2017-2018 REGIONAL TRAVEL SURVEY: IN-DEPTH ANALYSIS

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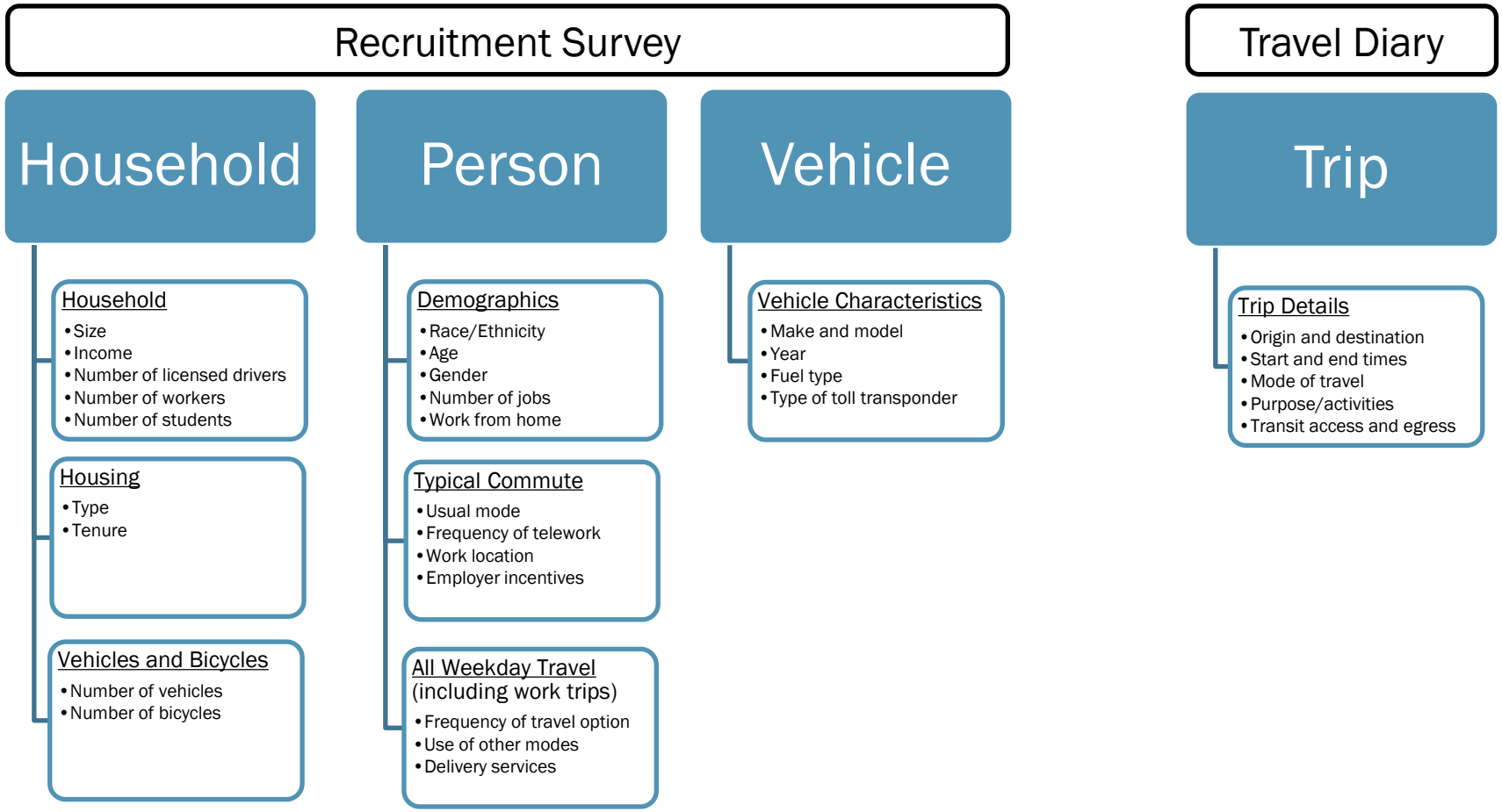
Agenda Item 5

National Capital Region
Transportation Planning Board

Overview of Regional Travel Survey (RTS) and In-Depth Analysis of Stakeholder Questions

- The 2017/2018 Regional Travel Survey (RTS) is a once-a-decade household travel survey for the National Capital Region
- The RTS collected detailed information about households and their daily travel obtained from a travel diary
- TPB staff asked regional stakeholders to offer questions that the RTS might help inform; TPB staff conducted an in-depth analysis of these questions for the TPB Planning Region
- This presentation highlights a few of the responses to the questions offered by our stakeholders

