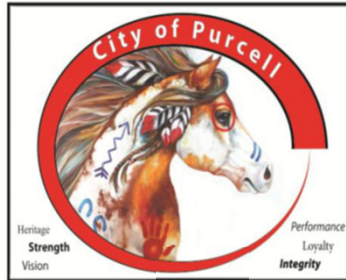




Welcome to the Oklahoma Department of Transportation’s virtual Open House for the proposed new access to I-35 at SH-74 (also known as Grant Street) in Purcell, Oklahoma, in McClain County. To keep the public informed about the proposed transportation improvements, The City of Purcell, ODOT and the Consultant team for this project (EST and CP&Y), have developed this on-line presentation. Under normal circumstances, this information would be presented at an in-person Open House, but due to ongoing concerns over the spread of COVID-19 and to protect the safety of the public, the City and ODOT have opted to host this Virtual Open House.

Purpose of this Open House



The purpose of this Virtual Open House is to introduce this proposed project to the public. Specifically, this presentation will:

- Provide an overview of the work that has been completed
- Present the purpose and need of this project
- Present the alternatives being studied
- Present the method of analysis that will be used to select the preferred action
- Offer opportunity for public input, and
- Outline the next steps and the proposed project schedule.



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- Present the alternatives being studied
- Present the method of analysis that will be used to select the preferred alternatives (or action)
- Offer opportunity for public input, and to
- Outline the next steps and the proposed project schedule.

Please take a moment to review this presentation, and feel free to contact us with questions, concerns, and comments through the interactive links provided on this Virtual Open House webpage.

Project Background

Under existing conditions, emergency response time to incidents on I-35 is delayed by the lack of access to I-35 between milepost 91 and 95 near Purcell. Secondly, the North Green Avenue directional interchange is missing the southbound I-35 connection which limits southbound access to I-35 for the northern area of Purcell.



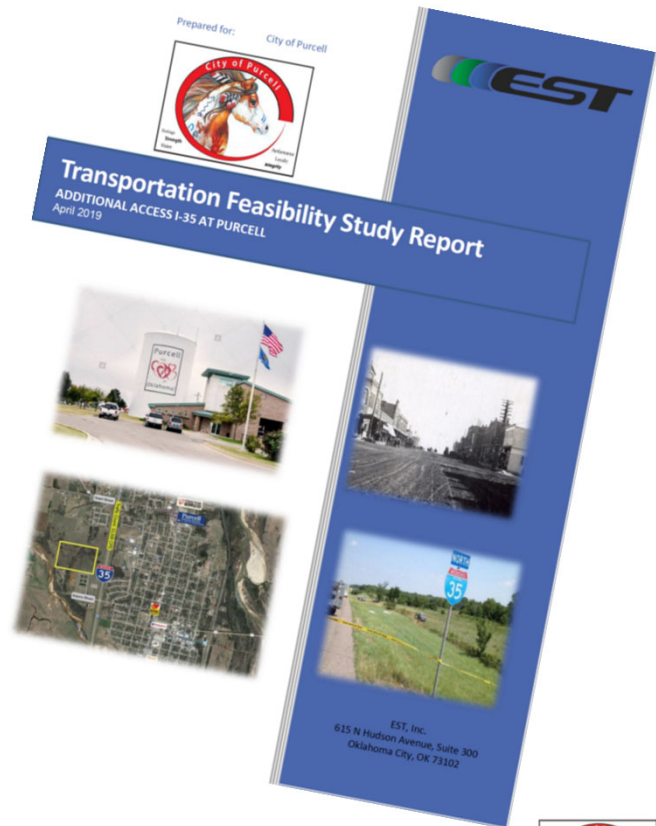
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In terms of the project background... There is growing concern over the City's emergency services to respond to incidents on I-35. Under existing conditions, emergency response time to incidents on I-35 is delayed by the lack of access to I-35 between milepost 91 and 95. Secondly, the North Green Avenue directional interchange is missing the southbound I-35 connection which prohibits southbound access to I-35 for the northern area of Purcell which further limits emergency response time to incidents on I-35.

Project Background

A Feasibility Study was conducted by the City in early 2019 that looked at responding to these challenges by providing additional access to I-35 within Purcell. That study showed the most practical location of seeking new access to I-35 would be at the existing SH-74 (Grant Street) crossing. The Feasibility Study identified a selected set of alternatives to carry forward for further study. An Alternatives Analysis project is currently underway to accomplish this goal. Preliminary results of this Analysis are presented here.



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A Feasibility Study was conducted by the City in early 2019 that looked at responding to these challenges by providing additional access to I-35 within Purcell. That study showed the most practical location of seeking new access to I-35 would be at the existing SH-74 (Grant Street) crossing. The Feasibility Study identified a selected set of alternatives to carry forward for further study. An Alternatives Analysis project is currently underway to accomplish this goal. Preliminary results of this Analysis are presented here.

Project Location



The location of this project is at the crossing of SH-74 or Grant Street and I-35 in the City of Purcell. Our study area includes I-35 from the I-35/SH-74 interchange on the south near Mile Post 91 to the North Green Avenue Interchange near Mile Post 95.

The project location is shown here.

