

MEMORANDUM

- TO: Mayor and City Council
- FROM: Tom Crawford, Interim City Administrator
- DATE: October 5, 2020
- SUBJECT: Response to Council Resolution R-20-225 Resolution Directing Evaluation of City Pedestrian and Cycling Transportation Environment by a Professional Engineer with Vision Zero Expertise

This memorandum and attached report are provided in response to approved City Council <u>Resolution R-20-225</u> – Resolution Directing Evaluation of City Pedestrian and Cycling Transportation Environment by a Professional Engineer with Vision Zero Expertise. Specifically, City Council directed the City Administrator to engage with Sam Schwartz, a PE with Vision Zero expertise, to review a sample of the city's pedestrian crossings, including, but not limited to various facility components utilized across varied geographic installations, related to city ordinances and educational communications, and interdependencies, such as, unlit crosswalks and the crosswalk ordinance. The purpose of the evaluation is to identify deficiencies and opportunities to significantly decrease our pedestrian and cyclist crash rate.

Attached to this memo is the draft report produced by the Sam Schwartz consulting team. Staff is currently reviewing the report and its findings, but wanted to share it with City Council as soon as possible. Any comments, questions, or concerns about the report can be shared with staff.

Attachments: Pedestrian & Bicycle Infrastructure Review

cc: J Fournier R Hess S Higgins C Hupy N Hutchinson E Cooper Sam Schwartz 223 W. Jackson Blvd., Suite 1101 Chicago, IL 60606 (773) 305-0800 samschwartz.com

Sam Schwartz

Memorandum

To: Eli Cooper, AICP – City of Ann Arbor
From: Sam Schwartz Consulting
Date: October 1, 2020
Re: Pedestrian & Bicycle Infrastructure Review

Ann Arbor's crosswalk ordinance mandates drivers to stop for pedestrians standing at the curb or within a crosswalk. Even so, tragically 44 percent of all crashes where a person walking was killed or seriously injured from 2014-2018 were a result of the driver failing to yield. In 2017, the crosswalk ordinance was reviewed in a memorandum by Toole Design Group, finding the ordinance to be "within the range of regional variation in norms and practices and consistent with driver instruction in Michigan."

In 2019, the city published Crosswalk Design Guidelines outlining design options for different types of crossing locations and establishing a transparent process to choose the level of design for a crosswalk. Overall, the guidelines provide an organized and clear approach for determining a crossing's design features and gives careful consideration for school crossings. Our review indicates that the guidelines present a thorough set of crosswalk treatments; however, opportunities exists to update the guidance as new research and device approvals have emerged.

To identify the design options for a selected crosswalk location, the guidelines follow a decision tree to determine whether the location requires (1) standard, (2) standard+, or (3) high-risk design applications. The various treatments are organized into separate matrices for controlled and uncontrolled design options. Uncontrolled design options, which is the focus of this review, follow a fairly intricate selection process. In addition to vehicular volume, the process is informed by the National Cooperative Highway Research Program (NCHRP) Report 562 five-step worksheet. The worksheet considers various data inputs including pedestrian volume, crossing distance, walking speed, vehicle speed, etc. to estimate pedestrian delay and to determine if a signal warrant is met. Ultimately, the pedestrian delay and expected compliance guides the design designation.

While the NCHRP Report considers school locations, the five-step worksheet does not apply to school crossings. The guidelines give special consideration for crosswalks adjacent to a school or designated walking route and qualifies the design option to apply the next level (e.g. a standard+ crosswalk would become high-risk).

Sam Schwartz compared Ann Arbor's existing Crosswalk Design Guidelines to relevant standards and guidance in the National Association of City Transportation Officials (NACTO) *Urban Street Design Guide* and the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD) *2011*. It is evident these standards and guidance were all consulted in the creation of the recent Crosswalk Design Guidelines. Organized by controlled and uncontrolled crossings, NACTO guidance applies treatments given vehicle volume, vehicle speed, and street width with special considerations for schools, parks, senior centers, transit stops, hospitals, campuses, and major public buildings. While similar to NACTO's toolbox of treatments, Ann Arbor's design categories are more straightforward in prioritizing safety.

Sam Schwartz also compared the existing Crosswalk Design Guidelines to the Federal Highway Administration (FHWA) *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* which post-dates the original authoring of the design guidelines. In FHWA guidance, crosswalk treatments are determined by roadway characteristics (vehicle volume, posted speed limit, and lane configuration) and, separately, by safety issues. Crash history and typical dangerous driving behaviors help inform safety measures. FHWA provides additional guidance about the effectiveness of Pedestrian Hybrid Beacons and Rectangular Rapid Flashing Beacons along with the interaction with other crosswalk treatments. The FHWA guidance links tools to the MUTCD standards, describing considerations such as minimum widths or thresholds. Overall, the Crosswalk Design Guidelines fall within FHWA guidance and, like FHWA, Ann Arbor's guidance identifies signage with their MUTCD designation.

Reviewed Standards and Guidance:

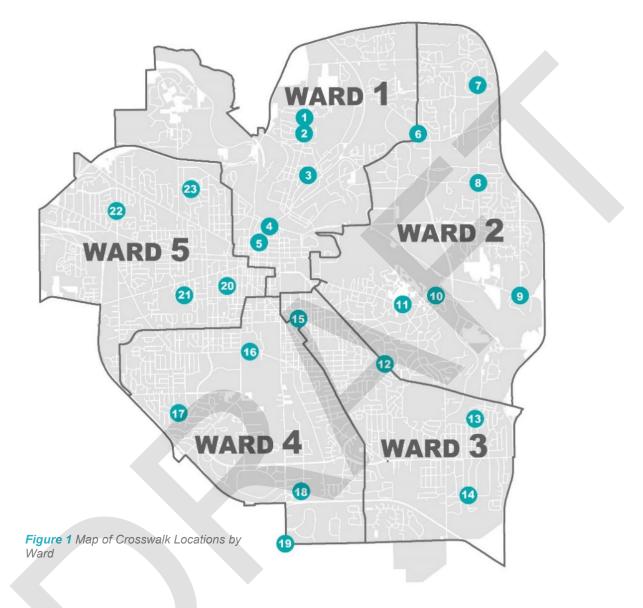
- 2019 <u>Ann Arbor Crosswalk Design Guidelines</u>
- 2013 National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- 2006 National Cooperative Highway Research Program (NCHRP) Report 562
- 2018 Federal Highway Administration (FHWA) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations
- 2011 <u>Manual of Uniform Traffic Control Devices (MUTCD)</u>, 2011 Michigan MUTCD, 2009 Federal <u>Edition</u>
- 2016 <u>Michigan Department of Transportation (MDOT)</u> User guide for R1-6 Gateway Treatment for <u>Pedestrian Crossings</u>
- 2020 MDOT Guidance for Installation of Pedestrian Crosswalks on Michigan State Trunkline <u>Highways</u>
- 2005 FHWA Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations
- 2004 (2010 Update) <u>American Association of State Highway Transportation Officials (AASHTO)</u> <u>Guide for the Planning, Design, and Operations of Pedestrian Facilities</u>

Data Collection

Based on a guideline review and using responses from the city's Pedestrian Crossing Survey from the beginning of 2020, Sam Schwartz identified an initial list of uncontrolled crosswalk locations for data collection. Those locations were reviewed and expanded upon by councilmembers. In a meeting with councilmembers, additional crosswalk locations were recommended for field review. Ultimately, a list of 23 crosswalk locations were identified for review, none controlled by a stop sign or signal. The selected crosswalks are shown in Figure 1 and included a variety of midblock crossings, school crossings, and/or along bike routes that make up a geographically diverse and representative sample of the existing pedestrian and bicycle network throughout the city. Additionally, the selected crosswalks are located on a variety of street types including local, collector, minor and principal arterials.

#	Crosswalk Location	Туре	Bus Stop	Bike Facility	School
1	Pontiac Trail south of Arrowwood Trail	Uncontrolled			
2	Pontiac Trail & Brookside Drive	Uncontrolled		Ø	
3	Traver Road south of John A Woods Avenue	Uncontrolled			
4	Broadway Street/ Division Street west of Broadway Bridge	Uncontrolled			
5	Fifth Avenue along Community High School	Uncontrolled			V
6	Nixon Road north of Plymouth Road	Uncontrolled	V	Ø	
7	Green Road & Burbank Drive (north of Plymouth)	Uncontrolled	V		
8	Green Road & Hubbard Road	Uncontrolled		V	
9	Geddes Road & Earhart Road	Roundabout			
10	Geddes Ave near Gallup Park pathway	Uncontrolled		V	
11	Geddes Avenue & Arlington Boulevard	Uncontrolled			
12	Washtenaw Avenue north of Stadium Boulevard	Uncontrolled			
13	Pittsfield Boulevard & Jeanne Avenue	Roundabout			
14	Fernwood Avenue & Lorraine Street	Uncontrolled			V
15	Tappan Avenue & Oakland Avenue	Uncontrolled	Ø		V
16	Stadium Boulevard between Kipke Drive & Main Street	Uncontrolled			
17	Delaware Drive between Mershon Drive & 7th Street	Uncontrolled			
18	Victors Way & Boardwalk Drive	Uncontrolled		\square	
19	State Street and Ellsworth Road	Roundabout			
20	Jefferson Street & Third Street	Uncontrolled			
21	Soule Boulevard & Lutz Avenue	Uncontrolled			
22	Maple Road & Haisley Drive	Uncontrolled	N	Ø	
23	Vesper Road & Red Oak Road	Uncontrolled			

Table 1. Crosswalk Locations for Field Data Collection



Key Findings

On September 17, 2020, a Sam Schwartz staff member visited each of the 23 identified crosswalk locations to collect information using the data collection forms contained in the Appendix A and took photographs. All field observations were conducted during daylight hours.

Of the 23 crosswalk locations, 20 were uncontrolled and three were at roundabouts (a single approach was observed at each roundabout). Nine crosswalk locations were adjacent to bus stops. Five locations were adjacent to schools with an additional five locations within two blocks of a school. Twelve crosswalks intersected a bike facility. Table 2 summarizes the crosswalk devices inventoried in the field by street type.

Street Type	#	High Visibility Markings	Adv. Ped Warning Series	Adv. School Warning Series	Ped Warning Series	School Warning Series	Bright Sides	In Lane Signs	Stop Bar	Stop Here for Ped	Over- head	RRFB	Ped Refuge Island	Curb Ext.
Local (2 lanes)	8	6*	0	3	0	3	0	0	0	0	0	0	1	0
Collector (2- 3 lanes)	4	2*	1	0	2	0	2	1	0	0	0	2	0	0
Minor/ Major 2 Lanes	6	6	2	0	2	0	1	3	0	1	1	1	2	2
Minor/ Major <u>></u> 3 Lanes	5	5	1	0	3	0	1	2	2	3	0	3	2	0
Total	23	18	4	3	7	3	4	6	2	4	1	6	5	2

Table 2. Summary of Crosswalk Devices by Street Type

*One crosswalk is under construction

Based on the information collected in the field, several key findings were identified and summarized below.

