

Pedestrian Master Plan

APPENDIX 5: KNOWLEDGE, ATTITUDES, AND BEHAVIORS SURVEY RESPONSES



METHODOLOGY

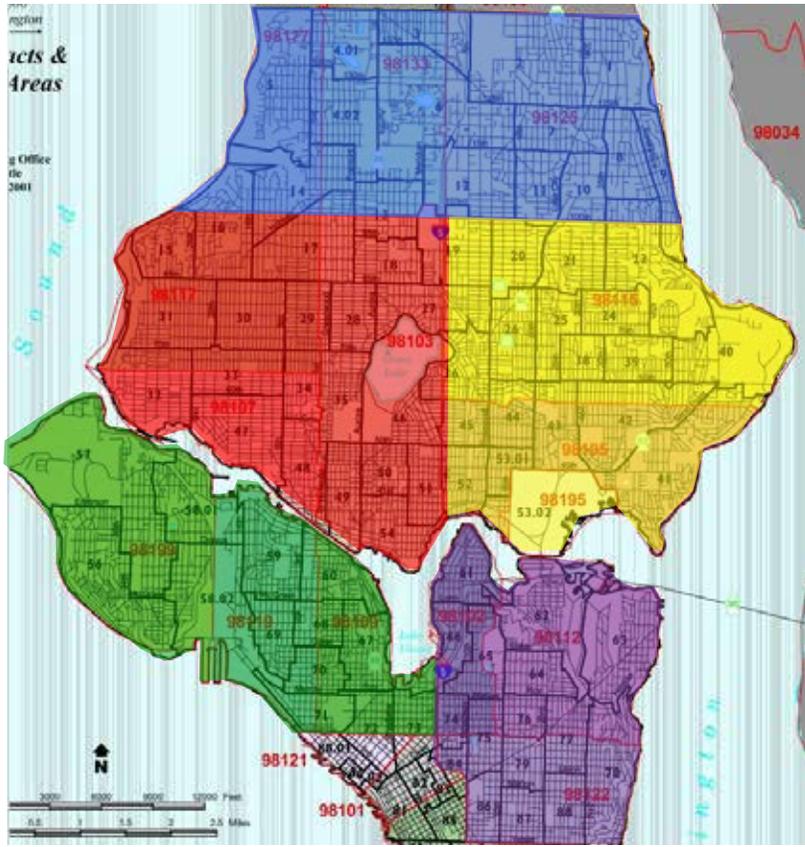
- Combined telephone and web survey of residents of the City of Seattle
 - Random Digit Dial (RDD) landline and cell phone survey of adult residents in the City of Seattle
 - Online web panel of adult residents of the City of Seattle
- Interviewing conducted December 2-16, 2014
- 700 total interviews
 - 450 Telephone
 - 250 Web Panel
- Overall margin of error: $\pm 3.7\%$ points at the 95% confidence interval
- Interviewing conducted by trained, professional interviewers

Please note that due to rounding, some percentages may not add up to exactly 100%.

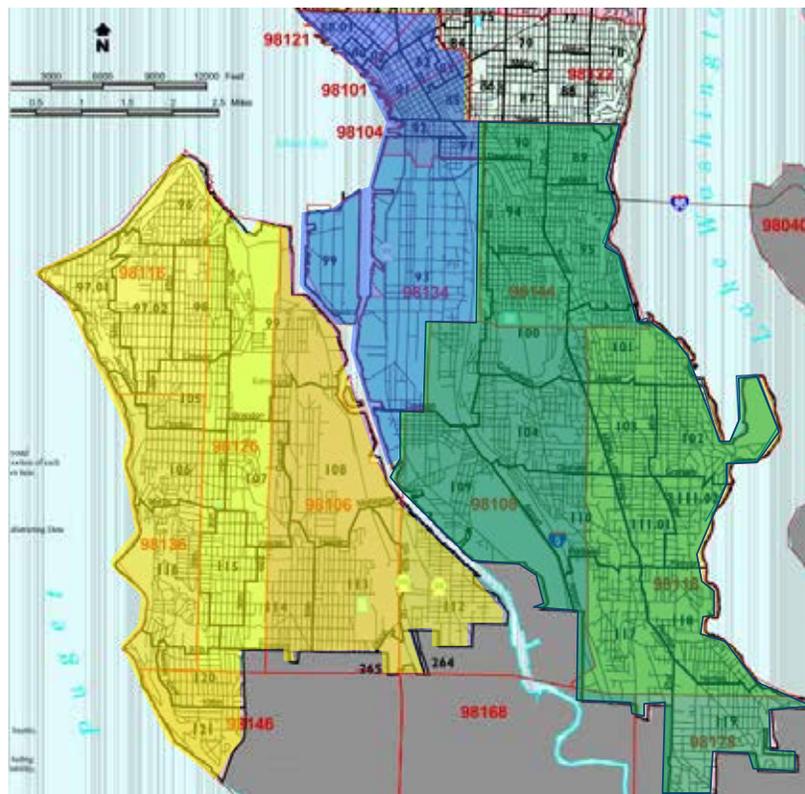
BREAKDOWN OF INTERVIEWS BY AREA

Area	# of Interviews	% of Total
Downtown	44	6%
East	95	14%
North	75	11%
Northeast	85	12%
Northwest	118	17%
Southeast	99	14%
Southwest	110	16%
West	75	11%
TOTAL	700	100

GEOGRAPHIC AREAS



- North
- Northwest
- Northeast
- West
- East



- Downtown
- Southeast
- Southwest

CONCERN ABOUT PEDESTRIAN SAFETY

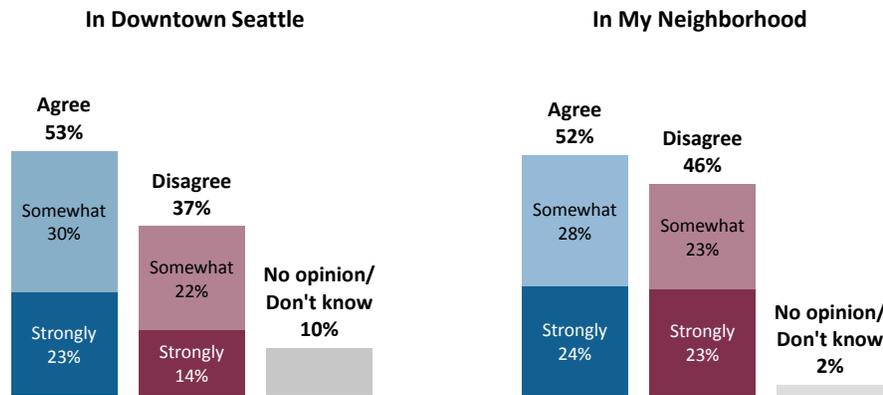
KEY FINDINGS

- A majority of Seattle residents are concerned about safety at pedestrian intersections downtown (53%) and in their neighborhood (52%).
 - There has been a significant increase in concern about pedestrian safety at downtown intersections (2008: 41% / 2014: 53%) with a majority now agreeing that there are downtown intersections where they do not feel safe crossing.
 - Among those residents who have concerns about the safety of downtown intersections, the top suggestion for improving safety is “more/better stop lights/signs” followed by mentions about intersection marking and visibility.
 - Residents in Downtown Seattle are most concerned about neighborhood intersection safety (65%) and a majority in 6 of 8 areas express concern about their neighborhood intersections.
 - Residents in East and North Seattle are less concerned about their neighborhood intersections.
 - Overall concern about neighborhood intersection safety has not changed much since 2008.
- Six-in-ten residents (59%) think overall pedestrian safety is a problem in Seattle.
 - Overall concern about pedestrian safety is significantly higher than in 2008 (2008: 47% / 2014: 59%) .
 - The greatest level of concern about overall pedestrian safety is in NW Seattle. Strong majorities in 6 of 8 areas are concerned. Downtown residents are divided.
 - A majority in all key subgroups are concerned about pedestrian safety. However, men, both younger and older, are less concerned about pedestrian safety than women, and those who have had a close call either as a pedestrian or a driver are more concerned than those who have not had a close call.

INTERSECTION SAFETY

A majority of Seattle residents are concerned about safety at pedestrian intersections downtown and in their neighborhood.

“There are intersections where I do not feel safe crossing.”

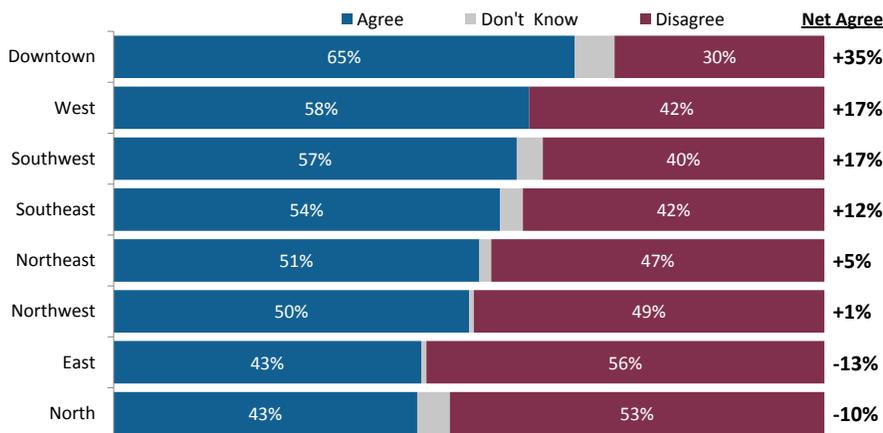


Q10. As a pedestrian, there are intersections in downtown Seattle where I do not feel safe crossing
 Q11. There are intersections in my neighborhood where I do not feel safe crossing

NEIGHBORHOOD INTERSECTION SAFETY –BY AREA

Residents in Downtown Seattle are most concerned about the safety of their neighborhood intersections and a majority in 6 of 8 areas express concern about their neighborhood intersections. Residents in East and North Seattle are less concerned about their neighborhood intersections.

“There are intersections in my neighborhood where I do not feel safe crossing.”



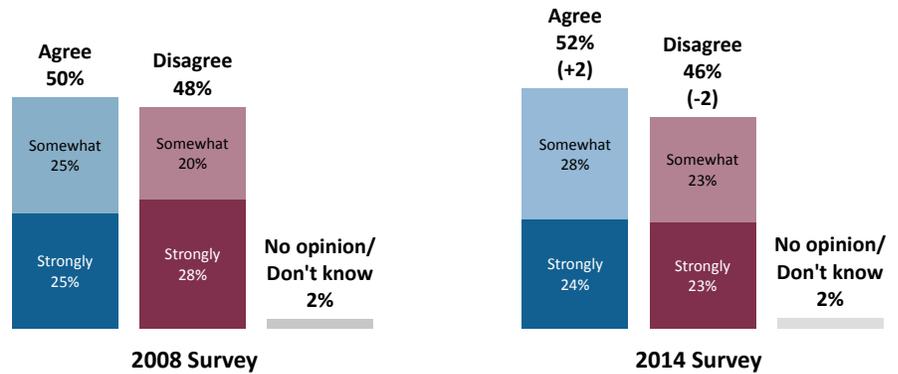
Q11. There are intersections in my neighborhood where I do not feel safe crossing

NEIGHBORHOOD INTERSECTION SAFETY –TREND

Overall concern about the safety of neighborhood intersections has not changed much since 2008.

