



## Salt Lake City Downtown Streetcar Synopsis Report

Date: October 8, 2010  
From: HDR/Fehr & Peers  
To: Matt Dahl, RDA  
Subject: Synopsis Report

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This memorandum summarizes the work completed in an analysis of a potential streetcar system serving Downtown Salt Lake City and its surrounding neighborhoods. HDR Engineering, with support from Fehr and Peers and Shields, Obletz, Johnsen, has been engaged by the Redevelopment Agency of Salt Lake City (RDA) to provide analysis and implementation options for this initiative. Over the past year, the consultant team has analyzed potential alignments, ridership, financial feasibility, and zoning codes.

It is the goal of the RDA to spur development in targeted areas of Downtown. The purpose of this study is to determine if a streetcar could serve as the necessary catalyst for redevelopment, while being a cost effective means of Downtown circulation for pedestrians. The objective of the study is the identification of the single most viable initial streetcar project serving Downtown Salt Lake City. The initial segment should have “stand-alone” functionality, but also be positioned to grow outward into a larger network. Figure 1 shows the study area.

### Analysis Framework and Approach

The project team has worked as a technical resource to City and RDA staff, meeting regularly with an in-house Steering Committee consisting of Salt Lake City (City), RDA, and Utah Transit Authority (UTA) staff, as well as periodically briefing the RDA Board on the results of the analysis. Technical deliverables that have been completed include:

- A series of Alignment Options;
- Conceptual Cost Estimates for these alignments;
- A Financial Analysis, reviewing the potential for various funding mechanisms to support the project;
- A review of the Potential for Federal Funding to support the project
- A assessment of Planning, Zoning, and Regulatory Issues that have a bearing on the potential project; and
- Supporting RDA staff in preparing an application for federal funding for an Alternatives Analysis.

### Outreach and Coordination Process

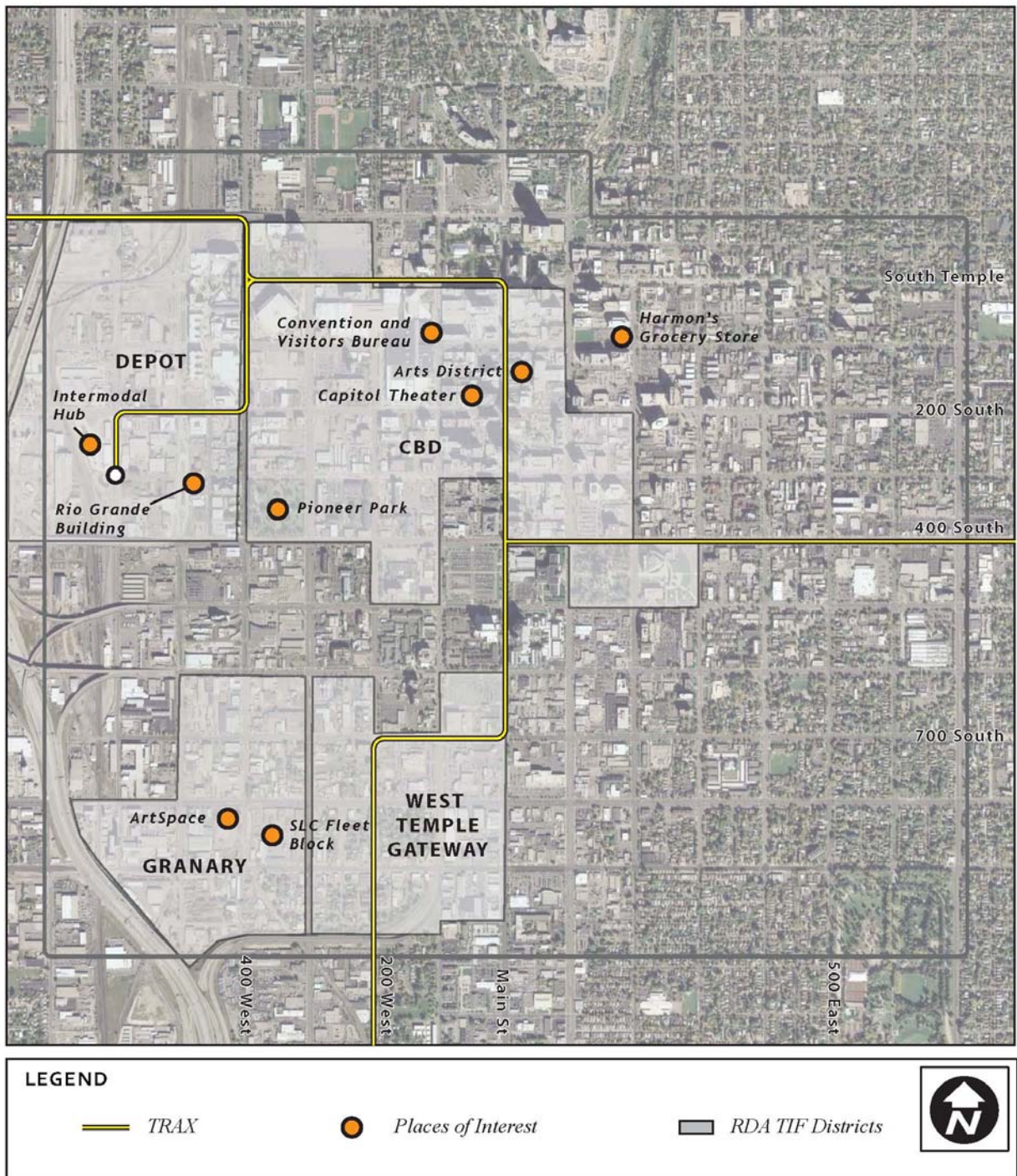
As this technical work was completed and as products of the analysis were drafted, the project team conducted a series of outreach efforts to stakeholders, again working in collaboration with the agency staff that make up the internal committee. These have ranged from large gatherings and formal outreach sessions to individual meetings and briefings with key stakeholders. Components of this effort have included:





## SALT LAKE CITY STREETCAR

Figure 1: Study Area







- A structured two-day public workshop that included property owners and potential project stakeholders, as well as City, UTA, and State of Utah officials;
- Community Council briefings;
- Presentations to organizations and at events with a focus on downtown, including the Chamber of Commerce and the Downtown Economic Development Forum; and
- Briefings for key community institutions including the leadership of the Church of Jesus Christ of Latter-day Saints and the University of Utah.
- Meetings with groups of residents and business owners from potentially impacted neighborhoods.

## **Guiding Principles**

The motivation for the Streetcar project is based in the RDA's goals of enhancing and accelerating walkable, transit-oriented redevelopment and providing non-automobile, local circulation for residents and visitors. To this end, principles were established to guide the project. They include:

- Advancing City land use goals;
- Catalyzing increased development and leveraging that development to pay for the project;
- Expandability beyond an initial project to a larger system serving more areas of the City;
- Building transit ridership in Salt Lake City, as well as in the larger UTA bus and rail network;
- Avoiding investment in temporary routing using "throwaway" track;
- Avoiding redundancy with light rail, spacing the projects with an eye to walking distances;
- Functioning as a circulator, as distinct from the "mid-range" and "long-haul" distances served by light rail and commuter rail lines;
- Assuming that the light rail system downtown will be "built out" consistent with the Downtown in Motion plan, with new track along 700 South, 400 West, and 400 South completing a downtown loop; and

## **Evaluation Criteria**

Evaluation criteria were established to test which of the alternatives had the highest potential for meeting the RDA's goals. The Project Team, after conferring with the Steering Committee, identified a series of qualitative and quantitative criteria for weighing the relative strengths of each of these options. These criteria are listed below:

- Access to Population Centers
- Access to Employment Centers
- Access to Major Destinations
- Activation of Developable Land
- Access to RDA-owned property
- Private Sector/P3 potential
- Potential Yield from Tax Increment Financing and Other Locally-Generated Funds
- Assessed Value Base
- Compatibility with Existing Plans
- Relative Lack of Constraints to Implementation
- Ridership
- Cost and Cost Effectiveness
- Public Support





## Alignments

The Project Team conducted a series of workshops with stakeholders to gather input regarding alignment options. Through these workshops, initial discussions, and fieldwork, preference for alignments were identified. ***Technical Memorandum #1 – Alignments for Analysis***, documents early analysis of a range of alternatives. This memorandum is included in Appendix A. The discussion below is organized by geographic area.

### Central Business District

The Central Business District (CBD) is an essential service area, as it provides a base for immediate ridership and major destinations for future “induced” ridership generated by new downtown housing. Three corridors were identified as potential east-west connections. These corridors were determined from their ability to serve the CBD and their potential for future expansion. Figure 2 illustrates the three CBD options.

#### ***100 South***

The 100 South corridor provides an opportunity to serve the City Creek redevelopment, Harmon’s Grocery Store, and the Salt Palace Convention Center. However, the Salt Palace Convention Center provides a constraint for the streetcar moving west, as do the parking ramps constructed in 100 South as part of the City Creek Center development.

#### ***200 South***

The 200 South corridor connects the Salt Lake City Central Station (Central Station) to a series of major destinations to the east, serving the Salt Palace Convention Center, Gallivan Center, Gateway Mall, City Creek Center, hotels, offices, and numerous restaurants, as well as accessing a number of infill redevelopment sites now occupied by low-density development and surface parking.

#### ***300 South***

The 300 South corridor serves major cultural destinations such as Pioneer Park, home of the Farmers’ Market and possibly the Twilight Concert Series, the Rose Wagner Theater, and the Broadway Center. A constraint of this alignment is maneuvering around the Rio Grande Depot to access the inner-Depot District and the Central Station. In addition, the City recently renovated portions of 300 South with median improvements and a single through travel lane. Additionally, there was strong sentiment by stakeholders that 300 South was developing well on its own and should not have its unique environment changed by the streetcar.

#### ***Recommendation***

It is the recommendation of the Streetcar Project Team that the 200 South corridor should be used to access the CBD. This option provides the greatest opportunity to serve potential downtown ridership and destinations with the least constraint.

### Depot District

The Depot District is a RDA TIF District located in the northwest part of Downtown. The analysis for accessing the Depot District focused on revitalizing the area between Pioneer Park and the Central Station due to the access to RDA-owned property and the potential for a year-round market at the Rio Grande Depot.

#### ***Access Concepts***

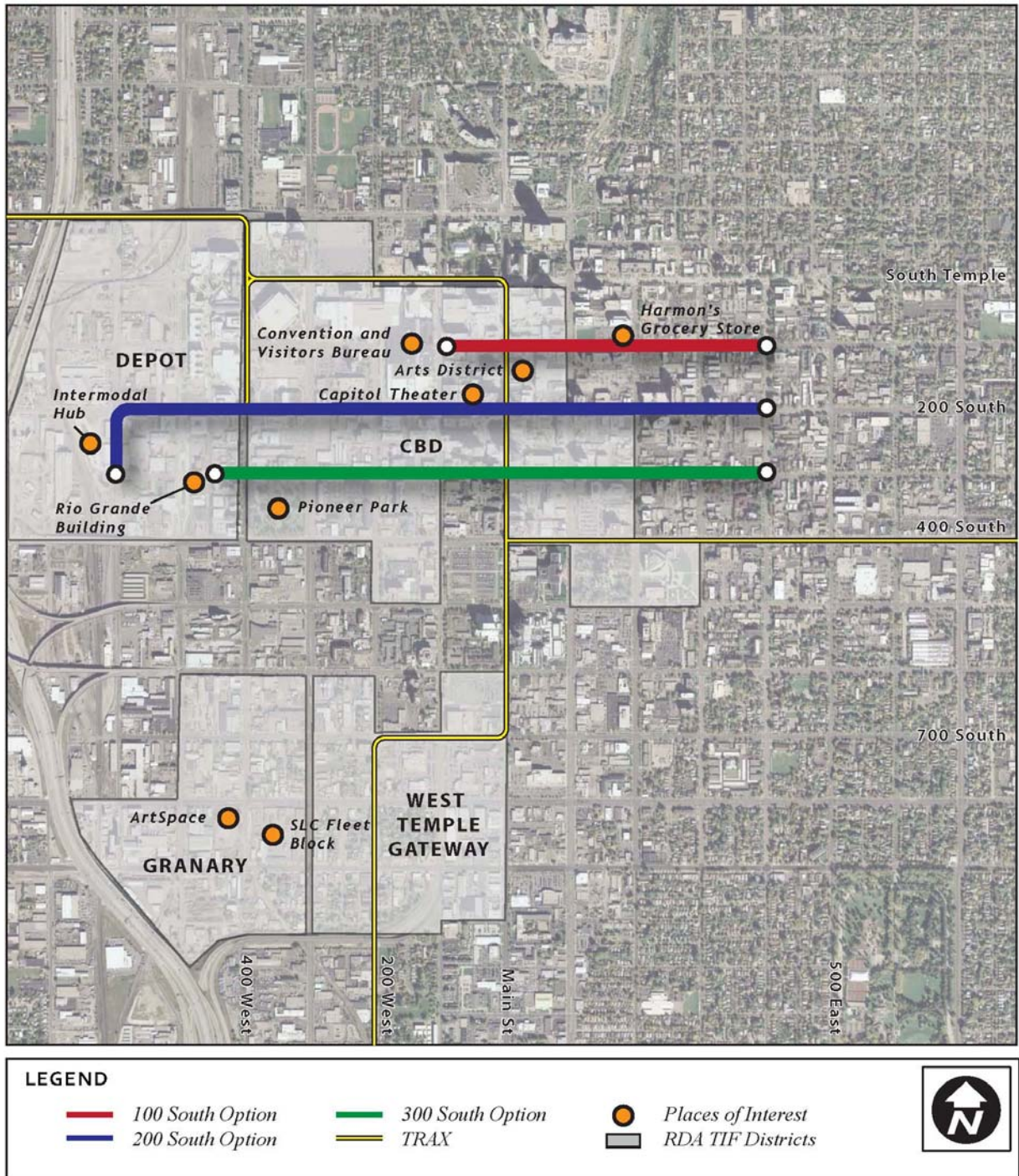
Access to the Depot District is made difficult by the long superblock created by Rio Grande Depot’s location on 300 South and light rail tracks on 200 South. The goal of variations within this vicinity is to provide the best access to parcels owned by the RDA and UTA and provide a closer connection to the Central Station. The most promising of the options to access the Depot District are illustrated in Figure 3.





## SALT LAKE CITY STREETCAR

Figure 2: Central Business District Options

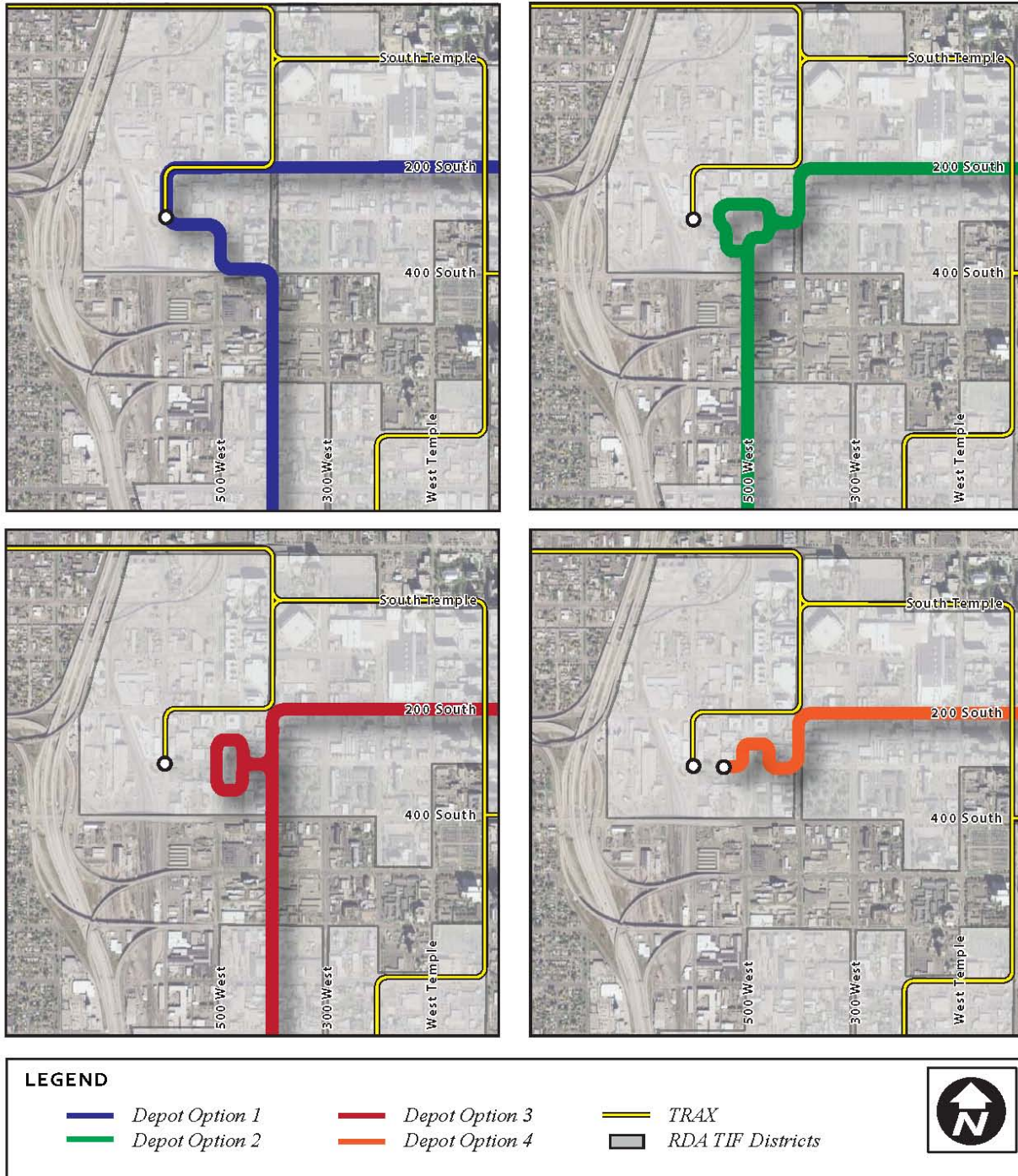






## SALT LAKE CITY STREETCAR

Figure 3: Depot District Options







There is no significant difference in the influence zone for the options with the exception of providing access to the Central Station. Due to the limited variations in influence zones, the analysis for these options is largely qualitative and concentrates on the potential attractiveness of the routes and sites to the development community and connections to the Central Station.

While the blocks being split are fairly large and there would seem to be some value to breaking these blocks up, in fact the opposite may be true. A division of these blocks in the manner shown in the route options would limit the design flexibility of potential developers. Any predefined division of the blocks would limit possible building layouts. This limitation may result in a narrowing of developer interest and therefore constrain property values and/or timing of development. Alignments that remain within existing streets and those proposed in the RDA's development strategy provide adequate access while preserving greater design flexibility for the redevelopment sites. If the alignment is located in-street only, the entirety of the blocks would still be within 800 feet of the streetcar, well within the generally accepted range of ¼-mile (1320 feet). In our opinion, the marginal gain of an intra-block alignment for the western portions of the block would not offset the limits to development flexibility. Finally, while a mid-block alignment would place the line marginally closer to the Central Station, alignments within existing streets provide access within the desired 1320' or closer.

Options that utilize existing streets achieve the goal of reaching west of 400 West toward the Central Station while also maintaining flexibility for future development. These alignments provide good access to points west of 500 West (including the RDA- and UTA-owned parcels in this area) and should therefore do more to facilitate development on those blocks.

### ***Mid-Block Concepts***

At the public workshop held for the Downtown Streetcar study, one of the discussion groups proposed a mid-block option between 400 and 500 West within the Granary District Project Area. The Project Team examined opportunities and constraints associated with this alignment, which are summarized in Table 1.

