



# CRITICAL CONNECTIONS

## HEALING SALT LAKE CITY'S EAST-WEST DIVIDE



The bridges in this photo have one key thing in common: they were built for cars.

Photo: Luke Garrott, Building Salt Lake.

I took the 400 S bridge once since I didn't know any better and I felt very unsafe even though it was daytime and not too crowded. Climbing the hill up the bridge while a wall of cars approach from the rear at 50+ MPH is scary. -Brian

Pedestrians and bicyclists risk their safety on this high traffic interchange [600 North] with residential, large trucks, industrial and commercial vehicles. The west end of the overpass has been the site of at least 3 auto-pedestrian fatalities in the last 15 years. -Kevin

With one grocery store, and not enough healthy options, most of our grocery shopping is completed on the East side of SLC. High school options are greater on the East side, leaving families on the Westside with limited options. As we return home, many of us are stuck at the train, with the hopes that it'll pass soon enough so we are not late to pick up our children from school. -Esther

Quiero que las calles reflejen a la comunidad que vive allí, a quienes realmente pasan tiempo en las calles como los niños, la gente que no tiene coche, la gente sin hogar. En el lado oeste, quiero que las calles ayuden a las diversas comunidades a vivir mejor, no desplazarlas porque subió la renta. -anonymous [translation](#)

Many times, I feel boxed in on this side of town. It is very common for me to be blocked by a train when I am commuting by bicycle to the granary, Central Ninth, Ball Park, or downtown areas. -Charlotte

... [Westside residents] have fallen into the same pattern ... They have figured out how to run their lives without crossing I-15. It is important to understand the mentality of staying in one's bubble, of operating on one side or the other of this nasty road. -Cindy

# OVERVIEW

Salt Lake City is a city divided by a regional north-south transportation corridor that has bifurcated east-west connectivity, altered community cohesion, and embedded socio-economic inequities and environmental injustice into the normative fabric of the city.

The east-west division started in 1870, the year the railroads constructed a spur from the Transcontinental Railroad joined famously in Utah with the 1869 driving of the Golden Spike at Promontory Point. The rails were cause for great celebration, but also divided the city. Homesteads and farms constructed west of the rails became less desirable as industrial uses dominated along the railroad and the nearby Jordan River was used as a dumping ground.

When redlining maps were drawn in the 1940s, Westside neighborhoods were deemed undesirable (red) and Eastside neighborhoods became havens of privilege.

The arrival of the freeways in the ensuing decades tore down any remaining unified composition for the city and entrenched the chasm of the east-west divide.

Large autocentric viaducts were constructed to carry vehicular traffic over the rail lines with

high-speed interchanges to ease motorized traffic on and off the freeways. Subsequent freeway widening expanded the monolithic nature of the infrastructure barriers, increased traffic congestion, noise, and pollution, and further amplified the east-west division.



The safest streets for all modes of travel are absent freeway interchanges. However, these safer streets generally do not have viaducts and travelers risk delays from trains blocking roads or urban trails. As freight train lengths have increased to upwards of two miles so has the length of time that crossings are blocked. Several east-west crossings are near rail yards where trains move forward and back slowly to add or remove cars. As a result, people walking or bicycling sometimes trespass on the tracks,

crawl between the cars of stopped trains, or hoist bikes between rail cars.

Now, finally, is the time to heal this divide. Critical Connections is a robust community-centric planning effort to expedite solutions for east-west crossings focused on a 6.1 mile highly urbanized corridor. Anticipated outcomes are conceptual designs and construction cost estimates for preferred and highest

priority approaches with focus on sustainable transportation modes -- walking, bicycling, rolling, and transit.

The Westside is more racially, ethnically, and socio-economically diverse than the city as a whole. Westside diversity has stimulated growth in minority-owned businesses and multi-cultural community-based organizations and has highlighted the equity growing pains of Salt Lake City. Perhaps the biggest challenge that concerns residents is the perception that life west of the freeway is different. Some describe the freeway as a “glass corridor” representing the invisible yet very real history of east-west socio-economic barriers that continue to be reflected in the stark differences between Westside and Eastside household incomes and housing values.

