

Addendum to Evaluation Criteria

The following includes additional context and comments from the City of Austin departments related to the Evaluation Criteria. Many comments are oriented toward future design options as the project moves forward, and we wanted to share the comments with you now to inform the developing project.

Purpose and Need

Aligned with TxDOT's Road to Zero Initiative and City of Austin's Vision Zero Initiative Supports TxDOT's mission to cut traffic fatalities in half by 2035 and then entirely by 2050. Supports the City's mission to eliminate traffic deaths and serious injuries on Austin streets.

Comment: The City would like to see more specificity in the parameter and metrics in order to reflect the spirit of the Vision Zero and Road to Zero programs of eliminating fatal and serious-injury crashes. Ideally, the parameter would specify design considerations including:

- a minimum mainlane median height of 54 inches;
- a reduction in surface-level access to mainlanes;
- pedestrian crossings spaced no more than one half-mile apart;
- sidewalks or shared-use paths along the entire corridor;
- design speeds compliant with the safe-systems approach;
- designs forgiving of human error, so severity of injuries is minimized;
- lane widths on frontage roads compatible with a safe systems approach;
- sufficient lighting on mainlanes and frontage roads;
- sufficient shoulder space for safely situating people and vehicles after a crash; and
- sufficient access points for emergency vehicles.

The metric should then score each alternative based on how many of these considerations it meets.

Reduction in crash rate

Comment: The City of Austin is working to eliminate all fatal and serious-injury crashes from its roads, so a metric that expects crashes to be reduced — rather than eliminated — runs counter to its council-approved safety goals. Please consider using this as a parameter as an alternative safety metric: “Reduction in people seriously injured or killed in the corridor and review potential for crash reductions.”

Emergency egress requirements

Tunnels will require detailed evaluations and additional design elements to meet Fire and Life Safety code requirements.

Comment: The City suggests the following as alternative language for this parameter:

- Reflect NFPA 502 standards for roads, tunnels, bridges, and elevated/limited access highways;
- Includes plans for improved technology to locate collisions and other incidents as well as inform best access points;

Additionally, please consider the following in the evaluation of the project design:

- Meet NFPA 502 Chapter 14 for HazMat transportation;
- Have adequate turn arounds for large public safety vehicles;
- Clearly state any proposed tunnel dimensions and ventilation plans for tunnels;

- Clearly identify shoulder locations and widths for main lanes;
- On- and off-ramps are designed to eliminate backup onto the main lanes;
- Include language about access during construction to hospitals as well as east/west connectivity across the construction areas for emergency response; and
- Consider increase in precipitation from historical norms.

Improves emergency response time for EMS, police, fire, and hospitals

Adequate ramps, detour routes for emergency vehicles

Comment: This parameter should specifically evaluate alternatives for following considerations:

- Details on adequate ingress/egress to new lanes;
- Provide large enough shoulders for emergency vehicle traffic;
- Reduction in barriers for emergency vehicle travel east and west across the project area;
- Enables ability to enforce traffic laws with limited access points and stopping areas; this includes both tunnels and HOV lanes;
- Surrounding roadways addressed to prevent secondary roadway traffic issues and congestion if mainlanes are restricted (example - 183 to IH35 access ramp);
- Includes evaluation of roadways during flood or icing events;
- Consider increases in precipitation above and beyond current models; and
- Will be built to NFPA 502 standards.

General purpose travel time

Change in travel time compared to the No Build

Comment: Please consider the following to develop an alternative parameter that emphasizes the movement of people and goods rather than vehicles.

“Change in person-carrying capacity for all transportation modes compared to the No Build:

- Are proposed capacity improvements focused primarily on reducing motor vehicle delays for peak-hour travel?
- How does this criterion ensure more people can use the corridor for the next several decades?
- How was projected population growth assumed to use the corridor? The project should not assume, plan, or facilitate additional users to continue choosing predominately single-occupancy trips and the same travel routes and same time-of-day trips.
- How might the project manage travel demand instead of simply improving vehicle throughput?”

