The Existing Conditions memo provides additional detail on the topics in this chapter.

2 COMMUNITY PROFILE AND DEMOGRAPHICS

COMMUNITY PROFILE

The city of Bend is the fifth-largest metropolitan area in Oregon and the largest city east of the Cascades, with a population of 76,639 in 2010. Bend comprises nearly 50% of the total population of Deschutes County. Bend grew rapidly in the 1990s and early-to-mid 2000s, however the housing downturn significantly affected housing values and employment, particularly construction jobs. Employment is not projected to return to a level near its 2007 peak until 2020.²

Bend is home to Central Oregon Community College (COCC). COCC enrollment has grown significantly in recent years. Full-time equivalent enrollment increased from 3,463 in 2007 to 5,479 in 2011 at the Bend campus—an increase of 58%. Total Bend campus enrollment was 14,632 in 2011. The Oregon State University (OSU) Cascades Campus is co-located with COCC and offers four-year and master's degrees. It has also grown significantly and has 678 students as of the Fall 2011 term. OSU is actively planning a new facility along Colorado Avenue in southwest Bend, with enrollment of 5,000 students projected within the next several years, of which about 8% are expected to live on-campus.

Located on the eastern edge of the Cascade Range along the Deschutes River, Bend is a hub for recreation with a relatively dry, high desert climate year-round. Tourism (including the Mt. Bachelor Ski Resort), manufacturing, high tech, and health care, are major economic sectors. Emerging or niche market products and services include semiconductors, software, medical instruments, and recreational equipment.

² Carolyn Eagan (OED Economist for Region 10), Personal Communication, January 2012.

DEMOGRAPHICS

This section reviews demographic information for Bend, focusing on segments of the population that typically have the greatest need for public transit services. Figure 2-1 lists these demographic categories and their share of the population in Bend compared to the state of Oregon overall. ³

Figure 2-1 Demographic Summary

Demographic Category	City of Bend	Oregon
Total population	76,639	3,831,074
% Youth (persons aged 10-17) ^a	12.4%	13.9%
% Seniors (persons aged 65+) ^a	10.1%	10.2%
% Minority	12.7%	21.5%
% Low-Income Households b	10.4%	14.0%
% Persons with a Disability ^c	12.0%	13.4%
% Households without a Vehicle b	5.4%	7.6%
% Population Speaking English Less than "Well" b	1.8%	3.6%

Notes: Minority includes non-white persons of one race and persons of two or more races. Low-income households are those earning below the federal poverty level. Disability is for the civilian non-institutionalized population aged 5 years or older. Population speaking English less than "well" is based on persons aged 5 years or older.

Sources: (a) U.S. Census Bureau, 2010 U.S. Census, Summary File 1: P1, P9, P12. (b) U.S. Census Bureau, American Community Survey, 2006-2010 5-Year Averages: B16004, B25044, C17002. (c) U.S. Census Bureau, American Community Survey, 2008-2010 3-Year Averages: S1810. Due to the change in disability questions in 2008, only a 3-year average is available.

The density of population, jobs, and services in a city are major determinants of transit demand. Figure 2-2 illustrates the general population density in Bend, based on 2010 Census data, in relation to existing transit service. Additional maps (Figure 2-3 through Figure 2-8) illustrate how specific population segments are distributed in the city, based either on U.S. Census data (by block) or American Community Survey (ACS) data (by block group, which includes multiple Census blocks). The population segments analyzed, and their general relationship to transit demand, are as follows:

• **Seniors.** Older adults often exhibit higher demand for transit as they become less capable or willing to drive themselves, or can no longer afford to own a car on a fixed income. They tend to use public transportation during the middle of the day for shopping and medical appointments. Seniors aged 65 or older account for just over 10% of the Bend population.

³ Each of these categories is based on a single characteristic, thus some individuals will be included in one or more demographic group.

