North Temple Mobility Hub Feasibility Study



SALT LAKE CENTRAL SALT LAKE AIRPORT



Acknowledgments

The North Temple Mobility Hub Feasibility Study was made possible by the advice, insight, and experience of Salt Lake City staff, partner agency staff, and numerous community members.

Salt Lake City Corporation

Susan Lundmark, Transportation Planner Jon Larsen, Director of Transportation Christianna Johnson, Communications/ Social Media Specialist

Utah Transit Authority

Eric Callison, Service Planning Manager

Hal Johnson, Project Development Manager

Joey Alsop, Service Planning Supervisor

Jordan Swain, Transportation-Oriented Development (TOD) Project Manager

Sean Murphy, Transportation-Oriented Development (TOD) Project Manager UTA

Technical Advisory Committee (TAC)

Amanda Dillon, Developer, GIV Group

Cara Lindsley, Redevelopment Agency (RDA) Deputy Director, Salt Lake City Corporation RDA

Eric Daems, Senior Planner, Salt Lake City Corporation Planning Dept.

Joe Taylor, Transportation Planner, Salt Lake City Corporation Transportation Dept.

Jonathan Larsen, Director of Transportation, Salt Lake City Corporation Transportation Dept.

Larry Mullenax, Chief Executive Officer, Utah State Fair Corporation

Mike Jenson, PacifiCorp

Community Advisory Committee (CAC)

Princesse Derose Keith McDonald Maren Miller Larry Mullenax Daniel Stanger Dave Galvan Billy Palmer Turner Bitton Karina Lugovillaba

Project Team Alta Planning + Design

Psomas

Chris Hupp, STP

Travis Perry, PE

Tyson Grant, PE

NeighborWorks

Jean Crowther, AICP

David Foster, PLA

Zoey Mauck

Jasmine Walton

MHTN

Ryan Wallace, AIA/AICP Emily Seang

Zions Bank Public Finance

Susan Becker



Table of Contents

Project Purpose

2

Best Practices & Emerging Trends p. 14

3

Community & Stakeholder Engagement Process p. 25

4

Guiding Principles & Program Development

p. 33

5

Site Suitability p. 41

6

Site Selection + Concept Design p. 49

7 Moving Forward p. 77

A Appendix

Executive Summary

Project Overview

Salt Lake City Transportation Division is working to make the use of active and shared modes of transportation easier for all in Salt Lake City, and especially the historically underserved Westside neighborhoods. One key project that will expand access to these options is the development of the North Temple Mobility Hub.

A **mobility hub** offers many transportation choices, and makes it easy to transfer from one form of travel (like walking or biking) to another (like taking the bus or riding TRAX). These centrally-located hubs are intended to bridge transportation gaps, all while reflecting the surrounding community, and providing opportunities for communitysupportive development.

The North Temple Mobility Hub Feasibility Study, using an extensive community input process and technical analysis, identifies areas that are viable hub locations, features it should include, and how to make it as convenient and inviting for people as possible.



View of downtown from the Westside

Study Area

The project study area centers on an approximately five and a half mile segment of the North Temple Corridor between 900 W and Redwood Road. Bordered by long-standing neighborhoods, North Temple serves as a de facto Main Street for many Westside communities. Bookended by downtown Salt Lake and the Salt Lake City International Airport and connecting interstates 215, 80, and 15, North Temple serves as a major artery for regional transportation. The corridor's dual roles make it an ever-evolving area, with bustling activity and mix of commercial destinations.



Public Input

Engaging with the community surrounding the study area was a critical piece in planning efforts for this project. A threephased engagement approach allowed for input provided through online and intercept surveys, a series of public workshops hosted at Westside destinations, and a partnership with NeighborWorks. While each phase used specific activities to engage participants, it was the conversations with local residents and business owners that led to the greatest understanding of needs and desires for the North Temple Mobility Hub.

Implementation

Guiding Principles

Rooted in the input provided during the project's public input process, seven guiding principles were established to guide project decision making, including:

- Responsive
- Realistic
- Equitable
- Versatile
- Welcoming and Easy
- Healthy and Safe
- Climate Resilient

Concept Development

Three design concepts were developed to show how mobility hub elements could be incorporated together in a large mixed-use development. The concepts were developed in response to the values, character, and goals defined by community members and stakeholders in the outreach efforts. The design process strives to incorporate all the guiding principles, spaces for social gathering, and varied transportation options. Each concept emphasizes specific principles and design elements to highlight a key site feature or type of event programming. These concepts, detailed on the following page, include:

- **Plaza**: Corner plaza formed by four-story hub building
- Paseo: Mid-block paseo forms sense of arrival to west side station
- Play: Pedestrian-first zone formed by sixstory buildings centered around access to nearby green space and trails

Next Steps

With desired site features selected and potential concepts developed, there are still a series of steps that are necessary before breaking ground on the project. These include the negotiation process (evaluating funding opportunities and partnership structures, and determining the site) and final design.

PLAZA



PASEO



PLAY



NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Plaza Concept

- A Climate Resilient: Rooftops with solar
 photovoltaic (PV) panels for energy efficiency
 A Versatile: Indoor and outdoor programming spaces that accommodate events year-round
 A Welcoming and Easy: An engaging corner
 B and staircase that invite pedestrian onto
- L the site and eases transitions between
- **E** transportation modes

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Paseo Concept

Responsive: An exciting, recognizable public plaza that adds character to the community by integrating local art and flexible uses

Equitable: Provides spaces to strengthen social connections, access to multiple services, and transportation options

Welcoming and Easy: Prioritizes pedestrian movement, comfort, and navigation

Play Concept

Climate resilient: Rooftops with solar photovoltaic (PV) panels for energy efficiency

Healthy and Safe: Access to green space, trees, and splashpad facilities to mitigate urban heat and provide a place to recreate

Equitable: Inclusive and inviting to families and people of all ages and abilities









Project Purpose

Project Purpose

Salt Lake City Transportation Division is working with Utah Transit Authority (UTA) to improve transportation services in the City, including the implementation of **mobility hubs** as noted in the 2017 Salt Lake City Transit Master Plan (executive summary p. 21, 6-13, 6-15)

The project team is considering locations to cluster and integrate transportation options in locations called **mobility hubs**. Mobility hubs should offer a range of transportation choices to get you where you need to go, and make it easier to transfer from one form of travel (like walking, biking, or carpooling) to another (like taking the bus, riding TRAX, or using a shared scooter). These hubs help to bridge the first and last mile of a user's trip.

Additionally, they should reflect the surrounding community, and provide opportunities for new, community-supportive development that adds value to nearby neighborhoods, beyond just transportation.

The North Temple Mobility Hub Study, using community input and technical analysis, identifies sites that are viable for locating the hub, what features it should include, and how to make it as convenient and inviting for people as possible.



Source: Ricardo630, wikimedia

Westside Neighborhoods

History

Salt Lake City's Westside is the most diverse area in the city with a blend of different cultures and backgrounds. While projects like the North Temple Mobility Hub are meant to help connect the City's east and west sides, it is important to note the historical and racial context related to housing and wealth-building in the city.

Salt Lake City is among the many metropolitan areas of the U.S. where redlining maps were created by the Home Owners' Loan Corporation (HOLC), in 1939, in an attempt to predict "safe" or "risky" home mortgage lending conditions, based in part on the racial composition of the area. Most of the areas deemed as "risky" on the map were west of the Salt Lake City freight rail tracks, or what is considered the Westside today. Historic redlining practices made wealth creation through homeownership more difficult for people of color in the Westside, contributing to conditions and areas that are still underserved and of lower income today.

This split between the Westside and the rest of Salt Lake City was further divided

when Interstate 15 (I-15) was built through the area in the 1950's and 60's. This not only created a physical blockade for Westside residents, but also required the demolition of neighborhoods along the I-15 corridor and led to exposure to air pollution and noise pollution from vehicle traffic.

Salt Lake City recognizes this history of disinvestment and division, and is working to leverage the strengths of the diverse Westside communities to create quality transportation projects moving forward that will benefit all residents. This involves building partnerships with grassroots community organizations, providing transparency and inclusion in engagement processes, and ensuring that all Westside community members can participate in the decision-making process for city projects.

The North Temple Mobility Hub Project aims to further Salt Lake City's transportation equity goals, including equitable engagement, access, options, and community. An extensive public engagement process (detailed in **Chapter 3**) was held throughout the duration of this project, and the conversations from community input events helped shape much of the project's guiding principles and concepts. As the next phases of this project unfold, Salt Lake City will continue to advocate for community ideas and needs. When built, the intent is that the North Temple Mobility Hub will serve as a Westside amenity that provides a place for community members to connect with each other, builds on the population and development growth that the city is currently experiencing, and connects to the rest of Salt Lake City despite historic and current barriers.

The North Temple Corridor

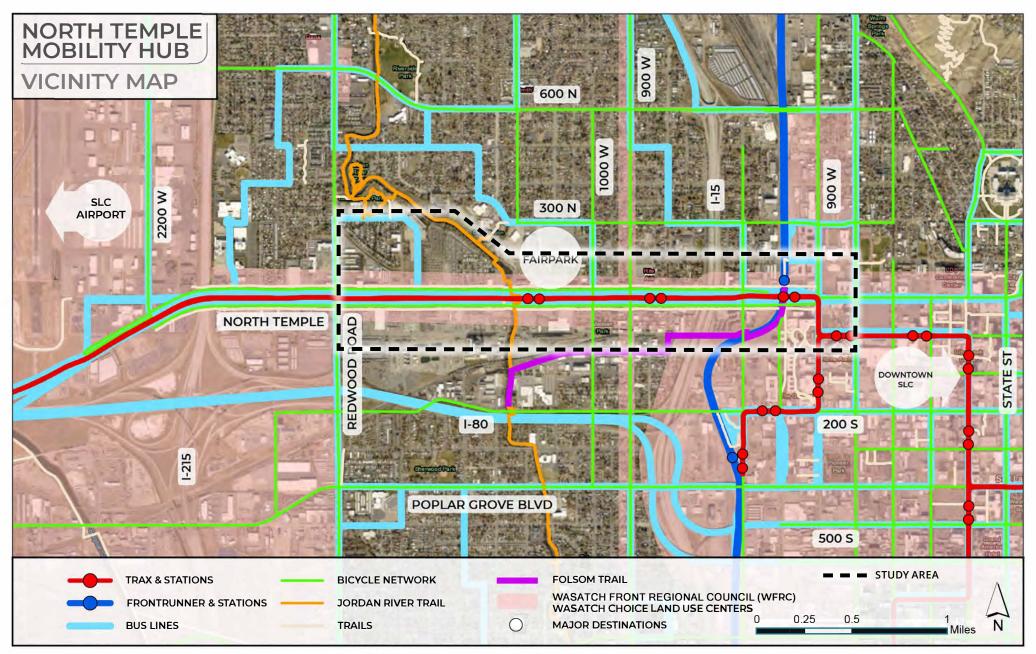
Study Area Context

The North Temple corridor and much of the west side of Salt Lake City is rapidly changing. To create an effective plan, the Study must incorporate existing plans and community input from Salt Lake City's west side, while also accounting for a wide range of new plans and new development currently underway. This combination has the potential to create tension between the needs and priorities of today's Westside residents and businesses and those of future Westside residents and businesses.