Project Objectives

The purpose of this project is to improve emergency vehicle access to I-35 and reduce response times to incidents on I-35 by providing additional access to Interstate at SH-74 (Grant St.) in Purcell, Oklahoma. This new access to I-35 will improve system connectivity, increase accessibility to the regional transportation network, and support the continued growth of the local community.



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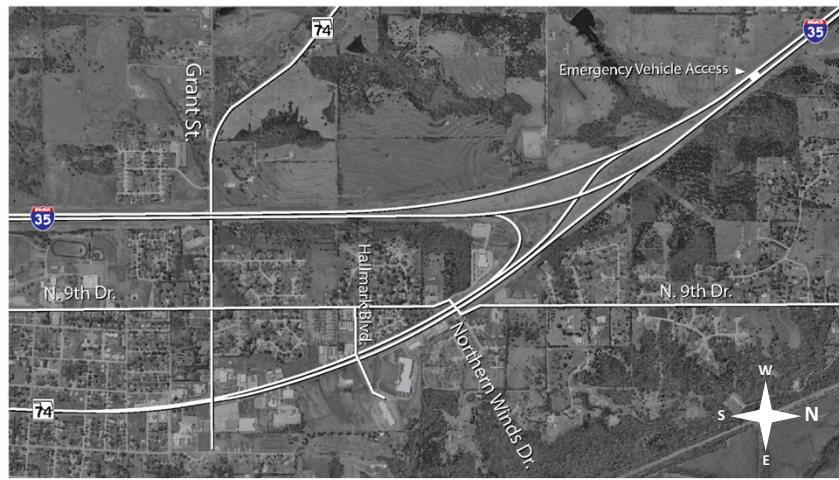


The purpose of this project is to improve emergency vehicle access to I-35 and reduce response times to incidents on I-35 by providing additional access to Interstate at SH-74 (Grant St.) in Purcell, Oklahoma. This new access to I-35 will improve system connectivity, increase accessibility to the regional transportation network, improve overall regional mobility, and support the continued growth of the local community.

Alternatives

Based on the results of the 2019 Feasibility Study and in response to the purpose and need for this project three (3) alternatives were selected for further study and are presented here.

Two of these alternatives include an option to remove the northbound I-35 off-ramp at North Green Ave.



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Based on the results of the 2019 Feasibility Study and in response to the purpose and need for this project three (3) alternatives were selected for further study and are presented here.

Two of these alternatives include an option to remove the northbound I-35 off-ramp at North Green Ave. as it would become a redundant movement to the new ramps at SH-74. So, what are the alternatives...

Alternatives

Alternative 1: Single Ramp

--- • I-35 Southbound On Ramp



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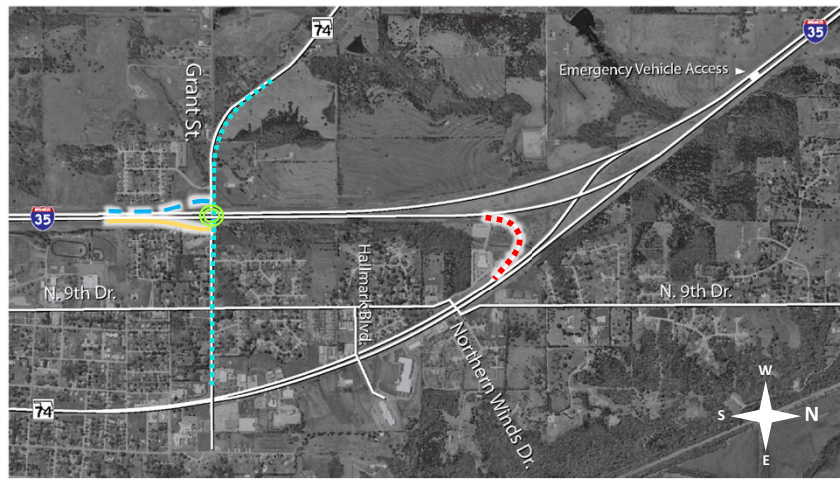


Alternative #1 adds a single ramp connecting SH-74 to southbound I-35. This arrangement is the minimum needed to add the missing southbound connection at the North Green Ave directional interchange as mentioned above.

Alternatives

Alternative 2: Half-Diamond Interchange

- - - - - • I-35 Southbound On Ramp
- • I-35 Northbound Off Ramp
- • I-35 Bridge Replacement
- · · · · • SH-74 (Grant St.) Reconstruction
- · · · · • Optional: Remove Existing I-35 Off Ramp at North Green Avenue



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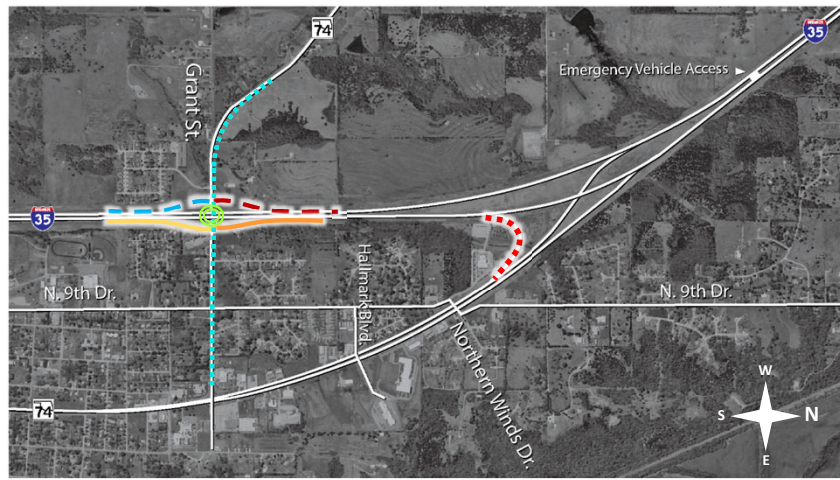
Alternative #2 provides for a half diamond interchange by adding an off-ramp from northbound I-35 to SH-74. For geometric and capacity reasons, this alternative replaces the I-35 bridges over SH-74 and includes improving the section of SH-74 between North Green Ave to a point north and west of the intersection with 220th Street.

