Utah and Salt Lake City's Opportunity Related to the concept of an Inland Port

February 6, 2018

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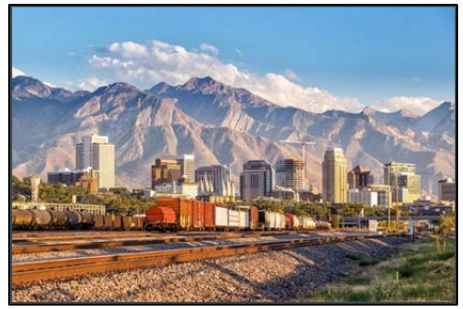

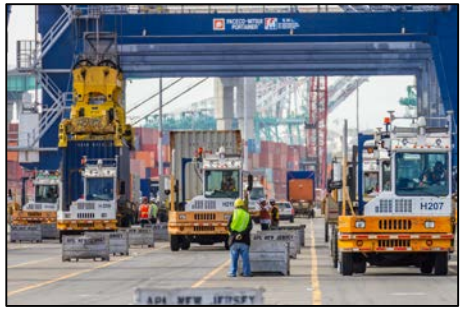
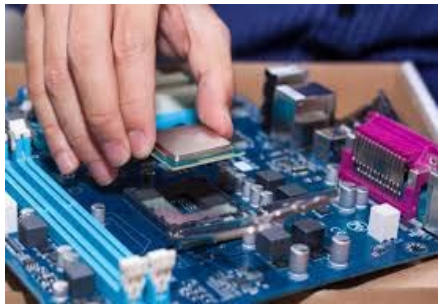




Project Structure

- Review of Inland Ports
- Site Review
- Logistics System Review
- Market Depth
- New Infrastructure
- Environmental Management
- Business Strategy
- Governance
- Recommendations

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What is an Inland Port?

- No formal global definition of the term “inland port”.
- In the United States, the term “inland port” is typically used to describe a (typically maritime-connected) logistics market that is located at a non-maritime inland location. Inland ports are typically planned around rail intermodal facilities, but not all intermodal locations are inland ports.

Seaport Owned or Seaport as a Partner

- Virginia; Port of Virginia VIP
- South Carolina; Greer
- Georgia; Cordelle

Inbound Distribution – Property/Railroad Interests

- Illinois; Joliet Intermodal Centers
- Kansas; Logistics Park Kansas City
- Texas; Alliance Global Logistics Hub

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What is a Inland Port in Salt Lake City, Utah?

- Balanced in and out
- Balanced distribution and manufacturing
- Must be quadrimodal
- Proximity to seaport hubs
- Strategic asset mix
- Site sizes and configurations
- Industry diversity
- Must be a managed product – otherwise it's just an industrially zoned area

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Generic Site Requirements

- Sizeable industrial development land asset(s)
- Appropriate surrounding uses
- Transportation access
  - Road
  - Rail
  - Air
  - Oriented well to ocean
- In a market that has an ability to compete for key investment types

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Site Review

- Northwest Quadrant – North and South of I-80
  - 5,000-6,000 total acres
  - Direct intermodal rail and carload rail, long-haul corridors, and airport access
  - Multiple property owners
  - Existing assets and infrastructure
  - Challenges:
    - Soils Concerns
    - Landfill
    - Roadway congestion
    - Environmental sensitivity

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Logistics Position - Commercial Vehicles

SLC – Pacific Northwest

- Distance: 840 Miles
- Service Time: 14.5 hours
- Corridor(s): I-84, I-32

SLC – Port of Oakland

- Distance: 725 Miles
- Service Time: 12.5 Hours
- Corridor(s): I-80

SLC – PoLA/PoLB

- Distance: 705 Miles
- Service Time: 12 Hours
- Corridor(s): I-15

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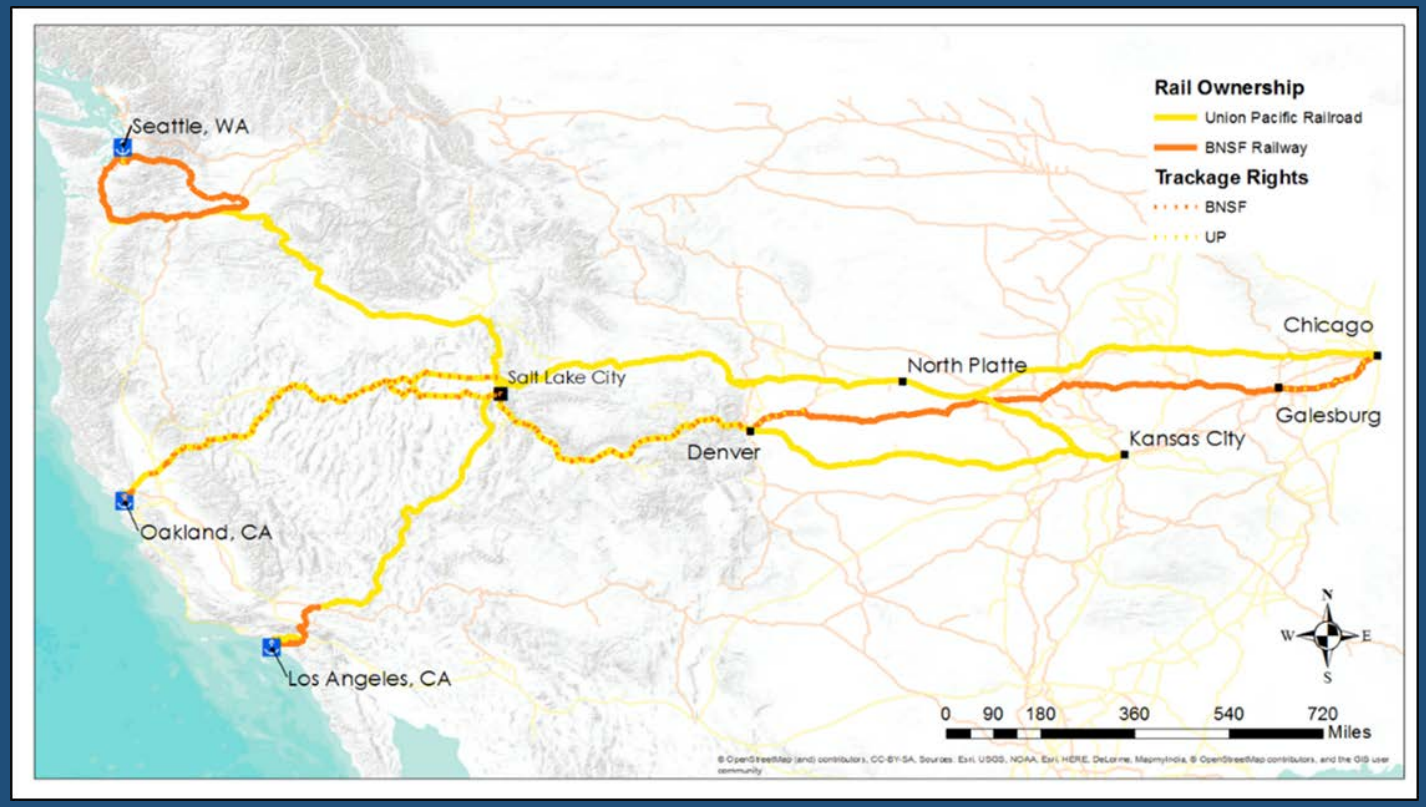
Logistics Position - Rail Service

- Efficient connectivity via Union Pacific's Central Corridor between Chicago, Denver, and the Ports of Los Angeles, Long Beach, and Oakland
- Long-standing history of trackage and haulage rights for BNSF on the Corridor



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Logistics Position - Rail Service

SLC – Pacific Northwest

- Distance: 870 Miles (BNSF: 1370 Miles)
- Service Time: Not currently served
- Ownership: Segments of BNSF and UP

SLC – PoO

- Distance: 840 Miles
- Service Time: 3 Days
- Ownership: UP (BNSF Trackage Rights)

SLC – PoLA/PoLB

- Distance: UP: 740 Miles BNSF: 1265 Miles
- Service Time: 3 Day Intermodal (UP)
- Ownership: UP from SLC to Barstow

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Market Depth - Overall Industrial Market

National

- Industrial market has been growing quickly
- The market has been shaped by:
  - High rates of economic growth
  - Ecommerce growth has dominated in some markets
  - Impact of restructured supply chains
  - Adjustments in trade relationships
  - (Some) level of reshoring
- The outlook is tied to economic growth and structure of trade relationships, current view is strong

