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DATE: August 31, 2007

TO: TPAC and Interested Parties

FROM: Kim Ellis, Principal Transportation Planner

SUBJECT: 2035 RTP System Analysis – Round 1 Preliminary Results

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## **Purpose**

The purpose of this memo is to describe Round 1 RTP system analysis data available for TPAC consideration. TPAC will be asked to discuss the preliminary results during the September 17 TPAC workshop. The workshop will be held from 1:30-4:30 p.m. at Metro in the Council Chambers. Additional workshops may be scheduled as needed.

## **System Analysis Data Available to Date**

The following data is available for TPAC review prior to the September 17 workshop:

- ✓ System performance measures for Total Region Trips and Intra-UGB Trips (Attachments 1 and 2 to this memo)
- ✓ Volume/capacity plots of EMME/2 model auto network volumes (region-wide and subareas) for the following time periods:
  - o 2005 PM 2-hour peak period (updated)
  - o 2005 Mid-day period (updated)
  - o 2035 No Build PM 2-hour peak period (updated)
  - o 2035 No Build Mid-day period (updated)
  - o 2035 Round 1 Illustrative PM 2-hour peak period (new)
  - o 2035 Round 1 Illustrative Mid-day period (new)
- ✓ Environmental Considerations Maps
  - Goal 5 inventory and Conservation Opportunity Areas (in hatched pattern) and RTP projects by mode
  - o Wildlife Hotspots, problematic culverts and RTP projects
  - o Watersheds, Floodplains, wetlands and RTP projects

Additional data and summary materials will be prepared for the workshop. The volume/capacity plots and maps are posted on Metro's ftp site to download in \*.pdf format. You can zoom into

the volume/capacity plots and other maps in Adobe Acrobat Reader to view on a computer screen or they can be printed poster size.

To access the files go to:

<a href="ftp://ftp.metro-region.org">ftp://ftp.metro-region.org</a>

Click on pub

Click on tran

Click on 2035RTP

Click on System Analysis (the files are located inside)

Please contact me by phone at (503) 797-1617 or email at <u>ellisk@metro.dst.or.us</u> with any questions about the 2035 RTP update or accessing this information.



## 2035 Regional Transportation Plan (RTP) Update System Performance Measures for <u>Total Region</u> Trips (includes Clark, Clackamas, Multnomah and Washington counties)

