



Seattle
Department of
Transportation



2019 Seattle Center City Commute Mode Split Survey **RESULTS REPORT** - April 2019

This presentation highlights the results from two studies of commuters to Commute Seattle's defined Center City neighborhoods in Downtown Seattle.

Commute Trip Reduction (CTR) Affected Commuter Survey

- Conducted with employees at statewide CTR-affected worksites; results filtered to only include Center City area worksites.
- Number of interviews (n)=58,953.
- Includes large CTR-affected worksites with 100 or more employees.
- Data primarily collected during the 2019-2020 Fall survey cycle, including 2017-2018 survey cycle data for worksites which had not yet participated in the current cycle.
- Survey administered as a print and online survey.

Non-affected Commuter Mode Split Survey

- Conducted with employees at Non-affected worksites in Center City neighborhood.
- Transportation Management Planning (TMP) participating properties were sampled similarly to the 2019 CTR survey effort. In previous years, TMP worksites were randomly sampled and included as part of the Non-affected survey effort. For comparison purposes, the TMP and other Non-affected results will continue to be reported together.
- Non-affected worksites data collected between October 28th and November 27th, 2019 and reflects commute data between October 21st and November 22nd.
- Number of Non-affected interviews excluding TMP (n)=2,069
- Number of TMP interviews (n)=4,518
- Includes both small and medium-size worksites (1-99 employees) and larger worksites (100+) that are not affected by WSDOT's CTR program.
- A full Center City business list and estimated worksite population counts were provided by InfoUSA. A random sample of worksites was pulled to approximate the estimated proportions of neighborhood commuter populations and worksite sizes. Each sampled worksite was contacted to identify and screen a survey coordinator, who was then recruited to administer the surveys to all employees at their respective worksites.
- Administered as an online and print survey, with telephone interviewing (for smaller 1-4 worksites).

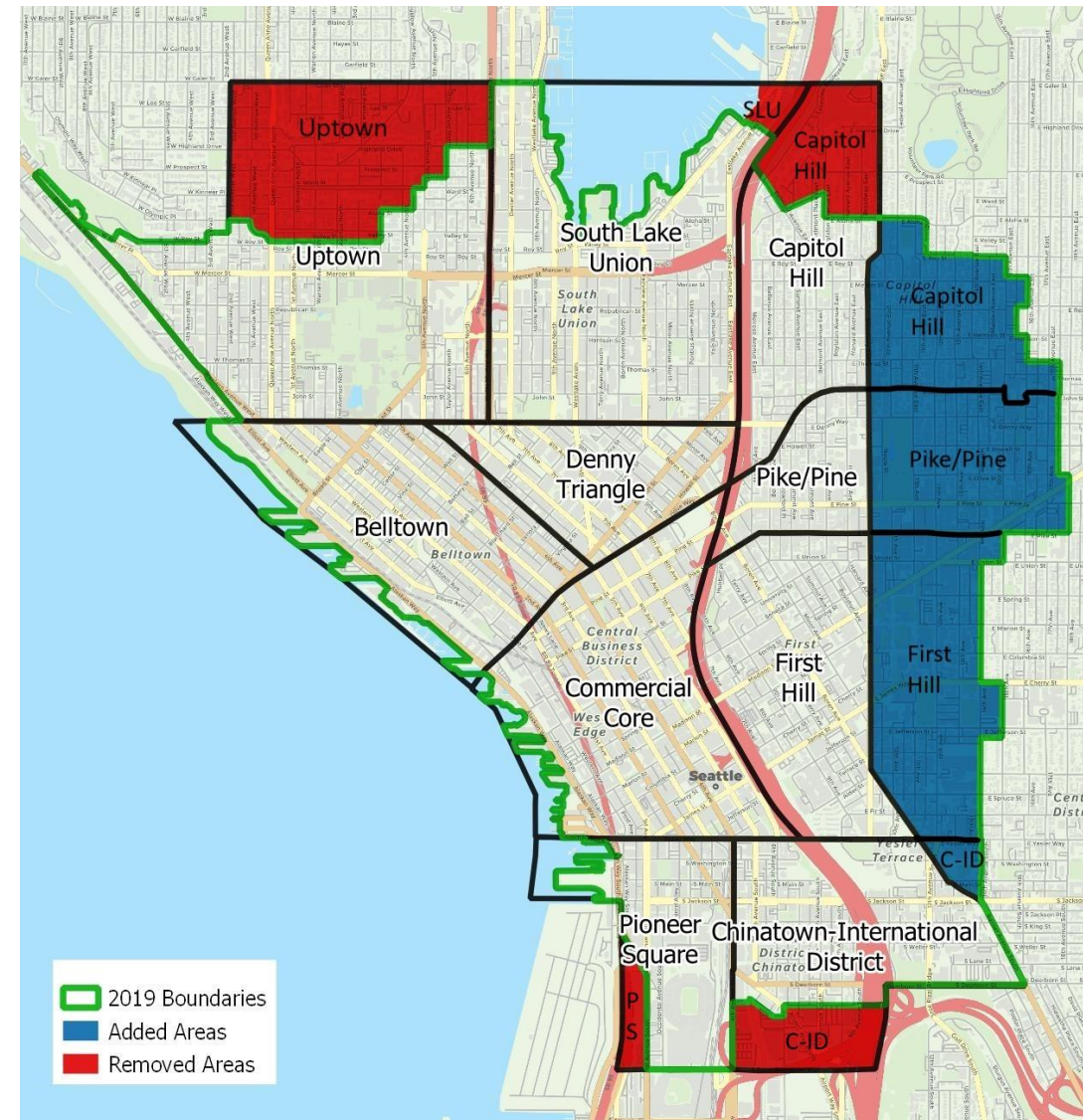
Caveats

➤ Geography boundary changes

To more closely align with current demarcations of Downtown Seattle neighborhoods, the survey geography boundaries have been revised between 2017 and 2019. The changes have been highlighted in the accompanying map. (blue=added in 2019; red=removed in 2019; no color=unchanged)

➤ Transportation Management Program (TMP) property sampling

Although included in the random sample of Non-affected worksites in previous years, worksites from several dozen TMP properties were not sampled as part of the Non-affected mode split survey effort in 2019. Instead, they were interviewed in tandem with the CTR data collection. The final data for these properties has been included as part of the Non-affected results highlighted in this report.



Caveats (Continued)

➤ **Downtown Construction Projects (“Seattle Squeeze”)**

- Various large scale SDOT and WSDOT transportation construction projects under way in Downtown Seattle throughout the CTR data collection period, most notably the opening of the Highway 99 Tunnel and closure and demolition of the viaduct. Tunnel tolling started in the middle of Non-affected data collection.

➤ **Weather**

- Daily high temperatures ranged from the low 40s to the upper 60s during the Non-affected survey period.
- There was about 2 inches of rain throughout the three-week Non-affected survey period.

➤ **Gas prices**

- On average, there was \$0.49 per gallon increase in gas prices in 2019 (\$3.49/gallon) compared to 2017 (\$3.00).

➤ **Sports events**

- One weekday Sounders match took place during the Non-affected data collection period, on Wednesday 10/23.

➤ **Economy**

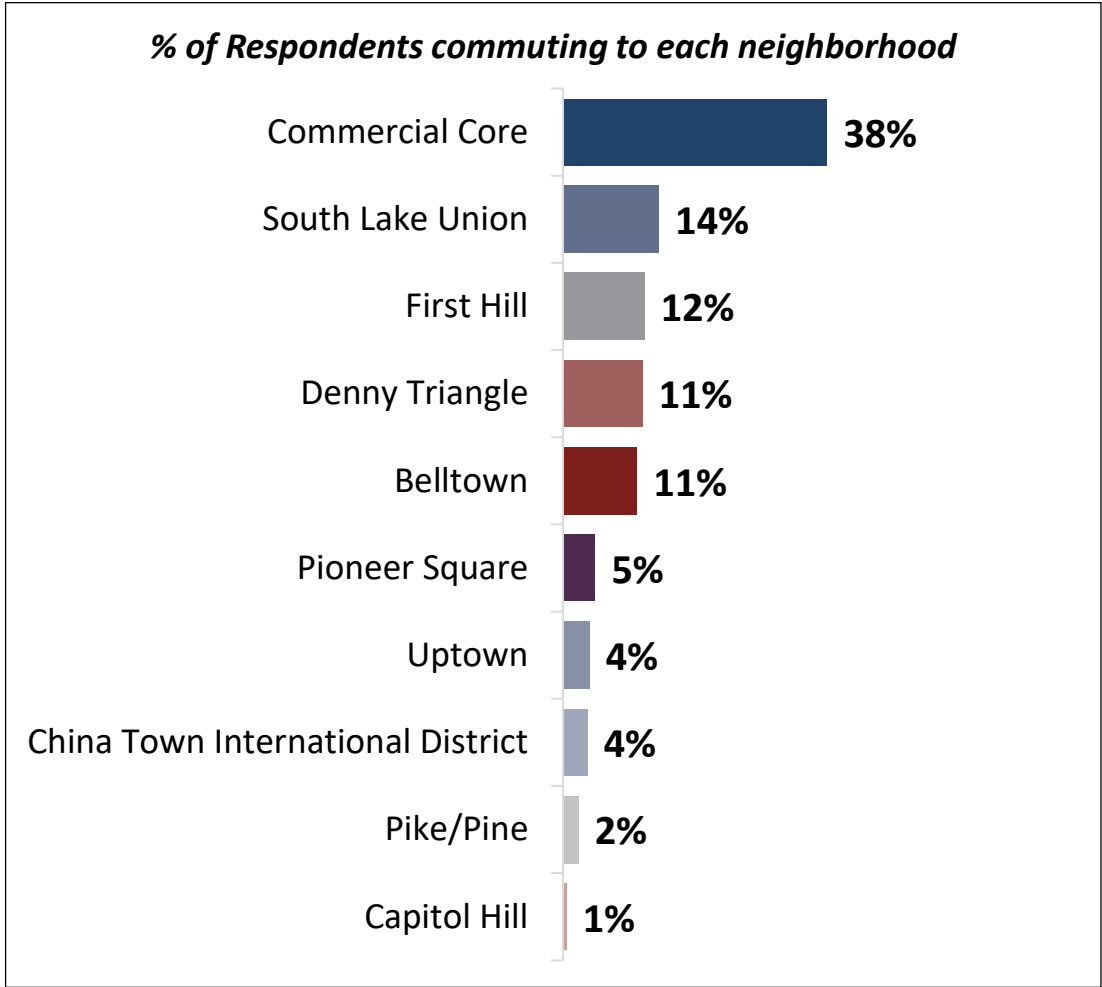
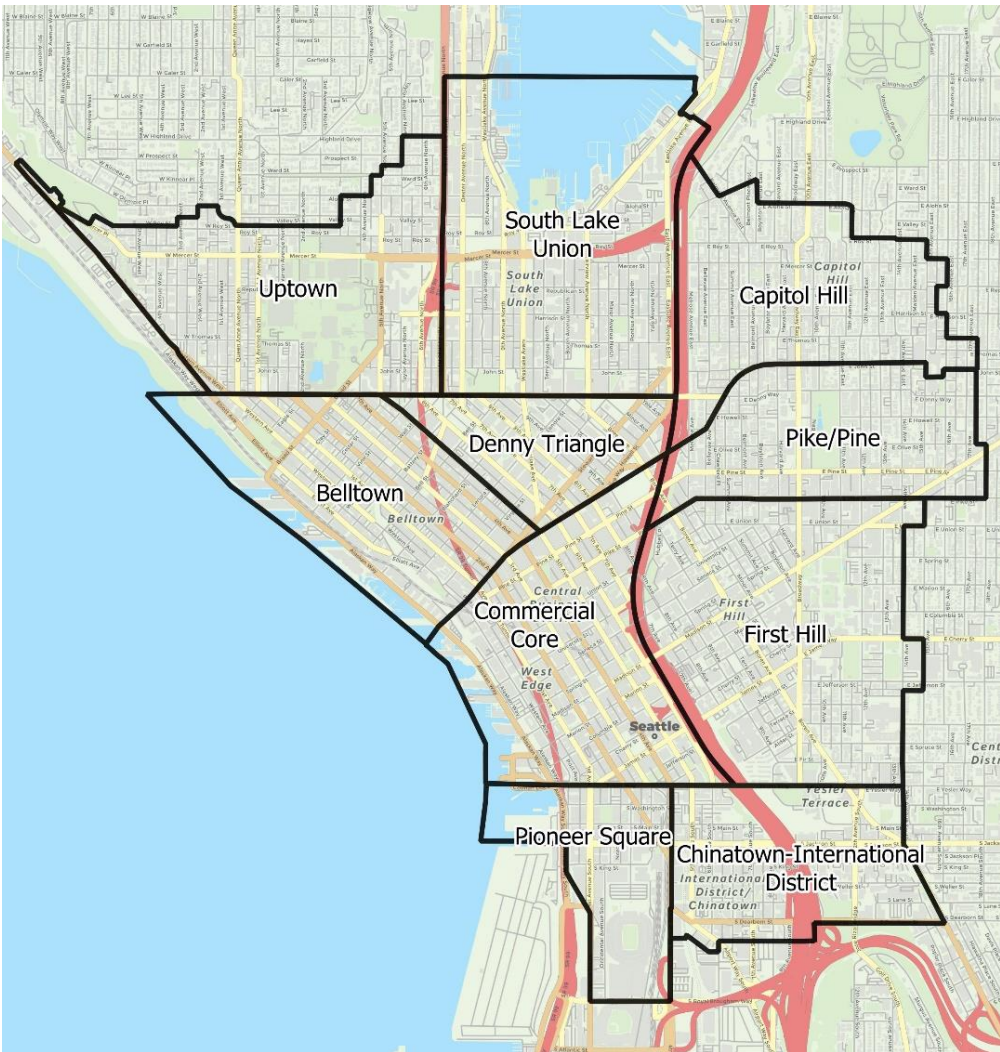
- A strong regional economy contributed to high ridership downtown.

