.

A handwritten signature in cursive script, appearing to read "Suzanne Flynn".



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## Summary

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Metro is responsible for solid waste planning and disposal for the tri-county area. Making sure residents in the Metro region have the opportunity to recycle is one of the original goals of the Agency's waste reduction and outreach efforts.

While the recycling rate has increased, a larger problem for the environment is that the Metro region is generating more waste than ever. From 1992 to 2006, the total amount of waste nearly doubled from 1.46 to 2.70 million tons. The amount of waste produced per person increased from 6.4 to 9.4 pounds per day.

The purpose of this audit was to determine if the Waste Reduction and Outreach Division used its resources strategically. Although plans and statute place a higher priority on waste prevention, our analysis found Metro spent more on recycling. From FY03 to FY07, the Division spent about half of its resources on recycling while spending about 30% on prevention and reuse.

In order to act strategically, an organization needs to be clear about its objectives, have adequate data to make decisions and evaluate progress, and have the skills necessary to manage operations. The Waste Reduction and Outreach Division does not have a mission statement. We reviewed various documents that state the Division's purpose and objectives. It is not clear whether the Division's primary objective is recycling or waste prevention. Therefore, it is unlikely managers and staff will be able to make decisions based on a well-defined organizational strategy.

Metro needs to develop measures that reflect the full range of its waste reduction activities. Currently, the Division's performance is measured primarily by the recycling rate.

Measuring outcomes and cost effectiveness of waste prevention strategies will be challenging. Total waste generated in the region is a good general measure of progress in preventing waste. However, it is affected by conditions outside of the Division's control. Changes in population, economic conditions, and other variables affect the amount of waste generated. To determine Metro's direct impact on preventing waste, the Division will need additional data sets and program evaluation tools.

Further, there are few models of successful waste prevention programs. If Metro shifts more resources to waste prevention, the Division will need to evaluate the risks and potential benefits of these less proven programs. By having a strategy that gradually increases its focus on waste prevention, the Division can reduce the risk of using resources ineffectively.



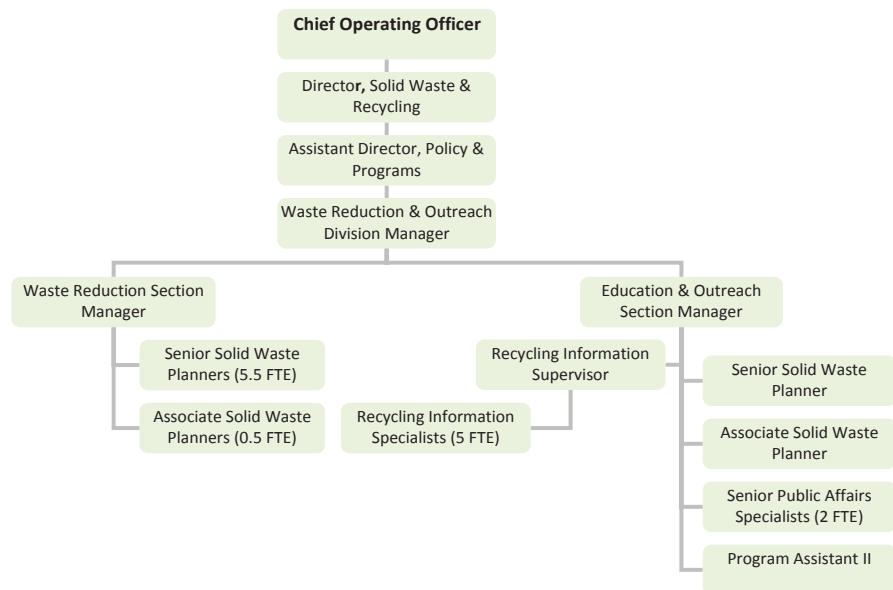


## Background

Metro is responsible for solid waste planning and disposal for the tri-county area. State law requires Metro to develop and implement a waste reduction plan. Making sure residents in the Metro region had the opportunity to recycle was one of the original goals of the agency's waste reduction and outreach efforts. As such, Metro initially focused primarily on curbside recycling. However, since the 1990s, Metro showed a commitment to move beyond recycling and address the growing problem of waste generation.

This audit looked at part of Metro's solid waste system, the Waste Reduction and Outreach Division. The Division provided education and outreach, managed grants to local governments, and carried out other waste reduction strategies. The Waste Reduction and Outreach Division was part of Metro's Solid Waste and Recycling Department and was made up of two sections: 1) Solid Waste Reduction and 2) Education and Outreach. The chart below shows the Division's organizational structure as of July 2008.

**Exhibit 1**  
Organizational chart  
as of July 2008



Source: Auditor's office review of organizational charts

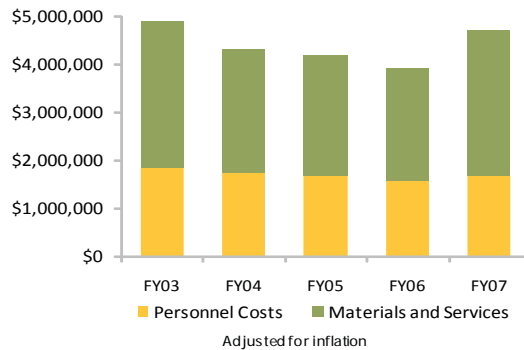
The **Waste Reduction** Section had three basic activities. The first was to maintain the region's recycling infrastructure through grants to local governments and providing coordination among governments and service providers. Second, the Section managed programs targeted at reducing waste in different sectors (multi-family residential housing, business, the building industry and commercial organics). Lastly, it measured and monitored performance.

The **Education and Outreach** Section also had three central activities. School education programs provided presentations, curriculum and education materials to teachers and organized an annual Earth Day art

contest. Adult education programs focused on reducing the toxicity of waste through hazardous waste and natural gardening programs. The Recycling Information Center used a hotline and website to answer questions about recycling, disposal and waste prevention.

The Division spent about \$4.4 million per year over the last five years. Spending decreased by 20% from Fiscal Year 2003 (FY03) to FY06, but increased in FY07. In FY03, the Division had 22 Full-time Equivalents (FTE). Staffing declined to 20 FTE for FY05 through FY07.

