2017-2018 REGIONAL TRAVEL SURVEY BRIEFING: DEMOGRAPHIC CHANGES AND TYPICAL COMMUTE

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Planning Directors Technical Advisory Committee
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Agenda Item 4

National Capital Region
Transportation Planning Board

Regional Travel Survey Overview

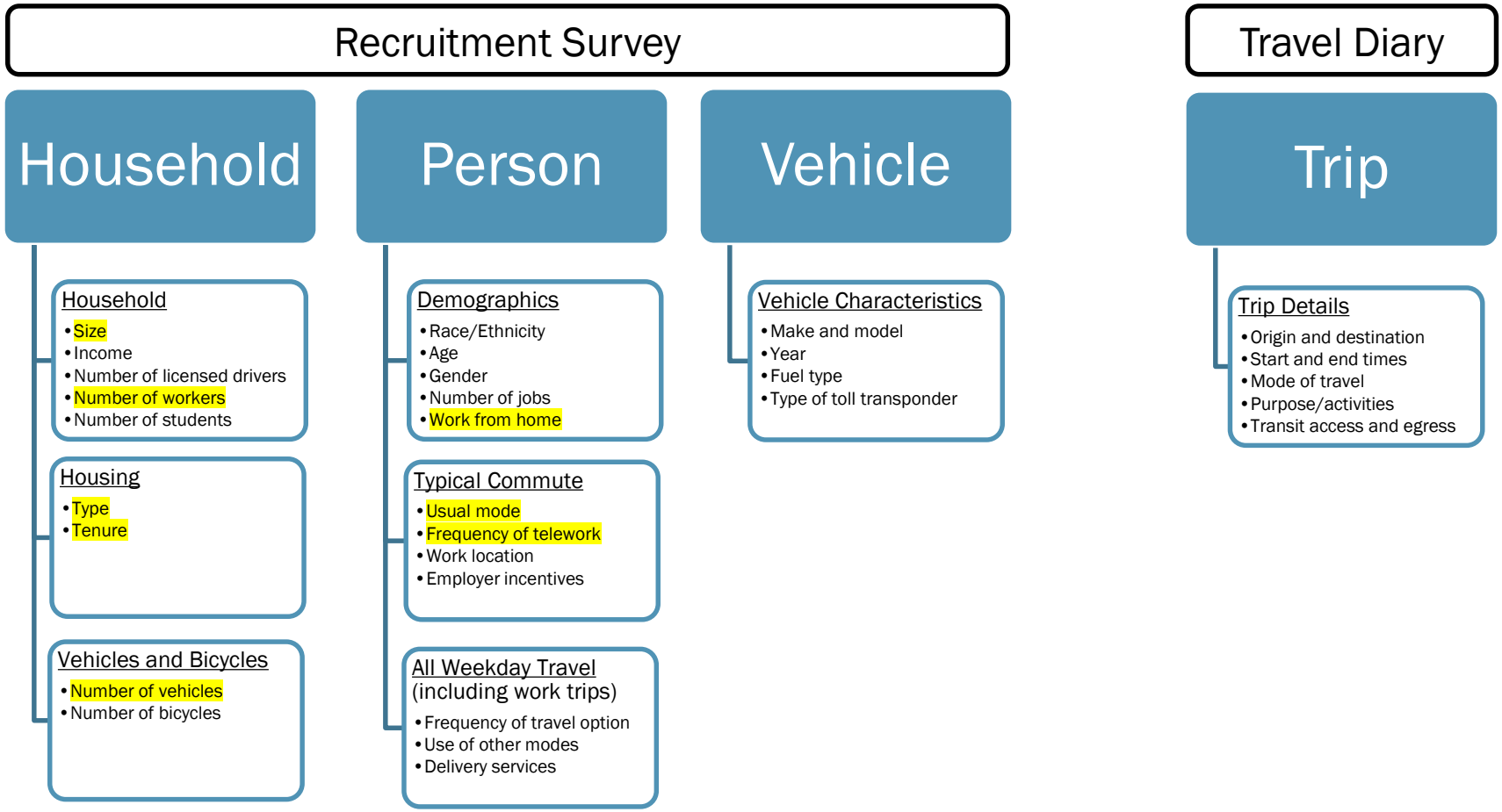
- TPB has conducted a regional household travel survey approximately every ten years since 1968
- Provides information about demographics and individual travel behavior, including trip purpose, mode choice, trip distance, and trip duration
- Provides a critical input for the regional transportation planning process
    - Input for travel demand models to forecast future travel patterns and vehicle emissions
    - Inform regional and sub-regional transportation studies and support other planning activities

Survey Design and Methodology

- Main survey of 16,000 households within the TPB modeled region
- The RTS covered 22 major jurisdictions and 111 geographic strata (PUMAs/Activity Centers)
- 11 TPB member jurisdictions (including Fauquier)
- Households were randomly selected to ensure a representative sample
- Survey was primarily web-based

