Salt Lake City

Utah, United States
Developing The Cultural Core

b|a

Bryonn Architecture Ltd.
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Architecture + Urban Design

CRD is a non-profit research initiative at Bryonn
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Bryonn Architecture Ltd specializes in master-planning,
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Contents

Salt Lake City

Salt Lake city is the capital of Utah and is home to a modern urban setting of neighborhoods and a city thriving with businesses, convention centers, cultural attractions, and performing arts. It was founded in 1847 by the Mormon pioneers. Due to its proximity to the great salt lake it was called the Salt Lake City. Salt Lake's skyline started to undergo a notable change when the Salt Palace convention center was rebuilt along with new office towers and new courts complex. This was followed by the building of new urban blocks and restored building facades in 1990s. The thriving convention business and success of the 2002 Olympic games has injected notable growth in its economy and urban environment. (utah.com, 2013).At present Salt Lake city stands as a major tourist and business attraction with diverse layers of history and culture.

Image courtesy : wikipedia. 2007
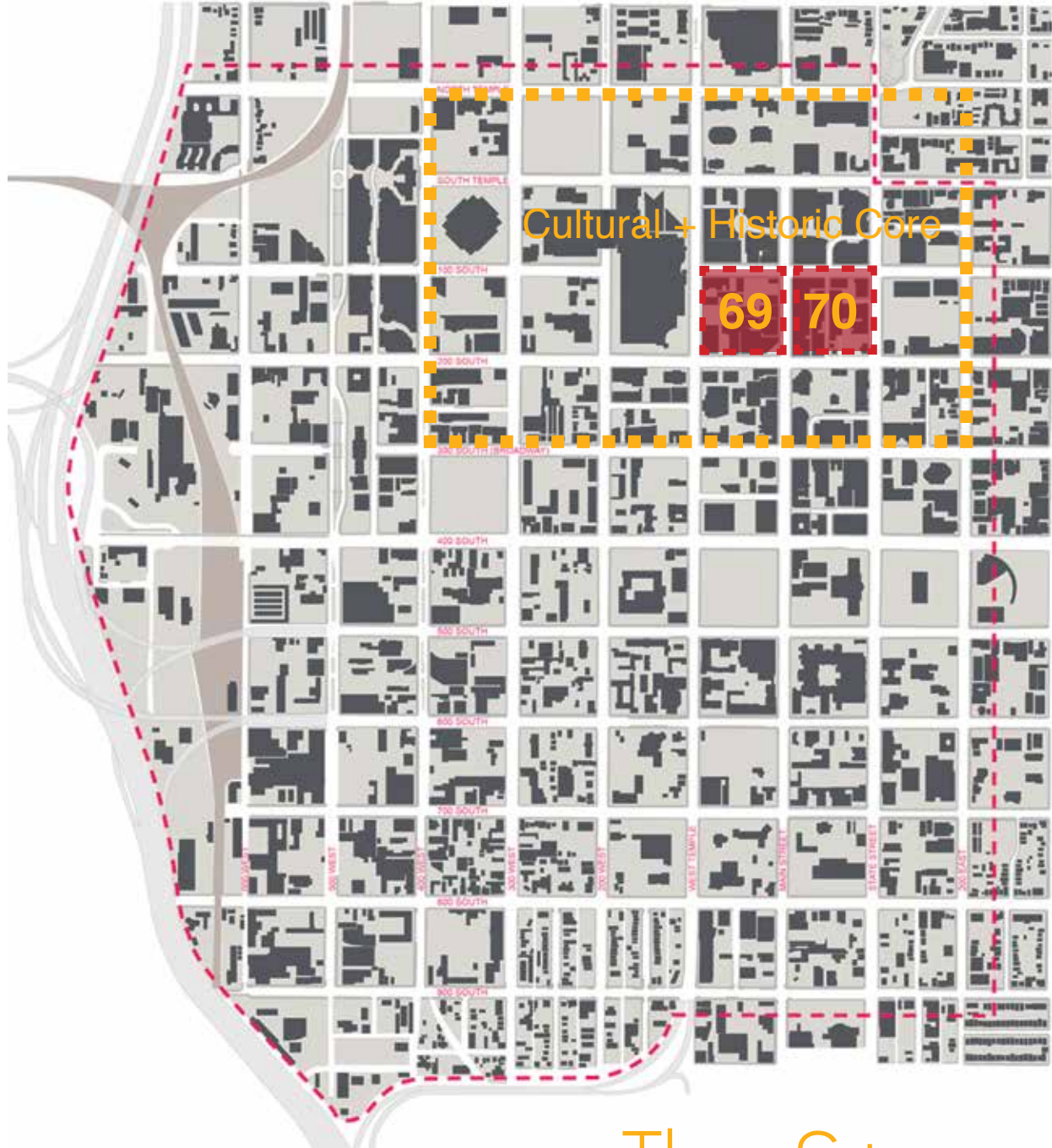
Cultural + Historic Core

69 70

The Site

01 | Functional Considerations

Evolution and Historic Analysis

Salt Lake City was founded in 1847 by the Mormon pioneers. Due to its proximity to the great salt lake it was called the Salt Lake City. Salt Lake's skyline started to undergo a notable change when the Salt Palace convention center was rebuilt along with new office towers and new courts complex. This was followed by the building of new urban blocks and restored building facades in 1990s. The thriving convention business and success of the 2002 Olympic games has injected notable growth in its economy and urban environment. (utah.com, 2013).

Contextual Analysis

The Salt Lake City displays a Zionic design with biblical principles with a grid pattern of planning with its central core comprising of thriving business and convention centers. The central core is predominantly mixed use in nature and the urban fabric is an assembly of historic, cultural, offices and retail venues evolved over the years through periodic layers of urban development. While it offers a vibrant mixed use it faces the challenge to maintain a strong interconnectivity and interaction between these activities in certain parts. With the growth of commerce and development of office and business towers, it has created large parking garage blocks in the fabric. (sixtynineseventy.com, 2013)

Salt Lake City, Utah 1920
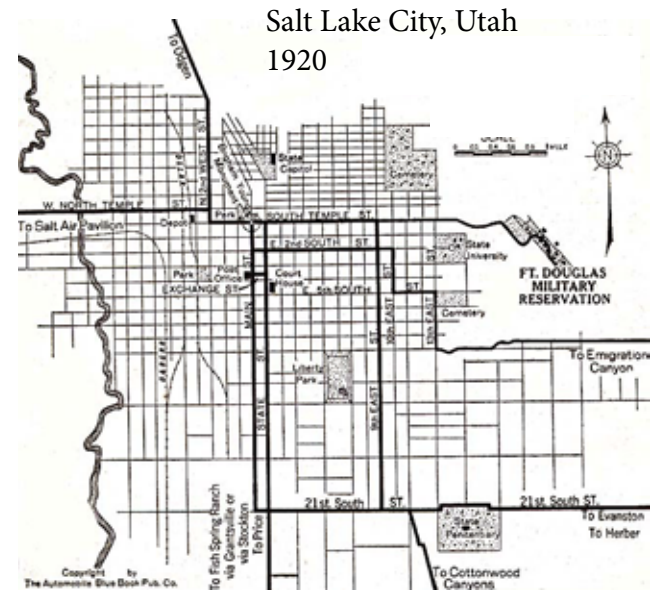
The layout and it's transformation

Salt Lake City Layout is clear assembly of wide streets, large blocks, public squares and separation of uses. The grid originates at the South corner of Temple Square Downtown. As laid out in the Salt Lake City's version of Plat of Zion the focus of the city was on the main Temple Square. The surrounding streets were named for directions. As the commercial district of downtown, Salt Lake City grew through mid and late 1800s. The Plat of Zion blocks were further subdivided into mid-block streets with a new range of opportunities for planning and development.(sixtynineseventy.com)

People, Market and Authorities

The economy of Utah is mixed economy covering industries like tourism, mining, agriculture, manufacturing, information technology, finance, and petroleum. According to the 2007 State New Economy Index Utah is ranked the top state in nation for economic dynamism that states a high degree of knowledge based, innovation driven and entrepreneurial economy. The 2012 State New Economy Index has ranked Utah as 8th best Tech-Based economies (State New economy Index, 2014). The Kauffman Foundation, State New Economy Index (2011) has ranked Utah number 1 in economic dynamism.

In late 19th century Utah attracted a large number of immigrants for the mining sector and till date mining activities play a major role in Utah's economy. With the dynamic development of business sector Utah continues to attract foreign workforce and tourism. Utah Authorities pose a supportive platform for rapid development of businesses and corporations. Financial incentives are provided by the Utah Governor's Office of Economic Development for business relocation and expansion.

Economic Development and Transformation.

The economy has been service-oriented with the steel, mining and rail road operations in the past and now the major industries are government, trade, transportation, utilities, and professional and business services.

In 2007 the Salt Lake Chamber and Downtown Alliance have revealed the plans to develop two-block sections of downtown south to be the arts hub with major renovations to existing theaters and establishing prominence of galleries and artists. 'Utah typically grows more rapidly than the nation after recessions, and this pattern is taking hold in the current recovery. For the U.S., employment grew 0.9% in 2011, compared to 2.3% for Utah. While employment increased during 2011, Utah's unemployment rate improved, falling to 7.7%.' (edcutah, 2013)

Future Transformations in the City

There are number of projects planned that project a strong impact on the cultural and economic scenario of the city.

