



NOTICE AND AGENDA

**NOTICE IS HEREBY GIVEN
THAT A COMMITTEE OF THE WHOLE MEETING**

WILL BE HELD ON

November 19, 2019

6:00 PM

Location: Oswego Village Hall

- A. CALL TO ORDER**
- B. ROLL CALL**
- C. CONSIDERATION OF AND POSSIBLE ACTIONS ON ANY REQUESTS FOR ELECTRONIC PARTICIPATION IN MEETING**
- D. PUBLIC FORUM**
- E. OLD BUSINESS**
- F. NEW BUSINESS**

F.1. Wolfs Crossing Update

[jh11919.pbot Wolfs Crossing Update.docx](#)
[Wolfs Crossing Update 11919.pdf](#)

Posted: _____
Date: _____
Time: _____
Place: _____
Initials: _____

Tina Touchette
Village Clerk

G. CLOSED SESSION

- G.1. a. Pending and Probable Litigation [5 ILCS 120/2(c)(11)]
- b. Appointment, Employment, Compensation, Discipline, Performance, or Dismissal of Personnel [5 ILCS 120/2(c)(1)]
- c. Collective Bargaining, Collective Negotiating Matters, Deliberations Concerning Salary Schedules [5 ILCS 120/2(c)(2)]
- d. Sale, Lease, and/or Acquisition of Property [5 ILCS 120/2(c)(5) & (6)]
- e. Security Procedures and the Use of Personnel and Equipment to Respond to an Actual, Threatened, or a Reasonably Potential Danger to the Safety of Employees, Staff, the Public, or Public Property [5 ILCS 120/2(c)(8)]

H. ADJOURNMENT

AGENDA ITEM

MEETING TYPE: Committee of the Whole
MEETING DATE: November 19, 2019
SUBJECT: Wolfs Crossing Update

ACTION REQUESTED:

Receive the report.

BOARD/COMMISSION REVIEW:

N/A

ACTION PREVIOUSLY TAKEN:

Date of Action	Meeting Type	Action Taken
N/A	N/A	N/A

DEPARTMENT: Public Works

SUBMITTED BY: Public Works Director/Village Engineer Jennifer M. Hughes, P.E., CFM

FISCAL IMPACT: To Be Determined

BACKGROUND:

We have been working with our consultant, Alfred Benesch & Company, since July 2016 to complete Phase I engineering for improvements to Wolfs Crossing. Phase I engineering involves establishing the purpose and need for the project; identifying the preferred alternative including alignment, profile, and right-of-way needs; determining preliminary drainage requirements; and investigating potential environmental, cultural, and historical impacts.

DISCUSSION:

We are nearing completion of Phase 1. The attached presentation discusses what has been completed to date and what are the next steps to complete prior to starting construction.

RECOMMENDATION:

Accept the report.

ATTACHMENTS:

