

*Word cloud on cover generated by respondent answers to the question: “If all of our infrastructure were to remain as it currently is, what single (non-infrastructure) change would make the biggest difference in the bikeability of Washtenaw County?” See “Non-infrastructure and Other Priorities” in the report and full answers in the appendix.

The Goal

While it has only been a year since our initial bicycle infrastructure survey, the Washtenaw Bicycling and Walking Coalition (WBWC) decided that it was worth revisiting in 2020. There were two main drivers that led to this decision. The first was the eagerness to revise the survey structure and questions, implementing lessons learned from the 2019 survey. The 2019 questions were, for the most part, completely open-ended. Additionally, there were demographic questions that we failed to ask in 2019 that would have given a clearer picture of the successes and failures of Washtenaw County's bicycle infrastructure. The other major reason for conducting the survey again was the October 2019 opening of the William Street Bikeway in Ann Arbor. There was great excitement about Washtenaw County's first protected two-way cycle track, and the WBWC was eager to see how this new type of infrastructure would measure up on a survey.

As in 2019, this survey was explicitly about on-street bicycle infrastructure. With its improved structure and clarity, the 2020 survey format yielded clearer responses that focused on the good and bad of the on-street bicycle infrastructure of Washtenaw County. To be sure, the continued development of county-wide trails is an equally important component of our bicycle transportation network. The survey's focus on on-street infrastructure is intended to show where the county is succeeding and where the county is failing in providing bicycling access to county residents on streets, where they live, work, and shop.

It is also important to note that in the midst of conducting the 2020 survey, the COVID-19 pandemic reached Michigan, and our community, along with the world, has been severely affected. This pandemic will have long-lasting effects—many yet to be known—on large segments of our society. Public transportation has been particularly affected, given the new social-distancing requirements necessary to reduce disease transmission. While this circumstance may induce some people to use cars rather than transit, it also may encourage more people to bike and walk.

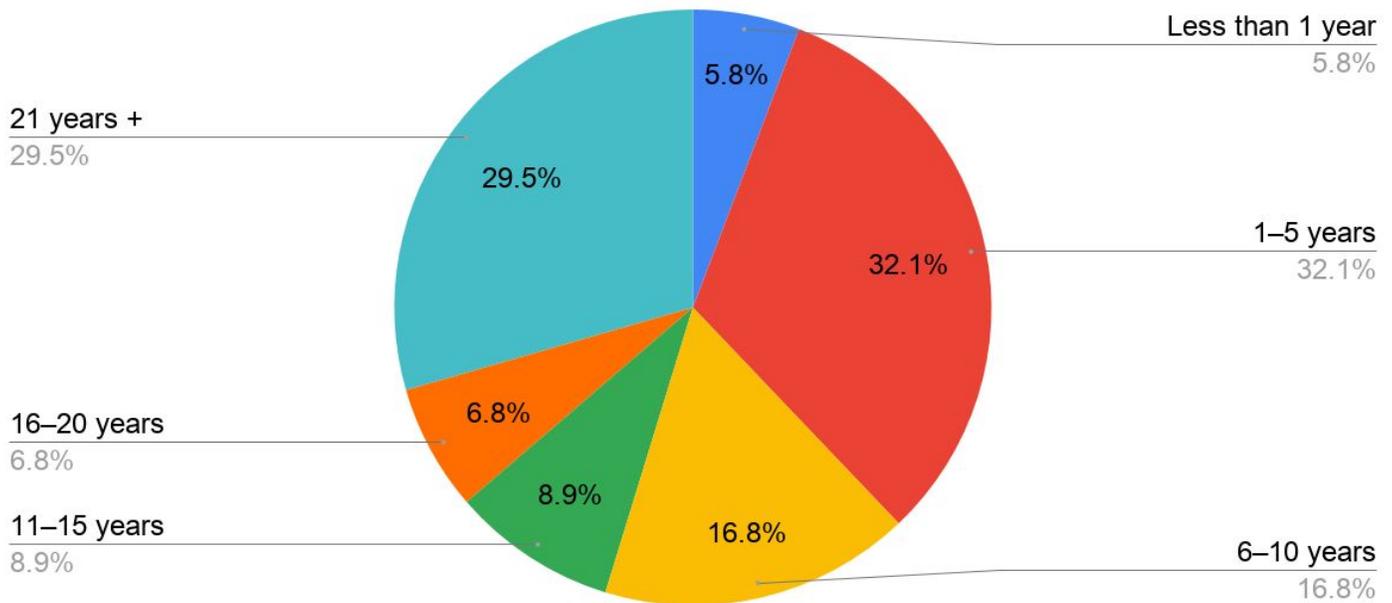
Survey Administration

This survey was administered between March 9, 2020 and April 4, 2020 by the WBWC, and was conducted online using Google Forms. A link to the survey was promoted on the WBWC Facebook page, Twitter, Google group, blog, and email newsletter—all places that can be viewed by both the WBWC members and the general public.