- As shown in Figure 2-3, some of the highest densities of seniors aged 65 or older reside in east Bend between Greenwood Avenue and Neff Road.
- Youth. Young people without driver's licenses or those unable to drive need transit service for school and after-school activities, part-time jobs, and access to recreation and entertainment particularly during the summer months. National trends show that a lower proportion of younger adults feel they need to own their own vehicle than earlier generations. Figure 2-4 shows youth density in relation to transit routes.
- Persons with disabilities. Persons with disabilities often are heavily dependent on public transit service. In the city of Bend, 12% of the overall population has one or more disabilities, on average between 2008 and 2010, including 9.5% of the population aged 18 to 64 and nearly 36% of the population aged 65 or older.4
- Low-income households. Over 10% of households in Bend are considered low-income, defined as earning at or below the federal poverty level, which is based on household size. An additional 19% of the population in the city of Bend earns between 100% and 200% of the federal poverty level. Figure 2-5 shows the density of low-income households in relation to transit routes.
- Households without access to a vehicle. One of the most influential indicators of transit demand is access to a motor vehicle, whether due to lack of economic means, inability to drive, or by choice. Over 5% of households in Bend do not have access to a vehicle. Figure 2-6 shows that the distribution of these households is roughly aligned with the distribution of low-income households and/or seniors.
- Minority households. "Minority" is defined for the purposes of this analysis as non-white persons of one race and persons of two or more races. The proportion of the minority population in Bend is 12.7%. Figure 2-7 illustrates the density of minority households in Bend.
- Persons with limited English speaking skills. Limited English speaking skills is an indicator of the ability for upward economic mobility and correlates closely to income. This can be another indicator of a household's relative dependency on transit. Roughly 2% of city of Bend residents speak English "less than well." Figure 2-8 identifies parts of Bend with the highest densities of population speaking English "less than well."

⁴ Due to a change in disability questions starting in 2008, only a 3-year average is available for disability data. Data from the 3-year average is not available at the block group level and is not mapped.

Figure 2-2 Population Density, 2010

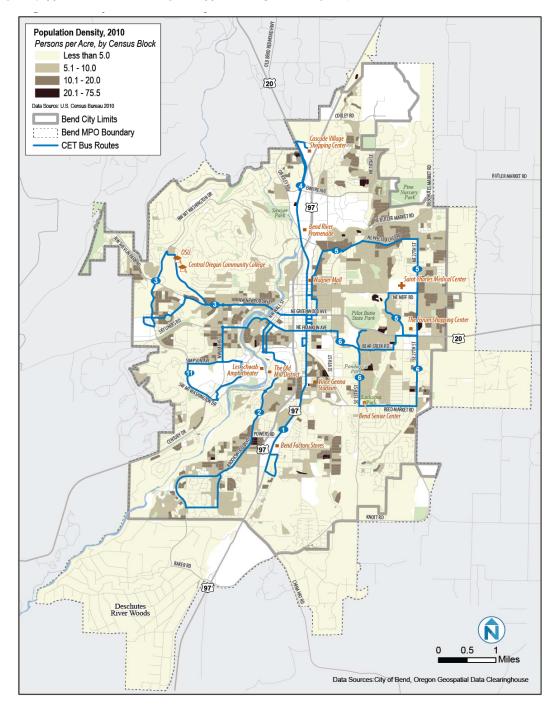


Figure 2-3 Senior (Aged 65 or Older) Population Density, 2010

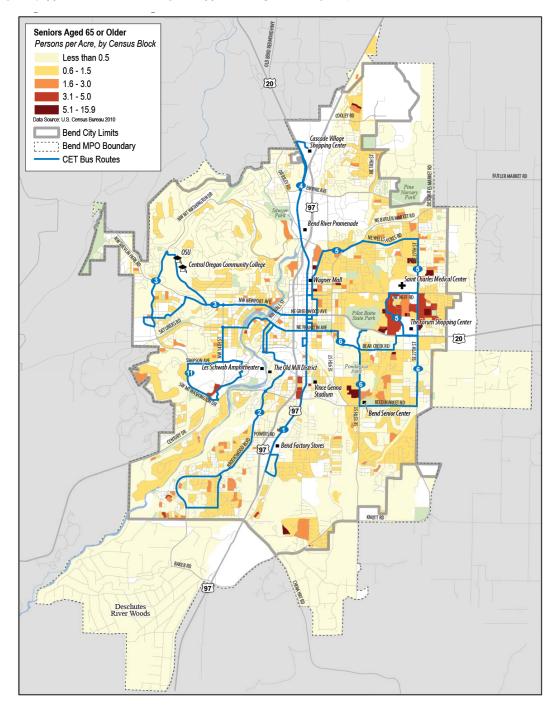


Figure 2-4 Youth (Aged 10 to 17) Population Density, 2010 NOTE: WILL BE REPLACED WITH FULL PAGE MAP IN PDF

