

Item #8
Updated Slides

Changes in Regional Commuter Patterns 2000 - 2011

Robert E. Griffiths
Technical Services Director

National Capital Region Transportation Planning Board

May 15, 2013



Background

- Periodic Census and TPB Household Travel Surveys can be used to examine how commuter patterns in the region are changing over time
- The last region-wide TPB Household Travel Survey was conducted in 2007/2008
- Analysis of Census American Communities Survey (ACS) Data provides an opportunity to examine how commuting patterns in the region have changed since 2007 as well as since the 2000 Census
- Data in this presentation were developed from 2000 Census, 2007 ACS and 2011 ACS Public Use Microdata Samples (PUMS).



Caveats:

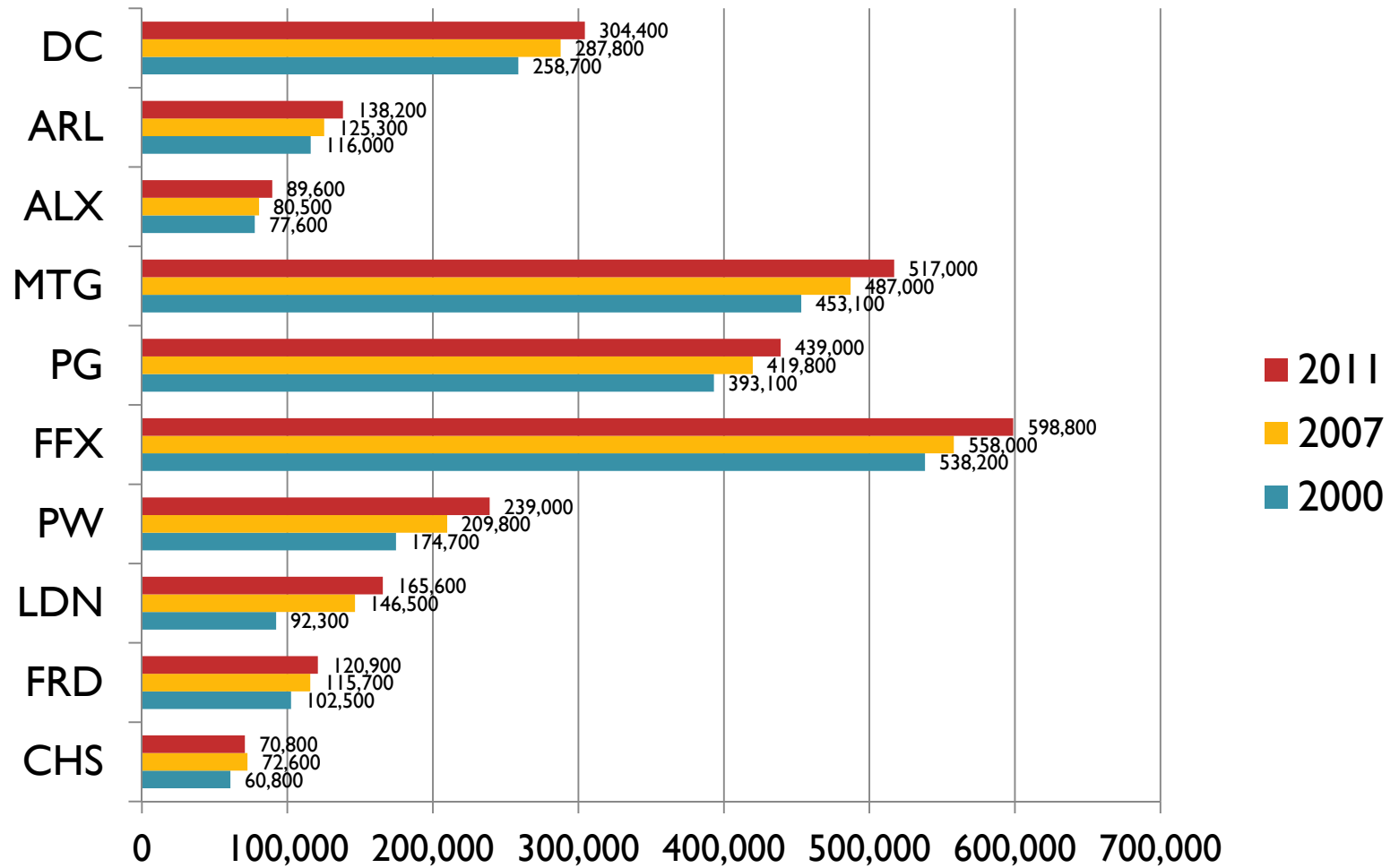
- The Census and ACS questionnaires asked “At what location did this person work last week?” and “How did this person usually get to work last week?” and, if more than one mode of transportation was used, to just report the mode used for the most of the distance. TPB Travel Surveys ask how persons travel on a randomly assigned weekday and capture all modes of transportation used for multi-modal transit trips.
- The 2007 and 2011 ACS PUMS data are from a sample of about 17,000 households in the region and are subject to both sampling and non-sampling error. The lightly striped bar chart bars in this presentation indicate where the data may be affected by these sampling issues.
- The 2000, 2007, and 2011 PUMS data geographically combine household data for Loudoun, Fauquier, Clarke, and Warren Counties. The data in this presentation prorate Loudoun County’s portion of the geographically combined totals. The Loudoun County portion of the PUMS combined areas was approximately 75%.
- The data in this presentation exclude approximately 46,500 workers from other areas temporarily working in the region in the previous week and 20,500 workers from our region who were temporarily working outside of our region in the previous week.