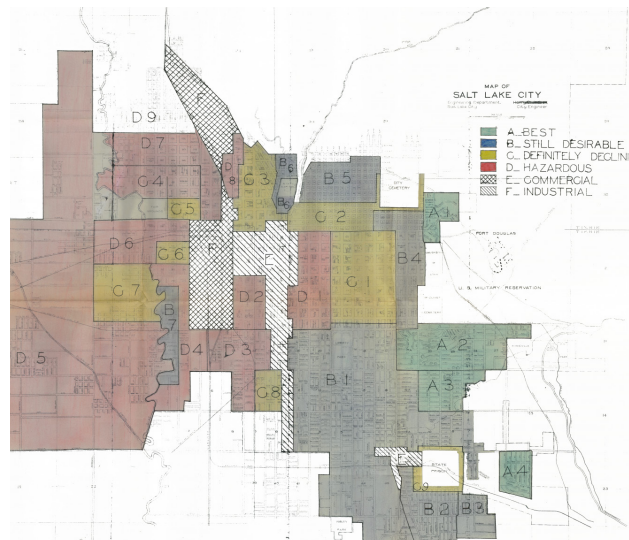
Salt Lake City has begun to address east-west crossings as a start and sign of its equity awakening, but more is desperately needed.

- North Temple Viaduct (2012): light rail transit, sidewalks, bike lanes, road diet.
- 1300 South Viaduct (2015): sidewalks both sides of the bridge; shared lane markings, now considered insufficient for bikes.
- 300 North Pedestrian Bridge (2022): federally-funded, elevator-based bridge to enable West High students to safely cross the tracks to and from their Westside homes.

The requested \$1.97 million from the Reconnecting Communities Pilot (RCP) Discretionary Grant will kick-start a comprehensive big picture analysis and prioritization of solutions to the core of the east-west divide through transportation infrastructure changes that foster connectivity and cohesion. This may take the form of a series of multi-modal bridges or a novel solution that transforms the entire urban landscape, such as a tunnel, train box, greenway deck, or a combination.



## WESTSIDE HISTORY



Redlining map of Salt Lake City, 1940. The interstate and rail corridor runs down the F-rated industrial area.

## WESTSIDE TODAY

36% of SLC residents  
 20% of school-aged kids  
 26% poverty vs. 18% citywide  
 74% of SLC's Hispanic residents  
 limited English proficiency 26%



High schoolers brave the crossing home to the westside. This time, they were not stopped by a train.

## LOCATION & MAP

**Geographic Setting.** Interstates 80 and 15 and adjacent rail lines divide Salt Lake City (SLC), which is the Crossroads of West. It is a livable and rapidly growing mid-sized city of 200,000 residents in the Salt Lake-West Valley urbanized area (pop. 1.26 million), home to the Utah state capital, headquarters for the Church of Jesus Christ of Latter-day Saints, and world-class skiing. Daily commuters and visitors more than doubles the resident population. SLC sits in a wide bowl that traps winter inversions between the Wasatch Mountains (east) and Oquirrh Mountains (west).

**Existing Transportation Network.** City and state arterials form a robust grid with commuter and local streets. [SLC's Complete Streets Ordinance](#), applied vigorously in the past decade, has resulted a strong network of bike lanes and sidewalks, with increasing emphasis on physically-separated bikeways, neighborhood byways, and multi-use trails. SLC constructed one of the nation's first protected intersections, using federal Transportation Alternative Program funds.