Overview of Regional Travel Survey Information



RTS In-Depth Analysis Questions

Topic	Question
Travel Patterns for Low-Income Households	How do travel patterns (by travel mode, trip purpose, trip length, and trip duration) differ for very low (less than $25,000) and low-income ($25,000 - $49,999) households?
Work Start and End Times	How have average work start and end times changed over the past ten years?
Growth in Telework Eligibility & Frequency	What are the temporal patterns of teleworking? How are they changing?
Telework and Proximity to High-Capacity Transit (HCT)	How does proximity to high-capacity transit (HCT) correspond with telework eligibility and frequency?
Dimensions and Characteristics of Peak and Off-Peak Travel	How do travel modes differ for peak and off-peak travel? How do trip purpose, trip length, and trip duration differ for peak and off-peak travel? How do they differ for all travel modes vs. transit modes? What is the income and race/ethnicity breakdown for persons traveling during off-peak hours? How do they differ for all travel modes vs. transit modes?
Transit Riders: Commute-only versus All-Purpose Socio-economic Characteristics	Do commute-only transit riders differ in socio-demographic characteristics from all-purpose transit riders?
Transit ridership, free parking, and transit subsidies	Do free parking and transit subsidies influence the choice of taking public transit? Did it change between 2007/2008 and 2017/2018?
Late-Night Travel: Characteristics of Travelers and Trips	What are the characteristics and trip patterns of people who travel during late-night hours?
Trends in Late Night Travel Modes	Have the travel modes of late-night travelers changed over time (from 2007/08 to 2017/18)?
Use of Personal Vehicles for Activities After Using Transit for Work Commute Trips	What is the incidence rate of weekday commuters returning home via public transit and heading out again by using a personal vehicle to shop? When weekday commuters head home via public transit, what reasons do they have for heading out by personal vehicle? What travel activities do weekday commuters engage in after heading home via public transit?
School Trips: Share of Total Trips, Trip Times	• What share of drop off/pick up trips in the TPB Planning Region are school and day care trips? • What share of school trips are performed by university students in the TPB Planning Region? • What share of drop off/pick up trips in the TPB Planning Region are performed in the following time periods? (AM peak, midday, PM peak, all other times) • What is the share of school trips out of total trips for the region, subregional area, and county-level jurisdiction?

Transit Rider Characteristics, Free Parking, and Transit Subsidies

Do commute-only transit riders differ in socio-demographics from all-purpose transit riders?