1. Crosswalk pavement markings are consistent and in good condition.

The majority (87%) of the crosswalks were marked. One crosswalk was unmarked (Vesper Road & Red Oak Road) and two were part of a resurfacing or restriping project during the Sam Schwartz field visit. Of the marked crosswalks, 95% had high-visibility pavement markings, and nearly all displayed the continental design, as shown in *Figure 2*. One crosswalk had parallel striping (Pittsfield Boulevard & Jeanne Avenue). Overall, the pavement markings were in good condition. Only one location had faded pavement markings (Broadway Street/ Division Street west of Broadway Bridge).



Figure 2 This crosswalk at Green Road and Burbank Road applies high-visibility continental pavement markings.

2. Basic crosswalk signage meets minimum engineering standards. In some locations, the minimum standards are exceeded with optional applications used.

Over half of the observed crosswalks (61%) included signage designated in the Guidelines. All crosswalks without signage were located on low-speed (25 MPH) local, collector, or minor arterial streets, or on a street under construction. 56% of the unsigned crosswalks were on local streets, and 22% on minor arterials and 22% on collector streets. The unsigned crosswalks aligned with "Standard" design option in the Guidelines.

Pedestrian Warning Series (W11-2) and In-Lane Signs (R1-6a) were the most common signage application. It was noted in the field that the in-lane signs at both the centerline and lane lanes appeared to be particularly effective at calming traffic by creating a sense of narrow travel lanes, encouraging drivers to slow down. There was some inconsistency in the application of in-lane signs and observations show the location, placement, and number of signs varied by location (see *Figures 3* and *4*).



Figure 3 The crosswalk at Pontiac Trail south of Arrowwood Trail has four in-lane pedestrian signs.



Figure 4 The crosswalk at Broadway and Division includes one in-lane pedestrian sign in the street and one on the island to the left.

Of the crosswalks with signs, 50% included advanced pedestrian or school warning signs. Four of the seven pedestrian warning series signs included advanced warning signs. School warning series (S1-1) signs were present at two of the five observed crosswalks adjacent to schools and one of the five observed crosswalks within two blocks of a school. All the observed school warning series signs had advanced warning signs. As advanced warning signs are considered optional by MUTCD, the city's application meets standards. However, FHWA best practice guidance recommends the use of advance signage in conjunction with warning signs, particularly at locations where drivers may not be expecting a crosswalk.

Of the observed crosswalks, the Stop Here for Pedestrians sign was applied four times, and only once in conjunction with a stop bar. These crosswalks without a stop bar are inconsistent with the city's Guidelines which call for a Stop Here for Pedestrian (R1-5b) sign to be used with a stop bar. Additionally, there appear to be several other crossings where this signage would be beneficial given FHWA's strongly worded guidance for crossings on roads with four or more lanes and/or roads with speed limits of 35 mph or greater.



Figure 5 A temporary, non-MUTCD sign at Vesper Road and Red Oak Road. This suggests a desire for appropriate MUTCD signage at some uncontrolled crossing locations.



Figure 6 A yellow school warning series sign at Delaware Drive between Mershon Drive and 7th Street. While the yellow color is permitted on MUTCD signage, school warning signs shall have a fluorescent yellowgreen background.

3. Several locations would benefit from additional or more consistent best practice countermeasure treatments, particularly for multi-lane roadways.

About a quarter of the observed crosswalk locations (26%) have a RRFB, including one school location (Tappan Middle School). The RRFBs were located on collector, minor arterials, and major arterial streets with varying speed limits. In the Crosswalk Design Guidelines, RRFBs are not listed as a recommendation for collector street types and may be an appropriate addition to the street type's design options.

Of the six locations with RRFBs, only one location had a pedestrian refuge island. While pedestrian refuge islands are a desirable crosswalk tool, RRFBs can serve as useful devices on four lane roads without islands where the posted speed limit is 30 MPH or less and average daily traffic (ADT) volume is 9,000 vehicles per day or less. Based on FHWA guidance, however, there are a few locations where an RRFB may not be sufficient. This includes streets with a posted speed limit of 40 MPH or more and ADTs exceeding 15,000 vehicles per day. An example may include the crosswalk on Washtenaw Avenue near Tappan Middle School where the speed limit is 45 MPH with a 30 MPH school zone during specific times (see *Figure 7*). In cases such as this, the FHWA recommends the use of a Pedestrian Hybrid Beacon, along with other crosswalk devices (e.g. Stop Here For Pedestrians sign and corresponding stop bar).

In the Guidelines, Pedestrian Hybrid Beacons (PHB) and RRFBs are recommended in "high-risk" locations on minor and major arterials. There were no observed PHBs during the field observations. During field observations, it appeared the prevailing speed of traffic was higher than the speed limit at some of the locations with RRFBs, particularly at locations with a speed limit of 35 MPH and over – although, official speed data was not collected. PHBs may be more appropriate at higher speed/volume locations to better alert traffic to stop.

Rather than categorizing by functional classification—which only serves as a proxy for key characteristics of the crossing, the FHWA provide guidance on crosswalk devices based on speed limit, lane count, and traffic volume. For example, RRFBs and PHBs are considered at all uncontrolled crosswalk locations except two lane roads \leq 30 mph and < 15,000 ADT *or* three lane roads with a raised median, \leq 30 MPH, and < 9,000 ADT. It would be beneficial to organize the suite of crosswalk devices based on speed and traffic volume rather than functional classification.



Figure 7 Near Tappan Middle School, crosswalk, with an RRFB, crosses four lanes of traffic with a 45 MPH speed limit with a 30 MPH school zone from 7:30 – 8:20 AM and 3:05 – 3:35 PM

4. Approximately one-third of the crosswalks had no adjacent lighting.

The presence/proximity of lighting was assessed during the daytime crosswalk observations. Per FHWA guidance, lighting within ten feet of the crosswalk markings is considered 'at the crosswalk'. Lighting between 10 to 20 feet is identified as 'adjacent to the crosswalk'. Crosswalks with lighting more than 20 feet away were considered to have no adjacent lighting. Nearly three-quarters of the crosswalks had lighting at or adjacent to the sidewalk; 52% of the lit crosswalks had lighting at the crosswalk and 48% had adjacent lighting. About a quarter of the crosswalks had no adjacent lighting. Of the crosswalks with no adjacent lighting, most were on local streets with lower traffic volumes. The midblock crosswalk at Pontiac Trail south of Arrowwood Trail, a minor arterial, was the only observed non-local street to have no adjacent lighting.

Table 3.		
Location of Lighting	#	%
At Crosswalk (<10 feet)	9	39%
Adjacent Lighting (10-20 feet)	8	35%
No Adjacent Lighting (>20 feet)	6	26%

The guidelines note street lighting is considered by Street Light Asset Management Team (SLAM). The guidelines acknowledge that collector, minor, and major arterial streets will contain positive contrast lighting, further guidance for street lighting at crosswalks is contained in Ann Arbor's engineering standards (<u>Orange Book</u>) and is currently being updated. NACTO and FHWA provide specific guidance for street lighting at crosswalks which the updated standards will reference. For example, FHWA recommends lighting to be placed within 10 to 15 feet in front of mid-block crosswalks in each direction of travel.



Figure 8 The light at Pontiac Trail south of Arrowwood Trail sits 60 feet away from the crosswalk.



Figure 9 The crosswalk on Geddes Avenue at Gallup Path includes lighting at the crosswalk on both sides.

Recommendations

- The FHWA publication provides an opportunity for Ann Arbor to update its guidance and enhance best practice applications. To codify what was observed in practice in many cases, the following recommendations were identified to inform the potential revision of, or inclusion in, the city's Crosswalk and Design Guidelines and/or related engineering design standards (such as Ann Arbor's Orange Book).
 - While Ann Arbor's Guidelines consider traffic volume and vehicular speed in the design process, updates should consider adopting FHWA methodology of organizing the suite of crosswalk devices based on roadway characteristics (speed, traffic volume, lane configuration) rather than functional classification.
 - In addition to school designations, special considerations should be expanded to include bus stops, parks, community centers, senior facilities, side paths/ trail crossings, and areas with higher transportation equity needs as candidates for "standard+" and/or "high risk" locations.
 - o Set the minimum standard for high-visibility continental pavement markings.
 - Updates should reference specific guidance from NACTO and FHWA for lighting to be placed within 10 to 15 feet in front of mid-block crosswalks in each direction of travels.
 - Guidelines for Pedestrian Hybrid Beacons and Rectangular Rapid Flashing Beacons should be updated to reflect current FHWA guidance.
- Follow consistency in the application of lighting, selected signage and countermeasure device treatments.
 - Consistent application of in-lane pedestrian signs and advanced pedestrian warning signage.
 - Use Stop Here for Pedestrians signs in conjunction with stop bars.
 - Continue to coordinate with the SLAM team to review lighting placement at uncontrolled crossings
- Ann Arbor should continue to educate drivers on the local crosswalk ordinance and support the institutionalization of stopping for pedestrians at a crosswalk. The city should continue and expand the A2 Be Safe Campaign, ensuring the campaign is shared with other agencies to reinforce consistent messaging and amplify the A2 Be Safe efforts.

Appendix

- A. FHWA Crosswalk Application Guidance Chart
- B. Blank Data Collection Form
- C. Select Crosswalk Devices by Street Type
- D. Completed Field Observation Forms (PDF)
- E. Completed Field Observations Data (Excel)

