# BROADWELL AVENUE & UNION PACIFIC RAILROAD CROSSING PLANNING AND ENVIRONMENTAL 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 for potential improvements at or near the existing Broadwell Avenue and Union Pacific Railroad (UPRR) crossing in Grand Island, Nebraska.

#### The purpose of today's meeting is to:

- Introduce you to the details of the Study
- Answer your questions and receive comments

# **Project Purpose & Need**

#### The purpose of the project is to:

- Improve traffic flow at the at-grade crossing of the Union Pacific Railroad mainline tracks and Broadwell Avenue
- Reduce the potential for train-vehicle and vehicle-vehicle crashes at the at-grade crossing
- Reduce traffic delays and associated costs

#### The project need is based on:

#### Train-Vehicle Conflicts

There have been six train-vehicle crashes since 2001.

Exposure factor is used to quantify the potential for train-vehicle crashes and at-grade railroad crossings. The exposure factor at Broadwell Avenue is 1,143,900 and would increase with additional traffic. Crossings

Year	Average Daily Traffic	Trains per Day	Exposure Factor <sup>1</sup>
2018	12,300	93	1,143,900
2040	17,600	93²	1,636,800

<sup>1</sup> Exposure factor is calculated by multiplying the average daily traffic by the average daily train traffic

with an exposure factor greater than 50,000 are potentially eligible for grade separation funding.

#### 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 traffic backups to clear
  - 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.
- On average, the annual cost of delay and crashes is \$233,500.

# **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 principle connection between the north and south portions of the City.







<sup>2</sup> Changes in train traffic are unknown and assumed to remain steady

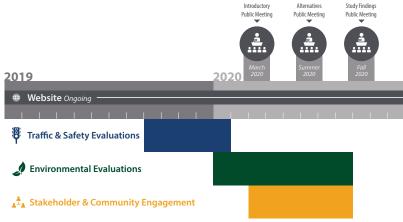
# What is a Planning and Environmental Linkages (PEL) Study?

A PEL study represents a collaborative and integrated approach to transportation decision-making that:

- 1. Considers environmental, community, and economic goals early in the transportation process
- 2. Uses the information, analysis, and products developed during planning to inform the environmental review process

This Study will use PEL principles to provide a smooth transition to future phases of this Project.

## **Study Schedule**



Schedule subject to change

## **Next Steps**

Following this public meeting, the Study team will:

Develop & analyze alternatives, which will consider:



- Host a public meeting for input on the alternatives analysis
- Identify a locally preferred alternative and prepare a report
- Present results to public

# Other Grade Separated / At-Grade Railroad Crossings



All materials from today's meeting will be hosted via online meeting from March 5, 2020, through March 20, 2020, 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 20, 2020, 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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