

2019 Bicycle Infrastructure Survey Synopsis May 21, 2019

#### The Goal

Many of us as individuals have years of experience biking the streets of Washtenaw County. As individuals we know our good routes and our bad routes, and we have opinions about what would benefit our personal cycling experience, but these are lone voices. The goal of this survey was to synthesize the collective voice of our bicycling experiences to better inform the direction our transportation infrastructure will take in the years to come. This initial bicycle infrastructure survey provided valuable insight into the current state of things in Washtenaw County and issues to consider as we plan for the future.

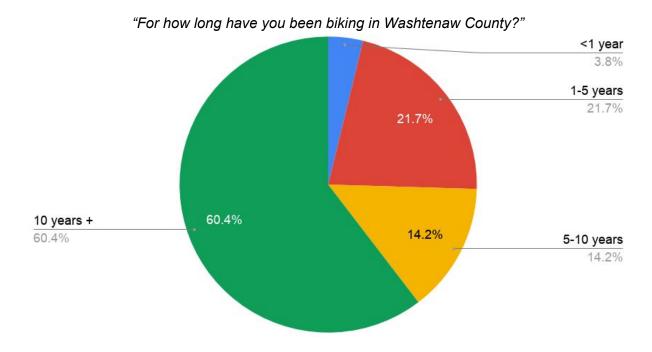
This survey was explicitly about on-street bicycle infrastructure. The continued development of countywide trails is an equally important component of our bicycle transportation network, however it was not the focus of this survey. Trails are wonderful for recreation and can provide great long distance connections. Off-street bicycle trails such as the Border-to-Border Trail are usually comfortable places to bike for many people and were less relevant to the questions on this survey (though they were certainly included in many answers). Trails in the form of parallel shared-use paths along major corridors can be safe and comfortable depending on their location and design. They are beneficial where space allows, but these opportunities are few and usually don't align with developed areas. Most locations that we access on a daily basis are located where we live, work, and shop: on streets. The beginning and end of virtually all trips are on streets. As such, on-street bicycle infrastructure was the focus of this survey.

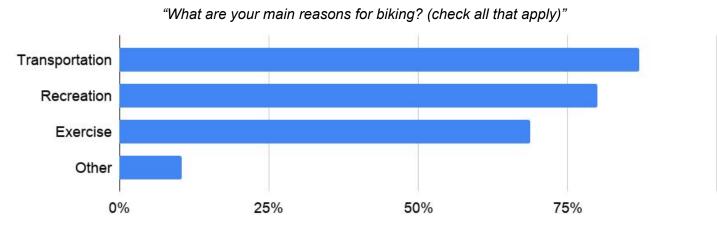
## **Survey Administration**

This survey was created and administered during the month of March 2019 by the Washtenaw Bicycling and Walking Coalition (WBWC), and was conducted online using Google forms. A link to the survey was promoted on the WBWC Facebook page, Google group, blog, and email newsletter-- all places that can be viewed by both WBWC members and the general public.

## Respondents

A total of 115 people participated in the survey, slightly more than 50% of whom are current members of the WBWC. Respondents were predominantly longtime active cyclists with many years of experience biking in Washtenaw County. Their reasons for biking were wide ranging and most individuals had more than one reason. **Nearly 90% listed transportation as one of their reasons for cycling.** Only 14% of these, listed transportation as their *only* reason for bicycling. Washtenaw County has succeeded in creating an environment that encourages recreational cyclists (people who bike for enjoyment or exercise) to expand into transportation cycling. We would like to see more individuals who are not currently recreational cyclists find comfort and value in cycling as a means of transportation. Encouraging more "Transportation Cyclists" (people whose *only* reason for biking is transportation) provides an opportunity for expansive growth with improved bicycling infrastructure. This isn't to say that once on a bike people won't find other reasons for doing so as the benefits are plentiful.