This half diamond arrangement provides a redundant movement, as mentioned, to the northbound off-ramp to North Green Ave. Because of adding the northbound off ramp at SH-74, this alternative includes the optional removal of the northbound off-ramp to North Green Ave.

Alternatives

Alternative 3: Full-Diamond Interchange

-  • I-35 Southbound On Ramp
-  • I-35 Northbound On Ramp
-  • I-35 Southbound Off Ramp
-  • I-35 Northbound Off Ramp
-  • I-35 Bridge Replacement
-  • SH-74 (Grant St.) Reconstruction
-  • Optional: Remove Existing I-35 Off Ramp at North Green Avenue



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Alternative #3 provides for a full diamond interchange at SH-74 that includes access in all four directions. For geometric and capacity reasons, this alternative also replaces the I-35 bridges over SH-74 and includes improving the section of SH-74 between North Green Ave to a point north and west of the intersection with 220th Street. This alternative also includes the option to remove the northbound off-ramp to North Green Ave.

Comparing the Alternatives

Based on the Project Objectives, three (3) operational criteria are used to compare the alternatives:

- **Incident Management,**
- **Connectivity, and**
- **Accessibility.**

In the next phase of this project, additional criteria will be developed for:

- **Cost (capital and maintenance costs),**
- **Impact to existing environmental resources,**
- **Right-of-way impacts,**
- **Utility impacts, and**
- **Public Input.**



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In the next phase of this project, additional criteria will be developed for:

- Cost (capital and maintenance costs),
- Impact to existing environmental resources,
- Right-of-way impacts,
- Utility impacts, and
- Public Input.

Incident Management

- Incident management is measured by the response time of the emergency responders. When an incident occurs on I-35 north or south of Grant Street in either northbound or southbound directions, response times are measured from first responders' station to the incident, and finally to the hospital.

- The main emergency responders are:

- Police Department/Law Enforcement
- Fire Department
- Emergency Medical Services (EMS) Branch/Hospital







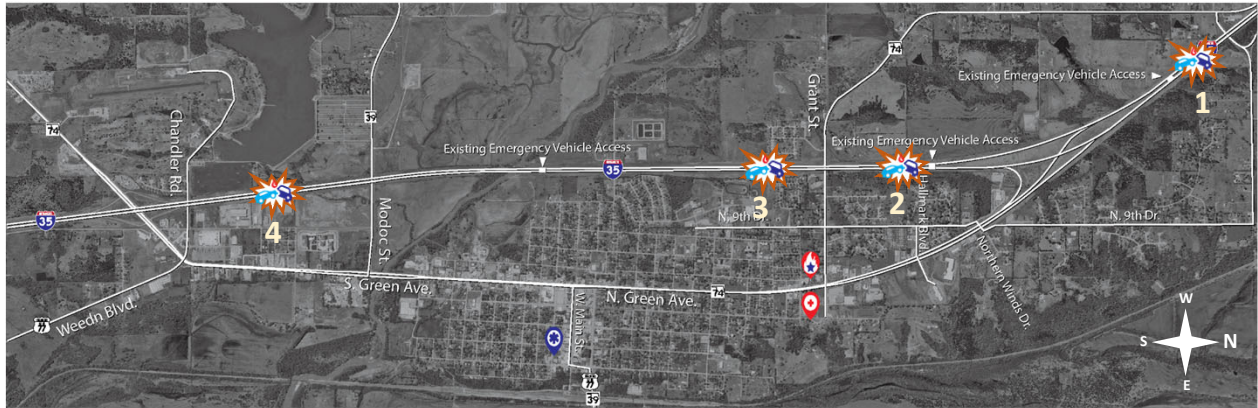
Incident management is measured by the response time of the emergency responders. When an incident occurs on I-35 north or south of Grant Street in either northbound or southbound directions, response times are measured from first responders' station to the incident, and from the incident to the hospital.