As shown in **Map 1-1**, the Study Area encompasses an approximately five-anda-half mile segment of the North Temple Corridor. Bordered by long-standing neighborhoods, North Temple serves as a de facto Main Street for many Westside communities. Bookended by downtown Salt Lake City and the Salt Lake City International Airport and connecting three interstates (I-215, I-80, and I-15), North Temple also serves as a critical major artery for regional transportation. The corridor's dual roles create a bustle of activity, busy streets, and commercial destinations, but can also lead to competing priorities.



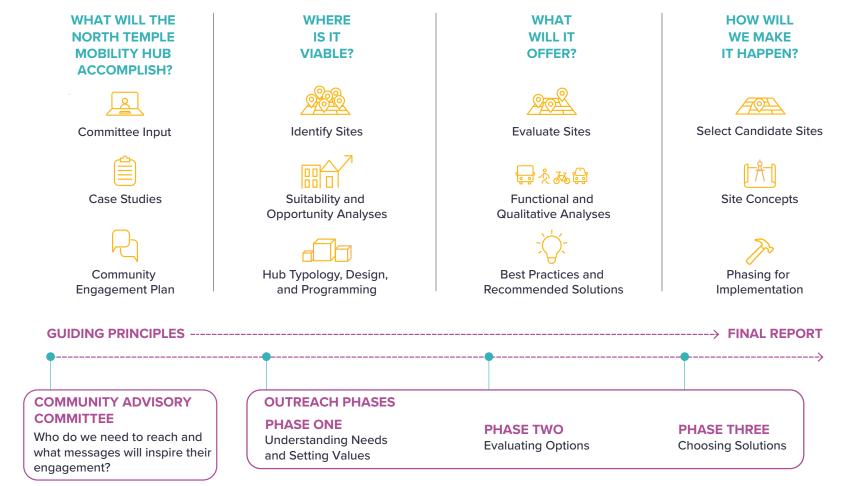
The intersection of North Temple and 600 W



Project Process

The North Temple Mobility Hub Study involved a multi-phase process designed to first establish the local community's definition of success and to learn from what other cities around the country are doing. The technical work that followed clarified what is possible and what is most likely to be effective for the North Temple corridor, while staying true to the community's priorities.

Figure 1-1 Project Process



NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY



Best Practices and Emerging Trends

What is a Mobility Hub?

Mobility hubs are places where different travel options – walking, biking, transit, and shared mobility (like a bike share or scooter share) – come together. In practice, mobility hubs are the sum of their parts, many of which are shown in **Figure 2.1**.



Mobility hub example in Long Beach, CA

function of using the site's transportation

outdoor seating, retail, library space, postal services, cafes, restaurants, food cart/truck

areas, playgrounds, concierge services, and

services. This could include public art,

many more options.

Mobility Hub Elements

In practice, mobility hubs are the sum of their parts. The services and amenities commonly considered in mobility hub planning include the following.

Transit and Trip-making elements include those that support movement to and from the mobility hub site, including transit boarding and alighting, pick-up/drop-off zones, and wayfinding and trip-planning signage. Emphasis is placed on movement efficiency and safe access to and from various modes.

Parking & Charging elements include parking and charging infrastructure for stationary vehicles, including personal vehicles, shared cars, shared micromobility devices, and other electric vehicles. This zone is characterized by parking the vehicle or device, whether short-term or long-term, and whether or not it is the individual's final destination.

Priority Access elements include support for human-scale travel to and from the site. This zone includes sidewalks, bike lanes, micromobility lanes, crossing treatments and similar investments that enable individuals to safely and comfortably access the hub's other design elements.

Amenities include complementary design elements that add value to the user's experience, but are not essential to the

Figure 2-1 Mobility Hub Features



What Does a Mobility Hub Look Like?

Mobility hubs are built in many shapes and forms depending on the needs of the community, but generally fall into three categories: Large, Small, and Micro Hubs. While all mobility hubs host transit stops, ticket kiosks, sidewalks, and other features, **Table 2-1** highlights which features differ between mobility hub sizes.

Large

The Large Mobility Hub represents the largest of the three mobility hub types. It provides a vision of how mobility hubs could be assembled in highest demand areas where there is sufficient space and likely includes the widest variety of available modes. Mobility services extend beyond the right-of-way and are integrated with adjacent land uses. Examples of large mobility hubs are highlighted on the following pages in the **Case Studies** section.

Small

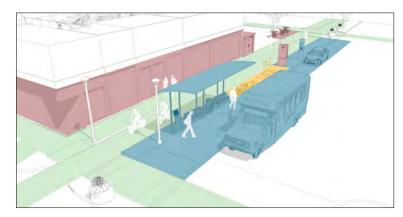
Small Mobility Hubs demonstrate how new technology can make it more convenient to pair transit with active transportation modes. It shows how a high demand bus stop could be upgraded with additional features where space allows. Long-term bike storage and prioritized vehicle parking help facilitate longer trips where users may not return for a day or more. This could be a place to accommodate autonomous vehicle pick-up and drop-off in the future as well as other new technologies.

Micro

The Micro Mobility Hub is a neighborhood node intended to fill gaps in the transit system by connecting active transportation modes with shuttles or on-demand service, rather than fixed route or high-capacity transit. It includes all of the features to support micro-mobility services, transit services, and vehicle pick-up/drop-off, but does not feature as many amenities as a small mobility hub.







From top to bottom: large-scale hub, small-scale hub, and micro-scale hub

Case Studies

The project team researched five examples of mobility hubs already designed, built, and in operation in the U.S. In researching these projects by reading news articles and project website pages, it was found that many of the case study projects experienced challenges in securing the needed funding to provide all of the desired services for the mobility hub. Several projects were able to secure the needed funding after extending the project planning timeline, while some decided to cut back or change the amenities that would be part of the hub.

Another challenge faced by several projects was coordination between many different groups in the planning process, resulting in conflicting opinions and requested needs. Eventually, however, agreements were made and problems were solved to make for a more effective mobility hub. Overall, each case study shows how the hub helped to consolidate transit routes, both local and regional, and make the act of taking public transportation more safe, seamless, and user-friendly.

Table 2-2Case Studies

CASE STUDY	СІТҮ	YEAR	APPLICABILITY
Montpelier Transit Center	Montpelier, Vermont	2019	 Placed in a formerly industrial space/scrap yard Inclusion of affordable housing, private vendor space Buses
Julia Carson Transit Center	Indianapolis, Indiana	2016	 Close proximity to trail Major bus transfer center/end-of-line facility
Silver Spring Library	Silver Spring, Maryland	2015	 Direct access to light rail and pickup/drop- off for bus Civic building, plus affordable housing/ vendor space
Boulder Junction TOD	Boulder, Colorado	2015	Bus connectionsAffordable housing options
Fairbourne Station	West Valley City, Utah	2012	 Office space and high-density residential Light rail and rapid transit, and access to shopping centers, the library, City Hall, and event/community space

Montpelier Transit Center Montpelier, VT

Acres: 10

- Structures: Taylor Streets Apartments: 39,740 sq. ft., four-story building, affordable housing (repurposed and netzero building)
- ★ Amenities: Parking, taxi pick-up areas, Amtrak access, walking/biking amenities, waiting rooms, telephones, public restrooms, small shops and vending machines
- Partnerships: City of Montpelier, Central VT Transit Authority (CVTA), VTrans, Downstreet Housing & Community Development and Housing Vermont, gbA Architecture & Planning, DEW Construction
- Surrounding Land Use: River front zoning, low- and medium-density residential, Western Gateway, rural, near Winooski River



Source: Dew Construction (top), Mortarr (bottom)

Julia Carson Transit Center Indianapolis, IN

Acres: 2.02

- **Structures**: 14,000 sq. ft transit center
- ★ Amenities: 19 covered bus bays, WiFi, indoor waiting area, customer service and pass sales, public restrooms, near Indianapolis Cultural Trail, near linear parks, electric carshare, bikeshare.
- Partnerships: Axis Architecture, Indianapolis Public Transportation Corporation (IndyGo), City of Indianapolis, U.S. Congresswoman Julia M. Carson
- Surrounding Land Use: Commercial, core mixed use, and public/government space, parks



Source: Guidon Design

Silver Spring Library Silver Spring, MD

- Acres: 8 acres (Future total development)
- **Structures**: 90,000 sq. ft., 3-story transit center, library, and arts space
- ★ Amenities: 32 bus bays, Silver Springs Library, parking, future connections to Purple line and Amtrak, 30+ bike racks/ lockers, 5 pedestrian paths every direction, drinking fountains/restrooms, carshare, pick up/ drop off zones, future connection to urban park and housing.
- Partnerships: Maryland Transit Administration, Washington Metro Transit Authority, Montgomery County
- Surrounding Land Use: Mixed use office, residential, public/semi-public gathering space, commercial services, and mixed use.



Source: Montgomery County, MD (top), RRMM Architects (bottom)

Boulder Junction TOD Boulder, Colorado

- Acres: 11.2 Current Development
 (Proposed Development 160 acres)
- Structures: 45,655 sq. ft. underground bus facility, residential-apartments (71 affordable housing units), hotel (150 rooms), parking garage with 386 spaces.
- ★ Amenities: 6 covered bus bays, housing, pedestrian access, and paths to Goose Creek greenway/open space.
- Partnerships: City of Boulder, Regional Transportation District (RTD), Adolfson & Peterson, Pedersen Development Company, SEH Architects, private property owners
- Surrounding Land Use: Commercial and residential
- Future Land Use: Office, mixed use space, service commercial, service industrial, retail, mixed use residential, high density residential.