Changes in Net In-Commuting

Year	Workers Working In Region	Workers Residing In Region	Net In-Commuters	Percent In-Commuting
2000	2,424,000	2,267,000	157,000	6.5%
2007	2,733,000	2,503,000	230,000	8.4%
2011	2,913,000	2,683,000	229,000	7.9%

Note: These figures exclude approximately 46,500 workers from other areas of the country temporarily working in the TPB Planning region and 20,500 workers from our region temporarily working outside of our region in the previous week

Workers by Place of Residence

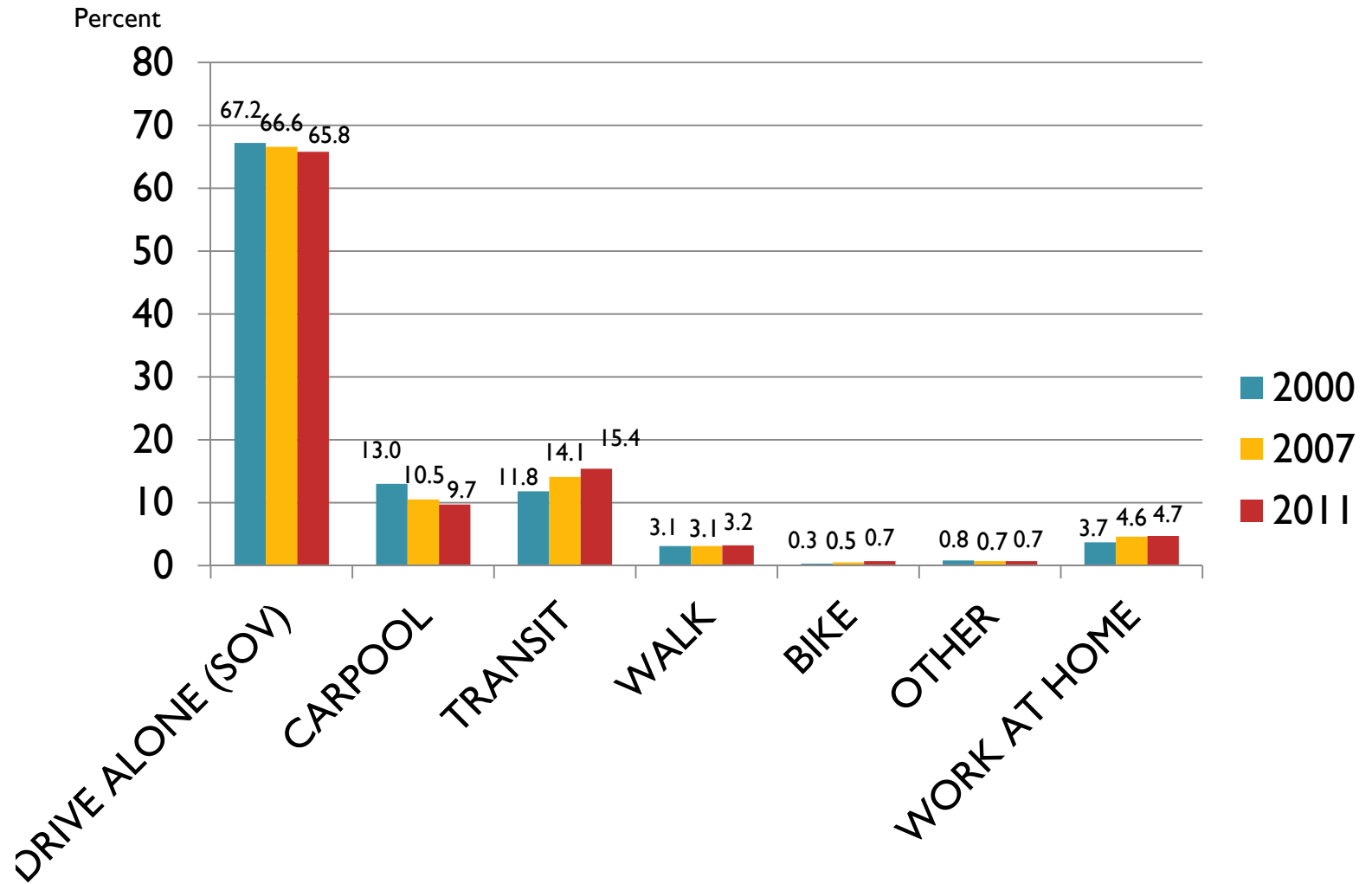




Major Changes in Workers by Place of Residence

- Between 2000 and 2011 Loudoun County added about 73,000 workers, Montgomery Counties and Prince William County (combined with the Cities of Manassas and Manassas Park) added about 64,000 each, and Fairfax County (combined with the Cities of Fairfax and Falls Church) added about 61,000 workers
- Prince George's County and the District of Columbia both added about 46,000 workers between 2000 and 2011
- In the 2007-2011 period, the greatest increases were in Fairfax with the Cities of Fairfax and Falls Church (+34,000), Prince William with the Cities of Manassas and Manassas Park (+28,000) and Montgomery (+27,000)
- The greatest increases in commuting flows between 2000 and 2011 were Montgomery to Montgomery (+42,000), DC to DC (+41,000), Loudoun to Loudoun (+31,000), Prince William/Cities to Prince William/Cities (+29,000), Fairfax/Cities to Fairfax/Cities (+28,000), Loudoun to Fairfax/Cities (+ 23,000) and Montgomery to DC (+20,000)
- About 90% of the workers added to the District's labor force between 2000 and 2011 both lived and worked in DC
- The greatest decreases in commuting flows between 2000 and 2011 were Montgomery to Fairfax/Cities (-8,000), Prince George's to Fairfax/Cities (-3,000), and DC to Fairfax/Cities (-2,000). Commuting flows from Montgomery and Prince George's to external areas outside the region also decreased significantly

