Travel Behavior and Mobility of Older Adults: Evidence from the National Household Travel Survey

Jeremy Mattson
Small Urban & Rural Transit Center
Upper Great Plains Transportation Institute, North Dakota State University

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Overview

- National Household Travel Survey
  - 2001 and 2009
- Aging and disabilities
- Ability to drive
- Miles driven
- Trip frequency
- Stayed in same place
- Would like to get out more often
- Trip distance
- Mode shares

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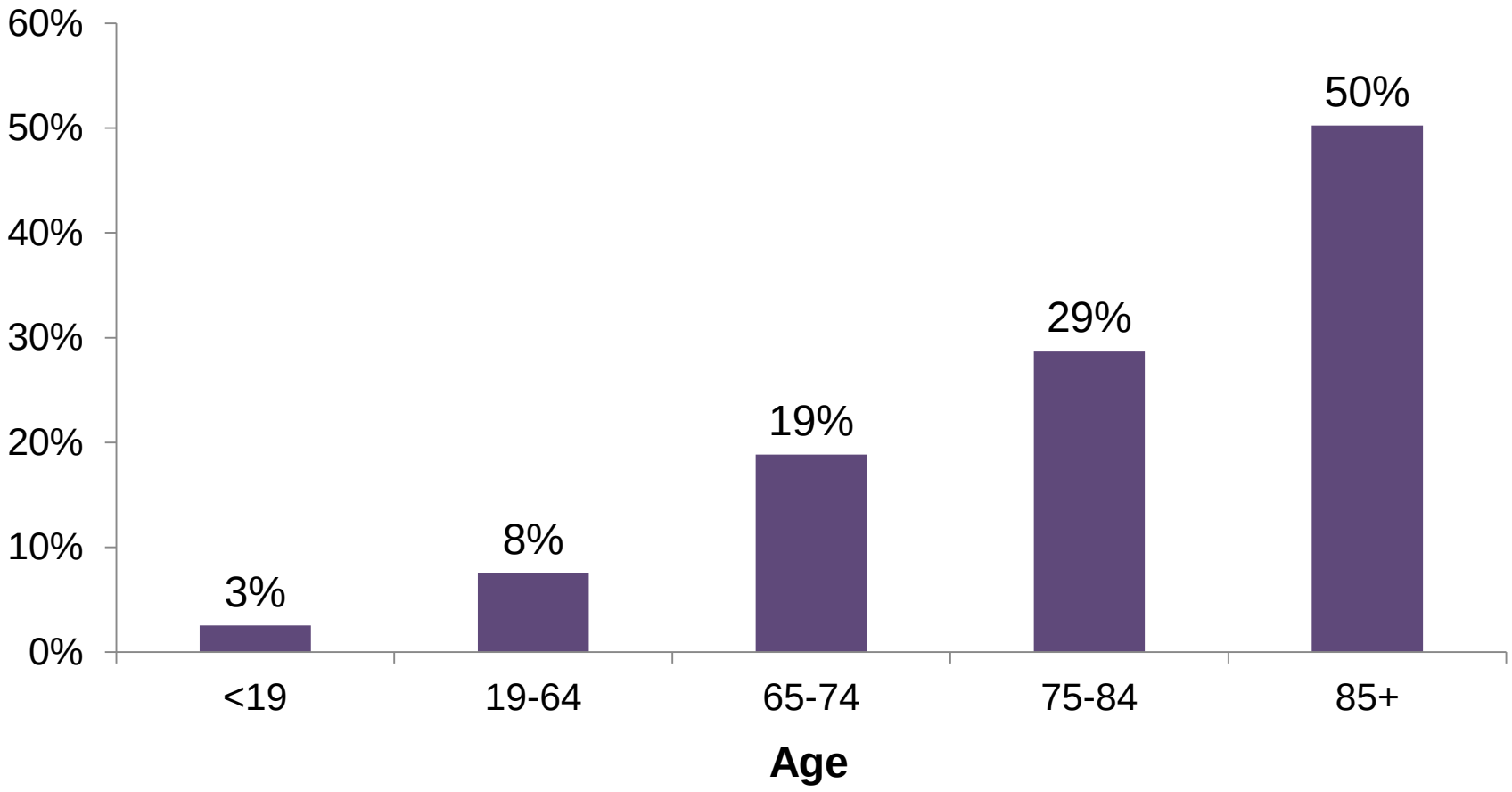
Aging and Disabilities



Percentage Having a Condition Making it Difficult to Travel

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Impact of Condition on Ability to Make Trips

	Age			
	19-64	65-74	75-84	85+
	----------Percentage----------			
Medical condition results in limiting driving to daytime	43	42	50	43
Medical condition results in using bus/subway less frequently	24	23	19	21
Medical condition results in asking others for rides	61	53	58	67
Medical condition results in giving up driving	28	32	41	62
Medical condition results in using special transit services	14	13	13	14
Medical condition results in using reduced fare taxi	7	6	6	6
Medical condition results in reduced day-to-day travel	81	83	84	87

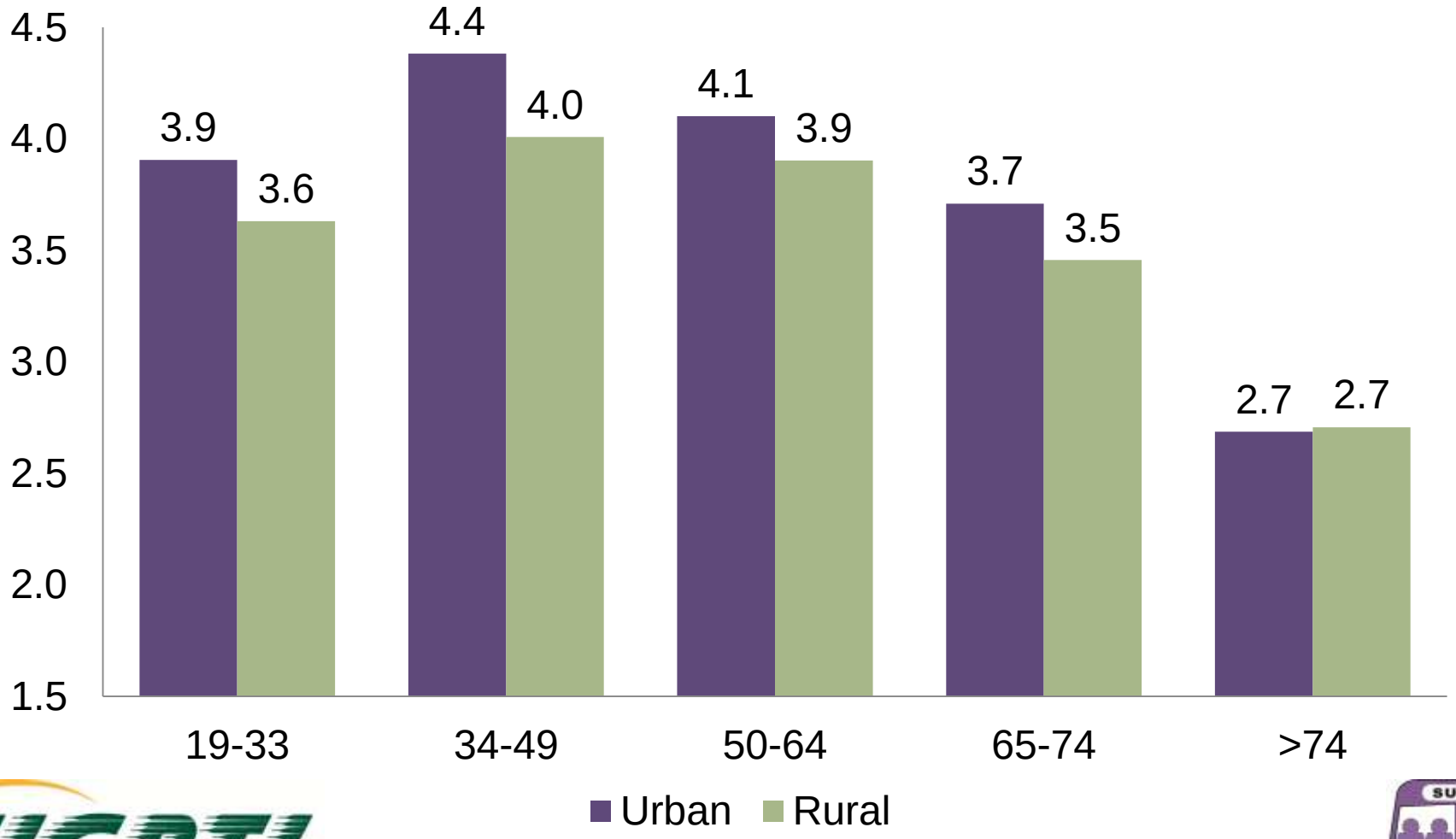
Percentage Who Drive

	Male		Female	
Age	2001	2009	2001	2009
19-64	95	94	91	91
65-74	94	93	82	84
75-84	87	87	67	68
85+	68	68	32	39

Average Annual Vehicle Miles Driven Per Person, by Age and Gender

	Male		Female	
Age	2001	2009	2001	2009
19-64	15,233	12,947	9,112	8,361
65-74	11,752	10,165	4,398	4,993
75-84	7,702	7,446	2,646	2,499
85+	3,439	3,047	907	993

Number of Trips per Day, by Age, Urban vs. Rural



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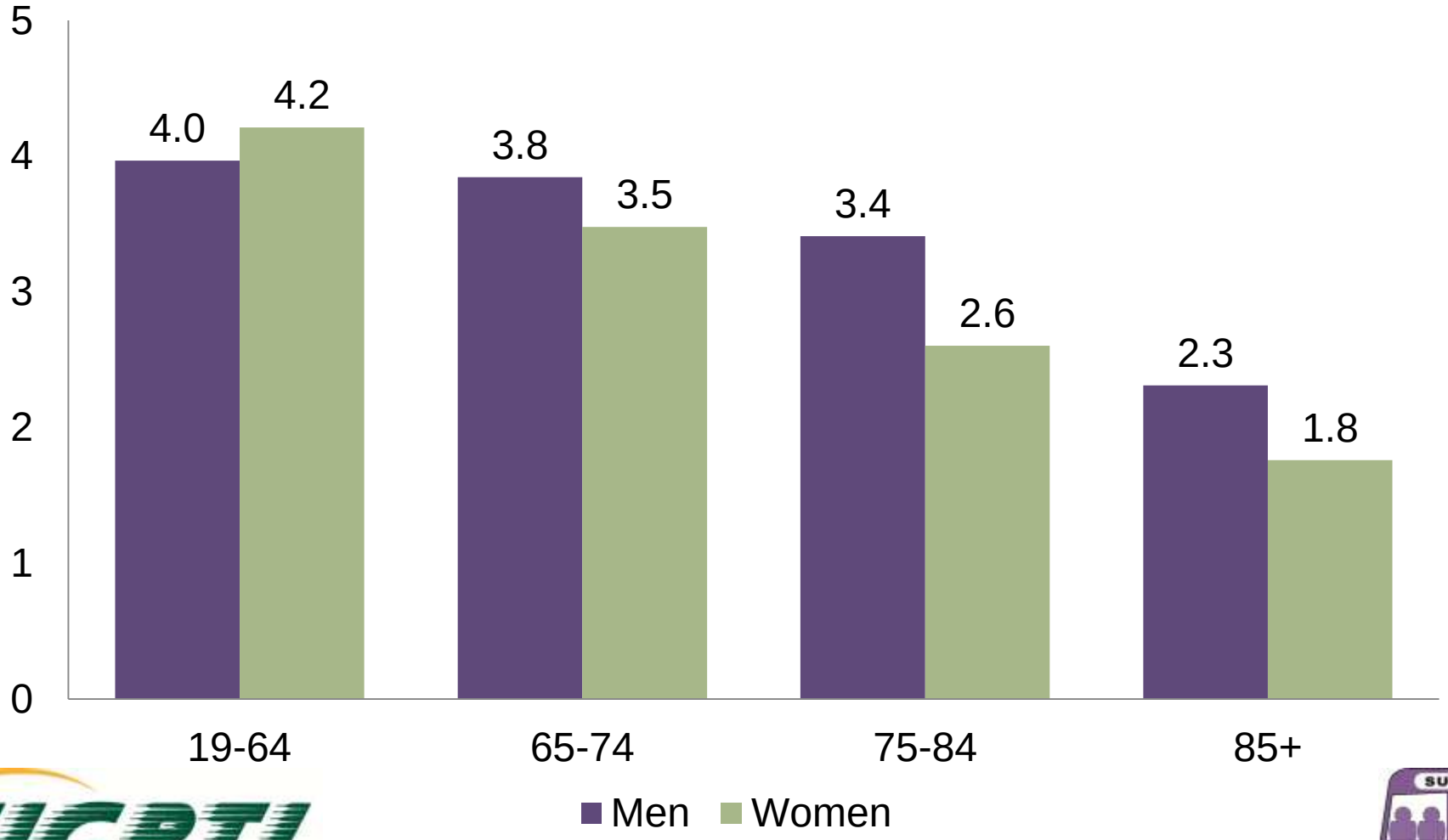
Number of Trips per Day, by Age and Gender



