



# 2011 Bellevue Downtown Commute Mode Share Survey



**Report prepared for  
City of Bellevue  
and  
Washington State Department of Transportation**



**Washington State  
Department of Transportation**

*For questions regarding the 2011 Downtown Commute survey or report, contact:*

**Michael Ingram, Senior Transportation Planner**

City of Bellevue Transportation Department

P.O. Box 90012

Bellevue, WA 98009-9012

425-452-4166

[mingram@bellevuewa.gov](mailto:mingram@bellevuewa.gov)

**Rebecca Elmore-Yalch**

Senior Vice President

ORC International

Public Services

One Union Square

600 University Street, Suite 2704

Seattle, WA 98101-4151

206-624-6465

[becky.yalch@orcinternational.com](mailto:becky.yalch@orcinternational.com)

# Table of Contents

<b>Background and Objectives .....</b>	<b>5</b>
Introduction .....	5
<b>Research Design .....</b>	<b>8</b>
Methodology .....	8
Sample Frame .....	8
Recruiting of Participating Small Businesses (Non-CTR-affected) .....	9
Survey Administration .....	10
Additional Survey Data .....	10
Sample Information .....	11
Weighting of Data .....	12
<b>Survey Results Downtown Bellevue .....</b>	<b>14</b>
Commute Modes “Used During Previous Week” .....	14
Comparing 2008 and 2010/2011 GTEC Survey Results .....	14
Drive-Along Rate .....	14
Commute Mode Split .....	16
Frequency of Alternative Mode Usage .....	19
<b>Downtown Bellevue Respondent Profile—Current Commute Behavior .....</b>	<b>20</b>
Work Schedule .....	20
Commute Distance .....	22
Location of Residence .....	24
Telework .....	26
<b>Downtown Bellevue Respondent Profile—Potential Commute Behavior .....</b>	<b>27</b>
Likelihood to Try Alternative Modes .....	27
Opportunities to Encourage Employees to Try or Continue Using Alternative Modes .....	30
<b>Vehicle Miles Traveled .....</b>	<b>31</b>

<b>Appendices .....</b>	<b>32</b>
A – Survey Instrument .....	32
B – Worksite Recruiting Materials (GTEC Survey).....	34
C – WSDOT Data Analysis Protocols.....	39
D – Weight Calculations .....	43
E – Comparison to Previous Surveys.....	44
Drive-Along Rate.....	44
Commute Mode Split.....	46
Commute Distance .....	47
Telework .....	48
Potential Commute Behavior – Likelihood to Try Alternative Modes.....	49
Potential Commute Behavior – Opportunities to Encourage Employees to Try or Continue Using Alternative Modes .....	50

# Background and Objectives

## Introduction

Downtown Bellevue is a hub of activity for Bellevue and the greater Eastside. It has nearly eight million square feet of office space, is home to headquarters and offices for major companies as well as many small companies, is a regional draw for shopping and, increasingly, is a destination for dining and entertainment. Currently, there are over 40,000 jobs and more than 10,000 residents in Downtown. Regional policies and plans encourage accommodation of new jobs and housing in designated urban centers, including Downtown, the only designated urban center in Bellevue. City policies and plans also identify Downtown as the location for much of the growth and development to occur in Bellevue in the coming years. By 2020, the City expects Downtown to have 55,000 jobs and 14,000 residents.

With growth, comes need to support increased levels of transportation demand. The City has adopted roadway level of service standards for each area of the community and the standards for Downtown allow for a higher level of vehicle delay than other commercial and mixed use areas. However, as more and more activity occurs in Downtown, it becomes increasingly challenging to maintain convenient automobile access for visitors, workers and residents as well as facilitate efficient delivery of goods, especially at peak periods of the day. The Downtown Plan identifies targeted



*Northeast 4th Street in Downtown Bellevue*

expansions of roadway capacity that are expected to be implemented over time and traffic signal system improvements now underway and planned also help to reduce delay and enhance capacity. However, reducing or shifting the demand for roadway space through “Transportation Demand Management” (also known as “Mobility Management”) strategies is also part of the mix.

In the early 1990s, the City established targets for the proportion of commute trips to Downtown (as well as certain other employment centers in the city) that are to occur by modes of travel other than driving alone. For Downtown, the current target is 40% of commute trips to occur by modes other than driving alone; these include transit, carpool, vanpool, bike and walk as well as “trips” avoided through telework and compressed work week schedules. Commute trips are a policy focus because Downtown (and Bellevue as a whole) is a major employment center and because commute trips occur regularly, typically five days/week and often during the AM and PM peak hours, when the roadway network is under the most stress. To the extent that a proportion of drive-alone commute trips can be shifted to other travel modes that have less impact on the roadway network—such as transit, carpooling, vanpooling—the existing or potentially feasible roadway network in Downtown is better able to serve the overall demand. Reducing drive-alone commute trips also supports environmental goals, including the City’s commitment to reduce greenhouse gas emissions. Additionally, to the extent that reduction in traffic demand delays or eliminates need for expansion of roadway capacity, there is cost savings to the public and adverse environmental and urban design impacts of larger roadways are avoided or reduced.

The State adopted the Commute Trip Reduction (CTR) law in 1991 (RCW 70.94.521-551). This law, subsequently amended in 1997 and 2006, applies to areas of Washington experiencing high levels of traffic congestion and affects worksites with 100 or more employees commuting to a location in the 6am-9am peak period. All affected worksites are required to designate a worksite employee transportation coordinator and establish a program to reduce the number and length of drive-alone commute trips to their worksite. As of March 2011, there are 30 CTR-affected worksites in Downtown, with a total of 16,523 employees (41% of total employment in Downtown).

Revisions to the CTR law in 2006 provided the option of designating areas of concentrated employment and population as Growth and Transportation Efficiency Centers (GTECs). Downtown Bellevue is a designated GTEC (one of eleven statewide and the only area in Bellevue so designated). To qualify for the designation, the City developed the Connect Downtown GTEC plan, according to a framework provided by the State, and identified feasible trip reduction targets, focusing in particular on employees at small employers (those with 5-99 employees). Plan implementation has involved extensive outreach to small employers as well as to individual employees and residents. State support initially included financial as well as technical assistance; the financial assistance was limited to the initial 2007-2009 biennium and ended in June 2009. Technical assistance continues, however.

This report details the results of the 2011 Mode Share Survey in the Downtown GTEC area and compares the results to the previous survey of the GTEC sponsored by the State in 2008. The surveys provide information about how actual travel mode choice compares to the established targets. Data gathered in the survey also provide useful additional information on commute origins and individual preferences that assist in understanding the programs or services which might encourage use, or increased use, of alternatives to drive-alone commuting.

Data used this survey project were collected in three sets:

- a. Data collected specifically for this survey project in April 2011 from 60 small worksites (fewer than 100 employees each).
- b. Certain large office buildings in Downtown are required to conduct biennial surveys of tenant employees so as to determine their performance against targets for trip reduction specified in



Figure 1: Downtown Bellevue GTEC Area

their Transportation Management Programs (which are a condition of their original project development permitting). Data collected at eight TMP buildings in November/December 2010 was used in this project. (All data collected was at small worksites, large worksites in these buildings survey separately, through the CTR program.)

- c. Large, CTR-affected worksites in Downtown conducted their regular, biennial surveys in March/April 2011. CTR data was available for 25 of the 30 worksites in Downtown that are affected by the CTR regulations (surveying at the other sites was on a slower or later timeline and not available for this project)

Details of the sampling framework and data collection protocols are in the Research Design section of this report. See Appendix E for comparison of the results of the 2011 and 2008 GTEC surveys to results of previous survey projects sponsored by the City of Bellevue and completed in 2005, 2002 and 2000, prior to the designation of the Downtown GTEC.

ORC International provided support for project planning, data collection and analysis. Their work included,

- Development of the sampling plan for small worksites;
- Data collection at small worksites;
- Data preparation;
- Data tabulation; and
- Analysis and reporting.

Financial and technical support for the project was provided by the Washington State Department of Transportation Public Transportation Division.

# Research Design

## Methodology

The 2011 GTEC Survey project utilized data collected from three groups:

- Small worksites (Non-CTR-affected), those with fewer than 100 employees and not located in buildings that conducted TMP building surveys
- Small worksites (Non-CTR-affected) located in eight TMP-affected buildings
- Large, CTR-affected worksites.

While the three data sets were collected separately, they were combined and analyzed as one for the purposes of this report. These data were analyzed to determine the commute mode share and related pertinent information regarding employee commute behavior and attitudes in each of the areas.

## Sample Frame

The City of Bellevue provided a GIS shape file showing the Downtown Bellevue boundary and ORC International purchased the most current available list of employers within those boundaries from InfoUSA. The City reviewed the sample list to remove worksites scheduled to survey through the CTR program or that already surveyed through the 2010 TMP building survey program. ORC then developed a stratified cluster sampling plan. Clusters were defined as employer worksites. The sample was stratified by number of employees (4 strata). The number of employer worksites to be surveyed as part of the final sample plan was proportionate to the percentage of employers in each stratum. A random sample of these listed companies was then pulled in proportion to the percentage of business type (based on SIC or NAICS code) and proportional to the percentage of Non-CTR-affected in Downtown Bellevue within the following company sizes:

- 5-9 Employees
- 10-19 Employees
- 20-49 Employees
- 50-99 Employees

Due to historically lower response rates from larger companies (those with between 50 and 99 employees), these segment were slightly oversampled to gather more data from employers of companies that size. Note that no specific sampling of worksites with fewer than five employees was done. The TMP survey does include some data from worksites in this cohort.

The table below illustrates the final sample plan and recruitment of businesses.

	Universe of Companies *	% of Universe	# of Worksites Recruited	% of Worksites Recruited	Expected # of Completed Surveys	Expected % of Completed Surveys
5 to 9 Employees	329	46%	55	43%	98	16%
10 to 19 Employees	225	31%	38	30%	130	22%
20 to 49 Employees	113	16%	17	13%	190	32%
50 to 99 Employees	51	7%	17	13%	182	30%
<b>Total</b>	<b>718</b>	<b>100%</b>	<b>127</b>	<b>100%</b>	<b>600</b>	<b>100%</b>
* Infogroup database						

### Recruiting of Participating Small Businesses (Non-CTR-affected)

ORC International mailed pre-notification letters to Non-CTR-affected businesses in Bellevue (number of employees between 5 and 99) excluding businesses located in those TMP buildings that had conducted building surveys. The purpose of the letters was to announce the survey, the importance of participating, and provide information regarding the intended use of the results (the pre-notification letter and other recruiting materials are reproduced in Appendix B).

Following distribution of the pre-notification letters, recruiters from ORC International’s data collection facility contacted the companies listed in the sample to recruit them for participation in the survey. Each company contacted was asked to designate a survey coordinator. As companies were recruited, an introduction letter was sent to the firm’s manager and identified “firm survey coordinator” inviting them to participate in the research effort. The letter also provided an explanation of the research purpose and provided contact information should questions arise during the survey process. Also included in the survey coordinator toolkit was a set of instructions, the appropriate number of paper survey instruments (one for each employee), and a postage pre-paid mail envelope for the return of completed surveys.

To encourage participation, the City of Bellevue provided incentive rewards to those coordinators who returned the survey packets. (A \$10 coffee gift card was sent to each survey coordinator and two \$75 restaurant gift cards were awarded by random drawing from among the 48 survey coordinators who achieved a 60% or better response rate at their worksite.)

Reminder emails and phone calls were sent to the on-site survey coordinators that had not yet returned their surveys at certain intervals during the data collection period. The purpose of the reminder was to confirm receipt of the survey package, reiterate the importance of their participation, and encourage them to distribute, collect, and return the surveys as quickly as possible. If the coordinator did not receive the survey package, the address was confirmed and a new survey package was re-sent as necessary. Of the 127 companies that initially agreed to conduct surveys, 60 companies ultimately followed through and participated (i.e. returned surveys). The companies that failed to participate either lost the surveys, did not distribute the surveys, or distributed but didn’t get them back. The final

count of returned surveys, 640, exceeded the 600 surveys anticipated in the sampling plan. Surveys from companies with fewer than 20 employees exceeded the expected numbers while those from companies with 20 to 99 employees fell slightly short of expected numbers.

The table below illustrates the outcome of the participating worksites.

	<b># of Worksites Returned Surveys (Participated)</b>	<b># of Surveys Distributed Among Participating Worksites</b>	<b>Actual # of Completed Surveys</b>	<b>% Returned Surveys Among Participating Worksites</b>
5 to 9 Employees	25	165	128	78%
10 to 19 Employees	18	227	171	75%
20 to 49 Employees	9	282	169	60%
50 to 99 Employees	8	493	172	35%
<b>Total</b>	<b>60</b>	<b>1,167</b>	<b>640</b>	<b>55%</b>

### Survey Administration

The 2011 GTEC Survey was conducted via self-administered survey. The survey instrument in all data collection efforts was the standard Washington State Commute Trip Reduction survey, either as a paper form or an online survey. The survey instrument is detailed in Appendix A. Unlike the 2008 survey, no online survey option was offered at Non-CTR-affected businesses in 2011.

### Additional Survey Data

Certain large office buildings in Downtown are required to conduct biennial surveys of tenant employees so as to determine their performance against targets for trip reduction specified in their Transportation Management Programs (TMPs), which are a condition of their original project development permitting. Data collected from small worksites at the following eight TMP buildings in November and December 2010 was used in this project (all data collected was at small worksites, large worksites in these buildings survey separately, through the CTR program):

- Bellevue Pacific Tower
- City Center Bellevue
- Civica
- Key Center
- One Twelfth at Twelfth
- Pacific Plaza
- Plaza East
- The Summit

Data at the TMP buildings was collected using the WSDOT paper CTR survey form.

