

Appendix G

Public Involvement

Public Involvement Plan

I-465 Transportation Systems Management and Operations (TSMO) Improvements from I-70 to I-65, SE Quadrant

Des. No. 2001134

Updated July 2021



Introduction

This Public Involvement Plan (PIP) has been developed for the proposed I-465 Transportation Systems Management and Operations (TSMO) Improvements from I-70 to I-65, SE Quadrant project, Des. No. 2001134 (hereinafter referred to as “I-465 SE TSMO Project”) by the consulting firm Parsons Transportation Group (Parsons), on behalf of the Indiana Department of Transportation (INDOT). The purpose of this plan is to establish the goals and strategies for engaging with the public and key stakeholders in accordance with the current *INDOT Public Involvement Procedures Manual*. Successful public involvement establishes communication between the public and INDOT in order to integrate the views, community concerns, transportation needs, and environmental considerations of the public into the transportation decision-making process.

Project Description

The I-465 SE TSMO Project is located in the southeastern portion of Marion County, Indiana, within Perry, Franklin and Warren Townships. The project includes I-465 from I-70 to I-65 and the entrance ramps at each interchange within the project limits, including:

- Emerson Avenue to WB I-465
- Everson Avenue to EB I-465
- Old US 421 to SB I-465
- Shadeland Avenue to SB I-465
- Brookville Road/US 52 to NB I-465
- Brookville Road/US 52 to SB I-465
- Washington Street/US 40 to NB I-465
- Washington Street/US 40 to SB I-465

The need for this project stems from safety and delay issues for motorists traveling on I-465 in this corridor. High traffic volumes and numerous entrance ramps has resulted in severe congestion and inconsistent speeds, with stop-and-go conditions common during peak hours. This project will evaluate the potential for TSMO strategies to address these needs. TSMO strategies under consideration include ramp metering and variable speed limits on entrance ramps and the highway.

Due to the nature of the project, it is anticipated to require a Categorical Exclusion, Level 4 (CE-4) environmental document as part of the National Environmental Protection Act (NEPA) process. Based on preliminary environmental analyses, the current recommended alternative does not require right-of-way, it falls under Minor Projects Programmatic Agreement for cultural resources, and it does not require a noise study. This PIP will be updated if changes are made to the scope or environmental document level.

Goals for the Public Involvement Plan

INDOT recognizes that local residents and business owners play an important role in shaping the transportation decisions that will affect their community. They count on a safe and reliable transportation network to travel throughout the community and the state. Residents depend upon this network to reach their workplaces, leisure destinations, and to return home safely. Businesses require an efficient and safe transportation network to transport products and materials to their production facilities, clients, and customers. In addition to being users of the transportation network, these community members have a stake in transportation decisions because they are taxpayers. As INDOT makes decisions on transportation improvement projects, it must incorporate:

- Input from the public,
- Input from local governmental agencies, including local and regional transportation/transit agencies whose facilities and routes may be impacted by the project,
- Input from resource agencies, such as federal and state agencies, that are responsible for environmental resources, such as historic resources, air quality, and endangered species, and
- Input from local business owners.

The goals established for this Public Involvement Plan are:

- Effectively communicating the project's benefits and schedule
- Responding quickly and clearly to community and user concerns
- Identifying potential project stakeholders, such as local officials and community members impacted by the project
- Establishing an inclusive and collaborative relationship with the various community members and key stakeholders throughout the public involvement process
- Developing partnering activities that assist with gathering information from stakeholders
- Adequately evaluating potential levels of controversy to address specific concerns and developing context sensitive solutions
- Working together to develop a transportation solution that has broad public support
- Providing productive forums for members of the public to provide comments

The Public Involvement Process

Open communication between local officials, key stakeholders, the public, and the Project Management Team (Team) is essential for developing a transportation plan that aligns with the needs of the community. The Team leading public involvement efforts for this project consists of INDOT Greenfield District Customer Service, local officials, and Parsons. This Team will manage the public involvement activities outlined in this document and coordination with agency stakeholders.

The public involvement process begins with coordination between the Team, local officials, and other stakeholders that will be involved with the project. Initial coordination meetings with local officials will include information on the scope and schedule of the project, as well as an opportunity to discuss potential project impacts as they relate to their jurisdiction. The process continues by providing information to these same stakeholders and keeping them informed of the project's direction.

The use of virtual public involvement methods to broaden public participation and promote safe and prudent practices, particularly during emergencies, in a manner that meets all federal and state public involvement requirements.

Stakeholders

Stakeholders are people and organizations that may be affected by the project, and agencies with jurisdiction related to project activities. Throughout the public involvement process, the Team will need to engage, educate, communicate, and coordinate with various categories of stakeholders. While such meetings are intended to focus on concerns related to a specific group of individuals, they are open to the public but will not be advertised. The Team will prepare the agenda and necessary handouts for all such meetings. Team members will also have numerous contacts with stakeholders throughout the project and will answer any questions and address comments throughout the project via e-mail and by telephone. Different outreach tools and engagement activities will need to be implemented depending on the targeted group of stakeholders.

The stakeholder categories for the I-465 SE TSMO Project include:

- Elected officials
- Federal, local, and regional transportation agencies
- Public safety and emergency responders
- Federal, state, and local resource agencies
- General public
- Potentially affected property owners, businesses and residents
- Major businesses and employers in the project area
- Community, neighborhood, and non-profit groups, including churches
- Historical/archeological consulting parties
- Native American Tribes

Stakeholder Communication Strategies

The groups of stakeholders described below will be coordinated with at different phases of the public involvement process. The phases of the process, and the level of stakeholder involvement at each phase, are as follows:

Communication Phases

Date	Phase Description
Fall/Winter 2020	Virtual Public Information Meeting (via webinar), December 15, 2020 Section 106, MPPA Category A determination, December 15, 2020 Since limited impacts are anticipated, a resource agency meeting (RAM) is not proposed
Spring 2021	Early Coordination Letters (March 25, 2021) Stakeholder Meeting (via webinar), May 10, 2021
Summer 2021	Notice of Planned Improvement Offering of Public Hearing Opportunity (Notice): Following release of the CE-4 document for public involvement, the public will have the opportunity to comment on the findings of the environmental document and request a public hearing. <ul style="list-style-type: none"> • Publish Notice in Indianapolis Star (twice) • Publish Notice in Indianapolis Recorder (once – published weekly) • Distribute to stakeholder list

Elected Officials

The Team will conduct outreach via email or by telephone to inform elected officials about the project. Elected officials will be informed about road closures and detours during the early coordination phase. The Team will conduct meetings with elected officials at their request. The PIP will be updated as appropriate to reflect any changes in the following offices.

Elected Officials

Name	Office
Governor Eric Holcomb	Governor of Indiana
Senator Mike Braun	U.S. Senator
Senator Todd Young	U.S. Senator
Representative Andre Carson	U.S. Congress 7th District of Indiana
Dennis Buckley, Mayor	City of Beech Grove
Joe Hogsett, Mayor	City of Indianapolis

Name	Office
State Senator Michael Crider	Senate District 28
State Senator Aaron Freeman	Senate District 32
State Representative Mitch Gore	House District 89
State Representative Mike Speedy	House District 90
State Representative Robin Shackelford	House District 98
State Representative R. Blake Johnson	House District 100
Councillor Michael Paul Hart	City-County Council District 18
Councillor David Ray	City-County Council District 19
Councillor Frank Mascari	City-County Council District 21
Councillor Michael Dilk	City-County Council District 24
Susie Day, Trustee	Marion County Perry Township
Don Brunson, Trustee	Marion County Franklin Township
Vernon Brown, Trustee	Marion County Warren Township

Federal, Local, and Regional Transportation Agencies

The federal transportation agency with authority over the project is the Federal Highway Administration (FHWA). Local and regional transportation agencies and providers include:

- INDOT, Central Office
- INDOT, Rail Programs Office
- INDOT, Greenfield District
- Indianapolis Metropolitan Planning Organization (MPO)
- City of Indianapolis Department of Public Works
- IndyGo
- CSX Railroad
- Perry Township Metropolitan School District
- Franklin Township Community School Corporation
- Warren Township Metropolitan School District
- Beech Grove City Schools

IndyGo provides fixed-route and paratransit service within Marion County. The four school districts provide bus service for students to and from schools within the I-465 SE TSMO project area. CSX Railroad owns the railroad that goes under I-465 just east of the I-65 interchange and the line just north of I-74 interchange.

Public Safety and Emergency Responders

Public safety and emergency responders must be able to effectively respond to incidents in the project area. Public safety and emergency response agencies within this jurisdiction include:

- Indiana State Police
- Indianapolis Metropolitan Police Department
- Marion County Sheriff’s Office
- Indianapolis Fire Department
- Beech Grove Police Department
- Beech Grove Fire Department
- Marion County Emergency Management Agency

Each of these organizations requires specific coordination efforts to solicit input on how their response routes and response times may be impacted by the project. Meetings between the Team and these agencies will occur during the planning and environmental phase.

Major Businesses and Employers

The corridor includes numerous major employers, primarily near the Emerson Avenue, US 52/Brookville Road, and US 40/E. Washington Street interchanges and along Shadeland Avenue, which parallels the northern portion of the corridor. Project notification efforts will include tactics to make these businesses aware of the project and how to participate.

Neighborhoods, Community Non-Profits, and Religious Organizations

The Team will coordinate with City of Indianapolis Marion County throughout the project, including the initial public open house and consulting party meetings.

Various types of neighborhood associations, nonprofit community development corporations, and other community nongovernmental organizations operate within the project area. The nature of their work generally consists of community outreach programs, community and neighborhood development, and advocacy. The Team will coordinate with these organizations during the public involvement process. Coordination may involve outreach via email or by telephone. At the organizations’ requests, the Team may hold a meeting to discuss how the project may affect the work they do, and how the specific communities they interact with may be affected. As potentially affected populations are identified, these groups may be included in specific environmental justice (EJ) outreach.

Neighborhoods and Community Non-Profits

Name	Association Type
Indy Chamber	Chamber of Commerce for metro-area
Greater Southport Business Alliance Franklin Township Chamber of Commerce Eastside Business Association	Local business organizations
Marion County Alliance of Neighborhood Associations Indianapolis Neighborhood Resource Center Community Alliance of the Far Eastside Far Eastside Neighborhood Association	Umbrella organizations of neighborhood associations

Name	Association Type
Carson Square Neighborhood Association Carson's Farm Community Association Greater Southport Community Alliance South Eastwood Neighbors Woods and Meadows Homeowners Association Arlington Commons HOA Carriage Courts Homeowners Association Churchman Estates Homeowners Association New Bethel Homeowners Association Villas of Quail Run Wildcat Run Homeowners Association Bierman Neighborhood Group Brookfield Place Homeowners Association Eastgate Neighborhood Association English Crossing Homeowners Association Franklin/Post Neighborhood Group Raymond Park Neighborhood Association Rumford Eastway Manor Association South Franklin Road Civic League Sycamore Heights Neighborhood Association Washington Place Neighborhood Association Willow Lakes and Willow Oaks HOA	Neighborhood Associations
Trinity Lutheran Church Post Road Christian Church Church of the Living Water Lighthouse Community Church Free Presbyterian Church Lighthouse Baptist Church Refuge Bible Church Southeastern Church of Christ St. John Lutheran Church Nativity Catholic Church Life Church and Training Center First Baptist of Beech Grove Beech Grove Independent Nazarene South Emerson Church of God Chin United Pentecostal Church Heartland District of Uua Ascension Lutheran Church and Preschool Church of God-Cleveland Falam Baptist Church of Indiana Beech Grove Bible Church Faith United Church of Christ Bethany Christian Church Lifeway Church	Churches/religious institutions

General Public

Engagement with the general public will occur during the public information meetings/open houses and the public hearing. Throughout the project, INDOT's website, traditional media, and social media will be used to communicate with the public. This is discussed in greater detail below.

