

Survey Analysis

March 2024



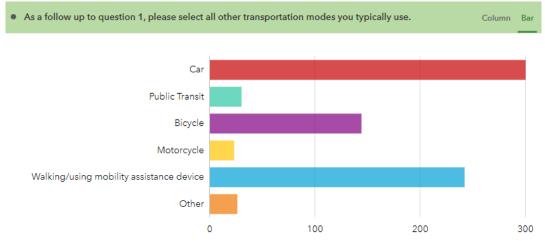




Modal Breakdown

The purpose of this question is to understand how area residents currently travel throughout the region.

90% of respondents' primary transportation mode is a car, 4% walking, 3% transit, and 2% bicycling. While cars remain the primary transportation mode of respondents, 34% noted that they also walk, 20% noted that they also use a bicycle, 4% use transit, and 3% use a motorcycle.

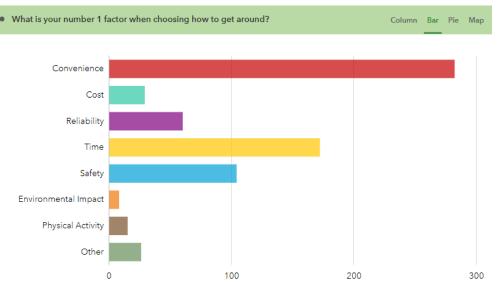


Factors Involved in Getting Around

The purpose of this question is to understand why people get around the way they do, and what the reason is that they use their primary mode of transportation.

The top three factors influencing mode choice are convenience, time, and safety. Cost and reliability were moderate factors. Environmental impact and physical activity were not significant factors, accounting for only 1-2% each.

With cars being the primary mode of transportation and convenience being the top factor involved with mode choice, people feel that it is easiest to get around the region by car.





Commute Times and Trends

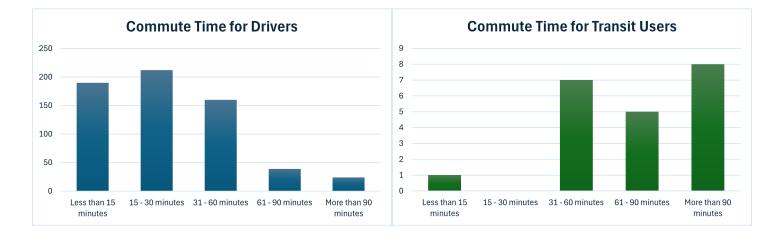
This question aims to identify how long it takes people to get to and from work each day, and whether they make any stops along the way.

About 80% of respondents have a total round trip commute time of under one hour, split fairly evenly between under 15 minutes, 15-30 minutes, and 30-60 minutes, while 7% had a commute time of 60-90 minutes and 5% of more than 90 minutes. Additionally, about 28% of commutes involve at least one additional stop or detour,

whether that may be to pick someone else up or drop someone else off, such as a child, elderly adult, or carpool passenger.

Commute Times by Mode

Breaking this data down to determine how long it takes a transit user to get to and from work versus how long it takes someone who drives a car to get to and from work is an important key to explore service metrics and potential disadvantages within the community.

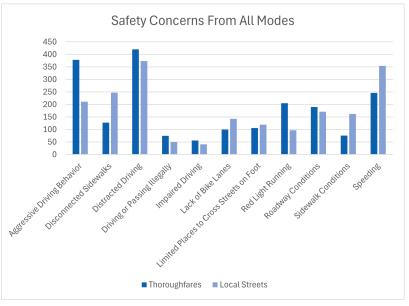


It takes public transit users significantly longer to get to and from work than it does for people who drive a car. The overwhelming majority of respondents who drive to work have a round trip commute time of under one hour, and most respondents who use transit indicated it takes 30 - 90+ minutes to get to and from work. This higher commute time can put transit users at a disadvantage, especially if they do not have any other reasonable options to get around, as they have to spend more of their day commuting and have less time to themselves.

Long transit trip times also discourage more people from using transit, which can increase the number of people who drive a car, thus increasing traffic, pollution, and noise levels.



Overall Safety Concerns on Major Thoroughfares vs Local Streets



There are both similarities and differences between safety concerns noted on major thoroughfares and local neighborhood streets. Top concerns for both were distracted driving. Aggressive driving and speeding were also major concerns for both, but aggressive driving was the 2nd-highest concern on major thoroughfares but was only the 4th-highest concern on local neighborhood streets, while speeding was the 2nd-highest concern on local neighborhood streets at 50% but only 35% noted it as a concern on major thoroughfares.

There were more pedestrian and bike-related safety concerns on local neighborhood streets than there were on major thoroughfares. Disconnected sidewalks were the 3rd-highest concern on local neighborhood streets, with 35% of respondents noting it as a concern, while roughly half noted it as a concern on major thoroughfares. Additionally, lack of bike lanes, limited places to cross streets on foot, and sidewalk conditions all had more selections on local neighborhood streets than they did on major thoroughfares.