Finally, survey data was obtained from the Washington State CTR program for employees of large, CTR-affected businesses. Companies affected by the CTR Law are required to administer a commute mode survey to employees every two years. Nearly all CTR-affected worksites in Downtown conducted their biennial survey in March or April 2011. Current survey data for 25 sites (of a total of 30 sites in Downtown) was available and is used in this analysis. Following are the CTR sites for which data was available:

- Ascentium
- CH2M Hill
- ChemPoint
- City of Bellevue
- Clark Nuber
- Drugstore.com
- Eddie Bauer Inc
- HDR Engineering Inc
- HNTB Corporation
- INCA Engineers, Inc.
- InfoSpace Inc
- Key Bank of Washington
- Microsoft - Bravern
- Microsoft - City Center Plaza
- Microsoft - Lincoln Square
- MulvannyG2 Architecture
- Nordstrom
- Oracle Corporation
- Overlake Hospital Medical Center (112<sup>th</sup>/12<sup>th</sup> Building worksite only)
- Parametrix Inc
- Puget Sound Energy
- Symetra Financial
- The Pokemon Company International
- US Bank of Washington
- Waggener Edstrom

### Sample Information

The following table provides detailed sample information as well as the final sample size and response rates for worksites surveyed in this study.

Data Source	# of Participating Businesses	# of Surveys Mailed	# of Surveys Returned	Response Rate
GTEC Survey	60	1,167	640	55%
TMP Survey*	8**	2,655	975	37%
CTR Survey***	25	10,675	6,241	58%
<b>Downtown Overall</b>	<b>93</b>	<b>15,758</b>	<b>7,856</b>	<b>50%</b>

\* These surveys were completed by employees at 8 TMP buildings in a survey process facilitated by the City of Bellevue in Nov/Dec 2010.

\*\*TMP surveys of small, non CTR-businesses tracked at building level, not at level of individual business/tenant; eight buildings conducted surveys.

\*\*\* This number includes all CTR data obtained from the Washington State Department of Transportation.

## Weighting of Data

The final data file was weighted using a formula developed by ORC International and reviewed by Bellevue and WSDOT. The weighting ensures proportional representation of employees at Non-CTR-affected businesses, at TMP Buildings surveyed and at large, CTR-affected worksites based on their response rates and the total number of employees each segment represents in Bellevue.

The weighting was done in three stages:

- 1) The first stage weight is a weight that adjusts for non-response at the building or employer level. In addition, because Microsoft distributed surveys to a sample of their employees in Bellevue, an adjustment was applied to the three Microsoft sites to scale them up to employee size. The first stage weight was computed as follows:

$$NONRESPONSE = \text{Number distributed} / \text{Number returned}$$

- 2) The second stage weight expands the data to represent the total number of employees at the work site level. Data for total employment at worksites in the various size cohorts was provided by the City, based on preliminary estimates of 2010 employment levels (official figures were not available in the timeline for this project). This weight was computed as follows:

$$EXPWEIGHT = \text{Number of employees} / \text{Number of surveys weighted for non-response}$$

The table below contains the data used to calculate the expansion weight for each worksite.

	Number of Employees	# of Surveys (w/ Non-Response Weight)	Expansion Weight
<b>GTEC</b> (non-CTR-affected businesses)	13,149	1,167	11.26735
<b>TMP</b> (non-CTR-affected businesses)	2,666	2,572	1.03644
<b>CTR</b> (CTR-affected businesses)	12,953	11,970	1.08212

- 3) The final step is to multiply the Non-Response Weight by the Expansion Weight as follows:

$$FINALWEIGHT = \text{Non-Response Weight} * \text{Expansion Weight}$$

Appendix D contains the data used to calculate the non-response weight and final weight for each individual worksite.

Overall, the weighting expands the data to all worksites in the 5-99 employee range and to the 25 large, CTR-affected worksites for which survey data was available; this population constitutes nearly 29,000 workers, out of a total of 40,000 workers in Downtown. Not captured in the weighting are employees working at businesses with fewer than 5 employees (almost 4,000 Downtown workers are at sites in this category). Also not covered are employees at the five CTR worksites for which survey data was not available for this analysis (almost 3000 employees) and large worksites that fall outside of the CTR requirements (generally, these are retail and hotel establishments, where commute times are spread

out and the CTR threshold of 100 employees commuting during the 6am-9am peak is not triggered; approximately 4000 Downtown workers are at sites in this category).

Because the overall dataset used a combination of data collected by random sample (the GTEC survey dataset) and by census (the methodology for the TMP and CTR datasets), a conventional inference of margin of error based on the size of the sample is not applicable. For the GTEC survey dataset, the margin of error (at a 95% level of confidence) is +/- 3.9%; however, no attempt was made to quantify a margin of error for the combined dataset used for the overall survey analysis.

# Survey Results Downtown Bellevue

## Commute Modes “Used During Previous Week”

All respondents were asked about the modes used to travel to work in the week prior to the survey period.

### Comparing 2008 and 2011 GTEC Survey Results

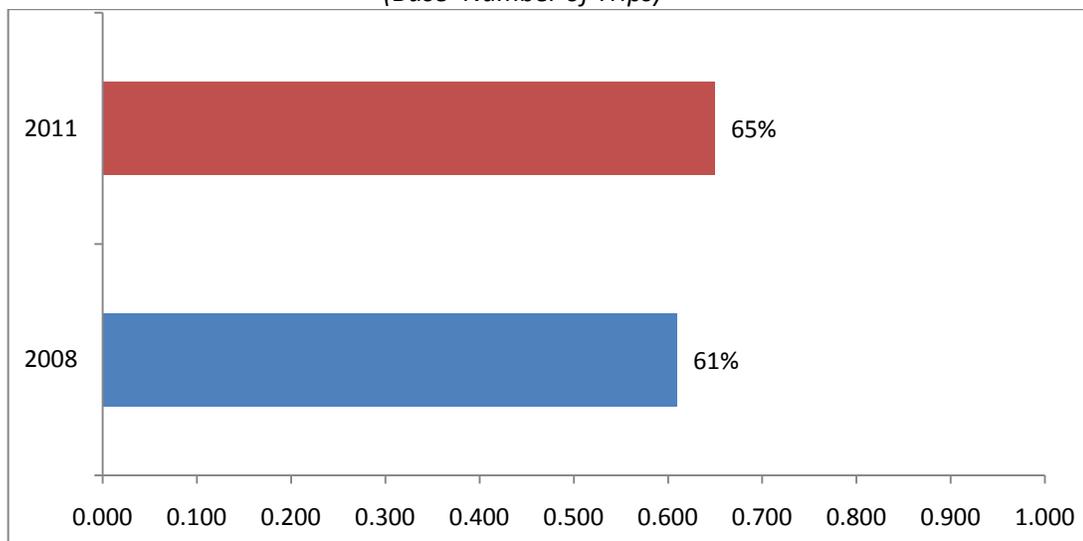
In this report, results from the 2011 GTEC survey project are compared to results of the 2008 GTEC survey project. There are some differences, however, in how data was collected and analyzed between the two survey projects. In the 2011 survey, data collected from TMP buildings was included in the overall analysis and the approach to weighting up responses was modified to avoid applying a very heavy weight to small data sets. In addition, there were some changes in how CTR survey data was processed and analyzed between 2008 and 2009 that impact CTR survey results. Comparing results from the 2008 and 2011 surveys, therefore, should be carried out cautiously.

### Drive-Along Rate

The aggregate drive-alone rate for employee commute trips for all companies in Downtown Bellevue measured 65% in 2011, an increase from the 61% reported in 2008. (Drive-alone trips are those made by driving alone in a vehicle or on a motorcycle; see Appendix C for complete discussion.)

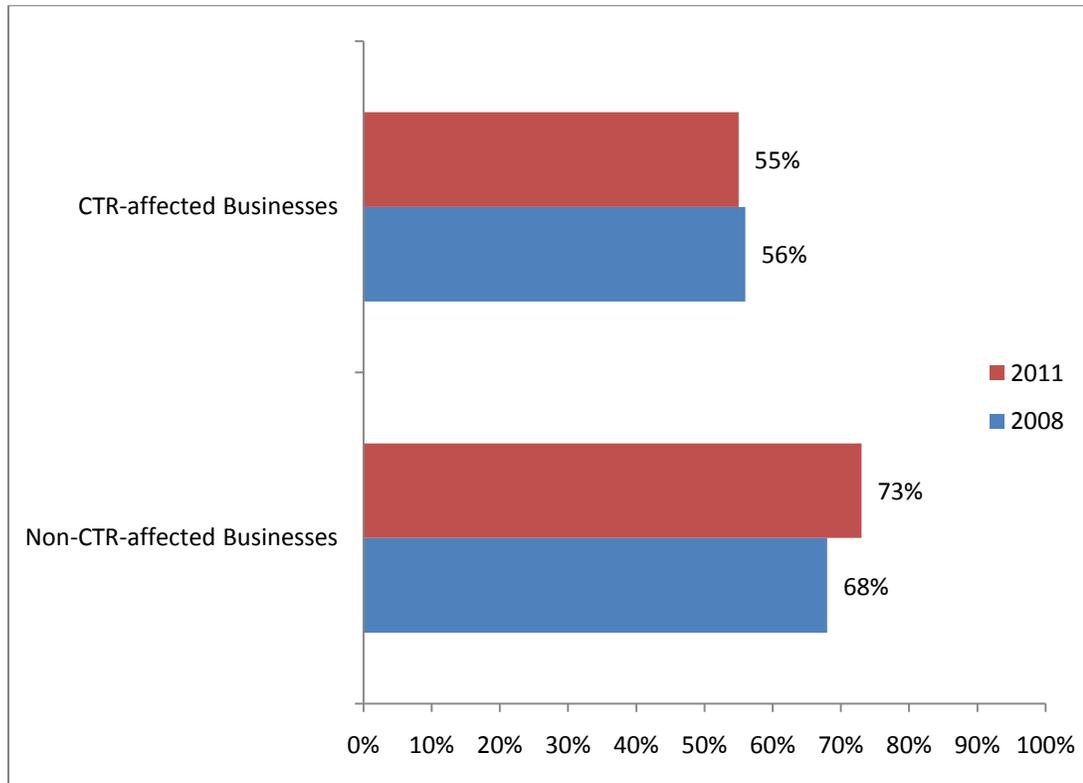
Conversely, non-drive-alone commute “Mode Split” measured 35% in 2011. This falls short of the City’s adopted 40% target for commute trips to Downtown occurring by a travel mode other than drive-alone and is a decrease from the 39% figure measured in the 2008 GTEC survey.

**Figure 2: Drive-Along Rate  
Downtown Bellevue  
(Base=Number of Trips)**



The drive-alone rate in 2011 has increased for small, Non-CTR-affected businesses (fewer than 100 employees at a worksite) and remained about the same for large, CTR-affected businesses (100 or more employees at a worksite, arriving in the 6am-9am peak). The drive-alone rate for Non-CTR-affected businesses increased to 73% in 2011 from 68% in 2008.

**Figure 3: Drive-Alone Rate by Business Size<sup>1</sup>**  
**Downtown Bellevue**  
(Base=Number of Trips)



<sup>1</sup> In this report, CTR-affected businesses are from the CTR dataset and Non-CTR-affected businesses are from the GTEC and TMP datasets combined.

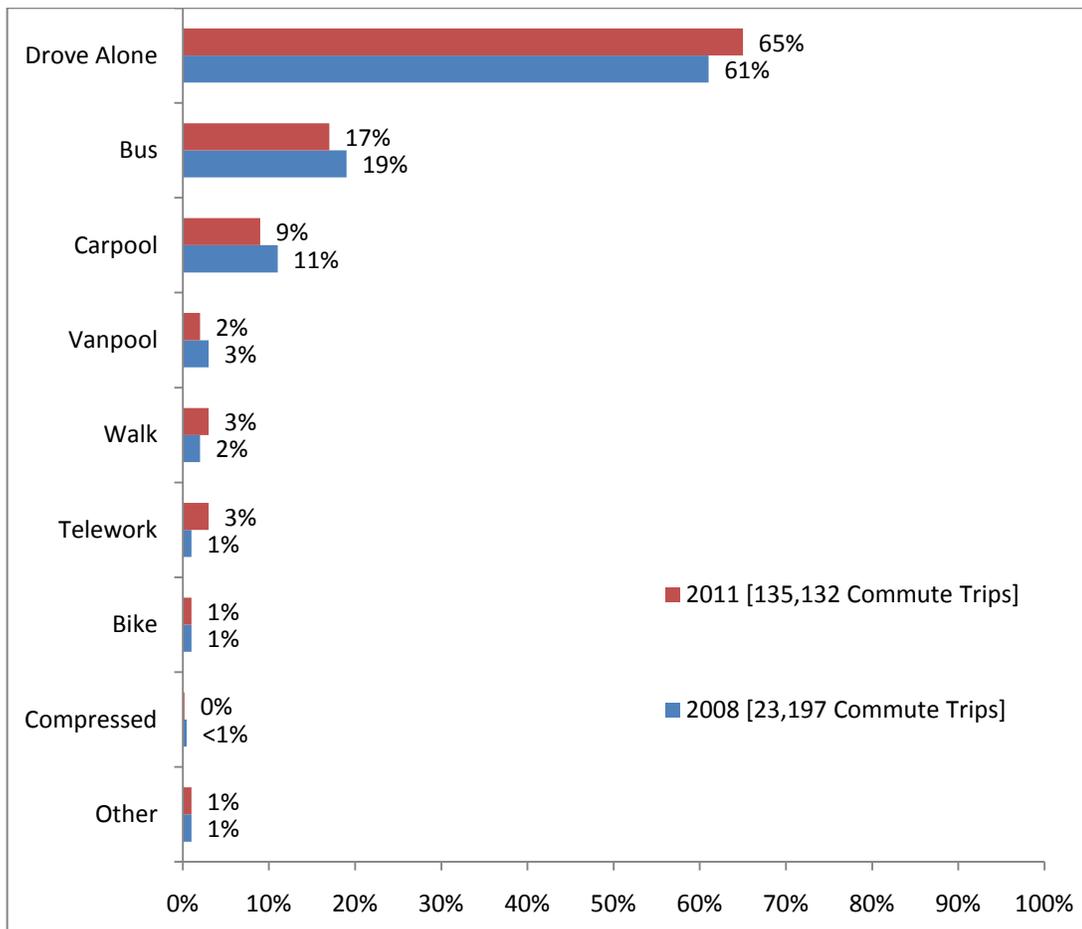
## Commute Mode Split

Commute Mode Split measures the type of transportation used by respondents to commute to work during the week prior to the survey. The measure for the entire week is based on weekly counts by commute mode divided by the total weekly count of commute trips (all mode responses except “did not work” and “overnight business trip”).