Community Advisory Committee (CAC)

A community advisory committee (CAC) is not proposed for this project. Small group meetings will occur with three groups: (1) emergency responders, (2) public officials, and (3) school/community stakeholders. Other community stakeholders will be invited to public open houses.

Environmental Justice Outreach

As described in its Public Involvement Manual, "INDOT considers the needs of low-income and minority populations as it undertakes public involvement activities in the planning, programming, and project development processes. INDOT seeks opportunities to reach out to and solicit input from these populations." Federal law, including Title VI of the Civil Rights Act of 1964, the Federal Highway Act of 1973, and the Age Discrimination Act of 1975, prohibits discrimination on the basis of race, color, national origin, gender, and age. Furthermore, Executive Order 12898, titled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," obligates Federal actions (those receiving federal funding) to avoid or minimize and mitigate adverse impacts to low-income and minority populations and to assure that disproportionately high and adverse impacts on these populations are identified and addressed.

In accordance with these regulations, INDOT policy requires that Environmental Justice (EJ) populations be identified and provided an opportunity for meaningful participation in the process. Based on the preliminary review of US Census data and the US Department of Housing and Urban Development (USHUD) Resource Locator mapping tool (<https://resources.hud.gov/>), potential EJ populations are present within the project area. Additional analyses and information will be gathered to identify potential EJ populations. Planned coordination with local elected officials and community groups to help identify minority and low-income populations within the study area. Utilizing the local officials, community groups, and local churches will enable the Team to effectively provide outreach to EJ populations. Community contacts and any organizations serving these populations will be added to the project mailing list and informed of relevant public involvement activities and project milestones.

Public Informational Meeting/Open House

Public informational meetings will be conducted to gather input from the full range of project stakeholders. Typically, on projects of this type and magnitude, the open house format is most effective, as it provides the public flexibility on time and provides for one-on-one discussion between stakeholders and the Team. Two public meetings were held during this phase of the project. A summary of the public meetings will be included in the environmental document.

The public meetings will be advertised on INDOT's website and in local media outlets, and notices will be sent to all members of the project mailing list. As appropriate, meeting notices will be placed in neighborhood and/or non-English publications, foreign language materials and translators will be provided, and, to the extent possible, the meeting locations will be transit accessible.

Virtual options to supplement public involvement requirements may be considered by FHWA and INDOT to supplement an in-person public information meeting and/or to enhance the in-person public information

meeting experience. A virtual public information meeting can be held to supplement a smaller in-person component when the Governor and/or President declares a health or other emergency and/or a local government jurisdiction determines that an in-person public hearing should not be held out of concerns for public health and/or safety.

To ensure compliance with the Americans with Disabilities Act (ADA), the public meetings will be held at locations that are accessible to individuals in wheelchairs, and meeting notices will include a contact person for requests for accommodation for hearing or sight-impaired individuals (e.g., sign language interpreter, telecommunications device for the deaf, etc.).

Resource Agency Coordination

The National Environmental Policy Act of 1969 (NEPA) calls for an examination and consideration of impacts of a proposed action on sensitive resources for a project of this scale. These resources include, but are not limited to, floodplains, wetlands, endangered species, historic and archaeological sites, parks, air quality, wildlife habitat, etc. There also are the transportation needs that must be fulfilled and socio-economic impacts that require consideration. Because of impacts to resources, socio-economic impacts, and needed transportation improvements, there is a balanced decision-making process that considers a range of factors of both impacts to the resources and the transportation needs. To produce better environmental decisions, agencies with special expertise or jurisdiction by law are included in the study process. This resource agency involvement begins early in the study to identify important issues related to the proposed action and continues throughout the study to avoid conflict later, ensuring full input from the various agencies. These agencies will receive early coordination letters. Individual meetings will occur as needed. A resource agency meeting is not currently scoped for this project. Resource agencies invited to consult on this project will include:

- US Fish and Wildlife Service (USFWS)
- Natural Resource Conservation Service (NRCS)
- National Park Service (NPS)
- US Department of Housing and Urban Development (USHUD)
- Indiana Department of Natural Resources (IDNR), Division of Fish and Wildlife (DFW)
- Indiana Geological and Water Survey (IGWS)
- Indiana Department of Environmental Management (IDEM)
- Marion County Surveyor
- Indianapolis MPO
- Indianapolis Parks and Recreation Department
- Beech Grove Parks Department
- Indianapolis Department of Public Works
- Beech Grove Public Works Department

Section 106 Consulting Party Coordination

Congress set forth the importance of historic and archaeological resources upon the fabric of American life as a part of the National Historic Preservation Act (1966) (NHPA), which states that “the historical and cultural foundations of the Nation should be preserved as part of our community life and development in order to give a sense of orientation to the American people.” As a result of the NHPA, federal agencies are required to take into account the impact of federal undertakings upon historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects, and/or districts within the Area of Potential Effects (APE). This consulting party involvement begins early in the study to identify important issues related to the

proposed action and continues throughout the study to avoid conflict later, ensuring full input from the various agencies.

At this point in the project development, it is not anticipated that Section 106 process will be required; therefore, no review by INDOT Cultural Resources Office is necessary. INDOT Cultural Resources Office will be coordinated with to determine if additional input in the Section 106 process is needed.

Updates on INDOT's Website

To provide the public with access to the most current project information available, the Team will provide project-related information to INDOT, who will be responsible for maintaining the project's website. Information that will be available on this website includes, but is not limited to:

- Project News and Updates
- Specific Project Information Such As: Project Schedules, Project Meetings, and Project Documents
- Contact Information for Providing Comments
- Project Maps
- Links to other Websites including INDOT and FHWA

Noise Study Information Meeting

It is assumed that this project will qualify as a Type III project, and that a noise study will not be required.

Public Hearing

A public hearing will be offered once the draft CE-4 has been released by INDOT for public involvement. The draft CE-4 will be posted on the project's website, and copies can be mailed upon request. A Notice of Planned Improvement Offering of Public Hearing Opportunity (Notice) will be advertised twice in the legal section of the area's most widely circulated newspaper, the *Indianapolis Star* and advertised once in the *Indianapolis Recorder* (published weekly). The Notice will be posted on the project's website, mailed to the project's stakeholder list, including adjoining landowners, and sent to project stakeholders on INDOT's statewide mailing lists. This Notice will provide a minimum of 15-days in which the public may request a Public Hearing. In addition, the Notice will offer the public the opportunity to submit comments, concerns, and/or questions related to the proposed improvement. The Notice will include contact information for requesting assistance for persons with disabilities or communication barriers. A summary of the public comments and responses to all substantive comments will be included in the final environmental document for the project. If INDOT decides to hold a Public Hearing, then this PIP would be updated accordingly.



Greenfield District
32 S. Broadway St.
Greenfield, IN 46140

PHONE: 1-855-463-6848
FAX: (317) 462-7031

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

December 1, 2020

DES. #: 2001134

NOTICE OF PUBLIC MEETING

The Indiana Department of Transportation (INDOT) will host a virtual public information meeting on, December 15, 2020, at 1:00 p.m. and repeated at 6:00 p.m. The presentation will be conducted via WebEx. To access the meeting go to:

1:00 p.m. meeting: <https://parsons.webex.com/parsons/j.php?MTID=e1ff7b55bd8be680d0733a9e5d8db57ff>

Meeting number: 146 115 8777 Meeting password: INDOTmeeting465!

Can join toll-free by phone: 18337521090 Access code: 146 115 8777

6:00 p.m. meeting: <https://parsons.webex.com/parsons/j.php?MTID=ecc35ca229e4973ff8315441be40f7125>

Meeting number: 146 374 6071 Meeting password: INDOTmeeting465!

Can join toll-free by phone: 18337521090 Access code: 146 374 6071

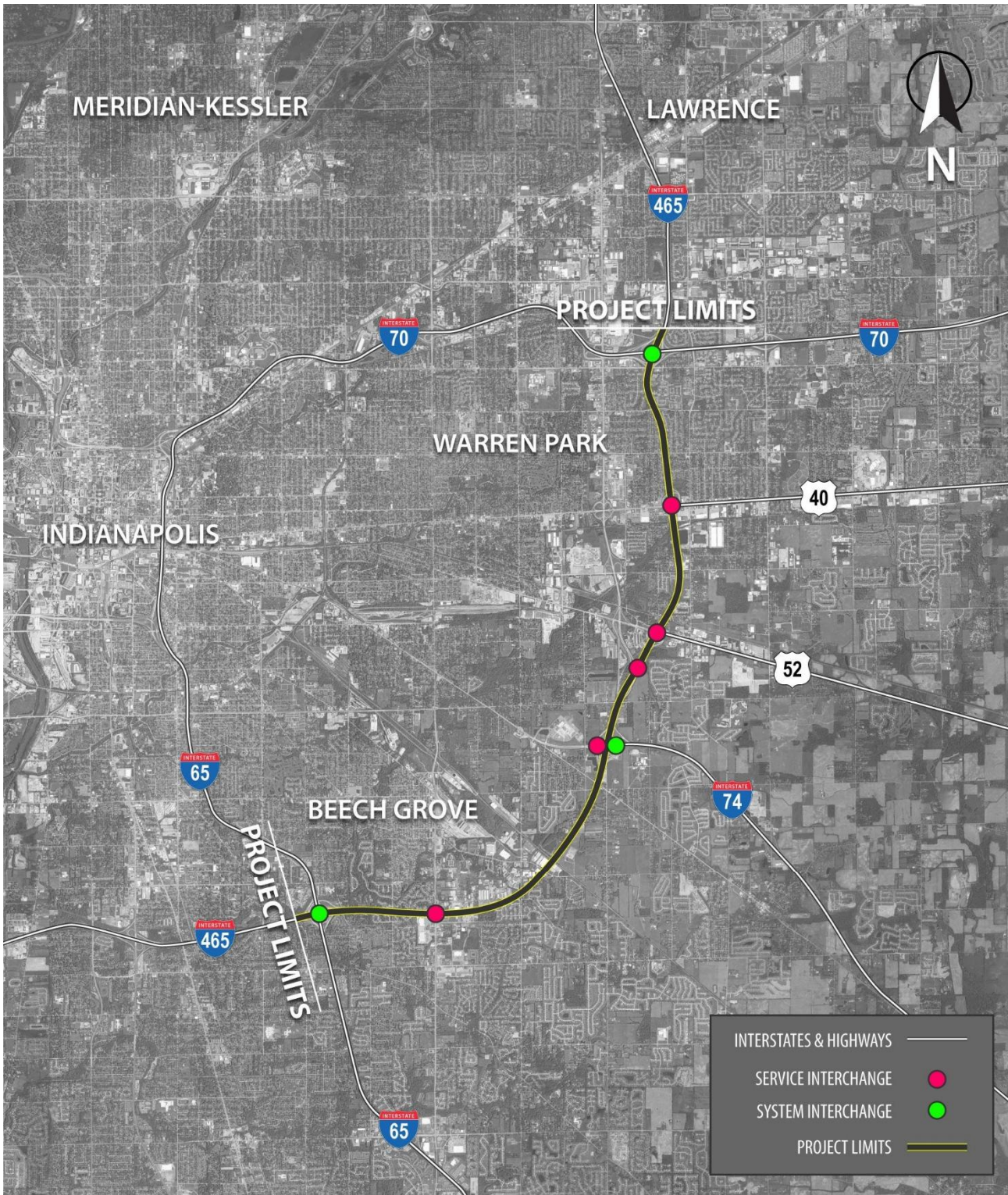
The purpose of the public meeting is to offer all interested persons an opportunity to comment on preliminary plans for the proposed I-465 Southeast Transportation System Management Operations (TSMO) in Marion County, Indiana. TSMO is a set of strategies that focus on operational improvements to the interstate system before extra capacity is needed. I-465 serves as an interstate loop surrounding Indianapolis. The Project location is on the southeast portion of I-465 from the I-65 interchange on the west to the I-70 interchange on the east (approximately nine miles).