“As a pedestrian, there are intersections in my neighborhood where I do not feel safe crossing.”

Q11. There are intersections in my neighborhood where I do not feel safe crossing

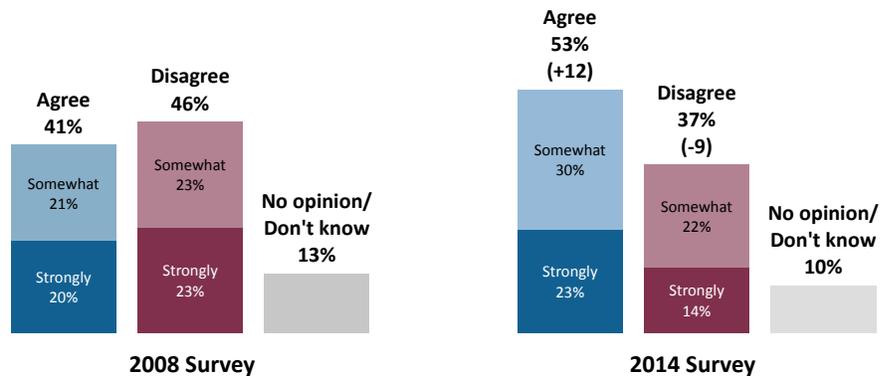


DOWNTOWN INTERSECTION SAFETY –TREND

There has been a significant increase in concern about pedestrian safety at downtown intersections with a majority now agreeing that there are downtown intersections where they do not feel safe crossing.

“As a pedestrian, there are intersections in downtown Seattle where I do not feel safe crossing.”

Q10. As a pedestrian, there are intersections in downtown Seattle where I do not feel safe crossing



POTENTIAL INTERSECTION SAFETY IMPROVEMENTS

Among those residents who have concerns about the safety of downtown intersections, the top suggestion for improving safety is “more/better stop lights/signs” followed by mentions about intersection marking and visibility.

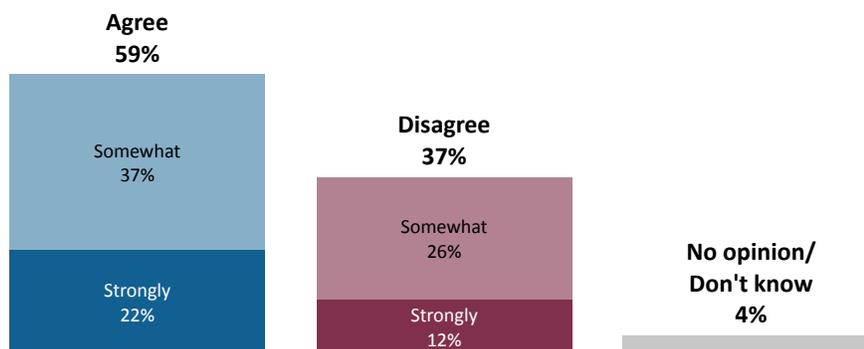
<i>What would make you feel safer?</i>	<i>%</i>
More/better stop lights/signs	30%
Better marked/more clearly marked crosswalks/signs	19%
Better/more lighting	15%
More crosswalks	12%
More law enforcement/Police presence	12%
Flashing lights	8%
Slower speed limits/Speed bumps	8%
Longer crossing lights	7%
Drivers/Pedestrians be more alert/aware	5%
Increase visibility	5%
Bright colored flags for crossing	4%
More sidewalks	3%
No 'right on red' at crosswalks	2%
Education for drivers/pedestrians	2%
Pedestrian crossing button	2%
None	6%
Other (less than 2%)	19%

Q12. What are some things that could be done to make you feel safer when crossing at these intersections?

OVERALL CONCERN ABOUT PEDESTRIAN SAFETY IN SEATTLE

Six-in-ten residents think pedestrian safety is a problem in Seattle. (NOTE: This question was asked in the negative – “Pedestrian safety is NOT THAT big of a problem here in Seattle” –but is reported in the reverse – “Pedestrian safety is a big of a problem here in Seattle” to simplify analysis.)

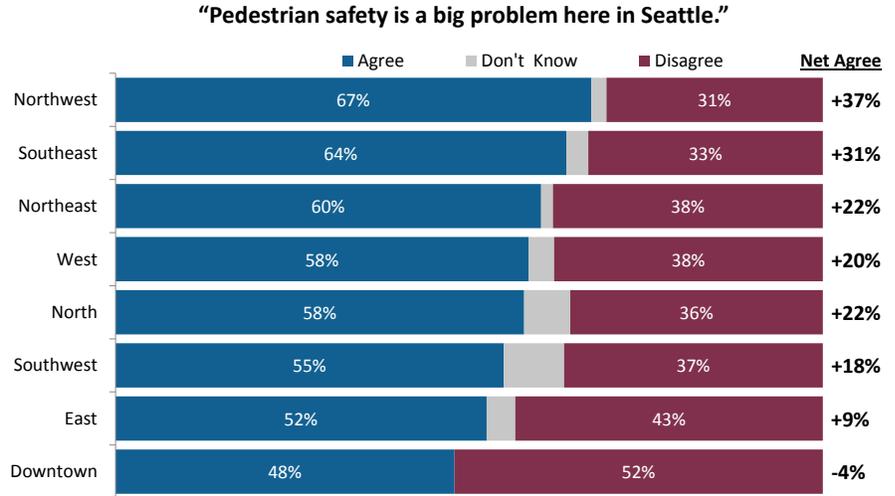
“Pedestrian safety is a big problem here in Seattle.”



Q13. Pedestrian safety is [not that]* big of a problem here in Seattle [*data and question reversed]

CONCERN ABOUT PEDESTRIAN SAFETY – BY AREA

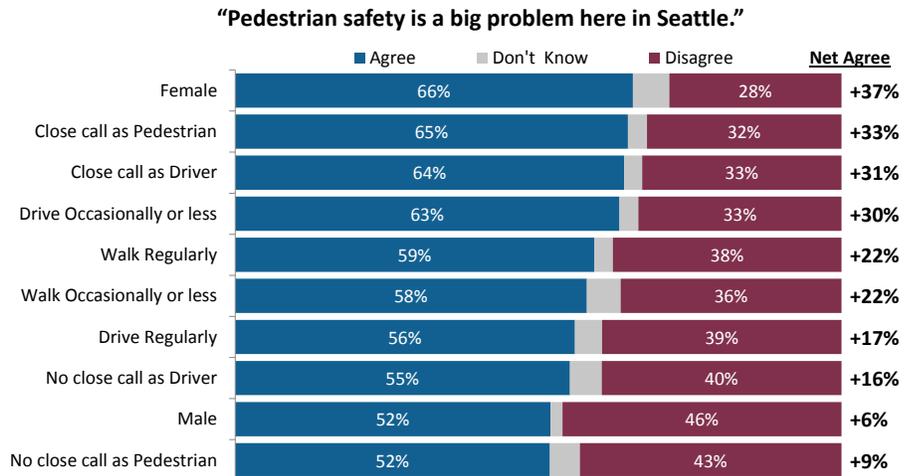
The greatest level of concern about pedestrian safety is in Northwest Seattle. Strong majorities in 6 of 8 areas are concerned. Downtown residents are divided over whether or not pedestrian safety is a problem in Seattle.



Q13. Pedestrian safety is [not that]* big of a problem here in Seattle [*data and question reversed]

CONCERN ABOUT PEDESTRIAN SAFETY – BY SUBGROUP

A majority in all key subgroups are concerned about pedestrian safety. However, men, both younger and older, are less concerned about pedestrian safety than women, and those who have had a close call either as a pedestrian or a driver are more concerned than those who have not had a close call.

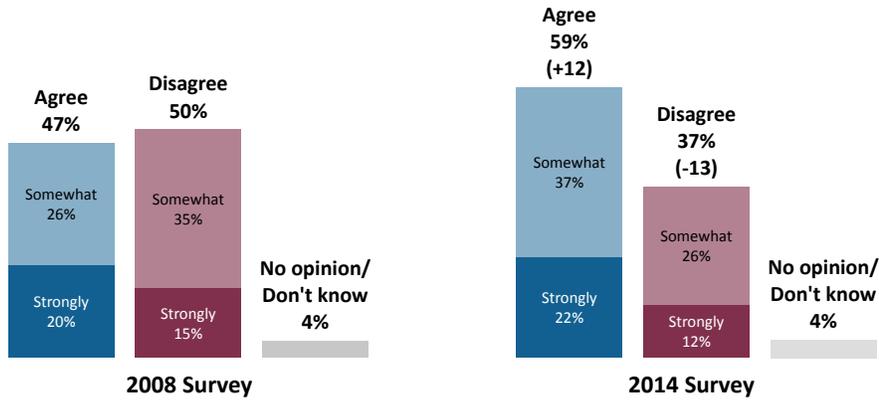


Q13. Pedestrian safety is [not that]* big of a problem here in Seattle [*data and question reversed]

CONCERN ABOUT PEDESTRIAN SAFETY –TREND

Overall concern about pedestrian safety in Seattle is significantly higher than in 2008.

“Pedestrian safety is a big problem here in Seattle.”



Q13. Pedestrian safety is [not that]* big of a problem here in Seattle [*data and question reversed]

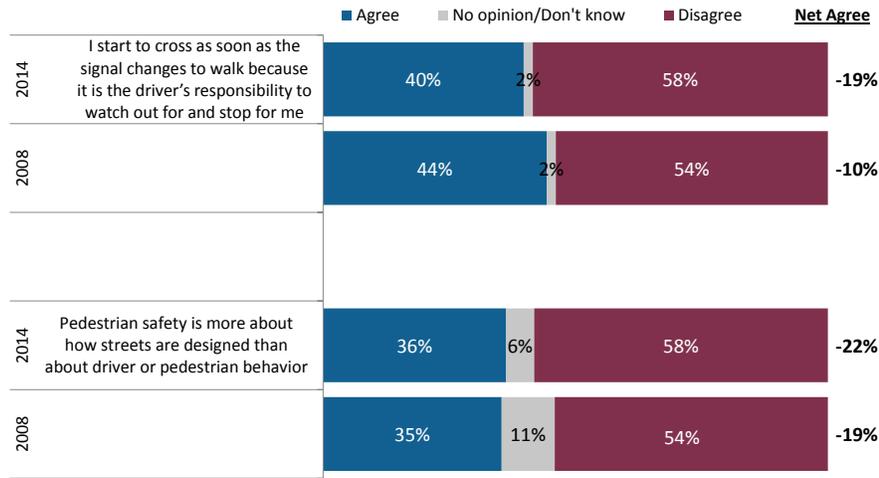
ATTITUDES ABOUT WALKING & DRIVING

KEY FINDINGS

- A majority of residents (58%) do not feel it is solely the driver's responsibility to watch out and stop for them when crossing. However, four-in-ten (40%) do feel it is the driver's responsibility.
 - The less a resident drives the more likely they are to agree that it is "the driver's responsibility to watch out for and stop for me," although non-drivers are the only subgroup where a majority agree it is the driver's responsibility. Age is also a significant factor in attitudes, with younger residents more likely to believe it is the driver's responsibility –even though younger and older resident have similar driving profiles.
- A majority (58%) disagree that pedestrian safety is more about design than driver/pedestrian behavior.
- Strong majorities continue to agree that they see both drivers (82%) and pedestrians (84%) who do not pay enough attention.
- A strong majority (63%) feel that drivers go too fast in their neighborhood, although agreement is down from 2008 (70%). Residents are not as concerned about drivers going too fast in downtown, but still close to half (47%) express concern.
- Two thirds (68%) of residents continue to support stronger enforcement on unsafe drivers and a majority (55%) now agree that the risk for getting caught speeding in Seattle is small.
- Most drivers (73%) agree that they worry about hitting a pedestrian and concern has increased somewhat since 2008 (68%).
- Most pedestrians (74%) continue to feel that crossing signals give them enough time to cross safely.
- A majority of residents (59%) say people riding bikes on sidewalks make them uncomfortable when walking.
- Most residents (70%) say they feel safe walking to and from their transit stop.

