

## Memorandum

TO:	DeeAnn Newell, Iowa DOT
FROM:	Diane M. Campione, PE, SE
SUBJECT:	Interstate 74 (I-74) NEPA Re-evaluation Technical Memorandum
DATE:	February 24, 2020/revised April 20, 2020

### I. Introduction

This technical memorandum describes the proposed maintenance of traffic (MOT) configuration change through the Illinois portion of the I-74 Interstate Quad Cities Corridor during 2020 since the approval of the December 5, 2014 NEPA Re-evaluation Technical Memorandum (Iowa side) and March 11, 2016 NEPA Re-evaluation Technical Memorandum (IL side), with FHWA noting original ROD for the project is still valid and that a 4(f) de minimis determination was also approved. The Final Environmental Impact Statement (FEIS)/Section 4(f) Statement was signed on January 8, 2009, and the Record of Decision (ROD) was signed on April 29, 2009. Per 23 CFR 771.130(c), the purpose of the NEPA reevaluation is to assess the impacts of the proposed changes in traffic and determine if 1) a supplemental EIS is necessary or 2) if the original ROD remains valid.

The Illinois and Iowa Departments of Transportation (Iowa DOT and Illinois DOT) propose a change in traffic configuration to continue moving traffic through the Illinois Portion of the I-74 Corridor during 2020 while keeping construction of the land based contracts moving forward as result of the delay in the completion of the westbound Mississippi River Bridge (WB River Bridge) construction. The original schedule for completion date of the WB River Bridge was November 20, 2019. The contractor's current schedule shows completion of the WB River Bridge as July 14, 2021. Since the current MOT is for all contracts, this delay of completing the WB River Bridge contract impedes all other contracts from advancing to the next construction stage while managing traffic.

Discussions of the proposed changes to the maintenance of traffic through the Illinois portion of the I-74 Corridor were initiated in Fall of 2019. A technical memorandum summarizing these initial discussions are contained in Appendix B. This technical memorandum was submitted on November 2019 for review from Illinois DOT, Iowa DOT, City of Moline and the City of Bettendorf. Concurrence was received to move forward with presenting Alternate WG to the public and to perform further traffic analysis to access the operational performance of the 19th Street Corridor intersections.

The NEPA re-evaluation memorandum outlines the reasons for this proposed change in traffic including an assessment of impacts resulting from this change. In addition, this memorandum includes summary of the Public Information Meeting held in December 2019 in which the proposed change in traffic was presented for public review and comments.



### II. Description of the Proposed Action

The Illinois and Iowa Departments of Transportation (Iowa DOT and Illinois DOT) propose a change in traffic configuration to continue moving traffic through the Illinois Portion of the I-74 Corridor during 2020 while keeping construction of the land based contracts moving forward as result of the delay in the completion of the westbound Mississippi River Bridge construction. The major land-based contracts include the following:

- Illinois Contract 64C08 includes the construction of WB and EB I-74 IL Viaduct and Roadway on plug fill. Also includes construction of Ramps 6th-C, 6th-D, RD-G and RD-H with Bridges for 6th-C and 6th-D, local road reconfiguration for 4th and 5th Avenues, reconstruction of 6th and 7th Avenues, major retaining walls and removal of the existing IL Viaduct.
- Illinois Contract 64E26 includes the construction of WB and EB I-74 Roadway from Avenue of the Cities to 7th Avenue and Bridges over 19th Street (2 locations), and 12th Avenue. Also includes ramp construction and local road reconstruction of 12th Avenue and 19th Street and major retaining walls along WB and EB I-74.
- Iowa Project (206) includes the construction of EB and WB I-74 Roadway from the Iowa Viaduct to south of Middle Road, Middle Road Ramp B and US67 Ramps A, B and D and Ramp A Bridge. Also included is construction of a temporary EB entrance ramp from Middle Road and mainline crossover south of Middle Road.
- Iowa Project (199) includes the construction of the WB Iowa Viaduct, Ramp B Bridge and Ramp D Bridge and partial removal of the existing WB Viaduct.
- Iowa Project (200) includes the EB Iowa Viaduct, Ramp C Bridge and removal of the Existing EB Viaduct and removal of the remaining portion of WB Viaduct.

The ROD original MOT required maintaining 2 lanes of traffic on I-74 EB and WB during all stages of construction of the project. Early efforts during Final Design reduced that timeframe down to 5 years while still maintaining two lanes of traffic in each direction. Subsequently, an Accelerated Construction/Innovative Delivery Workshop was conducted by the FHWA in Ames, Iowa on April 16-18, 2013. The overall goal of this workshop was to examine the entire corridor to try to build it faster to lower the cost. The recommended alternative coming out of the Accelerated Construction/Innovative Delivery 3B requires only 3 ½ years to construct but closes the two WB I-74 lanes for one construction season. The alternatives resulting from this workshop were documented in a report, with Concept 3B recommended and the report was presented to the Iowa DOT and the Illinois DOT management to determine how to proceed.

The MOT was modified during a ROD reevaluation. The ROD with this new MOT was validated by FHWA on December 5, 2014 ("December 2014 Re-Evaluation MOT") and resulted in the following changes to the MOT for the 3-1/2 construction duration (mid-2017 thru November 2020):

- a. Close WB I-74 in Moline and Bettendorf for one construction season (Year 2019).
- b. Reduce WB lanes over the River from two to one for one construction season.
- c. Reduce ingress and egress to EB I-74 for one construction season due to EB I-74 traffic being shifted to the newly constructed WB facility.

The current approved maintenance of traffic included the following:



### A. December 2014 Re-evaluation MOT:

• 2019 Construction Season:

Traffic on the Illinois Side was in Stage 2 configuration. Stage 2 had westbound I-74 (Iowa bound) closed at Avenue of the Cities.

- Westbound interstate traffic was detoured around the project corridor using Interstates 80 and 280.
- Westbound local Traffic exited at Avenue of the Cities and took northbound 19th Street to River Drive. Prior to River Drive traffic encounters an at-grade railroad crossing. The trains in this area are long and slow moving which creates significant delays at various times throughout the day. Once across the tracks, traffic turns east at River Drive and then takes the existing River Drive on-ramp to access the existing westbound I-74 bridge over the Mississippi River.
- Eastbound (Illinois Bound) interstate traffic is using the existing eastbound interstate lanes.
- This Stage 2 configuration was scheduled to remain in effect until November 2019.
- 2019/2020 Winter Stage 2:
  - Eastbound I-74 traffic remains in its existing condition.
  - Westbound I-74 traffic would be placed on new WB pavement, WB viaduct and WB River Bridge.
- 2020 Construction Season:

Traffic on the Illinois Side would be placed in the as-designed Stage 3 configuration.

- WB I-74 traffic would be shifted to outside of new WB to accommodate the EB I-74 traffic. Existing EB I-74 would be closed and two lanes of I-74 traffic would cross over to the newly constructed westbound side in Iowa. EB I-74 would cross back over to EB side south of Avenue of the Cities.
- The as-designed traffic configuration would allow the EB land-based contracts to move forward with construction of the new EB pavement and structures.
- This traffic configuration was scheduled to remain in effect until November 2020. At which point all lanes in both directions would be open.
- EB I-74 traffic is placed on the new EB pavement, EB Viaduct and EB River Bridge and WB I-74 traffic has all westbound lanes available.

### B. Current Construction Conditions - WB River Bridge Delayed.

According to the latest schedule submitted by the bridge contractor, the WB River Bridge is scheduled to open on December 29, 2020 (a delay of over a year from the original November 20, 2019 completion date). This delay means the 2019/2020 Winter Stage and 2020 Stage 3 will be delayed for the Illinois land based contractors if changes are not implemented to the traffic configuration.

### C. Approved Construction Changes to the Winter 2019/2020 Stage:

The WB River Bridge delay does not allow the I-74 westbound motorists to use the new westbound river bridge. However, at the end of Stage 2 (November 2019) the new westbound lanes in Illinois were available for traffic from south of the Avenue of the Cities to the Mississippi River. This shift of traffic to the new WB lanes resulted in reduction in travel times, an increase in storage capacity and eliminated the at-grade railroad crossing near 4th Avenue.



- In Illinois, local traffic is using the new westbound lanes from south of the Avenue of the Cities to the Mississippi River. The two westbound (Iowa bound) lanes are carried to 7th Avenue. At 7th Avenue local traffic can exit. Iowa bound motorists wishing to avoid the at-grade railroad crossing will continue in a single lane just before the south abutment of the river bridge where it will make a large U-turn movement to head down the new eastbound River Drive off-ramp. At the bottom of the ramp, the traffic will turn east to access the River Drive on-ramp to the existing westbound river bridge to head to Iowa or turn west to follow River Drive to downtown Moline.
- From the end of Stage 2 until the beginning of 2020, eastbound I-74 traffic remained on the existing lanes.
- At the beginning of January 2020, eastbound traffic was shifted onto the new westbound lanes via a temporary two-lane crossover located just south of 7th Avenue South of the Avenue of the Cities. The eastbound traffic crosses back over to the eastbound side before exiting the corridor.
- As the result of crossing the traffic to the westbound side, the land based contractors have been able to proceed with demolition of the existing eastbound bridges from north of 7th Avenue to the Avenue of the Cities and to begin construction of the new eastbound bridges substructure elements. Both activities can be substantially completed prior to May 1, 2020.
- These construction activities will minimize the impacts to southbound 19th Street in the event Alternative WG (described below) is implemented in spring 2020. Advancing this bridge work provides the opportunity to reestablish the Avenue of the Cities off-ramp at an earlier date. In addition, with the exception of the interface of the two Illinois land contracts (north limits of Contract 64E26), this revised traffic configuration allows the completion of Contract 64E26. However, it does not facilitate the continuation of Contract 64C08 to progress with constructing the new EB lanes.
- Exhibit A shows the current traffic configuration initiated in Winter 2019 and extends through Spring 2020 which represents the interim condition to Alternative WG.

### D. Proposed 2020 Stage 3 Maintenance of Traffic Configuration:

- Alternatives considered for 2020 Stage 3 Traffic included the following:
  - Alternate 1 Do Nothing
  - Alternate 2 (Alternative WG) Reroute eastbound traffic in Illinois to allow completion of all mainline pavement and bridges (referred to as Alternative WG in Appendix A – 2020 Illinois Traffic Configuration Alternative Analysis)
- Alternate 1 Do Nothing

The "Do Nothing" alternative would require suspension of the remaining work in the Illinois land base Contract 64C08 until the WB River Bridge is completed. The River bridge contractor's current schedule (revision April 2020 submittal) shows opening the WB River Bridge to traffic on December 29, 2020, completion of Stage 2 by January 11, 2021 and completion of Stage 3 by August 19, 2022. Based on these dates, it is assumed Contract 64C08 would be suspended until Winter of 2021 when traffic on the existing I-74 EB could be shifted to the new I-74 WB lanes. This will then allow the contractor to demolish the existing I-74 structure to construct that portion of the new I-74 EB that ties into existing alignment. Contract 64E26 would be expected to continue by utilizing the crossover discussed in the Current Winter 2019/2020. However, this contract could not be fully completed until Fall 2021 due to



interdependencies at the 7th Avenue abutment with contract 64C08.

### Advantages

- Eastbound I-74 remains in interstate configuration.

Disadvantages

- Construction delay costs.
- Disruption to Moline traffic patterns continue longer.
- Uncertainty when worksite available to remobilize the contractor for Contract 64C08.
- Uncertainty regarding 64C08 Contractor workforce availability upon return.
- 64E26 Contractor would need to remobilize in Summer/Fall 2021 to complete (due to interdependency with Contract 64C08).
- Alternate 2 (Alternate WG)

Alternative WG includes the closure of eastbound Interstate 74 to through traffic in a manner similar to the 2019 westbound Interstate conditions. Interstates 80 and 280 will be utilized to detour EB and WB interstate traffic around the project corridor.

The eastbound interstate (Illinois bound) lanes will be closed at 7th Avenue and local traffic wishing to continue south through the I-74 corridor will be forced to take the 7th Street offramp. At the bottom of the ramp at 7th Avenue traffic will be directed west for a short distance to 19th Street and then proceed south (along 19th Street) to the Avenue of the Cities. Traffic would rejoin the eastbound I-74 using the on-ramp just south of Avenue of the Cities.

To keep "re-routed" eastbound traffic flowing and reduce delays, 7th Avenue would be closed to thru traffic and northbound 19th Street would be closed from north of 12th Avenue to 7th Avenue. These measures would allow for a free flow movement of eastbound I-74 traffic at the 7th Avenue intersections with the eastbound off-ramp and at 19th Street. Access to southbound 19th Street from 19th Street north of 7th Avenue and from eastbound 7th Avenue traffic will be maintained. This can be accomplished by utilizing positive separation between eastbound I-74 traffic and southbound 19th Street/eastbound 7th Avenue traffic heading south. This traffic would be allowed to merge with eastbound I-74 traffic at a point south of the 7th Avenue/19th Street intersection.

Westbound I-74 traffic will remain in the configuration as described above in Section C - Approved Construction Changes to the Winter 2019/2020 Stage and as shown on Exhibit A.

See Exhibit B for the proposed traffic pattern changes (for Alternative WG) that would be in place until the new Iowa-bound I-74 bridge is complete. Exhibit C shows the proposed local traffic configuration of 7th Avenue in the Alternative WG configuration.

Advantages

- Would enable 64C08 contractor and 64E26 contractor to continue work with minimum interruptions to complete all new eastbound pavement and eastbound bridges in Illinois by end of November 2020 (according to these contracts' schedules).
- Reduce the length of time of construction activities in downtown Moline to the end of 2020 as originally scheduled instead of into 2021.



- Lessens the additional project costs due to the schedule delays resulting from the "Do Nothing" alternate.

Disadvantages

- Increased eastbound travel distance and time.
- Eastbound interstate traffic detoured.
- Although the River Bridge contractor's current schedule (revision April 2020), shows the WB River Bridge open to traffic on December 29, 2020, there is the potential for the need of Alternate WG to remain in place during winter 2020/2021 and into 2021 if the WB River Bridge is not complete by the end of 2020.

### Traffic Operations of Proposed Alternate 2 (WG) – Analysis and Evaluation:

The Illinois Department of Transportation's (IDOT) Work Zone Safety and Mobility Rule, State Safety Policy 3-07 states: "Delays caused by work zones should not exceed more than five (5) minutes per mile of project length with a maximum of thirty (30) minutes above the normal recurring traffic delay". To comply with this policy would require the proposed detour (Alternate WG) to impart a delay of less than 10 minutes 51 seconds.

Traffic analyses to assess the impacts of the WG detour alternative's effect on eastbound I-74 traffic were performed and the results were compared to the "Do nothing" approach. Appendix A contains the technical memorandum including data source, assumptions and the detailed analysis. The following is executive summary extracted from this technical memorandum.

Two types of traffic analysis were used to evaluate the Alternate WG:

- Synchro/Sim Traffic to access total travel time along southbound 19th Street
- Synchro 10 to access the operational performance of the 19th street corridor intersections with Highway Capacity Software (HCS) used to determine the operation of the merge movement.

The Sim Traffic microsimulation of southbound 19th Street was performed for the AM and PM peak hours and took into account the roadway speed, traffic signals and fluctuations of the peaking characteristics within that studied hour.

The simulation results, as shown in Table A (below), indicate a total travel time along southbound 19th Street to be approximately 276 seconds (4 minutes 36 seconds) with a delay of approximately 79 seconds (1 minute 19 seconds) on average, during the PM peak hour. The AM peak hour resulted in a travel time of approximately 243 seconds (4 minutes 3 seconds) with a delay of approximately 47 seconds on average.

The increased delay of 79 seconds as seen by vehicles on average during the peak hour is below the 5 minute per mile in accordance with the Illinois Department of Transportation's (IDOT) Work Zone Safety and Mobility Rule, State Safety Policy 3-07.



### TABLE A

Travel Lengths and Times – Synchro/Sim Traffic (referenced Table D.3.1 – Appendix A)

	Dista nce (Mile s)	Total Travel Time		Traffic	Signal Delay
		A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak
Current	2.17	2:22	2:22		
Alternative WG	2.25	4:03	4:36	0:47	1:19
Difference	0.08	1:41	2:14		

Observation of data indicates nearly all southbound 19th Street vehicles queued at 12th Avenue and Avenue of the Cities clear the intersection at the next available green phase for their direction. The demand may be different than modeled at a particular time of day, adverse conditions such as trucks turning, or other roadway occurrences may happen and affect an individual's anecdotal experience traversing the corridor. If the actual volumes at the study intersections are different than forecasted, the signal timing can be altered, if necessary, to minimize the occurrence of a southbound 19th Street driver waiting for additional cycles and experiencing excessive delays.

Synchro 10 was used to analyze the operational performance of the 19th Street corridor intersections while HCS was used to determine the operation of the merge movement. The results from these analysis, presented in Tables B, C, and D (see below), indicate the 19th Street intersections operate at acceptable levels of service with the exception of the northbound lefts from 19<sup>th</sup> Street to westbound 12<sup>th</sup> Avenue in the PM peak hour as shown in Table C. This is primarily due to the low amount of green time at this intersection and the lack of a protected phase for these movements. This movement would likely be local drivers, who may make adjustments to their routes and/or travel times to avoid a longer than acceptable delay.

### TABLE B

19th Street and 7th Avenue	(referenced Table D.3.2	– Appendix A)
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Movement	LOS (Delay in seconds)		95 <sup>TH</sup> Percentile Queue	
	A.M.	P.M.	A.M.	P.M.
Eastbound	Peak	Peak	Peak	Peak
Right	A (0.1)	A (1.4)	0'	10'
Southbound	B (11.0)	B (10.6)		
Through	B (11.3)	B (11.3)	90'	90'
Right	A (5.1)	A (4.2)	7'	10'
Overall	A (9.3)	A (5.9)		
	LOS (Density pc/mi/ln)		N/A	N/A
Southbound Merge (HCS)	B (13.1)	C (21.6)	N/A	N/A



### TABLE C

19<sup>th</sup> Street and 12<sup>th</sup> Avenue (referenced Table D.3.3 – Appendix A)

Movement	LOS (Delay in seconds)		95 <sup>TH</sup> Percentile Queue	
	A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak
Eastbound				
Through-Right	C (21.2)	D (52.6)	108'	205'
Westbound				
Left-Through	C (23.8)	E (58.8)	101'	164'
Northbound	A (8.0)	F (124.2)		
Left	B (11.2)	F (156.2)	31'	112'
Right	A (0.8)	A (0.9)	3'	4'
Southbound				
Left-Through-Right	A (9.5)	B (17.7)	186'	608'
Overall	B (14.7)	C (31.6)		

### TABLE D

19th Street and Avenue of the Cities (referenced Table D.3.4 – Appendix A)

Movement	LOS (Delay in seconds)		95 <sup>TH</sup> Percentile Queue	
	A.M.	P.M.	A.M.	P.M.
	Peak	Peak	Peak	Peak
Eastbound	C (21.7)	D (43.6)		
Through	C (26.1)	D (51.0)	168'	277'
Right	A (8.3)	B (15.1)	59'	81'
Westbound	C (21.0)	C (34.7)		
Left	D (54.5)	E (75.7)	202'	264'
Through	A (9.9)	C (20.5)	114'	190'
Southbound	C (23.6)	C (27.5)		
Left	B (16.9)	B (15.2)	67'	115'
Through	C (28.6)	C (34.7)	247'	567'
Right	A (2.1)	A (9.0)	13'	96'
Overall	C (22.3)	C (32.4)		



### **Proposed Public Outreach Campaign**

As means to educate, inform and aid in minimizing the impacts to the traveling public the Illinois DOT proposes to incorporate a public outreach during the duration of this changed traffic configuration. This public reach would be similar in format performed for public outreach for the WB I-74 detour in 2019. Below is summary of this recent public outreach:

Illinois DOT began outreach efforts in early 2019, including coordination meetings with local municipalities and emergency services. They developed project team talking points and organized a news conference to present the westbound detour and associated road closings. Media outlets were provided a news release and detour maps. Email announcements with maps and a step-by-step detour video were sent to the project distribution list as well as to local schools, libraries, transit agencies, chambers of commerce, emergency services, county staff, and major employers. Local municipalities were encouraged to share information about the detour on their websites, social media pages, and newsletters. The GEC also attended meetings with city staff, QC Chamber of Commerce, Visit Quad Cities, TaxSlayer Center, RI Arsenal, and others to help coordinate outreach efforts to residents, visitors, and businesses. A step-by-step detour video was posted on the project website and social media pages. The GEC offered/provided presentations and detour maps to local businesses meetings, major employers, and emergency services. Multiple media interviews were conducted closer to the date of the detour.

Bullet point list:

- News conference
- Press release
- Project team talking points
- Attended meetings with city staff, QC Chamber of Commerce, Visit QC, TaxSlayer Center, Moline Centre, Downtown Bettendorf Organization, RI Arsenal
- o Email announcements to project distribution list
- Emails with detour maps to local schools, libraries, transit agencies, chambers of commerce, emergency services, county staff, and major employers
- Announcements at local emergency services meetings as well as individual meetings as needed
- Coordination with municipalities to share information about the detour through multiple channels including city websites, email announcements, and social media pages
- Video with step-by-step detour posted on project social media pages
- o Information posted on project website and social media pages
- Media interviews closer to the date
- o Offered/provided presentations and detour maps to local major employers



### Environmental Consequences due to Proposed Alternate 2 (WG):

All proposed works associated with the Proposed Alternate WG will be within the NEPA Central Section Construction Limits as presented in the Illinois NEPA Re-evaluation Technical Memorandum (dated March 11, 2016) and determined by FHWA on June 29, 2016 that the original ROD for the I-74 project is still valid. See Figures S-1 and S-2 for these limits.

In regard to mitigating any delays that may be seen by filtering mainline traffic through the local road system and two traffic signals, the traffic signals will be re-phased and re-timed at 12<sup>th</sup> and Avenue of the Cities (AOTC) to minimize idling time. The detoured traffic will have two-lane free flow left turn at 7<sup>th</sup> Avenue. The WG detour traffic will be given priority and certain opposing movements will be restricted, such as the EB 7<sup>th</sup> Avenue through traffic at the 7<sup>th</sup> and 19<sup>th</sup> intersection.

The noise level of vehicles on 19th Street will likely increase due to the increased traffic volume. Table E presents the estimated 2020 AADT volumes along with the proposed volumes estimated for Alternate WG. However doubling the noise source (9,000 to 19,000 ADT) results in an increase of 3dB(A), which is barely perceptible to the human ear. This is a temporary condition which will occur during this time of the revised maintenance of traffic pattern. The sound from the mainline will decrease as only the WB direction is provided, and it is anticipated that the diversion of the heavy vehicles via the I-80/I-280 detour will help with reducing louder volumes.

	Existing	Estimated 2020	WG Alternative
I-74	69,700 <sup>1</sup>	71,000	
Eastbound I-74	34,900 <sup>1</sup>	35,000	24,300
19 <sup>th</sup> Street	8'400 <sup>2</sup>	9,000	19,000
$^{1}-2018$			

### TABLE E

**Estimated AADT** 

<sup>2</sup> - 2010

### **Local Agency Coordination**

Prior to holding of the Public Information Meeting, the Illinois DOT discussed the proposed Alternative WG traffic configuration with the City of Moline and City of Bettendorf at various meeting held on the following dates:

### September 17, 2019

The City of Moline discussed the proposed Alternative WG traffic configuration for 2020 at the September 17, 2019, Committee of the Whole meeting. Furthermore, at the September 24, 2019 City Council meeting, the council passed a "Resolution authorizing the City of Moline to request that the Illinois Department of Transportation (IDOT) take all steps necessary with the Federal Highway Administration (FHWA) to support the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the



City of Moline on 19th Street".

### September 27, 2019

The proposed configuration was discussed at an I-74 corridor meeting held September 27, 2019. The meeting was attended by representatives of the City of Moline, the City of Bettendorf, the Bi-State Regional Commission, the Iowa DOT and the Illinois DOT. No objections to the concept were noted by the local agencies.

### November 18, 2019

An update on the proposed Fall 2019 and 2020 traffic staging configurations was provided to City of Moline, the City of Bettendorf, Federal Highway Administration, the Iowa DOT and the Illinois DOT on November 26, 2019. No objections to the concept were noted by the local agencies.

See Exhibit J in Appendix B for detailed local agency coordination meeting minutes

### **Public Information Meeting Summary**

A public information meeting for the I-74 Mississippi River Bridge project was held on Wednesday, December 11, 2019 at the TaxSlayer Center, 1201 River Dr., Moline from 4 p.m. to 7 p.m. The purpose of the public meeting was to present the proposed WG traffic pattern change to allow the land based contractors (on Illinois side) to continue work with minimum interruptions to complete all new eastbound pavement and eastbound bridges in Illinois by end of November 2020 (as per contract schedule) while construction advances on the river bridge.

The meeting was held in an open house format. Attendees received newsletters highlighting both the proposed traffic pattern change and overall project progress. Attendees viewed a brief audiovisual presentation (played continuously), exhibit boards, and a large-scale aerial map of the project area. Staff from the Iowa and Illinois Departments of Transportation, as well as project consultants, were available to answer questions. Two tables with comment forms and two iPad stations provided opportunity for public comment. A media briefing was held prior to the public meeting. In addition, the Iowa DOT and Illinois DOT staff also informed people that if a person wanted their comment documented and/or wanted an official response they should fill out a comment form.

The public meeting was attended by 76 people and eight (8) media representatives. Fourteen (14) comments were received in response to the meeting.

The following public officials were in attendance:

- Mayor Stephanie Acri, City of Moline
- Alderman Dick Potter, 4th Ward, City of Moline
- Interim City Administrator J.D. Schulte, City of Moline

The following agencies/organizations were represented:

- Arnold Motor Supply
- Bi-State Regional Commission
- City of Davenport Parks & Rec
- City of Moline



- Deere & Co
- Duckys
- First Midwest Bank
- Junior Achievement
- Moline Centre
- Operating Engineers Local 150
- QC Marathon
- QCLL
- Two Rivers YMCA
- Wood Home Renovations

The following media outlets were represented:

- KWQC TV 6
- Quad-City Times
- WHBF TV 4
- WQAD TV8
- WVIK Radio

A total of fourteen (14) comments were received the day of the public information meeting. A total of thirty-three (33) comments were received within the comment period.

The comments covered a variety of topics, including:

- Support reducing project delays
- Support proposed traffic pattern changes
- Reduce duration of local road congestion
- Suggested traffic route improvements
- Concern regarding local road winter maintenance
- Duration of proposed traffic pattern
- Appreciation for opportunity to talk with project representatives
- Bridge construction delays
- Excitement about the impact of the overall project

The comments received at the meeting are summarized in Tables S-3A and S-3B. And subsequent to the meeting, the public had opportunity to submit comments to the Illinois DOT via the I-74 Website or email (see Table S-4A and Table S-4B). During the DOTs review of the comments received days after the meeting they did not find there was any other noteworthy verbal comments that were not included in the written comments.

Refer to Appendix C for the Detailed Public Outreach Summary document.



