

BROADWELL AVENUE & UNION PACIFIC RAILROAD CROSSING PLANNING AND ENVIRONMENT LINKAGES STUDY

Welcome!

The City of Grand Island (City), in coordination with the Nebraska Department of Transportation (NDOT) and the Federal Highway Administration (FHWA), is conducting a Planning and Environmental Linkages (PEL) Study (Study) for improvements at the existing Broadwell Avenue and Union Pacific Railroad (UPRR) crossing in Grand Island, Nebraska.

The purpose of today's meeting is to:

- Present the locally recommended alternative for the Study
- Answer your questions and receive comments

Project Purpose & Need

The purpose of the proposed improvements is to reduce:

- The potential for train-vehicle collisions
- Vehicle-vehicle collisions that result when vehicle traffic backs up while trains pass
- Traffic delays near the Broadwell Avenue and UPRR crossing

The project need is based on:

Train-Vehicle Conflicts

There have been 21 collisions that involved the railroad between 2015 and 2019. Only one was a train-vehicle collision.

Exposure factor is used to quantify the potential for train-vehicle crashes at at-grade railroad crossings. The exposure factor at Broadwell Avenue is 1,143,900 and would increase with additional traffic. Crossings with an exposure factor greater than 50,000 are potentially eligible for grade separation funding.

Year	Average Daily Traffic	Trains per Day	Exposure Factor ¹
2019	12,300	93	1,143,900
2045	16,000	93 ²	1,488,000

¹ Exposure factor is calculated by multiplying the average daily traffic by the average daily train traffic

² Changes in train traffic are unknown and assumed to remain steady

Traffic Delay

- Train events also affect traffic at the 2nd Street, 3rd Street, Old Lincoln Highway, North Front Street and 4th Street intersections along Broadwell Avenue.
 - Train events cause traffic to backup into adjacent intersections, blocking cross traffic
 - After train events it can take two to four traffic signal cycles for the system to return to normal traffic operations
 - Traffic backups can lead to vehicle-vehicle crashes
- Traffic stopped on southbound Broadwell Avenue at 3rd Street can back up across the railroad tracks with some drivers stopping on the tracks.

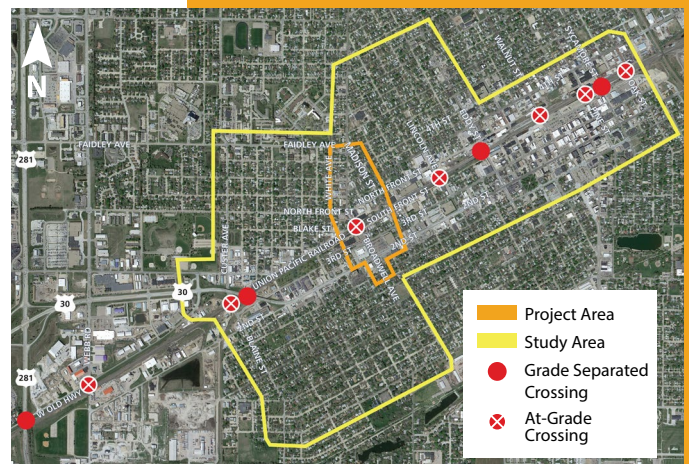
Project Description & Location

The Study is evaluating options for the at-grade crossing near the existing Broadwell Avenue crossing north of 3rd Street.

Broadwell Avenue is a north-south arterial roadway that serves as a principal connection between the north and south portions of the City.

The Project Area is the area that the study team considered to address the Project Purpose.

The Study Area encompasses a larger area that includes the potential detour route during construction as well as nearby at-grade crossings that may be closed as part of the project in order to qualify for state funding.



Potential Build Alternatives

The Study team evaluated four Build Alternatives for further review. A No Build alternative was also reviewed and would mean that no changes would be made to the crossing. The No Build alternative is being evaluated as a baseline comparison to the four alternatives as required by the National Environmental Policy Act (NEPA).

- **Alternative A - Two-Lane Overpass** ☆
- Alternative B - Three-Lane Overpass
- Alternative C - Four-Lane Overpass
- Alternative D - Two-Lane Overpass with Embankment

All alternatives included a 10-foot side path along Broadwell Avenue.

Evaluation Criteria

The alternatives were analyzed with consideration of the following.



	ALTERNATIVES				
	No-Build	A	B	C	D
PROJECT BENEFITS					
Potential to reduce train-vehicle and vehicle-vehicle collisions	●	●	●	●	●
Potential to reduce traffic delays during and after train events	●	●	●	●	●
PROJECT IMPACTS					
Potential to impact private properties	●	●	●	●	●
Potential to impact the natural environment	●	●	●	●	●
Potential to encounter regulated materials	●	●	●	●	●
Potential to impact historic properties	●	●	●	●	●
PROJECT COSTS					
Planning level cost estimate (in millions)	\$0	\$25	\$31	\$36	\$26

Locally Recommended Alternative

Alternative A - Two-Lane Overpass is the locally recommended alternative because a two-lane viaduct would have a smaller footprint and thus would have the lowest impact on adjacent private properties as well as the lowest estimated cost. The number of lanes on Alternative A is sufficient to carry future traffic.