Respondents

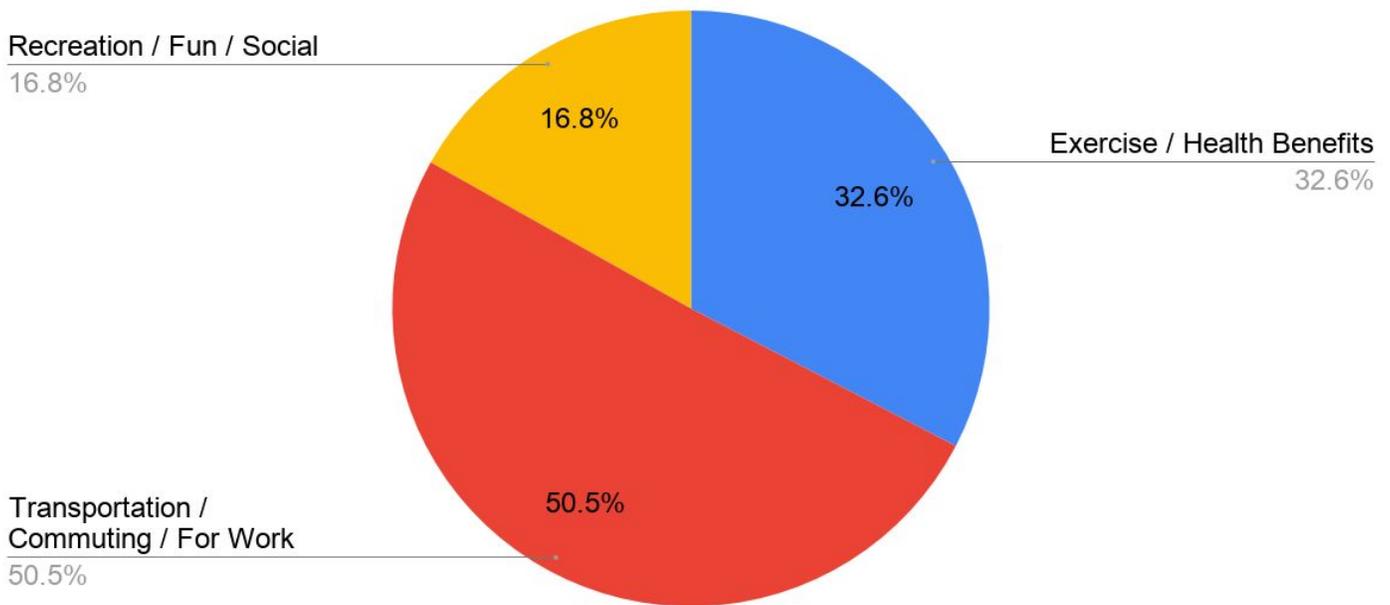
The 2020 survey yielded a total of 191 usable responses, which was a 66% increase from 2019. Increased promotion yielded a significant response from individuals who are not currently members of the WBWC. 67% of respondents were non-members compared with less than 50% in 2019. Additionally, there were more responses from newer cyclists: last year, one quarter of respondents had been biking in Washtenaw County for 5 or fewer years, whereas in 2020, that number is greater than 30% of respondents. This may be due to increased participation, but could also reflect an increase in cycling in Washtenaw County or some combination of the two.

“How long have you been biking in Washtenaw County?”



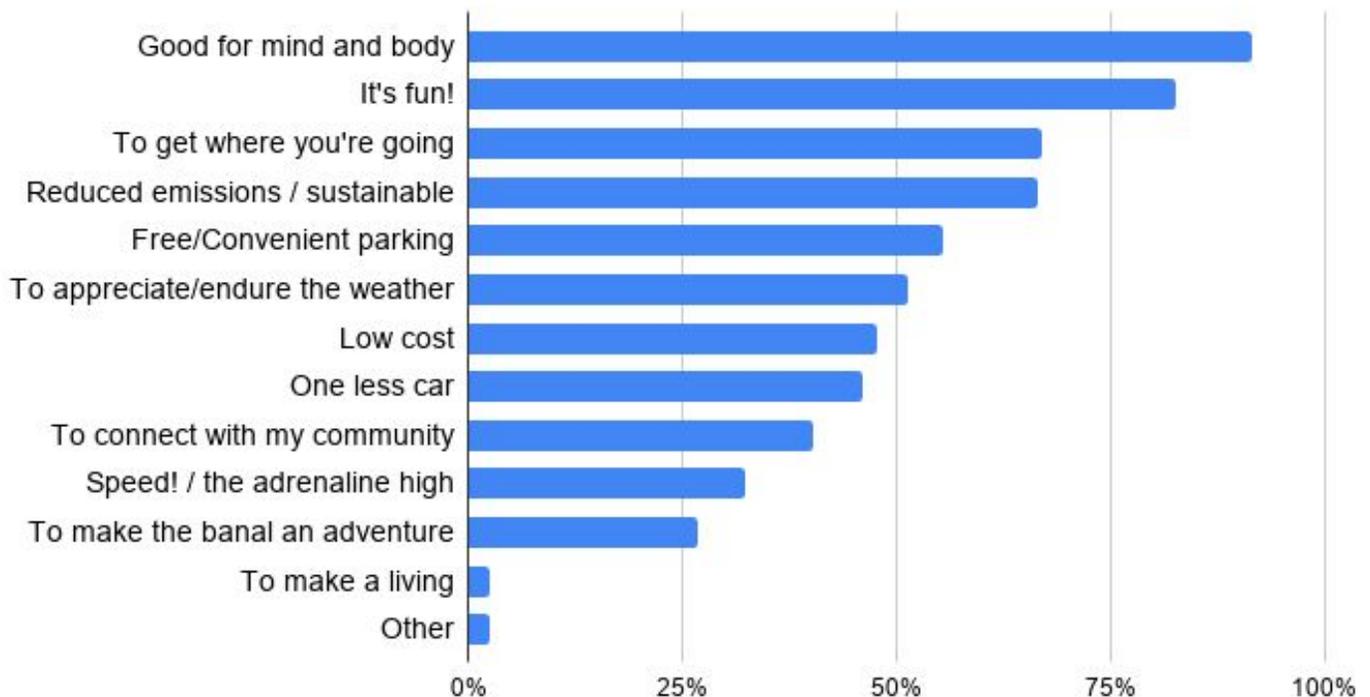
In the 2019 survey, respondents were asked what their reasons for biking were. The information gleaned there was useful, but the “why” got mixed up with the “what for,” and the variety of answers was wide ranging. This year we broke that into two questions:

*“What is the *primary* purpose of the majority of your bicycle trips?”*



Here the results were similar to last year. While people are on a bike for different purposes at different times, transportation is the respondents major primary purpose for being on a bike. Since we also wanted to include people’s “whys” and cyclists love to share, we also asked this question:

“Why do you ride a bike? (check all that apply)”



These responses illustrate that bicycling is appealing for a wide variety of reasons. They remind us that a usable county-wide bicycle infrastructure network can provide even more than transportation. As the network expands in size and accessibility, it likewise expands its user base, bringing both practical and pleasurable benefits to a larger and more diverse group of people. This is valuable for those individuals, as well as the community at large. A happier, healthier community is good for everyone, even if they don’t ride a bike.