# **Table S-3A.** Summary of Written Public Hearing CommentsAuthor of Comment did not request a Response be sent to them

Summary of Comments	Summary of DOT Responses
This project is the most exciting project ever	Thank you for your interest in the I-74 River
come to the QC. People need to be patient and	Bridge project. We appreciate your
realize the time it took to plan this and it is not	enthusiasm for the project and look forward
going to be built overnight. There are a lot of	to completing this iconic new structure.
trades building the bridge who know what they	
are doing let them do the job.	
I think this is a great project and will only	Thank you for your interest in the I-74 River
improve our transportation system between IL	Bridge project. We appreciate your
and IA. Great things take time so we, as	enthusiasm for the project and look forward
motorists, need to be mindful of the magnitude	to completing this iconic new structure.
of this project. Thank you for taking the time to	
address and open up the project specs to help	
the citizens of the QC better understand.	
Keeping the contractors on the job so the	Thank you for your comment regarding the
project can move forward is a good idea and	proposed traffic pattern changes. We
helps keep the delays at a minimum	appreciate your input.
If it shortens the overall length of construction,	Thank you for your comment regarding the
go for it	proposed traffic pattern changes. We
	appreciate your input.
Get the Iowa bound bridge done!!! Quit the	Thank you for your interest in the I-74 River
squabbling.	Bridge project.
	We are working diligently with the bridge
	contractor to keep progress moving forward
	on the Iowa-bound bridge. We are confident
	in the ability of the bridge to be built, the
	capability of the contractor to perform the
	work, and the safety and performance of the
	completed structure. We maintain an
	unwavering commitment to deliver a safe,
	sound, and cost-effective structure.
Do whatever is needed to expedite. Tweek	Thank you for your comment regarding the
lights and traffic delays continuously as needed	public meeting and proposed traffic plan.
to optimize. Try to optimize for incoming Iowa	We appreciate your input. We will continue
traffic to Arsenal.	to monitor traffic and make adjustments
	when there are opportunities to do so.
Very informative - answered all of our	Thank you for your comment regarding the
questions. I am in favor of the new traffic plan.	public meeting and proposed traffic pattern
	changes. We appreciate your input.



# **Table S-3B. Summary of Written Public Hearing Comments**Author of Comment requested a Response be sent to them

Summary of Comments	Summary of Iowa DOT Responses
I feel better about the proposed changes	Thank you for your comment regarding the
knowing that the roadway will be 2 lanes all	proposed traffic pattern changes.
the way through the detour. I'm skeptical that it	proposed traffic pattern enanges.
will go as smoothly as presented, but am not as	In order to keep traffic moving along the
firmly opposed to the idea as I was. Avoiding	proposed traffic route, we plan to implement
traffic delays is more important to me than	a continuous two-lane traffic flow from the
avoiding cost overruns.	7th Avenue exit to southbound 19th Street.
avolaling cost overrails.	This means that eastbound (Illinois-bound)
	<i>I-74 traffic will not have to stop at a stop</i>
	light until they reach 12th Avenue. The
	signal timing at 12th Avenue and Avenue of
	the Cities would be set to prioritize
	southbound 19th Street traffic. This
	configuration, however, would require
	closing eastbound 7th Avenue and
	northbound 19th Street. Traffic on both
	eastbound and westbound I-74 would be
	able to exit at 7th Avenue but would only be
	able to turn right.
	<i>We appreciate your input and will continue</i>
	to look for ways to improve traffic flow.
The earlier you can open 19th Street	Thank you for your comment regarding the
Southbound from 7h Avenue, the better, even if	proposed traffic pattern changes.
you are not yet ready to drop traffic from Iowa	
on to 7th Avenue. The current left turn to get to	We appreciate your input and will continue
the on ramp for I-74 at 7tth Avenue leads to	to monitor traffic and make improvements
backups on 19th Street. Having the option to	when there are opportunities to do so.
proceed via 19th Street to Avenue of the Cities	
would remove that congestion.	
I commute I-74 to IA and back 5 days/week.	Thank you for your comment regarding the
Gas changed from 330 miles/tank to 285 due to	existing traffic and the proposed traffic
current detours. Commute time from 19	pattern changes.
minutes to 32 minutes now (55 minutes in	
snow). Main concern is that new bridge is on	The proposed traffic pattern change in
task and work can be finished instead of non-	Moline is anticipated to begin in spring
[illegible]. Willing to do proposed detour if can	2020 and would remain in place until the
be April to Oct/Nov. Main concern is road	westbound bridge is completed (anticipated
maintenance during snow. This is biggest risk	to be in the second half of 2020). After the
for public. Moline needs to step up their	westbound bridge is complete, eastbound
maintenance in detour areas. Note - would	and westbound I-74 traffic would be shifted



appreciate opportunity for IA DOT to let me take historic photos on I-74 current bridge before destruction (1-2 hours once all traffic diverted).	to the new bridge. If the westbound bridge construction is delayed, the proposed eastbound I-74 traffic pattern would remain in place until the westbound bridge is complete.
	We appreciate your input regarding snow removal and will discuss improving maintenance with the project team.
	There may be an opportunity for the public to take photos from the new bike path prior to demolition of the existing bridge but it's too early to confirm that.
I came in against the proposal. I left supporting it. 1) The movie was not useful in my decision. It lacked content needed for better decision	Thank you for your comment regarding the public meeting and proposed traffic pattern changes.
making, for example, please include digital pictures of the current proposed exit and route. 2) How many people per day and per hour would use the proposed route? 3) What are the average costs per commute? Insurance risk, gas, cost per hour value to average person, or business? 4) What happens if the primary bridge project is delayed? 5) What is the duration of the proposed detour if everything remains on schedule? **After talking to the managers** I understand better the reasons for the proposed	Regarding your question about how many people per day and per hour would use the proposed route, our traffic modeling shows that approximately 18,000 to 20,000 vehicles per day will use the proposed route During the morning peak hour, that equates to approximately 1,200 vehicles per hour and in the afternoon peak it equates to approximately 1,600 vehicles per hour. The primary detour would direct traffic to use I- 80, which reduces traffic congestion on the local traffic route.
route. And now support the change. But please consider the following: Have [illegible] by ILDOT if snow or ice falls on the road, provide adequate lighting for route, provide driver ettiquette suggestions for more effective accident removal and to avoid multiple car accidents by public awareness training.	The average cost to motorists per commute using the spring 2019 westbound route was approximately \$3.40 and for the proposed eastbound route it is approximately \$2.30 per commute.
acciación o y puene unareness duming.	The westbound bridge is anticipated to be completed in the second half of 2020. After the westbound bridge is complete, eastbound and westbound traffic would be shifted to the new bridge. If the westbound bridge construction is delayed, the proposed eastbound I-74 traffic pattern would remain in place until the westbound bridge is complete.



	We appreciate your input and will take into consideration your suggestions regarding snow/ice removal, lighting, and driver awareness.
Really upset on time overun, watching prime	Thank you for your interest in the I-74 River
weather conditions all summer and fall with	Bridge project and for your comments
minimal progress. Some delay can be expected	regarding the bridge construction and
- 12 months in a blackeye - busted tooth - and	traffic.
grounds for divorce! Red flag on bidding.	
Contractors \$35 million under average bid.	The Iowa and Illinois departments of
"Fishy". Makes QC look foolish and like you	transportation continue to monitor traffic
hired your unemployed brother in law to bid	and make improvements when there are
and build this bridge. Traffic is a mess now, 4-	opportunities to do so. We appreciate your
minute stop light at Grant Street both ways. No	input regarding snow removal and will
way to get around it. Moline traffic stop and go	discuss your suggestions with the project
every hundred feet. Best time 15 minutes to get	team.
on bridge, worst 30 minutes. Snow this	
morning made trip downtown Moline a joke. A	We are working diligently with the bridge
slick mess at 5:30 am with 1 inch of snow.	contractor to keep progress moving forward
Better keep 24 tow trucks ready to keep traffic wrecks cleaned up if we get anything more	on the Iowa-bound bridge. We are confident in the ability of the bridge to be built, the
than 1 inch of snow, 48 trucks if we get ice!	capability of the contractor to perform the
and put chains on tow truck tires, my gravel	work, and the safety and performance of the
road at home was in better shape. Over-all	completed structure. We maintain an
tough job you have, but I am paying very well	unwavering commitment to deliver a safe,
to do a professions job/not a career job on I-74	sound, and cost-effective structure.
bridge.	
	1



### Table S-4A. Summary of Comments submitted via the I-74 Website or Email or Phone

Author of Comment did not request a Response be sent to them

Summary of Comment	Date of	Summary of Iowa DOT
	Iowa DOT	Response
	Response	
This comment is in response to the	12/6/2019	Thank you for your comment regarding
proposed traffic flow during 2020. I think		the proposed traffic pattern changes in
it is a good idea to continue work on the		Moline.
South/Illinois Bound direction of I-74 in		
Moline. However, instead of demolishing		Work on eastbound (Illinois-bound) I-
all connections in the Moline area, leave		74 south of 7th Avenue will begin this
the current overpass south of 7th Ave		spring. However, without the proposed
intact, located approximately here		traffic pattern change, we would not be
41°30'22.6"N 90°30'30.3"W. Also leave		able to complete the section of I-74 north
the roadway north of this location intact.		of 7th Avenue, thereby delaying
This will allow the majority of work to		completion of the entire eastbound
continue and be completed in 2020. When		roadway in Moline until 2021. Our
this limited construction is complete,		analysis of 2019 traffic trends showed
traffic flow south will then continue on I-		that the majority of interstate traffic
74 south rather than 19th St. Then when		diverts to other bridges, which reduces
the South/Illinois bound section of the		congestion on I-74. Based on these trends,
bridge is nearing completion, the above		the proposed traffic pattern change
overpass can be demolished and new		detouring local eastbound/Illinois-bound
construction can then be completed. This		traffic to 19th Street is anticipated to add
plan mitigates traffic disruption due to		an estimated 2 to 3 minutes to the average
delayed bridge construction and allows for		travel time from Middle Road to Avenue
IDOT to monitor the bridge construction		of the Cities. Access to downtown Moline
more closely to determine a more efficient		will also be available via the River Drive
time for demolition. I do not believe it is		off ramp (Exit 1) from the existing
necessary to complete all of I-74 Moline		eastbound River Bridge/lanes with the
construction right away when the bridge is		potential traffic control changes.
still years from completion, causing		Delaying construction without any traffic
unnecessary traffic, safety concerns, local		pattern changes would result in an
business decline, and consumer frustration.		estimated \$6.7 million increase in project
I hope to attend the meeting on		costs.
Wednesday to hear the full account of the		<b>11</b> 7 · , · , 1 · 11
plan and voice the concerns above. Thank		We appreciate your input and will
you for your time.		consider your suggestions in our evaluation
		of traffic impacts.
Any closer to have a frequently asked	12/7/2019	Thank you for your interest in the I-74
questions about the bridge construction?	14/1/2017	River Bridge project.
Many things fascinate me that I want to		Aiver Druge projeci.
ask about but I understand you don't have		A document with frequently asked
time to answer everyone's questions.		questions will be posted to the project
		website in the coming weeks
		website in the conting weeks



Summary of Comment	Date of Iowa DOT Response	Summary of Iowa DOT Response	
I74 bridge traffic issue, Illinois side/Iowa bound: Traffic on eastbound River drive and turning onto the I74 West ramp. one lane is allowed to turn. The other lanes are marked straight (no turn) however traffic continues to go past the normal turn lane and then turn right onto the ramp using the second lane. Either mark the intersection as such and allow this or police it. One way or the other.	12/11/2019	Thank you for your comment regarding traffic. The River Drive ramp location has been a challenge. Previously we implemented two turn lanes onto the entrance ramp, however, this made it challenging for motorists turning onto the ramp from westbound River Drive. The majority of local motorists are using the new lane configuration appropriately, but we will continue to monitor this location and make improvements when there are opportunities to do so.	
Iowa and Illinois DOT are doing a great job keeping traffic going through this construction project. Appreciate the opportunity to discuss in person the traffic issues. Items to consider: talk to Arsenal Garrison to see what workforce flexibility can be provided to alleviate traffic, consider changing to two right turn lanes onto I74 bridge from River Drive.	12/12/2019	Thank you for your comment regarding I-74 traffic. We appreciate the compliment and your suggestions. We do not have a record of how many Arsenal employees are using the I-74 bridge every day but we do coordinate with Arsenal staff regarding traffic pattern changes. The River Drive ramp location in Moline has been a challenge. Previously we implemented two turn lanes onto the entrance ramp, however, this made it challenging for motorists turning onto the ramp from eastbound River Drive. We will continue to monitor this location and make improvements when there are opportunities to do so.	



Summary of Comment	Date of Iowa DOT Response	Summary of Iowa DOT Response	
After seeing the video and poster boards I'm once again excited about the completion of the i74 bridge. I was impressed with the DOT reps from both states and grateful for the time they spent answering all of my questions. I see no better way to route traffic then what they are proposing and hope that it is approved soonest.	12/12/2019	Thank you for your interest in the I-74 River Bridge project and your comment regarding the proposed traffic pattern changes. We appreciate your input and attendance at the public meeting.	
I believe if the new proposed changes to the Illinois bound traffic pattern saves us time and money, then I'm all for it. Anything is good with me if we can keep the progress moving forward	12/12/2019	Thank you for your interest in the I-74 River Bridge project and your comment regarding the proposed traffic pattern changes. We appreciate your input.	
Absolutely institute the proposed changes to keep the project as on schedule as possible. That's a no-brainer.	12/12/2019	Thank you for your interest in the I-74 River Bridge project and your comment regarding the proposed traffic pattern changes. We appreciate your input.	
Please get the bridge done soon. Change the traffic patterns to promote the finishing of the bridge.	12/12/2019	Thank you for your interest in the I-74 River Bridge project and your comment regarding the proposed traffic pattern changes. We appreciate your input.	
Hello. I'm just calling, I don't need a response call, but I'm just letting you know. I don't know how you guys get the webcam set up, but now Camera 2, which previously had a view, just has a giant beam in front of it, so there's nothing to see. So you guys might want to reposition the camera. That's all. Thanks.	12/13/2019	No response necessary.	
Please adopt the plan to adjust the traffic pattern and complete the Moline I-74 construction in 2020.	12/13/2019	Thank you for your comment regarding the proposed traffic pattern changes. We appreciate your input.	



Summary of Comment	Date of Iowa DOT Response	Summary of Iowa DOT Response
I think it's a terrible idea to have Illinois bound traffic exit at 7th ave and go up 19th street to Avenue of the Cities!!!! Only way it adds 2-3 minutes is if no traffic and you hit all the lights green which we all know won't happen EVER!!	12/13/2019	Thank you for your comment regarding the proposed traffic pattern changes. Our analysis of 2019 traffic trends showed that the majority of interstate traffic diverts to other bridges, which reduces congestion on I- 74. Based on these trends, the proposed traffic pattern change detouring local eastbound/Illinois-bound traffic to 19th Street is anticipated to add an estimated 2 to 3 minutes to the average travel time from Middle Road to Avenue of the Cities. Access to downtown Moline will also be available via the River Drive off ramp (Exit 1) from the existing eastbound River Bridge/lanes with the potential traffic control changes. In order to keep traffic flowing, and only add an average of 2-3 minutes to your drive, we plan to implement a continuous traffic flow from the 7th Avenue exit to southbound 19th Street. This means that eastbound (Illinois-bound) I- 74 traffic will not have to stop at a stop light until they reach 12th Avenue. The signal timing at 12th Avenue and Avenue of the Cities will be set to prioritize southbound 19th Street traffic. This configuration would require closing eastbound 7th Avenue and northbound 19th Street.



Summary of Comment	Date of Iowa DOT Response	Summary of Iowa DOT Response
Re: the proposed IL traffic changes for 2020. Westbound River Drive traffic is currently allowed to turn left onto the IA- bound entrance ramp, seemingly without having to wait for a left turn arrow. This causes eastbound River Drive traffic to slow down and even stop turning right onto the IA-bound entrance ramp, possibly because they think these left- turning cars (from westbound River Drive) have the right-of-way. This backs- up eastbound River Drive traffic which, in turn, blocks cars coming off the new one- way ramp from going east on River Drive to the entrance ramp. I have sat at the light from the one-way off ramp thru several light changes because I couldn't get into the eastbound queue. I propose signage to either disallow westbound River Drive cars from turning left onto the entrance ramp altogether, or allow turns from westbound River Drive onto the IA-bound entrance ramp ONLY on a green arrow". If effectively timed AND ENFORCED, this would keep the flow of eastbound River Drive cars moving. Additionally, there should be a stoplight for eastbound River Drive where the exit ramp of the new highway meets it to let drivers coming off the one-way exit ramp get onto the IA-bound bridge ramp. If my message isn't clear, feel free to contact me for clarification. Thanks.	12/17/2019	Thank you for your comment regarding existing and proposed traffic pattern changes. The River Drive ramp location has been a challenge. The current configuration as you referenced, allowing concurrent westbound left turns with eastbound right turns, minimizes the traffic signal phases and provides the greatest intersection capacity. Unfortunately, as you noted, overly cautious drivers slowing down and/or stopping reduce the traffic flow effectiveness. We appreciate your suggestions and will continue to monitor this location and make improvements when there are opportunities to do so.



Summary of Comment	Date of	Summary of Iowa DOT		
	Iowa DOT	Response		
	Response	•		
I do not think you should be changing any	12/18/2019	Thank you for your comment regarding traffic		
traffic patterns until after Jan 1 due to the		changes.		
holidays, higher visitor representation				
unfamiliar with the new traffic pattern.		New traffic patterns for westbound (Iowa-		
Also, there is no stated plan on how to address snow/ice conditions with the		bound) traffic were implemented in November		
restricted traffic lane availability.		and December to provide a route the avoids train delays and improved traffic flow in		
resurced traffic falle availability.		Moline. The proposed 2020 traffic pattern		
		changes would provide two lanes of		
		eastbound I-74 traffic and would not be		
		implemented until spring.		
		<i>We understand your concern about snow/ice</i>		
		removal. The Illinois Department of		
		Transportation Operations staff have		
		reviewed the traffic routes are aware of the		
		snow removal challenges, and will be as		
		proactive as possible given the restrictive lanes. We will continue to monitor and		
		improve snow removal methods on the new		
		routes.		
		With the proposed eastbound traffic pattern in		
		Moline beginning in the spring, this should		
		avoid the potential for significant snow/ice		
	4 14 4 18 0 8 1	conditions to impact traffic on the new route.		
New traffic pattern: I think anything that	1/11/2020	Thank you for your comment regarding the		
alleviates the chaos downtown Moline		proposed traffic pattern changes. We		
will help. I don't even come from Iowa yet daily I have to deal with the long lines		appreciate your input.		
of traffic and trying to avoid constant				
changes. I come from Wilson school area				
Moline to the Arsenal, and have added at				
least 5-10 more minutes to commute time,				
have changed my routes three times now.				
I am going out of my way at least 2 miles				
daily to avoid everything. Whatever you				
need to do to get it done quicker, I am				
for				



### Table S-4B. Summary of Comments submitted via the I-74 Website or Email or Phone

Author of Comment Requested a Response be sent to them

Summary of Comment	Summary of Iowa DOT	
	Iowa DOT	Response
	Response	
Consider making a short temporary turn	12/12/19	Thank you for your comment regarding
lane in Moline at 12th ave and 19th street		the proposed traffic pattern changes.
for left turns from southbound 19th st to		117 · , , , 1 · 11
eastbound 12th ave. The turn lane could		We appreciate your suggestion and will
use a short section of the to be closed 19th		consider a turn lane at 12th Avenue in our evaluation.
st north bound lane. This may help avoid backups on southbound 19th street		evaluation.
because of vehicles turning left at 12th		
ave.		
With the talk of the new detours, I don't	12/12/19	Thank you for your comment regarding
understand for the life of me why we	12/12/17	the proposed traffic pattern changes.
continue to mess with this??		ine proposed ir dyre patiern endiges.
It would be FAR simpler for the project to		When construction options were
SHUT 1-74 DOWN from Kimberly to		discussed early on in the project, the
23rd Ave. PERIOD!!		communities expressed a desire to keep the
My goodness we have 4 other bridges to		<i>I-74 bridge open to local traffic at all times.</i>
use at our disposal!! It's not like the		Their desire to provide this local route was
Savanna bridge project. My god.		for various reasons, including continued
Stop coddling the whiners and get on with		access to downtown businesses during
it!!		construction. Through traffic as well as
Shut it down!! In BOTH directions until		local traffic is encouraged to take I-280 and
you're ready to open BOTH directions!!		I-80 but I-74 will remain open for motorists
		wanting to get to either downtown Moline
		or downtown Bettendorf.



I was disappointed in the reports of how far behind the new bridge is. I realize this year's flood was worse than normal, but the river floods every year, and it does get cold here in the winter. This should have been factored in the timeline to some extent. However, the comments about how insignificant a few more minutes delay using the detour, and now proposing the East bound detour way before the East bound span will be completed, is taken way to lightly. I think the West bound detour has added more like 10 minutes to my commute time so far. When you calculate the amount of time, times the number of cars using the bridge (80,000/day), the cost of the detour to the people crossing the bridge for an extra year (or more, considering how the west bound span is progressing, more like two years?) I would think the costs to the commuters and businesses using the bridge is far greater than the extra construction costs. This is not even including the extra pollution and vehicle wear and tear from all the extra starting and stopping. Businesses that have service vehicles that are delayed crossing the bridge what does that cost those companies? I think this is a pretty onesided view of the costs of the detours, only considering construction costs. Please consider the costs to the people and companies using the bridge for the years of taking detours, it is also my opinion that the delays in building the bridge have not all been due to weather. Even in good weather the construction on the bridge itself has been extremely slow. The contractors constructing the corridor connecting to the bridge have made excellent progress and have been very considerate of keeping the traffic moving as best they can and should not be penalized for the poor performance of the company building the main span of the

12/14/19

Thank you for your interest in the I-74 River Bridge project and your comment regarding the proposed traffic pattern changes.

We appreciate your input regarding cost to motorists and we will consider this in our evaluation. Our traffic modeling for the proposed traffic pattern showed a very limited impact on costs to motorists. The limited impact is mostly due providing two lanes of continuous flowing eastbound traffic from the 7th Avenue exit to 19th Street. Unlike the westbound (Iowa-bound) detour implemented in 2019, motorists would encounter fewer signalized intersections (two instead of six) and be able to avoid downtown congestion and train delays.

Contractors do account for weather delays in their schedule. However, while flooding is not uncommon, the extent of the record flooding in 2018 was beyond anything that could have been predicted. We had hoped that progress on the I-74 bridge would proceed much quicker after river levels receded but there have been various factors contributing to the delay. However, we have been pleased with the recent momentum on the arch.

The Department of Transportation does have contract provisions that allow them to hold contractors accountable for delays that are attributed to them. A key provision is the right to impose liquidated damages, which is a monetary penalty for each day past the determined completion date. However, because there are contested items that may affect the completion date, it is premature to assess whether liquidated damages may be due.

We are confident in the ability of the bridge to be built, the capability of the



Summary of Comment	Date of Iowa DOT	Summary of Iowa DOT Response	
	Response	Kesponse	
bridge itself. Nor should the taxpayers be		contractor to perform the work, and the	
penalized for their poor performance. I fell		safety and performance of the completed	
that the company that is building the		structure. We maintain an unwavering	
bridge should be held liable/responsible		commitment to deliver a safe, sound	
for the extra cost the delays are causing. If		structure, while balancing carefully our	
they are somehow rewarded with receiving		obligation to be fair to the contractor and	
more money for doing a poor job, or		good stewards of public funds.	
having bid the job poorly, it will be a great			
injustice. Thank you.			



Regarding "New Traffic pattern proposed	12/19/19	Thank you for your comment regarding
for Illinois-bound I-74: Changes would be		the proposed traffic pattern changes.
implemented in 2020". This is a terrible		ine proposed ir dyre pattern endinges.
idea. For those of us that live in Bettendorf		Our analysis of 2019 traffic trends
and work at Harvester Works, Seeding		showed that the majority of interstate traffic
Group, Kone, or the Arsenal, this new		diverts to other bridges, which reduces
traffic pattern will be a nightmare. I'm not		congestion on I-74. Based on these trends,
sure if I would be able to exit to the		the proposed traffic pattern change
downtown at 7th Ave in Moline (or re-		detouring local eastbound/Illinois-bound
enter the interstate from there), or if I		traffic to 19th Street is anticipated to add an
would have to go clear to Avenue of the		estimated 2 to 3 minutes to the average
Cities, but either way it's going to jam up		travel time from Middle Road to Avenue of
traffic badly and add much more than 2-3		the Cities. Access to downtown Moline will
minutes to my commute. Then traffic will		also be available via the River Drive off
have to stay that way not only until the		ramp (Exit 1) from the existing eastbound
Moline interstate is done, but until the		River Bridge/lanes with the potential traffic
entire first span is built. And if you told		control changes. In order to keep traffic
me there would be no more delays, I		flowing, and only add an average of 2-3
wouldn't believe you. Let's just wait! It's		minutes to your drive, we plan to implement
not for the motorists to pay the price for		a continuous traffic flow from the 7th
construction companies causing delays.		Avenue exit to southbound 19th Street. This
We already paid our taxes and we're not		means that eastbound (Illinois-bound) I-74
getting them back if construction gets done		traffic will not have to stop at a stop light
any quicker. Let's think of the general		until they reach 12th Avenue. The signal
public first and keep traffic flowing.		timing at 12th Avenue and Avenue of the
		Cities would be set to prioritize southbound
		19th Street traffic. This configuration,
		however, would require closing eastbound
		7th Avenue and northbound 19th Street.
		Traffic on both eastbound and westbound I-
		74 would be able to exit at 7th Avenue but
		would only be able to turn right. We
		appreciate your input and will consider
		your suggestions in our evaluation.
		We are working diligently with the bridge
		contractor to keep progress moving forward
		on the Iowa-bound bridge. We are confident
		in the ability of the bridge to be built, the
		capability of the contractor to perform the
		work, and the safety and performance of the
		completed structure. We maintain an
		unwavering commitment to deliver a safe,
		sound, and cost-effective structure.



Summary of Comment	Date of	Summary of Iowa DOT
	Iowa DOT	Response
	Response	
Hello, my name is Andrew [last name]. I	1/2/2020	Left voicemail stating that a map of the
work for a company called Here Maps.		new configuration in Moline is available on
And we provide maps that are used in		the project website. Also stated that this
many of the vehicle navigation systems		configuration would be in place until the
around the United States in North		westbound (Iowa-bound bridge) is
America. Anyways, I had a question		completed, which is anticipated to be in the
regarding the new configuration from		second half of 2020.
Illinois into Iowa on I-74. How you swing		
around the ramp and I was just wondering		
how long this configuration will be in		
place before the new section of bridge is		
open for I-74 westbound into Iowa. If you		
could please give me a call back when you		
get a chance, [phone number]. Thank you.		
Yes, I am just trying to figure out if we	1/09/20	Left message with front desk stating that
can access the I-74 Bridge off of Avenue		motorists can access I-74 from Avenue of
of the Cities. I live in Bettendorf, but I		the Cities.
work in the Moline, and I'm just trying to		
figure out how to get home. So if you		
could give me a call and let me know. My		
work number is [phone number], and my		
name is Sue. Thank you.		



### **Summary of Project Changes and Impacts**

Overall, the change to the traffic configuration proposed (Alternate WG) on the Illinois side during 2020 and potentially into first half of 2021 will affect (temporarily) the traveling public with increased eastbound travel distance and time and requires the detour of I-74 EB (interstate). The implementation of Alternate WG would allow construction crews to continue expanding the interstate in Moline while work advances on the WB River Bridge. The revised traffic patterns will not impact the permanent aspects of the proposed improvements.

As presented in the analysis and evaluation of traffic operations for the Alternate WG, the increased delay of 79 seconds as seen by vehicles on average during the peak hour is below the 5 minute per mile in accordance with the Illinois Department of Transportation's (IDOT) Work Zone Safety and Mobility Rule, State Safety Policy 3-07. In addition, implementation of Alternate WG will facilitate continuity of the proposed work on the Illinois side with minimum interruptions to complete all new eastbound pavement and eastbound bridges in Illinois by end of November 2020 (as per contract schedule). Enabling this work to proceed will lessen most of the construction impacts to downtown Moline at the end of 2020 as originally scheduled instead of extending major disruptions into 2021.