August 30, 2007 preliminary draft

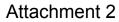
	2005	2035 No Build	Round 1 2035 Illustrative	2035 Financially Constrained	Round 2 2035 Illustrative	Round 3 2035 Illustrative
Demographic Data						
1 Population	1,899,407	3,034,596	3,034,595			
2 Households	767,020	1,208,686	1,208,686			
3 Employment	1,032,246	1,799,244	1,799,244			
Network Data						
1 a Total Miles in Network	6,828	6,913	7,076			
1 b Freeway Miles	497	510	514			
1 c Arterial Miles	6,331	6,403	6,562			
2 a Total Lane Miles	9,607	9,806	10,380			
2 b Freeway Lane Miles	1,192	1,247	1,291			
2 c Arterial Lane Miles	8,415	8,558	9,089			
3 a Total Roadway Capacity-Miles	8,808,609	9,096,272	9,622,036			
3 b Freeway Capacity Miles	2,085,913	2,219,419	2,280,577			
3 c Arterial Capacity Miles	6,722,697	6,876,854	7,341,459			
4 Total Lane Miles Added (from 2005)		199	773			
Financial Data						
1 Total System Cost (\$2007) in billions	n/a	n/a	\$21.40			
Motor Vehicle Data - Average Weekday (AWD)						
1 a AWD Total Auto Person Trips	7,048,654	11,457,519	11,416,726			
b AWD Total SOV Trips	3,672,218	5,946,941	5,909,417			
c AWD Total Vehicle Trips	5,146,167	8,365,198	8,325,554			
d AWD Total Person Trips	8,170,426	13,479,726	13,479,726			
2 AWD Total VMT	32,611,297	49,024,168	49,947,531			
AWD Total VMT % change from 2005	-	50%	53%	)		
3 AWD VMT/Capita	17.17	16.16	16.46			
VMT/Capita % change from 2005	-	-6%	-4%	)		
4 AWD VMT/Employee	31.59	27.25	27.76			
VMT/Employee % change from 2005	-	-14%	-12%	)		
5 Single Occupant Vehicle (SOV) Percent of Person Trips	44.95%	44.12%	43.84%	)		
6 Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	55.05%	55.88%	56.16%	) )		
7 AWD Motor Vehicle Average Trip Length (miles)	6.05	5.57	5.71			
8 Home-Based-Work Average Trip Length (miles)	9.09	8.56	8.69			
9 Auto Occupancy	1.37	1.37	1.37			
Motor Vehicle Data - PM 2 Hour Peak						
1 PM 2-HR Motor Vehicle Average Travel Time (minutes)	14.77	16.82	16.26			
2 PM 2-HR Average Motor Vehicle Travel Speed (miles per hour)	28.46	24.61	24.46			
3 a PM 2-HR Total Congested miles ( $v/c > 0.9$ ) (percentage of total miles in network)	210(3.08%)	857(12.39%)	664(9.39%)			
3 b PM 2-HR Freeway Congested miles (percentage of freeway miles in network)	64(12.89%)	128(25.05%)	111(21.68%)			
3 c PM 2-HR Arterial Congested miles (percentage of arterial miles in network)	146(2.31%)	729(11.38%)	553(8.43%)			
4 PM 2-HR Motor Vehicle Hours	216,980	406,782	391,868			
5 a PM 2-HR Motor Vehicle Hours of Delay (percentage of total PM 2 Motor Vehicle Hours)	8,540(3.94%)	52,464(12.90%)	36,539(9.32%)			
5 b PM 2-HR Freeway VHD (percentage of total PM 2 Motor Vehicle Hours)	4,965(2.29%)	23,096(5.68%)	15,552(3.97%)			
5 c PM 2-HR Arterial VHD (percentage of total PM 2 Motor Vehicle Hours)	3,575(1.65%)	29,367(7.22%)	20,987(5.36%)			

