**Recommendations**  
 Through our collective research on reasons why people do not use other modes of transportation in cities it has become clear that the main reasons that pedestrians do not feel safe taking walks are safety concerns and convenience. In our recent survey conducted on WPI students, forty-four percent of the sample size said that they did not feel safe walking or biking in Worcester. When asked to elaborate on these responses, many individuals said that they simply don’t feel safe. These concerns are valid considering that there have been at least eight fatal car crashes per year from 2016 to 2019 (City Data, 2022). Another article, “What predicts how safe people feel in their neighborhoods and does it depend on functional status?”, pointed out that “Higher crime rates can make populace feel less safe.” (Velasquez, 2021). According to City-Data, Worcester's crime rate, as of 2019, is two hundred and sixty-seven which is higher than seventy nine percent of US cities.

Furthermore, many respondents replied by saying that the infrastructure in Worcester is not built for bikers and pedestrians. These concerns are also supported by Michael Anderson’s article “Here’s what keeps people from riding a bike,” in which he points out that people are dissatisfied with the current biking infrastructure (Anderson, 2015).

However, safety concerns are not the only point of concern for pedestrians. According to our survey, ninety-one percent of respondents used a car as their primary form of transportation. Most of the responses to the following question, which asked “What form of transportation do you take on a regular basis?”, responded by saying things like, “It is more convenient to have a car” and “It’s easiest and safest” indicating that a big reason for the lack of non-vehicle related transportation is convenience.

Therefore, based on this research and data, considering the cost and resources we believe that the best approach to solving this problem is creating better biking and pedestrian infrastructure and promoting biking and walking as a form of transportation. Creating better infrastructure will make it safer to bike and walk and promoting biking and walking will increase the amount of people that decide to bike or walk over taking a car.

**Implementation**

The best way to go about creating a better pedestrian infrastructure, based on our research, is to improve the heavily congested intersections. One way to do this, based on our research is to make coordinated intersections, “which synchronizes traffic movements and manages the progression speed of specific modes where uninterrupted flow is desired along a corridor,” according to the National Association of City Transportation Officials. This will make the flow of traffic run smoothly and reduce the number of accidents as a result.

This implementation will be costly depending on how many intersections require upgrading. According to our research, a single intersection upgrade can cost anywhere from two hundred to three hundred dollars (Byungkyu, 2010).

Currently, only one percent of trips taken in America are by bike (Strauss, 2021). There are a variety of reasons for this which we have already touched on including infrastructure and safety. However, there are other reasons as well including fatigue and convenience (Cauwenberg, 2022). Therefore, based on our research, the best way to promote biking in Worcester is to provide electronic bikes, either for rent or public use. According to our research Riding an E-Bike often leads to more frequent overall biking and it is possible to extend the time that you can bike (Cauwenberg, 2022). Creating better infrastructure will make biking a safer option for pedestrians and making E-bikes more readily accessible will make using bikes an easier option because they are no longer as physically taxing and are therefore more convenient.

Creating a good biking infrastructure will require a lot of government-based actions including funds being delegated to remodeling of intersections. For this to work you would need a person who has some authority over funds delegated to city upkeep and updating. You could also reach out to an organization that takes initiative on these kinds of things and gathers money for remodeling intersections. For example, you could send our research to a well-known police chief who would ideally send this information to their higher ups and they would take this information into consideration when creating and implementing new policies. This would be the ideal scenario. However, a backup method could be contacting well known organizations who deal with city infrastructure development such as Green Worcester Advisory Committee whose goal is to bring sustainability to all aspects of living in Worcester. They could spread word about our information and possibly attract the attention of some government officials and the process would move on from there.

A success could be viewed as one day being able to statistically derive that the number of bikers in Worcester has increased by a noticeable amount and that there are now fewer car-related accidents happening as a result.

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