IL57 BROADWAY to I-172

Community Advisory Group Wednesday, July 13, 2022



Remembering

Tom Oakley









AGENDA

- Welcome / Agenda Review (2 minutes)
- Housekeeping (1 minute)
- Introductions (3 minutes)
- Study Overview (10 minutes)
- Recap CAG #3 (5 minutes)
- Alternatives Screening (5 minutes)
- Alternatives Review and Screening (60 minutes)
- Alternatives to Carry Forward (5 minutes)
- Questions & Answers (10 minutes)
- Next Steps (3 minutes)
- Thank You (1 minute)





Housekeeping

- Health Safety
- Restrooms
- Water Station
- Emergencies





Introductions

✓ Illinois Department of Transportation ✓ Consultant Team ✓ CAG Members





Study Overview







Study Intent

Evaluate the regional transportation needs and identify feasible projects that have individual utility and logical determination.





Study Limits



3 Sections

URBAN Broadway to Payson Avenue

SUBURBAN / INDUSTRIAL

Payson Avenue to 24th Street

RURAL 24th Street to I-172 Interchange







1.3 miles

4.8 miles

6.5 miles





Existing Urban Typical Sections



3RD STREET BROADWAY STREET TO YORK STREET (LOOKING NORTH)





4TH STREET BROADWAY STREET TO YORK STREET (LOOKING NORTH)





Existing Urban Typical Sections



YORK STREET FROM 3RD STREET TO 4TH STREET (LOOKING EAST)





IL57 BROADWAY to I-172

3RD STREET YORK STREET TO PAYSON ROAD (LOOKING NORTH)



Existing Suburban/Industrial Typical Sections



IL-57 PAYSON AVENUE TO LOCK AND DAM ROAD (LOOKING NORTH)



Existing Rural Typical Section



(LOOKING NORTH)















PEL Timeline

Planning and Environment Linkages (PEL) Phase

Determine Need and complete PEL Study to produce a NEPA-ready Purpose & Need and Alternatives to Carry Forward









- Project update presentation
- Alternatives review workshop





Alternatives Screening





Detailed Screening Criteria



New Data Driven Decision Tool

Illinois Department of Transportation

+ FLOODPLAINS

- + WETLANDS/ WATERS of the U.S.
- + PROTECTED SPECIES
- + CULTURAL/HISTORIC Resources
- + IMPACT to structures/property
- + ALIGNS with other area projects
- + MOBILITY & SAFETY
- + ROW NEEDS



Alternatives Review and Screening Results





Urban Section

URBAN Broadway to Payson Avenue

SUBURBAN / INDUSTRIAL Payson Avenue to 24th Street

RURAL 24th Street to I-172 Interchange



1.3 miles

4.8 miles

6.5 miles





Upgrade existing conditions, maintenance along 3rd and 4th Streets:



- DECOUPLE 3rd & 4th Streets, extend to Locust Street
- **SIGNALIZE** York St. & 3rd St. intersection
- (f) IMPROVE York St. & 4th St. intersection
- (f) 3rd St. south of York St. 2 lanes in each direction

Striped median/2-way left turn lane







Alternative U-2 3rd Street Broadway Street to York Street (Looking North)





Alternative U-2 4th Street Broadway Street to York Street (Looking North)





Alternative U-2 York Street 3rd Street to 4th Street (Looking East)





Alternative U-2 3rd Street York Street to Payson Avenue (Looking North)



Same as U-2 except with **feasibility analysis** for roundabout at York and 4th







Detailed Screening - Urban

Engineering, Traffic, and Safety Screening Criteria	U-1 Upgrade Existing	U-2 Decouple 3 rd & 4 th ST. Extend to Locust St.	U-2A Round-About at 4 th & York
New ROW required (acres)	0.0	0.9	1.1
Length of Improvements, in lane miles	3.7	5.0	5.0
Estimated Initial Construction Cost	\$1,500,000	\$5,500,000	\$6,000,000
Payson Ave Bridge Widening (square feet)	0	5,240	5,240
Provides Increase in Road Capacity (Yes/No)	No	Yes	Yes
Improves Mobility (Yes/No)	Yes	Yes	Yes
Crash Reduction / Safety Improvement (Yes/No)	Yes	Yes	Yes
Meets Policy for Access Control (Yes/No)	Yes	Yes	Yes
Meets Design Speed Requirements (Yes/No)	Yes	Yes	Yes