**Exhibit 2**  
Waste Reduction and Outreach expenditures

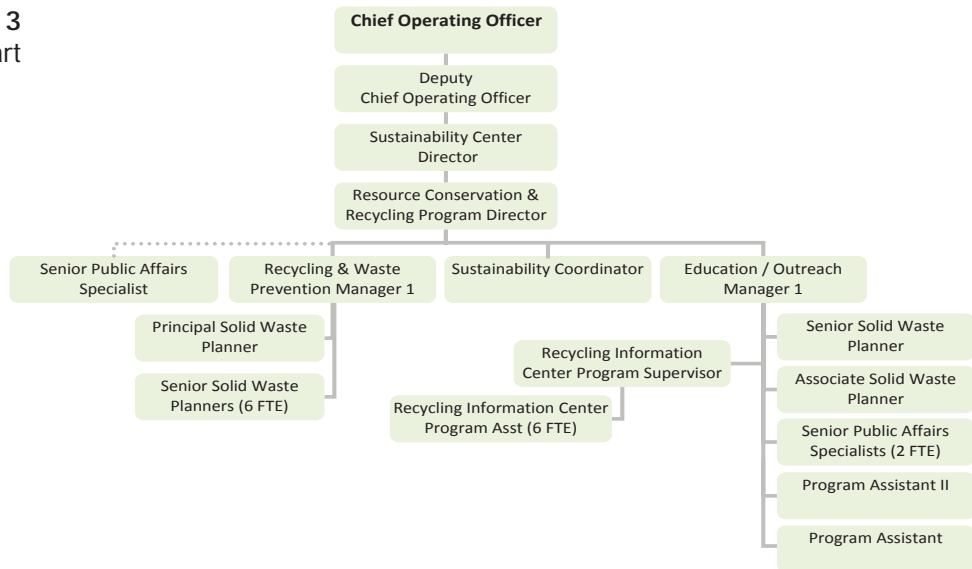


Source: Auditor's office analysis of Division financial data

**Metro's recent reorganization**

Effective October 1, 2008, Metro changed its organizational structure. Activities of the former Department of Solid Waste and Recycling are now part of two new departments. Metro's waste reduction and outreach programs are part of the Sustainability Center and report to the Resource Conservation and Recycling Program Director. The chart below shows the new organizational structure. The reorganization occurred after audit fieldwork was completed and the conclusions in this report are based on the prior organizational structure.

**Exhibit 3**  
Revised organizational chart



Source: Sustainable Metro Initiative documents

## Scope and Methodology

---

The purpose of this audit was to determine if the Waste Reduction and Outreach Division used its resources strategically to reduce the negative impacts of solid waste.

Our methodology included five objectives:

1. Identify what practices most effectively reduce the negative impacts of waste. Determine whether Metro's waste reduction and outreach programs target activities with the greatest impact.
2. Determine if the way the Division is organized presents barriers to operating efficiently and effectively.
3. Identify where Metro's regulatory environment, goals, objectives, and funding may conflict with programs that have the greatest environmental benefit.
4. Determine whether Metro measures results and uses analysis in deciding which activities to pursue.
5. Determine whether the Division is structured to meet Metro's definition of sustainability.

We reviewed state and local regulations, missions, goals, objectives, and strategic plans related to waste reduction and outreach programs. We reviewed other program documents, Metro Council resolutions, professional literature and studies. To better understand how Metro allocated resources and evaluated program effectiveness, we interviewed staff from Metro, the Oregon Department of Environmental Quality (DEQ), the Portland Office of Sustainable Development, and the Washington County Recycle at Work program. We researched literature on sustainability and sustainability frameworks.

The Division's spending was analyzed for a five-year period. We sorted the Division's activities and spending into five waste management practices defined by the state of Oregon and the Regional Solid Waste Management Plan. Division management confirmed how resources and staff were allocated. To determine the layers of management and ratio of staff to managers, we reviewed and updated the Division's organizational chart.

To assess how the Division measures program effectiveness, we looked at its data systems, performance measures, cost-benefit analyses, and performance reports. We developed new cost data from the agency's financial system. We used waste recovery and generation data reported to and reviewed by DEQ. As the financial data had been audited and the waste recovery and generation data reviewed by a third party, we believe this data is reasonable and accurate. Our limited testing of other data maintained by Division staff raised some concerns over its reliability

and accuracy; therefore, we cannot be assured that information controls are effective, and data is reasonable or accurate. We made no conclusions based on this data.

The scope of this audit was the Waste Reduction and Outreach Division. We also reviewed aspects of the Solid Waste and Recycling Department's Office of the Director and Financial Management and Analysis division related to organizational structure and Division financial information. During the course of this audit, we found the Division managed many contracts totaling about \$2 million per year. This amounted to more than 80% of its non-personnel related spending. While we chose not to study contract management practices in this audit, we will consider this as a possible topic for a future audit.

This audit was included in the FY08 audit schedule. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Results

Metro, like the state of Oregon and solid waste experts around the world, ranks recycling as the third best solid waste management practice. Waste prevention and reuse are considered better for the environment than recycling. This is because they have a bigger impact on waste generation, greenhouse gas emissions, and, in some cases, waste toxicity. Waste prevention is a term used to describe activities that reduce the amount or toxicity of waste before it is produced. Reducing product packaging, using longer-lasting goods, and using less toxic household and gardening products are examples of waste prevention. While there is agreement that waste prevention is better for the environment, there are few proven models of effective waste prevention programs.

Metro residents are producing more waste than ever before, even as the recycling rate has improved. The amount of waste being produced is a challenge to regional sustainability. This challenge comes at a time when the Metro Council has committed to making sustainability the guiding principle for all Metro policies and programs. In order to ensure the Waste Reduction and Outreach Division's programs align with Metro's focus on sustainability, the Division's goals and spending may need to change to reflect this new direction.

### Metro unlikely to meet recovery goal

State law requires Metro to develop a waste reduction plan and achieve certain waste recovery goals for the region. These State goals called for Metro to achieve a 62% recovery rate for solid waste by the end of 2005 and a 64% recovery rate by the end of 2009. Reaching this 64% recovery goal means that for every 1,000 pounds of solid waste, 640 pounds of it will be diverted from landfills through practices such as recycling and composting. The Metro region did not meet its 2005 goal and is unlikely to meet its 2009 goal. In 2005 the regional recovery rate was 59%. This dropped to 56% for 2006, reversing several years of steady improvement.

**Exhibit 4**  
Metro recovery rate  
1997-2006



Source: Oregon Department of Environmental Quality

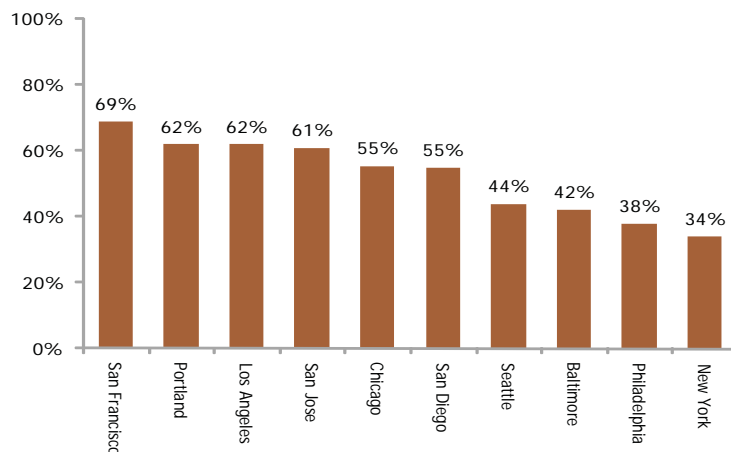
A review of Metro efforts by Oregon's Department of Environmental Quality (DEQ) found Metro is "doing all it could to move towards achievement of its 2009 recovery goal". DEQ stated there will be no penalty for not meeting its statutory goals. Metro is putting several programs in place to increase recovery. One program requires construction and demolition waste be screened to remove recyclables. The Metro Council also approved a proposal to make the recycling of paper and containers mandatory for businesses.

The regional recovery rate may be influenced by factors outside of Metro's control. Management said the recovery rate may have been artificially high in recent years due to market conditions resulting in the recycling of a large stockpile of metal inventory. Despite recent shortfalls, DEQ staff and Metro management stated that while it is unlikely the goal will be met in 2009, it may be met in the near future with new programs.

**Metro a leader in recycling but can still improve**

Even though the Metro region missed its 2005 recovery goal, it is still a leader in Oregon for recycling. Comparable data is not available to show how the Metro region ranks nationally. However, data for Portland indicates that it is a leader among U.S. cities. A 2006 study of the 30 largest cities showed that the average recycling rate was 28% compared to a 62% recycling rate for Portland. Only San Francisco had a higher recycling rate (69%) than Portland. While these results demonstrate the region's success, San Francisco's recycling rate is higher than Portland's, indicating improvement is possible.