The needs for this project are due to the safety and congestion issues in the corridor. This corridor experiences congestion and slows during the peak periods, which is resulting in high crashes during this time.

The proposed project would review potential TSMO strategies, including a variable speed limit (VSL) system and ramp metering. A VSL system would lower the speed limit to meet current travel conditions, which would help with congestion and increase safety. This would reduce the speed differential amongst the travelers, resulting in fewer collisions. This system would be active during peak conditions. Ramp metering allows vehicles to merge smoothly onto the mainline and reduces the need for vehicles on the mainline to reduce speed. Ramp metering can control the rate at which vehicles enter the mainline from the ramp.

Project information, including a copy of the presentation and graphics, will be available on INDOT's website: <https://www.in.gov/indot/2704.htm>

With advance notice, the Project Team can provide special accommodation for persons with disabilities and/or limited English speaking ability and persons needing auxiliary aids or services such as interpreters, signers, readers, or large print. Should special accommodation be needed please contact Alex Lee, Parsons at (317) 616-1011, or email alexander.lee@parsons.com.



I-465 SE TSMO Project

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 Meeting number: 146 115 8777 Meeting password: INDOTmeeting4651 Can join toll-free by phone: 18337521090 Access code: 146 115 8777
 6:00 p.m. meeting: <https://parsons.webex.com/parsons/j.php?MTID=ccc35ca229e4973ff8315441be40f7125>
 Meeting number: 146 374 6071 Meeting password: INDOTmeeting4651
 Can join toll-free by phone: 18337521090 Access code: 146 374 6071

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 hspaxip 12/11/20

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for
The Indianapolis Recorder Newspaper
 Indiana's Greatest Weekly

2901 N Tacoma Ave

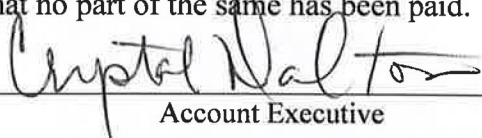
Indianapolis, IN 46218

Office (317) 924-5143 ~ Fax (317)921-6653

PUBLISHER'S CLAIM

Computation of charges:
 Total number of lines in notice.....56
 Column 2 inch deep equal 112 total column inches @ .6385
TOTAL AMOUNT OF CLAIM.....71.51

Legally due, after allowing just credits, and that no part of the same has been paid.


 Account Executive

Date: January 6, 2021

PUBLISHER'S AFFIDAVIT

State of Indiana, Marion County, ss:

A notary public in the state of Indiana who being duly sworn upon her oath, says (s) he is a clerk for The Indianapolis Recorder, a weekly newspaper of general circulation, printed and published in the English language in the city of Indianapolis, in the county of Marion, that the notice of which the attached is a true copy, was duly published in said paper for 1 time successively, the dates of publication being as follows:

The Indianapolis Star

130 South Meridian Street
Indianapolis, IN 46225
Marion County, Indiana

Federal Id: 06-1032273

PARSONS

Account #:INI-61927
Order #:0004492354
of Affidavits: 2
Total Amount of Claim:\$99.67
This is not an invoice

PARSONS
ATTN THOMAS WARRNER
101 W OHIO ST STE 2121
INDIANAPOLIS, IN 46204

PUBLISHER'S AFFIDAVIT

STATE OF WISCONSIN,
County Of Brown } SS:

Personally appeared before me, a notary public in and for said county and state, the undersigned

I, being duly sworn, say that I am a clerk for THE INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in the state of INDIANA and county of MARION, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 times., the dates of publication being as follows:

The insertion being on the 12/04/2020

Newspaper has a website and this public notice was posted in the same day as it was published in the newspaper.

Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

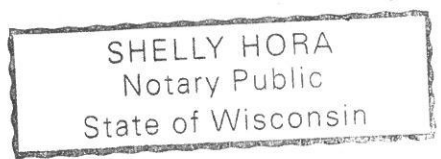
Kathleen Allen

Date: 12-4, 2020 Title: Clerk

Subscribed and sworn to before me this 4 day of December, 2020

Shelly Hora
Notary Public

Notary Expires: 8-25-23



To: INDIANAPOLIS

STAR

(Governmental Unit)

County, Indiana

Indianapolis, IN

79 lines, 2 columns wide equals 158 equivalent lines at \$0.63 per line @ 1 days, \$99.67

Website Publication \$0

Charge for proof(s) of publication \$0.00

TOTAL AMOUNT OF CLAIM \$99.67

Acct #: INI-61927
Ad #: 0004492354

DATA FOR COMPUTING COST
Width of single column 9.5 ems
Number of insertions 1
Size of type 7 point

Claim No. _____ Warrant No. _____

IN FAVOR OF

The Indianapolis Star

Indianapolis, IN

Marion County

130 S. Meridian St. Indianapolis, IN 46225

I have examined the within claim and hereby certify as follows:

That it is in proper form.

This it is duly authenticated as required by law.

That it is based upon statutory authority.

That it is apparently (correct)
(incorrect)

\$ _____
On Account of Appropriation For

FED. ID

#06-1032273

Allowed _____, 20____

In the sum of \$ _____

I certify that the within claim is true and correct; that the services there-in itemized and for which charge is made were ordered by me and were necessary to the public business.

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OF
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hspaxlp

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PARSONS

Account #:INI-61927
Order #:0004492354

of Affidavits: 2
Total Amount of Claim:\$99.67
This is not an invoice

PARSONS
ATTN THOMAS WARRNER
101 W OHIO ST STE 2121
INDIANAPOLIS, IN 46204

PUBLISHER'S AFFIDAVIT

STATE OF WISCONSIN,
County Of Brown } SS:

Personally appeared before me, a notary public in and for said county and state, the undersigned

I, being duly sworn, say that I am a clerk for THE INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in the state of INDIANA and county of MARION, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 times., the dates of publication being as follows:

The insertion being on the 12/04/2020

Newspaper has a website and this public notice was posted in the same day as it was published in the newspaper.

Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Kathleen Allen

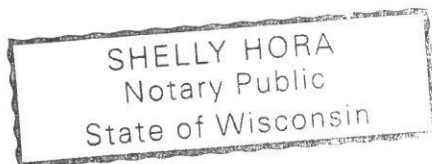
Date: 12-4, 2020 Title: Clerk

Subscribed and sworn to before me this 4 day of December, 2020

Shelly Hora

Notary Public

Notary Expires: 8-25-23



To: INDIANAPOLIS

STAR

(Governmental Unit)

Indianapolis, IN

County, Indiana

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TOTAL AMOUNT OF CLAIM \$99.67

Claim No. _____ Warrant No. _____

**IN FAVOR OF
The Indianapolis Star
Indianapolis, IN
Marion County
130 S. Meridian St. Indianapolis, IN 46225**

I have examined the within claim and hereby certify as follows:

That it is in proper form.

This it is duly authenticated as required by law.

That it is based upon statutory authority.

That it is apparently (correct)
(incorrect)

\$ _____
On Account of Appropriation For

FED. ID
#06-1032273

Allowed _____, 20____

In the sum of \$ _____

I certify that the within claim is true and correct; that the services there-in itemized and for which charge is made were ordered by me and were necessary to the public business.

NOTICE
OF
PUBLIC MEETING

The Indiana Department of Transportation (INDOT) will host a virtual public information meeting on, December 15, 2020, at 1:00 p.m. and repeated at 6:00 p.m. The presentation will be conducted via WebEx. To access the meeting go to:

1:00 p.m. meeting: <https://parsons.webex.com/parsons/j.php?MTID=e1ff7b55bd8be680d0733a9e5d8db57ff>

Meeting number: 146 115 8777 Meeting password: INDOTmeeting465!
Can join toll-free by phone: 18337521090 Access code: 146 115 8777

6:00 p.m. meeting: <https://parsons.webex.com/parsons/j.php?MTID=ecc35ca229e4973ff8315441be40f7125>

Meeting number: 146 374 6071 Meeting password: INDOTmeeting465!

Can join toll-free by phone: 18337521090 Access code: 146 374 6071

The purpose of the public meeting is to offer all interested persons an opportunity to comment on preliminary plans for the proposed I-465 Southeast Transportation System Management Operations (TSMO) in Marion County, Indiana. TSMO is a set of strategies that focus on operational improvements to the interstate system before extra capacity is needed. I-465 serves as an interstate loop surrounding Indianapolis. The Project location is on the southeast portion of I-465 from the I-65 interchange on the west to the I-70 interchange on the east (approximately nine miles).

The needs for this project are due to the safety and congestion issues in the corridor. This corridor experiences congestion and slows during the peak periods, which is resulting in high crashes during this time.

The proposed project would review potential TSMO strategies, including a variable speed limit (VSL) system and ramp metering. A VSL system would lower the speed limit to meet current travel conditions, which would help with congestion and increase safety. This would reduce the speed differential amongst the travelers, resulting in fewer collisions. This system would be active during peak conditions. Ramp metering allows vehicles to merge smoothly onto the mainline and reduces the need for vehicles on the mainline to reduce speed. Ramp metering can control the rate at which vehicles enter the mainline from the ramp.

Project information, including a copy of the presentation and graphics, will be available on INDOT's website: <https://www.in.gov/indot/2704.htm>

With advance notice, the Project Team can provide special accommodation for persons with disabilities and/or limited English speaking ability and persons needing auxiliary aids or services such as interpreters, signers, readers, or large print. Should special accommodation be needed please contact Alex Lee, Parsons at (317) 616-1011, or email alexander.lee@parsons.com.

(S - 10/4/2020 - 000 4492354)

hspaxlp

BREAKING NEWS / Click here for school/business closings and delays

● **WATCH LIVE** / FOX59 Morning News

WEATHER ALERTS / Special Weather Statement: **Boone, Carroll, Clinton, Decatur, Delaware, Fayette, Hamilton, Hancock, Henry,...**

NEWS

INDOT holding virtual public meetings Tuesday on I-465 project



File Photo (Photo By Getty Images)

by: [Web Team](#)

Posted: Dec 15, 2020 / 06:28 AM EST / Updated: Dec 15, 2020 / 06:28 AM EST

INDIANAPOLIS — The Indiana Department of Transportation will host two virtual public meetings Tuesday on the southeast I-465 transportation system management

operations.



The first meeting will be held at 1 p.m. Follow this [link](#). It will be under meeting number 146 115 8777. The meeting password is *INDOTmeeting465!*

You can also join toll-free by phone. Call (833) 752-1090 then enter access code 146 115 8777.

The second meeting will be at 6 p.m. Follow this [link](#) for access. The meeting number is 146 374 6071. The password is *INDOTmeeting465!*

To join toll-free by phone, call (833) 752-1090. The access code will be 146 374 6071.

The purpose of these public meetings is to give people a chance to comment on the preliminary plans for the proposed changes to the southeast portion of I-465 from the

I-65 interchange on the west to the I-70 interchange on the east.

INDOT said the project is needed due to the safety and congestion issues in the corridor.

[Suggest a Correction](#)

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BREAKING NEWS / [Click here for school/business closings and delays](#)

WEATHER ALERTS / Special Weather Statement: **Boone, Carroll, Clinton, Decatur, Delaware, Fayette, Hamilton, Hancock, Henry,...**

NEWS

Public invited to virtual public meetings Tuesday on I-465 project



by: [Web Team](#)

Posted: Dec 15, 2020 / 06:28 AM EST / Updated: Dec 15, 2020 / 06:28 AM EST

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INDOT said the project is needed due to the safety and congestion issues in the corridor.

[Suggest a Correction](#)

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MORE NEWS STORIES



TRANSPORTATION

A variable speed limit plan could have you slowing down on I-465 on the southeast side

Ethan May Indianapolis Star

Published 3:52 p.m. ET Dec. 15, 2020 | Updated 4:42 p.m. ET Dec. 15, 2020

The Indiana Department of Transportation is considering variable speed limits and on-ramp traffic signals to improve congestion and safety on I-465 on Indianapolis' southeast side.