	2005	2035 No Build	Round 1 2035 Illustrative	2035 Financially Constrained	Round 2 2035 Illustrative	Round 3 2035 Illustrative
Motor Vehicle Data - Midday 1 Hour						
1 MD 1-HR Motor Vehicle Average Travel Time (minutes)	12.61	13.07	12.78			
2 MD 1-HR Average Motor Vehicle Travel Speed (miles per hour)	31.95	30.48	29.69			
3 a MD 1-HR Total Congested miles ( $v/c > 0.9$ ) (percentage of total miles in network)	47(0.69%)	261(3.78%)	160(2.26%)			
3 b MD 1-HR Freeway Congested miles (percentage of freeway miles in network)	20(4.02%)	90(17.65%)	57(11.15%)			
3 c MD 1-HR Arterial Congested miles (percentage of arterial miles in network)	27(0.43%)	171(2.67%)	102(1.56%)			
4 MD 1-HR Motor Vehicle Hours	71,973	121,969	118,613			
5 a MD 1-HR Motor Vehicle Hours of Delay (percentage of total MD 1 Motor Vehicle Hours)	497(0.69%)	4364(3.58%)	2171(1.83%)			
5 b MD 1-HR Freeway VHD (percentage of total MD 1 Motor Vehicle Hours)	361(0.50%)	2718(2.23%)	1486(1.25%)			
5 c MD 1-HR Arterial VHD (percentage of total MD 1 Motor Vehicle Hours)	136(0.19%)	1647(1.35%)	685(0.58%)			
Freight Data - Average Weekday (AWD)						
1 AWD Total Truck Trips	128,441	212,479	212,479			
2 AWD Truck Average Trip Length (miles)	24.37	29.03	24.68			
4 Freight Network Miles	1,040	1,041	1,060			
Freight Network Miles added from 2005	-	1	20			
3 Freight Network Lane Miles	2,252	2,274	2,398			
Freight Network Lane Miles added from 2005	-	23	146			
Freight Data - PM 2 Hour Peak						
1 PM 2-HR Truck Average Travel Time (minutes)	40.35	52.38	48.13			
2 PM 2-HR Truck Hours	4,542	9,755	5,418			
3 PM 2-HR Truck Vehicle Hours of Delay (time accrued above $v/c > 0.9$ )	246	1,825	637			
4 PM 2-HR Congested Freight Network Miles	111	298	240			
Freight Data - Midday 1 Hour						
1 MD 1-HR Truck Average Travel Time (minutes)	36.65	44.11	40.82			
2 MD 1-HR Truck Hours	2,997	6,038	3,338			
3 MD 1-HR Truck Vehicle Hours of Delay (time accrued above $v/c > 0.9$ )	28	424	110			
4 MD 1-HR Congested Freight Network Miles	26	148	87			
Transit Data						
AWD Total Transit Trips (originating riders)	268,522	532,857	570,405			
2. AWD Transit Revenue Hours						
3. Transit Percent of Person Trips	3.29%	3.95%	4.23%			
4. AWD Originating Riders Per Revenue Hour *						
5. Percent Covered Households (w/in 1/4 mile)	61%	54%	55%			
6. Percent Covered Employment (w/in 1/4 mile)	81%	75%	76%	)		
Pedestrian Data						
Total Walk Trips (does not include walk trips to transit)	528,113	944,397	955,189			
2. Walk Percent of Person Trips	6.46%	7.01%	7.09%			
Bicycle Data				=		
1. Total Bike Trips	82,496	151,566	148,772	<del>-</del>		
2. Bike Percent of Person Trips	1.01%	1.12%	1.10%			
Environmental Data						
1 Total Number of Projects within Habitat Conservation Area (FICA)	n/a	n/a	573	3		
1 a. Total Number of Projects within High HCA	n/a	n/a				
Equity Data						