### In summary:

- The WG Alternative is anticipated to increase the ADT on 19<sup>th</sup> Street from 9,000 to 19,000.
  - Although this is a substantial increase, the one-way operation of 19<sup>th</sup> Street will allow signals to be optimized to accommodate this increased volume. The analysis shows that the roadway and signals can do this.
  - Doubling the noise source (9,000 to 19,000 ADT) results in an increase of 3dB(A), which is barely perceptible to the human ear. This is a temporary condition which will occur during this time of the revised maintenance of traffic pattern. The sound from the mainline will decrease as only the WB direction is provided, and it is anticipated that the diversion of the heavy vehicles via the I-80/I-280 detour will help with reducing louder volumes.
  - The additional daily traffic and loads could potentially impact the newly constructed pavement on NB 19<sup>th</sup> Street by accelerating deterioration, depending on actual traffic distribution exhibited during Alternate WG. However, considering Alternate WG will be signed to encourage heavy vehicles to use the I-80/I-280 detour route and not this alternate local route, the increase in heavy vehicles is anticipated to be minimal.
  - The delays at the traffic signals at 12<sup>th</sup> Avenue and Avenue of the Cities (AOTC) is an additional 2 minutes 14 seconds increased travel time in the PM peak hour on average.
- The WG Alternative limits 19<sup>th</sup> Street to one-way operations, similar to previous configurations used during construction
- Traffic signals will be re-phased and re-timed at 7<sup>th</sup>, 12<sup>th</sup> and AOTC to minimize delays for the detoured WG traffic.
- The WG configuration will only limit access to residential properties off of 19<sup>th</sup> Street via 11<sup>th</sup> Avenue, however, this will be no different than the current configuration which the contractors have completely closed 19<sup>th</sup> Street between 7<sup>th</sup> and 12<sup>th</sup> in order to accelerate the 19th Street bridge construction. Residential access is still provided via 12<sup>th</sup> Avenue, 7<sup>th</sup> Avenue, and 25<sup>th</sup> Street.
- No access to businesses will be obstructed with Alternative WG.



- These proposed changes would not affect other resources such as farmland, cultural resources, Section 4(f) or other special lands, wetlands, surface or ground water, floodplains, air quality, threatened and endangered species, and there will be no changes to special waste impacts.
- Ultimately, Alternative WG allows for the construction of the Illinois roadways to proceed on a schedule close to what was originally planned. This would encourage a majority of the Illinois roadway construction to be completed, even though the River Bridge construction is behind schedule. Subsequently, the work zone area would at least be reduced for the additional timeframe required to complete the River bridge construction.

The Illinois DOT staff has attended meetings with the City of Moline staff, QC Chamber of Commerce, Visit Quad Cities, TaxSlayer Center, RI Arsenal, and others to help coordinate outreach efforts to residents, visitors, and businesses. A step-by-step detour video was posted on the project website and social media pages. The Illinois DOT staff have offered/provided presentations and detour maps to local businesses meetings, major employers, and emergency services.

The Public Information meeting clearly identified the purpose of proposed of Alternate WG traffic configuration which is to allow roadway construction in Moline to be completed on schedule by the end of 2020 and demonstrated the impacts of these temporary issues. In general, the public supported the proposed traffic pattern changes (Alternate WG) as a solution to allow the I-74 construction in Moline to continue on schedule while work continues to complete the new WB River bridge.



ADOT	Ň	LEGEND         CONSTRUCTED PAVEMENT            EXISTING NEPA LIMITS         WG CONSTRUCTION	т	FIGURE S-3 ALTERNATIVE WG WITH EXISTING NEPA LIMITS SHEET 1 OF 2
			DISPLACEMENTS BIKE/PEDESTRIAN TRAILS WETLANDS PARKS	
		ENVIR ENVIR	ONMENTAL RESOURCE LEGEND POTENTIALLY CONTAMINATED PROPERTIES WITH STRUCTUR PROPERTIES WITH STRUCTUR COMMUNITY FACILITIES	ES LISTED ON/ELIGIBLE FOR NRHP
			MAICH	



**ENVIRONMENTAL RESOURCE LEGEND** 

POTENTIALLY CONTAMINATED SITES
PROPERTIES WITH STRUCTURES LISTED ON/ELIGIBLE FOR NRHP
PROPERTIES WITH STRUCTURES INELIGIBLE FOR NRHP
COMMUNITY FACILITIES
DISPLACEMENTS
BIKE/PEDESTRIAN TRAILS
WETLANDS
] PARKS

N	CONSTRUCTED PAVEMENT	FIGURE S-3
4	EXISTING NEPA LIMITS	ALTERNATIVE WG WITH
Δ	WG CONSTRUCTION	EXISTING NEPA LIMITS SHEET2 OF 2

# APPENDIX A ILLINOIS 2020 WG 19TH STREET TRAFFIC ANALYSIS MEMORANDUM





TO:	Illinois Department of Transportation
FROM:	Todd Artz, P.E., PTOE
DATE:	February 14, 2020
SUBJECT:	Illinois 2020 WG 19 <sup>th</sup> Street Traffic Analysis

### A. <u>Purpose of Memorandum</u>

Under the original project timeline, Iowa-bound (WB) I-74 lanes in Moline were scheduled for completion by the end of 2019 and work was to begin on the Illinois-bound (EB) lanes in 2020. Both EB and WB I-74 traffic was expected to shift to the newly constructed Iowa-bound bridge and roadways by the end of 2019. But that is no longer possible due to a delay in bridge construction. A proposed solution has been developed (herein referred to as "WG") that would allow roadway construction in Moline to be complete by the end of 2020. The plan would require temporarily detouring Illinois-bound (EB) I-74 through-traffic to I-80 and I-280. Local traffic on Illinois-bound (EB) I-74 would have to exit at 7th Avenue in Moline and take southbound 19th Street to continue south and then get back on Illinois-bound (EB) I-74 at Avenue of the Cities. The detour for Iowa-bound (WB) I-74 through-traffic would continue to be I-80.

Per 23 CFR 771.130(c), the purpose of the NEPA reevaluation is to assess the impacts of the proposed changes in traffic and determine if 1) a supplemental EIS is necessary or 2) if the original ROD remains valid. The purpose of this memorandum is to focus on the traffic analysis and the impacts of the WG detour alternative's effect on eastbound I-74 traffic and compare it to the "Do nothing" approach, which constrains EB I-74 construction in Moline.

### B. Traffic Criteria for Evaluation

The Illinois Department of Transportation's (IDOT) Work Zone Safety and Mobility Rule, State Safety Policy 3-07 states: "Delays caused by work zones should not exceed more than five (5) minutes per mile of project length with a maximum of thirty (30) minutes above the normal recurring traffic delay"

In order to comply with the rule, the proposed detour would need to impart a delay of less than approximately 10 minutes 51 seconds based on the current length of 2.17 miles.

### C. <u>Current Conditions – Do Nothing</u>

Current traffic movements are presented in Exhibit A. This includes EB utilizing the existing I-74 EB bridge until just south of 7<sup>th</sup> Avenue where it crosses over to the newly constructed WB I-74 pavement.

The distance between the termini of the proposed WG detour alternative, consisting of approximately the midpoint of the river bridge and after merging onto eastbound I-74 south of the Avenue of the Cities interchange, is 2.17 miles. The posted speed limit of 55 miles per hour leads to a current condition travel time of 2 minutes 22 seconds, assuming no incidents or reduction in speed due to congestion.

### D. Proposed Conditions (WG Alternative)

I-74 through traffic will be detoured to I-80 and I-280 (Exhibit B) and local traffic will be provided an option to use local roads in Moline as shown in Exhibit C. The proposed changes to the travel pattern of these eastbound vehicles is to reduce the speed limit to 35 miles per hour approximately at the midpoint of the river bridge, exit them at the 7<sup>th</sup> Avenue interchange and turn right on to 7<sup>th</sup> Ave, then immediately left to travel southbound on 19<sup>th</sup> Street. The detour would continue on southbound 19<sup>th</sup> Street, passing through traffic signals at 12<sup>th</sup> Avenue and the Avenue of the Cities, then rejoin the interstate via the Avenue of the Cities SB on ramp. The distance for this proposed detour is 2.25 miles.

### D.1 Traffic Analysis Process and Source of Data used in the analysis

Two types of traffic analysis were used to evaluate the Alternate WG:

- Synchro/Sim Traffic to access total travel time along southbound 19th Street
- Synchro 10 to access the operational performance of the 19th street corridor intersections with HCS used to determine the operation of the merge movement.

AM and PM turning movement counts were taken in January 2020 at the intersections of 19<sup>th</sup> Street with 7<sup>th</sup> Avenue, 12<sup>th</sup> Avenue, and the Avenue of the Cities. The proposed configuration analyzed consists of three traffic signals, (at the three counted intersections) and a merge movement onto 19<sup>th</sup> Street just south of its intersection with 7<sup>th</sup> Avenue. Besides the recent turning movement counts at the studied intersections, recent hourly counts for eastbound I-74 at QCDS10 and summer 2019 peak hour exit ramp counts at River Drive were utilized. These counts were necessary in forecasting the number of vehicles using the 19<sup>th</sup> Street detour and can be seen in Exhibit D.

This calculation consisted of taking the existing eastbound I-74 peak hour volumes and subtracting the number of vehicles exiting at River Drive. The number of vehicles exiting at River Drive is likely to increase from the existing count, as access to downtown Moline will be limited by the detour at 7<sup>th</sup> Avenue, however, in order to be conservative in the analysis of 19<sup>th</sup> Street, the number of vehicles exiting at River Drive is held constant. To determine the user delay costs, the Iowa DOT Planning section modeled the proposed WG configuration, and determined that there is a reduction in demand of approximately 30% over normal interstate conditions. This reduction was applied to the number of eastbound I-74 vehicles continuing south of River Drive that will be taking the WG detour route.

### D.2 Analysis Assumptions

Since 19<sup>th</sup> Street is currently closed to southbound traffic several other assumptions were made:

- *Vehicles traveling south on 19<sup>th</sup> Street at 7<sup>th</sup> Avenue*: The PM peak hour volumes for the southbound through at 7<sup>th</sup> Avenue were estimated in the original No-Build scenario in the initial Transportation Management Plan, this source was used for the AM peak hour as well.
- Vehicles turning east and west on 12<sup>th</sup> Avenue from southbound 19<sup>th</sup> Street and turning southbound on 19<sup>th</sup> Street from 12<sup>th</sup> Avenue: Since the turning movements at 12<sup>th</sup> Avenue likely consist of local trips, the direction and time of day traveled was reversed to estimate the turning movements. For example, the vehicle traveling eastbound to northbound in the AM peak hour, will travel southbound to westbound in the PM peak hour.
- Vehicles turning right, or northbound on 19<sup>th</sup> Street from the proposed two lane exit at 7<sup>th</sup> Avenue: An assumption of 80% of the existing right turning vehicles from 7<sup>th</sup> Avenue to 19<sup>th</sup> Street are from Interstate and desire to access downtown Moline. This is assumed because in the current configuration, in which the turning movement counts were taken, downtown Moline access for drivers east of I-74 along 7<sup>th</sup> Avenue would likely be accommodated by 23<sup>rd</sup> Street, as this would avoid the current westbound I-74 traffic using 19<sup>th</sup> Street.
- Vehicles turning right or southbound on 19<sup>th</sup> Street from eastbound 7<sup>th</sup> Avenue: An assumption of 85% of the counted eastbound through traffic along 7<sup>th</sup> Avenue at 19<sup>th</sup> Street will use the ramp to travel eastbound on I-74. These vehicles will turn south on 19<sup>th</sup> Street in the WG configuration.

All forecasted traffic and assumptions are summarized in Exhibit D. The proposed traffic pattern assumptions (detours and speed limits) are presented in Exhibit E and Exhibit F.

### D.3 <u>Results</u>

The distance of the proposed Alternate WG (19<sup>th</sup> Street detour) is approximately 2.25 miles, a marginally greater distance of less than a tenth of mile.

Synchro/SimTraffic was used for the analysis of the 19<sup>th</sup> Street detour. The SimTraffic microsimulation of southbound 19<sup>th</sup> Street was performed for the AM and PM peak hours. This type of analysis models the entire hour and takes into consideration roadway speed, traffic signals and fluctuations of the peaking characteristics within that studied hour. The SimTraffic simulation results gives the total travel time along southbound 19<sup>th</sup> Street to be approximately 276 seconds (4 minutes 36 seconds) with a delay of approximately 79 seconds (1 minutes 19 seconds) on average, during the PM peak hour. The AM peak hour resulted in a travel time of approximately 243 seconds (4 minutes 3 seconds) with a delay of approximately 47 seconds on average. The results can be seen in Table D.3.1.

	Distance (Miles)	Total Travel Time		Traffic Signal Delay	
		A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Current Conditions	2.17	2:22	2:22		
Alternative WG	2.25	4:03	4:36	0:47	1:19
Difference	0.08	1:41	2:14		

### Table D.3.1 Travel Lengths and Times (SimTraffic)

As seen by the Table D.3.1, the increased delay seen by vehicles on average during the peak hour is below the 5 minute per mile in accordance with the Illinois Department of Transportation's (IDOT) Work Zone Safety and Mobility Rule, State Safety Policy 3-07.

Furthermore, it was observed that nearly all southbound 19th Street vehicles queued at 12th Avenue and Avenue of the Cities clear the intersection at the next available green phase for their direction. Occasionally the southbound 19<sup>th</sup> Street vehicles were not able to clear during the next green phase, but these vehicles were always cleared on the subsequent cycle. If a particular driver is required to sit through two cycles at each of the signalized intersections, it could take approximately 160 additional seconds in delay in the PM peak hour to traverse the southbound 19<sup>th</sup> Street detour for that individual. This would not be the case for most drivers. If the actual volumes at the study intersections are different than forecasted, the signal timing can be altered, if necessary, to minimize the occurrence of a southbound 19<sup>th</sup> Street driver waiting for additional cycles and experiencing excessive delays.

Capacity analyses indicate how well an intersection is operating by applying a grading system called levelof-service (LOS). The LOS defines the quality of traffic operations at an intersection and is an "A-B-C-D-E-F" grading system, whereby the quality of operation on a street system can be broadly identified. LOS can range from an "A", the best traffic operation, to "F", the poorest. It is generally accepted that an acceptable LOS is LOS "D" during peak hour operation. LOS "E" represents full capacity.

Synchro 10, which uses Highway Capacity Manual methodologies, was used for the operational analysis of the 19<sup>th</sup> Street corridor intersections. While HCS was used to determine the operation of the merge movement. The results can be seen in Tables D.3.2, D.3.3, and D.3.4.

Movement	LOS (Delay in seconds)		95 <sup>™</sup> Percentile Queue	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Eastbound				
Right	A (0.1)	A (1.4)	0'	10'
Southbound	B (11.0)	B (10.6)		
Through	B (11.3)	B (11.3)	90'	90'
Right	A (5.1)	A (4.2)	7'	10'
Overall	A (9.3)	A (5.9)		
	LOS (Density pc/mi/ln)		N/A	N/A
Southbound Merge (HCS)	B (13.1)	C (21.6)	N/A	N/A

### Table D.3.2 19<sup>th</sup> Street and 7<sup>th</sup> Avenue (Synchro/HCS)

Movement	LOS (Delay in seconds)		95 <sup>™</sup> Percentile Queue	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Eastbound				
Through-Right	C (21.2)	D (52.6)	108'	205'
Westbound				
Left-Through	C (23.8)	E (58.8)	101'	164'
Northbound	A (8.0)	F (124.2)		
Left	B (11.2)	F (156.2)	31'	112'
Right	A (0.8)	A (0.9)	3'	4'
Southbound				
Left-Through-Right	A (9.5)	B (17.7)	186'	608'
Overall	B (14.7)	C (31.6)		

### Table D.3.3 19th Street and 12th Avenue

### Table D.3.4 19th Street and Avenue of the Cities

Movement	LOS (Delay in seconds)		95 <sup>™</sup> Percentile Queue	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Eastbound	C (21.7)	D (43.6)		
Through	C (26.1)	D (51.0)	168'	277'
Right	A (8.3)	B (15.1)	59'	81'
Westbound	C (21.0)	C (34.7)		
Left	D (54.5)	E (75.7)	202'	264'
Through	A (9.9)	C (20.5)	114'	190'
Southbound	C (23.6)	C (27.5)		
Left	B (16.9)	B (15.2)	67'	115'
Through	C (28.6)	C (34.7)	247'	567'
Right	A (2.1)	A (9.0)	13'	96'
Overall	C (22.3)	C (32.4)		

As seen in the Tables, the 19<sup>th</sup> Street intersections operate at acceptable levels of service with the exception of the northbound lefts from 19<sup>th</sup> Street to westbound 12<sup>th</sup> Avenue in the PM peak hour as shown in Table D.3.3. This is primarily due to the low amount of green time at this intersection and the lack of a protected phase for these movements. However, the forecasted demand for the northbound lefts from 19<sup>th</sup> Street is less than 100 vehicles without any reduction being applied caused by the construction. This movement would likely be local drivers, who may make adjustments to routes and/or travel times to avoid a longer than acceptable delay. There is sufficient storage capacity at the intersection to accommodate the anticipated queuing.

The exact geometry of the merge of the 7<sup>th</sup> Avenue vehicle to the southbound 19<sup>th</sup> movement varies between the substages. An acceleration length of 200' was used as a minimum for the analysis. Merges are not typically constructed at locations with low speeds. The minimum allowable freeway free flow speed for merge analysis the HCM uses is 45 miles per hour and was used for this analysis. Fluctuations in the free flow speed and freeway speed adjustment factors were shown to have little effect on the density and operations of the merging movement because the volumes involved are under capacity for the two-lane section. Therefore, the difference in posted speed limits along this section of 19<sup>th</sup> Street will likewise have little effect on the operations of the merging movement.
#### E. Overall Summary and Recommendations

- The proposed WG detour should be able to accommodate the anticipated traffic volumes with an increased delay of 1 minute 41 seconds and 2 minutes 14 seconds in the AM and PM peak hour, respectively on average. This would be expected to be less at off peak times.
- The local traffic currently accessing downtown via southbound 19th Street will be required to take an alternate route or turn WB at 12th Avenue. 15th Street, 16th Street and 27th Street may be used as alternatives. See Exhibit E.
- All local drivers traveling east and west on 7th Avenue will be required to take an alternate route. The one-way pair of 6th Avenue and 4th Avenue may be used as alternatives. See Exhibit E.
- The proposed traffic signal phasing and timing for 12th Avenue and Avenue of the Cities can be seen in Exhibit D. The Department of Transportation and the construction manager should monitor these signals and adjust the timings, if necessary.

### EXHIBIT A





**I74RiverBridge.com** 

# Interim Condition to Alternative WG

## Initiated Winter 2019, Extend through Spring 2020

# **TRAFFIC CONFIGURATION FOR I-74**





## EXHIBIT B

## **ALTERNATE WG: PROPOSED THROUGH TRAFFIC CONFIGURATION 2020**



**IOWA** 

(67)

**I74RiverBridge.com** 



## BEGINS SPRING 2020

THROUGH TRAFFIC TO BE **DETOURED OFF** OF I-74 TO REDUCE CONGESTION

Proposed traffic pattern changes would be in place until the new Iowa-bound I-74 bridge is complete.





## EXHIBIT C

## Avenue of the Cities 19th St 19th St TAKE AVENUE OF THE CITIES ON-RAMP TO CONTINUE EAST ON I-74

Proposed traffic pattern changes would be in place until the new lowa-bound I-74 bridge is complete.

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## **PROPOSED LOCAL TRAFFIC CONFIGURATION 2020 BEGINS SPRING 2020** (ALTERNATIVE WG) Illinois-bound I-74 local traffic is provided the option of using local roads in Moline







## EXHIBIT D

#### WG - Traffic Count Base Data





No Build/	<mark>Previo</mark>	<mark>us Mo</mark>	<mark>del D</mark> a	<mark>ita PM</mark>	Only
A		7TH - 19T	н		
N	30	250	442		
20	-	•		Ĺ	120
445					380
135					215
	<b>1</b> 10	<b>1</b> 80	200		

#### WG - Detoured Traffic

Assume 80% of existing turning vehicles are from Interstate to access downtown Moline.

- Assume 85% of through traffic accessing EB I-74 Ramp at 7th Avenue
- No Present Count Data, Use No-Build values and revered direction and travel times.
- From 2020 Count Data





#### EB Closure\_AM\_20200207.syn 2: 7th Avenue

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		1			<b>↑</b>	1
Traffic Volume (vph)	0	48	0	0	250	11
Future Volume (vph)	0	48	0	0	250	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	0	0	1863	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	0	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		454				12
Link Speed (mph)	30			30	30	
Link Distance (ft)	519			151	1552	
Travel Time (s)	11.8			3.4	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)	=					
Lane Group Flow (vph)	0	52	0	0	272	12
Turn Type		Perm		•	NA	Perm
Protected Phases					6	
Permitted Phases		4			•	6
Total Split (s)		22.5			22.5	22.5
Total Lost Time (s)		4.5			4.5	4.5
Act Effct Green (s)		18.0			18.0	18.0
Actuated g/C Ratio		0.40			0.40	0.40
v/c Ratio		0.06			0.37	0.02
Control Delay		0.1			11.3	5.1
Queue Delay		0.0			0.0	0.0
Total Delay		0.0			11.3	5.1
LOS		A			B	A
Approach Delay	0.1	/\			11.0	~~~~
Approach LOS	A				B	
Queue Length 50th (ft)	Λ	0			47	0
Queue Length 95th (ft)		0			90	7
Internal Link Dist (ft)	439	U		71	1472	,
Turn Bay Length (ft)	400			1	1712	
Base Capacity (vph)		916			745	640
Starvation Cap Reductn		0			0	0+0
Spillback Cap Reductn		0			0	0
Storage Cap Reductn		0			0	0
Reduced v/c Ratio		0.06			0.37	0.02
		0.00			0.57	0.02
Intersection Summary Area Type:	Other					
	Ouler					
Cycle Length: 45						
Actuated Cycle Length: 45			T 044	( O		
Offset: 0 (0%), Referenced	to phase 2:	and 6:5B	T, Start o	f Green		
Control Type: Pretimed						
Maximum v/c Ratio: 0.37	0.0				ha wa 1'	
Intersection Signal Delay:					tersectior	
Intersection Capacity Utiliz	zation 24.8%			IC	U Level o	of Service A
Analysis Period (min) 15						

01/08/2020 Baseline

Synchro 10 Report

#### EB Closure\_AM\_20200207.syn 2: 7th Avenue



#### EB Closure\_AM\_20200207.syn 3: 19th Street & 12th Avenue

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		A⊅					۲.		1		4î»	
Traffic Volume (vph)	0	340	96	25	334	0	51	0	22	42	1008	23
Future Volume (vph)	0	340	96	25	334	0	51	0	22	42	1008	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3422	0	0	3529	0	1770	0	1583	0	3522	0
Flt Permitted					0.884		0.194				0.998	
Satd. Flow (perm)	0	3422	0	0	3129	0	361	0	1583	0	3522	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		57							55		6	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		578			688			1930			1725	
Travel Time (s)		13.1			15.6			29.2			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	474	0	0	390	0	55	0	24	0	1167	0
Turn Type		NA		Perm	NA		Perm		Perm	Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Total Split (s)		21.0		21.0	21.0		39.0		39.0	39.0	39.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Act Effct Green (s)		12.4			12.4		33.1		33.1		33.1	
Actuated g/C Ratio		0.22			0.22		0.58		0.58		0.58	
v/c Ratio		0.61			0.58		0.27		0.03		0.58	
Control Delay		21.2			23.8		11.2		0.8		9.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		21.2			23.8		11.2		0.8		9.5	
LOS		С			С		В		Α		Α	
Approach Delay		21.2			23.8			8.0			9.5	
Approach LOS		С			С			А			Α	
Queue Length 50th (ft)		67			63		9		0		122	
Queue Length 95th (ft)		108			101		31		3		186	
Internal Link Dist (ft)		498			608			1850			1645	
Turn Bay Length (ft)												
Base Capacity (vph)		937			818		207		934		2029	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	
Reduced v/c Ratio		0.51			0.48		0.27		0.03		0.58	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 57												
Control Type: Actuated-Ur	ncoordinated											
Maximum v/c Ratio: 0.61												
Intersection Signal Delay:					tersectior							
Intersection Capacity Utiliz	zation 73.9%			IC	CU Level of	of Service	Ď					
Analysis Period (min) 15												

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Splits and Phases:	3: 19th Street & 12th Avenue	
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39 s		21 s

#### EB Closure\_AM\_20200207.syn 4: 19th Street

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Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations				<u></u>		77
Traffic Volume (vph)	0	0	0	1129	0	73
Future Volume (vph)	0	0	0	1129	0	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	3539	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	2787
Link Speed (mph)	45			45	45	
Link Distance (ft)	1706			1930	532	
Travel Time (s)	25.8			29.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1227	0	79
Sign Control	Free			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalize	ed					
Intersection Capacity Utili				IC	U Level o	of Service
Analysis Period (min) 15						

Analysis Period (min) 15

#### EB Closure\_AM\_20200207.syn 5: 19th Street & Avenue of the Cities

02/06/2020

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u></u>	1	1	<u></u>					ኘኘ	<u></u>	1
Traffic Volume (vph)	0	597	193	219	662	0	0	0	0	258	773	98
Future Volume (vph)	0	597	193	219	662	0	0	0	0	258	773	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		350	200		0	0		0	275		275
Storage Lanes	0		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	3433	3539	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164									164
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1101			955			1107			1706	
Travel Time (s)		25.0			21.7			16.8			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Lane Group Flow (vph)	0	649	210	238	720	0	0	0	0	280	840	107
Turn Type	Ū	NA	Perm	Prot	NA	U	U	U	U	Prot	NA	Prot
Protected Phases		4	T CITI	3	8					1	6	6
Permitted Phases		7	4	0	0						0	U
Total Split (s)		23.0	23.0	16.0	39.0					21.0	21.0	21.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					4.5	6.0	6.0
Act Effct Green (s)		15.7	15.7	9.8	31.5					19.5	18.0	18.0
Actuated g/C Ratio		0.25	0.25	0.16	0.51					0.32	0.29	0.29
v/c Ratio		0.23	0.20	0.10	0.31					0.32	0.23	0.29
Control Delay		26.1	8.3	54.5	9.9					16.9	28.6	2.1
Queue Delay		0.0	0.0	0.0	9.9 0.0					0.0	20.0	0.0
Total Delay		26.1	8.3	54.5	9.9					16.9	28.6	2.1
LOS		20.1 C	0.5 A	54.5 D	9.9 A					10.9 B	20.0 C	2.1 A
		21.7	A	U	21.0					D	23.6	A
Approach Delay Approach LOS		21.7 C			21.0 C						23.0 C	
		116	13	90	79					40	156	0
Queue Length 50th (ft)		168	59		114					40 67		0 13
Queue Length 95th (ft)			59	#202				1007		07	#247	13
Internal Link Dist (ft)		1021	250	200	875			1027		075	1626	075
Turn Bay Length (ft)		070	350 556	200	1898					275 1088	1036	275
Base Capacity (vph)		978		287								579
Starvation Cap Reductn		0	0	0	0					0	0	0
Spillback Cap Reductn		0	0	0	0 0					0	0	0
Storage Cap Reductn Reduced v/c Ratio		0 0.66	0 0.38	0 0.83	0.38					0 0.26	0.81	0 0.18
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 61	.6											
Control Type: Actuated-Ur	coordinated											
Maximum v/c Ratio: 0.84												
Intersection Signal Delay:	22.3			In	tersectior	n LOS: C						