The Utah Performing Arts Centre planned in the Seventy Block (a 2500 seat, first-run Broadway show theatre)

Jessie Eccles Quinney Center for Dance: A New Home for Ballet West

Utah Theatre to be the home for Utah Film and Media Arts Centre

Development of Regent Street as a retail corridor

'Downtown Rising is a movement to enhance Utah's capital city through planned investment and regional leadership which includes eight signature projects: an expanded rail network, a green loop of trails, walkways and paths around downtown, new housing, a World Trade Center Utah, a new performing arts center, a public market, and the region's flagship sports and fitness center.' (slcgov, 2013)

Changing Patterns of Population Geography and Employment Geography.

Utah has many informal neighborhoods with some demographic differences. The western front is occupied by the working class and its affordable nature has encouraged more professionals to move in. The eastern front has high property values because of the rail road being built in the western half. In 2005 it was found that the downtown was experiencing rapid growth and the number of residential districts in central zone increased by 80% since 1995. The city has recently seen a number of apartment towers and loft renovations that are encouraging dense living.

The employment geography tends to maintain an upward graph with Utah's world exports being increased by 37% from 2010 to 2011(edcutah, 2013) despite the economic climate. Banks and business services are clustered in the central zone with good transport links. The central zone hosts a strong mixed use employment pattern in retail, art, entertainment, local and international business firms.

Population influx and tourism in the Span of 10 years.

Population in 2012: 189,314 (100% urban, 0% rural). Population change since 2000: +4.2% . The 2010 Census places Utah's population growth at 24 percent from 2000, ranking Utah third among states in the rate of population growth. 40% of Utah's population growth is due to net migration and poses a rising demand for housing, infrastructure, recreation and public amenities (city-data.com, 2013). Much of Utah's Population lives in MPO boundaries, the state's growth is concentrated in urban areas.

Infrastructure and Transport Policies

The transportation policies and development is managed by Utah Department Of Transportation ( ) and is engaged with preparing the Long Range Transportation Plan (LRP) while the Metropolitan Authorities prepare the Regional Transportation Plans (RTPs). The transit system is operated by UTA. The 2040 Unified Transportation Plan is managed by Cache Metropolitan Planning Organization, the Wasatch front regional Council, the Mountainland association of Governments, and the Dixie Metropolitan Planning Organization to develop a state of the art infrastructure across the states in UTAH and meet the rising demands due to population growth. Utah has focused on multi-modal means of transportation to meet the growing demand in the last 20 years. With the current rate of population and economic growth, The state and MPO transportation plans believe that multi-modal transportation system can enhance the commuter experience and connect different sectors and activities of the city effectively. for Utah, a multi-modal transportation system would include:

• Expanded road system
• Expanded bus system
• Expanded light rail system
• Commuter rail, intercity rail, and interstate passenger rail
• Bus rapid transit
• Bicycle and pedestrian networks
• Carpool travel
• Passenger and freight inter-modal connections (Utah's Unified Transportation Plan booklet 2013)

Inference

Salt Lake City has been undergoing a growth in its world exposure, talent, and economy because of its positive outlook and a rich cultural heritage and events. Although the Salt Lake City has a very rational assembly of urban forms as compared to some other mixed use developments across the globe, at present, the physical assembly of urban elements do not entirely connect the dynamic work and cultural activities of the city. The urban interventions in the city need to underpin this growing exposure, tourism and economic development and tie its cultural activities heritage into one fabric. By tying its activities together its culture and economy a major pivot to derive more tourism and a holistic celebration of its prestigious events and culture.
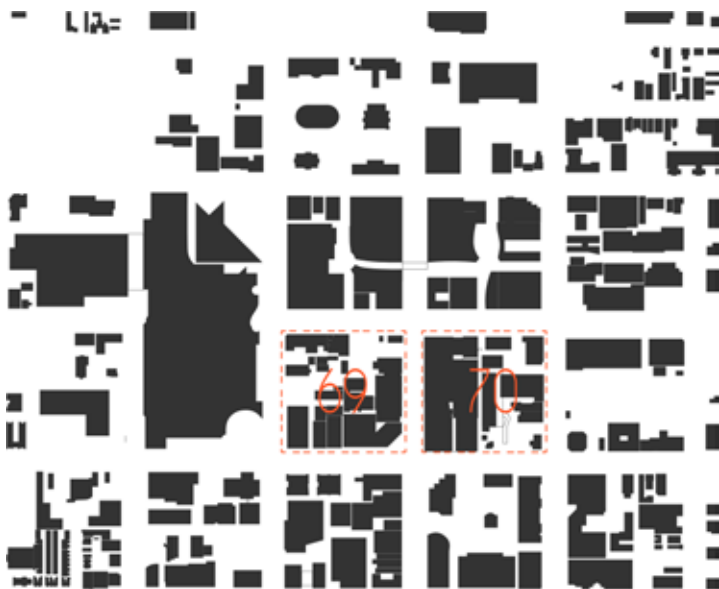
02 | Zoning and Land-use Pattern

Land Use Layout

Foot Print Layout

Mixed Use General
Retail Mixed Use
Cultural
Public Spaces/Corridors
Green Space

Inference
The Salt lake city core has a vibrant assembly of mixed use activities with a potential of strengthening it through the connecting corridors. The square grid pattern of blocks poses the challenge to channelize the random pedestrian movement into an informed and interactive circuit of activities. The individual blocks have some unused spaces which can be connected to the movement corridors bringing continuity and emphasizing the permeability of the individual blocks. The City Creek block has a strong pedestrian environment which can be visually and physically connected to the 69 block. There is a need to achieve similar pedestrian friendly connections into the neighboring blocks to achieve a homogeneous connectivity between the cultural, retail, offices and hospitality buildings.

CONNECTIONS THAT NEED TO BE STRENGTHENED TO CONNECT THE SEGREGATED ACTIVITIES ACROSS THE BLOCKS

EXISTING CULTURAL BUILDINGS

PROPOSED CULTURAL BUILDINGS

EXISTING RETAIL BUILDINGS

1. Radisson Hotel
1. Church History Museum
2. Salt Lake Tabernacle (home of the Mormon Tabernacle Choir)
3. Assembly Hall
4. Abravanel Hall
5. Utah Museum of Contemporary Art (UMOCA)
6. Jessie Eccles Quinney Center for Dance: A New Home for Ballet West
7. Capitol Theatre
8. Utah Theatre (future home of Utah Film and Media Arts Center)
9. Utah Performing Arts Center
10. Rose Wagner Performing Arts Center
11. Off Broadway Theatre Inc.
12. Gallivan Center Outdoor Performance Stage
13. Broadway Cinema Theaters (Salt Lake Film Society)
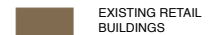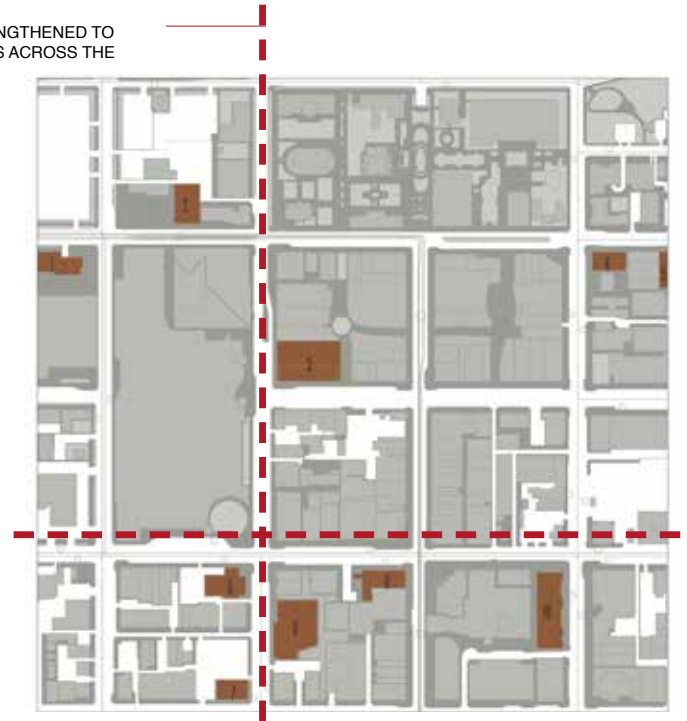
1. Radisson Hotel
2. Salt Lake City Plaza Hotel at Temple Square
3. Salt Lake Marriot Downtown at City Creek
4. Alta Club
5. Carlton Hotel
6. Shilo Inn Suites Hotel
7. Peery Hotel
8. Hilton Salt Lake City Center
9. Hotel Monaco
10. Salt Lake City Marriott City Center
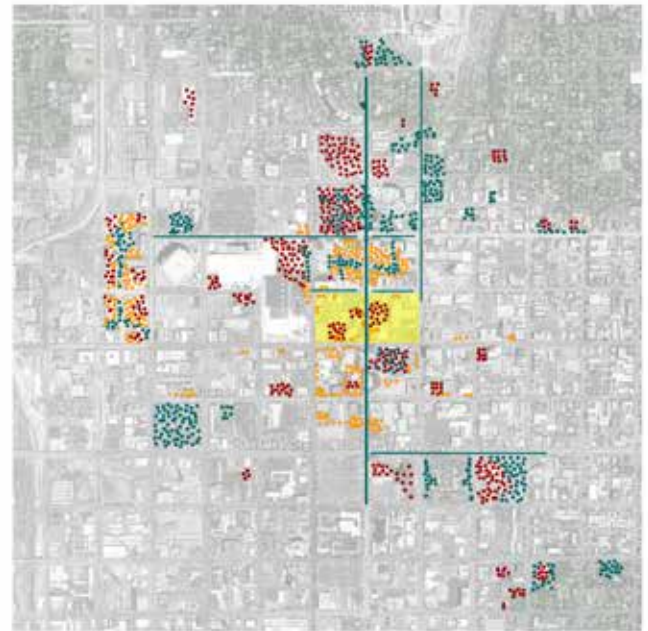
03 | Movement and Transport