Commute Mode Share

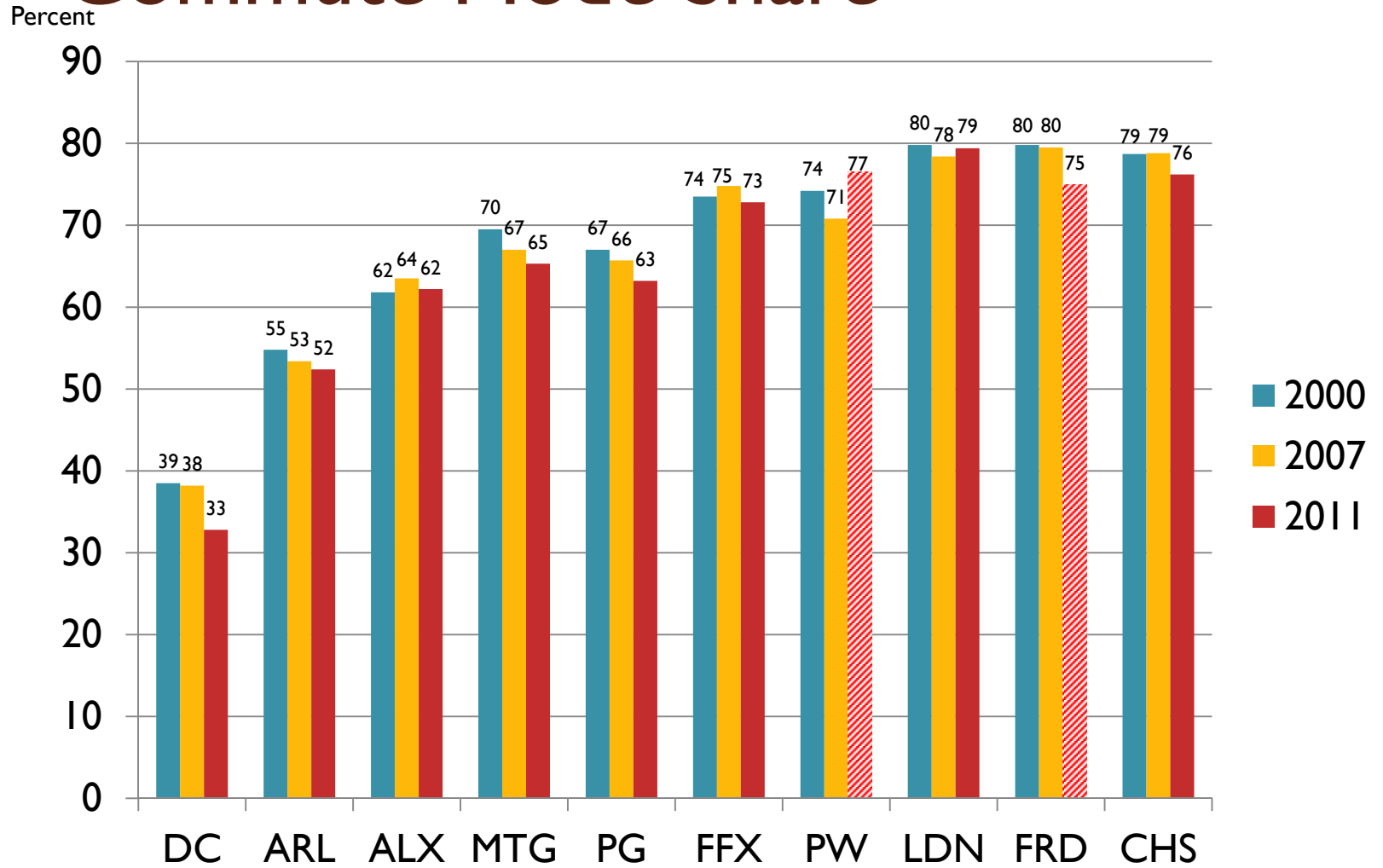




Changes in Commute Mode Share

- Regionally, between 2000 and 2011 workers commuters driving alone in single occupant vehicles (SOV) declined slightly from 67% to 66%
- Workers commuting in carpools and vanpools declined significantly from 13% to 10%
- The decline in carpooling was offset by an increase in transit commuting from 12% to 15%
- The walk to work mode share remained about the same at 3%
- The bike to work mode share increased from about 0.3% to about 0.7% (Caution suggested for very small percentages)
- The other means (taxi, shuttle bus, etc.) commute mode share remained about the same
- The percentage of workers who worked at home increased slightly from about 4% to 5%.