The main emergency responders are:

- Police Department/Law Enforcement
- Fire Department
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Modeled Emergency Response

- First Responder locations:
 - Police/Fire 
 - EMS 
 - Hospital 
- Four (4) Incident locations studied: 
(Northbound and Southbound)

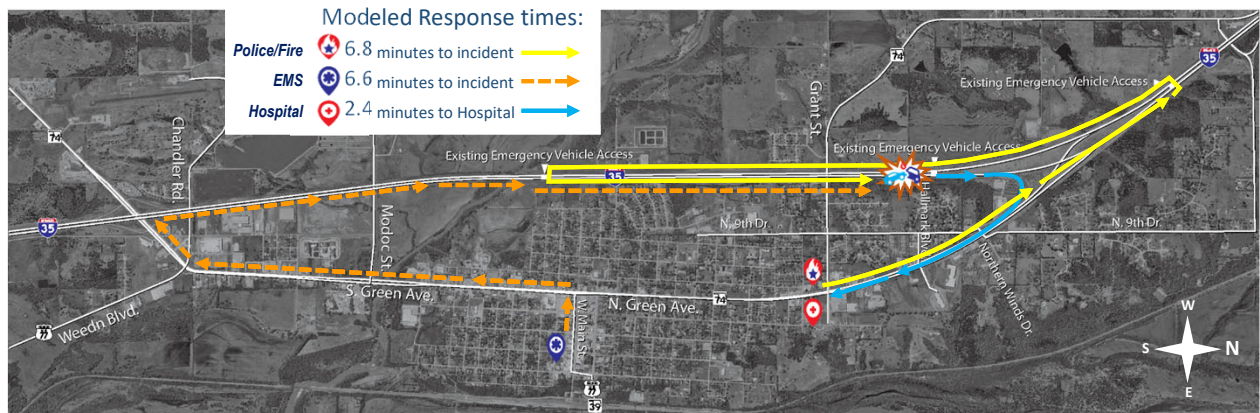


The location of the first responders in Purcell are shown here. To determine a representative response time to an incident on I-35, 4 incident locations, for both the northbound and southbound lanes were selected for study, as shown. This provides 8 total scenarios. The Alternatives Analysis Report studied each scenario in detail. For illustration purposes and because of time, incident location #2 in the northbound direction was chosen to show the basis of the analysis.

Emergency Response

- Existing Network

Routes and response times for an incident in the northbound lanes and located north of SH-74



First, as a base line, the travel time to and from incident location #2 was determined using the existing roadway network. The travel conditions and travel speeds were consistently applied to all scenarios in the analysis. The time between the occurrence of an incident and the time of initiating the response is not considered. As shown, Police and Fire take 6.8 minutes to arrive at the incident, EMS, 6.6 minutes, and the return time to the hospital is 2.4 minutes.

Emergency Response

--- • I-35 Southbound On Ramp

Alternative 1: South Bound On Ramp Only



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With Alternative 1, travel time is reduced where Police and Fire take 2.2 minutes to arrive at the incident, EMS, 4.2 minutes, and the return time to the hospital is the same, at 2.4 minutes.

Emergency Response

Alternative 2: Half-Diamond Interchange

- - - - - • I-35 Southbound On Ramp
- • I-35 Northbound Off Ramp
- • I-35 Bridge Replacement
- ⋯⋯⋯ • SH-74 (Grant St.) Reconstruction



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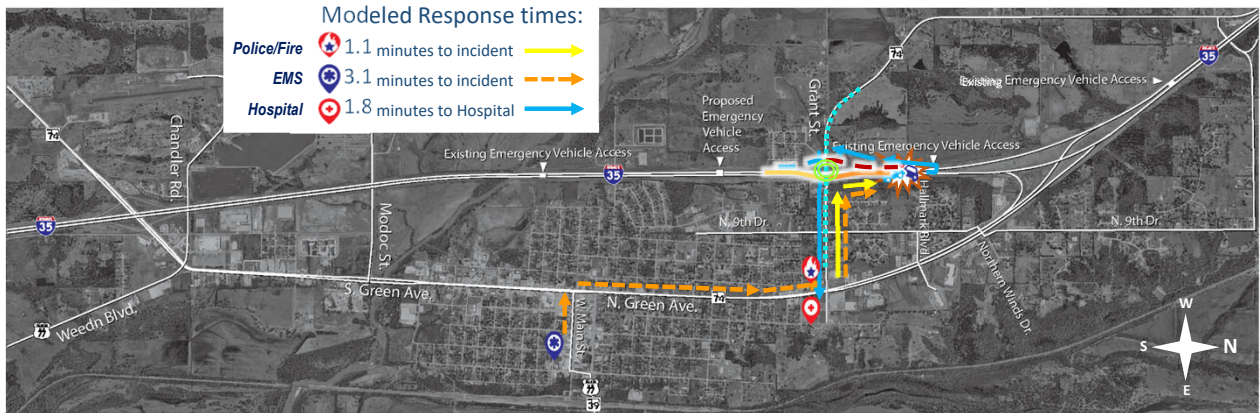


With Alternative 2, travel time is the same as Alternative 1, where Police and Fire take 2.2 minutes to arrive at the incident, EMS, 4.2 minutes, and the return time to the hospital is the same at 2.4 minutes.

Emergency Response

Alternative 3: Full-Diamond Interchange

- - - - • I-35 Southbound On Ramp
- • I-35 Northbound On Ramp
- - - - • I-35 Southbound Off Ramp
- • I-35 Northbound Off Ramp
- ⊙ • I-35 Bridge Replacement
- ⋯⋯⋯ • SH-74 (Grant St.) Reconstruction



With Alternative 3, travel time is reduced over the existing condition, where Police and Fire take 1.1 minutes to arrive at the incident, EMS, 3.1 minutes, and the return time to the hospital is reduced to 1.8 minutes.