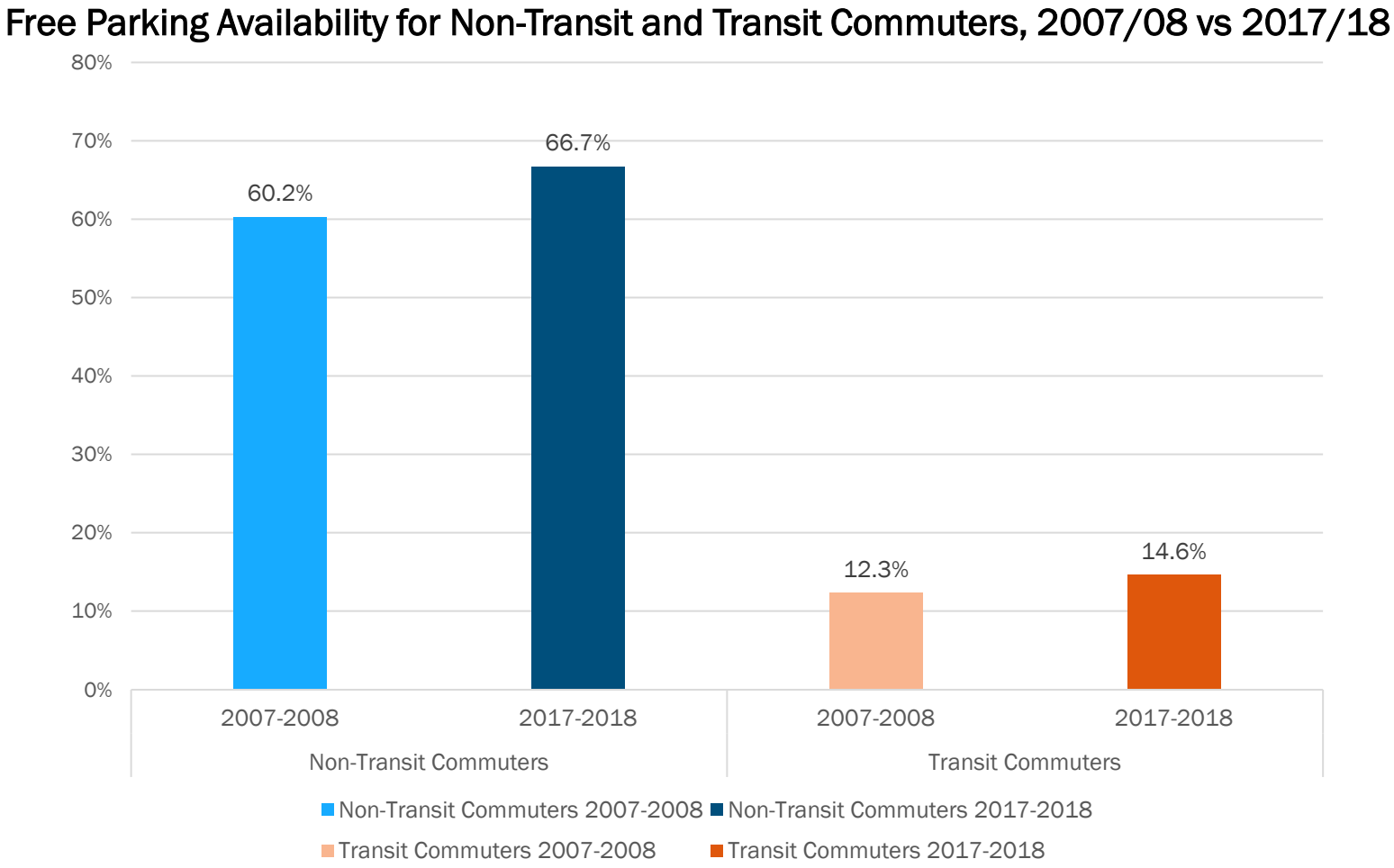
Do free parking and transit subsidies influence the choice of taking public transit?

- Commute-only and all-purpose transit riders by age, gender, income, home ownership, vehicle availability, and presence of children
- Transit rider = rail (commuter rail, subway, light rail) and bus (express commuter bus, local bus, paratransit)
- Influence of free parking and transit subsidies on transit ridership