Source: SEH Inc.

Fairbourne Station West Valley City, Utah

✔ Acres: 8.5

- Structures: 200,000 sq. ft. of office space, 1,000 high-density units, mid-rise residential (three stories)
- ★ Amenities: Light rail and rapid transit connections, parking, access to Valley Fair Mall/shopping centers, West Valley City Library, City Hall, Events and community space.
- Partnerships: City of West Valley City, UTA, West Valley City Economic Development/Redevelopment Agency, GSBS Architects, ICO Management
- Surrounding Land Use: Mixed use retail, commercial, office, retail, public/ civic space, high to very high density residential, hotel, green space.

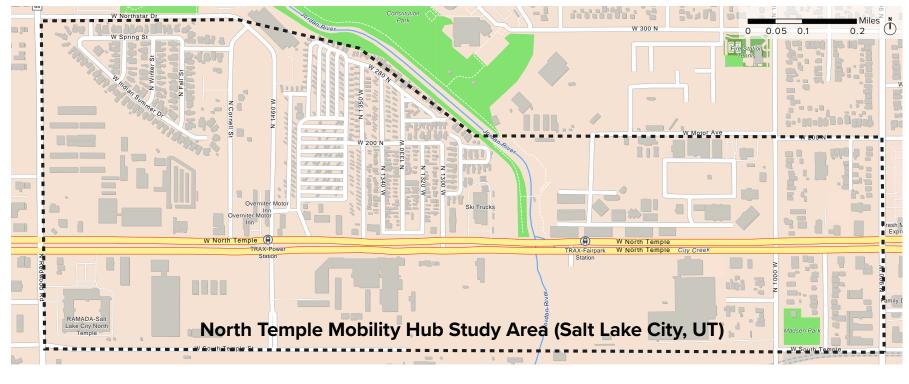


Source: Fairbourne Business Park (top), Wadman Corporation (bottom)

Scale Comparison

The footprints of built mobility hubs, as well as the study area for the North Temple Mobility Hub, are shown in **Map 2-1**. Placing the footprints next to the North Temple study area shows how a mobility hub of a similar scale could fit.

Map 2-1 North Temple Mobility Hub Case Study Scale Comparison





Montpelier Transit Center



Silver Spring Library



Julia Carson Transit Center

NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Community and Stakeholder Engagement Process

Community and Stakeholder Engagement Process

Three Phases of Engagement Overview

To gather community members' histories, experiences, and input on any future construction, the North Temple Mobility Hub team created an equitable community engagement plan aimed toward hearing from people who live and work nearby, and from those who might be less likely to engage in a standard City government planning process. This engagement plan worked to overcome mistrust from a history of historic disinvestment in the Westside (see **Westside Neighborhoods** in **Chapter 1**), providing accessibility and transparency throughout the engagement process.

With these goals in mind, the project team together with the Westside-based community group NeighborWorks led a three-phase community engagement process. The community's ideas and desires heard throughout this process informed each move made throughout the course of the project, and will continue to inform the City's role in the Mobility Hub as it evolves.



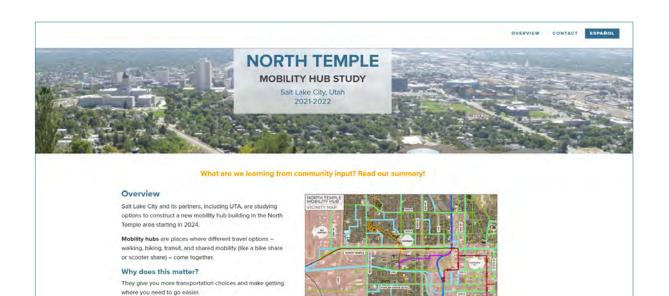
A yard sign advertising the community survey placed along North Temple in August, 2021

The three phases of engagement included:

- Phase One: Understanding Needs and Setting Values
 - Survey asking residents about connection to the study area, transportation habits, and desired amenities
 - » Survey made available online and in print format in English and Spanish
 - » Intercept surveys throughout the study area
 - » Tabling events at local community centers and events
 - Development of a project website that hosted a link to the online survey, project background, and information about upcoming engagement events

• Phase Two: Evaluating Options

- » Mobility Hub game developed to understand which hub programming and amenities were most important to the community
- » Game used for two community events in accessible neighborhood locations
 - Backman Elementary School and Mestizo Coffeehouse, and virtually



North Temple Mobility Hub website homepage

the country

with the Community Advisory (CAC) Committee and the Technical Advisory Committee (TAC)

Want to know more? Check out other mobility hubs around

Phase Three: Exploring Solutions

- » Survey asking residents to identify design styles and features they would like to see in a mobility hub
- Survey made available online in English and Spanish
- » SLC FB Live event for Westside Transportation Projects

Each phase of this process included a variety of outreach opportunities that allowed the project team to hear from a mix of community members. This included online public surveys, a public project website, in-person focus groups, door-to-door conversations, and tabling and community events. Summarized findings from these surveys and events are shared on the following pages, and a more complete review of each phase of the engagement process is included in the **Appendix**.

Partnership with NeighborWorks

NeighborWorks has been a key partner in making the outreach for the North Temple Mobility Hub project a success. This local organization helped spearhead multiple outreach events, including:

- A Community Advisory Committee comprised of neighborhood representatives, local businesses, nonprofits, and other community leaders;
- Door-to-door conversations at apartment complexes with NeighborWorks YouthWorks team;
- Three in-person focus groups in December 2021 (one at Mestizo Coffeehouse and two at Backman Elementary);
- Ongoing online and virtual engagement, including surveys and a virtual town hall event held in October, 2021.



Community workshop hosted at Backman Elementary School on December 14th, 2021.

Phase One

Phase One of the community engagement process involved an online public survey, open from July-September 2021, that received 250 responses, and an intercept survey, completed by YouthWorks, that collected responses from 52 businesses and residents. The questions asked aimed to understand participant relationship to the study area, their transportation habits, and desired community improvements that could be incorporated into the mobility hub.



Yard signs advertising the community survey placed along North Temple in August, 2021

Key Survey Takeaways



Most respondents (nearly 80%) access the study area via singleoccupancy vehicle (SOV)



While most respondents access the study area by driving, enhanced opportunities for multimodal travel are strongly supported

Once within the study area, the majority of respondents walk as their primary mode

The most requested amenities for a mobility hub were related to food options, demonstrating a lack of available food options in the area



Respondents expressed concerns about crime and safety in the study area throughout the survey

Key Intercept Survey Takeaways



Mobility challenges:

Too many transit stops, causing longer trips and delays*



Crossing rail lines and overpasses



Desired improvements included:

Increased support for walking, bicycling, and other modes to access transit



More frequent bus stops are desired, despite the common comment above noting "too many transit stops"

Additional neighborhood needs include:



Outdoor recreational opportunities like parks, playgrounds, and trails

More food options like restaurants, cafes, and grocery stores

*This survey was completed before the Aug 2022 service changes. The services changes streamlined service in Fairpark and Rose Park, making transit trips faster.

Phase Two

Build Your Own Mobility Hub Game

As an effort to understand what programming and amenities are most desired by the Westside community, the project team developed a "Build Your Own Mobility Hub" game. This game had participants select from a mix of transit-related, communitybased, and development-based programming options, as well as the mobility options they would like to see, and other desired amenities. After using this activity at three inperson focus groups (with printed copies of the game) and virtually with Advisory Committees, the project team was able to see what features and programming options stood out as being most important to the community. While the initial intent was to gather feedback based on the selected game pieces, it was the conversations afterward where participants were able to share their own unique ideas for the Mobility Hub that provided the most informative insights. Some key comments heard during the discussions included:

66 We want a communication hub where you happen to catch the bus.

We don't want this space to be only/all about the buses, we want it to be about people.

The Hub should be a place where many people want to visit, a third place, with eyes on the street. **99**





Mobility Hub Board Game in process at a community workshop hosted at Mestizo Coffeehouse in November 2021



Phase Three

To understand what the community desires in the look, feel, and function of a mobility hub in the North Temple study area, the project team developed an online survey that showed a variety of styles, amenities, and experiences possible for the future mobility hub. This survey was open from December 2021-February 2022, and received 189 total responses.



Word Cloud created from responses to the question, "What three word describe aspects of the culture and community of the surrounding Westside neighborhoods that you want to showcase and celebrate?

Key Survey Takeaways

- 58% or respondents live, work, or live and work in the North Temple study area
- Trees and plants, specifically native plants, are very important to include based on selectable responses and "other" responses that were typed in.
- Community gardens and linear parks/ trails were most highly rated for community features/functions
- Murals and functional art are most popular amongst all demographics
- Respondents would like for North Temple to feel clean, safe, and inviting
- Respondents described the culture and community in the Westside neighborhood as colorful, diverse, artistic, with strong community/families and great food



Top Type of Open Space: Courtyard with Plants and Seating



Top Features or Functions: Linear Park/Trail



Top Art Style: Murals

Summary of Findings

Through the numerous public engagement opportunities made available to the public and community stakeholder groups, the following themes continually emerged.



NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Guiding Principles and Program Development

Guiding Principles and Program Development Introduction

Articulating a project's intended outcomes, through Guiding Principles, can establish a "north star" for the study process to support effective decision-making at multiple stages. It provides a backstop when points of conflict or competing demands arise.

Each principle is rooted in input provided by the North Temple Mobility Hub project partners and Community Advisory Committee, as well as case study research and best practices. Given the recent completion of the <u>Westside Transportation</u> <u>Equity Study</u> and its relevance to this effort, major themes of that Study are used as a framework for the Guiding Principles. The Westside Transportation Equity Study centers on three overarching goals: Meeting Needs, Making Connections, and More Equitable Communities. Within those goals, the Study collected input and identified community-determined opportunities related to four core themes:

- Engagement
- Access
- Options
- Community

The North Temple Mobility Hub Guiding Principles align with these Westside goals and core themes.

The Guiding Principles and input of community members and project partners provided the basis for a mobility hub design typology. The typology illustrates how site programming could vary depending on the dominant use of the hub.