Utah's transport infrastructure:
 Salt Lake City lies at the convergence of two cross country freeways; The l-15 running north-south and l-80
Utah's major infrastructure changes came with the advent of l-15 freeway reconstruction and the launch of TRAX a $312 million light rail system connecting north south.

Utah's mass transit, operated by Utah Transit Authority includes bus system, light rail and commuter rail line. Airport is located 4 miles west of downtown connected with bus routes and light rail

Salt Lake City has one of the largest commuting population in the United States. According to a 2011 U.S. News analysis, amongst the 5 U.S. cities with the best combination of public transportation investment, ridership, and safety, Salt Lake City has been ranked second in the United Sates.(edcutah, 2013)

Mapping The Pedstrian Activity

Primary and Secondary Arteries Connecting The Pedestrian Activities

- Cultural and Religious Activity Spaces
- Mixed Use Retail Activity Spaces
- Public Open Spaces/ Parks
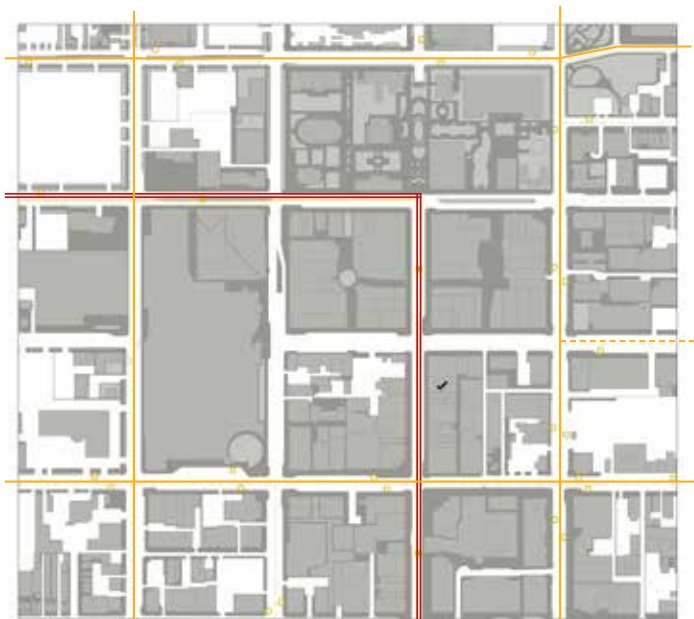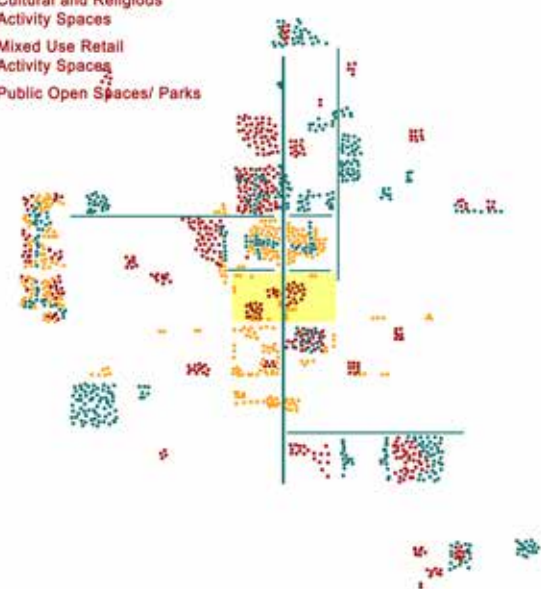
(Image Courtesy : SixtynineSeventy.com, 2013)

BIKE LANE — BUS ROUTE - - - BUS STOP ○ LIGHT RAIL — LIGHT RAIL STOP ●

Pedestrian Permeability and Movement

Legend:
- Mixed Use General
- Pedestrian Movement/ Direction
- Bus Lane
- Zone With Least Permeability
- Green Space
- Points of Pedestrian entry in public buildings/spaces
- Public Spaces/ Corridors

Points of mass pedestrian spill over

Legend:
- Points of Mass Pedestrian Spill Over through Bus Stops/ Car Parks
- Points of Pedestrian Entry into Public Buildings/Spaces
- Main Vehicular Arteries
- Bus Lanes
- Green Spaces
- Public Space/Corridors

10

Transport and Nodes

Transition between Transport and Pedestrian

Legend:

- Important transport and Pedestrian intersections
- Mixed Use General
- Retail Mixed Use
- Cultural
- Pedestrian Corridors
- Green Space
- Bus Lane
- Bus Stops
- Light Rail
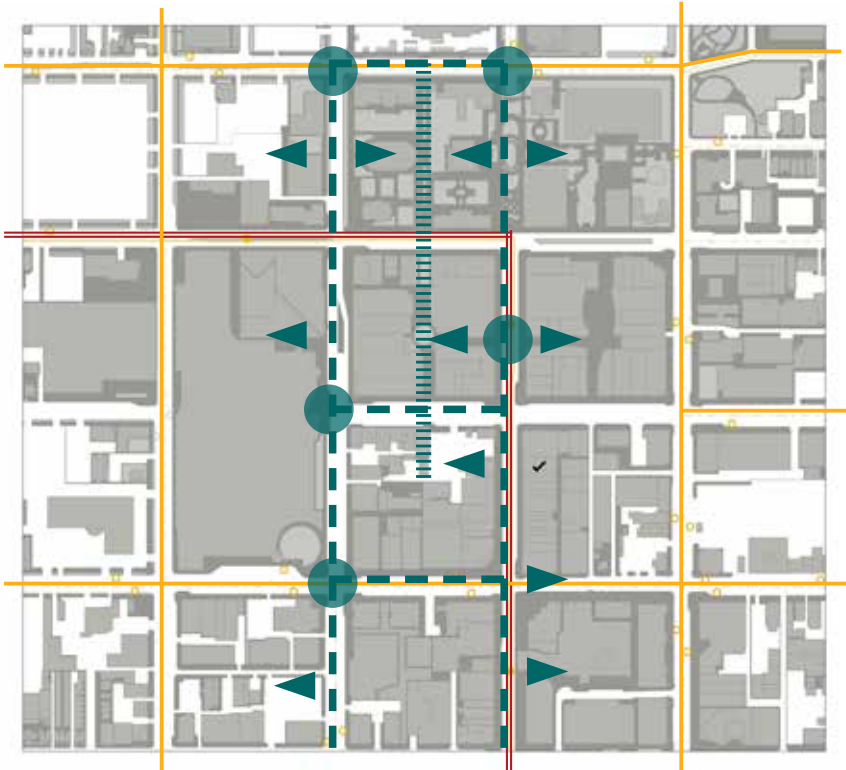
The Green nodes indicate the public and transport interactions that need to be emphasized with a physical intervention to tie the corridors together.

The Green dashed lines indicate the corridors that need to establish continuity for pedestrians with interventions that are interactive and informative.