**Exhibit 5**  
Large U.S. cities with highest recycling rates

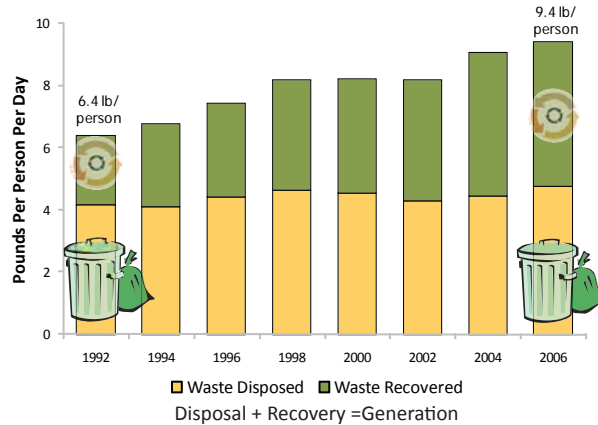


Source: Waste News, March 3, 2008

**Metro region generating more waste**

A larger problem for the environment is that the Metro region is generating more waste than ever. From 1992 to 2006, the amount of waste produced increased from 6.4 to 9.4 pounds per person per day. In the same fifteen year period, the total amount of waste nearly doubled from 1.46 to 2.70 million tons.

**Exhibit 6**  
Waste generation  
1992-2006

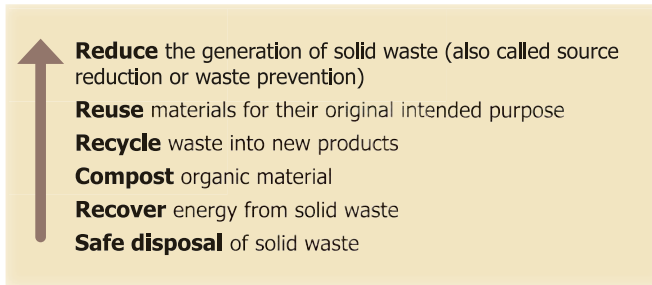


Source: Oregon Department of Environmental Quality

Growing concern over climate change and sustainability has increased the importance of reducing waste generation. Because the environmental impact of making new products is bigger than disposing of them, preventing a ton of waste is better than recycling a ton of waste. Every new product has an environmental cost, from mining the raw materials, to making the product, to shipping it. For example, 58% of a personal computer’s greenhouse gas emissions occur before a customer buys it, while less than 1% occurs in its disposal. As a result, recycling waste has a smaller impact on greenhouse gas emissions than reducing the number of new items manufactured.

Metro’s ten-year Regional Solid Waste Management Plan (RSWMP) and Oregon statute identify the solid waste hierarchy as the preferred management practice in the region. This hierarchy ranks waste prevention and reuse ahead of recycling.

**Exhibit 7**  
Solid waste hierarchy



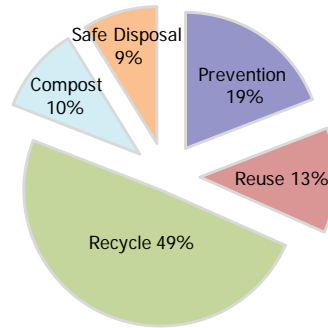
Source: Oregon Revised Statutes 459.015; RSWMP 2008-2018

**Resources not targeted to greatest environmental benefit**

Although plans and statute place a higher priority on waste prevention, our analysis found that Metro spent more on recycling. From FY03 to FY07, the Division spent about half of its resources on recycling. It spent about 30% on prevention and reuse. Between FY03 and FY07, spending on prevention increased from 16% to 19%. In total, the Division spent about \$2.3 million on recycling efforts and \$1.5 million on waste prevention and reuse for FY07.



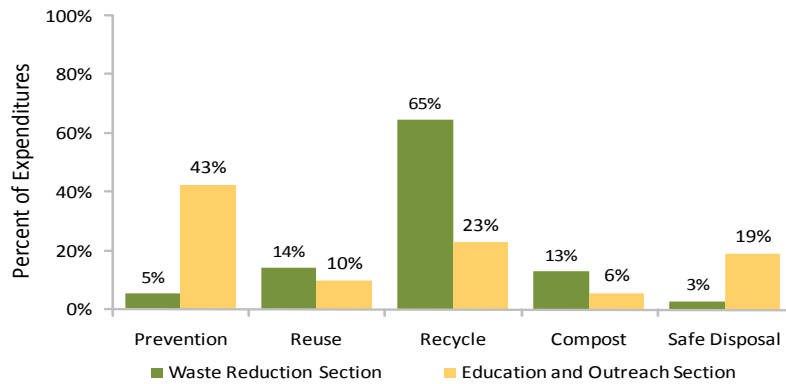
**Exhibit 8**  
Division expenditures  
FY07



Source: Auditor's Office analysis of financial data

Our analysis showed that the Education and Outreach Section targeted prevention activities to a greater degree than the Waste Reduction Section. By design, these sections have different objectives and programs, with the Waste Reduction Section focusing on recycling, reuse and composting. In FY07, 43% of Education and Outreach expenditures were for prevention while 5% of the Waste Reduction expenditures were for waste prevention.

**Exhibit 9**  
Spending by Section  
FY07



Source: Auditor's Office analysis of financial data

Management agreed that more of the Division's focus needs to be placed on waste prevention and stated several reasons why this has not occurred. The Division's direction was established in the 1990s, when there were different priorities. The Division needs to show progress towards meeting the recovery goal before it can shift its focus to prevention. It is difficult to convince people to consume less. Also, effectiveness of waste prevention activities is harder to measure.

**Mission unclear  
and there may be  
conflicting incentives**

An organization's mission, measures and incentives should be clearly linked. If this connection is not apparent, employees will not have the framework or direction to make decisions strategically. Moreover, it will be difficult to achieve intended results and ensure money is spent wisely.

The Waste Reduction and Outreach Division does not have a mission statement. In the absence of a mission statement, we reviewed various documents that state the Division's purpose and objectives. These documents included the budget, the Regional Solid Waste Management Plan, and the Solid Waste and Recycling Department Strategic Plan. We found inconsistencies between these documents. It is not clear whether the Division's primary objective is recycling or waste prevention. Therefore, it is unlikely managers and staff will be able to make decisions based on a well defined organizational strategy.