➤ **COVID-19**

- Since commuter data collection took place in Fall 2019, this report does not reflect the potential impacts the Coronavirus Disease 2019 (COVID-19) may have on commuting or telecommuting trends more recently.

Center City Neighborhoods

A map of the overall Center City and its neighborhood subareas are shown in the map below:



Nine Year (2010–2019) Survey Results

Weekday Peak Commuters

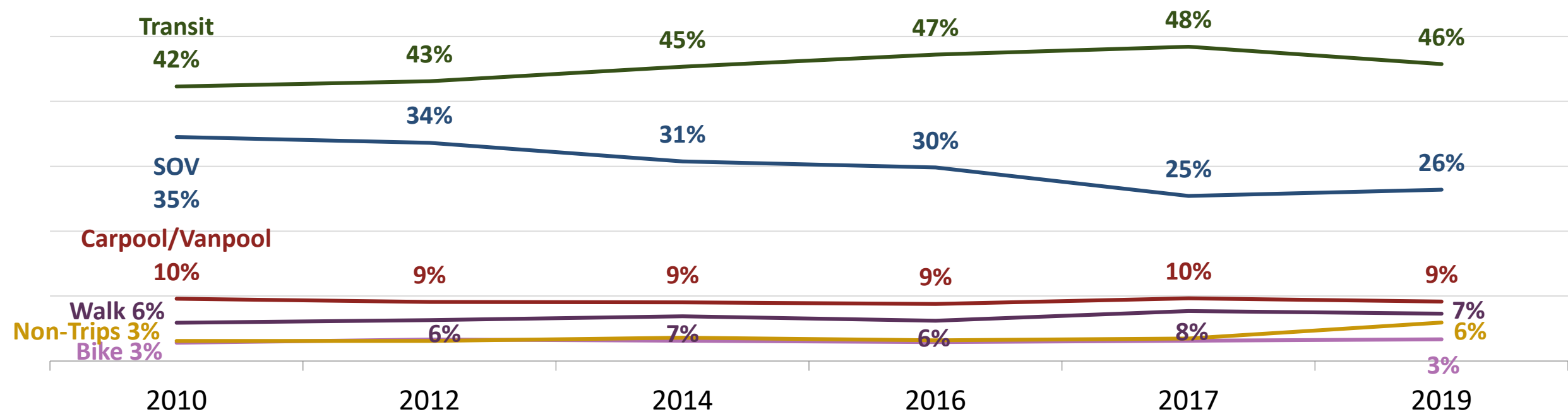
The following results reflect the CTR-affected and Non-affected respondents who started work between 6 a.m. and 9 a.m. on at least one weekday (Monday-Friday) during the survey period. Those who did not start work between 6 a.m. and 9 a.m. on a weekday have been omitted.

Weekday Mode Share – Trend

The overall SOV share of weekday commute trips in 2019 (26%) remains consistent with 2017 (25%) and is significantly lower than 2010 (35%). The reported share of transit trips has slightly dropped following its peak in 2017, corresponding with a leveling off of new ridership following 2016’s U-Link expansion. The reported share of non-commute trips – including telecommuting and compressed workweek days off – has nearly doubled over the last couple of years.

2010 – 2019 Commute Mode Change – Overall City Center
Respondents who started work between 6 a.m. and 9 a.m. on weekdays

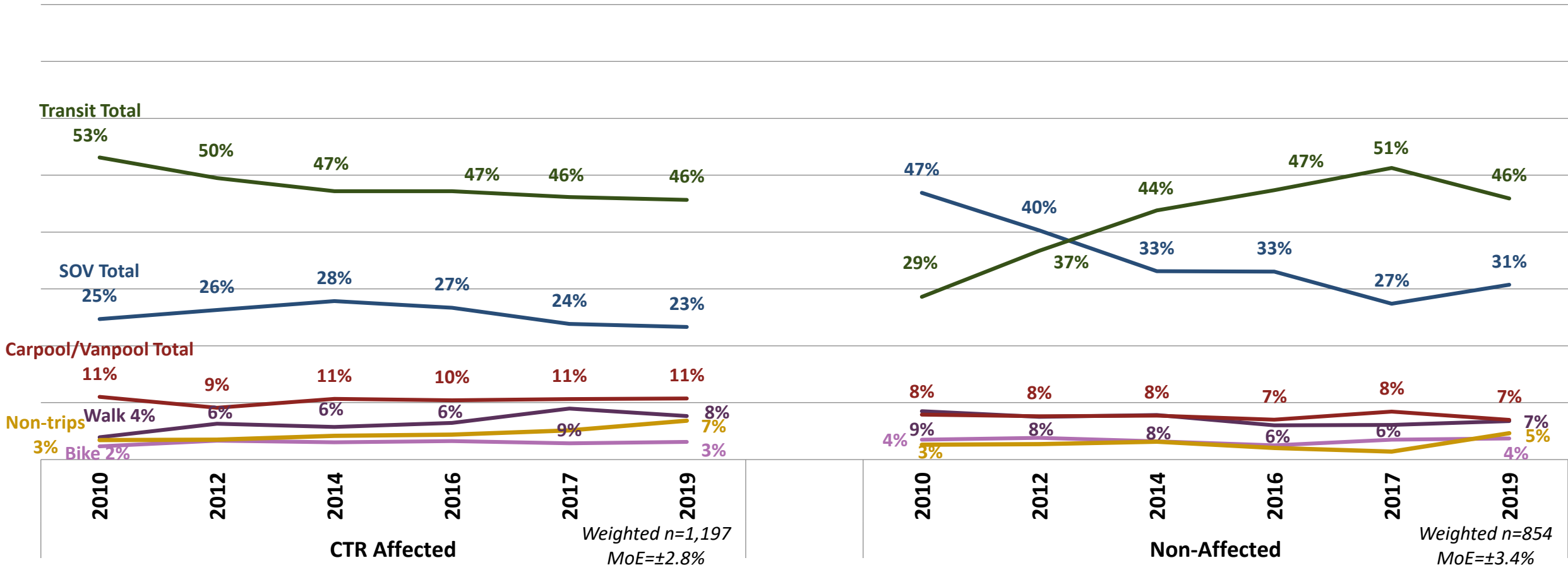
Unweighted n=59,921
Weighted n=2,051
Weighted MoE=±2.2 pts



Mode Shift – CTR-Affected vs. Non Affected

Over the last several years, Non-affected commuters have seen greater shifts in their commute mode usage than CTR-affected commuters, who have remained relatively consistent. Non-affected commuters have typically driven alone at a higher rate but their 2019 transit and SOV weekday peak trip shares have nearly rebounded to pre-2017 levels. The share of public transit trips is now comparable between both commuter groups.

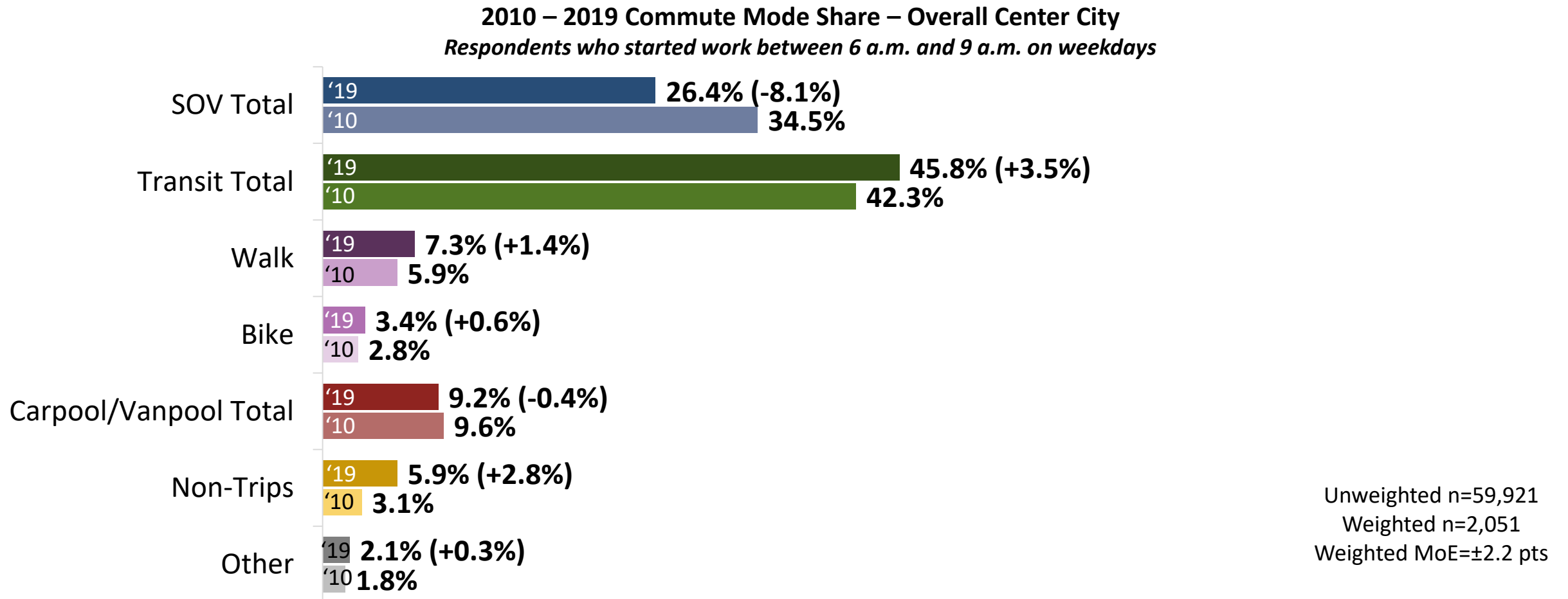
2010 – 2019 Commute Mode Change – CTR affected & Non-affected
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Q1. Last week, what type of transportation did you use each day to commute to your usual work location?