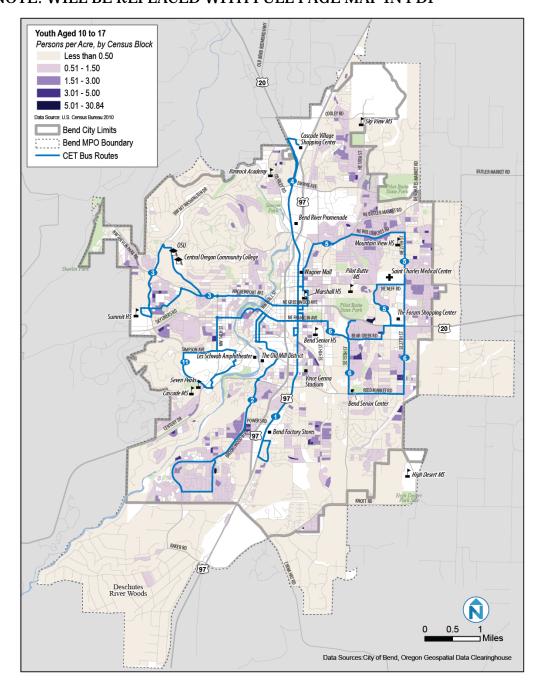


Figure 2-5 Low-Income Household Density, 2005-2009 5-Year Average NOTE: WILL BE REPLACED WITH FULL PAGE MAP IN PDF

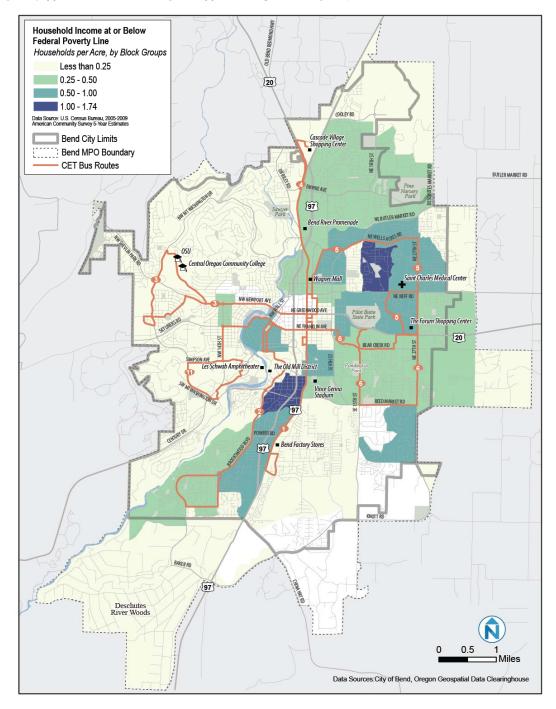


Figure 2-6 Density of No Vehicle Households, 2005-2009 5-Year Average NOTE: WILL BE REPLACED WITH FULL PAGE MAP IN PDF