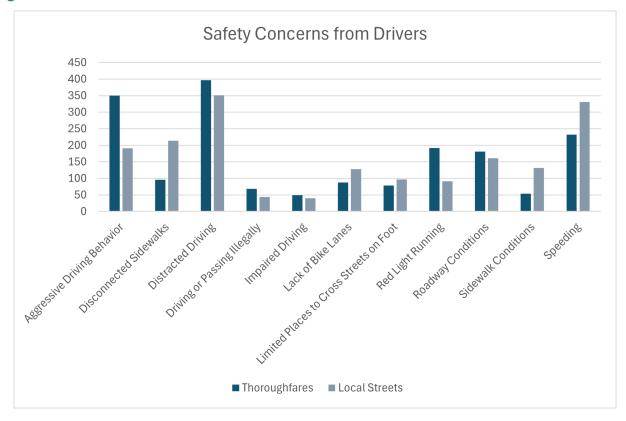
This demonstrates that there may be more people walking and biking on local neighborhood streets, thus more people noticing poor walking and biking conditions. At first glance, it might be assumed that there are better walking and biking conditions on major thoroughfares, but this result may be simply because there are fewer people walking and biking along major thoroughfares and therefore fewer people noticing poor conditions. It could also suggest that walking and biking conditions are poor enough that many don't even attempt to walk or bike on major thoroughfares and avoid them entirely. This may also be a reason why speeding is more of a concern on local streets, because the presence of more pedestrians and bicyclists makes it a bigger concern.

Included below is an additional analysis of these safety concerns by transportation mode to identify differences in perceived safety issues that may be covered up if a modal breakdown is not included.



Safety Concerns on Major Thoroughfares vs Local Streets by Mode

Breaking down respondents' noted safety concerns based on each respondent's primary mode of transportation identifies key differences in the perception of safety for people who travel via different modes of transportation.



Safety Concerns from Drivers

The top three concerns noted by drivers were aggressive driving, distracted driving, and speeding. Disconnected sidewalks were also a larger concern on local neighborhood streets, again signifying a potential increase of pedestrian activity on local streets versus major thoroughfares.

Generally, drivers noted safety concerns that are easily observable from a driver's perspective, that is, dangerous actions of other drivers. That may also explain why some concerns such as roadway conditions are of more importance to drivers than sidewalk conditions.



Safety Concerns from Bicyclists



Bicyclists' top three concerns were a lack of bike lanes, aggressive driving, and disconnected. Disconnected sidewalks and distracted driving were also noted as a larger concern on local neighborhood streets.

As the primary user of bike lanes, bicyclists notice when safe and separated facilities do not exist. Additionally, bicyclists are more impacted when separated cycling infrastructure is not present on a roadway. Bicyclists may also be susceptible to disconnected sidewalks.

Since bicyclists have very limited physical protections when biking and interacting with vehicles, it is also understandable why both aggressive driving and distracted driving are of high concern, since these can put bicyclists at higher risk of being struck by a driver and leading to severe injury and death. A protected bike network can help to both improve safety and comfortability for bicyclists but also encourage more people to bike because it is safer and more comfortable.



Safety Concerns from Pedestrians and Public Transit Users

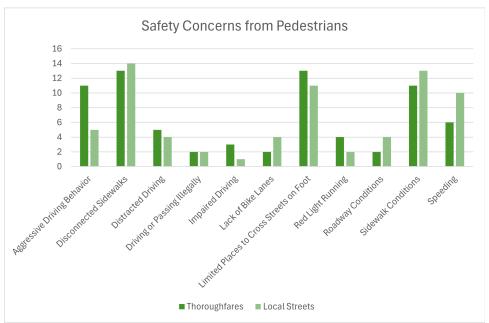
Pedestrians and public transit users both had very similar safety concerns.

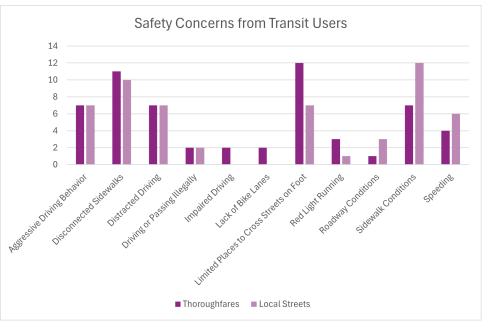
Disconnected sidewalks, limited places to cross streets on foot, and sidewalk conditions were both groups' top three safety concerns.

This similarity is likely since most transit users are also pedestrians as they walk to and from bus stops.

Of note, transit users' top concern on major thoroughfares is limited places to cross streets on foot.