TPB Modeled Area

Overview of Regional Travel Survey Information



REGIONAL
TRAVEL SURVEY

Planning Our Future Together

Household File

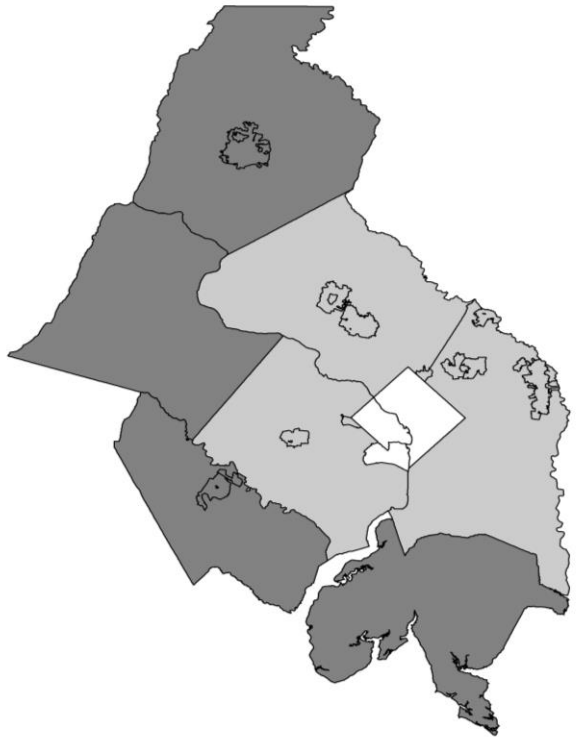
- Household size
- Number of workers
- Housing type
- Housing tenure
- Number of vehicles

Person File

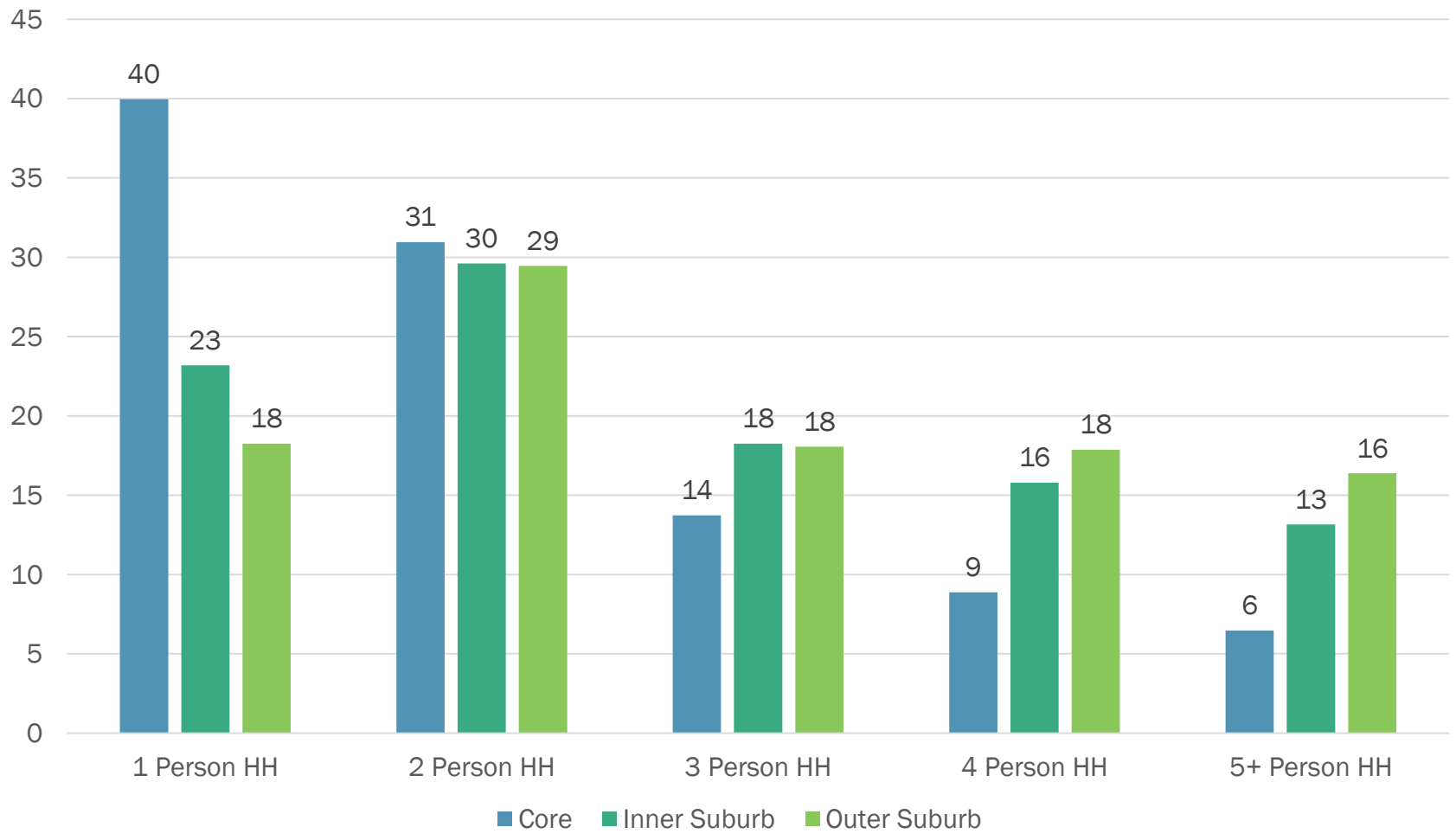
- Worked from home
- Usual commute mode
- Frequency of telework