01/08/2020 Baseline

Synchro 10 Report

Intersection Capacity Utilization 65.0%

ICU Level of Service C

Analysis Period (min) 15
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: 19th Street & Avenue of the Cities

Ø1	<b>√</b> Ø3	<b>™</b> Ø4	
21 s	16 s	23 s	
<b>♦</b> Ø6	<b>←</b> Ø8		
21 s	39 s		

#### EB Closure\_AM\_20200207.syn 15: 19th Street

	٦	Ť	Ļ	۶J		$\rightarrow$
Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations			<u></u>			1
Traffic Volume (vph)	0	0	775	0	0	298
Future Volume (vph)	0	0	775	0	0	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	3539	0	0	1611
FIt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1611
Link Speed (mph)		30	30		20	
Link Distance (ft)		346	1190		176	
Travel Time (s)		7.9	27.0		6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	842	0	0	324
Sign Control		Free	Free		Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalize	d					
Intersection Capacity Utiliz	zation 46.5%			IC	U Level o	of Service
Analysis Pariod (min) 15						

Analysis Period (min) 15

#### EB Closure\_PM\_20200207.syn 2: 7th Avenue & 19th Street

	≯	$\mathbf{r}$	1	Ť	ţ	~
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		1			1	7
Traffic Volume (vph)	0	292	0	0	250	27
Future Volume (vph)	0	292	0	0	250	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	0	0	1863	1583
Flt Permitted	, , , , , , , , , , , , , , , , , , ,		Ű	Ŭ		
Satd. Flow (perm)	0	1611	0	0	1863	1583
Right Turn on Red		Yes	Ű	Ŭ		Yes
Satd. Flow (RTOR)		454				29
Link Speed (mph)	30			30	30	
Link Distance (ft)	519			151	1552	
Travel Time (s)	11.8			3.4	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)	5.02	0.02	0.02	0.02	0.02	0.02
Lane Group Flow (vph)	0	317	0	0	272	29
Turn Type	v	Perm	v	Ŭ	NA	Perm
Protected Phases					6	
Permitted Phases		4			U	6
Total Split (s)		22.5			22.5	22.5
Total Lost Time (s)		4.5			4.5	4.5
Act Effct Green (s)		18.0			18.0	18.0
Actuated g/C Ratio		0.40			0.40	0.40
v/c Ratio		0.40			0.40	0.40
Control Delay		1.4			11.3	4.2
Queue Delay		0.0			0.0	0.0
Total Delay		1.4			11.3	4.2
LOS		A			B	ч.2 А
Approach Delay	1.4				10.6	Π
Approach LOS	A				B	
Queue Length 50th (ft)	П	0			47	0
Queue Length 95th (ft)		10			90	10
Internal Link Dist (ft)	439	10		71	1472	ĨŪ
Turn Bay Length (ft)	400			11	1712	
Base Capacity (vph)		916			745	650
Starvation Cap Reductn		910			0	0.00
Spillback Cap Reductin		0			0	0
Storage Cap Reductn		0			0	0
Reduced v/c Ratio		0.35			0.37	0.04
		0.55			0.37	0.04
Intersection Summary Area Type:	Other					
Cycle Length: 45	Une					
Actuated Cycle Length: 45						
Offset: 0 (0%), Referenced	to phase 2:	and 6.0D	T Start a	f Green		
Control Type: Pretimed	to phase 2.	anu 0.3D	r, Start 0	Gleen		
Maximum v/c Ratio: 0.37						
Intersection Signal Delay: 5	0			- In-	tersectior	
ů ,						of Service /
Intersection Capacity Utiliza Analysis Period (min) 15	auun 30.1 %			iC	U Level (	

01/08/2020 Baseline

Synchro 10 Report

Splits and Phases:	2: 7th Avenue & 19th Street		
		~> Ø4	
		22.5 s	
Ø6 (R)			
22.5 s			

#### EB Closure\_PM\_20200207.syn 3: 19th Street & 12th Avenue

02/06/2020	
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	٦	→	$\mathbf{\hat{z}}$	∢	←	*	•	Ť	1	5	Ļ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- <b>†</b> 1>					ሻ		1		4î b	
Traffic Volume (vph)	0	384	51	22	292	0	96	0	25	77	1985	17
Future Volume (vph)	0	384	51	22	292	0	96	0	25	77	1985	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3479	0	0	3525	0	1770	0	1583	0	3529	0
Flt Permitted					0.732		0.071				0.998	
Satd. Flow (perm)	0	3479	0	0	2591	0	132	0	1583	0	3529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15							41		2	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		578			688			1930			1725	
Travel Time (s)		13.1			15.6			29.2			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	472	0	0	341	0	104	0	27	0	2260	0
Turn Type		NA		Perm	NA		Perm		Perm	Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Total Split (s)		18.0		18.0	18.0		62.0		62.0	62.0	62.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Act Effct Green (s)		12.0			12.0		56.0		56.0		56.0	
Actuated g/C Ratio		0.15			0.15		0.70		0.70		0.70	
v/c Ratio		0.88			0.88		1.13		0.02		0.91	
Control Delay		52.6			58.8		156.2		0.9		17.7	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		52.6			58.8		156.2		0.9		17.7	
LOS		D			Е		F		А		В	
Approach Delay		52.6			58.8			124.2			17.7	
Approach LOS		D			E			F			В	
Queue Length 50th (ft)		119			88		~61		0		414	
Queue Length 95th (ft)		#205			#164		#112		4		#608	
Internal Link Dist (ft)		498			608			1850			1645	
Turn Bay Length (ft)												
Base Capacity (vph)		534			388		92		1120		2470	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	
Reduced v/c Ratio		0.88			0.88		1.13		0.02		0.91	
Intersection Summary												
21	Other											
Cycle Length: 80												
Actuated Cycle Length: 80												
Control Type: Actuated-Unc	oordinated											
Maximum v/c Ratio: 1.13												
Intersection Signal Delay: 37	1.6			In	Itersection	n LOS: C						
Intersection Capacity Utiliza	tion 101.1%	0		IC	CU Level	of Service	G					
Analysis Period (min) 15												
<ul> <li>Volume exceeds capacit</li> </ul>	ty, queue is	theoretic	ally infinit	te.								

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

#### Splits and Phases: 3: 19th Street & 12th Avenue

<b>▲</b> √Ø2	<b>→</b> Ø4	
62 s	18 s	
Ø6	₹ø8	
62 s	18 s	

#### EB Closure\_PM\_20200207.syn 4: 19th Street

	Ť	Å	L	Ţ	f	*
					T NUA/I	
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations				- <b>††</b>		77
Traffic Volume (vph)	0	0	0	2058	0	121
Future Volume (vph)	0	0	0	2058	0	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	3539	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	2787
Link Speed (mph)	45			45	45	
Link Distance (ft)	1706			1930	532	
Travel Time (s)	25.8			29.2	8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2237	0	132
Sign Control	Free			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalize						
Intersection Capacity Utiliz				IC	U Level o	of Service
Analysis Period (min) 15						

Analysis Period (min) 15

#### EB Closure\_PM\_20200207.syn 5: 19th Street & Avenue of the Cities

02/06/2020

	۶	-	*	4	ł	•	<b>&lt;</b>	1	1	1	Ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<u></u>	1	1	<u></u>					ሻሻ	<u></u>	1
Traffic Volume (vph)	0	573	149	212	614	0	0	0	0	441	1376	241
Future Volume (vph)	0	573	149	212	614	0	0	0	0	441	1376	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		350	200		0	0		0	275		275
Storage Lanes	0		1	1		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	3433	3539	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109									128
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		1101			955			1107			1706	
Travel Time (s)		25.0			21.7			16.8			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	623	162	230	667	0	0	0	0	479	1496	262
Turn Type		NA	Perm	Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8					1	6	6
Permitted Phases			4									
Total Split (s)		24.0	24.0	19.0	43.0					47.0	47.0	47.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					4.5	6.0	6.0
Act Effct Green (s)		17.9	17.9	13.0	36.9					42.5	41.0	41.0
Actuated g/C Ratio		0.20	0.20	0.14	0.41					0.47	0.46	0.46
v/c Ratio		0.88	0.40	0.90	0.46					0.30	0.93	0.33
Control Delay		51.0	15.1	75.7	20.5					15.2	34.7	9.0
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		51.0	15.1	75.7	20.5					15.2	34.7	9.0
LOS		D	В	E	С					В	С	A
Approach Delay		43.6			34.7						27.5	
Approach LOS		D			С						C	
Queue Length 50th (ft)		182	25	130	141					82	407	44
Queue Length 95th (ft)		#277	81	#264	190					115	#567	96
Internal Link Dist (ft)		1021	-		875			1027			1626	
Turn Bay Length (ft)			350	200						275		275
Base Capacity (vph)		708	403	255	1455					1622	1613	791
Starvation Cap Reductn		0	0	0	0					0	0	0
Spillback Cap Reductn		0	0	0	0					0	0	0
Storage Cap Reductn		0	0	0	0					0	0	0
Reduced v/c Ratio		0.88	0.40	0.90	0.46					0.30	0.93	0.33
Intersection Summary												
	Other											
Cycle Length: 90												
Actuated Cycle Length: 89.9												
Control Type: Actuated-Unco	ordinated											
Maximum v/c Ratio: 0.93												
Intersection Signal Delay: 32	.4			In	tersectior	LOS: C						

01/08/2020 Baseline

Synchro 10 Report

Intersection Capacity Utilization 80.6%

ICU Level of Service D

Analysis Period (min) 15
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: 19th Street & Avenue of the Cities



#### EB Closure\_PM\_20200207.syn 15: 19th Street

	٦	Ť	Ļ	N		$\mathbf{F}$
Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations			<u></u>			1
Traffic Volume (vph)	0	0	1537	0	0	542
Future Volume (vph)	0	0	1537	0	0	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	3539	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3539	0	0	1611
Link Speed (mph)		30	30		20	
Link Distance (ft)		346	1190		176	
Travel Time (s)		7.9	27.0		6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1671	0	0	589
Sign Control		Free	Free		Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	ation 82.7%			IC	U Level o	of Service
Analysis Period (min) 15						

### Arterial Level of Service Baseline

#### Arterial Level of Service: NB 19th Street

		Delay	Travel	Dist	Arterial
Cross Street	Node	(s/veh)	time (s)	(mi)	Speed
12th Avenue	3	38.3	75.6	0.4	17
Total		38.3	75.6	0.4	17

#### Arterial Level of Service: SB 19th Street

		Delay	Travel	Dist	Arterial	
Cross Street	Node	(s/veh)	time (s)	(mi)	Speed	
	14	2.9	82.7	0.7	30	
	15	2.3	27.3	0.2	30	
	18	1.3	11.1	0.1	21	
12th Avenue	3	10.1	36.7	0.3	32	
	4	4.5	34.1	0.4	39	
Avenue of the Cities	5	25.9	51.3	0.3	23	
Total		47.1	243.2	2.0	29	

### Arterial Level of Service Baseline

#### Arterial Level of Service: NB 19th Street

#### Arterial Level of Service: SB 19th Street

		Delay	Travel	Dist	Arterial	
Cross Street	Node	(s/veh)	time (s)	(mi)	Speed	
	14	5.9	86.5	0.7	28	
	15	11.4	36.5	0.2	22	
	18	2.0	11.8	0.1	20	
12th Avenue	3	15.4	42.1	0.3	28	
	4	7.5	37.2	0.4	35	
Avenue of the Cities	5	36.8	62.1	0.3	19	
Total		78.9	276.3	2.0	26	

#### HCS7 Freeway Merge Report

		ay merge report				
Project Information						
Analyst H	anson Professoinal Services	Date	1/28/2020			
Agency	TOC	Analysis Year	2020			
Jurisdiction IE	TOC	Time Period Analyzed	2020 AM P	Peak Hour		
	020 WG Illinois Traffic onfiguration Analysis	Unit	United Sta	tes Customary		
Geometric Data						
		Freeway	Ramp			
Number of Lanes (N), In		2	1			
Free-Flow Speed (FFS), mi/h		45.0	20.0			
Segment Length (L) / Acceleration Le	ngth (LA),ft	200	200			
Terrain Type		Level	Level			
Percent Grade, %		-	-			
Segment Type / Ramp Side		Freeway	Right			
Adjustment Factors						
Driver Population		All Familiar	All Familiar			
Weather Type		Non-Severe Weather	re Weather			
Incident Type		No Incident	No Incident -			
Final Speed Adjustment Factor (SAF)		1.000	1.000			
Final Capacity Adjustment Factor (CA	F)	1.000	1.000 1.000			
Demand Adjustment Factor (DAF)		1.000	1.000 1.000			
Demand and Capacity						
Demand Volume (Vi)		755	298			
Peak Hour Factor (PHF)		0.94				
Total Trucks, %		2.00				
Single-Unit Trucks (SUT), %		-				
Tractor-Trailers (TT), %		-	-			
Heavy Vehicle Adjustment Factor (fHV	)	0.980	0.980 0.980			
Flow Rate (vi),pc/h		820	323			
Capacity (c), pc/h		4500 1900				
Volume-to-Capacity Ratio (v/c)		0.25	0.17			
Speed and Density						
Upstream Equilibrium Distance (LEQ),	ft -	Number of Outer Lanes on Fr	reeway (NO)	0		
Distance to Upstream Ramp (LUP), ft	Distance to Upstream Ramp (LUP), ft -			0.325		
Downstream Equilibrium Distance (LEQ), ft -		Flow Outer Lanes (vOA), pc/h,	/ln	-		
Distance to Downstream Ramp (LDOW	/N), ft -	On-Ramp Influence Area Spe	ed (SR), mi/h	44.0		
Prop. Freeway Vehicles in Lane 1 and	2 (Pfm) 1.000	Outer Lanes Freeway Speed (	Outer Lanes Freeway Speed (SO), mi/h			
Flow in Lanes 1 and 2 (v12), pc/h	820	Ramp Junction Speed (S), mi/	/h	44.0		
Flow Entering Ramp-Infl. Area (vR12),	pc/h 1143	Average Density (D), pc/mi/lr	1	13.0		
Level of Service (LOS)	В	Density in Ramp Influence Ar	Density in Ramp Influence Area (DR), pc/mi/ln 13.1			

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#### HCS7 Freeway Merge Report

	11007 110000	iy Merge Report				
Project Information						
Analyst Ha	nson Professoinal Services	Date	1/28/2020			
Agency ID0	TC	Analysis Year	2020			
Jurisdiction ID	ОТ	Time Period Analyzed	2020 PM P	eak Hour		
Project Description 20 Co	Unit	United Sta	tes Customary			
Geometric Data						
		Freeway	Ramp			
Number of Lanes (N), In		2	1			
Free-Flow Speed (FFS), mi/h		45.0	20.0			
Segment Length (L) / Acceleration Leng	gth (LA),ft	200	200			
Terrain Type		Level	Level			
Percent Grade, %		-	-			
Segment Type / Ramp Side		Freeway	Right			
Adjustment Factors						
Driver Population		All Familiar	All Familiar			
Weather Type		Non-Severe Weather	re Weather			
Incident Type		No Incident				
Final Speed Adjustment Factor (SAF)		1.000	1.000			
Final Capacity Adjustment Factor (CAF)	)	1.000	1.000 1.000			
Demand Adjustment Factor (DAF)		1.000	1.000 1.000			
Demand and Capacity						
Demand Volume (Vi)		1537	542			
Peak Hour Factor (PHF)		0.94				
Total Trucks, %		2.00				
Single-Unit Trucks (SUT), %		-				
Tractor-Trailers (TT), %		-				
Heavy Vehicle Adjustment Factor (fHV)		0.980	0.980 0.980			
Flow Rate (vi),pc/h		1668	1668 588			
Capacity (c), pc/h		4500 1900				
Volume-to-Capacity Ratio (v/c)		0.50	0.31			
Speed and Density						
Upstream Equilibrium Distance (LEQ), f	t -	Number of Outer Lanes on Fr	reeway (NO)	0		
Distance to Upstream Ramp (LUP), ft	Distance to Upstream Ramp (LUP), ft -			0.350		
Downstream Equilibrium Distance (LEQ), ft -		Flow Outer Lanes (vOA), pc/h/	/In	-		
Distance to Downstream Ramp (LDOWN	v), ft -	On-Ramp Influence Area Spec	ed (SR), mi/h	44.0		
Prop. Freeway Vehicles in Lane 1 and 2	(PFM) 1.000	Outer Lanes Freeway Speed (	SO), mi/h	45.0		
Flow in Lanes 1 and 2 (v12), pc/h	1668	Ramp Junction Speed (S), mi/	′h	44.0		
Flow Entering Ramp-Infl. Area (vR12), p	c/h 2256	Average Density (D), pc/mi/ln	)	25.6		
Level of Service (LOS)	С	Density in Ramp Influence Are	Density in Ramp Influence Area (DR), pc/mi/ln 21.6			

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## EXHIBIT E



**I74RiverBridge.com** 

## **PROPOSED LOCAL TRAFFIC CONFIGURATION 2020 BEGINS SPRING 2020** (ALTERNATIVE WG)

# **7TH AVENUE & 19TH STREET ACCESS**





### EXHIBIT F



#### **APPENDIX B** 2020 ILLINOIS CONFIGURATION ALTERNATIVE ANALYSIS MEMORANDUM



### 2020 ILLINOIS TRAFFIC CONFIGURATION ALTERNATIVE ANALYSIS

November 2019


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# 2020 ILLINOIS TRAFFIC CONFIGURATION ALTERNATIVE ANALYSIS

# **INTRODUCTION**

The purpose of this study is to evaluate an alternative to move traffic through the Illinois portion of the I-74 corridor during 2020 in order to keep the land based contracts moving forward while the westbound Mississippi River Bridge construction is delayed.

# **CURRENT CONDITIONS**

Traffic on the Illinois side is currently in the Stage 2 configuration. In this configuration westbound I-74 is closed at Avenue of the Cities. At Avenue of the Cities local traffic exits and takes northbound 19<sup>th</sup> Street to River Drive. Prior to River drive traffic encounters an at-grade railroad crossing. The trains in this area are long and slow moving which creates significant delays at various times throughout the day. Once across the tracks, traffic turns east at River Drive traffic and then takes the existing River Drive on-ramp to access the existing westbound I-74 bridge over the Mississippi River. Eastbound I-74 traffic is utilizing the existing eastbound interstate lanes. This configuration was originally scheduled to remain in effect until the end of Stage 2 which was to conclude at the end of November, 2019.

# **RIVER BRIDGE DELAY**

According to the latest schedule submitted by the river bridge contractor the westbound structure is scheduled to be completed at the beginning of September, 2020. This delay means the 2019 Winter Stage and Stage 3 will be delayed for all contractors if changes to the traffic configuration are not implemented.

# WINTER 2019/2020 CONDITIONS (ALTERNATIVE WD-2)

Due to the river bridge delay westbound motorists will not be able to utilize the new westbound river bridge as promised. However, at the end of Stage 2 the new westbound lanes in Illinois, will now be available for use from south of the Avenue of the Cities to the Mississippi River. By shifting traffic on to these lanes travel times can be reduced; storage capacity increased; and the at-grade railroad crossing near 4<sup>th</sup> Avenue can be avoided eliminating train delays.

At the end of westbound Stage 2, in Illinois, local traffic will begin to use the new westbound lanes from south of the Avenue of the Cities to the Mississippi River. Two westbound (lowa bound) lanes will be carried to 7<sup>th</sup> Avenue. At 7<sup>th</sup> Avenue local traffic will have a chance to exit. Iowa bound motorists wishing to avoid the at-grade railroad crossing will continue in a single lane to just before the south abutment of the river bridge where it will make a large U-turn movement to head down the new eastbound River Drive off-ramp. At the bottom of the ramp traffic will turn east to access the River Drive on-

ramp to the existing westbound river bridge to head to lowa, or turn west to follow River Drive to downtown Moline.

From the end of Stage 2 until the beginning of 2020, eastbound I-74 traffic will remain on the existing lanes. Beginning in January 2020, eastbound traffic will be shifted onto the new westbound lanes via a temporary two-lane crossover located just south of 7<sup>th</sup> Avenue South of the Avenue of the Cities the eastbound traffic will cross back over to the eastbound side before exiting the corridor. By crossing the traffic over to the westbound side, demolition of the existing eastbound bridges from north of 7<sup>th</sup> Avenue to the Avenue of the Cities and construction of the new eastbound bridges substructure elements can be substantially completed prior to April 1<sup>st</sup>. This will minimize the impacts to southbound 19<sup>th</sup> Street in the event Alternative WG (described below) is implemented in spring 2020. In addition, advancing this bridge work provides the opportunity to reestablish the Avenue of the Cities off-ramp at an earlier date. Alternative WD-2 allows the completion of Contract 64E26 with the exception of the north limits of the project.

See Exhibit A for a map showing the Winter 2019/2020 Configuration (WD-2).

# **DESCRIPTION OF ALTERNATIVES STUDIED TO START STAGE 3 IN ILLINOIS**

Alternatives for 2020 traffic include the "Do Nothing" and rerouting eastbound traffic in Illinois to allow completion of all mainline pavement and bridges (Alternative WG).

# Do Nothing

In the "Do Nothing" alternative, Contract 64C08 would be suspended until the westbound river bridge is completed. Because the westbound river bridge is not currently scheduled to be completed until fall, 2020, it is assumed this contract would be suspended until spring of 2021. Contract 64E26 would be expected to continue by utilizing the crossover discussed above. However, it could not be fully completed until 2021 due to interdependencies at the 7<sup>th</sup> Avenue abutment with contract 64C08.

# <u>Advantages</u>

• Eastbound I-74 remains in interstate configuration.

# <u>Disadvantages</u>

- Construction delay costs.
- Disruption to Moline traffic patterns continue longer.
- Uncertainty when worksite available to remobilize Contractor.
- Uncertainty regarding Contractor workforce availability upon return.
- 64E26 Contractor has to come back in 2021 to complete.
- Creates additional coordination issues due to interdependency with Contract 64C08.
  - Uncertainty in 64C08 return timeframe.
  - Back and forth work tasks between Contracts at 7<sup>th</sup> Avenue abutment/wall creates significant inefficiencies.

# WG

Alternative WG includes the closure of eastbound Interstate 74 to through traffic in a manner similar to the current westbound conditions. Interstates 80 and 280 will be utilized to detour EB and WB interstate traffic around the project corridor.

The eastbound interstate lanes will be closed at 7<sup>th</sup> Avenue and local traffic wishing to continue south through the corridor will be forced to take the 7<sup>th</sup> Street off-ramp. At the bottom of the ramp at 7<sup>th</sup> Avenue traffic will be directed west for a short distance to 19<sup>th</sup> Street where it will head south to the Avenue of the Cities before utilizing the on-ramp to rejoin the eastbound I-74 lanes.

In order to keep traffic flowing and reduce delays 7<sup>th</sup> Avenue will be closed to thru traffic and northbound 19<sup>th</sup> Street will be closed from north of 12<sup>th</sup> Avenue to 7<sup>th</sup> Avenue. This will allow free flow movement of eastbound I-74 traffic at the 7<sup>th</sup> Avenue intersections with the eastbound off-ramp and at 19<sup>th</sup> Street. Access to southbound 19<sup>th</sup> Street from 19<sup>th</sup> Street north of 7<sup>th</sup> Avenue and from eastbound 7<sup>th</sup> Avenue traffic will be maintained. This can be accomplished by utilizing positive separation between eastbound I-74 traffic and southbound 19<sup>th</sup> Street/eastbound 7<sup>th</sup> Avenue traffic heading south. This traffic would be allowed to merge with eastbound I-74 traffic at a point south of the 7<sup>th</sup> Avenue/19<sup>th</sup> Street intersection.

Westbound I-74 traffic will remain in the WD-2 configuration as described above.

See Exhibit B for Alternative WG and Exhibit C for detail of 7<sup>th</sup> Avenue in WG configuration.

# <u>Advantages</u>

- Allows completion of all new pavement and bridges in Illinois on schedule.
- Allows downtown Moline to start recovering from construction impacts at the end of 2020 as originally planned instead of extending major disruptions into 2021.
- Reduces additional project costs resulting from construction delay.

# <u>Disadvantages</u>

- Increased eastbound travel time.
- Eastbound interstate traffic detoured.
- Potential for WG to remain in place during winter if westbound river bridge not complete.

# **TRAFFIC OPERATIONS**

# **Characteristics of Proposed Configuration**

# 7<sup>th</sup> Avenue Geometry Analysis

AutoTurn simulations were performed at 7<sup>th</sup> Avenue. The preliminary geometry will accommodate two side by side WB-65 trucks through the ramp and 19<sup>th</sup> Street intersections.

See Exhibit D for AutoTurn simulations.

# Proposed Speed Limits

The current posted eastbound speed limit through the Illinois portion of the corridor varies from 50 mph across the river bridge to 55 mph south of the bridge. In the proposed WG configuration the speed limit is expected to be lowered to 35 mph near the middle of the river bridge. The speed limit will be further reduced to 20 mph near the top of the 7<sup>th</sup> Avenue off-ramp. The 20 mph speed will be carried through the 7<sup>th</sup> Avenue intersections with the ramp and 19<sup>th</sup> Street. South of 7<sup>th</sup> Avenue the speed limit will increase to the current posted speed limit of 30 mph until approximately 11<sup>th</sup> Avenue where it increases to 45 mph. The speed will remain 45 mph until traffic merges back onto the eastbound I-74 lanes near Avenue of the Cities.

# Signalized Intersections

The detoured eastbound traffic will encounter existing traffic signals at 12<sup>th</sup> Avenue and Avenue of the Cities. The signal timing will be adjusted to prioritize the detour traffic and minimize delays.

See Exhibit E for speed limits and signalized intersection locations.

# Travel Times and Distance

Slight increased travel distance and lower speed limits will result in increases in eastbound travel times from the current conditions. Currently the speed limit it 50 mph across the bridge and then increases to 55 mph through the remainder of the construction corridor. Motorists traveling through the Alternative WG configuration will be travelling the corridor at the lower speeds described above. The lower speed of travel and slight increase in travel distance will result in approximately 1 minute, 28 seconds of additional travel time for motorists to traverse the corridor from the current condition.

In addition, vehicles on 19<sup>th</sup> Street may encounter delays at the two signalized intersection at Avenue of the Cities and at 12<sup>th</sup> Avenue. The estimated potential signal delay was determined by observing the current conditions at the aforementioned signalized intersections. The timings at these intersection are expected to remain approximately the same in the event the local I-74 eastbound traffic is shifted onto 19<sup>th</sup> Street southbound.

Both of these intersections are actuated and are operating satisfactorily. Traffic is able to traverse these intersection in a single cycle from all directions. The intersections are not coordinated and therefore, there are situations where traffic is required to stop at both intersections. It is more common for traffic to stop at the Avenue of the Cities intersection than at 12<sup>th</sup> Avenue due to longer red time required to allow the eastbound and westbound movements. It is estimated 19<sup>th</sup> Street traffic stops at Avenue of the Cites approximately 50% of the time and at 12<sup>th</sup> Avenue 25% of the time. It stops at both intersections approximately 15% of the time. On average the red time encountered by 19<sup>th</sup> Street traffic at Avenue of the Cities is 68 seconds. At 12<sup>th</sup> Avenue it is 29 seconds. Therefore, the estimated potential traffic signal delay is 1 minute, 37 seconds occurring approximately 15% of the time.

A comparison of the traffic times between the current and proposed conditions is summarized in Table 1.

	Distance	Time to Traverse Corridor	Estimated Potential Signal Delay At Peak Hour	Total Travel Time
Current Conditions	2.17 mi.	2 min. 22 sec.	N/A	2 min. 22 sec.
Alternative WG	2.24 mi.	3 min. 50 sec.	1 min. 37 sec.	5 min. 27 sec.
Difference	0.07 mi.	1 min. 28 sec.	1 min. 37 sec.	3 min. 05 sec.