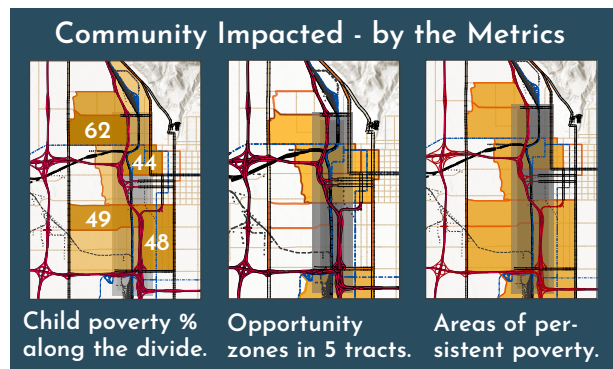
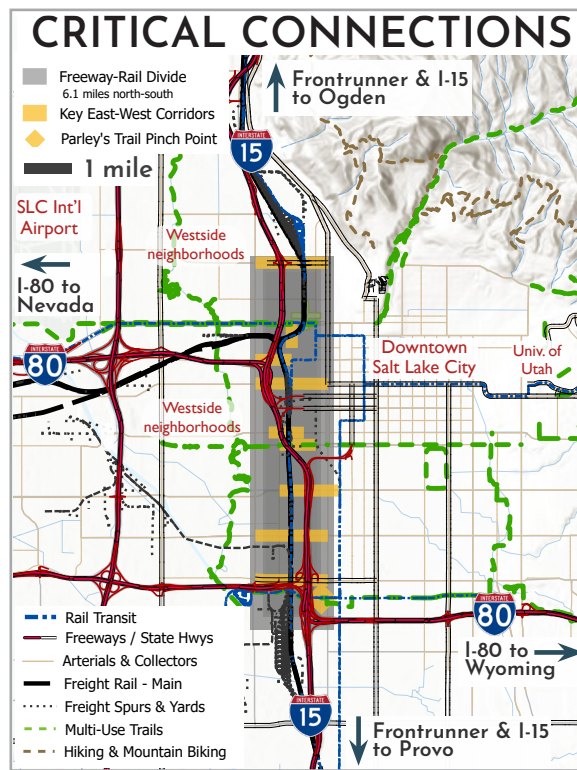
The **interstate and freeway** network is managed by Utah Department of Transportation (UDOT) with several routes planned for improvements or widening ([Wasatch Choices 2050 Regional Transportation Plan](#).)

**Freight rail** includes the Union Pacific Railroad (UPRR) mainline and Intermodal Terminal. Other rail companies have trackage rights on UPRR's lines. The Patriot Rail short-line serves northern parts of the Utah Inland Port and interfaces with UPRR.

**Transit** run by Utah Transit Authority (UTA) includes Front-runner Commuter Rail (Ogden to Provo) planned for double-tracking; four light rail / streetcar lines; and 27 bus routes serving the city, with 19 routes at 30 minutes or better service.

**Communities Impacted.** All census tracts along the divide are historically disadvantaged communities, and are more racially, ethnically, and socioeconomically diverse than the city as a whole. The map

vignettes below show key characteristics.



## MERIT CRITERIA

### 1: Equity, Environmental Justice & Community Engagement

**Analysis.** The professional planning team will develop a full understanding of historic and current policies and transportation decisions to provide the context for past disinvestment. Mapping tools, data sets, and an equity index ([Westside Transportation Equity Study, 2021](#)) will advance environmental justice; consider access and mobility; and address neighborhood change concerns in the process. Examples:

- Dissecting impacts of socio-economic disparities and routine ozone (summer) and PM<sub>2.5</sub> (winter) exposure because of Westside freeway proximity and lack of reasonable choices other than driving.

([Environmental Protection Agency EJSCREEN](#); [Climate & Economic Justice Screening Tool](#))

- Accounting of segregation due to advocacy capacities and political sway that enable wealthier, whiter eastside communities to fight off freeway development. ([Westside Transportation Equity Study](#))

- Accounting for Westside climate change burdens from minimal tree canopy exacerbating urban heat island effect, desertification from the Western megadrought, and risks from toxic dust clouds from the drying Great Salt Lake. ([Urban Forestry Public Tree Inventory](#))



Salt Lake City has some of the worst air in the country -- often worse on the Westside.

**Community Participation Plan.** A Community Advisory Committee (CAC) will develop a Community Participation Plan (CPP). CAC members drawn from community councils, residents, employees, and business owners, who engage daily with the barrier facilities, will receive a stipend to equitize participation. Working with community-based project partners, the CAC will guide public outreach and engagement through high-visibility involvement at Westside community events and centers, youth sporting events, grocery stores, and in-field tours; review work product, develop

evaluation metrics, and hold technical experts accountable to the needs of citizens. The CCP will follow [best-practice models](#) for governmental outreach to meet diverse resident needs.

Multilingual and highly visual outreach materials with universally understood symbology

will convey transportation concepts to diverse audiences. A mobile-friendly project website, social media, and digital open houses that mirror in-person events will encourage online engagement and offer participation parity for individuals with limited transportation or time.

The CPP will meet federal requirements for civil rights and nondiscrimination. The City's Chief Equity Officer is leading the development of a Title VI Plan and will advise the CPP. A signature of assurance is provided as an attachment.