Managed lane travel time

Change in travel time compared to the No Build

Comment: Please consider the following as an alternative parameter:

“Change in person-carrying capacity for all transportation modes compared to the No Build” and scoring the parameter on the basis of the following:

- Ability to adjust management control to respond to travel demand potentially resulting in congestion;
- Ability of managed lanes to provide prioritized transit operations;
- Ability to accommodate new pricing structure for managed lanes;
- Reduction on central business district grid loading/unloading compared to No Build; and
- Reduction in gridlock conditions”

Additionally, the City asks how do reductions to travel times and increases to person-carrying capacity compare between variable-priced managed lanes and free managed lanes? National studies can be referenced for corridors similar to IH-35 for this analysis.

Reduction in travel demand in adjacent transportation roadway network

Change in travel demand patterns/traffic volumes and delays on adjacent roadway network

Change in travel time compared to the No Build

Comment: The City has concerns about the measurement for this parameter. These relate to how the parameter will be quantified and the extent of the area of analysis. Does the analysis use traffic microsimulation or travel demand forecasting? Congestion from IH-35 impacts the City of Austin's street network a significant distance from the corridor, and it impacts people's choices where to access it. ATD recommends analysis extend one mile on both sides of the corridor.

Annual cost of delay

Cost savings from reduced delays relative to No Build

Comment: This parameter might be more effectively rearticulated as “annual cost of delay per person” to improve community engagement and address the Purpose and Need. A lay person will better understand the cost of delay per person than an abstract community-level figure. Additionally, it would reframe the analysis on moving people and goods, rather than moving vehicles since many individuals can occupy some vehicles. This metric might also be improved by factoring the total transportation cost (such the costs of owning a vehicle as compared to using transit). Please consider using a model that factors these costs into this parameter.

Improves east-west connectivity

Enhanced vehicular, bicycle and pedestrian crossings

Comment: Please consider using this language for the parameter:

“Enhanced existing and creating new vehicular, bicycle and pedestrian crossings.”

I-35 is the deadliest roadway for pedestrians in Austin, and much of that is due to distance between safe crossings. As a metric for this parameter, please consider using “Is the longest distance between safe pedestrian crossings less than or equal to 1/2 mile?” as a yes or no measure. It may also be useful to break out this parameter into three, one each for motor vehicles, bicycle users, and pedestrians.

Accommodates Cap Metro Project Connect improvements at cross routes

Accommodates Project Connect's proposed light rail system at east-west crossings

Comment: Please consider changing the parameter to “Accommodates Capital Metro's **service plan** at east-west crossings.” Project Connect includes not only light-rail service, but also rapid bus service connecting East Austin with the rest of the city. Moreover, many existing transit services cross I-35 and could be negatively impacted during construction and by the given alternative.

Additional criteria for Purpose and Need proposed by the City of Austin

Comment: Please consider adding the following criteria to the Purpose and Need evaluation. These criteria would likely result in the selection of an alternative that better reflects the needs of the Austin community and meets broader community support.

- **Parameter:** Person volume
Measure: Comparison of person-capacity per day to the No Build.
- **Parameter:** Person-Hours Traveled
Measure: Comparison of person-hours of travel to the No Build.
- **Parameters:** Travel times for each of the following:
 - General lanes
 - Frontage lanes
 - Managed lanes**Measure:** change in travel time compared to the No Build.
- **Parameters:** Peak period travel times for each of the following:
 - General lanes
 - Frontage lanes
 - Managed lanes**Measure:** change in travel time compared to the No Build.
- **Parameters:** Off-peak travel times for each of the following:
 - General lanes
 - Frontage lanes
 - Managed lanes**Measure:** change in travel time compared to the No Build.
- **Parameter:** Travel time variability for each of the following:
 - General lanes
 - Frontage lanes
 - Managed lanes**Measure:** 80th percentile planning time index (PT180) ratio of peak to off-peak variation in travel conditions.
- **Parameters:** Average speed for each of the following:
 - General lanes
 - Frontage lanes
 - Managed lanes**Measure:** Average system speed compared to the No Build.
- **Parameter:** Volume to capacity ratio
Measure: Comparison of levels of congestion to the No Build.
- **Parameter:** Vehicle volume
Measure: Comparison of vehicles per day to the No Build.