Sub-Regional Areas

Sub-Area	Jurisdiction
Core	District of Columbia
	Arlington County
	City of Alexandria
Inner Suburb	Montgomery County
	Prince George's County
	Fairfax County, including City of Fairfax and City of Falls Church
Outer Suburb	Charles County
	Frederick County
	Loudoun County
	Prince William County, City of Manassas, and City of Manassas Park



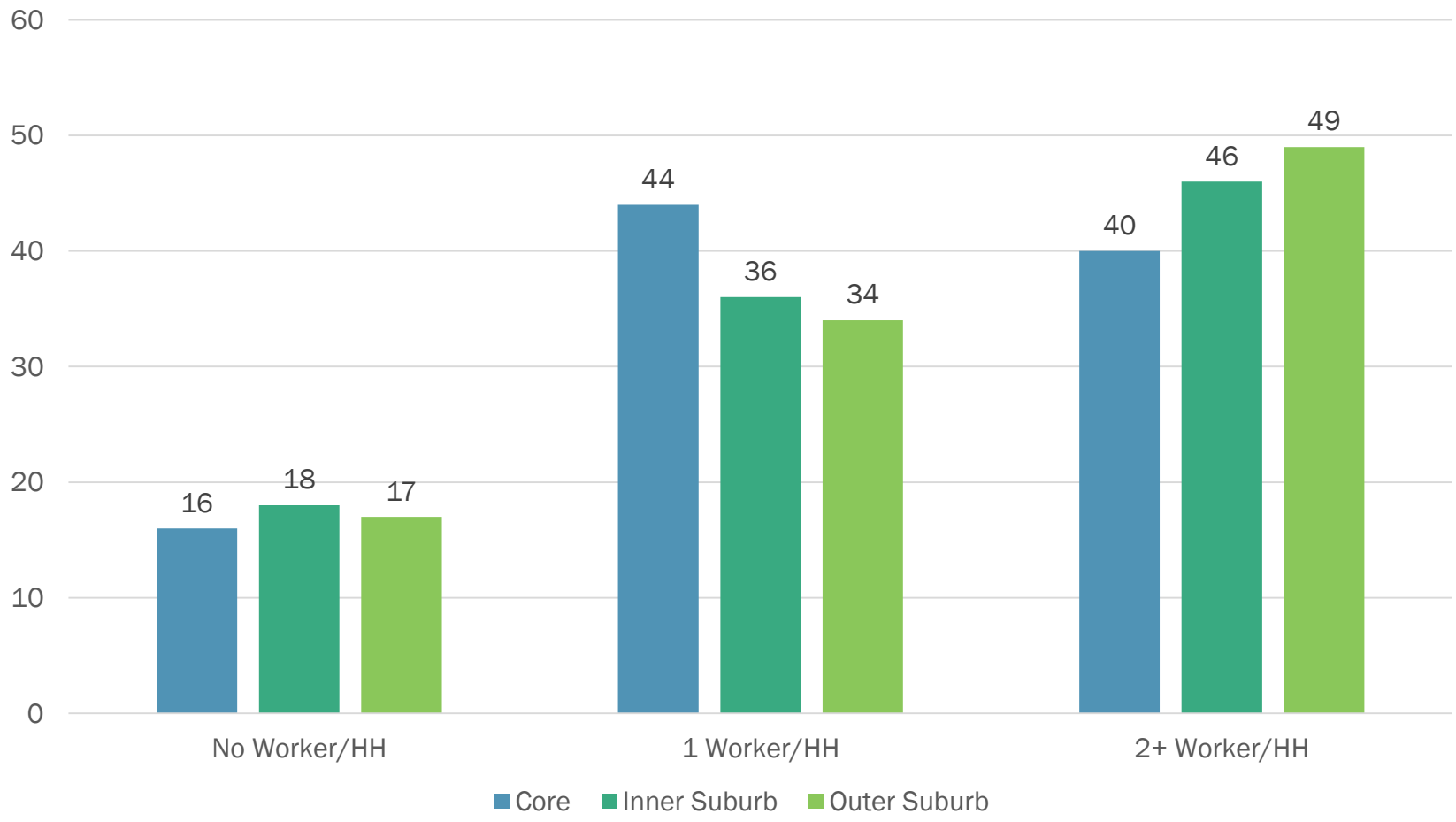
Household Size by Regional Sub-Area (2017/2018)



Change in Household Size by Sub-Area

Sub-Area	HH Size	2007/08 (%)	2017/18 (%)	% Change
Core	1	43	40	-3
	2	30	31	1
	3	12	14	2
	4	8	9	1
	5+	6	6	0
Inner Suburb	1	25	23	-2
	2	30	30	0
	3	17	18	1
	4	15	16	1
	5+	13	13	0
Outer Suburb	1	19	18	-1
	2	29	29	0
	3	18	18	0
	4	18	18	0
	5+	15	16	1

No. of Workers per HH by Sub-Area (2017/2018)