Transit Rider Characteristics, Free Parking, and Transit Subsidies

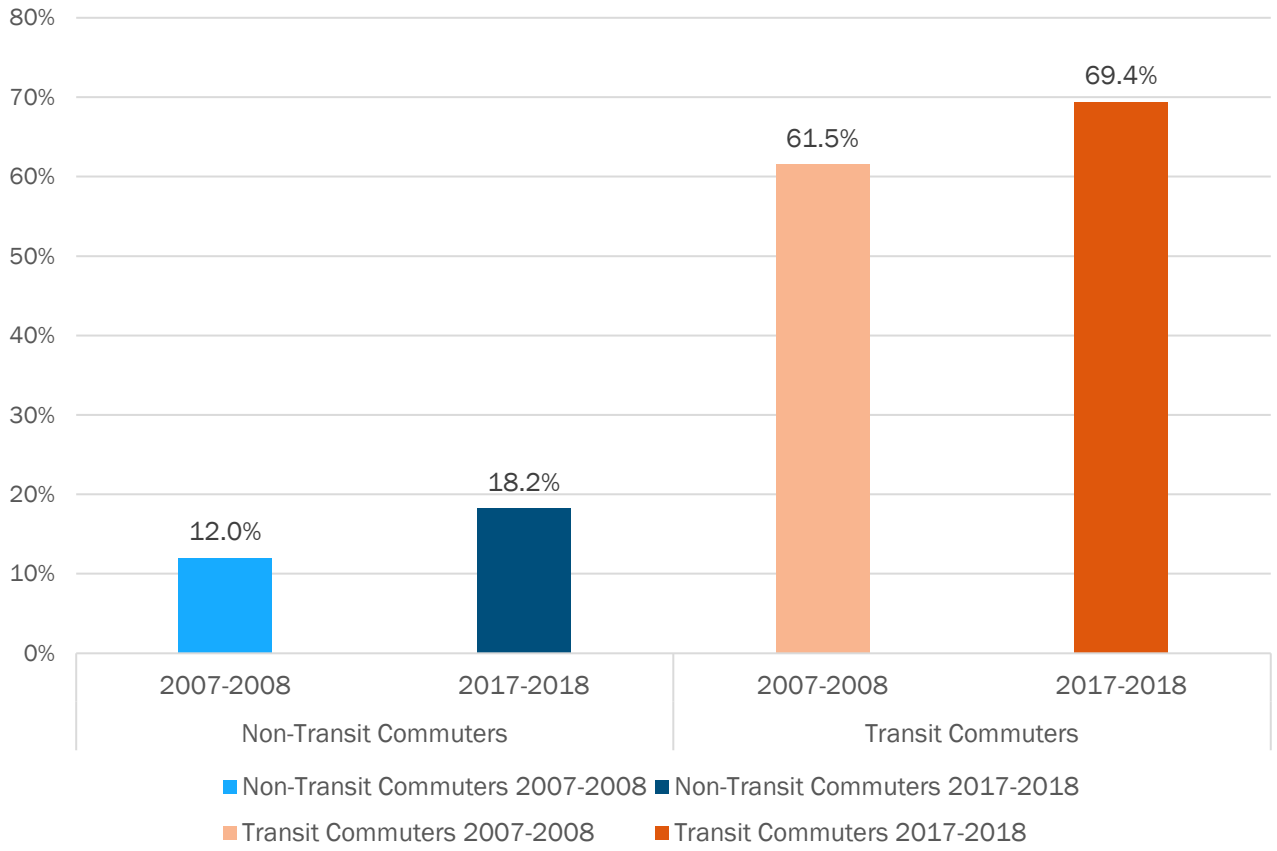
	All-purpose (%)	Commute-only (%)	All Transit Users (%)
Household Income			
Household Income, Less than $50,000	24.8	9.7	15.7
Household Income, $50,000 or more	75.2	90.3	84.3
Age Group			
Under 16 years old	5.5	-	2.2
16-24 years old	11.3	5.5	7.8
25-34 years	24.3	29.5	27.4
35-44 years	19.6	26.6	23.8
45-54 years	14.4	18.8	17
55-64 years	17.3	15.6	16.3
65 years or older	7.6	4.1	5.5
Gender			
Female	48.6	50.5	49.7
Male	51.4	49.5	50.3
Presence of Children			
No children	60.9	68.3	65.4
One or more children	39.1	31.7	34.6
Vehicle Availability			
0 (no vehicles)	31.4	18.5	23.7
1 vehicle	37	42.9	40.5
2 vehicles	24.1	29.5	27.3
3 or more vehicles	7.5	9.2	8.5
Home Ownership			
Own/Buying (paying mortgage)	47.7	59.1	54.5
Rent	50.6	39.4	43.8

Transit Rider Characteristics, Free Parking, and Transit Subsidies



Transit Rider Characteristics, Free Parking, and Transit Subsidies

Transit Benefit Availability for Non-Transit and Transit Commuters, 2007/08 vs 2017/18



Transit Rider Characteristics, Free Parking, and Transit Subsidies

Summary of Findings

- The share of all-purpose transit riders are higher for those from lower income households
- Higher share of commute-only riders in prime working age groups (25-54 years)
- Households with no vehicles and households who rent have a higher share of all-purpose transit trips
- Transit commuters are much less likely to have free parking available; free parking for non-transit commuters increased from 2007/08 to 2017/18
- Transit commuters are much more likely to receive transit benefits; the share of commuters with transit benefits increased from 2007/08 to 2017/18

Late-Night Travel

What are the socio-demographic characteristics of late-night travelers?

What are the travel mode and trip purpose of late-night travelers?

- Late night travel = midnight to 4 am
- Socio-demographic characteristics of travelers include age, gender, race/ethnicity, household income
- Travel modes: automobile modes (auto driver, auto passenger), transit (rail/bus), taxi/ridehail, walk/bicycle
- Trip purposes: work, work-related, drop off/pick up, school, shop/meal, personal business, social/recreation, other

Late-Night Travel

Socio-demographic Characteristics of Late-Night Travelers vs. All Travelers

	Late-Night Travelers (Midnight – 4 AM)	All Travelers
Age Group	**Percent**	**Percent**
Under 25 years	19	31
25-34 years	24	14
35-44 years	20	15
45-54 years	18	13
55-64 years	14	13
65 years and over	5	14
Gender		
Female	39	53
Male	61	47
Race/Ethnicity		
African American or Black	24	17
Asian	8	11
Hispanic or Latino	10	7
Other	6	4
White	52	61
Household Income		
Less than $50,000	21	13
$50,000-$99,999	29	24
$100,000-$149,999	21	25
$150,000 or more	29	38