Emergency Response

Incident Location	Responder	Existing (No-Build)	Alternative 1	Alternative 2	Alternative 3
2 (Northbound)	Fire/Police	6.8 minutes	2.2 minutes	2.2 minutes	1.1 minutes
	EMS	6.6 minutes	4.2 minutes	4.2 minutes	3.1 minutes
	To Hospital	2.4 minutes	2.4 minutes	2.4 minutes	1.8 minutes



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In summary, response times are best improved with Alternative #3.

Emergency Response

Comparative time for EMS to arrive at the incident location and return to the Hospital.

Incident Location	Dir*	Existing (No Build) (Minutes)	Alternative 1 (Minutes)	Alternative 2 (Minutes)	Alternative 3 (Minutes)
1) I-35 north of Green Ave	NB	11.5	11.5	11.5	10.9
	SB	11.6	11.6	11.6	11
2) I-35 north of Grant St	NB	9	6.6	6.6	4.9
	SB	11.3	8.4	6.8	4.9
3) I-35 south of Grant St	NB	9.1	6.7	5.1	5.1
	SB	11.3	6.6	5	5
4) I-35 north of SH-74	NB	9.1	9	7.4	7.4
	SB	12.3	11.2	9.9	9.9

* NB = North Bound, SB = South Bound



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The results of the entire analysis are shown here. Comparative time for EMS to arrive at the incident location and return to the Hospital.

Connectivity

Measured by the number of additional travel paths which become available connecting the southeast of the City to the northwest of the City.

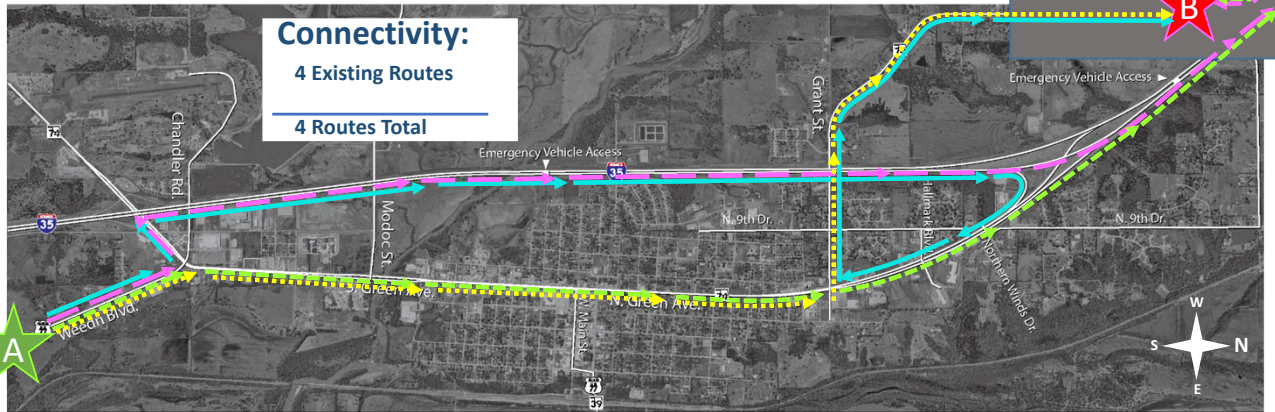


The second operational criteria used to compare alternatives is Connectivity. It is defined as the number of additional travel paths which become available by connecting the southeast area of the City to the northwest area of the City. For this analysis, two points were chosen; as shown here, Point A at the southeast of the City, Point B near the Johnson Interchange. For this analysis to be complete, the number of additional paths were determined from Point A to Point B as well as Point B to Point A.

Connectivity

- Existing Network

Existing Routes



As in the response time analysis, the base line condition was determined finding the number of travel paths between Point A and Point B using the existing network. There are 4 routes between points A and B, as shown.