- Wolfs Crossing Update 11/19/19



Wolfs Crossing

C O R R I D O R

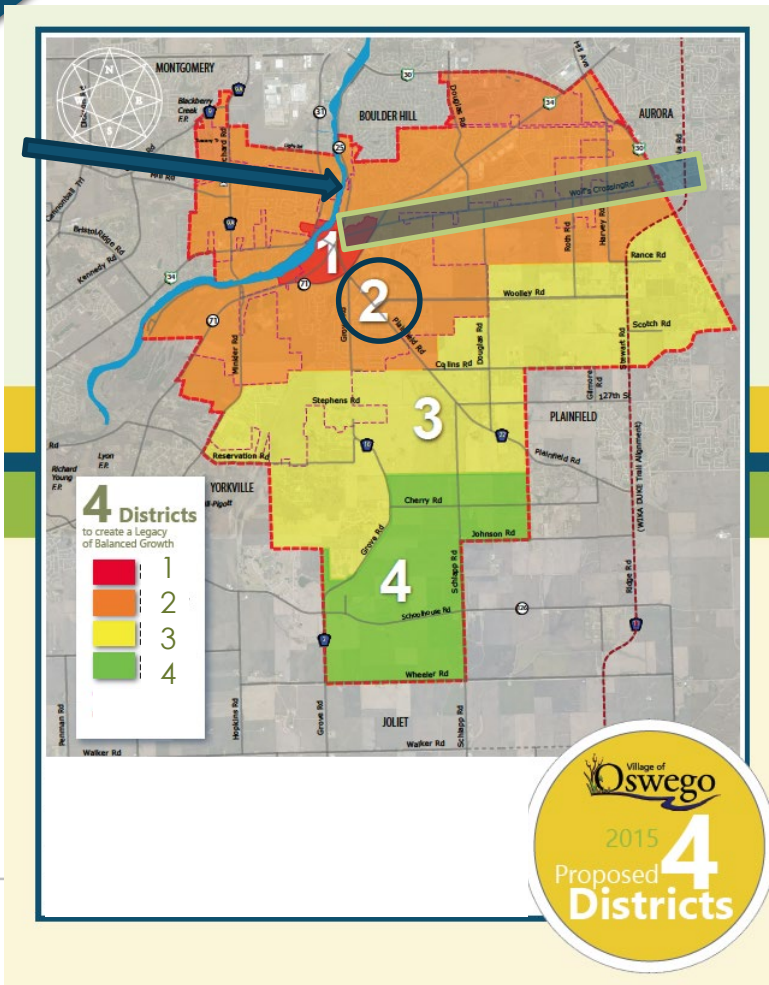


Project Overview

November 19, 2019

The Wolfs Crossing Project

Wolfs Crossing Road



Wolfs Crossing Road

Wolfs Crossing Corridor

The Wolfs Crossing Project

4.4 miles





Purpose and Need for the Project



Corridor History

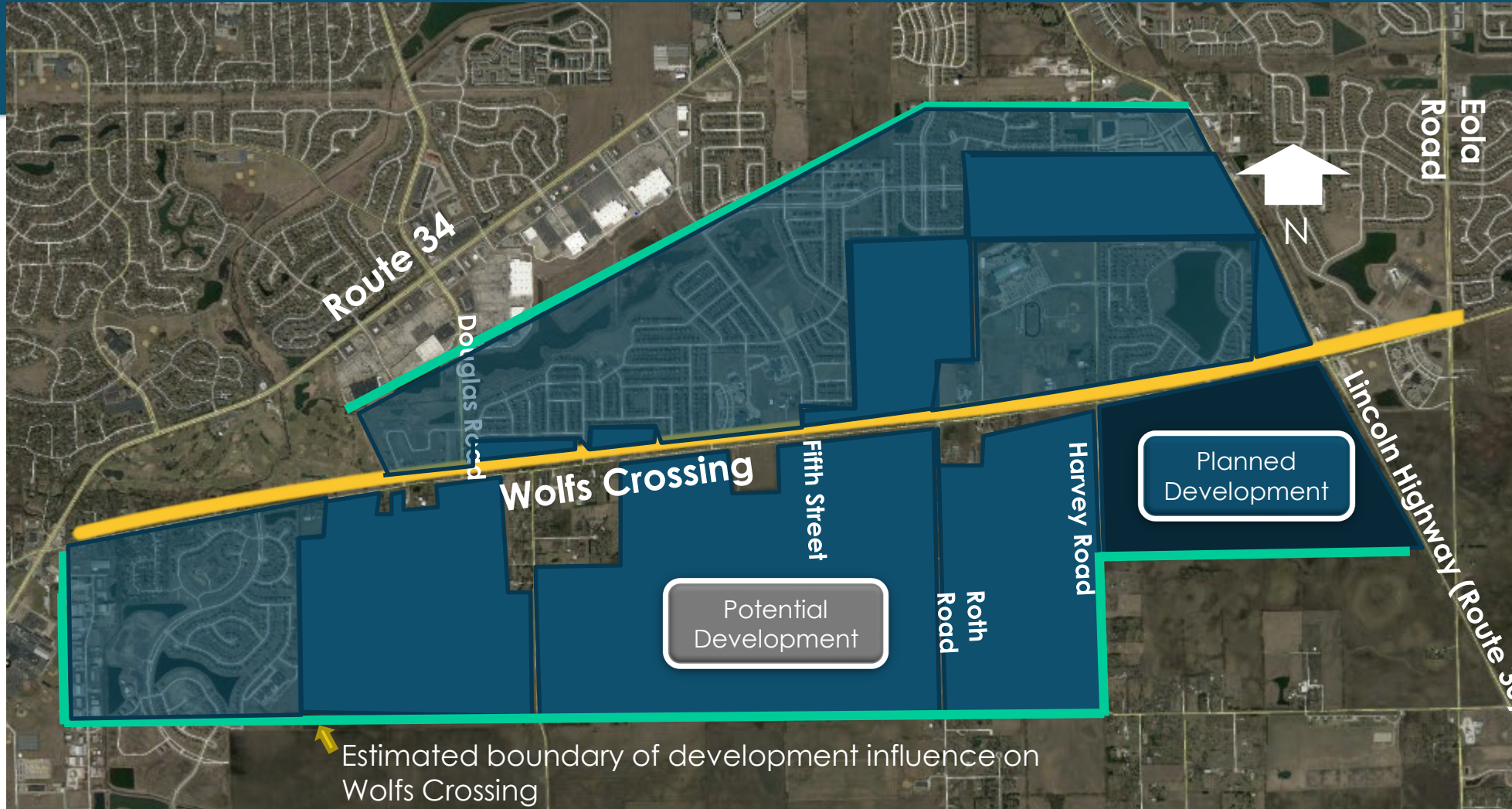
1994



2014



Potential Development



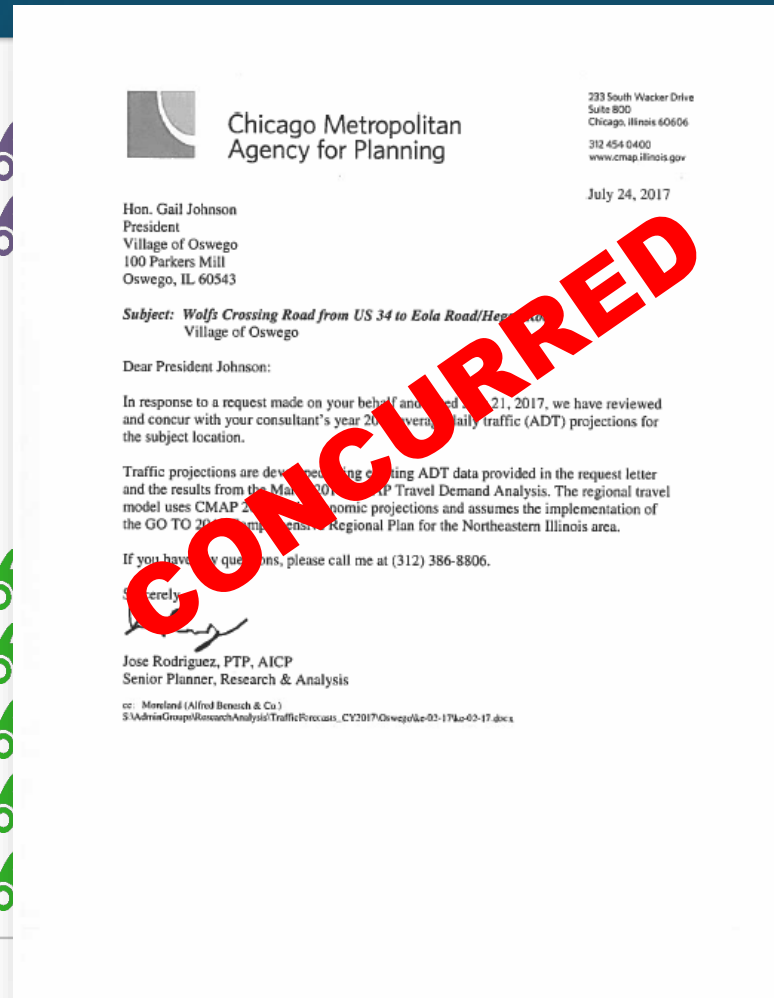
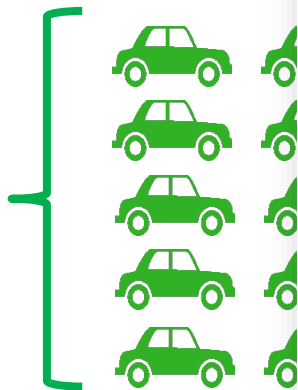
Estimated boundary of development influence on Wolves Crossing