ATTITUDES ABOUT RESPONSIBILITY –TREND

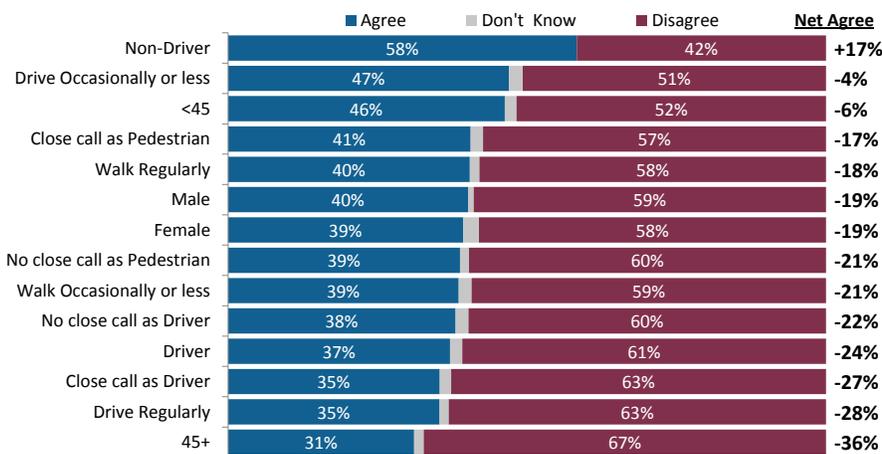
A majority of residents do not feel that it is solely the driver’s responsibility to watch out and stop for them when crossing. However, four-in-ten pedestrians do feel it is the driver’s responsibility. A majority also disagree that pedestrian safety is more about design than driver/pedestrian behavior.



Q20. I start to cross as soon as the signal changes to walk because it is the driver’s responsibility to watch out for and stop for me
 Q19. Pedestrian safety is more about how streets are designed than about driver or pedestrian behavior

DRIVER’S RESPONSIBILITY TO WATCH OUT FOR ME –BY SUBGROUP

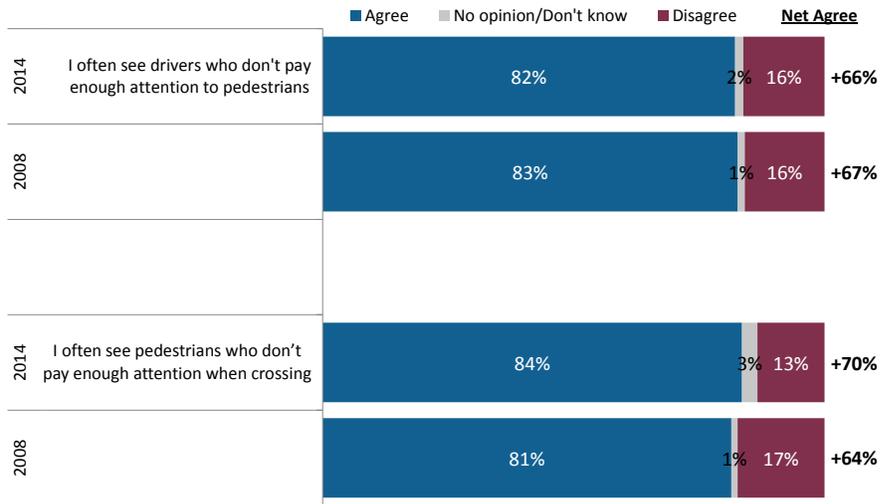
The less a resident drives the more likely they are to agree that it is “the driver’s responsibility to watch out for and stop for me,” although non-drivers are the only subgroup where a majority agree it is the driver’s responsibility. Age is also a significant factor in attitudes, with younger residents more likely to believe it is the driver’s responsibility –even though younger and older resident have similar driving profiles.



Q20. I start to cross as soon as the signal changes to walk because it is the driver’s responsibility to watch out for and stop for me

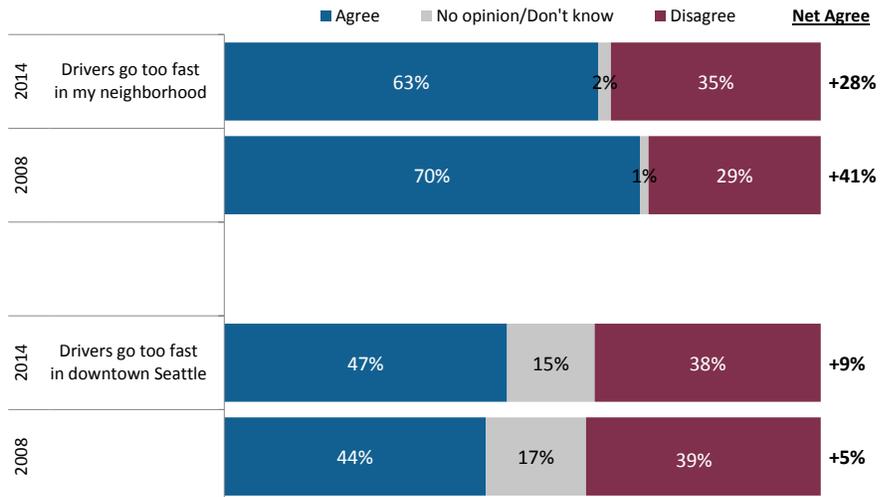
NOT PAYING ATTENTION –TREND

Strong majorities continue to agree that they see both drivers and pedestrians who do not pay enough attention.



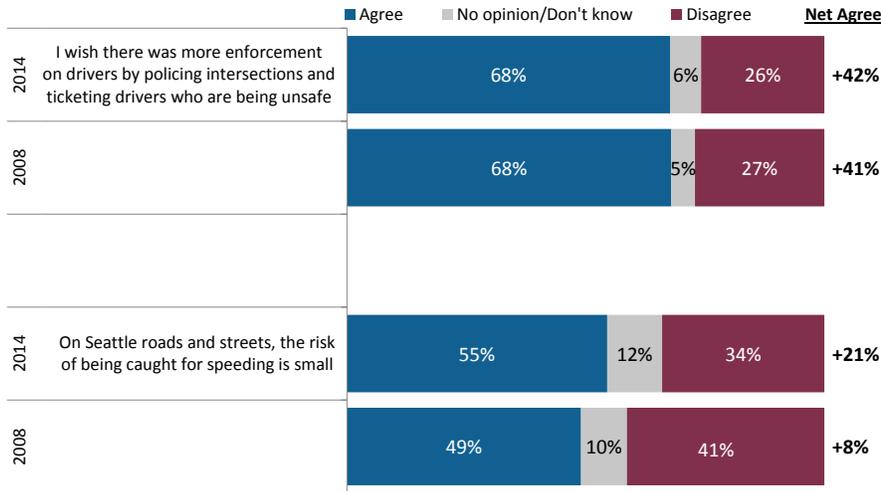
DRIVERS GO TOO FAST –TREND

A strong majority feel that drivers go too fast in their neighborhood, although agreement is down from 2008. Residents are not as concerned about drivers going too fast in downtown, but still close to half express concern.



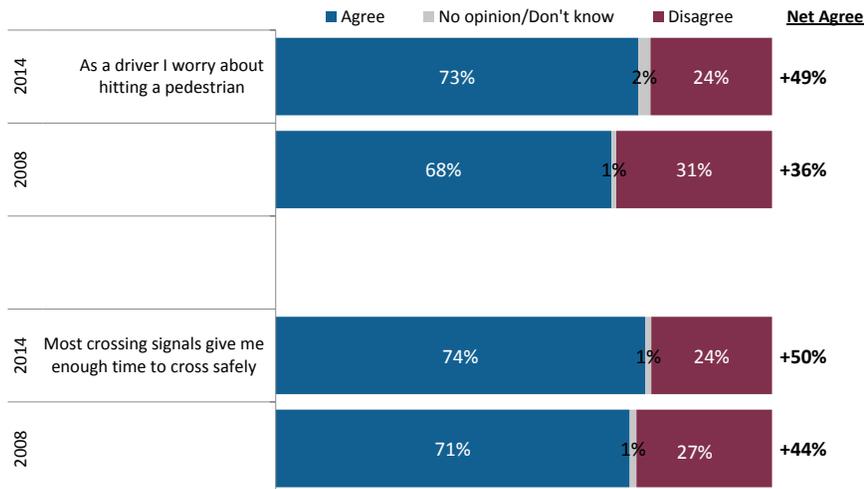
ENFORCEMENT –TREND

Two thirds of residents continue to support stronger enforcement on unsafe drivers and a majority now agree that the risk for getting caught speeding in Seattle is small.



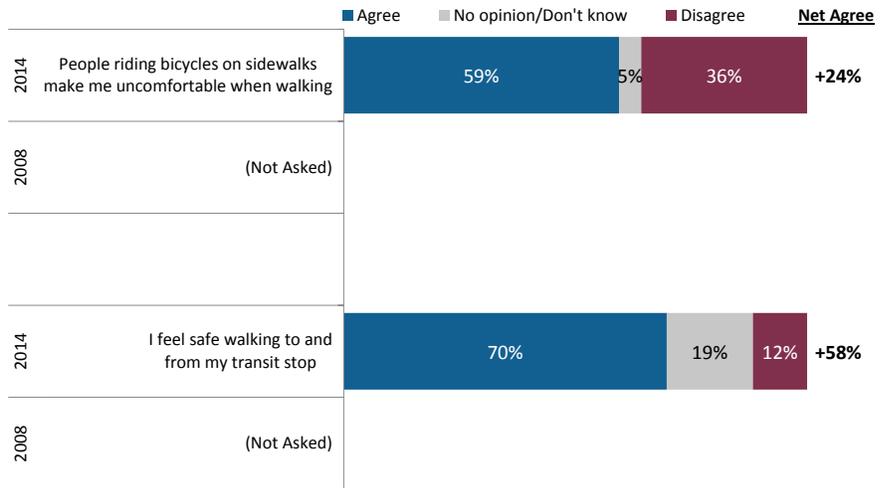
OTHER ATTITUDES –TREND

Most drivers agree that they worry about hitting a pedestrian and concern has increased somewhat since 2008. Most pedestrians continue to feel that crossing signals give them enough time to cross safely.