Regional

- Seen nationally as a healthy mid-sized market; similar in gross size to larger metropolitan region
- Vacancy rates are low
- Asset values are rising
- Land supply is an important factor
- Market has recently been substantially driven by large transactions
- Market is generally not seen as a prime player in national logistics

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Market Depth - Utah & Salt Lake City Regional Market

- Competitiveness analytics demonstrate that Utah & Salt Lake City's economic growth opportunities are based upon a strong and favorable business environment that is fueled by a competitive tax climate and a favorable legal and regulatory environment
- Utah enjoys a strong workforce and education system
- Region enjoys a strategic locational advantage for some supply chains, including a range of both distribution and manufacturing
- Rail connectivity is strong, but with a lesser level of competition than preferred
- UP intermodal facility in-place and with existing capacity
- The new airport asset should lead to even stronger and more competitive passenger service; strong Delta hub, but concerned about an overreliance on Delta ; airport has relatively uncongested skies and large aeronautical and non-aeronautical land assets

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Competitive Target Sectors - Manufacturing & Distribution

- Aerospace Component Manufacturing
- Automotive (Technology) Testing and Manufacturing and High Velocity Logistics
- Industrial Machinery Manufacturing
- Medical Products and Manufacturing
- Pharma Manufacturing and High-Velocity Logistics
- E-Commerce Forward Deployment
- Regional Distribution – Household Goods
- Super Regional Distribution – B2C Supplier
- Regional Food Distribution

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Project/Market Requirements

- Project of this size should assume that the project requires minimum of 500,000-1,000,000 sf net new absorption annually over life of the project
- Community should have value-add production activity as objective; so a careful balance of distribution and manufacturing
- Must have a balance of onsite demand for inbound and outbound cargo movement
- Project site and phasing should allow company expansions/growth in Utah onsite

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Infrastructure Assumptions

- TradePort incl property north + south of I-80
- Road & rail to key sites
- Range of site categories: large-scale/regional distribution center, manufacturing, high-velocity
- Total estimated infrastructure cost are a minimum $225M, including the following improvements:
  - Roads
  - Rail
  - Water
  - Telecommunications
  - Electric/Gas
  - Sanitary Sewer

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Environmental Management & Strategy

- Large industrial district impacts
  - Emission sources: mobile-source and point-source
  - Impacts are shaped by market & mode
- We believe that Utah & Salt Lake City region can create a model that is built around environmental sustainability objectives
- Key Strategy Issues:
  - Inbound --- Outbound Balance is Important
  - Distribution vs. clean/tech manufacturing
- Project's timeline & scale creates special opportunity *to plan, develop and operate* project that sets-out from the beginning to be a global leader in sustainable economic development
- Project planning should define high-efficiency development and transportation plan
- Transportation technologies will impact
- Will require an active strategy and cohesive business management and delivery plan
- Performance management plan

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Environmental Management Best Practice Examples

Best Practice: Port of Los Angeles

- Created Air Quality Report Card as a transparent guide to see the progress of clean air programs
- Under the Clean Air Action Plan, the Port made progress in reducing harmful emissions from all port-related sources including, ships, trains, trucks, small harbor craft and off-road cargo handling equipment

Best Practice: World London Gateway

- Creation of an Advisory Committee on Sustainability including nationally & international experts
- Defined a next-generation building guidelines, supported by PlanetMark certification of sustainability
- DP World London Gateway - Stanford Wharf Nature Reserve

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Business Strategy Foundation

- Define as a product, not an area
- Clear view of market
  - Investment, type, sector, timing
- Infrastructure to support market plan
  - Delivery plan, financing
- Delivery structure
- Establish formal business partnerships

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Requirement for Integration with Airport

- Airport is undergoing a dramatic rebuild project
- Cargo has been relatively light and there is gulf of opportunity to join-up airport growth, economic development and technology investment
- Global TradePort project is about joining-up investment attract and transport infrastructure and economics
- Global TradePort should be integrated with Airport business and development strategy
- Airport assets, adjacent and nearby industrial assets should be hugely valuable, especially in a region that seeks to further establish itself as a technology hub

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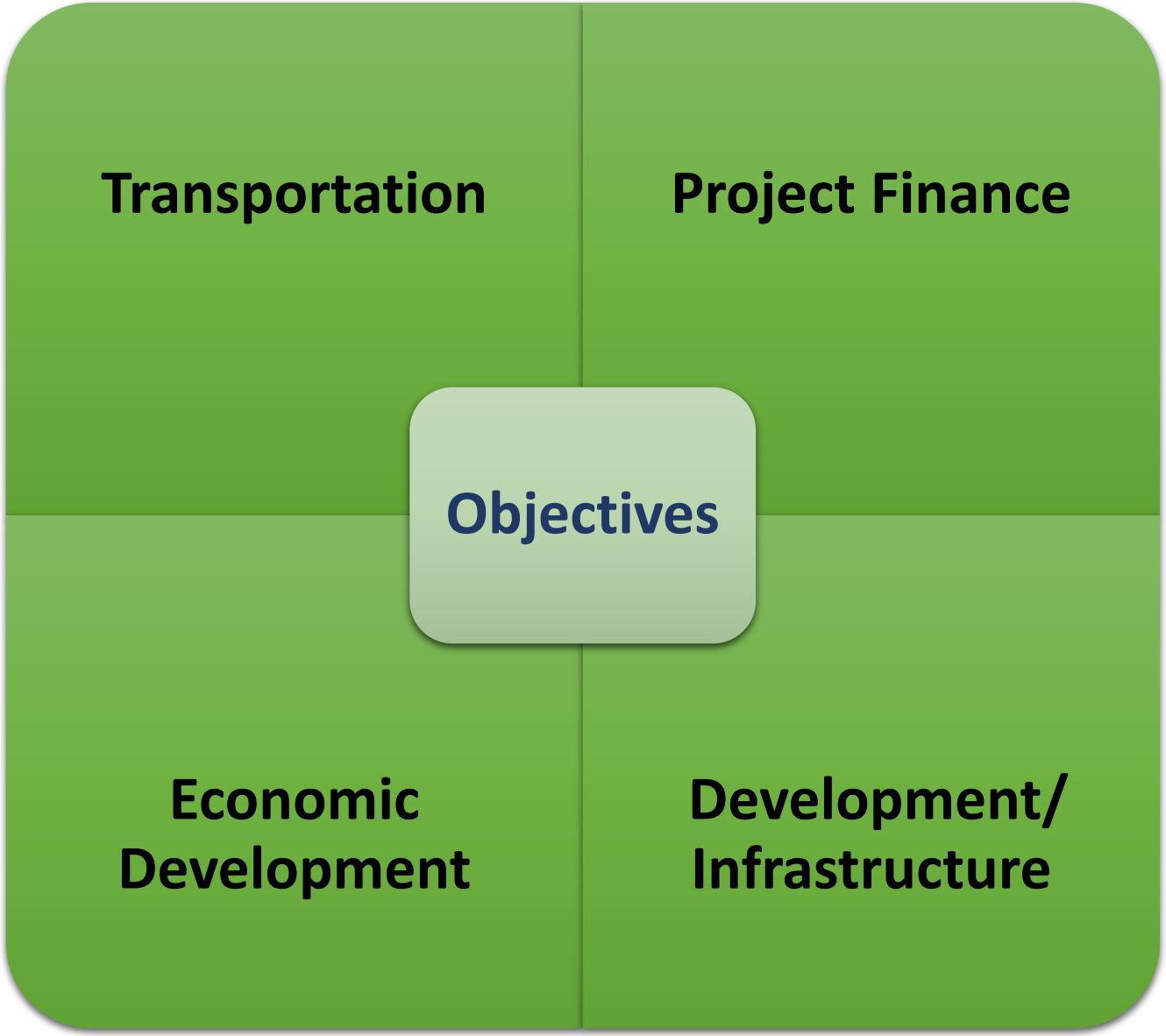
Public Development Entities/Port Authorities: Objectives



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Governance Model For Utah/SLC

Objective: Typically, to facilitate physical development including core infrastructure; project finance, economic development, can support Statewide objectives

Functional Role: Master planner, typically does not own/operate logistics infrastructure, value-add role in property and infrastructure, marketing

Typical Powers: Can issue debt, take risk, own/operate assets, enter into JV partnerships, market and represent project as official government sponsored/endorsed/investment project

Finances: Is a direct and/or indirect property and infrastructure investor and manages private investors relationships

Ownership: Public with plans for 3P to attract risk capital

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Keys To Success

- Active management strategy
- Public finance expertise
- Public sector shouldn’t assume all the risk
- Partnerships – logistic-economic-development-supply chain
- Organization that outlasts political cycles
- Representing the state, region, and city globally
- Environmental management strategy
- Access and expand airport cargo capabilities
- Consider statewide needs and assets for future integration

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Questions for Inland Port Consultant – Adam

Given the many projects your firm has worked on, could you tell us the range of options you have seen in terms of governance structure.