In 2011, driving alone continues to represent the majority of commute trips among Downtown Bellevue employees (65%). The proportion of commute trips made by driving alone increased from the 61% reported in 2008.

The percentage of commute trips made by bus has dropped slightly from 19% in 2008 to 17% in 2011. Commute trips by carpool have also dropped slightly from 11% in 2008 to 9% in 2011. The remaining modes represent a very small proportion of commute trips among Downtown Bellevue employees.

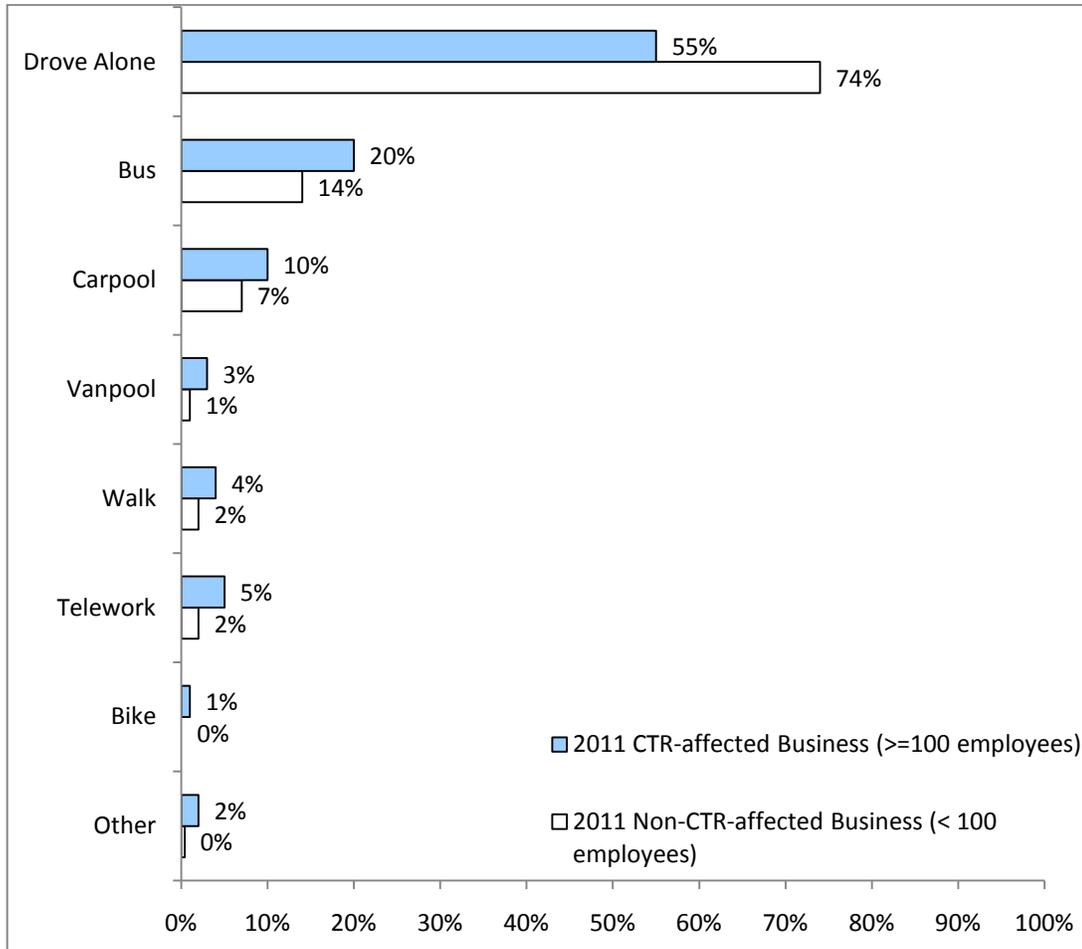
**Figure 4: Commute Mode Split**  
**Downtown Bellevue**  
 (Base=Number of Trips)



\* “Other” category trips include those for which “other” was indicated as the mode, as well as “ferry” and “train/light rail/streetcar” mode trips (respondents are asked to indicate the mode used for the longest distance on their commute).

Driving alone represents the majority of commute trips, regardless of company size. However, when comparing commute modes by company size, employees of CTR-affected businesses use alternative commute modes more than employees of Non-CTR-affected businesses. In particular, employees of CTR-affected businesses were more likely to commute by bus (20% of commute trips) than were employees of Non-CTR-affected businesses (14% of commute trips).

**Figure 5: Commute Mode Split by Company Size**  
**Downtown Bellevue**  
 (Base=Number of Trips)



The drive-alone rate of employees at businesses with 100 employees or more is 55%, the lowest drive alone rate of the business size comparison groups. The drive-alone rate for businesses with 50 or more employees is significantly lower than the drive-alone rate for businesses with fewer than 50 employees, 76% for businesses with 10 to 49 employees, and 80% for businesses with 5 to 9 employees.

- The proportion of commute trips by bus varies depending on business size, with larger businesses having a higher usage rate. One out of four (25%) commute trips among employees at businesses with 50 to 99 employees and one out of five (20%) among those at larger employers—over 100 employees—are made by bus, compared to 14% or fewer commute trips among employees at smaller worksites—less than 50 employees—that are made by bus.

**Table 6 : Commute Modes by Size of Worksite**  
(BASE = Number of Trips)

	Non-CTR Employee Size Unknown	5 to 9 Employees	10 to 19 Employees	20 to 49 Employees	50 to 99 Employees	100 or More Employees
Drove Alone	75%	80%	76%	77%	62%	55%
Bus	11%	6%	10%	14%	25%	20%
Carpool	8%	8%	7%	6%	8%	10%
Vanpool	1%	1%	1%	-	1%	3%
Walk	1%	3%	2%	2%	2%	4%
Telework	2%	1%	3%	<1%	2%	5%
Bike	1%	1%	-	<1%	<1%	1%
Other	1%	1%	<1%	<1%	<1%	2%

The table below compares the commute split among those employees who are usually scheduled to begin work between 6 and 9 a.m. and those who are not.

The drive-alone rate among those employees who are usually scheduled to begin work between 6 and 9 a.m. is significantly lower than the drive-alone rate among those who are not (64% compared to 70%).

**Table 7 : Commute Modes by Work Schedule**  
(BASE = Number of Trips)

	<b>Begin Work between 6 and 9 a.m.</b>	<b>Do Not Begin Work between 6 and 9 a.m.</b>
Drove Alone	64%	70%
Bus	18%	13%
Carpool	9%	8%
Vanpool	2%	1%
Walk	3%	4%
Telework	3%	2%
Bike	1%	1%
Other	1%	1%

#### Frequency of Alternative Mode Usage

The following table illustrates the frequency of each of the four alternative modes used by employees in Downtown Bellevue who report they used these alternative modes in the past week to commute to work.

**Table 8 : Frequency of Commute Modes Used in the “Previous Week”**  
(BASE = Respondents Who Used Each of the Alternative Commute Modes)

	<b>Carpool</b> [n <sub>w</sub> =3,792]	<b>Vanpool</b> [n <sub>w</sub> =506]	<b>Bus</b> [n <sub>w</sub> =5,771]	<b>Bicycle</b> [n <sub>w</sub> =437]
Once a week	24%	5%	11%	23%
Twice a week	18%	6%	10%	29%
Three times a week	17%	16%	13%	15%
Four times a week	13%	17%	15%	19%
Five or more times a week	28%	56%	52%	14%

## Downtown Bellevue Respondent Profile—Current Commute Behavior

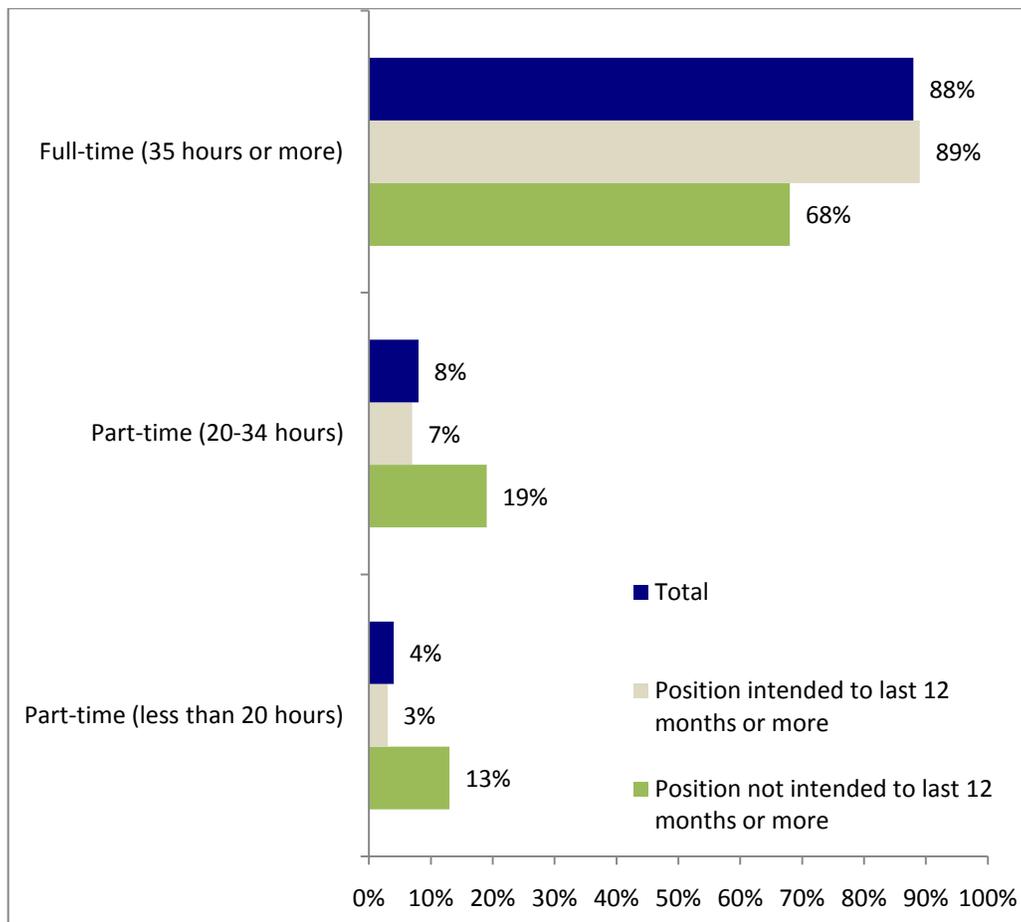
### Work Schedule

The majority (89%) of Downtown Bellevue employees surveyed report they usually work 35 or more hours per week in a position intended to last 12 months or more, similar to the 91% reported in 2008.

Similar to 2008, significantly more respondents who usually work at least 35 hours per week report they begin work at their work location between 6 and 9 a.m., compared to those who work fewer hours (91% full-time compared to 6% part-time (20-34 hours) and 3% part-time (less than 20 hours)).

- When comparing the results by the number of employees, significantly more respondents at CTR-affected businesses (with 100 or more employees) report they usually work at least 35 hours per week, than respondents at businesses with fewer than 100 employees (97% compared to 81%, respectively).