OTHER QUESTIONS

A majority of residents say people riding bikes on sidewalks make them uncomfortable when walking. Most residents say they feel safe walking to and from their transit stop.



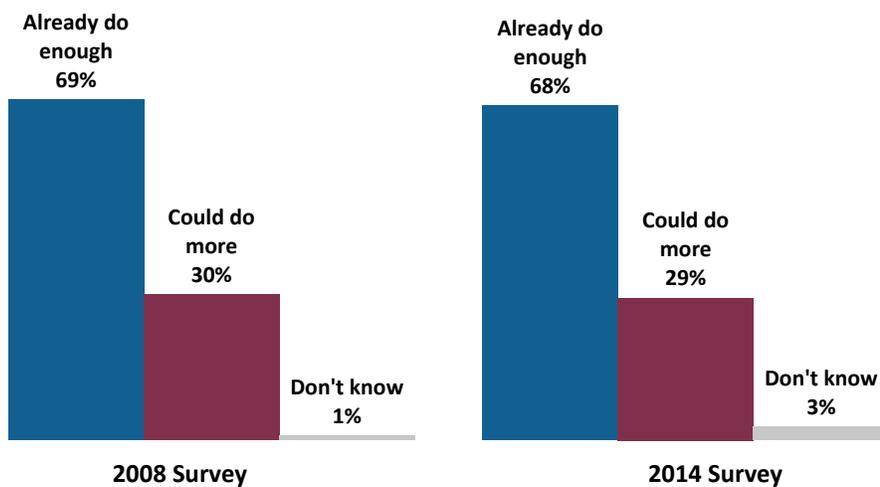
DRIVING BEHAVIOR

KEY FINDINGS

- Most drivers (68%) continue to say that they already do enough to stop for pedestrians. Just under a third (29%) say they could do more to reduce the likelihood of a collision.
 - Among those residents who feel they could do more as a driver, the top suggestions are about being more aware and watchful.
- For most driver behaviors, the percentage engaging in sub-optimal behavior is statistically unchanged from 2008. Two behaviors –not stopping for pedestrians at intersections with no light/sign and not checking left and right on a green light –have increased slightly, and one –using a cell without a headset –has decreased slightly.
 - The most frequent sub-optimal behaviors continue to be pulling into the crosswalk to turn on a red light, turning before pedestrians are at least a full lane away, and texting/looking at their phone when driving.

SELF-ASSESSMENT AS A DRIVER

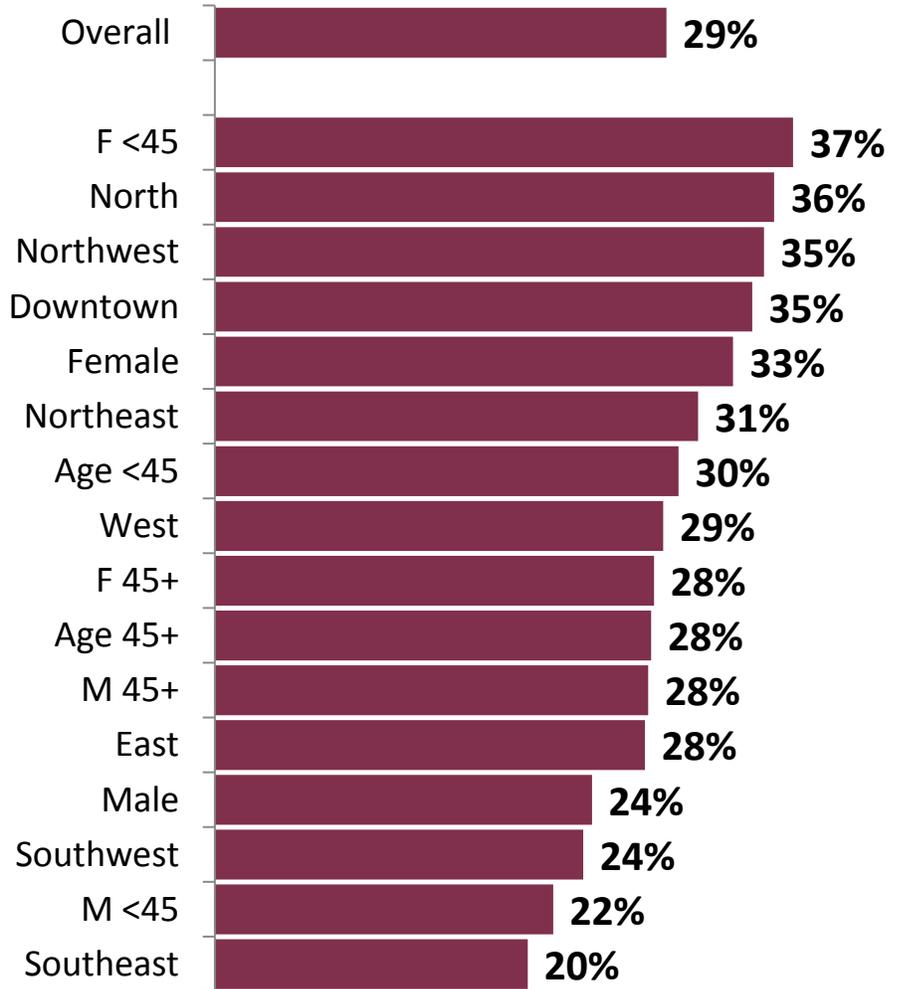
Most drivers continue to say that they already do enough to stop for pedestrians. Just under a third say they could do more to reduce the likelihood of a collision.



Q26. If you had to rate yourself overall as a driver, would you say that you already do enough to stop for pedestrians, or do you think you could do more to reduce the likelihood of a collision?

COULD DO MORE A DRIVER –BY SUBGROUP

Younger women and residents in North Seattle are the most likely to say they could do more as a driver to reduce the likelihood of a collision with a pedestrian.



Q26. If you had to rate yourself overall as a driver, would you say that you already do enough to stop for pedestrians, or do you think you could do more to reduce the likelihood of a collision?

WHAT ELSE COULD YOU BE DOING?

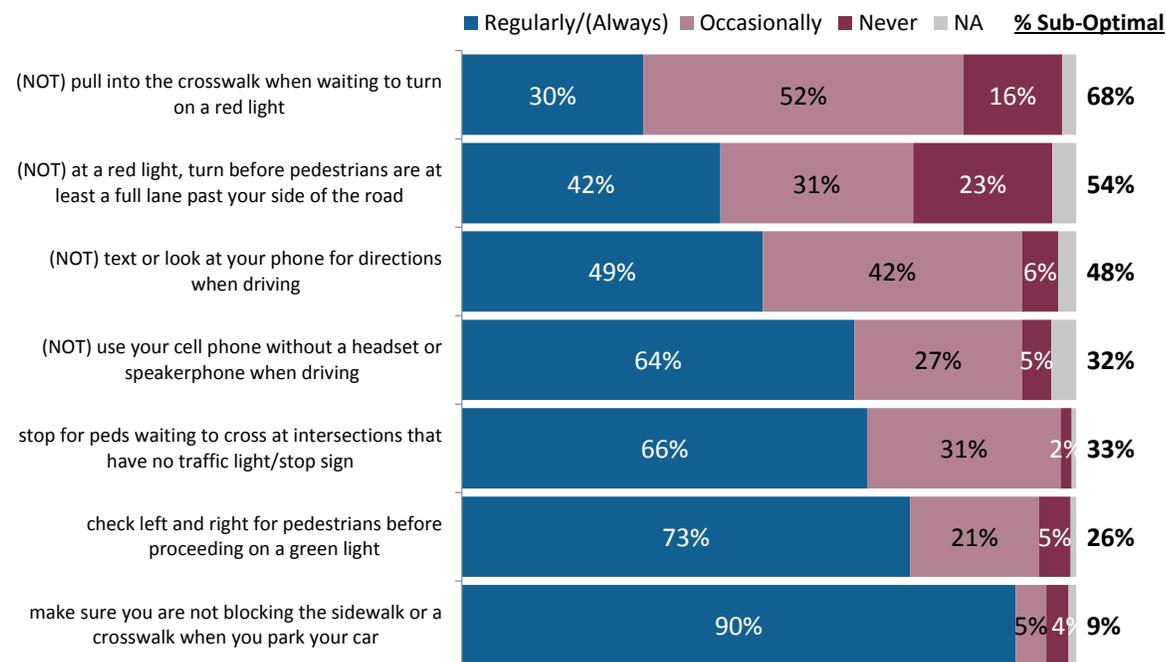
Among those residents who feel they could do more as a driver, the top suggestions are about being more aware and watchful.

What else do you think you could be doing? (n=179)	%
Be aware/alert	38
Watch for pedestrians/crosswalks	26
Drive slower	12
Avoid cellphones/distractions	5
Obey the laws	3
None	2
Other	11
Refused/Don't Know	3

Q27. What else do you think you could be doing?

ENGAGING IN OPTIMAL DRIVER BEHAVIOR

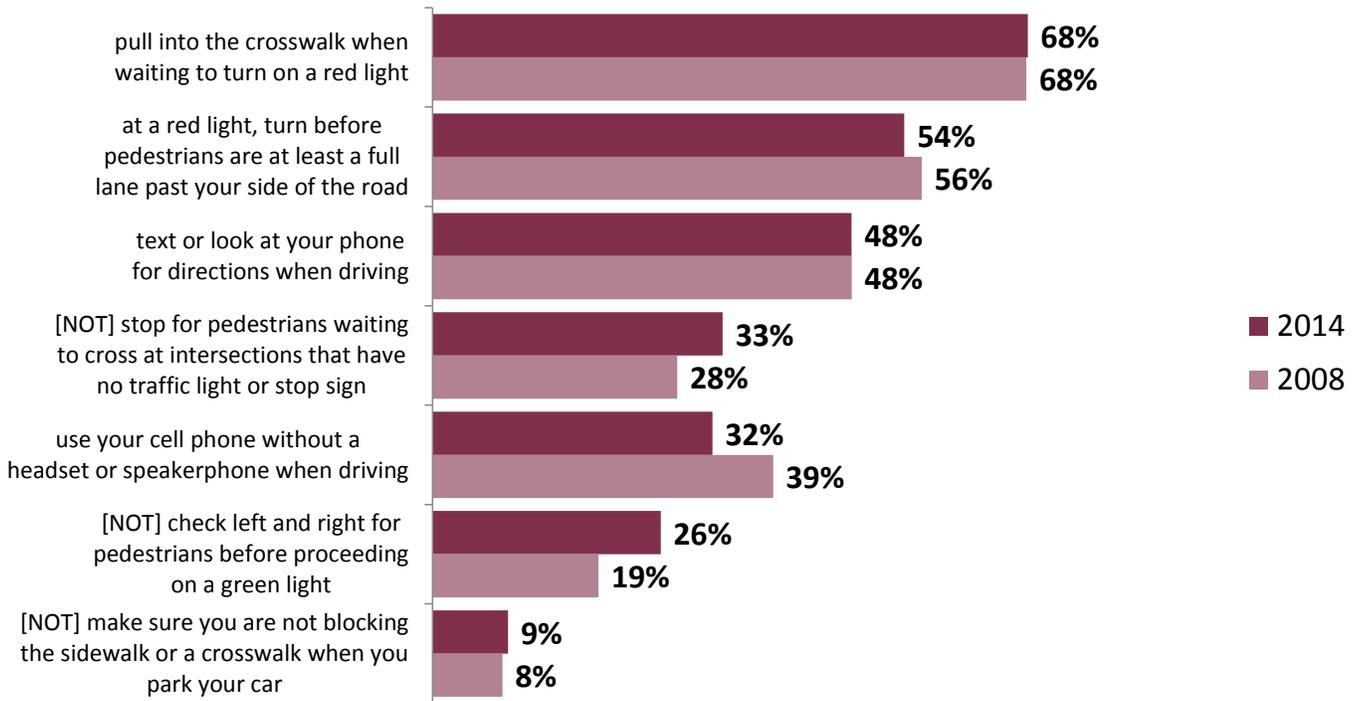
The most frequent sub-optimal behaviors are pulling into the crosswalk to turn on a red light, turning before pedestrians are at least a full lane away, and texting/looking at their phone when driving.