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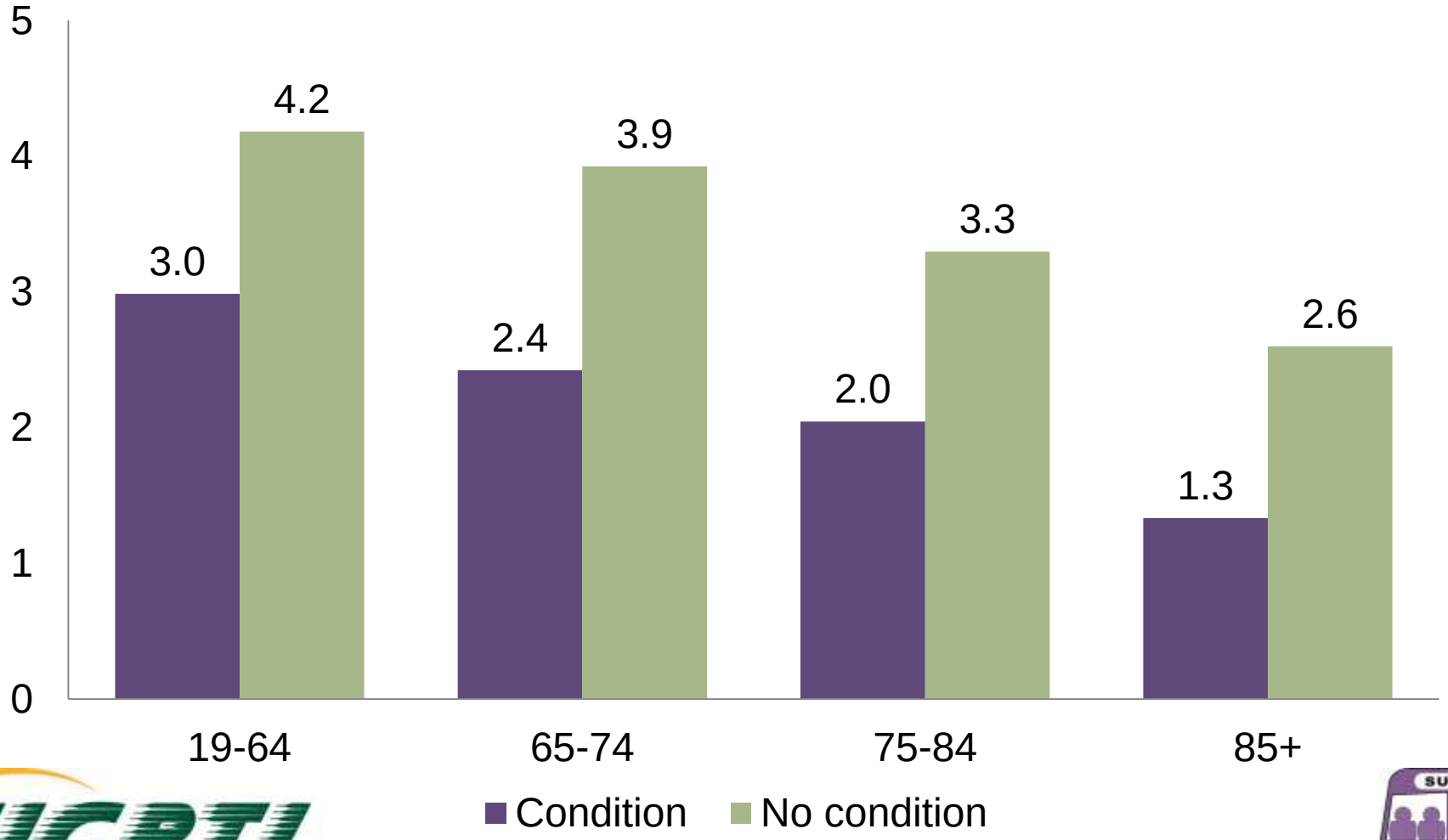
Number of Trips per Day, by Age and Medical Condition



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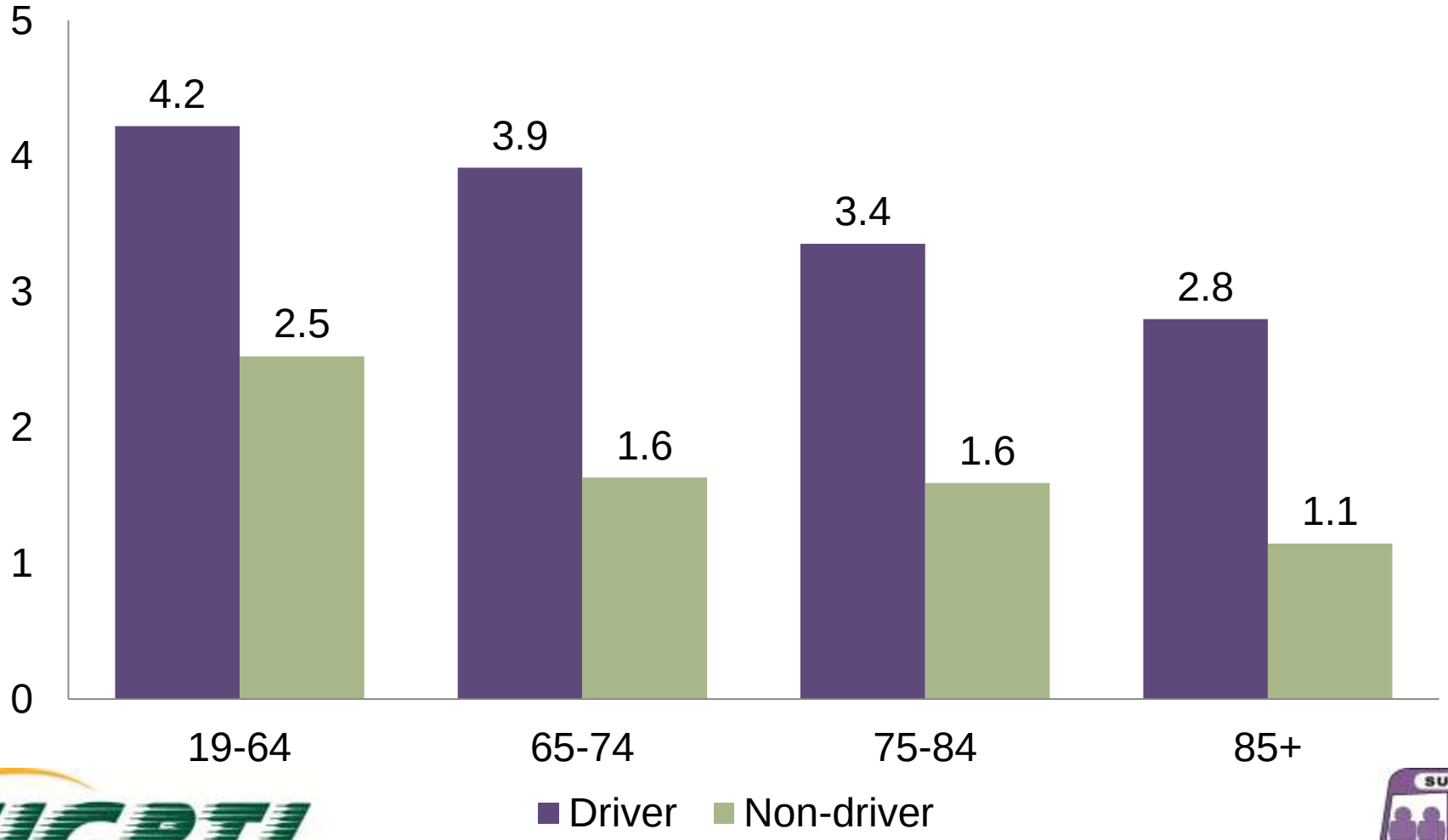
Number of Trips per Day, by Age, Drivers vs. Non-Drivers