**TABLE 1 -** TRAVEL LENGTHS AND TIMES

# **Estimated Traffic Diversion and User Delay Costs**

Although eastbound travel time is expected to increase through the corridor, the overall region user delay costs are expected to <u>decrease</u>.

The lowa DOT Planning section modeled the proposed configuration to determine user delay costs across the entire region and the estimated amount of traffic that will divert or return to the corridor if the proposed Alternative WG traffic configuration is implemented. The model also takes into account the changes to the westbound configuration (Alternative WD-2) that will be implemented this fall. The model indicated under the proposed conditions user delay costs for the region will decrease from the existing conditions. The user delay costs comparisons are detailed in Exhibit F.

The modeled diversion rate is 30% north of the River Drive exit ramp. It should be noted the existing west bound traffic is approximately 30% lower than the traffic in the eastbound direction across the river bridge. Prior to construction they were approximately the same. Therefore, it is appropriate to use an estimated diversion rate of 30%.

Exhibit G provides additional detail of the modeled diverted traffic volumes and calculations.

# **Queue Delays and Lengths**

Changes to the configuration and lowering of the speed limit can result in traffic queuing and delays at approaches. Therefore, a queuing analysis was performed.

The delay and queueing analysis was based solely on the estimated capacity of the individual roadway segments, and the forecasted demand of the facilities. No modeling was conducted or geometrics considered in this delay and queuing analysis. More precise performance forecasts of these facilities will require much more detailed analysis along with microsimulation and capacity modeling. The following outlines the assumptions and procedures used to determine queue delays and lengths:

- The capacity of an interrupted arterial roadway is determined by the delay and queue caused by the traffic signals along it, not the capacity of the roadway segments.
- For estimating purposes, three levels of capacity for the arterial roadway are estimated to be 600, 700, and 800 vehicles per hour per lane. This can vary depending on the signal phasing, timing and other local roadway factors, such as access, geometry, other roadway users
  - This is an educated assumption. There is no manual or standard that verifies this approximation.
- The capacity of the WG detour segment is estimated to be 1,200, 1,400, and 1,600 vehicle per hour (2 X 600, 700, 800 vehicles per hour per lane)
- The eastbound hourly volumes for vehicle traveling through the WG configuration were taken from modified data from Detector QCDS10, at the I-74 River Bridge Toll Plaza.
  - The hourly data recorded by Detector QCDS10 contains all of the I-74 eastbound volume coming across the bridge into Illinois.
  - AM and PM Peak hour counts dated 7-16-19 were taken at the intersection of River Drive and the I-74 ramps.
  - Using the ratio from the QCDS10 data of AM and PM peak hour to off peak times, off peak volumes were estimated throughout the day.
  - The full hourly volumes traveling through the WG is the QCDS10 data minus the estimated vehicles exiting at River Drive.
  - $_{\odot}$  The scenarios of a diversion rate of 10%, 20%, 30%, and 40% were considered.

Due to the proposed "free flow" condition at 7<sup>th</sup> Avenue and the proposed signal timings at the signalized intersections, the capacity of the route is estimated to be 1,6000 vehicles per hour. As discussed above the estimated diversion rate is 30% to 40%. As shown in Table 3 below there are no queue delays and lengths for assumed capacity and diversion rates.

Consoity		Full Traffic		Reduction	in Traffic	
Capacity Level		Load	10%	20%	30%	40%
1,200 vph	Max Delay (min.)	243	158	94	44	11
1,200 vpH	Max Queue (mi.)	23.7	15.4	9.2	4.3	1.1
1.400	Max Delay (min.)	131	78	39	11	N/A
1,400 vph	Max Queue (mi.)	14.9	8.9	4.4	1.3	N/A
1.600 ymb	Max Delay (min.)	68	35	11	N/A	N/A
1,600 vph	Max Queue (mi.)	8.8	4.6	1.5	N/A	N/A

TABLE 2 - ESTIMATED PEAK HOUR QUEUES

# COST ANALYSIS

The original intent of cost analysis was to determine the number of days/months the Alternative WG configuration can remain in place before the user costs outweigh the construction costs. However, as mentioned in the "Estimated Traffic Diversion and User Delay Costs" section above the user delay costs are expected to *decrease* according to the lowa DOT planning model. Therefore, it is not necessary to determine how many months the configuration can remain in place. It is only necessary to determine the estimated cost savings of Alternative WG implementation In order to determine the estimated cost savings contractor delay costs and Alternative WG implementation costs were determined. Components of the two items are listed include:

# **Contractor Delay Costs**

- Project Escalation
- Demobilization/Remobilization
- Overhead
- Contractor Lost Opportunity
- Traffic Control Maintenance
- Erosion Control Maintenance
- Contractor/Agency Liability Exposure
- Engineering Inspection and Management

# **Alternative Implementation Cost**

Traffic control

Temporary improvements.

The estimated cost savings equals the difference between the contractor delay costs and Alternative WG implementation costs.

Table 4 summarizes the estimated cost savings of implementing Alternative WG instead of delaying the construction until 2021. Detailed costs analysis may be found in Exhibit H.

Estimated Contractor Delay Cost if Alternative Not Implemented	Cost of Implementing Alternative	Estimated Cost Savings of Alternative Implementation
\$6,920,000	\$175,000	\$6,745,000

TABLE 3 - ESTIMATED SAVINGS OF IMPLEMENTING WG VERSUS DELAYING UNTIL 2021

# TRAFFIC CONFIGURATION AT END OF 2020 WITH IMPLEMENTATION OF WG

As noted above, the primary advantages of implementing Alternative WG is that it provides the opportunity to complete the new pavement and bridges in Illinois on or close to the original schedule. By minimizing this significant construction delay cost, can be avoided and the construction impacts to the City of Moline can disappear sooner.

Exhibit I illustrates the conditions at the end of 2020 if Alternative WG is implemented and the WB River Bridge is complete. As shown in the exhibit, the traffic configuration at this point would be very similar to the ultimate condition. The main exception being the eastbound River Drive off ramp is not available. It will not be able to be accessed until the eastbound river bridge is completed.

If the bridge is not complete the traffic will remain in the Alternative WG configuration.

# TRANSPORTATION MANGEMENT PLAN

The Interstate 74 corridor transportation management plan will be updated to address the proposed changes. General strategies are described below.

# Traffic Control Plan (TCP) Strategies

Traffic control plan strategies were discussed in general terms above. More detailed traffic control plans will be developed prior to implementation of Alternative WG.

# Public Information Plan (PIP)

The implementation of WG will have an impact on safety and mobility for eastbound traffic. Therefore it will require public notification and outreach. Prior to implementation the public will be informed via a news conference and/or a public meeting. In addition, stakeholder meetings will be held with first responders and major employers. Social media and news will also continue to be used extensively to keep the public informed.

# Transportation Operations Plan (TOP)

Demand Management strategies that will be used to mitigate work zone impacts consist of encouraging the use of public transit and carpooling through the use of social media.

Corridor/Network Management strategies include signal timing adjustments and ongoing coordination of corridor construction projects. Work Zone Safety Management strategies include temporary lane separation at the 7<sup>th</sup> and 19<sup>th</sup> Street intersection. In addition, to the above strategies the detour route will be monitored throughout the entire time it is in operation to identify locations and strategies for improvement.

# Traffic and Incident Management

Traffic and incident management strategies monitor traffic conditions and make adjustments based on these changing conditions. Strategies which will be utilized include:

- Intelligent Transportation Systems (ITS) used to:
  - Detect traffic flow, and automatically relay "real time" travel time to motorists via PCMS, websites, or other outlets
  - Detect queues, and automatically actuate warning systems.
- Utilization of the Highway Helper
- Review and update incident/emergency management plans.

# Enforcement

Local and State law enforcement will be coordinated to encourage compliance with work zone speed limits and enhance work zone safety.

# LOCAL AGENCY COORDINATION

The proposed Alternative WG traffic configuration has been discussed with the City of Moline and City of Bettendorf on several occasions.

# September 17, 2019

The City of Moline discussed the proposed Alternative WG traffic configuration for 2020 at the September 17, 2019, Committee of the Whole meeting. Furthermore, at the September 24, 2019 City Council meeting, the council passed a "Resolution authorizing the City of Moline to request that the Illinois Department of Transportation (IDOT) take all steps necessary with the Federal Highway Administration (FHWA) to support the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the City of Moline on 19th Street".

# September 27, 2019

The proposed configuration was discussed at an I-74 corridor meeting held September 27, 2019. The meeting was attended by representatives of the City of Moline, the City of Bettendorf, the Bi-State Regional Commission, the Iowa DOT and the Illinois DOT. No objections to the concept were noted by the local agencies.

# November 18, 2019

An update on the proposed Fall 2019 and 2020 traffic staging configurations was provided to City of Moline, the City of Bettendorf, Federal Highway Administration, the Iowa DOT and the Illinois DOT on November 26, 2019. No objections to the concept were noted by the local agencies.

See Exhibit J for agency coordination.

**PUBLIC INVOLVEMENT** 



# EXHIBIT A WINTER 2019/2020 CONFIGURATION



EXHIBIT A





# EXHIBIT B ALTERNATIVE WG



# EXHIBIT B

# $\frac{\text{EXHIBIT C}}{\text{ALTERNATIVE WG} - 7^{\text{TH}} \text{ AVENUE DETAIL}}$



# $\begin{array}{l} \underline{EXHIBIT D} \\ ALTERNATIVE WG - 7^{TH} AVENUE \\ AUTOTURN SIMULATIONS \end{array}$

# PRELIMINARY DRAWING TO BE FINALIZED DURING DETAILED DESIGN







# EXHIBIT E SPEED LIMITS AND TRAFFIC SIGNAL LOCATIONS



# EXHIBIT E

# EXHIBIT F USER DELAY COST COMPARISONS



# TECHNICAL MEMORANDUM

# Interstate 74 River Crossing Project User Cost Analysis - Staging and Traffic Control

Prepared For:	Danielle Alvarez, Dan Draper, Jim Schnoebelen
Prepared By:	Phil Mescher, Michael Pillman, Jeff von Brown – Project Management Bureau,
	Systems Planning Bureau
Date:	November 22, 2019

#### **Project Scope**

The following is a high-level analysis quantifying changes in user costs due to various staging options and traffic control measures regarding the Interstate 74 River Crossing project. District 6 is interested in a comparison of potential EB I-74 traffic control modifications as they are analyzing options to adjust staging on other projects on the corridor with a goal of opening the new WB structure across the river by the end of the construction season.

As with previous scenarios the methodology utilizes the Bi-State MPO travel demand model to determine routing of travel and the associated Vehicle Hours of Travel (VHT). VHT is the metric used to determine changes in travel time. Standard per-hour user costs are used to quantify the cost of travel in terms of dollars.

#### **Scenario Description**

Scenario 1B – All scenarios are compared to Scenario 1B which represents the staging and traffic control in place today. Scenario analysis utilizes the year 2020 Bi-State MPO Travel Demand Model to closely approximate conditions of travel for each staging and traffic control plan.

Scenario A –Alt\_I-Loop\_IA Not Carried Forward

a. Trucks exit at Middle Rd. b. All other vehicles exit at US 67

Scenario B –Alt\_WG\_IL

a. EB vehicles exit at 7th Avenue

b. EB rejoins following Ave of the Cities

# Scenario C –Stage 3A

a. Uses existing I-74 Bridge (1 Lane EB)

i. For those wishing to travel EB from US 67

- b. Uses new I-74 Bridge (2 lanes EB, 2 Lanes WB)
- c. All EB vehicles not entering from US 67 merge onto new bridge

Scenario D –Combo Alt\_WG\_I-Loop Not Carried Forward

a. Combine scenarios 5A and 5B

### **Project Assumptions**

*User Costs* - Per-hour user cost assumptions for truck and passenger car were obtained from INRIX and represent the national average of truck operation costs per hour. The INRIX passenger car user costs (\$18 per hour) were adjusted to consider Iowa's higher than average national median income resulting in \$25 per hour.

- Truck = \$94 per hour
- Passenger Car = \$25 per hour

Vehicle Mix on Interstate 74

- Truck % = 3.65
- Passenger Car % = 96.35

Initial Assumption of Liquidated Damages Cost Per Day

• \$37,900

### **Staging and Traffic Control Scenarios**

#### Scenario 1B

- Total VHT = 235,514
- Truck VHT = 8,596
- Passenger Car VHT = 226,918
- Truck Daily User Cost = \$808,049
- Passenger Car Daily User Cost = \$5,672,943
- Total Daily User Cost = \$6,480,992
- A. Scenario A Alt\_I-Loop\_IA Not Carried Forward
- Total VHT = 235,326
- Truck VHT = 8,589
- Passenger Car VHT = 226,737
- Truck Daily User Cost = \$807,404
- Passenger Car Daily User Cost = \$5,668,415
- Total Daily User Cost = \$6,475,819

Difference between Scenario A and Scenario 1B Not Carried Forward

- Total VHT = -188
- Truck VHT = -7
- Passenger Car VHT = -181
- Truck Daily User Cost = -\$645
- Passenger Car Daily User Cost = -\$4,528
- Total Daily User Cost = -\$5,173

#### B. Scenario B – Alt\_WG\_IL

- Total VHT = 235,092
- Truck VHT = 8,581
- Passenger Car VHT = 226,511
- Truck Daily User Cost = \$806,601

- Passenger Car Daily User Cost = \$5,662,779
- Total Daily User Cost = \$6,469,379

### Difference between Scenario B and Scenario 1B

- Total VHT = -422
- Truck VHT = -15
- Passenger Car VHT = -407
- Truck Daily User Cost = -\$1,448
- Passenger Car Daily User Cost = -\$10,165
- Total Daily User Cost = -\$11,613
- C. Scenario C Stage 3A
- Total VHT = 231,493
- Truck VHT = 8,449
- Passenger Car VHT = 223,044
- Truck Daily User Cost = \$794,252
- Passenger Car Daily User Cost = \$5,576,088
- Total Daily User Cost = \$6,370,340

# Difference between Scenario C and Scenario 1B

- Total VHT = -4,021
- Truck VHT = -147
- Passenger Car VHT = -3,874
- Truck Daily User Cost = -\$13,796
- Passenger Car Daily User Cost = -\$96,856
- Total Daily User Cost = -\$110,652
- D. Scenario D Combo Alt\_WG\_I-Loop Not Carried Forward
- Total VHT = 236,185
- Truck VHT = 8,621
- Passenger Car VHT = 227,564
- Truck Daily User Cost = \$810,351
- Passenger Car Daily User Cost = \$5,689,106
- Total Daily User Cost = \$6,499,457

Difference between Scenario D and Scenario 1B Not Carried Forward

- Total VHT = 671
- Truck VHT = 24
- Passenger Car VHT = 647
- Truck Daily User Cost = \$2,302
- Passenger Car Daily User Cost = \$16,163
- Total Daily User Cost = \$18,465

# EXHIBIT G ESTIMATED DIVERSION RATES

# **Estimated Diversion Rates**

# 2020 I-74 Model Run Scenarios

2006 Bi-State Model forecasted to 2020

# Output Notes:

VOL indicates trips taken on a link, not ADT. However, the relative changes would be line with changing traffic counts in each scenario. VOC inciates capacity ratio where 1 equals link at full capacity

							I-74 at Linco	ln Rd (IA)	I-74 at Lincol	n Rd (IA)	I-74 at River	& 7th (IL)						
	<u>T</u> (	<u>otal</u>	<u>I-74 Bridg</u>	e WB	<u>I-74 Brid</u>	ge EB	WB	_	<u>EB</u>		<u>WB</u>		<u>I-74 at River &amp; 7</u>	<u>'th (IL) EB</u>	Arsenal Brid	dge (WB)	Arsenal Bri	dge (EB)
	VHT	VMT	VOL	VOC	VOL	VOC	VOL	VOC	VOL	VOC	VOL	VOC	VOL	VOC	VOL	VOC	VOL	VOC
Base 2020 Run	230,765.60	8,497,078.10	45,275.000	0.794	45,917.449		36,505.763	0.641	39,690.571	0.696	22,985.190	0.403	26,545.469	0.466		0.677	5,074.375	
Current Conditions (1B)	235,514.01	8,473,417.68	18,219.197	0.959	35,734.931	0.940	12,901.390	0.226	31,943.430	0.560	19,548.460	0.514	30,741.301	0.809	7,624.497	1.017	5,785.039	0.771
5A - Alternative I-Loop (Iowa)																		
Not Carried Forward	235,326.57	8,460,018.88	24,498.947	0.645	30,254.349	0.796	13,809.316	0.242	15,025.322	0.264	26,634.199	0.701	23,890.428	0.629	7,024.054		6,582.456	
5B - Alternative WG (Illinois)	235,092.77	8,439,725.76	26,067.102	0.686	30,534.369	0.804	19,603.418	0.344	28,012.598	0.491	24,613.695	1.619	21,480.331	0.566	6,887.407	0.918	6,424.307	0.857
5C - Original Stage 3	231,493.13	8,395,053.90	32,690.722	0.574	35,338.221	0.689	27,540.322	0.483	29,777.857	0.522	13,978.217	0.368	9,676.216	0.637	5,970.871	0.796	5,779.785	0.771
5D - Combination of I-Loop and WG																		
Not Carried Forward	236,185.34	8,460,884.94	24,541.118	0.646	28,727.847	0.756	13,781.451	0.242	14,863.807	0.261	24,256.734	1.596	20,402.851	0.537	7,034.434	0.938	6,617.694	0.882
Percent Change																		
1B vs Base	2.06%	-0.28%	-59.76%	20.72%	-22.18%	16.73%	-64.66%	-64.67%	-19.52%	-19.52%	-14.95%	27.58%	15.81%	73.72%	50.25%	50.25%	14.00%	14.00%
5A vs 1B	-0.08%	-0.16%	34.47%	-32.77%	-15.34%	-15.33%	7.04%	7.07%	-52.96%	-52.96%	36.25%	36.26%	-22.29%	-22.29%	-7.88%	-7.88%	13.78%	13.79%
5B vs 1B	-0.18%	-0.40%	43.07%	-28.46%	-14.55%	-14.56%	51.95%	51.97%	-12.31%	-12.31%	25.91%	214.79%	-30.13%	-30.00%	-9.67%	-9.67%	11.05%	11.06%
5C vs 1B	-1.71%	-0.92%	79.43%	-40.19%	-1.11%	-26.71%	113.47%	113.52%	-6.78%	-6.78%	-28.49%	-28.50%	-68.52%	-21.31%	-21.69%	-21.69%	-0.09%	-0.09%
5D vs 1B	0.29%	-0.15%	34.70%	-32.65%	-19.61%	-19.61%	6.82%	6.85%	-53.47%	-53.46%	24.09%	210.23%	-33.63%	-33.63%	-7.74%	-7.74%	14.39%	14.40%
			Centential	Bridge	Centential B	ridge (EB)	I-280 WB	at IA/IL	<u>I-280 EB a</u>	t IA/IL	<u>I-80 WB a</u>	t IA/IL	I-80 EB at IA/I	L Border				
			<u>Centential</u> VOL	<u>Bridge</u> VOC	Centential Br VOL	ridge (EB) VOC	<u>I-280 WB ;</u> VOL	at IA/IL VOC	<u>I-280 EB a</u> VOL	<u>t IA/IL</u> VOC	<u>I-80 WB a</u> VOL	<u>t IA/IL</u> VOC	<u>I-80 EB at IA/I</u> VOL	<u>L Border</u> VOC				
Base 2020 Run				<u> </u>						<u> </u>								
Current Conditions (1B)			VOL	VOC 0.827	VOL	VOC	VOL	voc	VOL	VOC	VOL	VOC	VOL	VOC				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa)			<b>VOL</b> 12,404.944	VOC 0.827	<b>VOL</b> 11,832.149	<b>VOC</b> 0.789	<b>VOL</b> 13,816.630	<b>VOC</b> 0.364	<b>VOL</b> 13,128.300	<b>VOC</b> 0.346	<b>VOL</b> 19,245.689	<b>VOC</b> 0.507	<b>VOL</b> 18,718.331	<b>VOC</b> 0.493				
Current Conditions (1B)			<b>VOL</b> 12,404.944	VOC 0.827 1.056	<b>VOL</b> 11,832.149	<b>VOC</b> 0.789	<b>VOL</b> 13,816.630	VOC 0.364 <b>0.586</b>	<b>VOL</b> 13,128.300	<b>VOC</b> 0.346	VOL 19,245.689 25,680.162 21,976.967	<b>VOC</b> 0.507	<b>VOL</b> 18,718.331	<b>VOC</b> 0.493				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa)			VOL 12,404.944 15,833.575	VOC 0.827 1.056	VOL 11,832.149 13,504.010	VOC 0.789 0.900	VOL 13,816.630 22,274.642	VOC 0.364 <b>0.586</b>	VOL 13,128.300 14,294.052	VOC 0.346 0.376	VOL 19,245.689 <b>25,680.162</b>	VOC 0.507 0.676	VOL 18,718.331 20,314.040	VOC 0.493 <b>0.535</b>				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3			VOL 12,404.944 15,833.575 14,953.056	VOC 0.827 1.056 0.997	VOL 11,832.149 13,504.010 14,697.804	VOC 0.789 0.900 0.980	VOL 13,816.630 22,274.642 19,689.538	VOC 0.364 0.586 0.518	VOL 13,128.300 14,294.052 16,120.497	VOC 0.346 0.376 0.424	VOL 19,245.689 25,680.162 21,976.967	VOC 0.507 0.676 0.578	VOL 18,718.331 20,314.040 23,466.478	VOC 0.493 0.535 0.618				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG			VOL 12,404.944 15,833.575 14,953.056 14,772.800	VOC 0.827 1.056 0.997 0.906	VOL 11,832.149 13,504.010 14,697.804 14,607.400	VOC 0.789 0.900 0.980 0.898	VOL 13,816.630 22,274.642 19,689.538 18,957.308	VOC 0.364 0.586 0.518 0.499	VOL 13,128.300 14,294.052 16,120.497 16,192.991	VOC 0.346 0.376 0.424 0.426	VOL 19,245.689 25,680.162 21,976.967 22,947.455	VOC 0.507 0.676 0.578 0.604	VOL 18,718.331 20,314.040 23,466.478 21,873.000	VOC 0.493 0.535 0.618 0.576				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3			VOL 12,404.944 15,833.575 14,953.056 14,772.800	VOC 0.827 1.056 0.997 0.906	VOL 11,832.149 13,504.010 14,697.804 14,607.400	VOC 0.789 0.900 0.980 0.898	VOL 13,816.630 22,274.642 19,689.538 18,957.308	VOC 0.364 0.586 0.518 0.499 0.427	VOL 13,128.300 14,294.052 16,120.497 16,192.991	VOC 0.346 0.376 0.424 0.426	VOL 19,245.689 25,680.162 21,976.967 22,947.455	VOC 0.507 0.676 0.578 0.604	VOL 18,718.331 20,314.040 23,466.478 21,873.000	VOC 0.493 0.535 0.618 0.576				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward			VOL 12,404.944 15,833.575 14,953.056 14,772.800 13,504.286	VOC 0.827 1.056 0.997 0.906 0.776	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641	VOC 0.789 0.900 0.980 0.898 0.776	VOL 13,816.630 22,274.642 19,689.538 18,957.308 16,211.275	VOC 0.364 0.586 0.518 0.499 0.427	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749	VOC 0.346 0.376 0.424 0.426 0.376	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918	VOC 0.507 0.676 0.578 0.604 0.559	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678	VOC 0.493 0.535 0.618 0.576 0.543				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward Percent Change			VOL         12,404.944         15,833.575         14,953.056         14,772.800         13,504.286         14,968.459	VOC 0.827 1.056 0.997 0.906 0.776 0.998	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641 14,904.492	VOC 0.789 0.900 0.980 0.898 0.776 0.994	VOL 13,816.630 22,274.642 19,689.538 18,957.308 16,211.275 19,622.814	VOC 0.364 0.586 0.518 0.499 0.427 0.516	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749 16,785.215	VOC 0.346 0.376 0.424 0.426 0.376 0.442	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918 23,465.247	VOC 0.507 0.676 0.578 0.604 0.559 0.618	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678 22,596.825	VOC 0.493 0.535 0.618 0.576 0.543 0.595				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward Percent Change 1B vs Base			VOL 12,404.944 15,833.575 14,953.056 14,772.800 13,504.286 14,968.459 27.64%	VOC 0.827 1.056 0.997 0.906 0.776 0.998	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641 14,904.492 14.13%	VOC 0.789 0.900 0.980 0.898 0.776 0.994	VOL 13,816.630 22,274.642 19,689.538 18,957.308 16,211.275 19,622.814 61.22%	VOC 0.364 0.586 0.518 0.499 0.427 0.516	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749 16,785.215 8.88%	VOC 0.346 0.376 0.424 0.426 0.376 0.442 8.89%	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918 23,465.247 33.43%	VOC 0.507 0.676 0.578 0.604 0.559 0.618 33.43%	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678 22,596.825 8.52%	VOC 0.493 0.535 0.618 0.576 0.543 0.595				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward Percent Change 1B vs Base 5A vs 1B			VOL         12,404.944         15,833.575         14,953.056         14,772.800         13,504.286         14,968.459         27.64%         -5.56%	VOC 0.827 1.056 0.997 0.906 0.776 0.998 27.64% -5.56%	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641 14,904.492 14.13% 8.84%	VOC 0.789 0.900 0.980 0.898 0.776 0.994 14.14% 8.84%	VOL 13,816.630 <b>22,274.642</b> 19,689.538 <b>18,957.308</b> 16,211.275 19,622.814 61.22% -11.61%	VOC 0.364 0.586 0.518 0.499 0.427 0.516 61.22%	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749 16,785.215 8.88% 12.78%	VOC 0.346 0.376 0.424 0.426 0.376 0.442 8.89% 12.76%	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918 23,465.247 33.43% -14.42%	VOC 0.507 0.676 0.578 0.604 0.559 0.618 33.43% -14.43%	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678 22,596.825 8.52% 15.52%	VOC 0.493 0.535 0.618 0.576 0.543 0.595 8.53% 15.51%				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward Percent Change 1B vs Base 5A vs 1B 5B vs 1B			VOL         12,404.944         15,833.575         14,953.056         14,772.800         13,504.286         14,968.459         27.64%         -5.56%         -6.70%	VOC           0.827           1.056           0.997           0.997           0.998           0.998           27.64%           -5.56%           -14.16%	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641 14,904.492 14.13% 8.84% 8.84% 8.17%	VOC 0.789 0.900 0.980 0.898 0.776 0.994 14.14% 8.84% -0.26%	VOL 13,816.630 22,274.642 19,689.538 18,957.308 16,211.275 19,622.814 61.22% -11.61% -14.89%	VOC 0.364 0.586 0.518 0.499 0.427 0.516 61.22% 61.22% -11.62%	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749 16,785.215 8.88% 12.78% 12.78%	VOC 0.346 0.376 0.424 0.426 0.376 0.442 8.89% 12.76% 13.26%	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918 23,465.247 33.43% -14.42% -10.64%	VOC 0.507 0.676 0.578 0.604 0.559 0.618 33.43% -14.43% -10.64%	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678 22,596.825 8.52% 15.52% 7.67%	VOC 0.493 0.535 0.618 0.576 0.543 0.595 8.53% 15.51% 7.67%				
Current Conditions (1B) 5A - Alternative I-Loop (Iowa) Not Carried Forward 5B - Alternative WG (Illinois) 5C - Original Stage 3 5D - Combination of I-Loop and WG Not Carried Forward Percent Change 1B vs Base 5A vs 1B			VOL         12,404.944         15,833.575         14,953.056         14,772.800         13,504.286         14,968.459         27.64%         -5.56%	VOC 0.827 1.056 0.997 0.906 0.776 0.998 27.64% -5.56%	VOL 11,832.149 13,504.010 14,697.804 14,607.400 13,466.641 14,904.492 14.13% 8.84%	VOC 0.789 0.900 0.980 0.898 0.776 0.994 14.14% 8.84%	VOL 13,816.630 <b>22,274.642</b> 19,689.538 <b>18,957.308</b> 16,211.275 19,622.814 61.22% -11.61%	VOC 0.364 0.586 0.518 0.499 0.427 0.516 61.22%	VOL 13,128.300 14,294.052 16,120.497 16,192.991 14,423.749 16,785.215 8.88% 12.78%	VOC 0.346 0.376 0.424 0.426 0.376 0.442 8.89% 12.76%	VOL 19,245.689 25,680.162 21,976.967 22,947.455 21,254.918 23,465.247 33.43% -14.42%	VOC 0.507 0.676 0.578 0.604 0.559 0.618 33.43% -14.43%	VOL 18,718.331 20,314.040 23,466.478 21,873.000 20,623.678 22,596.825 8.52% 15.52%	VOC 0.493 0.535 0.618 0.576 0.543 0.595 8.53% 15.51%				

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# EXHIBIT H DETAILED COST ANALYSIS



# **ILLINOIS (ALTERNATIVE WG)**

# **Construction Delay Costs**

Contractor Delay Costs	
<ul> <li>Project Escalation</li> <li>Escalation for labor, equipment, fuel, materials, hauling, subcontractors, etc.</li> <li>64E26 = \$250,000</li> <li>64C08 = \$750,000</li> </ul>	\$1,000,000
<ul> <li>Demobilization/ Remobilization</li> <li>Cost to de-mob from site and remobilize to site once work can begin again.</li> <li>64E26 = \$100,000</li> <li>64C08 = \$400,000</li> </ul>	\$500,000
<ul> <li>Overhead</li> <li>Cost for onsite staff – Project Manager, Project Superintendent, Project Engine field office and site.</li> <li>64E26 = \$170,000</li> <li>64C08 = \$960,000</li> </ul>	<b>\$1,130,000</b> eer, Maintain
<ul> <li>Lost Opportunity</li> <li>Project margin that will be lost to maintain capacity to complete existing work.</li> <li>64E26 = \$200,000</li> <li>64C08 = \$1,000,000</li> </ul>	\$1,200,000
<ul> <li>Traffic Control</li> <li>Cost to repair damaged traffic control and maintain for an additional year.</li> <li>64E26 = \$500,000</li> <li>64C08 = \$300,000</li> </ul>	\$800,000
<ul> <li>Erosion Control</li> <li>Cost to repair damaged erosion control, and maintain for additional year.</li> <li>64E26 = \$120,000</li> <li>64C08 = \$120,000</li> </ul>	\$240,000
<ul> <li>Liability Exposure</li> <li>Cost of the additional risk to Contractor to have the project open for an addition</li> <li>64E26 = \$400,000</li> <li>64C08 = \$750,000</li> </ul>	<b>\$1,150,000</b> nal year.
<ul> <li>Engineering Inspection and Management Costs</li> <li>Cost to retain consultants for extended period.</li> <li>64E26 = \$150,000</li> <li>64C08 = \$500,000</li> <li>GEC = \$250,000</li> </ul>	\$900,000
Moline Tax Revenue Lost (est. \$100,000 – Not eligible for consideration in cost analysis.)	N/A

Subtotal Contractor Delay Cost \$6,920,000

#### Alternative Implementation Cost

#### Implementation

Cost of the additional traffic control/minor temporary road improvements

- 64E26 = \$40,000
- 64C08 = \$10,000

## **Costs for Contractor Inefficiencies**

Costs related to Contractors altering their operations due to changes in staging.