On Tuesday the department sought public feedback on the project, which is in planning stages and is expected to begin construction in 2022.

Work would affect the entire southeast corner of the city's beltway, from the I-65 interchange on the south side to the I-70 interchange on the east side.

North Split construction is underway. Take a drive on the finished interchange.

John LaBlonde, a transportation engineer with design firm Parsons, said this corridor of I-465 has congestion issues that result in high crash rates during busy periods. This project hopes to fix that without the type of major reconstruction soon to be seen at the North Split and planned for the I-465/I-69 interchange in the northeast.

Variable speed limits

INDOT is proposing two ways to do that.

The first is variable speed limits. Sensors would monitor congestion on I-465 and automatically reduce speeds from the usual 55 mph to 50 mph or even 45 mph, depending on traffic.

While the technology is used in road construction sites, LaBlonde said this would be its first permanent use in Indiana. Variable speed limits have been used in the U.S. for over 50 years, INDOT said.

The department said speeds would be dropped only in 5 mph increments and signs would be placed every half mile throughout the 9-mile corridor.

When asked whether research has shown drivers pay attention to the changing limits, project leaders said how much drivers pay attention is based on how much the limits are enforced. INDOT has discussed the technology with Indiana State Police and expects heavy enforcement, particularly when they are first installed.

Speeds would not be increased higher than 55 mph as part of this project, LaBlonde said. This project is focused on alleviating congestion during busy periods, such as rush hour.

LaBlonde explained why variable speed limits are useful on congested roadway:

"In a situation right now, if the posted speed limit is 55, most motorists are only going 45. You may have individuals that are still trying to go 55 or even faster, come to the congestion and have to slam on their brakes. That causes more backups and causes rear-end collisions. So this system will go through and automatically reduce speeds from 55 down to 50. And then if it needs to go further to 50 down to 45."

He said this will help everyone go the same speed, helping clear congestion faster.

Ramp metering

The second solution proposed by INDOT is what they call ramp metering. That's when stoplights are installed on on-ramps.

They're designed to allow one or two cars onto the interstate at a time to give drivers a more safe opportunity to merge into mainline traffic.

The signals are paired with sensors on I-465 that would detect traffic and then decide when to turn green. Drivers would be most likely to see a red light on the ramp during times of heavy traffic, such as when there is a crash. This would be the first use of the technology in Indiana.

INDOT identified eight ramps that would receive the meters, one for every local street that has an interchange with I-465. I-465 interchanges with other interstates would not receive the new traffic signals.

LaBlonde said engineers would choose locations for the signals that both maximize the space for vehicles to line up while still giving vehicles enough distance to accelerate to interstate speeds.

If the line of cars waiting on one of these ramps backs up into the intersection of the surface street, sensors will detect that and turn the signal green, allowing vehicles onto I-465 and clearing the local intersection.

While construction work is still at least a year away, INDOT does not anticipate restrictions on surface streets once work begins.

If the project stays on schedule, it would begin in 2022. That's the same year INDOT expects to complete work rebuilding the North Split. It's also the year targeted for the beginning of reconstruction on I-465 and I-69 on Indianapolis' northeast side.

What do you think about the plans? Let IndyStar transportation reporter Ethan May know at emay@indystar.com or 317-402-1058. Send him a tweet: @EthanMayJ.



Construction for the I-465 Reconfiguration project on the southside of Indianapolis is still more than a year away, but state transportation officials want to prepare drivers for what is planned.

Indiana Department of Transportation spokesperson Mallory Duncan said the project is needed to fix safety and congestion issues in the corridor.

She said a variable speed limit system will be part of the work.


There will be digital signs that will change the speed limit based on traffic so traffic can get through faster and also that's a lot safer," Duncan said.

Virtual public meetings were held Tuesday to give people a chance to comment on the preliminary plans.

More information can be found at <https://www.in.gov/indot/3961.htm>


Tags:[I-465road constructionsouth splitIndiana Department of Transportation](#)

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I-465 SE Transportation Systems Management Operations Project

Virtual Public Information Meeting
December 15, 2020



1

Virtual Public Information Meeting Welcome

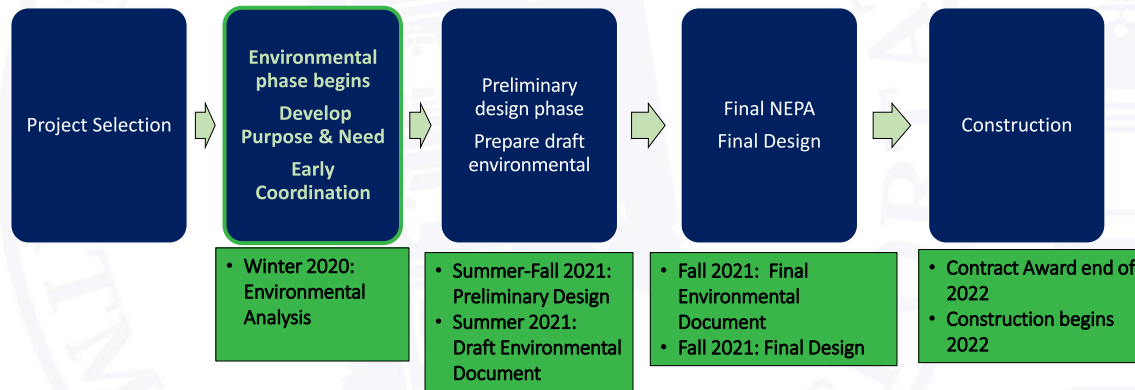
- Introductions of Project Team
- Presentation at 1:00 p.m. and repeat at 6:00 p.m.
- Project website: <https://www.in.gov/indot/4147.htm>



2

Project Development

Categorical Exclusion – Level 4 (CE-4) Project



3

Purpose of the Virtual Public Information Meeting

Stakeholders:

- Opportunity to provide input throughout the Environmental Process
- Discuss key issues
- Promote collaboration
- Build understanding and support throughout the project



4

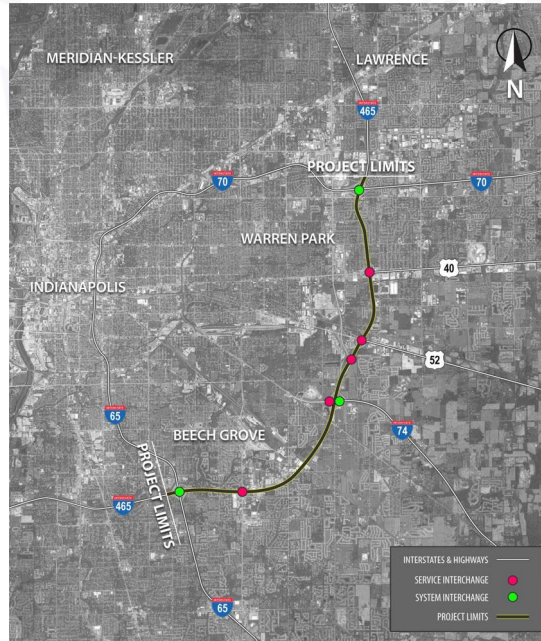
Project Stakeholders

- Indiana Department of Transportation
- Federal Highway Administration, Indiana Division
- Elected & Local officials
- Residents
- Businesses
- Emergency services
- Schools
- Transit
- Religious Institutions
- Community Organizations



5

Project Location



I-465 SE TSMO Project



6

Project Purpose

- Needs: Safety and congestion issues in the corridor; results in high crash rates during peak periods.
- Purpose: Analyze and implement appropriate Transportation Systems Management Operation strategies to address congestion and increase safety.



NextLevel
INDIANA

7

Transportation System Management Operations (TSMO)

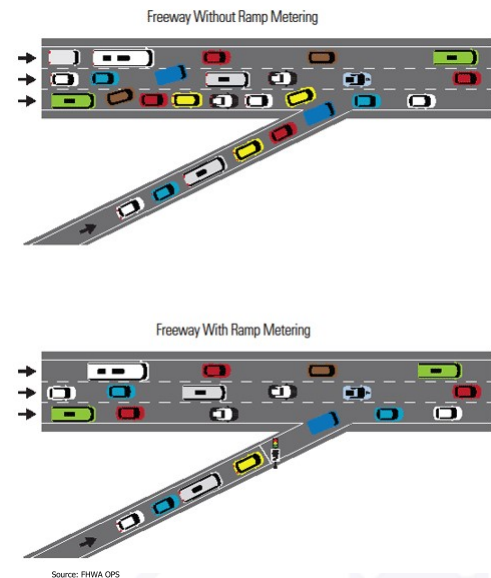
- TSMO is a set of strategies that focus on operation improvements
- Goal is to get the most performance out of a transportation facility
- Benefits:
 - Smoother and more reliable traffic flow
 - Reduce congestion and improve safety
 - More efficient use of resources (facility and funding)

NextLevel
INDIANA

8

Ramp Metering

- Ramp meters are traffic signals installed on freeway on-ramps
- Cost effective freeway management strategy
- Control the number of motorists entering the I-465 highway to allow safer merging



NextLevel
INDIANA

9

A video explaining the proposed project was included on this slide.
The video is available at <https://www.in.gov/indot/4147.htm>

10

Variable Speed Limit System

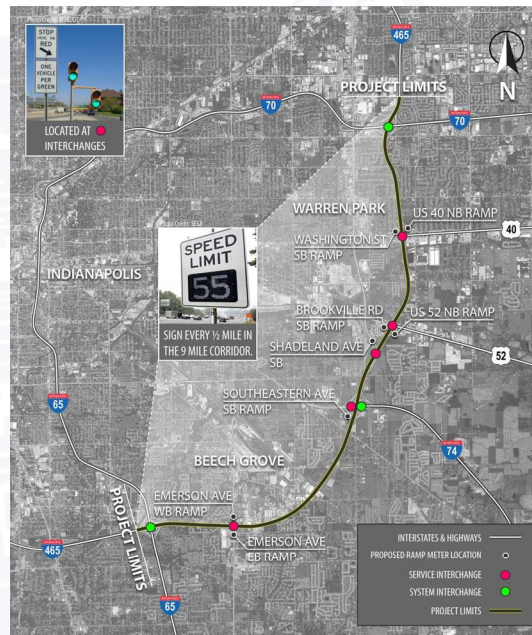
- VSL system would be used for congestion-based active traffic management
- VSL system would provide smoother traffic flow and less delay
- System would change the speed limit in real time
- VSL systems have been used in the U.S. for over 50 years



NextLevel
INDIANA

11

Recommended Alternative



I-465 SE TSMO Project

PARSONS

NextLevel
INDIANA

12

Project Schedule

- Environmental document released for public involvement – Winter 2020/2021
- Preliminary Design – Summer/Fall 2021
- Finalize environmental document – Fall 2021
- Final Design– 2021
- Award Contract –2022
- Construction - 2022



13

Next Steps

- Public and project stakeholder input
 - Information on website <https://www.in.gov/indot/4147.htm>
- Preliminary design and Environmental process
- Communicate a decision
 - INDOT will notify project stakeholders as the project proceeds planning and design
 - Work through local media, social media outlets, and legal notice



14

Thank You

- Questions or comments:

ATTN:
INDOT, c/o Alex Lee
Parsons
101 W Ohio St, Suite 2121
Indianapolis, IN 46204

Alexander.Lee@parsons.com

INDOT Next Level Customer Service

855-INDOT4U (855-463-6848)

www.indot4u.com

indot@indot.in.gov



Please mention "I-465 SE TSMO Project" in your comments.