## 2: Mobility & Community Connectivity

**Reducing Barriers.** Viability of adding ample sidewalks, bike lanes, or physically separated paths across viaducts and interchanges will be studied. Completely separated pathway bridges, tunnels or greenway decks will also be considered in keeping with investment levels for motor vehicle and railroad infrastructure.

Phased approaches and prioritized short- and long-term solutions will be vetted, particularly if landscape-level solutions are identified that require longer design and implementation timelines. The project will assess opportunities to dovetail with scheduled capital improvements addressing asset condition or corridor capacity. At the design level, all facilities will meet Americans with Disabilities Act standards for grades and other design elements, to ensure accessibility for users of all abilities.

**Existing Feasibility Studies.** Critical Connections is grounded in recommendations from master plans and regional plans including [SLC Pedestrian and Bicycle Master Plan \(2015\)](#), [SLC Transit Master Plan \(2017\)](#), [Wasatch Front Regional Council Regional Transportation Plan](#), and [Salt Lake County Active Transportation Implementation Plan](#) and in adherence to the [SLC Complete Streets Ordinance](#).

[Salt Lake City Climate Positive 2040](#) identifies increased walking, biking, and transit as key strategies to achieve its aggressive target

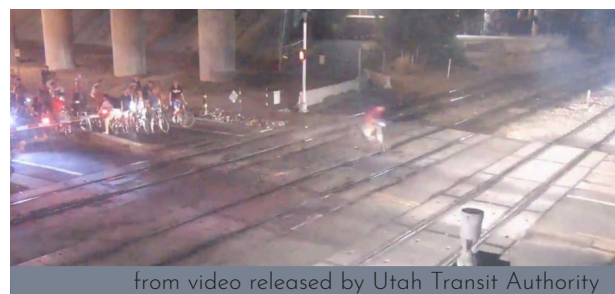
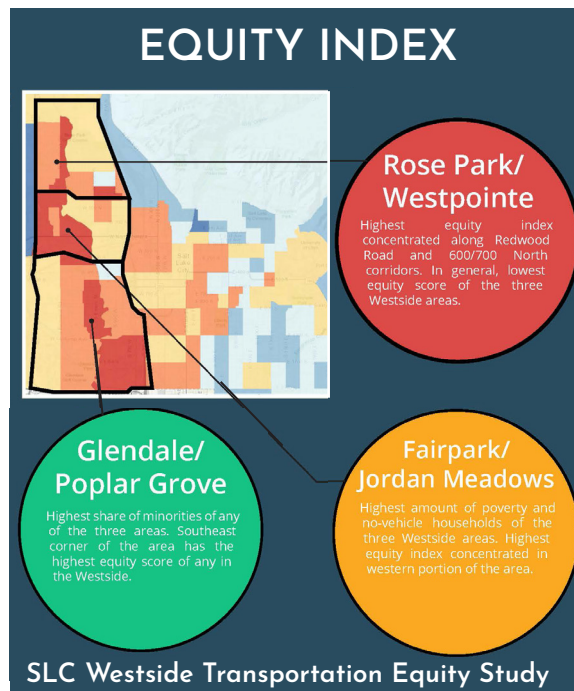
of 80% reduction in community greenhouse gas emissions from the 2009 baseline.

**Community-Conceived Idea.** The aspirational, conceptual “[Rio Grande Plan](#)” authored by two advocates, a local engineer and an urban designer, spurred the public imagination. The vision suggests placing freight and Frontrunner rails into a train box or trench to free over 100 acres for development, restore the use of an historic train station, and solve train-related east-west barriers.

The City is beginning an initial technical analysis in fall 2022 to inform further consideration under the Critical Connections project.

**Affordable Transportation Options.** Over 90% of Westside auto trips are solo occupancy compared to 70% for downtown. This points to Westside reliance on auto travel because no other option is safe, reliable, and time efficient.

Solutions that accommodate a shift to walking, biking, rolling, and transit will benefit household budgets and connectivity (with or without a vehicle) to major employment areas: downtown (70,000 jobs), SLC International Airport (32,000 jobs), University of Utah (20,000



A bicyclist, moments before being struck and killed by UTA’s Frontrunner train in July 2018.

jobs), State of Utah (20,000 jobs), Utah Inland Port (58,000 jobs).