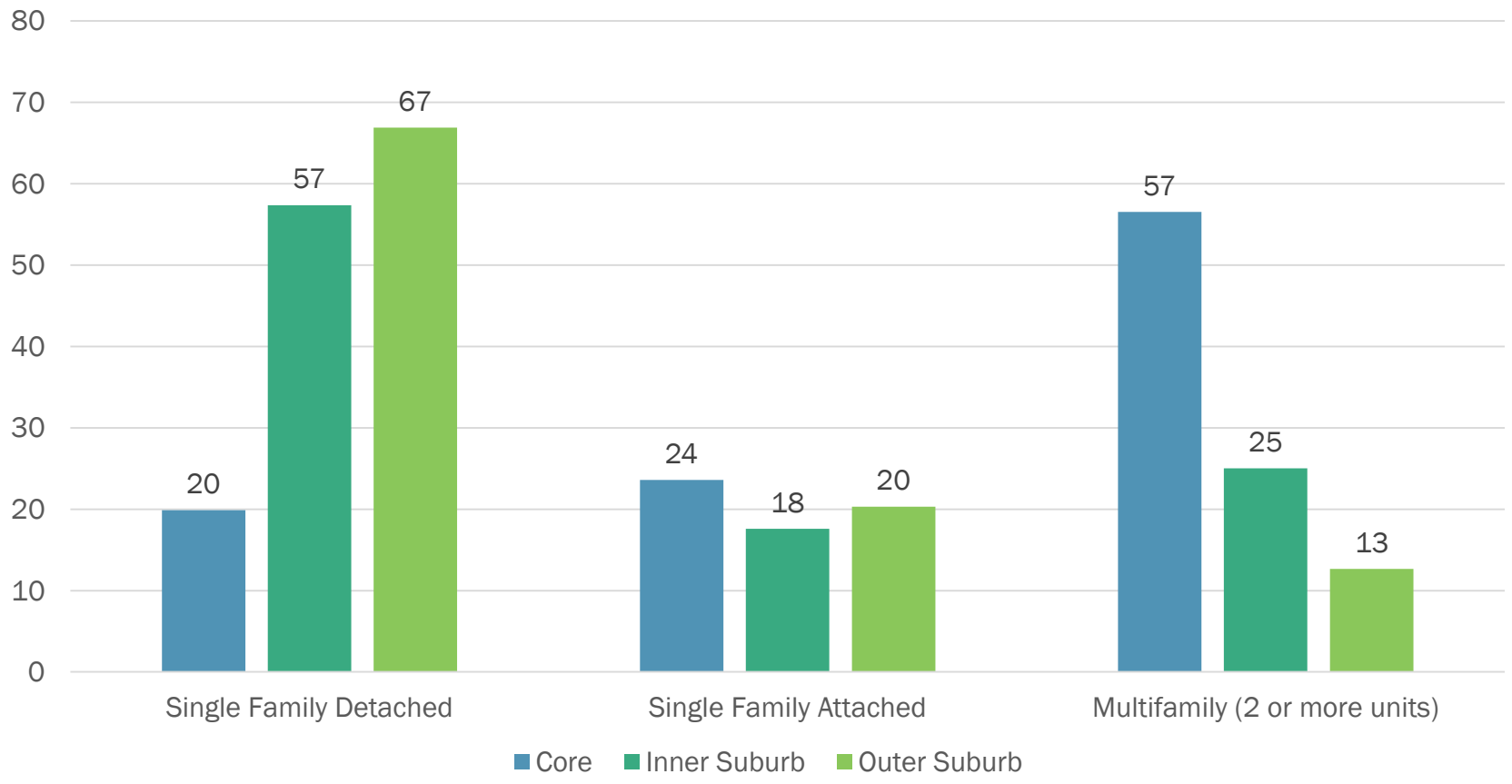
Change in No. of Workers per HH by Sub-Area

Sub-Area	Worker/HH	2007/08 (%)	2017/18 (%)	% Change
Core	0	19	16	-3
	1	48	44	-4
	2+	33	40	7
Inner Suburb	0	17	18	1
	1	39	36	-3
	2+	44	46	2
Outer Suburb	0	14	17	3
	1	35	34	-1
	2+	51	49	-2

Summary of Household Size and Workers

- One-person households comprise the highest share of households in the core; two-person households make up the highest share of households in the inner and outer suburbs
- The share of one-person households in the core decreased since 2007/08
- The share of zero and one worker households in the core significantly decreased since 2007/08
- The share of two worker households in the core significantly increased since 2007/08