Detailed Screening - Urban

Socioeconomic and Environmental Constraints Screening Criteria	U-1 Upgrade Existing	U-2 Decouple 3 rd & 4 th ST. Extend to Locust St.	U-2A Round-About at 4 th & York
Area of cropland (acres)	0	0	0
Area of prime/important farmland soils (acres)	0	0	0
Located in environmental justice population	Yes	Yes	Yes
Residential building impacts	0	0	0
Possible residential building impacts	0	3	3
Commercial building impacts	0	1	2
Possible commercial building impacts	0	1	1
Possible parking impacts	0	5	7
Forested landcover (acres)	0	0	0
NWI Wetland (acres)	0	0	0
Number of new stream crossings	0	0	0
Protected Species Occurrence Record	0	0	0
100-year floodplain (acres)	0	0	0
Number of recorded archaeological sites	0	0	0

Detailed Screening Results

Alternative	Carried Forward	Justification
U-1 Upgrade existing	Yes	Improves ride quality and traffic flow; no ROW; lowest cost
U-2 Decouple 3 rd & 4 th St. extend to Locust St.	Yes	Improves mobility, safety, ride quality
U-2A Roundabout at 4 th & York	No	Improves mobility, safety, and ride quality but not appreciably better than U-2; greater ROW impact that U-2



Discussion



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Suburban/Industrial Section







Upgrade existing conditions 4' raised median north of Lock and Dam Rd.

Add right turn lane at grain facility Add left turn lane at Jackson Street and 12th Street



4 & 3-Lane Section

Resurface existing 4-LANE configuration with narrow median to Lock and Dam Rd New **3-LANE** section to the south (one lane in each direction separated by a 12-foot 2-way left turn lane) to 24th St.

New Left TURN LANE at Jackson St.

Evaluate **PEDESTRIAN/BICYCLE** accommodations If warranted, a **MULTI-USE PATH** along the west side ending at Radio Rd. **CURB AND GUTTER**

installed along both edge of pavements to south of Radio Rd., 10' paved shoulder further south





Alternative S-2 Payson Avenue to South Lock & Dam Road (Looking North)







Alternative S-2 South of Lock & Dam Road to Radio Road (Looking North)









4-Lane Section

Resurface existing **4**-**LANE** configuration with a narrow median north of Lock and Dam Rd. New **4-LANE** section to the south (2 lanes in each direction separated by a 4' raised/painted median)

New **LEFT TURN LANE** at Jackson St.

CURB AND GUTTER installed to south of Radio Rd. **MULTI-USE PATH** or a grass shelf for a future multi-use path along the west side ending at Radio Rd.

South of Radio Road to 24th St. - 10' **PAVED SHOULDERS** along the outside







Alternative S-3 Payson Avenue to South of Radio Road (Looking North)







Alternative S-3 South of Radio Road to 24th Street (Looking North)





5 & 3-Lane Section

2 LANES in each direction separated by a 12-foot 2-way left turn lane south of Radio Rd.

CURB AND GUTTER along both EOPs from the urban section to south of Radio Rd.

MULTI-USE PATH or a grass shelf for a future multi-use path along the west side ending at Radio Rd.