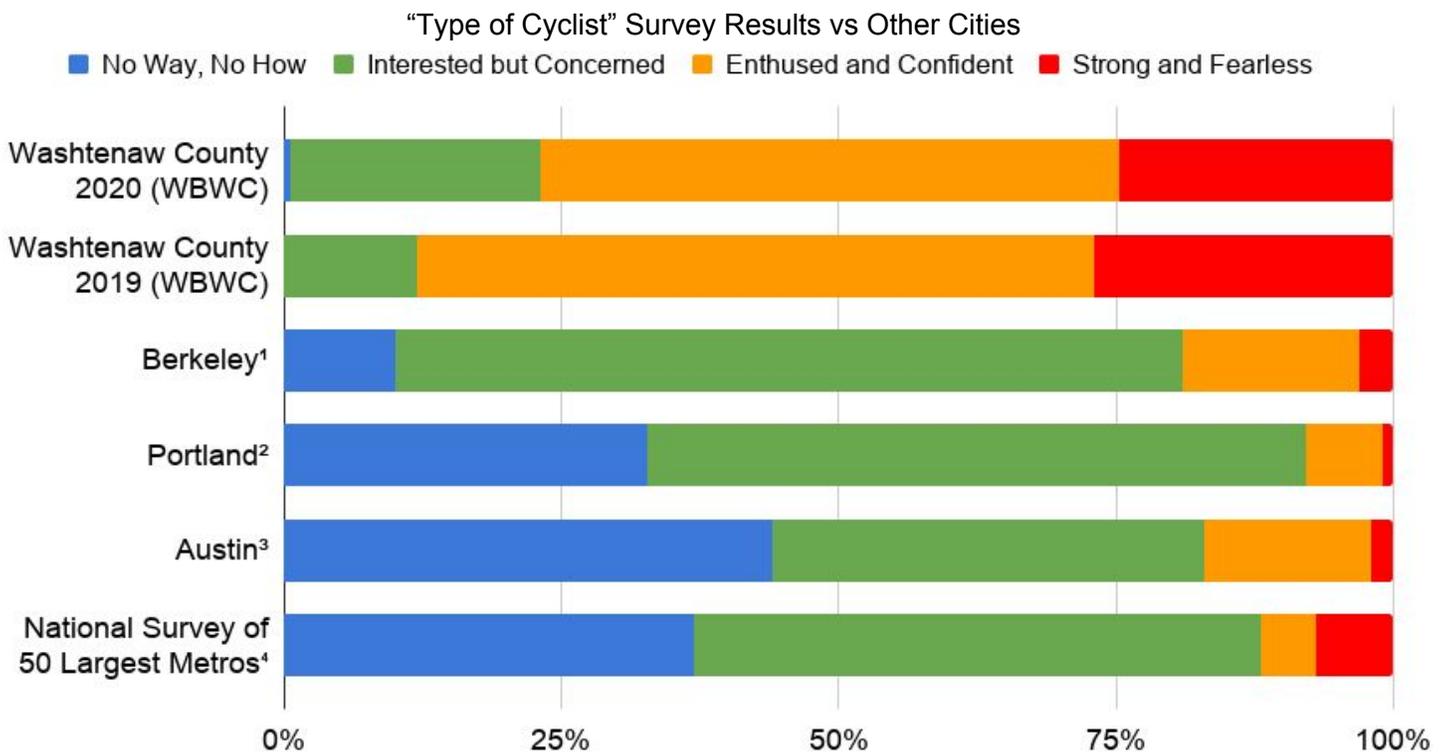
Cyclist Types

As in 2019, respondents were asked “What ‘type’ of cyclist are you?” with a reference link to the following article: “[Understanding the ‘Four Types of Cyclists’](#)” by Alta Planning and Design.

The four types are as follows:

- 1) Strong and Fearless: People willing to bicycle with limited or no bicycle-specific infrastructure
- 2) Enthusied and Confident: People willing to bicycle if some bicycle-specific infrastructure is in place
- 3) Interested but Concerned: People willing to bicycle if high-quality bicycle infrastructure is in place
- 4) No Way, No How: People unwilling to bicycle even if high-quality bicycle infrastructure is in place

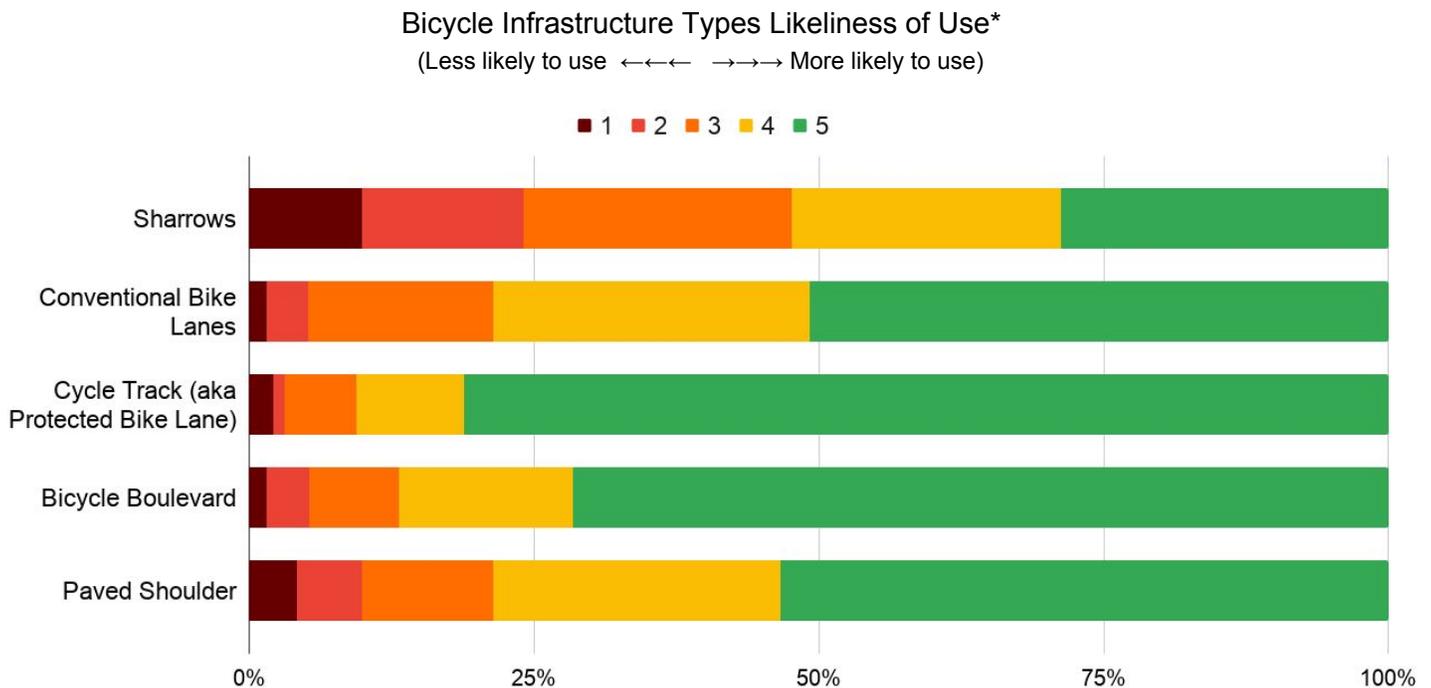
The numbers were similar to last year’s with a noticeable uptick in the “Interested but Concerned” contingent, probably due to the larger number of responses this year. We are presenting the 2020 results in the chart below alongside last year’s results, again compared with surveys in other cities of the public at large, not just cyclists. The wider the net is cast, the greater this contingent appears. Again, it would be beneficial for Washtenaw County municipalities to conduct such a survey, as it would better reveal the “Interested but Concerned” contingent and the benefits of a low-stress bicycle network. Steps in this direction are underway in some areas and the WBWC is very supportive of these initiatives.