Appendix A | FHWA Crosswalk Application Guidance Chart

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(1 lane in each direction)	4	5	6	7	5	6 9	0	5	6 9	4	5	6	7	5	6	0	5	6 0	4	5	6 9	7	5	6 9		5	6 0
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3 lanes w/o raised median	0	2	3	7		9 8	0		0 0	7		9 3	0	_	0 6		_	0 8	7		9 6	0		0 0	1		0 0
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two-way left-turn lane)	7		9	7		9		_	0	7		9	0		0		_	0	7		9			0			0
4+ lanes with raised median	0	5	8	0	5	3	1	5	3	0	5	8	1	5	8	1	5	8	1	5	8	1	5	8	1	5	0
(2 or more lanes in each direction)	7	8	9	7	8	9		8	0	7	8	9	0	-	0		8	Ø	0	8	0		8	0		8	0
4+ lanes w/o raised median	0		0	1		8	1		8	1		8	-		_	1		-	1		8	1		0	1		0
(2 or more lanes in each direction)	7	5 8	6	7	5 8	0		5 8	6 0	7	5 8	0 9			0		5 8	0		5 8	0		5 8	0 0		5 8	0
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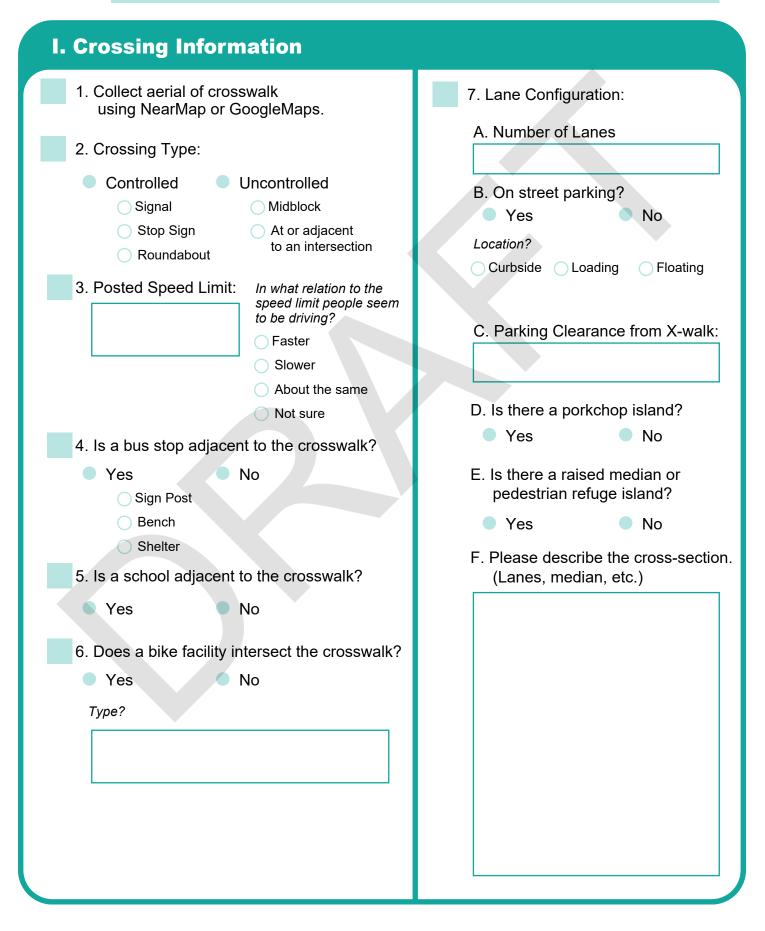
Table 1. Application of pedestrian crash countermeasures by roadway feature.

Source: FHWA. (2018, July). *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*.

https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_L_ oc_3-2018_07_17-508compliant.pdf

Please complete the following information about the crossing location.

Location:



Location:		
Time:	Date:	Weather:
1. Paven Unm	Data Observation nent Markings narked crosswalk ked Crosswalk Faded Parallel (or traditional)	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present
a locatior	High-visibility (continental, landstonal) stop bar present at the cross for cars to stop? What is the the crosswalk?	ader, or zebra) ADA ramp/ detectable warning ing indicating Sidewalk connection
Advand	ge & Signals ced Signage (within 200 ning Series Signage Pedestrian warning series School warning series	 At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft) No adjacent lighting Is lighting human-scaled? Yes
 Bright In St 	sswalk ning Series Signage Pedestrian warning series School warning series nt sides or post reflectors treet Stop for Pedestrian ber of Signs and Location:	No Draw placement and measure distance from crosswalk.
 Stop Over Sign 	s on island here for pedestrian rhead mounted "local law als? Associated Push-Bu Pedestrian Hybrid Beacon Rectangular Rapid Flashing er signage:	utton? 5. Photos

III. Field Data Additional Notes

When approaching or leaving the site, take note of the crosswalk as you drive through. Are there visibility concerns?

Notes:

Pedestrian & Bicycle Infrastructure Review October 1, 2020

Sam Schwartz

Appendix C | Select Crosswalk Devices by Street Type

					Loca	al Streets									
Location	Crosswalk Type	Pavement Markings	Type of Markings	Adv. Ped Warning Series	Adv. School Warning Series	Ped Warning Series	School Warning Series	Bright Sides	In Lane Signs	Stop Bar	Stop Here for Ped	Over- head	RRFB	Ped Refuge Island	Curb Ext.
Traver Rd South of John A Woods	Uncontrolled	Marked	High Visibility												
Tappan Ave and Oakland Ave	Uncontrolled	Marked	High Visibility												
Fernwood Ave and Lorraine St	Uncontrolled	Marked	High Visibility		1		1								
Delaware between Mershon and 24th	Uncontrolled	Marked	High Visibility		1		1								
Vesper and Red Oak	Uncontrolled	Unmarked												1	
Jefferson and 3rd	Uncontrolled	Marked	High Visibility												
Soule and Lutz	Uncontrolled	Marked	High Visibility		1		1								
Victors Way and Boardwalk Drive	Uncontrolled	Under Construction	Under Construction												
Total			6	0	3	0	3	0	0	0	0	0	0	1	0

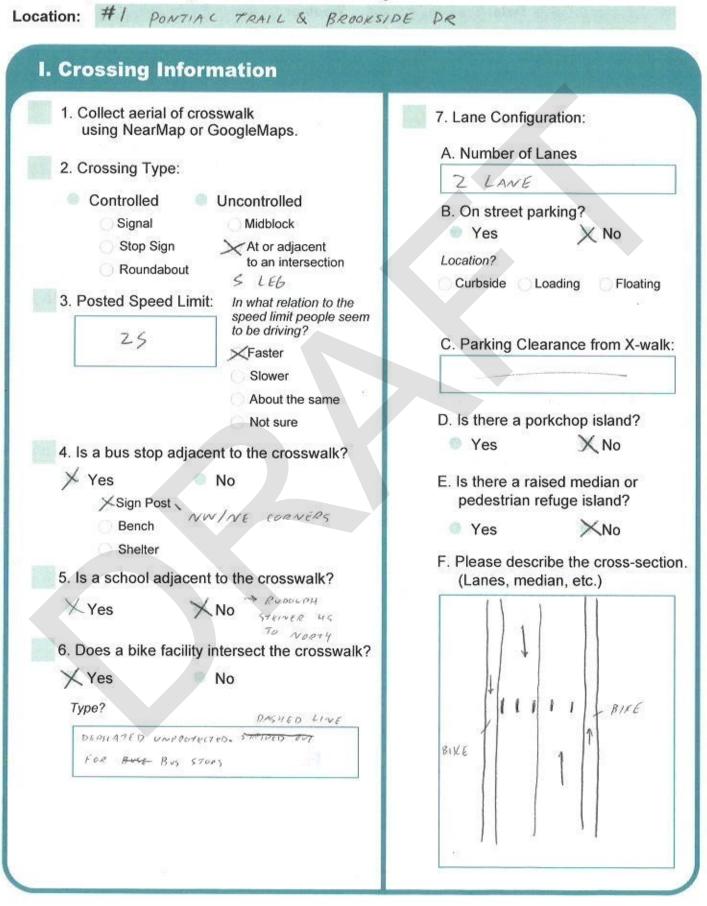
					Collec	ctor Stree	ets								
Location	Crosswalk Type	Pavement Markings	Type of Markings	Adv. Ped Warning Series	Adv. School Warning Series	Ped Warning Series	School Warning Series	Bright Sides	In Lane Signs	Stop Bar	Stop Here for Ped	Over- head	RRFB	Ped. Refuge Island	Curb Ext.
Green and Hubbard	Uncontrolled	Under Construction	Under Construction												
Green and Burbank	Uncontrolled	Marked	High Visibility	1		1		1	1				1		
Nixon North of Plymouth	Uncontrolled	Marked	High Visibility			1		1					1		
Pittsfield and Jeanne	Roundabout	Marked	Parallel												
Total				1	0	2	0	2	1	0	0	0	2	0	0

Sam

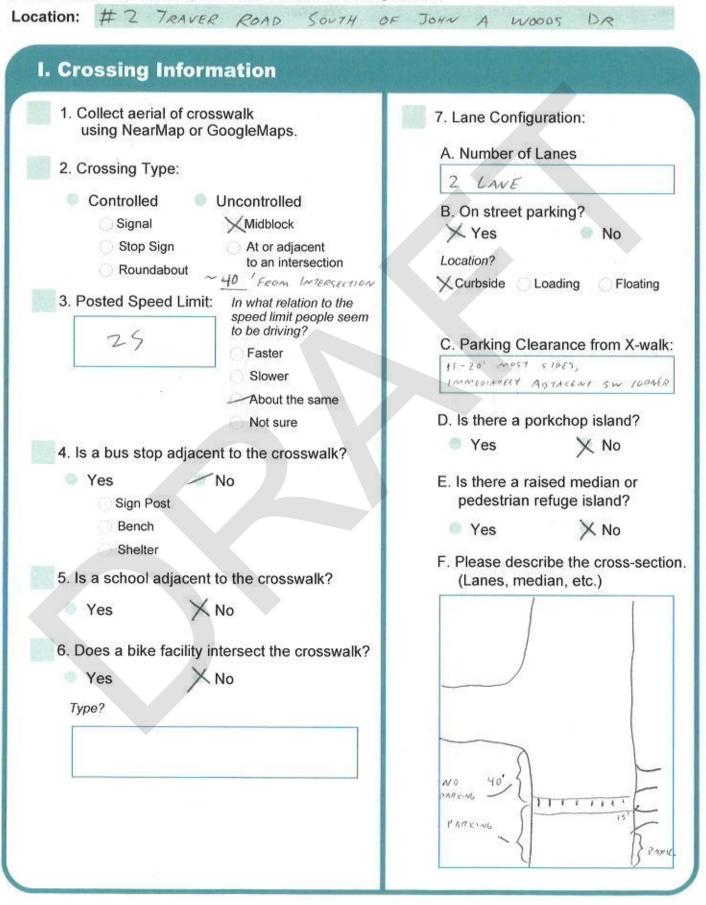
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Gros				Adv. Ped	Adv. School	Deal	0								
Location Type		Pavement Markings	Type of Markings	Warning Series	Warning Series	Ped Warning Series	School Warning Series	Bright Sides	In Lane Signs	Stop Bar	Stop Here for Ped	Over- head	RRFB	Ped. Refuge Island	Curb Ext.
Pontiac Trail and		Marked	- High Visibility												
Geddes Ave and Arlington Blvd Unco	controlled	Marked	High Visibility												
Geddes Ave at Gallup Park Pathway Unco	controlled	Marked	High Visibility	1		1					1	1	1		
Pontiac Trail south of Arrowwood Unco	controlled	Marked	High Visibility					1	1					0	1
Fifth Ave at Community High School Unco	controlled	Marked	High Visibility						1					1	1
Broadway and Divison west of Broadway Bridge Unco	controlled	Marked	High Visibility	1		1			1					1	
Total				2	0	2	0	1	3	0	1	1	1	2	2