<sup>\*</sup>AWD Transit Revenue Hours were calculated using existing daily peak and off-peak expansion factors.

\*\* Walk trips are consistently understated between systems because they represent only trips 6 blocks or longer in length and improvement in the pedestrian environment is not accounted for.

\*\*\* Bike trips are consistently understated between systems due to the broad area of coverage and sample size of the 1994 Metro Travel Behavior Survey.



# 2035 Regional Transportation Plan (RTP) Update System Performance Measures for Intra-UGB Trips (within Metro UGB, excludes Clark County, Washington)

August 30, 2007 preliminary draft

	2005	2035 No Build	Round 1 2035 Illustrative	2035 Financially Constrained	Round 2 2035 Illustrative	Round 3 2035 Illustrative
Demographic Data						
1 Population	1,365,564	2,001,128	2,001,128			
2 Households	565,988	330,066	830,066			
3 Employment	869,582	1,434,165	1,434,165			
Network Data		_				
1 a Total Miles in Network	3,210	3,226	3,384			
1 b Freeway Miles	201	201	204			
1 c Arterial Miles	3,009	3,025	3,180			
2 a Total Lane Miles	4,832	4,888	5,427			
2 b Freeway Lane Miles	539	550	580			
2 c Arterial Lane Miles	4,293	4,339	4,847			
3 a Total Roadway Capacity-Miles	4,410,187	4,465,562	4,966,707			
3 b Freeway Capacity Miles	1,058,214	1,082,115	1,137,376			
3 c Arterial Capacity Miles	3,351,974	3,383,448	3,829,331			
4 Total Lane Miles Added (from 2005)		56	595			
Financial Data						
1 Total System Cost (\$2007) in billions	n/a	n/a	\$21.40			
Motor Vehicle Data - Average Weekday (AWD)						
1 a AWD Total Auto Person Trips	5,110,453	7,571,365	7,524,583			
b AWD Total SOV Trips	2,660,070	3,909,298	3,872,441			
c AWD Total Vehicle Trips	3,729,208	5,518,623	5,476,830			
d AWD Total Person Trips	5,979,609	9,073,999	9,059,468			
2 AWD Total VMT	20,045,811	27,204,791	27,854,528			
AWD Total VMT % change from 2005	-	36%	39%			
3 AWD VMT/Capita	14.68	13.59	13.92			
VMT/Capita % change from 2005	-	-7%	-5%	· •		
4 AWD VMT/Employee	23.05	18.97	19.42			
VMT/Employee % change from 2005	-	-18%	-16%			
5 Single Occupant Vehicle (SOV) Percent of Person Trips	44.49%	43.08%	42.74%			
6 Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	55.51%	56.92%	57.26%			
7 AWD Motor Vehicle Average Trip Length (miles)	5.16	4.72	4.88			
8 Home-Based-Work Average Trip Length (miles)	7.54	7.06	7.24			
9 Auto Occupancy	1.37	1.37	1.37			
Motor Vehicle Data - PM 2 Hour Peak	-		•		•	
1 PM 2-HR Motor Vehicle Average Travel Time (minutes)	13.15	15.18	14.67			
2 PM 2-HR Average Motor Vehicle Travel Speed (miles per hour)	24.80	19.90	21.23			
3 a PM 2-HR Total Congested miles (v/c >0.9) (percentage of total miles in network)	180(5.60%)	665(20.60%)	501(14.82%)			
3 b PM 2-HR Freeway Congested miles (percentage of freeway miles in network)	58(28.79%)	105(52.18%)	91(44.51%)			
3 c PM 2-HR Arterial Congested miles (percentage of arterial miles in network)	122(4.05%)	560(18.50%)	411(12.91%)			
4 PM 2-HR Motor Vehicle Hours	135,004	231,721	222,447			
5 a PM 2-HR Motor Vehicle Hours of Delay (percentage of total PM 2 Motor Vehicle Hours)	7,751(5.74%)	44,163(19.06%)	31,104(13.98%)			
5 b PM 2-HR Freeway VHD (percentage of total PM 2 Motor Vehicle Hours)	4,506(3.34%)	18,591(8.02%)	13,253(5.96%)			
5 c PM 2-HR Arterial VHD (percentage of total PM 2 Motor Vehicle Hours)	3,245(2.40%)	25,572(11.04%)	17,851(8.02%)			