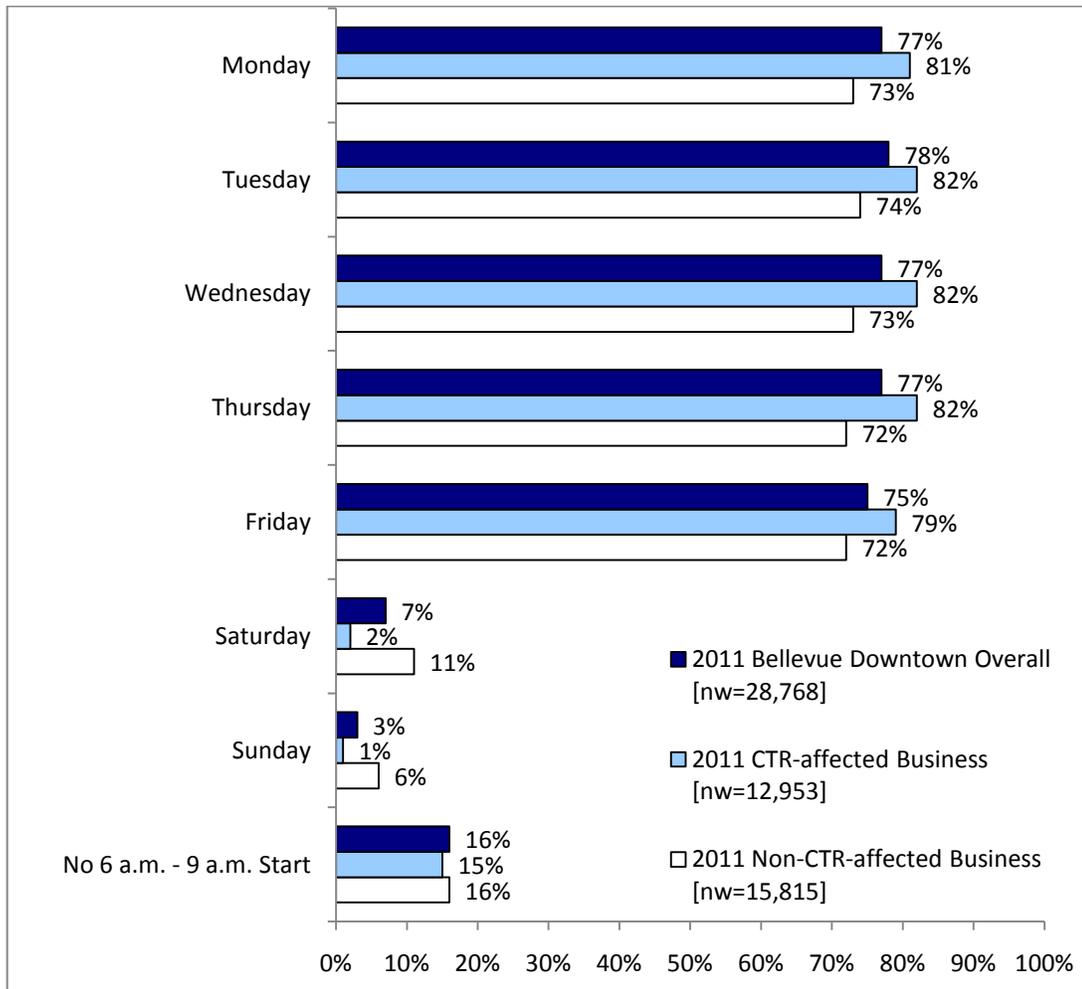
**Figure 9: Usually Work at Least 35 Hours per Week**  
**Downtown Bellevue**  
(Base=All Respondents [ $n_w=28,768$ ])



When asked about which days during the week prior to completing the survey they were scheduled to begin work between 6 and 9 a.m., the majority of Downtown Bellevue employees report they were scheduled to begin work between 6 and 9 a.m. Monday through Friday during the previous week.

- Employees at Non-CTR-affected businesses are significantly more likely than employees at CTR-affected businesses to report they were scheduled to begin work between 6 and 9 a.m. on Saturday or Sunday of the previous week (6% or more compared to 2% or less, respectively).

**Figure 10: Scheduled to Work between 6 and 9 a.m.**  
**Downtown Bellevue**  
*(Base=All Respondents)*



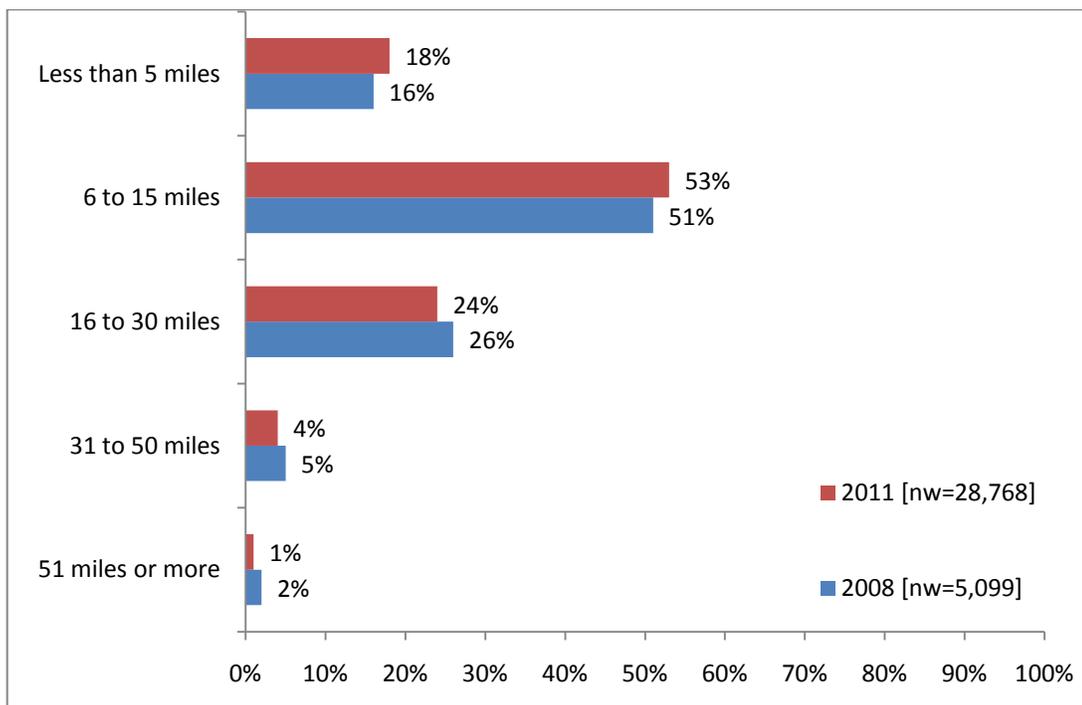
## Commute Distance

The average commute distance, regardless of commute mode, for Downtown Bellevue employees in 2011 is 13.47, lower than the 14.87 miles in 2008.

Nearly three-fourths (71%) of respondents report they commute less than 16 miles one-way to work; one percent (1%) report they commute more than 50 miles one-way to work in 2011.

- Eighteen percent (18%) of Downtown Bellevue employees indicate their one way commute distance is less than 5 miles.

**Figure 11: Commute Distance  
Downtown Bellevue  
(Base=All Respondents)**



*Note: Trips reported as more than 150 miles one-way are screened out of this analysis, as are walk mode trips >10 miles one-way in excess of 3x/week and bike mode trips >30 miles one-way in excess of 3x/week.*

The following table presents the reported one-way commute distance between respondents' home and work locations by major commute mode.

The 2011 average one-way commute distance remains similar to that in 2008 across all four major commute modes (Drive-alone, Carpool, and Bus) with the exception of Vanpool. The average distance among those who report using vanpool during the previous week to work has decreased by approximately 8 miles from 30.07 miles in 2008 to 22.14 miles in 2011.

- The average one-way commute distance of Downtown Bellevue employees who drive alone has decreased from 14.10 miles in 2008 to 13.17 miles in 2011.

**Table 12 : Commute Distance by Commute Mode**  
(Base = Respondents Who Used Each Mode during Previous Week)

	Drive-alone [n <sub>w</sub> =20,257]	Carpool [n <sub>w</sub> =3,792]	Vanpool [n <sub>w</sub> =506]	Bus / Train [n <sub>w</sub> =5,815]
5 miles or less	18%	14%	4%	12%
6 to 15 miles	55%	53%	33%	57%
16 to 30 miles	23%	27%	48%	25%
31 to 50 miles	3%	5%	11%	4%
51 miles or more	<1%	1%	4%	1%
Overall average distance	13.17 miles	14.70 miles	22.14 miles	14.42 miles

	Walk [n <sub>w</sub> =972]	Bicycle [n <sub>w</sub> =437]
Less than 1 Mile	19%	0%
1 to 2 miles	67%	7%
3 to 5 miles	5%	14%
6 to 10 miles	6%	37%
11 to 20 miles	3%	37%
21 miles or more	1%	5%
Overall average distance	1.97 miles	10.09 miles

*Note: some distortion of distance figures by mode is possible owing to limitations of the survey questionnaire:*

- For any given commute day, respondents are able input only one travel mode; those who mix modes in a trip (e.g., drive to a park & ride facility to access a bus or combine a bike+bus trip) are asked to indicate the mode used for the longest part of their commute trip.*
- Respondents specify once for the whole week the distance "from home to your usual work location" but specify their commute mode separately for each day of the week. Those (few) respondents who commute from more than one "home" destination during the course of the survey week could, if the "home" locations differ significantly in distance, introduce error. For example, if a person who usually commutes 10 miles to work by drive-alone mode were to stay twice in the week at an alternative "home" location 1 mile from work and walk to work those two days, the survey would record this person as has having made two 10-mile "walk" trips.*

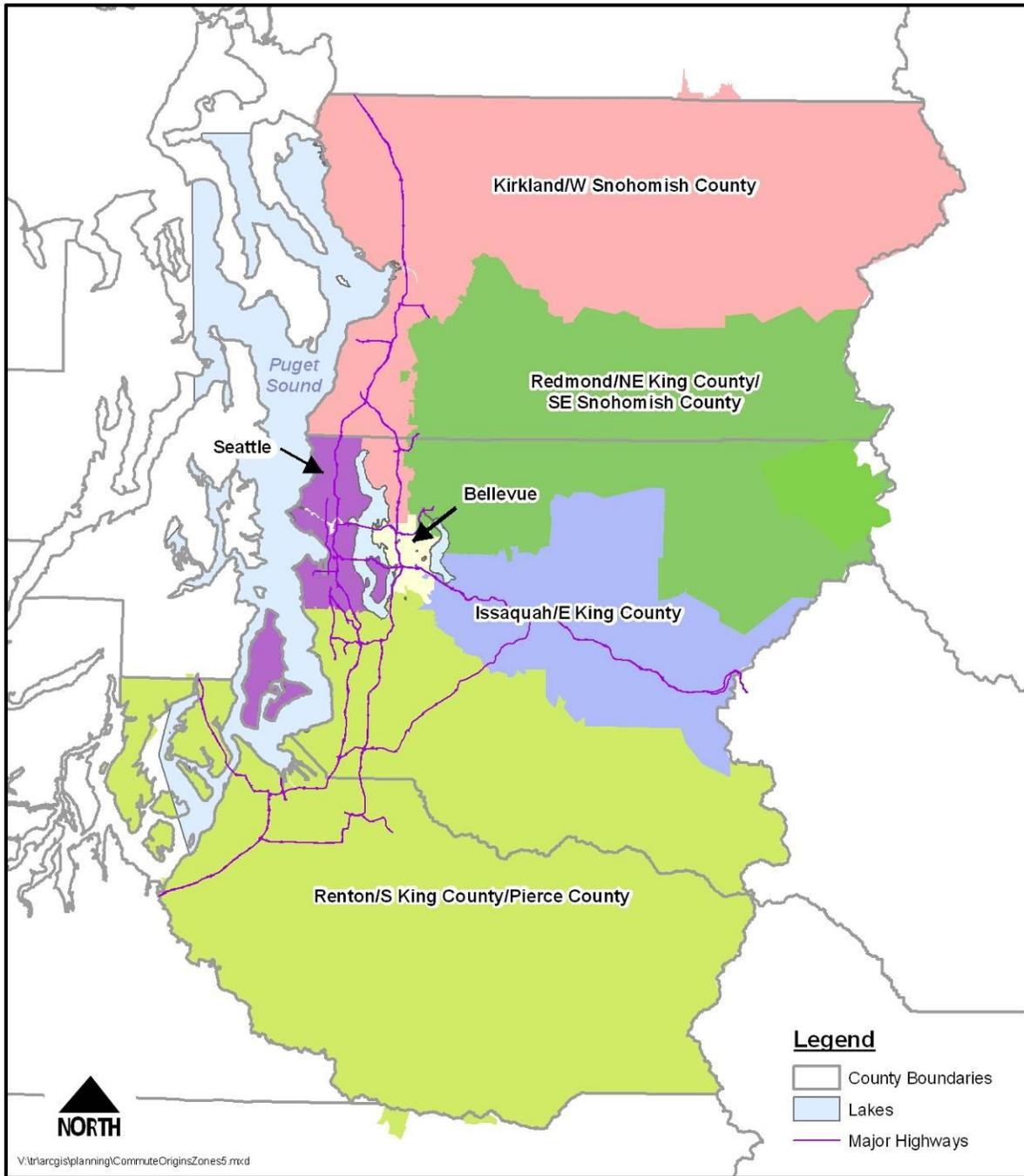
**Location of Residence**

All respondents were asked to provide their home zip code. The table below presents the area of residence by major geographic area.

**Table 13 : Residential Location of Employees**  
(BASE = All Respondents)

	<b>2011 Overall</b> [n <sub>w</sub> =28,768]	<b>2011 CTR- affected Business</b> [n <sub>w</sub> =12,953]	<b>2011 Non-CTR- affected Business</b> [n <sub>w</sub> =15,815]
Bellevue	20%	17%	23%
Seattle	21%	26%	16%
Kirkland / W Snohomish County	19%	18%	20%
Redmond / NE King County / SE Snohomish County	16%	19%	14%
Issaquah / E King County	7%	7%	7%
Renton / South King County / Pierce County	15%	11%	18%
Other	2%	1%	2%

Figure 14 : Commute Origin Zones



The following table illustrates the commute modes used by employees in Downtown Bellevue by their residence location. Because some commuters used different modes on various days of the survey week, totals are greater than 100%.