Traffic: Year 2040 Forecast

Anticipated traffic due to regional growth

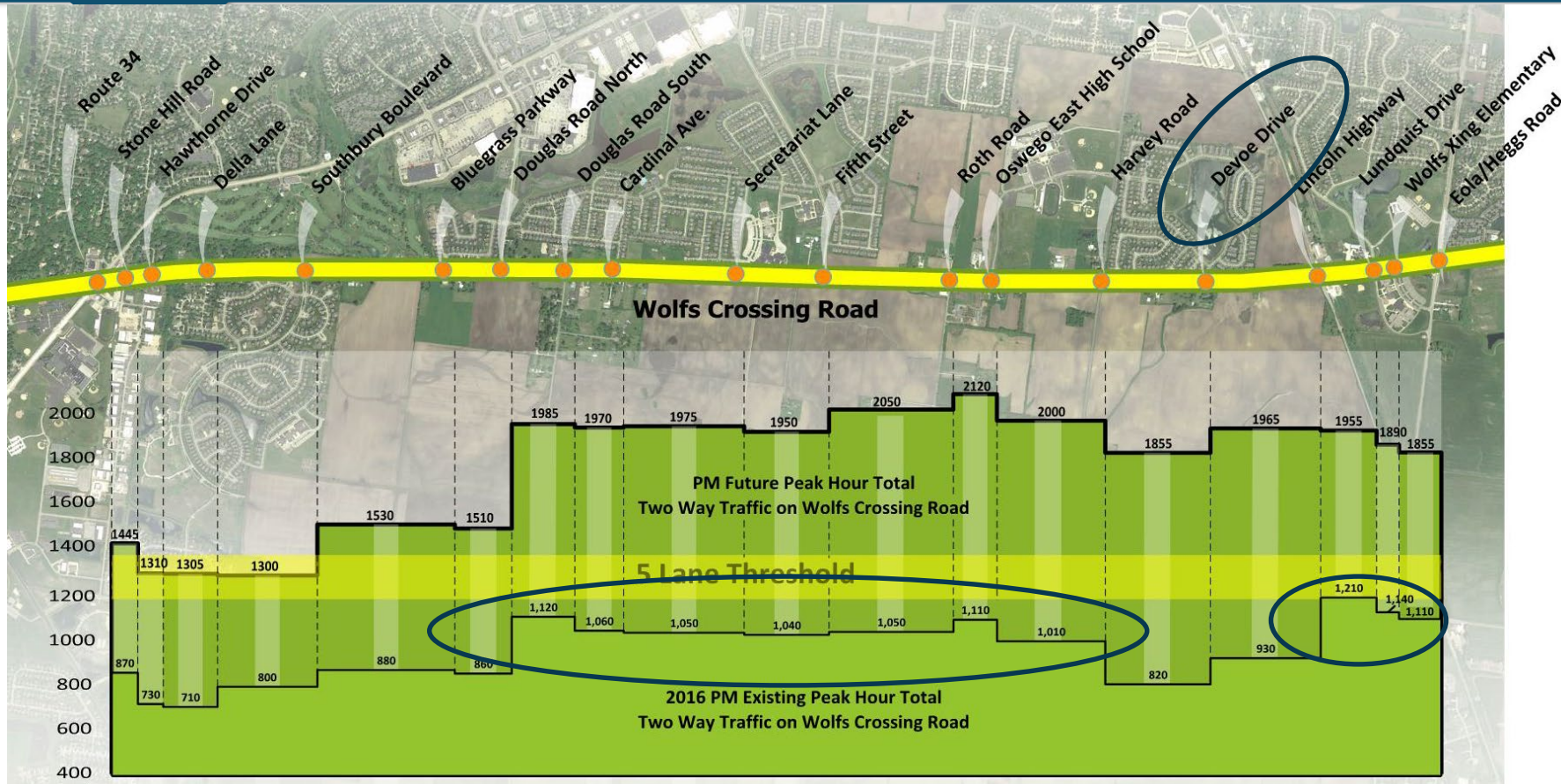


Existing traffic

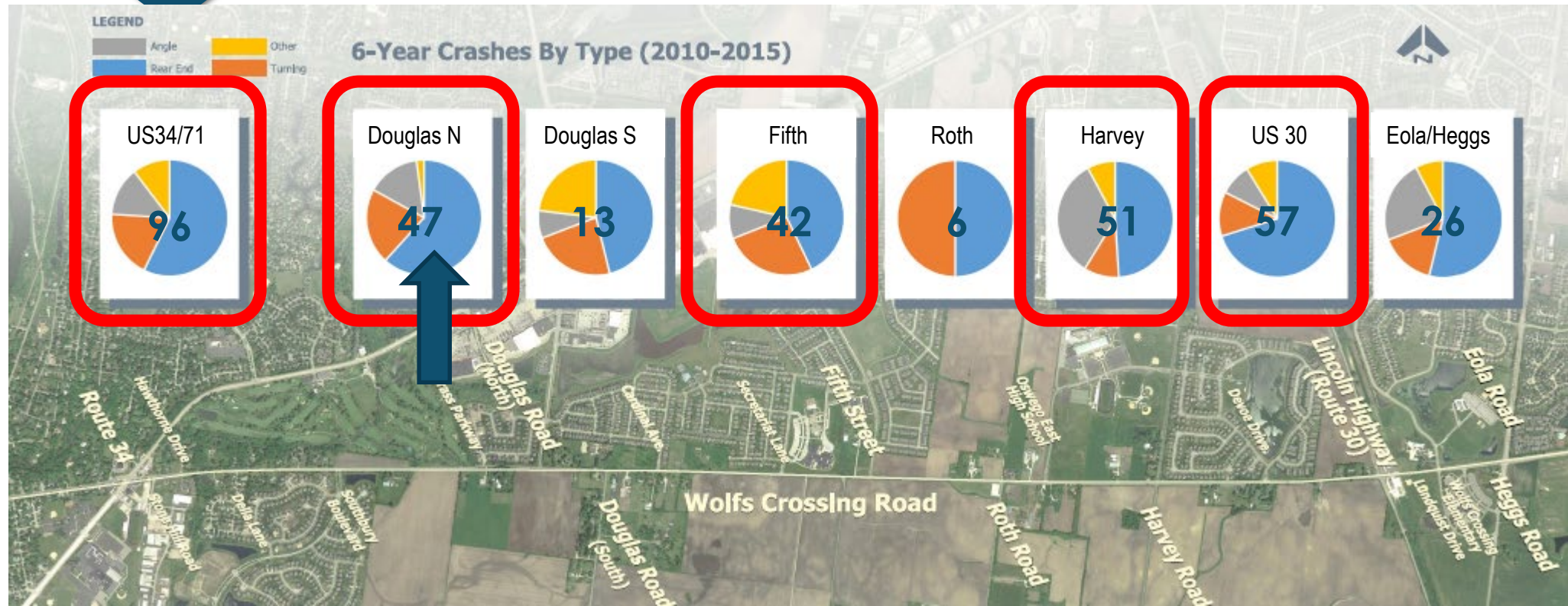


Year 2040 Forecasted Traffic

Traffic: How many lanes?



