



WV 705 and Maple Drive Intersection Area Pedestrian Safety Study

January, 2024

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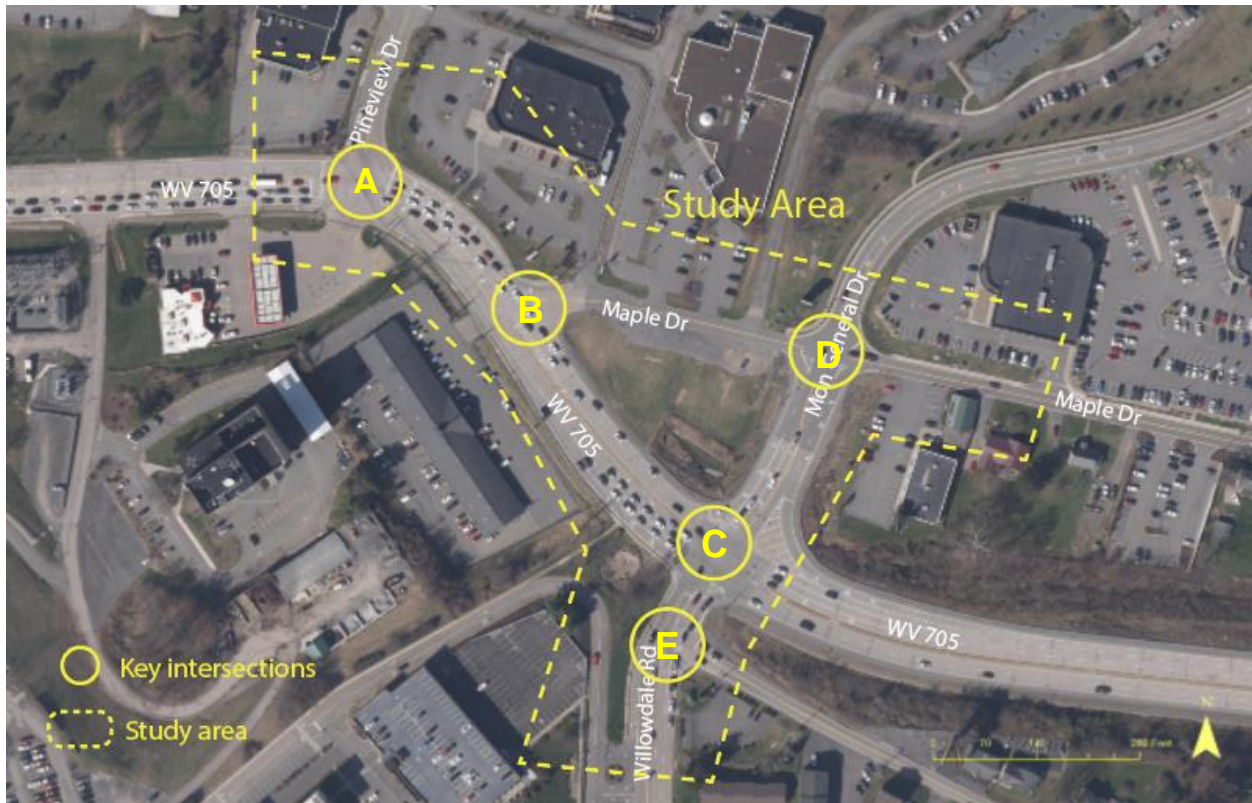
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Introduction

The purpose of this study is to document pedestrian traffic and identify potential pedestrian safety issues in the WV 705 and Maple Dr/Mon General Dr/Willowdale Rd intersection area. Additionally, the study also makes preliminary recommendations based on the findings in the study area. The study was initiated in response to a request from a member of the MPO's Citizens Advisory Committee (CAC) who had noticed safety concerns related to pedestrians crossing WV 705 near the Maple Drive intersection.