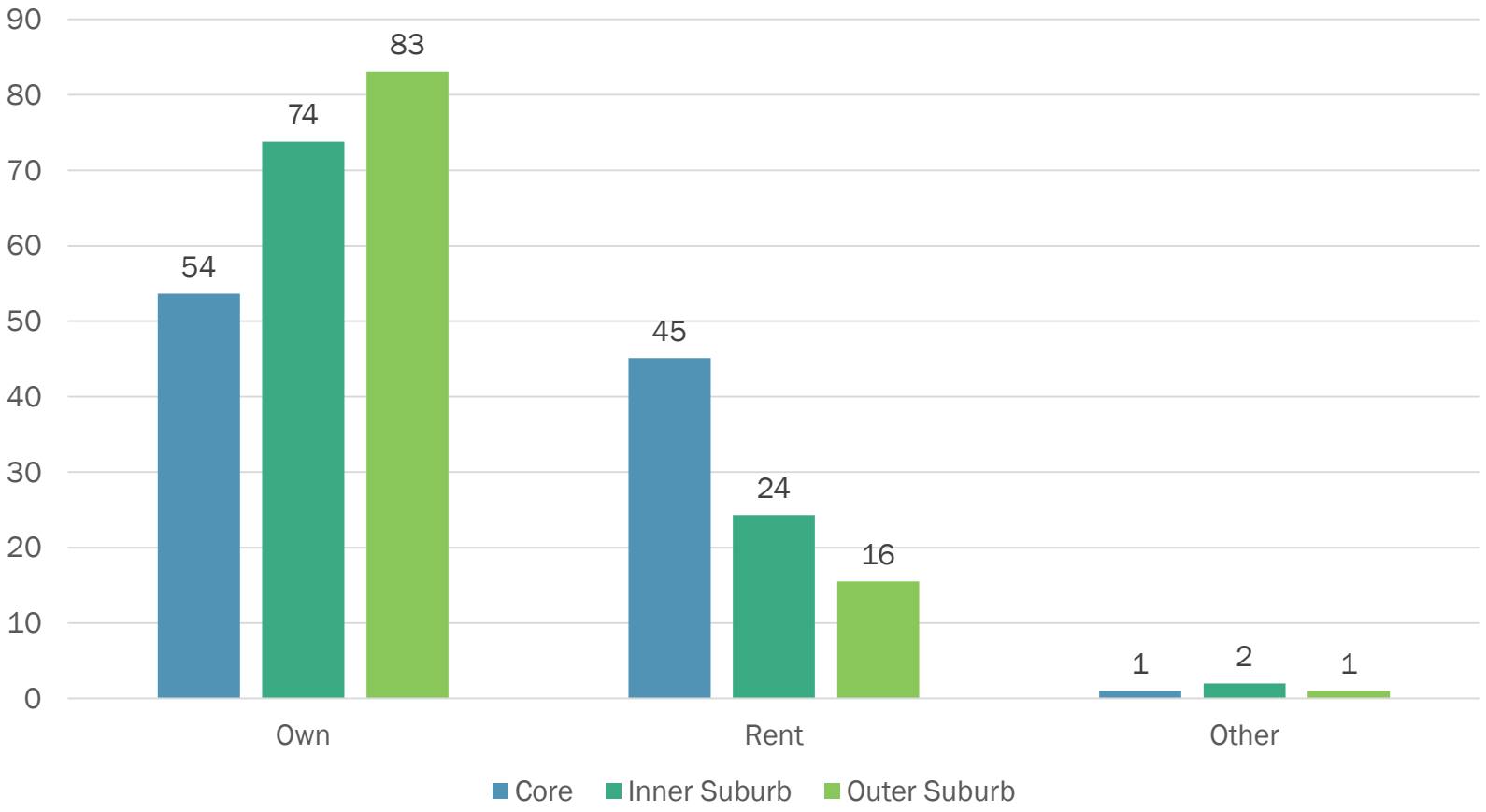
Housing Type by Sub-Area (2017/2018)



Change in Housing Type by Sub-Area

Sub-Area	Housing Type	2007/08 (%)	2017/18 (%)	% Change
Core	Single Family Detached	26	20	-6
	Single Family Attached	23	24	1
	Multifamily (2 or more units)	51	57	6
Inner Suburb	Single Family Detached	61	57	-4
	Single Family Attached	17	18	1
	Multifamily (2 or more units)	21	25	4
Outer Suburb	Single Family Detached	69	67	-2
	Single Family Attached	19	20	1
	Multifamily (2 or more units)	12	13	1

Housing Tenure by Sub-Area (2017/2018)



