

PROJECT INFORMATION SHEET

Springfield Pike Improvement HAM-4-4.31 (ODOT PID 98767) Public Meeting – March 23rd 2016

WELCOME

The Ohio Dept. of Transportation (ODOT) and the City of Wyoming are pleased to hold a public meeting for the improvement of Springfield Pike between W. Mills (S. Corp. Line) and Rolling Hills Drive. This meeting will provide a platform by which all interested persons may have an opportunity to review current plans, and provide input into the decision making process. This project is designed to provide safer roadway conditions for the traveling public through the City of Wyoming on Springfield Pike.

This handout and the materials that have been developed to summarize the project are on display to present the improvements currently under consideration. Project team representatives are available at the meeting to answer your questions and take comments.

PURPOSE OF MEETING

The purpose of the Public Involvement Meeting is to seed additional comments on the recent studies pertaining to the roadway improvement and assist in determining areas of concern. The improvements will go from 2 lanes in each direction with no turn lanes, to a road with 1 lane in each direction along with a center turn lane for the length of the project. Both thru lanes will be widened to 15 feet in width and will maintain the presence of shared lanes for bicycle travel with the use of shared lane markings and signage.

The curb width will remain the same on the full length of the project, no widening at the pavement will occur.

PROBLEM IDENTIFICATION

Springfield Pike is classified as an Urban Principal Arterial. The Average Daily Traffic (ADT) for this section of Springfield Pike is projected to be 20,000 vehicles per day (VPD) by the year 2038. Crash rates in this section of Springfield Pike are about 50% higher than the state average for similar roadways. Crash rates will continue to be higher than the state average if no improvements are made. Pavement condition has been observed to be deteriorating for some years, and investigation in 2010 showed very significant breakdown in the pavement structure. The pavement conditions have continued to deteriorate and as time goes on will accelerate beyond the ability of emergency repairs and pose increased risk to vehicles traveling on the Springfield Pike.

PURPOSE AND NEED FOR THE PROPOSED IMPROVEMENT

The purpose of the project is to improve the traffic flow, provide safer turning movement opportunities, and improve vehicle and pedestrian access to the facilities within the City of Wyoming. The purpose includes rehabilitation of existing pavement including substantial full depth and partial depth repairs to the existing pavement, repair of curb, storm sewer inlets and upgrading all traffic signals as well as adding a new signal at Bonham Road.

The project is needed to address crashes and deteriorating roadway surface within the City limits. Most recent crash analysis for this section of Springfield Pike (2012 to 2015) demonstrates that over 50% of all accidents were rear-end or side swipe in nature, indicating crashes related to left-turn movements. These crashes mostly occurred near or at the intersection of Oliver Road, Wyoming Avenue and Fleming Road.

For more information on this project please visit:

www.wyomingohio.gov/springfieldpikereconstructionproject.cfm

PROJECT SCHEDULE

Environmental Documentation Clearance	Summer	2016
Design Plans Completed	Winter	2017
Right-of-Way Acquisition Begins	Summer	2017
Right-of-Way Acquisition Completed	Fall	2017
Construction Award Date	Spring	2018

YOUR COMMENTS ARE IMPORTANT

This public improvement meeting is an important part of the environmental and planning decision making process. Please take this opportunity to review the project exhibits that will be on display and talk with the project study team representatives who will be present.

Your input is a very important part of this process. Comment sheets will be available for your use at this meeting for you to provide your input. Comments not submitted the day of the meeting are to be received ***on or before April 13, 2016*** and may be forwarded to the email address listed on the project website or to the following addresses:

Lynn Tetley, City Manager
City of Wyoming
800 Oak Avenue
Wyoming, Ohio 45215

-or-

Terry Huxel, Public Works Director
City of Wyoming
800 Oak Avenue
Wyoming, Ohio 45215

Thank you for your time and consideration.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 11, 2015 and executed by FHWA and ODOT.

TRAFFIC MODELING SOFTWARE

HAM SR 4-4.31 (PID 98767)

SYNCHRO & SIMTRAFFIC



TRAFFIC MODELING SOFTWARE – SYCHRO & SIMTRAFFIC

Industry standard for accurately modeling signal timing, signal phasing, controller operation, traffic volume and traffic volume fluctuation.

INPUT

- Hourly Volumes – counts, observations
- Turning Traffic (Left, Thru, Right) – counts, observations
- Traffic Signal Phasing
- Lane Selection
- Bus Stops
- Field Observations
- Hourly Fluctuations
- Traffic Signal Timing
- Vehicle Detection
- Pedestrians
- Existing Lanes

SIMTRAFFIC MODEL

Uses a variety of driver “types” from very aggressive to passive drivers

Aggressive drivers

- Change lanes often
- Wait until the last minute to get into correct lane

Passive drivers

- Stay in one lane
- Will wait behind left turners
- Get into desired lane early

MODEL VALIDATION

Drive corridor during each modeled time period several times to compare the “Travel Time” along the corridor. Travel Time is the time it takes to drive from the beginning of the corridor to the end, including all stops, signal changes, left turning vehicles, etc. This is done a minimum of 5 times in each direction for each peak modeled.

FUTURE MODELS

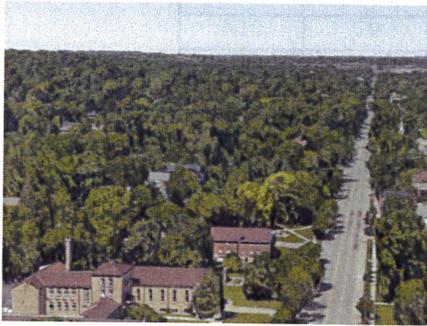
In addition to the existing traffic models, future models were created with projected to future volumes based on historic trends, previous growth in the area, etc. Models are developed for the existing and proposed case.