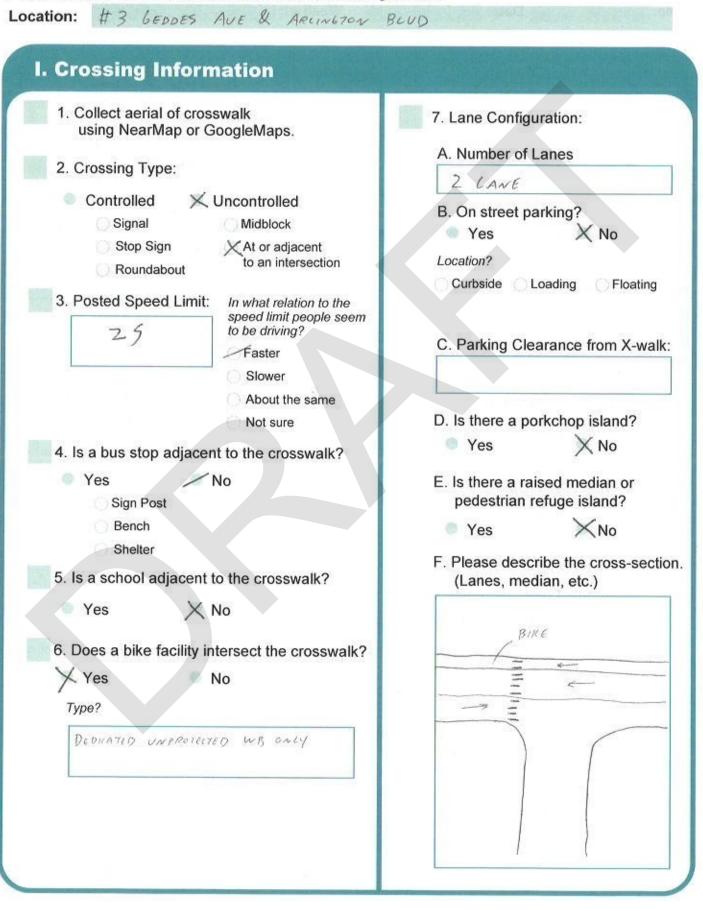
				Min	or/ Major Art	erials <u>></u> 3	Lanes								
Location	Crosswalk Type	Pavement Markings	Type of Markings	Adv. Ped Warning Series	Adv. School Warning Series	Ped Warning Series	School Warning Series	Bright Sides	In Lane Signs	Stop Bar	Stop Here for Ped	Over- head	RRFB	Ped Refuge Island	Curb Ext.
Washtenaw north of Stadium	Uncontrolled	Marked	High Visibility			1				1			1		
Stadium blvd between Kipke and Main	Uncontrolled	Marked	High Visibility	1		1			1		1		1	1	
Maple Rd and Haisley	Uncontrolled	Marked	High Visibility			1		1					1		
State St and Ellsworth Geddes Rd and	Roundabout	Marked	High Visibility								1			1	
Earhart Rd	Roundabout	Marked	High Visibility						1	1	1				
			Total	1	0	3	0	1	2	2	3	0	3	2	0



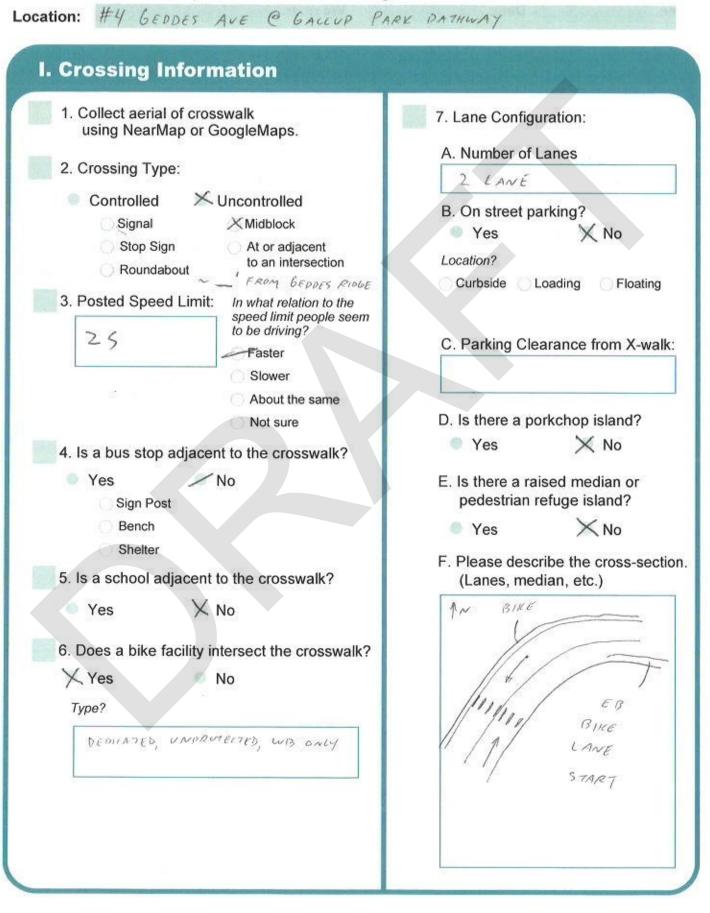
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II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop-bar-present at the crossing indicating a location for cars to stop? What is the location for the cars to prove for pedeestrian for the cars to prove for pedee	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature Variable Speed Linery star Side X-mact 4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft) No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings



e: Date: Wea	ather:
II. Field Data Observations	
 Pavement Markings Unmarked crosswalk Marked Crosswalk Faded 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout
Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a-stop-bar-present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
2. Signage & Signals Advanced Signage (within 200 ft)	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20
 Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Pedestrian warning series 	No adjacent lighting Is lighting human-scaled? Yes Pole Mounted Lights No E SIDE > 80' Facm X-WACK Draw placement and measure distance from crosswalk.
School warning series NONE Bright sides or post reflectors In Street Stop for Pedestrian Sign Number of Signs and Location:	ПОШ СГОЗЅWИК.
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage

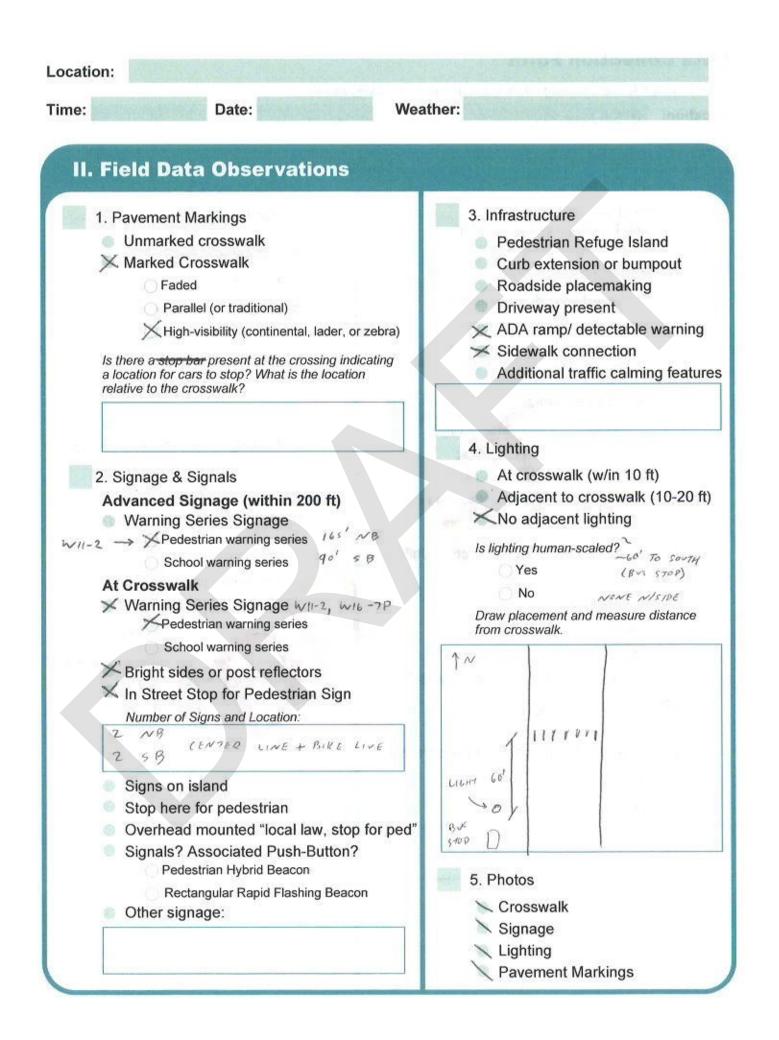


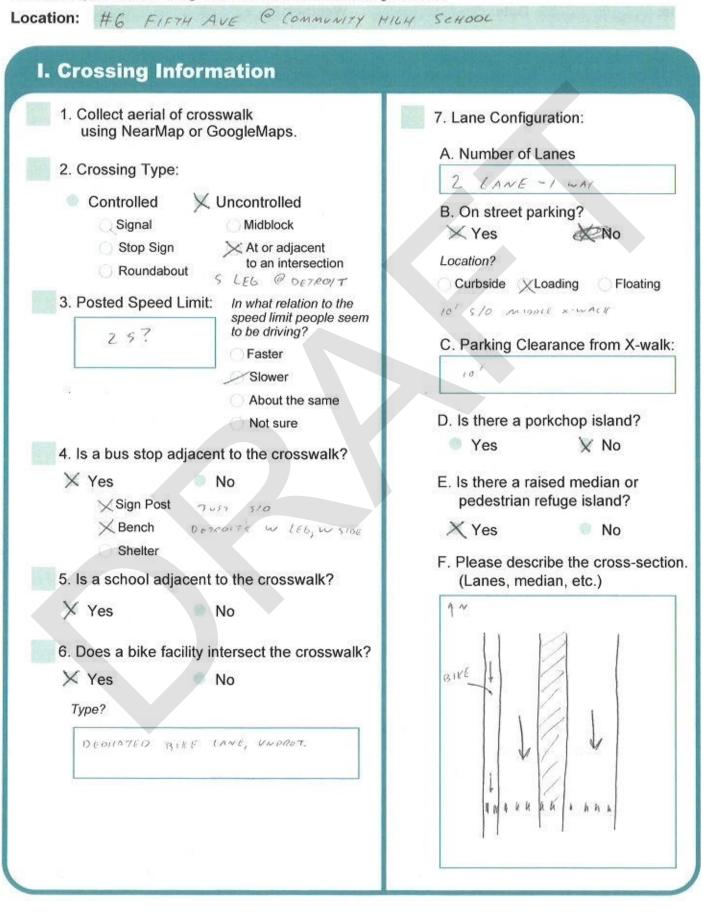
e: Date: Weat	her:
II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Pedestrian warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
Number of Signs and Location: Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage:	5. Photos Crosswalk Signage Lighting