**Table 15 : Commute Mode Used in the “Previous Week” by Location of Residence**  
(BASE = All Respondents)

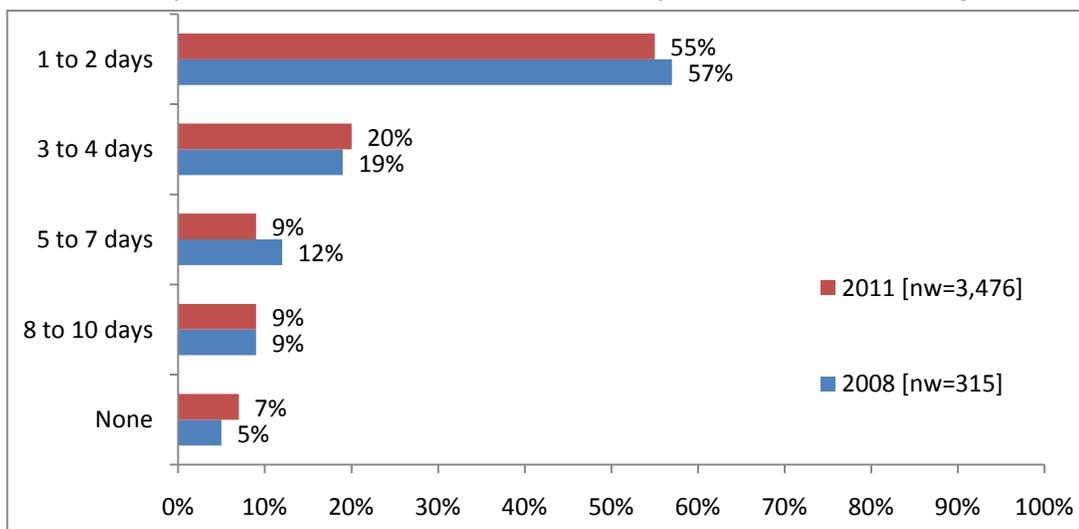
	Bellevue	Seattle	Kirkland / W Snohomish County	Redmond / NE King & SE Snohomish County	Issaquah / E King County	Renton / S King & Pierce County	Other
Drive alone	71%	72%	64%	77%	86%	73%	60%
Carpool	10%	11%	14%	17%	13%	15%	12%
Vanpool	<1%	2%	2%	1%	2%	3%	11%
Transit	16%	32%	21%	19%	8%	17%	5%
Bike	5%	9%	2%	2%	2%	3%	4%
Walk	16%	1%	<1%	<1%	<1%	1%	1%
Telework	4%	10%	5%	8%	6%	9%	15%

### Telework

More than one in ten (12%) Downtown Bellevue respondents report teleworking at least one day in two weeks, on average.

Of those respondents who, on average, telework at least one day in two weeks, more than half (55%) report they teleworked one or two days in the last two weeks.

**Figure 16: Number of Days Teleworked in Last Two Weeks**  
**Downtown Bellevue**  
(Base= Respondents Who Telework At Least One Day in Two Weeks On Average)



## Downtown Bellevue Respondent Profile—Potential Commute Behavior

### Likelihood to Try Alternative Modes

The proportion of Downtown Bellevue employees who report they take the bus to work at least occasionally (25%) remained the same as 2008 levels. Similar to 2008, slightly more than one out of eight (13%) Downtown Bellevue employees report they already carpool to work.

- The percentage of respondents who report they are likely to try or continue using carpool or vanpool to work decreased slightly between 2008 and 2011.

**Table 17: Likelihood to Try Alternative Modes**  
(BASE = All Respondents)

Mode	2011 [n <sub>w</sub> =28,768]				2008 [n <sub>w</sub> =5,099]			
	Do Now	Likely	Not Likely	Not An Option	Do Now	Likely	Not Likely	Not An Option
Carpool	13%	30%	38%	18%	16%	32%	38%	14%
Vanpool	3%	20%	53%	24%	4%	23%	55%	18%
Bus	25%	31%	30%	14%	25%	35%	27%	12%
Train	1%	15%	17%	67%	2%	16%	22%	60%
Bicycle	4%	14%	37%	46%	4%	11%	33%	52%
Walk	5%	6%	25%	64%	4%	18%	23%	55%
Telework	12%	40%	18%	30%	9%	46%	17%	28%
A compressed work week	5%	37%	22%	36%	5%	37%	18%	39%

When comparing respondents' likelihood to try alternative modes between CTR-affected and Non-CTR-affected businesses, a significantly greater proportion of Non-CTR-affected businesses employees report that most of the alternative modes are not an option for them.

- Significantly greater numbers of Non-CTR-affected business employees indicate telework (44%) and a compressed work-week (44%) are not options for them, whereas half of CTR-affected businesses' employees report they are likely to try telework (52%) and a compressed work-week (48%).

**Table 18: Likelihood to Try Alternative Modes by Business Size**  
(BASE = All Respondents)

Mode	2011 CTR-affected Business [n <sub>w</sub> =12,953]				2011 Non-CTR-affected Business [n <sub>w</sub> =15,815]			
	Do Now	Likely	Not Likely	Not An Option	Do Now	Likely	Not Likely	Not An Option
Carpool	15%	29%	43%	13%	12%	31%	34%	24%
Vanpool	4%	20%	60%	16%	2%	20%	48%	31%
Bus	30%	37%	23%	10%	20%	26%	37%	18%
Train	1%	14%	15%	70%	1%	16%	20%	64%
Bicycle	6%	18%	37%	39%	2%	11%	36%	51%
Walk	6%	6%	24%	65%	5%	6%	25%	64%
Telework	18%	52%	15%	15%	6%	29%	21%	44%
A compressed work week	5%	48%	21%	26%	5%	28%	23%	44%

The likelihood of trying alternatives to driving alone among heavy SOV commuters (those who drive alone to work 80% or more of the time) has leveled off since 2008, with the exception of a compressed work schedule and bicycle alternatives which increased slightly, and walking which decreased significantly.

- In 2011, nearly one in fifteen (6%) of the heavy SOV commuters indicate they are likely to try walking as an alternative to driving alone to work, compared to 19% in 2008.

**Table 19: Likelihood to Try Alternative Modes among Heavy SOV Mode Users**  
(BASE = Respondents Who Drive Alone to Work 80% or More of the Time)

Mode	Heavy SOV Mode Users (80% or More of the Time) [n <sub>w</sub> =16,509]			
	Do Now	Likely	Not Likely	Not An Option
Carpool	4%	31%	41%	24%
Vanpool	1%	17%	52%	30%
Bus	4%	37%	39%	19%
Train	1%	13%	19%	67%
Bicycle	1%	12%	36%	51%
Walk	1%	6%	24%	68%
Telework	8%	43%	18%	32%
A compressed work week	4%	38%	21%	36%

When comparing the likelihood of trying alternative modes to driving alone to work, those who are usually scheduled to begin work between 6 and 9 a.m. are more likely than those who are not to indicate they are likely to either already use or try alternative modes. Those who are not usually scheduled to begin work between 6 and 9 a.m. are more likely to indicate alternative modes are not an option for them.

- Those who are usually scheduled to begin work between 6 and 9 a.m. are significantly more likely than their counterparts to indicate they are likely to try telework (42% vs. 31%) and a compressed work week (39% vs. 27%).
- Significantly more Downtown Bellevue employees who are not usually scheduled to begin work between 6 and 9 a.m. indicate that telework and a compressed work week are not options for them.

**Table 20: Likelihood to Try Alternative Modes by Arrival Time**  
(BASE = All Respondents)

Mode	Begin Work between 6 and 9 a.m. [n <sub>w</sub> =23,430]				Do Not Begin Work between 6 and 9 a.m. [n <sub>w</sub> =4,353]			
	Do Now	Likely	Not Likely	Not An Option	Do Now	Likely	Not Likely	Not An Option
Carpool	13%	29%	40%	18%	14%	36%	31%	19%
Vanpool	3%	19%	55%	23%	3%	22%	48%	27%
Bus	26%	30%	30%	14%	19%	34%	34%	13%
Train	1%	15%	17%	66%	1%	13%	17%	69%
Bicycle	4%	13%	37%	46%	4%	17%	36%	44%
Walk	5%	5%	24%	65%	7%	8%	26%	60%
Telework	12%	42%	17%	29%	13%	31%	20%	37%
A compressed work week	5%	39%	22%	34%	6%	27%	24%	43%

### Opportunities to Encourage Employees to Try or Continue Using Alternative Modes

In 2011, the top five methods to encourage Downtown Bellevue employees to use or continue using alternate modes include a financial incentive for using a non-drive alone mode (38%); an opportunity to work at home (33%); an immediate ride home in case of an emergency (23%); more frequent bus service at the work site (21%); and an employer-provided car for work purposes during work hours (20%).

- Although a more flexible work schedule to meet carpool, vanpool, the bus, etc. was ranked fifth in 2008, in 2011 an employer-provided car for work purposes during work hours has replaced it as fifth.

**Table 21 : Top Five Ways to Encourage Employees to Try or Continue Using Alternative Modes**  
(BASE = All Respondents)

	Percent of Employees 2011 [n <sub>w</sub> =28,768]	Percent of Employees 2008 [n <sub>w</sub> =5,099]
A financial incentive for using non-drive alone modes	38%	43%
Opportunity to work at home (telework)	33%	37%
An immediate ride home in case of an emergency	23%	28%
More frequent bus service at the work site	21%	23%
An employer-provided car for work purposes during work hours	20%	15%

Although the top five ways to encourage Downtown Bellevue employees to use alternative modes is very similar regardless of business size, the order of item preference slightly differs in a few cases.

- Across all business sizes, Downtown Bellevue employees cite an opportunity to work at home as the second choice to encourage them to use an alternative to driving alone (27% among Non-CTR-affected businesses and 42% of CTR-affected businesses).
- Non-CTR-affected business employees are significantly more likely than CTR-affected business employees to indicate they need an employer-provided car for work purposes during work hours (25% vs. 14%) and personalized help with forming a carpool or vanpool (8% vs. 5%).

## Vehicle Miles Traveled

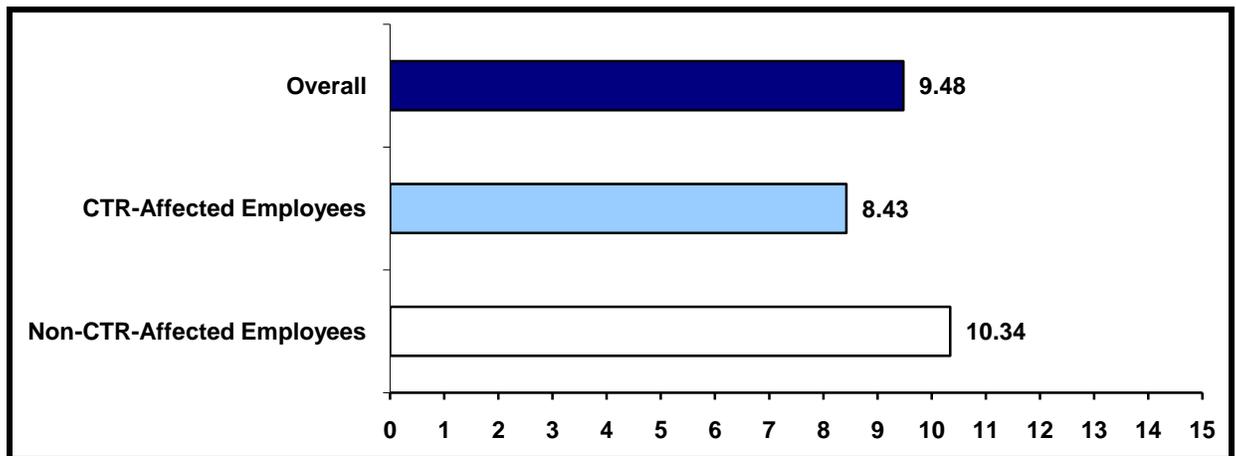
Vehicle Miles Traveled (VMT) is a measure of the average number of miles traveled by automobiles for commutes to work. Details on how VMT is calculated are provided in Appendix C. Overall, VMT is calculated based on average distance to work and the number of commute vehicle trips per employee. The number of commute vehicle trips per employee is calculated using the following weights:

- Trip by single occupant vehicle mode = 1 trip
- Trips by carpool and vanpool count as the inverse of the number of people in the carpool and vanpool, e.g., 1/2 trip for a 2-person carpool, 1/3 trip for a 3-person carpool, 1/7 trip for a 7-person vanpool, etc.
- Trips made by transit, walking, bicycling, and trips avoided through teleworking or using compressed work week schedules count as zero vehicle trips.

The overall one-way VMT rate for the Bellevue GTEC is 9.48

The VMT one-way rate for Non-CTR affected sites is greater than for CTR affected sites (10.34 compared to 8.43).

**Figure 22: Average Vehicle Miles Traveled**





7a. **ONE WAY**, how many miles do you commute from home **TO** your usual work location?

- **DO NOT** use roundtrip or weekly distance.
- Include miles for errands or stops made daily on the way to work.
- If you telework, report the miles from your residence to your worksite.
- Round off the distance traveled to the nearest mile.
- Write numbers in the boxes and fill in the corresponding circles.
- The example is for someone who lives 8 miles from work.

