

2.0 Alternatives

To respond to the project purpose and identified needs as described in **Section 1** of this EA, the Project Partners have proposed to construct a structural deck over a four-block section of I-670 in downtown Kansas City. The project proposes to create approximately 5.5-acres of new, at grade property above I-670 between Wyandotte Street and Grand Boulevard that will be used in a variety of capacities, including passive green space, a community gathering location, and hosting for public and private event programming.

After discussions with the Project Partners, MoDOT, and FHWA, four Build Alternatives were developed and evaluated for the proposed structural deck over I-670. All proposed Build Alternatives would meet the project Purpose and Need and maintain logical termini and independent utility.

This section of the EA discusses the evaluation and comparison of the four Build Alternative concepts in relation to Purpose and Need criteria, project goals, and potential engineering and environmental impacts. The No-Build Alternative includes existing planned projects but excludes future improvements in the project study area. The selection of a Preferred Alternative and additional engineering system factors that must be considered for project viability and regulatory approvals are also discussed.

2.1 No-Build Alternative

The No-Build Alternative for the South Loop Project would see no major improvements made within the project area, aside from routine and necessary maintenance and projects planned independently of this project. Roadways, bridges, and other structures within and around the project study area would remain in their current configuration. The No-Build Alternative will not enhance multimodal connections surrounding the project area or reconnect the CBD and adjacent Crossroads Arts District, previously separated by the construction of I-670. Therefore, it is only discussed as a baseline condition and means of comparison between no-build conditions and expected conditions with the Build Alternatives.

2.2 Build Alternatives

The Project Partners developed and evaluated four Build Alternatives for the proposed structural deck over I-670. All proposed Build Alternatives would meet the Purpose and Need for the project and maintain logical termini and independent utility.

Prior to the establishment of the Build Alternatives, the South Loop Link Feasibility Study identified potential alternatives in 2009. Several of these concepts called for improvements to the existing street network without the creation of a park. While these concepts meet the technical requirements established in the Feasibility Study, they do not meet the current Purpose and Need because they would not repair the physical separation between the economic and cultural districts severed by the construction of I-670. As a result, they were not carried forward as Reasonable Alternatives under this EA.

2.2.1 Western Superblock Build Alternative

The Western Superblock Build Alternative erects a structural deck over I-670 between Wyandotte Street and Main Street while closing and incorporating the existing Baltimore Avenue bridge over I-670 into the structural deck. Incorporating the Baltimore Avenue bridge into the open space allows the construction of a continuous two-block (“superblock”) section between Wyandotte Street and Main Street. The existing Main Street and Grand Boulevard bridges would remain, and the Walnut Street bridge would be replaced and maintained for vehicular and pedestrian crossings over I-670. Individual structural decks between Main Street and Walnut Street and Walnut Street and Grand Boulevard would be constructed. The combination of the existing Bartle Hall Convention Center, the Convention Center Grand Ballroom, a new western superblock structural deck, new individual structural decks between Main Street and Grand Boulevard, and existing bridges would create a 2,200-foot-long tunnel in which I-670 would be confined. The Project Partners do not anticipate new ROW acquisition for this alternative. **Figure 2-1** shows the limits of the proposed Western Superblock Build Alternative.



Figure 2-1: Western Superblock Build Alternative

Construction of this alternative would require multiple changes to existing infrastructure elements. Those elements include:

- **Truman Road** – Both westbound and eastbound Truman Road would be modified to reduce turn lanes and general travel lanes, from three lanes to two, to improve safety and reduce vehicle speeds. A typical cross-section of eastbound Truman Road is displayed on **Figure 2-2**. This typical cross-section applies to all Build Alternatives. The typical section and the roadway design of the arterials will adhere to all KCMO design guidelines and will be approved by KCMO during final design to meet City requirements.

