

2010 Mobility Report Card

Redmond's Transportation Performance Monitoring System





Introduction

The Mobility Report Card is the performance monitoring system used by the City to track implementation of the Transportation Master Plan (TMP). The City uses these reports to provide accurate information to the public about the City's progress implementing the TMP and the current condition of the transportation system. The reports also set the stage for future updates of the TMP.

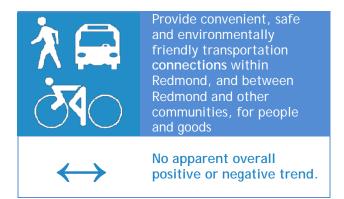
The Mobility Report Card is related to *Redmond Community Indicators*, a document that serves a similar purpose for Redmond's Comprehensive Plan, and includes many of the measures found here.

UNDERSTANDING INDICATORS

Each indicator (also known as a measure) measures some aspect of transportation that is topically related to the Transportation Master Plan. For each indicator there is a *baseline* value, a current year *observed* value, and in many cases a target, or *objective*. Redmond's goal is to move toward achieving the objectives of all of the indicators included here, which would indicate successful implementation of the Transportation Master Plan.

TABLE OF CONTENTS

	Page
Key Findings & Observations	3
Concurrency	4
Concurrency	4
Completion of 2022 Transportation Facilities Plan	4
Mode Share During AM Commute	
School Bus Ridership	
Transit	
Downtown Transit	
Overlake Transit	6
Metro & Sound Transit Ridership	7
Service Hour Targets	
Connection Frequency Targets	
Traffic	
PM Peak Hour Vehicle Miles Traveled	
Traffic Growth at Screenlines	
Traffic Growth by Transportation Management District	
Roadway Level of Service by Screenline	
Multimodal Environment	
Pedestrian Environment	
Bicycle Environment	
Collisions	
Planning for the Future	
Status of Three-Year Priority Action Plan	



Transit: Ridership on Metro and Sound Transit decreased 12.6% and 6.1% respectively. Prior to 2009, ridership had increased five of the last six years. Twelve of fifteen local service hour targets have been met, as well as two of five local connection frequency targets.

Safety: The number of collisions decreased in 2009, as did the number of collisions involving pedestrians or bicycles.

Pedestrian & Bicycle Environments: The pedestrian environment in Downtown continues to improve: 53% is "supportive" or better. Overlake Village and Redmond's multi-modal corridors are also top priorities. The City continues to complete portions of the 2022 Bicycle Priority Network.

Traffic: PM peak-hour vehicle miles traveled decreased slightly from 2008 to 2009. Traffic data by transportation management district and by screenline is updated biennially and will be updated in next year's report.

Mode Split: Approximately 36% of commuters surveyed in the Commute Trip Reduction survey chose an alternative to driving alone to work in 2009. The next survey will be conducted in 2011.

Transportation System Completion: Tracking the rate that Transportation Facility Plan (TFP) projects and programs are completed, funded or partially funded is critical to ensuring that the City's transportation system keeps pace with growth. Over 50% is planned to be completed within the next six years; reaching this level of completion depends on adequate revenues.



Mayor Marchione prepares to cut the ribbon to open the Bear Creek Parkway extension, a key link in the City's transportation system.

GO figure

Numbers at your fingertips

How Much/Many?	Of What?	Trend
9,200	Students riding the bus to school	\leftrightarrow
730	Traffic collisions not involving pedestrians or bicyclists	\leftrightarrow
29	Collisions involving pedestrians or bicyclists	\leftrightarrow
7.6%	Traffic growth for selected intersections since 1996 (2008)	↑
36%	AM commuters traveling by non-single occupancy vehicle	↑

Data for 2009 unless otherwise noted. Visit www.redmond.gov/insidecityhall/planning/compplanning/indicators.asp for more information about the above figures.



Baseline ('09): 1.31 Observed ('09): 1.31 Objective ('22): 1.00

Trend: TBD

As of the end of 2009, there are 8,963 mobility units available. There is a total supply of 37,462 mobility units and a total demand of 28,499 mobility units.

The objective is to keep funding for transportation facilities (supply) and pace of growth (demand) in balance.

Source: Public Works and Planning Departments

Updated January 2010

Completion of 2022 Transportation Facilities Plan

City role: Direct
Percentage of dollars spent on or allocated to projects and programs in the 2022

Transportation Facilities Plan compared to total anticipated 2022 TFP project costs.