**Exhibit 10**  
Primary purpose  
according to documents

Document	Priority	Stated purpose and objectives
<b>FY09 Program budget</b>	<ol style="list-style-type: none"> <li>1. <b>Recycling</b></li> <li>2. Prevention</li> </ol>	<p>The responsibilities (of the Waste Reduction section) are to ensure that an <b>opportunity to recycle</b> is provided for all generators of post-consumer waste.</p> <p>The principal purposes (of the Education and Outreach section) are to:</p> <ul style="list-style-type: none"> <li>• Promote <b>recycling</b> opportunities;</li> <li>• Integrate resource conservation concepts into school curriculum and classroom activities;</li> <li>• Directly promote <b>waste prevention</b>.</li> </ul>
<b>Regional Solid Waste Management Plan 2008-2018 Update</b>	<ol style="list-style-type: none"> <li>1. <b>Prevention</b></li> <li>2. Reuse</li> <li>3. Recycle or compost</li> <li>4. Recover energy</li> <li>5. Landfill</li> </ol> <p>Performance Measure: <b>Recycling</b></p>	<p>Solid waste management practices will be guided by the following hierarchy:</p> <ol style="list-style-type: none"> <li>1. Reduce</li> <li>2. Reuse</li> <li>3. Recycle or compost</li> <li>4. Recover energy</li> <li>5. Landfill</li> </ol> <p>The regional recovery rate continues to be the primary benchmark of progress.</p>
<b>Solid Waste and Recycling Department Goals (2004)</b>	<ol style="list-style-type: none"> <li>1. <b>Toxics Reduction</b></li> <li>2. Prevention</li> <li>3. Recycling</li> </ol>	<p><b>Goal 1 - Reduce the generation and disposal of hazardous waste.</b></p> <p><b>Goal 2 - Expand waste prevention, recycling and recovery.</b></p> <p><b>Goal 3 - Raise awareness of waste prevention and recycling opportunities.</b></p>

Source: Department documents

Also, Metro may need to address the potential conflict between some of its revenue sources and a goal to give a higher priority to waste prevention. Revenues to operate the solid waste disposal system and to fund other services outside of the Solid Waste and Recycling Department are based upon fees and taxes calculated on landfill waste. These funds vary with the amount of tonnage received. If Metro processed less waste at its transfer facilities because of successful waste prevention efforts, funding would decline. Currently, Metro has a reserve fund to stabilize downturns in revenues that support general Metro programs such as the Zoo, Planning, or Regional Parks and a contingency fund in Solid Waste to meet short-term unanticipated losses. However, if revenues begin to decline over the long term, adjustments will be needed.

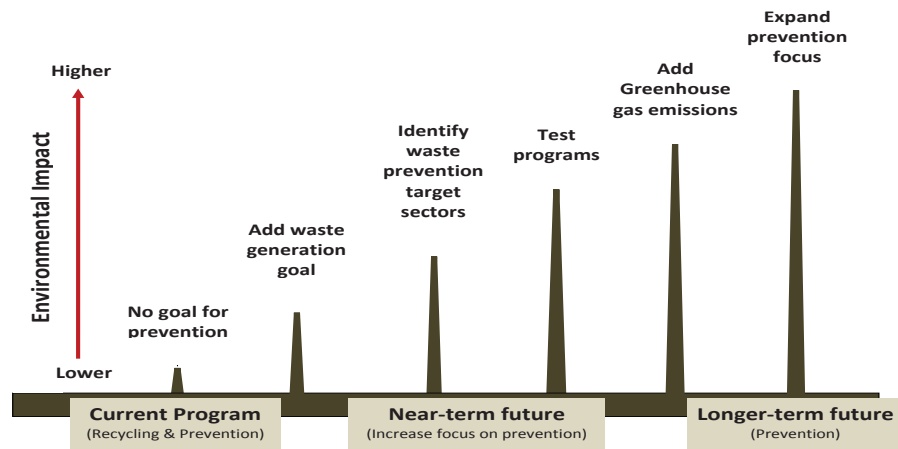
**Strategy for waste prevention efforts needed**

Metro has several activities underway with the objective of preventing waste, but they are not coordinated as part of a larger waste prevention strategy. Best practices recommend a clear and coordinated strategy that focuses on a limited number of priority materials and/or sectors. Priority areas are typically identified based what will have the largest environmental impact and where the greatest likelihood is of changing behavior.

This is not to say waste prevention should be the only strategy. There are few models of successful waste prevention programs. If it shifts resources to less proven models, the Division will need to evaluate the risks and

potential benefits of new programs and strategies. The diagram below identifies potential steps Metro could take to shift resources to programs with a greater environmental impact while testing new models for cost-effectiveness. By gradually increasing its focus on waste prevention, the Division can better align its programs and performance measures and reduce the risk of using resources ineffectively.

**Exhibit 11**  
Possible steps to shift program focus



Source: Auditor's office analysis

The Division can begin to implement new waste prevention strategies while continuing to work to meet its statutory recovery target. The Division's current programs are a mixture of recycling and prevention programs, yet the only regional target is for waste recovery. The State of Oregon has established statewide targets for waste recovery, waste generation and greenhouse gas emissions. Metro could adopt regional targets for waste generation and greenhouse gas emissions to better align with its programs and established statewide targets.

### Testing and evaluating waste prevention programs important

Measuring outcomes and cost effectiveness of waste prevention strategies will be challenging. Total waste generated in the region is a good general measure of progress in preventing waste. However, waste generation is affected by conditions outside of the Division's control. Changes in population, economic conditions, and other variables affect the amount of waste generated. To determine Metro's direct impact on preventing waste, the Division will need additional data sets and program evaluation tools. For example, if plastic bags are being targeted, the Division will need to track over time the amount of plastic bags thrown away. In addition, the Division may need to make greater use of pre- and post-event surveys to evaluate the effectiveness of outreach messages.

Our analysis of program expenditures indicated waste prevention strategies may be more costly. Metro's waste prevention and reuse programs spent almost ten times more per ton than recycling and compost programs. Similarly, expenditures per contact for education and outreach increased for waste prevention programs. For example, in FY07, the cost per contact for the Recycling Information Center, which is focused primarily on recycling and disposal, was \$5.56. In the same year, cost per contact for the Adult Toxic Reduction program, which is focused mainly on waste prevention, was \$25.04.

The higher cost per contact for prevention programs may be due to the method of delivery and the complexity of the message. Prevention programs can require more intensive in-person outreach because they involve introducing concepts that are new to people. Recycling programs have existed for many years. People are familiar with the messages and seek out information about recycling. To strategically allocate resources to meet its goals, the Division should acknowledge and account for this challenge.

**Exhibit 12**  
Expenditure per ton  
by strategy

Strategy	Expenditure/ton
Prevention and reuse	\$20.24
Recycling	\$ 2.73
Compost	\$ 2.47

*Source: Auditor's Office analysis of 2006 performance and expenditure data*

Even with these challenges, it is important for Metro to take a leadership role in waste prevention efforts. DEQ has developed strategies for waste prevention but does not have the resources to implement them. Because the Metro region is a state leader in developing effective recycling and other waste reduction programs, as well as the largest generator of waste in Oregon, it makes sense for Metro to continue to pilot new programs and test waste prevention strategies. Metro has a history of developing innovative planning and transportation programs to test strategies. The Division can build on these examples to test innovative waste prevention strategies.

One way to pilot waste prevention strategies is through grants the Division makes to local governments. Over the last five years, the Division spent about 60% of its non-personnel dollars through grants to local governments and businesses. Intergovernmental agreements with local governments for their waste reduction and Recycle at Work programs include some waste prevention activities; however, the primary focus of these programs is recycling. Once Metro has a waste prevention strategy, elements of this strategy could be included in grant criteria and requirements. This approach was used successfully by DEQ to target additional resources to waste prevention.

**Guidance needed to align programs**

In April 2008, the Metro Council adopted sustainability as the guiding principle for all Metro policies and programs. There are several different approaches to sustainability. Examples include the Triple Bottom Line, the Natural Step, the Ecological Footprint, and the Sustainable Hierarchy. The first approach emphasizes the need to balance economic, social and ecological goals. The next two focus on measuring and reducing damage to natural assets. The fourth attempts to provide an over arching framework for sustainability. Each approach emphasizes different goals and measures of success.