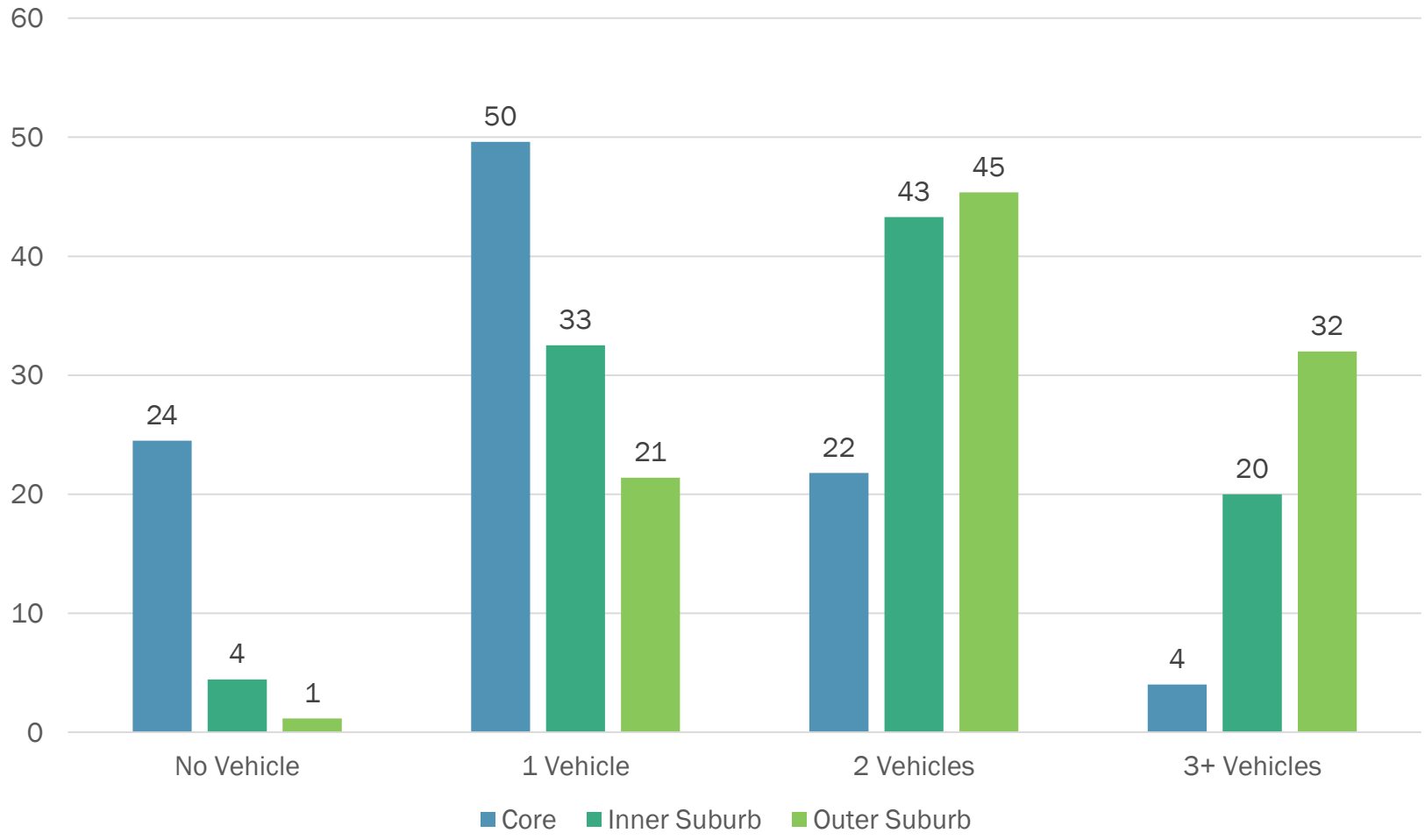
Change in Housing Tenure by Sub-Area

Sub-Area	Housing Tenure	2007/08 (%)	2017/18 (%)	% Change
Core	Own	60	54	-6
	Rent	40	45	5
	Other	1	1	0
Inner Suburb	Own	80	74	-6
	Rent	20	24	4
	Other	0	2	2
Outer Suburb	Own	86	83	-3
	Rent	14	16	2
	Other	0	1	1

Summary of Housing Type and Tenure

- More than half of residents in the core live in multifamily housing; nearly half of core residents live in rental housing
- The share of residents living in single family detached housing significantly decreased since 2007/08 in the core and inner suburbs
- The share of residents living in multifamily housing significantly increased since 2007/08 in the core and inner suburbs
- The share of residents living in rental housing significantly increased since 2007/08 in the core and inner suburbs

No. of Household Vehicles by Sub-Area (2017/2018)



Change in Household Vehicles by Sub-Area

Sub-Area	No. of HH Vehicles	2007/08 (%)	2017/18 (%)	% Change
Core	No Vehicle	19	24	5
	1 Vehicle	48	50	2
	2 Vehicles	27	22	-5
	3+ Vehicles	6	4	-2
Inner Suburb	No Vehicle	4	4	0
	1 Vehicle	31	33	2
	2 Vehicles	44	43	-1
	3+ Vehicles	22	20	-2
Outer Suburb	No Vehicle	1	1	0
	1 Vehicle	21	21	0
	2 Vehicles	48	45	-3
	3+ Vehicles	30	32	2

Summary of No. of Household Vehicles

- About one-quarter of households in the core have no vehicle; about one-third of households in the outer suburbs have three or more vehicles
- The share of no vehicle households in the core has significantly increased since 2007/08; the share of two-vehicle households in the core has significantly decreased
- The number of household vehicles in the inner and outer suburbs did not change as much as the core

Usual Commute Mode Question

- The usual commute mode question was asked during the recruitment survey
- This question inquired about the person's usual travel mode to work (i.e., commute mode)
- This question is intended to supplement the actual observed trips to work in the travel diary portion of the survey

