

Appendix H

Natural Environmental Resources

Nicollet-Central Transit Alternatives

Natural Environment Resources

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1. Introduction

Three transportation mode/alignment alternatives are being studied for potential implementation within the Nicollet-Central Transit Alternatives Study area. The transportation modes under consideration include enhanced bus along the entire alignment from 41st Ave NE in Columbia Heights to West 46th Street in Minneapolis, modern streetcar along the entire alignment, and modern streetcar along a segment of the alignment between 8th Street NE and West Lake Street in Minneapolis.

Natural resources that may be impacted by each of these alternatives have been identified and are summarized in this report. This was done as an early planning level effort so that potential impacts to natural resources could be avoided, minimized, or mitigated through the planning and design stages. To this end, this report focuses on identifying natural resources that will likely be addressed as part of environmental review of the Locally Preferred Alternative (LPA), following National Environmental Policy Act (NEPA) guidance.

2. Methodology

For purposes of this analysis, natural resources within a half-mile of either side of the alignment were identified using aerial photography and geographic information systems (GIS) data. Natural resources include features such as rivers, streams, lakes, wetlands, parks, and visual impacts. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) were also used to identify flood hazard areas. This assessment also included parklands, consistent with environmental review and Section 4f regulations. The Department of Transportation Act (DOT Act) of 1966 included a special provision (Section 4f) which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.
- The action includes all possible planning to minimize harm to the property resulting from use.

Figure 1 illustrates the relationship between the proposed alignment and environmentally sensitive areas located in the corridor. In subsequent phases of environmental analysis, each of the build alternatives will be evaluated for its potential to impact natural resources within the Corridor.

Figure 1: Environmental Resources in the Nicollet-Central Study Corridor



3. Findings and Conclusions

3.1. Bodies of Water

The City of Minneapolis, and this study corridor, are bisected by the Mississippi River. In addition to this major waterway, Loring Pond, Labelle Pond and Jackson Pond are additional water resources within the study corridor. Because the alternatives will operate within the existing roadway right-of-way and will not require the construction of any new bridges, it is unlikely that any of the build alternatives will have adverse impacts on bodies of water within the study corridor.

3.2. Wetlands

There are a limited number of wetlands within the study corridor: the areas around Loring Pond and Labelle Pond are both classified as wetlands. It is not anticipated that any of the alternatives under consideration would adversely impact either of these wetlands.

3.3. Public Parks and Open Space

There are several public parks and open spaces along the proposed alignment, including:

- Dr. Martin Luther King, Jr. Park
- Temple Israel Cemetery
- Sabathani Community Garden
- Washburn Fair Oaks
- Loring Park
- Mill Ruins Park
- St. Anthony Cemetery
- Columbia Park
- Deming Heights Park
- Labelle Park

In addition to these public parks and open spaces, the Mississippi River's recreational opportunities support its functionality as both a waterway and a public park. Because the alternatives under consideration will all operate within the existing right-of-way, it is unlikely they will have adverse impacts on public parks and open space.

3.4. Flood Hazard

Figure 1 illustrates the location of flood hazard areas within the Corridor:

- 1 percent annual flood hazard along the Mississippi River
- 0.2 percent annual flood hazard on Nicollet Island
- 0.2 percent annual flood hazard around Labelle Pond
- 0.2 percent annual flood hazard around Jackson Pond

While the proposed alignment crosses the Mississippi River and Nicollet Island, all alternatives under consideration will operate within the existing right-of-way and are unlikely to be adversely impacted by any flood events.

3.5. Visual Impacts

The enhanced bus alternative is not anticipated to visually impact the study corridor because it will operate in a similar visual envelope to the existing conventional bus system. Modern streetcar, however, will likely utilize

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electric power that is delivered to the vehicles through a system of overhead catenary wires and supporting poles. While the visual impact of this catenary system will likely to be camouflaged by the surrounding built environment along the majority of the alignment, it may have a more noticeable impact over the Hennepin Bridge.

While the catenary system of modern streetcar will likely introduce a new visual element into the environment, it is unlikely to exceed a minimal visual impact.

4. Summary

Based on an assessment of potential impacts on natural resources, it is unlikely that any of the build alternatives will adversely impact environmental resources within the study corridor. If streetcar is selected as the LPA mode, construction of an Operations and Maintenance Facility – depending on its siting – may impact natural resources within the corridor. Infrastructure and design decisions that are made during refinement of the LPA will be evaluated in more detail during NEPA evaluation.