Drive Alone (SOV) Commuter Mode Share



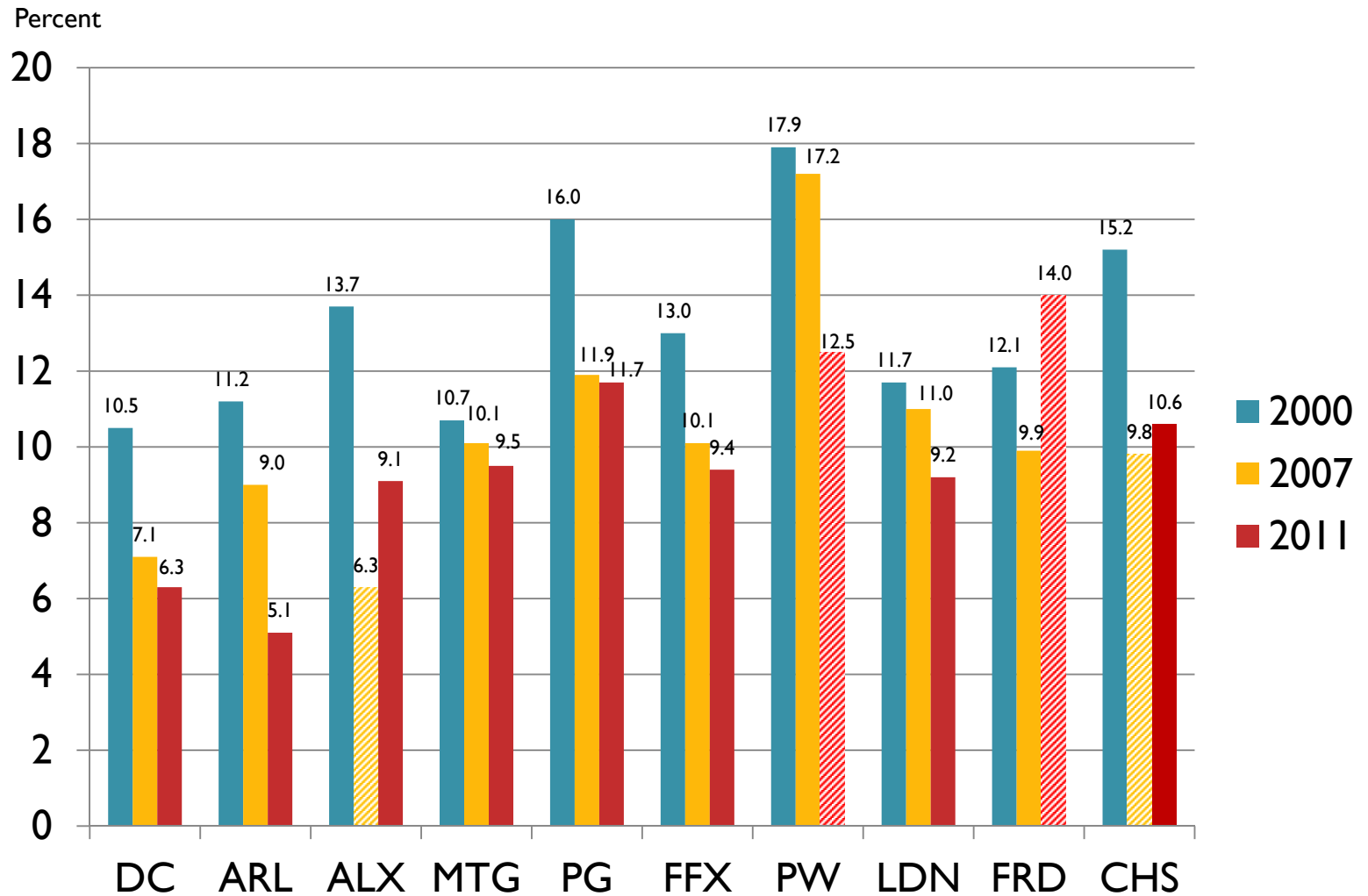
The regional Drive Alone/SOV commute mode share in 2011 was 66%



Changes in Drive Alone (SOV) Commute Mode Share

- Between 2000 and 2011 the drive alone/single occupant vehicle (SOV) mode share declined in DC, Arlington, Montgomery, and Prince George's and remained about the same in other jurisdictions in the region
- The greatest decreases in drive alone/single occupant vehicle (SOV) commuting flows were from Montgomery and Prince George's County to Fairfax and external areas outside the region
- Although drive alone/single occupant vehicle (SOV) mode share declined slightly in the region between 2000 and 2011, the total number of SOV commuters increased by about 228,000
- The greatest increases in drive alone/single occupant vehicle (SOV) commuting flows were from Loudoun to Loudoun, Loudoun to Fairfax/Cities, Prince William/Cities to Prince William/Cities, Prince William /Cities to Fairfax and Montgomery to Montgomery

