DRAFT
ENVIRONMENTAL IMPACT STATEMENT
for
South and East Beltways
Lincoln, Nebraska

SUMMARY

Background. The City of Lincoln, Lancaster County and the Nebraska Department of Roads, in cooperation with the Federal Highway Administration, are studying the possibility of constructing a beltway around the south and east sides of the City of Lincoln. The purpose of the project is to complete the circumferential (encircling) transportation network around Lincoln which currently exists only on the north and west sides. The project would move through traffic around Lincoln's congested urban area, and improve traffic flow on the existing urban street system.

The south beltway would provide an alternative connection between US Highway 77 (US 77) in the southwest and Nebraska Highway 2 (N-2) at the southeast edge of Lincoln. Access points are proposed at 27th, 68th and 84th Streets. The study area for the south beltway is bounded on the north by Yankee Hill Road, on the south by the half-section line 0.8 km (0.5 mi) south of Bennett Road, on the east by the half-section line 0.8 km (0.5 mi) east of 148th Street, and on the west by US 77.

The east beltway would connect N-2 at the southeast edge of Lincoln with Interstate 80 (I-80) in the northeast. Access points are proposed at Pine Lake Road, Pioneers Boulevard, US 34 (O Street), Adams Street, Fletcher Avenue and US 6 (Cornhusker Highway). The study area for the east beltway is bounded on the west by 98th Street, on the east by the half-section line 0.8 km (0.5 mi) east of 148th Street, on the north by I-80, and on the south by N-2.

The beltways could be constructed together, completing the loop around the City, or separately as stand alone projects with independent utility (*i.e.*, they would be usable and a reasonable expense even if only one is built without the other).

NEPA. This document has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969. All federally funded projects must comply with NEPA which requires that social, environmental and economic considerations be incorporated in project planning, and that public involvement be incorporated into the decision making process. The intent of the law is to find a balance between population needs and use of resources–with the idea that there can be a productive harmony between advancing development and preservation of our nation's resources for future generations.

Purpose and Need. Traffic data, regional growth trends and previous studies have all indicated a need for south and east beltways. Some of the highest rates of growth have been on the south and east fringes of Lincoln thereby requiring a long-range plan to develop early identification of bypass corridors and potential purchase of right-of-way. Existing high volumes of local traffic on arterials such as US 6 and N-2 is made worse by high volumes of through traffic which originates outside Lincoln and travels to destinations beyond the City. In addition, internal to external trips and external to internal trips are currently made using arterial roadways

with signalized intersections and, in some areas, direct access to adjacent properties. This results in excessive delay and congestion along these roadways.

Alternatives Analysis. The document contains an evaluation of project alternatives based on the results of five years of data collection, analysis, and public and agency review. Although the document includes the step by step evaluation process, the final evaluation represents an analysis of all that is known at this time.

The study considered a wide range of alternatives, including non-beltway and no build alternatives. These alternatives were evaluated and those considered most practical and with the least environmental impact were carried forward to more detailed levels of analysis. The planning process included four levels of analysis, each representing a more comprehensive evaluation. The overall process was envisioned as a funnel, with the alternatives continually being reduced in number until the best candidates remained to be carried forward in the DEIS analysis. These were identified as the four finalist alternatives, and included one south beltway alternative (SM-4) and three east beltway alternatives: close, mid and far (EC-1, EM-1 and EF-1).

Although the analysis of benefits and impacts has been completed, selection of the preferred alternative, will not occur until all comments on this Draft EIS are received and considered. Discussion of the final selection will be included in the Final EIS document.

Comments on the Draft EIS are due 45 days after notice of Draft EIS availability is published in the Federal Register. Comments should be sent to Mr. Roger Figard, City Engineer, City of Lincoln, 531 Westgate Boulevard, Lincoln, Nebraska 68528.

Proposed Action. The proposed action was assumed to involve construction of a 4-lane roadway designed to freeway standards, similar to Interstate 80 (I-80). A freeway design would have (1) complete access control (no at-grade crossings), (2) 75 to 90 m (250 to 300 ft) wide right-of-way, and (3) design speed of 110 km/h (70 mph) and posted speed of 105 km/h (65 mph). Beltway interchanges would be spaced approximately 3.2 km (2 mi) apart along the existing grid network. Roadways which cross the beltway may or may not be improved as part of the federal project. However for cost estimating purposes of this study, it was assumed that ultimately all unpaved county roads at beltway interchanges would be upgraded to 4-lane paved roadways. County roads which cross the beltway overpasses were assumed to be upgraded to 2-lane paved roadways.

Assessment of Transportation Benefits. Comparison of the four finalist beltway alternatives indicates that all of the alternatives will serve the project purpose and need, and all of the alternatives are considered feasible and cost-effective solutions. The location of the east beltway in terms of the close, mid or far alignment does not seem to have a significant effect on the amount of traffic it is expected to carry or the benefits obtained. The east beltway provides relief to traffic coming into or through Lincoln from the northeast (Omaha) and the southeast (Nebraska City). This traffic will use the east beltway regardless of which alternative is selected. The major differences between the east alternatives involve the interchanges at I-80, N-2 and the south beltway. The EC-1 and EF-1 require diagonal routing to connect to an interchange at I-80, and require two separate interchanges for N-2 and the south beltway. EM-1 requires a single, but more complicated interchange at N-2 and the south beltway. These differences are best reflected in the construction cost estimates and right-of-way impacts; however, they have little effect on system performance.