The FrontRunner pulling up to North Temple Station. Source: Aubrey Odom-Mabey on Unsplash

Guiding Principles

Table 4-1 North Temple Mobility Hub Guiding Principles

GUIDING PRINCIPLE	INTENTION	OBJECTIVE
Responsive	The hub design reflects priorities determined by the community	 Listen to those most affected and document transparency and responsiveness Add new value that is easily recognizable to area residents and businesses Make it popular from day one
Realistic	The hub design is feasible based on a current understanding of potential partners and available resources	 Maintain clarity and honesty in the planning process Set realistic community expectations
Equitable	The hub expands people's ability to access daily needs and participate in the area's economy	 Advance public transit plans and priorities Reduce mobility barriers, particularly for accessing jobs and education Strengthen connections to the immediately adjacent transportation network and businesses and services
Versatile	The hub connects modes of transportation to offer more ways for people to get where they need to go	 Improve available non-SOV (single-occupant vehicle) trip options Create flexibility for more and new mobility options Provide the information needed for daily travel decisions
Welcoming and Easy	The hub reduces stress and adds joy for nearby residents and local commuters who use it	 Plan for all ages and abilities and families Create a welcoming space that's easy to navigate Improve the experience accessing transit and transitioning between travel modes
Healthy and Safe	The hub contributes to the community's health, safety, and quality of life	 Promote active transportation and improve traffic safety Limit air quality impacts Support broader efforts to address social challenges on North Temple Achieve multiple objectives with every decision
Climate Resilient	The hub improves the environmental health and climate resilience of the surrounding community	 Design for low-impact modes of travel and low-impact development Consider climate mitigation and adaptation strategies, including new community resources

Program Development

Mobility hub design is shaped by the priorities of nearby community members and potential future users of the hub, as well as the partners who will be involved in funding and implementation. The elements that each stakeholder group identified as key to a successful mobility hub vary, but are also complementary and in many cases overlap. These key elements can be reflected in a mobility hub program in a variety of ways. The design typologies on the following pages illustrate what varying combinations could look like in a future mobility hub.

What Would a Successful Mobility Hub Look Like to You?

BUSINESS/LAND OWNERS

- Integrative to existing site operations and blends in with the neighborhood
- Adds value to employees and businesses
- Maximizes space and has goals that are translatable to company-wide decisions.

COMMUNITY

- Provides many and varied services to the community
- Includes flexible, active, and multipurpose community gathering spaces
- Incorporates sustainable infrastructure and green spaces

CITY

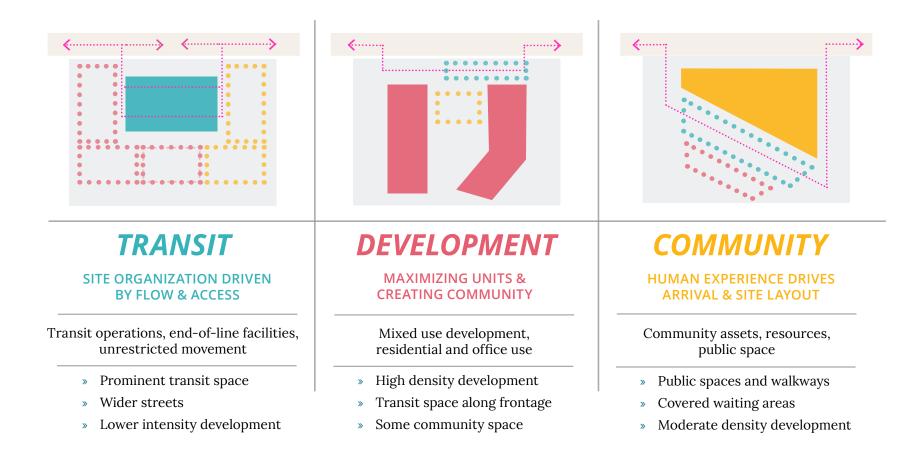
- Accommodates bus services and transit employees
- Becomes a landmark/node for the community and people coming into the City
- Seamlessly-integrated amenities

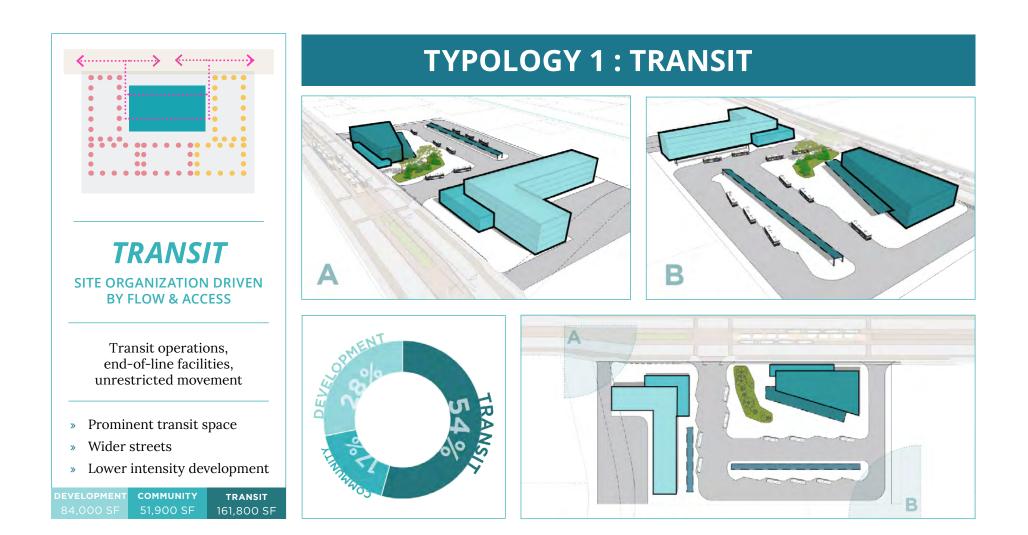
UTA

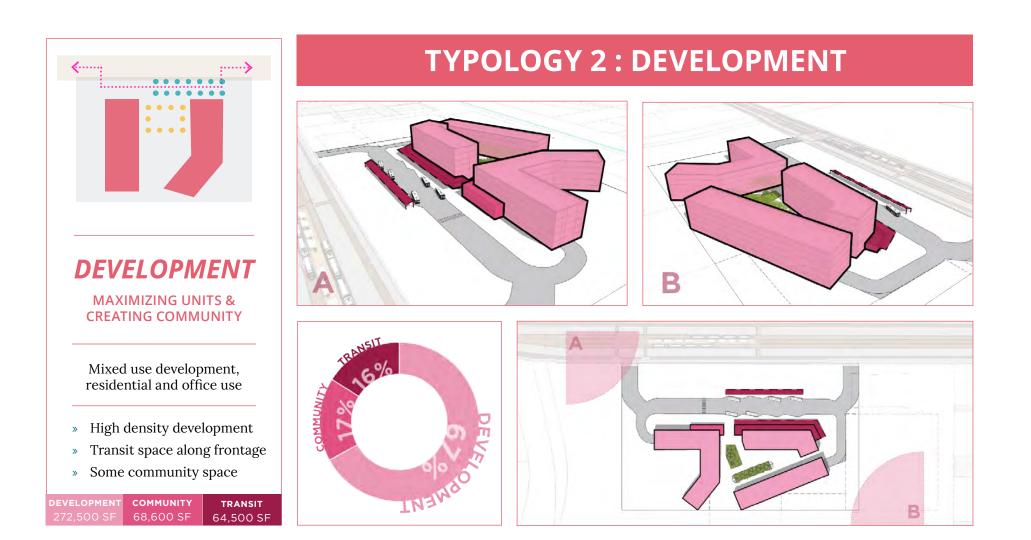
- Provides layover services (bus operator restrooms, break rooms, etc.) and adequate bus parking
- Accommodates bus maneuvers and access points to existing bus routes
- Potential for electric charging infrastructure
- Avoid large surface parking at front of house

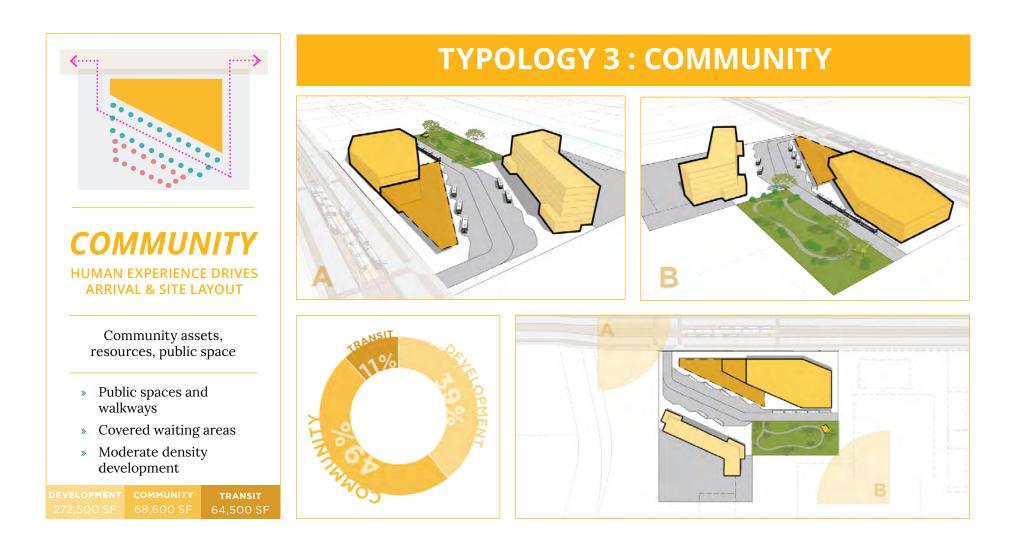
Design Typologies

The following typologies represent different styles of concept that could be applied to the North Temple Mobility Hub. The three types do not represent an all or nothing scenarios. Each type of hub would incorporate all three elements (transit operations, mixed use development, and community uses), but each type differs in which element is prioritized. The graphic below summarizes how each type varies in terms of organization, uses, and attributes.











Site Suitability

Site Suitability

Introduction

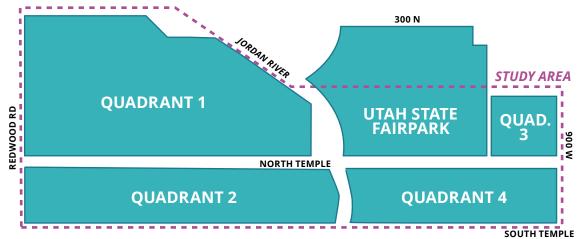
Potential sites for a mobility hub should fit within the natural patterns of people's lives and the transportation system, and should be reasonable candidates for development.

