

# TRAFFIC CALMING STUDY

KNAPP DRIVE: IL 7 (THEODORE STREET) TO NORTH LARKIN AVENUE / WEBER ROAD

CREST HILL, WILL COUNTY

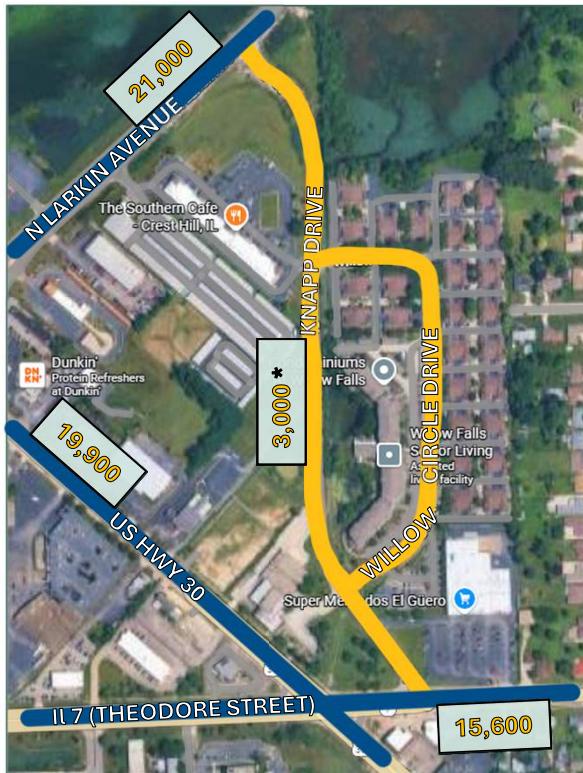


JANUARY 2026

## PROJECT AREA AND AVERAGE DAILY TRAFFIC DATA

### ❖ Study purpose:

Evaluate cut-through traffic on Knapp Drive between IL Route 7 (Theodore Street) and Larkin Avenue with the purpose of developing alternatives to reduce cut-through traffic by drivers seeking to avoid the triangle area (Larkin/Rte 7/Rte 30) and address concerns with the proposed QuikTrip development.



❖ Study area has 2 major and 2 minor intersections:

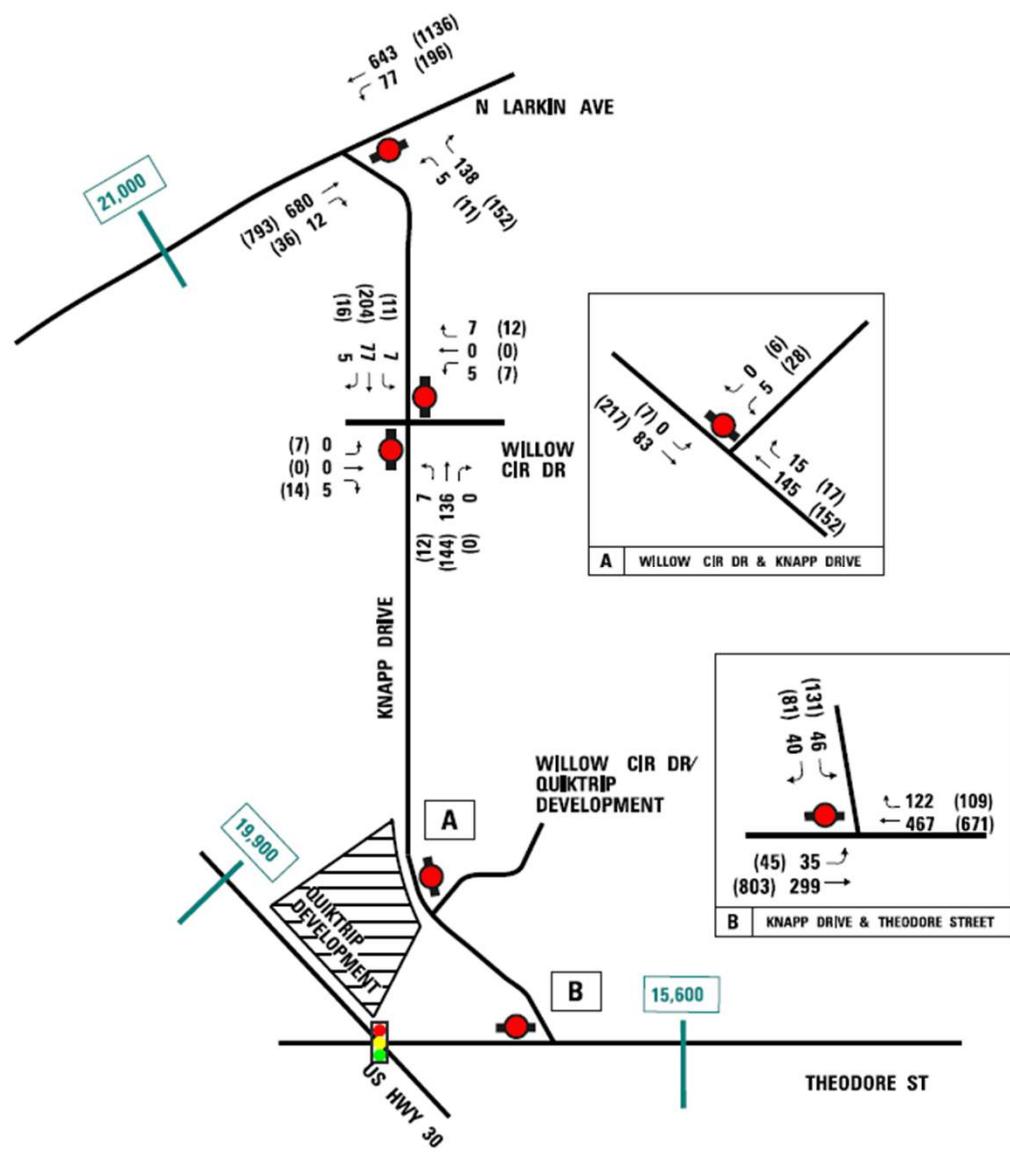
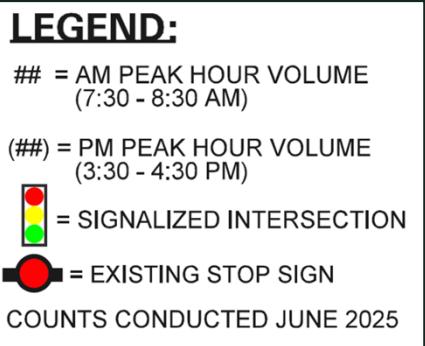
1. Knapp Drive and Larkin Avenue/Weber Road
2. Knapp Drive and IL Route 7 (Theodore Street)
3. Knapp Drive and Willow Circle Drive (North)
4. Knapp Drive and Willow Circle Drive (South)