What recommendations would you have for next steps – is the governing structure the next step or are there steps that you see that need to be taken in order to lay the foundation.

CAMBRIDGE SYSTEMATICS

Utah Inland Port - Feasibility Analysis

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prepared for

World Trade Center - Utah

Utah Governor's Office of Economic Development

prepared by

Cambridge Systematics, Inc

Global Logistics Development Partners, Inc

report

Utah Inland Port - Feasibility Analysis

prepared for

World Trade Center - Utah & Utah Governor's Office of Economic Development

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date

December 29, 2017

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Executive Summary

An inland port development in Utah has been the subject of three previous studies and countless discussions in and around the Salt Lake City area for more than forty years. The most recent efforts—a 2016 report completed by the Kem C. Gardner Institute, "Salt Lake Inland Port Market Assessment", and a 2017 Global Cities Initiative, "Salt Lake County Global Trade and Investment Plan"—concluded that Utah has a number of favorable assets and some locational attributes that may support an advanced logistics-based development.

The purpose of this business analysis was to assess the practical feasibility of some type of inland port in Utah. As a starting point, the project team recommended that globally, the term "inland port" is quite loosely defined and has a wide range of interpretations. The term usually connotes a pure inbound rail-oriented logistics hub, but not necessarily a logistics/value-add/manufacturing complex. Assuming that the State of Utah believes that logistics investment is a means to support increased competitiveness for higher-value manufacturing, we've proposed an integrated ln internationally-connected logistics and trade center, hereafter referred to by a placeholder name of "Utah Global TradePort". The structure of the following report includes:

- **Inland Port Typology –** A review of various representative inland port types and configurations in North America and Europe;
- **Logistics Environment –** An inventory and analysis of the region's existing transportation infrastructure by mode, accessibility to key markets; current and projected goods movement flows for the State of Utah and the Salt Lake City region;
- **Competitiveness –** A review of the analytics for how Utah and the region would compete against key competitor regions for a range of logistics and logistics-enabled manufacturing investment projects;
- **Market Demand –** A review of the Salt Lake City regional industrial property market, its relative size, growth and near-term outlook;
- **Environment –** Highlights of best practice examples for the development of a next-generation sustainable logistics and logistics-enabled manufacturing developments;
- **Site Requirements –** A high-level overview of utility and transport infrastructure plan and investment costs for developing the Northwest Quadrant area (NWQ); and
- **Recommended Next Steps –** A summary of recommendations and key steps for advancing the Utah Global TradePort to delivery.

Summary of Recommendations:

Overall Opportunity

Utah has many compelling business investment attraction attributes and over recent years the State and region has fared well as a regional logistics market and as a burgeoning technology hub. Though for Utah to establish itself as a larger, more compelling investment offer to global logistics and product manufacturing supporting global supply chains, it will need to harness its connectivity and underlying competitiveness by developing a global-scale investment product. Because of State's business friendly orientation, underlying competitiveness, and its logistics connectivity; we believe that a well-executed and well-structured logistics and logistics-enabled manufacturing project of scale would be quite successful in Utah. With that said, without a purpose-built and integrated investment product, we feel that the NWQ: 1) will not nearly yield the potential benefits that would be possible with a "Utah Global TradePort Active Development Plan" strategy, and 2) would not justify significant public resource investments requiring a meaningful return on investment. A fundamental element of the project business strategy should that the project is designed and developed as a quadrimodal asset.

UTAH GLOBAL TRADEPORT GOALS

- BALANCED INBOUND & OUTBOUND
- BALANCED DISTRIBUTION & MANUFACTURING
- MUST BE QUADRIMODAL
- PROXIMITY TO SEAPORT HUBS
- STRATEGIC ASSET MIX
- SITE SIZES AND CONFIGURATIONS
- INDUSTRY DIVERSITY
- **MUST BE A MANAGED PRODUCT – OTHERWISE IT'S JUST AN INDUSTRIALLY ZONED AREA**

Site and Opportunity

The NWQ has unique potential due to the scale of undeveloped land in a location situated adjacent to important transcontinental cargo transport infrastructure. This location presents a cohesive opportunity for a comprehensive industrial and multimodal logistics product, supported by: 1) strong existing transcontinental rail and intermodal rail connectivity, 2) immediate access to an important east-west interstate highway corridor, 3) adjacency to a growing, modern airport asset and 4) one or two day ground transportation access to the West Coasts seaports of Oakland, Los Angeles, and Long Beach. This is not something that is typical and available to most regions and due to a series of market and logistics circumstances, there is a window of opportunity to get this right. The proper development of this site will require substantial infrastructure investment commensurate to building a new trade/logistics city that could be seen as quite unique in the marketplace.

Overall Industrial Market

The industrial asset investment market in the United States has been growing quickly, and has been shaped by a period of high economic growth, restructuring supply

chains, ongoing adjustments to multilateral trade relationships, huge levels of ecommerce growth and a small but growing level of investment reshoring. There has been a lot of positive force has been creating growth, but there have been some significant forces that have created concern in the logistics space such as plateauing growth in China. Combined with increasing vessel sizes and the expectation of fewer port calls, concerns about overall trade growth and new competing seaport/maritime route options infrastructure, there is a new and increasing interest by major West Coast deepwater seaports to position themselves to gain competitive advantage by an affiliation or partner relationship with inland logistics and manufacturing hubs. This has been recently evidenced by the partnership that GLDPartners assembled between the Port of Los Angeles and new multimodal trade hub in the Central Valley of California which is four hours from the Port. In the face of rather substantial port-to-port competitiveness dynamics, it is important to recognize that these seaports are seeking to position themselves for both increased inbound and outbound cargo. As it relates to Utah's project opportunity, there are really no competitor markets that have an ability to offer a comprehensive large-scale and property, infrastructure, logistics and business attraction plan. In our opinion, due to some fundamental logistics and supply chain trend dynamics, there is a window of opportunity to capture market share during this still robust period of growth.

Utah and Salt Lake City Region Market

Regarding Utah and Salt Lake City markets, GLDPartners' competitiveness analytics demonstrate that in an underlying way, the State competes well for investments in a range of sectors. The analytical model shows that:

- Utah can compete well as a strong business friendly state
- The State enjoys a strong workforce and education system which distinguish it, especially in some tech-manufacturing sectors
- The Salt Lake City region enjoys strategic location for some supply chains; including through a range of distribution and manufacturing that depend on access to the Intermountain West region, the West Coast and the California's major seaports
- Rail freight connectivity is strong with service by two Class One railroads, but lower levels of competition than preferred exists into the NWQ; and the UP intermodal facility is in-place and has existing capacity
- Property and overall running costs are very competitive, especially versus the region's major urban competitor regions
- A major airport asset expansion under-construction which is expected to lead to more and more competitive passenger service. Salt Lake City International (SLC) is supported by a Delta Airlines hub, relatively uncongested skies, and offers substantial aeronautical and non-aeronautical land assets

Target Sectors/Project Types and Competitiveness

The project included an array of market analysis to identify how competitiveness for the region across multiple sectors. The analytics explain the region competes well for a range of project types and sectors, and after a thorough review of four key sectors,

their supply chains, and Salt Lake City region's competitiveness, the region shows as very competitive:

    - The Utah Global TradePort will compete well for technology and non-technology manufacturing that is not primarily dependent upon low logistics costs

- Distribution targets included:
    - Consumer goods regional and super-regional
    - Agriculture processing and logistics
- Manufacturing targets included:
    - Aerospace
    - Advanced materials
    - Food production
    - Medical products
    - Pharma
    - Electronics
    - Auto technology
    - Industrial machinery

However, to successfully compete it's imperative that the Utah Global TradePort demonstrate that it can provide an overall supply chain management advantage including: a better overall total landed cost, higher/competitive levels of reliability and at least competitive delivery times.