- 1) <http://www.bikeberkeley.com/wp-content/uploads/2017/07/Berkeley-Bicycle-Plan-2017-Final.pdf>
- 2) <https://www.portlandoregon.gov/transportation/article/264746>
- 3) http://www.austintexas.gov/sites/default/files/files/2014_Austin_Bicycle_Master_Plan_Reduced_Size_.pdf
- 4) <https://jenniferdill.net/types-of-cyclists/>

Bicycle Infrastructure Types

The 2019 survey provided a link to the website of the National Association of City Transportation Officials (NACTO) that described the different prescribed types of bicycle infrastructure. The intent was to inform survey takers of the varied options available and have them share specifically where they might like to see these different types. While we gleaned useful information from our answers last year, it was clear that some people's answers were based on incorrect assumptions or they hadn't clicked through to read the explainers. In an effort to help educate respondents on these prescribed types of bicycle infrastructure and again provide clarity on the survey generally, brief descriptions were given with graphics to explain each kind. These descriptions are available in Appendix B. Respondents were asked for their general likelihood of using each kind of bicycle infrastructure. Results are shown here:



*Assuming that all vehicles are obeying the rules of the road.

Here we see the clear favorite is the Cycle Track/Protected Bike Lane followed by the Bicycle Boulevard. Given that the cycle track separates bicycles from motor vehicles and the bicycle boulevard reduces the amount and speed of motor vehicle traffic, this is not surprising. The number of people, even among cyclists, who are willing to literally share a lane with motor vehicles on a thoroughfare is low. It is also important to point out that the brief descriptions and graphics we provided about these types of infrastructure were specific. For example, the sharrows were shown on a small urban two-lane two-way street. Had our graphic shown the sharrows on a larger, faster 5-lane roadway, the likelihood of use would certainly be less than shown here.

It is worth noting that the general input on infrastructure types we have received from both of our surveys is that there is a desire for safe low-stress infrastructure throughout Washtenaw County. For example, respondents expressed strong support for improved Washtenaw Avenue facilities (as described below), and

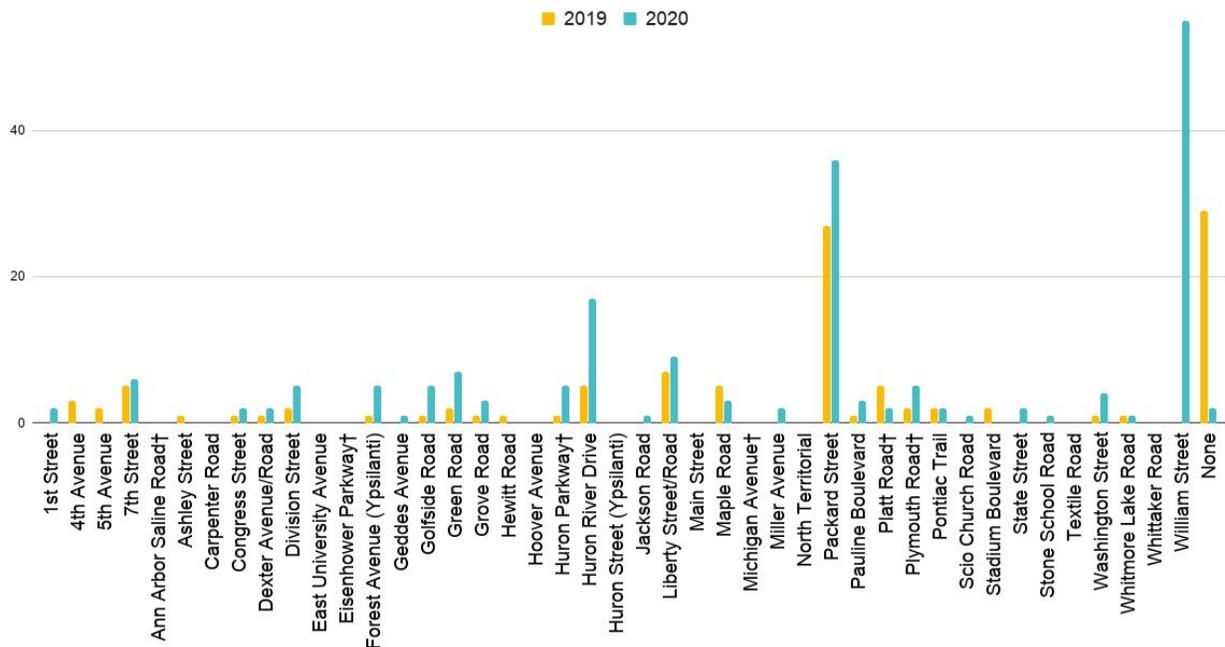
though they may be a challenge to implement, the *intent* of that suggestion is absolutely valid and *some* variety of safe infrastructure for bicycles should be a priority along this corridor. What specifically that turns out to be can best be determined by traffic engineers who can translate that intent into a workable solution. NACTO provides an excellent guide ([“Choosing an All Ages & Abilities Bicycle Facility”](#)) for our traffic professionals as to what type of bicycle infrastructure is best suited to what type of corridor (link also found in appendix).