Overall Mode Share – 2010 to 2019 Trend

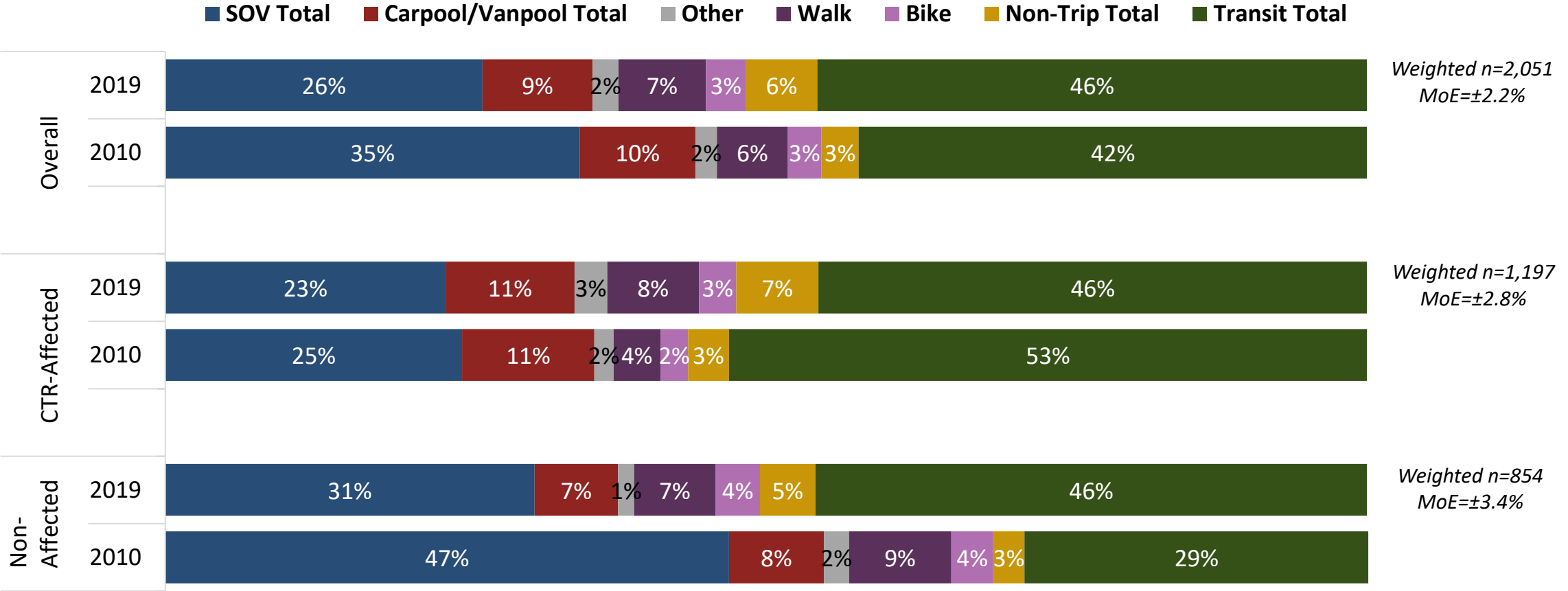
Between 2010 and 2019, the single-occupancy vehicle (SOV) trip share has dropped (-8 points), with a bulk of the gains shifting towards transit (+3.5 points), which now makes up a near majority (45.8%) of weekday peak trips to Center City, and non-trips, including working remotely (+2.8 points). Since 2010, the share of walking commute trips has increased slightly (+1.4 points) and the proportion of rideshare (carpool and vanpool) trips has remained almost unchanged.



Weekday Mode Share – 2010 to 2019 Trend by Survey Type

Since 2010, the share of weekday peak transit trips has increased significantly among non-affected commuters (+17 points). The walking mode split has doubled for CTR-affected commuters since 2010, aided by growth in residential development near major worksites.

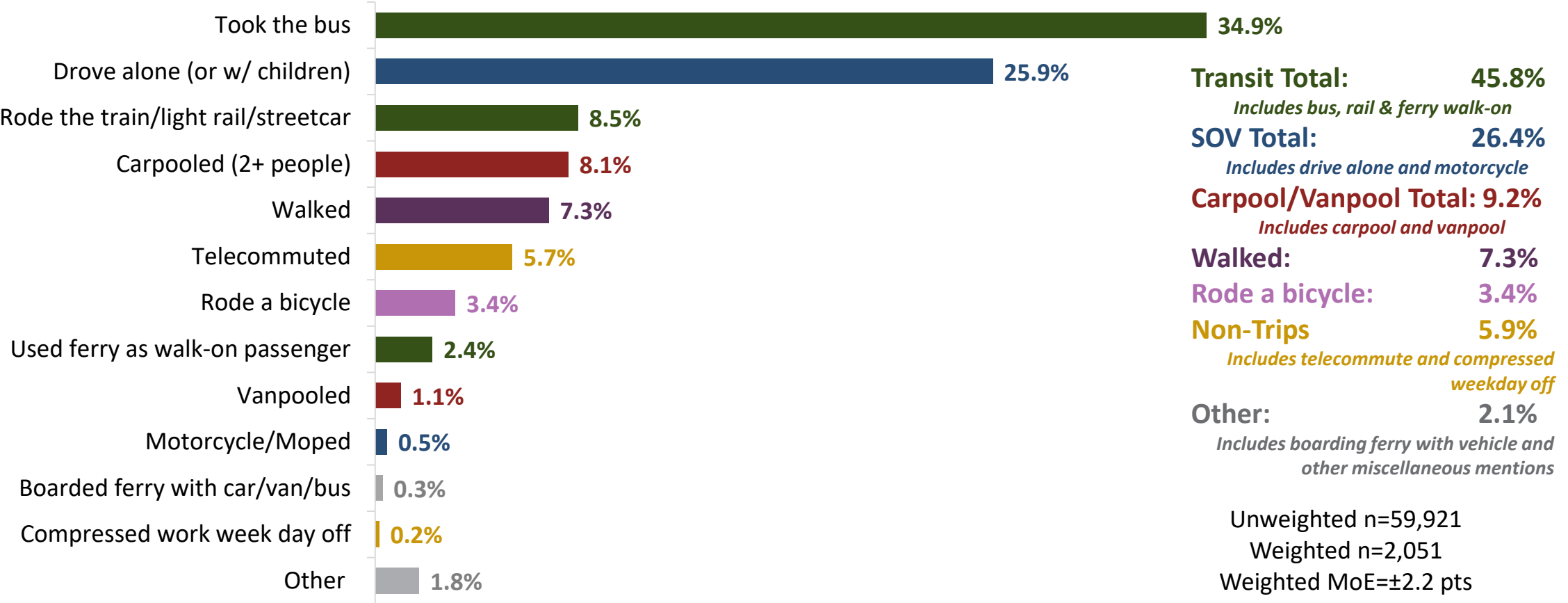
Weekday Mode Share by Survey Type
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Detailed Mode Share – 2019 Overall

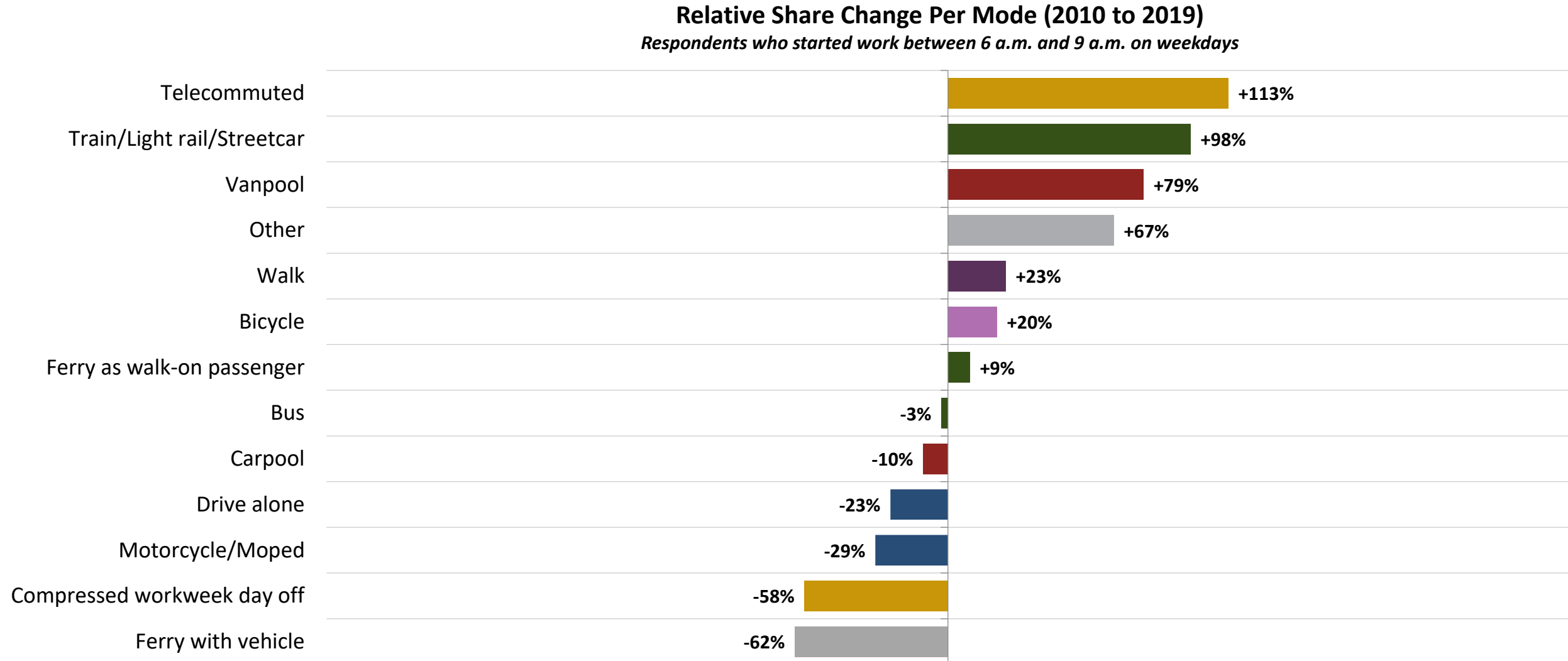
Among the specific mode share comparisons, bus trips make up a large plurality (34.9%) of weekday peak commute trips to Center City, followed by a quarter (25.9%) of drive alone (non-motorcycle) trips. Additionally, train/rail (8.5%), carpool (8.1%), walking (7.3%), and telecommuting (5.7%) round out the most frequently-used commute modes in 2019.

2019 Commute Mode Share – Overall Center City
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Relative Change in Weekday Mode Share

From 2010 to 2019, Telecommuting (+113%) and train/rail (+98%) trip have seen the greatest increases in reported weekday peak mode share.



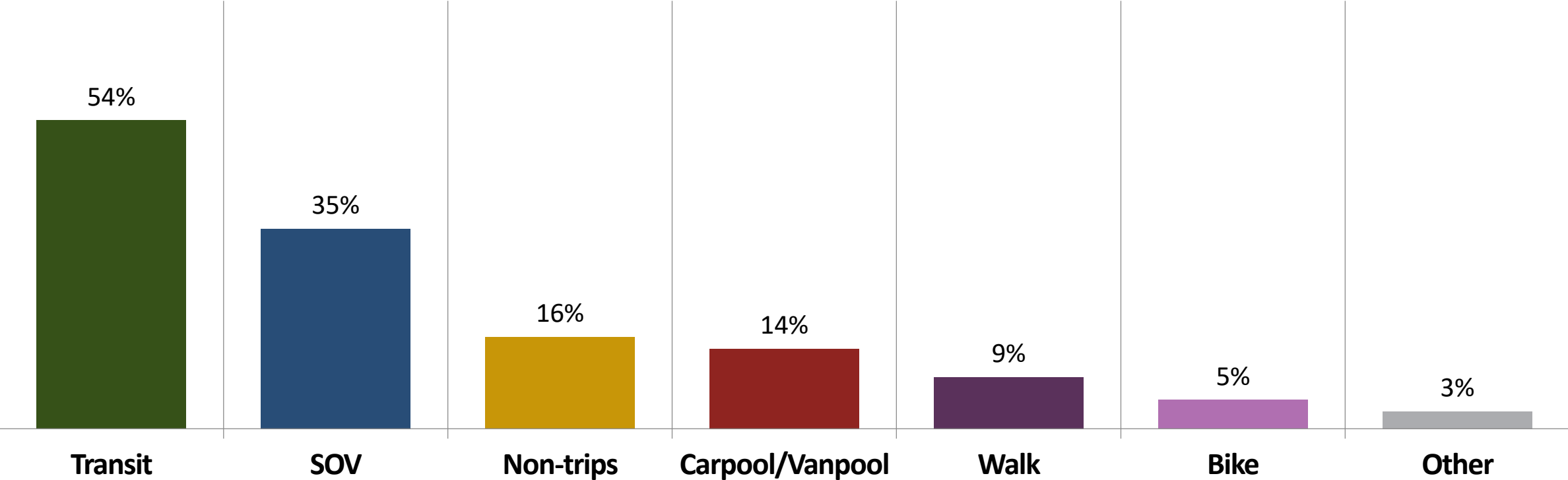
Detailed Mode Share – Nine-Year Comparison