Additional findings include:

- The TradePort Utah Global TradePort should be integral in growing the State's natural resource/extraction industries
- Project business objective must be a balanced level of inbound and outbound cargo, including a mixture of distribution and manufacturing
- Fundamental business strategy designed and developed as a quadrimodal asset (air, highway, railroad, seaport)

Delivery Options

We do not believe that the generic mostly logistics "inland port" as conceived would yield near the public and private value in terms of maximum jobs, quality of jobs, public revenues and private property values as could be achieved by a larger, more thoughtful project district development approach.

In the body of our report and at the November meeting of the Governor's Exploratory Committee, we strongly made the point that for the Utah Global TradePort to reach the level of success that we believe possible, it will be fully necessary to harmonize the original inland port concept into a project-specific Utah Global TradePort Active Development Plan. We see little pathway to reach that goal without some level of government involvement and probably substantial investment. To maximize the public benefit, we believe that the Development Plan should be a premised on the public sector's required return on investment and importantly, its specific overarching economic development objectives. It would make little sense for the State or local government to invest significant resources unless there was a demonstrated payback. Though we see an important coordinating role for government, we do not believe that all of the traditional infrastructure costs need be borne by the public. From our current and recent experience, we believe that the potential of this project could attract risk capital investors of national or international scale and we see the potential for a large-scale public-private partnership.

We have referred to the need to establish a "Utah Global TradePort Active Development Plan", which if followed, would elevate the market opportunity and the NWQ area from loosely-knit industrial park to a world-class logistics and value-add manufacturing complex of scale. We believe that with public sector leadership that this can occur, but without leadership the results will be modest and public participation will be a poor investment of resources. Unless the Utah Global TradePort is packaged and delivered as a cohesive and strategically phased project, the net result will be an under-developed and potential-limited area of Salt Lake City that creates modest value due to proximate access to good logistics assets.

Instead of following the path of most industrial economic development strategies in the US which are built mostly around an available property offer, public infrastructure investment with a loose government land-use framework and business strategy, the Utah Global TradePort would far more focused on creating a product that produces long-term structural value for target markets and its asset/investment partners. The Utah Global TradePort would join public and private resources to create a truly world-class business product including:

- a long-term brand and allied marketing strategy designed to elevate Utah to an investment-grade product
- a purpose-specific strategy for comprehensive and integrated infrastructure, designed to satisfy various business audience markets project types, project sizes and labor force requirements including a logical phasing plan which leads the market
- a business development marketing, investment audience focus

In the end, it will become extremely critical hat a good plan will accomplish little without an effective delivery structure. Some important features of an effective delivery structure are:

- Establishing that a core business objective is to minimize early investment and for the public sector, to minimize overall investment
- The development strategy must take maximum advantage of existing infrastructure and connectivity. Due to existing infrastructure, potential early priority areas include: 1) access to I-80 and UP intermodal, and 2) NWQ near to the airport
- The State should consider delivery structure variations including the establishment of port authority-like entity that can:
    - Own/dispose assets, issue debt, enter into joint ventures, take risks, dedicated professional team
    - Develop and maintain seaport, logistics partner partnerships
    - Promote Utah Global TradePort along with trade missions
    - Serve as day-to-day champion
    - Manage and advance environmental stewardship
    - Leverage risk capital and limit public risk
    - Coordinate with economic development and oversee incentives

Delivery Steps: Development Process Overview

The infographic on the following page lays out the specific steps necessary for advancing a project of this scale from feasibility through delivery. We have distilled it into seven major steps with a number of accompanying milestones.

Utah Inland Port & Production Hub

Development Process Overview

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1 Project Feasibility

Identify state and local planning efforts
Define capital improvements
Perform commodity flow analysis
Identify and compare logistics lanes
Perform preliminary site review

2 Governance

Evaluate governance structure and business model
Identify Port Authority and rules
Recommend appropriate structure and responsibilities

3 Competitiveness Testing and Market Projections

Conduct project-specific logistics lane competitiveness modeling
Perform project-specific investment attraction modeling
Estimate investment horizons: 5, 10, 15 years
Identify growth and market share opportunity
Project economic activity;
Increased/decreased competitiveness for lane/location
Structural/supply chain evolution

4 Development Planning

Conduct thorough site evaluation, including:
- Soils testing
- Gross development plan; yielding development envelope
- Base-level infrastructure plans and impact analyses
- Develop phasing assumptions
-- Environmental impact and air quality projections

5 Risk Assessment, Financial Projections, and Funding Plan

Perform clear and specific review of potential impediments to an investor
Factor risks into prospectus and development/investment negotiations
- Examples include: construction risks, start-up period risks, macroeconomic issues, geopolitical risks, pricing risks, weather, labor, and regulatory issues

Conduct financial performance analysis
- Measure profitability through development/start-up period, incremental growth/maturation period and at stabilization
- Account for up-front investment requirements, ongoing expenses, and revenue flows
- Measure profitability and benchmark versus similar projects
- Impute a range of risks, account for in risk-adjusted proforma

Evaluate funding and delivery
- Determine necessity and desire for public investment
- Determine necessity of private investment
- Prepare project prospectus
- Secure public funding

6 Contingent Use Agreements

Establish preliminary and contingent use agreements to demonstrate foundation of market; carrier, rail, 3PL, large shippers
Evaluate interest from other parties
Parallel track development

7 Project Delivery

Agree with public sector partners on project components/outcomes, business model, public responsibiliites, risk and investments, deal objectives
Deliver prospectus to target investors/partners
Review and promote to potential partners; depth of market current and future
Select1-3 best partners for negotiation
Negotiate terms to determine best deal(s) and partner(s)
Finalize deal structure
- Terms; financial participation, timing, infrastructure construction, third-party participation
- Performance; third-party action, timing, cargo throughput levels, jobs, industrial developmnent, third-party investment

Approvals: Governor, State Legislature, City/Local Mayor, City Council, Investor/Investment Board, Opeator, Management/Board (if applicable)

1.0 Introduction

The 2016 report completed by the Kem C. Gardner Institute, "Salt Lake Inland Port Market Assessment", performed a preliminary assessment of the practicality and market context for the development of an inland port in Salt Lake County.[1] While the research report confirmed that Salt Lake County is an attractive location for an inland port, that there are numerous other issues that require further investigation. A summary of the findings are shown below[2]:

- Salt Lake City is favorably positioned geographically and economically to support an inland port. It has direct rail connection to all major west coast terminals and access to major interstate highways (i.e. I-70, I-80, and I-84).
- Transportation infrastructure investments are supportive of an inland port, though additional investment is needed. The Salt Lake City International Airport and the Union Pacific Intermodal Terminal are vital assets to establishing an inland port. However, roadways accessing these facilities, particularly the intermodal terminal, are in need of improvement.
- Salt Lake City's northwest quadrant is an existing regional supply chain hub. In addition to the airport and intermodal terminal, this area is home to a large manufacturing base. It is also accessible to several potential markets within hours-of-service limitations for truck drivers.
- An inland port would be advantaged by a set aside of land for a new warehousing district with accompanying infrastructure investments to support such a district.

The analysis conducted in this report complements and in many cases expounds these transportation-related findings. Specifically, the analysis of commodity flows provides further insight into the advantages of Salt Lake City's geographic position and role as a regional supply chain in supporting an inland port. The commodity flow analysis also helps to identify existing and future modal trade lanes which supports the 2016 report's analysis of transportation infrastructure investments. The analysis of the locations of freight-intensive industries shows where clusters of these industries already exist which supports the co-location of a formal warehouse district surrounding the inland port. In addition the 2016 report addresses issues of governance, funding, and environmental considerations.

A more recent effort, "Salt Lake County Global Trade and Investment Plan", was completed as part of the Global Cities Initiative, in coordination with JPMorgan Chase and the Brookings Institute.[3] Key findings for this study were as follows:

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[1] Available at: http://gardner.utah.edu/wp-content/uploads/2016/10/IP-Brief-PRESS2.pdf

[2] A full list of the 17 findings is shown in Appendix A.