Quality of back streets and its visual connection with main streets to promote safety, violence free environment.
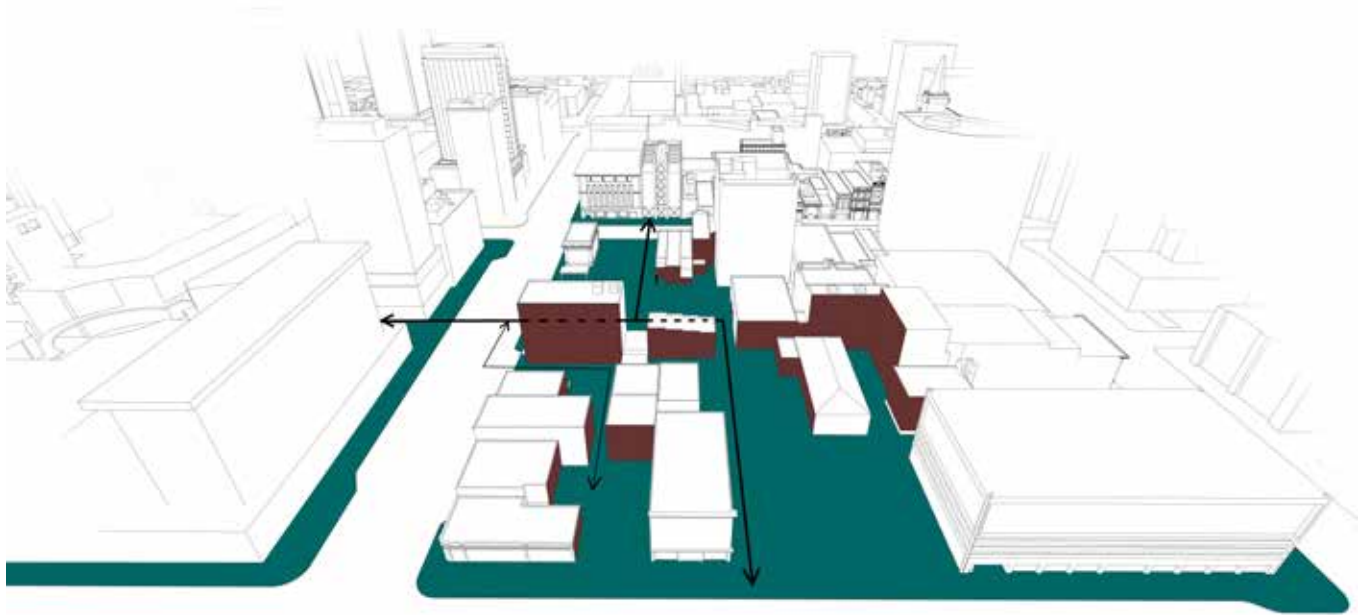
The square grid plots of Salt lake city display unused spaces and pockets creating unpleasant backyards with street facing buildings. These spaces are more hazardous, since on one side they offer permeability from the street and on the other create uncertainty because of unassigned functions

The built forms do not co-relate with the outdoor spaces creating an introvert assembly of activities that lack interaction and readability.
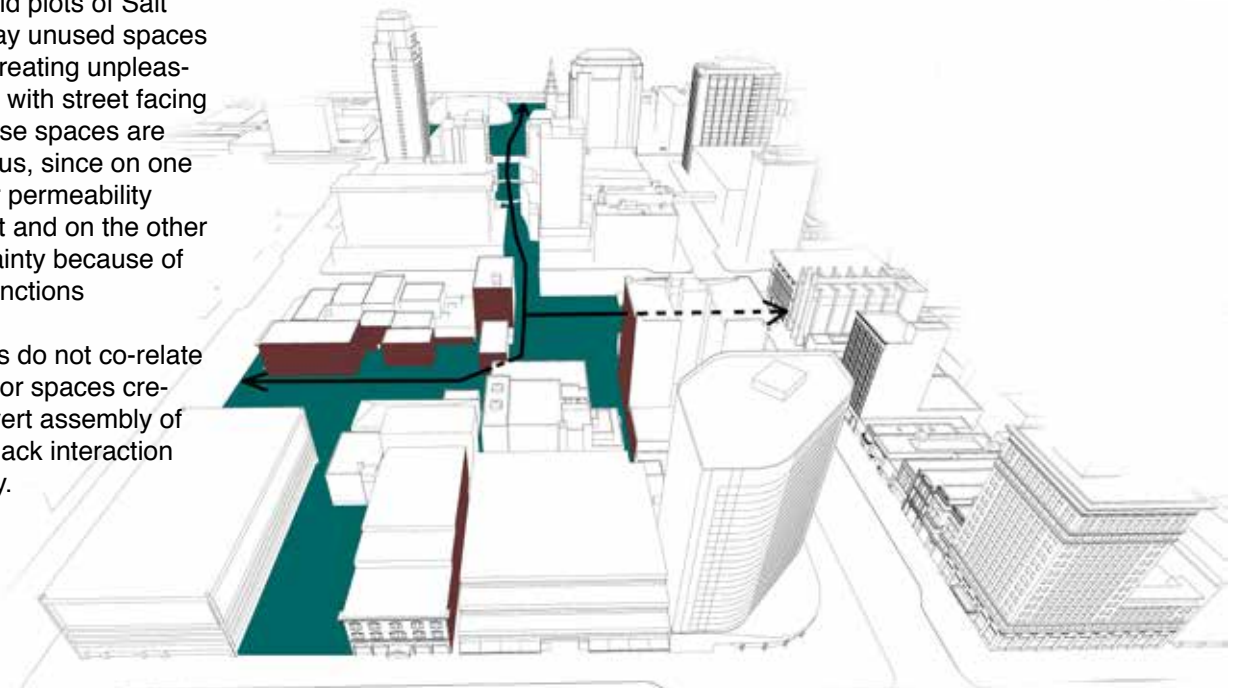
04 I Built-form analysis, streetscape and neighborhoods

Mapping The Architectural Grammar & Permeability Of Streets
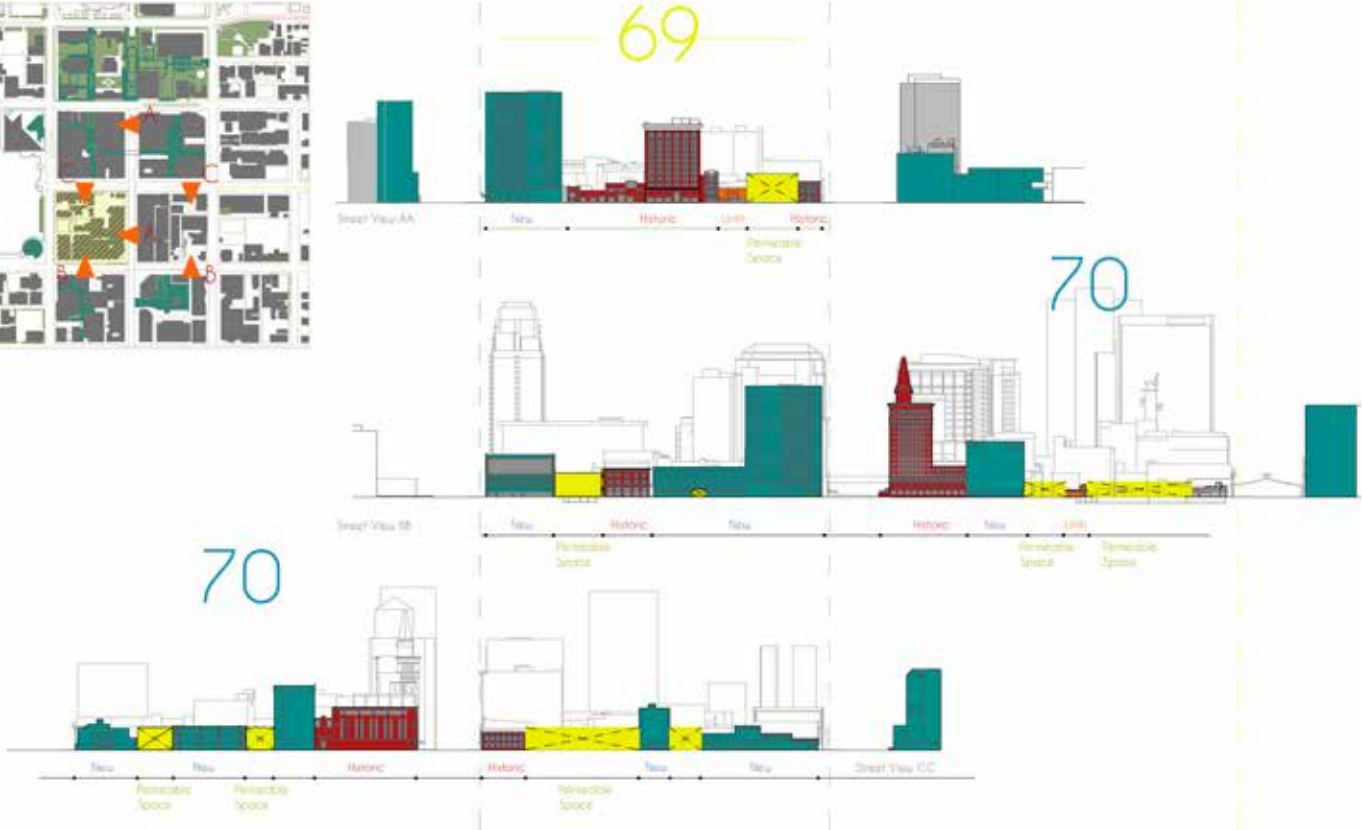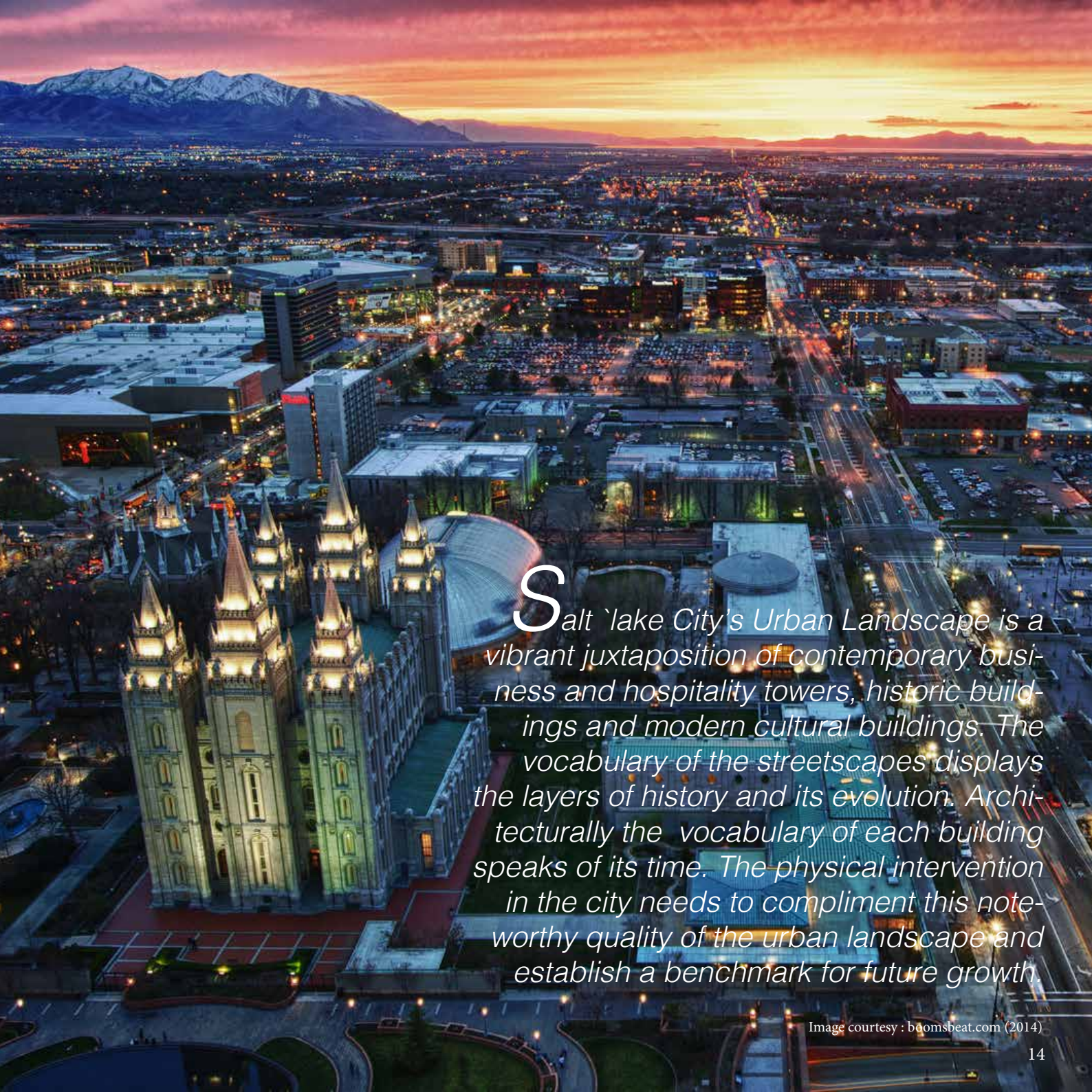
Salt `lake City's Urban Landscape is a vibrant juxtaposition of contemporary business and hospitality towers, historic buildings and modern cultural buildings. The vocabulary of the streetscapes displays the layers of history and its evolution. Architecturally the vocabulary of each building speaks of its time. The physical intervention in the city needs to compliment this noteworthy quality of the urban landscape and establish a benchmark for future growth.