Carpool Commute Mode Share



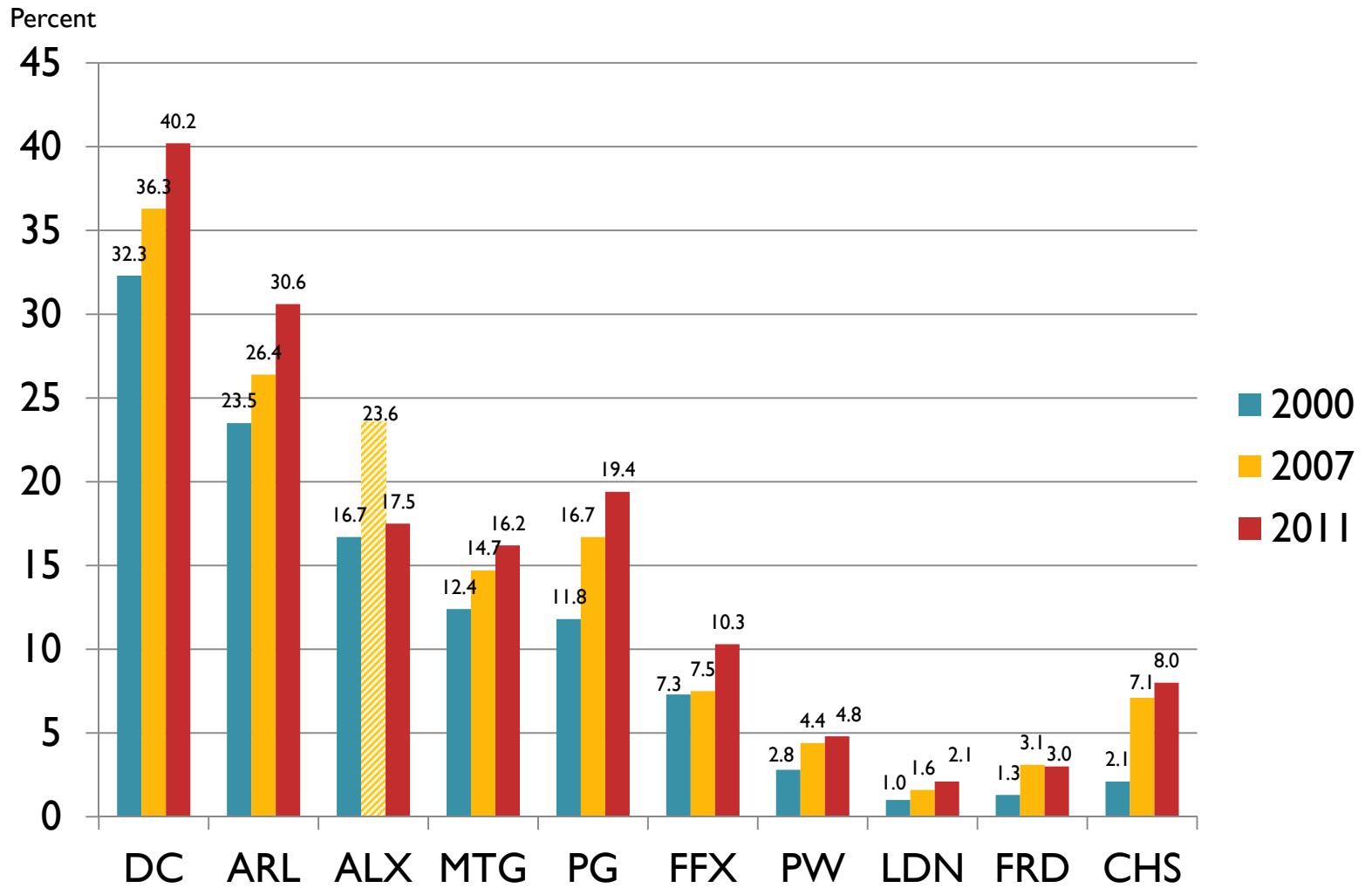
The regional Carpool commute mode share in 2011 was 9.7%



Changes in Carpool Commute Mode Share

- The carpool mode share declined regionally and in almost every jurisdiction between 2000 and 2011
- Most of the observed decrease in carpooling occurred between 2000 and 2007 and was also seen in the TPB Household Travel Survey and the Commuter Connections State of the Commute Survey.
- The greatest decreases in carpooling were from Prince George's and Fairfax/Cities to work place destinations in DC and Arlington
- The total number of regular carpoolers in the region declined by about 36,000 between 2000 and 2011.

Transit Commute Mode Share



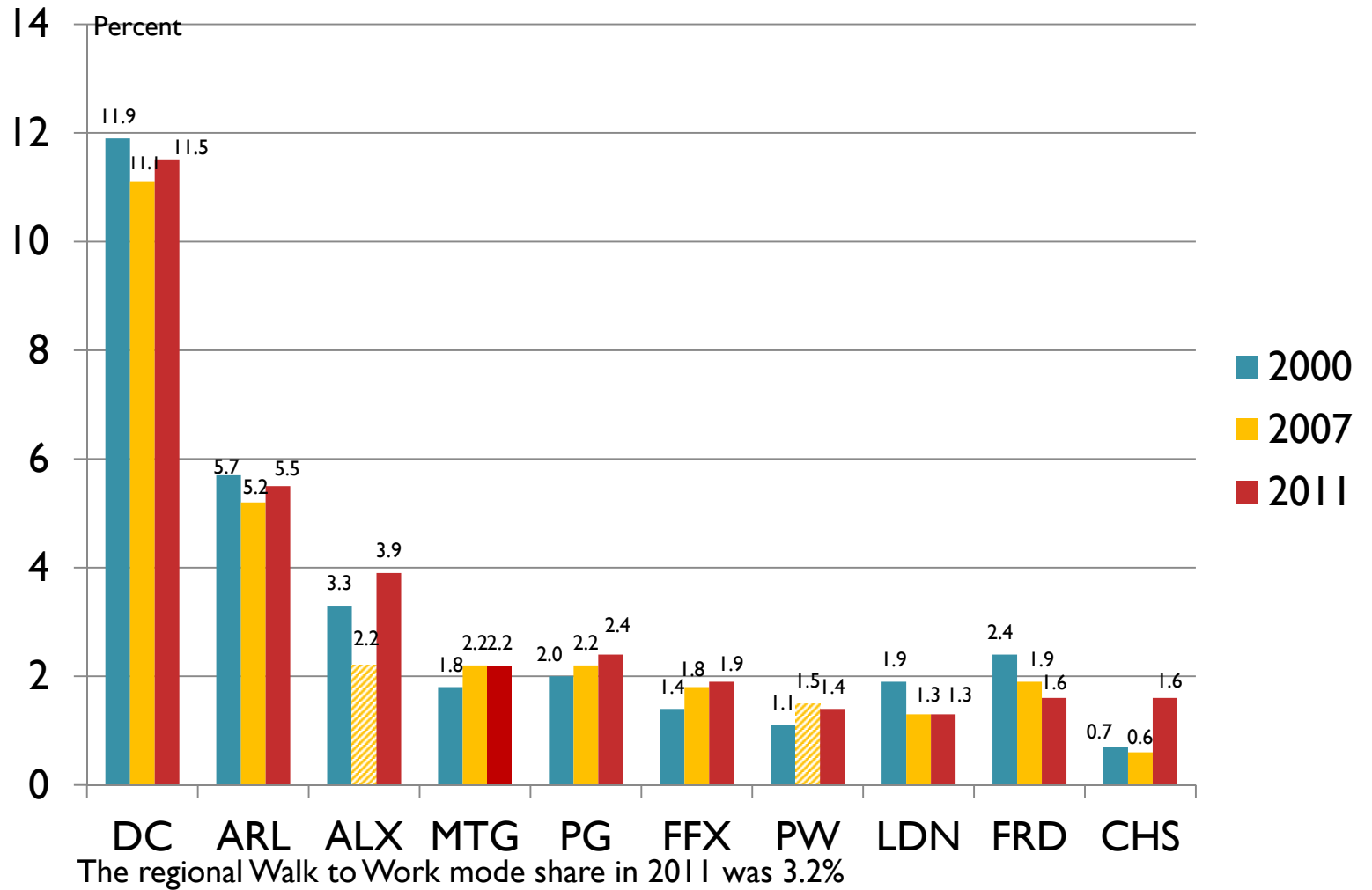
The regional Transit commute mode share in 2011 was 15.4%