**Table 1 Summary Table and Discussion: Opportunities and Constraints**

OPPORTUNITIES	CONSTRAINTS
Creation of 330' block pattern – shorter blocks are desired in downtown; better for walking and urban development.	Ownership/Acquisition to create ROW – see attached map for acres and cost associated with acquisition (conceptual)
Dedicated transit/bike/pedestrian corridor – ample space could be reserved (assumed 48') to accommodate a multi-modal corridor, excluding autos	LRT at 400 West/200 South – operationally difficult to integrate streetcar for the ½ block overlap with LRT on 200 South.
Better proximity to Rio Grande and the Central Station, which would shorten walk distances (by ½ block) between hub and streetcar	Mid-block crossing at 500/600 South – traffic issue due to high volumes on ramps, needed additional signals to cross the streetcar, and likely delay for autos on principal arterials into the City. UDOT will likely not agree to install signals. Formal warrants likely not met.
Continues Gateway mid-block pattern	Building orientation could detract 400/500 West - by turning buildings inward to the mid-block, slight risk of 'turning their backs' to 400 West and 500 West street fronts.
Would avoid the issue of UTA's plans to put LRT on 400 West	Timeline – would be slow to acquire parcels

### ***Recommendation***

As noted above, mid-block options can be questionable from an economic viewpoint due to their impact on the flexibility of developing the blocks west of 500 West. This loss of flexibility does not provide a significant improvement in proximity or frontage to developable land owned by the RDA or UTA, nor does it provide





significantly improved access to the Central Station. Midblock options should only be considered (at least from a development point of view) on those blocks where the property owners or developers specifically request them or where a specific development plan incorporates this element as part of the urban design of a project.

Therefore, it is recommended to serve the Depot District through Option 4, extending the Depot District spur to the Central Station. As part of the Alternatives Analysis, more in depth discussion will need to be held with the State of Utah's Division of Facilities and Construction Management to address issues associated with Option 4 and to determine if other alignments around the Rio Grande Depot may better serve the needs of the Depot District's stakeholders.

## Granary District

The Granary District is another RDA TIF District. It is located in the southwest portion of the Downtown, an area with numerous under-utilized warehouses and large development parcels. Recently, development has occurred within the area or on its periphery. Examples include Artspace (400 West 800 South), the Frida Bistro (550 West 700 South), and Target (300 West 1000 South). The options to access this Granary District from the north are 400 West and 500 West, as shown in Figure 4.

### **400 West**

400 West was originally considered an option because of existing rail track located in the middle of the street. This route provides access from the Gateway development on 200 South to the TRAX Station on 900 South without many problems. 400 West is close enough to existing development that it can act as a transition between development that is occurring to the east and the western portion of Downtown. In addition, the City-owned Fleet Block's western face borders 400 West. However, this study has not analyzed the benefits or burdens of sharing the corridor with TRAX, whose extension is planned along 400 West. Also, the general condition of the public right of way could make construction more expensive.

### **500 West**

500 West is considered a viable alternative to 400 West. It provides similar access to existing tax base and to developable land as 400 West without the potential conflict with TRAX. However, 500 West has major constraints with crossing 500 South and 600 South, state-owned corridors between Salt Lake and I-15. Permission to cross these thoroughfares is not probable. Additionally, 500 West may be too far west to maximize the transit benefit for development occurring along 300 West and the benefit to the development of the Fleet Block would be less than what is anticipated to be generated by the 400 West alignment.

### **Recommendation**

Overall, there is little to differentiate between the use of 400 West or 500 West south of 400 South from an economic perspective. On the basis of access to taxable value, an alignment using 400 West has a slight advantage, which could add approximately \$15M to the assessed value base within the influence zone versus an alignment that uses 500 West. In regards to access to developable land, the 500 West alignment would seem to offer a slight advantage in that it provides access to developable areas between 500 West and the railroad that are not otherwise proximate to transit. There is less than 5% difference in the amount of taxable value in the influence zone of the two considered alignments. 500 West does provide access to some unique areas between 500 West and the railroad tracks, but these appear to be harder to develop and generally less attractive than the areas on the eastern side of the influence zone.

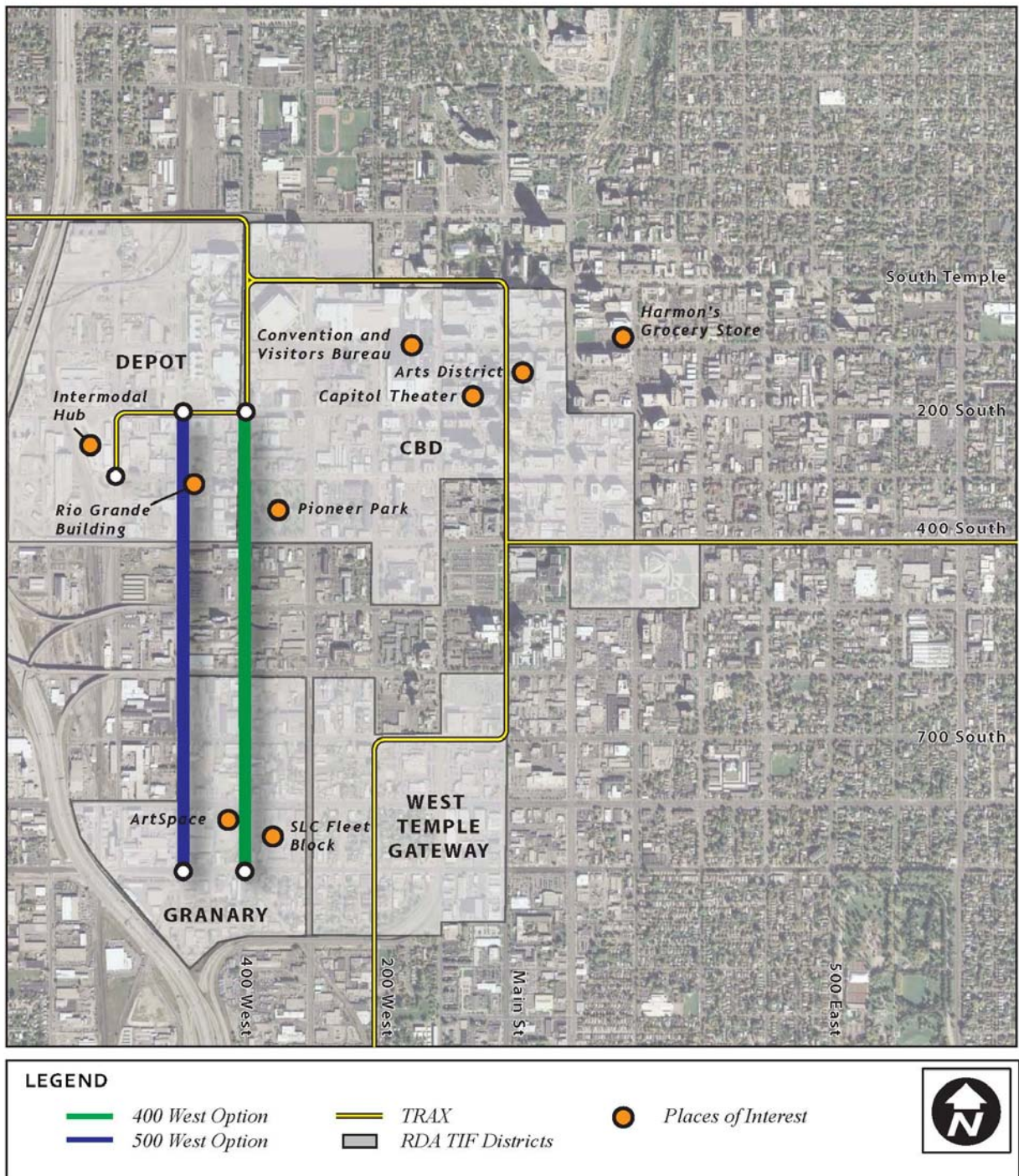
Due to the unlikelihood of crossing state-owned roads near the I-15 ramps and 400 West's proximity to the 300 West corridor and potential benefit to the Fleet Block, it is recommended that 400 West be the preferred alternative for the streetcar alignment.





## SALT LAKE CITY STREETCAR

Figure 4: Granary District Options







## Project Financing Options

A broad review of potential local financing tools was conducted, and a number of scenarios were created to consider how the capital and operating costs of the potential project could be funded. The full version of this Analysis appears as **Appendix B, Technical Memorandum 2– Financial Analysis**.

The potential funding tools considered focused on options based on revenues derived from economic activity occurring within either:

- 1 ½-block ( approximately ¼-mile ) of the proposed streetcar alignment(s) (i.e. “benefit zones”) or
- The entirety of the downtown area.

The underlying concept is that in a local funding strategy, a significant portion of the streetcar project costs should be borne by those who benefit most from its presence. People living, working, and visiting within walking distance of the starter route or owning businesses or property within that distance will clearly be the principal users and/or direct beneficiaries of the project and collectively receive the bulk, but not all, of the immediate benefits of the line. Hence the ¼-mile radius is used to define the “benefit zone” around each alignment. Revenue tools considered included:

- Assessment districts;
- Tax Increment Financing;
- Parking revenues and surcharges;
- Sales tax surcharge for a downtown district;
- Hotel/motel taxes
- Land sales/leases/partnerships

Those funding tools that were considered viable (legally permissible and potentially generating significant revenues) were further analyzed to estimate their potential capacity. Other funding tools that might be more appropriately directed toward operating costs, such as bulk user agreements, advertising and fares, were set aside for that purpose. Scenarios were then constructed utilizing combinations of these sources to address the funding required for the capital costs of a given alignment. The alignment options under consideration evolved somewhat over the course of the study, so the scenarios created do not correspond exactly with the alignment options described in this report; they do illustrate the potential, and the limitations, of the local funding sources under consideration. Examples of the resulting capital financing scenarios are shown in Table 2.

**Conclusion:** This analysis demonstrated that for at least some of the alignments under consideration, it is theoretically possible to fund all of the project’s capital costs and at least a portion of its operating costs from locally-controlled revenue sources. This would, however, preclude some other alignment options from moving forward and would require that almost all of the revenue options be fully utilized in order to fund the project. This may or may not be politically feasible.





**Table 2 Potential Project Financing**

Beginning of	Granary Line		Hybrid Line Extended	
	Year 5	Year 11	Year 5	Year 11
<b>A. Capital Costs:</b>	\$ 49.1	\$ 49.1	\$ 76.8	\$ 76.8
<b>B. Maximum Local Resources:</b>	\$ 22.5	\$ 44.6	\$ 75.0	\$ 106.8
Assessment District at 2.5 cents	\$ 1.7	\$ 2.5	\$ 5.8	\$ 7.3
TIF 20% of Existing	\$ 0.4	\$ 0.4	\$ 31.8	\$ 31.8
TIF Increase at 30% of available*	\$ 9.9	\$ 26.0	\$ 13.3	\$ 33.7
Higher Public Parking Revenues**	\$ -	\$ -	\$ 9.1	\$ 11.4
Monetize City/RDA Redevelopment Sites	\$ 10.5	\$ 15.8	\$ 15.0	\$ 22.5
<b>(Deficit)/Surplus [A-B]</b>	<b>(\$26.6)</b>	<b>(\$4.5)</b>	<b>(\$1.8)</b>	<b>\$30.0</b>
Beginning of	200 South		Hybrid Short	
	Year 5	Year 11	Year 5	Year 11
<b>A. Capital Costs:</b>	\$ 61.1	\$ 61.1	\$ 61.1	\$ 61.1
<b>B. Maximum Local Resources:</b>	\$ 69.6	\$ 101.6	\$ 74.8	\$ 106.4
Assessment District at 2.5 cents	\$ 5.4	\$ 7.2	\$ 5.7	\$ 7.2
TIF 20% of Existing	\$ 31.5	\$ 31.5	\$ 31.8	\$ 31.8
TIF Increase at 30% of available*	\$ 14.6	\$ 38.0	\$ 13.2	\$ 33.4
Higher Public Parking Revenues**	\$ 9.1	\$ 11.4	\$ 9.1	\$ 11.4
Monetize City/RDA Redevelopment Sites	\$ 9.0	\$ 13.5	\$ 15.0	\$ 22.5
<b>(Deficit)/Surplus [A-B]</b>	<b>\$8.5</b>	<b>\$40.5</b>	<b>\$13.7</b>	<b>\$45.3</b>
* 50% in Granary Line area				
** Year 5 = 12.5% increase over current revenues; Year 11 = 15.6% increase over current revenues				

The City, like many local governments, is under fiscal duress in the current economy; meanwhile, the federal government has recently become a funding partner to several streetcar projects across the nation. For these reasons, a review of potential federal funding options for the project was also conducted. This review (**Appendix C – Technical Memorandum #3 – Federal Funding Options**) highlighted a major policy shift that has recently been made at the federal level. Until recently, key federal officials had evinced little interest in funding streetcar projects, focusing their transit efforts primarily on “Bus Rapid Transit” projects. The requirements of the federal grant funding approval process, the “New Starts” and “Small Starts” programs administered by the Federal Transit Administration (FTA), made it difficult, if not impossible, for streetcar projects to be approved.

This picture has changed dramatically under the current Administration. Transportation Secretary Ray LaHood and FTA Administrator Peter Rogoff have been effusive in their praise for streetcar projects. Even more notably, the United States Department of Transportation (USDOT) and FTA have poured over \$300 million into capital grants for streetcar projects over the past twelve months, bypassing the existing New Starts/Small Starts process and



awarding the funds through other programs. This changed environment makes the federal government a credible potential funding partner for a Salt Lake City project.

## Planning, Zoning, and Regulatory Issues

An analysis was performed to assess the development environment associated with implementing a streetcar line in the downtown area, and to recommend improvements to zoning, parking, and general urban design requirements to overcome the challenges. This review included study of existing zoning and parking requirements, identifying barriers to development, and providing recommendations to overcome these barriers. The full review of these issues can be found in **Appendix D - Technical Memorandum 4 – Planning and Zoning Issues**.

### Existing Zoning and Parking Requirements

Existing zoning and parking requirements for each area of study are shown in Figure 13 and summarized Table 3.

**Table 3 Zoning Summary**

Area of Study	Zoning	Parking
<b>Granary</b>	Max building height of 60-65 feet/4 stories, increased building heights with conditional use	<ul style="list-style-type: none"> <li>• D-2, CG, PL</li> <li>• Surface parking permitted</li> <li>• Minimum parking requirements</li> <li>• Non-residential uses in buildings less than 1,000 square feet in D-2 and CG are exempt from parking requirements</li> <li>• Parking should provide pedestrian walkways</li> <li>• In D-2, a change of use does not require additional parking facilities</li> <li>• Credit for on-street parking is allowed within D-2</li> <li>• TDM alternative to on-site parking requirements</li> </ul>
<b>Depot</b>	25-75 feet building height, increased building heights with conditional use  Must have first-floor commercial  Minimum residential requirements  No setback requirements  Mid-block streets are allowed  Design material standards in D-3  Minimum window requirements in D-3	<ul style="list-style-type: none"> <li>• GMU, D-3, CG</li> <li>• Minimum parking requirements</li> <li>• Non-residential uses in buildings less than 1,000 square feet in D-3 and CG are exempt from parking requirements</li> <li>• The minimum number of parking spaces in D-3 is one per dwelling unit</li> <li>• Parking should provide ped walkways</li> <li>• In D-3, a change of use does not require additional parking facilities</li> <li>• Credit for on-street parking is allowed within D-3</li> <li>• TDM alternative to on-site parking requirements</li> </ul>
<b>CBD</b>	100-375 feet building height in core  75 feet building height in other area, increased building height with conditional use  Must have first-floor commercial  Mid-block streets are allowed  Minimum window requirements in D-1, D-3, & D-4	<ul style="list-style-type: none"> <li>• D-1, D-2, D-3, D-4</li> <li>• Minimum parking requirements</li> <li>• Non-residential uses in buildings less than 1,000 square feet in D-2 &amp; D-3 are exempt from parking requirements</li> <li>• The minimum number of parking spaces in D-3 &amp; D-4 is one per dwelling unit</li> <li>• Parking should provide pedestrian walkways</li> <li>• In D-1, D-2, &amp; D-3, a change of use does not require additional parking facilities</li> </ul>





- Credit for on-street parking is allowed within D-1, D-2, & D-3
- TDM alternative to on-site parking requirements

## Assessment of Transit-Oriented Zoning and Process

In general, the downtown core portion of the study area has a good basis for development. The CG zoning now in effect in much of the Granary District is inconsistent with urban development and will result in suburban forms of development. Most districts of the study area have adequate building heights. Many zones within the study area also allow for the creation of mid-block streets. However, parking is generally based on minimum parking requirements. The following is a list of conditions that may not support transit-oriented development around a proposed streetcar:

1. The patchwork of zoning designations now in effect, while evolving for understandable historical reasons, may overcomplicate land use requirements.
2. Minimum lot sizes and large block sizes may impede smaller development.
3. Design requirements apply only in a portion of the study area, and are partial in their scope of issues addressed, addressing some basic parameters of materials and window area, but falling short of a full set of design goals.
4. Minimum parking regulations are contrary to the intended urban form of an area to be highly transit-oriented.
5. Allowing surface parking lots compromises the desired urban form and restricts potential tax revenue.
6. Other “suburban” requirements contained in the provisions for existing zones (setbacks, allowance for drive-throughs, etc.) are in conflict with the intended urban character.

## Potential Improvements to Zoning and Process to Support Transit-Oriented Development

In response to the City’s current, traditional zoning code, which is focused on regulating heights and uses (and ensuring adequate parking), the Project Team recommends a “form-based” approach be adopted to achieve the level of urban quality Salt Lake City seeks in its downtown. Several issues will need to be addressed in making this essential transition:

- The current patchwork of zoning designations in what can become a greater downtown Salt Lake could hamper a coherent transit and pedestrian-oriented urban core. Collapsing the multiple zoning designations now in effect for this area into a much simpler single or small group of zoning designations (other than perhaps retaining O, PL and UI) should be considered. The basic urban components of the existing CBD zone (D-1) should (with some modifications and additions) be used as the framework for this transit-supportive zoning regime.
- The current planning effort for the North Temple transit corridor focusing on a form-based approach to planning for land uses around stations should be considered for the entire downtown area. Planning for these areas will undergo a modified process of public involvement and design review. In addition, the TOD zones around stations will include a list of what is not included, versus a list of included uses.
- The City should continue to pursue changing the review process for all land uses in favor of a ‘warrant’ based approach to meeting desired design factors that would support transit.
- Perform a review of the planned development review process. City feedback has indicated that the review process is not being used as intended, the intent of which is to shape the type of development in downtown.
- Establish significantly more generous height limits or Floor Area Ratios for the core areas currently zoned D2, D3, D4, and CG.
- Perform a complete update of the CG zone to “de-suburbanize” the regulations. Consider collapsing the CG zone into other zones with more transit-oriented elements.





- Remove minimum lot sizes.
- Do not provide any allowance for setbacks and require build-to lines.
- Prohibit drive-through facilities in all downtown zones
- Consider articulating and formally adopting a full set of design goals, objectives, recommended/not recommended elements, and specific requirements. Within those areas of specific requirements, review and consider enhancing the existing design and materials requirements (brick, stone, etc.), fenestration percentages, and prohibitions (such as prohibiting low-quality facing materials and street-level reflective glass). Then, apply these design goals, requirements, etc. throughout the core area.
- Although the area is probably too large to require active ground-floor uses throughout, at a minimum, additional street frontages, other than the ones already specified under the current Downtown or Gateway sections, should be designated where these requirements will apply.
- Allow mid-block streets to be developed anywhere within the core area.
- In the study area, implement parking maximums and have a “sliding scale” for maximum parking requirements such as developments within ¼-mile of a transit stop would have a lower parking requirement than ½-mile of the transit stop. Eliminate required parking minimums throughout this core area.
- Prohibit new surface parking lots throughout the core area.
- Provide bonuses or other incentives for the redevelopment of existing surface parking lots.

## Project Development

This analysis has demonstrated that streetcars can and should play a catalytic role in realizing the RDA’s plans for downtown development. The existing downtown core, while enjoying new vitality and continued new investment, is limited in its walkable area by Salt Lake City’s large block sizes and the lack of circulator transit options that expand the walking distance for pedestrians. This shortcoming will be particularly acute in trying to foster additional high-density residential development in and near Downtown in the “new normal” of a less robust real estate market. To expand “walkable urbanism” into the Granary District, in this market, **without** the strong place-making influence of a streetcar will likely be very difficult. It is therefore a wise strategy for the RDA to utilize a streetcar project to influence and intensify development in its areas of focus.