[3] Available at: http://slco.org/uploadedFiles/depot/fRD/fEconDev/global-trade-investment-plan.pdf

1) Primary Metal Manufacturing accounts for 63 percent of Salt Lake County goods exports;
2) Little overlap exists between countries that invest in the region and countries to which regional businesses export;
3) The region has multiple hard and soft assets to support export-related activities;
4) Over half of all Foreign-Owned Enterprises in Salt Lake County originate from four countries (Germany, Canada, England, and Japan);
5) Medical manufacturing is a key industry for attracting Foreign Direct Investment;
6) In Salt Lake County, Foreign-Owned Enterprises pay 32 percent higher wages than domestic-owned companies; and
7) Out-of-state perceptions of Utah are one of the biggest challenges to recruiting new talent;
8) Local talent is able to meet many business needs, but high-level talent is in short supply; and
9) Outdoor recreation is a major selling point for talent recruitment, but marketing efforts are targeted toward tourism, not business growth.

The following study encompasses many of the elements and findings in both of the aforementioned studies, and builds upon several key aspects. The approach involved a number of related elements to determine practical feasibility as well as inform a suite of recommendations (Figure 1.1).

Figure 1.1 Overview of Approach

The following sections delve deeper into each of these issues, and the report is organized as follows:

Section 2.0 Inland Port Typology;

Section 3.0 Logistics Environment;

Section 4.0 Competitiveness;

Section 5.0 Market Demand;

Section 6.0 Environment and Sustainability;

Section 7.0 Inland Port Site Requirements; and

Section 8.0 Recommended Next Steps.

2.0 Inland Port Typology

2.1 WHAT IS AN INLAND PORT?

There is not a consistent or formal global definition of the term "inland port". In some parts of the world a term of art used to describe inland logistics hubs is "dry port". Particularly in the United States, the term "inland port" is typically used to describe a (typically maritime-connected) logistics market that is located at a non-maritime inland location. Inland ports are typically planned around rail intermodal facilities, but not all intermodal locations are inland ports. Though there isn't a common definition of the term, the key shared points of meaning to the term are[4]:

- Having a direct connection to major seaport via Class I railroad
- Access to major transportation infrastructure usually, rail, but also interstate highway or inland waterway
- Access to large consumption market; 10M+ people within 300 miles
- Including significant industrial property with abundance of Class A warehouse and distribution space
- Including a large, affordable and trained labor pool
- Local or state economic development policies providing Free Trade Zone (FTZ) and tax incentives

2.2 WHERE ARE EXISTING INLAND PORTS?

There are not many examples of inland ports in the US, and those that do exist are generally facilities whose primary purpose is to provide logistics support to inbound containerized cargo moving inland from a load-center seaport. In these examples, principle partners are seaports, railroad companies and in some cases, property development partners. The first objectives of these investment hubs are to manage inbound movements of consumer goods and the repositioning of equipment, meaning directing empty containers back to costal seaports for return to overseas markets. A corollary objective of the inland port will be to support retail distribution and at the inland port complex there will be substantial warehouse or distribution centers.

Inland Port Types

When referring to inland ports in the US, there are generally two types:

1. Seaport Owned or Seaport as a Partner
    - Virginia; Port of Virginia VIP
    - South Carolina; Greer

[4] Source: *GLDPartners, CBRE Inland Port Logistics Annual Report 2016*

- Georgia; Cordelle

As products designed to be extensions of their seaport parent, these inland ports have intermodal rail cargo movement and streamlining as a core objective. Cordelle and Greer have no corresponding property investment attraction strategy associated with their operations. Economic development is a light byproduct from the logistics efforts of their port developers, mostly in the form of inbound distribution investment. All of these facilities are located on the East Coast.

2. Inbound Distribution – Property/Railroad Interests
    - Illinois; Joliet Intermodal Centers
    - Kansas; Logistics Park Kansas City
    - Texas; Alliance Global Logistics Hub

These projects are the result of railroad companies and property developers joining to share business interests. These facilities are strategically located in center of the US with access to large nearby markets and in the vicinity of other larger markets. These facilities are largely for inbound distribution and equipment redeployment. There is some but limited economic development beyond distribution investment, but these investments are substantial.

The examples listed above are the largest inland logistics hubs and as noted all are on the East Coast or in the center of the country. In the case of the East Coast, these inland ports represent the work of aggressive State port authorities that are operating in a very competitive environment. The distance from Norfolk, VA to Savannah/Brunswick, GA is only about 450 miles and there are six deep-water ports in that area. As State port authorities (Virginia, North Carolina, South Carolina and Georgia), a main mission of the ports is to facilitate economic development. As such, the leadership of the ports (executive and Board) are tightly wound into political and economic development projects and strategies.

By comparison, on the West Coast, over roughly the same distance the main load center deep-water ports are fewer and larger (Oakland, Los Angeles and Long Beach). That none of the West Coast ports are governed as statewide entities is important – all are governed by local authorities and each has historically had little connection to supporting an overall economic development mission. Generally speaking, none of the West Coast ports has had interest to develop assets or to collaborate substantially with investment attraction strategies. This makes sense when you consider that for example, the massive volume of cargo transiting through the Port of Los Angeles is either destined for the massive Southern California consumer market, or shipped onward to distant markets across the US. In fact, the Port of Los Angeles transfers cargo to every US Congressional District.

Due to a variety of factors this dynamic is changing. Seaports on the West Coast are becoming more competitive with each other and are increasingly worried because of: 1) expanding use of alternative maritime routes through the Panama or Suez Canals or through British Columbia, 2) the increased use of larger vessels is causing ocean carriers to make fewer port calls – which means that some ports will lose business and other will gain, 3) the ocean carrier business is inherently changing - the consolidation of and cooperation between ocean carriers means the potential for few

port calls, 4) an expectation of severe pressures on global trade, especially between Asia and the US (over the past 20 years, US container seaports have programmed for 5-8% growth annually and this pattern is not expected to continue), and 5) the combined effect of practically no maritime-business land for facility development and severe environmental and traffic congestion in the Bay Area and Los Angeles. Taken together, these factors are causing concern for seaports on the West Coast and are fueling some change of strategy.

Though there are not good West Coast examples of inland port projects, this may be changing. Driven by the factors above, all the West Coast ports are more focused developing competitive advantage than before, and this includes:

- Attempts to adjust the rail-port relationship, whereby the balance of truck-rail is adjusted in favor of rail due to the positive impact on road congestion and environmental impact
- The main container seaports in the Pacific Northwest (Seattle and Tacoma) have combined much of their business and operational strategy – mostly to form a more credible foil to the powerful Southern California ports, and a similar strategy has been employed in British Columbia where the Port of Vancouver merged with the Frasier River Port Authority to create Port Metro Vancouver
- On the site of a former military installation, the Port of Oakland is developing onsite warehouse and cold storage project with CenterPoint Properties
- The Port of Los Angeles recently announced joint venture participation to develop a 2,000-acre multimodal complex four hours north of the Port, the Mid California International Trade District is focused on both inbound distribution and outbound manufactured export products. This project could be the model for other offsite projects, including a massive inland cargo hub in the Inland Empire area. Beyond increased business, another objective for the Port is an attempt to support shorter-haul rail service to and from the Port.

Port Profile: DuisburgPort

DuisburgPort—the largest inland port in the world—is located at the confluence of the Rhine and Ruhr rivers. Duisburg is a tri-modal logistics hub and the largest inland hub in Europe and the world. The Port promotes an optimal combination of advantageous geographical location and favorable location conditions with extensive logistics expertise. With a total handling of 3.7 million TEU's (20-foot standard container), Duisburg Port has direct water, road and rail links to load-center seaports in Amsterdam, Rotterdam and Antwerp. A multimodal complex Duisburg has 25 miles of cargo handling docks handling more than 40M tons of cargo. A number of companies operate their own private docks and transit 114M tons of commodity goods annually. The Port hosts more than 20,000 annual ship calls. DuisburgPort is organized as a share capital company, with two-thirds of the shares controlled by the state of North Rhine-Westphalia and one-third the city of Duisburg (Figure 2.1).

