ITEM #: 35
DATE: 10-14-25
DEPT: PW

COUNCIL ACTION FORM

SUBJECT: E LINCOLN WAY CORRIDOR IMPROVEMENTS

BACKGROUND:

On September 23, 2025, City Council received a presentation of findings from the East Lincoln Way Corridor Study (see **Attachment A** for the presentation slides from that meeting and **Attachment B** for the final study report). The study was initiated to evaluate future roadway cross sections and multimodal improvements along East Lincoln Way from Duff Avenue to the South Skunk River bridge, in coordination with the FY 2026/27 Arterial Street Pavement Improvements project currently programmed in the Capital Improvements Plan (CIP).

The study identified a preferred alternative that improves traffic operations, establishes better multimodal connectivity, enhances safety, fits within the existing right-of-way, and can be delivered within the \$3.6 million construction budget (with \$2.88 million in AAMPO STBG funds and \$720,000 in GO Bonds).

RECOMMENDED IMPROVEMENTS:

The study recommended the following improvements:

- Reconstruct E Lincoln Way as a 3-lane roadway (one travel lane in each direction with a center two-way left-turn lane).
- Construct a 10-foot shared-use path on the south side of the corridor.
- Add pedestrian crossing improvements at priority locations identified in the *Walk Bike Roll Ames* plan.
- Reconfigure the intersection of Duff Avenue and Lincoln Way significantly improving operations and safety.

The following table provides a detailed breakdown of the benefits and drawbacks of moving forward with the study's recommended improvements versus maintaining the existing roadway and intersection geometry:

Factor	Study's Recommended Improvements (3-Lane Section)	Maintain Existing 4-Lane Section
Traffic Operations (Lincoln Way & Duff Ave intersection)	Provides much lower delays and acceptable operations through 2050. Average vehicle delays at the intersection are: 2027 - 26 sec (LOS C); 2050 - 34 sec (LOS C). Intersection also clears more quickly after train crossings at Duff Avenue.	Delays grow significantly over time. Average vehicle delays at the intersection are: 2027 - 42 sec (LOS D); 2050 - 64 sec (LOS E). Intersection will struggle to recover from train crossings as traffic and congestion increase.
Traffic Operations (E Lincoln Way Corridor)	Corridor can carry projected 2050 volumes. A dedicated center turn lane improves sight distance and keeps turning vehicles from blocking through lanes. Side-street drivers may see fewer gaps, but improved sight distance makes turning easier and safer.	Corridor can carry 2050 through volumes, but left turns remain from inside travel lanes, blocking traffic and limiting sight distance. Sidestreet drivers may see more gaps but will face reduced safety and visibility compared to a 3-lane design.
Signal Coordination (Duff Ave)	Removes the need for split-phasing at Duff Ave & Lincoln Way, which allows signals along Duff Avenue to be better coordinated. This reduces overall delays and emissions along the entire Duff Avenue corridor.	Split-phasing must remain at Duff Ave & Lincoln Way, making coordination with other signals along Duff Avenue more difficult. This increases stops, delays, and emissions along Duff Avenue.

Factor	Study's Recommended Improvements (3-Lane Section)	Maintain Existing 4-Lane Section
Safety	According to the lowa DOT's planning-level crash reduction factor (CRF) list, the following crash reductions would be expected with the study's recommended improvements: • Conversion from a 4-lane undivided roadway segment to a 3-lane roadway segment (with a two-way center left-turn lane): 30% reduction in total crashes along the road segment. • Improved pedestrian crossing with rectangular rapid flashing beacon (RRFB): 40% reduction in total crashes at each crossing location. • Install a dedicated right turn lane at a signalized intersection: 6% reduction in total crashes at the intersection.	Existing crash rates and totals along the corridor would be expected to continue or worsen moving forward toward 2050.
Pedestrian/Bike Connectivity	Adds a 10-foot shared-use path on the south side and adds safer crossings at priority locations identified in <i>Walk Bike Roll Ames</i> .	Limited facilities; crossings remain difficult and with reduced safety.
Vehicle Emissions	During the 2050 PM peak hour at the intersection of Duff Ave & Lincoln Way, produces approximately 20% less vehicle emissions and consumes 20% less fuel when compared to the existing intersection geometry (45gal of fuel; 3.17kg of CO emissions; 0.62kg of NOx emissions; 0.73kg of VOC emissions). Vehicle emission improvements are likely to be due to improved signal coordination along the Duff Avenue corridor, although this was not modeled and quantified as it fell outside the study limits and scope.	During the 2050 PM peak hour at the intersection of Duff Ave & Lincoln Way, produces 57gal of fuel, 3.97kg of CO emissions, 0.77kg of NOx emissions, and 0.92kg of VOC emissions. Signal coordination along Duff Avenue would be less efficient as well, leading to more vehicle emissions.

Factor	Study's Recommended Improvements (3-Lane Section)	Maintain Existing 4-Lane Section
Right-of-Way Impacts	Fits within the existing right-of-way through 2050. No acquisitions needed.	No ROW needed initially. By 2050, additional ROW may be needed to address worsening congestion at the Duff Avenue & Lincoln Way intersection.
Construction Costs	Estimated \$3.1M, within the \$3.6M programmed budget in the CIP.	Estimated \$3.1M, within the \$3.6M programmed budget in the CIP.
Long-Term Corridor Readiness	Accommodates forecasted traffic volumes and anticipated future development through 2050, with enough capacity to handle additional growth beyond 2050.	Faces significant challenges with forecasted traffic volumes and future development by 2050 at the Duff Ave & Lincoln Way intersection. Additional improvements will likely be required.

Overall, the 3-lane design offers greater safety, efficiency, and flexibility to meet future needs, while the 4-lane option would limit the corridor's long-term functionality and safety potential.

ALTERNATIVES:

- 1. Direct staff to utilize the E Lincoln Way (Duff Avenue to S Skunk River) Corridor Study's recommended improvements when proceeding with final design of the 2026/27 Arterial Street Pavement Improvements project, which will include converting from a four-lane to three-lane pavement section.
- 2. Direct staff to maintain existing roadway and intersection geometry when proceeding with final design of the 2026/27 Arterial Street Pavement Improvements project.

CITY MANAGER'S RECOMMENDED ACTION:

The study's recommended improvements will greatly improve long-term traffic operations, safety, and multi-modal connectivity along the E Lincoln Way Corridor. They also remain within the existing right-of-way (no acquisitions required) and fall within the project's current construction budget as programmed in the CIP. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted.

ATTACHMENT(S):

A - Presentation Slides (9-27-25).pdf

B - Final Study Report.pdf