MEASURES OF EFFECTIVENESS

Provides traffic statistics such as:

- Travel Time
- Queuing
- Traffic Progression
- Intersection Level of Service (Grade A-F)
- Delay
- Arterial Level of Service (Grade A-F)

SPRINGFIELD PIKE



TRAVEL TIME STUDIES – SPRINGFIELD PIKE – MODEL VALIDATION

Travel Time Studies were conducted in October during the AM Peak and PM Peak along SR 4.

SR 4 Travel Time* (in sec)

		Travel Time Study – Actual Drive	"Existing" Model	"Proposed" Model
AM Peak	NB	242	253.9	210.4
	SB	253	276.7	213.9
School Peak	NB	-	246.8	216.7
	SB	-	239	223.8
PM peak	NB	278	257.1	238.7
	SB	234	234.8	264.8

* Results between East Mill Ave and Bonham Rd
** # in box is the average time over an hour

What does this mean? Model closely resembles actual drive time along the corridor. Road diet will decrease or not increase the drive time for most cases.

TRAVEL TIME STUDIES – BURNS AVENUE (EAST MILLS AVE TO WYOMING AVE)

Burns Travel Time Comparison*(in sec)

		Burns – Travel Time Study – Actual Drive	SR 4 Existing - Travel Time Study - Actual Drive	SR 4 Proposed
AM Peak	NB	80	98	82.3
	SB	89	111	73.8
PM Peak	NB	110	141	95.1
	SB	92	102	85

* Results between East Mill Ave and Wyoming Avenue
** # in box is the average time over an hour

What does this mean? Burns is slightly quicker today than taking Springfield Pike. It will not be quicker with the proposed changes (signal changes, road diet).

SIDE STREET DELAY

Several unsignalized side streets were added to the model to address a variety of existing conditions.

	Average Side Street Delay (in sec)					
	Existing Model			Proposed Model		
	AM	SCH	PM	AM	SCH	PM
School Drive	2.8	16.1	-	8.9	33.1	-
Central Terrace	11.6	8.2	8.6	24.2	9.7	21.4
Dorino	6.9	6	11.1	23.3	15.6	38
Wentworth	7.4	7.9	11.8	15.2	16.3	25.9
Wilmuth	8.2	4.3	6.6	7	9	12.2
Reily	24.2	9.6	23.7	27.8	23	49.2

What does this mean? It will take approximately 6 to 25 seconds longer to get out of the side street, on average.

METRO BUS STOPS

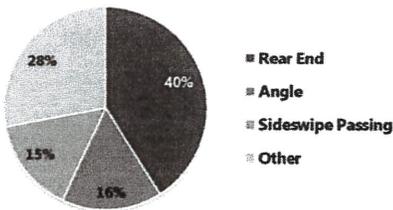
There are currently 26 Bus Stops along SR 4 (13 Northbound and 13 Southbound). The City has worked with Metro to reduce the number to 12 Bus Stops (6 Northbound and 6 Southbound) located:

- SR4 & Charlotte
- SR4 & Forest/Chestnut
- SR4 & Oliver
- SR4 & Linden/Wyoming (@ ex shelters)
- SR4 & Mt Pleasant
- SR4 & Sherry Rd

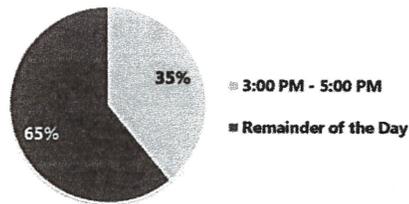
2013-2015 CRASH DATA

From 2013 to 2015, there were 105 total crashes. 20 (19%) of these crashes had injuries.

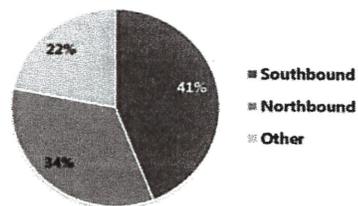
CRASH TYPE



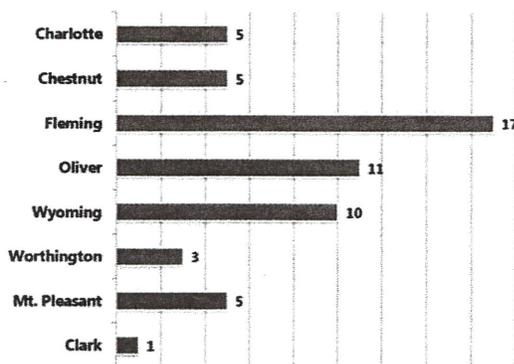
CRASH TIME



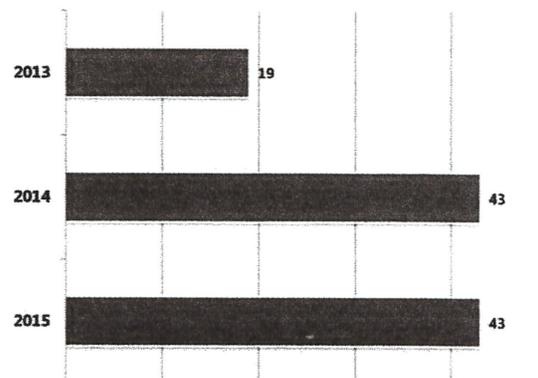
CRASH DIRECTION



CRASHES BY INTERSECTION



CRASHES BY YEAR



With a Road Diet, crashes have been shown to be reduced by 28%.