Changes in Transit Commute Mode Share

- The transit mode share increased regionally and in almost every jurisdiction between 2000 and 2011
- Almost half of the observed increase in transit commuting occurred since 2011.
- The greatest increase in transit commuting was for workers who both lived and worked in DC (+31,000). Significant increases in transit commuting was also seen in commutes from Montgomery, Prince George's and Fairfax/Cities to DC, commutes within Prince George's, within Montgomery County, and within Fairfax/Cities. Transit commuting between Fairfax/Cities and Arlington also increased noticeably.
- The total number of regular transit commuters in the region increased by about 162,000 between 2000 and 2011.

Walk to Work Mode Share

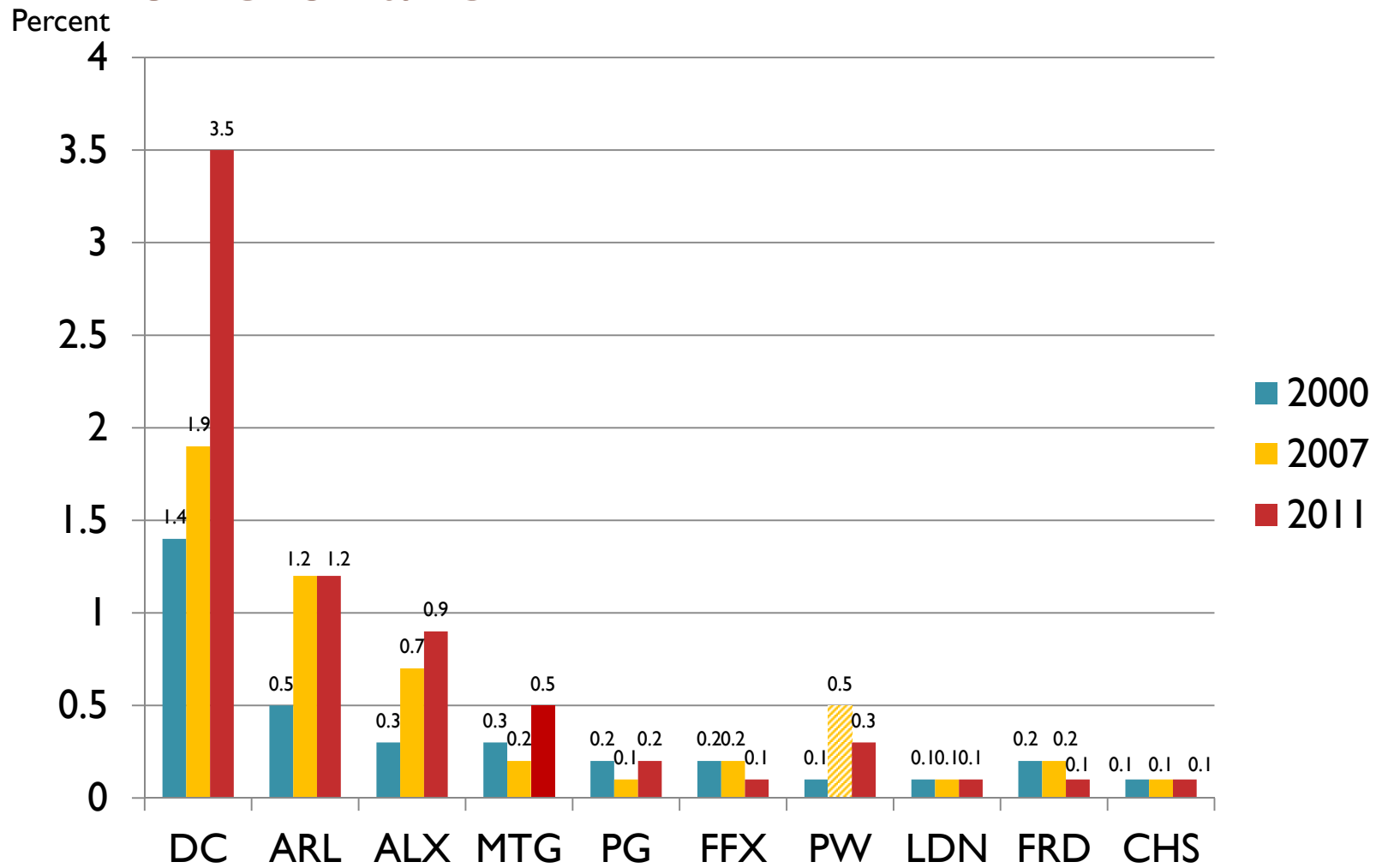