Given that using the streetcar project in this way is a good strategy and given the multiple options under consideration in this study, the question is one of phasing. Where should a Phase 1 segment be placed, in order for it to succeed in its own right and to build momentum for subsequent phases? The results of this Analysis lead to a conclusion that the most viable strategy would be to begin with a Phase 1 project running east/west along the 200 South corridor, running from the Central Station area and Depot District to the eastern edge of the downtown core at approximately 100 South/200 East. This Phase 1 segment would then be expanded southward along 400 West as development projects are readied in the Granary District.

### Phase 1 Segment: 200 South to the Depot District

Phase one would begin at the Harmon’s development site located at 100 South and 200 East. The route would proceed one block south to 200 South, then turn west on 200 South, and continue to 400 West. At 400 West, the route would then turn South to 300 South, then would use 300 South to access the Depot district, traveling north around the Rio Grande building to rejoin 300 South at 500 West. Conceptually this alignment is meant to connect streetcar passengers to Central Station. This connection could occur ½ to one block away from Central Station. This route is approximately 1.74 miles long, and would be in a double track configuration running on the outside lane of the street. Challenges of this alignment are primarily associated with:

- Sharing 200 East with a popular Salt Lake City parade route.





- Acquiring property to navigate around the north end of the Rio Grande building on 300 South.
- Establishing an appealing walking environment to connect the Central Station and the Streetcar station that will be located at the Rio Grande building.

A Capital Cost Estimate has been prepared for this revised “Short Term” alignment (Table 4, below). The Short Term alternative includes the cost of vehicles and a maintenance facility, along with the cost of right-of-way acquisition in the Depot District.

**Table 4 Capital Cost Estimate for the Phase 1 “Short Term” Segment.**

FTA Cost #	Cost Category	2010 Base Year Cost w/o Contingency	2010 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$9,783,485	\$11,740,182
20.00	Stations	\$780,465	\$975,582
30.00	Support Facilities	\$9,387,108	\$9,387,108
40.00	Sitework	\$5,240,152	\$6,812,198
50.00	Systems	\$5,084,002	\$6,355,002
60.00	Right of Way	\$89,750	\$89,750
70.00	Vehicles	\$10,867,500	\$10,867,500
80.00	Professional Services	\$7,971,463	\$9,286,610
	<b>TOTAL</b>	<b>\$49,203,925</b>	<b>\$55,513,931</b>

Opportunities associated with this first phase include:

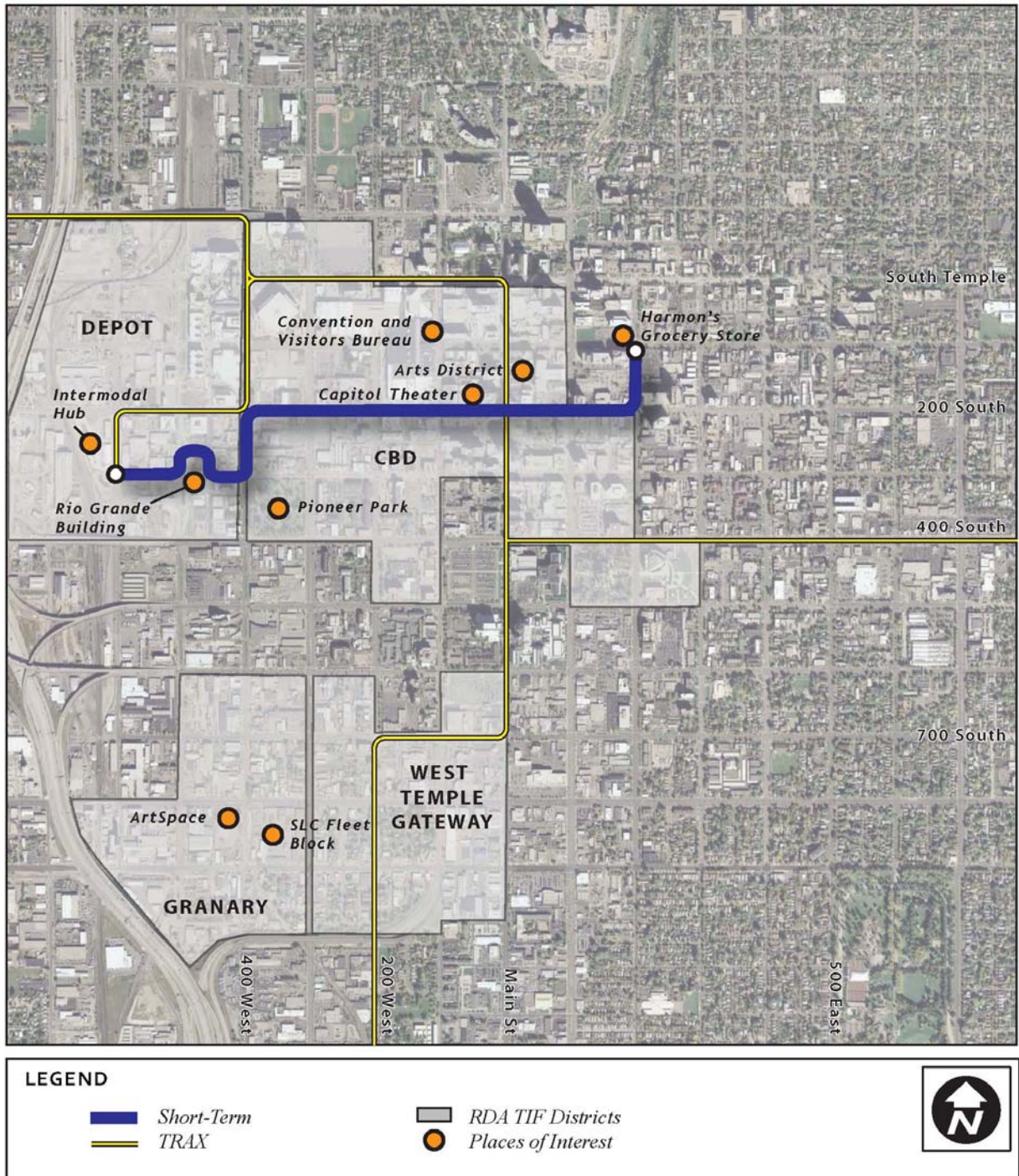
- Connecting to Central Station could increase ridership, in the short term, by approximately 30% over an alternative that does not serve the Central Station.
- The RDA owns several parcels of property that can be used to expedite transit-oriented development to support the streetcar.
- This streetcar segment provides the basis for moving quickly to a second phase to the south (see below) and for discussing future connections to the north (South Davis Streetcar) and to the East to the University of Utah.
- By connecting to the Central Station, this short term alternative will immediately deliver passengers between Commuter Rail and the primary core of downtown where many jobs are located. This route would avoid the out-of-direction travel of the existing light rail system. Immediate riders are important to the long term success of the project.





## SALT LAKE CITY STREETCAR

Figure 5: Short-Term







## Phase 2 Segment: 300 South to 900 South TRAX Station

Phase 2 of the downtown streetcar would extend the 400 West alignment to 900 South (along 400 West), and east to the 900 South LRT station. This piece of the alignment is 1.21 miles long, and would be in double track configuration running on the outside lane of the street. Challenges of this alignment include:

- The Granary District has yet to experience significant redevelopment activity. Additional efforts will be necessary to catalyze redevelopment in a timely manner to support the streetcar.
- 400 West has been identified by UTA as a desired LRT route into the Central Station, and is part of the Downtown in Motion plan. Additional discussions are necessary to determine the co-existence of each of these projects, or if the streetcar can ultimately play the role of LRT through this section, thereby eliminating the need for the LRT connection.
- Additional study will be necessary to analyze the connection between 400 West and the 900 South TRAX station.

A Capital Cost Estimate has been also prepared for this “Mid Term” extension (Table 5, below). The Mid Term alternative is assumed to be a future extension of the Short Term “starter system” and does not include vehicle and maintenance facility costs. In other words, the Mid Term alternative is not a stand-alone alternative.

**Table 5 Capital Cost Estimate for the “Mid Term” Extension Segment.**

FTA Cost #	Cost Category	2009 Base Year Cost w/o Contingency	2009 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$8,383,969	\$10,060,762
20.00	Stations	\$709,514	\$886,892
30.00	Support Facilities	\$0	\$0
40.00	Sitework	\$2,549,671	\$3,314,573
50.00	Systems	\$4,584,002	\$5,730,002
60.00	Right of Way	\$0	\$0
70.00	Vehicles	\$0	\$0
80.00	Professional Services	\$4,272,610	\$5,263,954
	<b>TOTAL</b>	<b>\$20,499,766</b>	<b>\$25,256,184</b>

Opportunities associated with streetcar segment include:

- The Salt Lake City Fleet Block is located on this alignment and presents a tremendous opportunity for transit oriented development to support the streetcar.
- Artspace, located at 800 South/400 West, is an existing anchor for the streetcar and will be occupied this year.
- The streetcar could provide a needed connection between the southwest part of Downtown Salt Lake City and the Central Business District
- This segment of streetcar will provide the connection to Downtown necessary for future extensions of the system to 900 West and 900 East, as well as south to the Sugar House Streetcar.

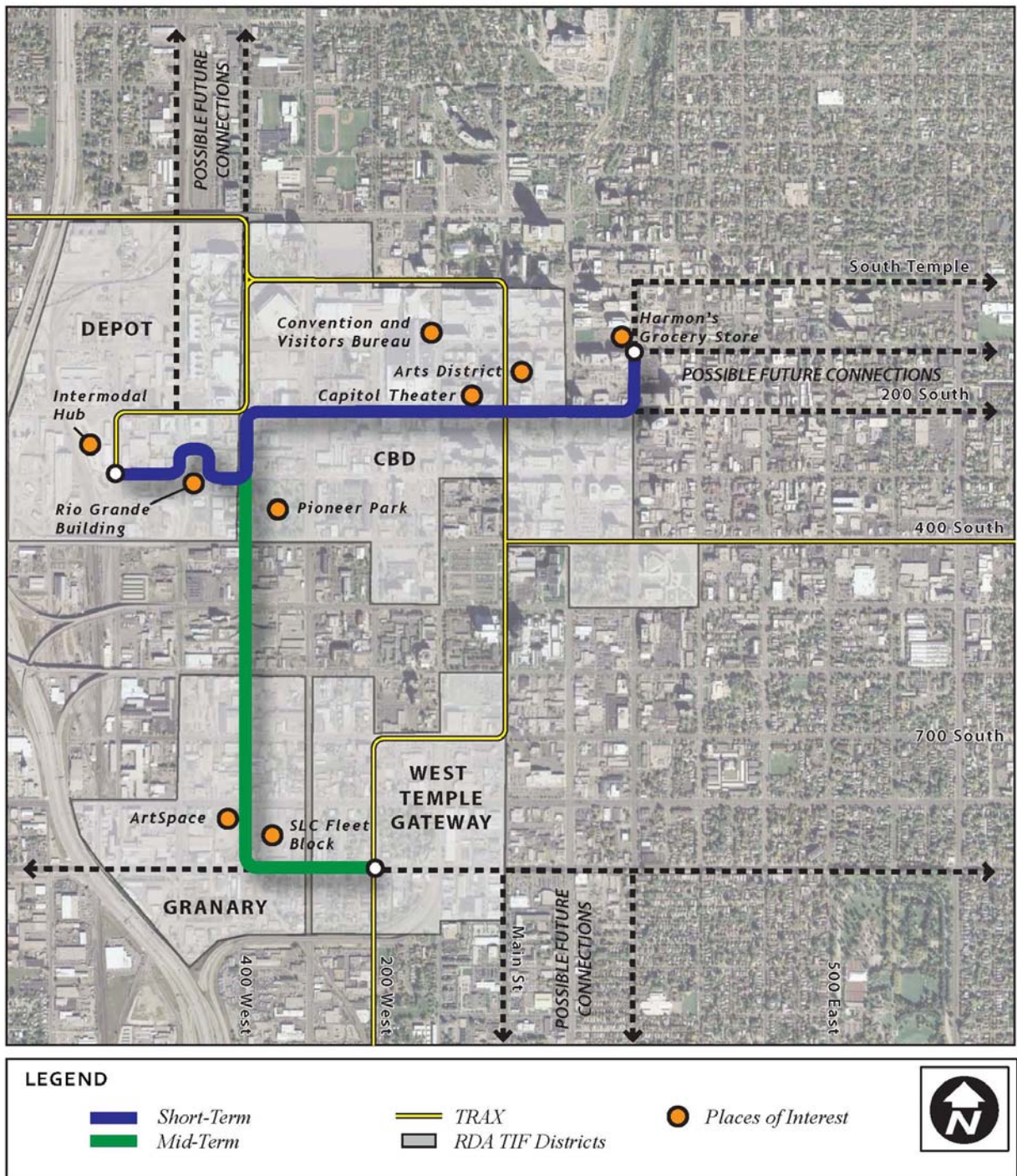
In the long term, ridership is expected to increase with the addition of development surrounding the streetcar. This ridership will be less associated with the distribution of commuter rail trips (as noted above), and more associated with all trip purposes, beyond traditional home and work connections





## SALT LAKE CITY STREETCAR

Figure 6: Mid-Term







## Next Steps

The project is now positioned for the next stage of the development process, with the next steps including the completion of an Alternatives Analysis and seeking a combination of local resources and federal capital grants, which will likely be sought under the FTA Small Starts program or its successor. The next stage of project development should take place on two levels: local support-building and formal analysis to conform to federal requirements. This evolution of the project concept will require:

1. Continuing communication with Stakeholders, the Streetcar Committee, and internally with City decision-makers and relevant agencies. This element includes a broader outreach effort to affected property owners, both through formal Alternatives Analysis (see below) and in order to build a viable finance plan for the local portion of the project's costs
2. Beginning an FTA-approved Alternatives Analysis to formalize the corridors studied in this first analysis, to complete detailed ridership estimates, and to prepare for the possibility of future federal funding;
3. Expanding discussions of the options for project operation, with UTA and with downtown property owners and other stakeholders.
4. Coordinating other City planning efforts and capital projects with the likelihood that a streetcar project will be sited on this alignment. This element includes planning projects in the corridor with this future construction in mind and changing zoning and regulatory requirements now to ensure that the development potential in the corridor, *which is key to its purpose*, is not diminished by the construction of incompatible, low-density projects.





## **APPENDIX A:**

### **TECHNICAL MEMORANDUM #1 – ALIGNMENTS ANALYSIS**





## Technical Memorandum #1

### Alignments for Analysis

**Date:** October 22, 2009  
**From:** Charlie Hales,  
HDR/Fehr & Peers/SOJ Streetcar Team  
**To:** Matt Dahl, RDA  
**Subject:** Alignments for Analysis

---

### Introduction

This brief memorandum is the first of a series of deliverables (project technical reports) to be produced in an analysis of a potential streetcar system serving Downtown Salt Lake City and city neighborhoods. HDR Engineering, with support from Fehr and Peers and from Shiels, Obletz, Johnsen, has been engaged by the Redevelopment Agency of Salt Lake City to provide analysis and implementation options for this initiative. This technical memorandum includes the following components:

- Understanding of streetcar concept
- Potential alignments
- Evaluation criteria
- Next steps

### Understanding of Streetcar Concept

The concept of a downtown streetcar has been developed by City staff, with support from the Mayor and City Council, over the past two years. The goals of such a project are to enhance and accelerate walkable, transit-oriented redevelopment and to provide non-automobile, local circulation for residents and visitors. Guiding principles behind this initiative include:

- Advancing City land use goals;
- Catalyzing increased development and leveraging that development to pay for the project;
- Expandability beyond an initial project to a larger system serving more areas of the City;
- Building transit ridership in Salt Lake City, as well as in the larger UTA bus and rail network;
- Avoiding investment in temporary routing using “throwaway” track;
- Avoiding redundancy with light rail, spacing the projects with an eye to walking distances;





- Functioning as a circulator, as distinct from the “mid-range” and “long-haul” distances served by light rail and commuter rail lines;
- Assuming that the light rail system downtown will be “built out”-consistent with the Downtown in Motion plan with new track along 700 South, 400 West and 400 South completing a downtown loop; and
- Seeking an alignment location and development pattern in which residents walk past retail en route to transit rather than retail customers walking past residential projects to reach retail;

Based on a review of previous City analysis of potential alignments, initial discussions with a Steering Committee of key City staff leading this initiative, and fieldwork conducted by the HDR team in September 2009, the Study Area shown in Figure 1 has been identified. There are multiple possibilities within this Study Area for an initial project alignment that advances the goals and conforms to the guiding principles.

Previous studies support this concept, including the Downtown in Motion plan (adopted 2008), the Downtown Streetcar Analysis report prepared by the Planning Division in 2009, and the goals and objectives of the Granary and Depot District Redevelopment Project Areas. Supporting relationships are described below:

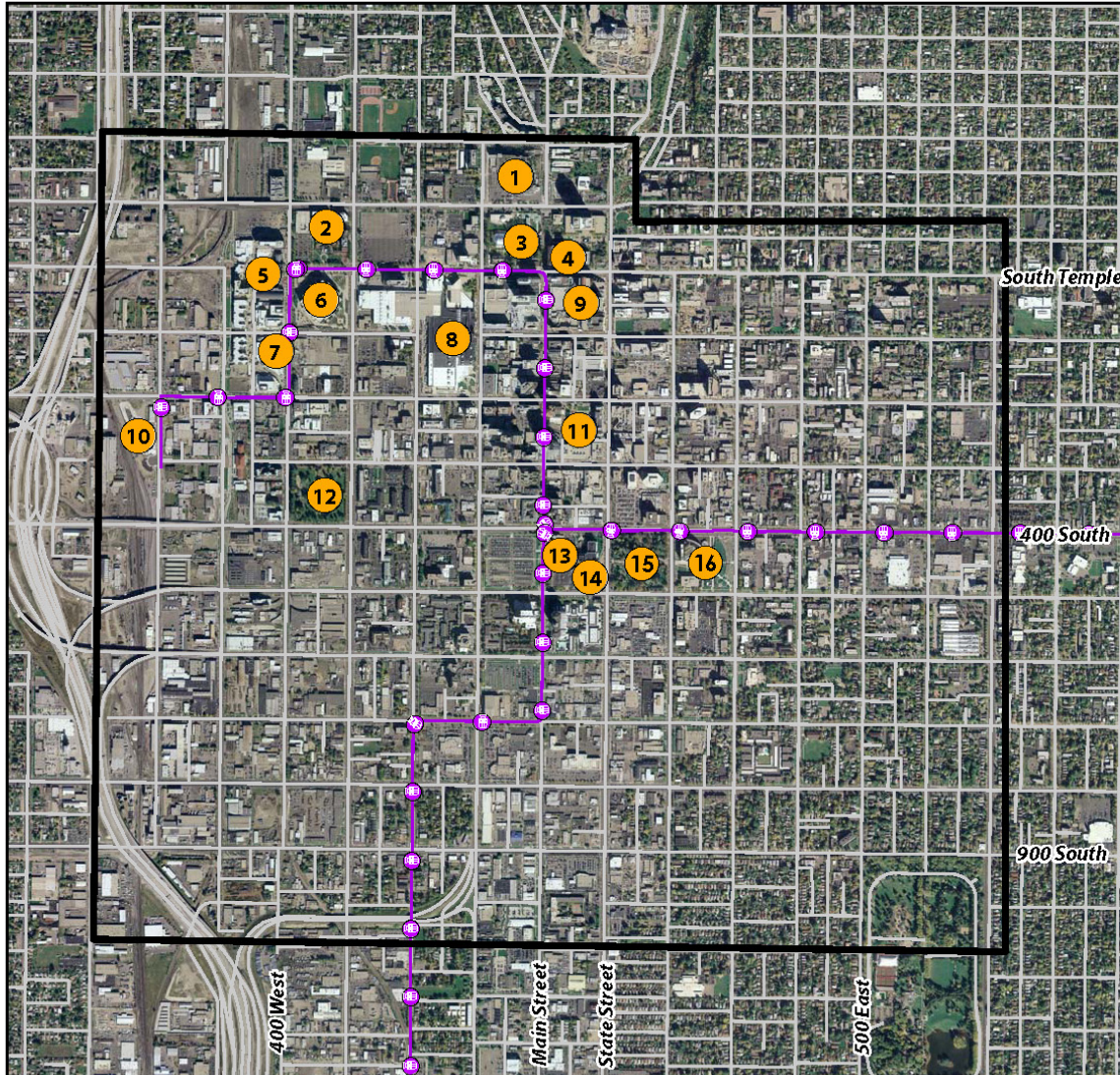
- Downtown in Motion – describes the completion of two loops of TRAX to provide a backbone of rail transit circulation in Downtown. The plan also describes the completion of an inner loop through Downtown. Lastly, the plan recommends further study of streetcar access to Downtown from surrounding neighborhoods not served directly by TRAX.
- Planning Division – An unofficial 2009 study identifies priorities for Downtown streetcar development as well as provided basis for analysis for two alignments in Downtown. The study recommended, as a first priority, the development of 400 West for streetcar development.
- Granary District Goals and Objectives – states that the Granary District Specific Area should “provide for the development of a diverse mixture of uses that complement Downtown, encourage a variety of housing opportunities, and facilitate the enhancement and revitalization of the Gateway District.”