05 | Cultural attractions and Tourism

Salt Lake City's center is a cultural core housing over 100 major cultural and art organizations. Tourism has increased in the Salt Lake City since the 2002 Olympic Winter Games and many hotels and restaurants were built for the event. 75% of Utah's visitors came from the Western U.S. In 2010, 5.0 million recreation visits occurred at Utah's seven national monuments, two national recreation areas, and one national historic site. The Utah Arts Council represents more than 400 organizations for performing, visual and literary arts. (edcutah, 2013.)

According to '2011 Downtown Alliance Research Report.', the most popular reason for visiting downtown Salt Lake was dining at 63%. Shopping was the second most-mentioned reason for visiting downtown at 54%, and 47% said they had visited for religious services and/or events. Performance arts and community festivals were the other most frequently cited activities. During the research 'When asked what the biggest motivators for coming to downtown Salt Lake would be (open-ended), 19% indicated arts & entertainment, including theatre, concerts, festivals, and events. Church and religious events were mentioned 14% of the time, dining/restaurants, and shopping 12% of the time.' The Strategic recommendations also state that ' Utah's younger demographic of 18-44 is more likely to enjoy downtown dining, nightlife, shopping and other downtown events and attractions. Create messaging and a persona that appeals to this demographic and persuades them that coming downtown for entertainment is the thing to do.'

Types of Museums as per 2013 Museum Survey
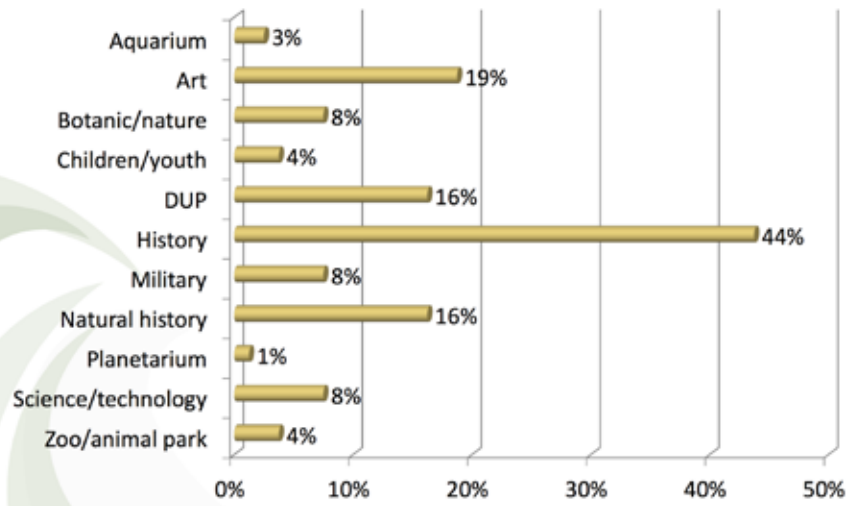
Graph from : Utah Division of Arts & Museums Office of Museum Services, 2013

'Throughout Utah, most cities and towns have Mormon heritage sites. It is common to find historic tabernacles, chapels, or mercantile cooperative buildings that are still utilized'(Utah Office of Tourism, 2014).' three city blocks in downtown Salt Lake City contain nearly 20 attractions related to Mormon pioneer history and genealogy, including the Salt Lake Temple, the Tabernacle, and the Family History Library.'(utah.com, 2013)

Salt Lake City is home to several museums
Church history Museum near temple square
The Church of Jesus Christ of Latter-day Saints (Arts and Artifacts from over two centuries)
University of Utah campus with Utah museum of fine arts and National history museum of Utah
Utah is home to several classic movie theaters.
Performing arts :
Broadway and off-Broadway performances are housed in the historic Capitol Theatre.
Salt Lake city is the home for several theatre companies and several famous broadcasts in the world like the 'Music and The Spoken Word'.
University of Utah holds the famous Ballet dance departments and Department of Modern dance.
Festivals and Cultural Events:
The Utah Arts Festival is a home to 80,000 visitors on an average each year.
Utah Pride Festival which is held in June every year.
Salt Lake City also hosts portions of The Sun-dance Film Festival
The Greek Festival at Greek Orthodox Church
(sitynineseventy.com, 2013)

The Transformation

Although Salt Lake City's historic and cultural venues are thriving with zest, the venues and events are spread out in the town with poor programmatic and visual connectivity. The connections between these cultural, historic and entertainment aspects of the city need to be strengthened to offer a holistic platform for artists, visitors and businesses. A platform that can underpin the vibrant culture and heritage of the city.

Sixty nine - Seventy block poses a strong opportunity to radiate visual and programmatic connections to the surrounding venues. The connections need to be visual as well as programmatic to create a holistic tour of the vibrant life Salt Lake City has got to offer in its prestigious venues. The Sixty nine-Seventy block has some of the most prominent buildings of cultural and historic importance. It needs to establish as core of information and events to channelize the pedestrian movement towards other venues and events.

Brief

Considerations for the Brief:
How do we establish Sixty nine-Seventy block as an introduction or a welcoming foyer to Salt Lake City, and how do the connections and events radiate from this foyer to other parts of Salt Lake City?
Do the transport and pedestrian corridors and nodes support this to be a welcoming foyer?
How do we make the spaces and their programs interactive by making a physical and programmatic intervention in the urban landscape?
How do we strengthen the pedestrian channels to connect different venues and events?
How do we treat the unused solids and voids in urban fabric to generate visual landmarks and connections?
How do we strengthen or introduce the pedestrian permeability at specific nodes to maintain the continuity of this pedestrian tour?
How would certain pedestrian corridors benefit from the growth of retail and business in these zones and vice versa?