Commuter Mode Share – Weekday Trips by CTR-affected/Non-affected Respondents who started work between 6 a.m. and 9 a.m. on weekdays															
	Overall					CTR-affected					Non-affected				
	2019	2017	2014	2010	Overall Change from 2010	2019	2017	2014	2010	CTR- affected Change from 2010	2019	2017	2014	2010	Non- affected Change from 2010
Weighted n	2,051	3,392	2,240	3,142		54,063	50,142	46,527	40,158		5,858	1,471	1,249	1,387	
Weighted Margin of Error (MoE)	±2.2%	±1.7%	±2.1%	±1.8%		±0.4%	±0.4%	±0.5 pts	±0.5%		±1.3%	±2.6% pts	±2.8 pts	±2.6%	
SOV Total	26.4%	25.4%	30.8%	34.5%	-8.1%	23.3%	23.9%	27.8%	24.7%	-1.5%	30.7%	27.4%	33.1%	46.9%	-14.9%
Transit Total	45.8%	48.4%	45.3%	42.3%	+3.5%	45.7%	46.1%	47.2%	53.1%	-6.7%	45.9%	51.3%	43.8%	28.6%	+16.1%
Carpool/Vanpool Total	9.2%	9.7%	9.0%	9.6%	-0.4%	10.7%	10.6%	10.6%	11.0%	-0.5%	7.0%	8.4%	7.7%	7.9%	-1.0%
Bus	34.9%	36.9%	37.9%	35.8%	-0.9%	34.7%	36.3%	39.3%	45.5%	-10.8%	35.1%	37.7%	36.9%	23.7%	+11.4%
Drive alone	25.9%	24.8%	30.1%	33.7%	-7.8%	22.7%	23.2%	27.1%	24.0%	-1.3%	30.4%	26.8%	32.5%	46.0%	-15.6%
Train/Light rail/Streetcar	8.5%	9.0%	5.4%	4.3%	+4.2%	8.9%	8.0%	5.8%	4.9%	+4.0%	8.0%	10.3%	5.0%	3.5%	+4.5%
Carpool	8.1%	8.4%	8.3%	9.0%	-0.9%	9.0%	8.4%	9.2%	10.0%	-1.0%	6.9%	8.3%	7.5%	7.8%	-0.9%
Walk	7.3%	7.7%	6.9%	5.9%	+1.4%	7.6%	9.0%	5.7%	3.9%	+3.7%	6.8%	6.1%	7.8%	8.5%	-1.7%
Telecommuted	5.7%	3.3%	3.3%	2.7%	+3.0%	6.6%	4.9%	3.9%	3.1%	+3.5%	4.5%	1.3%	2.8%	2.1%	+2.4%
Bicycle	3.4%	3.1%	3.1%	2.8%	+0.6%	3.1%	2.8%	3.0%	2.3%	+0.8%	3.7%	3.5%	3.2%	3.5%	+0.2%
Ferry as walk-on passenger	2.4%	2.5%	2.0%	2.2%	+0.2%	2.1%	1.8%	2.1%	2.7%	-0.6%	2.8%	3.3%	1.9%	1.4%	+1.4%
Vanpool	1.1%	1.3%	0.7%	0.6%	+0.5%	1.8%	2.2%	1.4%	1.0%	+0.8%	0.1%	0.2%	0.2%	0.1%	-
Motorcycle/Moped	0.5%	0.6%	0.6%	0.8%	-0.3%	0.6%	0.6%	0.7%	0.7%	-0.1%	0.4%	0.6%	0.6%	0.9%	-0.5%
Ferry with vehicle	0.3%	0.8%	0.4%	0.7%	-0.4%	0.3%	0.4%	0.4%	0.5%	-0.2%	0.3%	1.4%	0.5%	0.9%	-0.6%
Compressed workweek day off	0.2%	0.1%	0.3%	0.4%	-0.2%	0.2%	0.2%	0.2%	0.3%	-0.1%	0.1%	0.1%	0.3%	0.5%	-0.4%
Other	1.8%	1.4%	0.9%	1.1%	+0.7%	2.4%	2.1%	1.0%	1.1%	+1.3%	1.0%	0.5%	0.8%	1.2%	-0.2%

Mode Share at Least 1X a Week

Weekday peak commuters who telecommute or take rail into Center City are generally making longer commutes than those taking other modes.

Share of riders using mode at least once a week
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



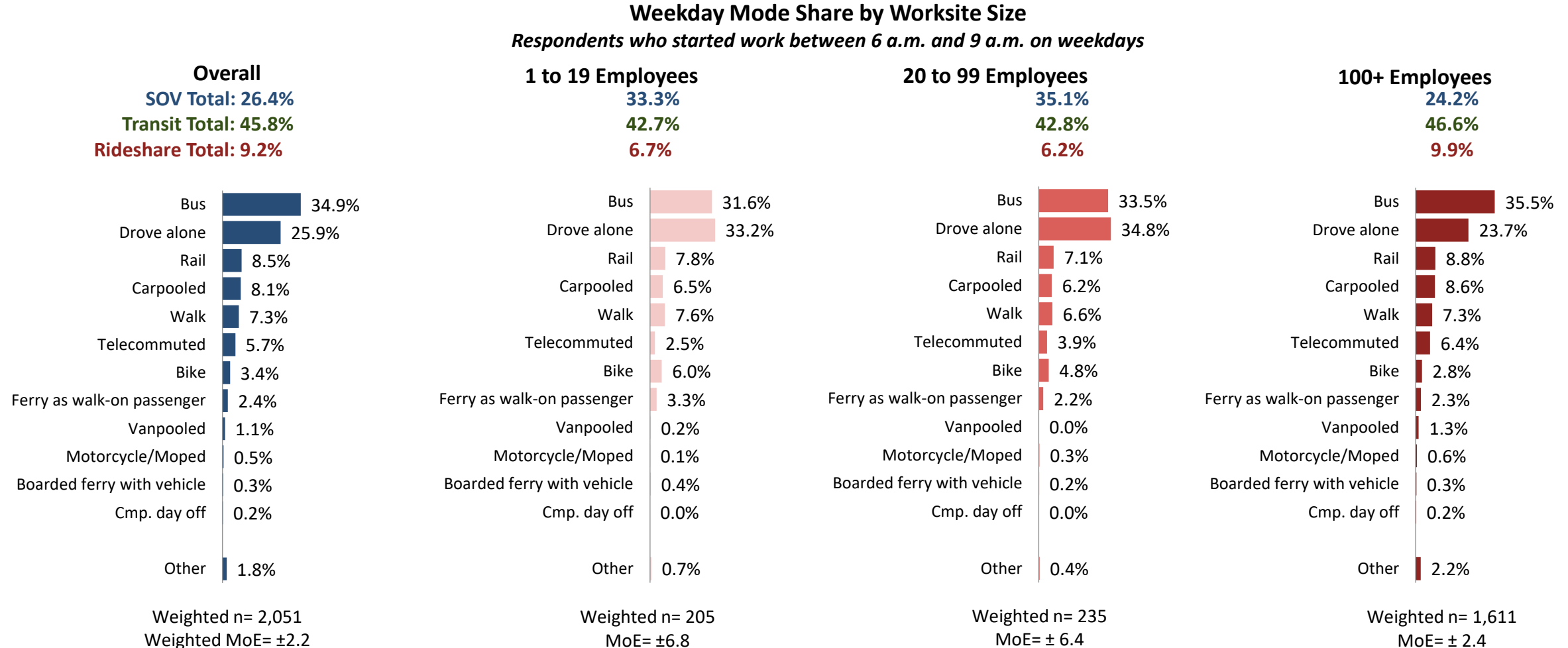
2019 Subgroup Comparisons

Weekday Peak Commuters

The following results reflect the CTR-affected and Non-affected respondents who started work between 6 a.m. and 9 a.m. on at least one weekday (Monday-Friday) during the survey period. Those who did not start work between 6 a.m. and 9 a.m. on a weekday have been omitted.

Weekday Mode Share by Worksite Size

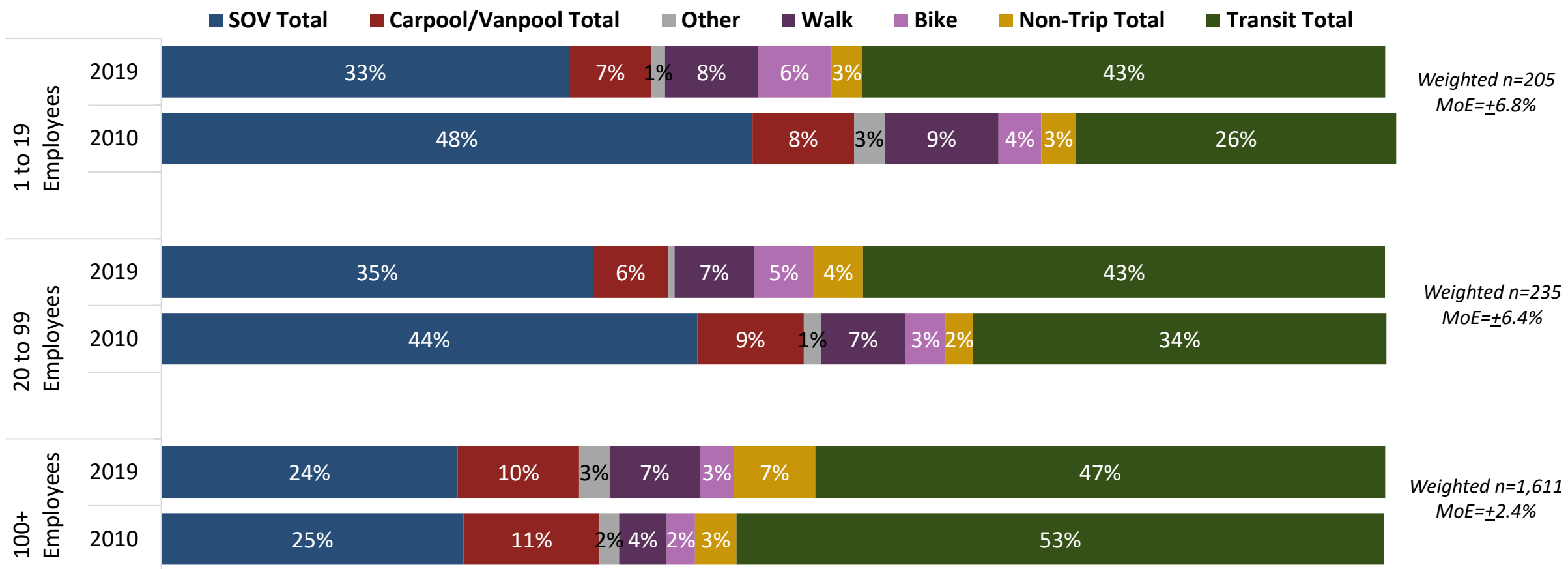
Center City commuters who work at smaller worksites (1-19 employees) still make a larger share of SOV trips than those who work at medium (20-99) and larger (100+) worksites, who are more likely to take bus, rail, or bike instead.



Weekday Mode Share by Worksite Size

Since 2010, weekday peak commuters to all sizes of worksites have reduced their share of drive alone commute trips. The mode splits among commuters to smaller and medium worksites have shifted the most since 2010. They now take transit for a greater share of trips than SOV.