December 15, 2020

[Attendees List](#)

I-465 SE TSMO Virtual Public Information Meeting @ 1pm

Total Participants: 34

Betsy Whitmore
Bryan Linenberg
Call-in User_2
Call-in User_3
Call-in User_4
Call-in User_6
candace t
Chris Jilg
Cliff myera
Courtney Bearsch
Doug Dagley
Ethan May
FOX59 WXIN
Jackson Hurst
Jen Higginbotham
Jenelle Bunton

Karen Stippich
Kevin Shaw
Kimberly Peters
Kirby Schott
Kris west
Leah Konicki
Mallory Duncan
Michael McNeil
Nathan Sheets
Nick Badman
Patrick Murphy
Ronnie rhton
Rusty Holt
Steve Pruitt
Virginia Laszewski

Attendees List

I-465 SE TSMO Virtual Public Information Meeting @ 6pm

Total Participants: 12

Andy Dietrick
Call-in User_2
Cathy McCann
Dave Ayala
Dave Henkel
Ethan May

Juliet Port
Matt Taylor
LT
Mike Speedy
Will Wingfeld

From: [Lee, Alexander](#)
To: [Higginbotham, Jennifer L.](#); jennifer.higginbotham@indy.gov
Cc: [Diefenbaugh, Cedric](#); [Miller, Daniel J](#)
Subject: 465 SE TSMO Virtual Public Information Meeting
Date: Tuesday, December 15, 2020 3:58:19 PM
Attachments: [image001.png](#)

In terms of your question:

Are there dedicated merge lanes at the top of each ramp? To prevent traffic from merging right? The answer is no; there are not dedicated merge lanes at the top of each ramp.

If you have any further questions, please don't hesitate to contact me. Thank you for attending on behalf of the Indianapolis MPO, much appreciated. On a personal note, pretty sure we have met at the APA-IN either Spring or Fall Development Conference a few years back. Take care.

Alex Lee

Alexander Lee, AICP
Senior Environmental Planner

101 West Ohio Street, Suite 2121 - Indianapolis, IN 46204
alexander.lee@parsons.com – P: 317-616-1011 M: 571-294-4555

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From: [Lee, Alexander](#)
To: [Laszewski, Virginia](#)
Cc: [Diefenbaugh, Cedric](#); [Miller, Daniel J](#)
Subject: RE: I-465 SE TSMO Virtual Public Information Meeting
Date: Tuesday, December 15, 2020 3:45:51 PM
Attachments: [image001.png](#)

The project is scoped for a Categorical Exclusion, Level 4/CE-4. The FHWA Project Manager is Eryn Fletcher, Sr. Transportation Engineer, Eryn.Fletcher@dot.gov, 317-26-7489 and the Environmental Contact is Robert Dirks, Planning and Environmental Specialist, Robert.Dirks@dot.gov, 317-226-7492 There will not be a formal scoping request because of the level of environmental documentation (Categorical Exclusion).

Address for Eryn and Robert:
[Federal Highway Administration](#)
U.S. Department of Transportation
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

Again this is not an EA but early coordination with the agencies will be going out shortly. Much appreciated.
Alex Lee

Alexander Lee, AICP
Senior Environmental Planner

101 West Ohio Street, Suite 2121 - Indianapolis, IN 46204
alexander.lee@parsons.com – P: 317-616-1011 M: 571-294-4555

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From: Laszewski, Virginia <Laszewski.Virginia@epa.gov>
Sent: Tuesday, December 15, 2020 2:52 PM
To: Lee, Alexander <Alexander.Lee@parsons.com>
Subject: [EXTERNAL] RE: I-465 SE TSMO Virtual Public Information Meeting

Hello Mr. Lee-

I appreciate your answers to my questions.

More questions: CE-4 . . . that is an FHWA NEPA Environmental Assessment (EA)? Who is the FHWA project manager and their contact information (title, address, email address, phone number)? When do you expect a formal NEPA EA scoping request will be sent to the agencies?

Thank you,

Virginia Laszewski
Environmental Scientist
USEPA, Region 5
ORA/TMPO/NEPA
312/886-7501

From: Lee, Alexander <Alexander.Lee@parsons.com>
Sent: Tuesday, December 15, 2020 1:20 PM
To: Laszewski, Virginia Laszewski.Virginia@epa.gov
Cc: Miller, Daniel J <Daniel.J.Miller@parsons.com>; Shattuck, Brian <bshattuck@indot.in.gov>; Andrew Dietrick <adietrick@indot.in.gov>; LaBlonde, John <John.LaBlonde@parsons.com>; Diefenbaugh, Cedric <Cedric.Diefenbaugh@parsons.com>; Duncan, Mallory <maduncan@indot.in.gov>
Subject: I-465 SE TSMO Virtual Public Information Meeting

Is FHWA involved with the environmental analysis? Yes, FHWA-IN is involved in the environmental analysis phase.

What is the environmental document? NEPA document. The environmental document that INDOT is preparing is a Categorical Exclusion- Level 4 (CE-4)

Below is my contact information. Thank you for attending on behalf of the EPA, much appreciated.
Alex Lee

Alexander Lee, AICP
Senior Environmental Planner

101 West Ohio Street, Suite 2121 - Indianapolis, IN 46204
alexander.lee@parsons.com – P: 317-616-1011 M: 571-294-4555

PARSONS - Envision More

Also sent to: tim.joyce@indy.gov
and melody.park@indy.gov

From: [Lee, Alexander](#)
To: anna.gremling@indy.gov; emily.mack@indy.gov; rick.hunter@ftcsc.org; pmurphy@perryschools.com; lstorm@warren.k12.in.us; tgearhart@bgcs.k12.in.us; lkaplan@cirta.us; michael.maurice@beechgrove.com; ghall@hhcorp.org; isp@isp.in.gov; ievens@indygo.net; hannah.harper@indy.gov
Cc: [Diefenbaugh, Cedric](#)
Subject: INDOT I-465 Southeast Transportation Systems Management and Operations (TSMO) Project Stakeholder Meeting
Date: Monday, April 19, 2021 5:10:13 PM

On behalf of Mr. Brian Shattuck, INDOT Major Project Delivery, Highway Engineer, would like to invite you to a meeting on Monday May 10th at 2:00 pm to update you and/or your designee/s on the I-465 SE TSMO Project. The meeting will be held on MS Teams (link below), you do not need to have a Teams account to join (join on the web instead, when prompted).

The Project location is on the southeast portion of I-465 from the I-65 interchange on the west to the I-70 interchange on the east (approximately nine miles). The proposed project would review potential TSMO strategies, including a variable speed limit (VSL) system and ramp metering. The project team held a virtual public information meeting on December 15, 2020. As the project is advancing; intent of this meeting is to update stakeholders including your organization.

If you have any questions, please let me know.
Alex Lee

<https://bit.ly/3n2XQj6>

Alexander Lee, AICP
Senior Environmental Planner

101 West Ohio Street, Suite 2121 - Indianapolis, IN 46204
alexander.lee@parsons.com – P: 317-616-1011 M: 571-294-4555

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I-465 SE Transportation
Systems Management
Operations Project

Stakeholder Meeting
May 10, 2021



1

Virtual Stakeholder Meeting Welcome

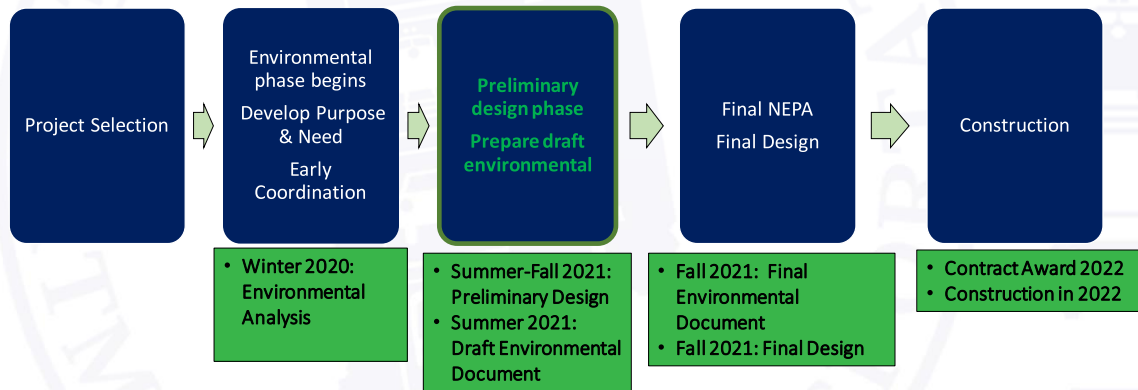
- Introductions of Project Team
- Project website: <https://www.in.gov/indot/4147.htm>



2

Project Development

Categorical Exclusion – Level 4 (CE-4) Project



3

Purpose of the Stakeholder Meeting

Stakeholders:

- Opportunity to provide input throughout the Environmental Process
- Discuss key issues
- Promote collaboration
- Build understanding and support throughout the project



4

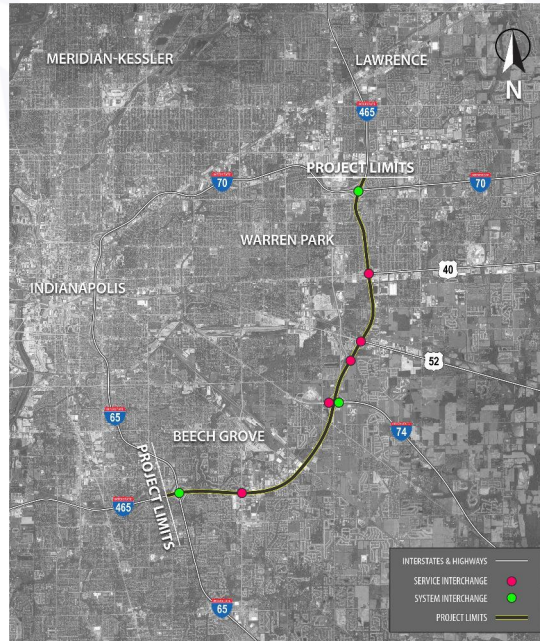
Project Stakeholders

- Indiana Department of Transportation
- Federal Highway Administration, Indiana Division
- Elected & Local officials
- Department of Public Works
- Residents
- Businesses
- Emergency services
- Schools
- Transit
- Religious Institutions
- Community Organizations



5

Project Location



I-465 SE TSMO Project



6

Project Purpose

- Needs: Safety and congestion issues in the corridor; results in high crash rates during peak periods.
- Purpose: Analyze and implement appropriate Transportation Systems Management Operation strategies to address congestion and increase safety.