Baseline ('05): 5% Observed ('09): 54% Objective ('22): 100%

Trend: \leftrightarrow

A functioning transportation system is critical to Redmond's quality of life and economic vitality. Investment in transportation in Redmond includes the obvious, such as lane paving and sidewalk extensions. It also includes unseen projects like signal synchronization and planning for the undergrounding of utilities.

The reported figure includes dollar amounts from TFP projects or programs that are complete, funded, or partially funded. This indicator helps determine the extent to which Redmond is achieving the transportation network envisioned to exist in 2022. It is dependent on City revenue and outside funding sources being available for transportation projects.

Note: During 2009 the City increased the number of projects included in the 2022 Transportation Facility Plan to provide increased people moving capacity for increased 2022 growth targets, therefore decreasing the percent complete, funded, or partially funded.

Source: Public Works Department

Updated April 2010

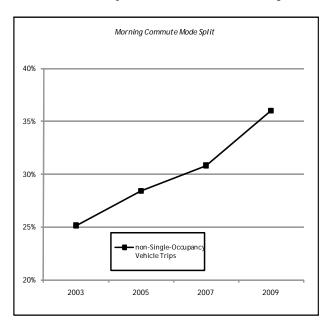
Mode Share During AM Commute City role: Indirect Percentage of "CTR-affected" (generally full-time, day shift employees in organizations with more than 100 employees) employees arriving to work by a method other than single-occupancy vehicle.

Baseline ('03): 25% Observed ('09): 36% Objective ('22): 30%

Trend: 1

Redmond city government strives to provide mobility choices for people who live in, work in, and visit Redmond. The City achieves this by planning for multi-modal transportation infrastructure that complements the community's long-term land-use plan, and by partnering with agencies such as Metro and Sound Transit that provide public transit.

According to a survey conducted by the state Department of Transportation, 36% of "CTR-affected" (see definition in box above) employees arrived at work by a mode other than driving alone.



The graph does not capture "from work" commute trips. In addition, very large employers sample fewer employees and so are weighted less.

Source: Planning Department, State Department of Transportation

Updated March 2010

School Bus Ridership

City role: Indirect

Percentage of students riding school buses to school, based on Lake Washington School District survey.

Baseline ('04): 42% Observed ('09): 38% Objective: --

Trend: \leftrightarrow

The Lake Washington School District reports in its 2009-10 bus ridership survey that 9,200 of 24,085 (38%) students ride the bus to school. This is an increase from the 31% reported for 2008-09.

Mobility options for students depend on a number of factors, including state funding for public school transportation, the local transportation network, and locations of schools, which in turn are influenced by the City's land use policies and regulations.

Note: LWSD encompasses Redmond, Kirkland, and portions of Sammamish and unincorporated King County. The cited survey is conducted annually for the purpose of state transportation fund allocation. Bus passenger counts during the survey period may not represent typical passenger counts. Figures include students using Metro Transit passes for transportation to/from school.

Source: Lake Washington School District

Updated February 2010



Travel Time Targets Met

Baseline ('03): 2 Observed ('09): 2 Objective ('22): 4

Trend: ←→

Service Frequency Targets Met

Baseline ('03): 1 Observed ('09): 1 Objective ('22): 4

Trend: \leftrightarrow

Transit from Downtown to:				
	Downtown Seattle	Bellevue Transit Center	University District (Seattle)	Downtown Kirkland
Travel Time (fastest)	35	30	25+	15
Service Frequency (best)	10	30	10	30
Route #	545	232	545*	248

*With one transfer or ½-mile walk Achieved targets are bolded and italicized.

Bus service from Downtown Redmond to key regional centers remained about the same during 2009.

Source: Metro Transit
Updated March 2010

4.4: Overlake Transit

City role: Indirect

Number of travel time and service frequency targets met for regional transit connections to/from the Overlake Transit Center.

Travel Time Targets Met

Baseline ('03): 1 Observed ('09): 4 Objective ('22): 4

Trend: ←→

Service Frequency Targets Met

Baseline ('03): 2 Observed ('09): 2 Objective ('22): 4

Trend: ←→

Transit from Overlake to:				
	Downtown Seattle	Bellevue Transit Center	University District (Seattle)	Downtown Kirkland
Travel Time (fastest)	25	10	15+	20
Service Frequency (best)	10	30	10	30
Route #	545	232	545*	245

*With one transfer or ½-mile walk Achieved targets are bolded and italicized.

Bus service from the Overlake Transit Center to key regional centers remained largely unchanged in 2009. Travel time to the Bellevue Transit Center did improve slightly.