Connectivity

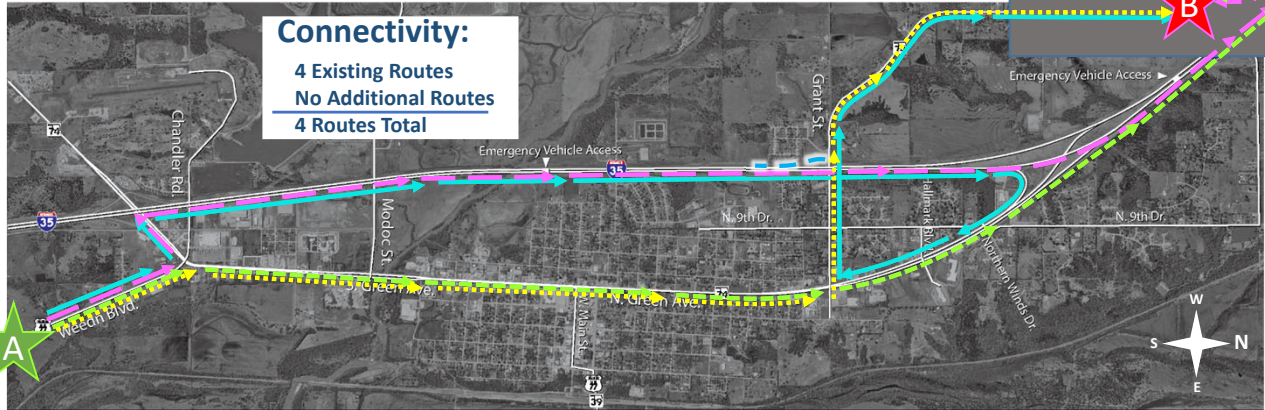
- Alternative 1



	Existing Routes
	Additional Routes

To Johnson Ave. Interchange - 1.9 Mi

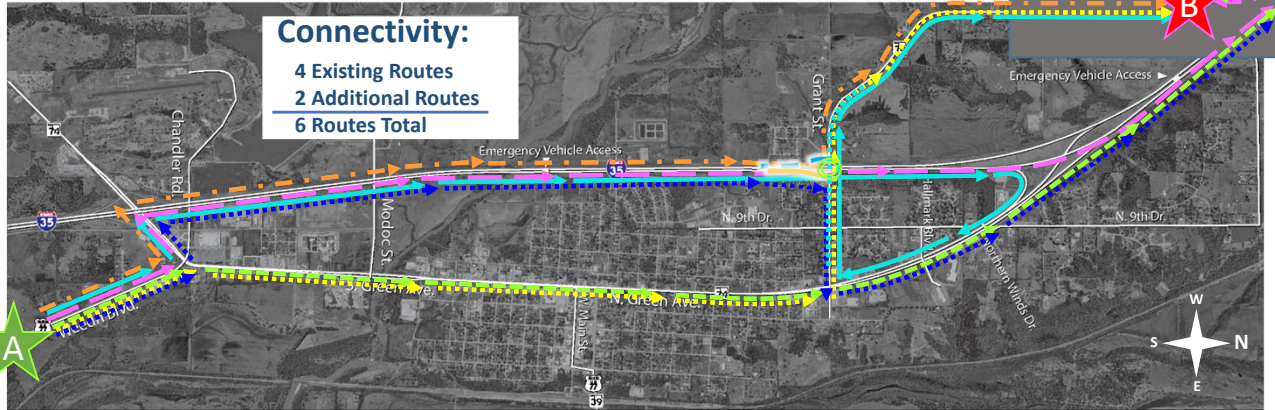
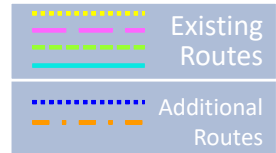
Connectivity:
4 Existing Routes
No Additional Routes
4 Routes Total



With Alternative #1, no additional travel paths are provided

Connectivity

• Alternative 2



With Alternative #2, two additional travel paths are provided for a total of 6

Connectivity

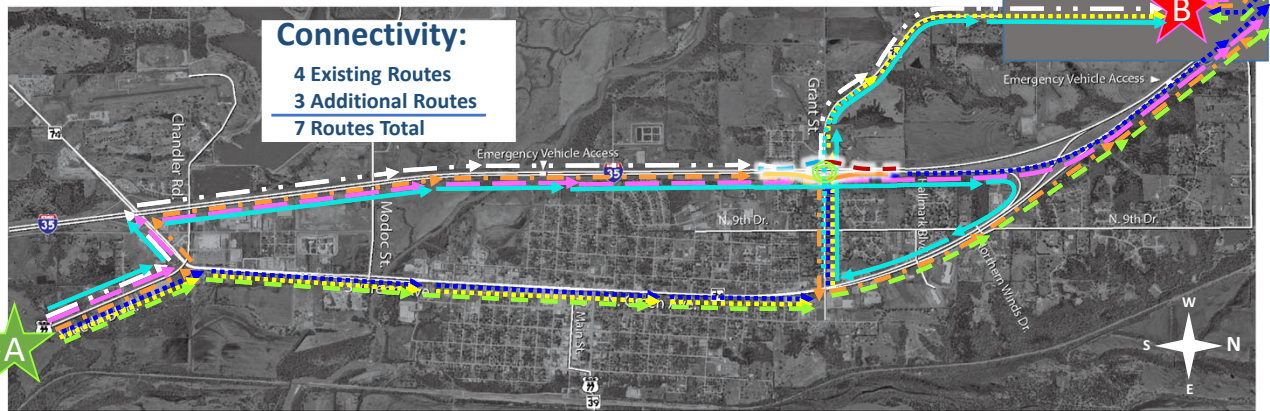
• Alternative 3



	Existing Routes
	Additional Routes

To Johnson Ave. Interchange - 1.9 Mi

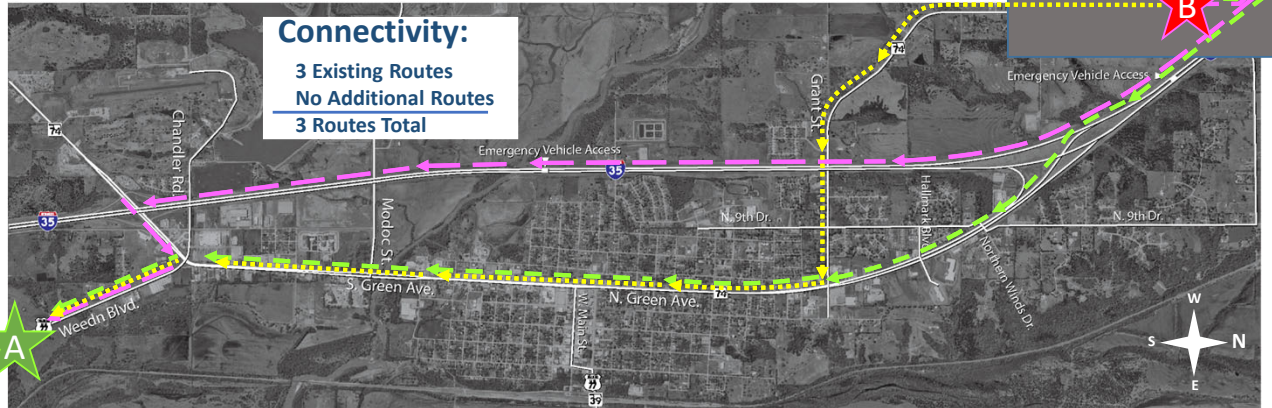
Connectivity:
4 Existing Routes
3 Additional Routes
7 Routes Total