Crashes





Considering alternatives

Corridor Advisory Team (WolfCAT)

1/11/2017

3/23/2017

9/28/2017

Who is the WolfCAT?

- ✓ Representatives of School District 308 (3)
- ✓ Representatives from IDOT (2)
- ✓ Officials representing the Oswegoland Park District, Village of Oswego, Oswego Township, Oswego Chamber of Commerce, City of Aurora, Oswego Fire Protection District, Kendall County, and Will County (12)
- ✓ Local business owners located on the corridor (8)
- ✓ Residents located on the corridor (18)



Character of the Corridor



WolfCAT Accomplishments

1 Formulated purpose and need statement

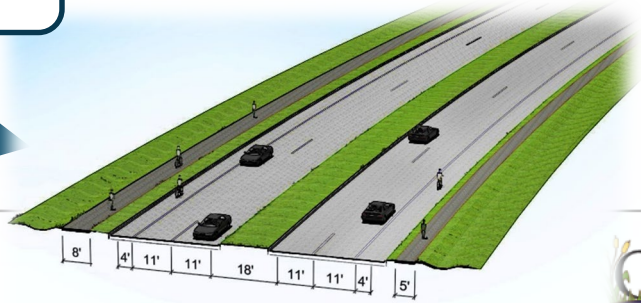
2 Recommended alignment



3 Recommended intersection types



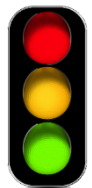
4 Recommended cross section



- Purpose (What are we trying to accomplish?)**
- ✓ Enhance safety
 - ✓ Reduce traffic congestion
 - ✓ Improve mobility and operations
 - ✓ Accommodate economic development
- Need (Why are we studying this corridor?)**
- ✓ Crash history
 - ✓ Capacity analysis of existing traffic data
 - ✓ Projected future traffic growth
 - ✓ Existing mobility and operations (Multi-modal)
 - ✓ Address drainage inadequacies
 - ✓ Minimize environmental impacts

Traffic Signals vs. Roundabouts: Crash Potential

Crash Potential



- Assigns right-of-way
- Tends to increase rear end crashes
- **5% - 45% overall reduction in crashes compared to an all-way stop***



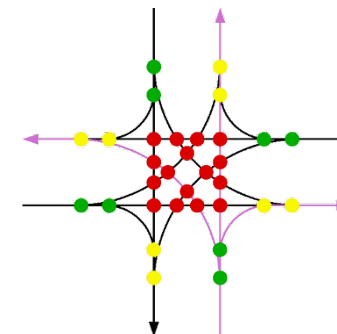
- Reduces conflict points: conflicting vehicles only approach from one direction
- Reduces severity of crashes by keeping vehicle speeds low **60% - 70% overall reduction in crashes compared to an all-way stop***

*Source: FHWA Crash Modification Factors Clearinghouse

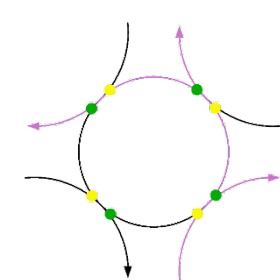
Conflict Points

A conflict point is a location where the travel paths of two different vehicles may collide

Conventional Intersection



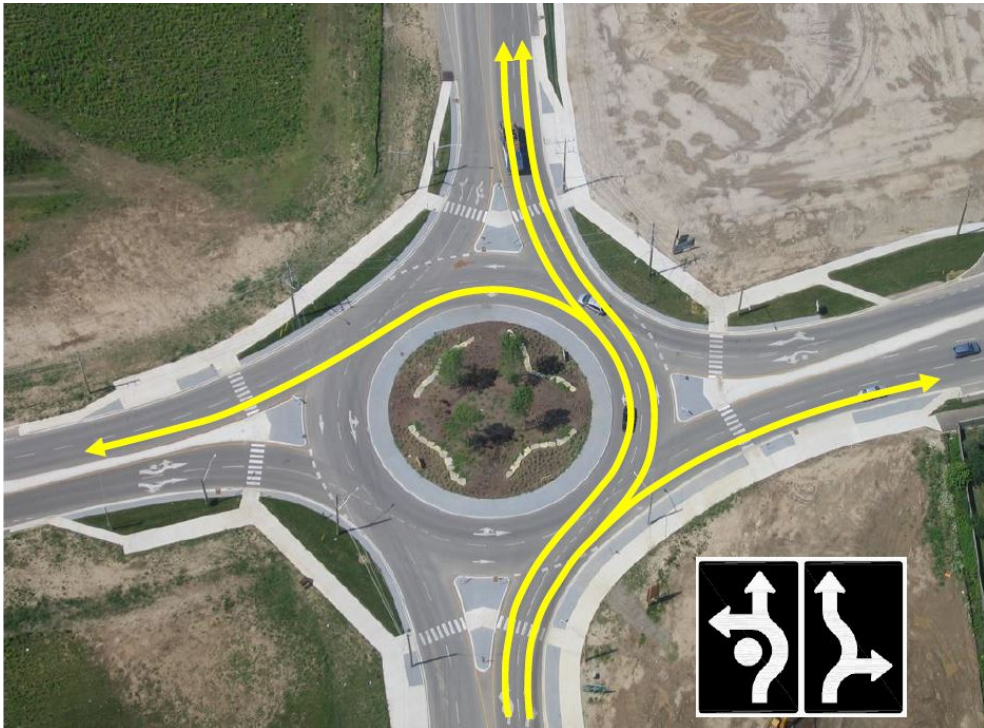
Roundabout



Conflict Type	Conventional Intersection	Roundabout
● Diverge	8	4
● Merge	8	4
● Cross*	16	0
Total	32	8

*Crashes of this type are more severe

Conventional Intersections vs. Roundabouts Traffic Operations



Operational comparison: Harvey Rd intersection

Conventional Intersection
All-Way Stop (2016)