Usual Commute Mode in the TPB Region

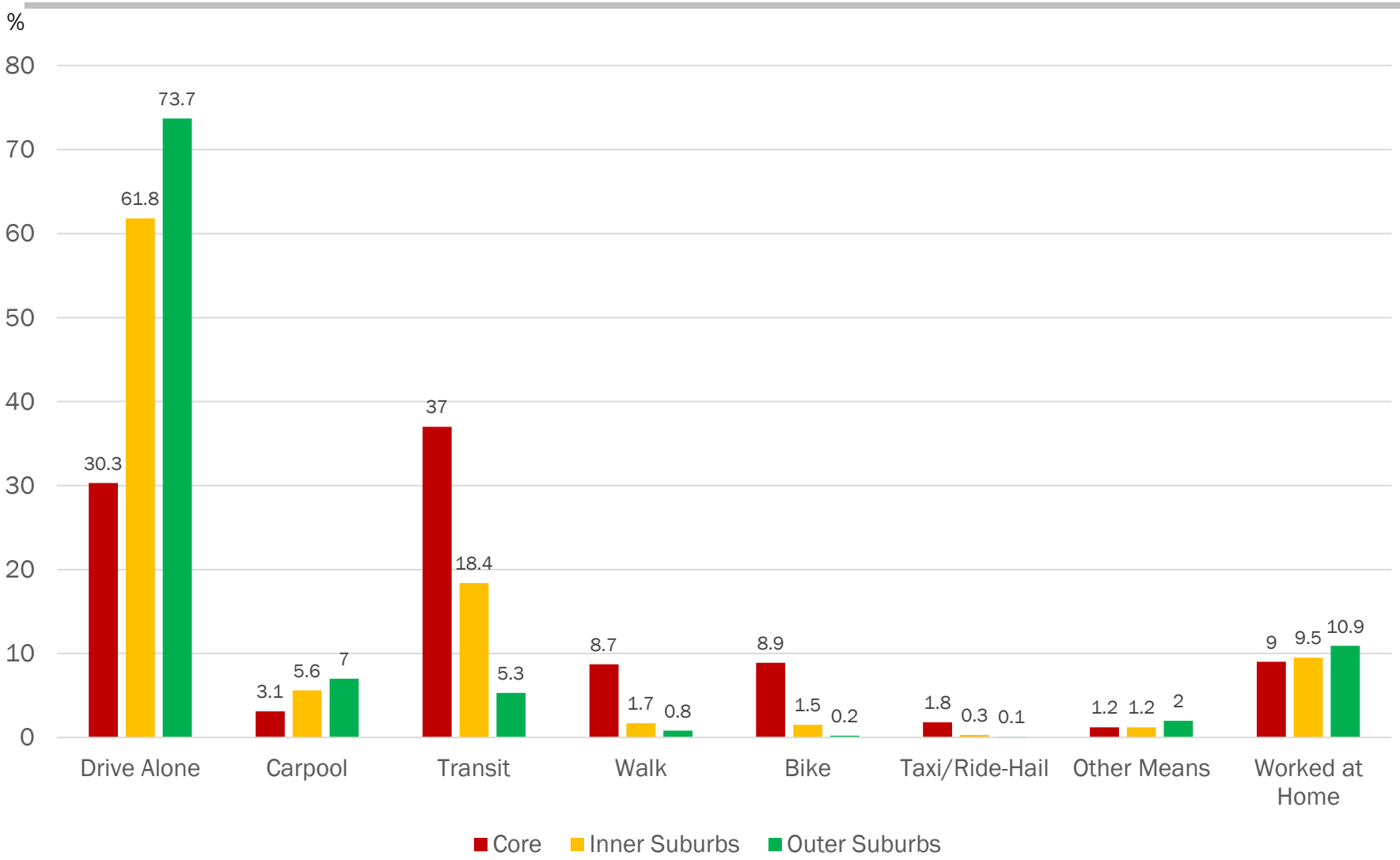
Commute Mode	2007-2008	2017-2018	% Pt. Change
Drive Alone	67.3	57.4	- 9.9
Carpool	4.3	5.3	+1.0
Transit	15.3	19.7	+4.4
Walked	2.2	3.1	+0.9
Bicycle	0.9	2.8	+1.9
Taxi/Ride-Hail	0.1	0.6	+0.5
Other Means	0.1	1.3	+1.2
Worked at Home	9.7	9.7	No change

Usual Commute Mode by Regional Sub-Area (%)

Commute Mode	'07/'08 Core	'17/'18 Core	% Point Change From '07	'07/08 Inner Suburb	'17/'18 Inner Suburb	% Point Change From '07	'07/'08 Outer Suburb	'17/18 Outer Suburb	% Point Change From '07
Drive Alone	46.6	30.3	-16.3	70.1	61.8	-8.3	78.3	73.7	-4.6
Carpool	3.3	3.1	-0.2	4.3	5.6	+1.3	5.4	7.0	+1.6
Transit	30.8	37.0	+6.2	13.7	18.4	+4.7	5.9	5.3	-0.6
Walked	7.2	8.7	+1.5	1.2	1.7	+0.5	0.6	0.8	+0.2
Bicycle	2.4	8.9	+6.5	0.5	1.5	+1.0	0.3	0.2	-0.1
Taxi/Ride-Hail	0.3	1.8	+1.5	0.1	0.3	+0.2	0.0	0.1	+0.1
Other Means	0.1	1.2	+1.1	0.1	1.2	+1.1	0.1	2.0	+1.9
Worked at Home	9.3	9.0	-0.3	10.0	9.5	-0.5	9.4	10.9	+1.5

Note: Cells highlighted in yellow for emphasis

Usual Commute Mode in the TPB Region 2017-2018



Usual Commute Mode by Age (%) (2017/18)