Motor Vehicle Data - Midday 1 Hour   1		2005	2035 No Build	Round 1 2035 Illustrative	2035 Financially Constrained	Round 2 2035 Illustrative	Round 3 2035 Illustrative
MD 1-HR Morey Vehicle Average Travel Time (minutus)	Motor Vehicle Data - Midday 1 Hour	2003	2000 NO DUITU	mustrative	Constrained	mustrative	mustrative
2 MD 1-HR Average Motor Vehicle travel Speed (miles per hour)   77.98   24.24   25.81   3 & MD 1-HR Rotal Congested miles (yc 2-00) [percentage of total miles in network)   2010.95%   79(9).86%   57(2).80%   3 & MD 1-HR Arteria Congested miles (percentage of treavy miles in network)   2010.95%   79(9).86%   57(2).80%   3 & MD 1-HR Arteria Congested miles (percentage of arterial miles (percentage of arterial miles (percentage of arterial miles (percentage of treat miles (percentage of arterial miles (percentage of total MD 1.00   2010.95%   2010.95%   2010.95%   5 & MD 1-HR Arterial Congested miles (percentage of total MD 1.00   10 Miles		11.00	11.57	11.28			
3 a MD 1-HR Total Congested miles (v? × 9.09 (spercentage of total miles in network) 3 b MD 1-HR The Renews (congested miles (percentage of feered miles in network) 20,097.05 (1904,005) 3 c MD 1-HR Arterial Congested miles (percentage of sterial miles in network) 4 MD 1-HR Moder Vehicle Hours 5 a MD 1-HR Moder Vehicle Hours 6 b MD 1-HR Moder Vehicle Hours 7 b MD 1-HR Moder Vehicle Hours 8 b MD 1-HR Moder Vehicle Hours 9 b MD 1-HR Moder Vehicle Hours 10 b MD 1-HR Frenews (The Uppercentage of total MD 1 Motor Vehicle Hours) 10 b MD 1-HR Frenews (The Uppercentage of total MD 1 Motor Vehicle Hours) 2 b MD 1-HR Arterial VII D (spectrolage of total MD 1 Motor Vehicle Hours) 3 c MB 1-HR Arterial VII D (spectrolage of total MD 1 Motor Vehicle Hours) 3 c MB 1-HR Arterial VII D (spectrolage of total MD 1 Motor Vehicle Hours) 3 c MB 1-HR Arterial VII D (spectrolage of total MD 1 Motor Vehicle Hours) 4 c MB 1-HR Total VAL Thip 4 c MB 1-HR Total VAL Thip 5 c MB 1-HR Arterial VII D (spectrolage of total MD 1 Motor Vehicle Hours) 4 c MB 1-HR Total VAL Thip 5 c MB 1-HR Total VAL Thip 5 c MB 1-HR Total VAL Thip 6 c MB 1-HR Total VAL Thip 6 c MB 1-HR Total VAL Thip 7 registed Network Miles added from 2005 4 c MB 2-HR Total VAL							
3 b MD 1-HR Frenwy Congested miles (percontage of frenway miles in network)   29(995%)   79(389%)   57(280%)   3 c b MD 1-HR Moor Velucie Hours of Delay (percentage of total MD 1 Motor Velucie Hours)   448(20 %)   3924(5.54							
A   MD   1-1R Arterial Congested miles (percentage of arterial miles in network)   20/07/89   81,428   84,438							
8 MD 1-HR Motor Vehicle Fours of Delay (percentage of total MD 1 Motor Vehicle Hours)   48(1028)   392(15348)   2020(1998)     5 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   36(10886)   23(105346)   486(2178)     7 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   17(1028)   184(2178)     8 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)   18(105346)   184(2178)     8 k MD 1 MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)   18(105346)   18(1028)     9 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)   18(1028)     1 k MD 10 HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)   18(1028)     1 k MD 10 HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     1 k MD 10 HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     1 k MD 10 HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     1 k MD 10 HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     1 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     1 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     2 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     2 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     3 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     4 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     5 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     6 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     8 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor Vehicle Hours)   18(1028)     8 k MD 1-HR Freewy VHD (percentage of total MD 1 Motor VHI Percentage of tota							
S a MD 1-HR Motor Vehicle Hours of Delay (percentage of total MD 1 Motor Vehicle Hours)   34(8,0%)   394(5,54%)   300(2,9%)   1486(2,1%)   1486(2,							
S b   MD 1-HR Faeeway VHD (percentage of total MD 11 Motor Which (Hours)   17(0.20%)   134(2.07%)   134(2.07%)   135(2.07%)   134(2.0							