The site suitability analysis examines the intersection of transportation supply (infrastructure and services) and demand (trip making and travel patterns) in relation to community context and development opportunities. Through this lens, the project team determined subareas of the study area most suited for clustering transportation choices and also most suited for capturing market opportunities for new investment and private development.

Four complementary analyses provide a multi-layered view of the North Temple Corridor:

- 1. Existing Conditions and Inventory
- 2. Urban Design Analysis
- 3. Transportation Analysis
- 4. Market/Real Estate Analysis

The combined results of these mapping analyses are summarized in this chapter as opportunities and challenges, followed by an explanation of the Market/Real Estate Analysis. For additional details and analysis maps, see the **Appendix**. When taken together, the combined analyses show that Mobility Hub siting considerations vary by subarea along the corridor. The project team identified four distinct quadrants in addition to the Utah State Fairpark property, which is considered a subarea of its own, given the large parcel size and single land owner overseeing redevelopment of the site. The unique characteristics of each subarea are illustrated on the following pages. These characteristics provide key insights into the type of mobility hub development that would best suit the area and what investments would need to be made to address challenges. For example, an area with no community assets may warrant a Community-focused hub to fill that gap, while an area with no complementary land uses may be best served with a Development-focused hub. Areas with barriers to access would need more substantial investment in the first and last mile biking and walking network than areas with high connectivity.

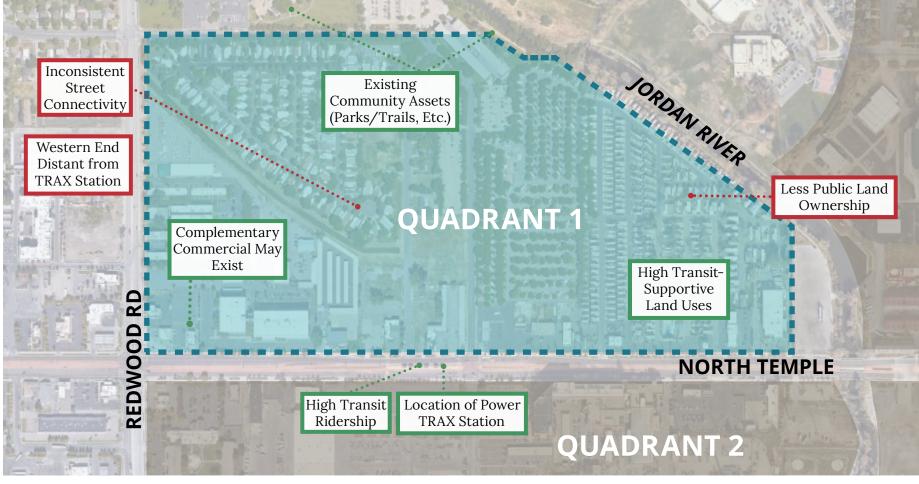


Map 5-1 Study Area Quadrants

Quadrant 1 (Northwest, to the Jordan River)

Opportunities and challenges relative to other quadrants, based on existing infrastructure at time of study

Map 5-2 Quadrant 1 Opportunities and Challenges



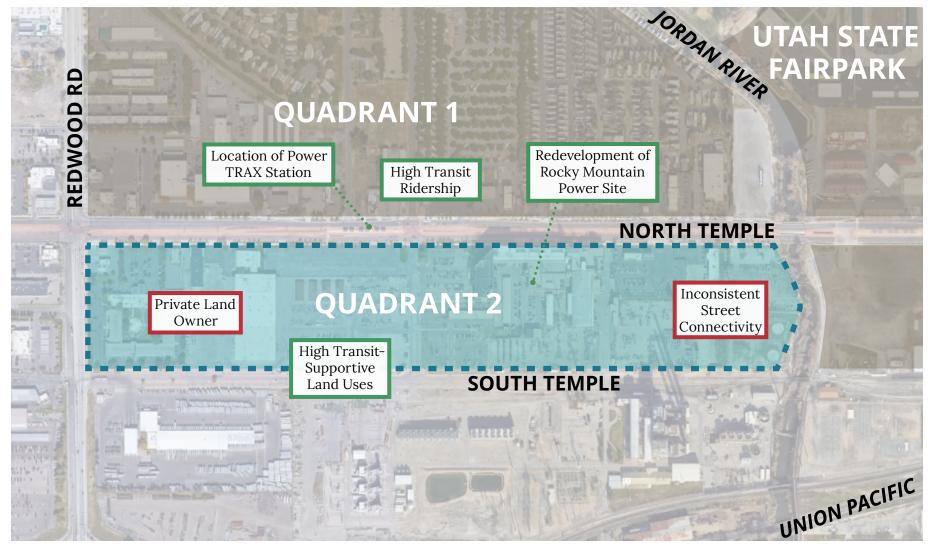
Opportunities

Challenges

Quadrant 2 (Southwest, to the Jordan River)

Opportunities and challenges relative to other quadrants, based on existing infrastructure at time of study

Map 5-3 Quadrant 2 Opportunities and Challenges



Opportunities

Challenges

Quadrant 3 (Northeast, east of the Fairpark Site)

Opportunities and challenges relative to other quadrants, based on existing infrastructure at time of study

Map 5-4 Quadrant 3 Opportunities and Challenges



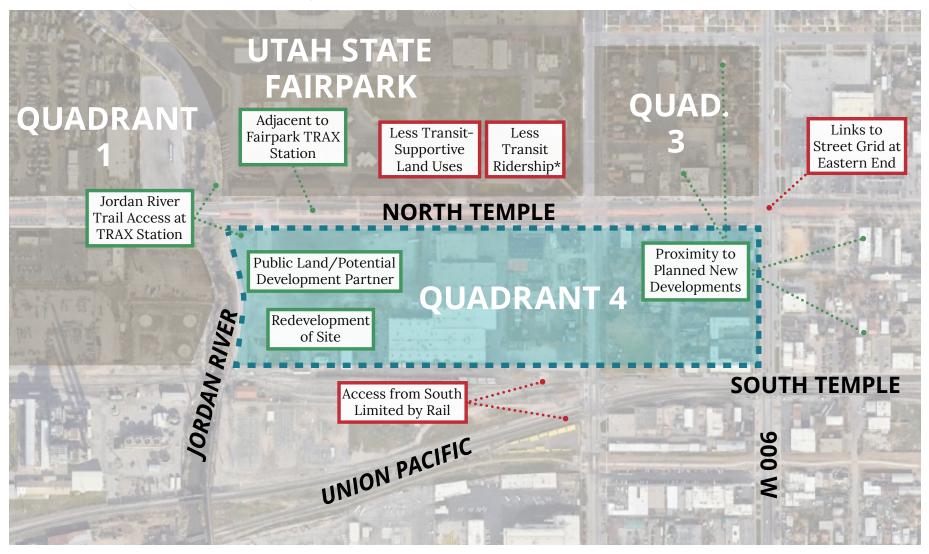
Opportunities — Challenges

*Fewer people boarding and exiting UTA TRAX trains and buses relative to other quadrants

Quadrant 4 (Southwest, to the Jordan River)

Opportunities and challenges relative to other quadrants, based on existing infrastructure at time of study

Map 5-5 Quadrant 4 Opportunities and Challenges



Opportunities

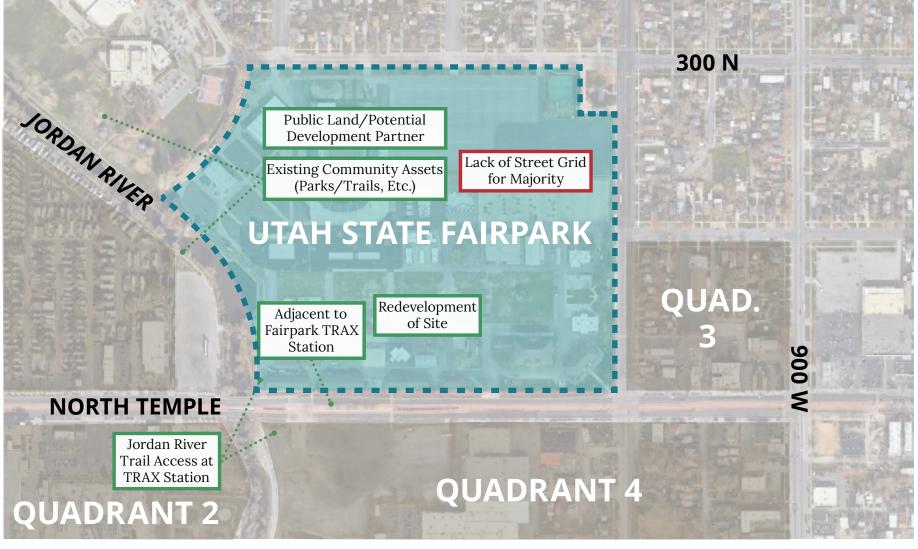
Challenges

*Fewer people boarding and exiting UTA TRAX trains and buses relative to other quadrants

Utah State Fairpark Site (Center North, west of the Jordan River)

Opportunities and challenges relative to other quadrants, based on existing infrastructure at time of study

Map 5-6 Utah State Fairpark Opportunities and Challenges



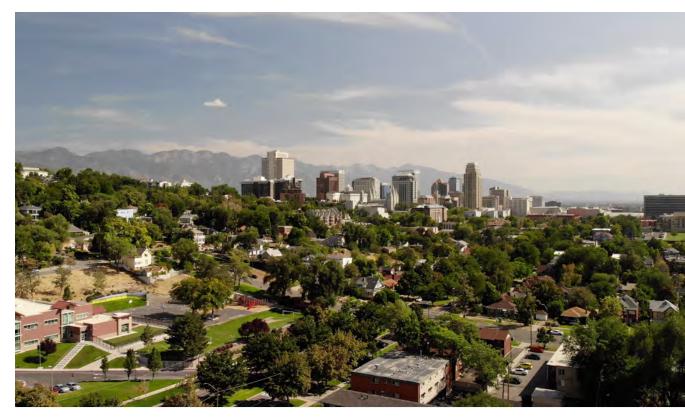
----- Challenges

Real Estate and Market Analysis

The project team conducted a real estate and market analysis to determine the feasibility of financing and developing a mobility hub at candidate sites. This final step in the suitability analysis examined seven locations deemed most suitable for hub development based on the existing conditions, transportation and urban design analyses. Because these locations are privately-owned, the precise sites are not disclosed.