Q28-34. How often do you...? Would you say regularly, occasionally, or never?

SUB-OPTIMAL DRIVER BEHAVIOR –TREND

For most driver behaviors, the percentage engaging in sub-optimal behavior is statistically unchanged from 2008. Two behaviors –not stopping for pedestrians at intersections with no light/sign and not checking left and right on a green light –have increased slightly, and one –using a cell without a headset –has decreased slightly. The most frequent sub-optimal behaviors continue to be pulling into the crosswalk to turn on a red light, turning before pedestrians are at least a full lane away, and texting/looking at their phone when driving.



Q28-34. How often do you...? Would you say regularly, occasionally, or never?

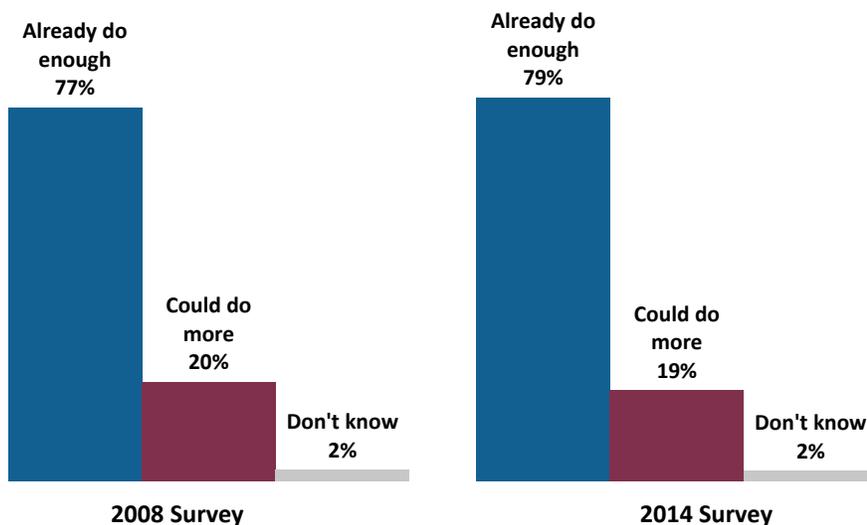
PEDESTRIAN BEHAVIOR

KEY FINDINGS

- Most pedestrians (79%) continue to say that they already do enough to be safe and pay attention to vehicles. One-in-five (19%) say they could do more to reduce the likelihood of a collision.
- The most frequent sub-optimal behaviors for pedestrians are crossing between intersections and starting to cross when the “don’t walk” signal is blinking. Most pedestrians say they stay alert for cars when crossing.
 - For most pedestrian behaviors measured, the percentage of residents engaging in sub-optimal behavior is up slightly from 2008.
 - The most frequent sub-optimal behaviors continue to be crossing between intersections and starting to cross when the “don’t walk” signal is blinking.

SELF-ASSESSMENT AS A PEDESTRIAN –TREND

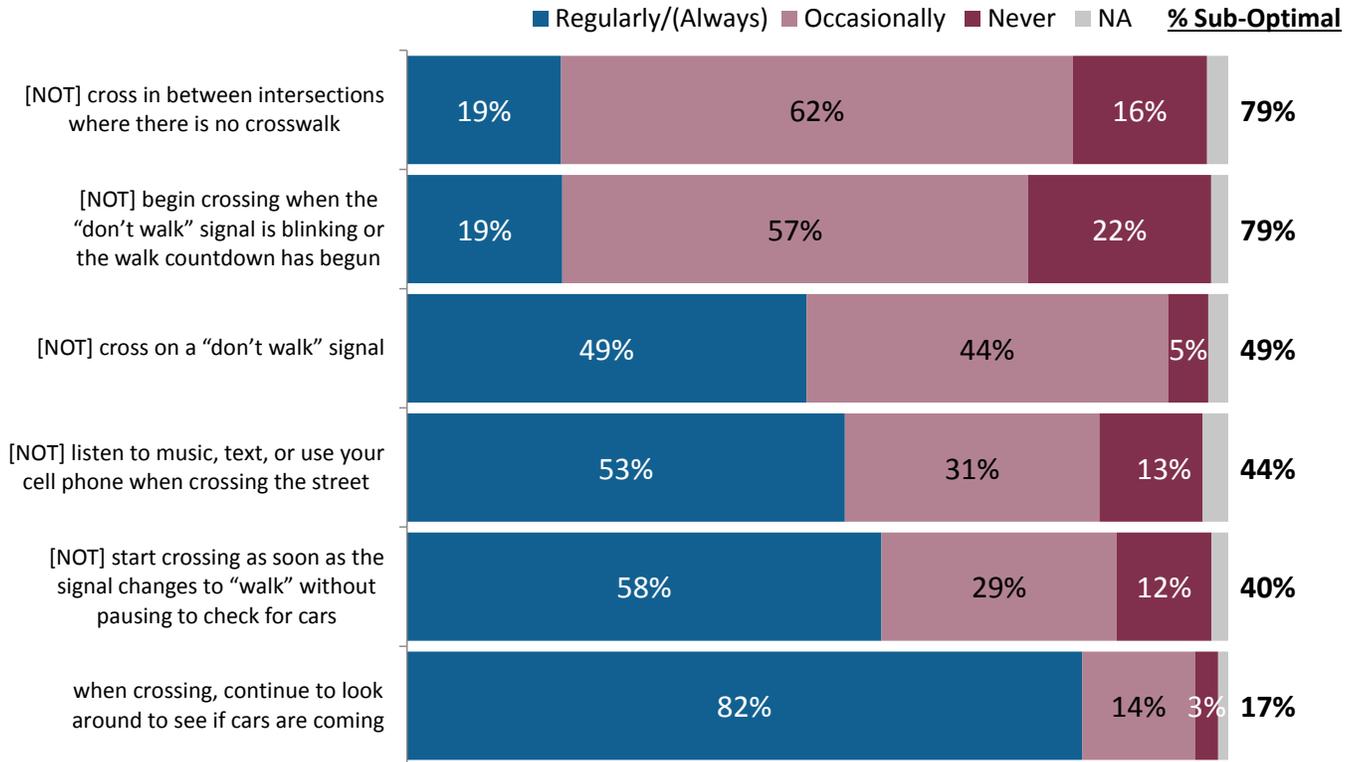
Most pedestrians continue to say that they already do enough to be safe and pay attention to vehicles. One-in-five say they could do more to reduce the likelihood of a collision.



Q35. If you had to rate yourself overall as a pedestrian, would you say that you already do enough to be safe and pay attention to vehicles, or do you think you could do more to reduce the likelihood of a collision?

ENGAGING IN OPTIMAL PEDESTRIAN BEHAVIOR

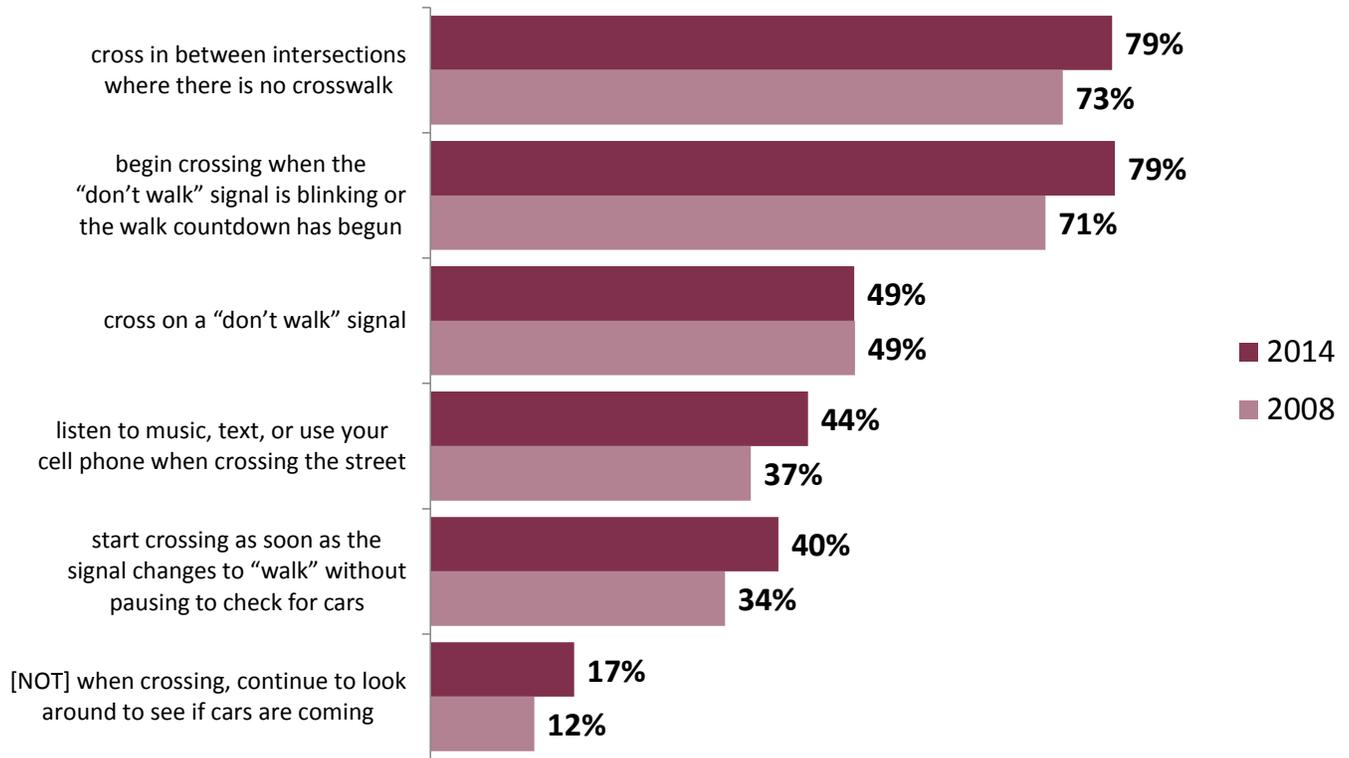
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SUB-OPTIMAL PEDESTRIAN BEHAVIOR –TREND

For most pedestrian behaviors measured, the percentage of residents engaging in sub-optimal behavior is up slightly from 2008. The most frequent sub-optimal behaviors continue to be crossing between intersections and starting to cross when the “don’t walk” signal is blinking.