Comfort Levels of Existing Infrastructure

We revisited questions about “Most Comfortable” and “Least Comfortable” from the 2019 survey. To simplify the survey and get more accurate answers, respondents were asked to select their answers from a pull-down list that was populated using the streets gleaned from the open-ended questions of 2019 as well as streets with recently improved bicycle infrastructure. There was also an option for respondents to insert a street name that was not on the list. Additionally, we asked them to describe the segment of the street to which they were referring. This was to help provide clarity on some of the county’s longer corridors, which can have a wide variety of bicycle infrastructure. See Appendix A for a full list of survey questions.

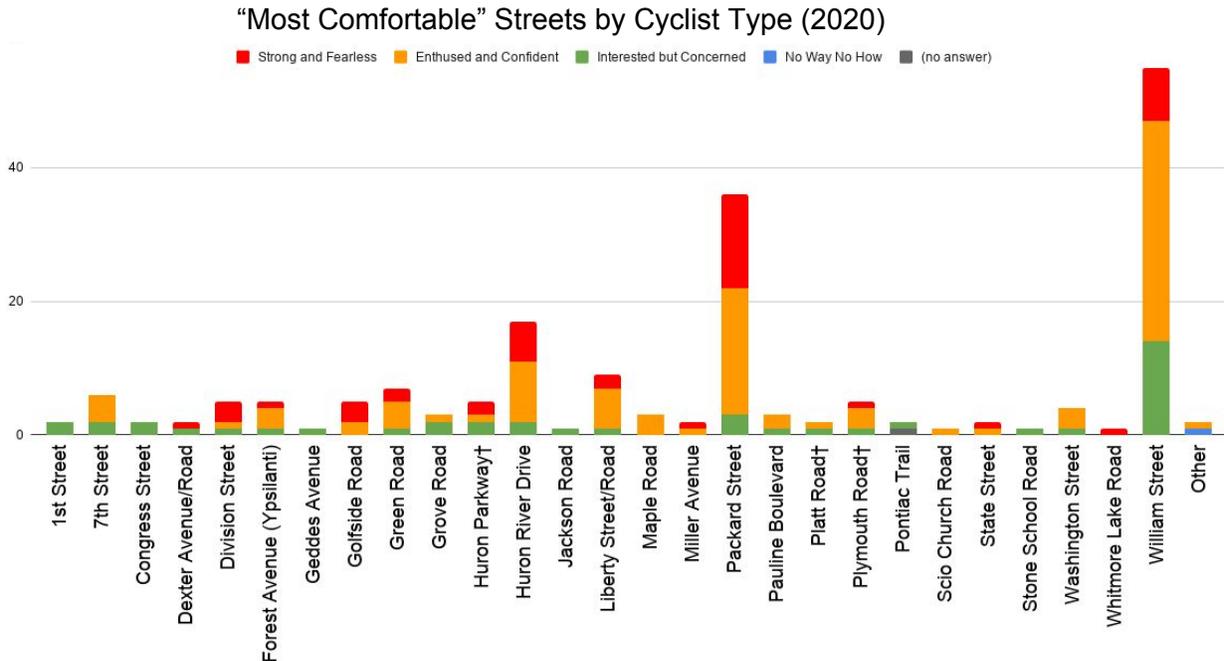
The results of “Most Comfortable” street were generally similar to 2019, with one notable exception: the William Street Bikeway. Comparing the “Most Comfortable” results from 2019 and 2020 side by side, the anecdotal success of the William Street Bikeway is proven. Hopefully this will help to make clear that more intentional investments in bicycle infrastructure, while more costly, make far better use of space and are far more accessible and useful to the public than basic lines of paint.

“Most Comfortable” Streets 2019 vs 2020¹

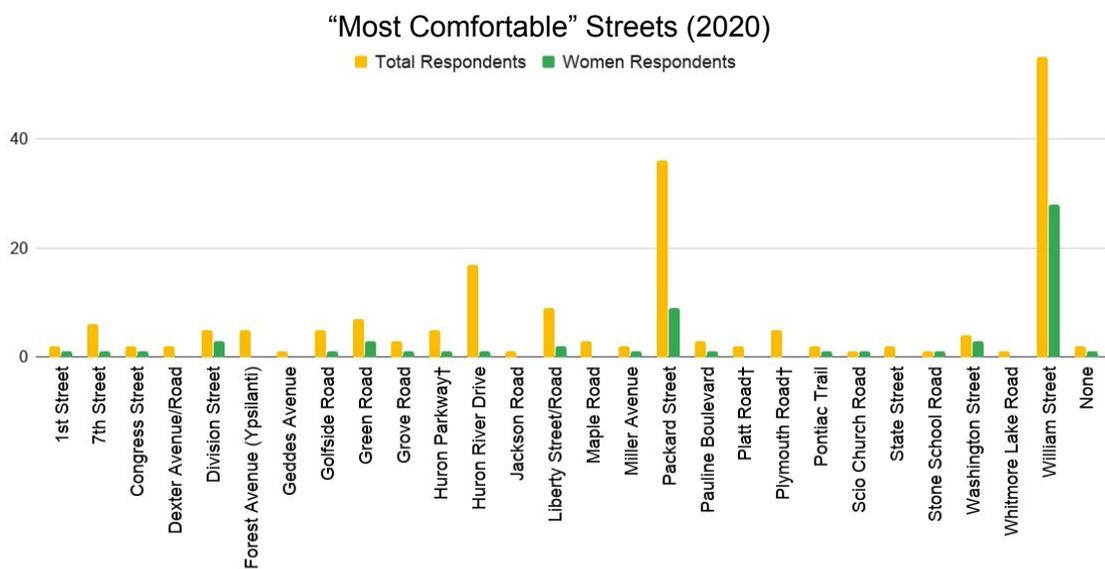


¹ On this and subsequent graphs, some streets are denoted with a †. Within the survey questions, this referenced the following footnote: †These roads have portions with adjacent shared use paths, but these are NOT the infrastructure that we are judging on this survey.