## SALT LAKE CITY STREETCAR

Figure 1: Study Area



### PLACES OF INTEREST

- |                                   |  |
|-----------------------------------|--|
| 1. LDS Conference Center          | 9. City Creek Development              |
| 2. LDS Business College           | 10. Intermodal Hub                     |
| 3. Temple Square                  | 11. Gallivan Center                    |
| 4. Joseph Smith Memorial Building | 12. Pioneer Park                       |
| 5. Gateway                        | 13. Eagle Gate College                 |
| 6. EnergySolutions Arena          | 14. Scott M. Matheson State Courthouse |
| 7. Clark Planetarium              | 15. City & County Building             |
| 8. Salt Palace Convention Center  | 16. Salt Lake City Library             |

### LEGEND

- Study Area
- TRAX
- Place of Interest





## Potential Alignments

This study is focused on identifying the single most viable initial streetcar project serving Downtown Salt Lake City. The initial segment should have “stand-alone” functionality, but also be positioned to grow outward into a larger network.

Based on initial discussions and fieldwork, we recommend three potential alignments for continued study as outlined in the Scope of Work:

- 200 South Option** - Beginning on its western end at the Salt Lake Central Station, this line would run one block east on 300 South, then turn north on 500 West and run one block north. Turning east again, the line runs east on 200 South to a terminus at 500 East. A number of engineering issues will need to be addressed in this alignment and will bear on its cost estimate, including whether or not it shares track with light rail in the one block where they would be co-located, details of track location within the right of way, and where the termini would be sited. This alignment appears below in Figure 2.

The focus of this alignment is on serving the existing built environment, while accessing a fairly substantial amount of redevelopment potential. Its greatest strength is connectivity between the existing Downtown core, close-in urban neighborhoods in City Center East and the Avenues, and the Central Station transit hub. Its capital cost is estimated at \$53 million in 2009 dollars. Note that in each case a cost per mile is calculated in addition to the cost of the segment; since the segments are of differing lengths, this will allow for a fair comparison of their relative merit.

FTA Cost #	Cost Category	2009 Base Year Cost w/o Contingency	2009 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$11,199,392	\$13,439,270
20.00	Stations	\$1,096,833	\$1,371,042
30.00	Support Facilities	\$9,069,670	\$9,069,670
40.00	Sitework	\$6,233,971	\$8,104,162
50.00	Systems	\$6,431,831	\$8,039,789
60.00	Right of Way	\$0	\$0
70.00	Vehicles	\$10,500,000	\$10,500,000
80.00	Professional Services	\$8,960,546	\$10,538,301
	<b>TOTAL</b>	<b>\$53,492,242</b>	<b>\$61,062,234</b>

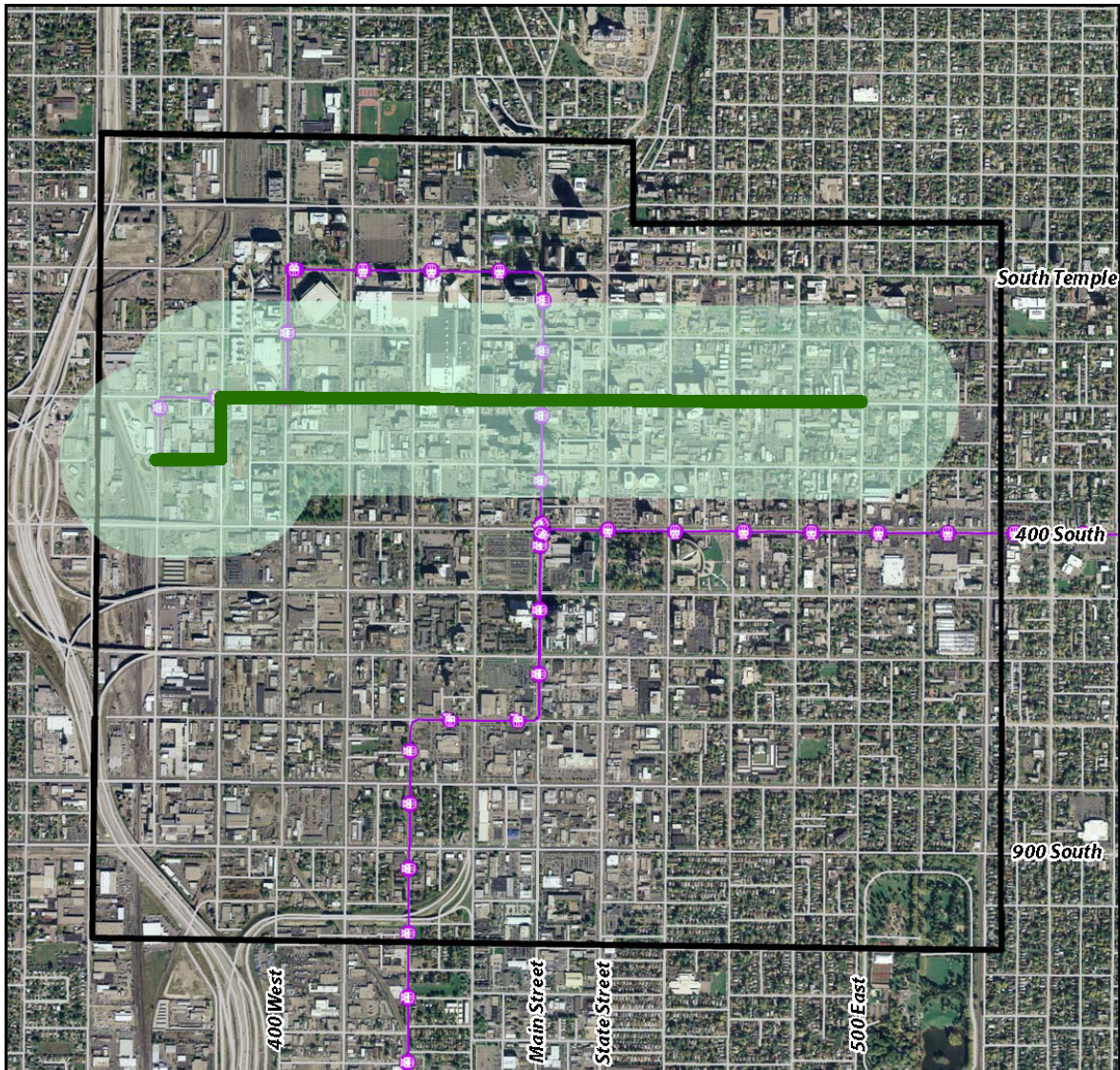
Total/mile                      \$29,553,725                      \$33,736,041







## SALT LAKE CITY STREETCAR


Figure 2: 200 South Option




### LEGEND

 200 South Option

 Influence Area

 Study Area

 TRAX





- **Granary Option** – Beginning on its northern end at the intersection of 400 West and 200 South, this line would proceed south until reaching 900 South, where it would turn east and connect, two blocks further, to the 900 South TRAX station (Figure 3). The predominant engineering issue for this alignment is its functional and physical coordination with the intended addition of light rail track on 400 West for the ultimate Downtown loop concept.

This alignment is focused on the large amount of redevelopment potential lying along this axis. City policy supports fostering expansion through high-density development southward and westward from the Downtown core and with this goal in mind, the RDA has purchased a substantial amount of property in this corridor. The conceptual cost estimate for this alignment is \$44 million in 2009 dollars.

FTA Cost #	Cost Category	2009 Base Year Cost w/o Contingency	2009 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$8,874,677	\$10,649,613
20.00	Stations	\$822,625	\$1,028,281
30.00	Support Facilities	\$9,069,670	\$9,069,670
40.00	Sitework	\$2,768,837	\$3,599,488
50.00	Systems	\$4,973,805	\$6,217,256
60.00	Right of Way	\$0	\$0
70.00	Vehicles	\$10,500,000	\$10,500,000
80.00	Professional Services	\$6,979,981	\$8,047,582
	<b>TOTAL</b>	<b>\$43,989,596</b>	<b>\$49,111,891</b>

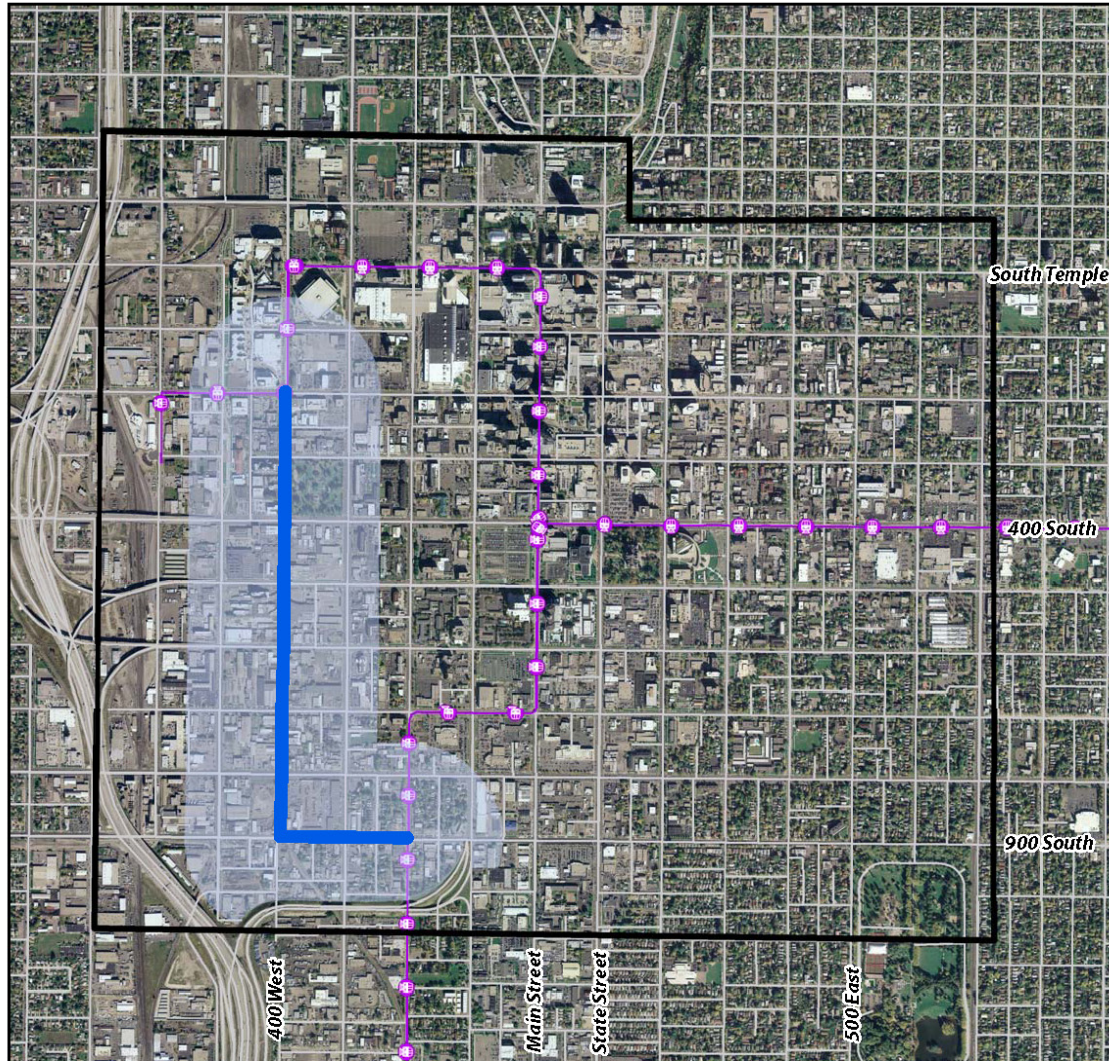
Total/mile                      \$32,345,291                      \$36,111,684









## SALT LAKE CITY STREETCAR

Figure 3: Granary Option



### LEGEND

-  Granary Option
-  Influence Area
-  Study Area
-  TRAX





- **Hybrid Option** – Beginning at its southern end this alignment would follow the same route as the Granary Option described above until reaching 300 South. At that point, this route turns east along 300 South for three blocks, until reaching West Temple, where it turns north for two blocks. Upon reaching 100 South, the line turns east for three blocks, terminating at the intersection of 200 South and 200 East (Figure 4). Engineering issues include the light rail coordination question noted in the Granary Option and details in the locations of the termini.

If the 200 South Option is fundamentally about serving the existing built environment and if the Granary Option is principally a development catalyst, this option is attempt to serve both objectives. Its configuration also seeks to more directly serve the Salt Palace and the massive addition to the CBD now being built in the City Creek project, as well as aligning with the highly walkable environment of this portion of 300 South. The conceptual cost estimate for this option is \$66 million in 2009 dollars.

FTA Cost #	Cost Category	2009 Base Year Cost w/o Contingency	2009 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$16,000,370	\$19,200,444
20.00	Stations	\$1,371,042	\$1,713,802
30.00	Support Facilities	\$9,069,670	\$9,069,670
40.00	Sitework	\$8,300,481	\$10,790,625
50.00	Systems	\$9,344,224	\$11,680,280
60.00	Right of Way	\$0	\$0
70.00	Vehicles	\$10,500,000	\$10,500,000
80.00	Professional Services	\$11,607,788	\$13,811,354
	<b>TOTAL</b>	<b>\$66,193,574</b>	<b>\$76,766,175</b>

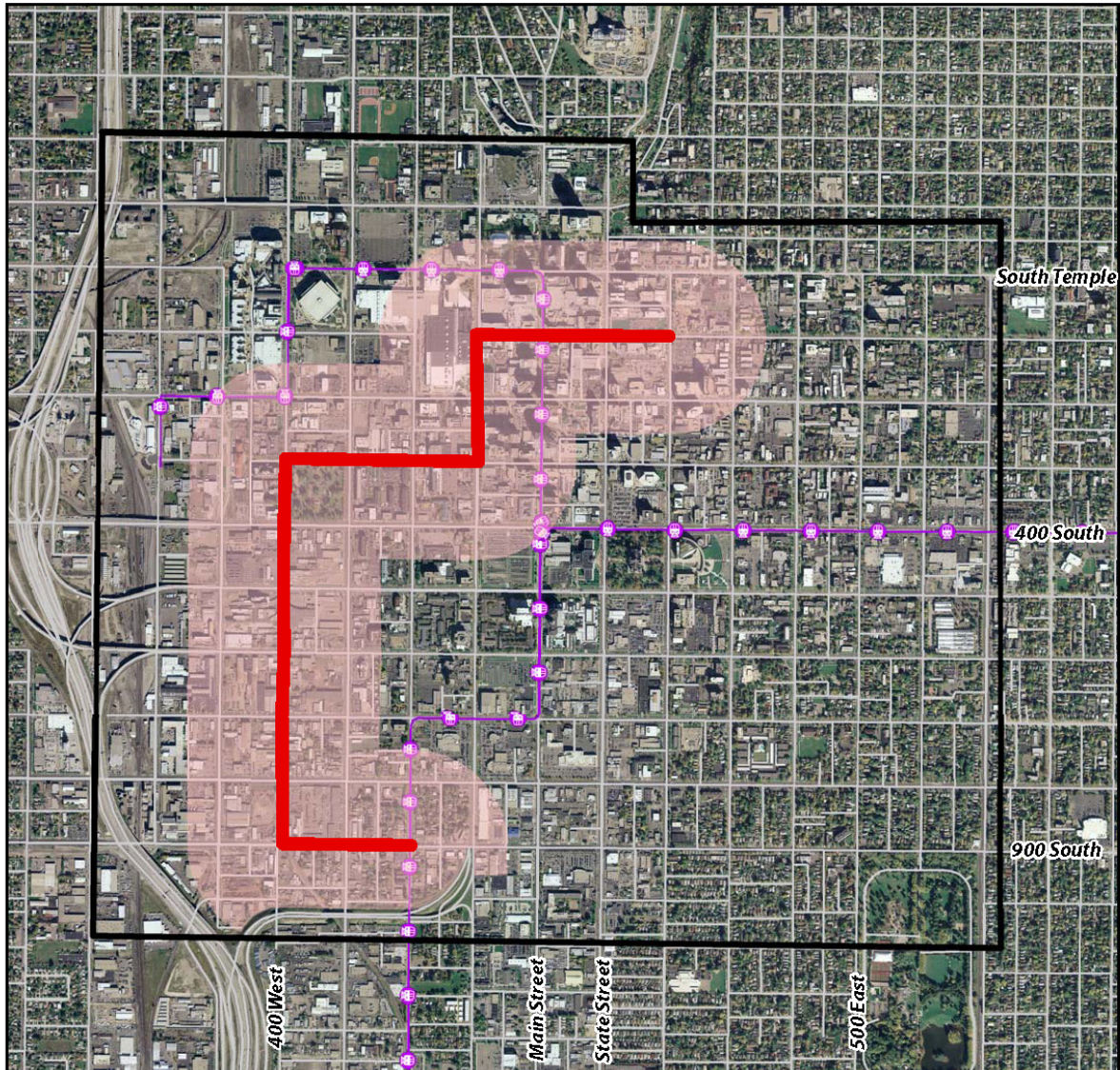
Total/mile                      \$33,600,799                      \$38,967,602









## SALT LAKE CITY STREETCAR

Figure 4: Hybrid Option



### LEGEND

-  Hybrid Option
-  Influence Area
-  Study Area
-  TRAX





- A shorter version of the hybrid alignment, terminating at 800 South and using a single ballasted track in the median of the street for the southern-most four blocks, is also being analyzed. Its cost estimate is approximately \$53 million.

FTA Cost #	Cost Category	2009 Base Year Cost w/o Contingency	2009 Base Year Cost w/ Contingency
10.00	Guideway and Track Elements	\$9,684,957	\$11,621,948
20.00	Stations	\$1,096,833	\$1,371,042
30.00	Support Facilities	\$9,069,670	\$9,069,670
40.00	Sitework	\$6,785,040	\$8,820,552
50.00	Systems	\$7,367,432	\$9,209,290
60.00	Right of Way	\$0	\$0
70.00	Vehicles	\$10,500,000	\$10,500,000
80.00	Professional Services	\$8,953,235	\$10,556,356
	<b>TOTAL</b>	<b>\$53,457,168</b>	<b>\$61,148,858</b>

Total/mile                      \$27,135,618                      \$31,040,030

## Evaluation Criteria

The project team, after conferring with the Steering Committee, has identified a series of qualitative and quantitative criteria for weighing the relative strengths of each of these options. These criteria are listed below:

- Population – the potential number of people living within a block and a half of the proposed alignment
- Employment – the potential number of people working within a block and half of the proposed alignments
- Major Destinations – the proximity to major Downtown destinations, as shown in Figure 1.
- Developable Land – the number of acres of developable land both within and outside of the RDA area, summarized by each.
- Access to RDA sites – access to important RDA sites.
- Private Sector/P3 potential – ability to leverage significant private sector investment in the project, or some other innovative method of project funding/implementation
- Potential Yield from TIF and other locally-generated funds- - potential total yield of locally-generated revenues derived from increased development or property value in the area
- AV Base – increase in the assessed value of real property in the area
- Compatibility with DIM – consistency with the goals and strategies of the Downtown in Motion Plan





- Compatibility with Community Master Plans, and other City Plans
- Relative lack of constraints to implementation
- Ridership - an informal estimation of the ridership potential on each of the three proposed lines including special trips (which refer to trips outside of work or regular errand trips) that could be generated by the proximity of the streetcar to major Downtown destinations
- Public Support – the opinion, support or lack-thereof for each of the three alignments, presented to either Community Councils or Focus Groups (as decided by client), and to the general public.