Q28-34. How often do you...? Would you say regularly, occasionally, or never?

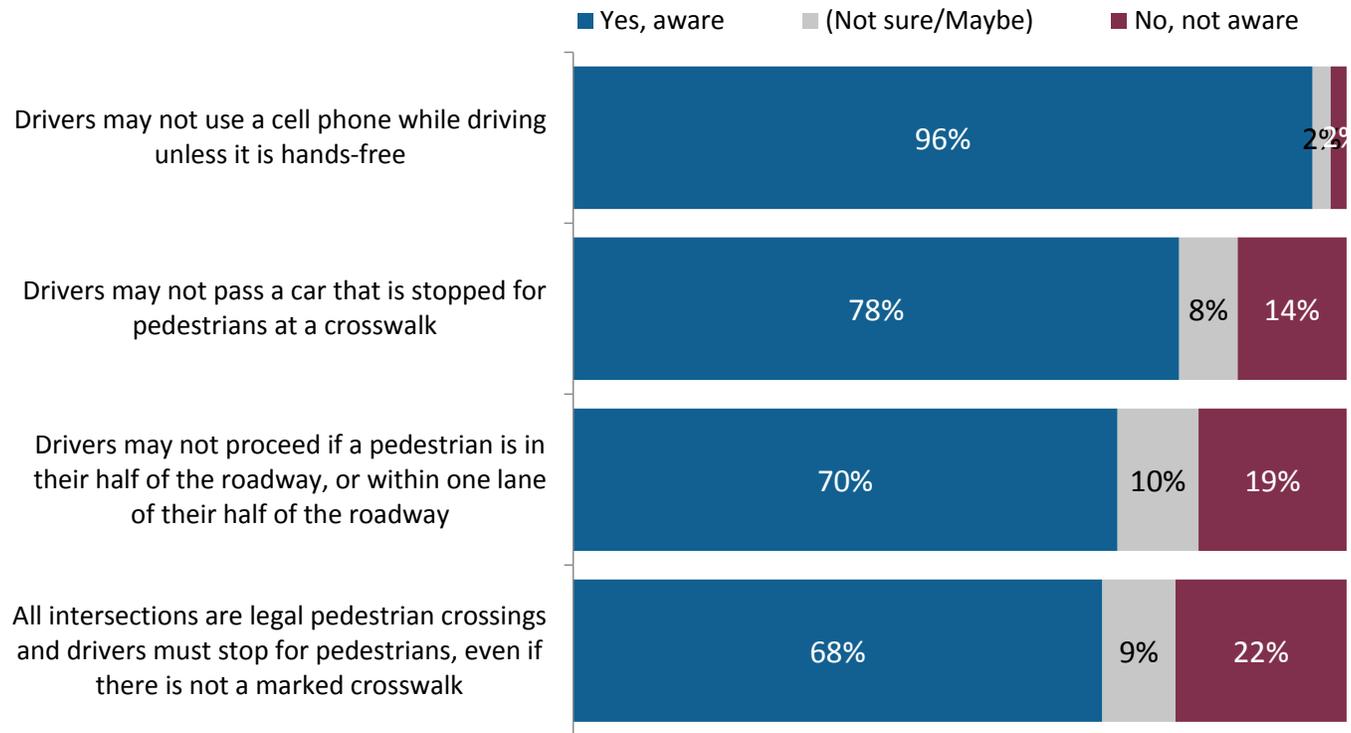
AWARENESS OF VEHICLE/PEDESTRIAN REGULATIONS

KEY FINDINGS

- Two-thirds or more of residents (68%+) say they are aware of each of the four vehicle/pedestrian regulations asked about in the survey. Awareness of hands-free cell phone requirements is the highest (96%).
 - Awareness is similar to 2008, although it has dropped somewhat for “drivers may not proceed if a pedestrian is in their half of the roadway, or within one lane of their half of the roadway.”
 - Drivers who are aware that all intersections are legal pedestrian crossings are much more likely to regularly or always stop for pedestrians waiting to cross at intersections that have no traffic light or stop sign (73% vs. 49%).
 - Drivers who are aware that they may not proceed if a pedestrian is in their half of the roadway, or within one lane of their half of the roadway are much less likely to turn before pedestrians are at least a full lane past your side of the road (48% vs. 27%).
 - When asked the most effective way to reduce vehicle-pedestrian collisions, top mentions were for drivers and pedestrians to be more alert/aware and to have more law enforcement/police presence.

AWARENESS OF VEHICLE/PEDESTRIAN REGULATIONS

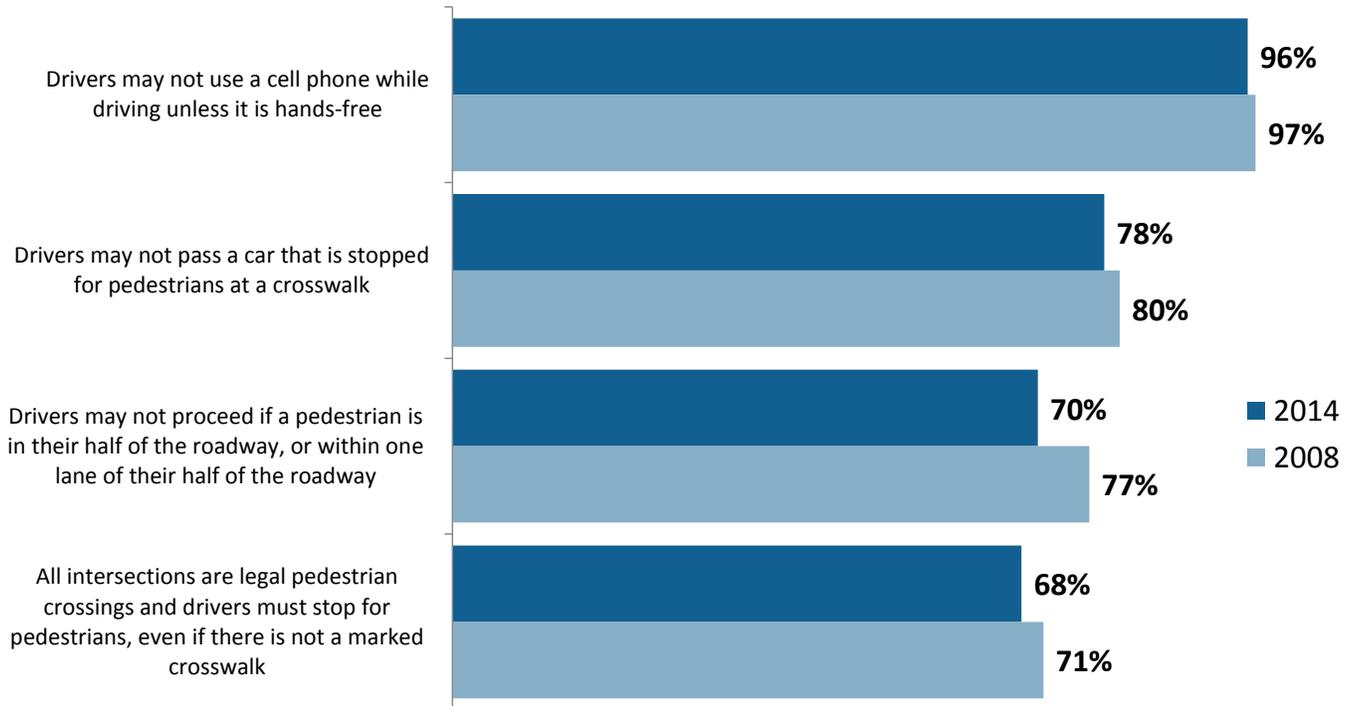
Two-thirds or more of residents say they are aware of each of the four vehicle/pedestrian regulations asked about in the survey. Awareness of hands free cell phone requirements is the highest.



Q42-45. To help with planning, the City is trying to better understand residents' familiarity with vehicle and pedestrian regulations. For each of the following please tell me if you are aware of that regulation or not. Again we are trying to understand how to improve communications efforts, not test for right or wrong answers, so if you are not aware of a particular regulation, please just say so. Were you aware of this regulation or not?

AWARENESS OF VEHICLE/PEDREGULATIONS –TREND

Awareness is similar to 2008, although it has dropped somewhat for “drivers may not proceed if a pedestrian is in their half of the roadway, or within one lane of their half of the roadway.”

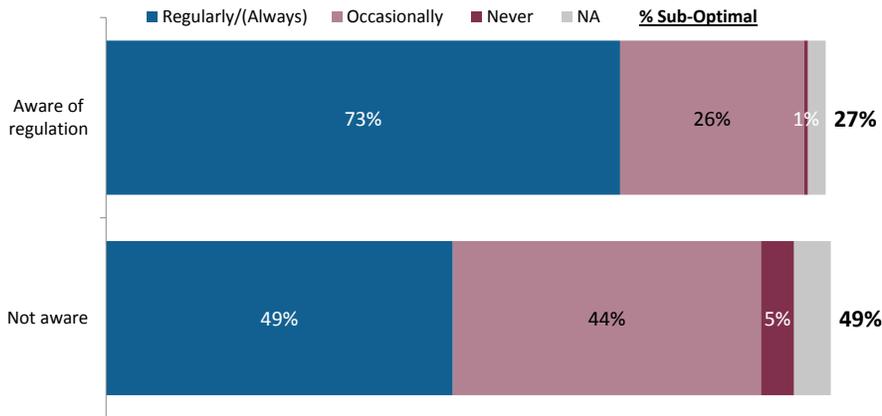


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AWARENESS VS. BEHAVIOR

Drivers who are aware that all intersections are legal pedestrian crossings are much more likely to regularly or always stop for pedestrians waiting to cross at intersections that have no traffic light or stop sign.

“How often do you stop for pedestrians waiting to cross at intersections that have no traffic light or stop sign?”

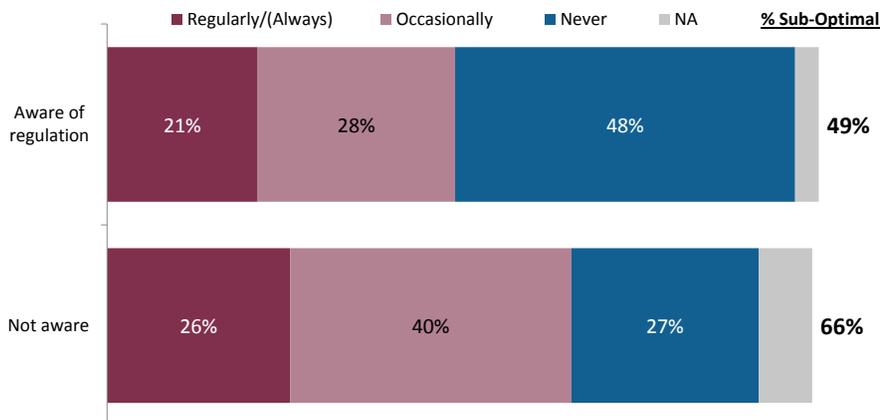


Q31. How often do you stop for pedestrians waiting to cross at intersections that have no traffic light or stop sign?