With Alternative #3, three additional travel paths are provided for a total of 7

Connectivity

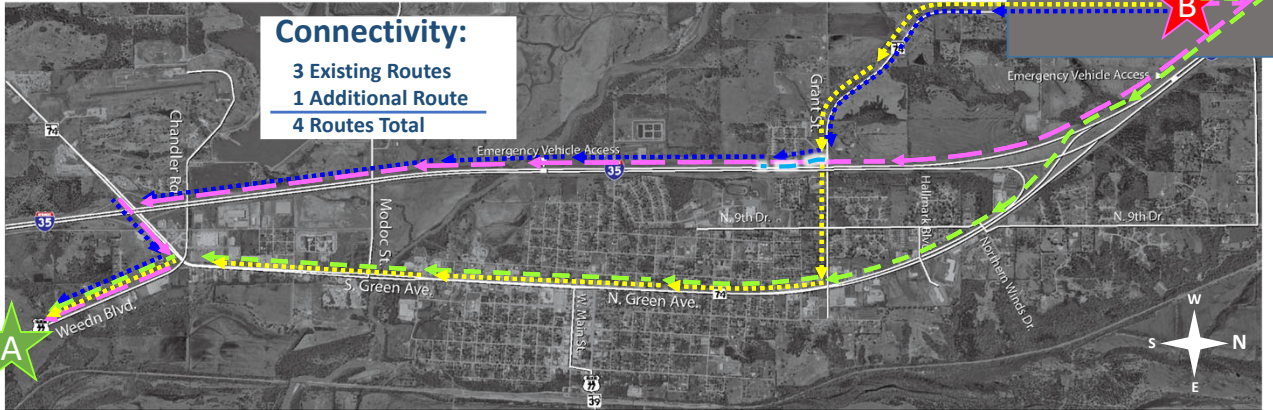
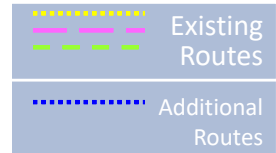
- Existing Network



Again, the base line condition was determined finding the number of travel paths between Point B and Point A using the existing network. There are 3 routes between points B and A.