**Safety.** The east-west divide is not only a cultural, economic, racial, and psychological barrier. It also has a documented track record of safety concerns. News media coverage of crashes increases the feeling that this corridor should be avoided, particularly for people walking and bicycling -- even though these crashes are caused by people not adhering to the railroad crossing signals. Lengthy waits, freights trains pulling forward and backing up while switching cars, and a combination of the

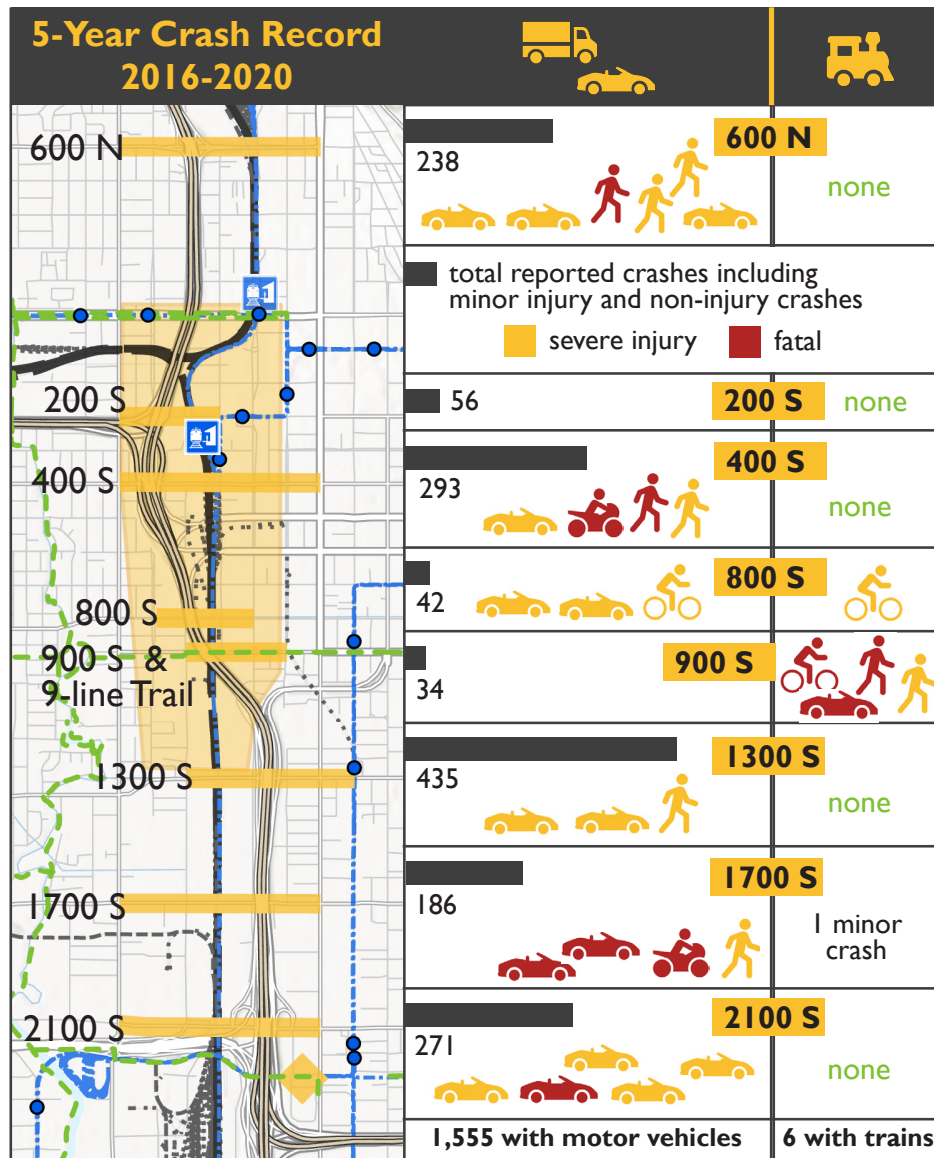
high-speed commuter rail along with the slow moving freight -- all of these together push those waiting to cross to the point of frustration where they make understandable but poor choices leading to serious injuries and deaths.