Feasibility, Design, and Engineering

Constructability

Construction duration, construction staging/sequencing complexity

Comment: The City is concerned about the impacts of construction to greenway and other non-motorized facilities. Please integrate impacts to greenways and other paths — including turn radii for bicycle and wheelchair users — into the measurement of this parameter.

Amount of new right of way (ROW) required

Acres of ROW

Comment: The measurement for this parameter may not take into account the relative value of ROW, such as ROW taken from parkland or cemeteries. If incursion into these areas is unavoidable, please consider weighting alternatives on the types of ROW needed, for example weighting acres from parks, cemeteries, or other culturally sensitive properties higher than ordinary ROW.

Drainage infrastructure complexity

Construction and maintenance of drainage infrastructure

Comment: Please consider in the measurement for this parameter the extent to which drainage from alternatives can be treated and improve existing water quality.

Additional criteria for Feasibility, Design, and Engineering proposed by the City of Austin

Comment: Please consider adding the following criteria to the Feasibility, Design, and Engineering evaluation. These criteria would likely result in the selection of an alternative that better reflects the needs of the Austin community and meets broader community support.

- **Parameter:** Cost of ROW required
Measure: total cost of ROW needs for each alternative
- **Parameter:** Accommodation of Green Infrastructure
Measure: acres of area available for tree planting, rain gardens, or bioswales
- **Parameter:** Navigability and User-friendliness of Alternatives
Measure: average length of sightlines to signage and exits
- **Parameter:** Disruption during construction

Environmental Resources

Minimize residential displacements

Travis Central Appraisal District property data

Comment: Please consider utilizing American Community Survey (ACS) data and City of Austin resources to identify minority and low-income property displacements. Please consider additional parameters to capture the cumulative effects of highway construction.

Minimize business displacements

Travis Central Appraisal District property data

Comment: The City has concerns about how the proposed project and its construction will affect existing small businesses. Please consider separating business owners from property owners in the analysis by using TCAD data and City of Austin resources. The parameters for analysis should also include business-owner demographics, rents, and other vulnerability factors. Please consider consulting the City's Economic Development Department to identify vulnerability factors.

Minimize minority and low-income property displacements

Travis Central Appraisal District property data and American Community Survey Data

Comment: Please consider expanding metrics used to capture minority and low-income property displacements. The City suggests including data about income, race, ethnicity, and transportation mode from ACS, City of Austin, and Travis Central Appraisal District for neighborhoods that will be affected by displacement because of this project.

Minimize visual impacts

Quality of views from frontage road and cross streets

Comment: Please consider clarifying the definitions of high- and low-quality views and how views will be evaluated.

Archeological sites and cemeteries

Risk and probability of encountering sites

Comment: The City has concerns about any impacts to municipal cemeteries that would result in relocation of existing burials. Many east-west connections are along existing watersheds, which hold a high potential for archeological resources. The city suggests revising the parameter language to: "risk and probability of encountering and disturbing sites."

Historic properties

Comment: Please consider adding metrics to assess the impact to individual historic properties. The City suggests measuring the percent of land acquired as a percentage of the tract and the increase in proximity of ROW to historic structures.

If historic structures need to be disturbed, please coordinate with the City's Parks and Recreation Department (PARC) to relocate structures to nearby parkland.

Traffic noise

Potential to reduce noise impacts

Comment: please consider the following metrics to assess the impact noise on the community:

- **Measure:** Average peak hour noise;
- **Measure:** Average traffic noise; and
- **Measure:** Average cumulative noise.

Please consider mitigating noise impacts through sound barriers and highway lids.

Parks purchased with Land and Water Conservation Funds

Acres within footprint

Comment: If parkland is required along the lake on acreage that would trigger the 6(f) process, please consider coordinating with PARD and TPWD on a mitigation plan for lost acreage.