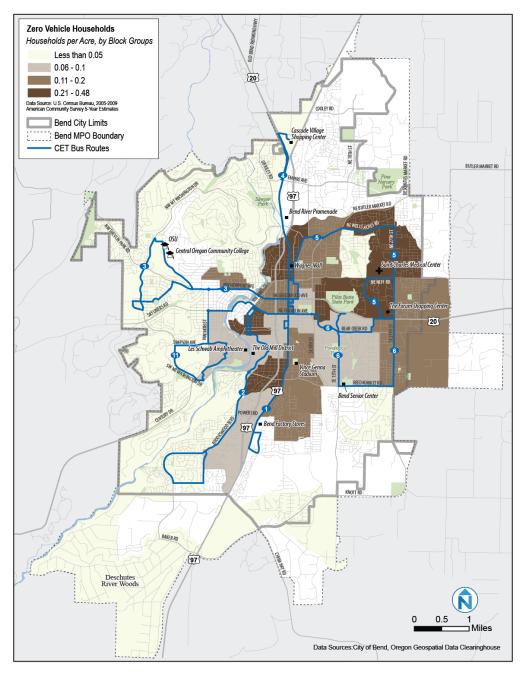


Figure 2-7 Minority Population Density, 2010

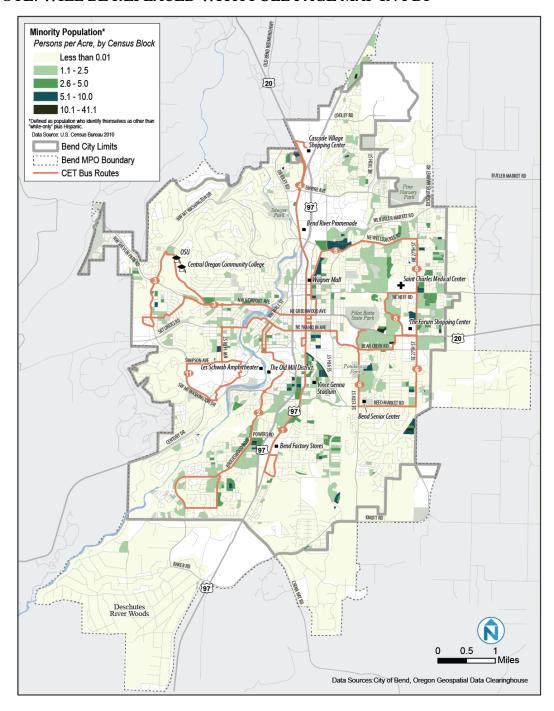
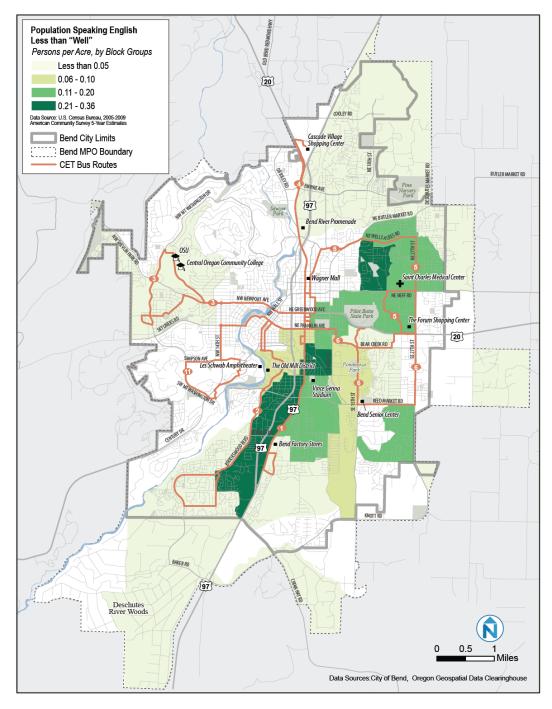


Figure 2-8 Density of Population Speaking English Less than "Well", 2005-2009 5-Year Average



POPULATION AND EMPLOYMENT PROJECTIONS

Figure 2-9 lists the most recent population projections (2004) for Bend (Urban Growth Boundary) and Deschutes County. These projections forecast over 100% growth for both Bend and Deschutes County between 2000 and 2025—an average increase of slightly more than 4% annually.

However, actual 2010 population estimates from the Portland State University Population Research Center (PRC) were approximately 5% lower than the earlier 2010 forecast: 76,740 for Bend and 157,905 for Deschutes County as of July 1, 2010.

Figure 2-9 Population Growth Projections, Bend UGB and Deschutes County

Geography	2000 (Actual)	2010 (Projected)	2010 (Actual)	2025 (Projected)	% Change, 2000-2025
Bend UGB	52,800	81,242	76,740	109,389	107.2%
Deschutes County	116,600	166,572	157,905	240,811	106.5%

Source: Deschutes County Coordinated Population Forecast, 2000-2025, August 25, 2004. Actual population for 2010 is from the 2010 U.S. Census.

About 65% of jobs in Deschutes County are located within the Bend Urban Growth Boundary (UGB). The largest employers in the city of Bend include St. Charles Medical Center, Central Oregon Community College (COCC), Bend Memorial Clinic, and the City of Bend (see Figure 2-10). As a result of the economic downturn, the level of employment in the region is not expected to reach peak 2007 levels until 2020.⁵

Figure 2-10 Top Employers in Bend (over 400 employees), 2011

Employer Name	Avg. # of Employees	Source/Notes
St. Charles Medical Center	2,978	1, Includes Redmond center
Sunriver Resort	900	2, Seasonal high, 2012
Les Schwab Tire Center	870	1. Regional
Mt. Bachelor	760	1, Seasonal high
Walmart	591	1, Regional
Bend Memorial Clinic	558	1
Safeway	500	1
Fred Meyer	472	1, Regional
Opportunity Foundation	420	1

Note: Does not include public sector employers, e.g., COCC.