Study Area

Segment	Intersection
WV 705 from Pineview Dr to Mon General Dr Maple Dr from WV 705 to Mon General Dr (Oasis Cafe)	A.) WV 705 and Pineview Dr intersection B.) WV 705 and Maple Dr intersection C.) WV 705 and Mon General Dr D.) Maple Dr and Mon General Dr intersection E.) Willowdale Rd and Chestnut Ridge Rd

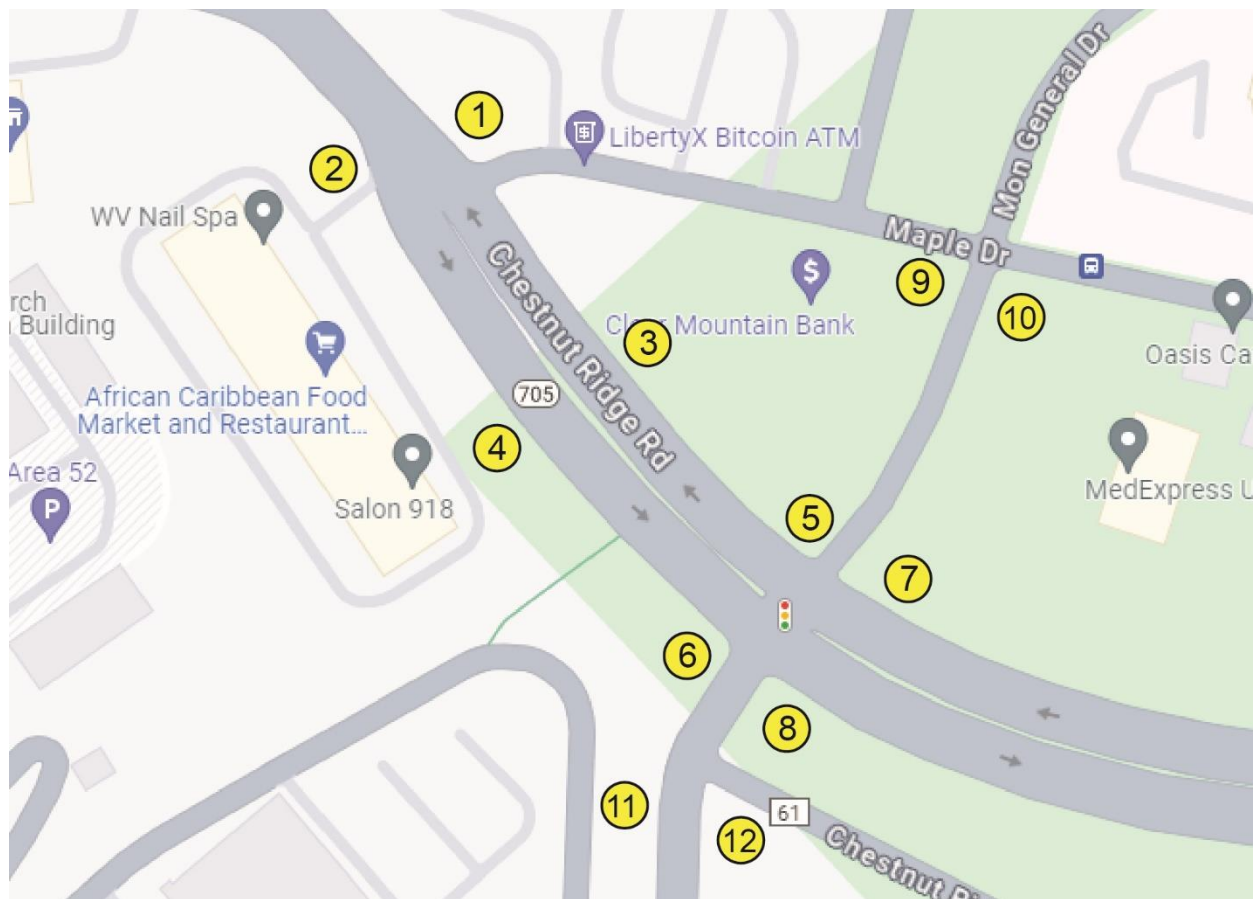


Data Collection

Pedestrian Traffic

MPO Staff collected data from September 12th through 13th from 9am – 12pm, and 12pm – 4:30pm. Refer to Figure 1 below for locations where data was collected. On September 12th, Staff observed where pedestrians crossed the road at areas 9, 10, 5, 7, 6, 8, 11, and 12. On September 13th, Staff observed where pedestrians crossed the road at areas 2, 1, 4, and 3.