Changes in Walk Commute Mode Share

- The walk to work mode share remained fairly constant between 2000 and 2011
- DC, Arlington and Alexandria had the highest percentage of workers who walked to work
- The total number of workers in the region who regularly walked to work increased by about 17,000 between 2000 and 2011.

Bike Commute Mode Share



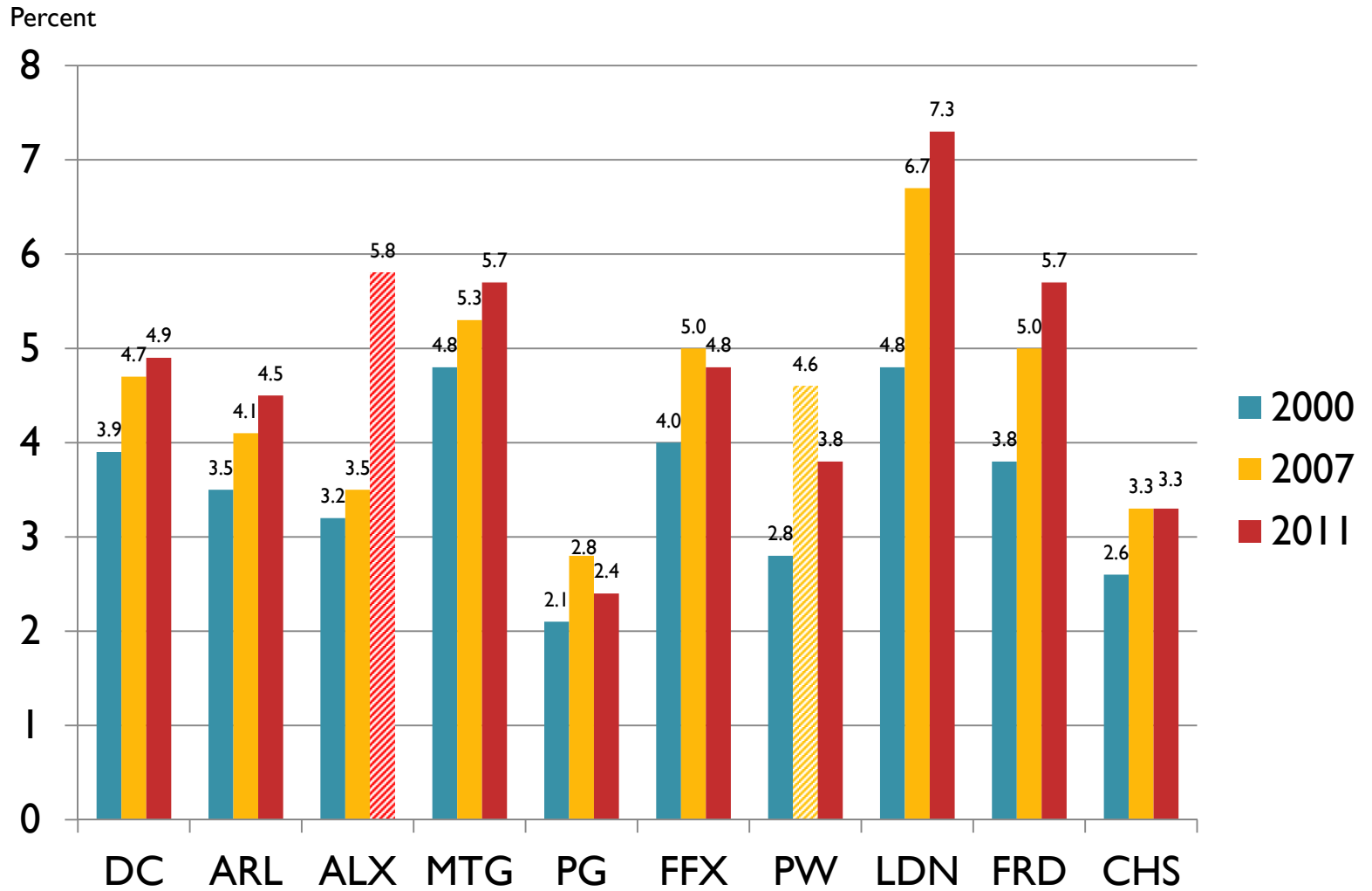
The regional Bike Commute mode share in 2011 was 0.7%



Changes in Bike Commute Mode Share

- The number of commuters regularly biking to work increased by about 11,000 between 2000 and 2011
- About 60% of this increase was by workers who both lived and worked in DC
- Significant increases in bike commuting was also seen for commutes within Montgomery County and commutes between DC and Arlington