- **Existing utilities** – Utilities crossing I-670 would continue to do so, either through existing bridge structures or within the new bridge structures. Impacts to existing utilities under Truman Road will be temporary in nature to provide connections to improvements on the structural deck. Utilities would be relocated as necessary. Such utility connections include water, sewer, storm drainage, fiber, and electric power.
- **I-670 retaining walls** – The existing retaining walls, located north and south of the Interstate, within the project area would be either refurbished or reconstructed to meet the desired 100-year useful life of the project.
- **Streetcar infrastructure** – There are no planned impacts to the existing streetcar infrastructure, including trackwork, overhead catenary system, and the existing traction power substation within the project study area.
- **Open space amenities** – Above the structural deck, this alternative would include a variety of spaces for visitors, including a small informal amphitheater, two performance pavilions, children’s play area, dog run, interactive art and water play areas, small food and beverage service buildings, and restrooms. The structural deck would also support landscape improvements such as native plantings, shade trees, and flexible lawn spaces.

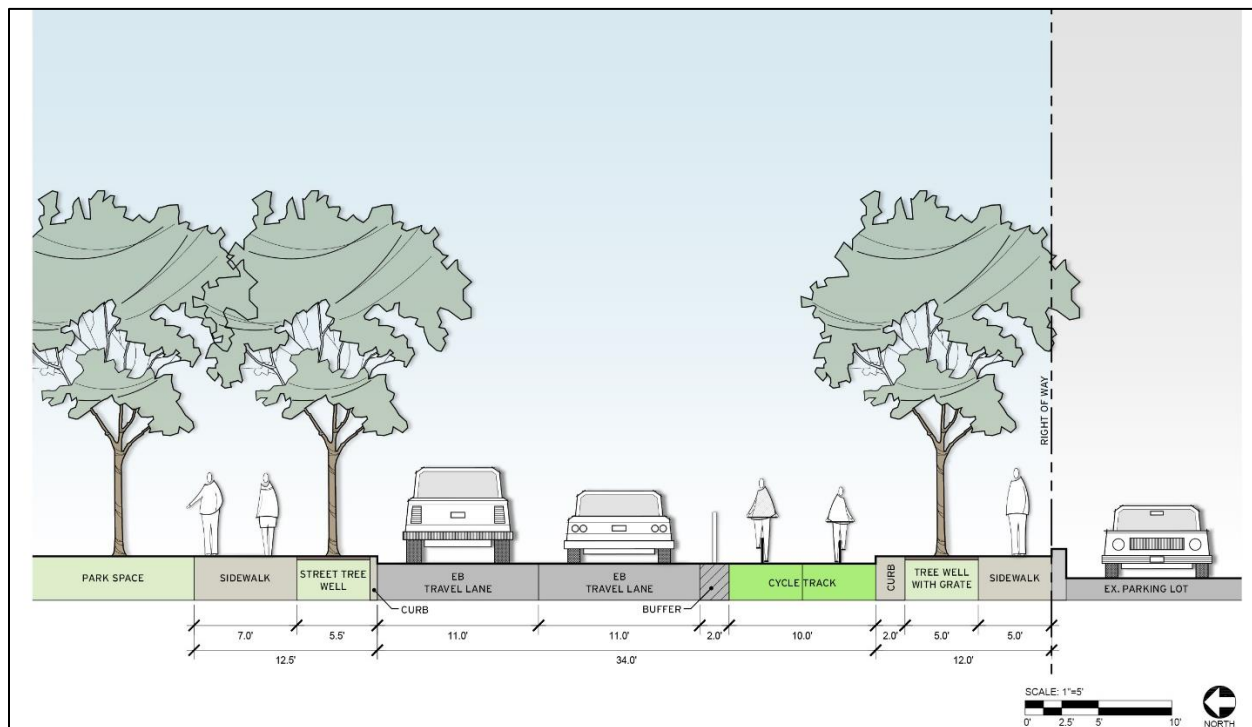


Figure 2-2: Typical Cross-Section for Eastbound Truman Road: Figure 2-2 shows a typical cross section; the final roadway design will adhere to all KCMO design standards.