Q45. Were you aware of this regulation or not -All intersections are legal pedestrian crossings and drivers must stop for pedestrians, even if there is not a marked crosswalk?

Drivers who are aware that they may not proceed if a pedestrian is in their half of the roadway, or within one lane of their half of the roadway are much less likely to turn before pedestrians are at least a full lane past your side of the road.

“How often do you...at a red light, turn before pedestrians are at least a full lane past your side of the road?”



Q30. How often do you, at a red light, turn before pedestrians are at least a full lane past your side of the road?

Q44. Were you aware of this regulation or not -Drivers may not proceed if a pedestrian is in their half of the roadway, or within one lane of their half of the roadway?

REDUCING VEHICLE-PEDESTRIAN COLLISIONS

When asked the most effective way to reduce vehicle-pedestrian collisions, top mentions were for drivers and pedestrians to be more alert/aware and to have more law enforcement/police presence.

<i>What do you think is the most effective way to reduce vehicle-pedestrian collisions?</i>	<i>2008 %</i>	<i>2014 %</i>
Drivers/Pedestrians be more alert/aware	19	39
More law enforcement/Police presence	10	16
Education for drivers/pedestrians	14	15
Avoid cell phones/distractions	6	11
Better marked/more clearly marked crosswalks/signs	7	9
Better/more lighting	-	8
Slower speed limits/Speed bumps	4	6
More/better stop lights/signs	-	5
More crosswalks	3	4
Increase visibility	-	3
Longer crossing lights	-	3
Flashing lights	2	3
None	2	2
Other	23	17
Refused/Don't Know	4	4

Q46. Given everything you have heard in this survey, what do you think is the most effective way to reduce vehicle-pedestrian collisions?

TRAVEL PROFILE

KEY FINDINGS

- Just over half of residents (53%) say they have had a close call or collision as a pedestrian, which is a slight increase compared to 2008 (49%).
- About a third of drivers (35%) say they have had a close call with a pedestrian. This is a slight increase compared to 2008 (30%).
- Most residents (80%) drive at least occasionally.
 - Residents who live downtown are the least likely to drive regularly or occasionally (49%).
- Most residents (63%) consider themselves at least “occasional walkers.”
 - Downtown residents are the most likely to be regular walkers.
- There has been a marginal decrease in the average number of days residents travel outside the home for work, school, or volunteer activities (4.87 vs. 4.92).
- Travel modes are very similar to 2008 with a slight increase in the percentage of residents who drive alone and a slight decrease in carpooling/vanpooling. Walking is also up slightly.
- A majority of residents in 5 of 8 areas drive alone for their usual commute.
 - Downtown has the lowest percentage of residents who drive alone and the highest transit and walking percentages. Northwest Seattle has the highest percentage of bike commuters.
- The citywide average is 1.6 working vehicles per household.
 - Residents in south Seattle average close to two working vehicles while Downtown residents average less than one vehicle per household.

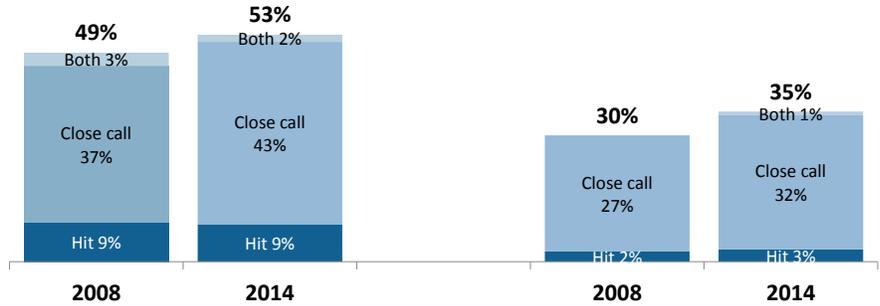
CLOSE CALL OR COLLISION –TREND

Just over half of residents say they have had a close call or collision as a pedestrian, which is a slight increase compared to 2008. About a third of drivers say they have had a close call with a pedestrian. This is also a slight increase compared to 2008.

“As a pedestrian, have you ever been hit by a vehicle or had a close call?”

“As a driver, have you ever had a collision or close call with a pedestrian?”

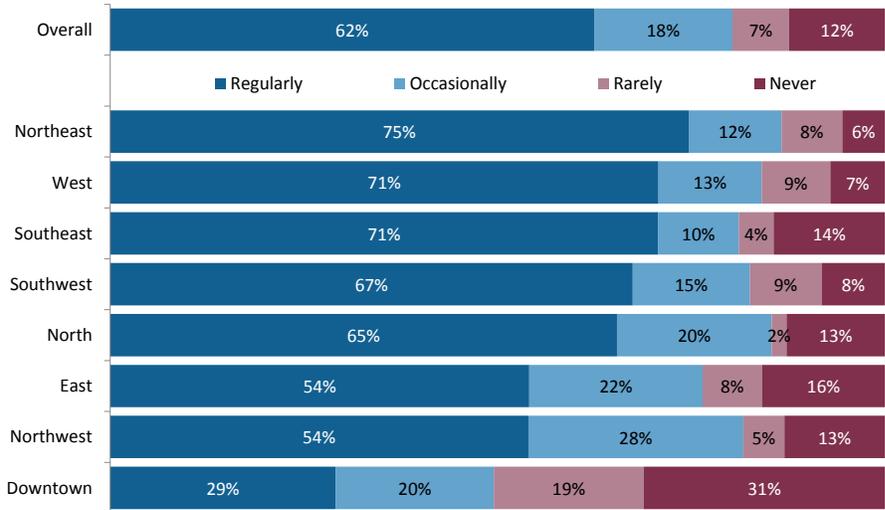
Q47. As a pedestrian, have you ever been hit by a vehicle or had a close call?
 Q48. [IF DRIVER=True]As a driver, have you ever had a collision or a close call with a pedestrian?



DRIVING FREQUENCY –BY AREA

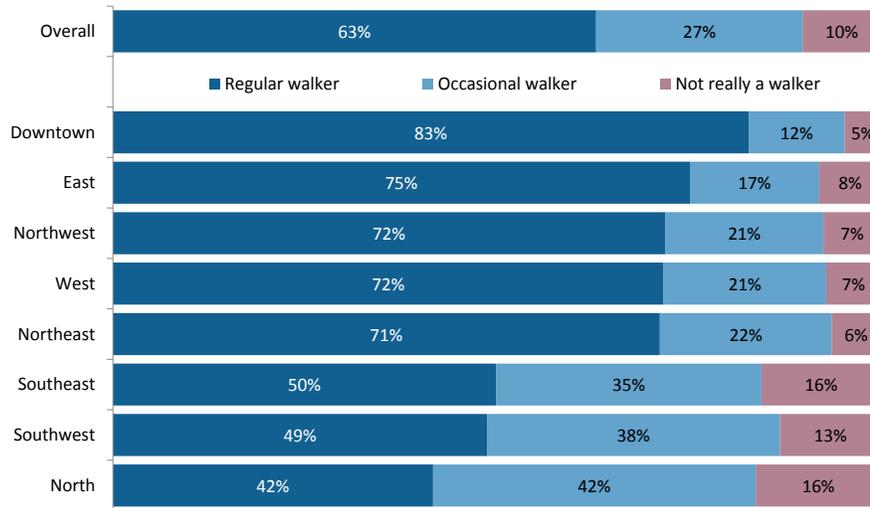
Most residents drive at least occasionally. Residents who live downtown are the least likely to drive regularly.

Q7. How frequently do you drive? Would you say you drive regularly, occasionally, rarely, or never?



WALKING FREQUENCY –BY AREA

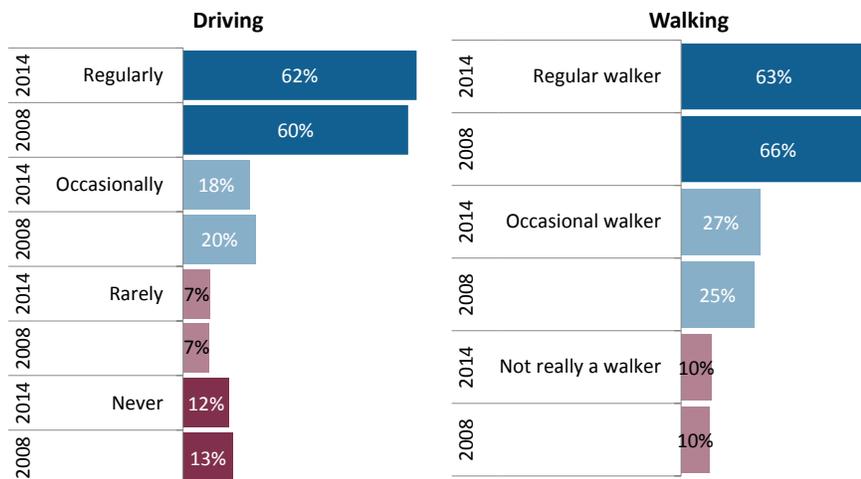
Most residents consider themselves at least “occasional walkers.” Downtown residents are the most likely to be regular walkers. Fewer than half of residents in North Seattle are regular walkers.



Q9. And how frequently do you walk in your neighborhood or where you work for things like exercise, going to the store, going to lunch and other activities? Knowing that people walk more when the weather’s nice, would you say that overall you are a regular walker, occasional walker, or not really a walker?

DRIVING AND WALKING FREQUENCY –TREND

There is little change in driving or walking frequency compared to 2008.

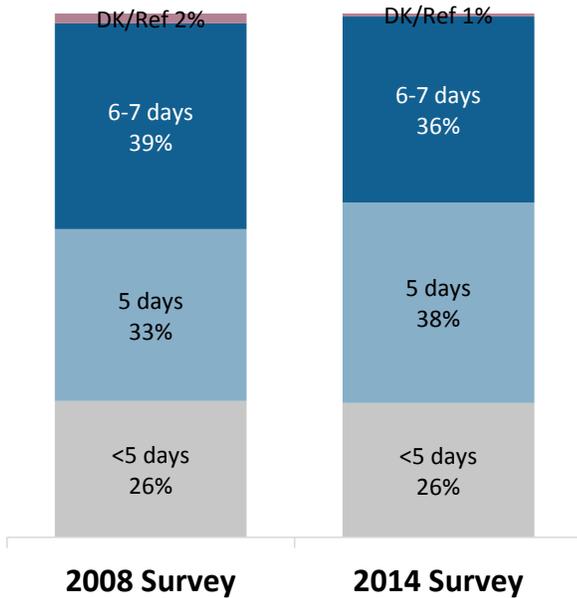


Q7. How frequently do you drive? Would you say you drive regularly, occasionally, rarely, or never?

Q9. And how frequently do you walk in your neighborhood or where you work for things like exercise, going to the store, going to lunch and other activities? Knowing that people walk more when the weather’s nice, would you say that overall you are a regular walker, occasional walker, or not really a walker?