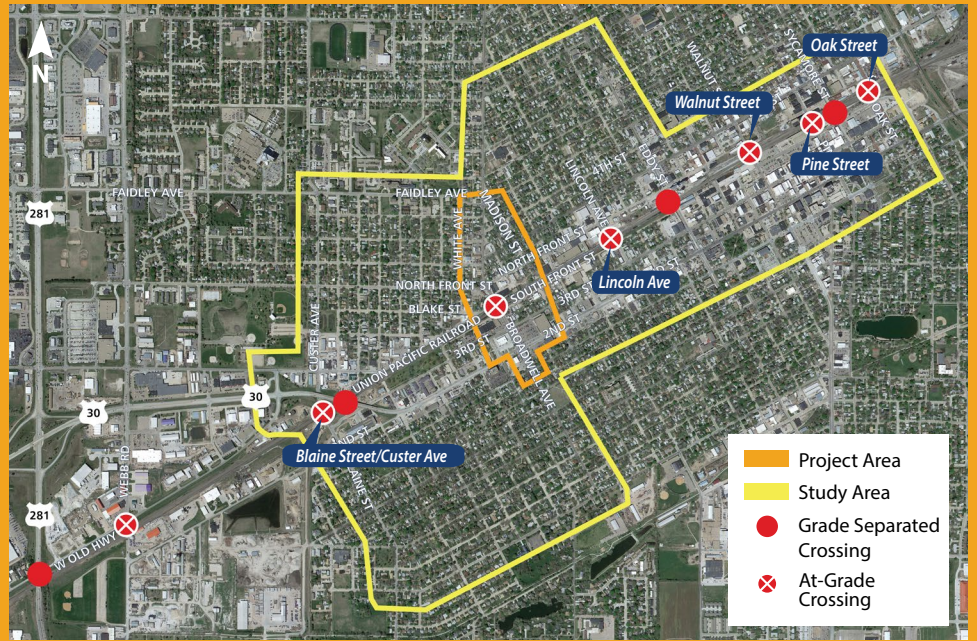


Additional At-Grade Street Closure

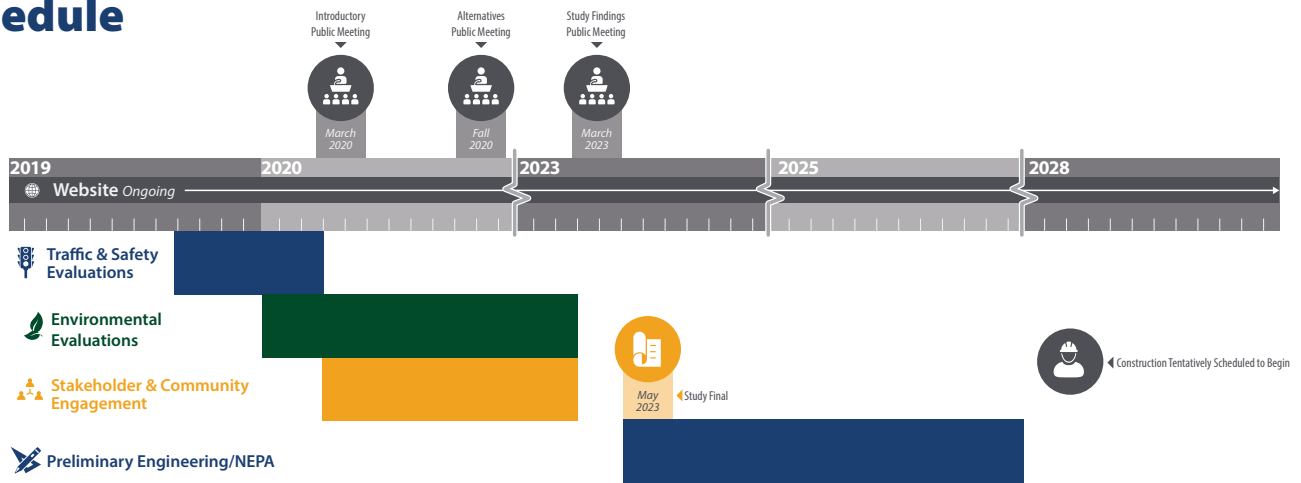
To qualify for state funding assistance, all Build Alternatives would include the closure of a second at-grade crossing.

The following crossings are being considered for closure:

- Blaine Street/Custer Avenue
- Lincoln Avenue
- Walnut Street
- Pine Street
- Oak Street



Schedule



Schedule subject to change

Next Steps

Following this public meeting, the Study team will:

- Review public feedback on the draft Study.
- Finalize the Study.
- Begin preliminary engineering and prepare detailed environmental documentation to satisfy the National Environmental Policy Act (NEPA). This phase would be led by the Nebraska Department of Transportation (NDOT) and the Federal Highway Administration (FHWA).

All materials from today's meeting will be hosted via online meeting through Friday, March 24, 2023, at www.grand-island.com/Broadwell-UPRR.

Information regarding the Study is available at www.grand-island.com/Broadwell-UPRR.

Comments will be collected through March 24, 2023, and should be submitted to:

Tim Golka, P.E., City of Grand Island
 100 East First Street, Grand Island, NE 68801
timg@grand-island.com | (308) 385-5455

For those without internet access, information may be obtained at the City offices or by contacting the City at:

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