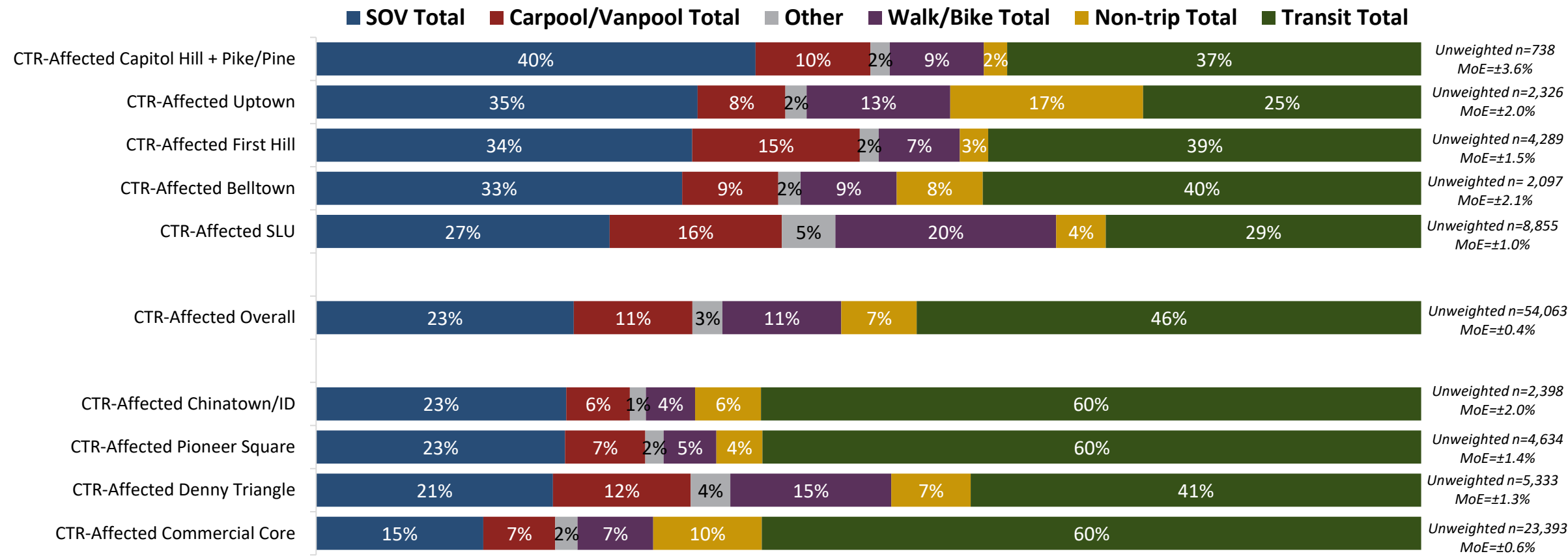
Weekday Mode Share by Worksite Size
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Neighborhood Mode Share – CTR-Affected

CTR-affected commuters use a broad mix of SOV-alternatives for their trips to each Downtown neighborhood. Those commuting to SLU (20% walk or bike), Denny Triangle (15%), and Uptown (13%) make the highest share of their trips by walking or biking. CTR commuters to Uptown report telecommuting for nearly 1-in-5 weekday peak trips.

CTR-Affected Mode Share by Destination Neighborhood
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Weekday Mode Share by Neighborhood – CTR-Affected

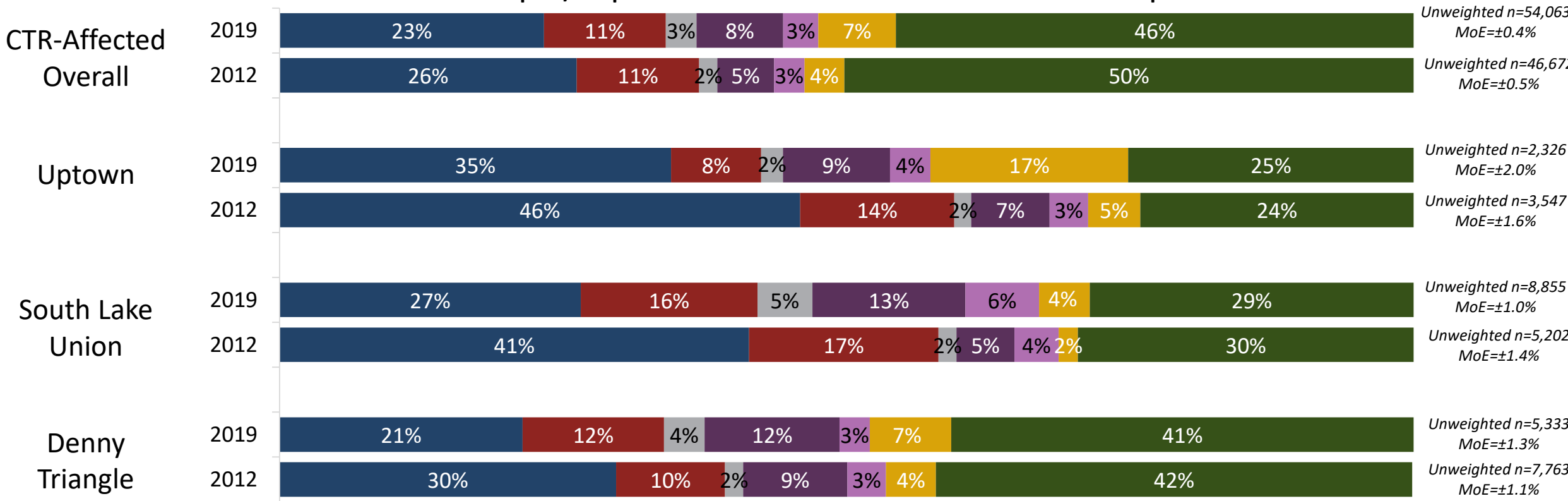


Between 2012 and 2019, the weekday peak mode share has grown slightly more diverse for CTR-affected commute trips and the shares of walk and telecommuting have increased. This is especially pronounced in the northern Center City neighborhoods, where the SOV share has dropped significantly for SLU, Uptown, and Denny. The share of walk trips have more than doubled to SLU and telecommuting has tripled to Uptown.

Weekday Mode Share by City Center Neighborhood

Respondents who started work between 6 a.m. and 9 a.m. on weekdays

■ SOV Total ■ Carpool/Vanpool Total ■ Other ■ Walk ■ Bike ■ Non-Trip Total ■ Transit Total



Weekday Mode Share by Neighborhood – CTR-Affected

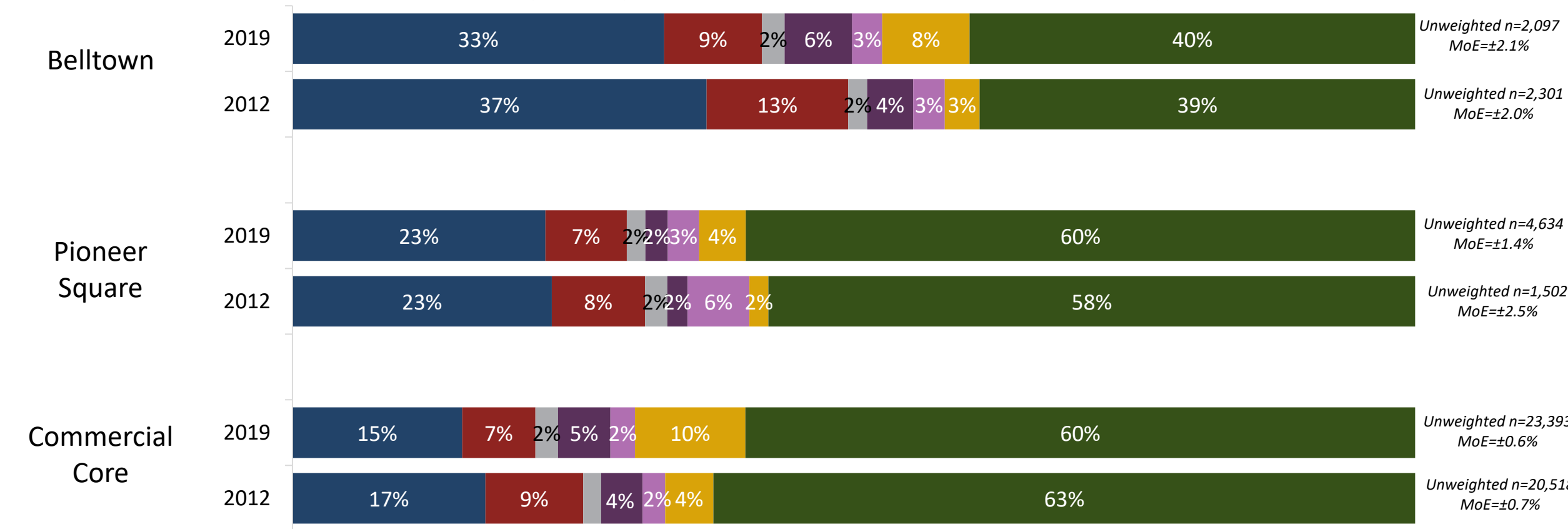


Relative to the areas to the north, the traditionally dense western neighborhoods have maintained relatively consistent mode splits from 2012 to 2019. They have all seen notable increases in their shares of telecommuting but the SOV and transit trip share to these areas have remained comparable to 2012.

Weekday Mode Share by City Center Neighborhood

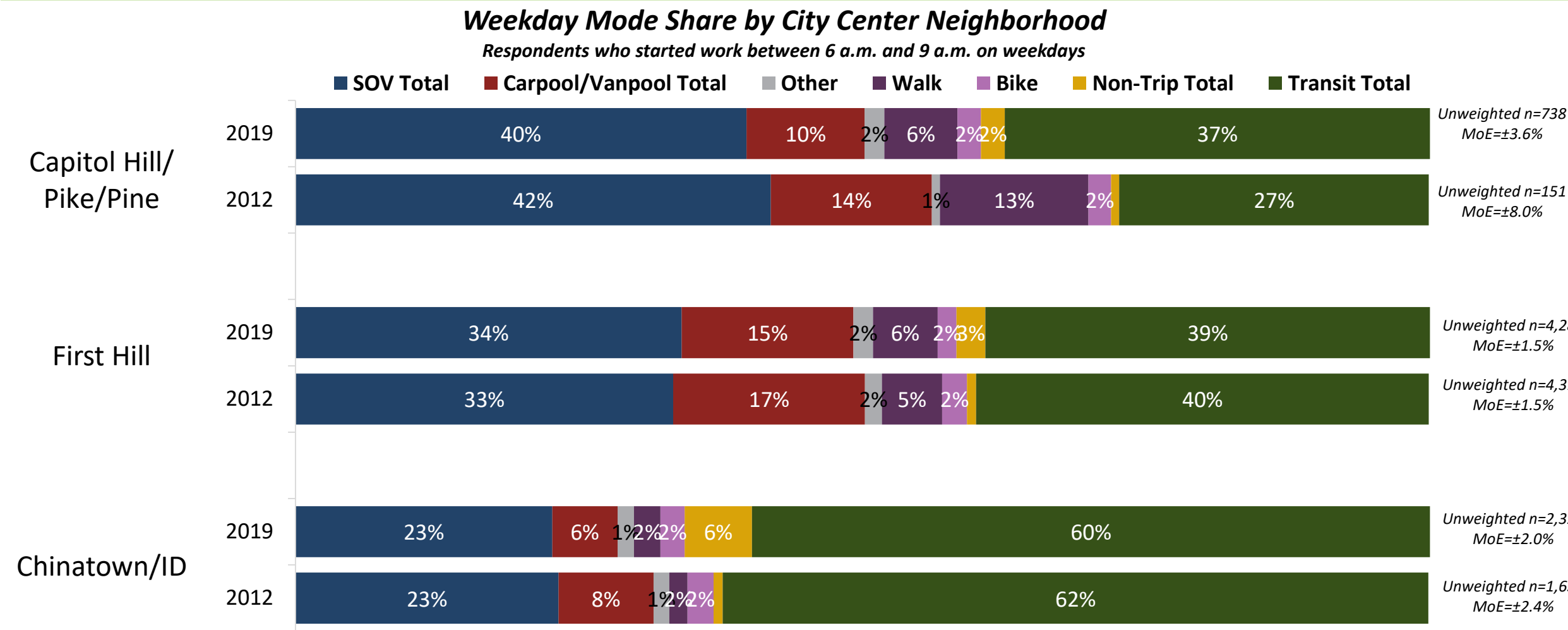
Respondents who started work between 6 a.m. and 9 a.m. on weekdays

■ SOV Total ■ Carpool/Vanpool Total ■ Other ■ Walk ■ Bike ■ Non-Trip Total ■ Transit Total