2.2.2 Eastern Superblock Build Alternative

The Eastern Superblock Build Alternative erects a structural deck over I-670 between Main Street and Grand Boulevard while closing Walnut Street over I-670. The existing Main Street, Baltimore Avenue, and Grand Boulevard bridges would remain. Individual structural decks between Wyandotte Street and Baltimore Avenue and Baltimore Avenue and Main Street would

be constructed. Similar to the Western Superblock Build Alternative, the combination of the existing Bartle Hall Convention Center, the Convention Center Grand Ballroom, two new individual structural decks between Wyandotte Street and Main Street, a new eastern superblock structural deck, and existing bridges would create a 2,200-foot-long tunnel in which I-670 would be confined. The Project Partners do not anticipate any new ROW for this alternative. **Figure 2-3** shows the limits of the Eastern Superblock Build Alternative.



Figure 2-3: Eastern Superblock Build Alternative

Construction of this alternative would require multiple changes to existing infrastructure elements, similar to the Western Superblock Build Alternative. Those elements include:

- **Truman Road** – Both westbound and eastbound Truman Road would be modified to reduce turn lanes and general travel lanes, from three lanes to two, to improve safety and reduce vehicle speeds. A typical cross-section of eastbound Truman Road is displayed on **Figure 2-2**.
- **Existing utilities** – Utilities crossing I-670 would continue to do so, either through existing bridge structures or within the new bridge structures. Impacts to existing utilities under Truman Road will be temporary in nature to provide connections to improvements on the structural deck. Utilities would be relocated as necessary. Such utility connections include water, sewer, storm drainage, fiber, and electric power.
- **I-670 retaining walls** – The existing retaining walls, located north and south of the Interstate, within the project area would be either refurbished or reconstructed to meet the desired 100-year useful life of the project.
- **Streetcar infrastructure** – There are no planned impacts to the existing streetcar infrastructure, including trackwork, overhead catenary system, and the existing traction power substation within the project study area.

- **Open space amenities** – Above the structural deck, this alternative would include a variety of spaces for visitors, including a small informal amphitheater, two performance pavilions, children’s play area, dog run, interactive art and water play areas, small food and beverage service buildings, and restrooms. The structural deck would also support landscape improvements such as native plantings, shade trees, and flexible lawn spaces.

2.2.3 Individual Blocks Build Alternative

The Individual Blocks Build Alternative constructs a structural deck over I-670 between Wyandotte Street and Grand Boulevard while maintaining the existing bridges at Main Street, Baltimore Avenue, and Grand Boulevard. This alternative also removes and reconstructs the Walnut Street bridge for the purpose of maintaining vehicular and pedestrian networks. Individual structural decks between Wyandotte Street and Baltimore Avenue, Baltimore Avenue and Main Street, Main Street and Walnut Street, and Walnut Street and Grand Boulevard would be constructed. Similar to the previous Build Alternatives, the combination of the existing Bartle Hall Convention Center, the Convention Center Grand Ballroom, four new individual structural decks between Wyandotte Street and Grand Boulevard, and existing bridges would create a 2,200-foot-long tunnel in which I-670 would be confined. It is not anticipated that the Individual Blocks Build Alternative would require any new ROW. **Figure 2-4** shows the limits of the Individual Blocks Build Alternative.



Figure 2-4: Individual Blocks Build Alternative

Construction of this alternative would require multiple changes to existing infrastructure elements, similar to the previous Build Alternatives. Those elements include:

- **Truman Road** – Both westbound and eastbound Truman Road would be modified to reduce turn lanes and general travel lanes, from three lanes to two, to improve safety

and reduce vehicle speeds. A typical cross-section of eastbound Truman Road is displayed on **Figure 2-2**.