The Proposal

Urban
Chalkboard

Cultural
Pavilion

The proposal comprises of physical intervention in the urban landscape, mainly comprising of the Cultural Pavilion as the Introduction Foyer, and stitching the cultural activities together through homogeneous landscape and interactive digital elements - The Urban Chalkboard
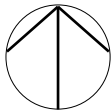
Masterplan

▔▔▔ Urban Chalk Board

║║║║║║║║║║║║║║║║║ Pedestrian Links

● Pedestrian Gathering Points
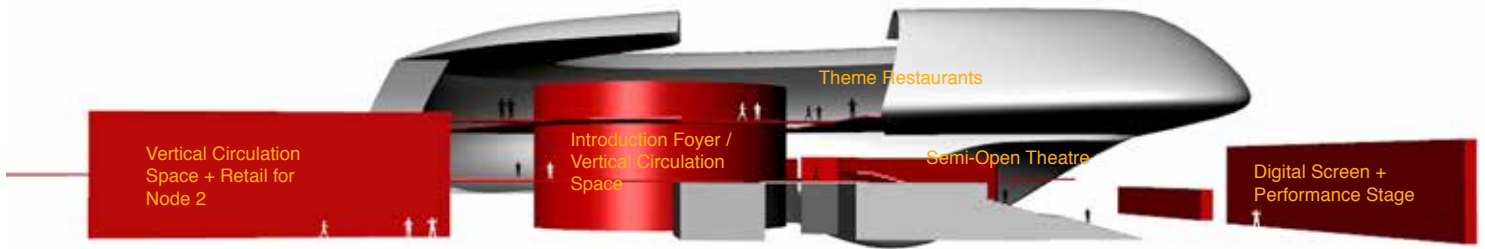
The Cultural Pavilion

The Cultural Pavilion is proposed on the 69-Plot and would be the introduction foyer for Salt Lake City's entire historic and cultural activities. With its strategic location to its surrounding context the pavilion can help radiate or congregate people for historic and cultural events across the city.
The pavilion itself is designed to host a grand events public space, performance areas, semi-open theatre, public library.
The location of the 69 Plot demands a strong public node for the pedestrian artery coming north to south through the City Creek public square. 69-Plot holds the possibility to connect the neighboring plots with a series of movement and pause in the pedestrian pattern.
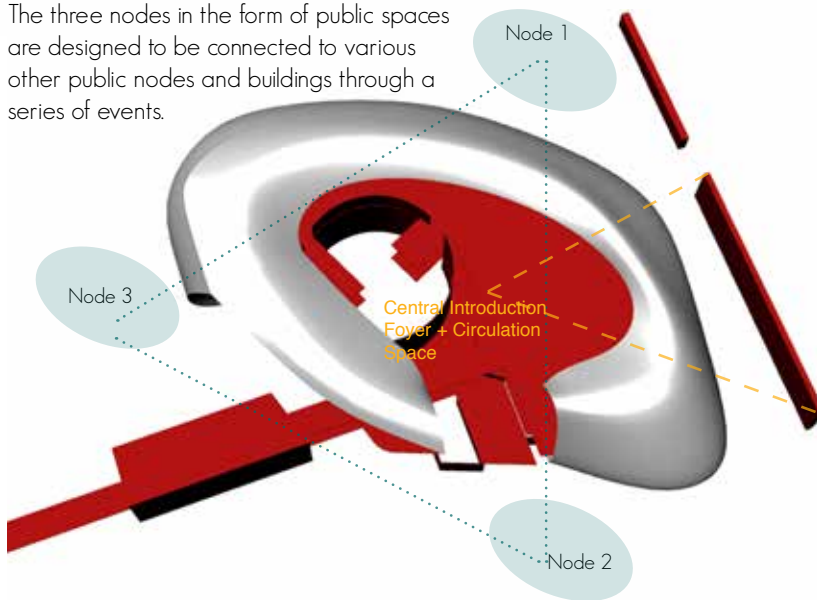
View From S Main Street

Conceptual schematic section

The three nodes in the form of public spaces are designed to be connected to various other public nodes and buildings through a series of events.

The idea of a cultural pavilion stems from the need to have a central pivot for the cultural and historic nucleus of Salt Lake City. The form and functions originate from the same principle holding the information and resources in the center and radiate people to various events with links through pedestrianized zones programs and interactive digital installations.

The approach for the design of the cultural pavilion was to contrast the non-transparent and rigid architectural built form in Salt Lake City. This would not only make the cultural pavilion more approachable as an introduction foyer but also help reach out to the activities surrounding the building and plot.

A bridge connecting the proposed Utah Performing Arts Centre will help to achieve purposeful permeability into the 70-Plot from the main introduction space on the first floor

View From S 100 S Street

Proposed Gr. Floor Layout at Plot-69

W 10 0 S - STREET

S MAIN STREET

(1) Projector Screen + Performance Stage
(2) Seating
(3) Reception + Bookings
(4) Existing Emporium Building
(5) Entrance to Pavilion Building
(6) Shops/ Retail / Food Kiosk
(7) Paved Informal Public Place

(8) Urban Chalk Boards
(16) Theme Gardens
(17) Children's Play Area
(18) Outdoor Games
(19) Proposed Power Station
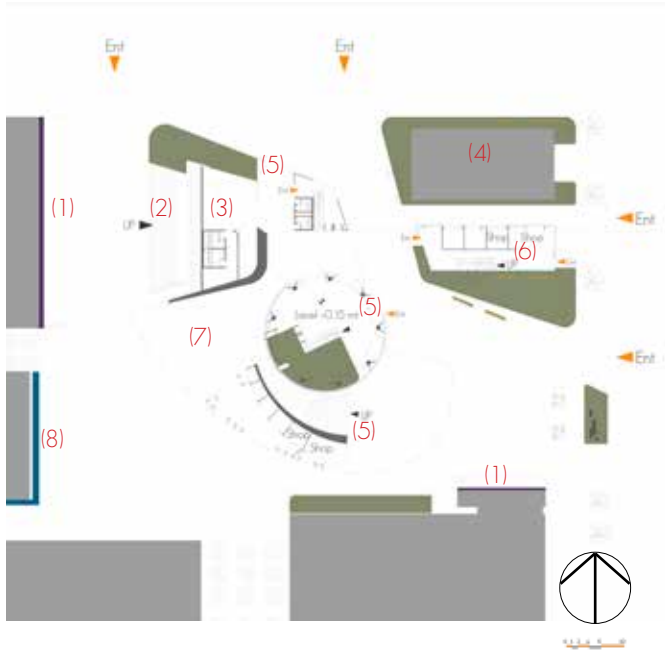(20) Glass Museum/ Gallery
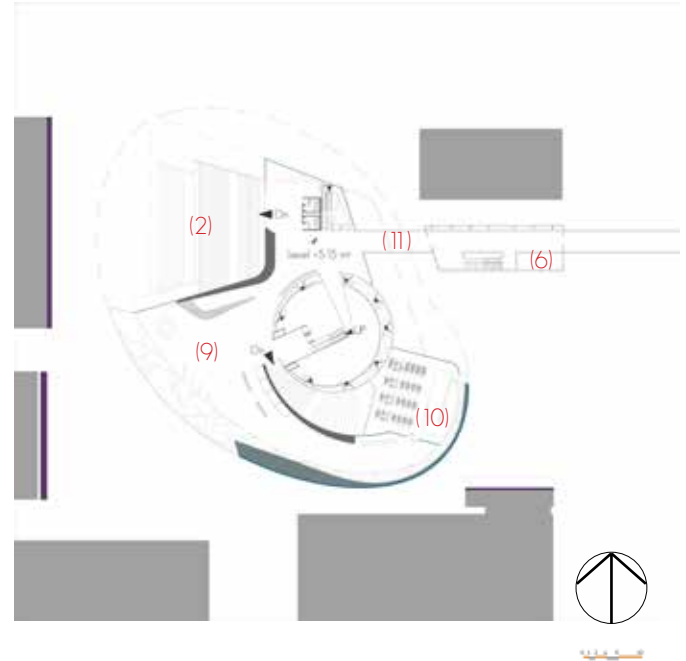
Ground Floor Plan