In 2003, the Metro Council adopted the Natural Step approach to guide the creation of a sustainable business model for Metro. Based on our review of the Waste Reduction and Outreach Division, we found the Natural Step framework has not been successfully integrated into its programs. Metro should determine what approach it will follow because that choice will affect how Metro and the Division sets priorities and measures progress.

**Key systems needed to strategically manage**

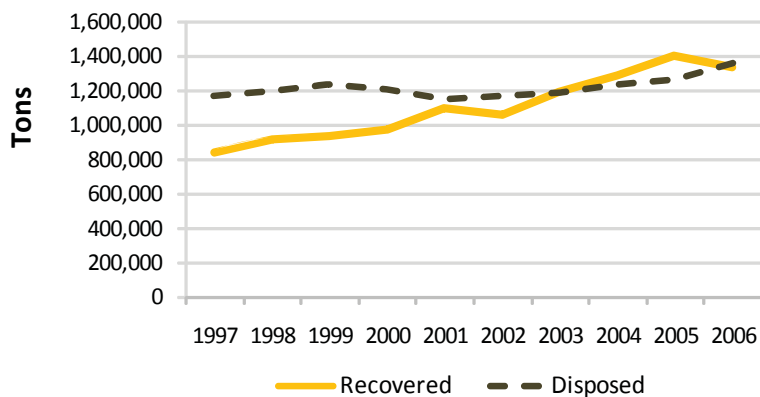
In order to act strategically, an organization needs to be clear about its objectives, have adequate data to make decisions and evaluate progress, and have the skills necessary to manage operations. Metro needs to develop measures for efforts in all areas of the waste hierarchy. Data collection systems that do exist are not providing adequate data and reports are not standardized. This weakens the ability to act strategically. Finally, we found that the Division could improve its organization and skill sets.

**Existing measures not sufficient**

The Division’s performance measures are not aligned with all of its strategies and don’t provide an accurate representation of its progress. The Division’s measurement is heavily weighted towards recycling. Less emphasis is placed on other goals, such as waste prevention and toxics reduction.

The primary performance measure that guides strategic decision making is the regional recovery rate, which is largely a measure of recycling. While this measures progress towards its statutory goal, it does not provide a full picture of the region’s waste reduction efforts. For example, over the last ten years the amount of waste disposed of in landfills increased by almost 190,000 tons even as the recovery rate increased from 48% to 56%.

**Exhibit 13**  
Tons recycled and disposed 1997-2006



Source: Oregon Department of Environmental Quality

As long as the Division’s success is primarily measured by the rate of recycling, it will be difficult to shift focus to strategies that have a greater impact on waste generation.

**Difficult to evaluate effectiveness**

The Division has difficulty evaluating program effectiveness. One difficulty is access to timely data. In the Waste Reduction Section, evaluation and strategic decision making for programs is based almost entirely on tonnage data from DEQ. DEQ tonnage data takes more than a year to report and detailed waste composition data isn't finalized for at least two years. This makes it difficult to determine the cost-effectiveness of Waste Reduction programs. The Section has attempted to overcome this barrier by receiving and analyzing raw data prior to DEQ reports being finalized.

During the audit, we found information systems insufficient to accurately report and maintain program data. Reports created by the Recycle at Work database contain errors. The Outreach and Education database has gaps in its data and isn't used consistently by all staff. This forces staff to maintain additional duplicative systems. Because each program maintains its own data, the Division's ability to produce consistent and accurate program data is weakened. Also, if staff members leave, the Division may not be able to maintain consistent data over time.

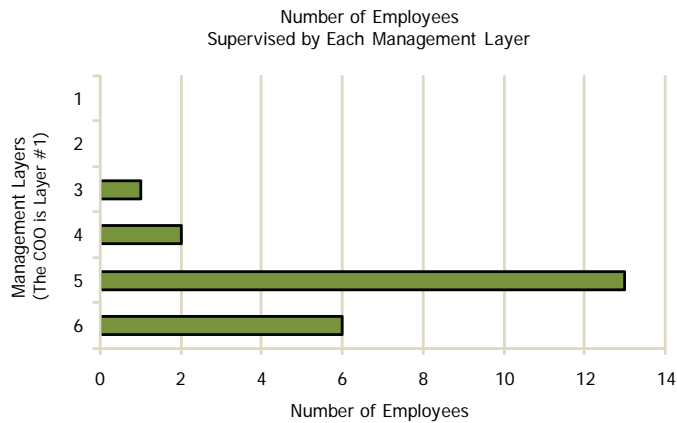
In the Education and Outreach Section, there is no dedicated data analyst position. As a result, program evaluation methods vary between programs. Moreover, it is very difficult to determine the outcomes of many of the waste prevention and toxicity programs. The number of people reached at each event is the standard performance measure published in departmental reports for these programs. The Division should consider additional sources of data to improve program evaluation.

There is also the need for a standardized evaluation and reporting process for the Division's programs. Staff occasionally conduct benefit-cost analyses and write policy papers to evaluate proposed program changes. These reports rely on different methods to estimate environmental impacts and do not compare programs against each other. Establishing clear program evaluation and reporting processes may help the Division make strategic decisions more efficiently. In addition, standardizing these tools will help in comparing programs against each other, and evaluating trends over time.

**Organization may present barriers to efficiency and effectiveness**

An organization's 'layers of management' are defined as the maximum number of people through which an employee must report in order to reach the chief executive. Prior to the reorganization of Metro, 86% of employees in the Waste Reduction and Outreach Division had five or more layers of management.

**Exhibit 14**  
Layers of management  
as of July 2008



Source: Auditor's analysis of organizational structure

Most contemporary management experts recommend a flatter management structure. Organizations with many layers of management tend to have poorer communication between the bottom and top layers, take longer to make service decisions, and have lower employee satisfaction. During the course of our audit, we found indications that the Division has these characteristics. Metro is currently reviewing its organizational structure. Metro may find it can increase the Division's efficiency and effectiveness by reducing management layers.

Assessing staff skills and training was not part of our audit plan. However, during the course of this audit we identified key skills that are important to effective operations:

1. *Contract management.* The Waste Reduction and Outreach Division spends about \$2 million per year through contracts. This amounts to more than 80% of its non-personnel related spending. Staff manage many contracts. Over the five year period from FY03 to FY07, two employees managed more than 100 contracts each. An additional 16 employees managed at least 10 contracts each.
2. *Community-based social marketing.* Community-based social marketing is an approach used to encourage people and businesses to adopt sustainable behaviors. This approach will be used by the Division in its waste prevention efforts. Staff say they apply these concepts in their programs. To ensure community-based social marketing concepts are applied effectively, staff need to have training in this approach.

## **RECOMMENDATIONS**





## Recommendations

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- 1. In order to align Division activities with the Metro Council's focus on sustainability:**
  - a. The Metro Council should adopt a sustainability framework that will guide how programs and policies should be changed to make sustainability the guiding principle.
  - b. Management should work with the Metro Council to clarify and prioritize recycling and waste prevention activities.
  - c. In the absence of a sustainability framework, the Division should use the waste management hierarchy to prioritize activities with the greatest environmental impact.
  
- 2. To improve the effectiveness of waste prevention activities:**
  - a. The Division should prepare a waste prevention strategy outlining priority materials and/or sectors and integrating separate prevention and reuse activities.
  - b. If the Metro Council prioritizes waste prevention, the Division should target additional resources to waste prevention activities and build waste prevention elements into its grants.
  