- **Existing utilities** – Utilities crossing I-670 would continue to do so, either through existing bridge structures or within the new bridge structures. Impacts to existing utilities under Truman Road will be temporary in nature to provide connections to improvements on the structural deck. Utilities would be relocated as necessary. Such utility connections include water, sewer, storm drainage, fiber, and electric power.
- **I-670 retaining walls** – The existing retaining walls, located north and south of the Interstate, within the project area would be either refurbished or reconstructed to meet the desired 100-year useful life of the project.
- **Streetcar infrastructure** – There are no planned impacts to the existing streetcar infrastructure, including trackwork, overhead catenary system, and the existing traction power substation within the project study area.
- **Open space amenities** – Above the structural deck, this alternative would include a variety of spaces for visitors, including a small informal amphitheater, two performance pavilions, children's play area, dog run, interactive art and water play areas, small food and beverage service buildings, and restrooms. The structural deck would also support landscape improvements such as native plantings, shade trees, and flexible lawn spaces.

2.2.4 Double Superblock Build Alternative

The Double Superblock Build Alternative is a combination of the Eastern and Western Superblock Build Alternatives. This alternative would construct a structural deck over I-670 between Wyandotte Street and Main Street and between Main Street and Grand Boulevard while closing both Baltimore Avenue and Walnut Street over I-670. The existing Main Street and Grand Boulevard bridges would remain. Similar to the Eastern and Western Superblock Build Alternatives, the combination of the existing Bartle Hall Convention Center, the Convention Center Grand Ballroom, a new eastern and western superblock structural deck, and existing bridges would create a 2,200-foot-long tunnel in which I-670 would be confined. It is not anticipated that the Double Superblock Build Alternative would require any new ROW. **Figure 2-5** shows the limits of the Double Superblock Build Alternative.



Figure 2-5: Double Superblock Build Alternative

Construction of this alternative would require multiple changes to existing infrastructure elements, similar to the Eastern and Western Superblock Build Alternatives. Those elements include:

- **Truman Road** – Both westbound and eastbound Truman Road would be modified to reduce turn lanes and general travel lanes, from three lanes to two, to improve safety and reduce vehicle speeds. A typical cross-section of eastbound Truman Road is displayed on **Figure 2-2**.
- **Existing utilities** – Utilities crossing I-670 would continue to do so, either through existing bridge structures or within the new bridge structures. Impacts to existing utilities under Truman Road will be temporary in nature to provide connections to improvements on the structural deck. Utilities would be relocated as necessary. Such utility connections include water, sewer, storm drainage, fiber, and electric power.
- **I-670 retaining walls** – The existing retaining walls, located north and south of the Interstate, within the project area would be either refurbished or reconstructed to meet the desired 100-year useful life of the project.
- **Streetcar infrastructure** – There are no planned impacts to the existing streetcar infrastructure, including trackwork, overhead catenary system, and the existing traction power substation within the project study area.
- **Open space amenities** – Above the structural deck, this alternative would include a variety of spaces for visitors, including a small informal amphitheater, two performance pavilions, children's play area, dog run, interactive art and water play areas, small food and beverage service buildings, and restrooms. The structural deck would also support landscape improvements such as native plantings, shade trees, and flexible lawn spaces.

2.3 Build Alternatives Screening Process and Criteria

The alternatives screening process consisted of four basic steps:

1. Establish Purpose and Need and screening criteria – The Purpose and Need described the project intent and needs, which any viable alternatives must resolve or satisfy. It then formed the basis for the criteria in which alternatives are compared. The Project Partners also established additional goals and objectives for the project to satisfy, if possible.
2. A range of Build Alternative improvement strategies were identified and developed and are previously described in **Section 2.2**. These Build Alternatives would involve substantial amounts of construction and may impact environmental resources.
3. Evaluation of alternatives – Screening criteria established via the Purpose and Need, additional goals established by the Project Partners, and other performance criteria were applied to each alternative. The alternatives were evaluated for their ability to satisfy the screening criteria. Alternatives that satisfied the Purpose and Need for the project were further considered, while alternatives that could not meet the Purpose and Need, and/or were deficient in other performance categories, were eliminated from further consideration.
4. Selection of the Preferred Alternative(s) – The results of the evaluation of alternatives were used to determine which alternative(s) best addressed the project needs. The alternative(s) that satisfied the Purpose and Need for the project and most favorably addressed the project goals was selected to move forward and developed in greater engineering detail.