Source: Metro Transit
Updated March 2010



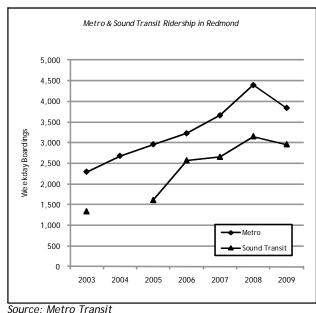
Metro

Baseline ('03): 2,296 Observed ('09): 3,841 Objective ('22): 4,133

Trend: \leftrightarrow

Sound Transit

Ridership on Metro and Sound Transit in Redmond decreased by 12.6% and 6.1%, respectively. Ridership has increased five of the last six years.



Source. Wetro Transit

Updated March 2010

7.4: Service Hour Targets for Local Transit City role: Indirect Number of local service hour and connection

Baseline ('04): 5 Observed ('09): 12 Objective ('22): 15

frequency targets met.

Trend: \leftrightarrow

Service to and from the Overlake Park & Ride and Northeast Redmond is least developed; service between the two does not exist. Service is circuitous between the Overlake Park & Ride and Overlake Transit Center.

Local Destination Service Hours					
to/from:	Redmond Town Center	Northeast Redmond	Overlake Transit Center	Overlake Park & Ride	Bear Creek Park & Ride
Downtown Transit Center	19	18	19	19	19
Route #	545, 253, 248	248	545	230	545, 253
Redmond Town Center	1	18	19	18	19
Route #	1	248	545, 221	253	545, 248, 253
Northeast Redmond	1		18	0	18
Route #			221		248
Overlake Transit Center				13	19
Route #				249	545
Overlake Park & Ride					13
Route #					253

Target service hours = 18; bolded indicates target met

Sources: Metro Transit, Sound Transit



Baseline ('03): 0 Observed ('09): 2 Objective ('22): 5

 $Trend: \longleftrightarrow$

Service frequency to/from Redmond's major transit centers to other areas in the City was mostly unchanged from 2008 to 2009. Service from the Overlake Park & Ride to/from the Overlake Transit Center continues to be somewhat circuitous. Better service exists for those willing to walk from transit stops on 156th Avenue NE to the Overlake Park & Ride area on 152nd Avenue NE.

Local Destination Service Frequency				
to/from:	Overlake Transit Center	Overlake Park & Ride	Northeast Redmond	Redmond Town Center
Downtown Transit Center	10	30	30	10
Route #	545	230	248	545
Overlake Transit Center	NS	30	NS	NS
Route #		249		

Target frequency = 15 minutes; bold and italicized indicates target met. NS = no standard.

Source: Metro Transit
Updated February 2010

7.6 PM Peak Hour Vehicle Miles Traveled (VMT) City role: Indirect

Number of vehicle miles traveled during the afternoon (PM) peak hour on Redmond arterials, based on computer modeling.

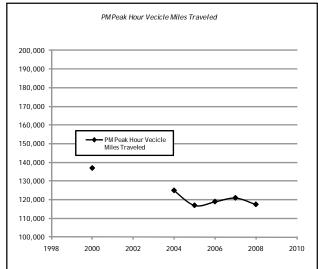
Baseline ('00): 137,000 Observed ('08): 117,500 Objective ('22): 176,000

Trend: \leftrightarrow

One "vehicle mile of travel" (VMT) represents one vehicle traveling one mile within the City on the Redmond arterial street network (including state routes). This measure cannot be directly observed or counted and thus must be estimated from other data. The estimate is for an average PM peak hour. It is obtained most readily by running the most recent update of the Bellevue-Kirkland-Redmond (BKR) traffic model.

VMT is the best variable for measuring trends in the amount of vehicular traffic in Redmond. It is also utilized in estimating air pollution, congestion and other dependent variables.

Variation between the 2000 base and 2005-2008 data reflect variations in the street network included in the model. This measure was updated using the latest available model data which represents 2008 conditions.