First Floor Plan

Second Floor Plan
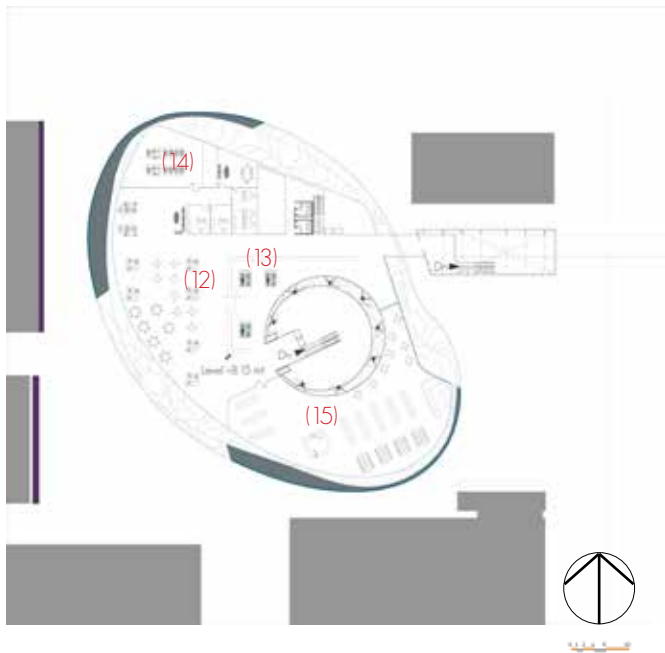
(1) Projector Screen + Performance Stage
(2) Seating
(3) Reception + Bookings
(4) Existing Emporium Building
(5) Entrance to Pavilion Building
(6) Shops/ Retail / Food Kiosk
(7) Paved Informal Public Place
(8) Urban Chalk Boards
(9) Introduction Foyer for City Wide Events
(10) Performance Room
(11) Bridge connecting Pavilion to Utah Performing Arts Centre
(12) Bar and Restaurant
(13) Open Kitchen and Bar
(14) Conference Rooms and Admin
(15) Public Library
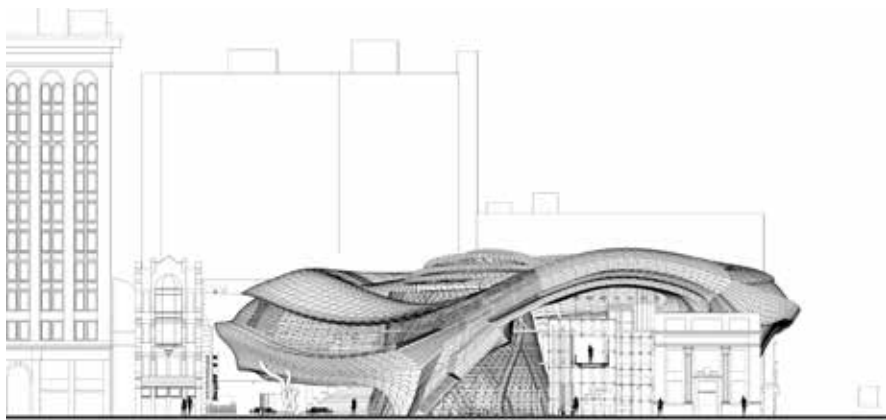
East Elevation

North Elevation

W 10 0 S - STREET

West
Elevation

East
Elevation

S MAIN STREET
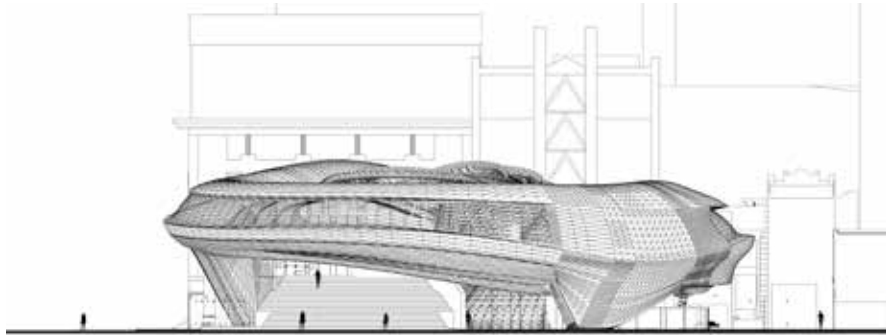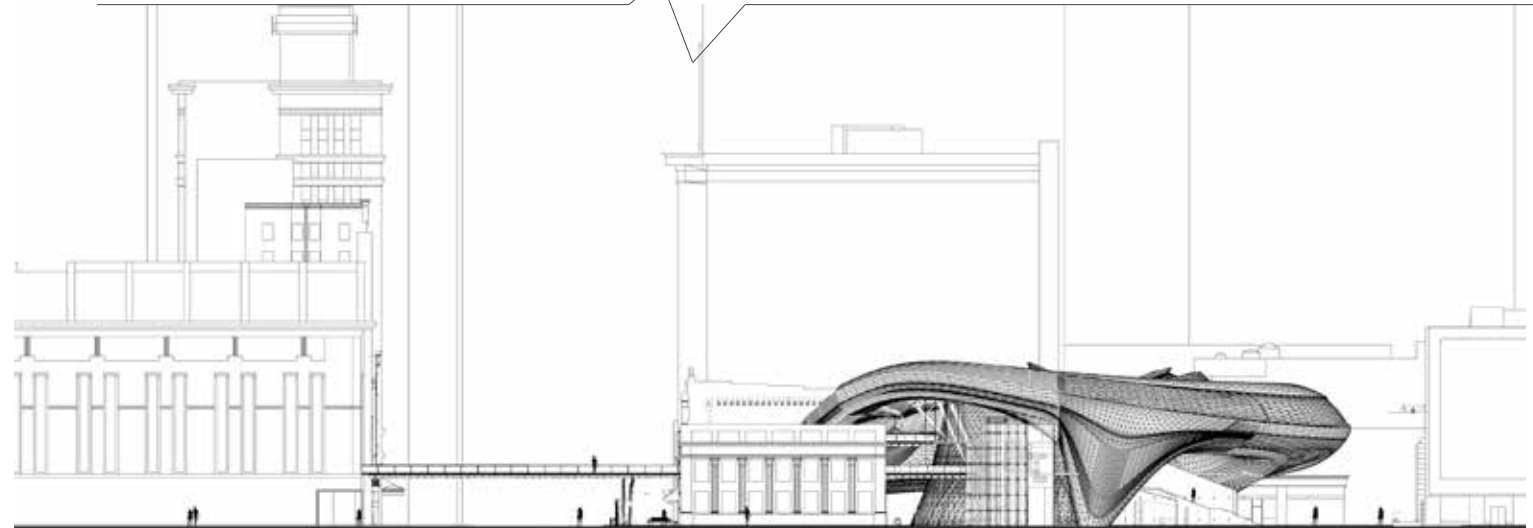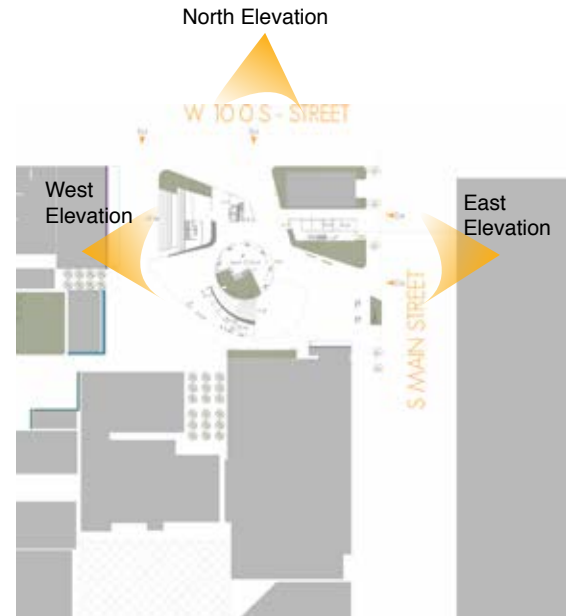
West Elevation

North Elevation

View : Entrance Foyer

Integrating Physical Environment and Public Interactions With A Homogeneous Computing Interface.

Merging the Architectural Environment with Digital Environment can change the way people meet, work, celebrate, socialize and interact and can help combat unsafe and negative urban spaces.

LED Media on Lifeless Facades

LED media in urban landscapes has proven to be a the way forward in public interaction spaces in todays digital age. It is also an effective way of building awareness amongst communities and tourists.

Some of the successful examples Interactive computing installations are the Millennium's Park Crown Fountain (Chicago), The national Library of Belarus, YAS hotel(AbuDhabi).

A homogeneous computing system in media facades and urban chalkboards can generate an information and interaction platform for the entire Salt Lake City's cultural and historic zone .

Interactive installations can change the way people move, congregate and interact in urban environments. It can be crucial for Salt Lake City's dynamic life and activities to connect with people everyday, every hour.

The idea is to make the lifeless walls transparent to people. The activities and functions of the buildings to interact like a human. With a homogeneous computing of all digital installation Salt Lake City's urban core can become a group of activities s possible to explore with ease and efficiency.