- 3. To measure program effectiveness more consistently and completely:**
  - a. The Division should adopt a waste generation goal as a key performance measure.
  - b. The Division should establish performance measures for the Waste Reduction and Education and Outreach Sections that are better aligned with the objectives in the Regional Solid Waste Management Plan.
  - c. The Division should develop a Division-wide data management system that will provide standardized data management and timely reporting.
  - d. The Division should standardize program evaluation tools (e.g. cost-benefit analyses, white papers, pro forma), processes, and procedures to facilitate regular evaluation of fiscal and environmental impacts and inform strategic decision making.
  - e. The Division should increase its capacity to analyze costs and environmental impacts of its programs through staff training or establishing Memorandums of Understanding with departments that have this technical expertise.

**4. To promote efficient and effective operations:**

- a. Metro management should review Division positions with 5-6 layers of management to identify opportunities to reduce layers of management.
- b. The Division should evaluate staff expertise and training needs in contract management and applying community-based social marketing techniques.

## **MANAGEMENT RESPONSE**





Date: Nov. 4, 2008

To: Suzanne Flynn, Metro Auditor

From: Michael Jordan, Chief Operating Officer  
Scott Robinson, Deputy Chief Operating Officer  
Jim Desmond, Director, Sustainability Center

Cc: Matt Korot, Program Director, Resource Conservation & Recycling

Re: Waste Reduction & Outreach Audit

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This memorandum is management's response to the final audit report transmitted by your office on Oct. 17, 2008. We appreciate receiving your thoughtful input at an opportune time for the Waste Reduction & Outreach programs. The integration of these programs into the new Sustainability Center, the renewed agency-wide emphasis on performance measures, the pending initiation of the Regional Solid Waste Management Plan's (RSWMP) long-term goals development process, and the agency's increasing engagement in actions to address climate change are all elements that create fertile ground for implementing the audit's recommendations.

#### *Overall Comments*

The report's primary conclusion is that the Waste Reduction & Outreach programs should place more emphasis, and thus devote more resources, to waste prevention activities relative to those for recycling. The report also points out that program prioritization decisions and allocation of budgetary resources would be even more effective if guided by an overall sustainability framework. We agree with both of these conclusions, believing that waste prevention goals and programs should be priorities, but subsumed within a broader sustainability framework. This approach would help guide Waste Reduction & Outreach programs toward the greatest environmental benefit.

#### *Clarification of Objectives*

After reviewing guiding documents such as the RSWMP and Metro program budgets, the report finds that it is unclear whether the Waste Reduction & Outreach program's primary objective is waste prevention or recycling. As a consequence, the report concludes that the program's decisions may lack a "well defined organizational strategy."

We agree that a clearer and more consistent statement of Waste Reduction & Outreach's mission and priorities would be of value. In practice, the program has tried to make strategic decisions and avoid establishing conflicting directions. Its core programs reflect the priorities set forth in the RSWMP and implemented through work plans that include waste prevention and toxics reduction elements. We

agree, though, that better integration of our strategies, and linking them to goals, are critically important.

A key step in that direction is the long-term goals project identified in the RSWMP. It calls for moving beyond using the number of tons recycled and disposed as the primary measuring tool, and for Metro to develop goals that meet the Plan's vision of sustainable resource use. These goals could include reducing greenhouse gases, product toxicity and waste generation. Staff has begun initial scoping work on this long-term goals project in consultation with members of Metro's Strategy Center.

#### *Data Management & Analysis*

The report found that the Waste Reduction & Outreach program's information systems are insufficient to accurately report and maintain program data, specifically noting that the use of different systems by different program staff may hinder the program's overall ability to produce consistent and accurate program data. We recognize that there are some inconsistencies and are committed to working to align the data tracking methods to the greatest degree possible.

The report points out that it is difficult to determine the outcomes of many of the waste prevention and toxicity programs, noting that the number of people reached at each event is the standard performance measure published in departmental reports for these programs. This may point more to reporting deficiencies than methodological ones. These programs rely on a number of ways to measure outcomes, including participant surveys, focus groups, as well as participant numbers. We will commit to evaluating what would be the best measures of outcomes for any particular project, and to fully reporting on these measures and outcomes.

#### **Response to Recommendations in the Auditor's Report**

The following summarizes the Sustainability Center's response to the specific recommendations in the Auditor's Report.

##### **Recommendation 1:**

In order to align Division activities with the Metro Council's focus on sustainability:

- a. The Metro Council should adopt a sustainability framework that will guide how programs and policies should be changed to make sustainability the guiding principal.

##### ***Response:***

This recommendation is directed to the Metro Council. The Sustainability Center could provide the Council with information on how its activities would fit within such a framework.

- b. Management should work with the Metro Council to clarify and prioritize recycling and waste prevention activities.

##### ***Response:***

We agree and will work with Metro Council to address this recommendation through review of new goals identified through the RSWMP's long-term goals process, the annual budgeting process, and the establishment of performance measures.

- c. In the absence of a sustainability framework, the Division should use the waste management hierarchy to prioritize activities with the greatest environmental impact.

***Response:***

Even in the absence of a unifying, agency-wide sustainability framework, it is clear to us that sustainability is a core element of Metro's strategic direction. Accordingly, Waste Reduction & Outreach programs will focus on achieving the greatest environmental impact, with the waste management hierarchy helping to guide our evaluation of program options.

**Recommendation 2:**

To improve the effectiveness of waste prevention activities:

- a. The Division should prepare a waste prevention strategy outlining priority materials and/or sectors and integrating separate prevention and reuse activities.

***Response:***

We will work to integrate the various waste prevention strategies that are currently part of our programs into an overall integrated strategy.

- b. If the Metro Council prioritizes waste prevention, the Division should target additional resources to waste prevention activities and build waste prevention elements into its grants.

***Response:***

We concur that the Waste Reduction & Outreach program's budgetary resources and priorities should reflect its strategic priorities.

**Recommendation 3:**

To measure program effectiveness more consistently and completely:

- a. The Division should adopt a waste generation goal as a key performance measure.

***Response:***

We concur with the value of a waste generation goal as a key performance measure. We would like to do additional analytical work, in collaboration with the Oregon DEQ, to establish a goal that can be linked to waste prevention efforts, rather than to external forces. The Waste Reduction & Outreach program's past and current waste prevention work is, however, implicitly directed at helping contribute to meeting the State's statutory goals of no annual increase in per capita municipal solid waste generation and, ultimately, no annual increase in total municipal solid waste generation.

- b. The Division should establish performance measures for the Waste Reduction and Education and Outreach sections that are better aligned with the objectives in the Regional Solid Waste Management Plan.

***Response:***

Agreed.

- c. The Division should develop a Division-wide data management system that will provide standardized data management and timely reporting.



***Response:***

We agree with this recommendation as an objective. We will assess the feasibility of developing and using such a system, informed by Agency-wide efforts to achieve consistency in data management.

- d. The Division should standardize program evaluation tools (e.g. cost-benefit analyses, white papers, pro forma), processes, and procedures to facilitate regular evaluation of fiscal and environmental impacts and inform strategic decision making.

***Response:***

The Waste Reduction & Outreach program will work with the Deputy Chief Operating Officer and the Strategy Center to standardize these evaluation tools with those used elsewhere in the Agency.