- 64E26 = \$100,000
- 64C08 = \$25,000

## Subtotal Alternative Implementation Cost \$175,000

Contractor Delay Cost \$6,920,000

- Alternative Implementation Cost\$175,000Total Construction Delay Costs\$6,745,000

a construction Delay costs \$0,745,000

\$125,000

\$50,000

# EXHIBIT I CONDITIONS AT END OF 2020 IF WB RIVER BRIDGE COMPLETE



# EXHIBIT I

# EXHIBIT J LOCAL AGENCY COORDINATION

City of Moline 619 16th Street Moline, Illinois 61265

# **Committee-of-the-Whole Minutes**

Tuesday, September 17, 2019

PRESENT:	Mayor Stephanie Acri ( <i>Chair</i> ) Alderman Scott Williams ( <i>Ward 1</i> ) Alderman David Parker, Jr. ( <i>Ward 2</i> ) Alderman Mike Wendt ( <i>Ward 3</i> ) Alderman Richard "Dick" Potter ( <i>Ward 4</i> ) Alderman Sam Moyer ( <i>Ward 5</i> ) Alderman Kevin Schoonmaker ( <i>Ward 6</i> ) Alderman Mike Waldron ( <i>Ward 7</i> ) Alderman Sonia Berg ( <i>Alderman At-Large</i> )
<b>ABSENT:</b>	None.
STAFF:	Lisa Kotter, City Administrator Janine Hollembaek Parr, City Clerk J.D. Schulte, Public Works Director Alison Fleming, Human Resources Manager Lori Wilson, Parks Recreation Director Don Goff, Information Technology Manager Bryon Lear, Library Director Darren Gault, Chief of Police Jeff Snyder, Fire Chief Scott Hinton, City Engineer Randi Haley, Interim Finance Director Jeff Anderson, City Planner Ryan Berger, Land Development Manager Tony Loete, Utilities General Manager Jon Clark, Design Engineer Laura Klauer, Civil Engineer
OTHERS:	Derke Price, Ancel Glink George Ryan, Wood PLC
Mayor Acri called th	e meeting to order at 6:02 n m in Council Chambers

Mayor Acri called the meeting to order at 6:02 p.m. in Council Chambers.

# Questions on the Agenda

There were no questions on the Agenda.

# Agenda Items

**1.** A Resolution authorizing the support of the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the City of Moline on 19<sup>th</sup> Street. J.D. Schulte, Director of Public Works, explained that the I-74 Bridge Construction phase of the arch span in the channel that was scheduled to be completed by November 26, 2019, is behind schedule. The Illinois Department of Transportation (IDOT) has been working with City staff to develop alternate routes. Supporting the proposed 2020 traffic configuration will allow the contractor to continue working, thus minimizing the impact on downtown businesses. A link to proposed traffic configuration maps will be accessible on the City website. Schulte explained that the City of EXHIBIT J

Bettendorf is in support of the configuration because they understand that it is good for the corridor. Council's support of the Resolution will keep the project moving forward. Staff will look into possible signage at the off-ramp to support downtown business activity. A motion was made by Alderman Parker to approve. Seconded by Alderman Wendt. George Ryan will provide the estimated delay time resulting from the proposed detour as compared to the current detour and anticipates having that information within the week. Motion passed unanimously.

# Work Session

**2020 Capital Improvement Plan (CIP).** Lisa Kotter, City Administrator, explained that City Engineer Scott Hinton will present two alternate proposals for the achievement of Strategic Priority Goal #3 – Six Miles of Road Reconstruction. Hinton presented the attached 2020 CIP. There was discussion. Utility cost increases the overall Reconstruction cost. Utilities General Manager Tony Loete will provide a report on the Red Water issue next month. Loete stated that there will be options presented that include fixing the pipe, or waiting and making changes at the treatment plant. Changes at the source may provide rapid results, however require EPA approval.

Alderman Parker noted that some recommended safety projects were not included in the Plan. Hinton explained that projects are still coming in, therefore not all are included at this time. Kotter indicated that the Superintendent of Schools would like their Safety Committee to offer recommendations and prioritizations, and will forward those by early October in order to meet the City's budget schedule. Mayor Acri and Alderman Berg will be part of those discussions and Mayor Acri stated that she will personally advocate for partnership.

Mayor Acri noted that six-miles of road reconstruction is incredibly expensive as presented, and encouraged Council and staff to consider other methodologies. She provided excerpts from the City of Decatur's Pavement Master Plan for review: <u>https://www.decaturil.gov/wp-content/uploads/2015/10/pavement master plan.pdf</u>. Moline uses a Pavement Condition Index (PCI) to rate street quality, and the benefit of rating street quality prior to the prioritization of projects was discussed. Mayor Acri stated that the City must look at how to impact the overall quality of its roads, indicating that the City's PCI tracking software is outdated and proposing the use of a different system. Decatur uses Lucity software, which is currently used in Moline's Utilities, Storm Water and Parks Departments. Adding the module would allow a better understanding of the PCI. Mayor Acri asked Council to consider modeling Decatur's more sophisticated program for capital improvement planning, and structuring priorities and investment so that road surface is addressed.

There was discussion that some street replacement is motivated by the need to replace the water and sewer lines below. It was suggested that when this is the case, utility funds should be used. Alderman Potter stated that a focus on utilities may result in partial reconstruction, and Alderman Waldron noted that this Council can make the policy decision to reconstruct curb to curb. Utilities General Manager Tony Loete stated that Water and WPC reserves are approximately \$3 million and \$14 million respectively. Mayor Acri noted that going light on reconstruction, and instead resurfacing more roads, may result in more efficient use of street funds. Alderman Potter stated that there is value in reconstruction, and Council should rely on staff's recommendation. There was discussion. Council directed staff to do appropriate reconstruction on a limited basis, overlay where needed, but also to do a sufficient amount of preventative and rehabilitation work to ensure that roads do not degrade substantially. Alderman Schoonmaker requested that staff revisit the discussion with Jane Adams School regarding partnering on wall reconstruction near the school. The CIP will be reviewed again in the spring.

In regard to red water projects, Water funds would be used for the pavement, thereby decreasing CIP project cost. The consensus of Council in regard to other utility projects is that if utility work is mandatory to the project, then utility funds would be used, otherwise the road work would be paid with CIP funds. Mayor Acri indicated that the PCI rating should be considered in making this decision. If the score is low, the road should be reconstructed anyway. Loete stated that existing red water issues can be rectified by boring behind the back of the curb.

Corporate Counsel Derke Price explained that a franchise fee for utilities in the right-of-way will be implemented using a middle-of-the-state model, beginning with MidAmerican Energy. The franchise fee will simply flow through them and be passed on to their customers. It is a traditional source of revenue.
Alderman Wendt proposed implementing the Road Diet concept to improve pedestrian safety, reducing from 4 to 3 lanes near John Deere Middle School on 19<sup>th</sup> Avenue, from 16<sup>th</sup> Street to the Rock Island border, and near Wilson Middle School on 12<sup>th</sup> Avenue, from 41<sup>st</sup> Street to the East Moline border, delaying Avenue of the Cities until next summer. Alderman Wendt suggested that the street striping contractor be engaged now for both areas. The consensus of Council was to move forward with this plan. Hinton will present the plan at the October 8, 2019, Committee-of-the-Whole meeting. This would bring us under budget, instead of being \$50,000 over as projected. Alderman Parker suggested looking at the north side of the street for parallel parking, and Alderman Wendt suggested putting in bike lanes instead for the safety of children in the area.

Director of Public Works J.D. Schulte shared information on quantifying pavement rehabilitation impacts to improve work zone planning from a Seattle Public Works Expo that he attended last week.

Mayor Acri will work with staff to invest \$8.7M (+ unknown carryforward from 2019 CIP budget) to address 6 miles-worth of roads in addition to debt service, sidewalks, and pavement marking. 2020 road improvements will focus on roads that can be improved via rehabilitation and preventative maintenance. These roads would be identified as having PCI of 60 or higher and can be addressed with crack seals, pot hole filling, bump milling, microsurfacing/slurry seals, mill & overlay, and patching.

General Pavement Rating	PCI	Maintenance Activity	Types of Activities
Excellent	90-100	Preventative Maintenance	Crack seals
Good	80-90	Preventative Maintenance	Crack seals, pothole filling, bump milling, microsurfacing
Fair	70-80	Preventative/ Rehabilitation	Microsurfacing/slurry seals, mill & overlay, occasional patching
Poor	60-70	Rehabilitation	Mill & overlay, significant patching
Very Poor	50-60	Reconstruction	Full reconstruction
Fail	0-50	Reconstruction	Full reconstruction

Projects that are triggered to address water supply, sewer, and red water issues will be funded via Water/ WPC/Storm funds. Staff will implement the Lucity Pavement Management module to establish a baseline overall street condition and perform budget and maintenance forecasting. This will be done with the expectation that the 2021 CPI projects will be identified to maintain or improve the overall condition of the street network quantified by the weighted average PCI rating.

### **Public Comment**

There was no public comment

The meeting adjourned at 8:07 p.m.

Janene Q. L. Paur

Janine A. H. Parr, City Clerk



Stephanie Acri Mayor

619 16<sup>th</sup> Street Moline, Illinois 61265

Office: 309.524.2001 Fax: 309.524.2020

Email: sacri@moline.il.us October 8, 2019

Omer Osman, Acting Secretary Illinois Department of Transportation Hanley Building 2300 S. Dirksen Parkway Springfield, IL 62764

### Re: Proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 Traffic through the City of Moline on 19th Street

Secretary Osman:

Please be advised that the City of Moline supports and requests that the Illinois Department of Transportation take all steps necessary with the Federal Highway Administration to support the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the City of Moline on 19<sup>th</sup> Street, Council Bill #1121-2019.

The I-74 Bridge Construction phase of the arch span in the channel that was scheduled to be completed by November 26, 2019, is behind schedule and your agency has been working with City staff to develop alternate routes. Supporting the proposed 2020 traffic configuration will allow the Illinois Department of Transportation's contractors to continue working with an estimated cost savings of \$6,745,000 due to the alternative route implementation while minimizing the impact on the City's downtown businesses.

We appreciate your agency supporting this proposed traffic configuration and taking all steps necessary with the Federal Highway Administration. Please do not hesitate to contact City staff should you have any questions pertaining to this request. You can reach J.D. Schulte, Interim City Administrator/Director of Public Works, at (309)524-2346.

Sincerely,

Stephanie Acri Mayor

Council Bill/Resolution No. <u>1121-2019</u> Sponsor: \_\_\_\_\_

### A RESOLUTION

AUTHORIZING the City of Moline to request that the Illinois Department of Transportation (IDOT) take all steps necessary with the Federal Highway Administration (FHA) to support the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the City of Moline on 19<sup>th</sup> Street.

WHEREAS, the I-74 Bridge Construction phase of the arch span in the channel that was scheduled to be completed by November 26, 2019, is behind schedule; and

WHEREAS, the Illinois Department of Transportation (IDOT) has been working with City staff to develop alternate routes; and

WHEREAS, supporting the proposed 2020 traffic configuration will allow the contractor to continue working and minimize the impact on the City's downtown businesses.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MOLINE, ILLINOIS, as follows:

That the City Council finds it in the best interest of the City of to authorize the City of Moline to request that the Illinois Department of Transportation (IDOT) take all steps necessary with the Federal Highway Administration (FHA) to support the proposed 2020 I-74 Traffic Configuration redirecting eastbound I-74 traffic through the City of Moline on 19<sup>th</sup> Street.

CITY OF MOLINE, ILLINOIS

DocuSigned by: CAC43CBA499A402

September 24, 2019

Date

Passed: September 24, 2019

Approved: October 8, 2019

Attest:



### I-74 Staging Discussion Meeting Minutes September 27, 2019 10:30 am

### **ATTENDEES**

J.D. Schulte	City of Moline
Scott Hinton	City of Moline
Decker Ploehn	City of Bettendorf
Brent Morlok	City of Bettendorf
Denise Bulat	<b>Bi-State Regional Commission</b>
Danielle Alvarez	lowa DOT
Troy Schroeder	lowa DOT
Ryan Hippen	Illinois DOT
George Ryan	GEC
James Threadgill	GEC
Dave Hunt	GEC
Dan Draper	GEC

### DISCUSSION (SEE ATTACHMENT FOR COPY OF POWERPOINT PRESENTATION)

The purpose of the meeting was to discuss proposed traffic configurations at the end of Stage 2 and for 2020 to keep work moving in Moline and Bettendorf during the river bridge delay.

- Iowa Side
  - I-Loop Configuration no longer being considered by Iowa DOT due to:
    - Uncertainty of westbound river bridge completion schedule and potential that completion would extend into 2021.
    - One of the main reasons for pursuing the I-Loop configuration was to get the EB viaduct project (Contract 200) underway so it could be complete when the EB river bridge is complete. The current estimate for completion of the eastbound river bridge is 2021 or 2022. This removes the urgency to get the eastbound viaduct work underway and makes the I-Loop configuration undesirable at this time.
    - Concern that significant diversion of traffic to other routes may cause operational problems on those routes.
    - The configuration diminishes the capacity of US 67.
  - Dual Crossover configuration (I-Crossover) will be utilized instead.
    - EB traffic crosses over to new WB lanes south of Middle then back onto existing EB lanes just north of existing EB viaduct.
    - WB traffic routed up new I-74 WB on-ramp (Ramp D) from US 67.
    - o I-74 traffic will no longer intermingle with Mississippi Boulevard traffic.
    - Eliminates Mississippi Boulevard signal.

- Allows Contract 207 (14<sup>th</sup> Street reconstruction) to proceed.
- Keeps US 67 configuration in current conditions.
- Initially local traffic wishing to access the US 67 corridor will be detoured to Middle Road to Kimberly Drive to US 67.
- Last Iowa exit to Kimberly Drive can be reestablished at some point and remain in place until the new US 67 off-ramp can be constructed.
- Allows McCarthy to continue construction (no demobilization until late in 2020).
- Allows construction of new EB I-74 on-ramp from Middle Road and mainline pavement from south of Middle to south of Lincoln Road.
- Will cause some inefficiencies in contractor operations because they may lose ability to stockpile on the project site.
- Once the WB river bridge is complete (and Ramp 6C is completed on Illinois side)
  - EB and WB traffic will utilize WB lanes.
  - All WB ramps and movements open.
  - EB Viaduct construction begins
  - US 67 loop ramp (WB) closed.
  - All US 67 Illinois bound traffic routed to State Street ramp and existing EB river bridge (as per original Stage 3 plan).
  - Existing Last Iowa Exit ramp to Kimberly remains in use.
- After I-Crossover work complete and until WB river bridge open:
  - EB and WB remain in I-Crossover configuration.
  - Grant Street remains in current configuration.
- Danielle noted Iowa is considering extending the dedicated WB Grant Street turn lane to improve operations between the traffic turning right at WB on-ramp at 14<sup>th</sup> and the loop ramp.
- Illinois Side
  - Fall 2019 Stage (WF)
    - Provides alternate route to avoid train crossing.
    - $6^{th}$  Avenue →  $6^{th}$  Avenue on-ramp → U-turn just before river → down EB River Drive off-ramp → River Drive → existing WB River Drive on-ramp.
    - o Implementation schedule
      - Original schedule to implement was September.
      - Current schedule is mid to late October.
      - Alternative WD implementation scheduled for late November.
    - IDOT considering skipping WF to avoid motorist confusion caused by:
      - Short time interval between implementation of WF and WD.
      - Opening 6<sup>th</sup> Avenue on-ramp and then closing it within a month.
      - WF utilizes 6<sup>th</sup> Avenue on-ramp but WD does not due to concerns of merging traffic in close proximity to the U-turn.
      - Jim T. noted a decision on whether to implement WF is needed soon.
      - IDOT and the City of Moline to discuss later before making final determination.
         Moline was receptive as long as WD does not get kicked back from late November.
  - Winter 2019-2020 (WD-2)

- WB (lowa bound) traffic
  - Uses new WB lanes to Mississippi River.
  - Two lanes to 7<sup>th</sup> Avenue exit.
  - Right lane exits.
  - Left lane continues to just before Mississippi River.
  - U-Turn just before river → down EB River Drive off-ramp → River Drive → existing
     WB River Drive on-ramp
- EB (Illinois bound) traffic
  - Uses existing lanes to just south of 7<sup>th</sup> Avenue.
  - Crosses over to new WB lanes.
  - Crosses back over to EB side south of Avenue of the Cities
  - 19<sup>th</sup> NB closed north of 12<sup>th</sup> Avenue to facilitate structure demolition and substructure construction.
  - Minimizes impacts to 19<sup>th</sup> in 2020 when WG may be in place.
  - Availability of new WB I-74 lanes minimizes impact to NB 19<sup>th</sup> closure.
  - Truck Route
    - Exit at 7<sup>th</sup> → Head east on 7<sup>th</sup> → 23<sup>rd</sup> Street → River Drive → existing WB River
       Drive on-ramp
- o Downtown access via:
  - 19<sup>th</sup> Street
  - New WB 7<sup>th</sup> Ave off-ramp
  - Existing EB 7<sup>th</sup> Avenue off-ramp
  - Existing EB River Drive off-ramp
  - New WB River Drive off-ramp
- 2020 EB I-74 Detour (WG)
  - Allows Contractor (Kraemer) to keep working and finish EB viaduct.
  - Allows Contractor (Walsh) to finish all mainline pavement and retaining walls.
  - EB utilizes 2 lanes on 19<sup>th</sup> Street SB.
  - EB traffic exits at 7<sup>th</sup> Avenue → Jogs over to 19<sup>th</sup> SB → Takes Avenue of the Cities on-ramp to rejoin EB I-74 lanes.
  - o 7<sup>th</sup> Avenue closed to thru traffic to allow "free-flow" of I-74 EB traffic.
  - Signalized intersections at 12<sup>th</sup> Avenue and Avenue of the Cities. Adjustments to timing necessary for "freer" flow of EB traffic.
  - $\circ$  NB 19<sup>th</sup> would be closed north of 12<sup>th</sup> as it was in WD-2.
  - Allows completion of Walsh work.
  - Allows completion of all significant Kraemer work except structure demolition near north end of project.
  - At least one lane of 6<sup>th</sup> Avenue will be open during WG
  - o GEC/IDOT will investigate whether two lanes of 6<sup>th</sup> Avenue can be opened.
  - Once the WB river is complete bridge (and Ramp 6C is completed on Illinois side)
    - All new interstate pavement and bridges complete in Illinois.
      - Traffic essentially in final configuration.
      - All WB ramps and movements open.

- Majority of EB ramps and movements open.
- New EB River Drive off-ramp not open.
- Existing EB River Drive off-ramp from existing bridge remains in operation.
- EB Viaduct construction begins
- Grant Street loop ramp closed.
- All Grant Street Illinois bound traffic routed to State Street ramp and existing EB river bridge (as per original Stage 3 plan).
- Existing Last Iowa Exit ramp to Kimberly remains in use.
- After WG work complete and until WB river bridge open:
  - Traffic remains in WG configuration.
- Traffic Analysis
  - WG Operations
    - o At 7<sup>th</sup> Avenue
      - Two Lanes
      - "Free Flow" concept.
      - Requires closure of 7<sup>th</sup> Avenue to thru traffic.
      - Dual lefts onto 7<sup>th</sup> and onto 19<sup>th</sup> SB for detour traffic.
      - Separated from other traffic by temporary lane separator.
      - EB 7<sup>th</sup> and SB 19<sup>th</sup> movements still allowed.
      - Merge with detour traffic south of 7<sup>th</sup> before going under 19<sup>th</sup> bridges.
      - Estimated speed of "jog" is 20 mph.
      - Downtown access from EB 7<sup>th</sup> Ave. off-ramp can be allowed by providing free flow right turn movement to NB 19<sup>th</sup>.
      - Cannot allow thru movement or require right turns to stop because it would create backups for the detour traffic.
      - Inlets on the 7<sup>th</sup> Avenue off-ramp would need to be adjusted up or filled prior to putting two lanes of traffic onto ramp.
      - Final details/geometry to be ironed out if concept approved.
    - Remainder of 19<sup>th</sup> SB Route
      - Two lanes
      - Signalized intersections at 12<sup>th</sup>
        - Timings to give priority to SB traffic.
      - Avenue of the Cities
        - Timings to be similar to current 19<sup>th</sup> NB Avenue of the Cities intersection.
  - Estimated Diversion
    - Per Iowa DOT planning there is expected to be a large diversion in the event Alternative WG is implemented.
    - It is estimated to be 47% at south of River Drive for EB traffic.
    - The planning model predicts a large percentage of WB traffic will return once WD and WG are implemented.
    - Per the model, in the middle of the bridge 40% of the traffic will divert from the current conditions.

- Current sensor data shows the WB traffic is 30% less than the EB direction on the bridge.
- Prior to construction the traffic in two directions were nearly equal.
- The model also predicts with the implementation of the proposed traffic configuration alternatives the user delay costs will be negligible across the Quad Cities area.
- Danielle Alvarez cited the large diversion of traffic to be one of the factors Iowa DOT considered in deciding not to implement the I-Loop alternative.
- In her opinion the large diversion is an indication of the poor operation of the I-Loop
- Therefore she does not want to proceed with it, especially in light of the delays on the river bridge which means the I-Loop will in place for an extended period of time including during the winter period.
- Estimated Queues
  - The queue analysis prepared by the Designers shows no queues or queue delays for the expected 1600 vehicle per hour capacity.
- Cost Analysis
  - User delay costs are negligible.
  - Estimated cost savings calculation:
    - Contractor delay costs including:
      - Project Escalation
      - Demobilization/Remobilization
      - Overhead
      - Contractor Lost Opportunity
      - Traffic Control Maintenance
      - Erosion Control Maintenance
      - Contractor/Agency Liability Exposure
      - Engineering Inspection and Management
    - Minus costs to implement the alternative
      - Traffic control
      - Roadway/structure widening
      - Contractor inefficiencies to construct differently than plan stages (i.e. cannot stockpile onsite, etc.)
    - Result in the estimated savings to implement the alternatives rather than delaying the project for a year.
      - Estimated Cost savings
        - I-Crossover \$6.3 million
        - WG \$6.7 million
        - Combination I-Crossover/WG \$13.0 million
- Other discussion:
  - J.D. Schulte questioned whether EB I-74 will be detoured.
  - Ryan Hippen indicated it will have to be.
  - Danielle Alvarez noted that the proposed detour will need to go through the NEPA process.
  - J.D. asked for commitment from Danielle to support the Illinois efforts to gain approval for Alternative WG.

- Danielle indicated she can support the Illinois efforts as long traffic does not back up into lowa and it appears according to the analysis it will not.
- J.D. noted the narrative of the situation is as important as the traffic and cost analyses.
- J.D. noted the City of Moline has had a 9.4% reduction in sales tax since construction began.
- It was noted that implementing WG offers the opportunity to get construction completed in Moline sooner and allows the City to begin healing.
- Ryan noted implementation of WG may be able to be delayed beyond April 1 based on the amount of time Kraemer expects it to take to complete their work before the end of 2020.
- J.D. voiced concern that if WG is not implemented and Kraemer walks away for a year it will be challenging if not impossible to get the workforce to return because other regional projects will utilize the labor force.
- Danielle noted FHWA approval will likely hinge on whether they feel the traffic will navigate the new route safely.
- Denise Bulat noted the original option to completely close the roadway was rejected. The public was promised to keep as much of the roadway open as possible. Alternative WG would still accomplish this goal while keeping the project moving.
- Scott Hinton noted the project was originally expected to take 8 years, then was reduced to 5 years and finally 3 ½ years. Alternative WG helps keep the project moving and as close to 3 ½ years as possible.
- Danielle asked for concurrence from Bettendorf on the I-Crossover soon so she can tell McCarthy the plan.
- Brent and Decker plan to meet on Monday or Tuesday to discuss.
- Public Outreach
  - News conference date to be set as soon as decision is made on whether to implement WF.
  - Mid November is currently being targeted to discuss the implementation of Alternative WD assuming WF will be skipped.
  - Danielle will be at the news conference there to answer river bridge questions.
  - The message regarding the river bridge delay needs to evolve.