### LEGEND

<span style="background-color: yellow; display: inline-block; width: 15px; height: 15px;"></span>	PROJECT AREA
<span style="background-color: blue; display: inline-block; width: 15px; height: 15px;"></span>	MAJOR STREETS
<span style="background-color: lightblue; display: inline-block; width: 15px; height: 15px;"></span>	ADT, 2025

\* ADT estimated based on June 2025 counts

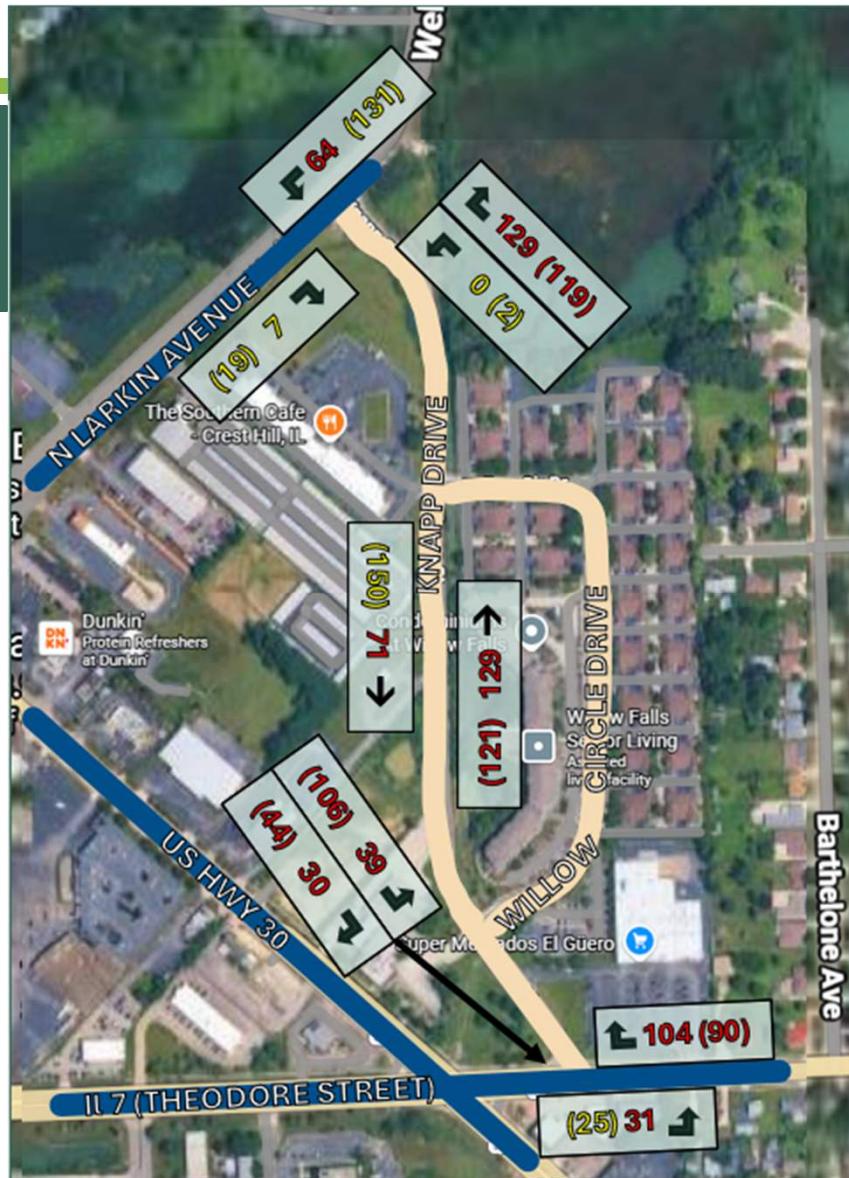
## EXISTING TRAFFIC DATA



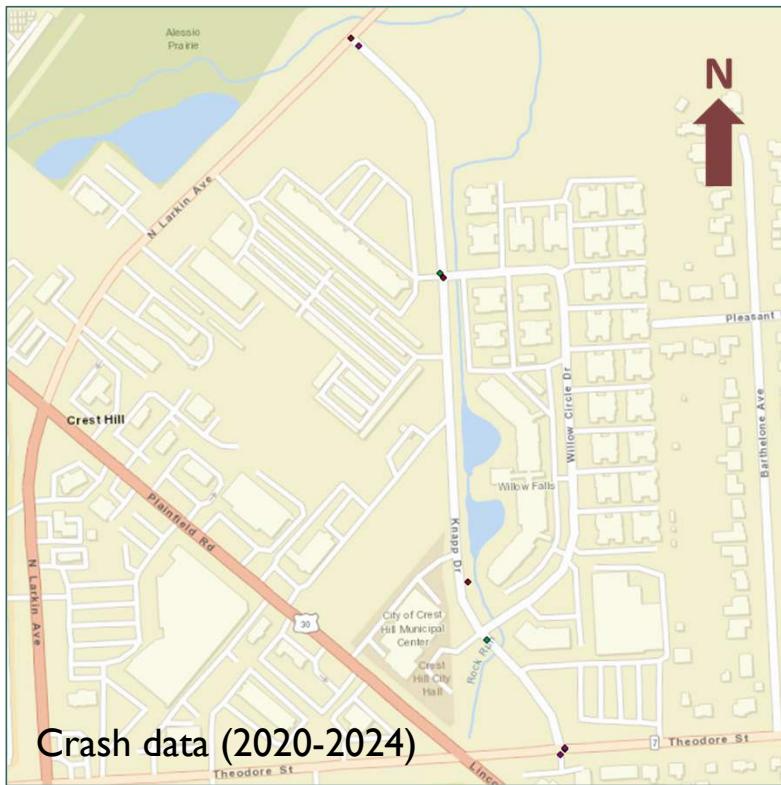