Assessment of Environmental Impacts. This Draft EIS contains an assessment of environmental, social and economic impacts, and includes proposed mitigation to avoid, minimize or compensate for project impacts to the extent possible. Comparison of the project impacts indicates that all of the alternatives have relatively low impact considering the length of the segments. This is due to the primarily rural setting and the great effort made to minimize impacts throughout the beltway planning process. However, all of the east routes have impacts to Section 4(f) resources.

Overall differences between the east alternatives are relatively minor. EC-1 and EF-1 have greater right-of-way requirements than EM-1; and therefore, have greater land use impacts. EC-1 has slightly more impact to suburban type land uses such as residential and commercial acreage and impacts to trails due to its closer proximity to Lincoln. In contrast, EF-1, which is 4.0 km (2.5 mi) more distant from the city than EC-1, has slightly more impact to rural uses such as farmland, prairie, historic structures, and actual number of residences. EM-1 and EC-1 have slightly more impact to natural resources such as streams, floodplains and floodways, and wetlands due to their closer proximity to Stevens Creek, where as EF-1 has slightly less impact to natural resources due to its general location along the ridgeline.

There are some differentiating impacts between the routes that should be carefully considered in selecting a preferred alternative.

- For EC-1, *noise and visual impacts* to nearby residences are greater than with other alternatives because it extends across a more developed landscape closer to the city.

- For EF-1, impacts to *historic structures* are greater due to the greater presence of resources with increasing distance from the city and urbanization.

- The *higher costs* of EC-1 and EM-1 compared to EF-1 are due to the major bridge structure at Stevens Creek.

- The diagonal segment at the north end of EC-1 creates a less desirable *circuitous route* (with backtracking for westbound traffic) and has greater impact to farming operations.

- The EC-1 connection at N-2 and the south beltway requires two interchanges which creates an undesirable triangle of land and *access problems* for several residences.

- There are *cost savings* with the SM-4/EM-1end-to-end beltway due to the common interchange at N-2.

Although all of the alternatives meet the project purpose and need, obviously, there are benefits and trade-offs with any of the three east alternatives. The goals, objectives and values of the Lincoln-Lancaster County community will need to be carefully considered in the selection of the preferred alternative.

Project Costs. Construction costs for end-to-end beltways ranged from $236 million with SM-4/EF-1, $247 million with SM-4/EM-1, and $254 million with SM-4/EC-1. Costs are within 8 percent of each other for the end-to-end beltways. This is within the 20 percent contingency contained in all cost estimates.

Areas of Controversy. Four main areas of controversy were identified during the beltways study. These were:

1. Wilderness Park. Concerns were raised about six south beltway alternatives which crossed Wilderness Park–a public park afforded certain protection under Section 4(f) of the Department of Transportation Act. Wilderness Park is an approximately 12.9 km (8.0 mi) long park encompassing over 728 ha (1,800 ac) and located along Salt Creek. The park is a favorite among local residents. Urban expansion and protection of the park have been critical issues affecting Wilderness Park in recent years. Based on the Level III alternatives analysis, it was shown that there were reasonable and prudent alternatives which did not require use of land from the park; therefore, all south beltway alternatives through Wilderness Park were eliminated from further consideration.

2. Historic Resources. Concerns have been raised regarding the impact of the beltway on historic resources. As a result, the beltway study has gone to extensive effort to identify and evaluate potential effects to historic standing structures and archeological resources in the study area. In compliance with Section 106 of the Historic Preservation Act, all studies and evaluations have been prepared in consultation with the Nebraska State Historic Preservation Office. Wherever possible, site specific shifts in alignments were made to avoid impacts to historic properties. Despite this effort, historic resources would be adversely affected, amounting to one site along SM-4, one site along EC–1, two sites along EM-1 and three sites along EF-1.

   In compliance with Section 4(f), impacts to historic sites were also evaluated to determine if proximity impacts were so severe that the activities, features or attributes that make the site significant, and of value to the public, would be substantially impaired. Based on this evaluation, only one site (a road sign) was determined to impacted under Section 4(f) (with EM-1 and EF-1).

3. Social Concerns. In 1997, elected officials indicated that impacts to residences and developed areas were of primary importance to their constituents. This community value was defined in a vote by the Supercommons (consisting of the City Council, County Commission and City-County Planning Commission) resulting in a directive to eliminate the EC-1 alternative from further consideration. In order to comply with NEPA, all reasonable alternatives have been evaluated, including EC-1.

4. Urban Sprawl. Concerns have been raised that the east beltway will encourage urban sprawl along the beltway route, where urban sprawl is considered to be any non-farm development not contiguous to the Lincoln City limits. The implication is a far location will create non-contiguous growth, and a close location will continue compact growth.

The City of Lincoln has a tradition of planning which dates back to the 1950s. One of the most long held policies has been to develop "a compact and generally contiguous urban form" around its confines with the goal to "protect existing rural areas from urban sprawl through planned development". The current *1994 Lincoln-Lancaster County Comprehensive Plan* embraces the concept of "managed contiguous growth" and the phasing of infrastructure expenditures based on this policy. However, the plan also encourages a unified planning approach between urban and rural interests and encourages "services to meet a range of urban and rural lifestyles".

Considering that there already exists a proliferation of non-farm residential acreages and acreage subdivisions in the beltway area, the development of a beltway will likely result in more pressure for urbanization in the area; however, this does not necessarily equate to urban sprawl when it follows a locally approved plan.

Contact Information. The following individuals may be contacted for additional information on the project.

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