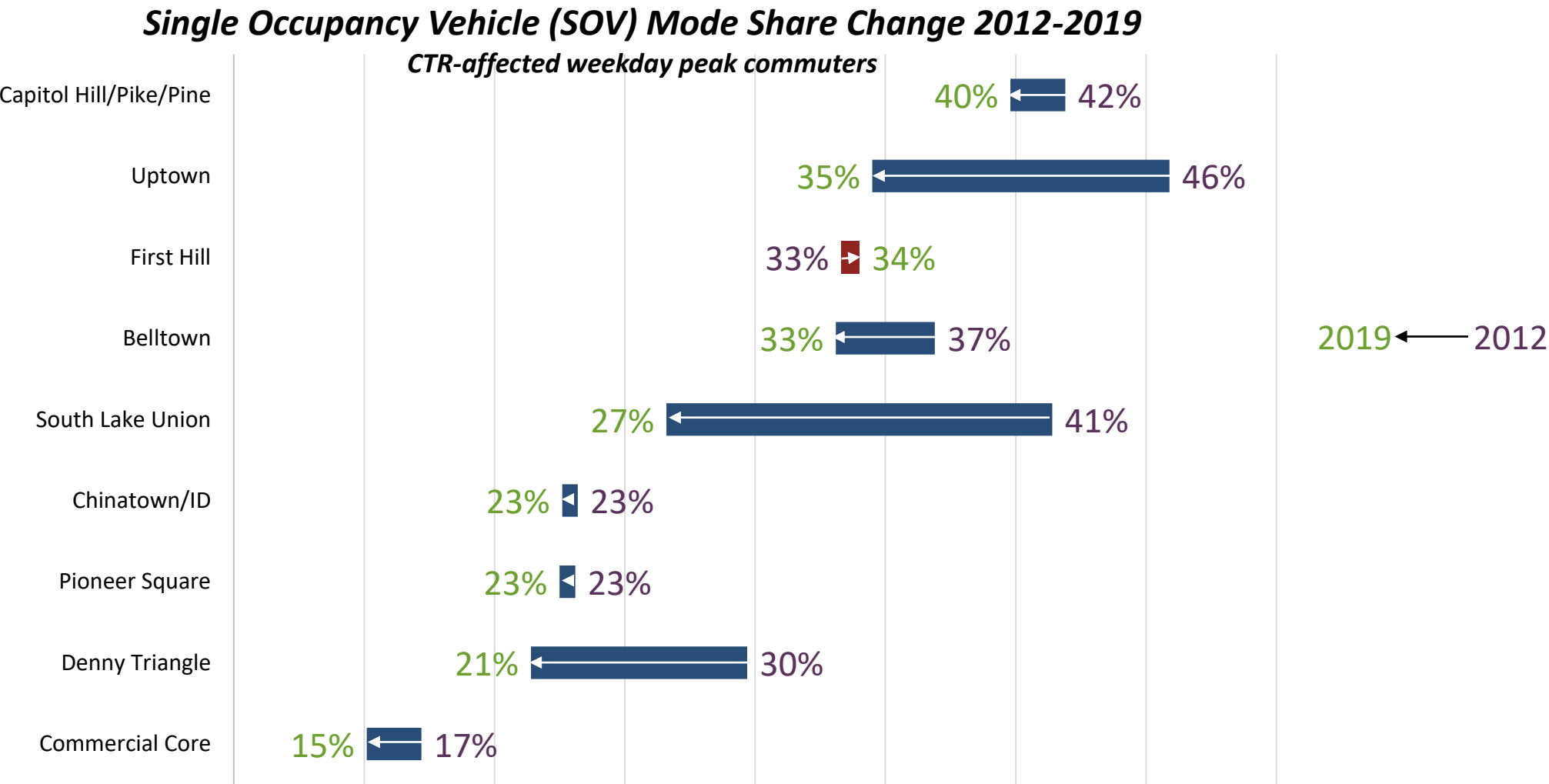
Weekday Mode Share by Neighborhood – CTR-Affected

The mode splits to Chinatown/ID and First Hill have remained relatively unchanged since 2012. The transit share has increased considerably to Capitol Hill/Pike-Pine (27 → 37%), coinciding with the opening of Link light rail to the area and the larger number of CTR-affected commuters to the neighborhood in 2019.

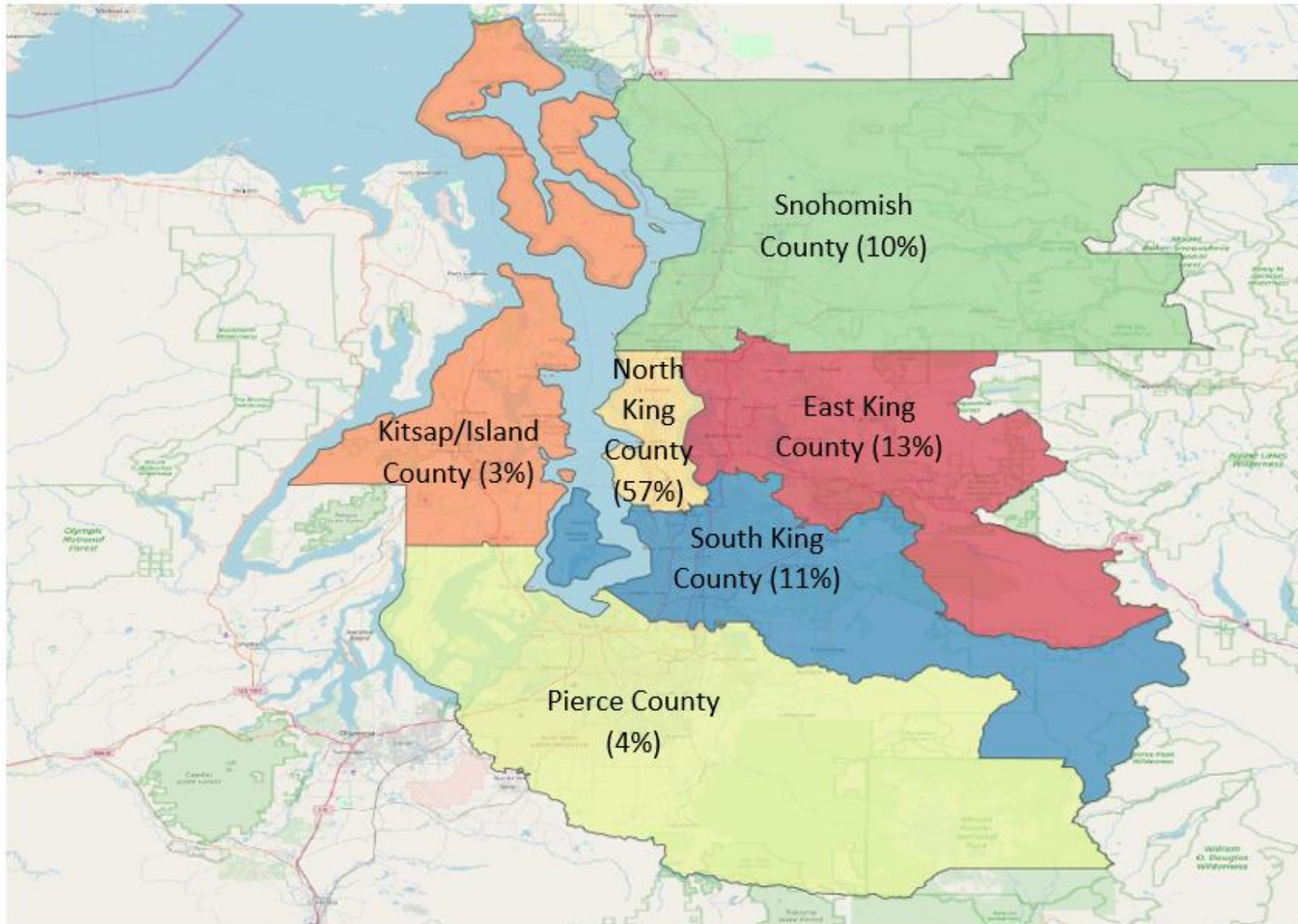


SOV Share by Neighborhood – CTR-Affected

Since 2012, the share of SOV trips dropped significantly for weekday peak commuters to South Lake Union (-14 points), Uptown (-11), and Denny (9). SOV rates are slightly lower for Commercial Core (-2), Belltown (-4), and Capitol Hill/Pike Pine (-2) CTR commuters, and unchanged for those in First Hill, Chinatown/ID, and Pioneer Square.



Home Geographies Map

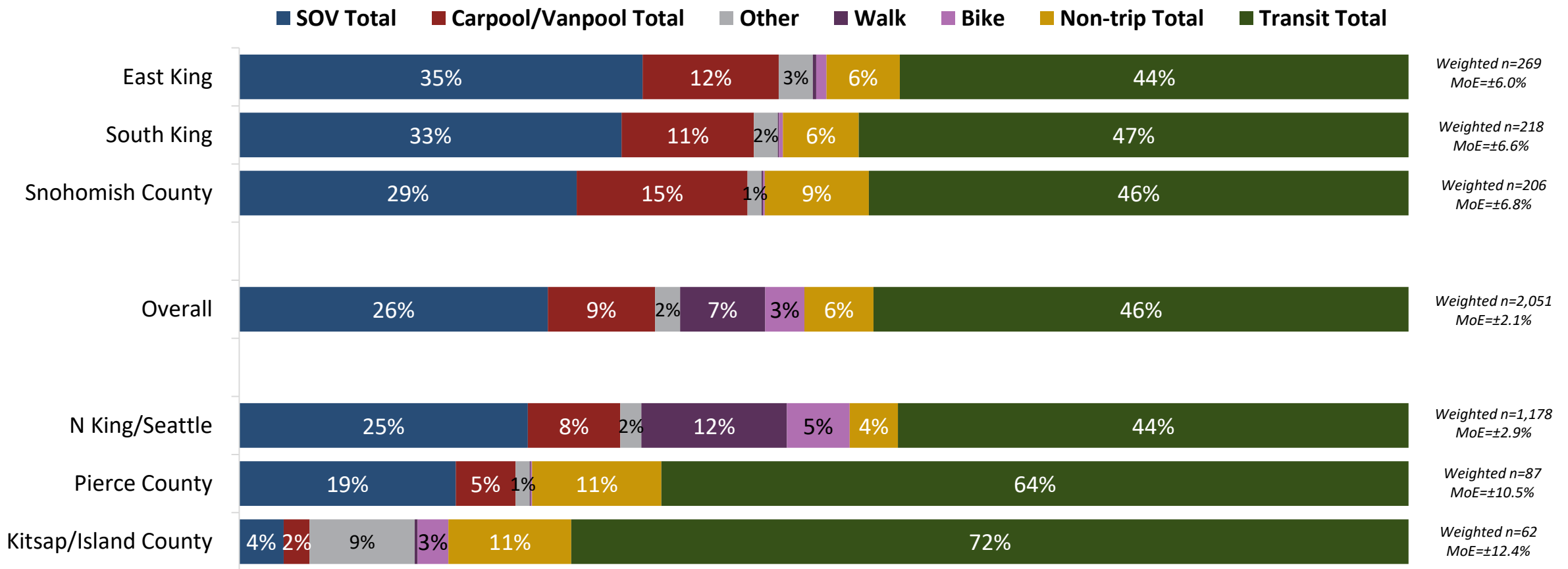


Mode Share by Commute Origin



Transit usage represents the plurality of weekday peak trips for commuters in all major Puget Sound regions, including a strong majority of trips from Pierce County and Kitsap/Island Counties. SOV and carpool/vanpool trip shares are highest among commuters from East King, South King, and Snohomish County.