MD 1-HR Arterial VHD (percentage of total MD 1 Motor Vehicle Hours)   1170 (26%)   1414(2.00%)   338(0.78%)     Freight Data - Average Weeke(day (AWD)     AWD Total Truck Trips   13.22   13.48     Preight Network Average Trip Length (miles)   13.12   13.52   13.48     Preight Network Average Trip Length (miles)   13.12   13.42   13.48     Preight Network Miles added from 2005   21   22   23   23   23   23     Preight Network Miles added from 2005   14.6   14.32   13.41     Preight Network Miles added from 2005   12.5     Preight Network Average Trip Length (minutes)   26.38   35.29   32.49     Preight Network Average Trip Length (minutes)   26.38   35.29   32.49     Preight Network Average Trip Length (minutes)   26.38   24.22   1.536     Preight Network Length (minutes)   26.38   24.22   1.536     Preight Network Miles Average Trip Length (minutes)   26.38   24.22   1.536     Preight Network Miles Hours of Delay (time accrued above v/c > 0.9)   119   1.492   549     Preight Network Miles Hours of Delay (time accrued above v/c > 0.9)   12.9   1.492   549     Preight Network Miles Hours of Delay (time accrued above v/c > 0.9)   21.9   1.492   549     Preight Network Miles Hours of Delay (time accrued above v/c > 0.9)   24.8   27.9   3.75   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   27.7   37.5   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   27.7   37.5   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   27.7   37.5   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   28.4   29.7   5.100     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   27.7   37.5   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   27.8   37.5   107     MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)   28.4   29.7   29.8							
1 AWD Total Truck Irips				, , ,			
1 AWD Total Truck Irips	Freight Data - Average Weekday (AWD)						
4 Freight Network Miles added from 2005	1 AWD Total Truck Trips	53,249	77,808	77,808			
4 Freight Network Miles added from 2005	2 AWD Truck Average Trip Length (miles)	13.12	13.52	13.48			
Freight Network Lane Miles added from 2005	4 Freight Network Miles	631	634	652			
Freight Data - PM 2 Hr Truck Average Travel Time (minutes)  1 PM 2 HR Truck Hours 2 PM 2 HR Truck Hours of Delay (time accrued above v/c > 0.9) 2 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 2 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 2 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 2 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 2 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 3 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 4 PM 2 HR Truck Whiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Hours 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 5 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 6 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 7 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 7 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 7 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 7 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 7 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0.9) 8 PM 1 HR Truck Wehiche Hours of Delay (time accrued above v/c > 0	Freight Network Miles added from 2005	-	2	21			
Freight Data - PM 2 Hour Peak	3 Freight Network Lane Miles	1,416	1,432	1,541			
PM 2-HR Truck Average Travel Time (minutes)	Freight Network Lane Miles added from 2005	-	16	125			
PM 2-HR Truck Hours   1,526   2,422   1,526   2   1,	Freight Data - PM 2 Hour Peak						
PM 2-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)	1 PM 2-HR Truck Average Travel Time (minutes)	28.28	35.29	32.49			
PM_2-HR Congested Freight Network Miles   102   260   204	2 PM 2-HR Truck Hours	1,328	2,422	1,526			
Freight Data - Midday T Hour	3 PM 2-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)	2.19	1,492	549			
MD 1-HR Truck Hours   24.84   29.76   27.19	4 PM 2-HR Congested Freight Network Miles	102	260	204			
2 MD 1-HR Truck Hours 3 MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9) 4 MD 1-HR Congested Freight Network Miles  27 375 107 4 MD 1-HR Congested Freight Network Miles  1. AWD Total Transit Trips (originating riders) 2. AWD Transit Revenue Hours* 3. Transit Percent of Person Trips 4. AWD Originating Riders Per Revenue Hour 4. AWD Originating Riders Per Revenue Hour 5. Percent Covered Households (w/in 1/4 mile) 66% 62% 62% 6. Percent Covered Employment (w/in 1/4 mile) 88% 81% 81%  Pedestrian Data  1. Total Walk Trips (does not include walk trips to transit) 2. Walk Percent of Person Trips 6.59% 7.32% 7.47%  Bicycle Data  1. Total Bike Trips 6.4428 112,584 109,977 2. Bike Percent of Person Trips 1. 1 Total Data  Environmental Data  1. Total Number of Projects within Habitat Conservation Area (HCA) 1. Total Number of Projects within Habitat Conservation Area (HCA) 1. Total Number of Projects within High HCA 1. Tota	Freight Data - Midday 1 Hour						
3 MD 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9) 4 MD 1-HR Congested Freight Network Miles  Transit Data  1. AWD Total Transit Trips (originating riders) 2 43,216 494,950 517,007 2. AWD Transit Revenue Hours * 3. Transit Perent of Person Trips 4. AWD Originating Riders Per Revenue Hour * 5. Percent Covered Households (w/in 1/4 mile) 6. Percent Covered Households (w/in 1/4 mile) 7 Pedestrian Data  1. Total Walk Trips (does not include walk trips to transit) 2 Walk Percent of Person Trips 6 4,428 112,584 109,977 2 Bicycle Data  1. Total Bike Trips 6 64,428 112,584 109,977 2 Bike Percent of Person Trips 7 Total Data  Environmental Data  1. Total Number of Projects within Habitat Conservation Area (HCA) 1 a. Total Number of Projects within Habitat Conservation Area (HCA) 7 Na		24.84	29.76	27.19			
MD 1-HR Congested Freight Network Miles   25   133   84	2 MD 1-HR Truck Hours	801	1,416	877			
Transit Data	3 MD 1-HR Truck Vehicle Hours of Delay (time accrued above $v/c > 0.9$ )	27	375	107			