76 seconds
average delay

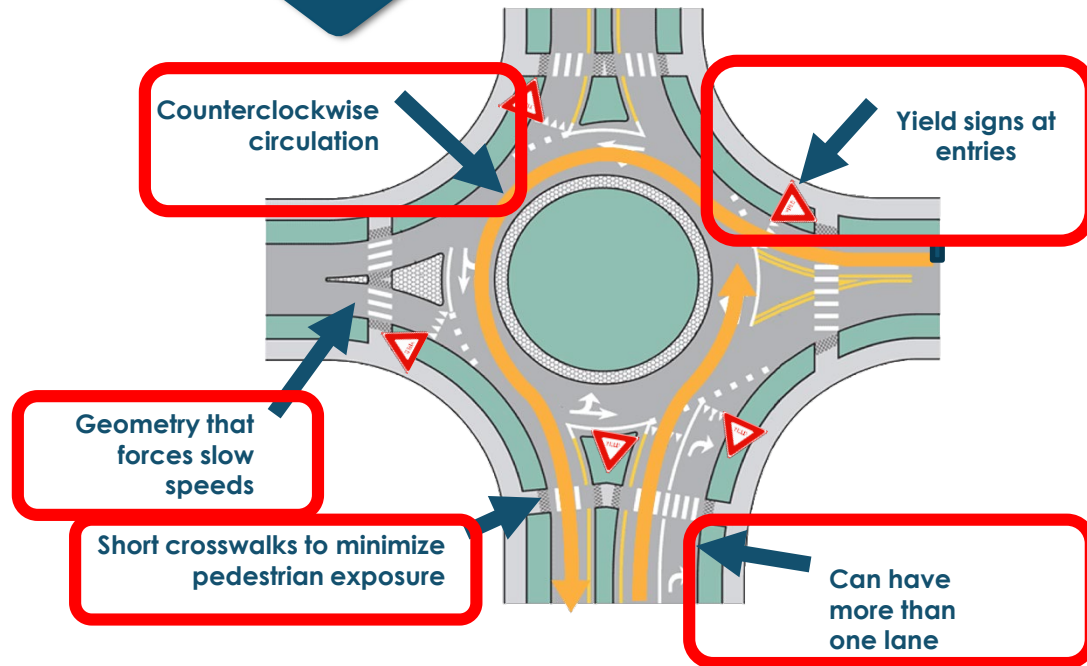
Conventional Intersection
Traffic Signal
(future year 2040)

23.9 seconds
average delay

Roundabout
(future year 2040)

5.8 seconds
average delay

How does a roundabout work?

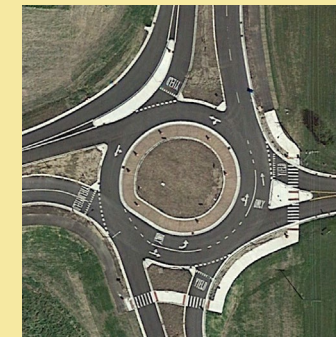


Golden rule of roundabouts:

Drivers in the circle have the right of way. When you enter the roundabout, you must yield to circulating traffic, pedestrians and bicyclists.

Nearby roundabouts you may be familiar with

- **Aurora:** Sullivan Road and Highland Road
- **Sugar Grove:** Dugan Road and Granart Road
- **Plainfield:** Renwick Road and Drauden Road



Sugar Grove



Plainfield

Alternatives



June 29, 2017
50 attendees



Alternative 1
Corridor of Signals

Alternative 2
Corridor of Roundabouts

Alternative 3
Hybrid Roundabout/Signal Corridor

Wolfs Crossing Preferred!





The Proposed Plan

The Recommended Alternative



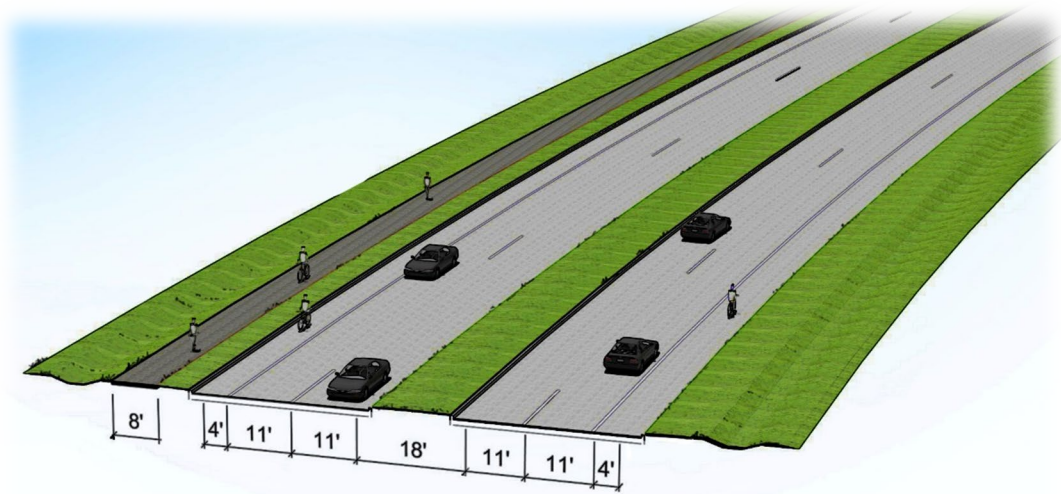
3 lanes
(one lane in each direction
plus turning lane)



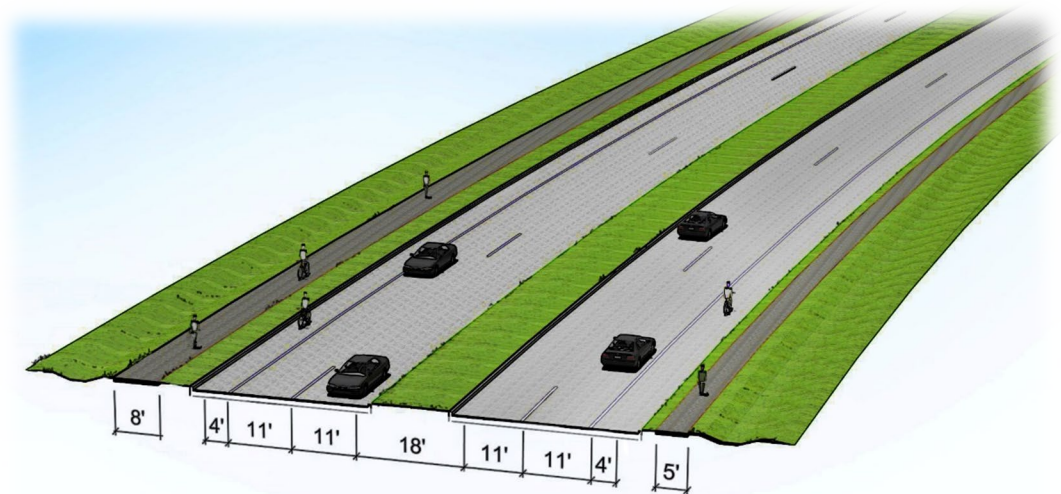
5 lanes
(two lanes in each direction
plus turning lane)