As many bus routes run along major thoroughfares, transit users have difficulty crossing these major roads when walking between the bus stop and their trip origin or destination.





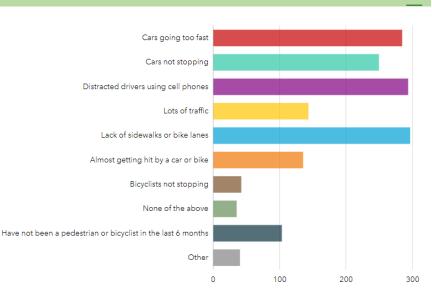
Overall, respondents noted safety concerns that are most applicable to their primary mode of transportation. For example, pedestrians concerned about sidewalks and crossing streets, bicyclists concerned about bike lanes, and drivers concerned about distracted driving, aggressive driving, and speeding, and generally less concerned with bike and pedestrian-related infrastructure and safety concerns, since drivers either do not notice issues with bike and pedestrian infrastructure since they are inside a vehicle instead, or just because it feels like it doesn't affect them.



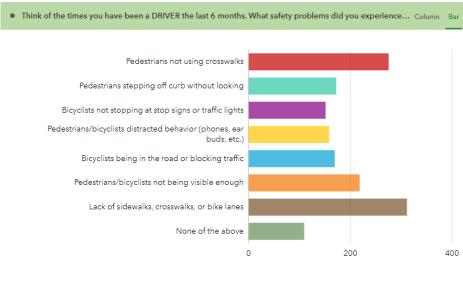
Observed Safety Problems

This question identifies what safety problems people have seen or experienced when using the transportation network.

Top safety problems noted as pedestrians and bicyclists include cars going too fast, cars not stopping, distracted driving, and a lack of sidewalks. Each were noted by at least 35% of participants.



Think of the times you have been a PEDESTRIAN or BICYCLIST the last 6 months. What safety problems... Column Bar



Top safety problems noted as drivers were a lack of sidewalks, crosswalks, or bike lanes (44%), pedestrians not using crosswalks (39%), and pedestrians/bicyclists not being visible enough (31%).

Other selection options each had 20-25% of respondents select them, including pedestrians stepping off curb without looking, bicyclists not stopping at stop signs/traffic lights, pedestrians/bicyclists distracted behavior, and bicyclists being in the road or blocking traffic.

The most frequently selected concerns and observations in this question suggest that drivers have noticed and recognized that there is often not sufficient bike and pedestrian infrastructure in place, and that it is not the fault of the person walking or biking. For example, pedestrians not using crosswalks and bikes being in the road or blocking traffic are both results that stem from a lack of sidewalks, crosswalks, or bike lanes, which was the most frequently selected concern in this question. A pedestrian might not use a crosswalk because there aren't enough crosswalks conveniently located for pedestrians, and a bicyclist might be in the road because they are provided with no other options.



Comfortability by Mode

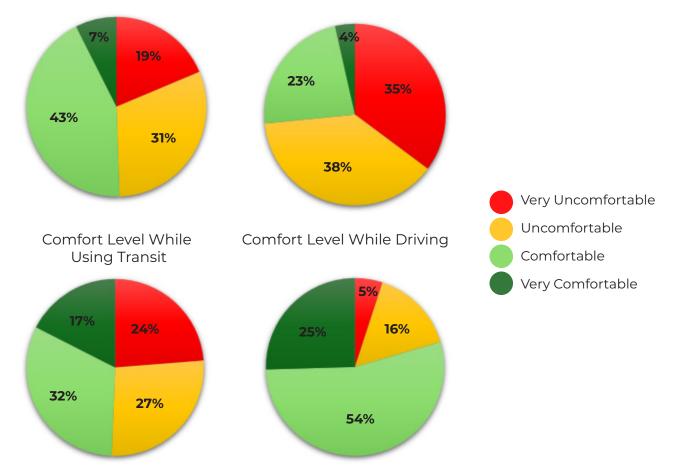
This question aims to breakdown how comfortable or uncomfortable people are when traveling by different modes, in part to gauge both perceived and actual safety levels by mode.

50% of people who walk said they are comfortable or very comfortable and 50% are uncomfortable or very uncomfortable while walking.

74% of people who bike said that that are either uncomfortable or very uncomfortable when biking.

80% of people who drive said that they are comfortable or very comfortable when driving. 74% of people who use a motorcycle are either uncomfortable or very uncomfortable. 50% of people who use transit are uncomfortable, and 50% are comfortable.

60% of people who use rideshares are comfortable.



Comfort Level While Walking Comfort Level While Bicycling

Respondents are most comfortable when driving, split about 50/50 when walking or taking transit, and are least comfortable when bicycling. Road users not in a car are generally more vulnerable than those in a vehicle, as they lack physical protections that vehicle occupants have, and have both a lower perceived level of safety and actual level of safety. That is, road users not in a car both feel more unsafe and are more unsafe. Our transportation infrastructure must be designed in a way that not only makes people feel safer, but actually makes them safer as well.