Late-Night Travel

Travel Mode and Trip Purpose of Late Night Trips vs. All Trips

	Late-Night Trips (Midnight – 4 AM)	All Trips
Travel Mode	**Percent**	**Percent**
Walk/Bike	8	11
Auto Driver	66	57
Auto Passenger	14	22
Transit	3	6
Taxi/Ridehail	8	1
Other	2	4
Trip Purpose		
Work	31	21
Work-related	2	4
Drop Off/Pick Up Someone	13	14
School	4	9
Shop/Meal	19	26
Personal Business	8	11
Social/Recreation	9	10
Other	13	4

* Home is excluded as a trip purpose in this table

Late-Night Travel

Summary of Findings

- The largest group for late-night travelers is 25 to 34 years; late night travelers are more likely to be of prime working age (25 to 54 years)
- Late-night travelers are more likely to be male, African American, Hispanic/Latino, and from lower income households
- The share of taxi/ridehail trips is much higher for late-night trips; shares of transit and walk/bike trips are much lower for late-night trips
- The share of work trips is much higher for late-night trips compared with all trips

Use of Personal Vehicles for Activities After Using Transit for Work Commute Trips

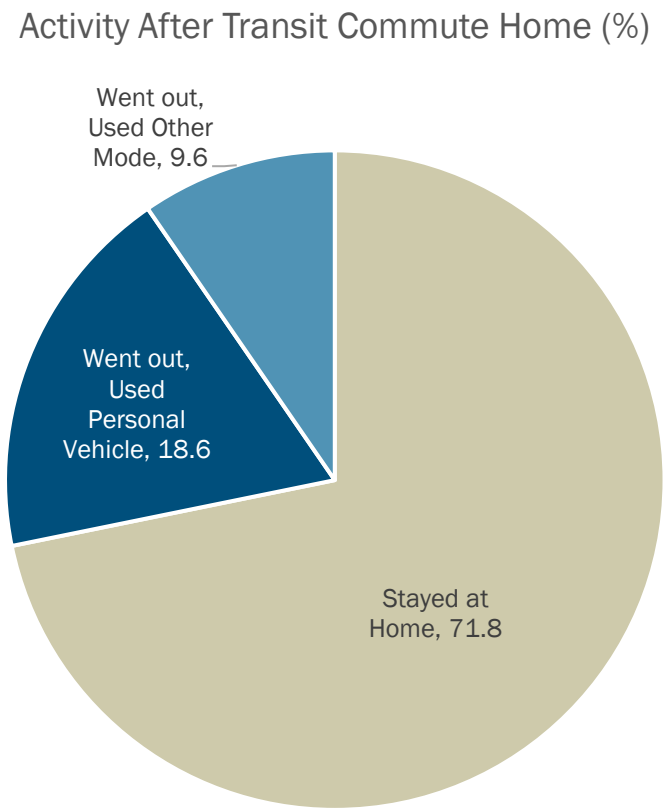
What is the incidence rate of weekday transit commuters returning home and heading out again by personal vehicle?

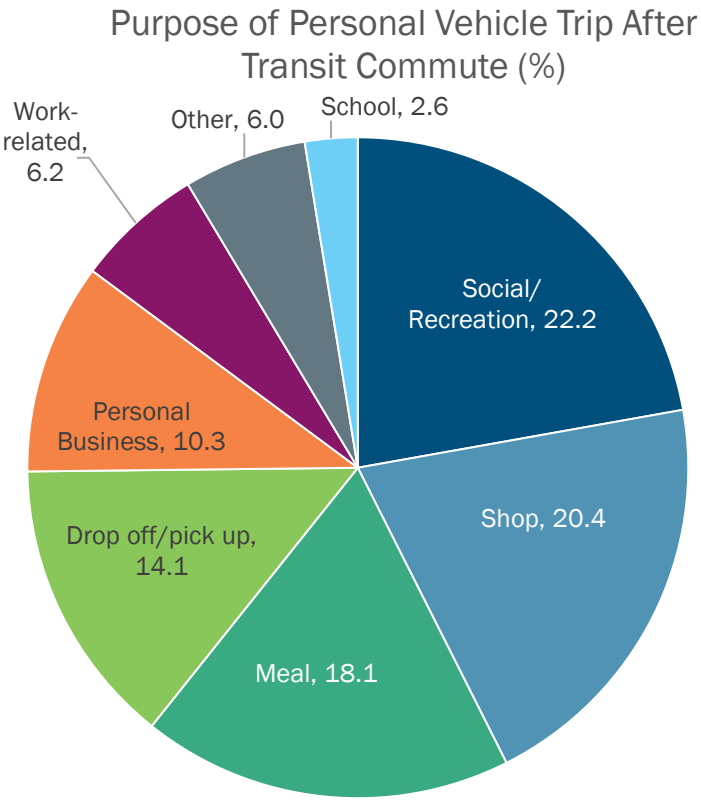
What is the trip purpose by personal vehicle after transit commute trips?