The Roadway Section

Initial roadway section in undeveloped areas

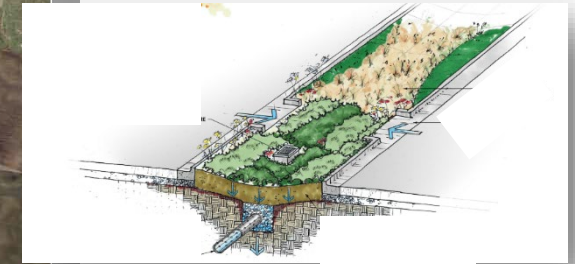
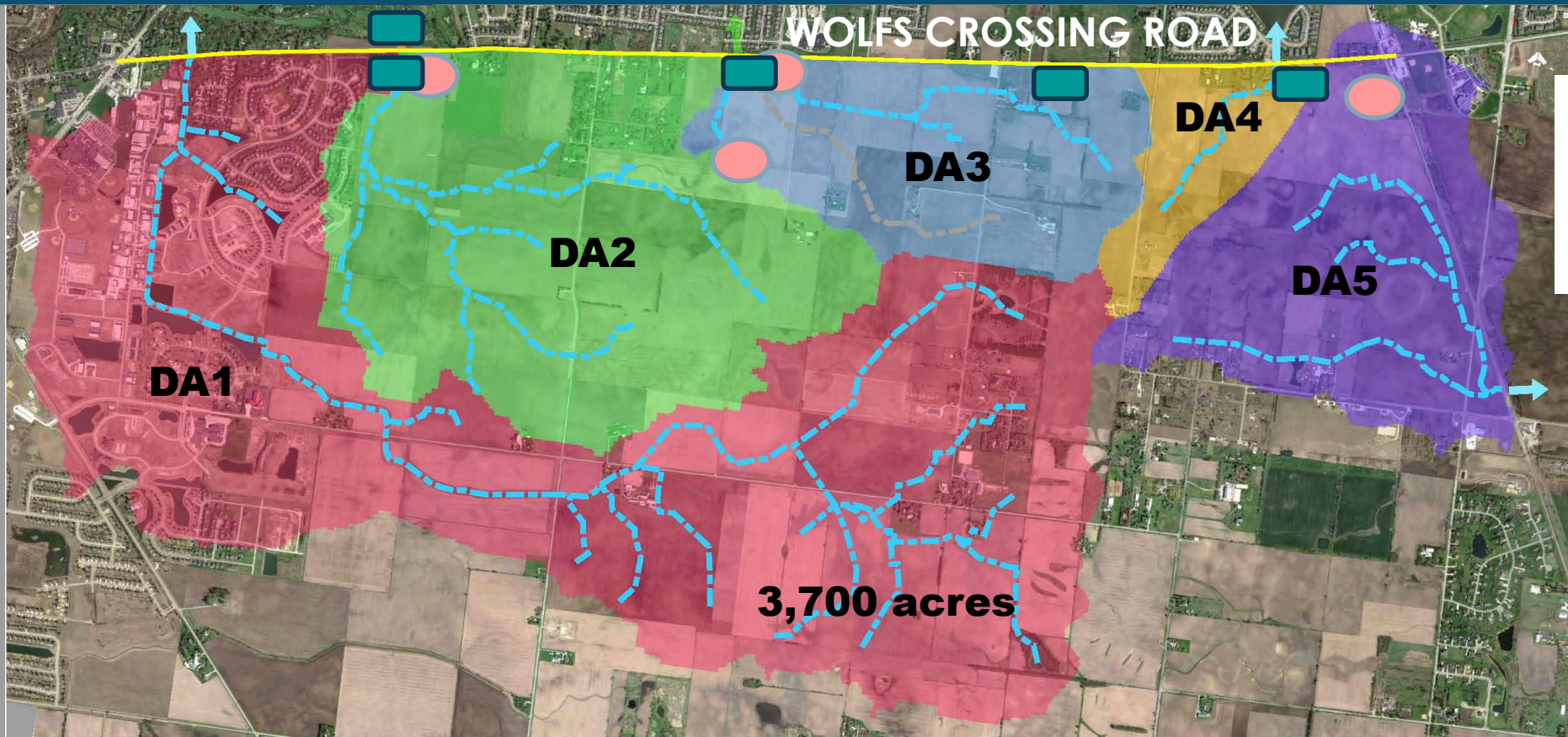


Ultimate roadway section





Graphics being revised to remove bike shoulder

Drainage



Median bio-swale

-  Historical flooding or overtopping
-  Proposed detention location



When will we build it?