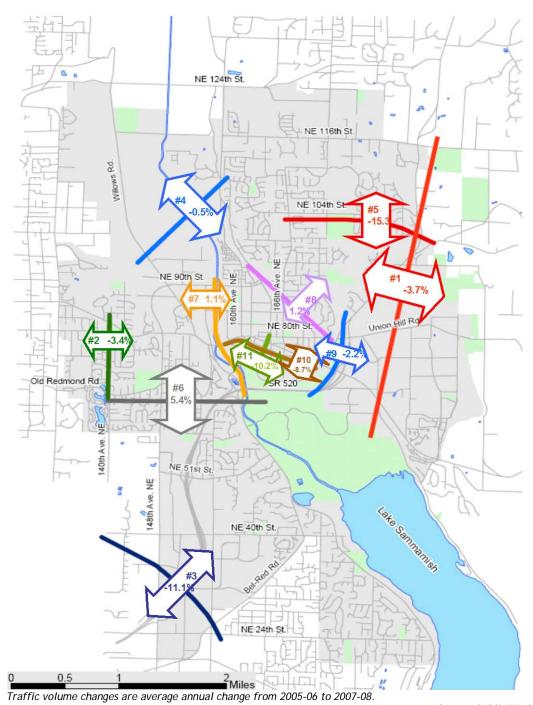


Source: Public Works Department

Annual Traffic Growth at Screenlines City role: Indirect Change in traffic volumes across key screenlines in Redmond, based on average daily weekday traffic counts. Updated

biennially.

The map below shows eleven screenlines utilized in the Transportation Master Plan. The same links will be counted each year, and reported every two years. These screenlines are also used to monitor the city's traffic volume-to-capacity ratios. Thus, this data helps provide context for interpreting changes in the screenline service levels.



Source: Public Works Department Updated February 2009



Citywide Traffic Volume Change

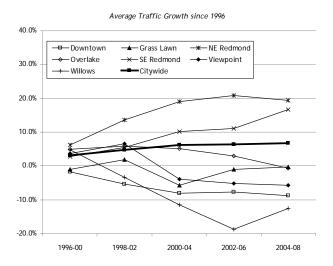
Baseline ('96): 0.0% Observed ('08): 6.8% Objective: --

Trend: 1

This data is obtained from the City's annual traffic count program. Count locations are summed within Transportation Management Districts and compared to previous years. Data is for the arterials only; local streets are not included in this measure.

Occasionally, specific count locations are unavailable due to construction or for other reasons. Also, from time to time the City will revise count locations. When this occurs, the annual comparison is made using only data from count stations represented in both data sets.

Counts for the Viewpoint, Willows, and Grass Lawn TMDs are from three or fewer intersections, and so may be more volatile from year to year.



Source: Public Works Department

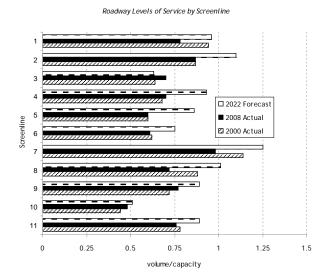
Updated March 2009

Roadway Level of Service by
Screenline
City role: Indirect

Volume-to-capacity ratios along selected screenline, using data from annual traffic counts.

The City has set Level of service (LOS) objectives for Redmond's arterials. These are described in Chapter 4 of the Transportation Master Plan.

Most screenlines experienced lower V/C ratios in 2008 vs. 2006. Screenline 2 showed a decrease of 0.45 and Screenline 8 showed a decrease of 0.17. Screenline 3, in the Overlake neighborhood, is above the V/C ratio forecasted for 2022.



Source: Public Works Department



Multimodal Corridors (% Supportive or Better)

Baseline ('07): 5%
Observed ('09): 6%
Objective ('22): 100%

Trend: ←→

Overlake Village (% Supportive or Better)

Baseline ('07): 9%
Observed ('09): 10%
Objective ('22): 100%

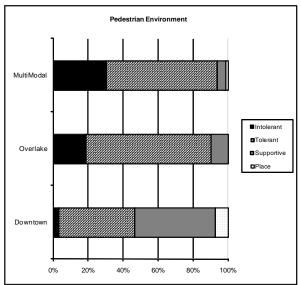
Trend: ←→

Downtown (% Supportive or Better)

Baseline ('07): 45% Observed ('09): 53% Objective ('22): 100%

Trend: ↑

The City has set objectives for improvements in its pedestrian environment. The highest priorities are the two urban centers - Downtown and Overlake, and commercial portions of multi-modal corridors: pedestrian environments in these areas should be 100% "supportive" or "pedestrian place" by 2022. Citywide the objective is to reach 100% "tolerant" or better pedestrian environments.