Initial	Name	Company	Phone	E-mail
-	Doug McDonald	lowa DOT	319-364-0235	Douglas.McDonald@lowadot.us
J	Danielle Alvarez	Iowa DOT	563-349-9014	Danielle.Alvarez@iowadot.us
J.F.	Troy Schroeder	Iowa DOT	563-349-9014	TROY.SCHROEDER@iowadot.us
	Cedric Wilkinson	Iowa DOT	563-349-4763	Cedric.Wilkinson@iowadot.us
	Curtis Carter	lowa DOT		Curtis.Carter@lowadot.us
	Hampton Grim	lowa DOT		Hampton.Grim@iowadot.us
	Adrian Simonson	lowa DOT	515-203-1214	Adrian.Simonson@lowadot.us
N.C.Y.	Ryan Hippen	Illinois DOT	815-284-5347	<u>Ryan.Hippen@Illinois.gov</u>
	Dave VonKaenel	Illinois DOT	815-284-5335	Dave.Vonkaenel@Illinois.gov
	Kevin Marchek	Illinois DOT	815-284-2271	<u>Kevin.Marchek@Illinois.gov</u>
	Doug Dirks	Illinois DOT	217-720-3534	Douglas.Dirks@illinois.gov
	Ali Mansour	Illinois DOT	815-440-5432	<u>Ali.Mansour@illinois.gov</u>
	Tim Kell	Illinois DOT		Tim.Kell@Illinois.gov
	Jeff Koenig	CM/GEC	319-538-2268	jkoenig@hrgreen.com
	George Ryan	CM/GEC	309-712-1777	George.Ryan@amecfw.com
5	Jim Threadgill	CM/GEC	815-228-4483	jthreadgill@hutchisoneng.com
	Tom Ripka	CM/GEC	312-735-2709	<u>tripka@knightea.com</u>
	Mike Levar	CM/GEC	847-489-7319	<u>Mlevar@cmchin.com</u>
	Geoff Griffin	CM/GEC	309-303-8888	geoff.griffin@woodplc.com
No.	Dan Draper	CM/GEC	815-303-8194	ddraper@hutchisoneng.com
N.A.	Dave Mallery	CM/GEC	815-866-2671	dmallery@rmchin.onmicrosoft.com
HCC	Dave Hunt	CM/GEC	815-488-8027	<u>dhunt@hrgreen.com</u>
	Micah Loesch	FHWA	515-233-7319	micah.loesch@dot.gov
	Dan Briddle	FHWA	217-492-4632	Dan.Brydl@dot.gov
	Andrew Brinkerhoff	FHWA	217-492-4281	Andrew.Brinkerhoff@dot.gov
	Chris Cromwell	FHWA	515-233-7320	chris.cromwell@dot.gov

I-74 Traffic Staging 2019/2020 Meeting September 27, 2019



	Mark Anderson	HNTB	206-498-2667	manderson@hntb.com
	Tom McQuillan	HNTB	312-771-8537	tmcquillan@hntb.com
	Bernie Hopfinger	HNTB	816-536-8313	bhopfinger@hntb.com
	Travis Konda	HNTB	612-328-3803	tkonda@hntb.com
	Aaron Messing	HNTB	313-296-0457	amessing@hntb.com
	Aaron Russell	HNTB		alrussell@HNTB.com
	Glenna Lovig	HNTB		glovig@HNTB.com
an	J.D. Schulte	Moline	563-650-7452	jschulte@moline.il.us
Ser	Scott Hinton	Moline		2
8				
She	Brent Morlok	Bettendorf		
Place	Decker Ploehn			
ANB	Peuise Bulad	Bi-state		

### • Iowa Side

### Dual Crossover (I-Crossover)

- $\circ\,$  Illinois bound traffic uses new WB lanes from S. of Middle to N. of Mississippi
- $\,\circ\,$  Iowa bound traffic switched from 14  $^{th}$  Street ramp to new Ramp D
  - I-74 traffic no longer intermingles with Mississippi Blvd traffic
  - 14<sup>th</sup> St. reconstruction can proceed
- $\,\circ\,$  Last Iowa Exit can be reestablished until WB river bridge complete
- $\circ\,$  Contractor's work will be less efficient
- $\circ$  Less room for onsite stockpiling

### □I-Loop no longer being considered

- o WB river bridge completion schedule uncertainty
- o Significant diversion of traffic to other routes
- o Diminished capacity of US 67



### • Iowa Side

### UWB River Bridge Complete

- $\circ\,$  EB and WB traffic utilizing new WB structure
- o All WB ramps and movements open
- EB Viaduct construction begins
  - Grant Street loop ramp closed
  - All Grant Street Illinois Bound routed to State Street ramp and existing EB river bridge
- o Existing Last Iowa Exit ramp to Kimberly remains in use



• Iowa Side

UWB River Bridge Not Complete

- $\circ\,$  EB and WB remain in I-Crossover configuration
- $\circ\,$  Grant Street remains in current configuration



### • Illinois Side

□ Fall 2019 Stage (WF)

 $\circ$  Alternate route to avoid trains

### o May not be implemented?

- Original schedule → Open in September
- Current schedule → mid to late October
- WD-2 scheduled implementation → end of November
- Better to skip WF rather than have two changes back to back?



### • Illinois Side

### □Winter Stage (WD-2)

 $\,\circ\,$  WB (Iowa bound) traffic on new WB lanes to Mississippi River.

- U-Turn at just before river.
- $\,\circ\,$  EB (Illinois bound) traffic crosses over from exiting lanes to new WB lanes S. of 7^{th}
  - Allows Contractor to begin structure demolition and substructure construction
  - Minimizes impacts to 19<sup>th</sup> in 2020.
  - 19<sup>th</sup> St. NB closed north of 12<sup>th</sup> to facilitate construction.
  - Availability of new WB I-74 lanes minimizes impacts.



### • Illinois Side

EB I-74 Detour (WG)

- $\,\circ\,$  Allows Contractor (Kraemer) to keep working and finish EB portion of viaduct
- o Allows Contractor (Walsh) to finish north end of project
- $\circ$  EB traffic utilizes 19<sup>th</sup> St. SB
  - "Free Flow" at 7<sup>th</sup> Avenue
  - Signalized intersections at 12<sup>th</sup> Avenue and Avenue of the Cities
  - NB 19<sup>th</sup> closed north of 12<sup>th</sup> Avenue



### • Illinois Side

### UWB River Bridge Complete

- o All new interstate pavement and bridges complete
- o Traffic essentially in final configuration
  - All WB ramps and movements open.
  - Majority of EB ramps and movements open
    - New EB River drive off ramp not open
    - Existing EB River drive ramp from existing bridge remains in operation
- $_{\rm O}$  Significant remaining work includes completion of Illinois EB and WB viaduct demolition.

### UWB River Bridge Not Complete

 $\circ\,$  Traffic Remains in WG configuration



# Traffic Analysis

• WG Operations at 7<sup>th</sup> Ave.

### At 7<sup>th</sup> Avenue

- o Two lanes.
- o "Free Flow" Concept
  - Requires closure of 7<sup>th</sup> Avenue to thru traffic.
  - Dual lefts onto 7<sup>th</sup> and on to 19<sup>th</sup> for detour traffic
  - Separated from other traffic by temporary lane separators.
  - EB 7<sup>th</sup> and SB 19<sup>th</sup> movements still allowed.
  - Merge with detour traffic south of 7<sup>th</sup> before going under 19<sup>th</sup> bridges.
  - Final details/geometry to be ironed out if concept approved.
- Estimated speed of "jog" → 20 mph





## Traffic Analysis

### • Estimated Diversion

	Estimat	ed Traffic I	Diversion F	ate From O	Current Co	nditions
	Lincolı	n Road	River	Bridge	S. of Riv	er Drive
Alternative	EB	WB	EB	WB	EB	WB
I-Loop	55%	-46%	21%	-44%	29%	N/A
WG	31%	-90%	40%	-55%	47%	N/A
I-Loop/WG Combination	56%	-47%	26%	-45%	49%	N/A





# Cost Analysis

	Estimated		Estimated Cost
	Contractor Delay	Cost of	Savings of
	Costs if Alternative	Implementing	Alternative
Alternative	Not Implemented	Alternative	Implementation
I-Loop	\$7,570,000	\$374,000	\$7,196,000
I-Crossover	\$7,570,000	\$1,300,000	\$6,270,000
WG	\$6,920,000	\$175,000	\$6,745,000
I-Loop/WG Combination	\$14,490,000	\$424,000	\$14,066,000
I-Crossover/I-Loop/WG Combination	\$14,490,000	\$649,000	\$13,841,000
I-Crossover/WG Combination	\$14,490,000	\$1,475,000	\$13,015,000



### I-74 Staging Local Agency Update and Discussion Meeting Minutes November 18, 2019 10:30 am

### **ATTENDEES**

J.D. Schulte	City of Moline
Decker Ploehn	City of Bettendorf
Brent Morlok	City of Bettendorf
Cedric Wilkinson	Iowa DOT
Adrian Simonson	Iowa DOT
Troy Schroeder	Iowa DOT
Masood Ahmad	Illinois DOT
Ryan Hippen	Illinois DOT
Tricia Thompson	Illinois DOT
George Ryan	GEC
James Threadgill	GEC
Dan Draper	GEC

### DISCUSSION (SEE ATTACHMENT FOR COPY OF POWERPOINT PRESENTATION)

The purpose of the meeting was to update and discuss the proposed traffic configurations at the end of Stage 2 and for 2020 to keep work moving in Moline and Bettendorf during the river bridge delay. The main discussion points included:

### November 2019

- Alternative WF to be implemented (Illinois)
  - $6^{\text{th}}$  Avenue →  $6^{\text{th}}$  Avenue on-ramp → U-turn just before river → down EB River Drive off-ramp → River Drive → existing WB River Drive on-ramp.
  - Provides alternate route to avoid train crossing.
  - Main WB detour route remains on 19<sup>th</sup> Street.
  - New signalized intersection introduced at EB River Drive off-ramp intersection.
  - Traffic signal timing at intersection will prioritize River Drive traffic under this configuration.
- Temporary cross-over to be constructed south of 7<sup>th</sup> Avenue for future use in Alternative WD-2.
- Traffic to be put on new WB on-ramp from Grant Street (lowa)
  - WB traffic routed up new I-74 WB on-ramp (Ramp D) from US 67.
  - I-74 traffic will no longer intermingle with Mississippi Boulevard traffic.
  - Targeted for implementation the evening of 11/20.
  - o 14<sup>th</sup> Street to be closed between Grant and Mississippi.
  - Dedicated right turn lane for westbound Grant Street traffic will be closed for approximately 2 weeks to reconfigure intersection.



- EB traffic crosses over to new WB lanes south of Middle then back onto existing EB lanes just north of existing EB viaduct.
- o Eliminates Mississippi Boulevard signal.
- Allows Contract 207 (14<sup>th</sup> Street reconstruction) to proceed.
- Keeps US 67 configuration in current conditions.
- Initially local traffic wishing to access the US 67 corridor will be detoured to Middle Road to Kimberly Drive to US 67.
- Last lowa exit to Kimberly Drive can be reestablished at some point and remain in place until the new US 67 off-ramp can be constructed.
- o Allows McCarthy to continue construction (no demobilization until late in 2020).
- Allows construction of new EB I-74 on-ramp from Middle Road and mainline pavement from south of Middle to south of Lincoln Road.
- Will cause some inefficiencies in contractor operations because they may lose ability to stockpile on the project site.
- December 2019
  - Alternative WD to be implemented (Illinois)
    - WB (lowa bound) traffic
      - Uses new WB lanes from south of Avenue of the Cities to Mississippi River.
      - Two lanes to 7<sup>th</sup> Avenue exit.
      - North of 7<sup>th</sup> merges to single lane approaching Mississippi River.
      - U-Turn just before river→ down EB River Drive off-ramp → River Drive → existing
         WB River Drive on-ramp
- January or February 2020
  - Alternative WD-2 to be implemented (Illinois)
    - WB (Iowa bound) traffic
      - Same as Alternative WD.
    - EB (Illinois bound) traffic
      - Uses existing lanes to just south of 7<sup>th</sup> Avenue.
      - Crosses over to new WB lanes.
      - Crosses back over to EB side south of Avenue of the Cities
      - Two options for Avenue of the Cities access under consideration to allow EB structure demolition and substructure construction to minimize impacts if WG implemented.
      - Option 1 Via 19<sup>th</sup> Street
        - $\hookrightarrow$  Single SB lane from 12<sup>th</sup> Avenue to Avenue of the Cities.
        - $\hookrightarrow$  Close 19<sup>th</sup> NB closed north of 12<sup>th</sup> Avenue.
          - > Availability of new WB I-74 lanes minimizes impact to NB 19th closure.
      - Option 2 Close 19<sup>th</sup> SB from 7<sup>th</sup> to Avenue of the Cities
        - → Access to Avenue of the Cities obtained by exiting at 7<sup>th</sup> Avenue → Proceeding up 7<sup>th</sup> Avenue on ramp → Taking existing auxiliary lane and exit ramp to Avenue of the Cities.



- March or April 2020
  - Iowa Dual Crossover configuration (I-Crossover)
    - EB traffic crosses over to new WB lanes south of Middle then back onto existing EB lanes just north of existing EB viaduct.
    - Initially local traffic wishing to access the US 67 corridor will be detoured to Middle Road to Kimberly Drive to US 67.
    - Last lowa exit to Kimberly Drive can be reestablished at some point and remain in place until the new US 67 off-ramp can be constructed.
    - o Allows McCarthy to continue construction (no demobilization until late in 2020).
    - Allows construction of new EB I-74 on-ramp from Middle Road and mainline pavement from south of Middle to south of Lincoln Road.
    - Will cause some inefficiencies in contractor operations because they may lose ability to stockpile on the project site.
  - Illinois Implement Alternative WG
    - WB (Iowa bound) traffic
      - Same as Alternative WD.
    - EB (Illinois bound) traffic
      - EB I-74 closed → Detoured to I-80/280
      - Local Traffic uses existing interstate lanes to just south of 7<sup>th</sup> Avenue.
      - EB traffic exits at 7th Avenue → Jogs over to 19th SB → Takes Avenue of the Cities on-ramp to rejoin EB I-74 lanes.
      - 2 lanes on 19th Street SB.
      - 7th Avenue closed to thru traffic to allow "free-flow" of I-74 EB traffic.
      - Signalized intersections at 12th Avenue and Avenue of the Cities. Adjustments to timing necessary for "freer" flow of EB traffic.
      - NB 19th closed north of 12<sup>th</sup> Avenue.
      - Allows completion of all Walsh mainline work.
      - Allows completion of all Kraemer mainline work.
    - Analysis of Alternative WG
      - Construction Delay Costs <u>minus</u> Cost of Implementation = \$6.75 million
      - Iowa DOT Planning Model Revised
        - └→ User Delay Costs increased significantly
        - $\hookrightarrow$  Some potential inconsistencies in the model are being investigated
        - If model is confirmed, estimated user delay costs = \$150k per day across entire region.
        - Set is time WG in place before exceeding construction delay costs = 1 ½ months.
      - Diversion = Approximately 30%
        - ↔ Based on comparison current WB Traffic on River Bridge versus EB Traffic
      - At 30% no queue length or delays expected.
      - Estimated travel delay for EB motorists using corridor 1 ½ minutes to 3 minutes depending on whether traffic stops at traffic signals.



- June 2020
  - Tentative Contract 200 (EB Viaduct) Letting
- Fall 2020 (Assuming WB River Bridge Opens)
  - Kraemer completes Ramp 6C Bridge (approx. 6 to 8 weeks)
    - WG still in effect in Illinois until Ramp 6C Bridge completed.
  - o At completion of Ramp 6C Bridge
    - EB and WB traffic on new WB river bridge and lanes.
    - EB access to Avenue of the Cities via cross-over south of 7<sup>th</sup>.
    - Or all traffic crosses over to EB side depending on progress of EB construction.
  - Kraemer completes remaining two spans of EB Viaduct over RR and 4<sup>th</sup> Avenue.
- End of 2020 (If WB River Bridge Not Complete)
  - If bridge deck not poured by end of November or early December winter weather may push construction back as far as May or June.
  - o Illinois
    - Traffic remains in WG. (over winter)
  - o lowa
    - In Iowa, traffic still exits at Exit 4 and goes through intersection with US 67.
    - EB traffic returns to existing EB alignment
    - Contract 200 delayed.
- Potential Ways to Mitigate Bridge Completion Delays
  - Accelerate work on Ramp 6C Bridge Work 24/7
  - Put EB traffic on WB structure as soon as ready instead of waiting for completion of Ramp 6C
    - Means access to downtown Moline would be via Bettendorf and across old bridge or via Avenue of the Cities to 19<sup>th</sup>.
    - Allows Contract 200 to start rather than waiting for completion of Ramp 6C Bridge.
  - Combination of the above.
  - Work to complete Ramp 6C bridge expected to take 6-8 weeks.
  - o Illinois DOT considering an option to decrease that time to 4 weeks.
  - The City of Moline will consider and this issue will be revisited when the schedule becomes clearer.
- Post Conference Call Discussion
  - Following the end of the conference call, discussion regarding the 7<sup>th</sup> Avenue and 19<sup>th</sup> Street intersection continued.
  - o J.D. Schulte suggested the EB 7<sup>th</sup> Avenue left turn movement is not necessary.
  - Dan Draper will modify exhibits accordingly.



# I-74 Corridor - Staging Discussion

I-74 Field Office Conference Room 11/18/19 2:00 PM

a a tat in set				
a a tat in set	J.D Schulte	Moline	309-524-2346	jschulte@moline.il.us
d a tat wy set	Scott Hinton	Moline	309-524-2351	<u>shinton@moline.il.us</u>
a tat y	Decker Ploehn	Bettendorf		dploehn@bettendorf.org
tat tat	Brent Morlok	Bettendorf	563-344-4063	bmorlok@bettendorf.org
test Law Law	Dave VonKaenel	Illinois DOT	815-284-5335	Dave.vonKaenel@illinois.gov
tat in stat	Rebecca Marruffo	Illinois DOT		Rebecca.Marruffo@illinois.gov
Carl	Ryan Hippen	Illinois DOT	815-440-5638	<u>ryan.hippen@illinois.gov</u>
CAN - CAN	Danielle Alvarez	Iowa DOT	563-349-0241	<u>danielle.alvarez@iowadot.us</u>
XIII I	Cedric Wilkinson	Iowa DOT	563-349-4763	cedric.wilkinson@iowadot.us
J.J.	Troy Schroeder	Iowa DOT	563-349-9014	troy.schroeder@iowadot.us
	Adrian Simonson	Iowa DOT	515 203-1214	<u>Adrian.Simonson@iowadot.us</u>
٩	Micah Loesch	FHWA	515-233-7319	<u>micah.loesch@dot.gov</u>
010	Dan Draper	I-74 GEC	815-303-8194	<u>ddraper@hutchisoneng.com</u>
G.R.	George Ryan	I-74 GEC	309-712-1777	george.ryan@woodplc.com
L L	Jim Threadgill	I-74 GEC	815-228-4483	jthreadgill@hutchisoneng.com
P MA	MA SOON AHMAD			
P TRI	TRICIA THOMPSON			
	and due to the decision			
	8			









### I74Mississippi

# **CHRISTMAS 2019**

• Start WD for utilization of new WB lanes

11/18/2019



# **DANNOARCY OR FEBRUARY 2020**Illinois EB crossover to new WB lanes Walsh start EB removal and structures (this will allow AOC to be open sooner – see 7/20/20 below). Acceleration? - Especially on 19<sup>th</sup> St. structures. You options under consideration for Avenue of the Cities access Option 1 – Via 19<sup>th</sup> Street SB 19<sup>th</sup> NB closed north of 12<sup>th</sup> Avenue Option 2 – Via 7<sup>th</sup> Avenue on-ramp and auxiliary lane. 19<sup>th</sup> SB closed from 7<sup>th</sup> to Avenue of the Cities off-ramp

11/18/2019











174-Mississippi

# UPDATED IMPACTS OF WG

- Cost Analysis
  - Construction Delay Costs <u>minus</u> Cost of Implementation = \$6.75 million
  - Iowa DOT Planning Model Revised
    - o User Delay Costs increased significantly
    - $\circ$   $\;$  Some potential inconsistencies in the model are being investigated
    - o If model is confirmed, estimated user delay costs = \$150k per day across entire region.
  - Estimated time WG in place before exceeding construction delay costs = 1 ½ months.
- Diversion = Approximately 30%
  - Comparison current WB Traffic on River Bridge versus EB Traffic
- At 30% no queue length or delays expected.
- Estimated travel delay for EB motorists using corridor = 3 minutes

11/18/2019












# • Contract 200 delayed. • Contract 200 delayed. • Contract 200 delayed.

11/18/2019





174-Mississippi

# POTENTIAL WAYS TO MITIGATE BRIDGE COMLETION DELAYS

- Accelerate work on Ramp 6C Bridge Work 24/7
- Put EB traffic on WB structure as soon as ready instead of waiting for completion of Ramp 6C
  - Means access to downtown Moline would be via Bettendorf and across old bridge or via Avenue of the Cities to 19<sup>th</sup>.
  - Allows Contract 200 to start rather than waiting for completion of Ramp 6C Bridge.
- Combination of the above.

11/18/2019



# EXHIBIT K PUBLIC INFORMATIONAL MEETING

# **APPENDIX C**

# **DETAILED PUBLIC OUTREACH SUMMARY DOCUMENT**





# **Public Meeting**

Moline Traffic Pattern Change

Detailed Public Outreach Summary

January 11, 2020 Moline, Illinois



# Contents

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# I-74 Mississippi River Bridge Moline Traffic Pattern Change Public Meeting Summary

December 11, 2019 - Moline, Illinois

#### Fast Facts

- The public meeting was held on Wednesday, December 11, 2019 at the TaxSlayer Center in Moline, Illinois.
- The public meeting was attended by 76 people and eight (8) media representatives.
- Thirty-three (33) comments were submitted within the comment period.

#### **Project Overview**

Reconstruction of the I-74 corridor between Moline, Illinois and Bettendorf, Iowa is underway, including construction of two river bridges over the Mississippi River. As a new phase of construction begins in 2020, the Illinois Department of Transportation has proposed a traffic pattern change for Illinois-bound I-74, which would allow construction crews to continue expanding the interstate in Moline while work advances on the river bridge.

Under the original project timeline, I-74 traffic was expected to shift to the newly constructed Iowabound bridge and roadways by the end of 2019. However, that is no longer possible due to a delay in bridge construction. A proposed solution was developed to allow roadway construction in Moline to be completed on schedule by the end of 2020. The plan would require temporarily detouring eastbound I-74 through-traffic to I-280. Local traffic on eastbound I-74 would have the option to exit at 7th Avenue in Moline and take southbound 19th Street to continue south and then get back on eastbound I-74 at Avenue of the Cities. The detour for westbound (Iowa-bound) I-74 through-traffic would continue to be I-80.

#### Public Meeting Overview

The purpose of the public meeting was to present proposed traffic pattern changes that would detour eastbound I-74 through traffic, while also providing a local traffic route in Moline. The meeting was held in an open-house format. Attendees received newsletters highlighting both the proposal and overall project progress and were provided an opportunity to view a continuous audiovisual presentation, exhibit boards, and a large-scale aerial map of the project area. Staff from the Illinois and Iowa departments of transportation, as well as project consultants, were available to answer questions. Tables with comment forms and iPad stations provided opportunity for public comment. A media briefing was held prior to the public meeting.

#### 5 Takeaways from the Public Meeting

- 1. A traffic pattern change is proposed for eastbound (Illinois-bound) I-74.
- 2. The new configuration would allow construction crews to continue expanding the interstate in Moline while work advances on the river bridge.



- Implementation of the proposed traffic pattern would require temporarily detouring eastbound I-74 through-traffic to I-280. The detour for Iowa-bound I-74 through-traffic would continue to be I-80.
- 4. The proposed traffic pattern would avoid an estimated \$6.7 million increase in project costs due to delaying construction and allow I-74 in Moline to be completed on schedule.
- 5. The proposed traffic pattern is estimated to add two-to-three minutes to the average travel time for local motorists from Middle Road in Bettendorf to Avenue of the Cities in Moline.

#### **Public Meeting Details**

The public meeting for proposed traffic pattern changes was held from 4-7 p.m. on Wednesday, December 11, 2019 at the TaxSlayer Center, 1201 River Dr., Moline, Illinois

#### The public meeting was attended by **76 people and eight (8) media representatives**.

#### The following public officials were in attendance:

- Mayor Stephanie Acri, City of Moline
- Alderman Dick Potter, 4<sup>th</sup> Ward, City of Moline
- Interim City Administrator J.D. Schulte, City of Moline

#### The following agencies/organizations were represented:

- Arnold Motor Supply
- Bi-State Regional Commission
- City of Davenport Parks & Rec
- City of Moline
- Deere & Co
- Ducky's
- First Midwest Bank
- Junior Achievement
- Moline Centre
- Operating Engineers Local 150
- QC Marathon
- QCLL
- Two Rivers YMCA
- Wood Home Renovations

#### The following media outlets were represented:

- WHBF
- KWQC
- WVIK
- WQAD



A total of fourteen (14) comments were submitted at the public meeting or on the project website on the day of the meeting. The comments covered a variety of topics, including:

- Support reducing project delays
- Support proposed traffic pattern changes
- Reduce duration of local road congestion
- Suggested traffic route improvements
- Concern regarding local road winter maintenance
- Duration of proposed traffic pattern
- Appreciation for opportunity to talk with project representatives
- Bridge construction delays
- Excitement about the impact of the overall project

Additional comments were received within the comment period ending on January 11, 2020. A total of thirty-three (33) comments were received within the comment period. See Appendix A for all comments received.

#### Identification of Stakeholders

A stakeholder is anyone who could be affected by the construction project and has a stake in its outcome. This includes construction project area residents, commuters, property owners, businesses, state and local officials, chambers of commerce, local interest groups, commercial and recreational boaters and others.

Stakeholders were identified through a combination of internet searches and input from all parties relevant to the study area (residents, commuters, etc.) as well as gathered from previous public meetings, community meetings, corridor meetings, and one-on-one meetings. Interested persons can also subscribe for updates via the project website.



#### PUBLIC INVOLVEMENT EFFORTS

#### Advertisements

A newspaper advertisement was published in the Quad-City Times and Dispatch-Argus two weeks prior to the public meeting. The advertisement was published on November 27, 2019 and December 4, 2019.



#### **E-Blast Invitation**

An e-blast invitation to the public meetings was sent on December 4, 2019 and December 10, 2019 to the entire I-74 project list, which includes stakeholders and website subscribers. The e-mail included the purpose and description of the meetings, as well as location and contact information. A reminder eblast was send on December 10, 2019 and included a newsletter with information about the overall project progress.



E-Blast Invitation

E-Blast Reminder



#### **News Release**

A news release was sent to local media on December 2, 2019 and it included information about the purpose of the public meeting, the proposed traffic pattern changes, and details on when and where the public meeting would be held.



#### **Media Briefing**

A media briefing was held prior to the start of the public meeting. The purpose of this briefing was to allow the media to preview all public meeting materials and ask any questions regarding the project. Representatives from Illinois and Iowa departments of transportation were available to answer questions.