Figure 1



Pedestrian Activity

Table 1

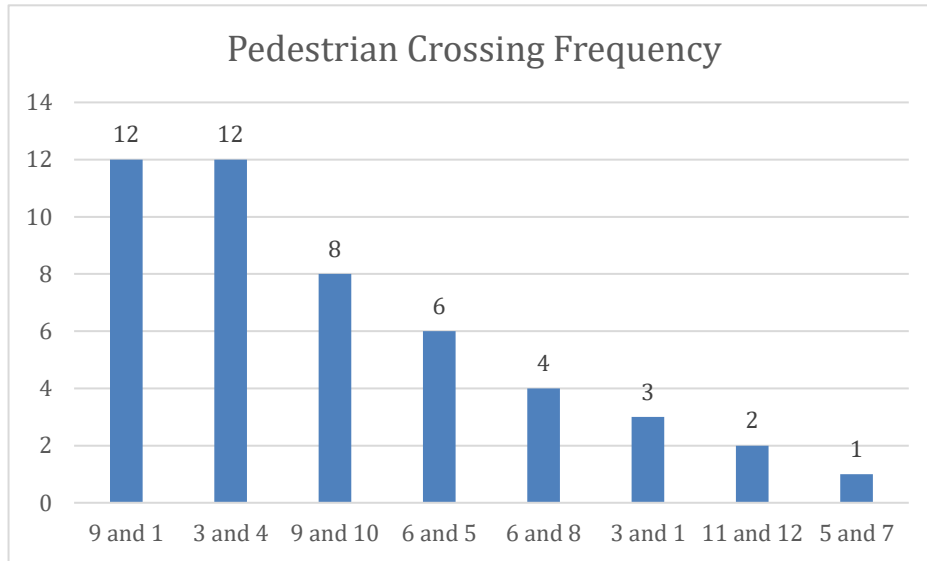
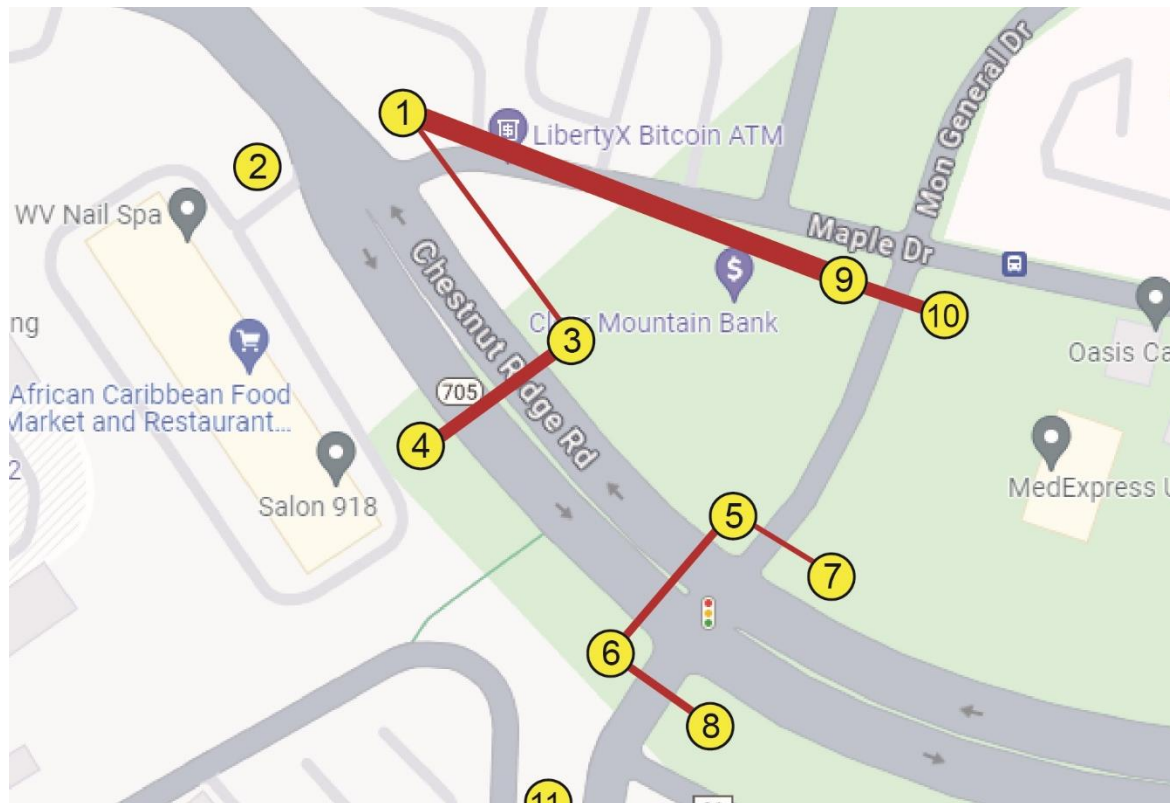


Table 1 illustrates the frequency of pedestrian crossings observed by MPO Staff at specific locations. For instance, between points 9 and 1, Staff identified 12 pedestrian crossings.