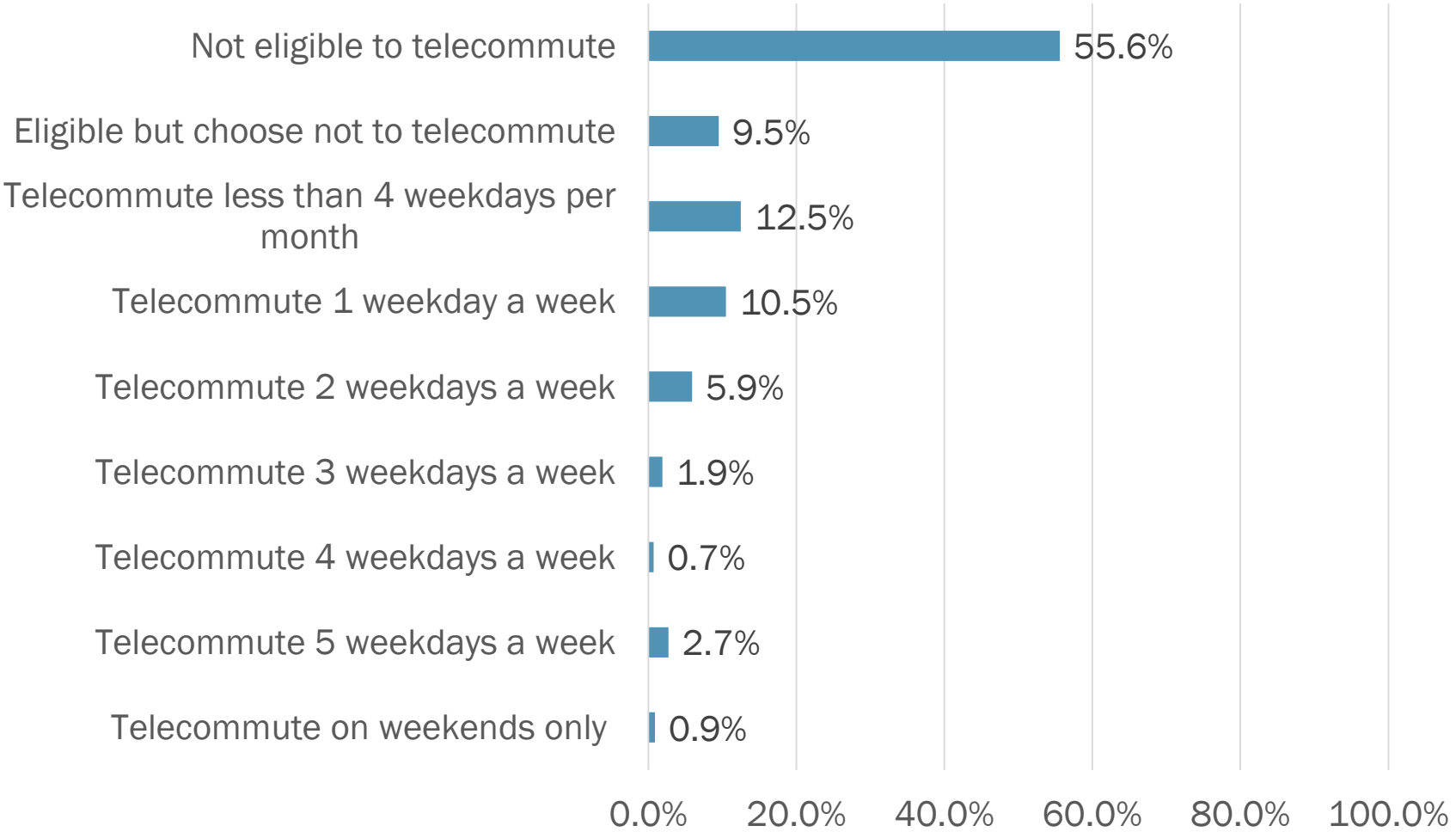
Commute Mode	16-17 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 or older
Drive Alone	51.5	54.4	51.1	56.7	60.0	62.9	60.8	63.0	49.7
Carpool	23.1	7.2	5.3	5.6	5.4	4.6	3.4	1.1	0.0
Transit	6.5	23.3	24.8	20.1	16.6	17.6	14.3	8.0	0.0
Walked	6.6	6.0	4.9	2.8	2.4	1.6	1.4	3.4	0.0
Bicycle	5.0	2.5	4.8	3.4	2.3	1.0	1.1	0.0	0.0
Taxi/Ride-Hail	0.7	1.1	1.1	0.6	0.5	0.2	0.1	0.0	0.0
Other Means	0.0	1.4	1.4	1.3	1.7	1.2	1.0	0.0	0.0
Worked at Home	6.5	4.1	6.6	9.4	11.1	10.9	17.8	24.4	50.3

Note: Cells highlighted in yellow for emphasis

Summary of Usual Commute Mode Findings

- Share of commuters who drive alone declined across the entire region, especially in the regional core
- Share of commuters who take transit, bicycle, or taxi/ride-hail increased in the regional core and inner suburbs, with the sharpest increase in the regional core
- Commuters who take transit, walk, bicycle, and taxi/ride-hail tend to be younger than those who drive or carpool

Telecommute in the TPB Region (2017/18)



Telecommute by Employer Type (%) (2017/18)

Frequency of Telecommute	Private for-profit firm/org.	Nonprofit firm/org.	Federal govt.	State or local govt.	Foreign or int'l govt. org.	Self-employed
Not eligible	60.6	52.7	37.4	75.5	44.8	62.5
Eligible but choose not to	8.1	8.4	15.0	6.1	17.9	5.3
Less than 4 weekdays/mo.	12.4	15.4	14.4	5.8	22.4	7.5
1 weekday/week	8.3	12.4	16.3	6.3	8.2	6.6
2 weekdays/week	4.2	5.8	11.0	2.2	0.2	7.2
3 weekdays/week	1.8	1.6	2.1	1.0	0.5	4.3
4 weekdays/week	0.8	0.7	0.7	0.2	0.7	1.0
5 weekdays/week	2.8	2.4	2.5	2.4	3.1	4.0
Weekends only	1.1	0.6	0.7	0.5	2.3	1.7

Summary of Telecommute Findings

- About two-third of workers telecommute at least occasionally; nearly one-quarter telecommute at least once a week
- Federal government workers telecommute most frequently; nearly half telecommute at least occasionally
- State and local government workers telecommute least frequently; three-quarters are not eligible to telecommute

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