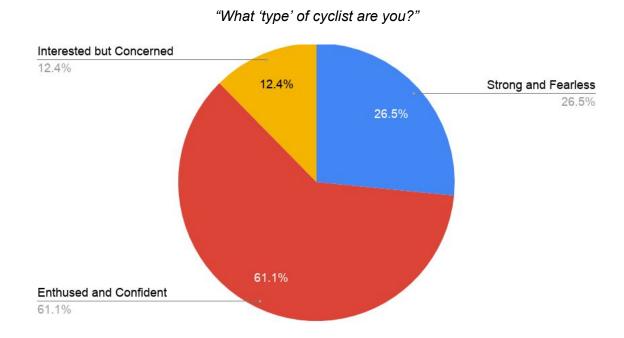
Respondents were asked "What 'type' of cyclist are you?" with a reference link to the following article: "Understanding the 'Four Types of Cyclists'" by Alta Planning and Design <a href="https://blog.altaplanning.com/understanding-the-four-types-of-cyclists-112e1d2e9a1b">https://blog.altaplanning.com/understanding-the-four-types-of-cyclists-112e1d2e9a1b</a>

#### From the article:

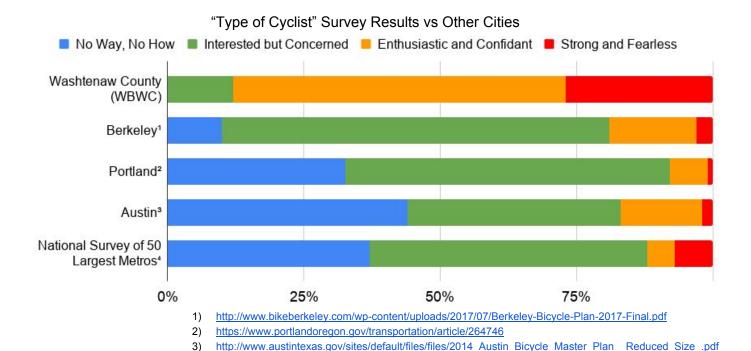
"Originally developed by Roger Geller at the City of Portland, OR, the 'Four Types of Bicyclists' are meant to guide efforts in assessing — in broad terms — what certain segments of a population require or want in a bikeway facility."

The four types are as follows:

- 1) Strong and Fearless: People willing to bicycle with limited or no bicycle-specific infrastructure
- 2) Enthused 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



Unsurprisingly, since this survey was taken specifically by cyclists, there were no takers for the "No Way No How" category, though a survey of the public at large would provide a cross section of the community along the lines of results from other cities (see chart below). 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 potential for growth in "Transportation Cyclists".



- Also from the article:
  - "Bike routes that promote bicycling as an everyday option are comfortable for most people and not just for experienced bicyclists. High comfort and low-stress facilities are vital to developing a fully functioning network that accommodates persons of all ages and abilities."

https://jenniferdill.net/types-of-cyclists/

As is evident from respondent self classifications, **over half of survey answers are coming from very experienced cyclists**.

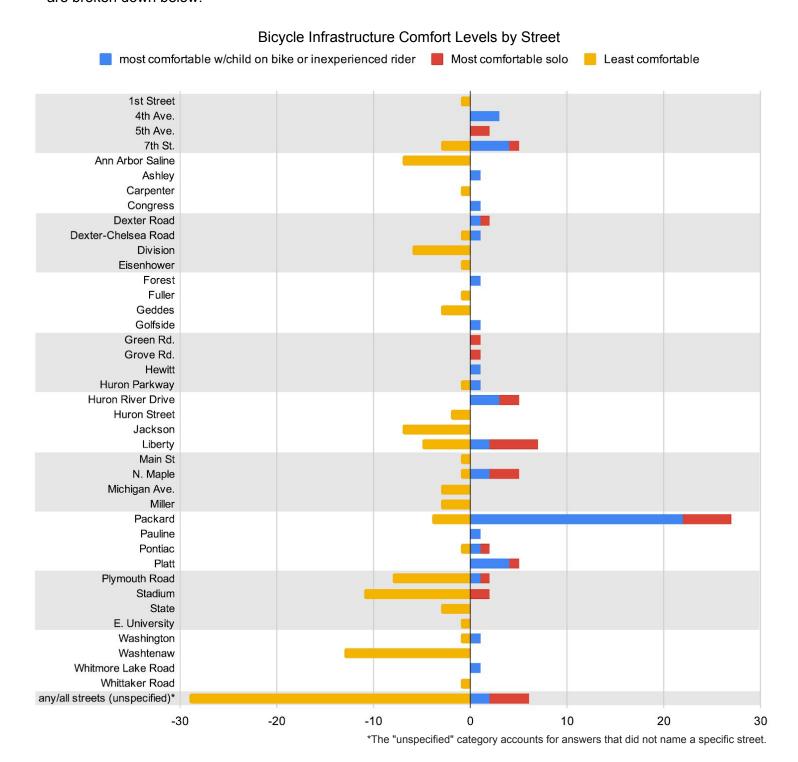
# **Comfort Levels of Existing Infrastructure**