Percent Work at Home



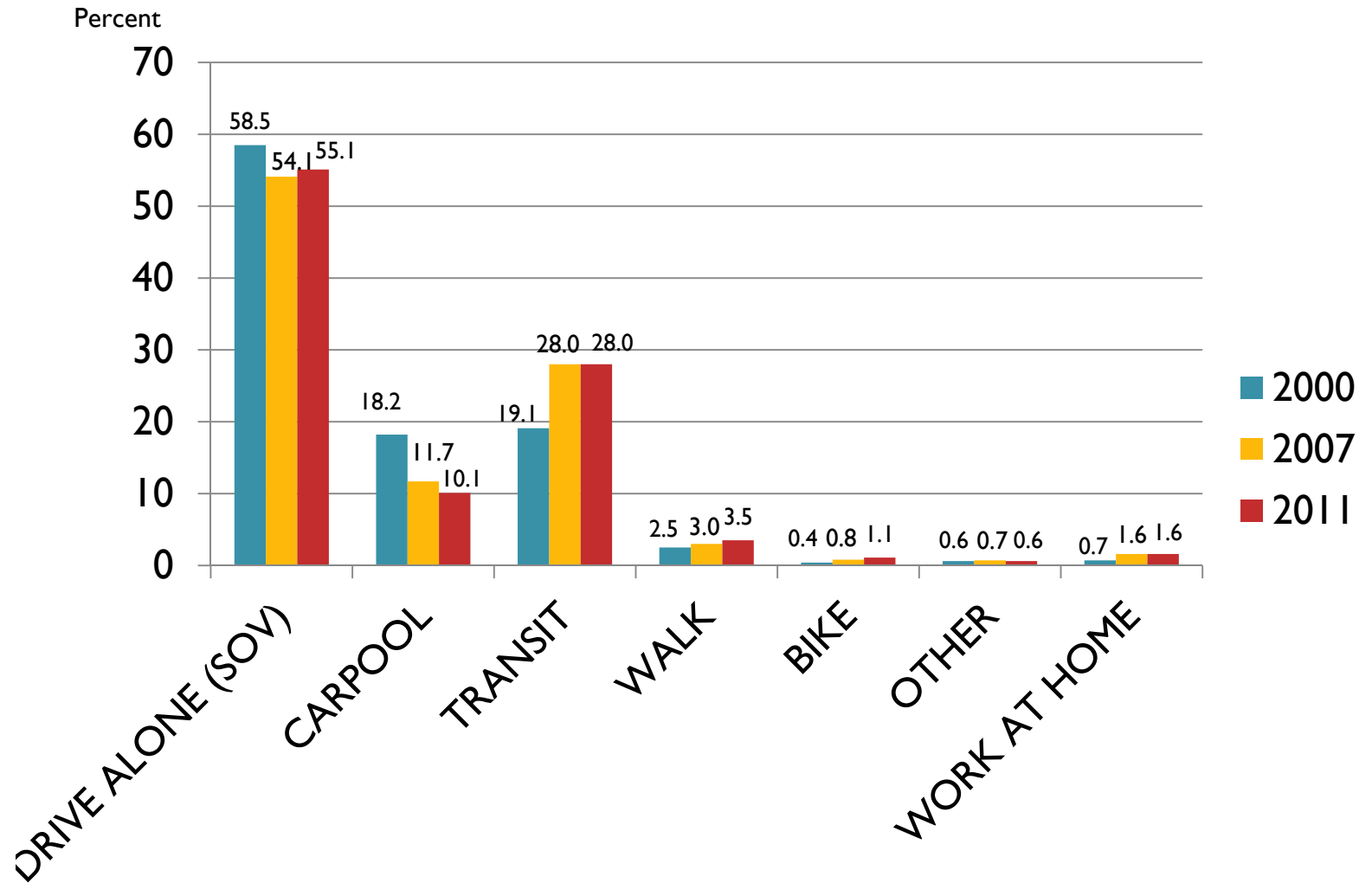
The regional Percent Work at Home in 2011 was 4.7%



Changes in Percent of Workers Who Work at Home

- The number of workers working primarily from their home increased by about 45,000 between 2000 and 2011
- The largest increases in the number of workers working from home were in Loudoun County, Montgomery and Fairfax/Cities

Commute Mode Share for Federal Government Workers





Changes in Federal Worker Commute Mode Shares

- Federal workers had the greatest increase in the transit commute mode share and the greatest decrease in the carpool commuting mode share between 2000 and 2011
- The percent of Federal workers using transit for their usual daily commute increased from 19% in 2000 to 28% in 2007 and 2011
- The percent of Federal workers regularly carpooling to work decreased from 18% to 10% between 2000 and 2011
- The share of Federal workers commuting in single-occupant vehicles also decreased 59% to 55% between 2000 and 2011
- The percent of Federal workers regularly working from home (likely telecommuters) more than doubled from less than 1% to 1.6% between 2000 and 2011
- The walk and bike to work mode share for Federal workers also increased between 2000 and 2011
- Currently, about 80% of the Federal workers in the region are offered a \$240/month transit subsidy benefit (2010 State of the Commute)



Summary of Major Findings

- The number of workers residing in areas outside the region commuting to jobs inside the region increased by about 40% between 2000 and 2007, but has remained about constant since then, reducing the growth in long-distance commutes from external areas
- All jurisdictions added a significant number of workers between 2000 and 2011
- Drive Alone/SOV commutes have declined slightly, but steadily since 2000
- Carpool mode share has declined significantly since 2000
- Transit mode share increased in every jurisdiction from 2000 to 2011, and increased regionally by 30%
- Bike mode share has increased significantly in DC, Arlington, Alexandria, and Montgomery since 2000
- Walk mode share has remained about the same
- The % of workers who work from home has increased in every jurisdiction, but most significantly in Loudoun
- Federal workers showed the greatest increase in the transit commute mode share and the greatest decrease in the carpool mode share since 2000