South of Radio Rd. to 24th St. includes **1 LANE IN EACH DIRECTION** separated by a TWLTL, and a 10' paved shoulder along each side







Alternative S-4 Payson Avenue to South of Radio Road (Looking North)







(Looking North)





Detailed Screening - Suburban

Engineering, Traffic, and Safety Screening Criteria	S-1 Upgrade Existing	S-2 4 & 3-Lane Section	S-3 4-Lane Section	S-4 5 & 3-Lane Section
New ROW required (acres)	0.6	4.6	8.9	6.1
Length of Improvements, in lane miles	11.7	15.0	17.9	19.2
Estimated Initial Construction Cost	\$7,000,000	\$17,500,000	\$25,000,000	\$23,500,000
Area of New Bridges (square feet)	6,838	10,855	12,693	11,290
Provides Increase in Road Capacity	No	Yes	Yes	Yes
Projected Level of Service	С	А	Α	Α
Improves Mobility	Yes	Yes	Yes	Yes
Projected Density	5.3 (followers/mi)	0.6 (followers/mi)	6.7 (pc/mi/lane)	6.7 (pc/mi/lane)
Crash Reduction/Safety Improvement	Yes	Yes	Yes	Yes
Meets Policy for Access Control	Yes	Yes	Yes	Yes
Meets Design Speed Requirements	Yes	Yes	Yes	Yes

Detailed Screening - Suburban

Socioeconomic and Environmental Constraints Screening Criteria	S-1 Upgrade Existing	S-2 4 & 3-Lane Section	S-3 4-Lane Section	S-4 5 & 3-Lane Section
Area of cropland (acres)	0.04	0.7	1.3	0.7
Area of prime/important farmland soils (acres)	0.3	3.2	5.7	3.2
Located in environmental justice population	Yes	Yes	Yes	Yes
Residential building impacts	0	0	2	0
Possible residential building impacts	0	6	6	6
Commercial building impacts	0	0	2	2
Possible commercial building impacts	0	3	5	4
Possible parking impacts	1	4	6	4
Forested landcover (acres)	0.1	0.3	0.3	3.2
NWI Wetland (acres)	0	0	0.02	0
Number of new stream crossings	0	0	0	0
Protected Species Occurrence Record	0	0	0	0
100-year floodplain (acres)	0.1	0.3	0.3	0.1
Number of recorded archaeological sites	0	1	1	1

Detailed Screening Results

Alternative	Carried Forward	Justification
S-1 Upgrade existing	Yes	Least ROW required; lowest cost; adding turn lanes improves safety; lower impacts to buildings and resources
S-2 4 & 3-lane section	Yes	Second lowest ROW and lower impacts to buildings and resources than S-3 and S-4; Second lowest cost; TWLT enhances safety and improves mobility
S-3 4-lane section	No	Significantly more ROW and impacts to properties and natural resources than S-1 and S-2; highest cost; impacts and cost outweigh added capacity not warranted by traffic projections
S-4 5 & 3-lane section	No	Significantly more ROW and impacts to properties and natural resources than S-1 and S-2; second highest cost; impacts and cost outweigh the added capacity not warranted by traffic projections.



Discussion



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Rural Section



Rural Alternative – R-1

Improved 2-Lanes (one lane in each direction)

Maintain the existing lane configuration and do LOCAL IMPROVEMENTS

- Resurfacing south of Marblehead
- Shoulder improvements
- Fix flooding issues

Add left turn lanes at:

- 24th Street
- E. 900th Street



Rural Alternative – R-1A

Improved 2-Lanes (one lane in each direction)

Same as R-1 with

• Marblehead Bypass to the West





Rural Alternative – R-1A





Rural Alternative – R-2

Super 2

1-LANE in each direction separated by an intermittent 16' center lane, with paved outside shoulders vary from 10' to 4'

CENTER LANE will alternate as a passing lane for both directions

Necessary modifications to fix **GEOMETRY/ FLOODING** issues

MARBLEHEAD BYPASS (to the west)





Rural Alternative – R-2



Northbound Passing Lane (Looking North)

Rural Alternative – R-3A (replaces R-3)

New 4-Lane with Frontage Road

IL 57 would be a NEW 4-LANE EXPRESSWAY	2 lanes in each direction separated by a 50' GRASS MEDIAN	MARBLEHEAD BYPASS (to the west)
Existing IL 57 becomes a FRONTAGE ROAD	Alternative requires I-172/IL 57 INTERCHANGE RECONFIGURATION	Meets ACCESS CONTROL requirements



Rural Alternative – R-3A (replaces R-3)



Alternative R-3A (Looking North)