In Table 2, the thickness of the lines corresponds to the volume of pedestrian traffic, mirroring the data presented in Table 1.

Table 2



Crashes Involving Non-motorists

To enhance the study, crashes involving non-motorists are listed below. This data is significant in showing the dangers pedestrians face when navigating this intersection. Based on WV DOH crash data from 2018 to 2022, there were two crashes involving non-motorists in the study area. Both crashes caused injuries and they both happened during the day time.

Crash Location	Frequency
WV 705 and Maple Dr Intersection	1
WV 705 and Pineview Dr Intersection	1

Transit Users

Staff also included data on transit users in the area to identify regularly occurring pedestrian traffic. Based on 2023 September passenger data provided by Mountain Line Transit Authority, MPO staff identified the following:

- There were a total of 55 boardings or alightings in the study area for the days observed in the study area, ranging from 1 to 8 boardings or alightings for any day and averaging 5 boardings or disembarks per day for those days.
- The time of boardings and alightings are nearly evenly split in the morning and afternoon.
- The following map shows the locations of boarding and alightings in the study area.



Identified Issues

Background of Area

This location is a heavily traveled area, with many people running and walking. Many pedestrians walk from apartment complexes to stores and the medical facilities in the area. The heavy flow of west bound vehicular traffic on 705 has limited visibility at the pedestrian crossings combined with a high-speed limit westbound (40 mph), presenting a potentially dangerous situation for pedestrians as there is only one concurrent crosswalk in the area, and it is not convenient for the majority of potential users, as our data collection shows.

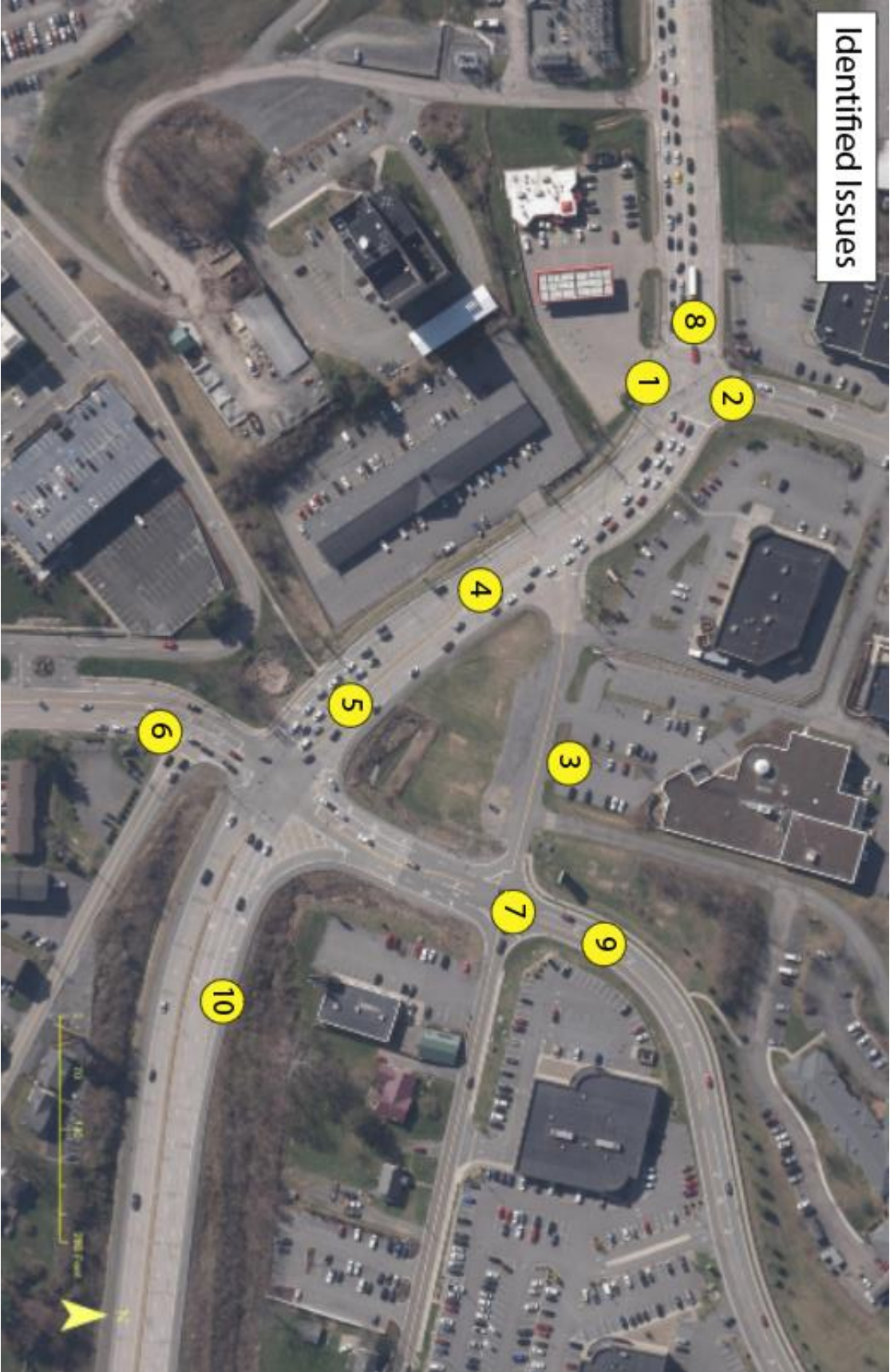
Based on the data collected by staff, we identified eight (8) major issues in the area, listed below. Many of these include areas where pedestrians are crossing heavy traffic areas without any facilities.