In the summer of 2018, two fatalities in two months at the rail crossing along the 900 South corridor stunned the local community. One was a bicyclist on an evening social ride using the 9-Line Trail, who, likely weary of waiting for a freight train and attempting to cross the rails, was then hit by the fast-moving UTA Frontrunner train. The other was a pedestrian,

who tried to roll under a moving freight train, "like in the movies," according to a spokesperson for Salt Lake City Police Department.

The 5-year crash record shows how these high-profile train crashes are joined by significant safety concerns at all of the crossings with a freeway interchange -- 600 North, 400 South, 1300 South, and 2100 South.

This project will provide short-term recommendations and long-term approaches to improve safety, while also making these crossings more welcoming and comfortable, especially for people walking or bicycling.



### 3: Community-based Stewardship, Management, & Partnerships

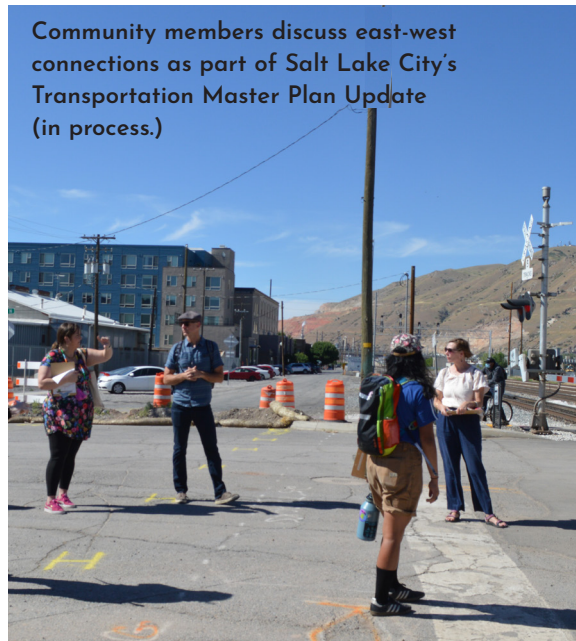
**Community-Centered Approach.** Salt Lake City is the convener of the Critical Connections project because residents, businesses, elected officials, and other community members have expressed, again and again, how significant the east-west divide is in daily life. Within the structure of the Community Participation Plan led by the Community Advisory Committee and bolstered by partner non-profit organizations, the City is committed to facilitating from behind with humility and creating a welcoming judgement-free zone so that others can enter, bear responsibility for, and contribute to the planning decisions and future priority capital investments.

The City is already listening to ideas from the community such as the Rio Grande Plan and is open to other big-vision ideas that may have been overlooked by technical staff, who tend to be more bounded by practicality. This, too, is why the Arts Council will be involved, to encourage the community to dream a little... or maybe a lot.

The professional project team will evaluate concepts for their technical merits: to what extent each resolves the challenges of environment, connectivity, time, cost, safety, aesthetic, and other key concerns identified by the community.

**Partnerships.** Community-based organizations including NeighborWorks Salt Lake, Westside Coalition, and the Downtown Al-

liance will advise and assist in steering and executing the public outreach and engagement, including the formation of the Community Advisory Committee. The Utah Transit Authority, Union Pacific Railroad, Utah Department of Transportation, SLC Department of Public Utilities, SLC Redevelopment Agency, and SLC Arts Council have all committed to participate with their respective expertise: weighing-in on technical feasibility; advising on floodplain, water/sewer, and stormwater coordination; and integrating artists in the public engagement. Partner commitment letters are attached.



Community members discuss east-west connections as part of Salt Lake City's Transportation Master Plan Update (in process.)

**Stewardship for the Future.** Throughout this planning project, the Community Advisory Committee and partner agencies will contemplate the future stewardship and management of resulting solutions. While appropriate state and municipal agencies will be responsible for the structural, safety, and functional aspects of public infrastructure, ongoing representation such as through a community oversight board can assure that the community's input is carried into future maintenance, management, and policies.

.....

**A community-based approach will give members of the public their salient voice:**

- What are the day-to-day consequences of existing infrastructure?
- What locations are most important in advancing people's ability to get around?
- What unforeseen consequences might proposed solutions carry?





## 4. Equitable Development & Shared Prosperity

**Comprehensive Plan.** The vision-focused [Plan Salt Lake](#) compiles core values citywide as a set of guiding principles, including sustainability, neighborhoods, transportation and mobility, air quality, and equity. This project will build on these principles, with a focus on the east-west divide. By looking at the east-west connection challenge holistically, rather than one crossing at a time, the community will have an opportunity to solemnize the full impact of the divide and develop strategies and priorities for an incremental (and therefore cost-feasible) approach to change.