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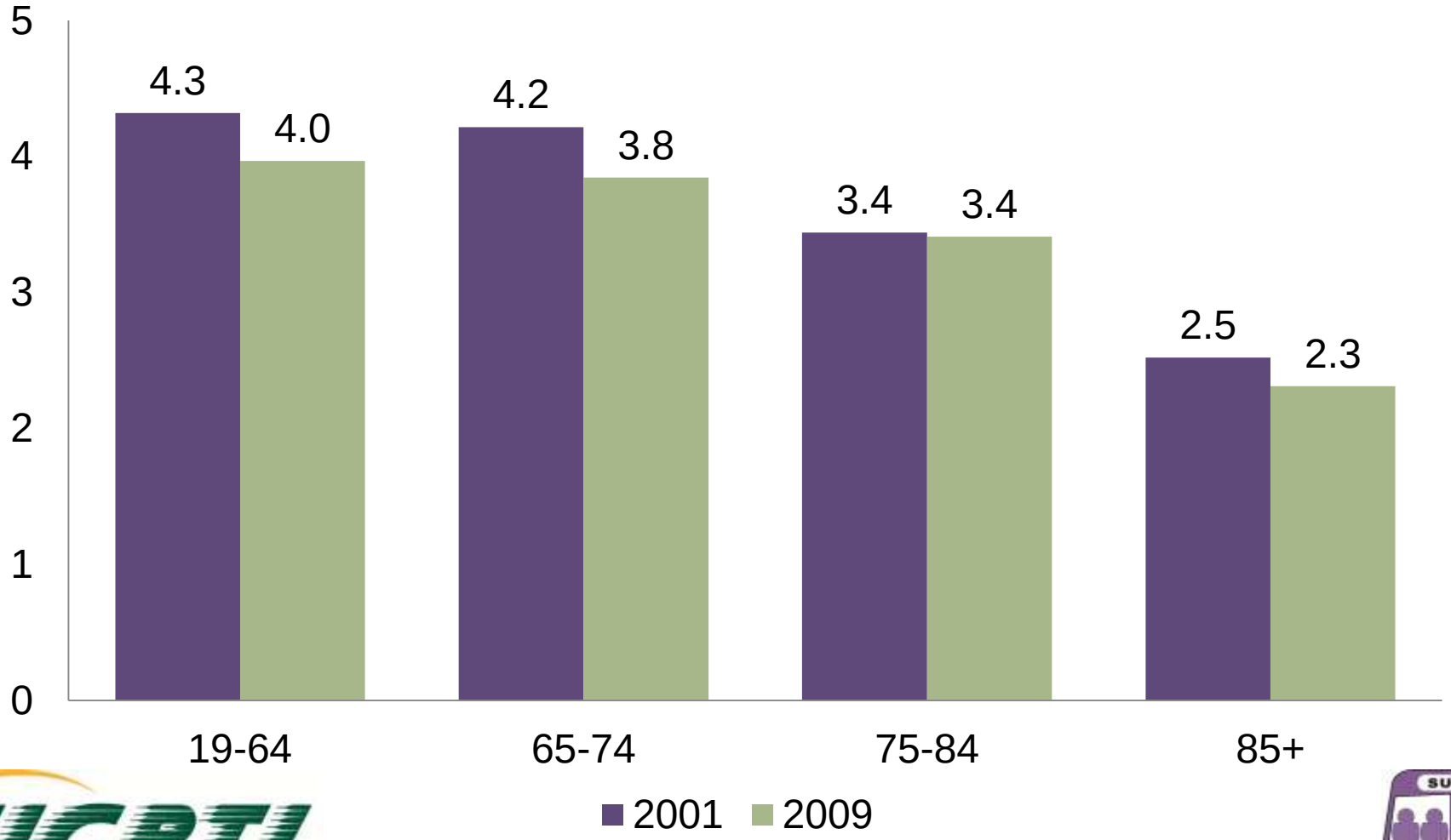
Men: Number of Trips per Day, by Age, 2001 and 2009



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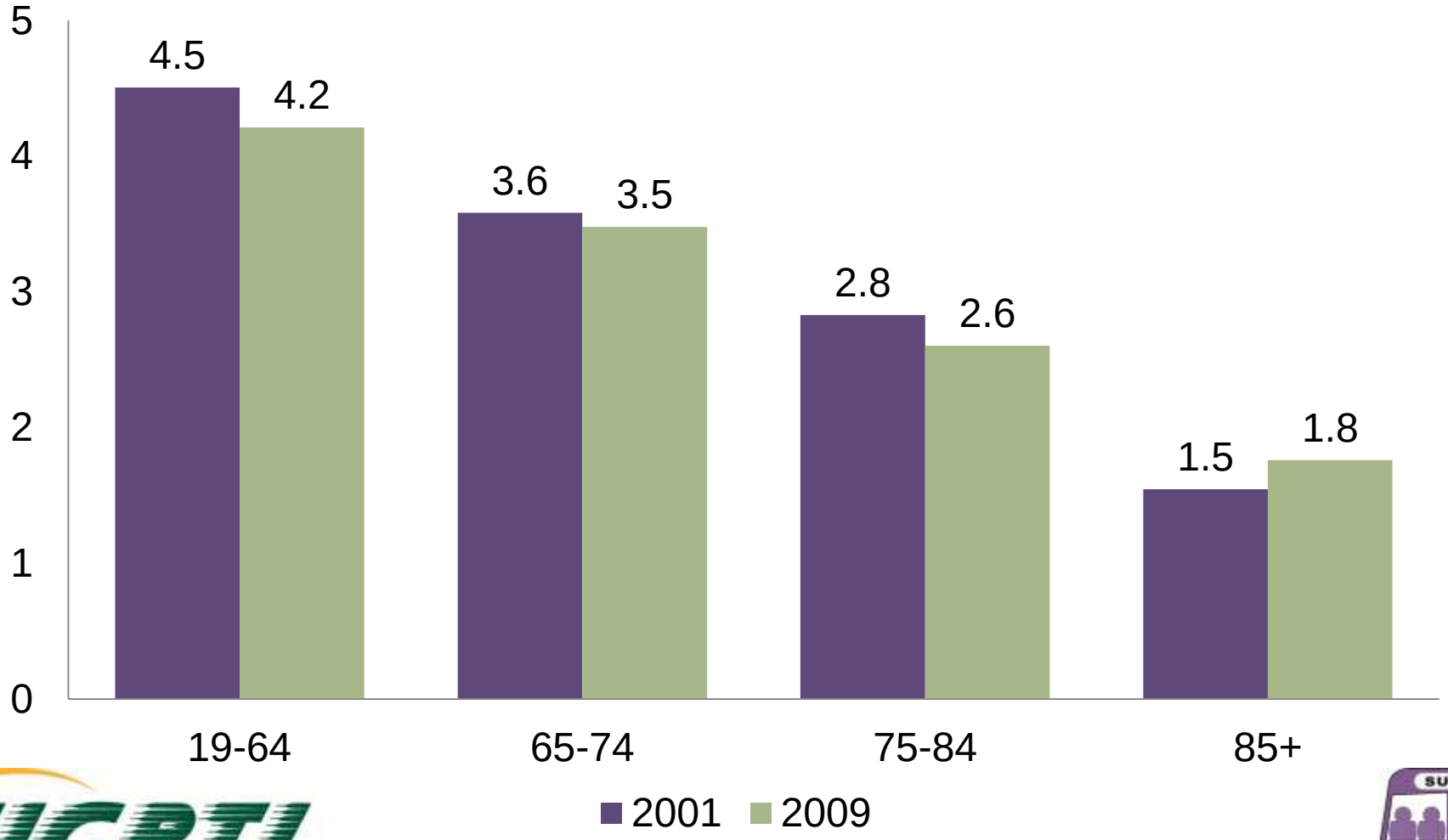
Women: Number of Trips per Day, by Age, 2001 and 2009



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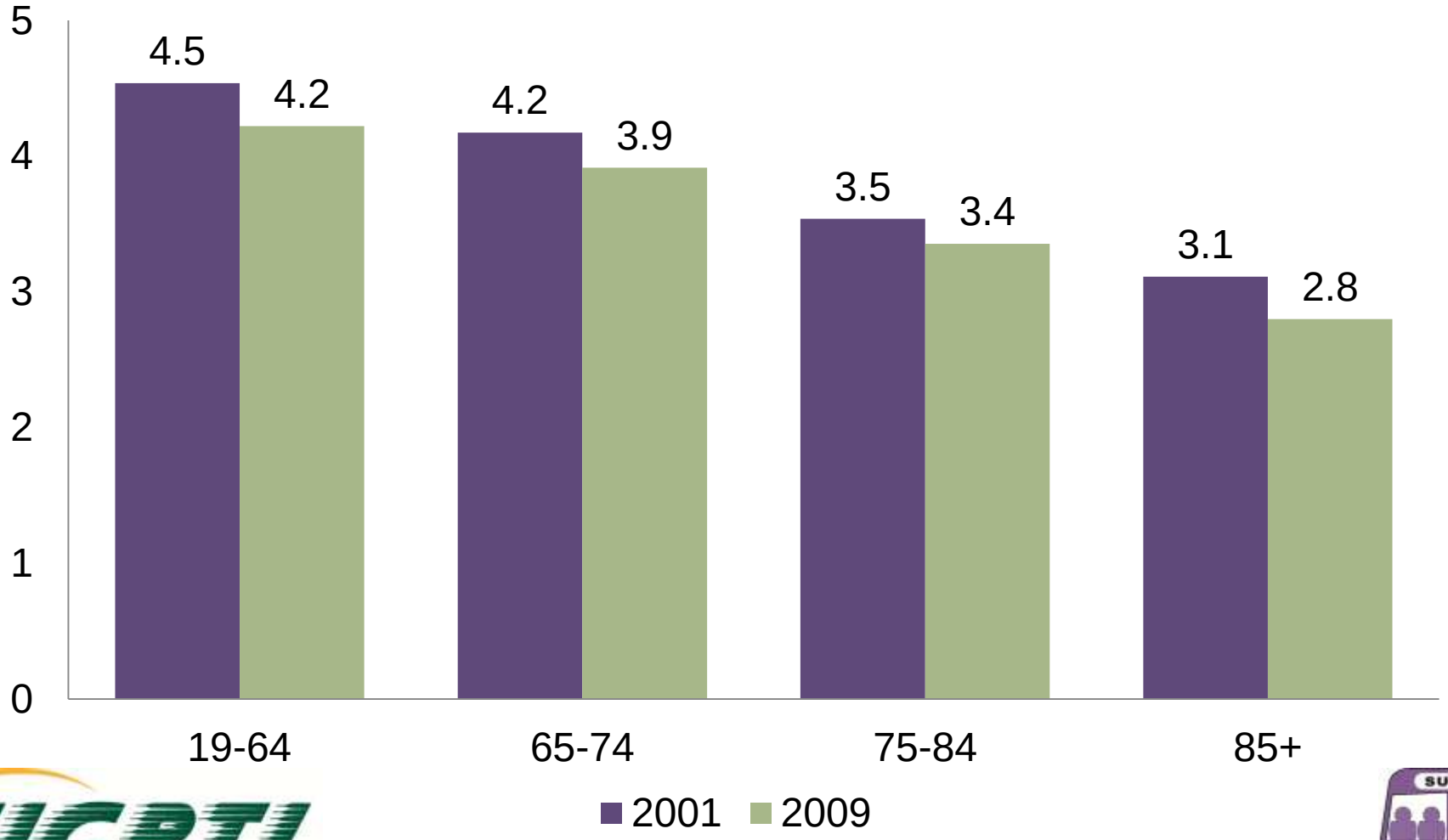
Drivers: Number of Trips per Day, by Age, 2001 and 2009