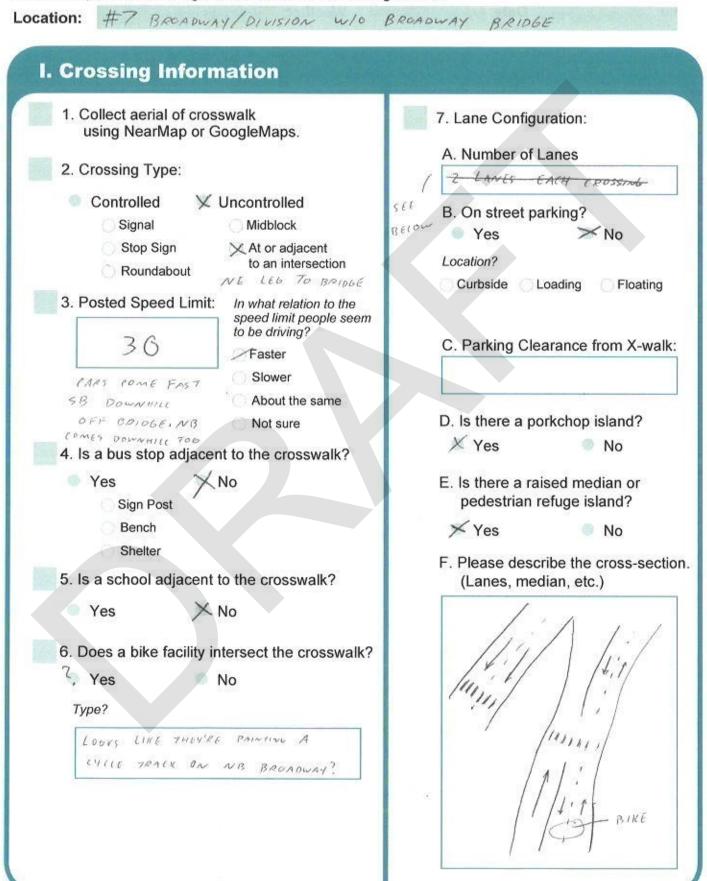
e: Date: Weather:		
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series 340' WB School warning series 250' EB At Crosswalk Beoth Haue Warning Series Signage Befarows Attacked Pedestrian warning series Beoth Warning series Bright sides or post reflectors In Street Stop for Pedestrian Signagion Number of Signs and Location: 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk. ATTACHED TO OVERHEAD SHEWAGE MAST ARMS	
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings	

Signal Stop Sign Roundabout 3. Posted Speed Limit: 30 4. Is a bus stop adjacent	Malk bogleMaps.	7. Lane Configuration: A. Number of Lanes 2 LAWE B. On street parking? Yes No Location? Curbside Loading Floating C. Parking Clearance from X-wall D. Is there a porkchop island? Yes No E. Is there a raised median or pedestrian refuge island? Yes No F. Please describe the cross-section (Lanes, median, etc.)
Type? NB/SB DEDUATED	0	





I. Field Data Observations		
 Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage	

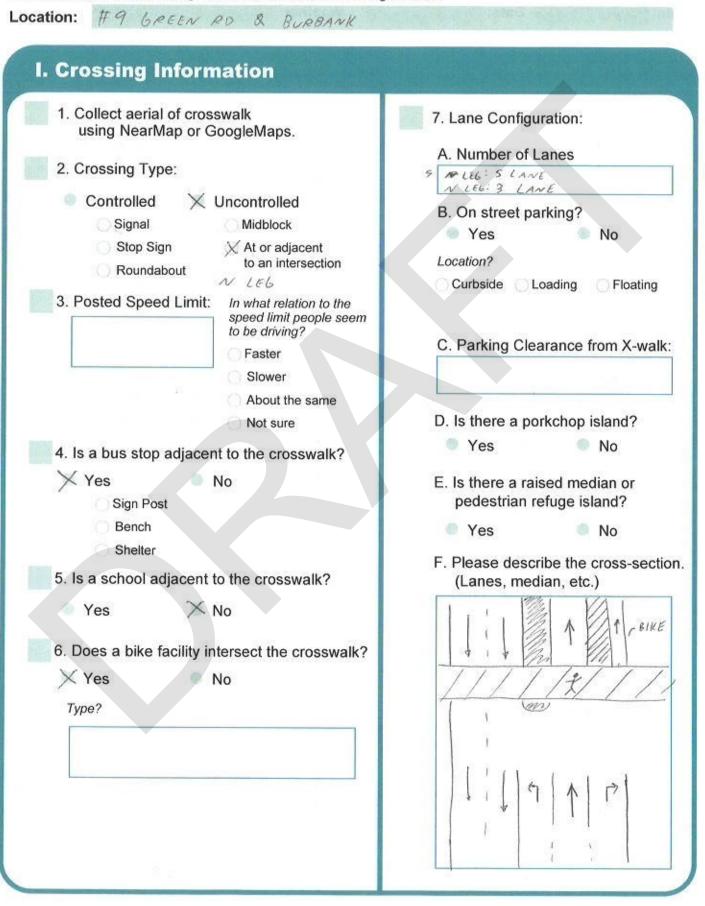


e: Date: Weather: II. Field Data Observations		
High-visibility (continental, lader, or zebra) Is there a stop bar-present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	ADA ramp/ detectable warning Sidewalk connection Additional traffic calming featur	
2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Pedestrian warning series School warning series School warning series W16-7P, W11-2	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.	
Bright sides or post reflectors In Street Stop for Pedestrian Sign-RI-6A Number of Signs and Location: (x 3) If PER SIDE (2 TOTAL) CENTEDCIME BTW THAV LANES, 1 ON MEDIAN Signs on island	20' 0' 11-1-1-1-1-1-25'	
 Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings	

Please complete the following information about the crossing location.

#8 GREEN & HUBBARD Location: I. Crossing Information 1. Collect aerial of crosswalk 7. Lane Configuration: using NearMap or GoogleMaps. A. Number of Lanes 2. Crossing Type: 3-LANE (TWITE) X Uncontrolled Controlled B. On street parking? Signal Midblock Yes × No Stop Sign X At or adjacent Location? to an intersection Roundabout N LEG Curbside Curbside Floating 3. Posted Speed Limit: In what relation to the speed limit people seem to be driving? 35 C. Parking Clearance from X-walk: Faster Slower About the same D. Is there a porkchop island? Not sure × No Yes 4. Is a bus stop adjacent to the crosswalk? X Yes No E. Is there a raised median or pedestrian refuge island? Sign Post NE TORNER Bench XNO Yes Shelter F. Please describe the cross-section. 5. Is a school adjacent to the crosswalk? (Lanes, median, etc.) XNO Yes 6. Does a bike facility intersect the crosswalk? X Yes No Type? DEDIGATED, UNPROTECTED NBISB ROAD BEING REPAVED, No X-WALX OR SIGNAGE

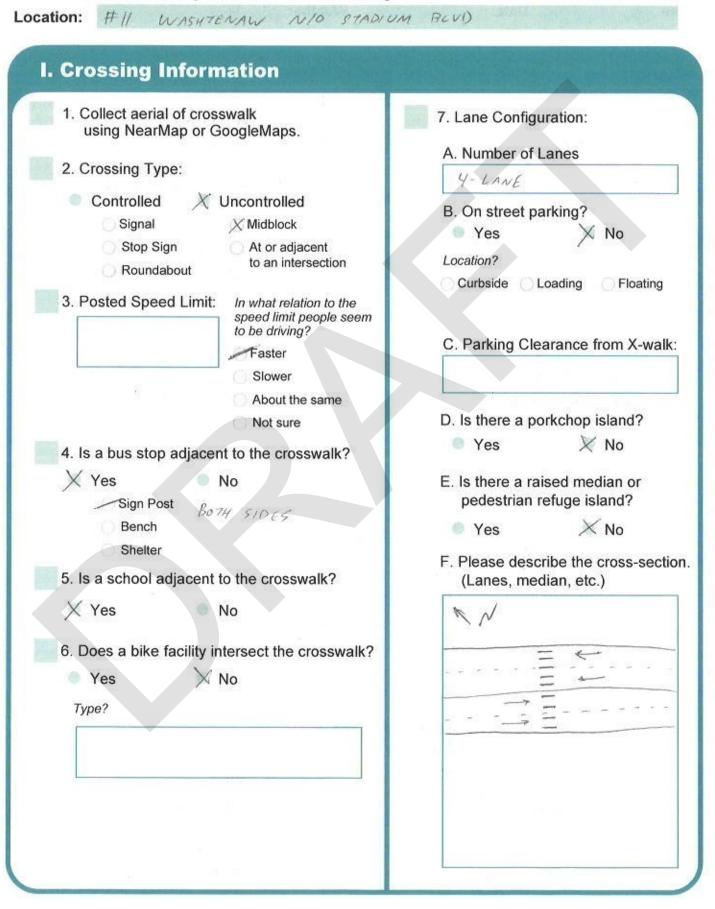
e: Date: Weather:		
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series Marc At Crosswalk Warning Series Signage Pedestrian warning series Marc School warning series Marc Bright sides or post reflectors In Street Stop for Pedestrian Sign Mumber of Signs and Location: 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.	
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings	