While not listed at all in 2019, in 2020 William Street is clearly leading the pack. This news on its own is very encouraging and great to see. If we look more closely at the data, the further success of William Street comes into view and shows why this type of installation is an excellent template to follow. Displayed below is the same “Most Comfortable” information broken down by “Cyclist Type” (as discussed above):



As shown here, William Street is described as “Most Comfortable” not only by “Strong and Fearless” and “Enthused and Confident” cyclists, but also by the “Interested but Concerned” contingent. In fact, the number of “Interested but Concerned” cyclists on William is 467% greater than the number on Packard (the next closest “Most Comfortable” street). Also keep in mind that the William Street Bikeway opened in October 2019, and the survey was conducted in March 2020. We expect these numbers to increase further due to increased ridership during fair-weather months as well as more public awareness of the bikeway going forward.

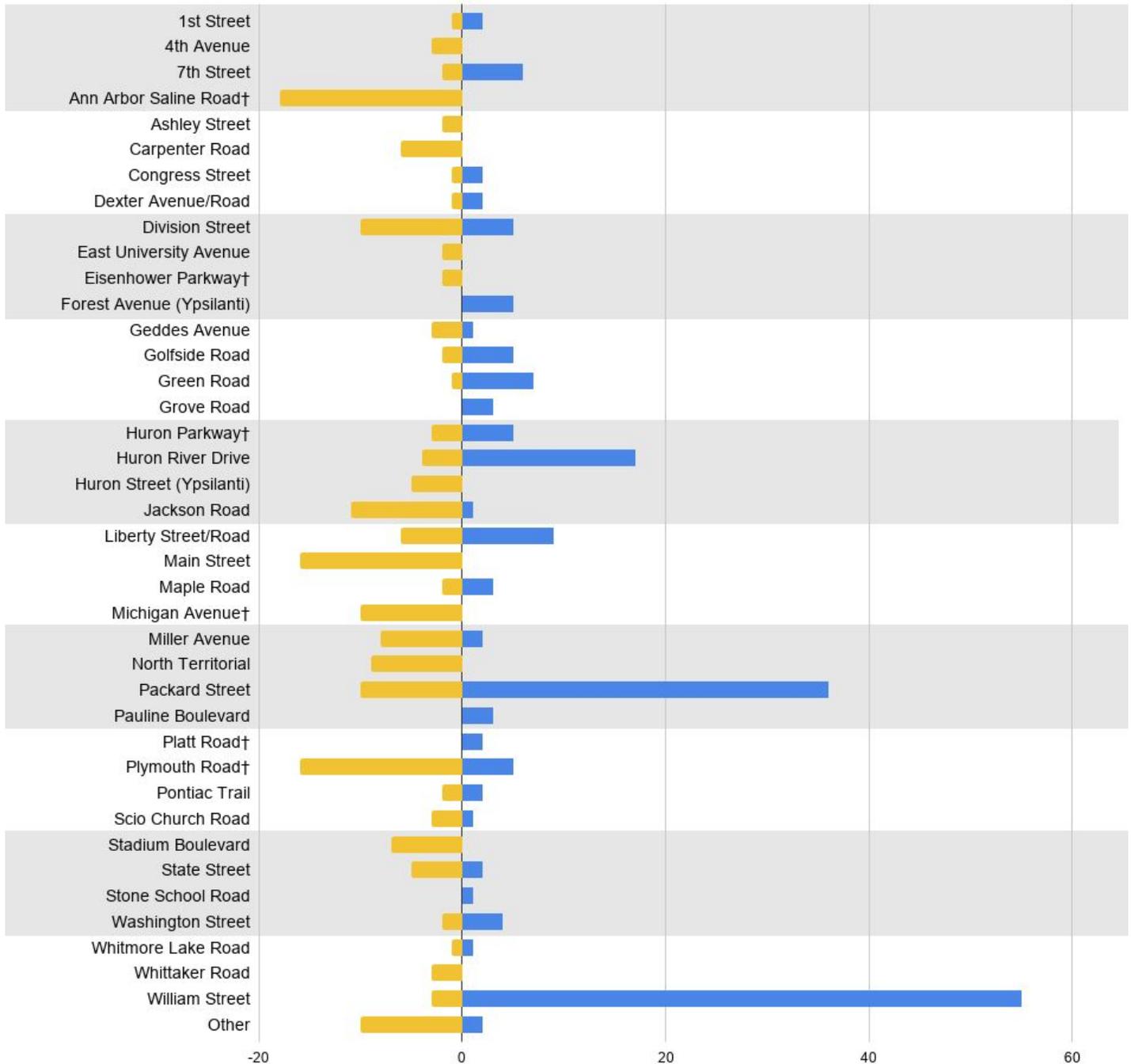


Additional demographic questions also provided an opportunity to see the levels of women respondents on this same question of “Most Comfortable”. This again shows the great success and equity gained with projects such as the William Street Bikeway. The 2019 stand-out was Packard (between Main Street and Eisenhower): In looking at the percentage of women comfortable on this corridor, Packard is at 25%, while William Street is at 51%—now that is equity!

If we bring in the “Least Comfortable” Street data alongside the “Most Comfortable” data, a picture emerges that looks slightly more encouraging than in 2019, though many of last year’s challenges remain:

Bicycle Infrastructure Comfort Levels by Street

■ Most Comfortable ■ Least Comfortable



The “Least Comfortable” streets of 2020 closely mirror those of 2019. Once again, streets with more than one lane in each direction are decidedly uncomfortable when they have conventional bicycle lanes or sharrows: Ann Arbor Saline, Carpenter, Jackson, Main, Plymouth, Packard (east of Eisenhower), Michigan, and even Division (despite being one-way). Two lanes of traffic going the same direction inevitably generate higher vehicle speeds and conditions where drivers are more concerned about interactions with other motor vehicles than with vulnerable road users. Municipalities continue to include conventional bike lanes along these kinds of corridors. While having a designated place in the road is certainly appreciated in principle, in practice, uncomfortable = largely unused, and a more intensive investment is necessary to provide access and connections along these very important corridors.

