



MEMORANDUM

TO: Craig Hupy
FROM: Raymond Hess
DATE: April 14, 2020
SUBJECT: Transportation opportunities for social distancing amid COVID-19

This memorandum is provided to outline transportation measures that *have been done* and *could be done* to allow for social distancing amid COVID-19. The transportation team observes several different factors that necessitate this discussion: there are changes in travel patterns and travel mode shifts throughout the City; there is an expected increase in non-motorized travel demand as the weather continues to improve and residents feel the need to exercise in the public right of way; there is a desire to provide equitable access to work via safe non-motorized transportation options, especially in light of the reduction of transit service; and there is an expectation that social distancing will likely continue for the foreseeable future to reduce the transmission of the disease.

The actions and suggestions offered below are based on various articles, ITE (Institute of Transportation Engineers) meetings, ITE and APBP (Association of Pedestrian and Bicycling Professionals) discussion boards, and resource pages put together by [ITE](#), APBP, and [NACTO](#) (National Association of City Transportation Officials). These organizations encourage local public agencies to try new things with the resources at hand and not allow perfection to stand in the way of doing good work in service of our residents.

Leading Pedestrian Intervals

Description

A leading pedestrian interval (LPI) gives pedestrians the opportunity to enter an intersection 3 seconds before vehicles are given a green indication. LPIs are one of FHWA's proven safety countermeasures because they offer: increased visibility of crossing pedestrians; reduced conflicts between pedestrians and vehicles; increased likelihood of motorists yielding to pedestrians; and enhanced safety for pedestrians who may be slower to start into the intersection. More information on LPIs can be found here:

https://safety.fhwa.dot.gov/provencountermeasures/lead_ped_int/

What is being done amid COVID-19?

LPIs are currently used at many locations throughout the City and have been under consideration elsewhere. Given the increased levels of people walking and riding bicycles as well as concerns about increased speeds from driving vehicles, LPIs have been installed, or will be installed over the next two weeks, in the following locations:

- Seventh Street signalized intersections have already been done
- MDOT jurisdiction intersections are being pursued, with MDOT approval:
 - Huron Street at Ashley Street
 - Huron Street at First Street
 - Main Street at Kingsley Street
- Signalized intersections throughout the entirety of the Downtown Development Area (DDA) have already been done
- City-wide LPIs at all remaining signalized City-controlled intersections will be done over the course of the next two weeks
- Adjustments to signal timing have been made to minimize cycle lengths

What could be done amid COVID-19 and considerations?

- Since we are moving forward with City-wide LPIs, there is nothing more that will need to be done. Because this helps achieve “Vision Zero” goals related to pedestrian safety, staff does not anticipate a need to undo these changes after things return to normal post COVID-19.

Pedestrian Recalls in lieu of Pedestrian Pushbuttons

Description

A pedestrian “recall” is a setting in a traffic signal controller that requires a pedestrian phase to be serviced every opportunity possible in the traffic signal’s defined sequence of operations. Some signalized intersections, such as those in the DDA, always operate with permanent pedestrian recalls. Other intersections, such as those on Plymouth Road, only service pedestrians when the pedestrian pushbutton is pushed.

What is being done amid COVID-19?

To minimize exposure of touching common surfaces (such as the pushbutton) and allow social distancing, pedestrian recalls have been installed at:

- Signalized intersections surrounding the University of Michigan’s medical campus
- Signalized intersections where direct requests have been made by community members.
- Signage is being developed and will be posted on signals that have pedestrian recalls in effect over the next two weeks. The signage is meant to communicate to pedestrians that they do not need to push the button for the walk signal.

What could be done amid COVID-19?

- City-wide pedestrian recalls
 - Considerations – Making this change City-wide would require a notable commitment from the Signs and Signals Team (which is currently operating a “skeleton crew”) as each intersection may require up to 8 signs. Additionally, it is unclear if pedestrian recalls at every intersection will be desirable once things return to normal post COVID-19, especially at congested intersections.
- Communications – the City could use social media or other paid advertising to remind the public that a bump from the elbow or knee can be used to activate the pushbutton.

Repurposing on-street parking

Description

The changes in travel patterns and modes have altered the demand for on-street parking, especially downtown. Because so many businesses and the University are closed, much of the demand for parking has shifted from all day parking to shorter term pick-up/drop-off parking.

What is being done amid COVID-19?