**Community Stabilization.** Transportation and housing cost burdens are increasing for Westside residents. Local median home prices increased 26 percent between February 2021 and February 2022. Residents increasingly look to transportation as the only reasonable way to lower cost of living. This project will seek to ease transportation costs with transit, biking and walking options.

If a landscape scale solution is found, such as the train trench, a tunnel, or significant reconfiguration of roads, then underlying land of a transportation investment may be freed for development. Should that occur, some market-rate development will likely be needed to pay for the cost of construction. The City

would seek to commit other tracts of land into perpetual affordable uses. The City is initiating a housing land-trust approach, wherein affordable housing is developed for ownership, rather than rental. This increases residents' economic and housing stability and improves their sense of belonging in the community.

**Creative Place Making.** The assistance of Salt Lake City Arts Council in involving an artist(s) in the community outreach and engagement is a purposeful strategy to help open public visioning and the landscape to possibilities. An artistic eye may offer expressions to elevate and celebrate the unique characteristics of Westside neighborhoods reflected with temporary public art in prelude to a permanent signature work of public art at a crossing. The Transportation Division and the Arts Council have been in active dialogue about projects as visionary and iconic as the Tucson rattlesnake and basket bridges.



Art incorporated into transportation crossings.

The Transportation Division and the Arts Council have been in active dialogue about projects as visionary and iconic as the Tucson rattlesnake and basket bridges.

**Local Inclusive Economic Development.** The public engagement process will increase visibility and outreach to local, disadvantaged, minority, and women-owned firms and expand diverse participation in bid notifications and awarded contracts. The City follows procurement best practices that allow for open and transparent competition across all parties. Local hiring provisions will be incorporated for outreach components.



# Budget

## Funding Sources, Costs, & Usage

**Funding Sources.** The project budget is \$3,740,000, per table below. No additional federal funds are associated with the project. No conditions are associated with the local funding commitments, which are documented in [cost-share commitment letters](#).

Federal	Non-Federal	
RCP FY2022	Salt Lake City	
\$1,970,000	Mayor / City Council	\$1,240,000
	Public Utilities	\$5,000
	RDA	\$25,000
	Utah Transit Authority	
		\$500,000
<b>\$1,970,000</b>		<b>\$1,770,000</b>
53%		47%
<b>Grand Total \$3,740,000</b>		

**Costs and Usage.** Funding is directed to contract professional planning, engineer, and design consultant (\$3,425,000), community-based organization partners (\$225,000), and professional artist (\$90,000).

Services include iterative community engagement; visioning; language translation; technical analysis; conceptual design; screening of alternatives; and a prioritization process to determine one or more crossings or subset of crossings to advance as far as funding will allow through environmental determination, review, and documentation followed by preliminary structural engineering sufficient to determine a cost estimate in preparation for seeking construction funding. The approach seeks to be scalable to meet community goals and to advance doable solutions while also considering big vision options.



“If there was more accessibility via public transit I would take that every day to work. Also since we are becoming more and more of a food desert we need more accessibility to fresh food.” -Calvin

“We expect to have true choices about how we live our lives, from what kind of home we live in to how we travel to work, shop, worship, or recreate.

We expect that all people will be treated equitably, with dignity and respect, and be free from discrimination and that these tenets will be followed as we see demographic changes.” - [Plan Salt Lake](#)'s vision statement

“I once lost out on a job I applied for because the interviewer could not believe that the 20 minutes I was late was caused by a constant flow of trains....” -westside resident

“East-west crossings would mean improvements to my daily life ... less road rage, lower emissions (from using transit), less wear on my personal car, savings by not needing a parking pass - the list goes on.” - Sheri

“The trains aren't bad; there are a lot of benefits to the railway and the role we play in facilitating the rail system. I hope things like raised pedestrian walkways or overpasses (underpasses?) can be utilized rather than trying to excise the railway or pushing the tracks into another community.” -Lisa



## Critical Connections on SLC.gov

- Letters of local match commitment
- Utah congressional delegation support letters
- Related plans and studies
- Letters of public support and public comments

[www.slc.gov/east-west](http://www.slc.gov/east-west)