Project Cost - \$60 million +



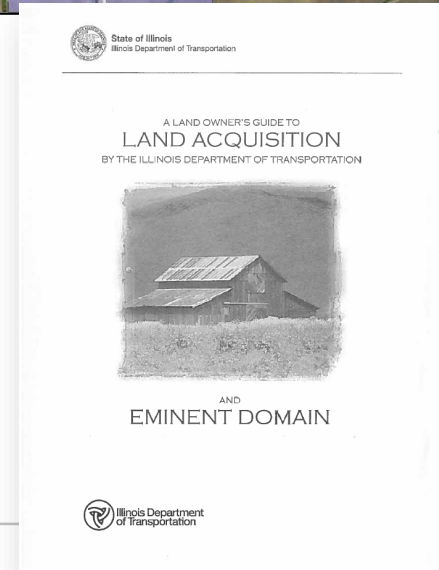
Segment	Location	From Station	To Station	Length (FT)	Pavement			Median Cost	Sidewalk Cost	Multi-Use Path Cost	Drainage Cost	Onsite Detention Cost	Signal	Lighting	Utility Relocation	Curb (Outside)	Earthwork			Base Cost (Replace Ex + Median) 3 Lane Cost	3 Lane Total w/ Engineering	Cost to Expand to 5 Lanes	Potential Non-Motorized Costs	5 Lane Total	5 Lane Total w/ Engineering
					ROW (AC)	Base Cost 3 Lane Cost	Total Cost 5 Lane Cost										LS Area (AC)	Base Cost 3 Lane Cost	Total Cost 5 Lane Cost						
Project 1	Harvey	369+81.23	387+06.90	1726	5.2	\$ 974,000	\$ 1,794,000	\$ 190,000	\$ 80,000	\$ 23,000	\$ 352,000	\$ 227,920		\$ 76,000	\$ 323,829	\$ 153,000	2.3	\$ 509,870	\$ 761,000.00	\$ 2,676,619	\$ 3,078,111	\$ 1,304,130	\$ 103,000	\$ 3,980,740	\$ 4,577,861
	Harvey to Hudson Pointe	387+06.90	403+50.00	1643	1.5	\$ 525,000	\$ 1,003,000	\$ 144,000	\$ 77,000	\$ 1,000	\$ 300,000					\$ 121,000	2.1	\$ 300,160	\$ 448,000.00	\$ 1,270,180	\$ 1,460,684	\$ 823,840	\$ 78,000	\$ 2,094,000	\$ 2,408,100
																	TOTAL =	\$ 3,946,779	\$ 4,538,795	\$ 2,127,970	\$ 181,000	\$ 6,074,740	\$ 6,985,961		
Project 2	Champions Run to Roth	338+50.00	346+04.50	755	0.5	\$ 206,000	\$ 395,000	\$ 333,000	\$ 34,000	\$ 21,000	\$ 138,000	\$ 538,253				\$ 53,000	0.8	\$ 140,030	\$ 209,000.00	\$ 1,376,283	\$ 1,582,725	\$ 345,970	\$ 55,000	\$ 1,184,000	\$ 1,361,600
	Roth & OEHS	346+04.50	363+04.60	1700	2.5	\$ 799,000	\$ 1,524,000	\$ 123,000	\$ 72,000	\$ 46,000	\$ 347,000		\$ 500,000	\$ 68,000	\$ 613,043	\$ 131,000	0.8	\$ 414,060	\$ 618,000.00	\$ 2,910,109	\$ 3,346,618	\$ 1,131,940	\$ 118,000	\$ 4,042,043	\$ 4,648,349
	OEHS to Harvey	363+04.60	369+81.23	677	1.5	\$ 215,000	\$ 387,000	\$ 64,000	\$ 30,000	\$ 19,000	\$ 124,000					\$ 48,000	0.6	\$ 158,120	\$ 236,000.00	\$ 580,120	\$ 667,138	\$ 327,880	\$ 49,000	\$ 908,000	\$ 1,044,200
																	TOTAL =	\$ 4,866,505	\$ 5,596,481	\$ 1,805,790	\$ 222,000	\$ 6,134,043	\$ 7,054,149		
Project 3	Douglas	258+33.00	278+84.83	2052	4.3	\$ 986,000	\$ 1,842,000	\$ 1,278,000	\$ 90,000	\$ 60,000	\$ 418,000	\$ 322,853		\$ 76,000	\$ 413,305	\$ 201,000	2.0	\$ 578,210	\$ 863,000.00	\$ 4,132,369	\$ 4,752,224	\$ 1,431,790	\$ 150,000	\$ 5,241,305	\$ 6,027,501
																	TOTAL =	\$ 4,132,369	\$ 4,752,224	\$ 1,431,790	\$ 150,000	\$ 5,241,305	\$ 6,027,501		
Project 4	Hudson Pointe to US 30	403+50.00	407+10.23	360	0.6	\$ 99,000	\$ 180,000	\$ 30,000	\$ 14,000	\$ 9,000	\$ 66,000	\$ 118,297				\$ 23,000	2.1	\$ 126,630	\$ 189,000.00	\$ 448,927	\$ 516,266	\$ 180,370	\$ 23,000	\$ 511,000	\$ 587,650
	US30	407+10.23	427+50.00	2040	1.5	\$ 994,000	\$ 1,942,000	\$ 117,000	\$ 92,000	\$ 54,000	\$ 416,000			\$ 250,000	\$ 64,000	\$ 474,394	\$ 146,000	0.7	\$ 366,490	\$ 547,000.00	\$ 2,735,684	\$ 3,146,267	\$ 1,366,510	\$ 146,000	\$ 4,102,994
																	TOTAL =	\$ 3,184,812	\$ 3,682,534	\$ 1,546,880	\$ 169,000	\$ 4,613,394	\$ 5,305,404		
Project 5	Eola/Heggs	427+50.00	436+29.23	879	0.0	\$ 272,000	\$ 544,000	\$ 70,000	\$ 38,000	\$ -	\$ 179,000		\$ 250,000	\$ 34,000	\$ 240,631	\$ 83,000	1.6	\$ 146,060	\$ 218,000.00	\$ 1,191,691	\$ 1,370,446	\$ 444,940	\$ 38,000	\$ 1,636,631	\$ 1,882,126
																	TOTAL =	\$ 1,191,691	\$ 1,370,446	\$ 444,940	\$ 38,000	\$ 1,636,631	\$ 1,882,126		
Project 6	Fifth to Champions Run	334+14.76	338+50.00	435	0.5	\$ 125,000	\$ 236,000	\$ 193,000	\$ 20,000	\$ 12,000	\$ 80,000	\$ 204,556				\$ 31,000	0.8	\$ 98,490	\$ 147,000.00	\$ 713,046	\$ 820,003	\$ 210,510	\$ 32,000	\$ 719,000	\$ 826,850
	Fifth	320+63.71	334+14.76	1351	0.1	\$ 594,000	\$ 1,185,000	\$ 1,164,000	\$ 39,000	\$ 39,000	\$ 275,000			\$ 71,000	\$ 234,880	\$ 140,000	0.9	\$ 276,040	\$ 412,000.00	\$ 2,653,920	\$ 3,052,008	\$ 905,960	\$ 78,000	\$ 3,559,880	\$ 4,093,862
																	TOTAL =	\$ 3,366,996	\$ 3,872,010	\$ 1,116,470	\$ 110,000	\$ 4,278,880	\$ 4,920,712		
Project 7	Douglas to Fifth	278+84.83	320+63.71	4179	7.1	\$ 1,426,000	\$ 2,640,000	\$ 1,566,000	\$ 187,000	\$ 115,000	\$ 763,000	\$ 85,273			\$ 566,105	\$ 314,000	3.4	\$ 942,690	\$ 1,407,000.00	\$ 5,464,067	\$ 6,283,677	\$ 2,179,310	\$ 302,000	\$ 7,558,105	\$ 8,691,820
																	TOTAL =	\$ 5,464,067	\$ 6,283,677	\$ 2,179,310	\$ 302,000	\$ 7,558,105	\$ 8,691,820		
Project 8	Southbury	230+70.20	246+84.22	1614	2.7	\$ 611,000	\$ 1,139,000	\$ 1,188,000	\$ 72,000	\$ 47,000	\$ 329,000	\$ 114,946		\$ 71,000	\$ 413,172	\$ 138,000	0.6	\$ 289,440	\$ 432,000.00	\$ 3,063,558	\$ 3,523,091	\$ 880,560	\$ 119,000	\$ 3,829,172	\$ 4,403,548
	Southbury to Douglas	246+84.22	258+33.00	1149	2.3	\$ 367,000	\$ 664,000	\$ 474,000	\$ 51,000	\$ 33,000	\$ 210,000					\$ 82,000	1.6	\$ 506,520	\$ 756,000.00	\$ 1,590,520	\$ 1,829,098	\$ 679,480	\$ 84,000	\$ 2,270,000	\$ 2,610,500
																	TOTAL =	\$ 4,654,678	\$ 5,352,189	\$ 1,560,040	\$ 203,000	\$ 6,099,172	\$ 7,014,048		
Project 9	US34	200+00.00	213+00.00	1300	0.9	\$ 335,000	\$ 642,000	\$ 29,000	\$ 68,000	\$ 4,000	\$ 265,000	\$ 5,570		\$ 64,000	\$ 408,543	\$ 96,000	1.6	\$ 188,270	\$ 281,000.00	\$ 1,299,383	\$ 1,494,290	\$ 563,730	\$ 72,000	\$ 1,857,543	\$ 2,136,174
																	TOTAL =	\$ 1,299,383	\$ 1,494,290	\$ 563,730	\$ 72,000	\$ 1,857,543	\$ 2,136,174		
Project 10	US 34 to Southbury	213+00.00	230+70.20	1770	2.6	\$ 315,000	\$ 552,000	\$ 637,000	\$ 80,000	\$ 21,000	\$ 323,000	\$ 20,456			\$ 281,165	\$ 26,000	2.3	\$ 2,805,290	\$ 4,187,000.00	\$ 4,402,910	\$ 5,063,347	\$ 1,724,710	\$ 101,000	\$ 6,107,165	\$ 7,023,239
																	TOTAL =	\$ 4,402,910	\$ 5,063,347	\$ 1,724,710	\$ 101,000	\$ 6,107,165	\$ 7,023,239		
PROJECT BASED TOTAL					33.8	\$ 8,843,000	\$ 16,670,000	\$ 7,600,000	\$ 1,044,000	\$ 504,000	\$ 4,585,000	\$ 1,638,122	\$ 1,000,000	\$ 524,000	\$ 3,969,066	\$ 1,766,000	24.4	\$ 7,846,370	\$ 11,711,000	\$ 36,509,559	\$ 41,985,993	\$ 14,501,630	\$ 1,548,000	\$ 49,600,986	\$ 57,041,134