For each location, the analysis evaluated:

- Population
- Employees
- Market Value per Acre
- Land Value per Acre
- Building Value per Square Foot
- Proximity to New Development



A view of downtown Salt Lake City

The results of this analysis provided a snapshot of the relative feasibility of development at each location. This provided the key insights needed to:

- narrow the list of candidate locations
- include market feasibility as a criteria for determining a preferred site in the site selection process that follows, and
- inform financing options and potential development partners as the project moves toward implementation.

NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Site Selection and Concept Design

Park

Siting a Mobility Hub

The process for determining the best site for a mobility hub is different in every community. The mobility hub's dual role as both a transportation connector and a vibrant community destination, creates unique challenges for siting, such as:

Location: it is critical to find the right site to serve mobility goals, but in some cases, land availability, cost, and land use zoning also have to align.

Constrained right-of-ways: co-locating services or re-orienting space within the public right-of-way can be difficult when the street is already crowded.

Existing policies: providing amenities and a vibrant mix of uses may be limited by land use policies and development regulations.

Capacity limitations: transit and other mobility services at a hub need to have the capacity and operational characteristics to serve the new users that a hub is designed to attract. **Meaningful engagement:** community outreach has to overcome the hurdle of introducing a new concept that may offer new technologies, new services, and new ways of making choices in order to gain meaningful input that will drive the success of the project.

Known unknowns: with mobility services evolving and more change expected, hubs have to be designed for seamless adaptation in an uncertain future.

Successfully siting a mobility hub is contingent on identifying feasible locations for mobility hub investment that are also appropriately located to support transportation choice and advance locallydetermined goals.



A bike lane in Salt Lake City's Westside neighborhoods

Site Selection

The Site Suitability analysis yielded five candidate locations for a mobility hub on the North Temple corridor. Narrowing that list to one or more preferred sites requires a more localized assessment of opportunities and challenges. The project team identified seven site selection criteria (shown at right) that align with the project's Guiding Principles, mobility hub best practices, and implementation constraints. A scoring matrix was used to assess each site and evaluate the mix of pros and cons across all options. This process resulted in a short list of preferred mobility hub sites.

Due to several factors that are outside of Salt Lake City's control, the Feasibility Study does not identify potential site locations at this time. The ultimate site selection and location for the mobility hub would depend on partnering with private property owner(s), likely during a site's development or redevelopment. Physical Characteristics

Size of site, space for buses, and existing shade.

Market Feasibility

Current ownership, land and existing structure values, need for environmental mitigation, visibility from major collectors, etc.

Transportation

Existing TRAX and trail/pathway connections, pedestrian signals, proximity to intersection, adequate circulation.

🔰 Future Compatibility

Proximity to destinations and connection to existing plans.

Parking

Existing on-site parking and distance to the nearest dedicated parking lot/ structure.

Land Use and Urban Form

Ability to include mixed-use development and/or create a community gateway or placemaking investment, existing dining, retail, or other daily services nearby, compatibility with uses on adjacent properties.

Cumulative Factors

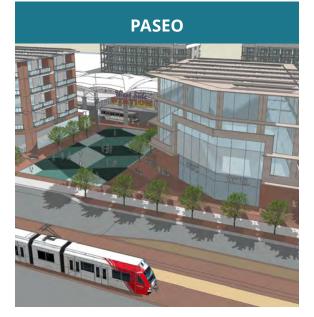
Readiness of the site to support transit operations, and how readily the site's existing programming and land use could be removed, relocated, or integrated into the mobility hub.

Concept Overview

The site selection process demonstrated that there is opportunity within the study area to create mobility hub concepts that are customized to the North Temple corridor and that reflect the priorities of this project and the individuals living in or near the study area. While these are not final designs, the Study offers three concepts that show how the many elements of a mobility hub could fit together and how the community's priorities for the hub could be reflected within a future design. Each concept demonstrates a different arrangement of transit, development, and community-focused uses, with each concept including active bus bays as well as layover bus bays at a site nearby. Several variations on community-focused spaces include varying levels of green space, plazas, event spaces, and both indoor and outdoor gathering spaces. The concepts are intended to explore these different uses and foster discussion about relationship between buildings and navigating through the surrounding mobility hub, while addressing the needs of the community and integrating the overall identity into the neighborhood to tell the community's stories. A final site has not yet been determined for this concepting phase.

PLAZA





PLAY



NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Site Selection and Concept Design

CONCEPT A: PLAZA



Plaza Mobility Hub Concept



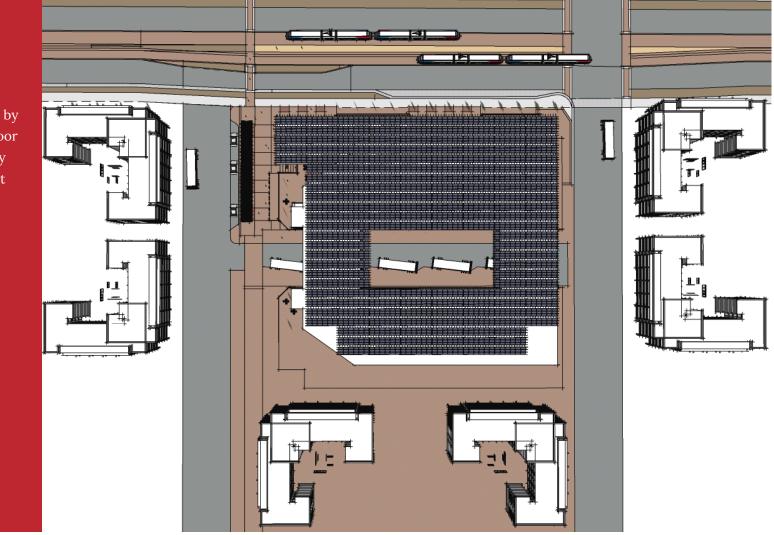
Plaza Mobility Hub Concept

ACREAGE:

3.69 acres

DESCRIPTION:

Corner plaza formed by four-story ground floor retail and community uses including transit station with housing and/or office above.





Plaza Mobility Hub Concept

Vertical Mixed-Use Building:

Ground floor transit, retail and community uses with office/residential above

Adjacent Development:

Multi-family residential anticipated, with ground floor retail

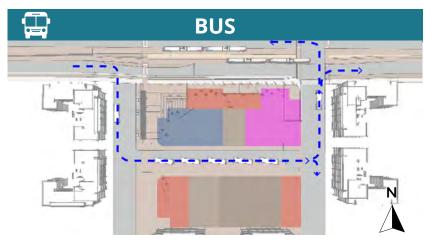
Transit Services Details:

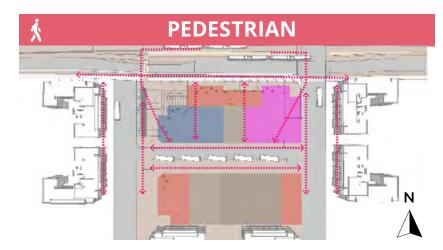
Large transit and trip making center adjacent to bus stops. Multiple rideshare drop-off and pick-up locations.

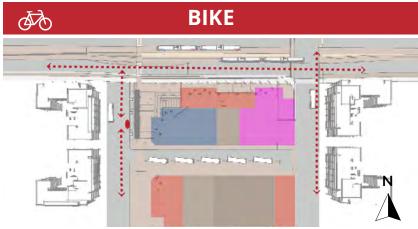


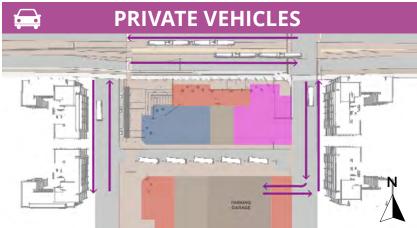
SITE CIRCULATION

Buses enter from the west through the one-way bus stop/layover area and exit at the signalized intersection to the east of the transit hub. Bikes and private vehicles utilize both entrances and can access a parking garage by the eastern corner of the mobility hub. Pedestrians can circulate around the building on all sides to access the bus bays via continuous sidewalk infrastructure as well as access the bus bays by entering the building.