Location ID (Map on the next page)	Location Description	Issue
1	Driveway to Sheetz Gas Station	No crosswalk or pedestrian signal. A significant volume of pedestrians was observed utilizing the sidewalk on the south side of WV 705, which include crossing at this location.
2	The segment of Pineview Drive at the intersection with WV 705 and Pineview Drive.	No crosswalk or pedestrian signal, however there were sidewalks on both sides of the segment.
3	Maple Dr	Sidewalk disconnected on Maple Dr between WV 705/Maple Dr intersection and Maple Dr/Mon General Dr intersection.
4*	WV 705 near Maple Dr intersection	Pedestrian crossing without crosswalk in high traffic volume location.
5*	WV 705 near Mon General Dr intersection	Pedestrian crossing without crosswalk in high traffic volume location.
6	Willowdale Rd	Pedestrian crossing without crosswalk.
7	The north Mon General Dr leg at Mon General Dr/Maple Dr intersection	Pedestrian crossing without crosswalk.

8	The east WV 705 leg at WV 705/Pineview Dr intersection	At intersections with concurrent pedestrian and vehicle signals, an issue was identified wherein vehicles consistently fail to yield the right of way to pedestrians crossing.
9	North Mon General Dr	Observed speeding.
10	WV 705	Observed speeding.

*A CAC member stated they felt safer crossing at these locations when the cars are stopped than at the crosswalk near Sheetz.

