

Mid-Block Crosswalk Evaluation

General Information

CR 975 E. and Oak Ridge Drive Evaluation and Recommendation

November 15, 2021



Three-Part

1. Review of crosswalks
2. Evaluation methodology
3. Location recommendation

Part I

Crosswalks 101

Mid-Block Crosswalk Definition

Any location where a pedestrian crossing a road is not protected by vehicular traffic control regulations:



What does the law say?

I.C. 9-21-8-36

“...when traffic control signals are not in place or not in operation, a person who drives a vehicle shall yield the right-of-way, slowing down or stopping if necessary to yield, to a pedestrian crossing the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling or when the pedestrian is approaching closely from the opposite half of the roadway.”

Vehicles have right of way over pedestrians waiting to cross at a crosswalk

Must be prudent in applications

- Driver confusion
- Pedestrian confusion
- Pedestrian frustration
- Telling people to cross
- Assumption of safety by peds
- Inconsistent reactions by drivers and peds
- Multiple locations disrupt traffic flow

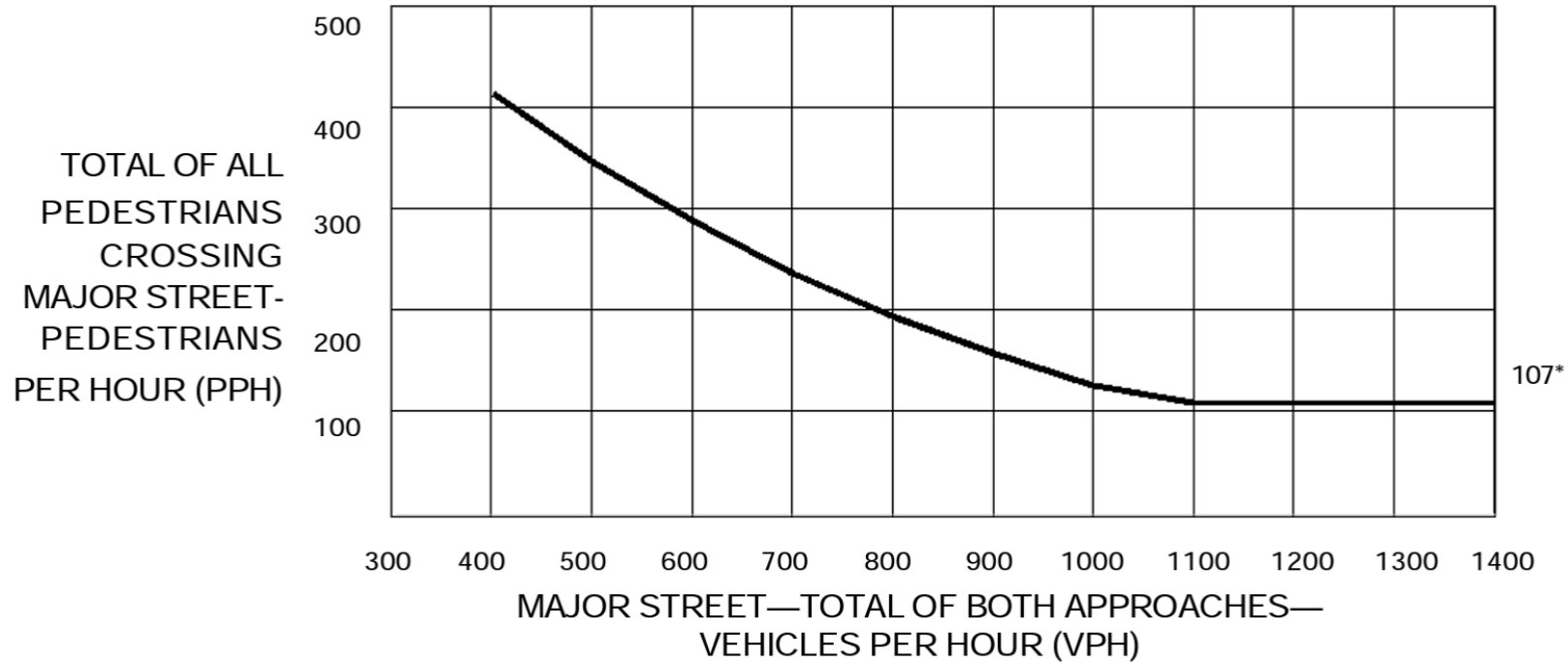
Indiana Manual on Uniform Traffic Control Devices (IMUTCD) Criteria

Chapter 4C addressing signal warrants

- Posted speed limits
- Number of lanes
- Pedestrians per time period
- Community population

IMUTCD pedestrian signal warrant

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



*Note: 107 pph applies as the lower threshold volume.

Part II

Localize the process to fit our community

Localize accepted methodology

Avoid subjectivity, if here why not there, solid data-driven decisions

Three-tiered approach to location evaluation

1. High level initial screening based on physical conditions
2. Data collection
3. Alternatives and location evaluation

1. Initial high-level scoring

- Supporting infrastructure in-place or readily provided?
- Separation and distance from other crosswalks?
- School zone?
- Within ¼ mile of public amenities?
- Pathway network connectivity?
- Posted speed limit 35 mph or less?
- Cross only two through-traffic vehicle lanes?

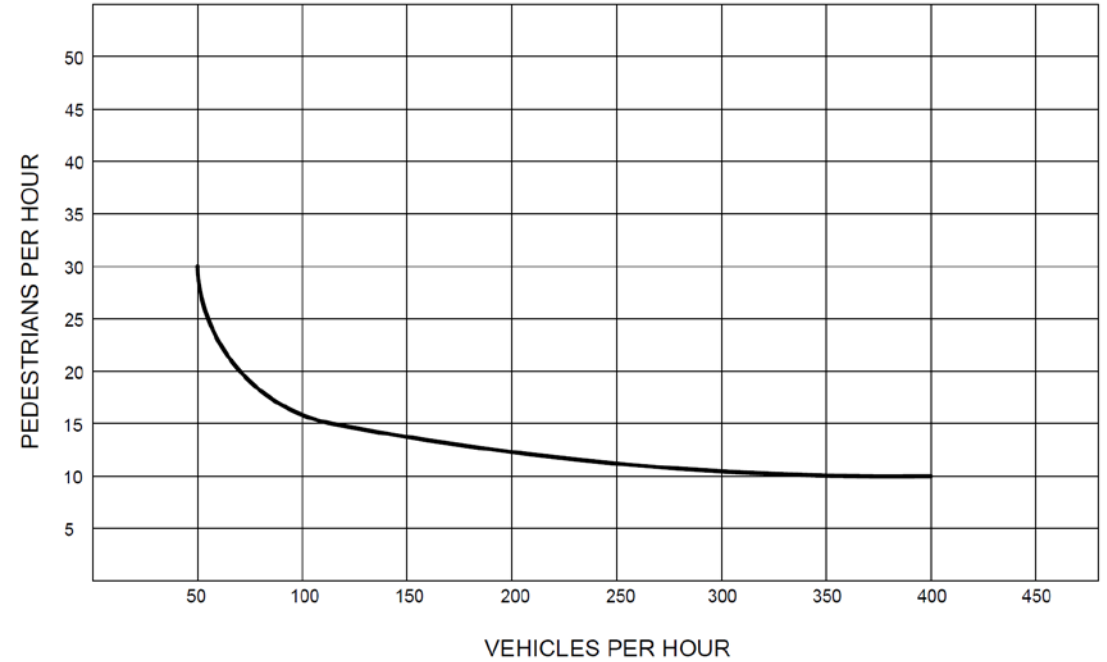
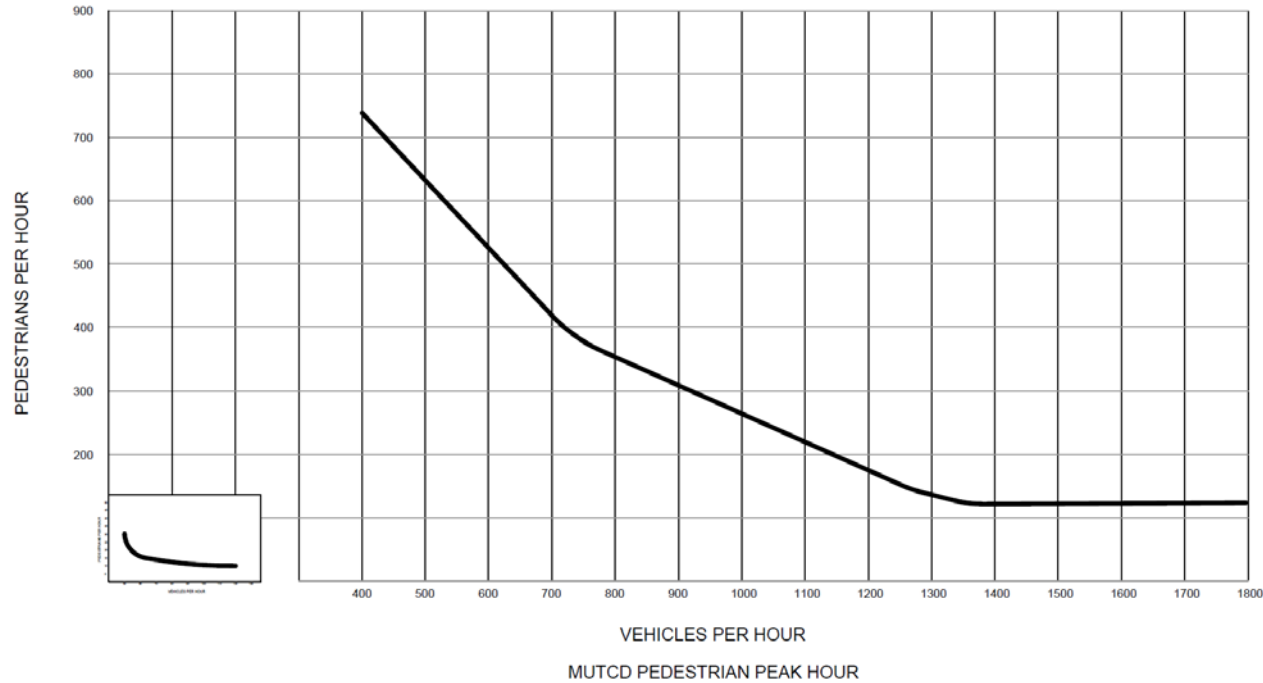
Yes = 1 / No = 0 Non-weighted scoring: 4 or above advances

2. Data collection

How much use is there during prime/peak hour?

- Pedestrian counts taken (youth/students x2)
- Most recent available traffic volume data

2. Data collection



Minimum 10 pedestrians per peak hour
On or above the curve advances

3. Alternatives and location evaluation

Professional review of location

- Event driven?
- Crossing guard option?
- Location sight lines?
- Lighting?
- Alternate preferred nearby location?
- Connect to existing pathway?
- Relationship to schools/school zones?
- Pedestrian network connectivity, not just a single group?
- Any relevant or unique considerations?

Final Determination

- Staff findings vetted by Mayor's ad-hoc committee
- Develop design specific to location and any improvements
- Recommend to Town Council per §70.29 of the Code of Ordinances
- Request necessary additional funding for specialized equipment
- Budgeted items such as sidewalks already within current budgets
- Two new locations reviewed per year based on initial scoring and subsequent submissions

Standard Warning Sign

Rapid Rectangular Flashing Beacon (RRFB)

Currently three in use within town's jurisdiction




- Oak St. & 5th St. (town project)
- CR 400 S. at Hampshire Subdivision
- CR 500 S. at Hampshire & Pemberton Subdivisions (Plan Commission commitment by developers)



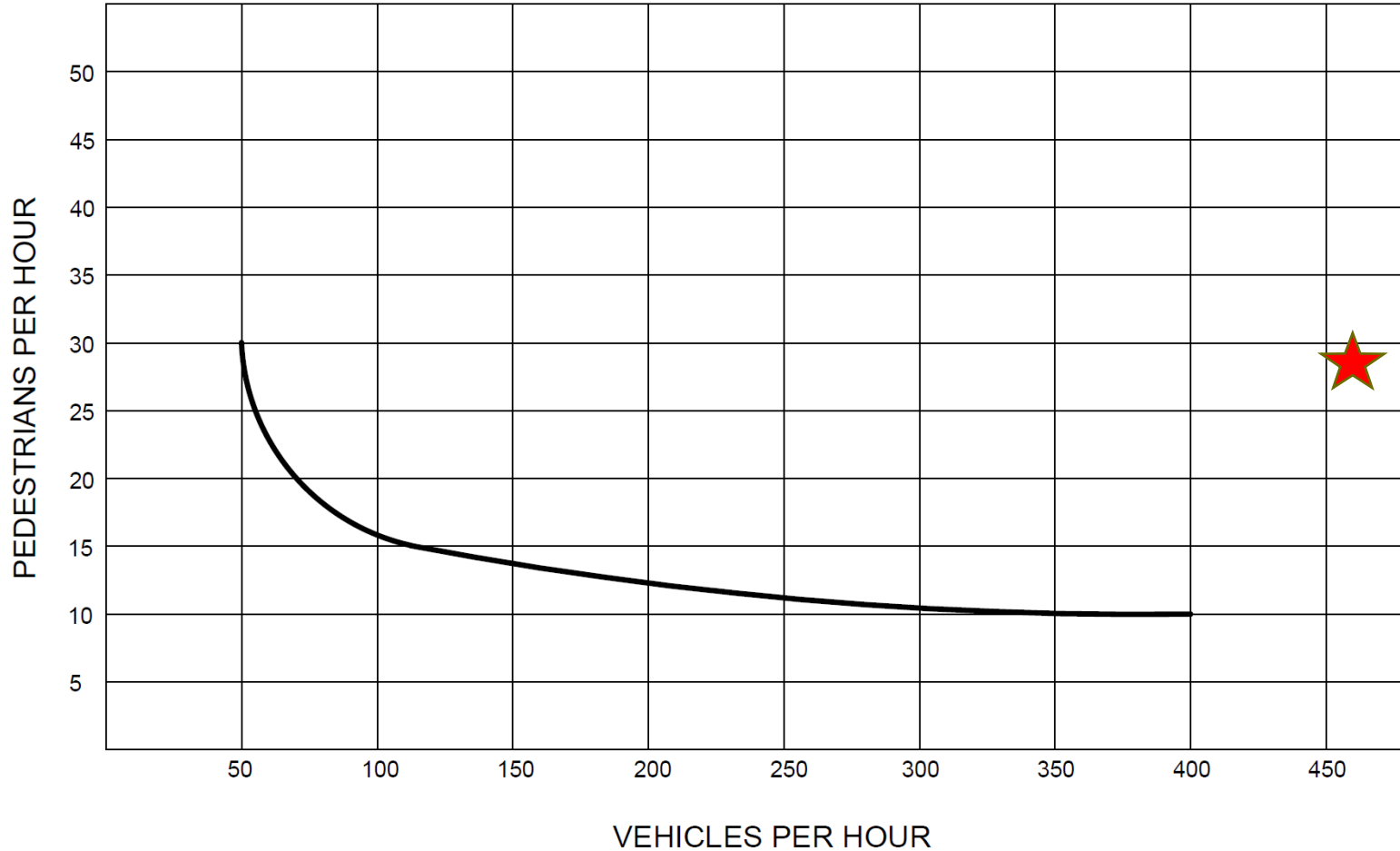
Part III

Crosswalk Recommendation CR 975 at Oak Ridge Dr.

CR 975 at Oak Ridge Drive

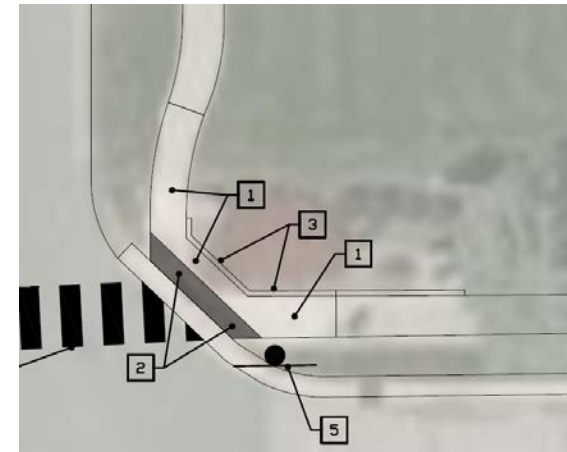
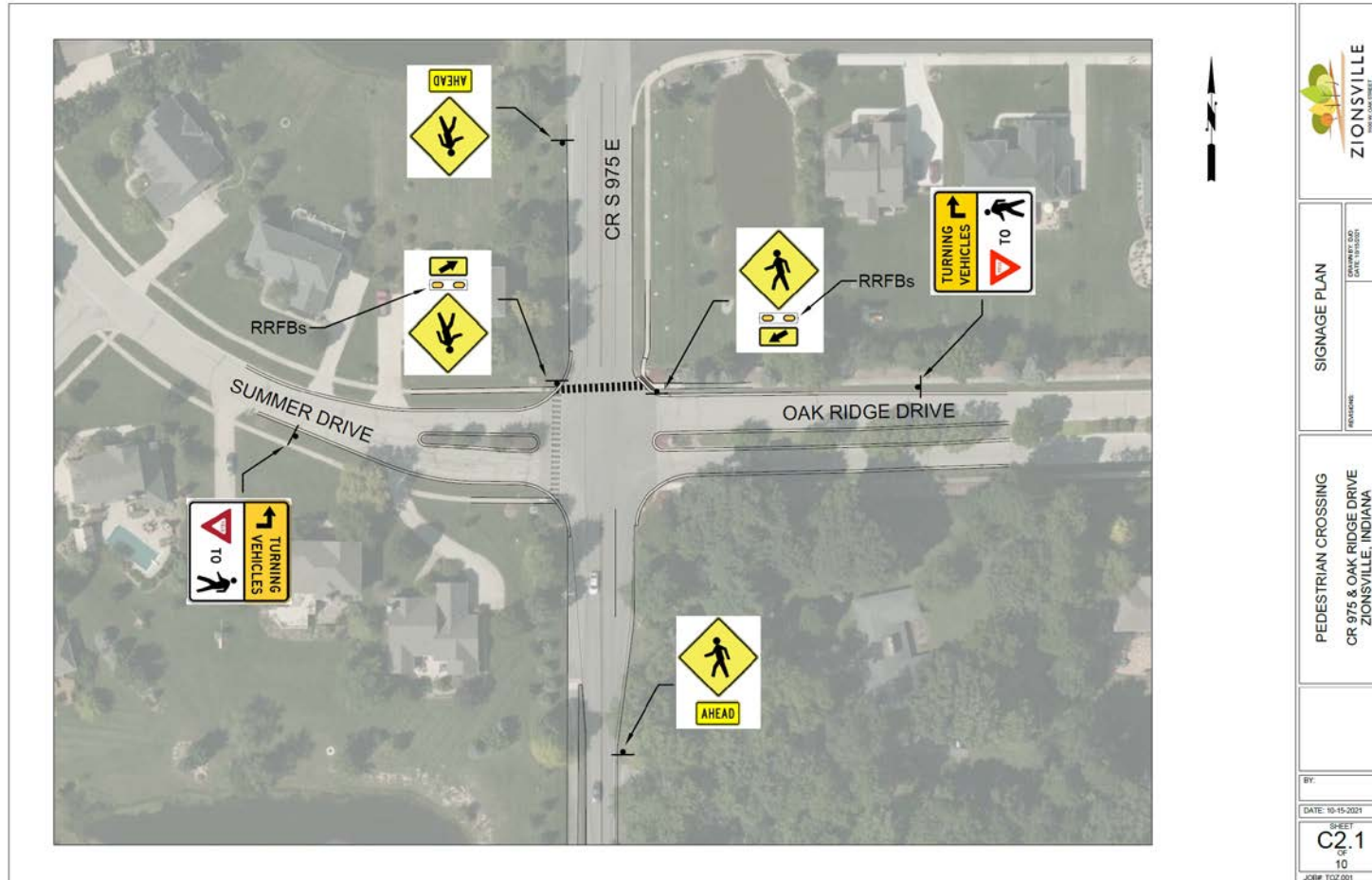
- Initial scoring evaluation 5 
- Pedestrian counts taken v. hourly traffic data 
- Alternatives and location evaluation identified minor sidewalk modifications on east side of road 

Data Analysis



27 peds / hour
460 vehicles / hour

Detailed Site-Specific Design



- KEY NOTES**
- 1 CONCRETE SIDEWALK (SEE SHEET C3.0)
 - 2 DETECTABLE WARNING SURFACE
 - 3 LANDSCAPE BLOCK RETAINING WALL (RE-USE EXISTING BLOCKS)
 - 4 2'x6' THERMOPLASTIC STRIPING SPACED 4' O.C.
 - 5 SOLAR POWERED RRFB SIGN (SEE SHEETS C2.1 & C3.0)

Recommendation

On CR 975 East at its intersection with Oak Ridge Dr. on the north leg

DPW finds that:

- This location meets all local evaluation criteria
- Is an appropriate and justified location for the establishment of a marked crosswalk meeting all design standards
- The community will benefit from the provision of said crosswalk