NextLevel
INDIANA

7

Transportation System Management Operations (TSMO)

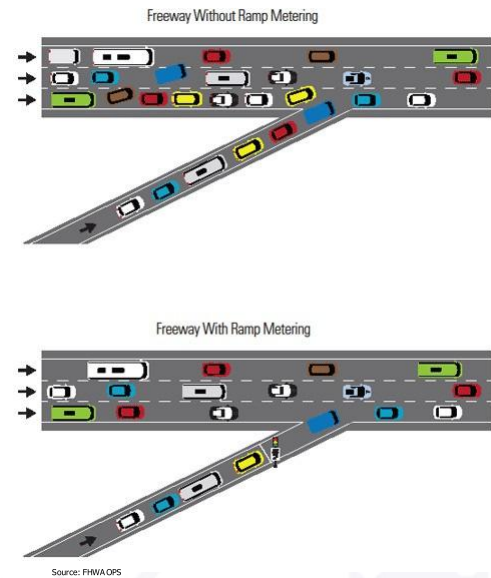
- TSMO is a set of strategies that focus on operation improvements
- Goal is to get the most performance out of a transportation facility
- Benefits:
 - Smoother and more reliable traffic flow
 - Reduce congestion and improve safety
 - More efficient use of resources (facility and funding)

NextLevel
INDIANA

8

Ramp Metering

- Ramp meters are traffic signals installed on freeway on-ramps
- Cost effective freeway management strategy
- Control the number of motorists entering the I-465 highway to allow safer merging



NextLevel
INDIANA

9

A video explaining the proposed project was included on this slide.
The video is available at <https://www.in.gov/indot/4147.htm>

10

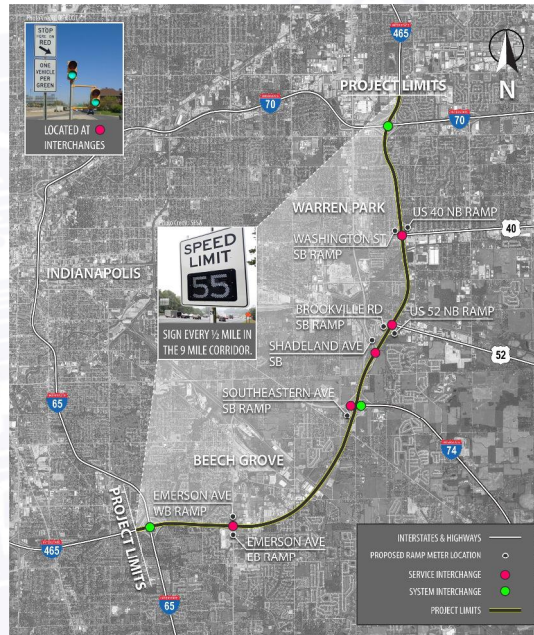
Variable Speed Limit System

- VSL system would be used for congestion-based active traffic management
- VSL system would provide smoother traffic flow and less delay
- System would change the speed limit in real time
- VSL systems have been used in the U.S. for over 50 years



11

Preferred Alternative



I-465 SE TSMO Project



12

Project Schedule

- Environmental document released for public involvement – Winter 2020/2021
- Preliminary Design – Summer/Fall 2021
- Finalize environmental document – Fall 2021
- Final Design– 2021
- Award Contract –2022
- Construction – 2022

NOTE: Temporary Ramp Metering Project will be implemented Summer 2021 that is not related to this Project



13

Next Steps

- Public and project stakeholder input
 - Information on website <https://www.in.gov/indot/4147.htm>
- Preliminary design and Environmental process
- Communicate a decision
 - INDOT will notify project stakeholders as the project proceeds planning and design
 - Work through local media, social media outlets, and legal notice



14

Thank You

- Questions or comments:

ATTN:
INDOT, c/o Alex Lee
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INDOT Next Level Customer Service

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Please mention "I-465 SE TSMO Project" in your comments.



MEETING SUMMARY

I-465 SE TSMO Stakeholder

Meeting Summary

Des. No. 2001134

May 10, 2021, 10:00 AM & 2:00 PM, Microsoft Teams

ATTENDANTS

10:00 AM Meeting

Name	Organization	Title
Andy Dietrick	INDOT	Major Projects Communications
Mallory Duncan	INDOT	Communications Director
John LaBlonde	Parsons	Parsons Project Manager
Daniel Miller	Parsons	Environmental Manager
Alex Lee	Parsons	Senior Environmental Planner
Ericka Miller	Indianapolis DPW	Chief Engineer
David Borden	Indianapolis DPW	Deputy Director, Engineering Division

2:00 PM Meeting

Name	Organization	Title
Andy Dietrick	INDOT	Major Projects Communications
John LaBlonde	Parsons	Parsons Project Manager
Daniel Miller	Parsons	Environmental Manager
Alex Lee	Parsons	Senior Environmental Planner
Erica Johnson	HNTB	Senior Project Manager
Ryan Huebschman	HNTB	Transportation Planning Manager
Greg Hall	Marion County	Emergency Preparedness Coordinator
John Seber	CIRTA	Executive Director
Michael Booth	IndyGo	Capital Projects Director
Michael Maurice	Beech Grove	Police Chief
Randall Hadler	Beech Grove Fire Department	Captain
Patrick Murphy	Perry Township Schools	Transportation Director
Rick Hunter	Franklin Township Community Schools	Director of Facilities
Todd Livesay	Franklin Township	Director of Transportation
Catherine Kostyn	Indianapolis MPO	Senior Planner

MEETING SUMMARY (IDENTICAL PRESENTATIONS AT 10:00 AM AND 2:00 PM)

Welcome and introductions – Dan Miller, Parsons Environmental Manager, Discussed the intent of the meeting, asked everyone to state what organization they represent (see attendants). Andy Dietrick, INDOT Major Projects Communications, thanked everyone for joining.

Dan discussed the project development, stated that the project will be a categorical exclusion- level 4 project. Project is in the preliminary design phase and the draft environmental is currently under development. Final environmental and design late fall, end of the year. Construction is planned for 2022. Dan stated the purpose of the stakeholder meeting is provide the opportunity for input throughout the environmental process including collaboration and discussion of key issues.

John LaBlonde, Parsons Project Manager, gave an overview of the project setting, needs for the project and schedule. He discussed what is Transportation Operations and Management Systems (TSMO), benefits and goals of the project. John discussed what are some of the TSMO strategies that project considered. John then discussed ramp metering and showed a video depicting ramp metering. Another TSMO strategy that would be implemented is variable speed limit (VSL) system. VSL would be used for congestion based active traffic management. VSL system would provide a smoother traffic flow in the corridor.

John went over the project schedule; final design later this year and construction in 2022. He noted that there is a temporary ramp metering project that will be implemented in the Summer of 2021, this is not related to the TSMO project but a strategy being implanted by INDOT and HNTB as a mitigation for the North Split project.

Dan then discussed the next steps, design and environmental process; INDOT will notify project stakeholders as it proceeds with planning and design. Work with local media, social media and provide a legal notice. He mentioned if you have any questions, please contact Alex Lee, Parsons Public Involvement.

Dan asked if anyone in the group has any questions: Patrick Murphy, Perry Township Schools asked if the ramp metering were enforceable by Indiana State Police. John said yes; that the ramp metering and VSL systems are enforceable.

John proceeded to highlight some plans from the preliminary field check plans which included VSL and ramp metering locations as well as the maintenance of traffic (MOT) plans.

Dan asked the group if they had any additional questions, if you would like a copy of the plan sheets that John highlighted, please let Alex know. Appreciated everyone's time today. Meetings ended at approximately 10:40 AM and 2:40 PM.

The above summary represents our recollection of the pertinent discussion points, decisions, and action items from the two meetings. Please contact the preparer, Alex Lee, at alexander.lee@parsons.com, within three days from your receipt of this document if you wish to make any additions or corrections. If revisions are made, the updated summary will be re-sent to all the attendants. Otherwise, this summary shall stand as the official record of the meeting.

Appendix H

Air Quality

Indiana Department of Transportation (INDOT)
State Preservation and Local Initiated Projects FY 2020 - 2024

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
Indiana Department of Transportation	42821 / 2001134	A 18	I465	ITS Traffic Management Systems	from I-70 to I-65 on the southeast side of I-465	Greenfield	9.35	NHPP	\$11,300,000.00	Road Construction	CN	\$9,270,000.00	\$1,030,000.00			\$10,300,000.00		
										Road Consulting	PE	\$900,000.00	\$100,000.00	\$1,000,000.00		\$0.00		
Performance Measure Impacted: Congestion Mitigation and Air Quality (CMAQ)																		
Indiana Department of Transportation	42821 / 2001134	A 20	I465	ITS Traffic Management Systems	from I-70 to I-65 on the southeast side of I-465	Greenfield	9.35	NHPP	\$11,300,000.00	Road Construction	CN	\$9,000,000.00	\$1,000,000.00			\$10,000,000.00		
										Road Consulting	PE	\$1,170,000.00	\$130,000.00	\$1,000,000.00		\$300,000.00		
Performance Measure Impacted: Congestion Mitigation and Air Quality (CMAQ)																		
Comments:add CN to STIP CN: FY 2020, NHPP, AQC exempt: 4/15/20, IMPO Res. # 20-IMPO-007: 4/15/20, pg 2																		
Indiana Department of Transportation	42821 / 2001134	M 13	I465	ITS Traffic Management Systems	from I-70 to I-65 on the southeast side of I-465	Greenfield	9.35	NHPP	\$11,300,000.00	Mobility Construction	CN	-\$9,270,000.00	-\$1,030,000.00				(\$10,300,000.00)	
										Mobility Consulting	PE	-\$900,000.00	-\$100,000.00	(\$1,000,000.00)				
Performance Measure Impacted: Congestion Mitigation and Air Quality (CMAQ)																		
Comments:INDOT Technical correction. The issue is a double entry in the STIP; the project was approved in both the A20-18 and the A20-20 STIP amendments. The project should not been included in the A20-18 STIP amendment. This purpose of this technical correction modification is to remove the duplicate funding in order to correct and properly balance the funding. The action is removing PE FY2020 \$1,000,000 and CN FY2022 \$10,300,000.																		
Indiana Department of Transportation	43048 / 2000393	A 25	I65	Bridge Deck Overlay	over WEST 82ND STREET, 03.41 N I-465	Greenfield	0	NHPP	\$1,764,049.00	Bridge Construction	CN	\$1,272,644.10	\$141,404.90					\$1,414,049.00
										Bridge Consulting	PE	\$315,000.00	\$35,000.00		\$350,000.00			
Performance Measure Impacted: Bridge Condition																		
Comments:A Add PE CN \$350,000.00 1,414,049 2021 2023 IMPO Resolution 06/01/2020 AQC Exempt 06/24/20																		
Indiana Department of Transportation	43051 / 2000571	A 22	US 52	HMA Overlay, Preventive Maintenance	0.19 mi E of I-465 to 1.75 mi E of I-465	Greenfield	1.56	NHPP	\$5,228,116.00	Bridge Construction	CN	\$279,292.00	\$69,823.00					\$349,115.00
										Road Construction	CN	\$3,323,200.80	\$830,800.20					\$4,154,001.00
										Road Consulting	PE	\$480,000.00	\$120,000.00		\$600,000.00			
										Road ROW	RW	\$100,000.00	\$25,000.00			\$125,000.00		
Performance Measure Impacted: Pavement Condition																		
Comments:A Add PE, RW, CN \$600,000.00, \$125,000, \$4,503,116, 2021, 2022, 2023 IMPO Resolution 06/01/20 AQC Exempt 06/01/20																		
Indiana Department of Transportation	43081 / 2000578	A 25	US 136	HMA Overlay, Preventive Maintenance	1.15 mi W of I-465 to 0.29 mi E of I-465	Greenfield	1.44	STBG	\$1,541,902.00	Road Construction	CN	\$1,005,521.60	\$251,380.40					\$1,256,902.00
										Road Consulting	PE	\$120,000.00	\$30,000.00		\$150,000.00			

*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.