Park impacts

Acres within footprint

Comment: The City has concerns about the potential loss of high value waterfront parkland. The City requests that waterfront parkland be considered separately from other parkland areas. The loss of waterfront parkland should be minimized, and any waterfront parkland taken should be re-created adjacent to green-stormwater infrastructure. The City does not consider stormwater infrastructure as creditable parkland acreage. Please consider adding additional metrics to capture the Urban Heat Island effect and biodiversity.

Economic Development

Comment: The City has concerns about the impact of the project on local economic development. Narrowing the I-35 footprint to retain or expand adjacent property for redevelopment would be especially important if the proposed lid or deck features must be locally funded. Please consider the following to develop evaluation criteria to quantify retention and creation of redevelopable real property adjacent to the I-35 corridor to support positive fiscal conditions for this project.

- Estimated acreage, square feet, or frontage. This may be inversely proportional to measure of displacement risk.
- Potential for deck to support buildings and allow for expansion of developable area.
- This metric could be combined with the minimization of additional ROW from business and residential property that must be subject to eminent domain.

Capitol/Protected Views

Comment: The City would like to see more specificity in the parameter by including the size and number of protected viewsheds retained.

Additional criteria for Environmental Resources proposed by the City of Austin

Comment: Please consider adding the following to the Environmental Resources evaluation. These criteria would likely result in the selection of an alternative that better reflects the needs of the Austin community and meets broader community support.

- **Parameter:** Loss of existing income-restricted affordable housing
Measure: existing number of income-restricted affordable housing
- **Parameter:** Loss of existing market-rate affordable housing
Measures: Existing rent data in the Area of Potential Effects.
- **Parameter:** Displacement of low-income, minority, and other vulnerable residents
Measure: Income, race, ethnicity, car ownership, and transportation mode data for people who will be affected by project.
- **Parameter:** long-term displacement of low-income and minority homeowners and renters
Measure: Analyze the effect of the proposed project on property taxes and how this could affect residents. Consider working with City to identify opportunities to mitigate displacement.
- **Parameter:** MBE/WBE business displacements
Measure: Business owner demographics, rent data, other vulnerability factors.
- **Parameter:** Parkland Amenity Impact
Measure: The dollar value of land, which would capture public investments, and community investment, which would take into account the value of investments into community gardens and other amenities made by communities.
- **Parameter:** Impervious cover
Measure: Amount of impervious cover to No Build.
- **Parameter:** Ecological impacts
Measure: Tree preservation, tree planting, channel erosion, water quality controls, and non-erosive natural treatment of lake shoreline.
- **Parameter:** Trees, tree canopy
Measure: Comparison of tree canopy to No Build.
- **Parameter:** Air quality
Measure: Model the potential effect on air quality for the proposed alternatives. Impact on MSAT and CO levels on adjacent communities should be evaluated.
- **Parameter:** Change in greenhouse gas emissions
Measure: Greenhouse-gas emissions models.

Local Enhancements

Deck Plaza Local Enhancements

Comment: Please consider the extent to which each alternative would allow for the construction of a deck. The placement of a deck may consider using underutilized ROW and park-deficient areas. A deck between Cesar Chavez and 8th Street in downtown Austin would allow for better activation of Palm Park and the redeveloped Convention Center Area.

Preliminary Project Costs

Minimize construction cost

Comment: Please consider building all trail connections if land is secured prior to construction. Each creek crossing will likely have a custom Limit of Construction.

Minimize operation and maintenance cost

Preliminary operation and maintenance cost estimate

Comment: Please consider the impact of climate change on soil elasticity when sizing structural elements.

Additional Operations and Maintenance criteria proposed by the City of Austin

Comment: Please consider adding the following to the cost evaluation. These criteria would likely result in the selection of an alternative that better reflects the needs of the Austin community and meets broader community support.

- **Parameter:** Caps and Stitches
Measure: Amount of ROW needed, cost of construction.
- **Parameter:** Developable ROW for other uses
Measure: Amount of ROW created for development.
- **Parameter:** Value capture for affordable housing and economic development
Measure: Potential economic development impact.