As previously mentioned, screening criteria for the alternatives are based upon the Purpose and Need, additional goals established by the Project Partners, but not derived from the Purpose and Need, and other performance-related criteria. The following summary addresses whether the proposed Build Alternatives meet the Purpose and Need for the project:

Physical separation of economic and cultural districts – The I-670 freeway facility currently sits 20-feet below-grade and separates the CBD and the Crossroads Arts District. The separation of the two districts limits the potential for additional investment in the area. All four Build Alternatives meet this Purpose and Need element through the creation of a structural deck over I-670, which eliminates the physical separation between cultural districts and reconnects both the north and south sides of I-670. The No-Build Alternative did not meet this element.

Enhance multimodal connections for adjacent neighborhoods and the broader community – The current transportation infrastructure design in the South Loop Project study area prioritizes vehicles over any other mode of transportation. Because of this design, the environment creates limitations to pedestrians, cyclists, and transit users. The four Build Alternatives meet this Purpose and Need element by providing opportunities for additional east-west and north-south pedestrian, bicycle, and transit connections from the South Loop Project area along Truman Road to other facilities like the “Greenline,” a planned bike/pedestrian trail loop facility, thus creating an extended network of transportation options. The new Truman Road and “Greenline” facilities that would connect to the South Loop Project area run through areas of environmental justice populations. These neighborhoods would receive the direct benefit of safer and more equitable transportation facilities leading directly to the South Loop. The No-Build Alternative does not enhance pedestrian, bicycle, and/or transit connections and, therefore, cannot meet this Purpose and Need element.

The Build Alternatives successfully address the transportation problems associated with the below-grade section of I-670, which separates the CBD and the Crossroads Arts District in Downtown Kansas City. **Table 2-1** in **Section 2.4** of this document shows that the Build Alternatives would address the transportation problems identified in the Purpose and Need and would provide positive outcomes to those in and around the project study area. The No-Build Alternative would not satisfy all of the screening criteria and performance measures.

2.4 Summary of Alternatives Screening and Evaluation

All four Build Alternatives successfully address the Purpose and Need elements. **Table 2-1** displays the Alternatives Screening Criteria Matrix which summarizes each Build Alternative's performance on the Purpose and Need criteria, other project goals as determined by the Project Partners, and engineering and environmental criteria. The No-Build Alternative is included in the screening matrix summary for comparison purposes only.

Table 2-1: Alternatives Screening Criteria Matrix

Screening Criteria Definitions	
Positive / Acceptable / Potentially Low Impact	▲
Generally Positive / Potentially Less Impact	◊
Neutral/No Change	■
Negative	●

Criterion	Measure/Description	No-Build Alternative	Western Superblock	Eastern Superblock	Individual Blocks Alternative	Double Superblock
Purpose and Need Elements						
Repair the physical separation between the economic and cultural districts that occurred when I-670 was constructed.						
Repair physical connection in the north and south sides of I-670	Does the structure improve connections?	■	▲	▲	▲	▲
Provide walking path, trail, sidewalk, or other pedestrian-oriented facilities that connect to the existing pedestrian mobility system	Does it include additional pedestrian connections to existing systems?	■	▲	▲	▲	▲
Enhance multimodal connections for residents of adjacent neighborhoods and the broader community.						
Provide bicycle-focused amenities (e.g., bike racks) and cycling-oriented facilities on adjacent street network	–Does it include additional bicycle connections to existing systems?	■	◊	◊	◊	◊
Accommodate transit connections (stops/park-and-ride/hub) nearby (.25 mile)	Does it accommodate transit connections to existing systems?	■	■	■	■	■
Other Project Goals - Engineering Criteria						
Conceptual cost	How do the conceptual costs compare between alternatives?	\$	\$\$\$	\$\$\$	\$\$	\$\$\$\$
Project phasing	Can improvement be phased/constructed over time?	■	▲	▲	▲	▲
Constructability	Does construction require unique or unusual construction methods?	■	●	●	●	●
Impacts to MoDOT facilities	Do the improvements reduce or change existing travel lane geometry or change access on I-670?	■	■	■	■	■
Maintenance of traffic, temporary traffic control	Does construction require extensive lane closures of long duration or detours?	■	●	●	●	●
On-going maintenance	Do the improvements require an increase in maintenance needs?	■	●	●	●	●
Safety impacts	Do the improvements maintain or improve existing safety conditions on existing infrastructure at the arterial level and interstate level?	■	■	■	■	■
Vehicular traffic impacts	Do the improvements maintain or improve existing levels of service?	■	●	●	◊	●