In an effort to get a benchmark of where Washtenaw County's bicycle infrastructure stands currently with regards to comfort levels, we asked respondents:

- 1) On what specific street/road with bicycle infrastructure within Washtenaw County are you most comfortable riding?
- 2) Would you ride on the street/road cited above with a child on your bike or with an inexperienced rider? Why or why not?
- 3) On what specific street/road with bicycle infrastructure within Washtenaw County are you least comfortable riding? Why?

These questions about specific streets were completely open-ended. The population of this street data was all by respondents. The intent was for respondents to provide a single answer, though many listed multiple

streets. In these cases we took their "official" answer to be the first street listed. In the future, we will reword the questions to make the intent of a single answer more clear. The "unspecified" category accounts for answers that did not name a specific street. Once again, we will adjust question wording in the future with the goal of reducing the number of "unspecifieds". They are still represented in the graph because they provide a general impression of the quality and comfort level of the bicycle network. For example, several respondents said something to the effect of "I don't feel comfortable on any street." The results of these "comfort" questions are broken down below.



These results show there were more uncomfortable streets identified than comfortable streets. The question was intended to be focused on streets that have bicycle infrastructure, but some answers included streets without infrastructure. Certainly not all streets will be comfortable for cyclists. However, the locations where investments have been made in bicycle infrastructure should be as comfortable and usable as possible.

The major standout is Packard which is currently our best exemplar of a bicycle route that, while not exactly high comfort and low stress, is more comfortable than all of our other on-street options. This "most comfortable" route along Packard runs from Main St. to Eisenhower, but then unfortunately stops. Packard east of Eisenhower into Ypsilanti would be characterized as an extremely low comfort and high-stress route. Generally, the other routes that respondents noted as "most comfortable" (Liberty, 7th, Platt) are residential streets with one lane in each direction and bike lanes. Where these streets fall short relative to Packard is in bike lane continuity--merging with motor vehicles at intersections is decidedly uncomfortable for most.

It is also worth noting that the "top" specified vote getters among the "Least Comfortable" streets are all streets with 2 lanes of traffic in each direction and higher speeds (Washtenaw, Stadium, Plymouth, Jackson, Ann Arbor Saline). The basic bike lanes provided along these streets are insufficient in providing even medium comfort, medium-stress routes. Perhaps the right-of-way real estate currently dedicated to bike lanes along these corridors would be better used as a cycle track?

To reiterate, the comfort levels of most streets within the county network as judged by self-described "Strong and Fearless" or "Enthused and Confident" cyclists (26.5% and 61.1% of respondents respectively) are found to be predominantly "less comfortable" for biking. The usefulness and ultimate success of a bicycle transportation network is dependent on providing infrastructure that is seen by the majority of the public as a viable means of getting around town. This includes not just those already comfortable biking on a road, but those "Interested but Concerned" (parents with kids in tow, teenagers, older adults, adults who haven't ridden since their youth...). While progress has certainly been made up to this point, there is a long way to go in providing a bicycling network that is truly beneficial to the public at large within Washtenaw County.