- e. The Division should increase its capacity to analyze costs and environmental impacts of its programs through staff training or establishing Memorandums of Understanding (MOU) with departments that have this technical expertise.

***Response:***

We are committed to strengthening the capacity to do these types of analysis in the Sustainability Center, the Research Center, Finance and Administrative Services and, in fact, agency-wide. Building core skills and consistently using best practices are key goals of the Sustainable Metro Initiative (SMI) and the agency is now organized to better allow for this work to be done collaboratively.

Staff is also actively collaborating with Oregon DEQ and others to develop improved models for measuring the environmental impacts of waste prevention and recycling programs.

**Recommendation 4:**

To promote efficient and effective operations:

- a. Metro management should review Division positions with 5-6 layers of management to identify opportunities to reduce layers of management.

***Response:***

This was addressed through the Sustainable Metro Initiative.

- b. The Division should evaluate staff expertise and training needs in contract management and applying community-based social marketing techniques.

***Response:***

This evaluative work will be strengthened as a result of the Sustainable Metro Initiative's focus on improving management practices (e.g., contract management) and organizationally integrating like functions (e.g., solid waste and parks social marketing techniques).





Office of the Auditor  
600 NE Grand Avenue  
Portland, Oregon 97232  
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Agenda Item Number 5.1

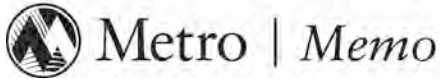
Consideration of Minutes of the November 6, 2008 Metro Council  
Regular Meeting

*Consent Agenda*

Metro Council Meeting  
Thursday, November 13, 2008  
Metro Council Chamber

**PRESENTATION AND DISCUSSION OF  
TRANSPORTATION SCENARIOS**

Metro Council Meeting  
Thursday, November 13, 2008  
Metro Council Chamber



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

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### **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.

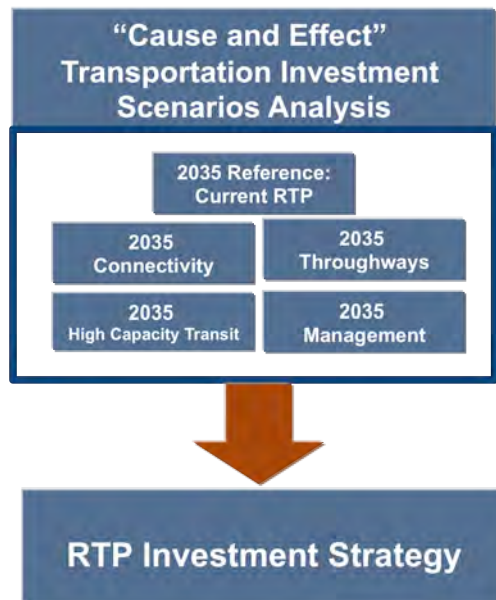
### **General Construct and Scope**

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

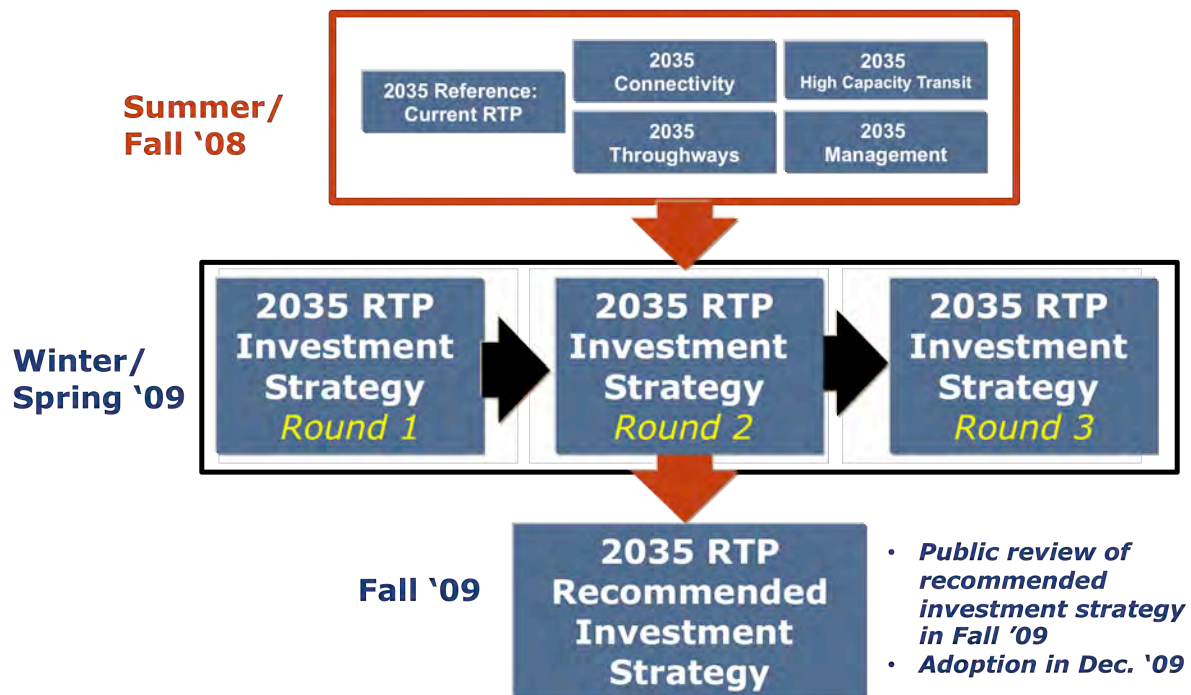
The RTP scenarios were developed with the regional travel demand model for the purpose of the analysis. The MetroScope model was used to evaluate the land use and economic effects of each of the transportation networks. This approach allowed a comprehensive analysis of the relative benefits and trade-offs 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.



[www.oregonmetro.gov](http://www.oregonmetro.gov)

## 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

MAKING THE GREATEST PLACE

## Purpose of November 12

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



MAKING THE GREATEST PLACE

## Our region is unique



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





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



MAKING THE GREATEST PLACE

## Rising Costs, Stagnant Revenues

Local  
And  
Regional  
Challenges

- 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

Estimated RTP Maintenance Funding Gap



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



MAKING THE GREATEST PLACE

## Choices for the Future

Urban Form – local aspirations, urban & rural reserves

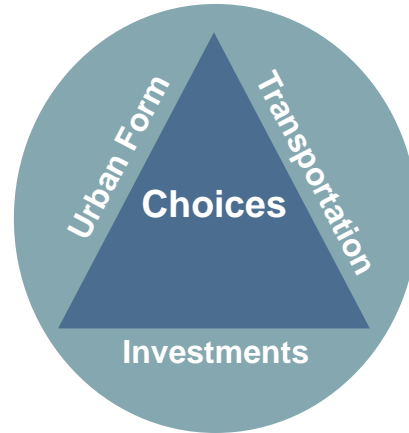
*How and where do we grow?*

Transportation - RTP

*How do we travel?*

Investments - infrastructure

*How do we prioritize needed investments?*



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





2035 REGIONAL TRANSPORTATION PLAN

## New RTP Direction To Respond

[www.oregonmetro.gov](http://www.oregonmetro.gov)

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

**2035**  
REGIONAL TRANSPORTATION PLAN

December 13, 2007  
Approved by the Federal Highway Administration  
and the Federal Transit Administration  
on February 28, 2008