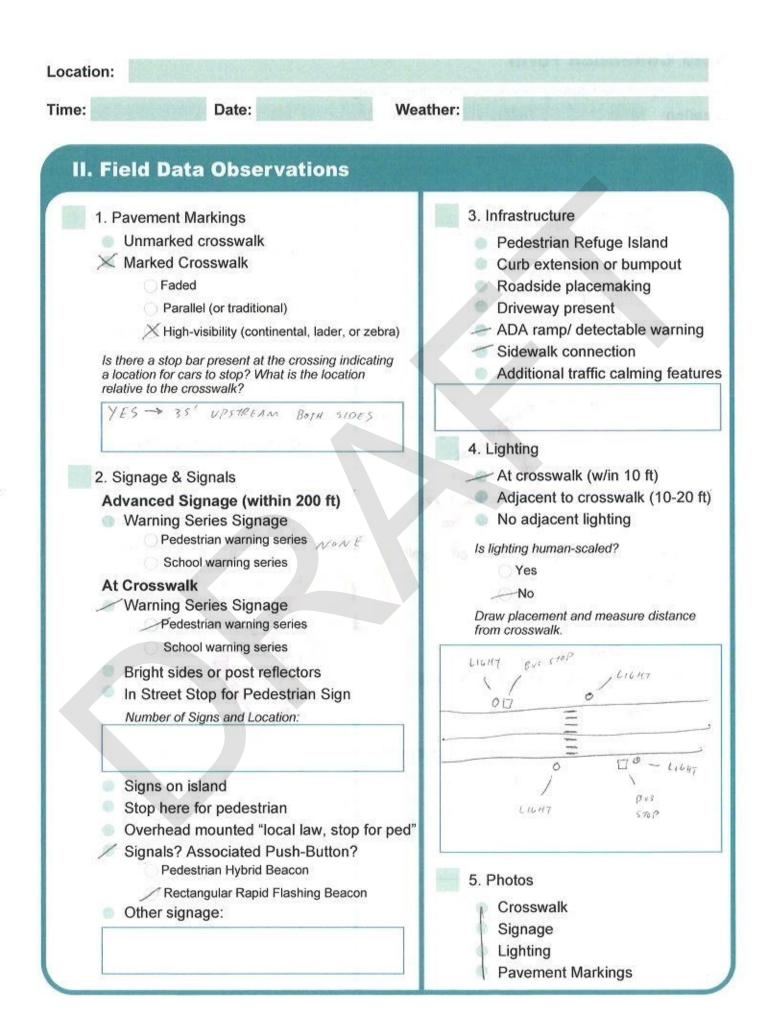


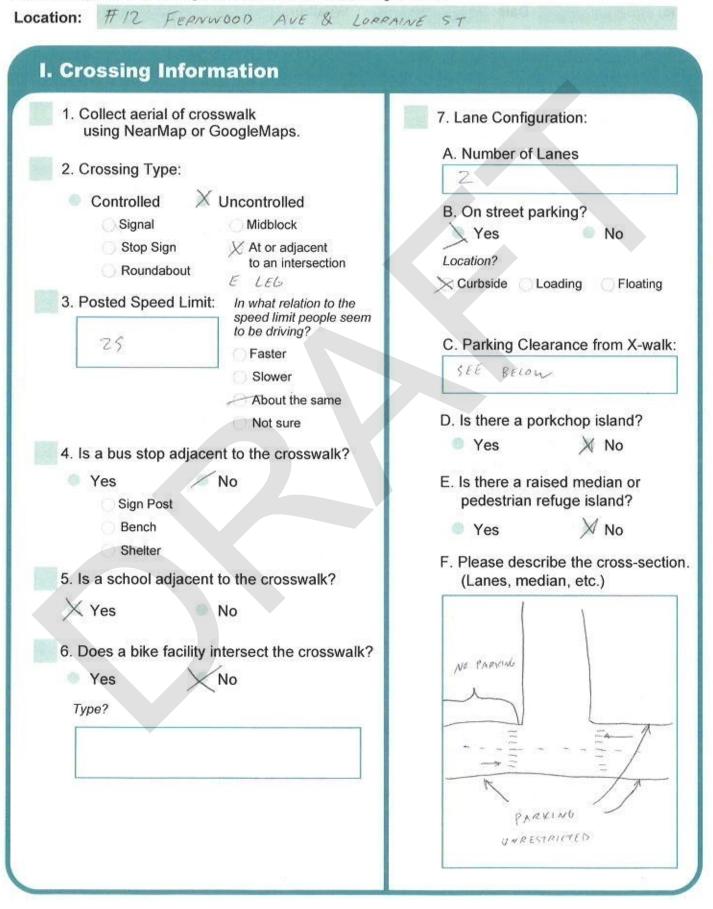
e: Date: Weather:		
II. Field Data Observations		
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature 	
2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series VB: 320 School warning series At Crosswalk Warning Series Signage Pedestrian warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Mumber of Signs and Location:	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.	
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: Auplible: "Leois streten withoutient vehicles may may stop" 	5. Photos Crosswalk Signage Lighting Pavement Markings	

1. Collect aerial of crosswalk using NearMap or GoogleMaps. 2. Crossing Type: Controlled Midblock Stop Sign Midblock Stop Sign Midblock Roundabout X At or adjacent to an intersection 2.5 (Assumed) Faster 2.5 (Assumed) Faster Slower About the same Not sure Not sure 4. Is a bus stop adjacent to the crosswalk? Yes Yes No Sign Post Bench Shelter Solower Stop Sign Post No 6. Does a bike facility intersect the crosswalk? Yes No 7ppe?	 7. Lane Configuration: A. Number of Lanes B. On street parking? Yes X No Location? Curbside Loading Floating C. Parking Clearance from X-wat D. Is there a porkchop island? Yes No E. Is there a raised median or pedestrian refuge island? Yes No F. Please describe the cross-sect (Lanes, median, etc.)
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e: Date: Weat	her:
I. Field Data Observations	
1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional)	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present
High-visibility (continental, lader, or zebra) Is there-a-stop-bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series Warning Series Signage Pedestrian warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Mumber of Signs and Location: 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Signs on island Stop here for pedestrian NONE Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting



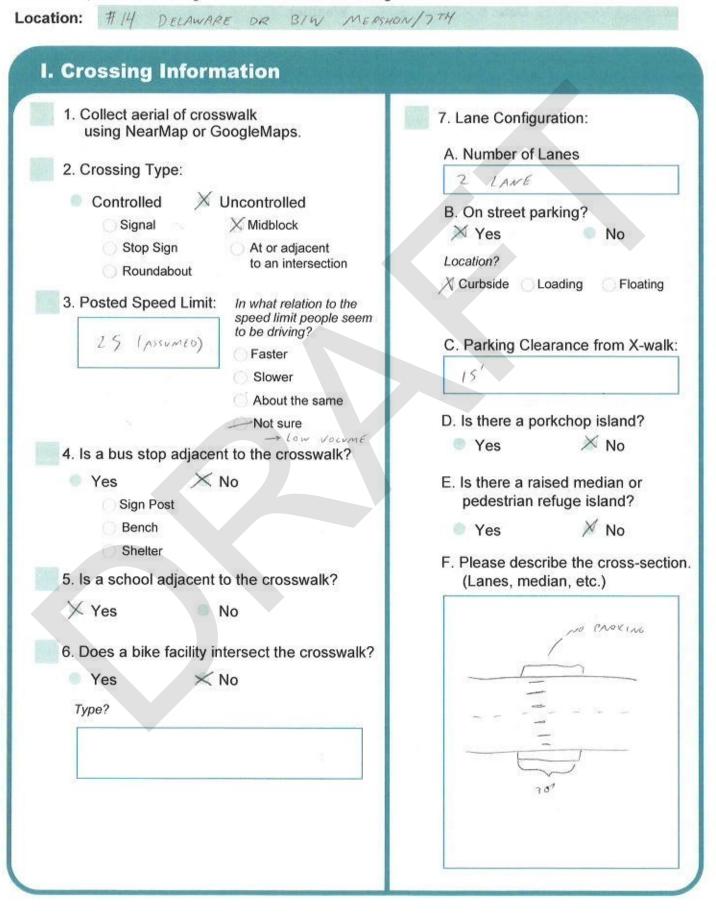




: Date: Weat	her:
II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series EB: 160' At Crosswalk Warning Series Signage Pedestrian warning series School warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Number of Signs and Location: 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft) No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage

1. Collect aerial of cross using NearMap or G		7. Lane Configuration	ı :
 2. Crossing Type: Controlled Signal Stop Sign Roundabout 3. Posted Speed Limit:	Uncontrolled Midblock At or adjacent to an intersection In what relation to the speed limit people seem to be driving? Easter	A. Number of Lanes	
4. Is a bus stop adjacer Yes Sign Post Bench Shelter		 D. Is there a porkchool Yes E. Is there a raised repedestrian refuge Yes F. Please describe the second s	No Nedian or island?
6. Does a bike facility in Y Yes <i>Type</i> ?	No	(Lanes, median, e	etc.)

ation: Date: Weather: Date: Weather: Weather: No. 1000000000000000000000000000000000000	
YES → 20' UPSTREAM BOTH DURETTIONS 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting
 Pedestrian warning series WB: 330' School warning series EB: 355' At Crosswalk Warning Series Signage Pedestrian warning series 	Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Number of Signs and Location:	1~ 0 15'
 Signs on island Stop here for pedestrian ×2 Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos
Other signage: II (0055 STREET AUDIBLE' WILAUTION, VEHILLES MAT NOT STOP!!	Signage Lighting Pavement Markings

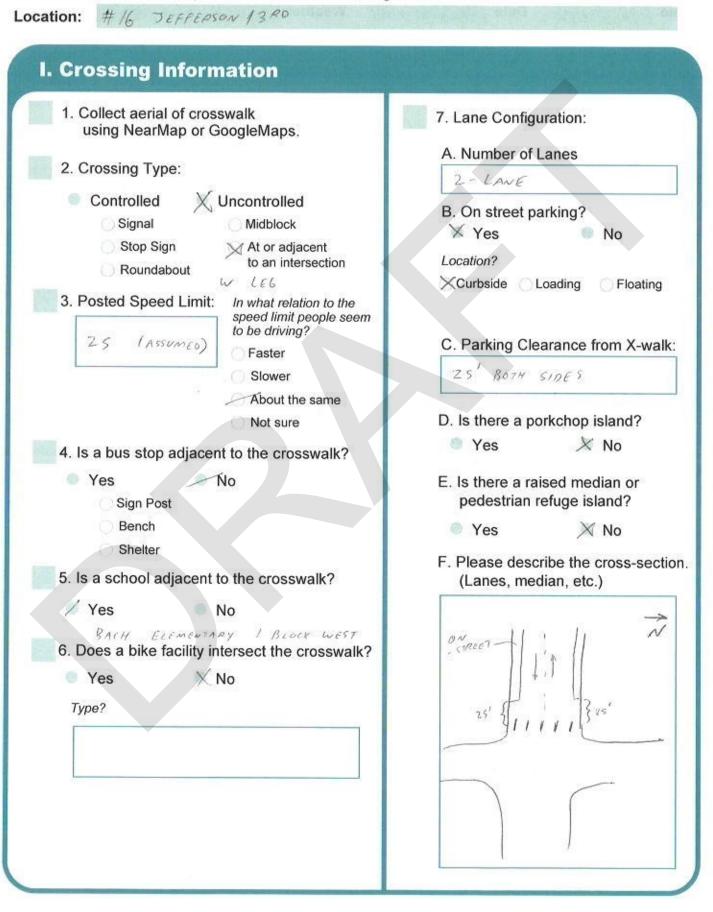


e: Date: Weat	ther:
II. Field Data Observations	
 Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop-bar-present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Pedestrian warning series We opperend to the series School warning series School	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings

Please complete the following information about the crossing location.

Location: #15 VESPER/RED OAK I. Crossing Information 1. Collect aerial of crosswalk 7. Lane Configuration: using NearMap or GoogleMaps. A. Number of Lanes 2. Crossing Type: 4LANE? 2 LANE? × Uncontrolled Controlled B. On street parking? Midblock Signal No X Yes Stop Sign X At or adjacent Location? to an intersection Roundabout Curbside Loading Floating N LEG 3. Posted Speed Limit: In what relation to the speed limit people seem to be driving? 257 C. Parking Clearance from X-walk: Faster UNLIEAR BUT DIDN'T SEE Slower TAPS PARKED CLOSE About the same D. Is there a porkchop island? Not sure X Yes No 4. Is a bus stop adjacent to the crosswalk? X No Yes E. Is there a raised median or pedestrian refuge island? Sign Post Bench X Yes No Shelter F. Please describe the cross-section. 5. Is a school adjacent to the crosswalk? (Lanes, median, etc.) NO IDEA ... Yes × No NO SILVAGE WHATSOFFER 6. Does a bike facility intersect the crosswalk? Yes < No Type?

e: Date: Wea	ither:
II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning
High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Pedestrian warning series School warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Number of Signs and Location: Signs on island → DIY FLAG MAW Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage



e: Date: Weat	her:
II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop-bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming featu
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series Marning Series Signage Pedestrian warning series School warning series School warning series School warning series Marting Series Signage School warning series School warning series Marting Series Signage School warning series Marting Series Signage School warning series Marting Series Signage School warning series Marting Series Marting	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting

Please complete the following information about the crossing location.