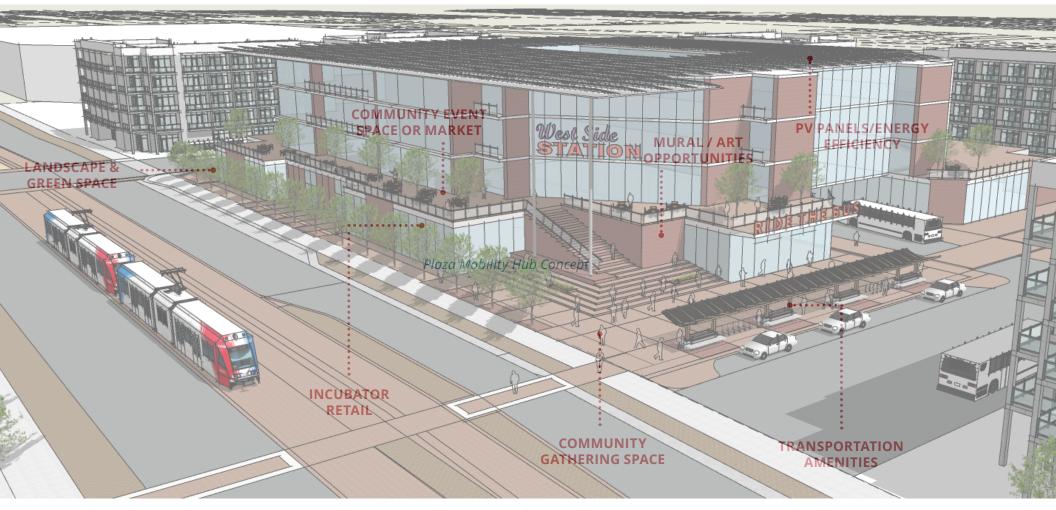


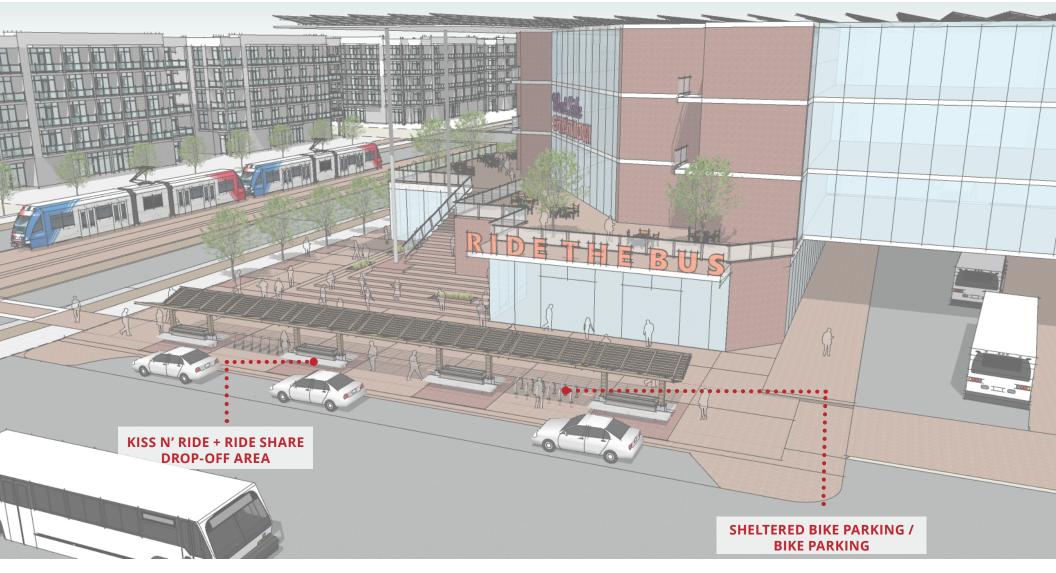




PLACEMAKING OPPORTUNITIES

The plaza can be seen prominently from the west. The stairs that open towards the entrance of the mobility hub provide areas to sit and socialize. The upper level of the plaza is an inviting place for patrons of the mobility hub as well as employees or residents of the building. Community event space and incubator retail space activate the street-level. Opportunities for public art are available around the site.





Plaza Mobility Hub Concept

NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Site Selection and Concept Design

CONCEPT B: PASEO



Paseo Mobility Hub Concept



Paseo Mobility Hub Concept

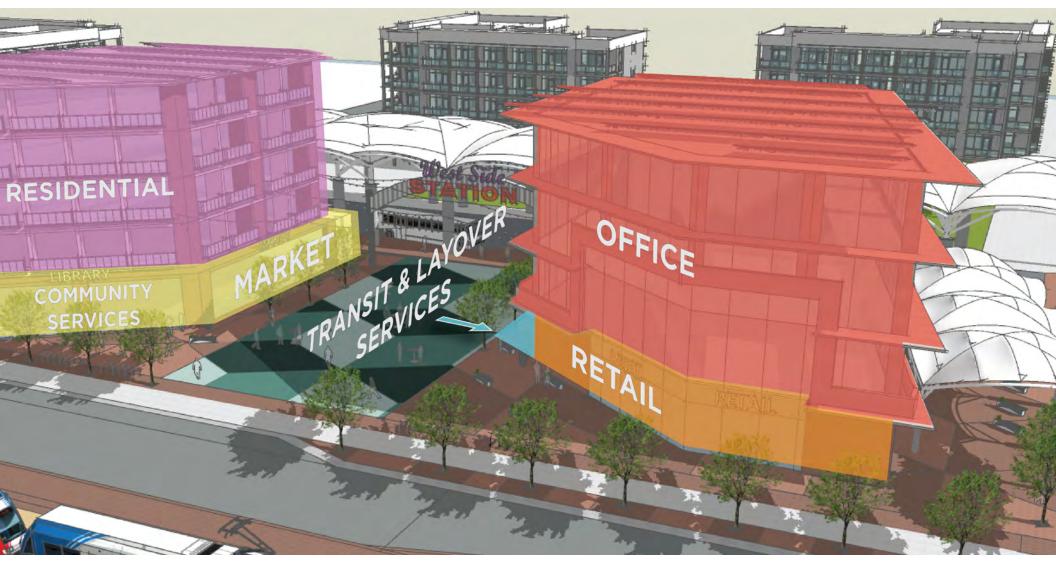
ACREAGE:

2.58 acres

DESCRIPTION:

Mid-block paseo forms sense of arrival to Westside station. There is supported land use on either side to provide activating ground floor retail and transit station with office and housing above.





Paseo Mobility Hub Concept

Vertical Mixed-Use:

The Paseo is framed by engaging ground floor retail with four-stories of office and a large community space below four stories of residential.

Adjacent Development:

Multifamily residential is anticipated

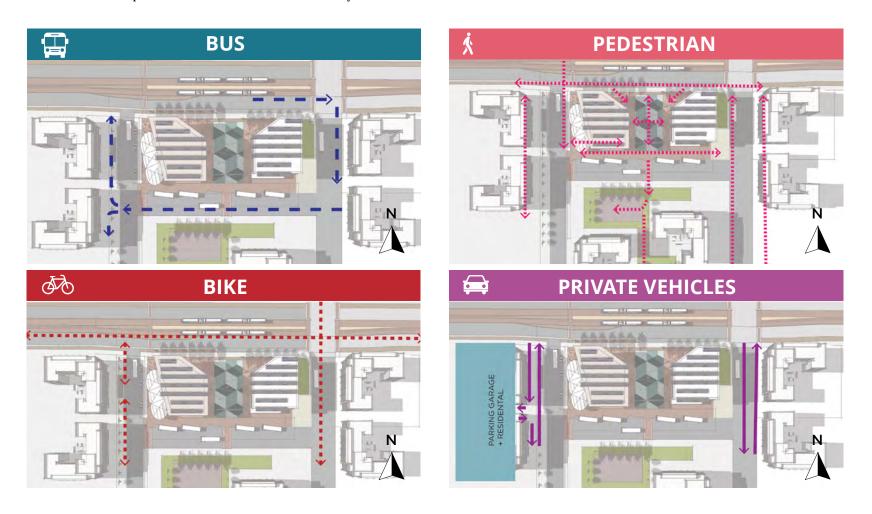
Transit Services:

Covered transit and rideshare waiting areas, transit and trip making center, and UTA employee rest area.



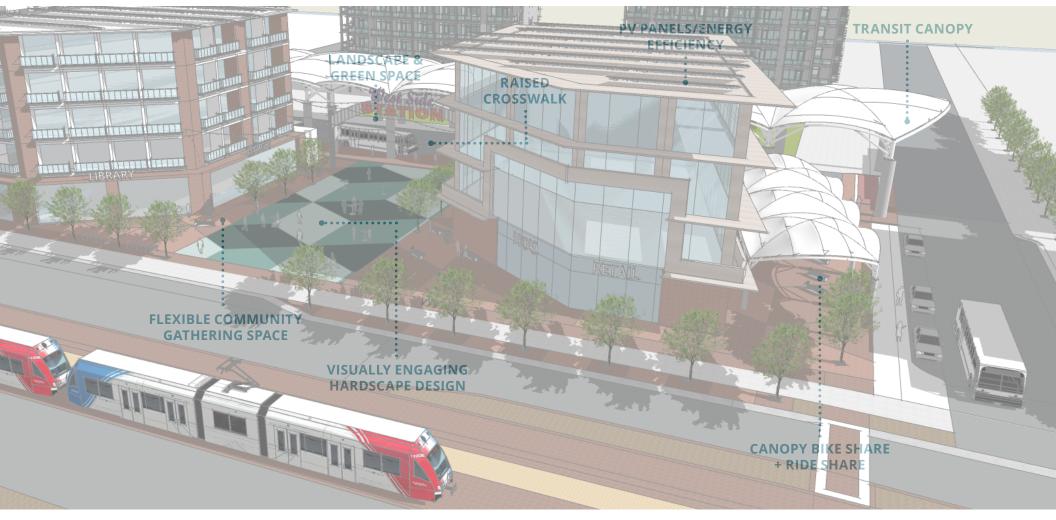
SITE CIRCULATION

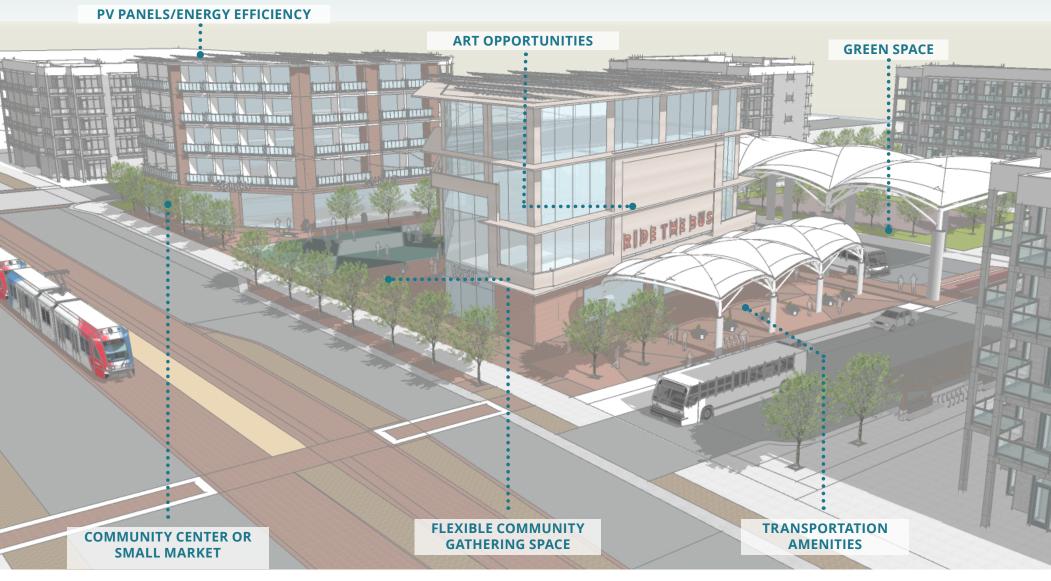
Buses enter the site at a signalized intersection and enter the transit canopy through a one-way entrance. Personal vehicles circulate by the streets to the east and the west. Pedestrians enter primarily through the paseo, and the streets provide comfortable routes for bicyclists.