Criterion	Measure/Description	No-Build Alternative	Western Superblock	Eastern Superblock	Individual Blocks Alternative	Double Superblock
Utilities impacts	Level of impact to existing utilities, ability to accommodate future utilities	■	◇	◇	◇	◇
Right-of-Way (ROW) /Acquisitions	Do the improvements require permanent ROW or property acquisition or easements?	■	▲	▲	▲	▲
Other Project Goals - Urban Design Criteria						
Maximize open space	Amount of open space created	●	▲	▲	◇	▲
Revenue-generating opportunities	Ability to accommodate revenue-generating events and activities	●	▲	▲	◇	▲
Include resilient improvements	Does the alternative extend the life of infrastructure in the area?	■	◇	◇	◇	◇
Create opportunities for additional economic development	Does the alternative create opportunities for additional economic development?	■	▲	▲	▲	▲
Environmental Criteria						
Natural resource impacts	Impacts to wetlands, streams, floodplains, farmland, T&E species, habitat	■	■	■	■	■
Park and recreation resource impacts	Section 4(f) property impacts	■	■	■	■	■
Environmental justice (EJ) impacts	Impacts to community resources/residential/commercial properties in EJ areas	■	◇	◇	◇	◇
Hazardous Materials	Number of hazardous materials sites impacted	■	■	■	■	■
Stormwater	Effect of stormwater drainage	■	◇	◇	◇	◇
Displacements	Number of residential displacements	■	■	■	■	■
Sensitive noise receptors	Number of sensitive noise receptors in project area	■	▲	▲	▲	▲
Cultural resource impacts	Number of historic architectural or archeological properties impacted	■	TBD	TBD	TBD	TBD
Land use impacts	Potential for changes in land use	■	▲	▲	▲	▲

2.5 Selection of the Preferred Alternatives

Based upon the screening and evaluation of the four Build Alternatives, the Project Partners, in consultation with MoDOT and FHWA, selected both the Eastern Superblock and Western Superblock Build Alternatives as the Preferred Alternatives because they both meet the Purpose and Need by:

- Providing a physical connection between the CBD and Crossroads Arts District by constructing a structural deck over I-670; and
- Providing pedestrian, bicycle, and transit-oriented facilities and amenities that enhance connections to the broader community.

The four Build Alternatives performed similarly on most Engineering and Environmental Evaluation criteria. However, the Individual Blocks Build Alternative did not perform as well in the Urban Design Criteria categories, due to not maximizing open space and having less revenue generating capability resulting from non-contiguous blocks. Additionally, the Double Superblocks Build Alternative did not perform as well in the Cost and Vehicular Traffic Impacts categories due to the closing of two streets. For these reasons, the Individual Blocks Build Alternative and the Double Superblock Build Alternative were eliminated from consideration.

Both the Eastern Superblock and Western Superblock Build Alternatives were selected to be carried forward as Preferred Alternatives since they performed equally in all Engineering and Environmental Evaluation criteria and will provide the ability for KCMO and the CM/GC to choose the best alternative to move forward with during the final design phases of the project. Additionally, the Eastern Superblock and Western Superblock have the same limits of impact from construction.