## Next Steps

Under the Scope of Work for this assignment, these “candidate” alignment options will now be subject to more in-depth analysis and public discussion, including:

- Reviewing each Option against the Evaluation Criteria outlined above;
- Preparing a Financial Analysis which will examine the funding potential for each option, with specific attention to an Influence Area adjacent to the proposed alignment where the project’s financial benefits would be most strongly felt (this Influence Area is depicted through shading on each of the Figures mapping the alignment Options);
- Preparing a more specific review of the relative potential for implementing each Option through the use of Public-Private Partnerships;
- Meeting with key stakeholders representing neighborhoods and properties served by the Options; and
- Conducting a workshop, to be held in early December, in which the results of this public involvement and technical analysis are brought together. The goal of this workshop will be to reach broad agreement on an initial, feasible project.





**APPENDIX B:**

**TECHNICAL MEMORANDUM #2 – FINANCIAL ANALYSIS**





## Technical Memorandum #2

### Financial Analysis

**Date:** November 17, 2009  
**From:** Peter Bass and James Brown,  
HDR/Fehr & Peers/SOJ Streetcar Team  
**To:** Matt Dahl, RDA  
**Subject:** Financial Analysis

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### Table of Contents

I.	Introduction .....	1
II.	Summary of Local Tools Used for Streetcar Funding .....	1
A.	Local Funding Tools That Might Apply a District-Based Funding Approach .....	2
B.	Other Funding Tools That Might Apply a Benefits Based Funding Approach .....	8
III.	Available Tools – Revenue Potential Evaluation .....	11
A.	Assessment Area or Local District Approach .....	11
B.	Tax Increment Financing .....	12
C.	Parking .....	13
D.	Land Sales/Leases/Partnerships .....	15
IV.	Potential Local Funding Options Mix .....	17





## I. Introduction

This Technical Memo provides a list of local potential funding sources and finance mechanisms for consideration in funding a proposed Downtown Salt Lake City streetcar system. The sources examined were drawn from HDR's experience and research of streetcar systems throughout the United States, and particularly from earlier work done by HDR in conjunction with the study of the planned Sugarhouse line. This memo is organized into the following sections:

1. Explanation of the basic concept or mechanics behind each source. It further evaluates the availability of the approach for the City of Salt Lake City.
2. Presentation of a preliminary estimate of the maximum potential of a select sub-set of sources.
3. Third, it outlines some preliminary options for the funding of a starter line.

## II. Summary of Local Tools Used for Streetcar Funding

The potential funding tools described below are limited to those based on revenues derived from economic activity occurring within either:

- 1 ½ blocks ( approximately ¼ mile )of the proposed streetcar alignment(s) (i.e. "benefit zones") or
- The entirety of the downtown area.

The underlying concept is that in a local funding strategy, a significant portion of the streetcar costs should be carried by those who benefit most from its presence. People living, working and visiting within walking distance of the starter route or owning businesses or property within that distance will clearly be the principal users and/or direct beneficiaries of the project and collectively receive the bulk, but not all, of the immediate benefits of the line. Hence the ¼ mile radius is used to define the "benefit zone" around each alignment.

However in an area as generally compact but diversified and complex as Salt Lake City's traditional downtown, it is also appropriate to consider that some of the benefits will likely spill over to bordering blocks. This can be particularly noticed where increased connectivity and convenience of access between transit modes (streetcar, light rail and bus lines) as well as downtown parking facilities, spreads out the area of impact to other nearby attractions.

Traditionally, it is sound economic practice and supportable public policy to design a funding plan where those who use and benefit the most from an economic good, contribute the most towards the cost of producing it. Direct benefits derive from either improved connectivity to Downtown destinations for passengers riding the line as well as from property owners' financial gains through increased business activity and/or property values. Other geographically confined





transactions, such as paid admissions or parking within proximity to the streetcar, can also be used as indicators of who will most directly use and benefit from the streetcar.

On the other hand, revenue sources such as general sales taxes or property taxes which are applicable citywide, are not considered at this time as they would fall equally over a wide area and therefore involve categories of taxpayers who, because of their distance from the core, might rarely see much benefit from the streetcar project. It may be appropriate that some small portion of the total cost be carried by this larger category of citywide or even regional sources, since there are some benefits that spill out region-wide. For example, a healthy downtown can increase the region's overall ability to attract or retain creative talent and accelerate everybody's overall level of income and rate of economic growth. Following an analysis and evaluation of the funding potential of the more localized "user benefit" oriented funding tools it may be appropriate to consider turning to these broader revenue sources, along with State and/or Federal funds, to fill any remaining funding gaps. Reliance on these broader funding sources can be considered at a later stage in the study once the full potential of the more localized tools is fully understood and weighed.

## **A. Local Funding Tools That Might Apply a District-Based Funding Approach**

Utah state law enables use of a number of geographically based special-purpose funding tools applicable on the small district level – that is, areas with boundaries different than those of the entire City of Salt Lake City.<sup>1</sup> Some of these district-based tools have been used in different settings in the state. The principal ones identified that might support streetcar funding are described in the following sections.<sup>2</sup>

### **1. Assessment Area**

Title 11, Chapter 42 of the Utah Code allows "local entities" (in this case cities and/or special service districts) to designate "assessment areas" "to pay some or all of the costs of providing improvements benefiting the property, perform operation and maintenance benefiting the property..." Furthermore, the resolution or ordinance designating the specific area "may divide the assessment area into zones to allow the governing body to levy a different level of assessment or to use a different assessment method in each

---

<sup>1</sup> Typically, districts are smaller than the unit of local general government. Two such examples are an assessment area established under the Assessment Area Act (Utah Code Title 11, Chapter 42) and a Special Services District (established under Title 17D, Chapter 1).

<sup>2</sup> We would recommend that the Salt Lake City Attorney review and confirm, or modify as appropriate, these observations and interpretation of state code.





sub-zone to reflect more fairly the benefits that the property within the different zones is expected to receive..." Assessment methods could be based on such factors as frontage, area, taxable value, fair market value, lots, number of connections, or equivalent residential units of the property proposed to be assessed. Within an assessment area, certain properties may be excluded from assessment: "The boundaries of the assessment area may also include property that is not intended to be assessed."

It would appear that assessments could be applied to provide funding toward the streetcar line under the operation of this section of the Code either alone or possibly in combination with the sections enabling creation of Local Districts (Title 17B and 17D), State law allows this assessment area tool to be initiated by the local jurisdiction and applied, following appropriate notice, public hearing, and action by the governing body, unless "adequate protest" is lodged by at least 50% of the "frontage, area, taxable value, fair market value, lots, number of connections, or equivalent residential units of the property proposed to be assessed, according to the same assessment method by which the assessment is proposed to be levied..." Alternatively, a voluntary assessment area could also be created, initiated by property owners in the affected area.

As implied in the prior paragraph, a wide variety of assessment methods can be considered and different types used in different "sub-zones" of a larger district. Also, it is possible to exclude individual properties.

## **2. Local Districts**

A wide variety of local districts is enabled under Titles 17B and 17D of the Utah Code. Under 17B-1-202, districts may be created that provide services within their boundaries. These services may consist of "transportation, including public transit and providing streets and roads." Other sections of 17B-1-202 permit special districts providing "parks and recreation facilities", "street lighting," and the "construction, and maintenance of curb, gutter and sidewalk." A single district could engage in several of these activities. Districts formed under these provisions are limited to ad valorem methods of taxation and so they do not have the extent of assessing method flexibility indicated above under Title 11. Similar to the formation of assessment areas under Title 11, property owners may object to the formation of the district. The thresholds for objecting to the formation of such districts are lower than in under Title 11; the proposed formation of such a district can be blocked by: "(i) the owners of private real property that: (B) covers at least 25% of the total private land area within the applicable area; and (C) is equal in value to at least 15% of the value of all private real property within the applicable area; or (ii) registered voters residing within the applicable area equal in number to at least 25% of the number of votes cast in the applicable area for the office of governor."

Special Service Districts may be formed under 17D of the Code and have powers to assess property either on an ad valorem method and/or using the approaches indicated





under the Assessment Area act (Title 11, Chapter 42 - above). The formation of such a district under Title 17D can be blocked by 33% of the taxable value of all taxable property in the proposed area or by 33% of all registered voters in the applicable area.

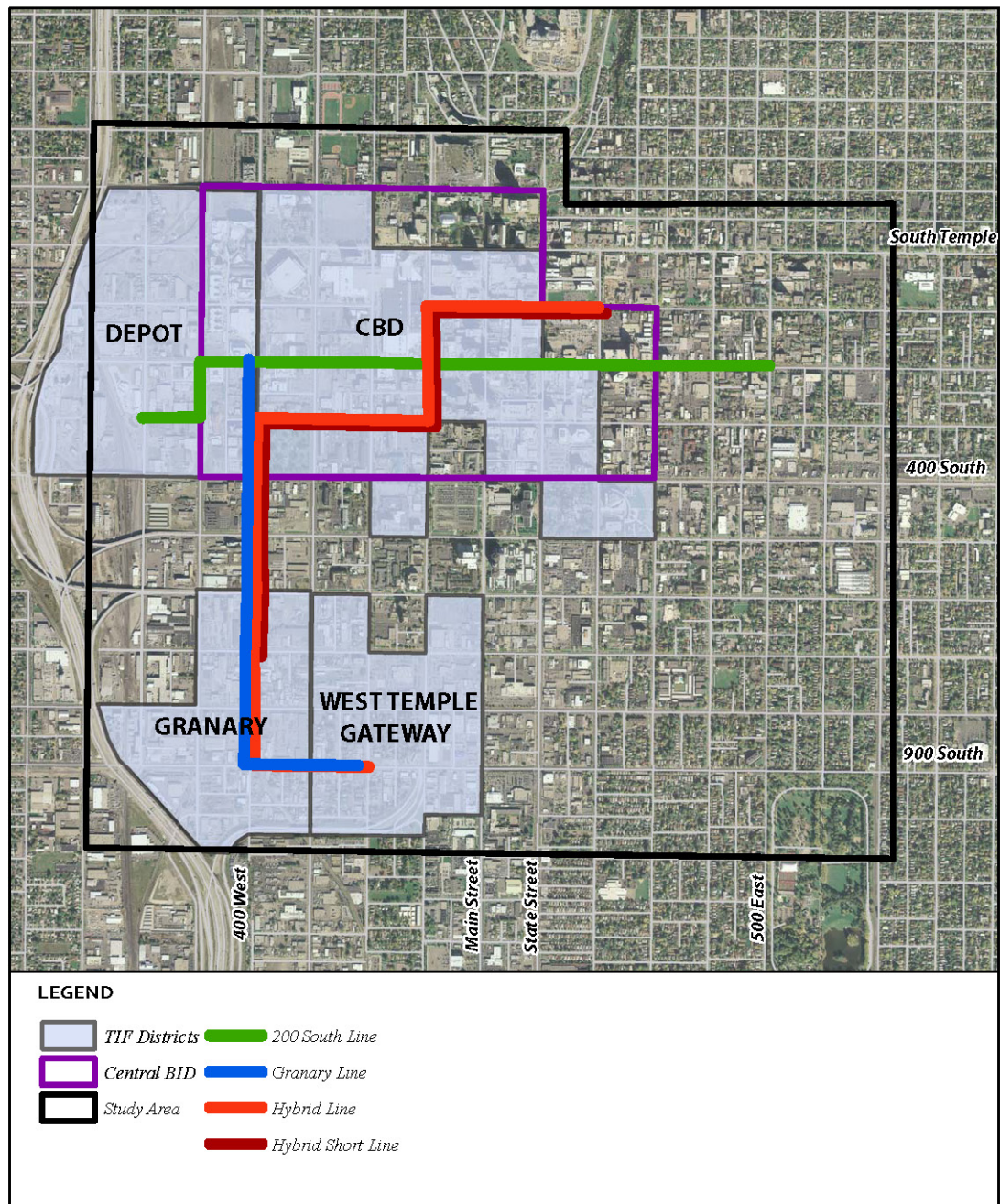
An assessment area, the Central Business Improvement District No. DA-CBID-06 (aka "Downtown Alliance"), already exists covering an extensive portion of the Downtown. The Downtown Alliance district encompasses virtually all of the area served by the 200 South alternative and most of the areas served by the Hybrid line, see Map 1 below. Presently the CBID assesses 1.473 cents per \$100 of AV in the district and raises \$800,000 annually, by assessment, for use towards a variety of Downtown marketing, festivals, and "Economic Promotion Activities". This existing district, via renewal and/or geographic extension and broadening of functions, could possibly be utilized for some local funding of a streetcar. It should be noted that it may be necessary to use differential assessment of different properties, and exclusion of some, to get consensus; and that the larger the district and further from the line, the more difficult it may be to avoid hitting the objection thresholds. Alternatively, it may be more appropriate to consider creating a new overlay district, with different boundaries and purposes more specifically related to the streetcar and possible other improvements.





Map 1

**SALT LAKE CITY STREETCAR**  
*Central BID & TIF Districts*







### 3. Tax Increment Financing

Title 17C, Chapter 2 of the Utah Code discusses formation of Community Development and Renewal Agencies, which can fund their activities by creating Tax Increment Districts. Presently, a large portion of the overall downtown area is divided up amongst 6 tax increment districts. 75 to 82% of the area within the ¼ mile “benefit zones” surrounding each of the proposed downtown streetcar alignments currently falls in one or more of four TIF Districts (CBD – expires 2040, West Temple Gateway-2018, Depot-2022, and Granary-2023: see Map 1 above). It appears reasonably feasible to allocate both a portion of ongoing tax increment being collected, as well as future growth in tax increment, from each of the TIF districts impacted by a streetcar line to be used towards financing that line. Present **total** annual levels of TIF collected are significant in the Central Business District (\$9.4 million in 2008) and the Depot District (\$3.5 million); the key question is how much of this revenue stream might be made available to invest in the streetcar project..

Development of the streetcar is expected to strongly augment the growth of Assessed Value in the areas near the new line, both through increasing the value of existing land and buildings (the streetcar “premium”) and through attracting new development at a faster pace. Thus the amount of money captured through the tax increment tool could grow significantly due to the presence of a streetcar over any projection of what would occur without it. It should be possible to apply this difference or a significant portion of it towards financing the line.<sup>3</sup>

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<sup>3</sup> It will be necessary to carefully review the financing conditions/covenants associated with each specific affected district to determine the amount of discretion available in allocating present levels of TIF revenue, as well as future increases in TIF revenues.





#### 4. Parking Zones

Some other cities are already applying, or considering applying, “district-based” parking revenue sources toward streetcar funding. These mechanisms have included increased meter and/or public parking rates in a given zone and/or surcharges on private commercial parking revenues. Other options being used include increasing the number of parking meters on streets, hours of operation and the levels of fines for parking violations. Changing the collection mechanism from meters to pay-station kiosks also typically produces a revenue increase; some of this increase could, after supporting the capital cost of the kiosks, be assigned to the streetcar project.

In some cities, the amounts raised from these sources can be quite large – due to both the large number of parking spaces and the often high cost of parking in downtown garages.

Salt Lake City clearly has the ability to control the number of metered spaces on its streets, their hours of operation, and the rates at these and the few publicly owned parking facilities (e.g. Library Garage) located proximate to the proposed lines. Nonetheless this total inventory at present is estimated to not exceed 2,500 spaces. Downtown’s 30,000+ privately owned commercial spaces represent a far larger potential revenue source

It should be determined whether the City has any legal authority (under Utah code) to be able to tax such privately owned parking either directly through a special sales or use tax, or through some form of ad valorem tax or fee.

#### 5. Retail Sales

We have not been able to identify any existing state enabling legislation that would permit an incremental additional sales tax to be charged on the basis of a district unit smaller than an entire municipality. This would imply that, in order to apply any sales tax originating in the streetcar corridor areas toward the starter line, the City of Salt Lake City would have to specifically designate, through their normal annual municipal appropriations processes, that a portion of their existing or future sales tax revenues coming from existing or future projects in this area, or the existing tax increment districts affected, would be appropriated for the streetcar line.

Other states do provide the authority for a district-level increment of sales tax. For example, Missouri state law allows the creation of a “Transportation Development District,” and the sales tax portion from one of them is being used to support a planned streetcar project in St. Louis. A change in state law would appear to be needed to implement this tool in Salt Lake City.





## **6. Hotel/Motel Tax**

Some jurisdictions in other states that have very large concentrations of hotel rooms along their proposed alignments are considering either levying an additional surcharge on hotel rooms/services or diverting a portion of existing receipts to help finance streetcars. In some instance, this surcharge is assessed in connection with free ridership rights to guests of the hotels that are subject to such charges. The Utah State Code does not appear to allow for such a geographically defined approach, and it also seems to set limits on the level of taxation of hotels and motels and/or the uses to which any funds raised from such sources can be applied. Since fewer than 2600 hotel rooms are within walking distance of the route alternatives under consideration, the maximum amount likely to be raised from such a source, assuming a mechanism could be found to levy such a tax is likely to be relatively modest relative to the entire cost of the line. It may be better to consider a more directly negotiated approach with hotel owners, where they might obtain free passes for all of their guests in return for a set annual contribution in support of the line e.g. a “bulk user” agreement (see below).

## **B. Other Funding Tools That Might Apply a Benefits Based Funding Approach**

The following list of tools use a “benefits” based approach to raising revenue. They are not “district defined” (as in the case of the previous described tools) but nevertheless target the collection of revenues in a generally direct manner from “beneficiaries” who stand to obtain some clearly identified direct benefit from either using or being near the streetcar line.

### **1. Farebox**

Some streetcar systems charge a fare to riders. Salt Lake City, UTA or whichever agency may operate the streetcar system could charge a fare for users. Typical fares charged range from \$.50 to \$1.50 per ride. In the case of Salt Lake City, this may need to be tested against the existence of the “fare free” zone established by UTA in the downtown core. This option should be examined relative to the existing fare structure on other UTA transit modes (i.e. bus or LRT). Also, the effect on ridership should be considered when considering fares.

### **2. Reallocation of Transit Funds**

Some jurisdictions and transit agencies have reallocated transit funds previously used for other modes. Generally this approach has been used when it could be shown that the streetcar system would replace the service provided by the other modes in use and hence could save on operating costs for those other lines. Given the short length of the





proposed starter line, it is unlikely that any existing transit service would be substantially reduced.

### **3. Advertising/Sponsorships**

Advertising and sponsorships are used to provide revenues towards some streetcar systems. Schemes include advertising on the interior and exterior of streetcars as well as at stops (i.e. on shelters, benches etc.). Some schemes collect a fee for system-wide sponsorship or sponsorship of individual cars or stops. Sponsorships can include local corporations or foundations, or national entities with a large local presence. Major corporate entities with a large local presence and a high profile in the community (such as Delta Airlines, Wells Fargo Bank, Convergys) could be considered for this approach. It should be noted that UTA currently does not allow any advertisement on LRT vehicles. If UTA were to operate the system, this option may not be possible.