Project Overview

Funding History

Amendment History

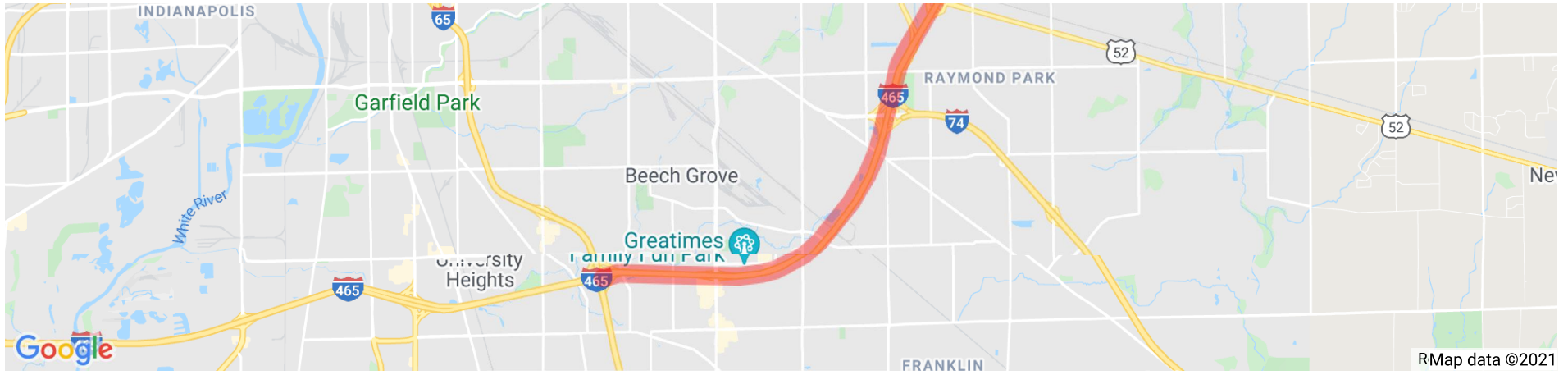
<<Go Back

ITS Project on I-456 SE (2001134)

<i>Des Number</i>	2001134	<i>Amendment</i>	20-05 INDOT	<i>Exempt Category</i>	Exempt	<i>Est Total Project Cost</i>	\$11,300,000
<i>Lead Agency</i>	INDOT	<i>Contact (ERC)</i>	Brian Shattuck 3178473969	<i>INDOT District</i>	Greenfield	<i>County</i>	Marion
<i>Project Type</i>	Its Traffic Management Systems	<i>Letting Date</i>		<i>Functional Classification</i>	Interstate	<i>Bike/Ped Component(s)</i>	No
<i>Title</i>	ITS Project on I-456 SE						
<i>Limits</i>	From I-70 to I-65 of Distance (mile) 9.35 Milepost begins at 43.8 ends at 53.99						
<i>Description</i>	TSMO - active traffic management to address congestion during peak periods on I-465 from I-70 to I-65						

Phase	Fund Source	Prior SFY	SFY2020	SFY2021	SFY2022	SFY2023	SFY2024	Future SFY	Total
PE	FEDERAL - NHPP	-	\$900,000	-	-	-	-	-	\$900,000
PE	STATE - Other	-	\$100,000	-	-	-	-	-	\$100,000
<i>Total Preliminary Engineering</i>		-	\$1,000,000	-	-	-	-	-	\$1,000,000
CN	FEDERAL - NHPP	-	-	-	\$9,000,000	-	-	-	\$9,000,000
CN	STATE - Other	-	-	-	\$1,000,000	-	-	-	\$1,000,000
<i>Total Construction</i>		-	-	-	\$10,000,000	-	-	-	\$10,000,000
CE	FEDERAL - NHPP	-	-	-	\$270,000	-	-	-	\$270,000
CE	STATE - Other	-	-	-	\$30,000	-	-	-	\$30,000
<i>Total Construction Engineering</i>		-	-	-	\$300,000	-	-	-	\$300,000
Total Programmed		-	\$1,000,000	-	\$10,300,000	-	-	-	\$11,300,000





Appendix I

Additional Studies

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated July 2020)

Project Number	SubProjectCode	County	Property
1800048	1800048	Marion	Eagle Creek Park, Nature Preserve, and Peace Learn
1800072	1800072	Marion	Martin Luther King Park
1800088	1800088	Marion	Eagle Creek Park, Nature Preserve, and Peace Learn
1800114	1800114	Marion	Eagle Creek Golf Course
1800167	1800167	Marion	Eagle Creek Park, Nature Preserve, and Peace Learn
1800185	1800185	Marion	German Church & 30th St Park
1800222	1800222	Marion	Southwestway Park
1800245	1800245	Marion	Lawrence Community Park
1800247	1800247	Marion	Ft. Harrison S.P. Dog Park (old--Fall Creek Park)
1800307	1800307	Marion	Washington Park
1800307.1	1800307.1	Marion	16TH AND FRANKLIN PARK (GREENE PARK)
1800330	1800330	Marion	Riverside Park, Aquatic Center
1800369	1800369M	Marion	Ft. Harrison S.P. Dog Park (old--Fall Creek Park)
1800384	1800384	Marion	Sarah T. Bolton Park
1800401	1800401A	Marion	Eagle Creek Firing Range
1800401	1800401B	Marion	Eagle Crest
1800401.1	1800401	Marion	Cancer Park
1800401.2	1800401.2A	Marion	Starling Nature Sanctuary at Eagle Creek
1800401.2	1800401.2B	Marion	Wish Park
1800401.3	1800401.3	Marion	Cancer Park
1800401.4	1800401.4	Marion	Krannert Park
1800404	1800404	Marion	Major Taylor Velodrome & Lake Sullivan
1800459	1800459	Marion	Fall Creek Parkway, Fall Creek Corridor Ph.III
1800467	1800467	Marion	Hartman Park/Beech Grove Little League
1800478	1800478	Marion	Oaklondon Play Park
1800505	1800505	Marion	Fall Creek Parkway, Fall Creek Corridor Ph.III
1800541	1800541	Marion	Southwestway Park
1800600	1800600	Marion	Southport Park
1800617	1800617	Marion	Fort Benjamin Harrison Civic Plaza
1800635	1800635	Marion	Leonard Park

Source: <https://www.in.gov/indot/files/IN%20LWCF%20sites%20by%20county.xlsx>



Final Alternative Report I-465 SE TSMO

Des. 2001134

Indiana Department of Transportation

November 2020



The purpose of this project is to improve mobility and safety in the corridor, specifically on the I-465 mainline during the design year (2030). Targeted improvements will be reduction in travel time, speed deficit, and crashes on the corridor.

1.3 PROJECT APPROACH AND SCOPE

Based on input from the project stakeholders and the purpose and need defined above, the team looked at Transportation Systems Management and Operations (TSMO) strategies that do not require significant mainline roadway geometric changes or additional pavement or proposed right-of-way. The following tables identify TSMO strategies that are to be considered and strategies that have been eliminated. Many of these strategies are already implemented within the region and some can be quickly eliminated from consideration based on anticipated potential costs or required implementation time frames. Options, alternatives and issues related to applicable strategies were looked at in detail during the development of this document and evaluated to best fit within the project limits and constraints. These strategies were also identified in the approved Framework Document (refer to Appendix A).

Alternatives to be Considered

TSMO STRATEGIES	STATUS
Active Transportation and Demand Management (ATDM)	ATDM enables travelers to make informed decisions along their entire trip and requires a proactive and regionally integrated approach to managing the system, linking different public and private agencies, functions, and roles. Some aspects of ATDM are in place in the region. Any TSMO strategies that are deployed for this project should consider how to best fit into the region's current ATDM environment.
Ramp Management	Potential strategy to provide incremental improvements in throughput, travel times, reliability, and safety. While ramp closures and special use treatments are likely to include socioeconomical and political aspects that would expand the scope of this project beyond the proposed budget and time frame, ramp metering and limited ramp terminal treatments may be applicable.
Traffic Signal Coordination	Coordination of signals on arterial roadway with other strategies, such as ramp metering.
Variable Speed Limits (VSL)	VSL can be implemented within the geographic limits and cost constraints of this project, and provide some incremental improvements in throughput, travel times, reliability and safety. Options related to VSL should be fully reviewed.
Queue Warning	Queue warning can be implemented as a component of a VSL solution and should be looked at in coordination with VSL or as a standalone option if traffic safety analysis justifies the costs.

Table 1: TSMO Alternatives to be Considered

Alternatives Identified but Eliminated

TSMO STRATEGIES	STATUS
Access Management	Access management strategies such as managed lanes, special purpose lanes, High Occupancy Vehicle (HOV), toll or High Occupancy/Toll (HOT) lanes include a broad range of socioeconomical and political aspects that would expand the scope of this project beyond the proposed budget and time frame.
Active Parking Management	Outside the boundaries of the project limits and not applicable to facility type.
Congestion Pricing / Dynamic Pricing	Not applicable to facility type (non-toll facility).
Connected and Automated Vehicle Deployment	Not included within the project intent nor can be analyzed within the project schedule.
Dynamic Shoulder Use	Does not meet the project intent to increase mobility along the corridor without geometric enhancements/proposed construction on the mainline I-465 freeway.
Freight Management	Does not meet the project intent.
Improved Bicycle and Pedestrian Crossings	Not applicable to facility type (freeway).
Integrated Corridor Management	Does not meet the project intent nor can be analyzed within the project schedule.
Lane Control	Does not meet the project intent nor can be analyzed within the project schedule.
Predictive Traveler Information	Does not meet the project intent nor can be analyzed within the project schedule.
Road Weather Management	Not included within the project intent.
Special Event Management	Already part of the Traffic Management Center (TMC) operations
Traffic Incident Management	Already part of the TMC operations
Transit Management	Does not meet the project intent
Traveler Information	Already part of the TMC operations.
Work Zone Management	Already part of the TMC operations

Table 2: TSMO Alternatives to be Considered

An added travel lanes option was identified but eliminated as it does not need the project intent. Adding travel lanes in each direction would require major reconstruction, additional permits and environmental coordination, most likely right-of-way, and significant additional funding. All these elements are outside the project intent and eliminated as a viable alternative.

Table 3: Existing ITS Field Devices

Brookville Road and Washington Street are referred to as “US52” and “US40,” respectively, in the associated exhibits to shorten the name for legibility in the exhibit.

The AC-powered camera sites are typically equipped with a managed Ethernet switch. Open ports on these switches present an opportunity for new ITS field devices to connect to the existing INDOT network. These opportunities will depend on the final locations of the new ITS field devices being in proximity of these existing switches.

2.4 EXISTING TRAFFIC MANAGEMENT CENTER

INDOT currently operates two Traffic Management Centers (TMCs), one each in Indianapolis and Gary. The Indianapolis TMC operates 24/7/365. It has five operators during the AM and PM peaks and a one operator overnight unless snow operations are in effect. At all other times the center has four operators available. The center has six workstations available and can expand to accommodate 8 workstations during emergencies. There is also the ability to add staff in remote offices to support the operations center.

2.5 EXISTING SYSTEMS

INDOT currently uses the **Q-Free MAXVIEW** system for its traffic signal control. MAXTIME is a ramp metering control module with standard ramp metering functions needed to do general ramp metering functions. These include start up and shut down functions, multiple lane metering, emergency vehicle preemption, time of day metering, local traffic responsive metering, and queue override and queue flushing strategies. The MAXVIEW ATMS also offers system interfaces with other software such as the IRIS open source platform developed in Minnesota and defined further in this section. Such an interface could open up more useful features for ramp metering in the areas of corridor wide control and even system wide control.

INDOT currently uses an Iron Mountain and **IRIS (Intelligent Roadway Information System)** hybrid system. Iron Mountain is INDOT’s legacy ATMS. IRIS is an open-source Advanced Traffic Management System (ATMS) software project developed by the Minnesota Department of Transportation. It is used by transportation agencies to monitor and manage interstate and highway traffic. It is an integrated platform for transportation agencies to manage traffic monitoring and control devices. The IRIS software presents a map-based interface to system operators.

The IRIS base software is written in Java and licensed for anyone to use under the GPL. In addition, all dependencies required to install and operate an IRIS system are available as free software. The software has a client/server architecture. System configuration data is stored in a PostgreSQL database, and managed by the IRIS server. The server also handles communication with all traffic control and data collection devices. The client software is distributed by an Apache web server, using Java Web Start. All communication between the server and clients is encrypted using *transport layer security* (TLS). The server may be configured to pass authentication requests off to an external LDAP server, allowing IRIS to integrate into an existing authentication system. INDOT is modifying the IRIS core software to be web based.

2.6 EXISTING CRASH DATA

A historical crash analysis was performed for the study corridor along I-465 from the I-70 interchange on the north end to the I-65 interchange on the south end.

Crash Data

The crash data for this safety analysis includes all identified crashes in the I-465 SE corridor for the years 2017, 2018, and 2019. The data was provided by INDOT and includes information involved with each crash incident including weather, surface, and light conditions, latitude and longitude, severity, manner of collision, and date and time of crash.

The raw crash data was filtered to ensure more accurate analysis. Only crashes that contained latitude and longitude values that placed the crash location within the project area were used in this study. In addition, only crashes that happened on I-465 or on associated ramps were included. These filters resulted in 1,354 applicable total crashes over the three-year period, or 451 crashes per year.