## CUT-THROUGH TRAFFIC DATA

### LEGEND

- GREATER THAN 75% CUT-THROUGH VOLUME
- BETWEEN 51% TO 75% CUT-THROUGH VOLUME
- LESS THAN 50% CUT-THROUGH VOLUME
- ## AM PEAK HOUR CUT-THROUGH VOLUME
- (##) PM PEAK HOUR CUT-THROUGH VOLUME



## CRASH DATA & SPEED DATA ON KNAPP DRIVE

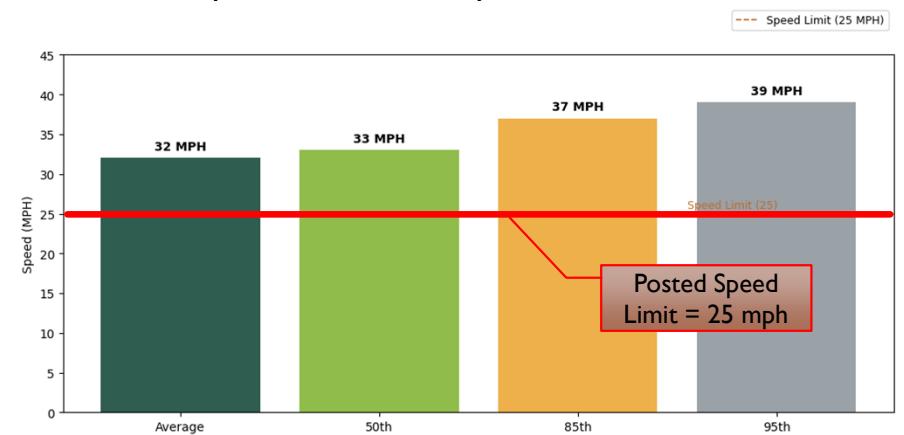


### Crash Data:

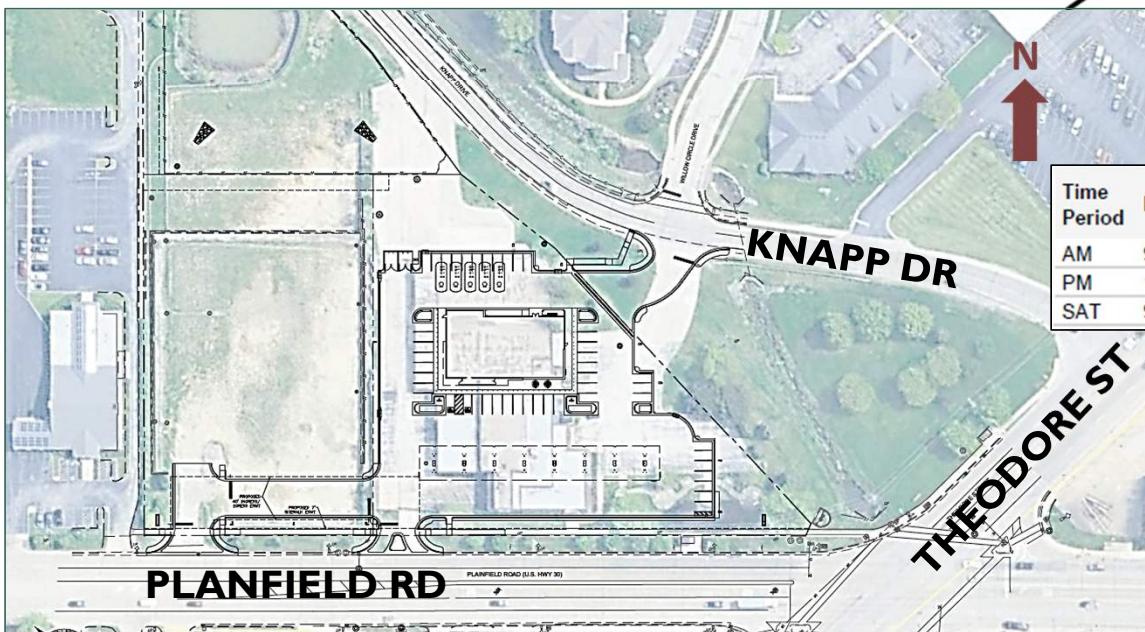
- ❖ 79 Total Crashes – 2020 to 2024
  - 74 (93.7%) at TWSC/AWSC Intersections
  - 5 (6.3%) at Midblock