Connectivity

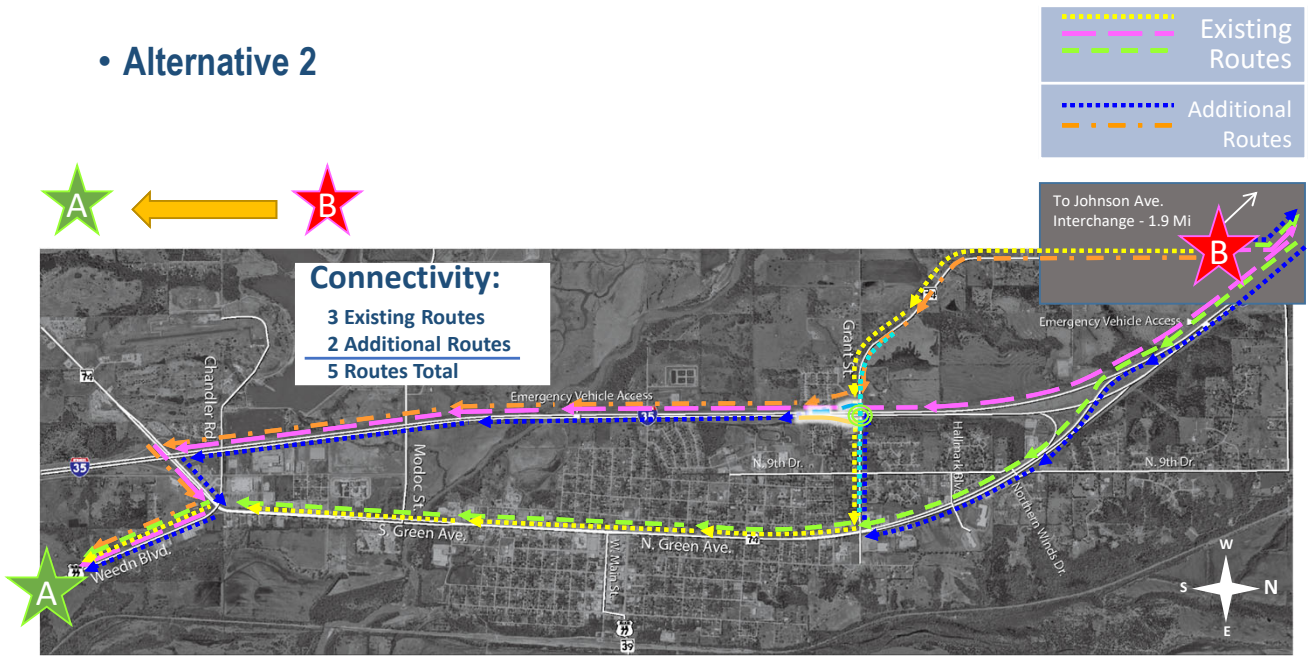
• Alternative 1



With Alternative #1, one additional travel path is provided for a total of 4

Connectivity

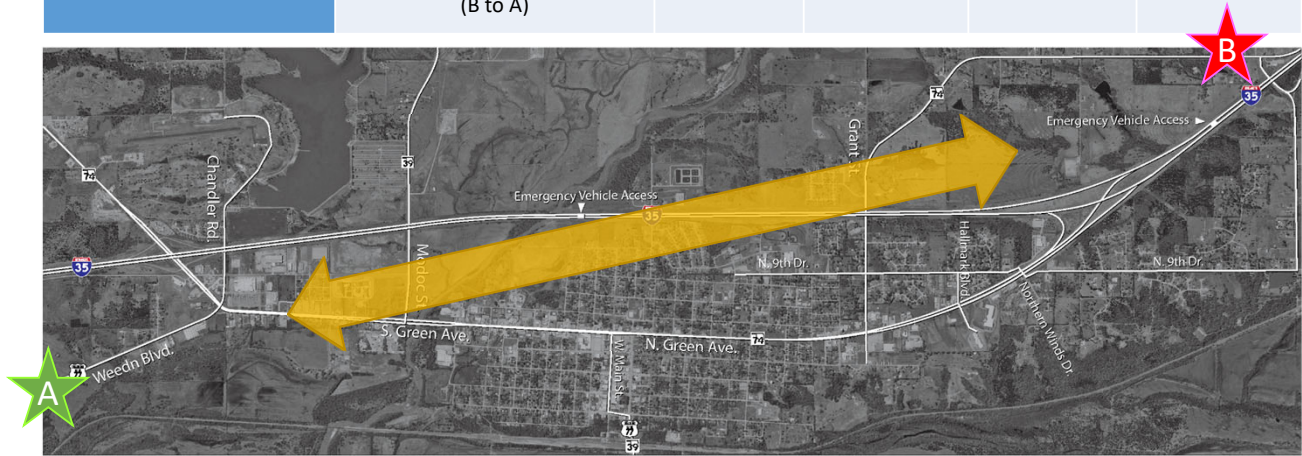
• Alternative 2



With Alternative #2, two additional travel paths are provided for a total of 5

Connectivity

P&N Selection Criteria	Method Of Effectiveness	Existing (No-Build)	Alternative 1	Alternative 2	Alternative 3
Connectivity	Number of Paths (A to B)	4	4	6	7
	Number of Paths (B to A)	3	4	5	6



The results of the entire analysis are shown here. Connectivity is best improved with Alternative #3

Accessibility

Measured by the number of alternative access points provided by each of the alternatives.

P&N Selection Criteria	Measure of Effectiveness	Existing (No-Build)	Alternative 1	Alternative 2	Alternative 3
Accessibility	Additional Access points	0	1	2	4



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Accessibility is measured by the number of alternative access points provided by each of the alternatives. Accessibility is best improved with Alternative #3.

Environmental Studies

- **ODOT and the City of Purcell are completing studies of:**
 - **Traffic Noise**
 - **Right-of-Way Impacts**
 - **Cultural Resources (Historic and Archeological)**
 - **Water and Wetlands**
 - **Threatened and Endangered Species**
 - **Hazardous Materials**
 - **Socio-Economic Impacts**
- **Studies will be compiled in an Environmental Assessment and will be presented at a Public Hearing**



ODOT and the City of Purcell are in the process of completing additional studies including:

Traffic Noise

Right-of-Way Impacts

Cultural Resources (both Historic and Archeological)

Water and Wetlands

Threatened and Endangered Species

Hazardous Materials, and

Socio-Economic Impacts

These studies will be compiled as part of an Environmental Assessment and will be presented at a Public Hearing

Next Steps



So, what are the next steps? We invite your comments to be provided by February 10th, 2021.

We expect the Environmental Studies, Final Access Configuration Selection and Public Notification of the Proposed Action be complete by the Summer of 2022.

The Right-of-way purchase process we expect to begin between the Fall 2022 or Winter of 2023.

We expect final design and construction of the Proposed Action to begin in 2025.

How to Submit Public Comments



Online – “Submit Comment” tab



E-mail – Environment@ODOT.org



Phone – (405) 325-3269



Mail – Oklahoma Dept. of Transportation
Environmental Programs Division
200 N.E. 21st Street
Oklahoma City, OK 73105



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EST
COMPREHENSIVE ENGINEERING SERVICES

CP&Y



Thank you for participating in this Virtual Open House. Please submit your comments through one of the various options which includes the online Comment Form accessible in the Comment section, by sending an e-mailing with your comments to environment@odot.org, or by mailing your comment form to the address provided. If you have any questions, you are invited to call 405-325-3269 or by mail to

**Oklahoma Dept. of Transportation
Environmental Programs Division
200 N.E. 21st Street
Oklahoma City, OK 73105**

Comments are requested to be submitted by February 10th.

Thank you.