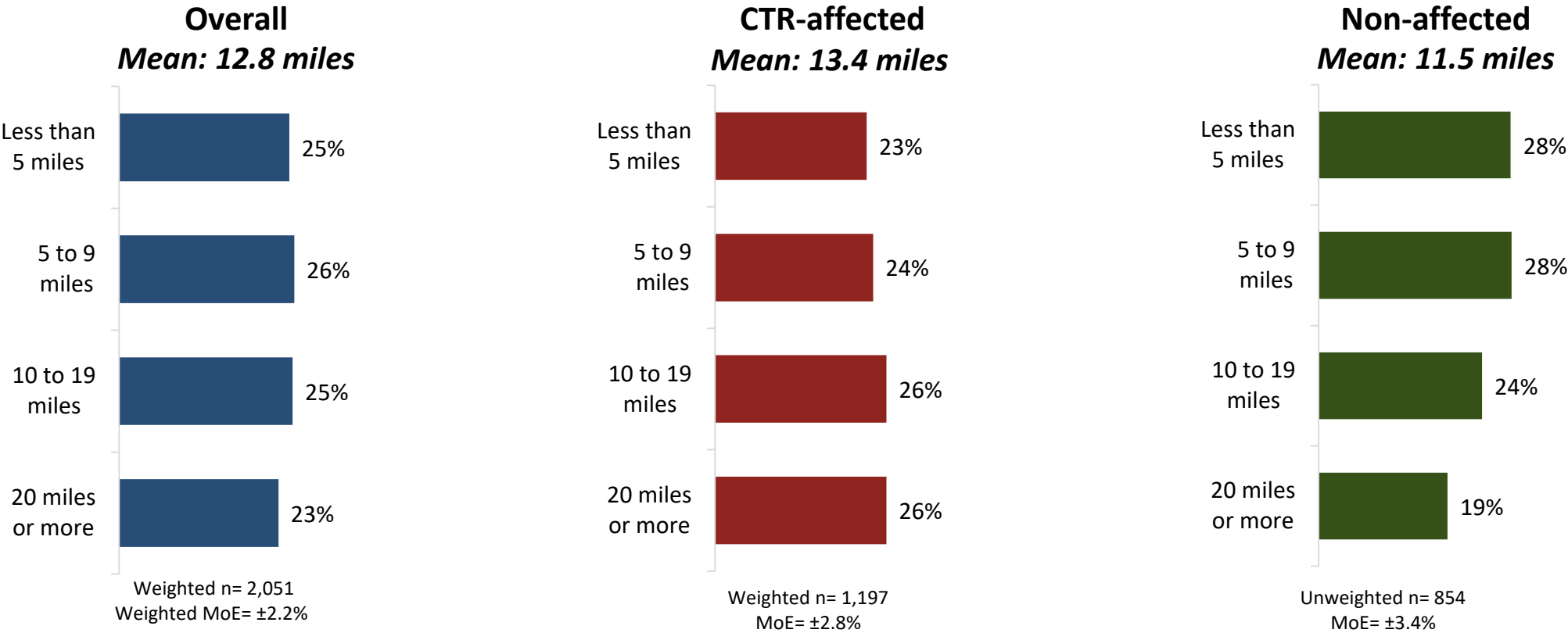
Mode Share by Commute Origin
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Commute Distance

Employees at CTR-affected worksites are making slightly longer commutes (13.4 miles on average) than those at smaller, non-affected worksites (11.5) during weekday peak hours.

Respondents who started work between 6 a.m. and 9 a.m. on weekdays

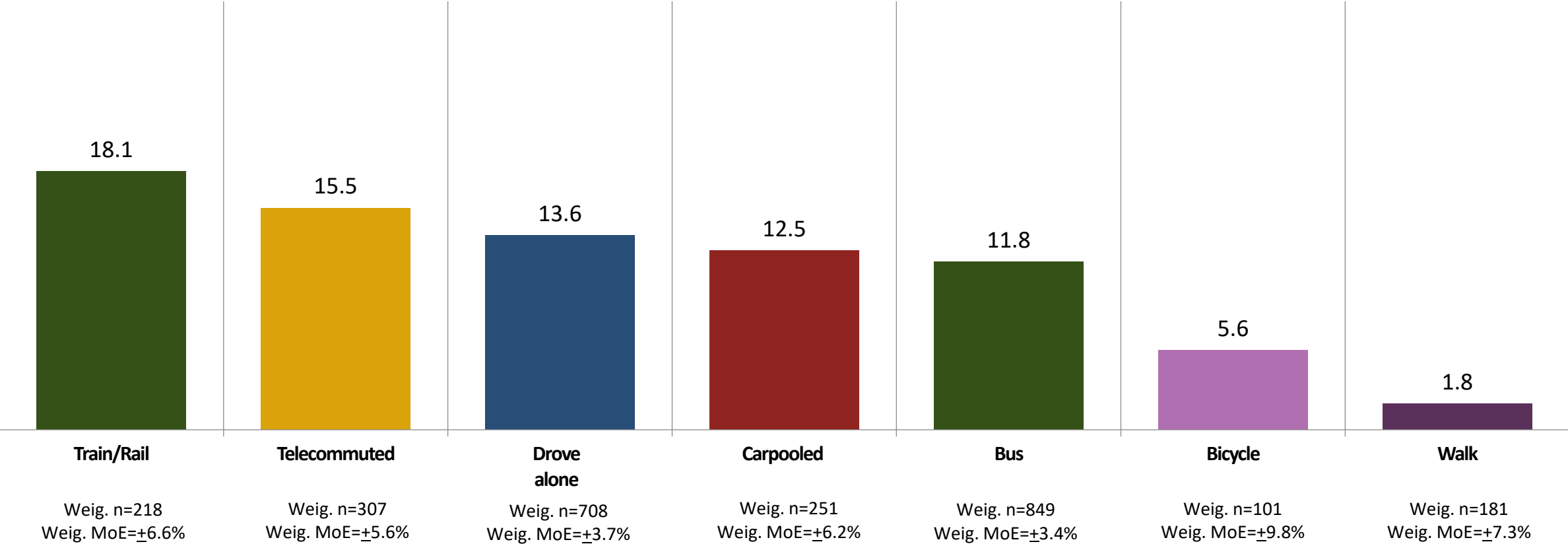


Q5. Thinking about your one way commute from home to your usual work location, including miles for errands or stops made on the way to work, how many miles do you commute?

Average Miles to Work by Commute Mode

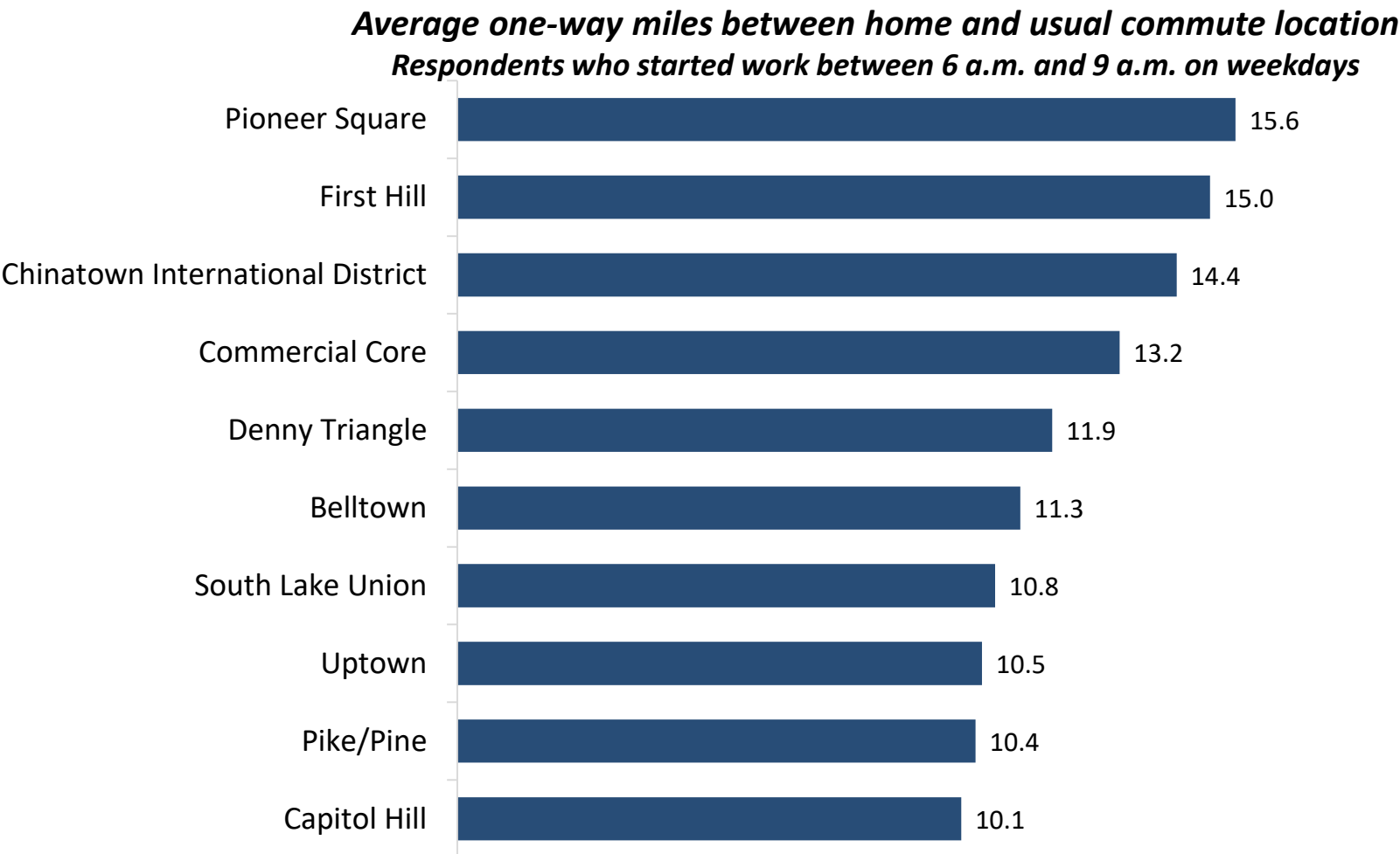
Weekday peak commuters who telecommute or take rail into Center City are generally making longer commutes than those taking other modes.

Average one-way miles between home and usual commute location
Respondents who started work between 6 a.m. and 9 a.m. on weekdays



Avg. Miles by Destination Neighborhood

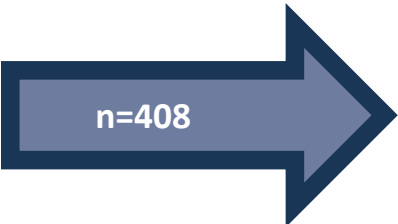
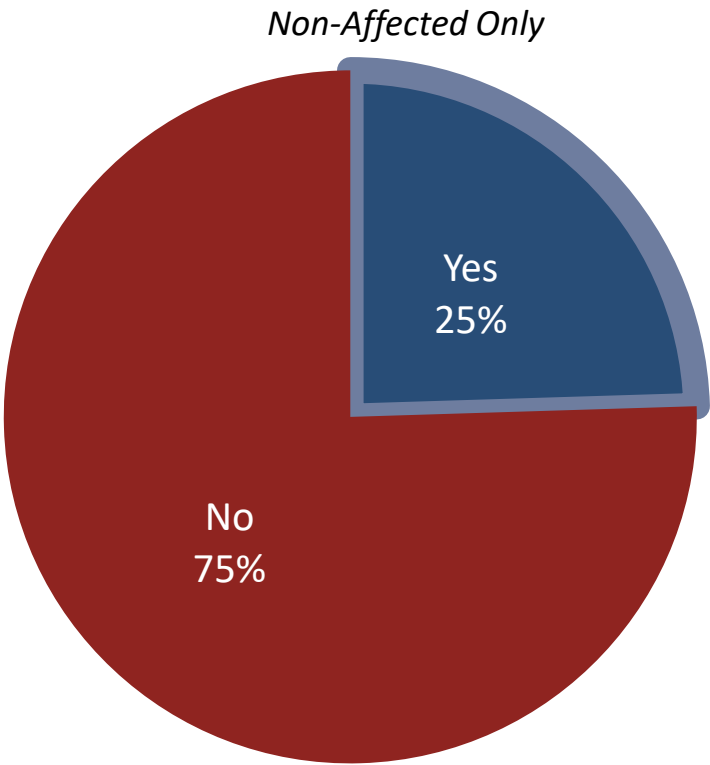
Those in Pioneer Square have the longest commute by distance, while none have an average commute of less than 10 miles.