What are the travel activities after a transit commute trip?

- Personal vehicle = auto driver or auto passenger (excluding motorcycles)
- Trip purposes: work-related, drop off/pick up, school, shop, meal, personal business, social/recreation, other
- Activities after returning home of transit commuters

Use of Personal Vehicles for Activities After Using Transit for Work Commute Trips





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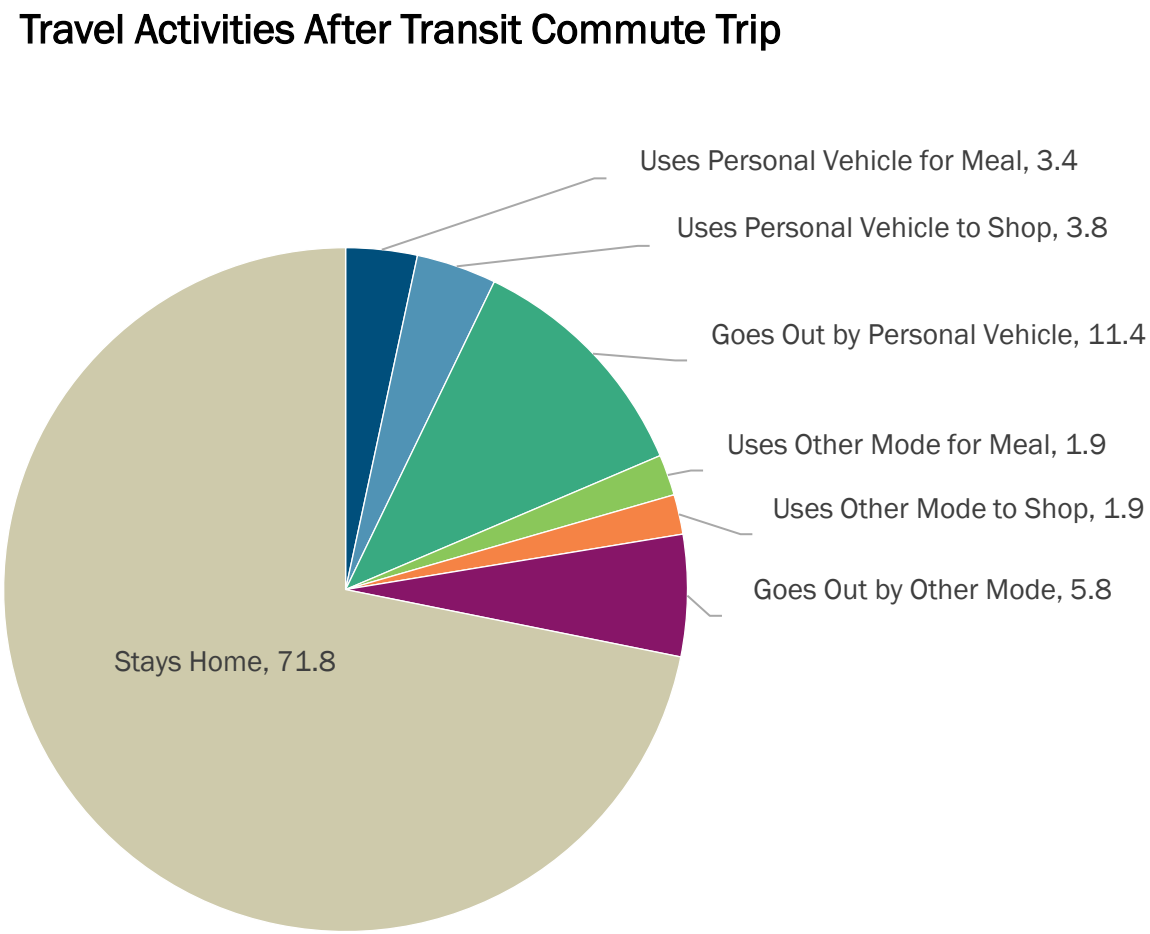