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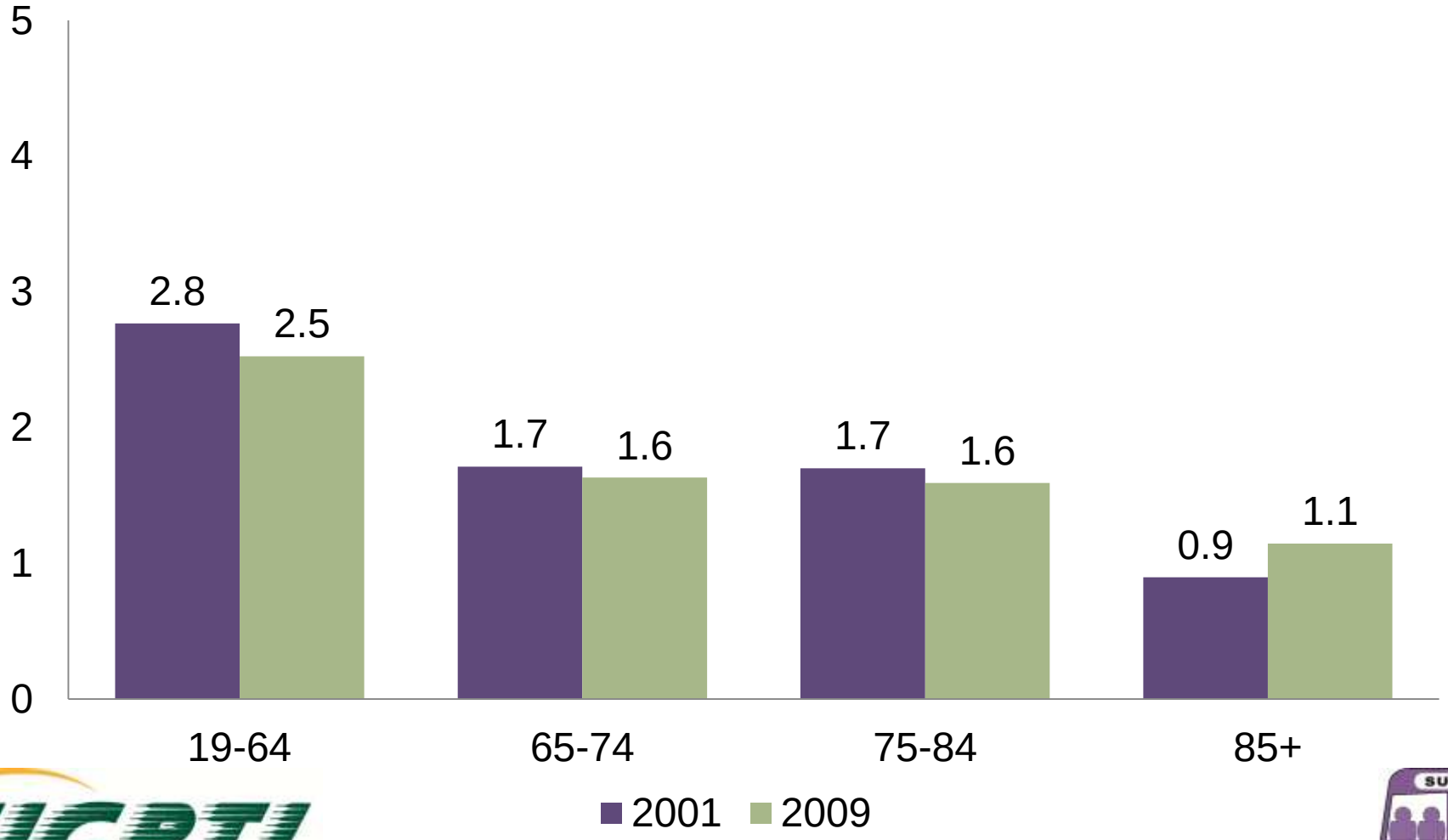
Non-Drivers: Number of Trips per Day, by Age, 2001 and 2009



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Trip Distance by Age

Age	Mean	5th Percentile	Median	95th Percentile
19-33	9.8	0.2	4	31
34-49	11.0	0.2	4	33
50-64	10.2	0.2	4	33
65-74	8.5	0.2	3	28
75+	7.1	0.2	3	25

Trip Purpose by Age

	Age				
Trip Purpose	19-33	34-49	50-64	65-74	75+
	----------Percentage----------				
Work	23	24	23	10	5
School/Daycare/Religious	7	3	3	4	5
Medical/Dental	2	2	3	5	7
Shopping/Errands	24	26	31	38	40
Social/Recreational	18	15	16	18	18
Family Personal Business/Obligations	4	5	6	7	7
Transport Someone	10	13	7	7	5
Meals	11	10	10	11	13
Other	1	1	1	1	1

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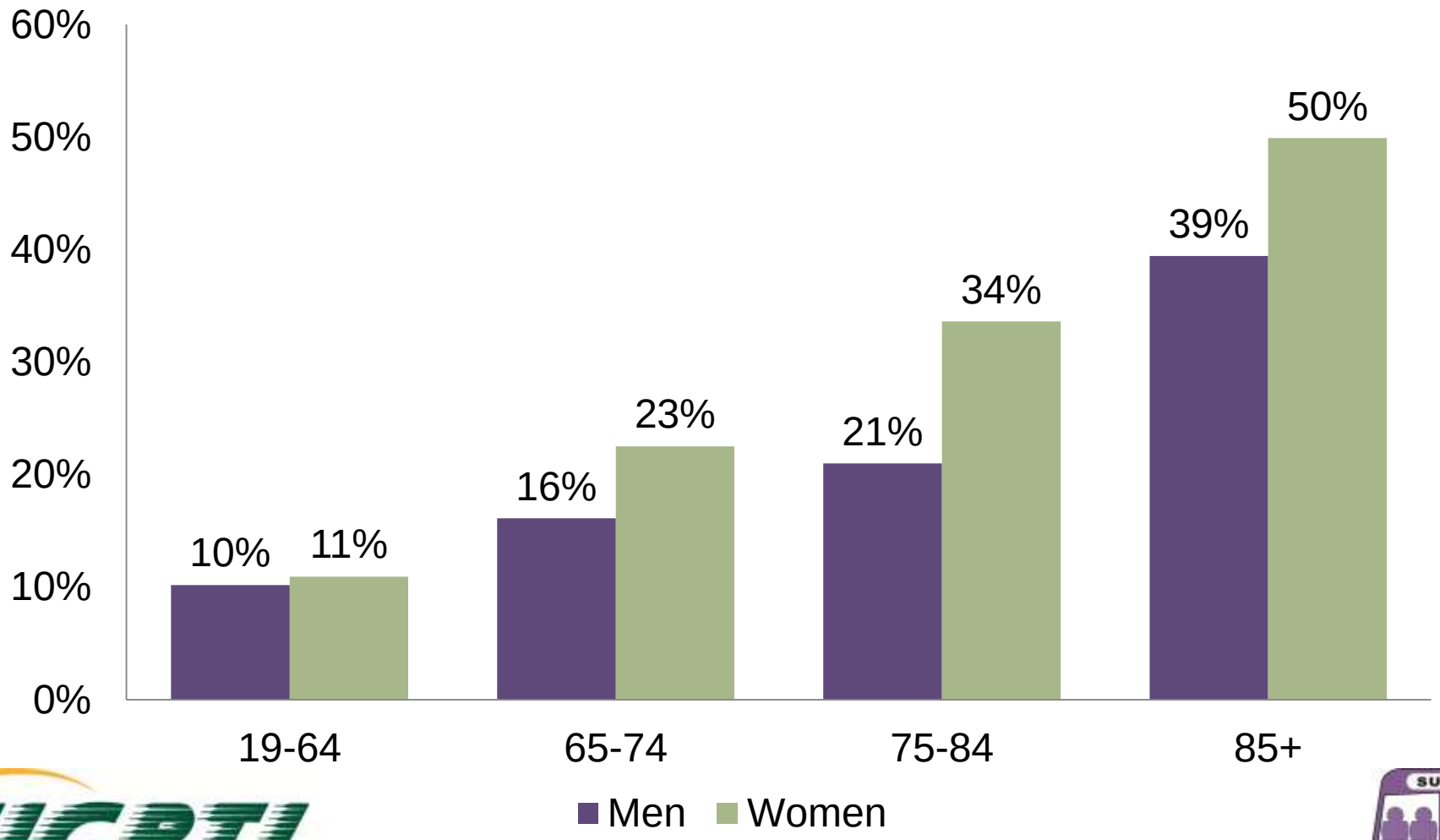
Percentage Stayed in Same Place All Day



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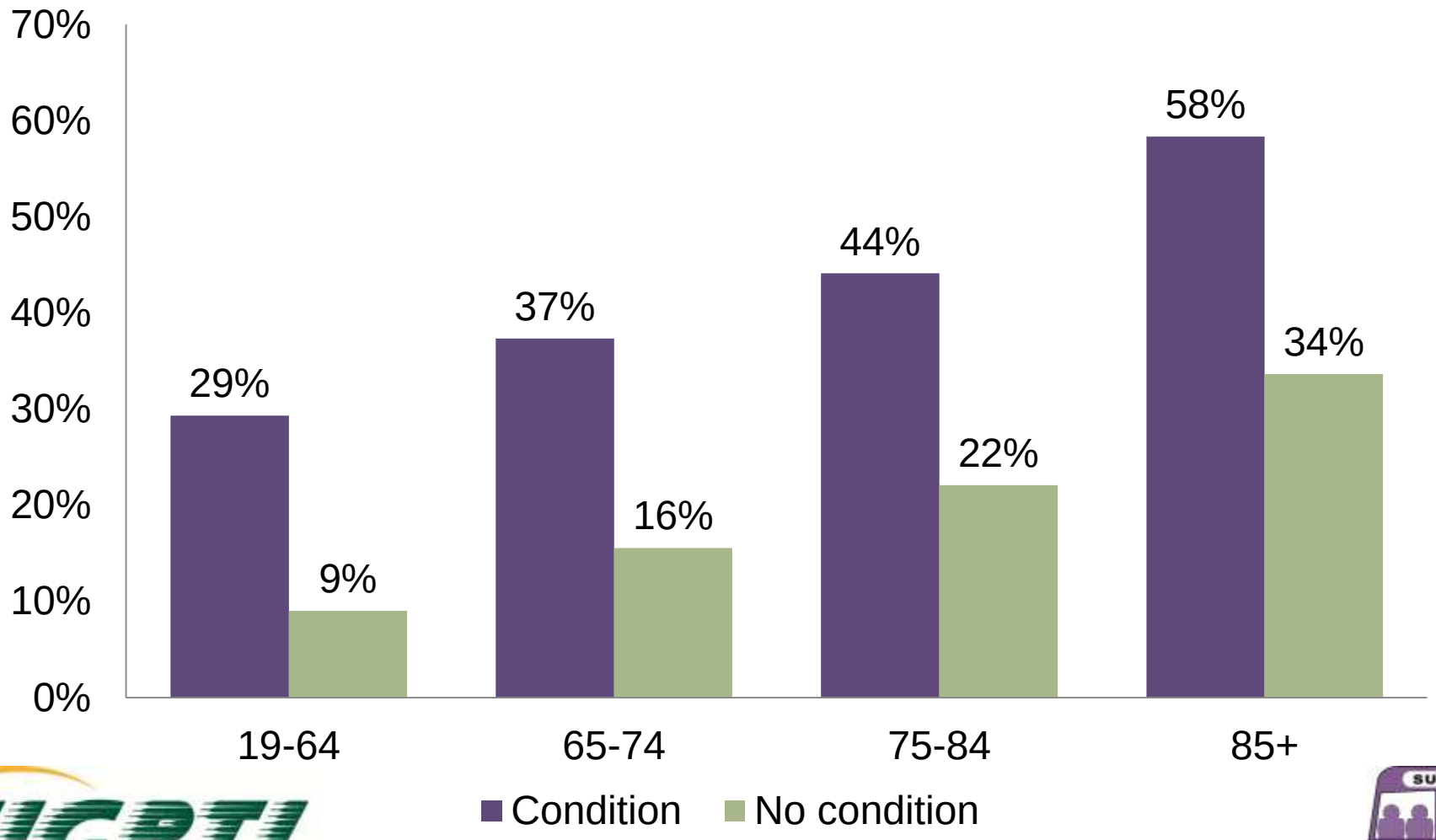