Rural Alternative – R-4

4-Lane Expressway New Alignment

2 LANES in each direction separated by a 50' grass median	Existing IL 57 becomes a FRONTAGE ROAD
Located west of existing IL 57 including a MARBLEHEAD BYPASS to the west	Alternative requires I-172/IL 57 INTERCHANGE RECONFIGURATION



Rural Alternative – R-4





Detailed Screening – Rural

Engineering, Traffic, and Safety Screening Criteria	R-1 Upgrade Existing	R-1A By-Pass	R-2 Super 2	R-3A New 4-Lane w/Frontage	R-4 New 4-Lane
New ROW required (acres)	1.8	25.3	70.7	165.2	211.9
Length of Improvements, in lane miles	13.1	13.2	19.7	27.7	28.2
Estimated Initial Construction Cost	\$7,000,000	\$20,500,000	\$51,500,000	\$87,000,000	\$91,500,000
Area of New Bridges (square feet)	3,549	23,116	35,501	62,772	79,567
Provides Increase in Road Capacity	No	No	Yes	Yes	Yes
Projected Level of Service	А	А	А	А	А
Improves Mobility	Yes	Yes	Yes	Yes	Yes
Projected Density	1.8 (followers/mi)	1.8 (followers/mi)	0.3 (followers/mi)	2.9 (pc/mi/lane)	2.9 (pc/mi/lane)
Crash Reduction/Safety Improvement	Yes	Yes	Yes	Yes	Yes
Meets Policy for Access Control	Yes	Yes	Yes	Yes	Yes
Meets Design Speed Requirements	No	Yes	Yes	Yes	Yes
Miles of no passing zones due to lack of passing sight distance	2.1 (NB) 1.9 (SB)	1.9 (NB) 1.5 (SB)	0	0	0

Detailed Screening – Rural

Socioeconomic and Environmental Constraints Screening Criteria	R-1 Upgrade Existing	R-1A By-Pass	R-2 Super 2	R-3A New 4- Lane w/ Frontage	R-4 New 4-Lane
Area of cropland (acres)	0.9	12.4	42.2	116.4	185.6
Area of prime/important farmland soils (acres)	1.8	25.3	70.3	164.8	198.4
Located in environmental justice population	No	No	No	No	No
Residential building impacts	0	0	4	16	0
Possible residential building impacts	0	1	1	2	0
Commercial building impacts	0	0	0	3	0
Possible commercial building impacts	0	0	0	1	1
Possible parking impacts	0	0	1	1	1
Forested landcover (acres)	0	5.5	5.5	9.6	16.4
NWI Wetland (acres)	0	0.7	0.7	1	12.1
Number of new stream crossings	0	2	2	4	10
Protected Species Occurrence Record	0	0	0	0	0
100-year floodplain (acres)	0.2	17.0	25.1	42.7	66.6

Detailed Screening Results

Alternative	Carried Forward	Justification
R-1 Upgrade existing	Yes	Some safety and mobility improvements; minimal ROW; minimal impacts; lowest cost
R-1A Upgrade with bypass	Yes	Some safety and mobility improvements; second lowest ROW, impacts and cost
R-2 Super 2	Yes	Enhanced mobility and safety improvements; provides access control
R-3A 4 lane frontage	No	Significantly more ROW and impacts to buildings and natural resources than R-1 and R-1A; added capacity not warranted by traffic projections
R-4 New 4-lane	No	Significantly more ROW and impacts to buildings and natural resources than all other alternatives; added capacity not warranted by traffic projections



Discussion



Rightony



Alternatives to Carry Forward





Alternatives to Carry Forward

URBAN

- U-1 Upgrade existing
- U-2 Decouple 3rd & 4th Street, extend to Locust St.

SUBURBAN/INDUSTRIAL

- S-1 Upgrade existing
- **S-2** 4 & 3-lane section

RURAL

- R-1 Upgrade existing
- **R-1A** Upgrade with Marblehead Bypass
- **R-2** Super 2





Questions & Answers





Next Steps

Public Meeting #2 – September 1, 2022 FHWA Meeting – September 8, 2022 Final PEL Report – December 2022

www.IL57Quincy.org