Sources: (1) Bend Chamber of Commerce, 2011. (2) Economic Development for Central Oregon (EDCO), 2012.

⁵ Carolyn Eagan (OED Economist for Region 10), Personal Communication, January 2012. Peak employment in the Tri-County Region 10 area, of which Deschutes County comprises about 85% of jobs, was 84,870.

Figure 2-11 Population Density by Census Block, 2010

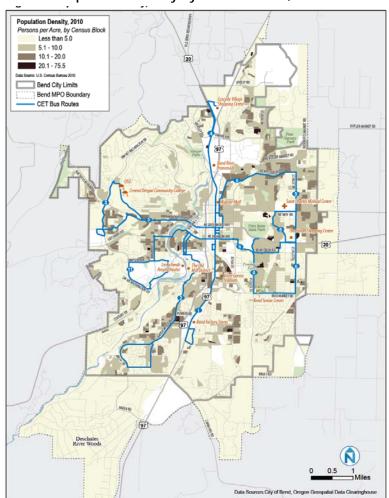


Figure 2-12 Projected Population Density by TAZ, 2030

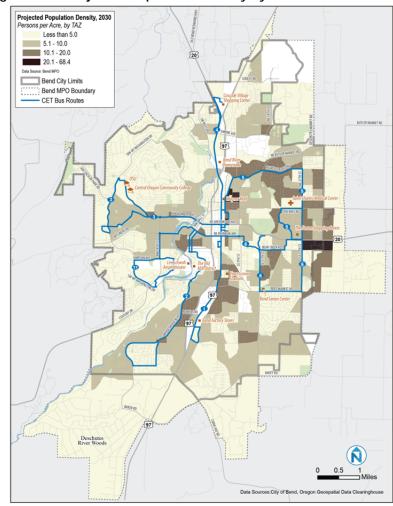


Figure 2-13 Employment Density by TAZ, 2010

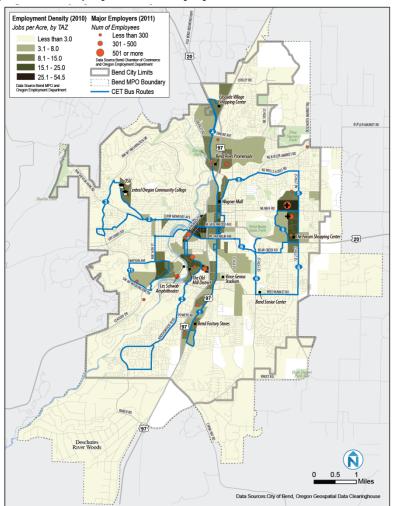
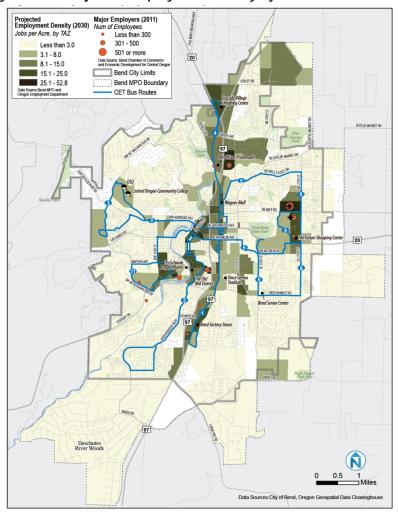


Figure 2-14 Projected Employment Density by TAZ, 2030

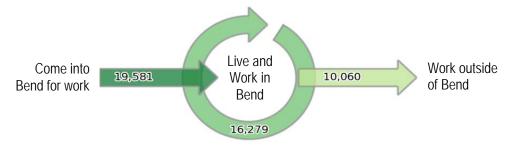


TRAVEL PATTERNS

Work Commute Patterns

Based on U.S. Census Bureau LEHD (Longitudinal Employer-Household Dynamics) data for 2009, of the over 38,000 total jobs in the city of Bend, nearly 21,000 (about 55%) are held by workers who live outside of Bend. About 16,000 Bend workers both live and work in Bend.⁶ In addition, about 10,000 Bend residents work outside of the city; this represents about 38% of residents who are working. The maps in Figure 2-16 and Figure 2-17 illustrate the work locations of Bend area residents and the home locations of Bend area workers.