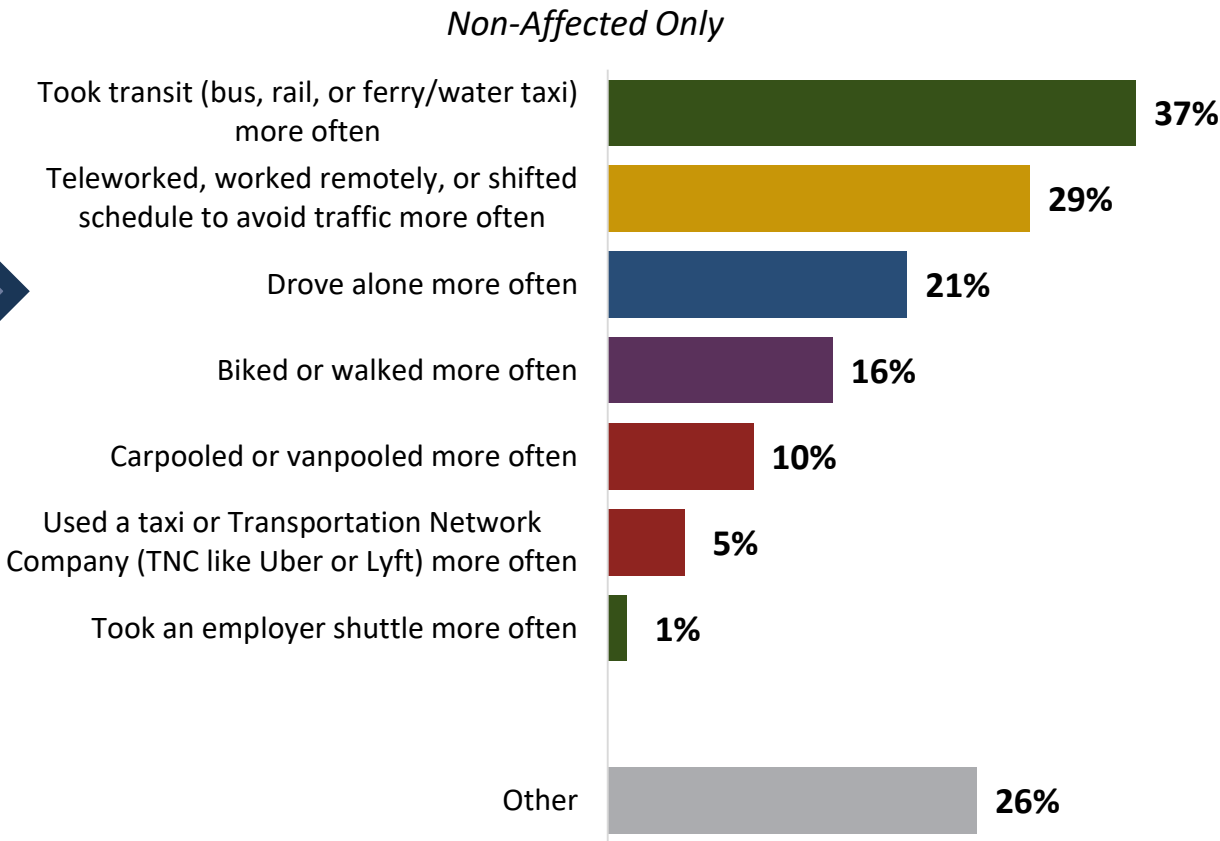
Impact of Transportation Changes on Commuters

Among Non-affected worksites, a quarter of weekday peak time respondents report having their commutes impacted by recent transportation changes. Of those impacted, over a third (37%) took transit more often, whereas only one-in-five (21%) drove alone more often.

In the past year, did you change how you commute because of transportation changes in Seattle?*



How did you change your commute in the past year?



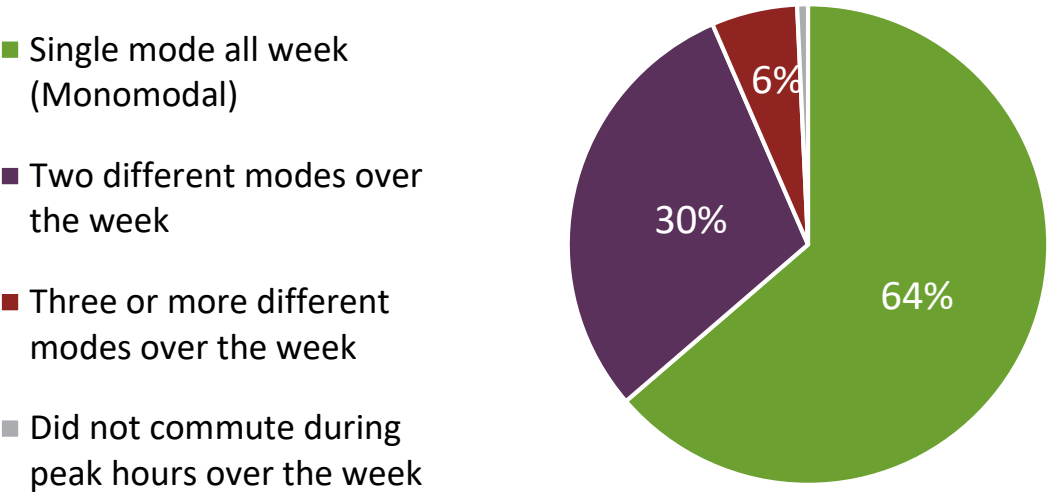
Q7 – Q8
*Examples include the SR-99 viaduct closure/demolition, transit service and route changes, or roadway construction and congestion in the city

Multi-modal Commuter Segmentation

Nearly two thirds (64%) of weekday peak time commuters report taking a single mode every day, while another third (30%) use two different modes. Among those who use SOV three or more times per week, half telecommute and a quarter use transit for their other trips.

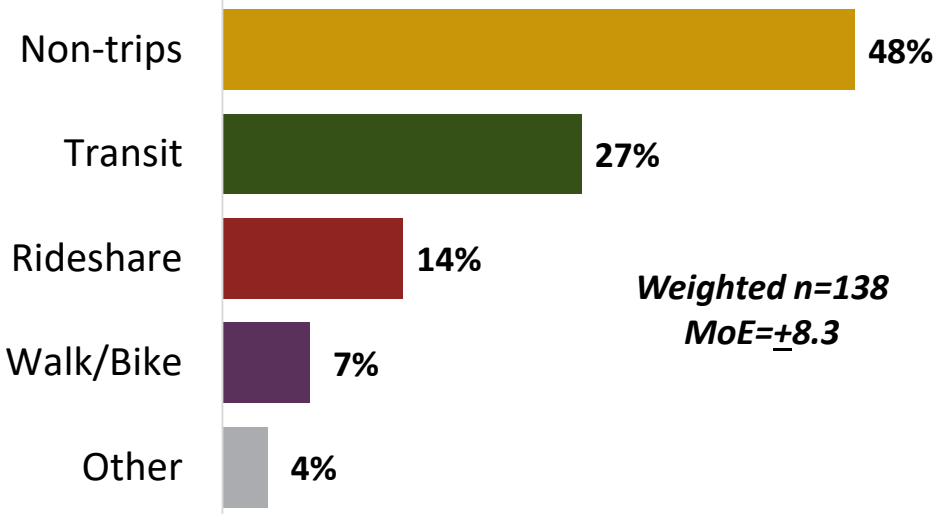


of Different Modes throughout Week



Other Modes Used in Addition to Driving Alone

Among Primary SOV users: Multi-modal weekday peak commuters who use SOV 3+ days per week



Weighted n=138
MoE=±8.3

Summary of Findings

- *Commuters use an increasingly diverse mix of travel modes for their weekday peak trips to Seattle Center City. The commute mode split looks increasingly similar for people commuting to Non-CTR affected worksites as it does for those commuting to larger CTR-affected worksites.*
- *People commuting to Seattle Center City report using public transit for nearly half (45.8%) of their weekday peak commute trips, including bus (34.9%), train/rail (8.5%), and walk-on ferry (2.4%). In particular, the share of rail modes – including Link Light Rail, Sounder trains, and streetcar – has grown significantly since 2010 (4.3% → 8.5%) and has likely stabilized in the years since 2016’s major Link service expansions.*
- *In 2019, those commuting to Center City report driving alone for about a quarter (26%) of their weekday peak trips. The Single Occupancy Vehicle (SOV) share has fallen since the beginning of the decade (-8 points since 2010) and has remained consistent over the last couple of years.*
- *During weekday peak hours, the share of walking (7.3%) and bike (3.4%) commute trips combine for about 1-in-10 trips to Center City worksites. These shares are highest among commuters to larger worksites in South Lake Union, Denny Triangle, and Uptown, which likely reflects the influx of residential and commercial development around those neighborhoods in the last few years.*
- *Although representing a small share of the Center City mode split, the share of non-commute trips by telecommuting have increased significantly from 2010 (2.7%) to 2019 (5.7%).*

Appendix

The slides in this section are reflective of *all* survey respondents, regardless of the days or times they commute to Center City

Weighting

To better approximate the broader universe of Center City commuters, the final survey data was weighted to the reported WSDOT CTR employee counts and estimated Infogroup counts of the non-affected commuter population:

- 1) The estimated proportions of CTR-affected, non-affected and TMP commuters were weighted within each neighborhood, individually.
- 2) Each neighborhood was weighted to its total estimated proportion of the Center City commuter universe, with the largest non-affected worksites weighted as a separate category. The specific CTR worksites with the lowest survey sampling rates were individually weighted to closer reflect their estimated portions of Center City commuters.
- 3) Non-CTR data weighting was further refined to reflect the estimated share of each worksite size category (1-4, 5-9, 10-19, 20-49, 50-99, 100+) in the non-affected universe.

Weighting – All Respondents

Category	CTR-affected						TMP						Non-affected					
	Unweighted		CTR Counts		Weighted		Unweighted		TMP Counts		Weighted		Unweighted		InfoUSA Estimates		Weighted	
	n	%	N	%	n	%	n	%	N	%	n	%	n	%	N	%	n	%
													Non-affected 1-99 worksites weighted within neighborhood					
Belltown	2,304	3.5%	4,169	1.4%	38	1.6%	360	0.5%	2,518	0.9%	20	0.9%	217	0.3%	9,147	3.2%	74	3.2%
Capitol Hill + Pike/Pine	780	1.2%	1,652	0.6%	15	0.6%	44	0.1%	60	0.0%	1	0.0%	106	0.1%	6,013	2.1%	49	2.1%
Chinatown ID	2,525	3.9%	4,335	1.5%	40	1.7%	-	-	120	0.0%	0	0.0%	81	0.1%	3,235	1.1%	26	1.1%
Commercial Core	23,003	35.1%	36,597	12.6%	335	14.3%	3,394	5.2%	14,378	5.0%	117	5.0%	645	1.0%	22,491	7.8%	182	7.8%
Denny Triangle	4,641	7.1%	7,746	2.7%	71	3.0%	346	0.5%	2,563	0.9%	21	0.9%	112	0.2%	4,081	1.4%	33	1.4%
First Hill	1,567	2.4%	8,670	3.0%	79	3.4%	32	0.0%	1,157	0.4%	9	0.4%	153	0.2%	5,993	2.1%	48	2.1%
Pioneer Square	5,278	8.1%	8,384	2.9%	77	3.3%	-	-	-	-	-	-	167	0.3%	3,914	1.3%	32	1.3%
South Lake Union	6,278	9.6%	9,364	3.2%	86	3.7%	314	0.5%	1,066	0.4%	9	0.4%	148	0.2%	4,997	1.7%	40	1.7%
Uptown	2,539	3.9%	4,042	1.4%	37	1.6%	28	0.0%	554	0.2%	4	0.2%	136	0.2%	5,937	2.0%	48	2.0%
Amazon Denny Triangle	1,204	1.8%	26,000	9.0%	142	6.1%												
Amazon SLU	1,169	1.8%	24,000	8.3%	138	5.9%												
Medical Centers (Swedish/Virginia Mason)	3,036	4.6%	14,855	5.1%	136	5.8%												
City of Seattle Municipal Tower	966	1.5%	7,000	2.4%	64	2.7%												
Google SLU	690	1.1%	3,000	1.0%	28	1.2%												
Oracle America Inc	955	1.5%	2,000	0.7%	18	0.8%												
Fred Hutch - FHCR Day Campus	2,018	3.1%	2,410	0.8%	22	0.9%												
													Non-affected 100+ worksites weighted as a separate category					
Non-affected 100+													304	0.5%	37,628	13.0%	304	13.0%
Total	58953	89.9%	164,224	56.6%	1,327	56.6%	4,518	6.9%	22,416	7.7%	181	7.7%	2,069	3.7%	103,436	36%	836	36%

Non-affected Response Rates

Non-affected Worksite Survey Response Rates			
	Surveys Distributed	Surveys Completed (n)	Response Rate (%)
Neighborhood			
Belltown	780	333	43%
Capitol Hill	55	24	44%
Chinatown ID	261	98	38%
Commercial Core	1,621	816	50%
Denny Triangle	275	112	41%
First Hill	312	153	49%
Pike/Pine	147	82	56%
Pioneer Square	295	167	57%
South Lake Union	288	148	51%
Uptown	301	136	45%
Employee Size			
1 to 4	497	230	46%
5 to 9	337	188	56%
10 to 19	589	347	59%
20 to 49	896	462	52%
50 to 99	1,091	538	49%
100+	925	304	33%



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