Location: # 17 Soule/ LUT2

I. Crossing Information

- 1. Collect aerial of crosswalk using NearMap or GoogleMaps.
- 2. Crossing Type:

Signal Stop Sign

X Uncontrolled Controlled

- Midblock
- X At or adjacent to an intersection
- Roundabout

29 (ASSUMED)

- 3. Posted Speed Limit:
- speed limit people seem to be driving?

In what relation to the

Faster

N LEG

- Slower
- About the same
- Not sure

No EBERWHITE ELEM. TO SOUTH

4. Is a bus stop adjacent to the crosswalk?

× No

- Sign Post
- Bench
- Shelter
- 5. Is a school adjacent to the crosswalk?
- Yes

Yes

6. Does a bike facility intersect the crosswalk?

No

Yes

Type?

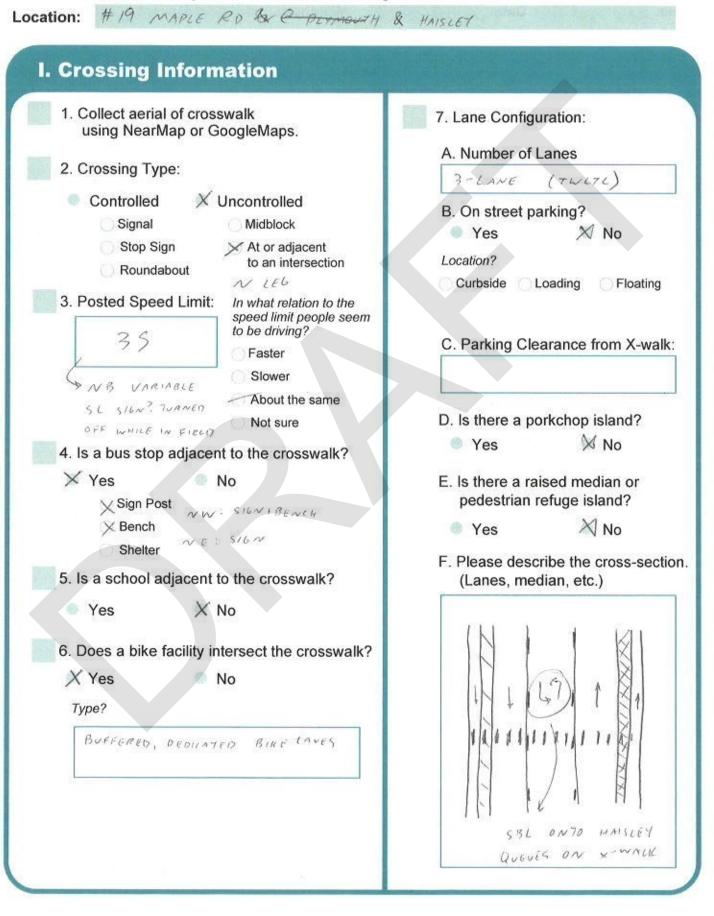
	guration:
A. Number of	Lanes
4 LIEE E	BELOW)
B. On street p	parking?
X Yes	No
Location?	·
Curbside	Loading OFloating
C. Parking CI	earance from X-wa
101	
). Is there a p	oorkchop island?
Yes	X No
	aised median or refuge island?
• Yes	× No
. Please des (Lanes, me	cribe the cross-sec edian, etc.)
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14	
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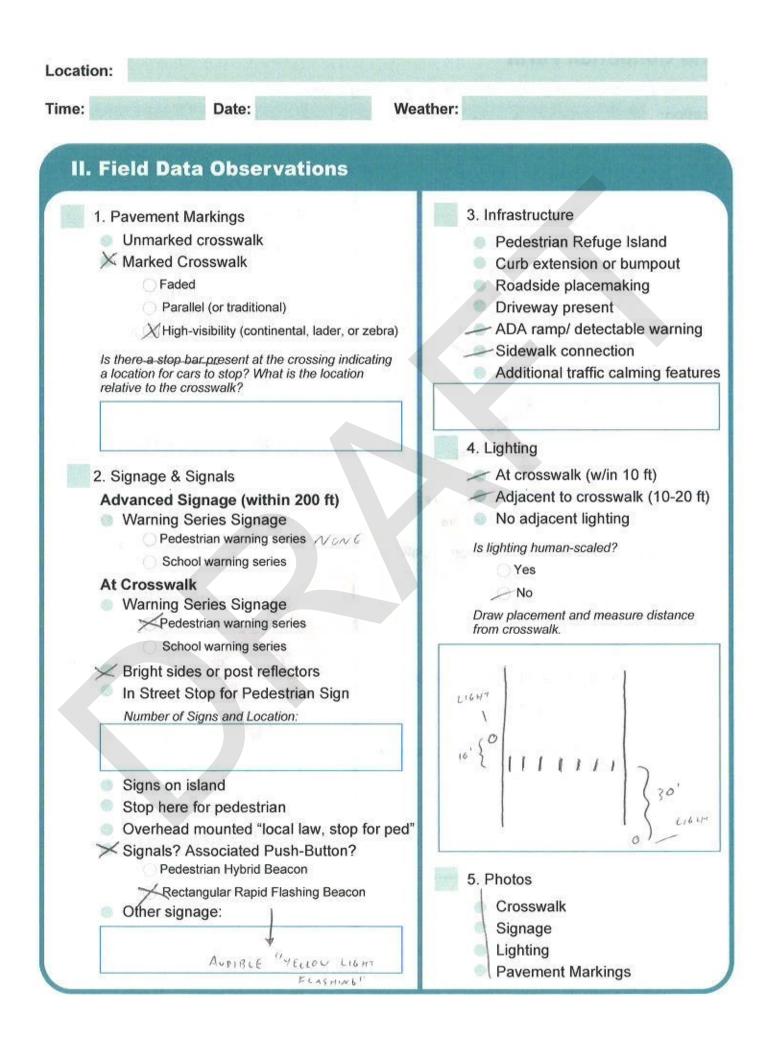
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II. Field Data Observations		
1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking 	
Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming featu	
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series At Crosswalk Warning Series Signage Warning Series Signage Pedestrian warning series An Dateed School Pedestrian warning series School warning series Pedestrian warning series School warning series School	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.	
 Signs on island Stop here for pedestrian Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage	

Please complete the following information about the crossing location.

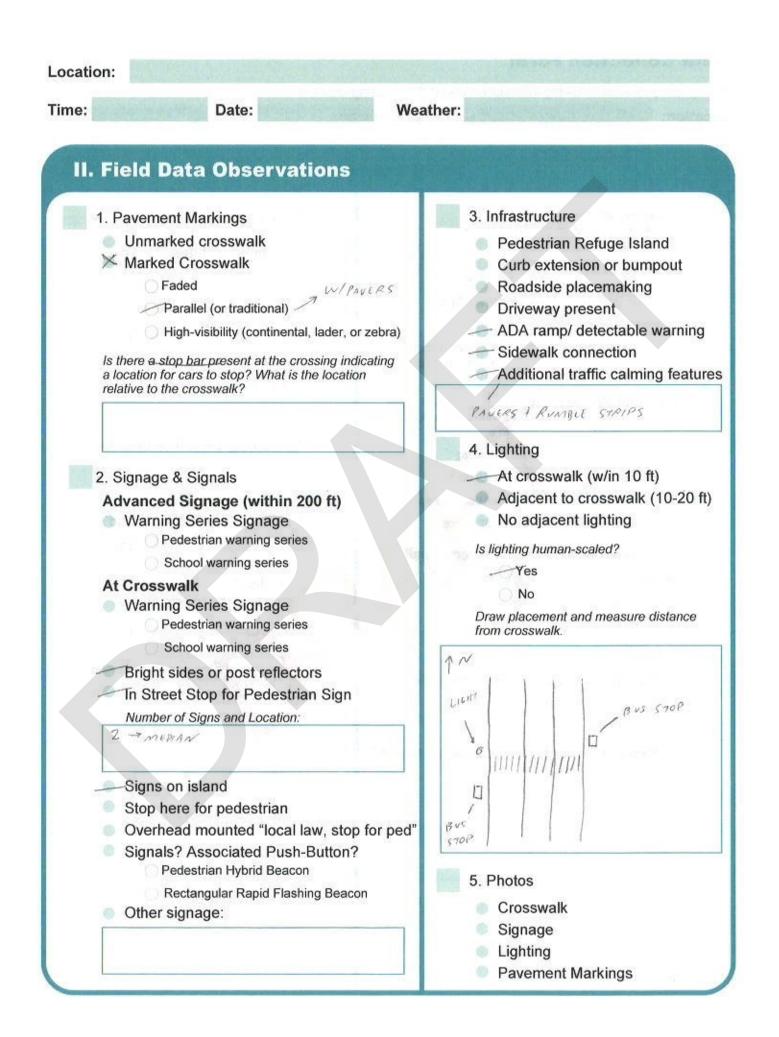
Location: #18 VICTORS WAY & BOARDWACK DRIVE I. Crossing Information 1. Collect aerial of crosswalk 7. Lane Configuration: using NearMap or GoogleMaps. A. Number of Lanes 2. Crossing Type: 2-LANE X Uncontrolled Controlled B. On street parking? Signal Midblock X No Yes Stop Sign X At or adjacent Location? to an intersection Roundabout W LEG Curbside Curbside Floating 3. Posted Speed Limit: In what relation to the speed limit people seem to be driving? 25 C. Parking Clearance from X-walk: Faster Slower About the same D. Is there a porkchop island? Not sure Yes X No 4. Is a bus stop adjacent to the crosswalk? Yes No E. Is there a raised median or pedestrian refuge island? Sign Post Bench XNo Yes Shelter F. Please describe the cross-section. 5. Is a school adjacent to the crosswalk? (Lanes, median, etc.) Yes X No STREET WAS BEING RESURFACED DURING 6. Does a bike facility intersect the crosswalk? FIELD VISIT, LANEAGES Yes No X- WALK TYPE/ BIKE Type? LANES UNKNOWN