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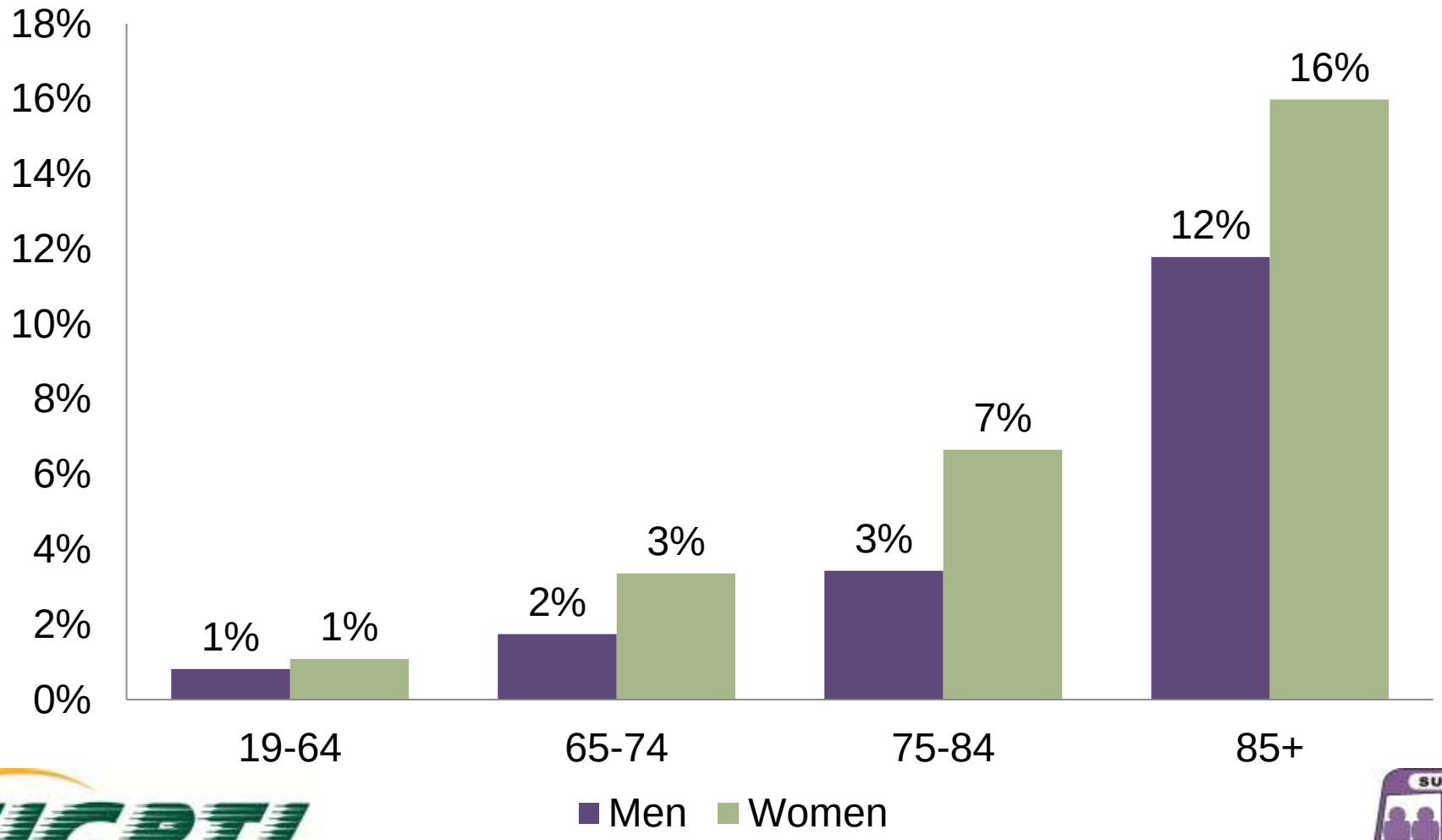
Stayed in Same Place All Week



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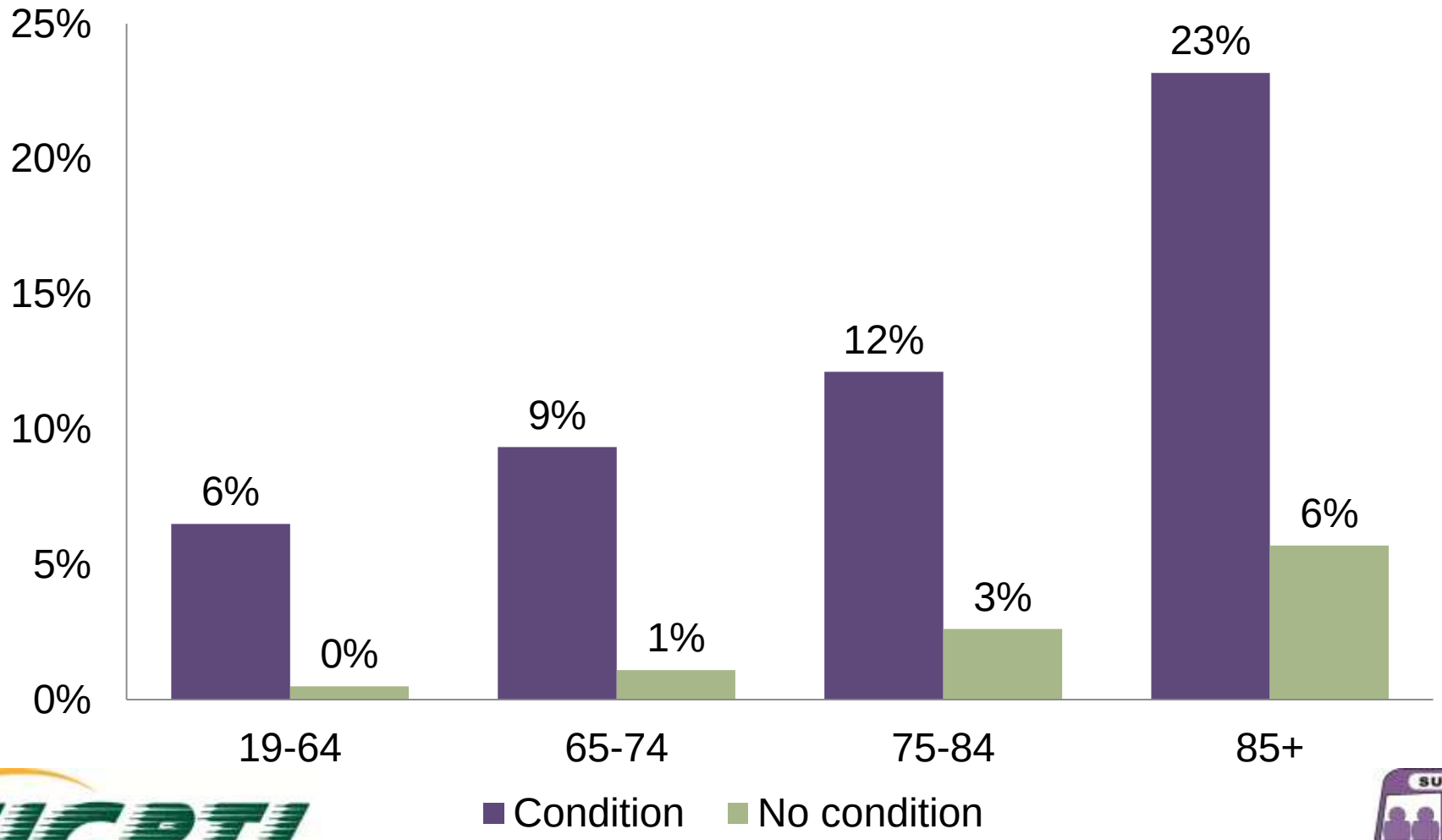
Stayed in Same Place All Week



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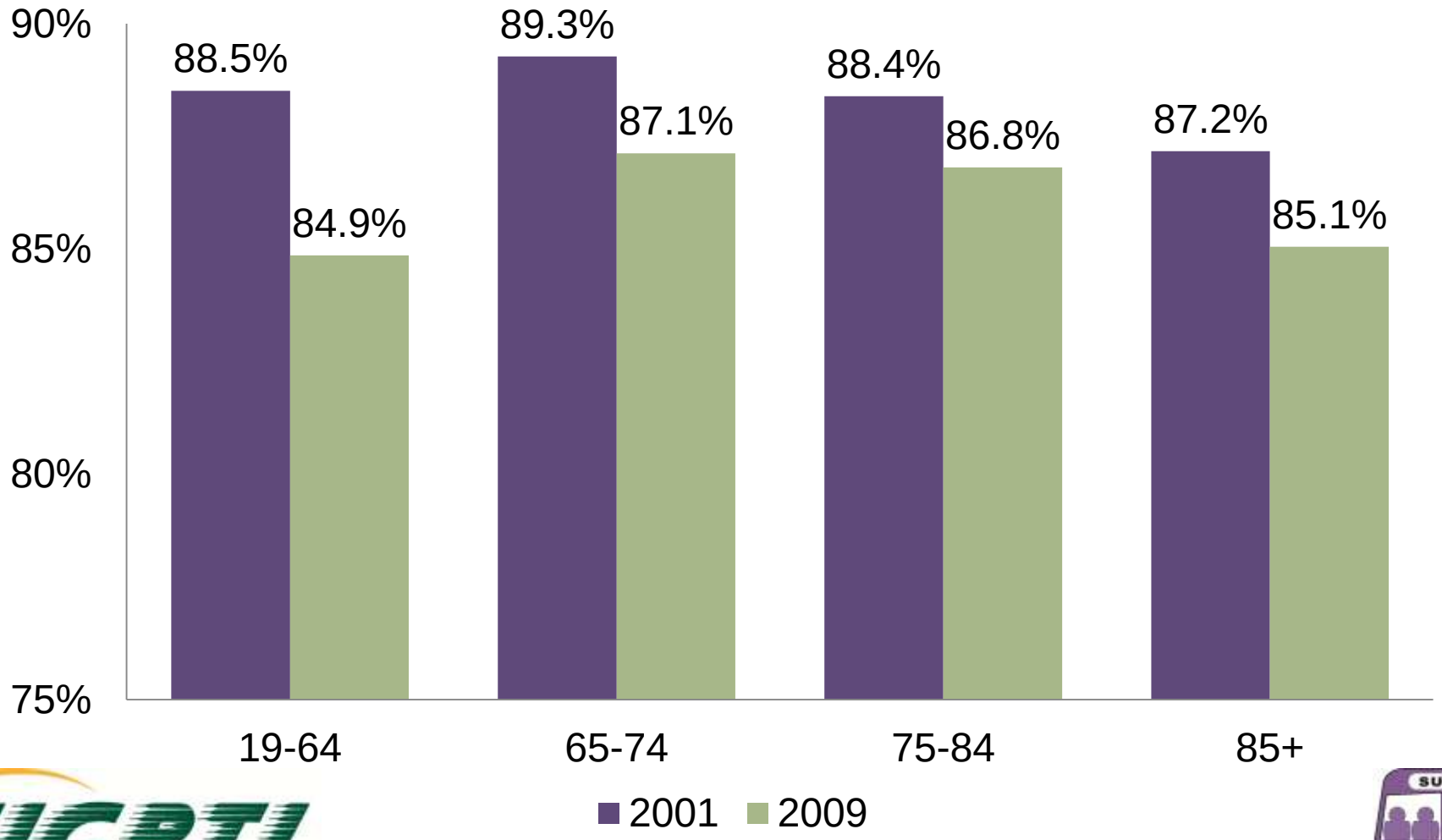
Percentage Among Those Not Making Trip in Last Week Who Would Like to Get Out More Often