Figure 2-15 Commute Flows to, from, and within Bend (Primary Jobs), 2009



Source: U.S. Census Bureau, LEHD, 2009

Figure 2-16 (left panel) shows the work locations of Bend area residents in 2009, in relation to bus routes in Bend. These locations generally correspond to where existing bus service runs, with the exception of clusters of jobs in NE and SE Bend (see inset map). Outside of city limits, there is a moderate concentration of jobs in the vicinity of Bend Municipal Airport. Outside of the Bend area, there are moderate concentrations of residents employed in Redmond, Prineville, and Sun River.

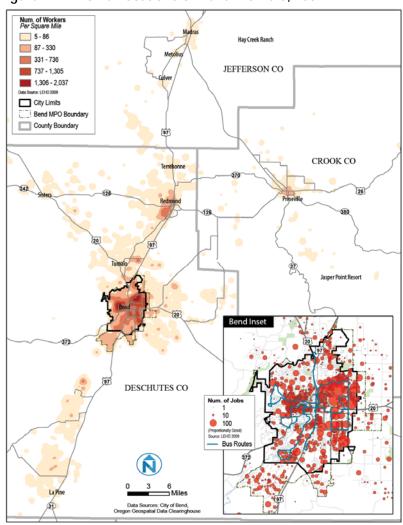
Figure 2-17 (right panel) illustrates the home locations of Bend area workers. While the most significant concentrations of home locations within city limits have transit service, the exceptions are in the southeast quadrant of the city and in the northern portion of the city, east and west of Highway 97 (see inset). Outside of city limits, there is no fixed-route transit service to Deschutes River Woods, in the southwest corner of the Bend MPO boundary. Outside of the Bend area, the highest concentrations of home locations are in Redmond, Prineville, Tumalo area, and Sun River/La Pine area.

⁶ Limited to primary jobs, defined as the one job for each worker that provides the most earnings.

⁷ As of 11/26/2012, a stop for the Bend-La Pine Community Connector was implemented at the Riverwoods Baptist Church in Deschutes River Woods (on Cinder Butte Road near the intersection with Baker Road). This is one of the service recommendations provided in Chapter 7. In addition, limited Dial-A-Ride service is provided in Deschutes River Woods.

Figure 2-16 Work Locations of Bend Residents, 2009 Num. of Jobs Per Square Mile 5 - 172 Hay Creek Ranch 173 - 674 JEFFERSON CO 1,512 - 2,683 2,684 - 4,190 City Limits Bend MPO Boundary County Boundary CROOK CO Bend Inset DESCHUTES CO 10 100 (Proportionally Sized) Source: LEHD 2009 Bus Routes

Figure 2-17 Home Locations of Bend Workers, 2009



Work Commute Mode

Figure 2-18 illustrates the percentage of work commute trips in Bend made by different forms of transportation (mode share), based on the ACS. Less than 1% of workers age 16 or older residing in Bend commute to work by public transportation, while over 2% bike to work and nearly 3% walk.

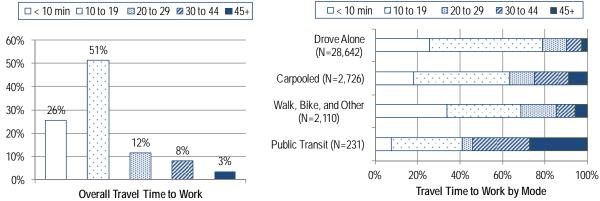
100% ■ City of Bend □ Oregon 78.6% 80% 60% 40% 20% 7.5% 7.5% 2.9% 2.2% 0.6% 0.7% 0% Drove Alone Walked **Public** Bicycled Worked from Other (includes Carpooled Transportation home taxicab and motorcycle)

Figure 2-18 Commute Mode Share, 2006-2010 5-Year Average

Source: American Community Survey, 2006-2010 5-Year Average

The left panel of Figure 2-19 shows that most Bend residents have relatively short commutes; more than 75% of working residents travel fewer than 20 minutes to work. However, the right panel of Figure 2-19 shows that the majority of transit riders had commutes of 30 minutes or more (see lowest horizontal bar).





Source: American Community Survey, 2006-2010 5-Year Average. "Other" includes walk, bicycle, taxicab, and motorcycle modes.