The Eastern Superblock Build Alternative proposes to remove the Walnut Street bridge. The Walnut Street bridge, nearing the end of its useful structural life, will require replacement in the near future, and the Eastern Superblock Build Alternative would replace the bridge with a structural deck for the planned open space. The preliminary designs for each Preferred Alternative are included as **Appendix A**. Even when removing the Walnut Street bridge, traffic analysis demonstrated the existing vehicular street circulation levels of service (LOS) within and around the project study area were acceptable for both existing and future (2050) operations. Comparative intersection operational LOS between the future No-Build Alternative and this Preferred Alternative is further discussed in **Section 3.8**.

The Western Superblock Build Alternative proposes to remove the Baltimore Avenue bridge and incorporate it into the structural deck. The Walnut Street bridge would still be replaced as part of this Alternative, however it would remain a bridge for vehicular traffic and not be incorporated into the structural deck. The preliminary design for each Preferred Alternative are included as **Appendix A**. A traffic analysis was completed for the removal of the Baltimore Avenue bridge which demonstrated the existing street circulation levels of service (LOS) within and around the project study area were acceptable for both existing and future (2050) operations. Comparative intersection operational LOS between the future No-Build Alternative and this Preferred Alternative is further discussed in **Section 3.8**

The preliminary construction cost estimate for each of the Preferred Alternatives is approximately \$217.2 million in 2023 dollars. Final selection of a Preferred Alternative, including construction

phasing scenarios, will not occur until the Project Partners, MoDOT, and FHWA evaluate all comments received as a result of their review of this EA document and a public hearing. Following public and agency review of this EA, FHWA will determine if an Environmental Impact Statement (EIS) is warranted. If an EIS is not required, the Preferred Alternative(s) will be identified in the Finding of No Significant Impact (FONSI) document.

2.6 Other Considerations for the Preferred Alternatives

Prior to the construction of a new structural deck over I-670, several additional considerations must be addressed to satisfy local, state, and federal laws, requirements, standards, and guidelines. The creation of a new 2,200-foot I-670 tunnel and its potential hazards, airspace issues, property governance, maintenance, operations, and perpetual funding of the structural deck are summarized in the following sections.

2.6.1 I-670 Tunnel

Both Preferred Alternatives propose to deck over a four-block section of I-670. The new deck, either the Eastern Superblock or the Western Superblock, plus individual decks between the blocks would be adjacent to the existing I-670 overbuilt Bartle Hall Convention Center and Grand Ballroom structures, resulting in a continuous 2,200-foot-long underground tunnel structure. Creating a new tunnel would introduce new hazards and other potential impacts, including:

- In-tunnel vehicular collisions;
- Fires (e.g. cars, heavy goods vehicles (HGVs), flammable combustible liquids (FCL), battery electric vehicles (EVs), tunnel equipment, etc.);
- Explosions (e.g. hydrogen release);
- Natural disasters (e.g. flooding, earthquakes);
- Structural collapse;
- Noise;
- Ventilation and air quality; and
- Combinations of the above.

Fire life safety design criteria are driven by National Fire Protection Association (NFPA) standards, namely *NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways*. Specific requirements depend on the tunnel category. The Preferred Alternative's 2,200-foot-long tunnel qualifies as a category C tunnel. For a category C tunnel, NFPA 502 provides minimum fire protection requirements and defines conditionally mandatory requirements that are based on the results of an engineering analyses. The potential hazards and mitigation are discussed within the appropriate sub-sections of **Section 3.0 Environmental Analysis**.

The introduction of a tunnel into the proposed Preferred Alternatives will require additional tunnel safety and operations systems. Those systems include:

- Structural fire protection;
- Incident detection;
- Emergency communications;
- Water supply and drainage systems for fire suppression;
- Fixed firefighting;

- Lighting;
- Stormwater;
- Ventilation and air quality management systems; and
- Power supply.