Example

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

7b. Last week did you ride a ferry as part of your commute?

- Yes  No

7c. Last week did you use a park-and-ride lot as part of your commute?

- Yes  No

7d. Last week did you pay for parking at work?

- Answer **YES** whether you paid by the day, or prepaid by the week, month, or year, or whether your employer reimbursed part of your parking cost.

- Yes  No

8. What is your home zip code? (Write numbers in the boxes and fill in corresponding circles.)

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

9. If you drive alone to work, which of the following would most encourage you to try using an alternative to driving alone? Mark the **three** most important to you.

- a. An employer-provided car for work purposes during work hours
- b. Transportation during lunch or breaks for personal errands
- c. An immediate ride home in case of an emergency (guaranteed ride home)
- d. A more flexible work schedule to meet carpools, vanpools, the bus, etc.
- e. A financial incentive (allowance/subsidy) for using an alternative to driving alone
- f. A financial subsidy for giving up your parking space
- g. Priority, reserved, or discounted parking for carpools and vanpools
- h. Personalized help forming a carpool or vanpool
- i. Secured, covered parking for your bicycle
- j. Lockers and showers for walkers and bicyclists
- k. On-site childcare, banking, dry cleaning, fitness center or other services
- l. On-site food service or kitchen facility
- m. Personalized help finding bus times and routes
- n. More frequent bus service at the worksite
- o. More information about commute alternatives
- p. Opportunity to work at home (telework)
- q. Improved security at park-and-ride lots
- r. More spaces at park-and-ride lots
- s. Other: \_\_\_\_\_

10. How likely would you be to try the following ways of getting to work?

	do now	likely	not likely	not an option
carpool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
vanpool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
train	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
bicycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
telework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
a compressed work week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCARTON Mark Rutlex® BM-255322-3-054321 HR06

Answer question 11 only if you rode transit (either bus or train), or a ferry as a walk-on passenger, at least once last week.

11. Last week, how many one-way transit or walk-on ferry rides did you take on each listed below (for any purpose, not just getting to and from work)? If you transferred between buses within the same system, count only one (1) ride on that system. If you transferred to another system, count a ride on each. Do not count ferry rides where you boarded with a motor vehicle. Write numbers in the boxes and fill in the corresponding circles.

King County Metro	Sound Transit	Community Transit	Pierce Transit	Kitsap Transit	Intercity Transit	Everett Transit	Island Transit	Ferry as walk-on	Skagit Transit	Other
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9

Thank you for completing the survey!

## B – Worksite Recruiting Materials (GTEC Survey)

### Prenotification letter

The letter below was sent to a list of 718 small worksites in Downtown, prior to the recruitment calls.

<p>  Post Office Box 90012 • Bellevue, Washington • 98009-9012</p> <p>[DATE]</p> <p>«CONTACT_NAME» «COMPANY_NAME» «PRIMARY_ADDRESS» «PRIMARY_CITY», WA «PRIMARY_ZIP10»</p> <p>Dear «SALUTATION»«LAST_NAME»:</p> <p>The City of Bellevue is conducting a survey to measure commute trip behavior and the transportation choices people make. The City is working with ORC International to administer this survey to understand the types of transportation employees use to get to work, the length of their commute and their usual work schedules. Information developed from the survey will allow the City to better understand the effect of policies and investments, which can then translate into improved services for your employees as well as reduced congestion on the region's roadways.</p> <p>In the next week or so, ORC International will be calling a set of randomly selected businesses in downtown Bellevue to participate in this important survey effort. If you are among those randomly selected for the survey, we encourage and very much appreciate your business's participation. The survey will take your employees approximately five minutes to complete.</p> <p>If you have any questions about this survey, you may contact Michael Ingram, Senior Planner, Bellevue Transportation Department at 425-452-4166 or <a href="mailto:mingram@bellevuewa.gov">mingram@bellevuewa.gov</a>.</p> <p>The report from the last commute Mode Share Survey, conducted in 2008, is posted on the City website at, <a href="http://www.bellevuewa.gov/modeshare_survey.htm">http://www.bellevuewa.gov/modeshare_survey.htm</a>. More information about the City's transportation planning efforts is also on the website, <a href="http://www.bellevuewa.gov/transportation.htm">www.bellevuewa.gov/transportation.htm</a>.</p> <p>Thank you in advance for your time and cooperation. The results of the survey effort will be used to improve transportation options, which aid in maintaining and enhancing economic growth and quality of life in Bellevue.</p> <p>Sincerely,</p> <p></p> <p>Goran Sparrman, P.E. Director, Transportation Department</p>
--

## Recruiting Call Script

### 2011 ~~Parametrix~~ WSDOT GTEC Survey Coordinator Recruiting Screener

[PROGRAMMERS NOTE: At this point all sample elements should be set at Interviewer\_status=1 "uncalled" or some label like that].

Hello, I'm (NAME) with ORC International calling on behalf of the City of Bellevue and the State of Washington Department of Transportation. May I please speak to [CONTACT\_NAME], or a manager or someone responsible for finding transportation options for your employees?

[IF NEEDED: We're conducting a brief research study regarding transportation and commuting options in the area. This is a public opinion survey being done for research purposes only.]

[ONCE CONTACT IS ON THE PHONE:]

[REINTRODUCE]

Hello, I'm (NAME) with ORC International calling on behalf of the City of Bellevue and the State of Washington Department of Transportation. Bellevue is conducting research as part of the State's Growth and Transportation Efficiency Center (or GTEC) program to measure commute trip behavior and transportation mode choice to maintain and enhance mobility in the future.

To do that, we would like you to be, or help us select, a coordinator for the survey effort at your company. Your involvement and time will be minimal. We will provide you with a packet of one page questionnaires to distribute to your employees. Once the surveys are completed, and returned to you, you will send them back to us in a prepaid envelope. If they have any questions about the survey or its purpose, we would be responsible for addressing any concerns they might have. Once the surveys have been returned to us the coordinator will receive a gift card and all participating employees in your area will be entered into a drawing for other prizes.

IF NEEDED: The City is working with ORC International to administer a survey to understand the types of transportation employees use to get to work, the length of their commute and their usual work schedules. Your company was chosen randomly among all of the local businesses in the City's GTEC area and we would greatly appreciate your company and employees participation in this important study.]

SCR1 [ASK IF SCREENERFLAG=1] To verify is your office located at [ORC\_ADDRESS]?

1. YES
2. NO [SKP THANK1]
3. SEND INFORMATIONAL FAX/EMAIL
4. ALREADY RECEIVED / DID SURVEY
9. DK/REFUSED [SKP THANK1]

SCR1A. [ASK IF SCR1=4] Ok, thanks for your participation, I have two real quick questions for you. First, is your business in a large building?

1. YES
2. NO
9. DK/REFUSED

SCR1B. [ASK IF SCR1=4] Finally, are there 100 or more employees in your office?

1. YES
2. NO
9. DK/REFUSED

[PROGRAMMERS NOTE: AFTER SCR1B SKIP TO THANK2 AND CREATE A NEW DISPOSITION "ALREADY DID SURVEY"]

SCR2 How many employees are in your office? [IF NEEDED: How many employees are located in your location only?]

\_\_\_\_\_ # of Employees

[PROGRAMMERS NOTE: COMPUTE NUMBER\_EMPLOYEES=Q4]

[PROGRAMMERS NOTE: IF Q4 < 5 OR IF Q4 GE 100 SKIP TO THANKNQ1]

[PROGRAMMERS NOTE: QUOTA'S SET BASED ON NUMBER OF EMPLOYEES]

Q1 Would you like to be the coordinator for your company?

[IF NECESSARY REPEAT THE RESPONSABILITIES: SAY: "We will mail you a packet of one page surveys and we ask that you distribute these to all employees in your office and encourage them to fill out the surveys. You will also be provided with a pre-addressed, pre-paid envelope that you will put the completed surveys in and drop in any mailbox so they will be mailed back to us."]

- 1 YES
- 2 NO
- 9 REFUSED

Q1a [ASK IF Q1=2] Would you be able to refer us to someone else at your company who might be willing to assist us?

- 1 YES [AT THIS POINT ASK FOR THE CONTACT INFORMATION FOR THE PERSON WHO MAY BE WILLING TO HELP. TRY TO GET THAT PERSON ON THE PHONE NOW AND SKIP BACK TO REINTRODUCE]
- 2 NO
- 9 REFUSED

Q1B [ASK IF Q1A=2] Are you sure there isn't anyone in the office who would be willing to help with this important study for the City of Bellevue?

- 1 YES – I'M SURE NO ONE WILL HELP YOU [SKP to THANK2]
- 2 NO – MAYBE THERE IS SOMEONE WHO WILL HELP YOU. [AT THIS POINT ASK FOR THE CONTACT INFORMATION FOR THE PERSON WHO MAY BE WILLING TO HELP. TRY TO GET THAT PERSON ON THE PHONE NOW AND SKIP BACK TO REINTRODUCE]
- 9 DON'T KNOW [TERMINATE]

[IF YOU GET THE NAME OF A PERSON WHO WE NEED TO CALL BACK ON Q1A OR Q1B, PLEASE TRACK THAT NAME IN THE NOTES SECTION].

Q2 [ASK IF Q1=1] Thank you for agreeing to assist us with this important study. I have a couple more questions that I need to ask in order to confirm the information that I have about your company. First, is your company located at...[PRIMARY ADDRESS]?

- 1 YES
  - 2 NO
- [PROGRAMMERS NOTE: IF Q2=1 COMPUTE MAILING ADDRESS=ORC\_ADDRESS, COMPUTE MAILING CITY=ORC\_CITY, COMPUTE MAILING\_STATE=ORC\_STATE  
COMPUTE MAILING\_ZIP=ORC\_ZIPCODE]

Q3 [ASK IF Q2=2] What is the correct address?

STREET ADDRESS \_\_\_\_\_ [PROGRAMMERS NOTE: RECODE THIS AS MAILING\_ADDRESS]

CITY \_\_\_\_\_ [PROGRAMMERS NOTE: RECODE THIS AS PRIMARY\_CITY\_FIX]

STATE \_\_ [PROGRAMMERS NOTE: RECODE THIS AS STATE\_FIX]

ZIP CODE \_\_\_\_\_ [PROGRAMMERS NOTE: RECODE THIS AS  
PRIMARY\_ZIP\_FIX]

Q4 Record gender: (DO NOT ASK)

MALE  
FEMALE

Q6 What type of company do you work for?  
[READ AS NECESSARY]

- 01 AGRICULTURE, FORESTRY, FISHING AND HUNTING
- 02 MINING, QUARRYING, AND OIL AND GAS EXTRACTION
- 03 UTILITIES
- 04 CONSTRUCTION
- 05 MANUFACTURING
- 06 WHOLESALE TRADE
- 07 RETAIL TRADE
- 08 TRANSPORTATION AND WAREHOUSING
- 09 INFORMATION
- 10 FINANCE AND INSURANCE
- 11 REAL ESTATE AND RENTAL AND LEASING
- 12 PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES
- 13 MANAGEMENT OF COMPANIES AND ENTERPRISES
- 14 ADMINISTRATIVE AND SUPPORT & WASTE MANAGEMENT & REMEDIATION SERVICES
- 15 EDUCATIONAL SERVICES
- 16 HEALTH CARE AND SOCIAL ASSISTANCE
- 17 ARTS, ENTERTAINMENT, AND RECREATION
- 18 ACCOMMODATION AND FOOD SERVICES
- 19 OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
- 20 PUBLIC ADMINISTRATION
- 21 OTHER [SPECIFY:]
- 99 DON'T KNOW/REFUSED

[PROGRAMMERS NOTE: Q7 THROUGH Q10 CAN BE ON ONE SCREEN]

Q7 What is your job title?

[PROGRAMMERS NOTE: COMPUTE MAILING\_TITLE=Q7]

Q8 Please verify your name for me.

99 REFUSED  
[PROGRAMMERS NOTE: COMPUTE MAILING\_NAME=Q8]

Q9 May I please get your e-mail Address?

[IF NEEDED: "We will only use your email address to send direct communications about this study. We expect to send no more than two reminder emails. If you do not provide your email address then we will call you with reminders and information about this study"]

99 REFUSED  
[PROGRAMMERS NOTE: COMPUTE MAILING\_EMAIL=Q9]

Q10 And finally, what is the best phone number to contact you?

99 REFUSED  
[PROGRAMMERS NOTE: COMPUTE MAILING\_PHONE=Q10]

Thank you - those are all of the questions I have. I really appreciate your willingness to participate in this particular study. We will be sending you a packet of questionnaires and instructions, and you should receive it within the next few days. Should you have any questions about the packet or its contents or if you don't receive the packet, please call Nathan Blower with ORC International at (206) 624-6465.  
Have a wonderful day.

Thank1  
Thank you, but I am unable to continue without that information.

Have a wonderful day.

THANK2  
Ok, well thank you for your time so far. Have a wonderful day.  
THANKNQ1

Thank you for your time, but looks like we have filled all of the coordinators in your business size. Have a wonderful day.

Have a wonderful day.

WSDOT Guidance for CTR Survey Data Analysis—Drive Alone Rate

## Drove Alone Rate

---

Drove Alone Rate is the proportion of all trips made by respondents that are considered 'drove alone' trips to all trips that are considered "potential trips".