### **4. Property Sales/Lease Proceeds**

Streetcar presence should increase the marketability and value of City owned land along the line. Funds from the sale or leasing of land or other real property owned by the local government can be used to pay for streetcar improvements and operations. Salt Lake City and its Redevelopment Agency own significant amounts of land and buildings along parts of the proposed alignments (see Map 2). Some of the proceeds from elevated price levels or accelerated rates of sales could be applied towards the streetcar funding plan. It may even be possible, in the case of the Granary Line, to consider a public private partnership where a developer or other business partner could obtain a significant interest in the City and RDA parcels along this route in return for a specific amount of up-front funding of the capital costs for the portion of the streetcar line affecting the properties included in the partnership agreement.

This approach was used successfully in funding the Airport light rail line in Portland. The public-private partnership that implemented the project included an arrangement by which adjacent properties were assigned by a long-term lease on favorable terms to the private partner (Bechtel Group) in exchange for a \$35 million capital contribution to the project.

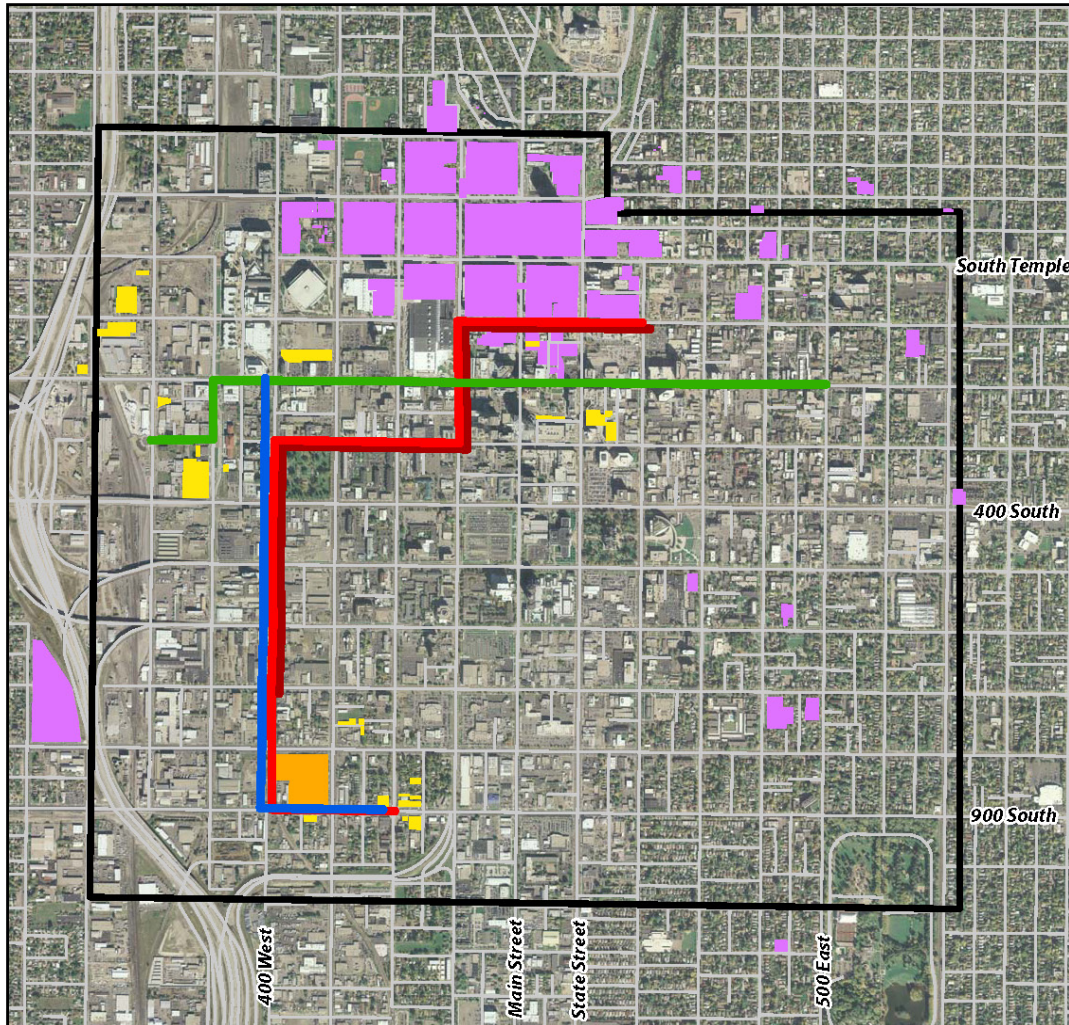




Map 2

# SALT LAKE CITY STREETCAR

*Some Key Landholdings Near Alignment*



## LEGEND

- |                        |                        |
|------------------------|------------------------|
| RDA Properties         | Granary Alignment      |
| LDS Church Properties  | 200 South Alignment    |
| City Excess Properties | Hybrid Alignment       |
|                        | Hybrid Short Alignment |
|                        | Study Area             |





## **5. Bulk User Agreements**

In the case where a large organization or activity center is located along a route, that entity may be approached to provide funding for the large number of users it generates. In most cases, the “bulk user” entity’s passengers then have the right to use the streetcar for free or a reduced fare by showing a pass, validation coupon or event ticket stub. The Convention Center, the Church of Latter Day Saints, and hotels along the line may all be prime candidates for “bulk user” agreements. It should be noted that this approach is most viable in instances where the system charges a fare for use of the streetcar.

## **6. Events Surcharge**

A separate fee or surcharge placed on top of existing ticket fees can be used for funding. Such fees are generally charged to entertainment or sporting venue ticket sales. It may be more feasible to attempt to negotiate a “bulk user” agreement with the Convention Authority and any other large “event generators” than to seek a new form of tax on events.

# **III. Available Tools – Revenue Potential Evaluation**

A sub-set of the above sources was selected based on their availability to the project under consideration and their likelihood for significant revenue productivity. Generally, sources for which there is no state enabling legislation for local district based collections (and little prospect of such legislation) were not carried forward. The discussion below provides a rough estimate of the maximum revenue potential possible for each of the selected sources.

## **A. Assessment Area or Local District Approach**

With the support of affected property owners the City could collect special assessments to be applied towards either the capital costs (debt financing) and/or the operating costs of the streetcar. This owner support could be obtained either directly via property owner petition for creating such assessment, or by them failing to oppose district creation (under the provisions of Title 11 as discussed above). The assessment approach has





the merit of creating a reasonably stable and predictable revenue stream which raises the possibility of a debt offering based on that revenue stream alone and not more generally based on the credit worthiness of the City itself.

Based on a maximum overall average levy of 2 1/2 cents per \$100 of Assessed Value within ¼ mile (1 ½ standard city blocks) of the line<sup>4</sup>, such an assessment could generate somewhere between \$140,000/yr (in the case of the Granary Line) to \$475,000/yr in the case of the Hybrid Extended line by start of Year 5 (the assumed first full year of operations). The revenue stream created by this level of assessment could support \$1.7 to \$ 5.8 million in bonds (assuming bonds issued at 5.5%, 25 years with 110% debt coverage ratio).

By the start of Year 11 the range in annual assessments yields might increase to \$200,000 (Granary) to \$600,000 (Extended Hybrid) per year.<sup>5</sup> Based on this estimate, the level of supportable bonds might increase to \$2.5 to \$7.3 million.

## **B. Tax Increment Financing**

The RDA currently manages 4 TIF Districts (“TIFs”) in the downtown area that encompass portions of one or more of the starter line alternatives being studied (see Map 1). A preliminary high level analysis was completed to determine a possible range of uncommitted TIF revenues that might become available towards streetcar financing as a result of future development. For the purpose of this initial analysis, the following assumptions were made:

- 20% of the existing level of TIF collected from each district could be made available, beginning in 2012, towards a streetcar project passing through that given TIF district.
- A maximum of 30% of higher future TIF revenue (due to new development going forward, the streetcar premium and 2% annual inflation) is assumed on what can be made available towards funding the streetcar for all lines other than Granary

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<sup>4</sup> In actual fact, the effective assessment rate might be varied [perhaps in three tiers] depending upon the distance of a property from the line and whether or not it had frontage along it – the 2 1/2 cent maximum average could allow for a variation in rates from perhaps 1 cent 1 ½ blocks away to a level perhaps 3 to 5 times that for direct frontage on the line. A 2 ½ cent levy equals \$4/month on a \$200,000 condo or 1000-1500 sf retail space, or \$1 per month per office employee.

<sup>5</sup> Assumes optimistic rates of property value increase due to streetcar premium and accelerated levels of development, and typical long term “background inflation” of 2%/year)





(due to already existing commitments<sup>6</sup> in the other TIF districts and the need in these denser areas to use some of the TIF for subsidized parking and other development inducements). In the Granary District we assume up to 50% of TIF funds from future property value increases can be made available towards the streetcar due to the lack of prior commitments and the assumption that most development will be at a density that does not require subsidizing structured parking.

- The amount of annual downtown residential development will range up to two times (2x) the annual amount observed from 2000-2009. The related upside multiplier for commercial uses is 1.2 times the observed 2000-2009 average. The annual value of development will be escalated based upon a modest assumption for inflation (2.0%). An additional 4% average one time increase will be applied to all assessed values in the year following introduction of streetcar service to reflect the increased value of property served by streetcar (the “streetcar premium”).

Based on these assumptions and existing tax rates (\$.39 for City, \$.49 for School District and \$.20 for the County), annual TIF revenues available for streetcar financing by the beginning of Year 5 could range from \$.8 million/year for the Granary Line up to \$3.7million/year for the highest yielding of the other alternatives (Hybrid Extended). These revenue streams might support bonds in the range of \$ 10.3 million for Granary and \$45.1 million for the best of the other alternatives. By the start of Year 11 (approximately 6-7 years from opening of the starter line), annual TIF revenues could increase to a range of \$ 2.1 million/year (Granary) to \$5.4 million/year (Hybrid Extended), and support bonds in the range of \$26.4 million (Granary) to \$65.5 million (Hybrid Extended).

### C. Parking

#### Public Parking:

The City of Salt Lake City operates approximately 2400 parking spaces in the Downtown area (on-street and in the garage at the Library). The 2009-2010 budget anticipates collecting approximately \$1.5 million in parking revenue (from meters and the garage) and \$4.5 million in parking fines, for a total of \$6 million/year. Approximately 800 of the on-street parking spaces are unmetered and all are free after 6PM. Although some

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<sup>6</sup> For example, paydown of bonds in CBD and Depot Districts, and need to return 60% of any TIF from CBD District to the various taxing agencies.





meter rates have been increased in recent years, they still generally remain significantly below rates in adjoining off-street lots and garages. Fines have been increased significantly in the past few years.

There still remains the possibility of additional revenues from this source. These revenues could derive from increasing the number of on street spaces that are metered, increasing some of the rates, and /or extending the hours of operation. Similarly, the amount raised from fines could go up from the more extended enforcement opportunities, but perhaps not proportionately since some of the base increase might be attributable to higher meter rates rather than longer hours or more meters; and there will be added costs for the additional enforcement area/operation hours (more person hours).

We project the maximum overall potential increase from this source by Year 5 (time of opening of streetcar) to be \$600,000/year from meter and garage revenues, (40%) and \$900,000/year (20%) for fines. Collectively, if 50% of this increment<sup>7</sup> was used to back streetcar oriented bonds, it might support approximately \$9.1 million in capital funding. By Year 11, these numbers might grow by another 25% (to account for annual inflation of 2%/year and some further increase in rates as the Downtown's revitalization continues).

Since virtually all of the referenced metered spaces are in the area north of 400 South, it may be difficult to justify using funds collected in this area (via increased meter rates and fines) to finance a Granary Line which would provide very limited utility to the users of these spaces.

#### Private Commercial Parking:

A recently completed survey of parking in the Downtown area (Parking Technical Report: Appendix G of the Downtown Transportation Master Plan: April, 2007) identified approximately 30,000 off street commercial spaces (in garages and lots) in the area bounded by North Temple, 200 East, 400 South and 500 West. Approximately 5300 of these are within walking distance of the Granary alignment; 17,600 within walking distance of the 200 South alignment; and 21,100 for the Hybrid alignments.

Monthly rates range from \$25 to \$146/month; and daily rates from \$3 to \$12/day. Average revenue yield per space, reflecting both relatively low overall occupancy rates (under 60% at peak lunch hour) and low weighted average rates almost certainly does not exceed \$600/year per space.

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<sup>7</sup> We assume that for equity and political reasons, 50% of any monies raised by higher rates or enforcement activities is applied towards the cost of parking management, wayfaring and other downtown promotion/accessibility programs.





If it were hypothetically possible to collect a surcharge of 10% (or \$60/space/year) on ALL spaces in the Downtown and allocate 50% of this collection towards an associated streetcar line (with the other 50% being used towards improved way finding, signage, parking management programs and other improvements), then up to \$900,000 per year (30,000 spaces \* \$60/yr \* 50%) would be available towards streetcar funding. If a surcharge area were restricted to the “benefit zone” within ¼ mile of a streetcar alignment, the maximum revenue yield would decrease to \$150,000/year for the Granary Line to a maximum of \$600,000/yr for the Hybrid alignments.

These numbers are offered, not as a recommendation at this time but rather as a measure of potential yield. As mentioned earlier, there does not appear to be any Utah enabling legislation at the present time that would allow this type of surcharge to be applied.

#### **D. Land Sales/Leases/Partnerships**

The RDA owns approximately 11 acres of land near the Granary alignment south of 400 South. This land includes the 8.77 acres currently serving as the City’s maintenance yard at 800 South 400 West. Collectively the 11 acres has an assessed land value of \$4 million or approximately \$8.50 per square foot. All of the land in this area is deemed redevelop-able, so the structures have no effective re-use or value.

North of 400 South, the Redevelopment Agency owns approximately 13 acres with assessed land value of \$ 9 million. Some of this property is already developed. There is an estimated 10 acres, totaling perhaps \$ 6 million in value that may be feasible for redevelopment.

Adding these two sets of parcels together yields a total of 20+/- acres of developable land with a current assessed value of about \$10 million. This land might have a present or near term market value of up to \$15 million, on the assumption it may be somewhat under-appraised relative to its value if a firm commitment to build a streetcar line near it is made.





This completes the list of potential major revenue sources<sup>8</sup> for capital finance based on localized benefits. A number of other tools (such as fares, advertising and sponsorships) can be expected to contribute additional sums, which can be used to help offset operating costs. The outside magnitude of these amounts depends, in the case of fares, on a number of variables not yet resolved (including for example the forecast of ridership and the degree to which it varies as a function of fare level, or whether there is a “fare free” zone, and the degree to which any “bulk user” agreements factor into potential fare payment streams). In any event, the combined amount from fares, advertising, and bulk user agreements is unlikely to cover the entire amount of operating costs and thus none of these mechanisms should be regarded as a significant potential source of funds for capital costs.

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<sup>8</sup>Sponsorships are more likely to take the form of “Bulk User Agreements” and be used towards operating costs rather than capital costs, unless the amounts are relatively insignificant. It may be more practical to attempt to negotiate bulk user agreements with owners of activity generators likely to benefit from convenient access by streetcar riders., and perhaps offer them some additional naming or sponsorship rights for an upfront payment as part of their overall agreement. Such agreements could perhaps be negotiated with a partnership comprised of one or more of the following: the Convention Center Authority, the Latter Day Saints Church, the City Creek and Gateway Shopping Centers (and entertainment complexes), and many of the hotels along the potential alignments. Collectively, the revenue potential from such bulk users might be in the magnitude of several hundred thousand to perhaps an upside of \$1/2 million/year.





## IV. Potential Local Funding Options Mix

For this analysis, a preliminary “all local funding” option was developed to show maximum upside potential for capital cost support for each of the four lines, using the four principal funding tools analyzed above (assessment districts, TIF allocation, public parking, and leveraging re-developable City owned land). The tables immediately below show the projected capital cost of each alignment alternative, and then show how much of that capital cost can be supported directly by geographically based local revenue streams associated with that particular alignment.

The first table compares the lowest and highest cost alignment alternatives studied – the Granary Line at \$49.1 million and the Extended Hybrid at \$ 76.8 million. The second table shows the intermediate cost alternatives (200 South and Hybrid Short).

Beginning of	Granary Line		Hybrid Line Extended	
	Year 5	Year 11	Year 5	Year 11
<b>A. Capital Costs:</b>	\$ 49.1	\$ 49.1	\$ 76.8	\$ 76.8
<b>B. Maximum Local Resources:</b>	\$ 22.5	\$ 44.6	\$ 75.0	\$ 106.8
Assessment District at 2 1/2 cents	\$ 1.7	\$ 2.5	\$ 5.8	\$ 7.3
TIF 20% of Existing	\$ 0.4	\$ 0.4	\$ 31.8	\$ 31.8
TIF Increase at 30% of available*	\$ 9.9	\$ 26.0	\$ 13.3	\$ 33.7
Higher Public Parking Revenues**	\$ -	\$ -	\$ 9.1	\$ 11.4
Monetize City/RDA Redevelopment Sites	\$ 10.5	\$ 15.8	\$ 15.0	\$ 22.5
<b>(Deficit)/Surplus [A-B]</b>	<b>(\$26.6)</b>	<b>(\$4.5)</b>	<b>(\$1.8)</b>	<b>\$30.0</b>
Beginning of	200 South		Hybrid Short	
	Year 5	Year 11	Year 5	Year 11
<b>A. Capital Costs:</b>	\$ 61.1	\$ 61.1	\$ 61.1	\$ 61.1
<b>B. Maximum Local Resources:</b>	\$ 69.6	\$ 101.6	\$ 74.8	\$ 106.4
Assessment District at 2 1/2 cents	\$ 5.4	\$ 7.2	\$ 5.7	\$ 7.2
TIF 20% of Existing	\$ 31.5	\$ 31.5	\$ 31.8	\$ 31.8
TIF Increase at 30% of available*	\$ 14.6	\$ 38.0	\$ 13.2	\$ 33.4
Higher Public Parking Revenues**	\$ 9.1	\$ 11.4	\$ 9.1	\$ 11.4
Monetize City/RDA Redevelopment Sites	\$ 9.0	\$ 13.5	\$ 15.0	\$ 22.5
<b>(Deficit)/Surplus [A-B]</b>	<b>\$8.5</b>	<b>\$40.5</b>	<b>\$13.7</b>	<b>\$45.3</b>
* 50% in Granary Line area				
** Increase on All public spaces in Dtn				





## V. Conclusion

The above analysis identifies a sufficient set of resources, under “best case scenarios”, to enable two of the four line alternatives studied to be potentially 100% financeable out of local, geographically based resources by Year 5 (assumed first year of full operations). These lines are 200 South and Hybrid “Short”, both of which cost about \$61 million and run through the heart of the Downtown. A Year 5 financing “surplus” potential of \$ 8.5 to \$13.7 million (assuming maximum use of each of the studied tools) would allow for some margin in reducing reliance on any of the given tools. In essence relying on 80 - 85 % of the maximum indicated capacity of each tool would be sufficient to finance these lines by end of Year 4.

The Hybrid “Extended” might just be financeable out of these resources by Year 6 with no margin for error or shortfalls. The Granary Line falls significantly short, and would need \$27 million or more in additional funding from some combination of local general funds, and/or State and Federal sources, even after Year 4 and maximum reliance on local geographically based resources.

In terms of overall risk and funding capacity relative to cost, then, 200 South and Hybrid “Short” appear to be roughly equivalent and in first place in terms of their feasibility of funding. The Hybrid “Extended” falls significantly behind into a second tier of financial feasibility, but still may be “doable” under a “best case scenario” solely out of geographically based local resources, with some short term “bridge” financing to Year 5 or 6. The Granary Line does not appear to be a financially viable proposition unless the City of Salt Lake City wishes, for a significant part of the funding, to commit in early years either general fund revenues and/or rely on State and/or Federal resources





## **APPENDIX C:**

### **TECHNICAL MEMORANDUM #3 – FEDERAL FUNDING OPTIONS**





## Technical Memorandum #3 Potential for Federal Funding

**Date: March 22, 2010**

**From: Charlie Hales,**

**HDR/Fehr & Peers/SOJ Streetcar Team**

**To: Matt Dahl, RDA**

**Subject: Federal funding options**

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The purpose of this memorandum is to summarize the current federal funding environment for streetcar projects, as background to creating an implementation strategy for a Phase 1 downtown project. There are some key “where do we go from here” questions raised at the conclusion of this memo which require discussion.