Crash Patterns – Overall Corridor

The first step in the crash analysis was to examine the historical crashes (2017-2019) for the overall I-465 corridor to determine overall safety performance trends within the corridor. From that information, crash hot spots and manner of collision trends were identified. Table 4 shows the I-465 mainline crash data by manner of collision and crash severity.

MANNER OF COLLISION	CRASH SEVERITY			
	PROPERTY DAMAGE ONLY (PDO)	INJURY	FATALITY	TOTAL
Angle	9	5	1	15
Backing	3	1	0	4
Head On	9	0	0	9
Object in Road	71	1	0	72
Other	33	10	1	44
Out of Control	149	40	1	190
Rear End	438	58	1	497
Sideswipe	412	33	1	446
TOTALS	1124	148	5	1277

Table 4: Total Mainline Crashes by Crash Type and Severity

Of these 1,277 crashes, 1,124 are property damage only (PDO) crashes, 148 are injury crashes, and five crashes had fatalities. The data shows that there is currently an average of 1.2 crashes per day within the I-465 SE corridor. Of the fatal crashes, three occurred during the weekend. The other two occurred on a weekday with one being during the midday and one during the PM peak period (3:00 PM to 6:00 PM).

Crash locations were recorded to the nearest 0.1-mile milepost. The mainline crashes in the I-465 SE corridor during the three-year period were mapped to the nearest milepost and heat maps were created (Appendix B – Figure 1). For the purposes of this study, direction of travel on I-465 will be described as eastbound to northbound travel and southbound to westbound travel. The heat map highlights areas of the corridor with the highest crash densities indicating hotspots where crashes have occurred most frequently over the three-year period. Separate heat maps have been created for the directions of travel around I-465. The eastbound to northbound direction shows the largest hotspot near the merge of the northbound I-65 on-ramp. Secondary hot spots are located at the diverge to I-74, the weave between I-74 and Brookville Road (US 52), and the I-70 interchange. The southbound to westbound direction shows the largest hotspot in the weave between the Emerson Avenue and I-65 interchanges. Secondary hot spots are located between the I-70 and Washington Street (US 40) interchanges, between the Washington Street (US 40) and Brookville Road (US 52) interchanges, and at the I-74 on-ramp merge.

Appendix B – Figure 2 shows a heat calendar of the crashes by day of the week and hour of the day. Two trends can be observed. First, the highest concentrations of crashes occur during the AM and PM peak periods. Second, although the weekend days do not show the same peak-period patterns, the midday periods are comparable in intensity (or even slightly higher) to those during weekdays. The hotspots during the peak-periods warrant further analysis and will be examined in the next section.

Crash Patterns – Peak Periods

Crashes in the I-465 SE corridor are more prevalent during the peak periods as identified in the crash heat calendar. Table 5 shows total crashes by manner of collision for the AM peak period (6:00 AM to 9:00 AM) and PM peak period (3:00 PM to 6:00 PM).

MANNER OF COLLISION	AM PEAK PERIOD (6:00 AM TO 9:00 AM)		PM PEAK PERIOD (3:00 PM TO 6:00 PM)	
	NUMBER OF CRASHES	PERCENT	NUMBER OF CRASHES	PERCENT
Angle	1	0%	2	1%
Head On	2	1%	1	0%
Object in Road	10	4%	11	2%
Other	4	2%	2	1%
Out of Control	18	8%	15	5%
Rear End	105	47%	194	59%
Sideswipe	84	38%	104	32%
TOTALS	224		329	

Table 5: - Manner of Collisions – Peak Periods

About half of the total crashes in the corridor occurred during peak periods. Rear end and sideswipe crashes make up 85 percent and 91 percent of the AM and PM peak period crashes, respectively.

Mainline rear end and sideswipe crashes in the I-465 SE corridor were mapped to the nearest milepost and a heat map was created for the AM peak period (Appendix B – Figure 3) and the PM peak period (Appendix B – Figure 4). (It should be noted that the hotspot density shading for the two periods is calculated relative to each figure separately and the intensity cannot be compared accurately between the two time periods.) In order to examine crash activity in the area of on-ramp merge areas, influence areas of 1,500' from the on-ramp gores are called out on these heat maps.

During the AM peak period, hotspots are indicated in the area of the I-74 on-ramp, the diverges to I-74 and Shadeland Avenue off-ramps, and the I-74 on-ramp in the eastbound to northbound direction. Smaller hotspots appear in the areas of the I-74 and Emerson Avenue on-ramps in the southbound to westbound direction. During the PM peak period in the eastbound to northbound direction, a hotspot is indicated at the on-ramp area from northbound I-65 area and a secondary hotspot is indicated at the I-74 diverge area. In the southbound to westbound direction, hotspots are indicated at the on-ramp area from westbound I-70 and the I-65 diverge area and secondary hotspots are shown in the areas of the Washington Street (US 40) on-ramp, between Washington Street US 40) and Brookeville Road (US 52), the Brookeville Road (US 52) on-ramp, the I-74 on-ramp, and the Emerson Avenue on-ramp. The southbound to westbound direction during the PM peak period experiences the highest traffic volumes and recurring congestion. The corresponding heat map indicates a consistent spatial pattern of crashes throughout the corridor with few breaks. This could indicate crashes correlated with recurring mainline PM peak-period congestion in the southbound to westbound direction.

The hotspots identified near on-ramp influence areas indicate areas where ramp metering may improve safety. Hotspots identified along mainline areas away from ramp merge, diverge, or weaving areas may indicate areas where VSL may improve safety.

Crashes were also analyzed for on-ramps that are candidates for ramp metering. Crashes on these ramps over the three-year period totaled nine crashes. Therefore, no significant patterns of concern were identified.

2.7 ADJACENT LAND USE

The project is in the highly urbanized area of Indianapolis surrounded by industrial, commercial and residential properties. The interchanges of I-465 with Washington Street, Brookville Road, and Emerson Avenue are primarily adjacent to commercial and residential land use. I-465 interchanges with Shadeland Avenue and Southeastern Avenue have adjacent industrial properties with some residential properties. I-465 within this segment is also used as a connecting roadway between I-70, I-74, and I-65.

2.8 EXISTING UTILITIES

There are multiple utilities within the project area, including but not limited to:

- Communications:
- AT&T Long Distance Fiber
- Charter
- Comcast
- Crown Castle
- Centurylink
- TCS Communication
- MCI Verizon
- Citizens Gas
- Citizens Water
- Citizens Sanitary
- INDOT facilities (ITS, signal equipment, Lighting, etc)

All utilities will receive notices of the project intent at each ramp. As design progresses with placement of poles, signs, or any other feature, utilities will be located to specific geo-spatial positions. With the specific utility location verified, the design team will modify the infrastructure placement so that utilities will not be impacted by the proposed design feature.

2.9 EXISTING TRAFFIC CONDITIONS

There are three system interchanges in the study corridor: I-465 with I-70, I-74, and I-65. The I-74 interchange provides freeway-to-freeway connections on the east side of the interchange while the west side of the interchange provides connections to Southeastern Avenue, an arterial. The corridor includes service interchanges at Washington Street (US 40) (folded diamond interchange), Brookville Road (US 52) (folded diamond interchange), and Emerson Avenue (Single Point Urban Interchange (SPUI)). There is also a partial interchange with direct-connect ramps from southbound Shadeland Avenue to southbound I-465 and northbound I-465 to northbound Shadeland Avenue.

The I-465 corridor between I-70 and I-65 experiences moderate peak-hour congestion. The dominant travel patterns are northbound to I-70 and westbound to I-65 during the AM peak hour and southbound from I-70 and eastbound from I-65 during the PM peak hour. National Performance Management Research Data Set speed data for the corridor shows speed degradation in both the AM and PM peak periods. Figure 2-4 and Figure 2-5 show the average mainline speeds over ramp to ramp segments every 10 minutes for the AM and PM peak periods, respectively.

I-465 Year 2019 (through 7/31/2019)

Table showing existing I-465 mainline speeds for the AM period, Eastbound to Northbound (I-65 SJ to I-70 EJ). The table lists 18 interchange locations and provides speed data for 18 time intervals from 0630 to 0920.

Southbound to Westbound (I-70 EJ to I-65 SJ)

Table showing existing I-465 mainline speeds for the AM period, Southbound to Westbound (I-70 EJ to I-65 SJ). The table lists 18 interchange locations and provides speed data for 18 time intervals from 0630 to 0920.

Figure 2-4: Existing I-465 Mainline Speeds – AM Period

The eastbound to northbound direction shows average mainline speeds between 40 and 50 miles per hour from 7:20 AM to 7:50 AM from just north of the I-74 interchange through the Brookville Road (US 52) interchange. This section includes a weaving section between the I-74 on-ramp and the Brookville Road (US 52) off-ramp and the Brookville Road (US 52) on-ramp merge. The southbound to westbound direction shows very little congestion.

I-465 Year 2019 (through 7/31/2019)

Table showing existing I-465 mainline speeds for the PM period, Eastbound to Northbound (I-65 SJ to I-70 EJ). The table lists 18 interchange locations and provides speed data for 18 time intervals from 1530 to 1820.

Southbound to Westbound (I-70 EJ to I-65 SJ)

Table showing existing I-465 mainline speeds for the PM period, Southbound to Westbound (I-70 EJ to I-65 SJ). The table lists 18 interchange locations and provides speed data for 18 time intervals from 1530 to 1820.

Figure 2-5: Existing I-465 Mainline Speeds – PM Period

The eastbound to northbound direction of travel shows average mainline speeds between 44 and 50 miles per hour from the I-65 interchange through the Emerson Avenue interchange. This section is a weaving section between the two interchanges. The southbound to westbound direction during the PM peak period shows the most severe congestion in the corridor. Average mainline speeds below 50 miles per hour are seen from 4:10 PM through 6:00 PM from I-70 south through the Brookville Road (US 52) interchange. At the height of the peak hour at around 5:30 PM, the average mainline speeds fall into the 30s in this area. The congestion begins to taper off after the I-74 interchange. The section between Brookville Road and I-74 has a lot of weaving and merging activity that causes turbulence in the traffic stream. The southbound Brookville on-ramp is followed directly by the southbound Shadeland Avenue on-ramp that creates a weaving area to I-74.

The congestion in the corridor is characterized by friction from higher volumes and multiple merging and weaving movements rather than one singular, capacity constrained bottleneck. Therefore, a TSMO strategy such as ramp metering could be implemented to try to provide incremental improvements at several of the key merging areas. Candidates for ramp metering are the southbound on-ramps at Brookville Road and Shadeland Avenue that contribute

the PM peak-hour congestion, the westbound Emerson on-ramp that contributes to the weave to I-65, and the northbound Brookville Road (US 52) on-ramp that contributes to slower speeds during the AM peak hour.

Variable speed limits may be used to warn or slow traffic ahead of slower or queued traffic ahead to reduce rear-end crashes. For example, variable speed limits could be used to step down mainline northbound speeds ahead of the slowdowns shown above at Shadeland Avenue during the AM peak hour.

Section 3: Design Elements

3.1 DESIGN GUIDELINES

The Project will be developed as 4R Partial Reconstruction in compliance with the Indiana Design Manual (IDM) Figure 54-2A.

Design Class:	Expressway/Freeway
Design Speed:	70 mph (I-465) & 25-55 mph (Ramps)
Terrain:	Level
Project Access Control:	Both Partial and Full

Table 6: Major Project Features

It is not anticipated that major reconstruction will occur along of the entrance ramps to I-465 or to any of the system-to-system entrance ramps, except for the widening of an additional lane on the Emerson Avenue entrance ramps to WB and EB I-465. However, this proposed work is anticipated to maintain on the existing roadbed utilizing the existing shoulder with minimal widen for a substandard shoulder on the outside. Acceleration distances will be accounted for in placement of the proposed alternatives.