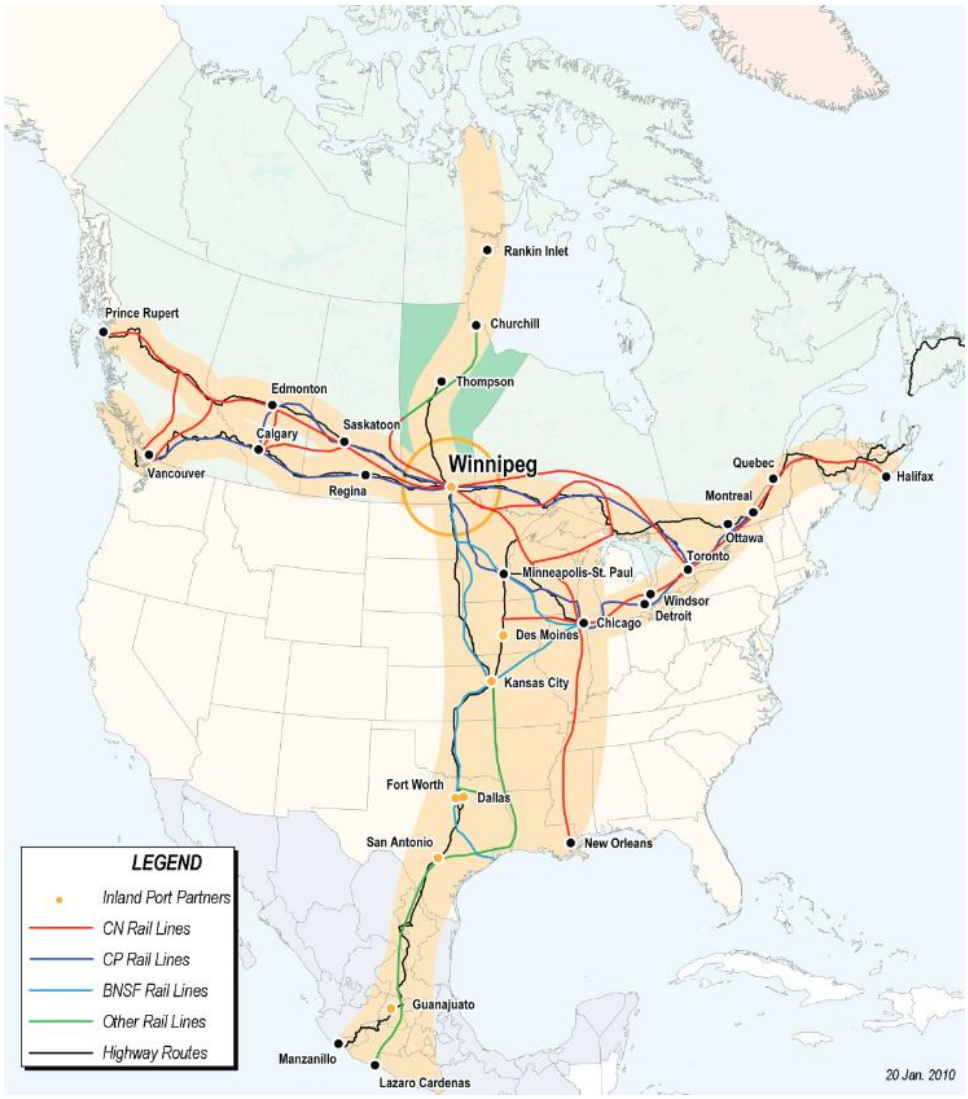
Figure 2.1 Duisport Aerial

Source: The Port of Duisburg

Port Profile: CentrePort Canada

In Canada, national policy and regional economic development strategies have given rise to new logistics routes and the development of inland cargo hubs assets. The Canadian Government has developed strategy to attract North American-wide logistics activity via its "gateway strategies" which seeks to position Canada as a preferred logistics lane for inbound Asia-North America and Europe/South Asia-North America transit. These strategies have provided support to seaport development projects in Nova Scotia and Quebec in the east and in British Columbia in the west. On the West Coast, cargo growth at both the Port of Prince Rupert and Port Metro Vancouver have created new options for shippers that have markets in both Central Canada and into the Midwest of the US. Two would-be inland port facilities are attempting to develop inland logistics hub status in Canada as well – one in Regina (Global Transport Hub) and the other in Winnipeg (CentrePort). Both are creations of government (Federal, Provincial and local) and have substantial amounts of public investment. CentrePort has received almost $250M in public investment so far as it attempts to develop a 20,000-acre continental logistics hub. Both projects are attempting to take advantage of their middle of continent location and their access to Class One rail networks. In the case of Winnipeg, the CentrePort project is the convergence point for the Canadian Pacific, Canadian National and BNSF railroads (Figure 2.2).

Figure 2.2 CentrePort Trade Gateways

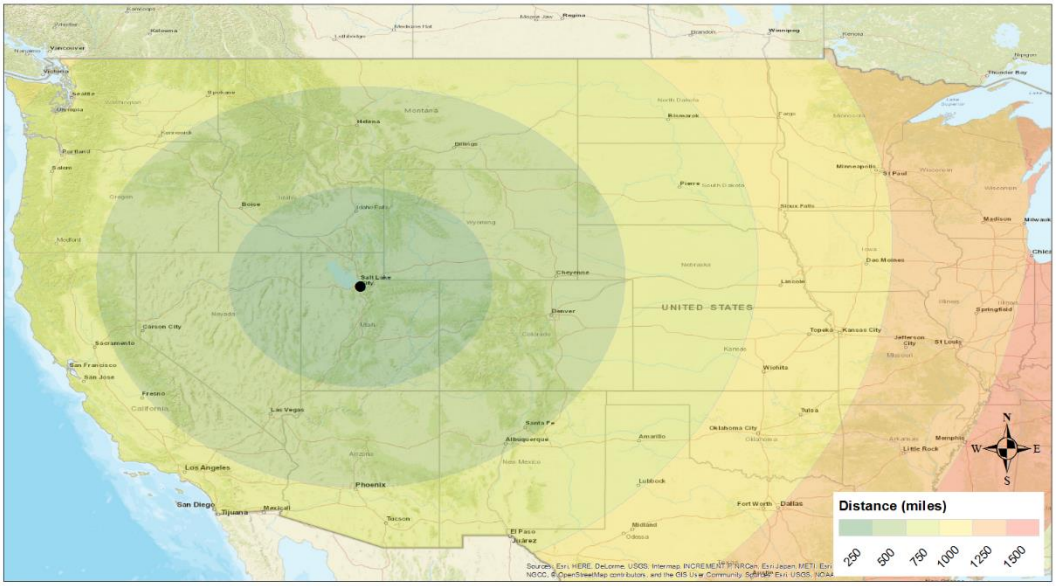


Source: CentrePort Canada

3.0 Logistics Environment

Utah, and particularly the Salt Lake region, is positioned at a crossroads of the intermountain west. Highway connectivity to all directions is provided by: I-70, I-15, I-80, and I-84. Union Pacific Railroad, BNSF Railway, and a number of short line and switching railroads offer local rail service to the area. The region has deepwater seaport access to the Port of Oakland and the Port of Los Angeles and Long Beach (POLA/LB) via both rail and highway. Pacific Northwest Seaports are accessible by highway, and technically accessible by rail, though there are no regularly scheduled routes at this time. On the air cargo side, Salt Lake City Airport (SLC) offers regular service to a number of major integrator airports as well as smaller airports. Figure 3.1 exhibits the relative distance between the Salt Lake area and major cities in the U.S.