In mid-March, when the City shut down non-essential City services, the Downtown Development Authority initiated the following measures:

- Public garages and unmetered lots downtown became free.
- The DDA “bagged” some on-street parking meters and signed them as pick-up/drop-off to support local businesses, such as restaurants, that were still open. The DDA made changes and continues to make changes to which spaces are bagged after feedback from restaurants and downtown associations.

What could be done amid COVID-19?

The DDA has expressed they are a committed partner as we work to solve social distancing needs and provide safe access. The following measures could be considered when pedestrian traffic picks up downtown but there is still a need to maintain social distancing:

- On street parking spaces downtown could be blocked off to allow for wider sidewalks or ‘pedestrian passing zones’
 - Considerations – business needs for pick-up/drop-off will likely remain. There would also need to be some sort of communication campaign to let people know why the parking has been eliminated and how to properly use this space. Additionally, a metric would need to be identified as to when the parking should be restored back to its original configuration/operation. Lastly, there will likely be a cost to block off these spaces with cones, barrels or barricades (bagging alone would probably not achieve the desired outcome).

Alternative Pedestrian Phases

Description

A “scramble” or “Barnes Dance” allows all pedestrian movement, typically even a diagonal crossing, to occur at the same time. This style of pedestrian service is considered a safety improvement as all motorized traffic is stopped and right turns on red are typically prohibited.

What is being done amid COVID-19?

Staff is not considering pedestrian scrambles at this time because they may actually have an adverse effect on social distancing as they require longer wait times for pedestrians before they are served with the “walk” signal. Additionally, infrastructure changes (new signage, new pavement markings, physical modification to the signal and/or signal cabinet, and modified ramps) might be needed and could not be addressed in the short term. However, it should be noted that the signal operational study, which is currently underway, will evaluate pedestrian scrambles at four intersections along State Street.

What could be done amid COVID-19?

As things return to normal, pedestrian scrambles could be considered at high pedestrian crossing locations. These locations are most likely adjacent to or on the University of Michigan campus and the signal operational study will help evaluate the feasibility of this strategy.

Lane Closures/Road Closures and Open Streets

Description

Many communities across the country are closing lanes of travel or entire roadways to allow pedestrians to walk in the street and observe social distancing that may not be possible on the sidewalk alone. These “open streets” also can benefit bicyclists by providing a more comfortable riding experience and a safe riding buffer to achieve social distancing between other cyclists and pedestrians (note: cyclists might need a greater social distance buffer because they may be respirating harder than pedestrians and leaving a “microdrop wake” as they ride). The opportunity presents itself due to the decrease in traffic and vehicle miles traveled which is estimated to be down 50% to 75% in Washtenaw County.

What is being done amid COVID-19?

It is staff’s interpretation that [Resolution R19-139](#) which requires Council approval for lane reductions precludes staff from administratively advancing lane closures or road closures, even temporarily amid the COVID-19 pandemic. Additional requirements of this resolution for outreach and data analysis cannot be done amidst social distancing and drastically changed travel patterns. However, City staff and DDA staff are in discussions about process and locations if City Council directs City staff to implement such measures. This may include using public parking or otherwise flexing the street space to expand the sidewalk width to provide social distancing on streets.

What could be done amid COVID-19?

- A network approach to create “quick build” non-motorized facilities to accommodate increased mobility with social distancing once the shelter in place order is lifted is a possibility. These facilities could be created using temporary construction resources. A resident/business driven request process or tool could be developed that would help identify where there is support for such lane/road closures. Access to and around the downtown will likely become more critical as shelter in place orders are lifted, but social distancing requirements remain to protect public safety and/or to provide public

comfort and confidence. Temporary changes to sidewalk and bike lane widths may be needed.

- Considerations – Special care will be needed to maintain business access during lane/road closures. A request process would have to be set up electronically (like an online survey or crowd sourcing tool) so that people do not need to gather signatures physically. Communications would have to go out to the public explaining the purpose of the closure. A threshold would have to be agreed upon as to when enough support is received for the closure. Additionally, a metric would need to be identified as to when the street should be restored back to its original configuration/operation. Lastly, there will likely be a cost to block off these lanes/roads with cones, barrels or barricades.

I hope you find this memo helpful in the identification of what is currently being done and what could be done in the transportation realm during the COVID-19 pandemic. I'll await further direction on whether some of the potential ('could be done') measures should be pursued further.

cc: N Hutchinson