A series of federal policy and program changes over the past year have significantly improved the prospects for Federal funding for streetcar and urban circulator projects. In the following sections, this memorandum first discusses the changing Federal funding environment and what it means for streetcar projects. It then presents a list of recommended next steps if Salt Lake City decides to prepare a downtown streetcar project for a future Federal funding application.

The Federal government, under the provisions of the Transportation Authorization legislation periodically renewed by Congress, provides capital funding for new transit projects under the “New Starts” program. In 2003, a new mechanism was created within this framework that was intended by its Congressional authors to provide funding for smaller-scale local transit projects, including streetcar projects. Called “Small Starts”, this program was set up to be hospitable to streetcar investments, with criteria for project approval aimed at economic development and land use, as well as traditional measurements of transportation cost-effectiveness. The Small Starts program was configured to provide grants of up to \$75 million to worthy projects against a total project capital cost not to exceed \$250 million; however, prior to 2009, no streetcar projects had been funded through the Small Starts program. Until 2009, the program had been used primarily to fund Bus Rapid Transit projects.

At the time that the RDA began considering the potential for a downtown streetcar system, successful streetcar projects in other cities had been implemented using locally-controlled funding sources, such as parking revenues, assessment districts, and value capture tools, and by constructing short line segments based in downtowns. A robust development market enabled the use of value capture tools to “bootstrap” at least some streetcar projects into implementation.





Since then, there have been two dramatic changes. First, a massive national recession and a deep chill over real estate investment has had the dual effects of reducing local government revenue potential and thinning the ranks of private-sector partners that might be enlisted in a local streetcar funding scenario. While Utah has suffered less in the recession than other states, and while some significant new development is still taking place in downtown Salt Lake, the environment for investment in new development in the study area is much less favorable than it was, and it appears that the transition back to a more robust market will be slow.

Secondly, the federal government is placing increasing emphasis on the role that transit investment coordinated with land use and community development can play in increasing the overall livability and sustainability of communities. USDOT Secretary Ray LaHood and FTA Administrator Peter Rogoff have recently taken significant steps to reform surface transportation funding and decision-making – changes that will broaden the opportunities for New Starts, Small Starts, and urban circulator projects in competition for Federal funding. Perhaps the most dramatic policy shift to date occurred on January 13, 2010 with the announcement of changes to the process for recommending New Starts and Small Starts projects for discretionary Federal funding and steps that FTA will be taking to change the project rating and evaluation process. This recent announcement is one step in a series of program reforms that USDOT and FTA have been introducing over the past six to nine months.

This general policy movement is now being followed up with specific actions. While these changes will benefit transit development in general, streetcars and urban circulators are particularly impacted positively:

***January 2010 Policy Shift:*** On January 13, 2010, USDOT and FTA formally rescinded a policy implemented in 2005 that all projects funded through the New Starts and Small Starts program must achieve at least a “medium” rating in the defined measure of “cost effectiveness”. This measure was based on travel time savings and presented significant challenges to many transit projects, particularly streetcars and urban circulators (projects based more on general accessibility and access to economic development rather than travel time savings). FTA policies now direct that a broader set of criteria (related to livability, economic development, environmental, social, and congestion relief benefits) be given equal weight to “cost effectiveness” measures. This change should have a favorable impact in making streetcar projects more competitive for New Starts and Small Starts funds compared to more traditional line-haul rail and bus transit projects.

This recent announcement piggy-backs on June 2009 policy guidance also introducing a broader and more equally weighted set of project evaluation criteria for New Starts and Small Starts. FTA is anticipated to initiate rulemaking on improvements to the measures of cost-effectiveness, economic development and livability/sustainability.





**DOT-HUD-EPA Partnership for Sustainable Communities:** In 2009, the U.S. Department of Transportation (DOT), Housing and Urban Development (HUD), and Environmental Protection Agency (EPA) announced a joint “Partnership for Sustainable Communities”. The three agencies made a commitment to work together to advance livable communities and sustainable development. All of the new and updated funding programs within these agencies are following basic livability principles articulated in this partnership, as evidenced in the new Urban Circulator program as well as criteria applied in project selection criteria in the ARRA and TIGER grant programs.

**Urban Circulator Grants:** In December, 2009 the Administration announced the availability of up to \$280 million in Section 5309 funds for “Urban Circulator” projects and “Bus Livability projects”, with \$130 million specifically reserved for “Urban Circulators”. The grant applications were to be for a maximum of \$25 million per project and were due on February 10, 2010. The NOFA (Notice of Funding Availability) is attached as Appendix 1, and again highlights and extends the livability, economic development, environmental and community benefits criteria as articulated in the DOT-HUD-EPA Partnership and initiated in the TIGER program. FTA will select projects by late Spring of 2010, and *may* be able to continue with another round of discretionary funding for these types of projects within the current fiscal year. The Sugar House project has applied for these funds, and if that application is successful, the “path will be open for another project in Salt Lake to enter this application process.

**Funding of Streetcars under the ARRA Act:** In fall 2009, a \$1.5 billion discretionary surface transportation funding program was created, including funding for streetcar projects, referred to as Transportation Investment Generating Economic Recovery (TIGER) grants, under the American Recovery and Reinvestment Act (ARRA). Criteria for these funds (besides being “shovel ready” and creating jobs) included:

- A state of good repair for existing transportation facilities
- Enhanced economic competitiveness;
- Safer streets and communities;
- Environmental sustainability; and
- Enhanced community livability.

On February 17, 2010 the award of a wide range of surface transportation projects totaling \$1.5 billion was announced. These awards included \$160 million in funding for streetcar projects in New Orleans, Tucson, Dallas and Portland. Out of 1400 applications





(totaling over \$57 Billion in projects) for \$1.5 billion in available TIGER funds, note that four streetcar projects (or less than 0.3% of the total applicant pool) were awarded more than 10% of the total funds. Over 30% of all streetcar projects that applied for TIGER funds received awards. The Administration anticipates a second round of TIGER funds totaling \$600 million to be available in Fall 2010 with project applications and selection criteria similar to the first round.

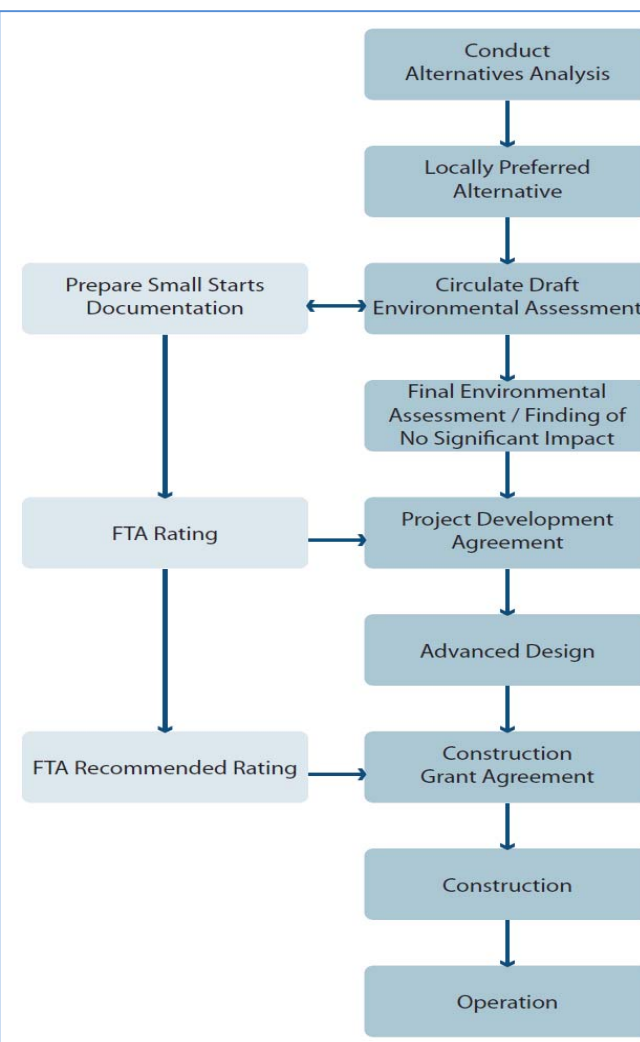
TIGER grant projects are focused on near-term job creation, in addition to loftier long-term objectives focused on supporting walkable, livable communities. There are resulting criteria that call on project sponsors to be ready to proceed. Projects must have:

- Completed basic feasibility/alternatives analysis;
- Agreed on a schedule and process with the relevant FTA regional office for completing NEPA clearance;
- Crafted a local finance and operating plan that specifies the local share of funding for capital and ongoing funding for operations;
- An ability to commit to initiating construction within 18 months of receiving a grant award.

After receiving a TIGER or Urban Circulator grant award, recipients will be subject to FTA oversight, including a “Go/No Go” decision within the first few months after award as to whether the project is truly able to proceed on the required schedule.

**Figure 1 – Small Starts Project Development Process**

If, as expected, there will be another round of TIGER grant funding opening for applications over next few months, these commitments would need to be in place by summer-fall 2010. If it is possible to select a most-promising initial project phase, and to have these other pieces in place by September of 2010, then a TIGER-funded project is a possibility. If not, then the more sequential Small Starts







process is a better process for carrying the project forward.

**SAFETEA-LU Reauthorization:** Many of the streetcar friendly criteria already incorporated into the TIGER and Urban Circulator Grants evaluation process (see Table 1, below) are likely to be further refined and incorporated into the Reauthorization bill as it is being drafted over the next year (but unlikely to be passed until 2011). However, it is important to realize that the current SAFETEA-LU statutory evaluation measures and framework are still in effect, including cost effectiveness, until new Authorization and new rulemaking. This Spring 2010 (typically in May/June), FTA will release its annual updated reporting instructions and evaluation methodology for New Starts and Small Starts project ratings to be applied in the coming year. It is likely that *some* changes will be introduced at that time. FTA states they will initiate rulemaking soon to implement a revised cost effectiveness measure considering additional transit benefits, but it may be 2011 before an evaluation matrix comes into full play that allows balanced consideration to be given to a wide range of benefit measures (other than pure mobility statistics), such as land use and economic development impacts.





**Table 1: Federal Capital Funding for Streetcar Projects**

Program	Total available	\$ Per Project	Key Criteria	Projects	Timeline/Process
TIGER Transportation Investments Generating Economic Recovery	\$1.5 billion in first round,  \$600 million slated for second round	No limitation, but informal statements by USDOT that amounts will be smaller in next round, and that level of local commitment is important	State of Good Repair  Economic Competitiveness (jobs)  Livability  Sustainability  Safety	Portland - \$75m  Tucson - \$63m  New Orleans - \$45m  Dallas - \$23m	Next round will be opened for applications in September  Title of program will change to "National Infrastructure Investment Program"  Criteria likely to remain as before, or similar  Joint USDOT/HUD/EPA review of applications  <u>Process:</u> Application/NEPA/commit to construction by 2/2012
FTA Urban Circulator Grant Program	\$130 million	\$25 million	Livability Sustainability Economic Development Leverage of public and private investment	Applications were submitted February 10 <sup>th</sup>  70 projects submitted, for a total amount of over \$1 billion	Selected projects to be announced in May/June  Unclear if funding will be found to support another round of project awards  <u>Process:</u> Alternatives Analysis/NEPA/FTA review/Commit to begin construction within 18 months/Construction grant
FTA Small Starts	\$200 million in current appropriations	\$75 million  Total project cost: no more than \$250 million	Transportation Cost-Effectiveness  Economic Development  Land Use	None  Portland and Tucson were in the review process, but were shunted to TIGER	Criteria under review, but likely to evolve closer to Urban Circulator criteria, with additional attention to ridership and cost-effectiveness  <u>Process:</u> Alternatives Analysis/NEPA/FTA Review/Project Development Agreement/Design/FTA Review/Construction grant





**Small Starts:** It now appears that with new Federal management, new policies already being introduced, and a new Transportation Reauthorization bill on the horizon, the FTA Small Starts program may be a viable option for streetcar projects. Compared to TIGER grants or even the Urban Circulator grant program, this revived option will mean larger potential grant amounts (up to \$75 million, a figure that might be maintained in the new Reauthorization bill). Small Starts currently requires a more elaborate FTA project development and grant approval process (Figure 1). As a *transit* program of the Federal Transit Administration (as opposed to an *economic stimulus* program of the overall USDOT), there will be greater attention to a proposed project's performance as a transit line, in addition to credit given for economic development leverage.

Given this background, it is reasonable to plan for some level of Federal capital support for an initial downtown streetcar project. These funding opportunities may come from a revised New Starts/Small Starts program, additional discretionary funding opportunities through ARRA or TIGER economic recovery programs, additional new funds available in the DOT-HUD-EPA Partnership for Sustainable Communities, or other programs. However, the city must compete for these funds with an increasing number of other cities seeking streetcar funding. In all cases, the streetcar line(s) seeking Federal funds must be included in the regional transportation plan to be eligible.

There are some intertwined **intergovernmental** issues to be considered and addressed before making the assumption that a downtown Salt Lake project can advance through the process and actually be granted federal funds. These issues mostly involve the role of the UTA in the development of such a project.

First is the question of UTA's official and unofficial posture toward this project. The Utah Transit Authority is, rightly, focused on the implementation of a robust transit system that serves the metropolitan region. Local circulators can and do play a role in such a system, but with an eye on financial and service equity throughout the region, UTA cannot lavish too much investment and attention on any given subarea, even one as important to the region as downtown Salt Lake. UTA's level of support for a downtown Salt Lake line or system needs to be determined.

Secondly, federal transit investments are channeled by law and practice to transit authorities. FTA Administrator Rogoff noted at the Streetcar Summit meeting last month that statutory changes will likely be needed if the FTA is to grant funds to nontraditional grantees like cities or nonprofit corporations. He did not seem closed to this possibility, but such legislation has not yet been drafted or passed.

Third, regardless of this legal/legislative point, the FTA will look closely at a project sponsor's ability to successfully implement a project, both through construction and on into everyday operations. Administrator Rogoff also emphasized this point at the Streetcar Summit, mentioning that project sponsors that are new to providing rail transit service will be given





especially careful scrutiny. While this is a point of great strength for the Sugar House project, and **could be** for this downtown project as well...UTA's great reputation for project management and steady expansion of service is well-established...a downtown Salt Lake Streetcar to be operated by an entity **other** than the UTA would be subject to this higher level of scrutiny.

These intertwined questions need to be resolved before proceeding much further into the realm of a federal application for this project.





**APPENDIX D:**

**TECHNICAL MEMORANDUM #4 – PLANNING AND ZONING ISSUES**





## TECHNICAL MEMORANDUM #4 PLANNING AND ZONING ISSUES

Date: April 16, 2010

To: Matt Dahl, RDA

From: Charlie Hales, HDR  
Robin Hutcheson, Fehr & Peers  
Julie Bjornstad, Fehr & Peers

Subject: Planning, Zoning and Regulatory issues

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The purpose of this memorandum is to assess the development environment associated with implementing a streetcar line in the downtown area, and to recommend improvements to zoning, parking, and general urban design to overcome the challenges. This memorandum is organized into the following sections:

- Area of study
- Existing zoning and parking requirements by segment
- Barriers identified
- Recommendations to overcome barriers

### Area of Study

Though no final decision has been made on a first streetcar line, and alternatives are still being evaluated, the area of study included in this memorandum includes the Granary District, the Depot District, and the Central Business District (CBD), specifically surrounding 100 and 200 South. This area of study is shown in the following map (Figure 1).

### Existing Zoning and Parking Requirements

#### Zoning

The existing zoning in the Granary District is a mixture of Downtown Support District (D-2), General Commercial District (CG), and Public Lands District (PL).

The D-2 zone, while less development-intensive than those in the CBD, is intended to accommodate uses and activities that support the CBD. The maximum building height in the D-2 zone is currently 65 feet. Building heights greater than 65 feet but less than 120 feet may be





permitted as a conditional use. There is no minimum lot area, lot width, or minimum yard requirement specified by the D-2 zone.

Figure 1 Study Area



The CG zone specifies a maximum height of 60 feet or four stories, whichever is less. However, buildings higher than 60 feet may be allowed as a conditional use. Lots in the CG zone must have a minimum area of 10,000 square feet and a minimum width of 60 feet.

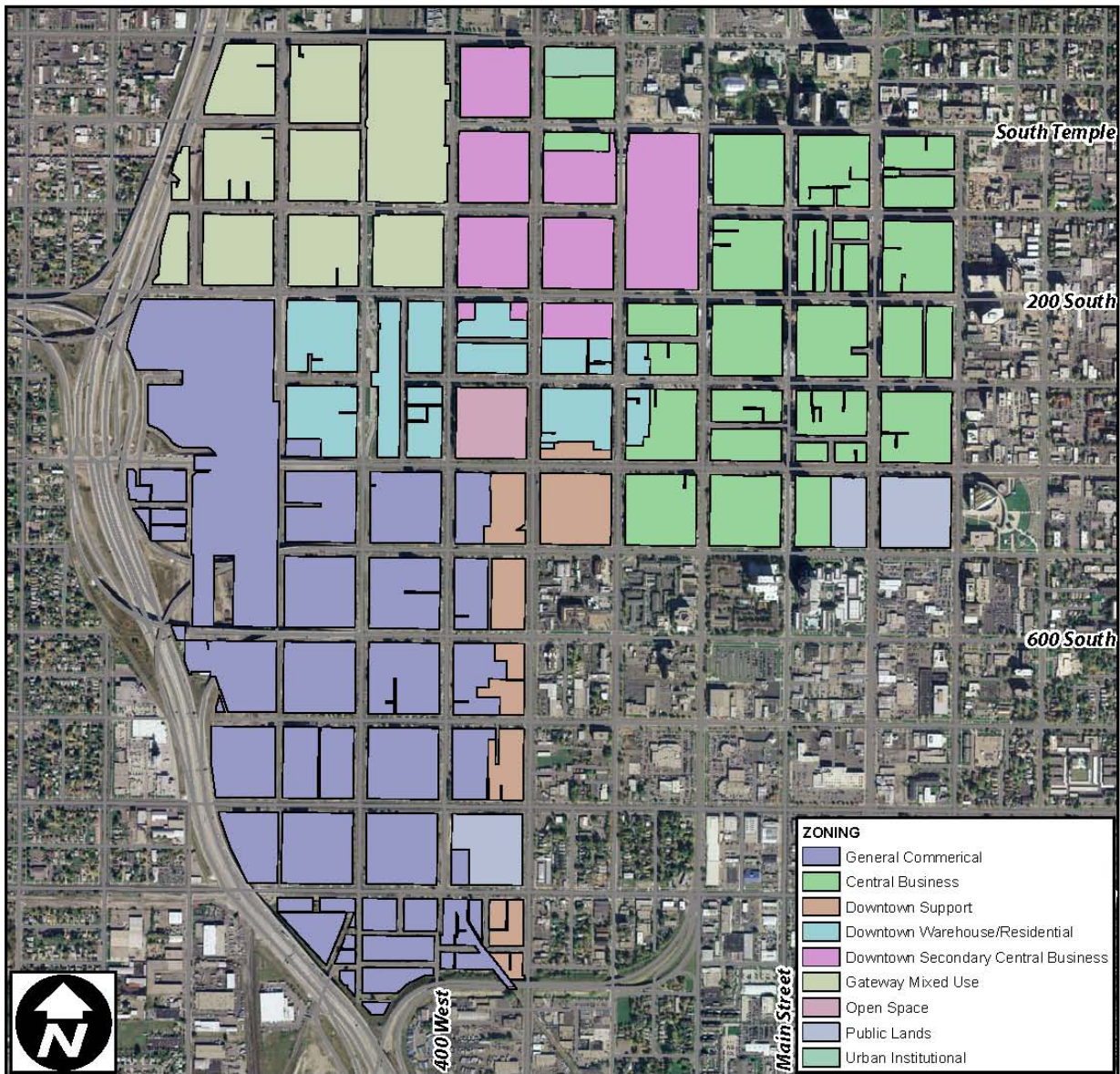
The PL zone delineates areas of public use and controls potential redevelopment of public lands and facilities. The maximum building height in the PL zone for local government facilities, jails,





government offices, arenas, and exhibition halls is 75 feet. If the adjacent zoning district allows greater height, the height standard of the adjacent district shall apply. For other uses in the PL zone, the maximum building height is 35 feet. Permitted uses in the PL zone, with the exception of public schools, have a minimum lot area of 20,000 square feet and a minimum lot width of 75 feet.