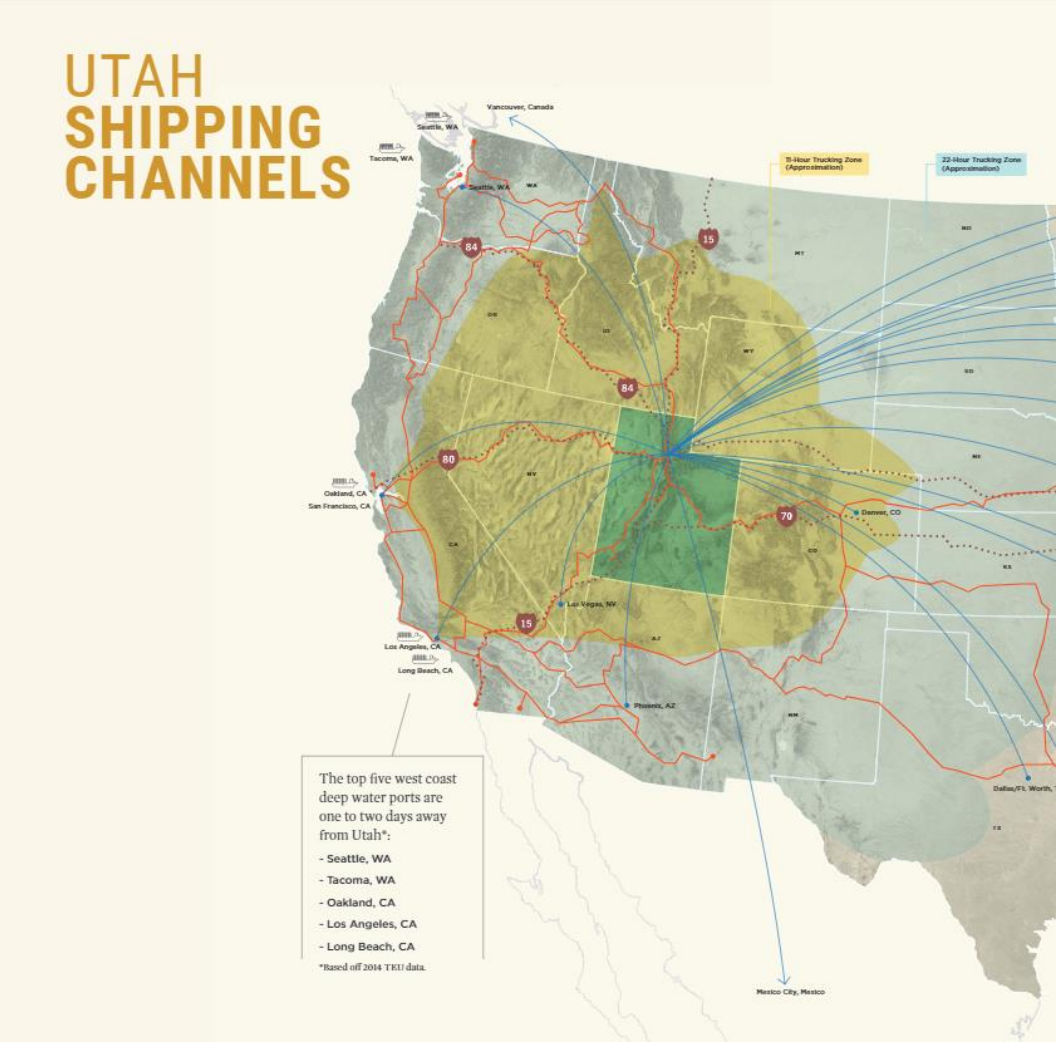
Figure 3.1 Relative Distance between Salt Lake City and Major U.S. Cities



3.1 EXISTING INFRASTRUCTURE

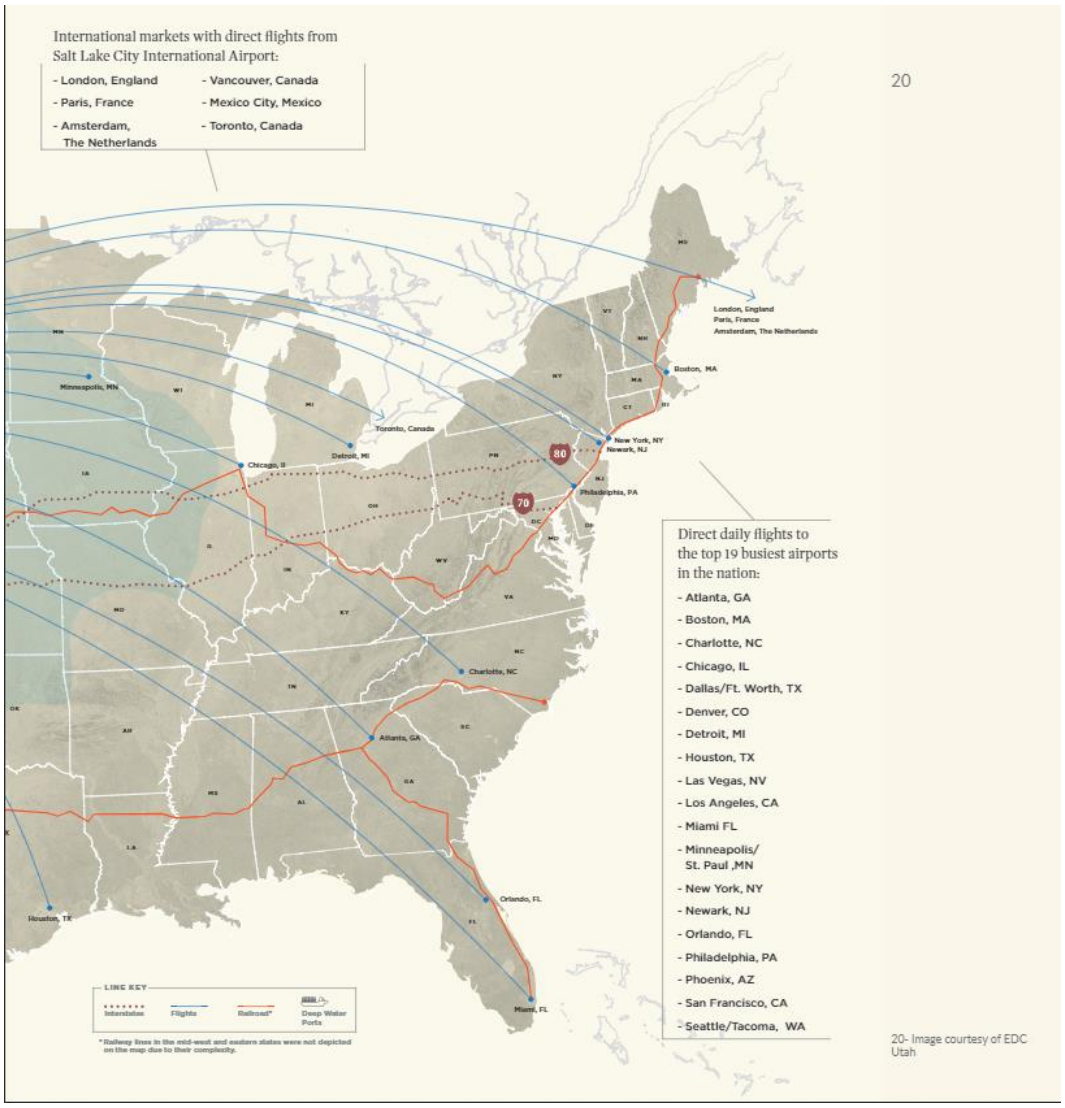
Figure 3.2 and Figure 3.3 from the recent Global Cities Initiative "Salt Lake County Global Trade and Investment Plan", exhibit current infrastructure and connectivity for the Salt Lake area.[5] The following sections delve deeper into each modal group and their connectivity to major hubs, particularly West Coast seaports.

Figure 3.2 Utah Shipping Channels – Western U.S.



[5] Report available at: http://slco.org/uploadedFiles/depot/fRD/fEconDev/global-trade-investment-plan.pdf

Figure 3.3 Utah Shipping Channels – Eastern U.S.



3.2 INTERSTATE MARKETS

Commercial vehicle drivers going to and from SLC are somewhat limited by Federal Hours-of-Service regulations, which place strict restrictions on the number of hours a driver can operate daily and over the course of several days. Figure 3.4 provides a summary for the current regulations, though they contain a number of nuances. The important takeaway is that a driver is limited to 11-hours of driving on a given day, which means that a regional interstate trip from SLC must be about 5.5 hours out and back. Based on this criteria, Figure 3.5 displays approximate truck travel sheds for a SLC-based trip. This indicates that the distance between SLC and major markets and hubs to the west and southwest are on the fringe, but unlikely for a single day truck trip.

Figure 3.4 Federal Hours-of-Service Summary

HOURS-OF-SERVICE RULES	
PROPERTY-CARRYING DRIVERS	PASSENGER-CARRYING DRIVERS
11-Hour Driving Limit May drive a maximum of 11 hours after 10 consecutive hours off duty.	10-Hour Driving Limit May drive a maximum of 10 hours after 8 consecutive hours off duty.
14-Hour Limit May not drive beyond the 14th consecutive hour after coming on duty, following 10 consecutive hours off duty. Off-duty time does not extend the 14-hour period.	15-Hour Limit May not drive after having been on duty for 15 hours, following 8 consecutive hours off duty. Off-duty time is not included in the 15-hour period.
Rest Breaks May drive only if 8 hours or less have passed since end of driver's last off-duty or sleeper berth period of at least 30 minutes. Does not apply to drivers using either of the short-haul exceptions in 395.1(e). [49 CFR 397.5 mandatory "in attendance" time may be included in break if no other duties performed]	60/70-Hour Limit May not drive after 60/70 hours on duty in 7/8 consecutive days.
60/70-Hour Limit May not drive after 60/70 hours on duty in 7/8 consecutive days. A driver may restart a 7/8 consecutive day period after taking 34 or more consecutive hours off duty.	Sleeper Berth Provision Drivers using a sleeper berth must take at least 8 hours in the sleeper berth, and may split the sleeper berth time into two periods provided neither is less than 2 hours.