Identified Issues



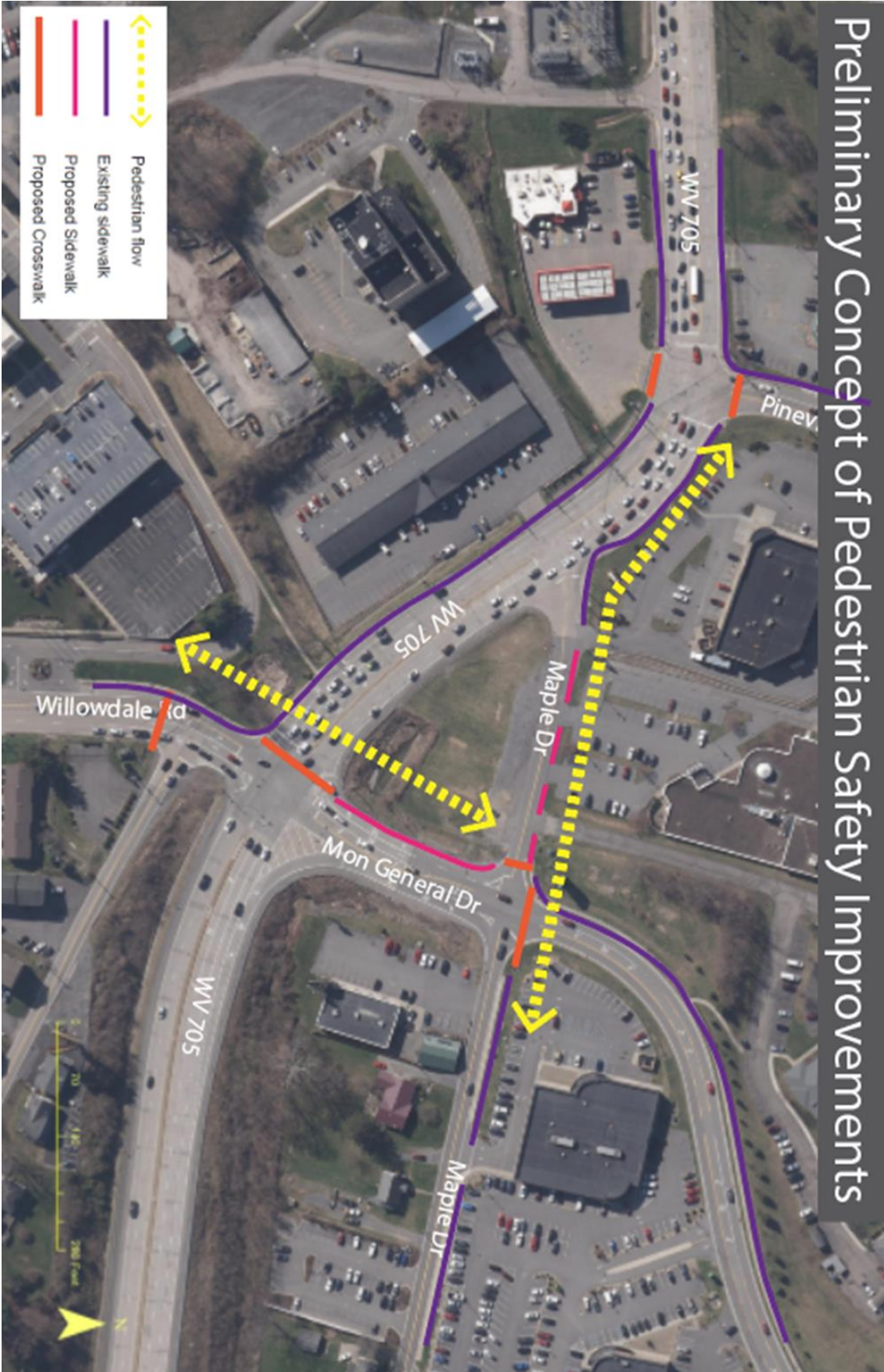
Preliminary Recommendations

MPO Staff analyzed the collected data, crashes involving non-motorists, transit users, and identified issues and reviewed this information with the TTAC and CAC boards. Based on staff's analysis and input from the TTAC and CAC, a list of preliminary recommendations to improve the safety of the area was created. This is listed below.

Location ID (Map on the next page)	Location Description	Improvements
1	Driveway to Sheetz Gas Station	Install crosswalk. Install pedestrian signal and use concurrent pedestrian signal timing with a pedestrian leading phase.
2	The segment of Pineview Drive at the intersection with WV 705 and Pineview Drive.	Install crosswalk with ramps connecting the sidewalks on both sides of Pineview Dr. Install pedestrian activated signal and use concurrent pedestrian signal timing with a pedestrian leading phase.
3	The east WV 705 leg at WV 705/Pineview Dr intersection	Modify pedestrian signal with a pedestrian leading phase.
4	Maple Dr	Construct sidewalk on Maple Dr from WV 705/Maple Dr intersection to Maple Dr/Mon General Dr intersection.
5	The north Mon General Dr leg at Mon General Dr/Maple Dr intersection	Install crosswalk, include traffic calming measures, and add pedestrian warning signs for oncoming traffic.
6	The west Maple Dr leg at Mon General Dr/Maple Dr intersection	Install crosswalk, include traffic calming measures, and add pedestrian warning signs for oncoming traffic.

7	Mon General Dr	Construct sidewalk on the west side of Mon General Dr from the Maple intersection to the WV 705 intersection.
8	WV 705	Install crosswalk. Install on-demand (push button) pedestrian signal and use pedestrian exclusive timing. Tighten turning radius to slow down the speed of turning vehicles.
9	Willowdale Dr	Install pedestrian crossing warning sign. For the long term, install sidewalk on Chestnut Ridge and crosswalk on Willowdale connecting the sidewalk.
10	Bus shelters	<p>Install sister shelters at the steps to Mon Health on Maple Dr. Additional sister shelters are recommended on Maple Dr near its intersection with Poultry Farm Rd, along with stairs to the commercial development on Donahue Dr.</p> <p>(Mountain Lines has identified in their Shelter Plan that resources and funds are available to install the shelters. Permission from the property owner to use the space is needed.)</p>

Preliminary Concept of Pedestrian Safety Improvements



Preliminary Recommendations