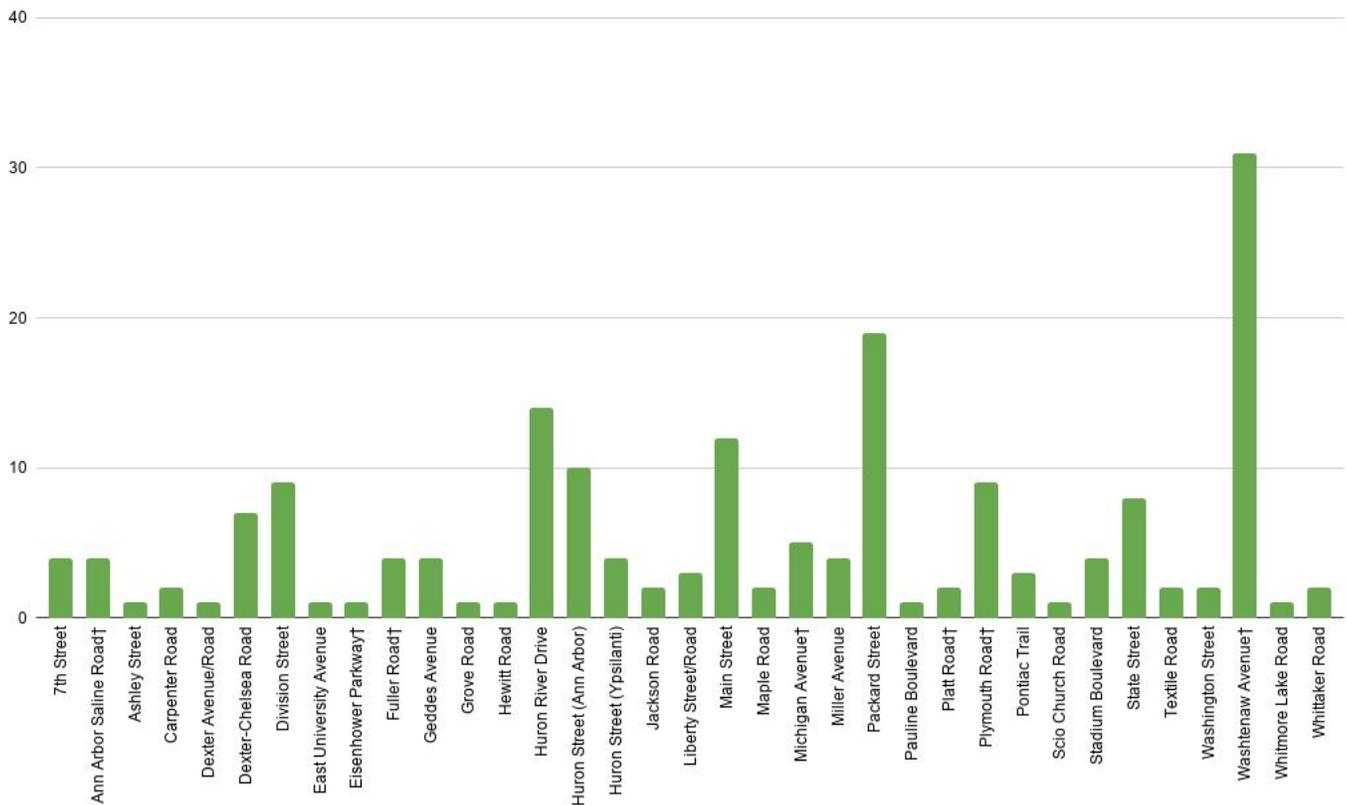
It would be interesting to see a protected bicycle facility along a major 4-lane road to see where the comfort levels might fall. It is also worth referring (again) to the NACTO design guide [“Choosing an All Ages & Abilities Bicycle Facility”](#) regarding what type of facility is best suited to each type of corridor. This guide recommends against conventional lanes along high-speed corridors. The usefulness and ultimate success of a bicycle transportation network is dependent on providing infrastructure that the majority of the public—those with experience, but more importantly the “Interested but Concerned”—considers a viable means of getting around town.

Infrastructure Improvement Priorities

Given the real limitations on building new infrastructure and/or fixing everything simultaneously, projects must be prioritized. More often than not, bicycle infrastructure improvements are sidebars or add-ons to road projects, which are typically prioritized by road and underground utility conditions. The WBWC advocates that bicycle infrastructure be considered part of the prioritization and planning process. Bicycle infrastructure is a vitally important part of the transportation toolbox (especially in populated areas) and should not be an afterthought.

While not identical to the chart of priorities from 2019, the chart below, highlighting respondents' streets of highest priority for infrastructure improvements, yields two very similar high points: Washtenaw Avenue (largely between Ann Arbor and Ypsilanti) and Packard Street (also between Ann Arbor and Ypsilanti). These two results are identical to last year's findings. We will reiterate that a safe and convenient route along one or both of those corridors would provide more convenient and affordable transportation options for the population living and working between the two cities. In addition to providing an Ann Arbor/Ypsilanti connection, there is a real desire for bike facilities into and out of Ann Arbor in other directions. The top six priority streets after Washtenaw Avenue and Packard Road (Huron River Drive, North and South Main Street, Huron Street (Ann Arbor), Plymouth Road, Division Street, and State Street) are all corridors that connect the county at large to the main population and employment center of Washtenaw County. It is important for people to be able to not only bike in town, but *into and out of town*.