Figure 2 Study Area Zoning



The existing zoning in the Depot District is a mixture of CG, Gateway-Mixed Use Development (G-MU), and Downtown Warehouse/Residential District (D-3).





The G-MU zone applies to the Gateway Development area and is intended to implement the objectives of the Gateway Development Master Plan. The G-MU zone specifies that all buildings fronting 200 South must have first-floor commercial space. The facades of the first-floor commercial must be “compatible and consistent” with the building and with the surrounding area. Buildings fronting on 500 West are required to have residential uses occupy a minimum of 50% of the structure’s gross square footage. The G-MU zone includes a minimum building height of 45 feet, except along the 200 South corridor where the minimum height is 25 feet. The maximum building height shall not exceed 75 feet, except for buildings with non-flat roofs, which have a maximum height of 90 feet. The extra height gained by the non-flat roof can be used as habitable space. With conditional use approval, building heights may reach 120 feet. Mid-block streets are allowed as part of a development project. There is no minimum lot area, lot width, or minimum setback requirement. However, at least 25% of the length of the façade of a principal building shall be set back no farther than five feet from the street right-of-way.

The D-3 zone was created to allow for the renovation of warehouse buildings into multi-family residential uses. New developments or significant redevelopment should be mixed-use with retail uses on the lower floors and multi-family dwellings on the upper floors. Mixed-use developments should have residential-type uses for at least 50% of the total floor area of the building and commercial/office uses are allowed as the sole use of a building only in two-story buildings. If commercial/office is the sole use in buildings of three or more stories, it must be demonstrated that the proposed location is not suitable for multi-family residential use. Maximum building height in the D-3 zone is 75 feet, but the height may extend to 90 feet with a conditional use. There is no minimum lot area, lot width, or minimum yard requirements. All lots containing residential units must provide 20% of the lot area as common open space in the form of ground-level plazas, interior atriums, landscape areas, roof gardens and decks, or other such forms accessible by residents.

The existing zoning in the Central Business District is a mixture of Central Business District (D-1), D-2, D-3, Downtown Secondary Central Business District (D-4), Urban Institutional District (UI), Open Space District (OS), and PL.

The D-1 zone is intended to foster an environment consistent with the area’s function as a center of the community and region. Special controls have been established for block corners, mid-block areas, and the Main Street Retail Core. Block corner buildings are regulated to heights between 100 feet and 375 feet, but may have heights greater than 375 feet on the condition of additional setbacks, enhanced amenities such as art visible to the public, and adoption of traffic demand management plans. There are no minimum lot area or lot widths within the zone except for block corners. Block corner lot sizes shall have a minimum lot area of 10,000 square feet and a minimum lot width of 100 feet. Buildings within the middle of the block have a height restriction of 100 feet; however, taller buildings may be authorized as a conditional use. Although no minimum yards are required, no yard can be greater than five feet except as a conditional use. The Main Street Retail Core special controls apply along Main





Street between South Temple and 400 South, 100 South between West Temple and State, 200 South between West Temple and State, and 300 South between West Temple and State. Within the Retail Core, the first floor of all buildings are required to be retail, restaurants, public service, departments stores, art galleries, movie theatres, or performing arts facilities. Further, no driveways shall be permitted along Main Street.

The D-4 zone specifies maximum building height within the D-4 zone is 75 feet; with a conditional use, building height may be authorized up to 120 feet. There is no minimum lot area, lot width, or yard requirements. However, for yards exceeding five feet, a conditional use is required. Developments that construct mid-block streets as part of a project may increase the height of the building on the remaining abutting parcel as a conditional use with design review approval.

The UI zone was created to regulate the development of larger public, semi-public, and private institutional uses in an urban context. Developments within the UI zone typically are campus-like sites surrounded by development. For areas of worship, the minimum lot area is 20,000 square feet with a minimum lot width of 100 feet. For all other uses within the D-4 zone, the minimum lot area is 1 acre with a minimum lot width of 150 feet. The maximum building height in the D-4 zone is 75 feet, with conditional use approval up to 120 feet. The minimum open space shall not be less than 20% of the lot area. If the UI zone abuts a lot in a residential district, a landscape buffer shall be provided.

The OS zone is intended to preserve and protect urban open space. The minimum lot area is 10,000 square feet with a minimum width of 50 feet. Buildings within the OS zone have a maximum height of 35 feet. For each foot of height in excess of 30 feet, the required yard and landscaped yard increases one foot.

### Parking

For the entire study area, the number of off-street parking spaces provided must meet the requirements of the "Schedule of Minimum Off-Street Parking Requirements," as outlined in the Salt Lake City Zoning Ordinance, with the exception of the D-1 zone. In general in the study area, there should be two parking spaces per 1,000 square feet for retail; 2 spaces per 1,000 square feet for office; one parking space per single-family dwelling unit; one-half parking space per multi-family dwelling unit; one parking space for every two hotel rooms; 2 spaces per 1,000 square feet of gross floor area for the first 10,000 square feet plus 1/2 space per 2,000 square feet for the remaining space for warehouses. Non-residential uses in buildings less than 1,000 square feet and located within the commercial district or D-2 and D-3 zones are exempt from the requirement of providing off-street parking.

In the D-1 zone, the minimum number of parking spaces required for non-residential uses is one space per 1,000 square feet of gross floor area in excess of 25,000 square feet and for





residential uses is one-half space for each dwelling unit. The maximum parking for non-residential uses is two and one-half spaces for each 1,000 square feet of gross floor area; for retail sale and services uses, four spaces for each 1,000 square feet of gross floor area; and for residential uses, two spaces for each residential unit.

In the D-3 and D-4 zones, the minimum number of parking spaces is one per dwelling unit. Any building that has ten (10) or more residential units with at least 20% of the units as either affordable, senior housing, or assisted living units shall be allowed to have a minimum of one-half of a parking space provided for each dwelling unit. In the D-3 zone, no off-street parking is required for the first 5,000 square feet of floor area. For all uses with more than 5,000 square feet, the parking requirement shall be one space per 1,000 square feet of gross floor area, including the initial 5,000 square feet. In the D-4 zone, no off-street parking is required for the first 25,000 square feet of floor area. For all uses with more than 25,000 square feet, the parking requirement shall be one space per 1,000 square feet of gross floor area, not including the initial 25,000 square feet.

All parking areas should be located on the same lot as the building or use for which they serve unless otherwise permitted. Off-site parking lots in the D-1 zone should not be more than 1,200 feet away from the proposed use. All surface parking lots in excess of 30 parking stalls are required to provide a clear pedestrian pathway from the parking lot to the entry of a building or the public sidewalk. When existing buildings or structures are altered to different uses, parking shall be provided for the amount required for the new use. However, in the D-1, D-2, and D-3 zones, a change of use does not require additional parking facilities.

With proper approval, leased parking, shared parking, off-site parking, employer-sponsored vanpool, and/or employer-sponsored public transportation program may serve as an alternative to on-site parking requirements. Credit for on-street parking is allowed within the D-1, D-2, and D-3 zones for on-street spaces along the street frontage adjacent to the use.

The following exceptions apply:

- In the G-MU zone, surface parking lots must have a 15-foot landscape setback from the front property line.
- In the D-1 zone, parking lots and structures shall be located behind principal buildings or at least 75 feet from front and corner side lot lines. Any parking lot or structure within a mid-block must have commercial/office on the first floor adjacent to the front or corner side lot line and facades of such developments must be “compatible and consistent” with the rest of the building and other retail uses in the area. Above the first floor, the parking structure may not have sloped floors or facades. Parking lots as a principal use shall be permitted as a conditional use with approval from the planning commission. As part of the application, the parking lot must be shown to be necessary for an existing, adjacent land use or must be shown to be needed for the general parking of an area in which case the lot must participate in the downtown token program.





- In the D-3 zone, surface parking lots are required to be set back from the front and corner side yard property lines by 15 feet.
- In the D-4 zone, parking lots and structures must be located behind principal buildings. Within the block corner areas, parking structures must be 75 feet from front and corner side lot lines and within mid-block area, parking structures must be 30 feet from front and corner side lot line. At grade parking lots must be set back at least 75 feet from front and corner side lot lines and landscaped to minimize visual impacts.

### Other Design

There are special provisions in the zoning code specifying design standards within the D-3 zone for new building construction. All new buildings constructed with the zone must have a minimum of 70%, including windows, of the exterior material of brick, masonry, textured or patterned concrete, and/or cut stone. EIFS, vinyl, tilt-up concrete panels, corrugated metal, and aluminum siding are only allowed under conditional use.

In the D-1, D-3, and D4 zones, the first floor elevation facing a street must be 40% glass surface in all new building or buildings in which the property owner is modifying the size of windows on the front façade. Along the Main Street retail core, 60% of the first floor elevation must be glass surface of a non-reflective nature. Exceptions may be authorized as a conditional use, especially if the requirement would affect historic character or structural stability.

All buildings constructed within the D-1, D-3, and D-4 zones must comply with the City's official plan for mid-block pedestrian walkways.

Requirements are summarized in the following table (Table 1).

**Table 1 Zoning Summary**

Area of Study	Zoning	Parking
Granary	60-65 feet/4 stories, increased building heights with conditional use	D-2 <ul style="list-style-type: none"> <li>• Minimum parking requirements</li> <li>• Non-residential uses in buildings less than 1,000 square feet in D-2 and CG are exempt from parking requirements</li> <li>• Parking should provide ped walkways</li> <li>• In D-2, a change of use does not require additional parking facilities</li> <li>• Credit for on-street parking is allowed within D-2</li> <li>• TDM alternative to on-site parking requirements</li> </ul>
Depot	25-75 feet building height, increased building heights with	D-3 <ul style="list-style-type: none"> <li>• Minimum parking requirements</li> </ul>





	<p>conditional use</p> <p>Must have first-floor commercial</p> <p>Minimum residential requirements</p> <p>No setback requirements</p> <p>Mid-block streets are allowed</p> <p>Design material standards in D-3</p> <p>Minimum window requirements in D-3</p>	<ul style="list-style-type: none"> <li>• Non-residential uses in buildings less than 1,000 square feet in D-3 and CG are exempt from parking requirements</li> <li>• The minimum number of parking spaces in D-3 is one per dwelling unit</li> <li>• Parking should provide ped walkways</li> <li>• In D-3, a change of use does not require additional parking facilities</li> <li>• Credit for on-street parking is allowed within D-3</li> <li>• TDM alternative to on-site parking requirements</li> </ul>
CBD	<p>100-375 feet building height in core</p> <p>75 feet building height in other area, increased building height with conditional use</p> <p>Must have first-floor commercial</p> <p>Mid-block streets are allowed</p> <p>Minimum window requirements in D-1, D-3, &amp; D-4</p>	<p>D-1,D-2,D-3,D-4</p> <ul style="list-style-type: none"> <li>• Minimum parking requirements</li> <li>• D-1 has specific minimum parking requirements</li> <li>• Non-residential uses in buildings less than 1,000 square feet in D-2 &amp; D-3 are exempt from parking requirements</li> <li>• The minimum number of parking spaces in D-3 &amp; D-4 is one per dwelling unit</li> <li>• Parking should provide ped walkways</li> <li>• In D-1, D-2, &amp; D-3, a change of use does not require additional parking facilities</li> <li>• Credit for on-street parking is allowed within D-1, D-2, &amp; D-3</li> <li>• TDM alternative to on-site parking requirements</li> </ul>

### Assessment of Transit Oriented Zoning and Process

Zoning and parking regulations, as well as the processes for approval, are assessed below with respect to compatability with transit-oriented development in downtown. This assessment is made with the assumption that a certain character and urban intensity is necessary for the development of a streetcar line. A “pedestrian accelerator” fits into a great pedestrian environment, so, aligning policies to ensure this outcome ensures that a streetcar investment would synergize with the built environment. On another practical front, a more intense urban environment would contribute more to the streetcar’s funding base through tax increment financing and other measures. The following is a list of conditions that may not support transit-oriented development around a proposed streetcar:





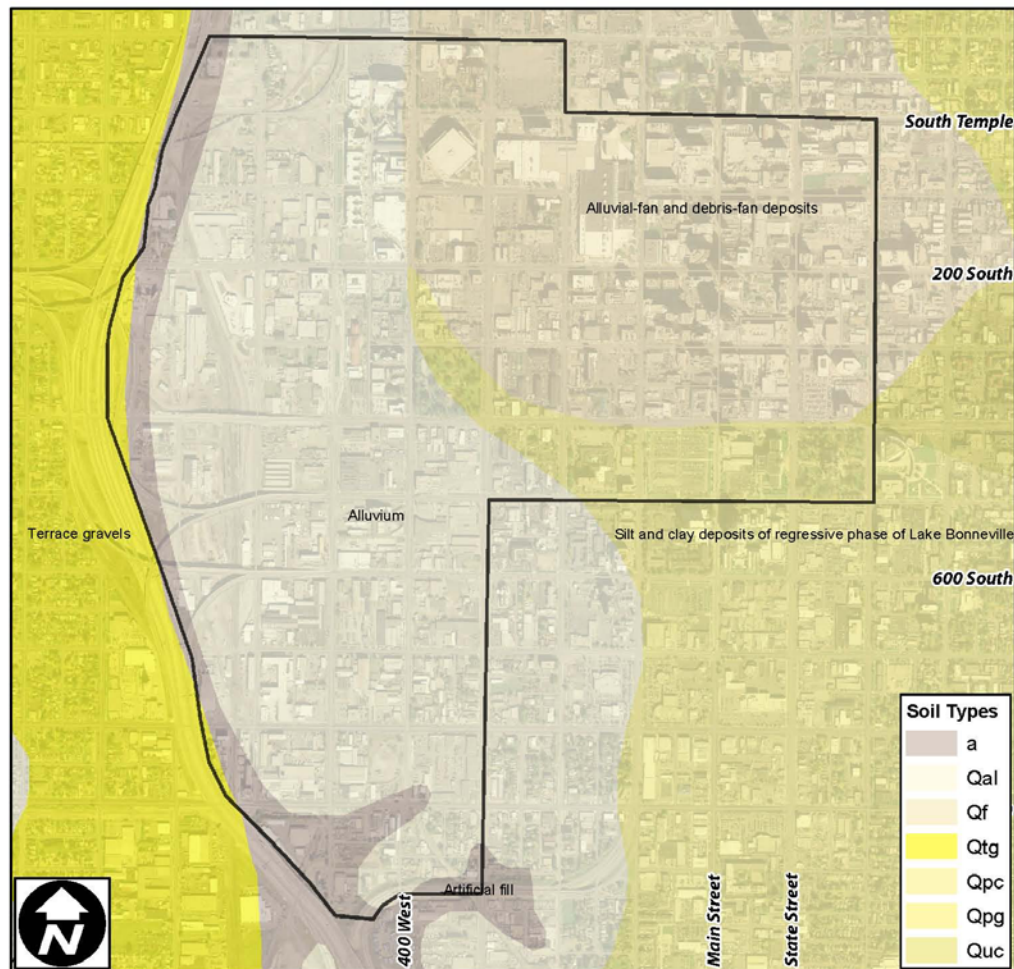
1. The patchwork of zoning designations now in effect, while evolving for understandable historical reasons, may overcomplicate land use requirements.
2. Minimum lot sizes and large block sizes may impede smaller development.
3. Design requirements apply only in a portion of the study area, and are partial in their scope of issues addressed, addressing some basic parameters of materials and window area, but falling short of a full set of design goals.
4. Minimum parking regulations are contrary to the intended urban form of an area to be highly transit-oriented.
5. Allowing surface parking lots compromises the desired urban form and restricts potential tax revenue.
6. Other “suburban” requirements contained in the provisions for existing zones (setbacks, allowance for drive-throughs, etc.) are in conflict with the intended urban character.

Through our conversations with stakeholders, and specifically with Artspace (the most recent developer in the Granary District), one other potential limitation is the soils in the study area. The following map (Figure 3) shows the soil types in the study area. The soil type Quaternary alluvium is shown on the Granary, and has a high liquefaction potential. The result is that costly piers would likely be required for construction over four stories high. This may be cost prohibitive in the near term due to the increase need for boring and structure reinforcement. It may also limit underground or structured parking potential. Nevertheless, this area should be brought up to urban core zoning standards, while engineering and financial solutions are considered to address the potentially higher costs of vertical construction in this subarea.





Figure 3 Study Area Soil Types



### Potential Improvements to Zoning and Process to Support Transit-Oriented Development

Achieving the intensity and urban form already envisioned for downtown Salt Lake, and supporting the major investment of a streetcar circulator in this urban environment will require “truly urban” development regulations and practices. The current zoning map confines truly urban development to the D-1 zone and achieves, at best, a low-rise urban form in the other zones. Under-building or suburban design types currently allowed in some of the other zoning districts, particularly CG, will allow essentially suburban development models in what is supposed to be an urban district at the heart of the region, undermining the potential of the area and sending mixed messages to property owners as to its intended character.

The City’s current, traditional zoning code is focused on regulating heights and uses (and ensuring adequate parking). To achieve the level of urban quality Salt Lake City seeks in its downtown, a “form-based” rather than “use-based” approach should be adopted. Several issues will need to be addressed in making this essential transition:





1. The current patchwork of zoning designations in what can become a greater downtown Salt Lake could hamper a coherent transit and pedestrian-oriented urban core. Collapsing the multiple zoning designations now in effect for this area into a much simpler single or small group of zoning designations (other than perhaps retaining O, PL and UI) should be considered. The basic urban components of the existing CBD zone (D-1) should (with some modifications and additions) be used as the framework for this transit-supportive zoning regime. Legislatively re-zone the portions of the study area now designated CG to downtown zoning (see recommendation #1 above) for all blocks that have a blockface within 1200 feet of the planned streetcar alignment(s).
2. The current planning approach for the North Temple transit corridor focusing on a form-based approach to planning for land uses around stations should be considered for the streetcar project area. Applying the same standards and the checklist/scoring system being developed for properties in the North Temple project area to those in the streetcar project area would provide consistent policy and ease of administration, both for the City and for citizens, property owners and applicants. s
3. The City should continue to pursue changing the review process for all land uses in favor of such a 'warrant' based approach to meeting desired design factors that would support transit.
4. Establish significantly more generous height limits or Floor Area Ratios for the core areas formerly zoned D2, D3, D4, and CG.
5. Remove minimum lot sizes.
6. Do not provide any allowance for setbacks and require build-to lines.
7. Prohibit drive-through facilities in all downtown zones
8. Consider articulating and formally adopting a full set of design goals, objectives, recommended/not recommended elements, and specific requirements. Within those areas of specific requirements, review and consider enhancing the existing design and materials requirements (brick, stone, etc.), fenestration percentages, and prohibitions (such as prohibiting low-quality facing materials and street-level reflective glass). Then, apply these design goal, requirements, etc. throughout the core area.
9. Although the area is probably too large to require active ground-floor uses throughout, at a minimum, additional street frontages, other than the ones already specified under





the current Downtown or Gateway sections, should be designated where these requirements will apply.

10. Allow mid-block streets to be developed anywhere within the core area.
11. In the study area, implement parking maximums and have a “sliding scale” for maximum parking requirements such as developments within ¼-mile of a transit stop would have a lower parking requirement than 1-2 mile of the transit stop. Eliminate required parking minimums throughout this core area.
12. Prohibit new surface parking lots throughout the core area.
13. Provide bonuses or other incentives for the redevelopment of existing surface parking lots.