Factors to Increase Safety for All Road Users

Respondents were asked to rank the importance of five statements in an effort to determine what safety improvement strategies are both preferred by the public as well as which ones they believe are most effective.

The order of these statements is listed below, with the top statement having the highest average ranking in terms of importance.

Improve safe streets design to design roads that support all road users, including drivers, pedestrians, bicyclists, and transit. (4.11/5)

Promote safe speeds and reduce drive speeds to reduce injury severity for all road users. (3.2/5)

Support communities to plan for safe streets and public areas. (3.08/5)

Expand awareness of safe walking, biking, and rolling. (2.69/5)

Provide physical and emotional care to crash survivors and their families. (1.93/5)

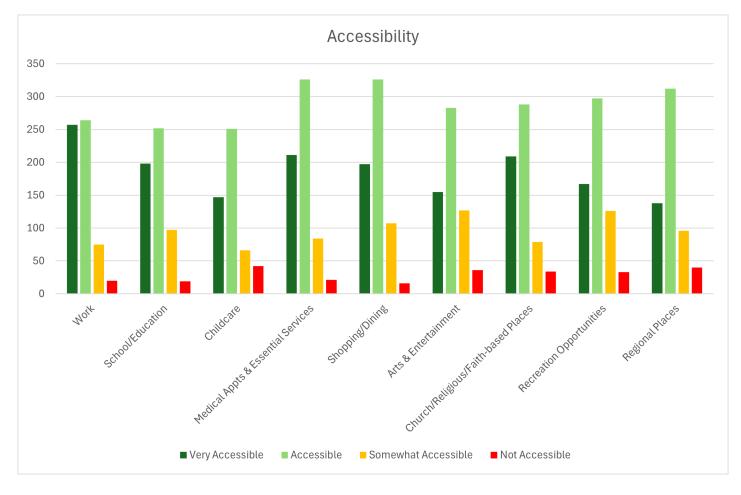
Respondents indicated a preference for design and infrastructure changes to improve safety more than awareness and public relations campaigns to reduce speeds.

This demonstrates that the community is aware that the way our transportation network is designed is the key component of determining safety and aspects like driver behavior. Infrastructure that safely and comfortably includes all road users will likely have a more impactful outcome of improving safety than solely trying to better educate people on safety practices without also including infrastructure changes.



Accessibility of Destinations via Primary Mode of Transportation

The purpose of this question is to understand how accessible different community aspects are to residents, and what perceived levels of accessibility are.



Respondents generally noted that most destinations were accessible or very accessible via their primary mode of transportation. Some destinations that saw slightly higher selections of "Somewhat Accessible" or "Not Accessible" were Arts & Entertainment, Recreation Opportunities, and Childcare. Places like Work, Medical Appts & Essential Services, and Shopping/Dining generally were considered as more accessible by respondents.

Since cars are the primary mode of transportation in the region and most people are traveling by car, this is likely why there is a high overall perception of accessibility to destinations within the region.



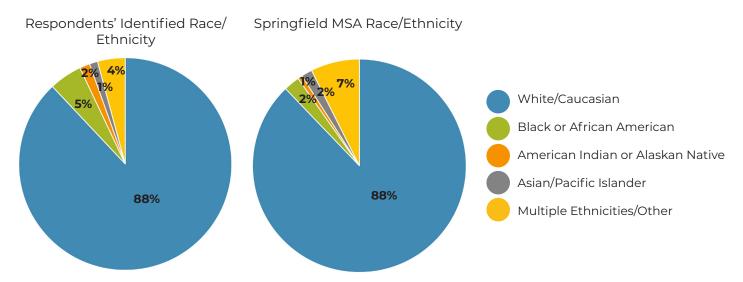
Demographics

Demographic Information

A combined 3/4 of respondents are over the age of 35, something of note to understand that the younger population groups may be underrepresented in the survey sample size. Keeping in mind that some respondents preferred not to answer some demographic questions, about 49% of respondents were female and 45% were male.

About 92% of respondents own or otherwise have reliable to a vehicle, while 8% do not. Approximately 6% of households in the Springfield metro area do not have access to a reliable vehicle, per the 2022 American Community Survey.

Not including those who declined to respond, about 88% identified as White/Caucasian, 5% as Black or African American, 2% as American Indian or Alaskan Native, 1% as Asian/ Pacific Islander, and 4% identified with multiple ethnicities or other. These results are roughly in line with the Springfield metro area as a whole as provided by the 2020 US Census, and a comparison is shown in the pie charts below.



Most respondents live in the 65714 zip code (Nixa). While this may show overrepresentation of Nixa residents, it is also important to note that Springfield is split between several zip codes.