### Infrastructure Improvements

The following links were provided for respondents showing the primary bicycle infrastructure options as defined by the National Association of City Transportation Officials (NACTO):

- Sharrow (https://goo.gl/EHgzUn)
- Bike lanes (https://goo.gl/JicvKu)
- Cycle track (<a href="https://goo.gl/RLShPm">https://goo.gl/RLShPm</a>)
- Bicycle boulevard (<a href="https://goo.gl/3GZDM6">https://goo.gl/3GZDM6</a>)

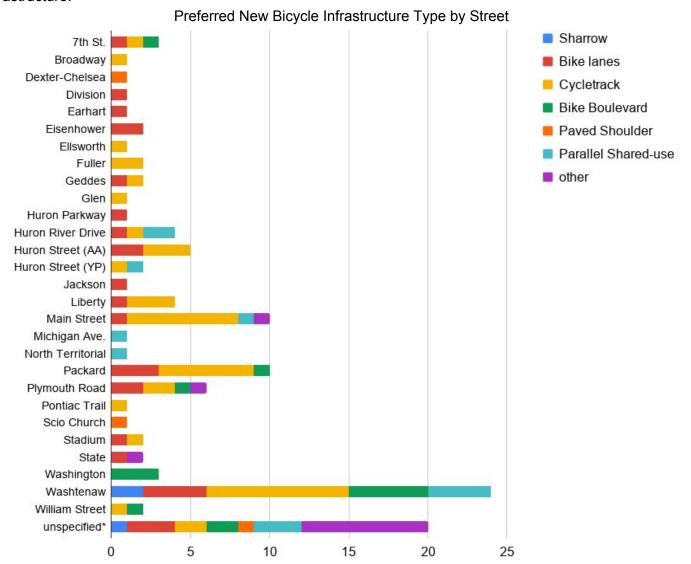
It is important for advocates, policy makers, and designers to become familiar with these terms. There is particular confusion between the terms "cycle track" and "bicycle boulevard" as these are often used

interchangeably. Though they certainly both describe a safe and appealing place to ride a bike, they are not the same thing. This confusion was reflected to some degree in responses.

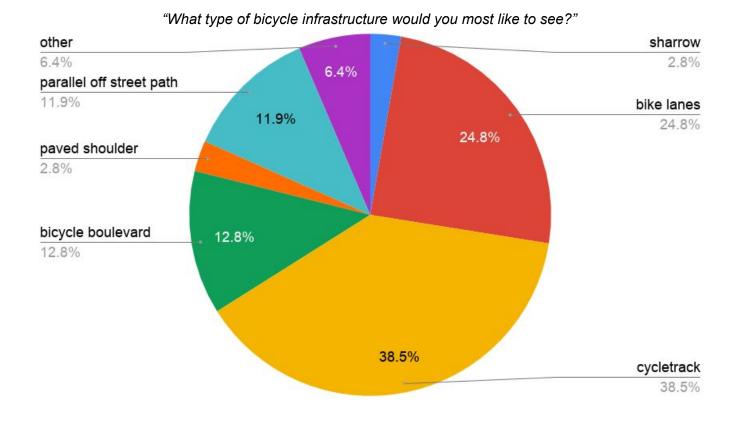
Respondents were asked the following:

- 1) On what specific street/road (currently without bicycle infrastructure) within Washtenaw County would you like to see bicycle infrastructure added?
- 2) What type of bicycle infrastructure would you most like to see on above street/road?

Results below reflect a wide variety of information. There is a real desire for better network continuity; notable connections which are currently missing include South Main to North Main to Huron River Drive in Ann Arbor, Plymouth Road connecting the north side of Ann Arbor, and Packard and Washtenaw providing connections between Ann Arbor and Ypsilanti. The range of preferred bicycle infrastructure types on single roads is reflective, to some degree, of the length and changing nature of long corridors. Sections of differing character lend themselves better to different levels of infrastructure. Of course individual personal preferences are at play here as well. The overall takeaway is that there is a real desire for more on-street, often protected, bicycle infrastructure.



Below is the breakdown of desired bicycle infrastructure types separated from specific road data. Fully 50% of respondents are desirous of infrastructure that provides more protection from motor vehicles or areas where motor vehicle speeds are not excessive (i.e. cycle tracks or bicycle boulevards).