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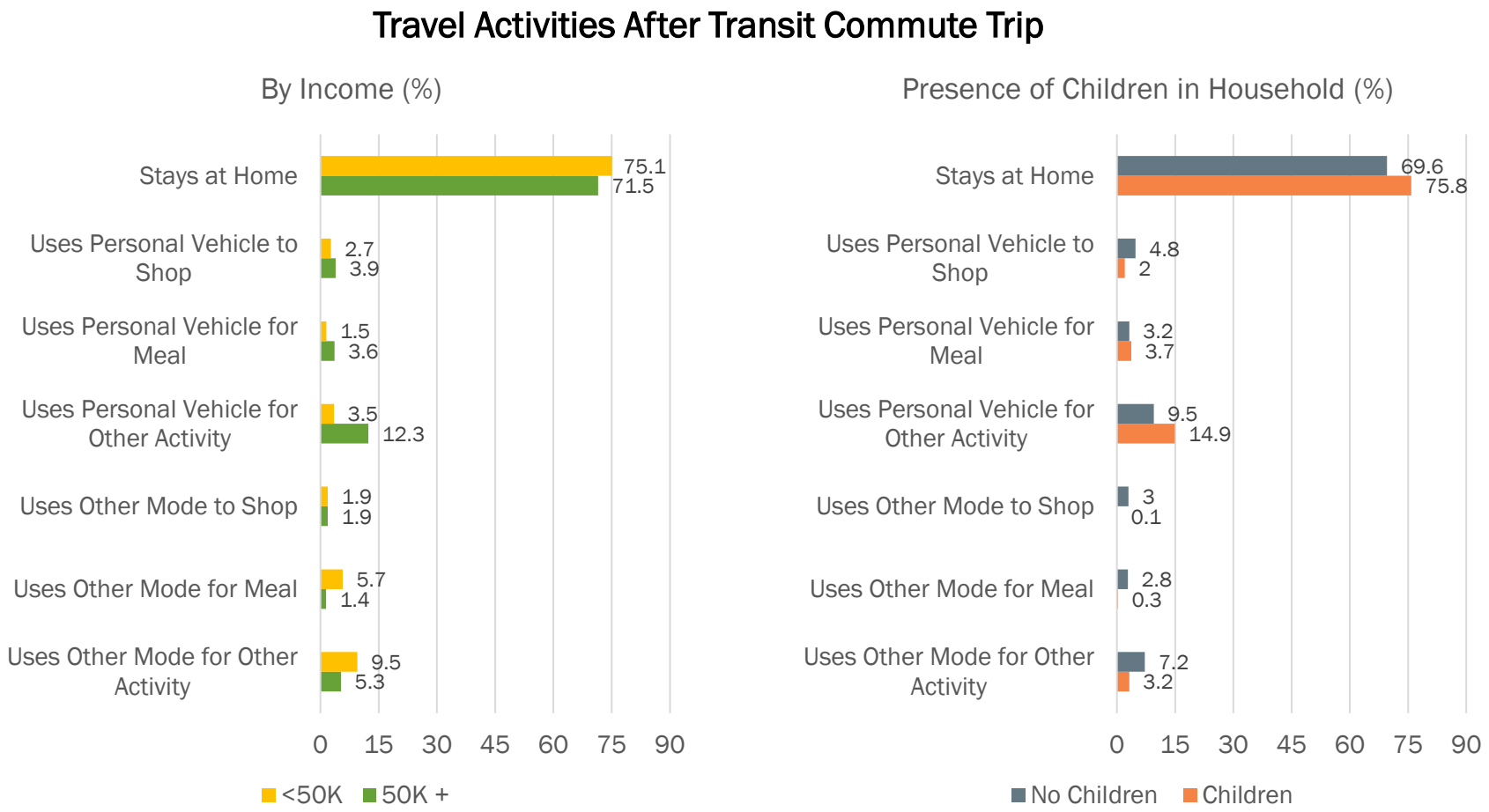