### Speed Data:

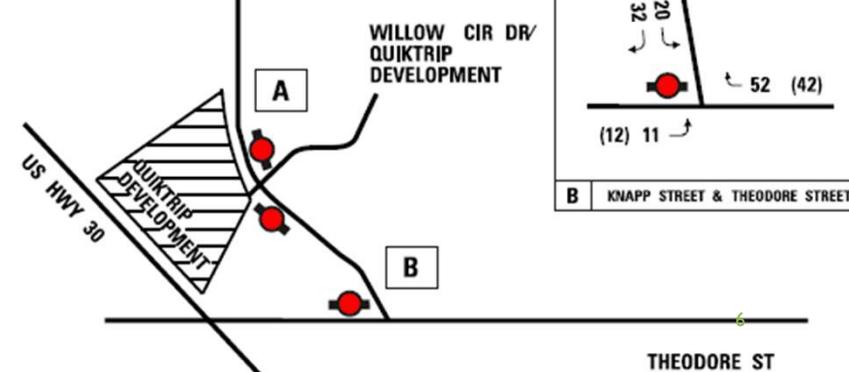
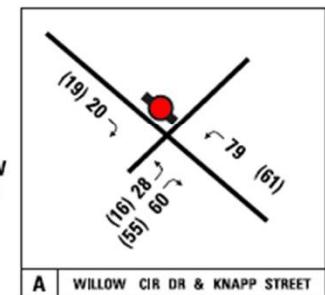
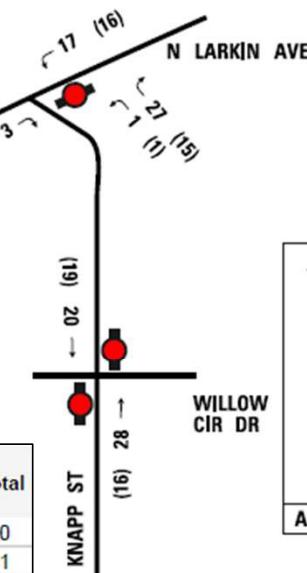
- ❖ ~32 mph average speed of vehicles
- ❖ ~37 mph 85<sup>th</sup> %ile
- ❖ Posted Speed Limit = 25 mph



# QUIKTRIP DEVELOPMENT



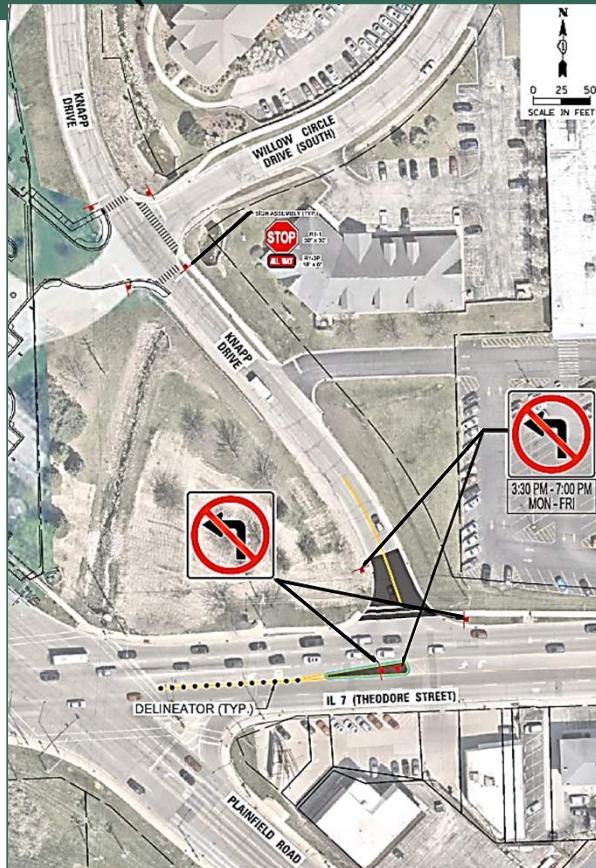
Time Period	Inbound	Outbound	Total
AM	98	82	170
PM	126	105	231
SAT	97	81	178



Source: KLOA TIS dated July 31, 2025

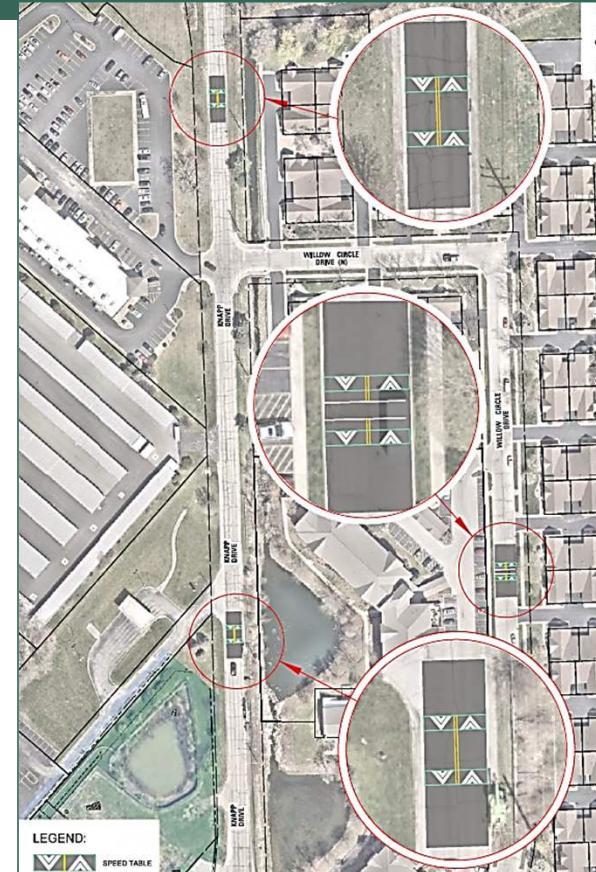
## TRAFFIC CALMING SUMMARY – INITIAL IMPLEMENTATIONS ALTERNATIVES:

### ALT. I (AWSC & LT Restrictions)



**Alt I:**  
Install all-way stop control at Willow Circle (south) with left turn restrictions at IL 7 (Theodore St)

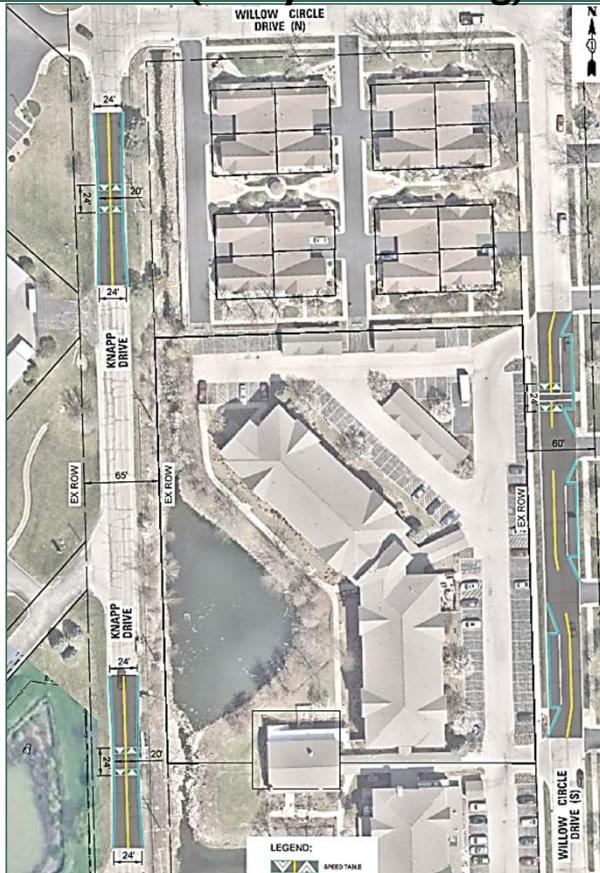
### ALT. 2 (Perm/Temp Speed Tables)



**Alt 2:**  
Install permanent or temporary speed tables along Knapp Drive

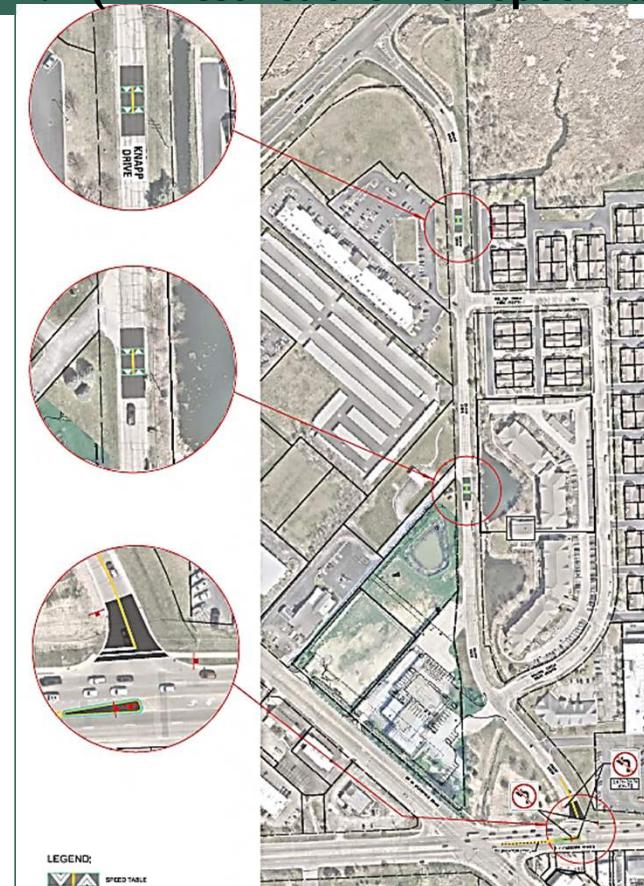
## TRAFFIC CALMING SUMMARY – INITIAL IMPLEMENTATIONS ALTERNATIVES:

### ALT. 3 (Rdwy Narrowing)



**Alt 3:**  
Install roadway narrowing along Knapp Drive and consider curb extensions and parking for Willow Circle Drive

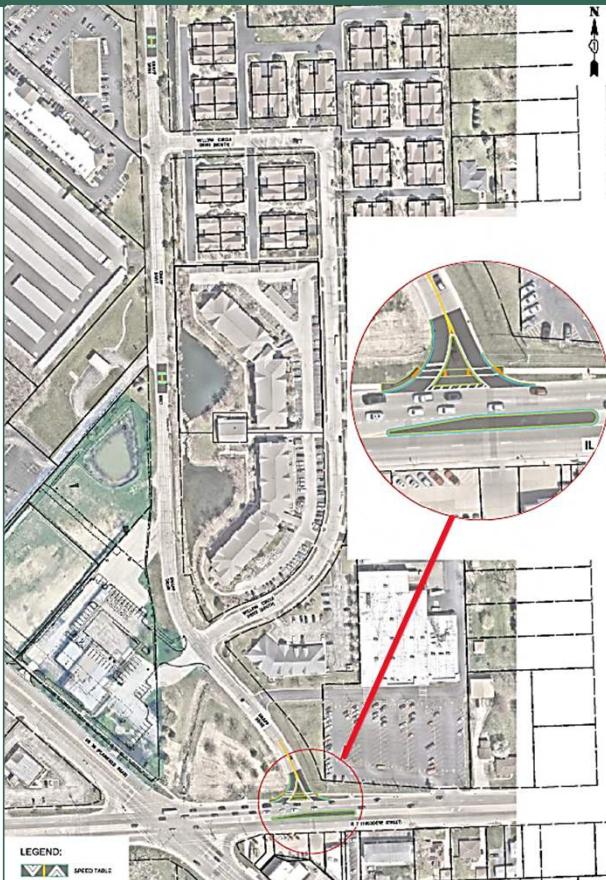
### ALT. 4 (LT Restrictions with Speed Tables)