## Drove Alone Trips

A trip is considered a "drive alone" trip when, on the survey:

- (i) A respondent chooses 'drove alone' as a mode of transport to his/her work location for one day
- (ii) A respondent chooses 'motorcycle' as a mode of transport to his/her work location for one day, but does not provide an occupancy for the vehicle, i.e. does not satisfactorily answer the question that pertains to the number of people that are usually in the vehicle, in the scenario that the respondent has used a carpool, vanpool or motorcycle as a mode of transport to place of employment.

## Potential Trip

A trip is considered a "potential" trip when, on the survey:

A respondent chooses any of the following modes of transport to his/her work location for one day:

- Drove Alone
- Carpool
- Vanpool
- Motorcycle
- Bus
- Used ferry as walk-on passenger
- Boarded ferry with car/van/bus
- Teleworked
- Compressed Work Week (CWW) / Day Off
- Walked
- Rail
- Bicycle
- Other

A respondent is

Question 4a. Last week, what type of transportation did you use each day to commute TO your usual work location?

$$\text{Drive Alone Rate} = \text{Trips}_A / \text{Trips}_P$$

Drive Alone Rate is calculated for all valid survey responses (Monday through Sunday):

Where,

$\text{Trips}_A = \sum \text{Drive Alone} + \sum \text{Motorcycle/Moped Trips Where Occupancy 1 or Occupancy Not Indicated}$

$\text{Trips}_P = \sum \text{All Trip Modes} - (\sum \text{Overnight Trip} + \sum \text{Did Not Work})$

Note: "All Trip Modes" includes drove alone, carpool, vanpool, motorcycle/moped, took the bus, rode the train, bicycled, walked, teleworked, compressed workweek day off, Boarded ferry with car/van/bus, Used ferry as walk-on passenger, Other

## Drove Alone Rate

---

Drove Alone Rate is the proportion of all trips made by respondents that are considered 'drove alone' trips to all trips that are considered "potential trips".

## Mode Shares

---

Mode shares represent the proportion of all trips made by respondents of each mode (sum of weekly counts by mode), relative to the weekly total of "potential trips".

For example, the walk mode share is calculated as follows:

$$\text{Walk Mode Share} = \sum \text{Weekly Walk Trips} / \text{Trips}_P$$

## VMT per Employee Rate

---

$$\text{VMT Per Employee} = (\text{VMT\_Trips} / \text{TRIPS\_P}) * (\text{MILES\_X} / \text{MILES\_N})$$

Where:

**VMT\_Trips** = Sum of all drive alone, carpool, vanpool, and motorcycle trips for all employees for all days of the week. Except for drive alone trips, these are all vehicle trips weighted by occupancy. So a two-person carpool is ½ trip. A ten person vanpool is 1/10 trip. If respondent indicates carpool but not occupancy, assume occupancy of 2. If respondent indicates motorcycle but not occupancy, assume 1. If respondent indicates vanpool but not occupancy, assume 7.

$$\text{TRIPS\_P} = \sum \text{All Trip Modes} - (\sum \text{Overnight Trip} + \sum \text{Did Not Work})$$

*Note:* “All Trip Modes” includes drove alone, carpool, vanpool, motorcycle/moped, took the bus, rode the train, bicycled, walked, teleworked, compressed workweek day off, Boarded ferry with car/van/bus, Used ferry as walk-on passenger, other.

**VMT\_Trips / TRIPS\_P** = Average of all trips to a worksite occurring in a vehicle.

**MILES\_X** = Sum of all one-way miles traveled regardless of mode for all employees (sum of responses to question 7a in survey). However, responses with VMT greater than 150 miles should be screened out as “suspected errors” and not included in the Miles\_X calculation, with the exceptions in the table below.

**MILES\_N** = Sum of all people who have traveled more than 0 miles. E.g., if 90 survey respondents traveled 1 mile or more to work, then Miles\_N = 90. However, responses with VMT greater than 150 miles should be screened out as “suspected errors” and not included in the Miles\_N calculation, with the exceptions in the table below.

<b>Mode</b>	<b>If Mode Choice This Many Times or More in Week...</b>	<b>Screen out from Miles_X and Miles_N If One-Way Miles:</b>
All modes except if the modes below satisfy conditions in table.	Any	Greater than 150
Walk	3	Greater than 10
Bike	3	Greater than 30

**Miles\_X / Miles\_N** = Average one-way miles traveled by workers to that worksite.

## D – Weight Calculations

Information in the table below augments the discussion of weighting, covered in the Research Design section of this report.

*NONRESPONSE = Number Distributed / Number Returned*

*EXPWEIGHT = Number of Employees / Number of Surveys (Weighted for Non-Response)*

*FINALWEIGHT = Non-Response Weight \* Expansion Weight*

CTR Identification Code	Total Employee Count	Surveys Distributed	Actual Surveys Returned Count	Factor for Sites that survey by sample*	NON-RESPONSE WEIGHT (Stage 1)	EXPAN-SION WEIGHT (Stage 2)	FINAL WEIGHT (Stage 3)
E80821	1167	1167	640		1.8234	11.2674	20.5453
E88008	441	441	310		1.4226	1.0364	1.4744
U80111	357	357	132		2.7045	1.0364	2.8031
E88006	33	22	16		1.3750	1.0364	1.4251
E80033	588	588	95		6.1895	1.0364	6.4150
E88007	455	455	161		2.8261	1.0364	2.9291
E88009	290	290	88		3.2955	1.0364	3.4155
U80106	290	290	77		3.7662	1.0364	3.9035
E88010	212	212	124		1.7097	1.0364	1.7720
E85251	230	180	149		1.2081	1.0821	1.3073
E81323	344	344	255		1.3490	1.0821	1.4598
E80552	158	158	137		1.1533	1.0821	1.2480
E80526	807	807	570		1.4158	1.0821	1.5321
E89797	142	142	100		1.4200	1.0821	1.5366
E80401	179	179	117		1.5299	1.0821	1.6556
E80541	479	479	281		1.7046	1.0821	1.8446
E81471	170	170	117		1.4530	1.0821	1.5723
E81521	168	168	134		1.2537	1.0821	1.3567
E81512	130	130	94		1.3830	1.0821	1.4966
E88369	135	135	52		2.5962	1.0821	2.8094
E88815	233	180	141		1.2766	1.0821	1.3814
E80641	2305	1604	596	1.437	3.8674	1.0821	4.1851
E80642	1878	1461	487	1.285	3.8563	1.0821	4.1729
E80543	1572	1386	583	1.134	2.6964	1.0821	2.9178
E87171	166	166	120		1.3833	1.0821	1.4969
E82578	767	143	107		1.3364	1.0821	1.4462
E81509	365	175	102		1.7157	1.0821	1.8566
E80418	222	195	163		1.1963	1.0821	1.2946
E89946	80	72	58		1.2414	1.0821	1.3433
E84681	1074	1074	803		1.3375	1.0821	1.4473
E80402	875	875	759		1.1528	1.0821	1.2475
E81524	135	115	84		1.3690	1.0821	1.4815
E84574	92	90	57		1.5789	1.0821	1.7086
E87189	247	247	180		1.3722	1.0821	1.4849

\* Employer distributed surveys to a sample of their employees in Bellevue, therefore an adjustment was applied to the these sites to scale them up to worksite population.

## E – Comparison to Previous Surveys

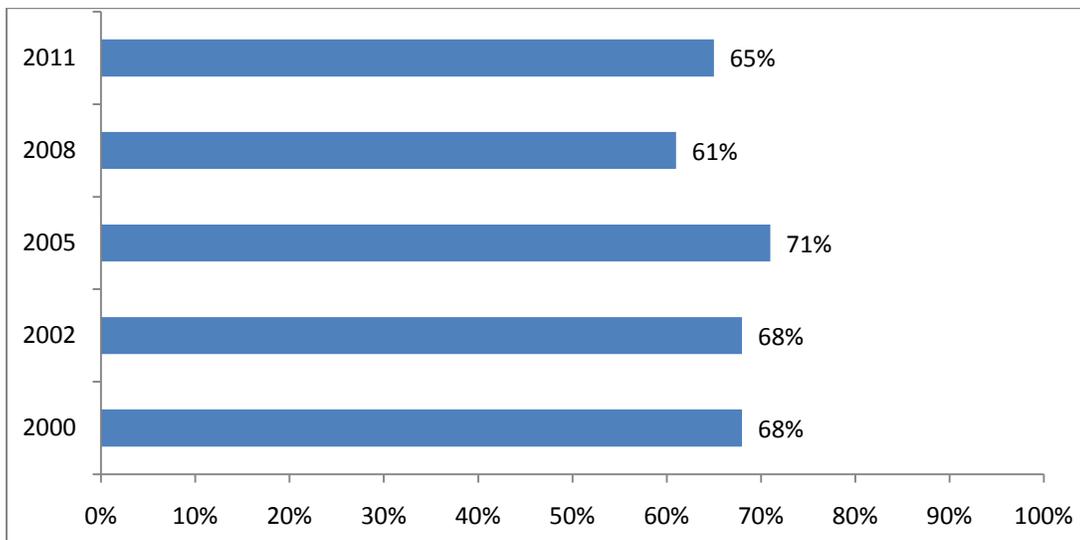
The 2011 and 2008 Commute Surveys in Downtown were conducted with financial and technical support from the Washington State Department of Transportation, under the Growth and Transportation Efficiency Center (GTEC) program. Prior to the establishment of the Downtown GTEC (in early 2008) the City sponsored similar surveys of Downtown commuting (along with several other employment centers in Bellevue). Measurements taken since 2000 use essentially similar methodology of combining existing data collected at large, CTR worksites with additional data collected from small, non-CTR worksites and applying weights to the different datasets to represent commute behavior across a broad range of the Downtown worker population. There have been, however, some differences in how survey data is weighted and expanded to the broader Downtown employee population; in particular, the GTEC surveys conducted in 2008 and in 2011 used more elaborate weighting schemes than the earlier, City-sponsored surveys and the scheme used in the 2011 GTEC survey (described in the Research Design section of this report) differed from that used for the 2008 GTEC survey. Because of the differences in the weighing methodology, some caution is appropriate in comparing the results of the 2011 and 2008 GTEC surveys as well as the results of previous survey projects completed in 2005, 2002 and 2000.

### Drive-Along Rate

The aggregate drive-alone rate for employee commute trips for all companies in Downtown Bellevue measured 65% in 2011, an increase from the 61% reported in 2008. (Drive-alone trips are those made by driving alone in a vehicle or on a motorcycle; see Appendix C for complete discussion.)

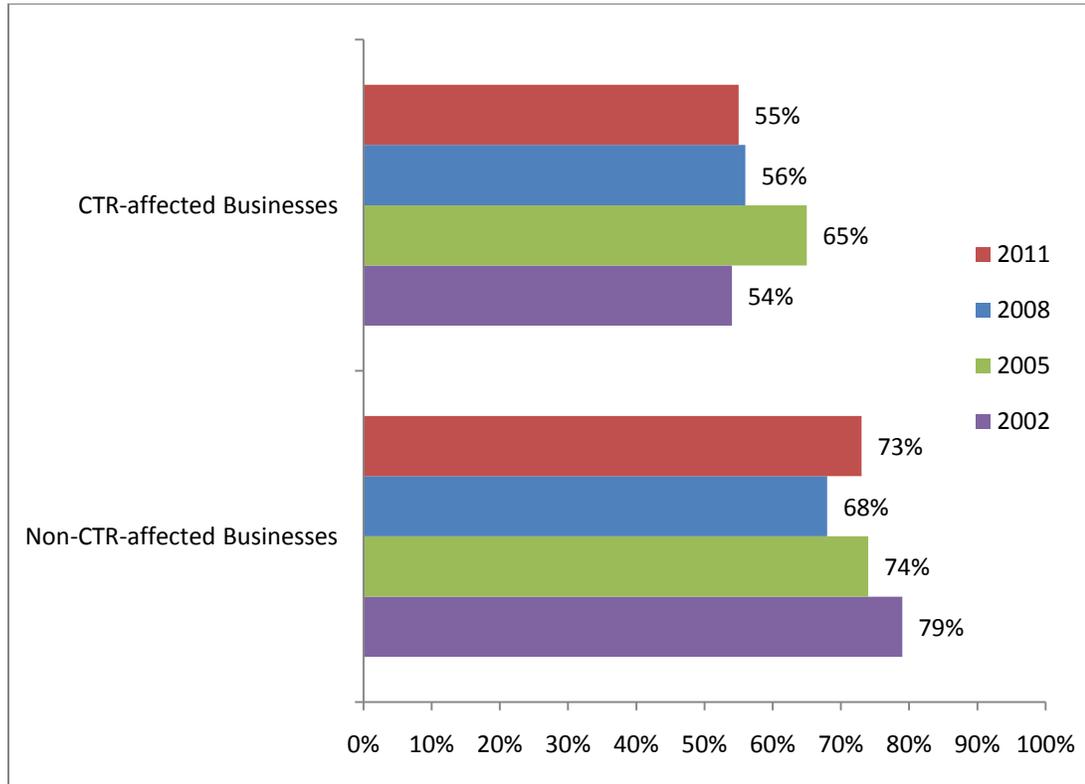
Non-drive-alone commute “mode split” measured 35% in 2011. This is a decrease from the 2008 figure of 39% of commute trips made by a travel mode other than drive-alone and falls short of the City’s adopted 40% target for commute trips to Downtown occurring by a travel mode other than drive-alone.