Project Phasing

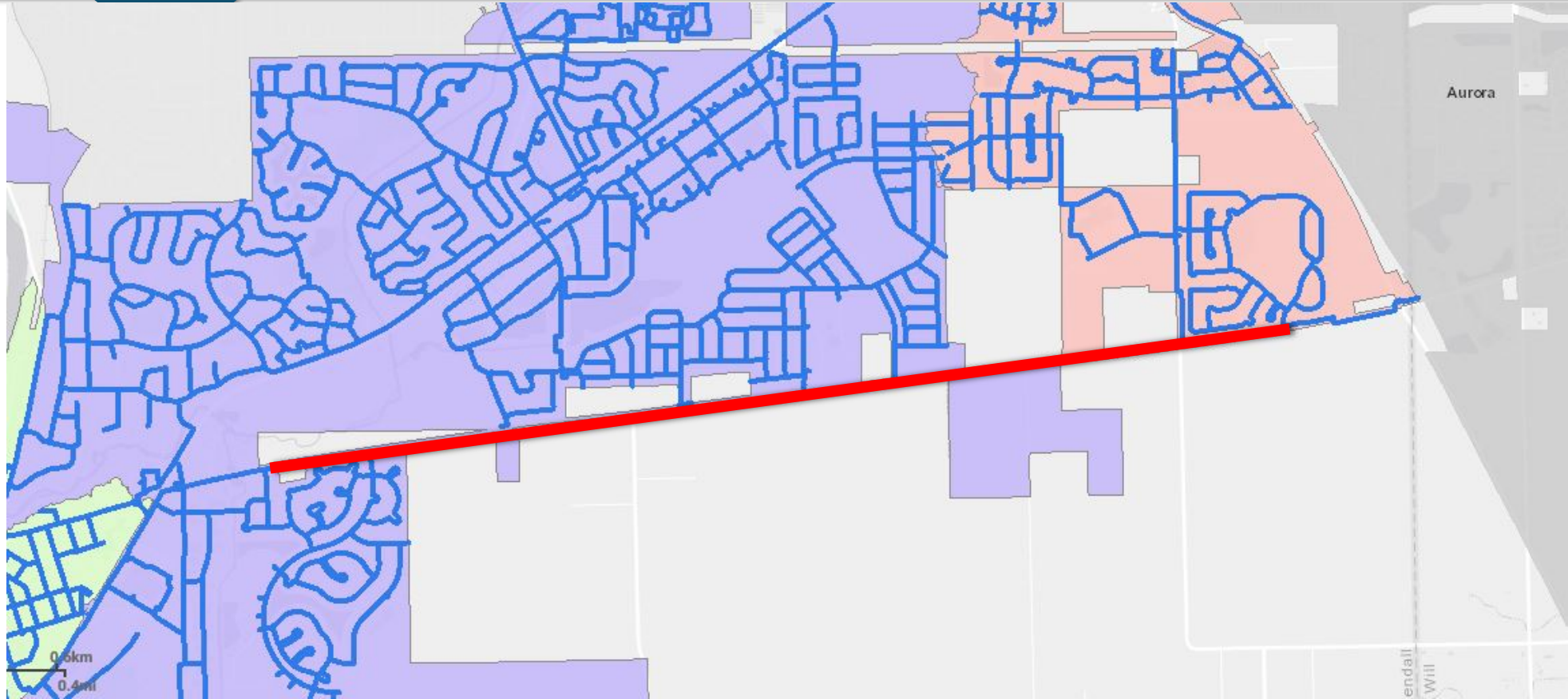


\$60 million +

Property required



Watermain – System Improvements



How Do We Pay For It?

Funding Strategy

- Segment project to spread cost
- Diversify Funding Sources
 - Surface Transportation Program (federal) - \$2.5 Million
 - Local Funds
 - Loans
 - Bonds
 - Additional Opportunities
 - Additional STP Funds (Shared Fund – Contingency Fund)
 - State Funds
 - Other



Next Steps

- Complete Phase 1 – Late Fall 2019
- Select Project 1 – Harvey Road Intersection
- Negotiate Contract for Phase 2 Engineer (requires IDOT approval)
- Phase 2 – Project 1 – Spring 2020-Fall 2021
 - Engineering
 - Land Acquisition
- Phase 3 – Construction - Spring 2022 – Fall 2024
 - Bid and award construction contract (requires IDOT approval)
 - Construction - ~ 2 years