		Urban	Rural
Age			
	19-33	79	59
	34-49	72	51
	50-64	69	57
	65-74	55	50
	>74	49	46
Gender			
	Male	67	57
	Female	56	50
Medical Condition			
	Yes	67	53
	No	51	52

Modes Shares

- Automobile – Car, van, SUV, pickup truck
- Transit – local public bus, commuter bus, charter/tour bus, city to city bus, shuttle bus, Amtrak/intercity train, commuter train, subway/elevated train, street car/trolley, ferry, special transit-people with disabilities
- Walking
- Bicycling
- Other – motorcycle, RV, other truck, light electric vehicle, school bus, taxi, airplane, other

Automobile Mode Shares by Age, 2001 and 2009



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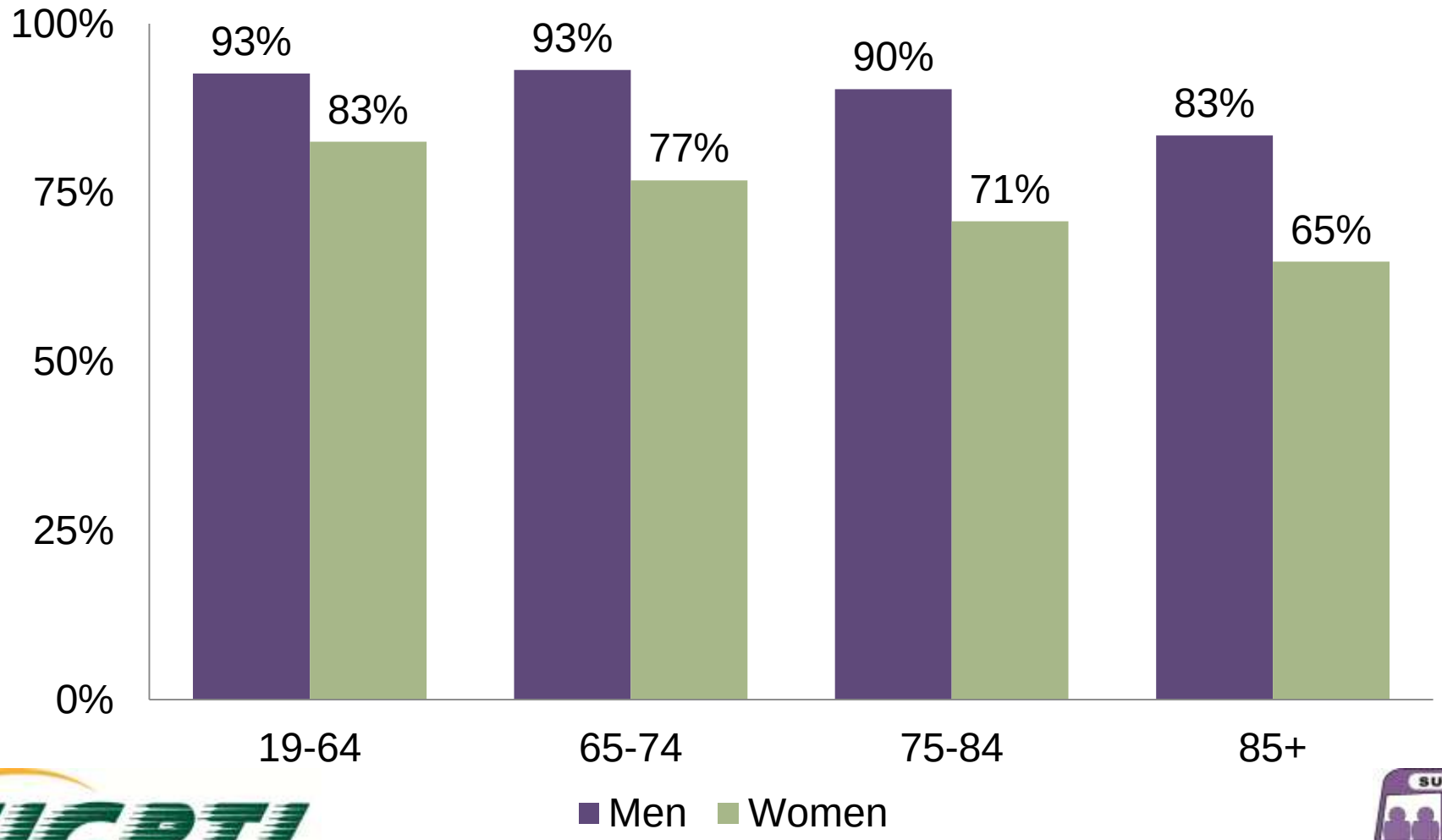
Private Vehicle Trips Taken as Drivers



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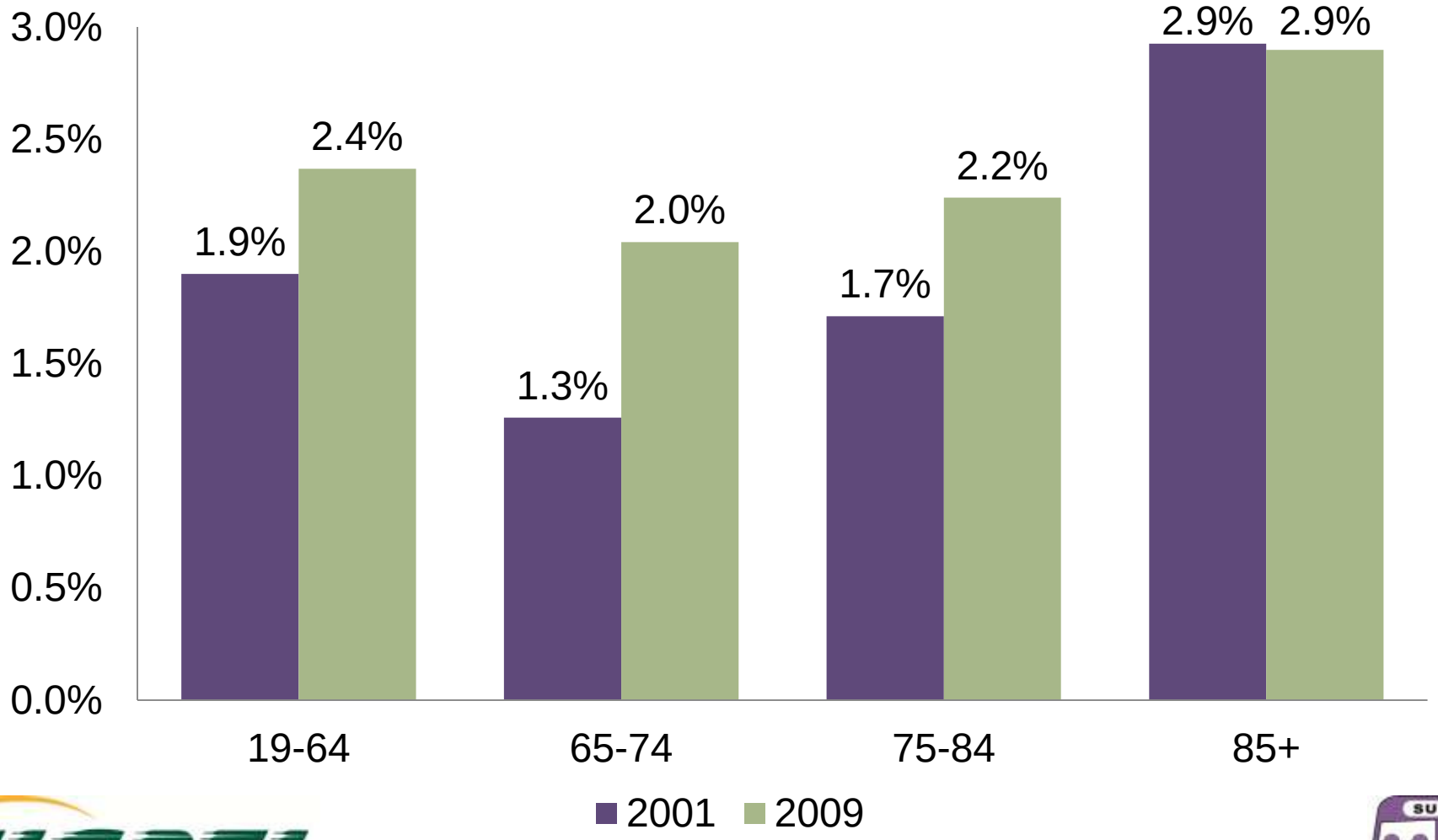
Transit Mode Shares by Age, 2001 and 2009



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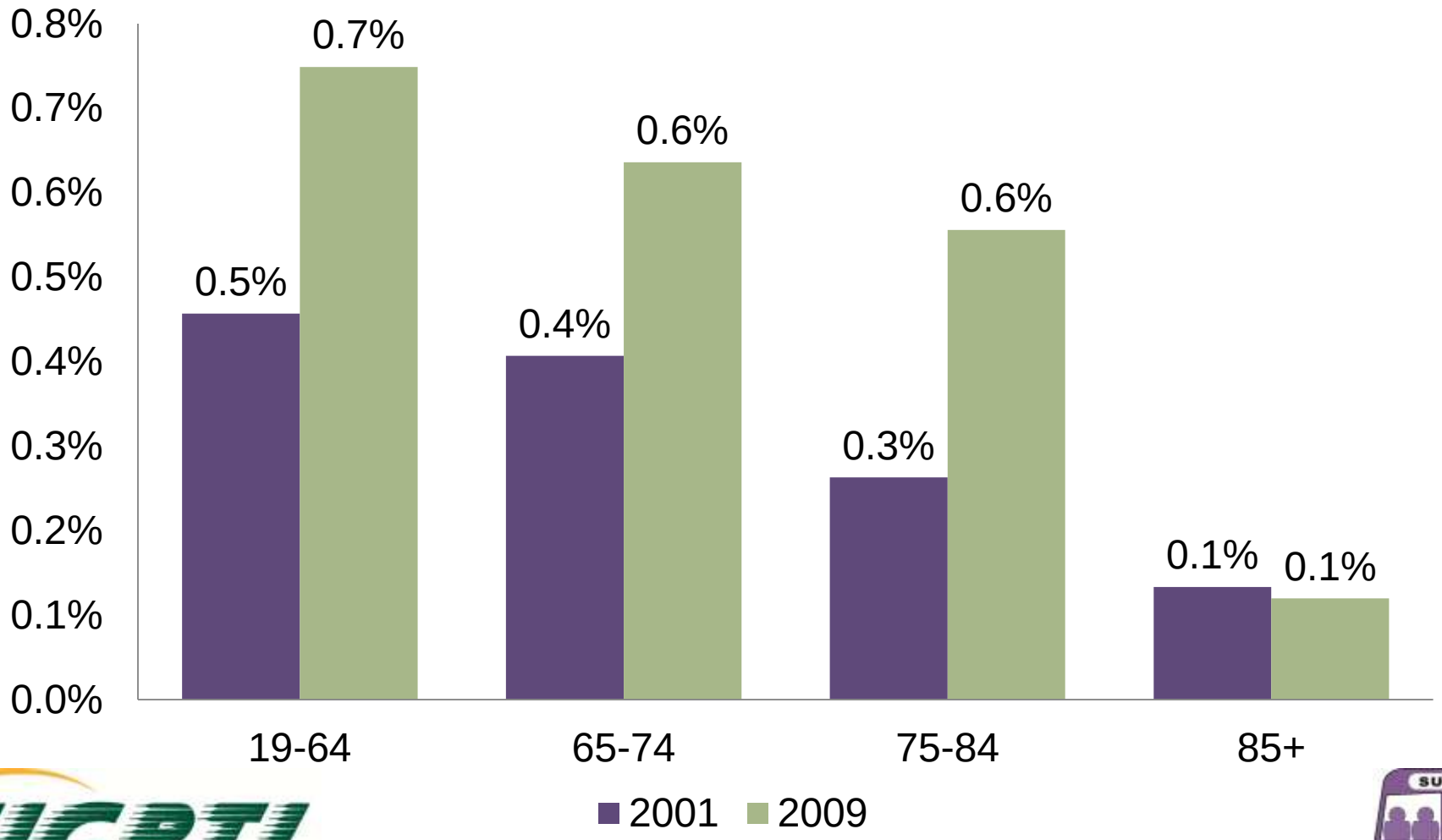
Bicycle Mode Shares by Age, 2001 and 2009