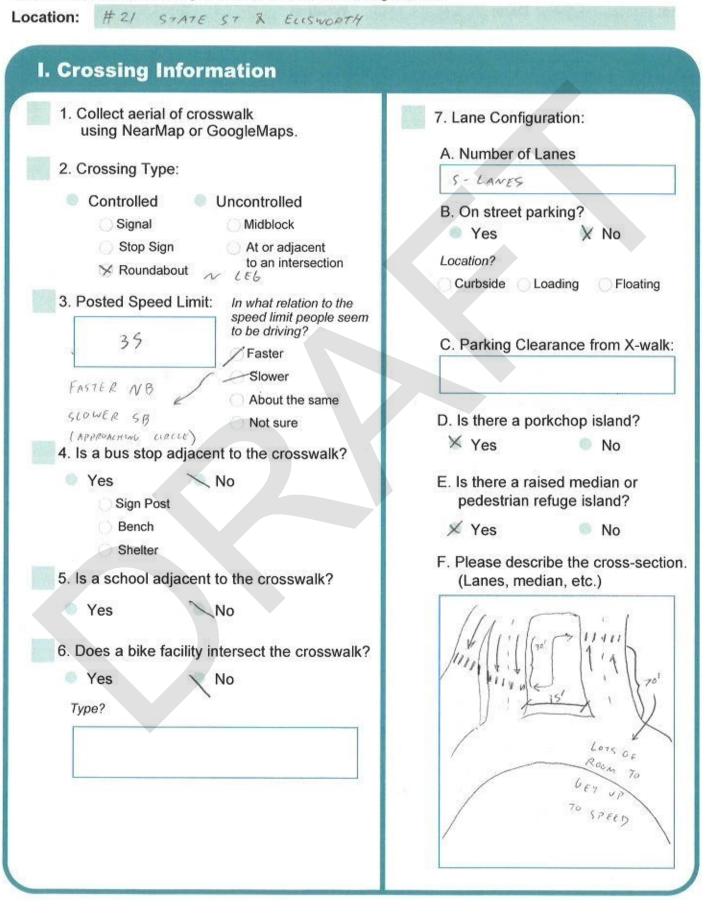
: Date: Weather:		
II. Field Data Observations		
 Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk?	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature 	
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series Marning Series Signage Pedestrian warning series Marning Series Signage Pedestrian warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Number of Signs and Location: 	4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 f No adjacent lighting <i>Is lighting human-scaled?</i> Yes No Draw placement and measure distance from crosswalk.	
 Signs on island Stop here for pedestrian Mome Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting	



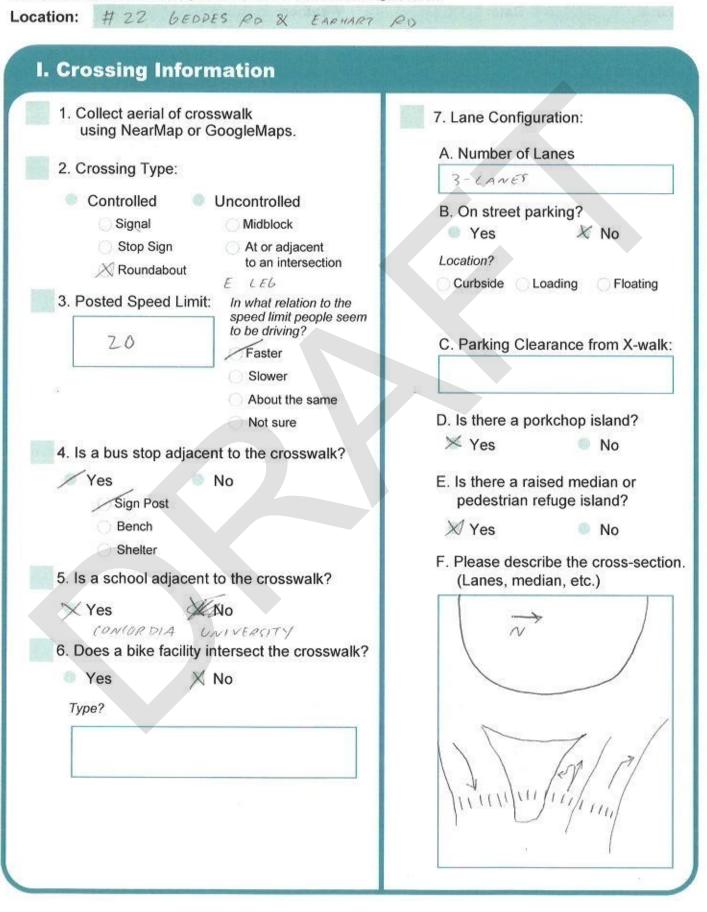


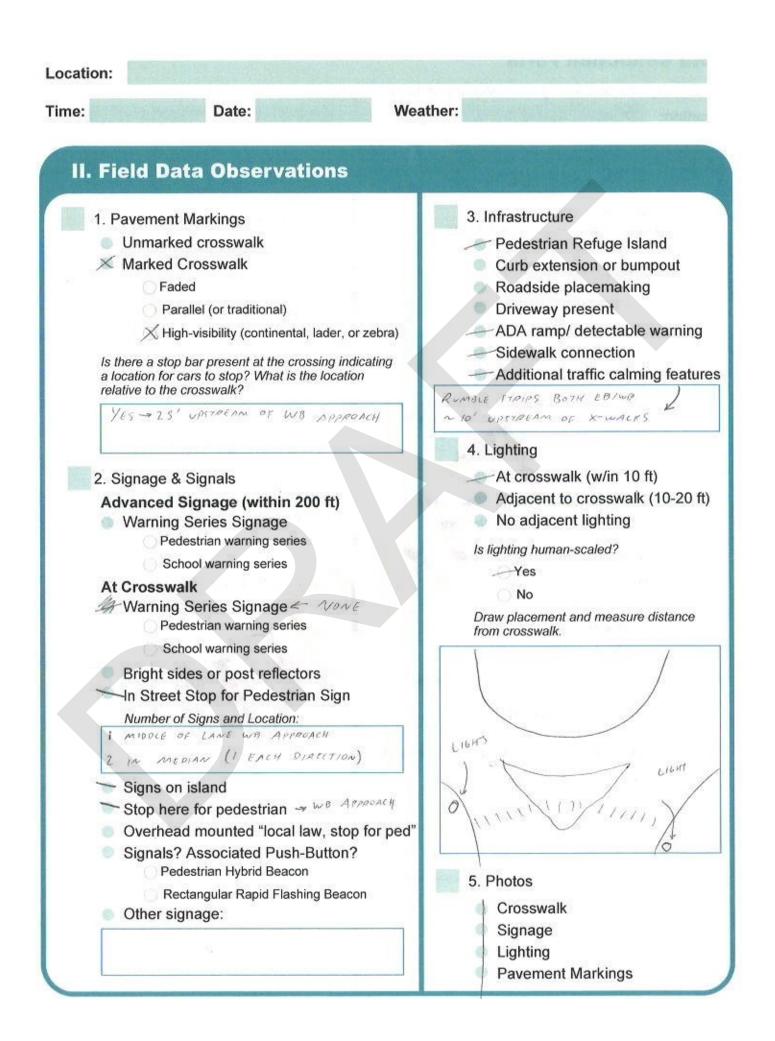
cation: #20 NIXON RO NIO PLYMOUT	
 I. Crossing Information 1. Collect aerial of crosswalk using NearMap or GoogleMaps. 2. Crossing Type: Controlled Signal Stop Sign Roundabout 3. Posted Speed Limit: In what relation to the speed limit people seem to be driving? Faster Slower About the same Not sure 4. Is a bus stop adjacent to the crosswalk? Yes No Sign Post Shelter 5. Is a school adjacent to the crosswalk? Yes No 6. Does a bike facility intersect the crosswalk? Yes No Type? 	 7. Lane Configuration: A. Number of Lanes 3-taxe (1000000) B. On street parking? Yes X No Location? Curbside Loading Floating C. Parking Clearance from X-walk: D. Is there a porkchop island? Yes No E. Is there a raised median or pedestrian refuge island? X Yes No F. Please describe the cross-section (Lanes, median, etc.)

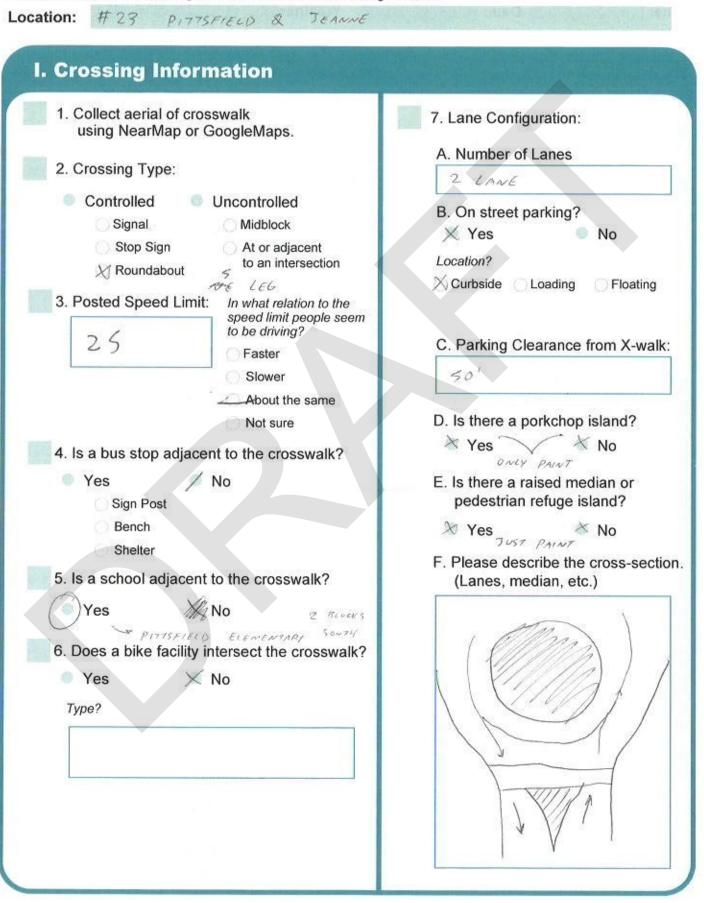




e: Date: Wea	ather:
II. Field Data Observations	
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there a stop bar present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature
 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series Max "YIELO Marning Series Signage Pedestrian warning series School warnin	 4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk.
 Signs on island Stop here for pedestrian × 3 Overhead mounted "local law, stop for ped" Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage Lighting Pavement Markings







e: Date: V	leather:	
II. Field Data Observations		
 1. Pavement Markings Unmarked crosswalk Marked Crosswalk Faded Parallel (or traditional) High-visibility (continental, lader, or zebra) Is there - step bar-present at the crossing indicating a location for cars to stop? What is the location relative to the crosswalk? 2. Signage & Signals Advanced Signage (within 200 ft) Warning Series Signage Pedestrian warning series School warning series School warning series School warning series School warning series Bright sides or post reflectors In Street Stop for Pedestrian Sign Number of Signs and Location: Signs on island Stop here for pedestrian Mark Overhead mounted "local law, stop for pedestrian Park Putter 2 	 3. Infrastructure Pedestrian Refuge Island Curb extension or bumpout Roadside placemaking Driveway present ADA ramp/ detectable warning Sidewalk connection Additional traffic calming feature VARIABLE SPECH CART STER VARIABLE SCHOOL WB 4. Lighting At crosswalk (w/in 10 ft) Adjacent to crosswalk (10-20 ft) No adjacent lighting Is lighting human-scaled? Yes No Draw placement and measure distance from crosswalk. 	
 Signals? Associated Push-Button? Pedestrian Hybrid Beacon Rectangular Rapid Flashing Beacon Other signage: 	5. Photos Crosswalk Signage	