**Figure 23: Drive-Along Rate  
Downtown Bellevue  
(Base=Number of Trips)**



The drive-alone rate in 2011 has increased for small businesses and remained about the same for large businesses. The drive-alone rate for small businesses reversed its downward trend—to 73% in 2011 from 68% in 2008, 74% in 2005 and 79% in 2002.

**Figure 24: Drive-Along Rate by Business Size  
Downtown Bellevue  
(Base=Number of Trips)**



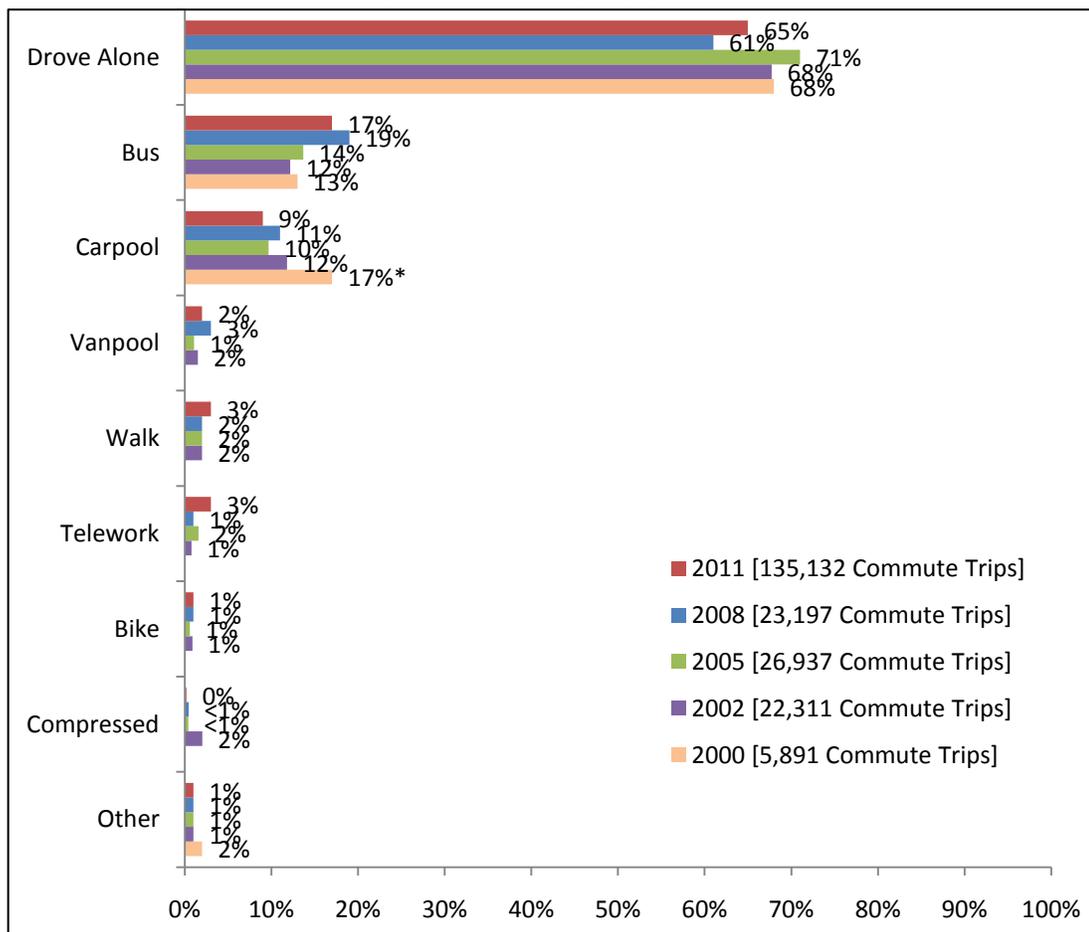
## Commute Mode Split

Commute Mode Split measures the type of transportation used by respondents to commute to work during the week prior to the survey. The measure for the entire week, is based on weekly counts by commute mode divided by the total weekly count of commute trips (all mode responses except “did not work” and “overnight business trip”).

In 2011, driving alone continues to represent the majority of commute trips among Downtown Bellevue employees (65%). However, the proportion of commute trips made by driving alone dropped significantly from the 71% reported in 2005 to the 61% reported in 2008.

The percentage of commute trips made by bus has leveled off after an earlier upward trend - to 17% in 2011 from 19% in 2008, 14% in 2005 and 12% in 2002. Commute trips by carpool have dropped slightly over time: 9% in 2011, 11% in 2008, 10% in 2005, and 12% in 2002. The remaining modes represent a very small proportion of commute trips among Downtown Bellevue employees.

**Figure 25: Commute Mode Split  
Downtown Bellevue  
(Base=Number of Trips)**



\* The 2000 data for carpool included both carpool and vanpool trips.

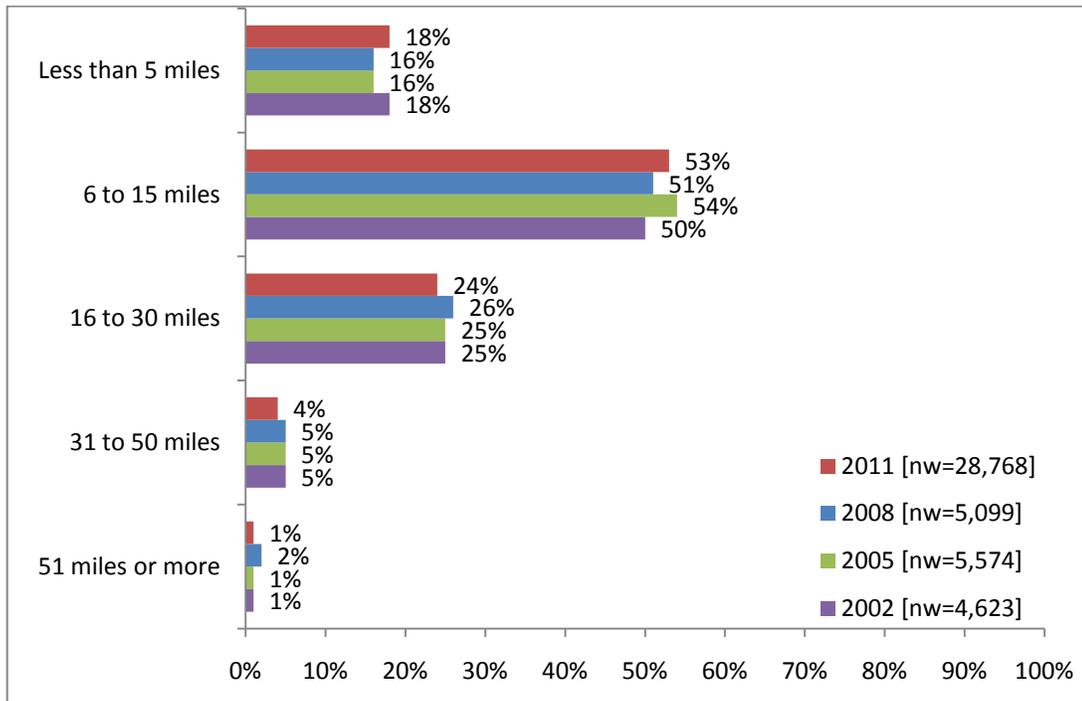
\*\* “Other” category trips include those for which “other” was indicated as the mode, as well as “ferry” and “train/light rail/streetcar” mode trips (respondents are asked to indicate the mode used for the longest distance on their commute).

## Commute Distance

The average commute distance, regardless of commute mode, for Downtown Bellevue employees in 2011 is 13.47, lower than in previous years (14.87 miles in 2008, 14.46 miles in 2005, and 14.48 miles in 2002).

Nearly three-fourths (71%) of respondents report they commute less than 16 miles one-way to work; one percent (1%) report they commute more than 50 miles one-way to work in 2011.

**Figure 26: Commute Distance**  
**Downtown Bellevue**  
*(Base=All Respondents)*



*Note: Following current protocols, 2011 and 2008 trips reported as more than 150 miles one-way are screened out of this analysis, as are walk mode trips >10 miles one-way in excess of 3x/week and bike mode trips >30 miles one-way in excess of 3x/week. Data for earlier years was not screened to remove these outliers.*

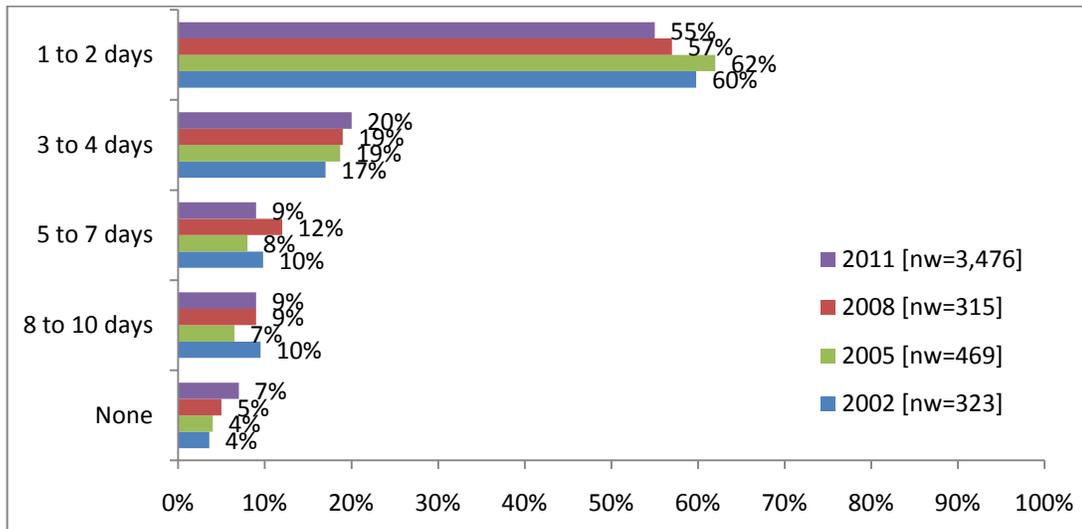
## Telework

In 2011, more than one in ten (12%) Downtown Bellevue respondents report teleworking at least one day in two weeks, on average. This is an increase from the 2008 Survey figure of 7%, the 2005 figure of 8% and the 2002 figure of 7%.

Of those respondents who, on average, telework at least one day in two weeks, more than half (55%) report they teleworked one or two days in the last two weeks.

**Figure 27: Number of Days Teleworked in Last Two Weeks  
Downtown Bellevue**

*(Base= Respondents Who Telework At Least One Day in Two Weeks On Average)*



## Potential Commute Behavior--Likelihood to Try Alternative Modes

The proportion of Downtown Bellevue employees who report they take the bus to work at least occasionally has trended upward since 2002 (17% in 2002, 20% in 2005, and 25% in 2008 and 2011). Similar to 2005 and 2008, slightly more than one out of eight (13%) Downtown Bellevue employees report they already carpool to work.

- The percentage of respondents who report they are likely to try or continue using carpool or vanpool to work increased significantly in 2008 and declined slightly in 2011.

**Table 28: Likelihood to Try Alternative Modes**  
(BASE = All Respondents)

Mode	2011 [n <sub>w</sub> =28,768]				2008 [n <sub>w</sub> =5,099]				2005 [n <sub>w</sub> =5,574]			
	Do Now	Likely	Not Likely	Not An Option	Do Now	Likely	Not Likely	Not An Option	Do Now	Likely	Not Likely	Not An Option
Carpool	13%	30%	38%	18%	16%	32%	38%	14%	14%	28%	38%	20%
Vanpool	3%	20%	53%	24%	4%	23%	55%	18%	2%	19%	53%	26%
Bus	25%	31%	30%	14%	25%	35%	27%	12%	20%	30%	31%	18%
Train	1%	15%	17%	67%	2%	16%	22%	60%	<1%	15%	16%	69%
Bicycle	4%	14%	37%	46%	4%	11%	33%	52%	3%	12%	31%	54%
Walk	5%	6%	25%	64%	4%	18%	23%	55%	3%	5%	21%	71%
Telework	12%	40%	18%	30%	9%	46%	17%	28%	8%	47%	15%	29%
A compressed work week	5%	37%	22%	36%	5%	37%	18%	39%	4%	44%	20%	31%

**Potential Commute Behavior-- Opportunities to Encourage Employees to Try or Continue Using Alternative Modes**

In 2011, the top five methods to encourage Downtown Bellevue employees to use or continue using alternate modes include a financial incentive for using a non-drive alone mode (38%); an opportunity to work at home (33%); an immediate ride home in case of an emergency (23%); more frequent bus service at the work site (21%); and an employer-provided car for work purposes during work hours (20%).

- Although a more flexible work schedule to meet carpool, vanpool, the bus, etc. was ranked fifth in 2008, in 2011 an employer-provided car for work purposes during work hours has replaced it as fifth.

**Table 29 : Top Five Ways to Encourage Employees to Try or Continue Using Alternative Modes**  
(BASE = All Respondents)

	Percent of Employees 2011 [n <sub>w</sub> =28,768]	Percent of Employees 2008 [n <sub>w</sub> =5,099]	Percent of Employees 2005 [n <sub>w</sub> =5,574]	Percent of Employees 2002 [n <sub>w</sub> =4,623]
A financial incentive for using non-drive alone modes	38%	43%	41%	43%
Opportunity to work at home (telework)	33%	37%	38%	5%
An immediate ride home in case of an emergency	23%	28%	28%	33%
More frequent bus service at the work site	21%	23%	20%	22%
An employer-provided car for work purposes during work hours	20%	15%	*	*

*\*Figures for 2005 and 2002 not available.*