1. AWD Total Transit Trips (originating riders)       243,216       494,950       517,007         2. AWD Transit Revenue Hours*       4.07%       5.45%       5.71%         3. Transit Percent of Person Trips       4.07%       5.45%       5.71%         4. AWD Originating Riders Per Revenue Hour *       66%       62%       62%         5. Percent Covered Households (w/in 1/4 mile)       84%       81%       81%         Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       n/a       n/a         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a       n/a	4 MD 1-HR Congested Freight Network Miles	25	133	84			
2. AWD Transit Revenue Hours*       4.07%       5.45%       5.71%         3. Transit Percent of Person Trips       4.07%       5.45%       5.71%         4. AWD Originating Riders Per Revenue Hour*       66%       62%       62%         5. Percent Covered Households (w/in 1/4 mile)       66%       62%       62%         6. Percent Covered Employment (w/in 1/4 mile)       84%       81%       81%         Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       121%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a							_
3. Transit Percent of Person Trips       4.07%       5.45%       5.71%         4. AWD Originating Riders Per Revenue Hour *       ***       ***         5. Percent Covered Households (w/in 1/4 mile)       66%       62%       62%         6. Percent Covered Employment (w/in 1/4 mile)       84%       81%       81%         Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a	AWD Total Transit Trips (originating riders)	243,216	494,950	517,007			
4. AWD Originating Riders Per Revenue Hour *       66%       62%       62%         5. Percent Covered Households (w/in 1/4 mile)       84%       81%       81%         6. Percent Covered Employment (w/in 1/4 mile)       84%       81%       81%         Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1. Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a							
5. Percent Covered Households (w/in 1/4 mile)       66%       62%       62%         6. Percent Covered Employment (w/in 1/4 mile)       84%       81%       81%         Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a		4.07%	5.45%	5.71%			
6.       Percent Covered Employment (w/in 1/4 mile)       84%       81%       81%         Pedestriar Data         1.       Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2.       Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1.       Total Bike Trips       64,428       112,584       109,977         2.       Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1       Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a.       Total Number of Projects within High HCA       n/a       n/a       n/a							
Pedestrian Data         1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a		66%	62%	62%			
1. Total Walk Trips (does not include walk trips to transit)       394,105       663,867       677,131         2. Walk Percent of Person Trips       6.59%       7.32%       7.47%         Bicycle Data         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a	6. Percent Covered Employment (w/in 1/4 mile)	84%	81%	81%			
Bicycle Data       6.59%       7.32%       7.47%         1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a							
Bicycle Data   Total Bike Trips   64,428   112,584   109,977     2. Bike Percent of Person Trips   1.08%   1.24%   1.21%							
1. Total Bike Trips       64,428       112,584       109,977         2. Bike Percent of Person Trips       1.08%       1.24%       1.21%         Environmental Data         1 Total Number of Projects within Habitat Conservation Area (HCA)       n/a       n/a       573         1 a. Total Number of Projects within High HCA       n/a       n/a       n/a	2. Walk Percent of Person Trips	6.59%	7.32%	7.47%			
2. Bike Percent of Person Trips  1.08% 1.24% 1.21%  Environmental Data  1 Total Number of Projects within Habitat Conservation Area (HCA) 1 a. Total Number of Projects within High HCA  1.08% 1.24% 1.21%  573  7/a  7/a  7/a  7/a  7/a	Bicycle Data						
Environmental Data  1 Total Number of Projects within Habitat Conservation Area (HCA) 1 a. Total Number of Projects within High HCA  n/a  n/a  n/a  n/a  n/a		64,428	112,584	109,977			
1 Total Number of Projects within Habitat Conservation Area (HCA) n/a n/a 573 1 a. Total Number of Projects within High HCA n/a n/a	2. Bike Percent of Person Trips	1.08%	1.24%	1.21%			
1 a. Total Number of Projects within High HCA n/a n/a							
	1 Total Number of Projects within Habitat Conservation Area (HCA)	n/a	n/a	573			
Family Data	1 a. Total Number of Projects within High HCA	n/a	n/a				
Equity Data	Equity Data	•					

<sup>\*</sup> AWD Transit Revenue Hours were calculated using existing daily peak and off-peak expansion factors.

\*\* Walk trips are consistently understated between systems because they represent only trips 6 blocks or longer in length and improvement in the pedestrian environment is not accounted for.

\*\*\* Bike trips are consistently understated between systems due to the broad area of coverage and sample size of the 1994 Metro Travel Behavior Survey.