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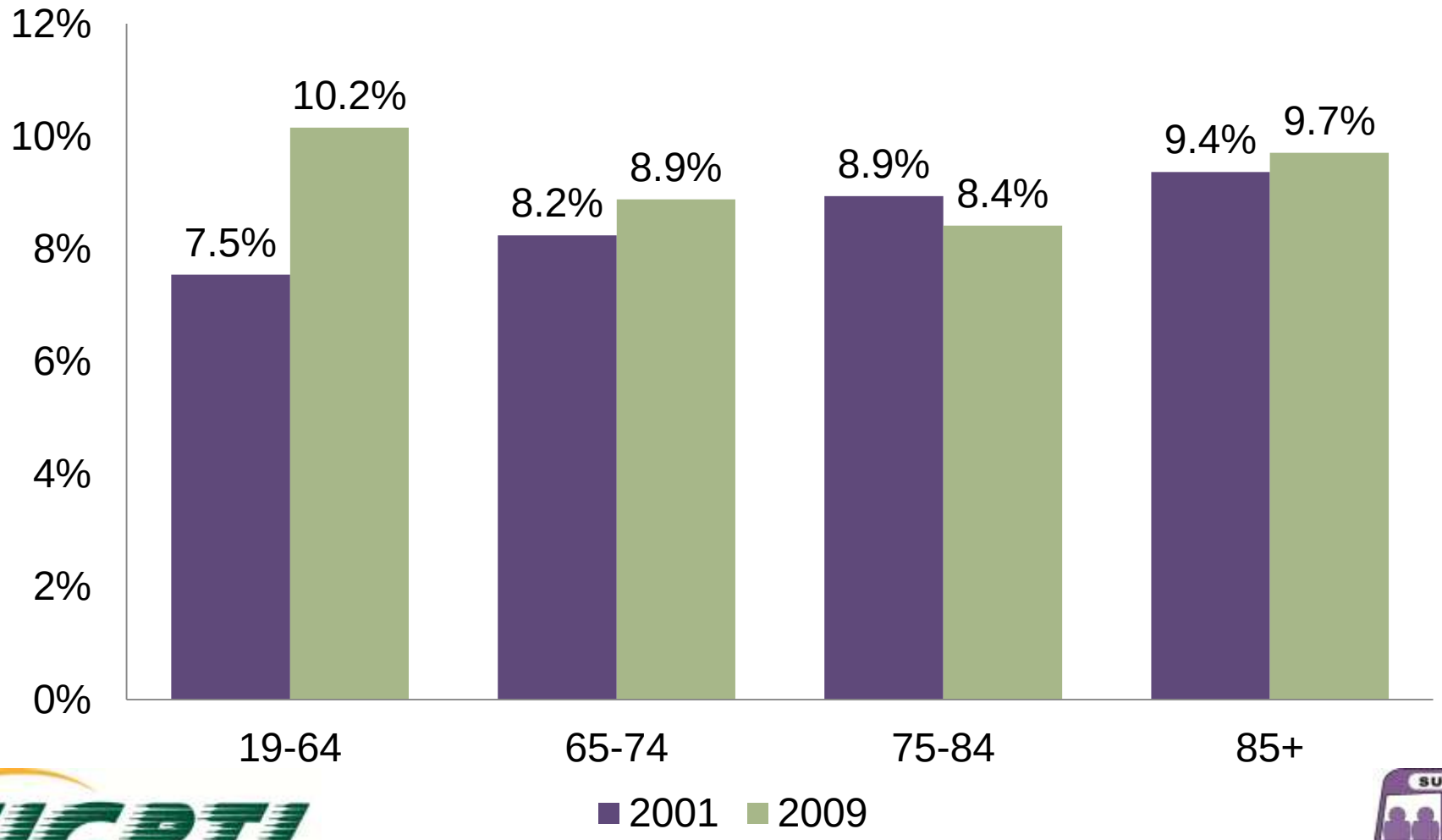
Walking Mode Shares by Age, 2001 and 2009



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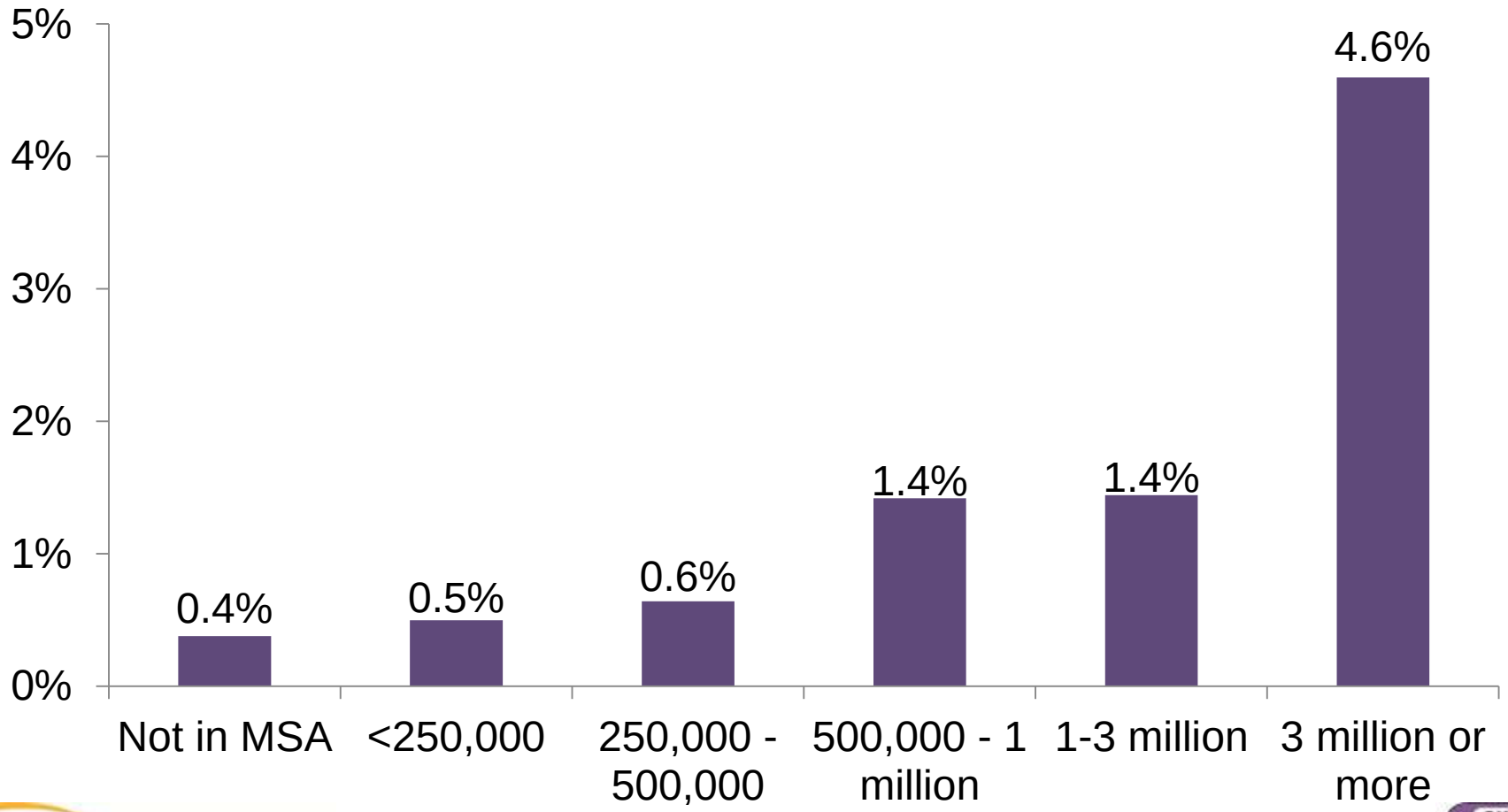
Transit Mode Shares by Size of Metro Area



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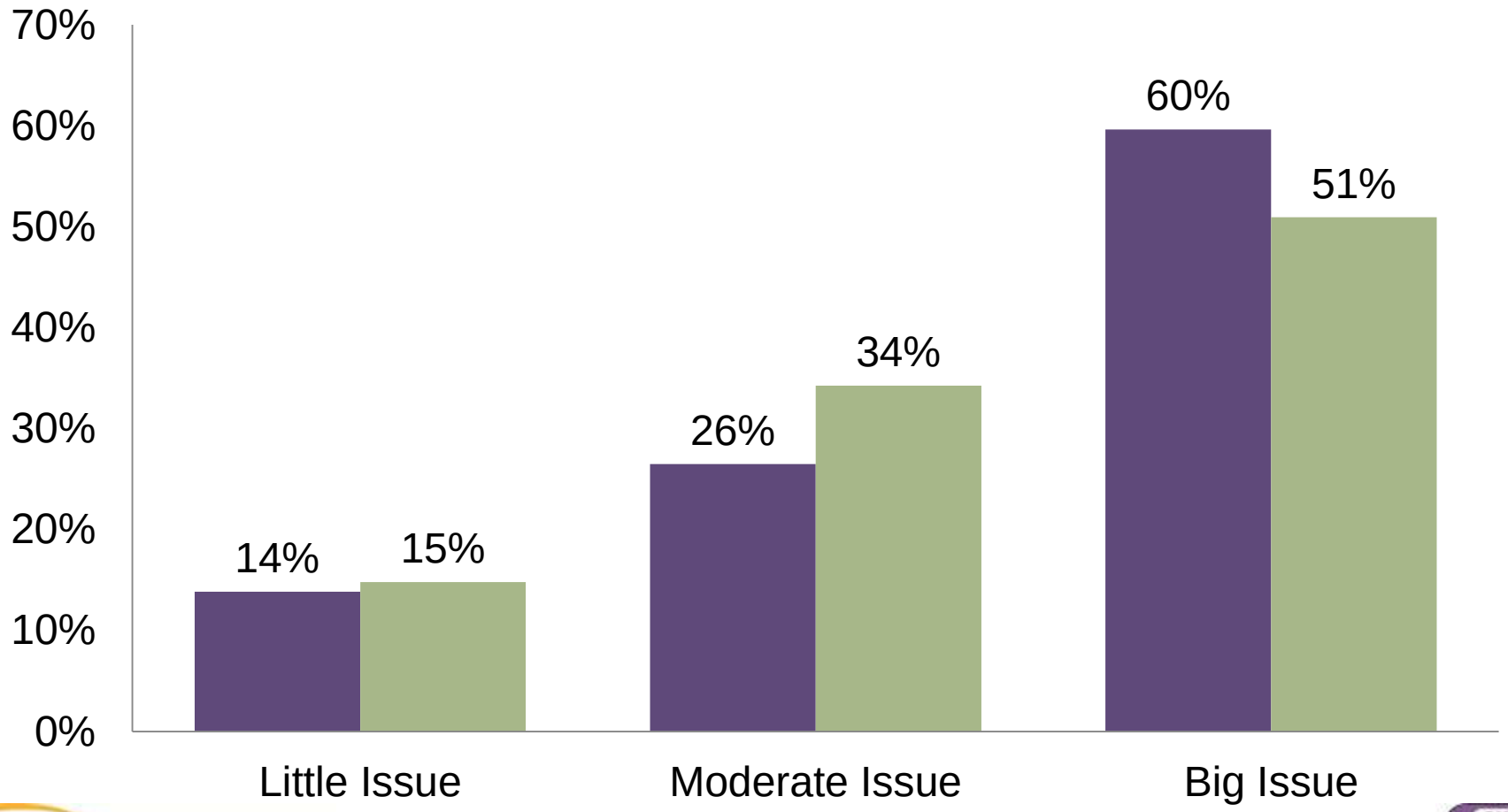
Binary Logit Model Results