TRAVEL OUTSIDE THE HOME –TREND

There has been a marginal decrease in the average number of days residents travel outside the home for work, school, or volunteer activities.

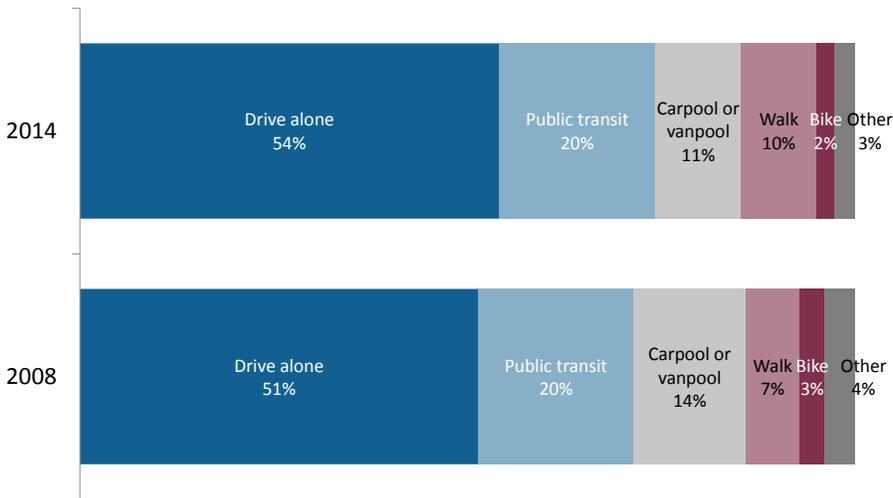


By Area	Mean # of Days 2008	Mean # of Days 2014
TOTAL	4.92	4.87
East	5.36	5.10
Southeast	4.80	5.05
West	4.70	5.05
Northeast	5.19	5.02
Downtown	5.31	4.94
North	4.44	4.87
Northwest	4.96	4.59
Southwest	4.80	4.54

Q51. How many days a week do you travel outside the home just for work, school, or volunteer work?

TRAVEL MODE –TREND

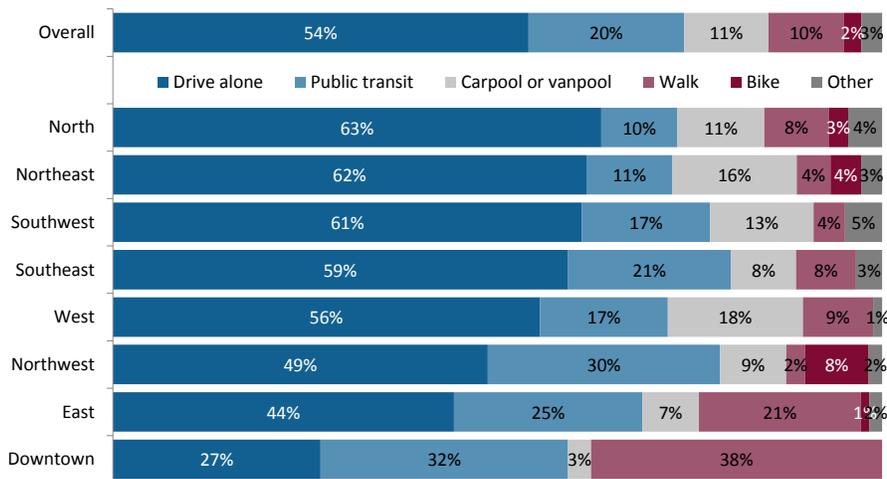
Travel modes are very similar to 2008 with a slight increase in the percentage of drive alone residents and a slight decrease in carpool/vanpool. Walking is also up slightly.



Q52. Do you usually drive alone, carpool or vanpool, take public transit, walk, bike, or travel some other way?

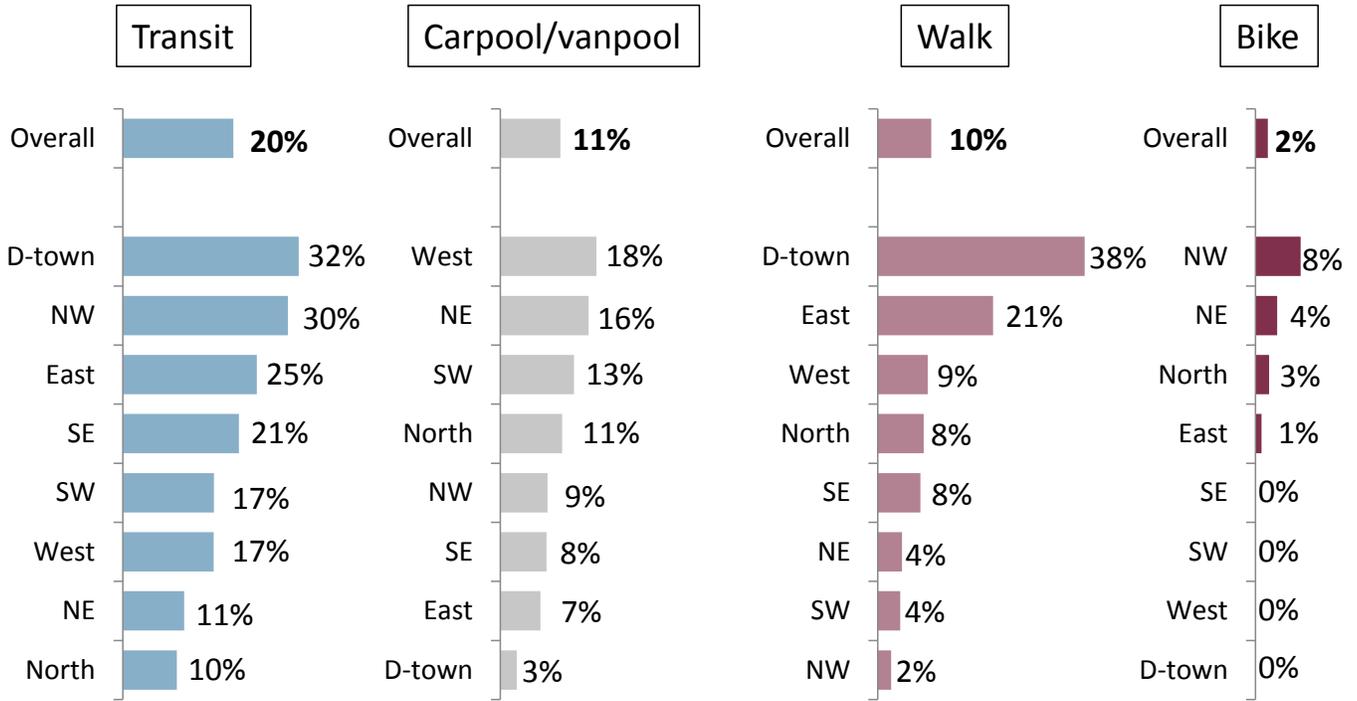
TRAVEL MODE –BY AREA

A majority of residents in 5 of 8 areas drive alone for their usual commute. Downtown has the lowest percentage of residents who drive alone and the highest transit and walking percentages. Northwest Seattle has the highest percentage of bike commuters.



Q52. Do you usually drive alone, carpool or vanpool, take public transit, walk, bike, or travel some other way?

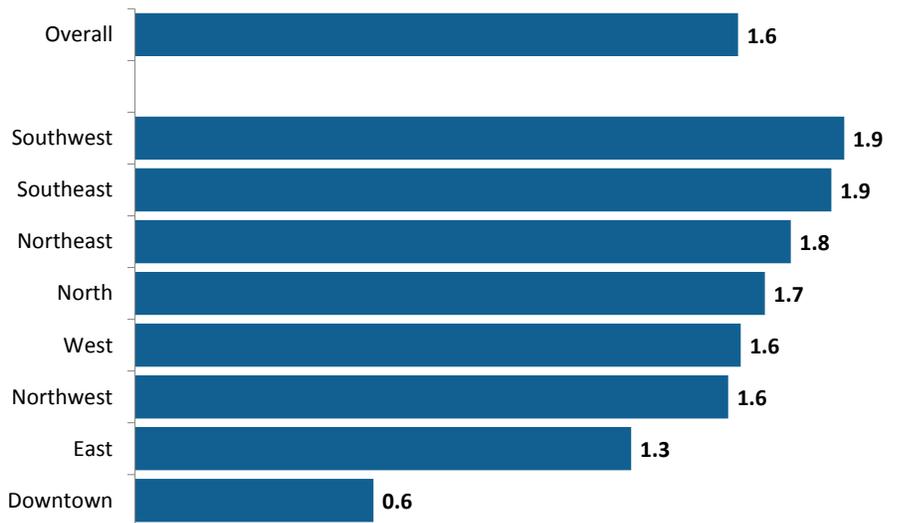
OTHER TRAVEL MODES -BY AREA



Q52. Do you usually drive alone, carpool or vanpool, take public transit, walk, bike, or travel some other way?

MEAN NUMBER OF WORKING VEHICLES -BY AREA

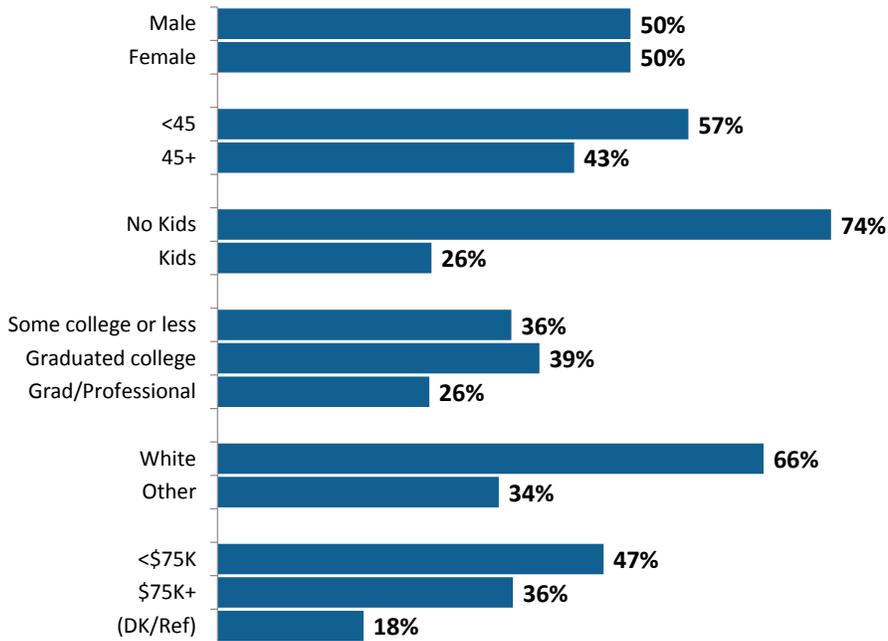
The citywide average is 1.6 working vehicles per household. Residents in south Seattle average close to two working vehicles while Downtown residents average less than one vehicle per household.



Q53. How many working vehicles does your household own?

DEMOGRAPHICS

DEMOGRAPHIC SUBGROUPS



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