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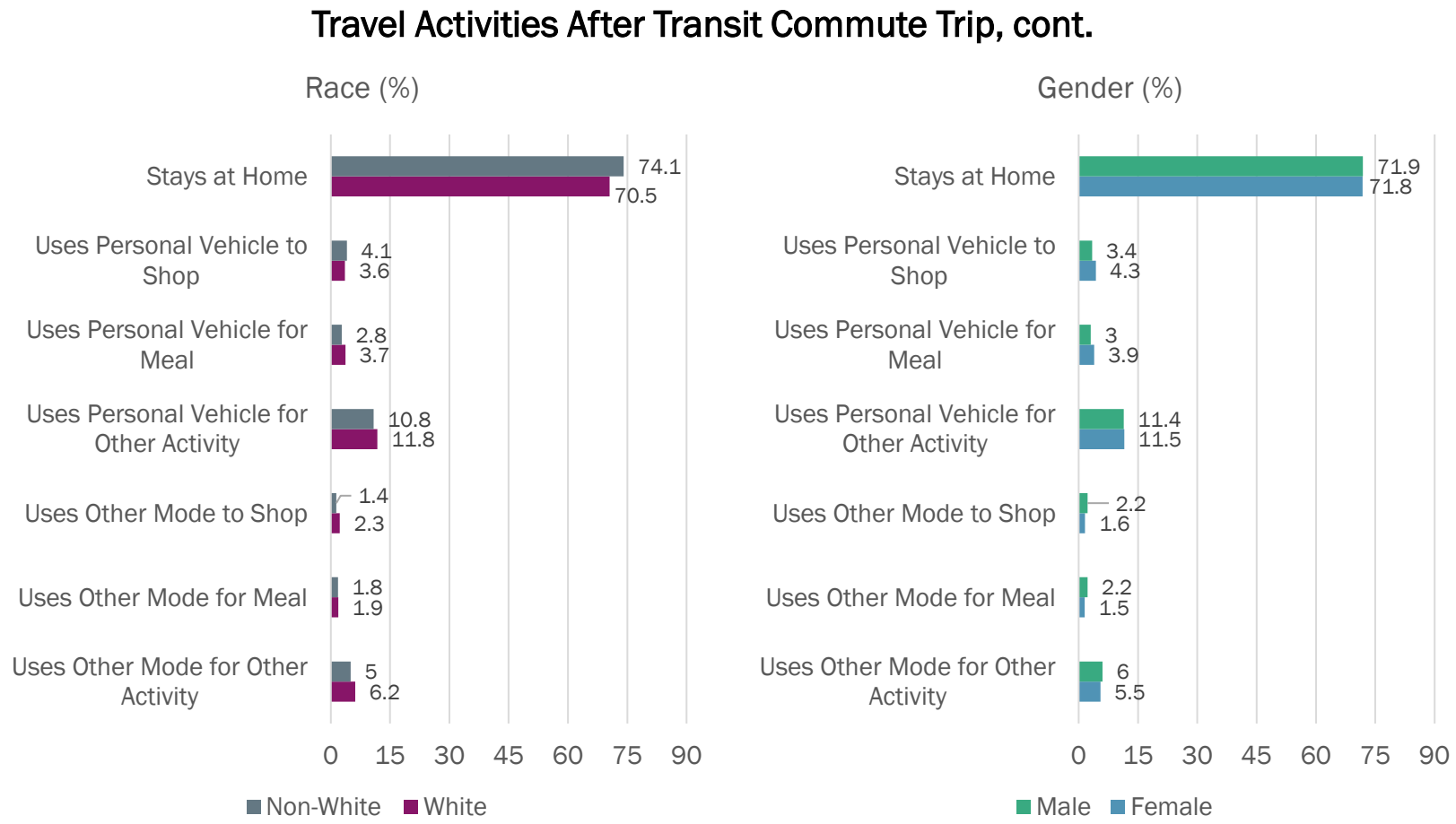

Use of Personal Vehicles for Activities After Using Transit for Work Commute Trips

Summary of Findings

- The number of persons who use transit for commuting home from work is fairly small; among this group, the majority remain at home, and a smaller share go back out using a personal vehicle.
- Persons from lower income households are more likely to use a mode other than personal vehicle for trips after a transit commute compared with persons from higher income households.
- Persons from households with children are most likely to use personal vehicles for after transit trips, but few of those trips are for the purpose of shopping.
- Persons from households without children are most likely to go back out after returning home from a transit commute.

RTS In-Depth Analysis Questions and RTS Resources

- RTS In-Depth Analysis Questions are available on the RTS website (https://www.mwcog.org/transportation/data-and-tools/household-travel-survey/)
- Other RTS Resources available on the RTS website:
  - RTS Technical Documentation
  - RTDC RTS Tabulations
  - RTS Public Files

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