#### Newsletters

Two project newsletters were made available for all attendees and published on the project website. One of the newsletters detailed the specific route change proposal, while the other provided an overview of project progress. The project update newsletter was also sent electronically to stakeholders as part of a meeting reminder. Specific topics in the newsletters included:

- Proposed route detail and maps
- Proposal advantages and disadvantages



- Construction timeline
- Safety of structure
- Construction progress detail
- How to submit proposal feedback
- How to stay connected for construction updates





#### Social Media

Social media was used to both promote the meeting and multiple announcements were made prior to the public meeting.

#### 





# Public Meeting Photographs





#### APPENDIX A

#### Comments and Responses

The following chart includes a list of all comments received within the comment period as well as comment responses.

#	Date	Status	Name	Торіс	Source	Response Type	Comment	Response
1	12/6/2019	New	Nick Maclin	Other, Safety, Traffic	Online	Do not send me a response	This comment is in response to the proposed traffic flow during 2020. I think it is a good idea to continue work on the South/Illinois Bound direction of I-74 in Moline. However, instead of demolishing all connections in the Moline area, leave the current overpass south of 7th Ave intact, located approximately here 41°30'22.6"N 90°30'30.3"W. Also leave the roadway north of this location intact. This will allow the majority of work to continue and be completed in 2020. When this limited construction is complete, traffic flow south will then continue on I-74 south rather than 19th St. Then when the South/Illinois bound section of the bridge is nearing completion, the above overpass can be demolished and new construction can then be completed. This plan mitigates traffic disruption due to delayed bridge construction and allows for IDOT to monitor the bridge construction right away when the bridge is still years from completion, causing unnecessary traffic, safety concerns, local business decline, and consumer frustration. I hope to attend the meeting on Wednesday to hear the full account of the plan and voice the concerns above. Thank you for your time.	Thank you for your commer Work on eastbound (Illinois without the proposed traffic of I-74 north of 7th Avenue, in Moline until 2021. Our al interstate traffic diverts to o trends, the proposed traffic to 19 <sup>th</sup> Street is anticipated from Middle Road to Avenu via the River Drive off ramp potential traffic control char would result in an estimated We appreciate your input an impacts.
2	12/7/2019	In progress	Jay Cole	Design, Traffic	Online	Do not send me a response	Any closer to have a frequently asked questions about the bridge construction? Many things fascinate me that I want to ask about but I understand you don't have time to answer everyone's questions.	Thank you for your interest A document with frequently coming weeks.
3	12/11/2019	New	Matt Mentzer	Safety, Traffic	Online	Do not send me a response	174 bridge traffic issue, Illinois side/Iowa bound: Traffic on eastbound River drive and turning onto the I74 West ramp one lane is allowed to turn. The other lanes are marked straight (no turn) however traffic continues to go past the normal turn lane and then turn right onto the ramp using the second lane. Either mark the intersection as such and allow this or police it. One way or the other.	Thank you for your comment The River Drive ramp location lanes onto the entrance ram the ramp from westbound for lane configuration appropri improvements when there a
4	12/12/2019	New	Julie Lawrence	Traffic	Online	Do not send me a response	Iowa and Ilinois DOT are doing a great job keeping traffic going through this construction project. Appreciate the opportunity to discuss in person the traffic issues. Items to consider: talk to Arsenal Garrison to see what workforce flexibility can be provided to alleviate traffic, consider changing to two right turn lanes onto 174 bridge from River Drive.	Thank you for your commer We appreciate the complim Arsenal employees are using staff regarding traffic patter The River Drive ramp locatio two turn lanes onto the ent turning onto the ramp from and make improvements wh

ent regarding the proposed traffic pattern changes in Moline.

his-bound) I-74 south of 7th Avenue will begin this spring. However, fic pattern change, we would not be able to complete the section he, thereby delaying completion of the entire eastbound roadway analysis of 2019 traffic trends showed that the majority of b other bridges, which reduces congestion on I-74. Based on these fic pattern change detouring local eastbound/Illinois-bound traffic d to add an estimated 2 to 3 minutes to the average travel time hue of the Cities. Access to downtown Moline will also be available op (Exit 1) from the existing eastbound River Bridge/lanes with the hanges. Delaying construction without any traffic pattern changes ted \$6.7 million increase in project costs.

and will consider your suggestions in our evaluation of traffic

st in the I-74 River Bridge project.

tly asked questions will be posted to the project website in the

ent regarding traffic.

tion has been a challenge. Previously we implemented two turn amp, however, this made it challenging for motorists turning onto d River Drive. The majority of local motorists are using the new briately, but we will continue to monitor this location and make e are opportunities to do so.

ent regarding I-74 traffic.

ment and your suggestions. We do not have a record of how many ing the I-74 bridge every day but we do coordinate with Arsenal ern changes.

tion in Moline has been a challenge. Previously we implemented ntrance ramp, however, this made it challenging for motorists m eastbound River Drive. We will continue to monitor this location when there are opportunities to do so.

5	12/12/2019	New	Tom Lawrence	Traffic	Online	Do not send me a response	After seeing the video and poster boards I'm once again excited about the completion of the i74 bridge. I was impressed with the DOT reps from both states and grateful for the time they spent answering all of my questions. I see no better way to route traffic then what they are proposing and hope that it is approved soonest.	Thank you for your interest in proposed traffic pattern chan meeting.
6	12/12/2019	New	Gary Cook	Traffic	Online	Respond to me by e- mail	Consider making a short temporary turn lane in Moline at 12th ave and 19th street for left turns from southbound 19th st to eastbound 12th ave. The turn lane could use a short section of the to be closed 19th st north bound lane. This may help avoid backups on southbound 19th street because of vehicles turning left at 12th ave.	Thank you for your comment We appreciate your suggesti evaluation.
7	12/12/2019	New	Eric Mckenzie	Traffic	Online	Do not send me a response	I believe if the new proposed changes to the Illinois bound traffic pattern saves us time and money, then I'm all for it. Anything is good with me if we can keep the progress moving forward	Thank you for your interest i proposed traffic pattern char
8	12/12/2019	New	DAVID JENSEN	Traffic	Online	Respond to me by e- mail	With the talk of the new detours, I don't understand for the life of me why we continue to mess with this?? It would be FAR simpler for the project to SHUT 1-74 DOWN from Kimberly to 23rd Ave. PERIOD!! My goodness we have 4 other bridges to use at our disposal!! It's not like the Savanna bridge project. My god. Stop coddling the whiners and get on with it!! Shut it down!! In BOTH directions until you're ready to open BOTH directions!!	Thank you for your comment When construction options v expressed a desire to keep th provide this local route was f businesses during construction I-280 and I-80 but I-74 will re Moline or downtown Betten
9	12/12/2019	New	Patrick Fisher	Other, Traffic	Online	Do not send me a response	Absolutely institute the proposed changes to keep the project as on schedule as possible. That's a no-brainer.	Thank you for your interest in proposed traffic pattern char
10	12/12/2019	New	Kerry Debus Mangelsdorf	Traffic	Online	Do not send me a response	Please get the bridge done soon. Change the traffic patterns to promote the finishing of the bridge.	Thank you for your interest in proposed traffic pattern char
11	12/13/2019	New	N/A N/A	Other	Phone	Do not send me a response	Hello. I'm just calling, I don't need a response call, but I'm just letting you know. I don't know how you guys get the webcam set up, but now Camera 2, which previously had a view, just has a giant beam in front of it, so there's nothing to see. So you guys might want to reposition the camera. That's all. Thanks.	No response necessary.
12	12/13/2019	New	Joscelyn Rowe	Traffic	Online	Do not send me a response	Please adopt the plan to adjust the traffic pattern and complete the Moline I-74 construction in 2020.	Thank you for your comment appreciate your input.
13	12/13/2019	New	Scott Jackson	Traffic	Online	Do not send me a response	I think it's a terrible idea to have Illinois bound traffic exit at 7th ave and go up 19th street to Avenue of the Cities!!!! Only way it adds 2-3 minutes is if no traffic and you hit all the lights green which we all know won't happen EVER!!	Thank you for your comment Our analysis of 2019 traffic to other bridges, which reduces pattern change detouring loo to add an estimated 2 to 3 m of the Cities. Access to dowr (Exit 1) from the existing eas

t in the I-74 River Bridge project and your comment regarding the nanges. We appreciate your input and attendance at the public

ent regarding the proposed traffic pattern changes.

stion and will consider a turn lane at 12th Avenue in our

t in the I-74 River Bridge project and your comment regarding the nanges. We appreciate your input.

ent regarding the proposed traffic pattern changes.

as were discussed early on in the project, the communities to the I-74 bridge open to local traffic at all times. Their desire to as for various reasons, including continued access to downtown ction. Through traffic as well as local traffic is encouraged to take I remain open for motorists wanting to get to either downtown endorf.

t in the I-74 River Bridge project and your comment regarding the nanges. We appreciate your input.

t in the I-74 River Bridge project and your comment regarding the nanges. We appreciate your input.

ent regarding the proposed traffic pattern changes. We

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c trends showed that the majority of interstate traffic diverts to ces congestion on I-74. Based on these trends, the proposed traffic local eastbound/Illinois-bound traffic to 19<sup>th</sup> Street is anticipated minutes to the average travel time from Middle Road to Avenue wntown Moline will also be available via the River Drive off ramp astbound River Bridge/lanes with the potential traffic control

								changes. In order to keep t drive, we plan to implemen southbound 19th Street. Th to stop at a stop light until t Avenue of the Cities will be would require closing eastb
14	12/14/2019	New	Roger Killion	Environmental, Other, Safety, Traffic	Online	Respond to me by e- mail	I was disappointed in the reports of how far behind the new bridge is. I realize this year's flood was worse than normal, but the river floods every year, and it does get cold here in the winter. This should have been factored in the timeline to some extent. However, the comments about how insignificant a few more minutes delay using the detour, and now proposing the East bound detour way before the East bound span will be completed, is taken way to lightly. I think the West bound detour has added more like 10 minutes to my commute time so far. When you calculate the amount of time, times the number of cars using the bridge for an extra year (or more, considering how the west bound span is progressing, more like two years?) I would think the costs to the commuters and businesses using the bridge is far greater than the extra construction costs. This is not even including the extra pollution and vehicle wear and tear from all the extra starting and stopping. Businesses that have service vehicles that are delayed crossing the bridge for the years of taking detours, it is also my opinion that the delays in building the bridge have not all been due to weather. Even in good weather the construction on the bridge itself has been extremely slow. The contractors constructing the corridor connecting to the bridge have made excellent progress and have been very considerate of keeping the traffic moving as best they can and should not be penalized for the poor performance of the company building the bridge should be held liable/responsibe for the extra cost the delays are causing. If they are somehow rewarded with receiving more money for doing a poor job, or having bid the job poorly, it will be a great injustice. Thank you.	Thank you for your interest proposed traffic pattern cha We appreciate your input re evaluation. Our traffic mode impact on costs to motorist continuous flowing eastbou westbound (Iowa-bound) de signalized intersections (two train delays. Contractors do account for uncommon, the extent of th been predicted. We had ho quicker after river levels red delay. However, we have be The Department of Transpo contractors accountable for impose liquidated damages completion date. However, completion date, it is prema We are confident in the abi perform the work, and the s an unwavering commitmen obligation to be fair to the o
15	12/17/2019	New	James Roth- Roffy	Safety, Traffic	Online	Do not send me a response	Re: the proposed IL traffic changes for 2020. Westbound River Drive traffic is currently allowed to turn left onto the IA-bound entrance ramp, seemingly without having to wait for a left turn arrow. This causes eastbound River Drive traffic to slow down and even stop turning right onto the IA-bound entrance ramp, possibly because they think these left-turning cars (from westbound River Drive) have the right-of-way. This backs-up eastbound River Drive traffic which, in turn, blocks cars coming off the new one-way ramp from going east on River	Thank you for your comment The River Drive ramp location referenced, allowing concur- the traffic signal phases and you noted, overly cautious effectiveness. We appreciate and make improvements w

p traffic flowing, and only add an average of 2-3 minutes to your ent a continuous traffic flow from the 7th Avenue exit to This means that eastbound (Illinois-bound) I-74 traffic will not have il they reach 12th Avenue. The signal timing at 12<sup>th</sup> Avenue and be set to prioritize southbound 19<sup>th</sup> Street traffic. This configuration stbound 7th Avenue and northbound 19th Street.

est in the I-74 River Bridge project and your comment regarding the changes.

regarding cost to motorists and we will consider this in our deling for the proposed traffic pattern showed a very limited sts. The limited impact is mostly due providing two lanes of ound traffic from the 7th Avenue exit to 19th Street. Unlike the detour implemented in 2019, motorists would encounter fewer wo instead of six) and be able to avoid downtown congestion and

or weather delays in their schedule. However, while flooding is not f the record flooding in 2018 was beyond anything that could have noped that progress on the I-74 bridge would proceed much receded but there have been various factors contributing to the been pleased with the recent momentum on the arch.

portation does have contract provisions that allow them to hold for delays that are attributed to them. A key provision is the right to ges, which is a monetary penalty for each day past the determined er, because there are contested items that may affect the mature to assess whether liquidated damages may be due.

bility of the bridge to be built, the capability of the contractor to be safety and performance of the completed structure. We maintain ent to deliver a safe, sound structure, while balancing carefully our e contractor and good stewards of public funds.

ent regarding existing and proposed traffic pattern changes.

ation has been a challenge. The current configuration as you current westbound left turns with eastbound right turns, minimizes nd provides the greatest intersection capacity. Unfortunately, as is drivers slowing down and/or stopping reduce the traffic flow ciate your suggestions and will continue to monitor this location when there are opportunities to do so.

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							Drive to the entrance ramp. I have sat at the light from the one-way off ramp thru several light changes because I couldn't get into the eastbound queue. I propose signage to either disallow westbound River Drive cars from turning left onto the entrance ramp altogether, or allow turns from westbound River Drive onto the IA-bound entrance ramp ONLY on a green arrow". If effectively timed AND ENFORCED, this would keep the flow of eastbound River Drive cars moving. Additionally, there should be a stoplight for eastbound River Drive where the exit ramp of the new highway meets it to let drivers coming off the one-way exit ramp get onto the IA-bound bridge ramp. If my message isn't clear, feel free to contact me for clarification. Thanks.	
16	12/18/2019	New	Donna Jones	Safety, Traffic	Online	Do not send me a response	I do not think you should be changing any traffic patterns until after Jan 1 due to the holidays, higher visitor representation unfamiliar with the new traffic pattern. Also, there is no stated plan on how to address snow/ice conditions with the restricted traffic lane availability.	Thank you for your commer New traffic patterns for wes and December to provide a Moline. The proposed 2020 74 traffic and would not be We understand your concer Transportation Operations s removal challenges, and wil continue to monitor and im With the proposed eastbour avoid the potential for signit
17	12/19/2019	New	Victor Vogel	Traffic	Online	Respond to me by e- mail	Regarding "New Traffic pattern proposed for Illinois-bound I-74: Changes would be implemented in 2020". This is a terrible idea. For those of us that live in Bettendorf and work at Harvester Works, Seeding Group, Kone, or the Arsenal, this new traffic pattern will be a nightmare. I'm not sure if I would be able to exit to the downtown at 7th Ave in Moline (or re-enter the interstate from there), or if I would have to go clear to Avenue of the Cities, but either way it's going to jam up traffic badly and add much more than 2-3 minutes to my commute. Then traffic will have to stay that way not only until the Moline interstate is done, but until the entire first span is built. And if you told me there would be no more delays, I wouldn't believe you. Let's just wait! It's not for the motorists to pay the price for construction companies causing delays. We already paid our taxes and we're not getting them back if construction gets done any quicker. Let's think of the general public first and keep traffic flowing.	Thank you for your comment Our analysis of 2019 traffic to other bridges, which reduce pattern change detouring lo to add an estimated 2 to 3 m of the Cities. Access to dow (Exit 1) from the existing east changes. In order to keep tr drive, we plan to implement southbound 19th Street. This to stop at a stop light until th Avenue of the Cities would be configuration, however, would street. Traffic on both eastb but would only be able to tu suggestions in our evaluation We are working diligently w the lowa-bound bridge. We capability of the contractor

ent regarding traffic changes.

estbound (Iowa-bound) traffic were implemented in November a route the avoids train delays and improved traffic flow in 20 traffic pattern changes would provide two lanes of eastbound Ie implemented until spring.

ern about snow/ice removal. The Illinois Department of s staff have reviewed the traffic routes are aware of the snow vill be as proactive as possible given the restrictive lanes. We will mprove snow removal methods on the new routes.

bund traffic pattern in Moline beginning in the spring, this should nificant snow/ice conditions to impact traffic on the new route. ent regarding the proposed traffic pattern changes.

c trends showed that the majority of interstate traffic diverts to ces congestion on I-74. Based on these trends, the proposed traffic local eastbound/Illinois-bound traffic to 19<sup>th</sup> Street is anticipated 8 minutes to the average travel time from Middle Road to Avenue bwntown Moline will also be available via the River Drive off ramp eastbound River Bridge/lanes with the potential traffic control traffic flowing, and only add an average of 2-3 minutes to your ent a continuous traffic flow from the 7th Avenue exit to This means that eastbound (Illinois-bound) I-74 traffic will not have I they reach 12th Avenue. The signal timing at 12<sup>th</sup> Avenue and d be set to prioritize southbound 19<sup>th</sup> Street traffic. This yould require closing eastbound 7th Avenue and northbound 19th ttbound and westbound I-74 would be able to exit at 7th Avenue turn right. We appreciate your input and will consider your cion.

with the bridge contractor to keep progress moving forward on /e are confident in the ability of the bridge to be built, the or to perform the work, and the safety and performance of the

								completed structure. We ma cost-effective structure.
18	1/2/2020	Responded	Andrew Zolesky	Other	Phone	Respond to me by phone	Hello, my name is Andrew [last name]. I work for a company called Here Maps. And we provide maps that are used in many of the vehicle navigation systems around the United States in North America. Anyways, I had a question regarding the new configuration from Illinois into Iowa on I-74. How you swing around the ramp and I was just wondering how long this configuration will be in place before the the new section of bridge is open for I-74 westbound into Iowa. If you could please give me a call back when you get a chance, [phone number]. Thank you.	Left voicemail stating that a project website. Also stated (Iowa-bound bridge) is comp
19	1/7/2020	New	Carol Simpson		Online	Do not send me a response		No response necessary.
20	1/9/2020	Responded	Sue N/A	Other	Phone	Respond to me by phone	Yes, I am just trying to figure out if we can access the I-74 Bridge off of Avenue of the Cities. I live in Bettendorf, but I work in the Moline, and I'm just trying to figure out how to get home. So if you could give me a call and let me know. My work number is [phone number], and my name is Sue. Thank you.	Left message with front des Cities.
21	1/11/2020	New	Melinda THOMPSON	Design	Online	Do not send me a response	New traffic pattern: I think anything that alleviates the chaos downtown Moline will help. I don't even come from Iowa yet daily I have to deal with the long lines of traffic and trying to avoid constant changes. I come from Wilson school area Moline to the Arsenal, and have added at least 5-10 more minutes to commute time, have changed my routes three times now. I am going out of my way at least 2 miles daily to avoid everything. Whatever you need to do to get it done quicker, I am for	Thank you for your commen appreciate your input.
22	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	This project is the most exciting project ever come to the QC. People need to be patient and realize the time it took to plan this and it is not going to be built overnight. There are a lot of trades building the bridge who know what they are doing let them do the job.	Thank you for your interest for the project and look forv
23	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	I think this is a great project and will only improve our transportation system between IL and IA. Great things take time so we, as motorists, need to be mindful of the magnitude of this project. Thank you for taking the time to address and open up the project specs to help the citizens of the QC better understand.	Thank you for your interest for the project and look forv
24	12/11/2019	New	Lisa Miotto	Other, Traffic	Public Meeting	Respond to me by email or mail	I feel better about the proposed changes knowing that the roadway will be 2 lanes all the way through the detour. I'm skeptical that it will go as smoothly as presented, but am not as firmly opposed to the idea as I was. Avoiding traffic delays is more important to me than avoiding cost overruns.	Thank you for your comment In order to keep traffic moving continuous two-lane traffic means that eastbound (Illing they reach 12th Avenue. The set to prioritize southbound closing eastbound 7th Avenue westbound I-74 would be at

maintain an unwavering commitment to deliver a safe, sound, and

t a map of the new configuration in Moline is available on the ed that this configuration would be in place until the westbound mpleted, which is anticipated to be in the second half of 2020.

esk stating that motorists can access I-74 from Avenue of the

ent regarding the proposed traffic pattern changes. We

st in the I-74 River Bridge project. We appreciate your enthusiasm prward to completing this iconic new structure.

st in the I-74 River Bridge project. We appreciate your enthusiasm prward to completing this iconic new structure.

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by by by by by the proposed traffic route, we plan to implement a ic flow from the 7th Avenue exit to southbound 19th Street. This inois-bound) I-74 traffic will not have to stop at a stop light until The signal timing at 12<sup>th</sup> Avenue and Avenue of the Cities would be nd 19<sup>th</sup> Street traffic. This configuration, however, would require enue and northbound 19th Street. Traffic on both eastbound and able to exit at 7th Avenue but would only be able to turn right.

								We appreciate your input a
25	12/11/2019	New	Mike Day	Other, Traffic	Public Meeting	Respond to me by email or mail	The earlier you can open 19th Street Southbound from 7h Avenue, the better, even if you are not yet ready to drop traffic from Iowa on to 7th Avenue. The current left turn to get to the on ramp for I-74 at 7tth Avenue leads to backups on 19th Street. Having the option to proceed via 19th Street to Avenue of the Cities would remove that congestion.	Thank you for your commer We appreciate your input a when there are opportunitie
26	12/11/2019	New	Tammy Mutka	Traffic, Other	Public Meeting	Respond to me by email or mail	I commute I-74 to IA and back 5 days/week. Gas changed from 330 miles/tank to 285 due to current detours. Commute time from 19 minutes to 32 minutes now (55 minutes in snow). Main concern is that new bridge is on task and work can be finished instead of non- [illegible]. Willing to do proposed detour if can be April to Oct/Nov. Main concern is road maintenance during snow. This is biggest risk for public. Moline needs to step up their maintenance in detour areas. Note - would appreciate opportunity for IA DOT to let me take historic photos on I-74 current bridge before destruction (1-2 hours once all traffic diverted).	Thank you for your commen- changes. The proposed traffic pattern would remain in place until second half of 2020). After to 74 traffic would be shifted to delayed, the proposed east westbound bridge is complet We appreciate your input re- with the project team. There may be an opportuni demolition of the existing b
27	12/11/2019	New	Ron Mutka	Other, Traffic	Public Meeting	Respond to me by email or mail	I came in against the proposal. I left supporting it. 1) The movie was not useful in my decision. It lacked content needed for better decision making, for example, please include digital pictures of the current proposed exit and route. 2) How many people per day and per hour would use the proposed route? 3) What are the average costs per commute? Insurance risk, gas, cost per hour value to average person, or business? 4) What happens if the primary bridge project is delayed? 5) What is the duration of the proposed detour if everything remains on schedule? **After talking to the managers** I understand better the reasons for the proposed route. And now support the change. But please consider the following: Have [illegible] by ILDOT if snow or ice falls on the road, Provide adequate lighting for route, Provide driver ettiquette suggestions for more effective accident removal and to avoid multiple car accidents by public awareness training.	Thank you for your commer changes. Regarding your question ab proposed route, our traffic r per day will use the propose approximately 1,200 vehicle approximately 1,600 vehicle which reduces traffic conge The average cost to motoris approximately \$3.40 and fo commute. The westbound bridge is an westbound bridge is comple new bridge. If the westbour traffic pattern would remain We appreciate your input an snow/ice removal, lighting,

and will continue to look for ways to improve traffic flow.

ent regarding the proposed traffic pattern changes.

and will continue to monitor traffic and make improvements ities to do so.

ent regarding the existing traffic and the proposed traffic pattern

ern change in Moline is anticipated to begin in spring 2020 and til the westbound bridge is completed (anticipated to be in the r the westbound bridge is complete, eastbound and westbound Id to the new bridge. If the westbound bridge construction is stbound I-74 traffic pattern would remain in place until the plete.

regarding snow removal and will discuss improving maintenance

nity for the public to take photos from the new bike path prior to bridge but it's too early to confirm that.

ent regarding the public meeting and proposed traffic pattern

about how many people per day and per hour would use the c modeling shows that approximately 18,000 to 20,000 vehicles used route. During the morning peak hour, that equates to cles per hour and in the afternoon peak it equates to cles per hour. The primary detour would direct traffic to use I-80, gestion on the local traffic route.

rists per commute using the spring 2019 westbound route was for the proposed eastbound route it is approximately \$2.30 per

anticipated to be completed in the second half of 2020. After the plete, eastbound and westbound traffic would be shifted to the und bridge construction is delayed, the proposed eastbound I-74 ain in place until the westbound bridge is complete.

and will take into consideration your suggestions regarding g, and driver awareness.

28	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	Keeping the contractors on the job so the project can move forward is a good idea and helps keep the delays at a minimum	Thank you for your commer your input.
29	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	If it shortens the overall length of construction, go for it	Thank you for your commer your input.
30	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	Get the lowa bound bridge done!!! Quit the squabbeling.	Thank you for your interest We are working diligently w the Iowa-bound bridge. We capability of the contractor completed structure. We m cost-effective structure.
31	12/11/2019	New	Jim Cox	Traffic	Public Meeting	Do not send me a response	Do whatever is needed to expedite. Tweek lights and traffic delays continuosly as needed to optimize. Try to optimize for incoming Iowa traffic to Arsenal.	Thank you for your commer appreciate your input. We v there are opportunities to d
32	12/11/2019	New	N/A	Other	Public Meeting	Do not send me a response	Very informative - answered all of our questions. I am in favor of the new traffic plan.	Thank you for your commer changes. We appreciate you
33	12/11/2019	New	Randy Eckstein	Schedule, Traffic	Public Meeting	Send me a response	Really upset on time overun, watching prime weather conditions all summer and fall with minimal progress. Some delay can be expected - 12 months in a blackeye - busted tooth - and grounds for divorce! Red flag on bidding. Contractors \$35 million under average bid. "Fishy". Makes QC look foolish and like you hired your unemployed brother in law to bid and build this bridge. Traffic is a mess now, 4 minute stop light at Grant Street both ways. No way to get around it. Moline traffic stop and go every hundred feet. Best time 15 minutes to get on bridge, worst 30 minutes. Snow this morning made trip downtown Moline a joke. A slick mess at 5:30 am with 1 inch of snow. Better keep 24 tow trucks ready to keep traffic wrecks cleaned up if we get anything more than 1 inch of snow, 48 trucks if we get ice! and put chains on tow truck tires, my gravel road at home was in better shape. Over-all tough job you have, but I am paying very well to do a professions job/not a career job on I-74 bridge.	Thank you for your interest the bridge construction and The Iowa and Illinois depart improvements when there a snow removal and will discu We are working diligently w the Iowa-bound bridge. We capability of the contractor completed structure. We ma cost-effective structure.

nent regarding the proposed traffic pattern changes. We appreciate

ent regarding the proposed traffic pattern changes. We appreciate

est in the I-74 River Bridge project.

with the bridge contractor to keep progress moving forward on /e are confident in the ability of the bridge to be built, the or to perform the work, and the safety and performance of the maintain an unwavering commitment to deliver a safe, sound, and

ent regarding the public meeting and proposed traffic plan. We e will continue to monitor traffic and make adjustments when o do so.

ent regarding the public meeting and proposed traffic pattern our input.

est in the I-74 River Bridge project and for your comments regarding nd traffic.

artments of transportation continue to monitor traffic and make e are opportunities to do so. We appreciate your input regarding scuss your suggestions with the project team.

with the bridge contractor to keep progress moving forward on /e are confident in the ability of the bridge to be built, the or to perform the work, and the safety and performance of the maintain an unwavering commitment to deliver a safe, sound, and