Metro | Joint Policy Advisory Committee on Transportation

METRO  
PEOPLE PLACES  
OPEN SPACES

# RTP Goals and Outcomes



2035  
REGIONAL TRANSPORTATION PLAN

December 13, 2017

Approved by the Metropolitan Planning Administration  
and the National Transit Administration  
on February 10, 2018

Metro | Joint Policy Advisory Committee on Transportation



- 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

# Old and New

Performance Measures

## Current Measures

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



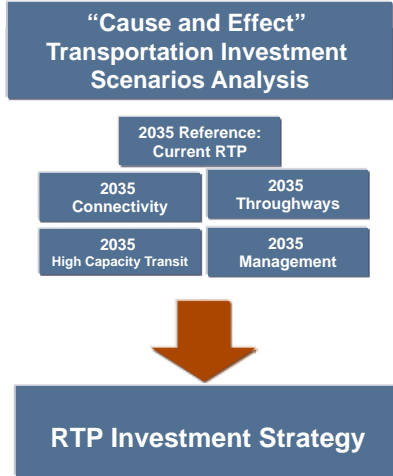
## New Measures

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

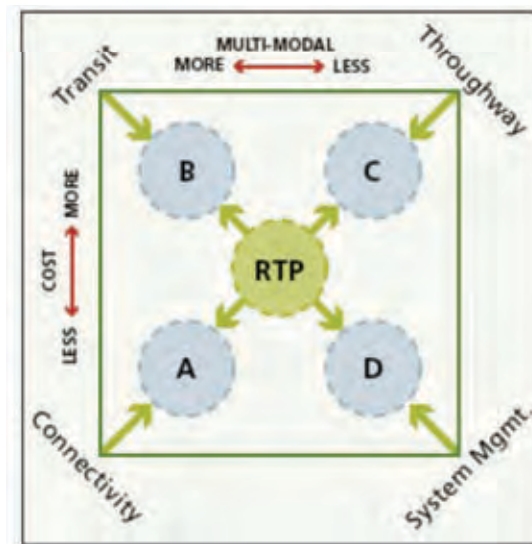


## Transportation Scenarios Analysis

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



## Transportation Scenarios Analysis





# 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





KEY ASSUMPTIONS – REFERENCE SCENARIO

## Reference Scenario – Current Plans

Theme	Purpose	Key Assumptions
Reference: Current RTP <i>Current path if current local and regional plans are followed through 2035</i>	Rely on current adopted plans and policies to serve future needs	<ul style="list-style-type: none"> <li>Adopted Financially Constrained System</li> <li>Current land use plans</li> <li>New funding sources<sup>(1)</sup></li> </ul>

Notable assumptions:

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

<sup>(1)</sup> 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



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



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

## 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	<ul style="list-style-type: none"> <li>• Same transit as Reference Scenario</li> <li>• Adds all arterials in current plans and widens existing streets to 4 lanes to meet 1-mile arterial spacing</li> <li>• Bike, pedestrian and trail networks completed</li> <li>• 12 new river crossings</li> <li>• Throughway overcrossings every 2 miles</li> </ul>

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)



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%



*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
<p>Concept B – High Capacity Transit</p> <p><i>Bold expansion of HCT and frequent bus service, beyond current RTP policy</i></p>	<p>Rely on a high capacity transit oriented system to meet future needs</p>	<ul style="list-style-type: none"> <li>• Same roads as Reference Scenario</li> <li>• HCT to all regional centers, some town centers</li> <li>• All HCT modeled as LRT</li> <li>• New park-and-ride lots</li> <li>• Frequent bus on all major arterials</li> <li>• Portland Streetcar Plan</li> </ul>

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



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%



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

## THROUGHWAYS SCENARIO

### CONCEPT C



KEY ASSUMPTIONS – CONCEPT C

## Throughways Scenario

Theme	Purpose	Key Assumptions
Concept C - Throughways <i>Bold expansion of throughway system, beyond current RTP policy</i>	Rely on highway- oriented transportation system to serve future needs	<ul style="list-style-type: none"> <li>• Same transit as Reference Scenario</li> <li>• Up to 10 lanes assumed in most congested Reference Scenario corridors</li> <li>• Number of through lanes tied to congestion</li> <li>• Two new Columbia River crossings</li> </ul>

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



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%)



*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%



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

## SYSTEM MANAGEMENT SCENARIO

### CONCEPT D





KEY ASSUMPTIONS – CONCEPT D

## System Management Scenario

Theme	Purpose	Key Assumptions
<p>Concept D – Management <i>Aggressive implementation of RTP management policies</i></p>	<p>Rely on aggressive system management to optimize capital investments in the transportation system</p>	<ul style="list-style-type: none"> <li>• Same transit and road system as Reference Scenario</li> <li>• Parking management and reduced transit fares in all centers</li> <li>• Access control and interchange removals</li> <li>• Arterial corridor traffic management</li> </ul>

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



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%



*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 + 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%



## 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



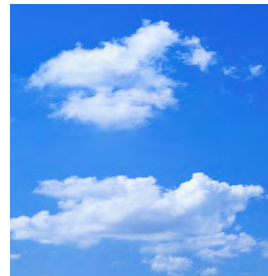
## Notable Job Effects

- 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



## Notable Air Quality Effects

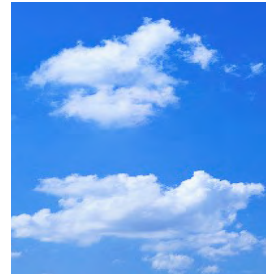
- All scenarios show air quality that continues to improve from today
- HCT scenario shows greatest decrease in air pollutant levels, compared to Reference scenario
- Connectivity and Throughway scenarios show increase in all emissions levels, compared to Reference scenario



SCENARIOS RESULTS – HOW THEY COMPARE

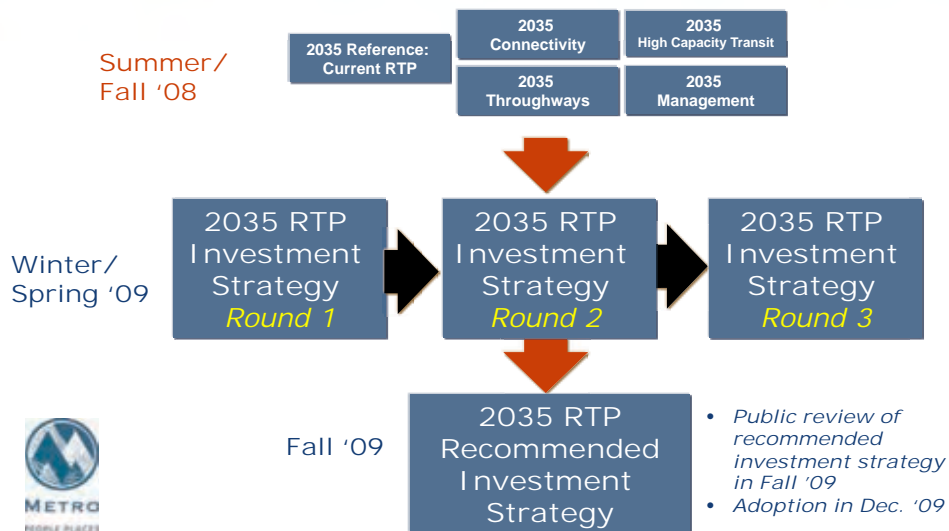
## Notable Greenhouse Gas Effects

- 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



2035 REGIONAL TRANSPORTATION PLAN

## Moving Forward to 2009



## 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?*