The Urban Chalk Board
With Gesture Recognition Technology
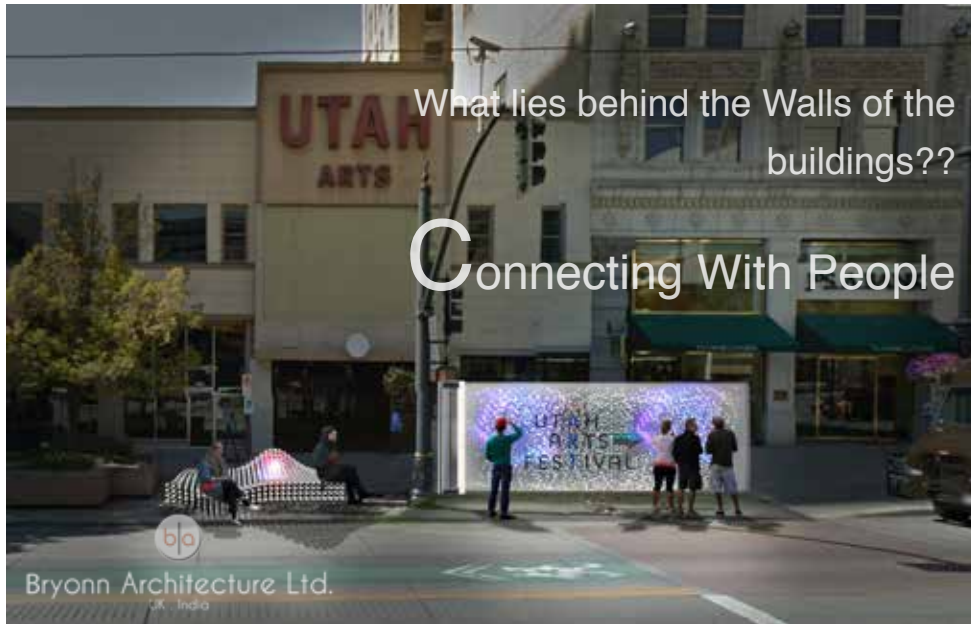
What lies behind the Walls of the buildings??

Connecting With People

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"Those of us who are concerned with buildings tend to forget too easily that all the life and soul of a place, all of our experiences there, depends not simply on the physical environment, but on the patterns of events which we experience there." [Alexander, 1979]

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The Urban Chalk Board would be a series of interactive 3 dimensional interactive led boxes at strategic locations to tie all the events, programs and information about the entire cultural zone. The idea is to unlock a whole new world of expression, interaction and gestures in the urban setup of Salt Lake City.

The Boxes can adopt any function like displaying art, banners, interactive 3dimensional information and virtual tour of events or even as a public screen to display mega events and sports.

The idea is to make Salt lake city a 'national favorite' when it comes to celebrating, showcasing and managing multi cultured events running parallel across the entire zone. People at any location within the zone will be cohesive and be informed with the entire events and touring scenario with the urban chalk boards.

People traveling from outside the city would know they have entered the cultural and historic with the interactive chalkboard boxes and digital installations.

The Urban Chalk Boards would be entirely programed and synchronized with the daily events, tours and places of interests. Bringing together Salt Lake City's strong cultural and historic activities into a homogeneous tour rather than separate activities.

The Urban Chalkboard is aimed to change the way we interact with our environment. With it's endless possibilities in public use, it is mainly targeted for merging indoor and outdoor activities through a range of functions like digital screen to display indoor sports and events, display public art, interactive positioning and maps, information center and before choosing to go to a particular venue one could get a 3 dimensional feel of the space and event. This would not only connect the user with the neighboring buildings and events but the whole of cultural and heritage district.

The installation is aimed to be at strategic locations to stitch the public pathways or connect the public pathways separated by vehicular arteries. It is designed to be in such public spaces and nodes so that the journey of experiencing the entire context is homogeneous and effortless It could hold the possibility of taking the highlight of any upcoming event in the city by walking into a digital box on the street. These chalkboards also have a wider application in unused and unsafe urban spaces of Salt Lake City. It would add an element of security, dynamic interaction and being watched because these installations will be controlled by numerous gesture recognition cameras to interpret the movement of the user.

Gesture Recognition software is based on unique, sophisticated hand shape and motion detection algorithms working together with a standard 2D camera. The algorithms identify the positioning of X, Y coordinates of the hand in order to support accurate cursor control (pointgrab, 2012)

Image courtesy : phys.org

'The Universitat Politècnica de Catalunya BarcelonaTech (UPC) presents a new multi-projector CAVE, designed and built in its entirety by the Virtual Modelling, Visualisation, Interaction and Virtual Reality Research Group (MOVING)
It consists of four 3 m2 walls (including the floor) that function as screens and has 40 commercial, low-cost projectors that are controlled by 12 PCs. The new CAVE system is currently being used in applications related to the visualisation of museum pieces, cooperative ship design and medicine, although its sphere of application is broader still, covering industrial design, visualisation of simulation results, molecular design, architecture and urbanism.'(phys.org, 2012)

Pedestrian Interaction

New Cultural pavilion
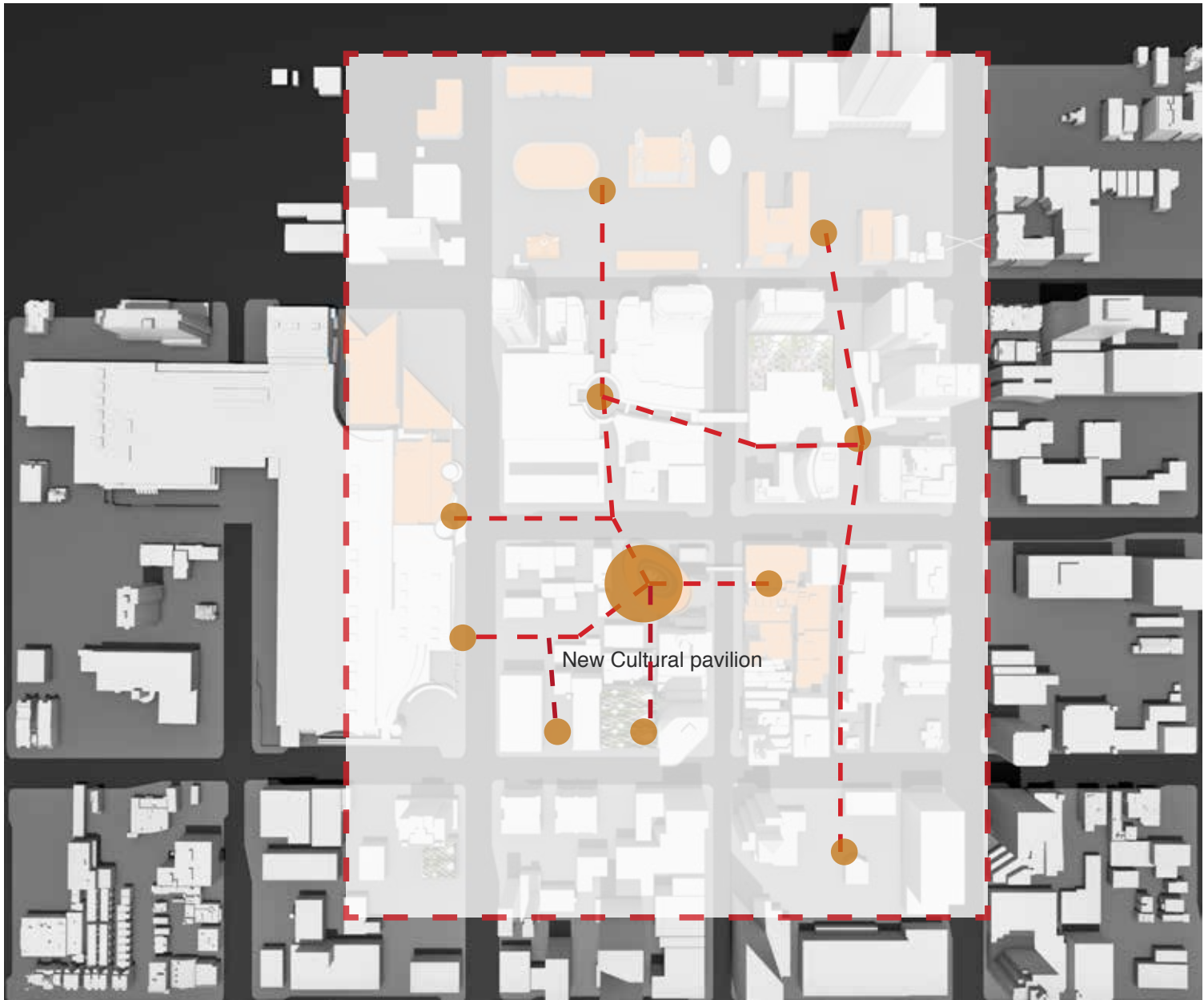
Connecting the cultural activities and Public Spaces

Making the Cultural Zone Pedestrian Friendly and Connecting the Nodes

Urban Chalk Board

Changing The Street Interactions

Bryonn Architecture Ltd.
UK . India

Urban Forms that could adapt to the activities of pedestrians like movement, pause, interaction, visual connections and forming a continuity through the entire cultural zone as a landscape element.

Creating a pedestrian friendly visual pathway and tour by introducing Slow Speed Paved areas for pedestrian connections to important public nodes, cultural and historic buildings.
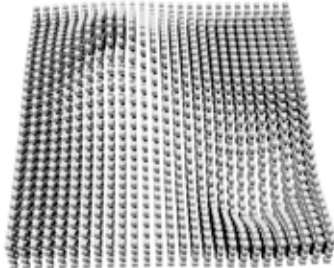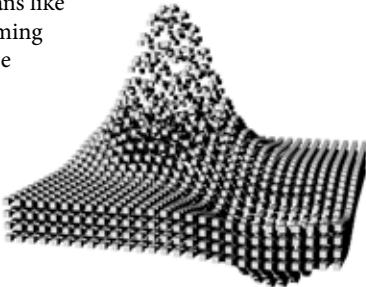
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