Source: Public Works Department

Updated March 2010

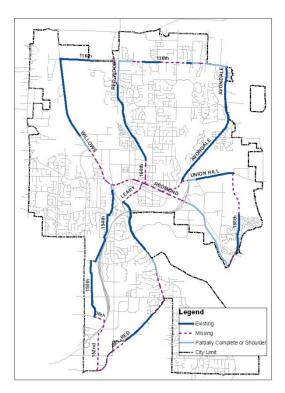


Baseline ('07): 51% Observed ('09): 55% Objective ('22): 100%

Trend: ↑

Redmond's Bicycle System Plan (chapter 5B of the Transportation Master Plan) identifies primary bicycle corridors, secondary bicycle corridors, and priorities for completion by 2022. Below is a map of the 2022 priority areas - 55% of bicycle system mileage targeted to be complete by 2022 is now complete.

In Redmond's urban centers, missing links include facilities along 152nd Avenue NE in Overlake and Leary Way in Downtown.



Source: Public Works Department Updated March 2010



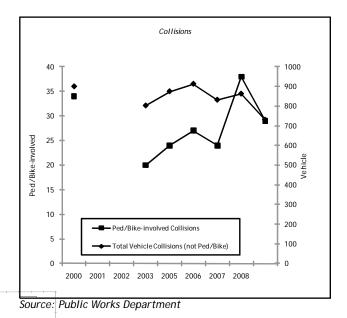
Vehicle Collisions not involving pedestrians or bicyclists

Vehicle collisions involving pedestrians or bicyclists

Baseline ('00): 34 Observed ('09): 29 Objective ('22): <20

Trend: ↔

The primary objective of the City's Transportation Master Plan is to ensure the health and safety of users of the transportation system. This indicator reflects the extent to which the City is achieving that objective. Many projects and programs that improve pedestrian and bicycle safety will also encourage travel by those modes. Note that many bicycle and pedestrian "incidents" (minor collisions and near misses) go unreported. The number of collisions may increase in the future because of the increase in the number of trips taking place in Redmond.



Updated March 2010

- 12 -

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7.9: Status of Three-Year Priority Action Plan City role: Direct Status of actions scheduled to begin in 2005-07 (from Transportation Master Plan, chapter 9).

Complete:2985% of totalIn Progress:39% of totalFuture:26% of total

	Action	Status as of March 2010			
1. Ordin	1. Ordinance and Council Actions				
1.a	TMP Adoption/Update Transportation Element	Complete			
1.b	Concurrency Management	Complete.			
1.c	Business Tax Extension	Complete			
1.d	Impact Fee Ordinance Update	Complete			
2. STUDII	es and Plans				
2.a	Downtown HCT Corridor/Station	Complete			
2.b	Impact Fee Update	Last updated in 2009			
2.c	Overlake Plan	Phase I Complete, Phase II Underway			
2.d	Adequate Maintenance	<u>Future</u>			
2.e	Street Design Standards	In Progress			
2.f	Targeted Safety Program	Complete			
Z.g	Union Hill/Novelty Hill Network	Complete			
Z.h	Local Transit Service Study	Complete			
2.i	2006 Mobility Report Card	Complete			
Z.j	Freight and Goods Study	Complete			
Z.k	North South Study - Willows North	Complete			
3. DESIGN ONLY					
3.a	164 th Extension Across RR Right-of-Way	Complete			
3.b	Design Downtown Couplet Conversion (Downtown East- West Corridor Study)	Complete			
3.c	West Lake Sammamish Parkway	Complete			

3.d	Red-Wood Road	Complete
3.e	BNSF Corridor	In Progress
3.f	172 nd Extension	Complete
4. Const	RUCTION PROJECTS	
4.a	SR 520 Bikeway Connection to Sammamish River Regional Trail	Complete
4.b	156th Ave NE Sidewalk Improvements from NE 59th St to NE 61st St	Complete
4.c	Union Hill Rd Phase II from Avondale Rd to 178 th PI NE	Complete
4.d	NE 116th St Phase I	Complete
4.e	Redmond Way/NE 76 th St. Intersection Modifications	Complete
4.f	East Lake Sammamish Pkwy Intersection Improvements	Complete
4.g	NE 83rd St Improvements from 160th Ave NE to 161st Ave NE	Complete
4.h	Old Redmond Rd Improvements from 132 nd Ave. NE to 140 th Ave. NE	Complete
4.i	Redmond Intelligent Transportation System Phase I (Overlake)	Complete
4.j	Redmond Intelligent Transportation System Phase II (Redmond Way)	Complete
4.k	NE 85 th St. Re-channenlization from 156 th Ave. NE to 164 th Ave. NE	Complete
4.1	164 th Ave NE Re-channelization from NE 80 th St to NE 87 th St	<u>Future</u>
4.m	Bear Creek Parkway Extension	Complete

Source: Public Works Department