**Alt 4:**  
Install left turn restrictions at IL 7 (Theodore St) with speed tables along Knapp Drive

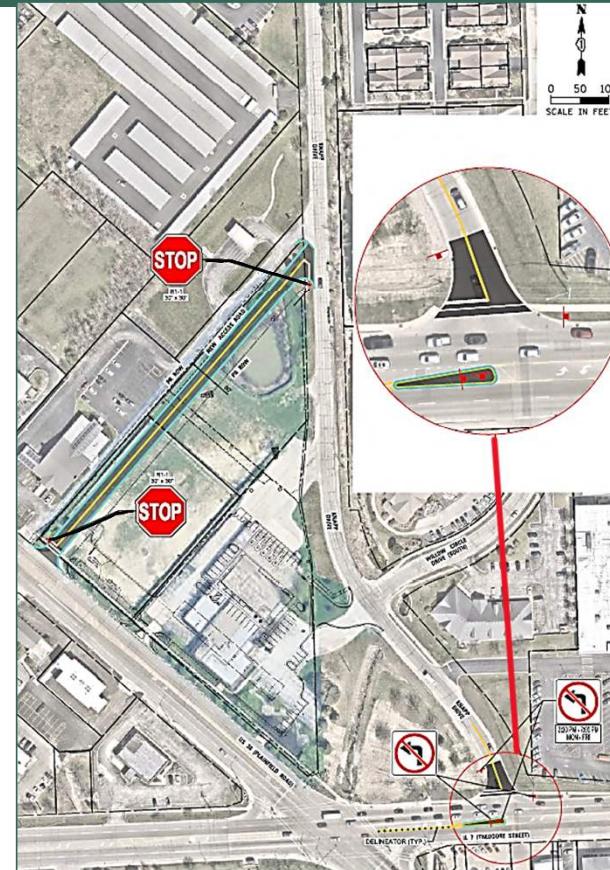
## TRAFFIC CALMING SUMMARY – SECONDARY IMPLEMENTATION ALTERNATIVES:

### ALT. 5 (RIRO at IL 7)



**Alt 5:**  
Install a right-in, right-out at IL 7 (Theodore Street) with speed tables along Knapp Drive.

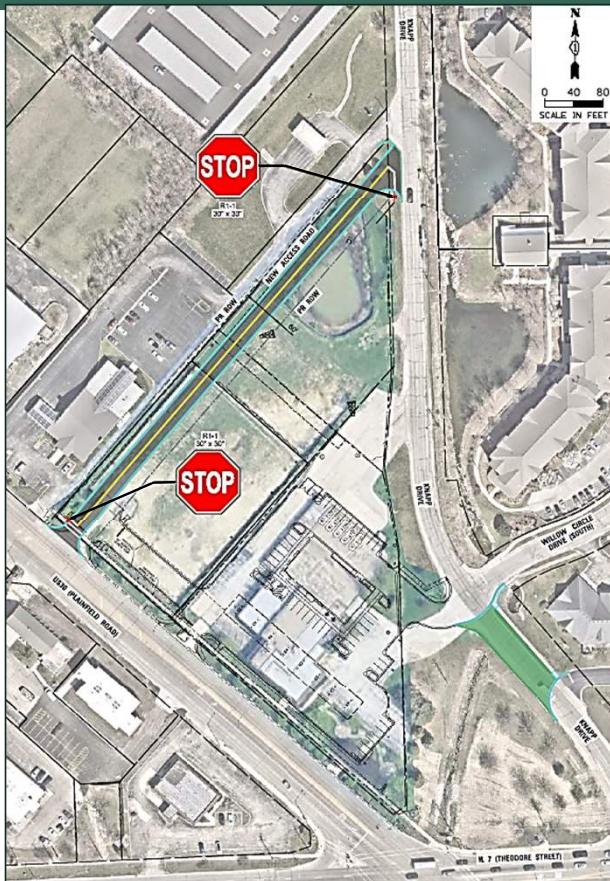
### ALT. 6.A (New Access Road)



**Alt 6A:**  
Construct a new access road at US 30 along the west side of the development to connect to Knapp Drive and install left turn restrictions at IL 7 (Theodore Street).