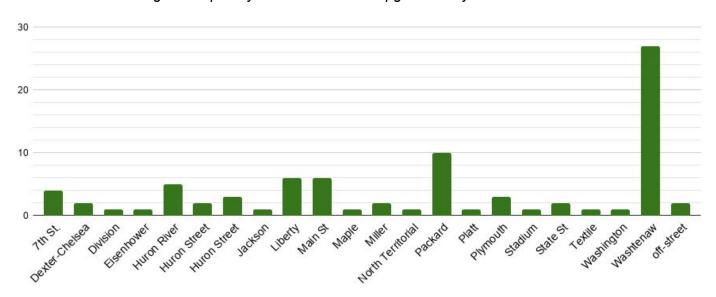


### **Infrastructure Improvement Priorities**

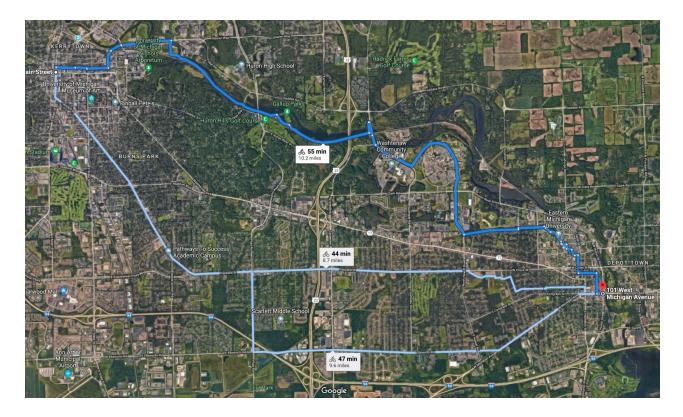
Given the real parameters that limit our ability to build new infrastructure and/or to fix everything simultaneously, projects must be prioritized. More often than not bicycle infrastructure improvements are sidebars or add-ons to "real" road projects which are typically prioritized by road and underground utility condition. We'd like to advocate 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. Respondents were queried on what streets should be prioritized for new or upgraded bicycle infrastructure.

In the chart below, the high bar on Packard (for the most part) is referring to Packard east of Eisenhower. Combining this with Washtenaw illustrates a clear desire for a convenient route connecting Ypsilanti and Ann Arbor. A safe and convenient route along one or both of those streets would provide an extremely important connection along population centers between the two cities and provide more convenient and affordable transportation options.

# "What specific street/road (or section thereof) within Washtenaw County should be of greatest priority for new/additional/upgraded bicycle infrastructure?"



While the Border to Border Trail currently provides a bicycling connection between Ann Arbor and Ypsilanti, it is not a direct and convenient connection. The B2B can be a useful route for some, but it is a circuitous route (2 miles longer from central AA to central Ypsi versus on-street routes), it is not maintained/available year-round, and (most importantly) it is not located along population centers. As such, it is not a useful route for folks just trying to get from the west side of Ypsi to the east side of Ann Arbor (as an example).



### Conclusions

Though not perfect, this first survey of the bicycle infrastructure of Washtenaw County has been very successful in hearing the collective voice of cyclists across the county. They have told us that *transportation* is their main reason for biking. Despite many years of experience biking in Washtenaw County, they found the majority of existing bicycle infrastructure lacking in comfort. High-comfort, low-stress bicycle infrastructure is vital to a successful bicycle transportation network. More that half of respondents desire the cycle tracks and bicycle boulevards that provide such an environment. Moreover, these facilities open up bicycling for transportation to the less experienced "Interested but Concerned" contingent. While such 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.

Overall, the survey has been successful in providing a benchmark of bicyclists and bicycle infrastructure in Washtenaw County. As we return to the survey in the future, we have much to learn from this first survey experience. There is room for improvement in conducting the survey: more explicitly worded questions for more specific answers, additional demographic information, and increased quantity and geographic reach of respondents. There is also room for improvement in parsing data (e.g. separating out segments of long corridors and organizing streets by jurisdiction). 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 to mark our progress as we work to improve the bicycle infrastructure of Washtenaw County.

## **Appendix**

Raw survey responses found here:

https://docs.wixstatic.com/ugd/84d2c6 ff8fe94bc3e34bb1964243c65b33f0d1.pdf

And here:

