



ALIGNMENT ALTERNATIVE EVALUATION FACTORS

As part of the alignment alternative evaluation process for the North Hamilton Crossing project, the project team is assessing how each proposed alternative affects or is affected by a series of factors, listed below. The current phase of analysis is being conducted based on a desktop review of databases, GIS, and other available information resources.

Purpose and Need – Primary Needs

This category evaluates how well the proposed alignment alternatives satisfy the primary needs that have been identified for the project. Evaluation factors include:

- Improves east-west connectivity
- Improves lack of sufficient river crossings
- Improves lack of grade-separated (overpass or underpass) railroad crossings
- Improves mobility/congestion on the local road network
- Improves safety

Purpose and Need – Secondary Needs

This category evaluates how well the proposed alignment alternatives satisfy the secondary needs that have been identified for the project. Evaluation factors include:

- Supports economic development
- Improves bike/pedestrian connectivity
- Improves multimodal linkage – Multimodal refers to providing accommodations and linkages for more than one method of travel through an area. Options could include travel by personal vehicle, public transit (bus, rail, light rail, streetcar, etc.), bicycle, walking, etc.

Cultural Resources

A cultural resource is any prehistoric or historic site, district, building, structure, or object. A “historic property,” is defined as any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP). The phrase “eligible for inclusion in the National Register of Historic Places,” includes properties that meet the National Register Evaluation Criteria and have been formally determined as eligible by the Secretary of the Interior and/or Ohio’s State Historic Preservation Office (SHPO).

Evaluation factors in this category include:

- **National Register of Historic Places (NRHP) – Listed Sites** – A listed site is a location designated by the National Park Service where pieces of political, military, cultural, or social history have been preserved due to its cultural heritage value. A historic site may be a building, landscape, or structure that is of local, regional, or national significance.
- **National Register of Historic Places (NRHP) – Listed Historic Districts** – A historic district is an area designated by the National Park Service due to its cultural heritage value. Historic districts can be a group of buildings, structures, or even small neighborhoods and communities.

The National Register of Historic Places (NRHP) is the National Park Service's official list of historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources throughout the country.

Section 4(f)/6(f)

Evaluation factors for this category consider potential impacts on:

- **Section 4(f)/6(f) sites** – Section 4(f) refers to the U.S. Department of Transportation Act of 1966 that protects publicly-owned parks, recreation areas, wildlife and waterfowl refuges, and public or privately owned historic sites included in or eligible for inclusion in the National Register of Historic Places (NRHP) from impacts resulting from construction of transportation facilities funded by the USDOT. Section 6(f) of the Land and Water Conservation Fund Act (LWCF) of 1965 protects certain recreation lands that received LWCF assistance from being converted into a non-recreational use.

Ecological Resources

In this category, the project team assesses the potential impacts of each alternative on the following ecological resources:

- **Great Miami River/Hydraulic Canal**
- **Other streams**
- **Wetlands**

Floodplains and Floodways

This category evaluates how much each alignment alternative encroaches on designated floodplain and floodway areas identified on FEMA's Flood Insurance Rate Maps (FIRM) and defined as follows:

- **100-year floodplain** – Floodplains are areas of land that are prone to flooding during times of heavy wet weather events. It is generally the flat area next to rivers and streams.
- **100-year floodway** – A floodway lies within the boundaries of a floodplain. It is the channel of a river or stream and the adjacent land that must remain free from obstruction so that base floodwaters can flow downstream without rising above a designated level. Floodways must be kept clear of buildings, houses, or other man-made structures.

Hazardous Materials

This category identifies the presence of any properties that pose a regulated materials concern within and near to a proposed alignment alternative. Impacts to regulated materials sites is evaluated through a Regulated Materials Review (RMR) which includes, but is not limited to:

- Solid waste and hazardous waste as defined by State or Federal regulations;
- Other wastes contaminated with hazardous substances, petroleum fuels, toxic substances, and pollutants; and
- Any substance, product, refuse, discarded material, or other material of any nature that is or becomes listed, regulated, or managed pursuant to State or Federal regulations.

Community & Land Use Impacts

The Community & Land Use category considers how the communities through which each proposed alignment alternative pass would be affected. Evaluation factors include:

- **Farmland Impacts** – Refers to amount of farmland that would be impacted in order for a particular alignment alternative be constructed.
- **Community facilities** – Lists community facilities that could potentially be impacted by the construction of a particular alternative. These include schools, churches, libraries, community centers, fire stations, police stations, and other public buildings.
- **Traditionally Underserved Populations** – Each alternative will be evaluated to determine if it would impact Underserved Populations which include minority, low income, older adults, individuals with disabilities and individuals with limited English proficiency.

Stakeholder/Public Involvement

This category considers the opinions and concerns of stakeholders and the general public, which will be gathered during Stakeholder Committee meetings and public input opportunities. Evaluation factors include:

- **Public concerns**
- **Stakeholder concerns**

Right-of-Way

The Right-of-Way category considers the property impacts of each alternative. Evaluation factors include:

- **Required relocations** – Refers to the number of residential and/or business relocations that would be required should a particular alignment alternative be constructed.
- **Right-of-Way** – Refers to the amount of right-of-way (the right to pass over or through properties that are owned by someone other than the city or county) that would need to be purchased in order for a particular alignment alternative be constructed. The number of parcels that may be impacted is also listed.

Engineering Considerations

The Engineering Considerations category looks at key design elements of each alignment alternative including:

- **Alternative length** – Identifies the full length of the alternative.
- **Design speed** – Identifies the average speed limit that the alternative will be designed to support.
- **Roadway design issues** – Identifies any specific issues pertaining to roadway design.
- **Structural design issues** – Identifies number of bridges required and any specific issues pertaining to structural design of each alternative.
- **Utility relocations and/or issues** – Identifies significant utilities that may need to be relocated and other issues that need to be considered.

Traffic/Maintenance of Traffic Considerations

This category will use traffic modeling to assess the following:

- **Anticipated alternative travel time** – The projected length of time it will take to travel the proposed alternative from end to end.
- **Anticipated % reduction in High Street (SR 129) travel time** – The projected % change in the projected time it will take to travel along High Street during specific time periods throughout the day
- **Anticipated % reduction in High Street (SR 129) traffic** – The projected % change in the volume of traffic using High Street during specific time periods throughout the day

- **Maintenance of traffic concerns** – Identifies any concerns that would/could potentially impact traffic flow during construction.

Preliminary Cost Estimates

This category looks at the following estimated costs:

- **Preliminary construction costs** – Estimated costs for materials and construction
- **Preliminary right-of-way costs** – Estimated costs to purchase right-of-way

Conclusion

This category is an overall determination that considers all the evaluation factors and identifies whether or not a proposed alignment alternative should be eliminated from consideration, modified, or advanced for further study. The evaluation factor is:

- **Recommended for further study?**