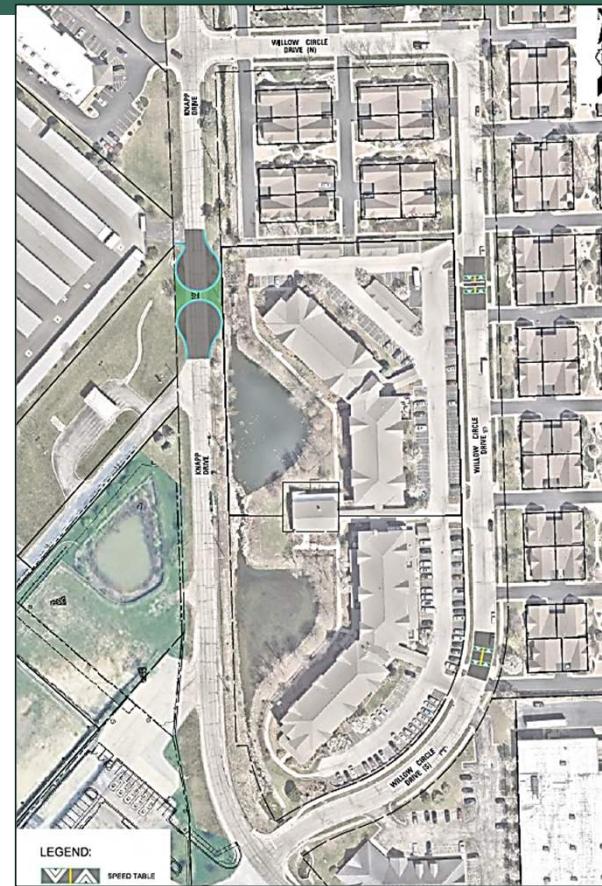
## TRAFFIC CALMING SUMMARY – SECONDARY IMPLEMENTATION ALTERNATIVES (...CONTINUED)

### ALT. 6.B (New Access Rd with Closure)



Alt 6B:  
Construct a new access road at US 30 along the west side of the development to connect to Knapp Drive and close Knapp Drive south of Willow Circle Drive south.

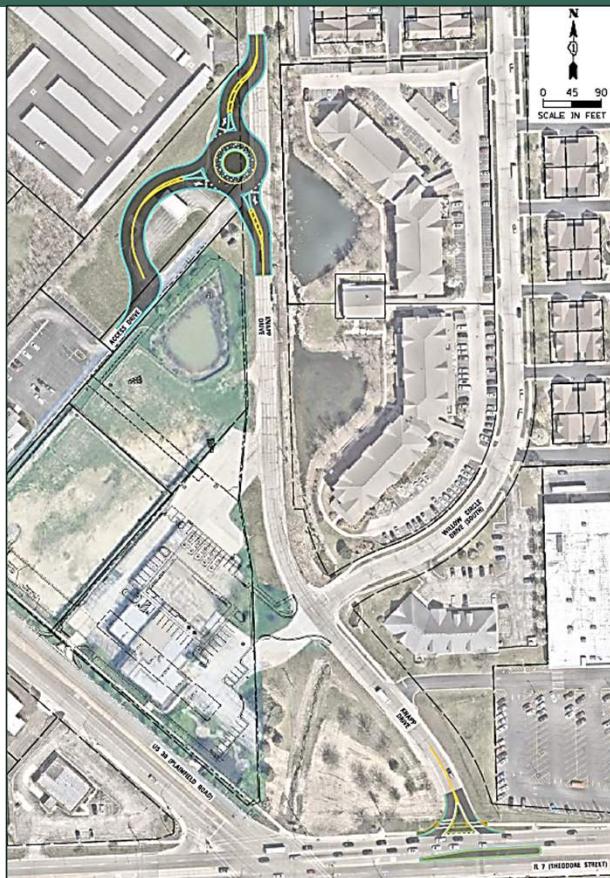
### ALT. 7 (Knapp Drive Closure)



Alt 7:  
Construct a road closure on Knapp Drive located in between Willow Circle Drive north and Willow Circle Drive south. Install supplemental speed tables on Willow Circle Drive.

## TRAFFIC CALMING SUMMARY – SECONDARY IMPLEMENTATION ALTERNATIVES (...CONTINUED)

**ALT. 8 (Roundabout with RIRO at IL 7)**



**Alt 8:**  
Construct a roundabout to slow traffic on Knapp Drive located in between Willow Circle Drive north and Willow Circle Drive south and install a right-in, right-out at IL 7 (Theodore St.).

**ALT. 9 (Two Roundabouts at Willow Circle Dr)**



**Alt 9:**  
Construct two roundabouts located at Willow Circle Drive north and Willow Circle Drive south.

## RECOMMENDATION



Recommendation is to implement Traffic Calming measures using an iterative approach beginning with the initial improvements:

- Curb Bumpouts/Road narrowing
- Speed Tables
- Barrier Median
- Stop Control

If initial measures do not yield expected results, the secondary improvements should be implemented:

- RIRO
- New Roadway Access
- Roadway Closures
- Roundabout



## APPENDIX - EXAMPLES

## EXAMPLE OF PERMANENT CLOSURE:

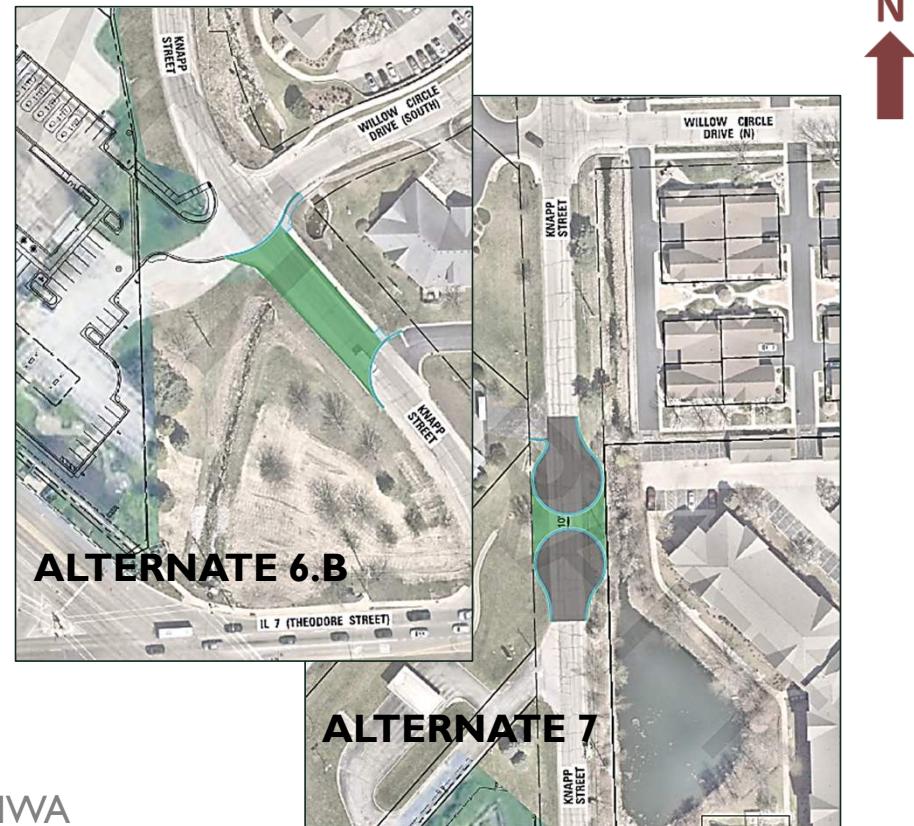
Reduces volume of cut-thru traffic.

Suggested location: South of Willow Circle Drive  
North and Knapp Drive

Full Closure



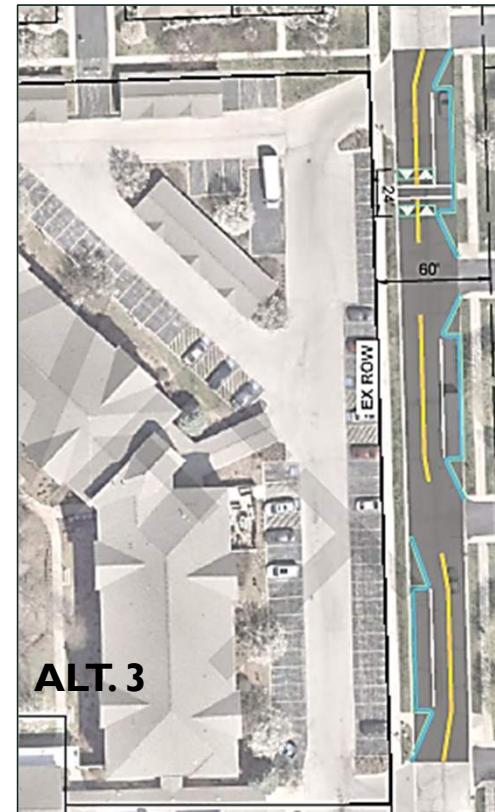
- Dead end street with one ingress/egress
- Created to eliminate through traffic



## EXAMPLE OF CURB EXTENSIONS / BUMPOUTS AT INTERSECTIONS:

Visually & physically narrow the roadway, reducing volume and speed of cut-thru traffic. Raised crossing to make pedestrians more visible to motorists.

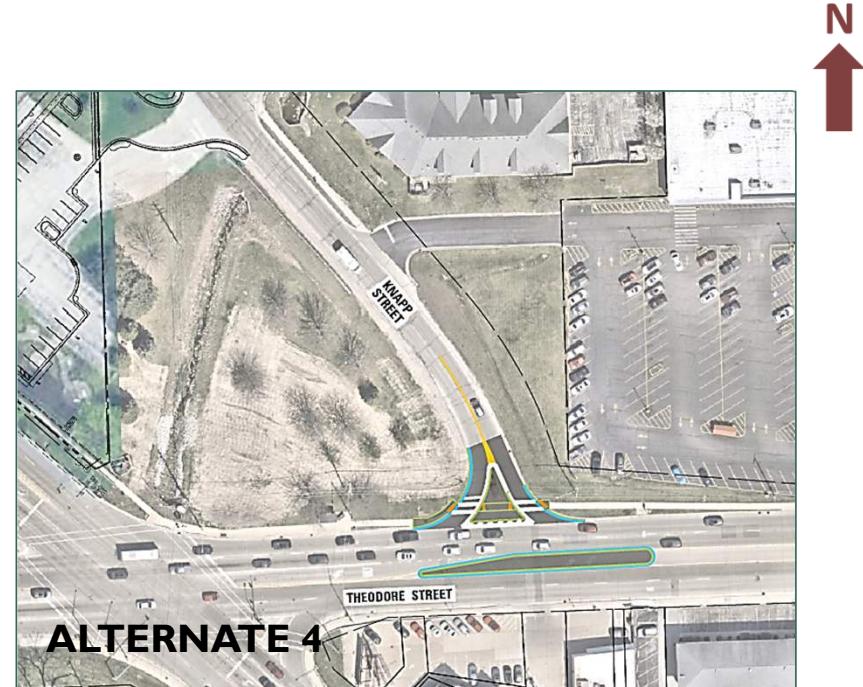
Suggested location: Willow Circle Drive



## EXAMPLE OF RIGHT IN/RIGHT OUT (RIO) AT INTERSECTIONS:

Physically restricting access at the intersection, reducing the volume of cut through traffic.

Suggested location: IL 7 (Theodore St) and Knapp Dr



## EXAMPLE OF ROUNDABOUTS:

Reduces speed of all traffic and volume of cut through traffic.

Suggested location: Knapp Dr and Access Dr  
Knapp Dr and North and South Willow Circle Dr