The design and level of detail of these required tunnel systems have not been finalized at this stage of the project. Tunnel systems designs will continue to advance as the project progresses into later design phases.

The existing overbuilt structure (Bartle Hall Convention Center and Ballroom) has a 3-hour fire rating comprising of insulated precast concrete panels (PCC). However, this is based on building code requirements, and is currently not considered adequate for HGV or FCL fires. By building an adjacent structural deck, the existing overbuilt structures will be an integral part of a 2,200-foot-long tunnel and will need to comply with current safety standards. The Study Team is considering the following conceptual measures:

- Closure of ceiling openings, particularly between Bartle Hall and Broadway Boulevard and on both sides of Central Street, to avoid distraction of drivers by changing lighting conditions, rain, snow, and to reduce local noise emissions.
- Addition of dividing walls between the existing eastbound and westbound I-670 lanes to provide bright surfaces, improving lighting conditions and driver guidance, and to separate airflow between the traffic directions, namely in case of a fire. The space between dividing walls can provide technical rooms and emergency exits.
- Adaptation and possible refurbishment of the existing tunnel lighting to provide a unified, safe lighting concept throughout the tunnel.

A tunnel safety concept would be developed for each construction phase of the project to maintain an adequate level of safety during the entire construction process, considering the potential for lane closures and limited traffic restrictions. Additional traffic management measures are required to minimize risks, including operating traffic unidirectionally, minimizing times with bi-directional traffic and temporary restriction of hazardous materials shipments through the tunnel, to be allowed only during defined hours. Tunnel systems would be successively installed, commissioned, and tested in segments [Commitment 5].

2.6.2 Property Governance

Construction of either Preferred Alternative would create a new property within MoDOT ROW. There are several important factors to consider in order to understand the governance of this newly created property including airspace agreements, property ownership, maintenance, operations, and funding. KCMO will obtain a ROW Permit from MoDOT ([Permits | Missouri Department of Transportation \(modot.org\)](https://www.modot.org/Permits)), which has been coordinated with FHWA, before construction begins [Commitment 6].

Airspace Agreements

After construction, the newly created property that sits above I-670 would remain within MoDOT ROW. In order to occupy the ROW, the new property owner would need to obtain an “Airspace Agreement” with the Missouri Highways and Transportation Commission (MHTC) prior to the beginning of construction [Commitment 7]. This Airspace Agreement would allow the property

owner to build and maintain the entire property over I-670 and would likely be a 99-year lease, with an option to renew for another 99-year term.

One example of such an agreement is the existing contract between KCMO and MHTC to occupy the space above I-670 for the Bartle Hall Convention Center and Grand Ballroom, located adjacent to the proposed deck. The Airspace Agreement has multiple conditions that must be met and maintained to comply with and keep the agreement in effect. Additionally, the Airspace Agreement is revocable and terminable based on certain conditions. Possible conditions could include, but are not limited to, change in use, failure to maintain insurance, or violation of applicable laws.

Ownership of Property

The property created above I-670 within the project study area would be leased by a public entity, KCMO through the Airspace Agreement with MoDOT. Formal ownership of the property itself would be maintained by MoDOT as outlined in the Airspace Agreement. The property would be formally reserved for future highway ROW uses and temporarily function as a park. The designation would require clear documentation that the non-transportation-related activities on the structural deck would cease once the land is required for any future transportation project. This documentation, along with the Airspace Agreement, should clearly convey that the use of the structural deck for park purposes is temporary in nature [Commitment 7].

Maintenance, Operations, and Funding

The property above I-670 within the project study area would be operated, maintained, programmed, and funded by a 501(c)(3) nonprofit entity that will be formed prior to the completion of construction. This entity would raise funds from private and public sources to support the park's annual budget, staffing, and day-to-day operations. Additionally, this budget would be used for public programming and community outreach. A special agreement would be created between the 501(c)(3) and KCMO that outlines the conditions of park management prior to the completion of construction [Commitment 8]. Maintenance of the newly formed tunnel will be outlined in the Airspace Agreement.