PLACEMAKING OPPORTUNITIES

The central paseo is a flexible space for community gatherings and events, a place to meet or wait for the bus. The hardscape, lighting, and gateway sign of the paseo provide a visually-striking entrance to both the buildings and the transit area. There is potential for a pocket park south of the transit canopy and opportunities for murals and public art





Paseo Mobility Hub Concept

NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Site Selection and Concept Design

CONCEPT C: PLAY



Play Mobility Hub Concept

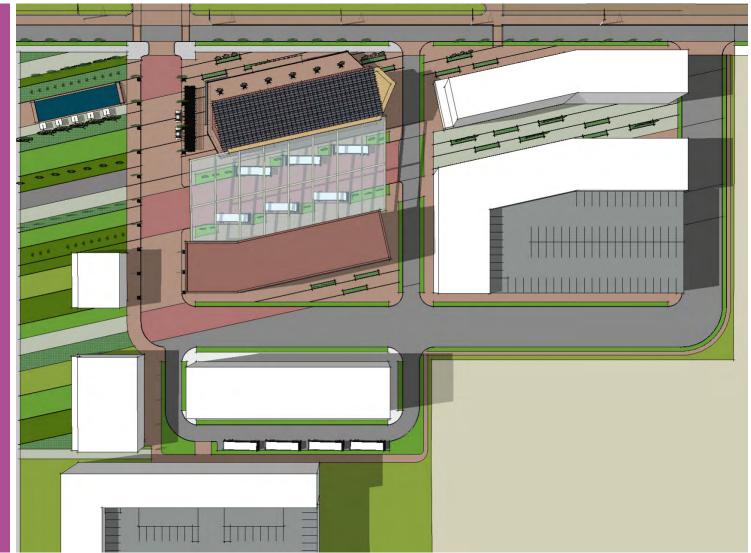


Play Mobility Hub Concept

ACREAGE: 2.60 acres

DESCRIPTION:

Centered around access to nearby green space and trails. The mobility hub is a pedestrian-first zone formed by formed by six-story buildings with ground floor retail and community uses including transit station with housing and/or office above.





Play Mobility Hub Concept

Vertical Mixed-Use Building:

Ground floor transit, retail and community uses with office/ residential above

Adjacent Development:

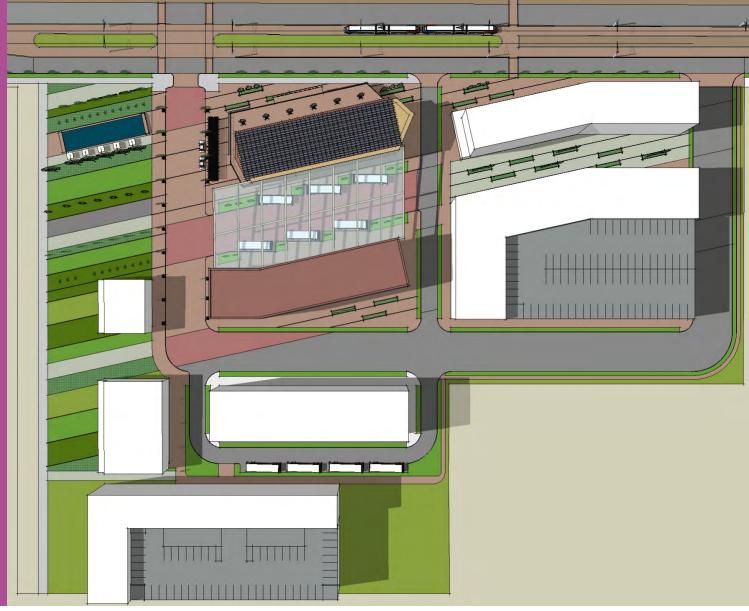
Multi-family residential anticipated, with ground floor retail, and office flex.

Green Space:

Public park & access to nearby trails. Room for community garden and gathering areas.

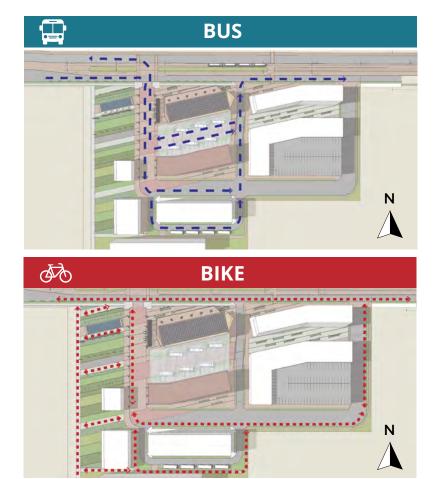
Transit Services Details:

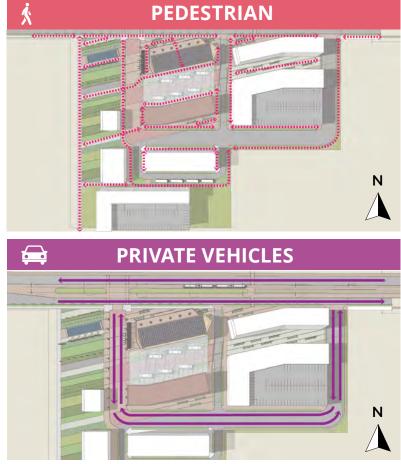
Covered bus bays and waiting area. Break room for UTA employees.



SITE CIRCULATION

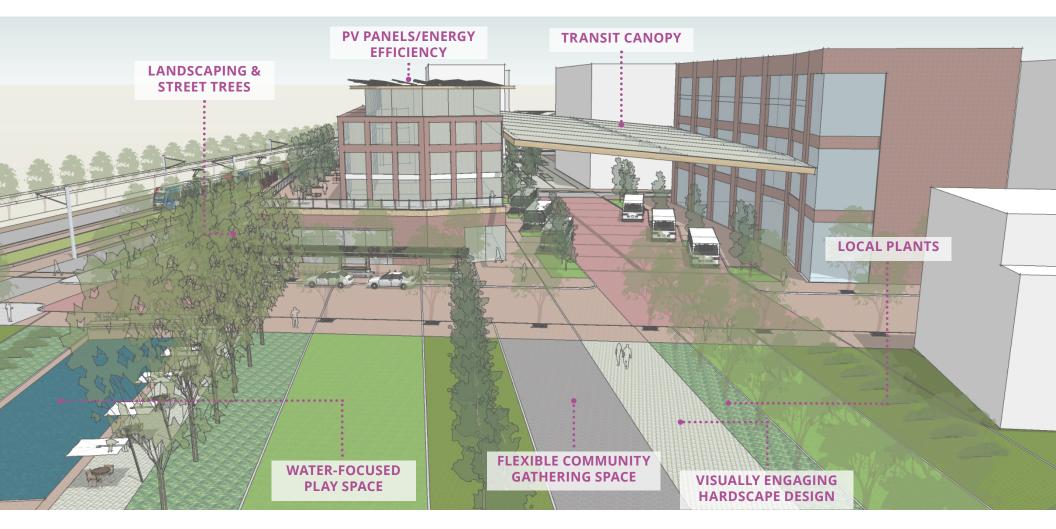
Buses enter the site and the bus stop/layover area from either the east or west. A transit-only road is provided through the center of the site. Private vehicles circulate around the site to adjacent buildings and potential parking areas. Shared streets circle the transit hub and ample pathways are provided for pedestrians and bicyclists.

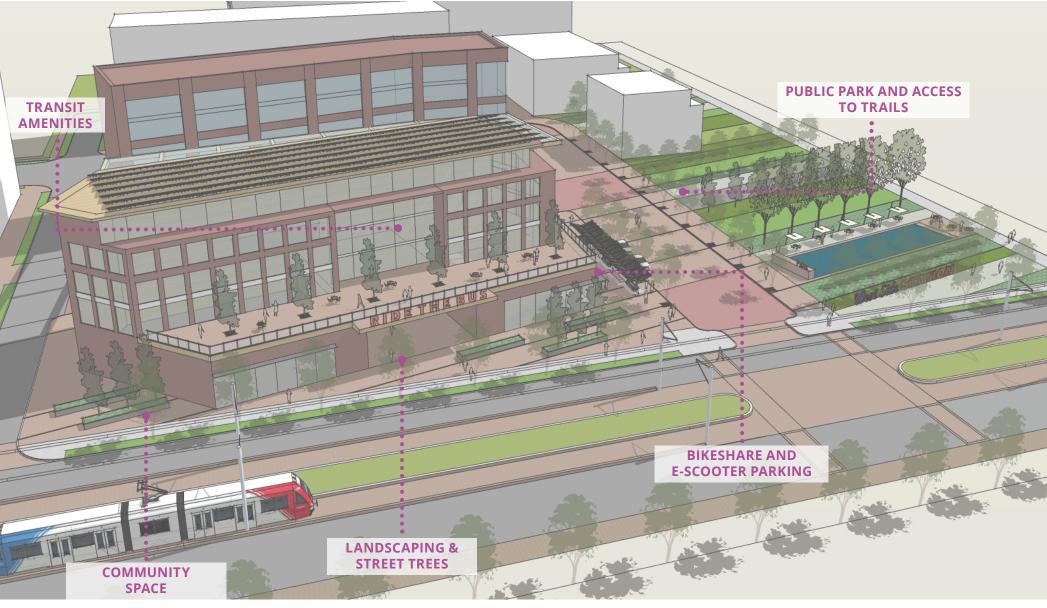




PLACEMAKING OPPORTUNITIES

This concept brings much-needed public green space to the North Temple corridor. This space is enhanced through connection to nearby trails and offers flexible space for play and community gathering. Small plazas are located around the transit hub and provide space for public art and seating.





Play Mobility Hub Concept

NORTH TEMPLE MOBILITY HUB FEASIBILITY STUDY

Moving Forward

Moving Forward Creating the North Temple Mobility Hub

The North Temple Mobility Hub will likely be built in phases, starting with small improvements to the selected site, working toward more significant efforts. These larger and more complex construction projects, such as the concept designs included in the Concept Design chapter, will not begin until the City has confirmed a development partner and financing plan. In the meantime, community engagement will continue. While this phase of the project aimed to understand the needs for the facility, goals for the project, and an understanding of what a project like this might look like, there is still more to be done to turn this vision into reality.



Downtown Salt Lake City

Remaining Process

The process shown on this page indicates what has been completed, and what still needs to take place to begin constructing the North Temple Mobility Hub.

We are here —

Feasibility Study	 Identify priority sites Identify desired programming and urban design character Document community-supported elements Conduct Fatal flaw analysis and high-level budgeting
Negotiation	 Analyze and refine relationships between the hub and surrounding property Identify and evaluate financial tools Evaluate partnership structures (City purchase, public-private partnership, long-term lease, etc.) Formalizes community or governmental partnerships Craft agreements and conduct due diligence Establish tentative hub programming
Design	 Finalize hub programming Engage the public in the design within the framework of the previous negotiation phase Refine programming and develop detailed design Bid documents and phasing
Construction	Begin construction