*“Select the street *regardless of current bicycle infrastructure or lack thereof* within Washtenaw County that should be of greatest priority for improved bicycle infrastructure.”*



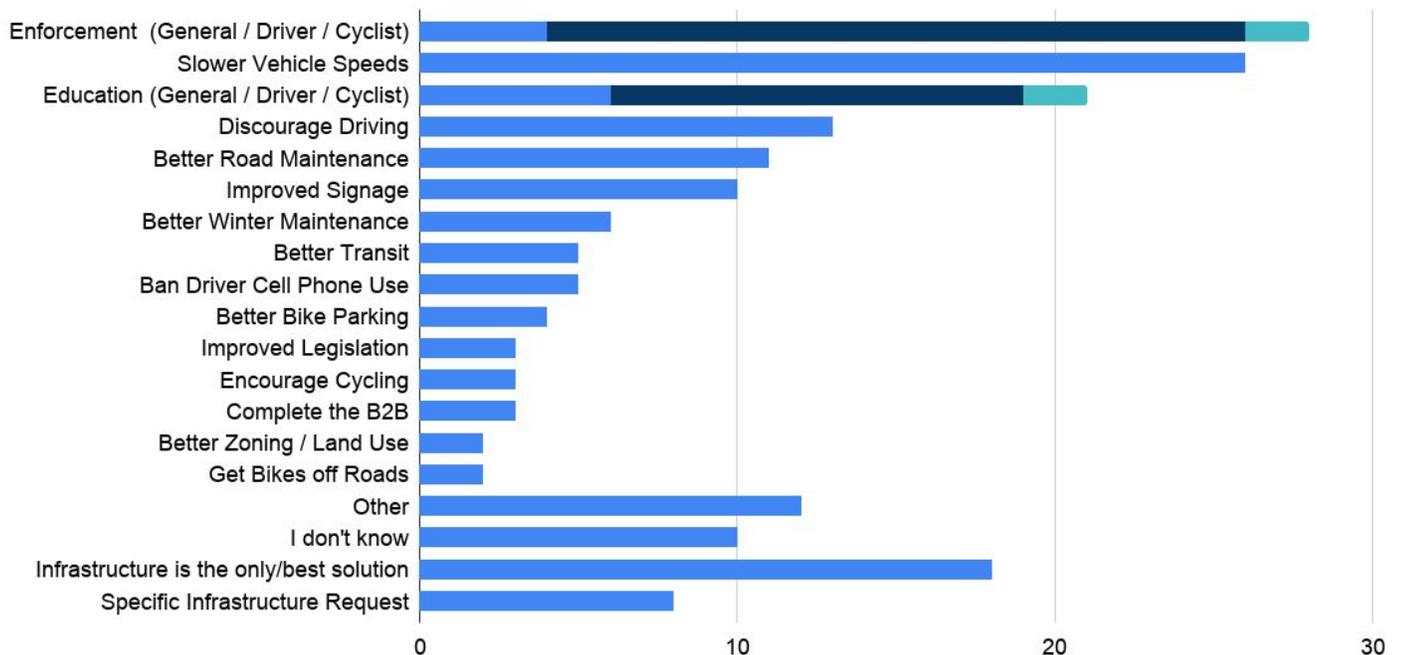
Non-infrastructure and Other Priorities

We asked a new open-ended question in 2020:

If all of our infrastructure were to remain as it currently is, what single (non-infrastructure) change would make the biggest difference in the bikeability of Washtenaw County?

There were a wide variety of answers to this question, but we did our best to group them thematically. The chart below shows these themes and orders the number of mentions from greatest to least along with some answers less applicable to “non-infrastructure” at the bottom.

What single (non-infrastructure) change would make the biggest difference in the bikeability of Washtenaw County?



As acknowledged above, we cannot improve every street in the county simultaneously, given the realities of planning and construction, not to mention funding. The chart above, however, shows other opportunities for improving bicycling within the county. Some of these *could* be made in parallel with infrastructure improvements. Local municipalities should consider these (in addition to improved bicycle infrastructure) as priorities to make Washtenaw County a national leader in active transportation. The WBWC would particularly endorse reducing (actual) speeds and improving driver and cyclist education in schools and at the state level. Both of these actions would benefit not only people on two wheels, but pedestrians and drivers as well.

Conclusions

Apart from the pandemic that hit mid-survey and has slowed the completion of this report, the WBWC Bicycle Infrastructure Survey of 2020 has been a great success. An even greater number of people on bikes have shared their collective voice on this year's survey. Once again, we have been reminded that *transportation* is people's main reason for biking. We have learned that user comfort with bicycle infrastructure makes a significant difference in the accessibility of the infrastructure to a wide array of users with varied experience and capabilities (the "Interested but Concerned"). And we have learned that the bicycle infrastructure types that are most high-comfort and low-stress are those most likely to be used and therefore be worth the investment.

Though it has only been a year between these two surveys, that has been long enough to register a very important blip in the improvement of our bicycling network. The county's first two-way protected cycle track is a very encouraging sign, and a similar facility under construction on First Street is being met with great anticipation. The Ann Arbor Downtown Development Authority (DDA) is learning by doing, so this facility will be an improvement even upon William St. We do hope that these facilities will be great examples and inspiration for other low-stress facilities throughout the county. It is also important to reiterate that while low-stress facilities cannot exist on every street in the county, there should be a continuous usable network providing bicycle access to a greater segment of the population. These areas of lesser access and facilities with little or no comfort should be prioritized for improvement and provided greater import as road improvement projects are considered. There is still a long way to go county-wide, and the lack of an on-street connection between Ann Arbor and Ypsilanti remains an important missing link in our developing network. The design of this link and other new facilities can benefit from municipalities applying what they learn from our current successes as we work toward the goal of a low-stress bicycle network.

The improvements made to the 2020 survey yielded improved results and insight and will be easily replicated down the road with more directly comparable data points as we continue to mark our progress. Once again, we hope Washtenaw County municipalities can benefit from the insight we have gained. We have learned a lot and look forward to revisiting this survey in the future (though likely not 2021) to mark our progress as we work to improve the bicycle infrastructure of Washtenaw County.

Appendix Resources:

Clickabl e links	Appendix A Raw Survey Answers	Appendix B Bicycle Infrastructure Types Material from Survey	Choosing an All Ages & Abilities Bicycle Facility (by NACTO)	2020 Bicycle Infrastructure Survey Synopsis Resource Page
QR Codes				