Dependent variable = No Trips During Travel Day/Week

	Day			Week	
Variable	OR	95% CI		OR	95% CI
Age	1.015**	1.01-1.02		1.023**	1.02-1.03
Male	0.809**	0.79-0.83		0.926*	0.86-1.00
Condition/disability	2.499**	2.42-2.58		5.027**	4.62-5.47
Rural	1.301**	1.27-1.34		1.229**	1.14-1.34
Household size	1.037**	1.03-1.05		1.125**	1.09-1.16
Household income (scale 1-18)	0.957**	0.95-0.96		0.929**	0.92-0.94
Driver	0.337**	0.33-0.35		0.261**	0.24-0.28
Transit user	0.667**	0.64-0.70		0.552**	0.47-0.64

Note: OR = odds ratio; CI = confidence interval. *p < .05 **p < .01

Views on Transportation: Access to Transit



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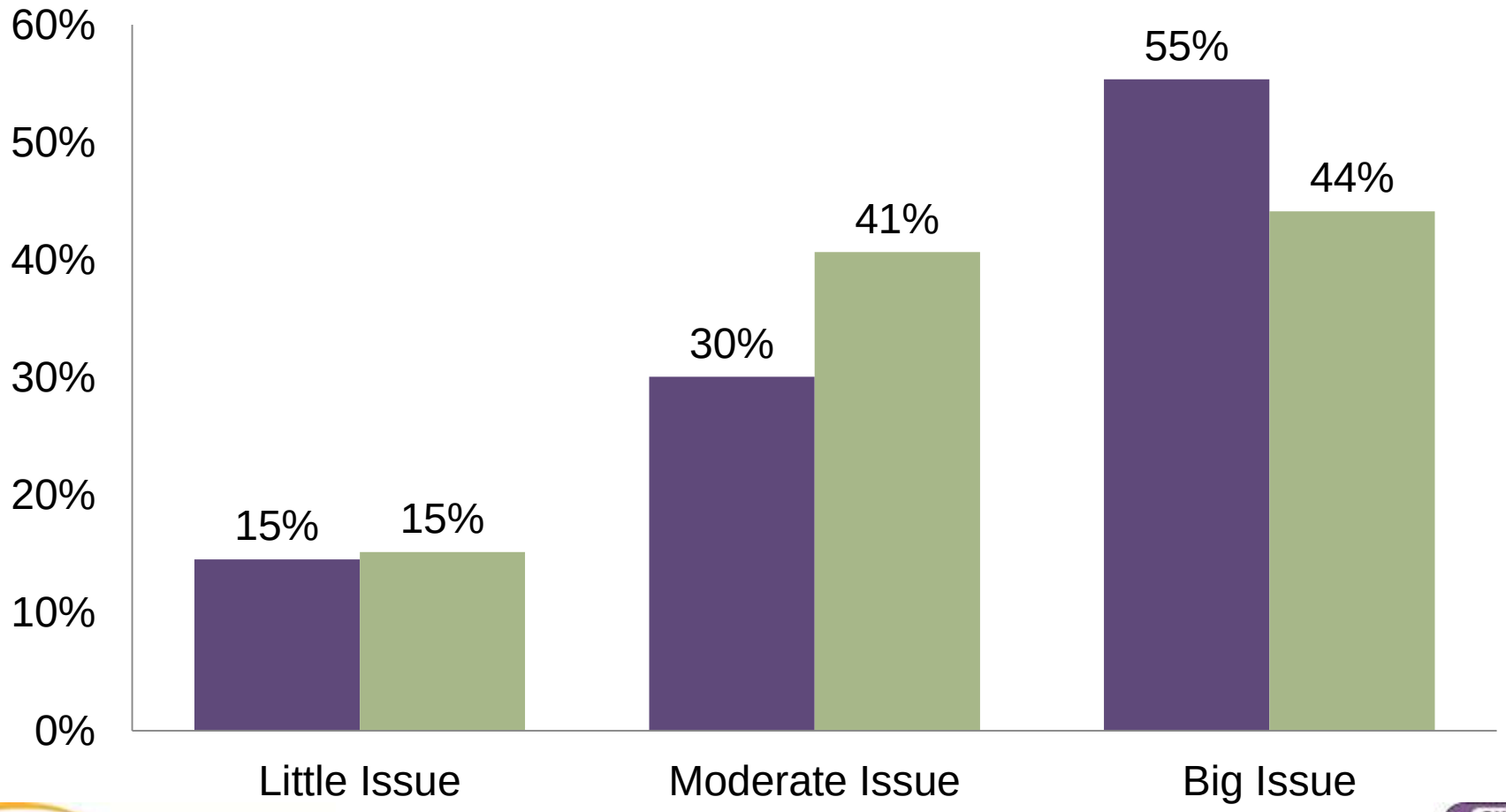
Views on Transportation: Lack of Walkways



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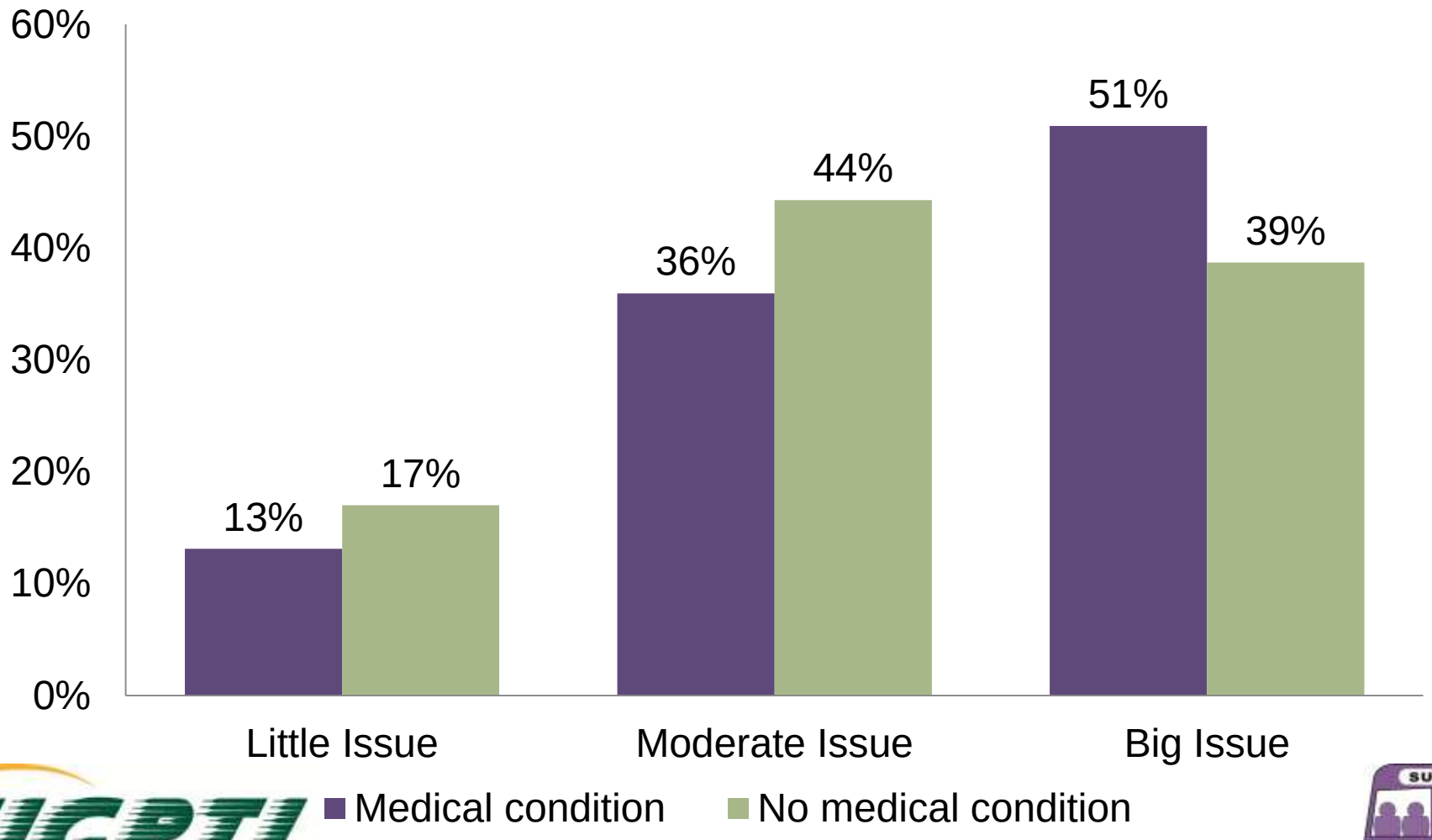
Views on Transportation: Safety Concerns



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Conclusions

- Increase in disabilities with age
- Impact of disabilities on ability to make trips
- Gaps exists between older men and women drivers, but the percentage of women 85 or older driving has increased
- While working-aged men drove less in 2009 than 2001, older men and women drove slightly more
- Individuals with medical conditions or disabilities and those who do not drive make significantly fewer trips per day
- Number of trips taken per day decreased for most age groups from 2001 to 2009 but increased for women 85 and older
- Older men make more trips per day than older women, but the gap decreased slightly in 2009

Conclusions

- Number of trips by non-drivers 85 or older, while low, increased from 2001 to 2009
- Older adults, women, and those with a medical condition are more likely to stay in the same place all day or week
- Individuals from rural areas and those with lower household income are also more likely to stay in the same place, while being a transit user significantly decreased the likelihood of not making a trip
- Of those not making a trip in the last week, younger individuals and those with medical conditions are more likely to want to get out more often, though large percentages of all groups say they would like to get out more

Conclusions

- Average trip distances also decrease with age
- Automobile mode shares for all age groups decreased from 2001 to 2009
- Transit mode shares for nearly all age groups in both urban and rural areas increased from 2001 to 2009, and transit mode shares are highest for the 85 or older group
- People with disabilities or medical conditions are more likely to consider transportation issues to be important

THANK YOU

Jeremy Mattson
Associate Research Fellow
Small Urban & Rural Transit Center
Upper Great Plains Transportation Institute
North Dakota State University
jeremy.w.mattson@ndsu.edu
www.surtc.org
701-231-5496