Source: Federal Motor Carrier Safety Administration

Figure 3.5 Truck Travel Sheds from Salt Lake City

Seaport Connectivity

The following statistics indicate the approximate distance, estimated duration, and major highway(s) for trucks to/from SLC. The shortest trip is between POLA/LB at 705 miles, followed closed by Port of Oakland at 725 miles. Routes are shown in Figure 3.6

Salt Lake City – Pacific Northwest

- Distance: 840 Miles
- Service Time: 14.5 hours
- Corridor(s): I-84, I-32

Salt Lake City – Port of Oakland

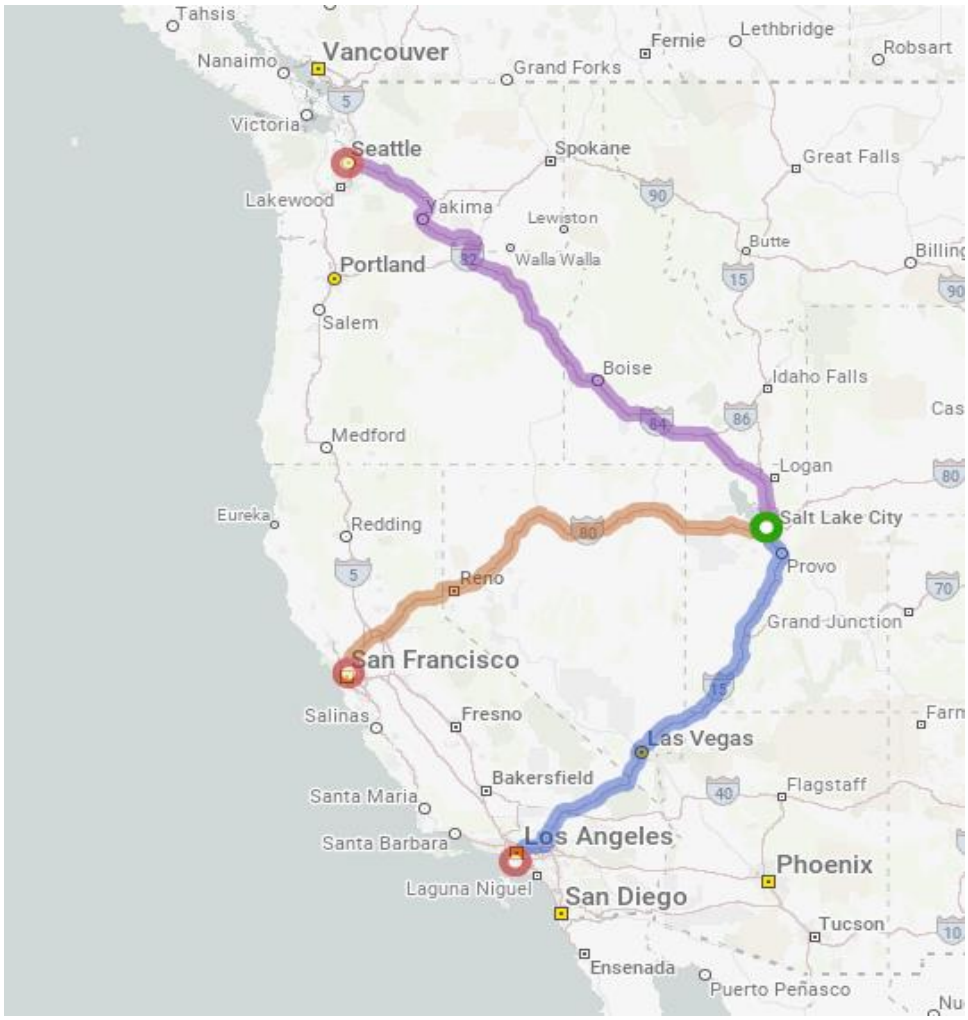
- Distance: 725 Miles
- Service Time: 12.5 Hours
- Corridor(s): I-80

Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: 705 Miles
- Service Time: 12 Hours
- Corridor(s): I-15

*Note: Distance and times are approximate

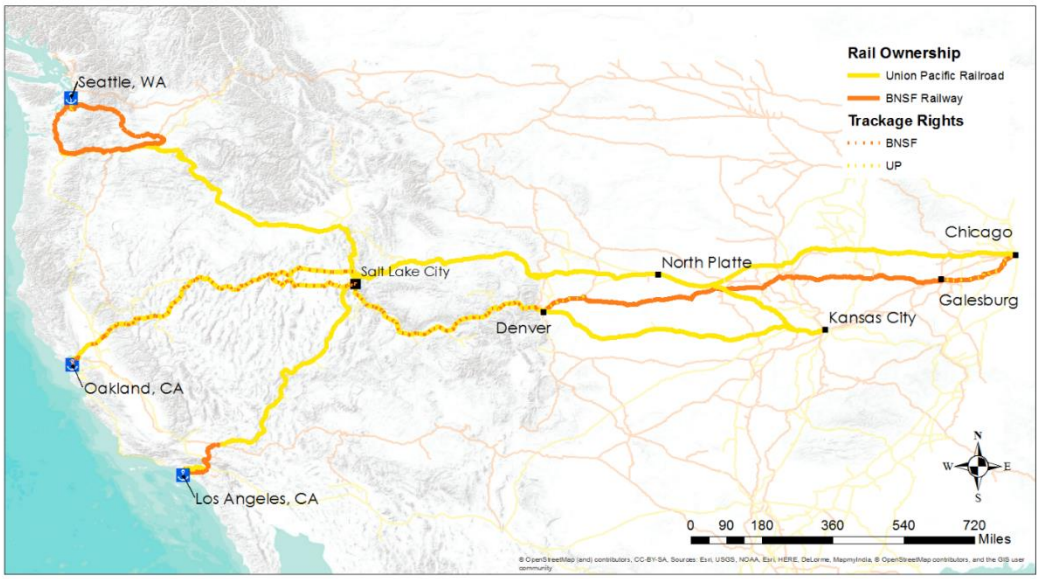
Figure 3.6 Salt Lake Area Interstate Highways



3.4 RAILROAD MARKETS

From a railroad connectivity perspective, SLC is well situated along a crossroads for UP, with a history dating back to the 1800's. Utah has about 1,350 miles of track operations throughout the state, with about 1,250 miles operated by UP. Particularly important is accessibility between the Ports of Oakland and LA/LB and North Platte, and eventually Chicago (Figure 3.7). In terms of capacity, all of the mainline track in all directions from SLC are rated at 286k or above, which indicates that all of the most modern cars and unit trains can operate safely. A map of allowable gross weight is shown in Appendix C for reference. Between SLC and Oakland, it was noted in discussions that there are multiple vertical clearance issues that would prohibit double-stack container trains without substantial investment.

Figure 3.7 Rail System and Salt Lake City



The following statistics indicate the approximate distance, estimated duration, and rail routes to/from SLC. The shortest trip is between POLA/LB and, followed closed by the Port of Oakland. BNSF does not have direct access between SLC and POLA/LB under current trackage rights agreements, therefore the trip would include Oakland, then southbound (Figure 3.8).

Salt Lake City – Pacific Northwest

- Distance: 870 Miles (BNSF: 1370 Miles)
- Service Time: Not currently served
- Ownership: Segments of BNSF and UP

Salt Lake City – Port of Oakland

- Distance: 840 Miles
- Service Time: 3 Days
- Ownership: UP (BNSF Trackage Rights)

Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: UP: 740 Miles BNSF: 1265 Miles
- Service Time: 3 Day Intermodal (UP)
- Ownership: UP from SLC to Barstow

*Note: Distance and times are approximate

Figure 3.9 depicts rail operations in the Greater Salt Lake Region. As noted, UP owns the majority of trackage in the region, with four short line railroads providing service to customers in several areas of the metro area. BNSF, Utah Railway and Amtrak all have trackage rights to operate on specified segments, but do not own track in the region.

Figure 3.8 Rail Ownership from Utah

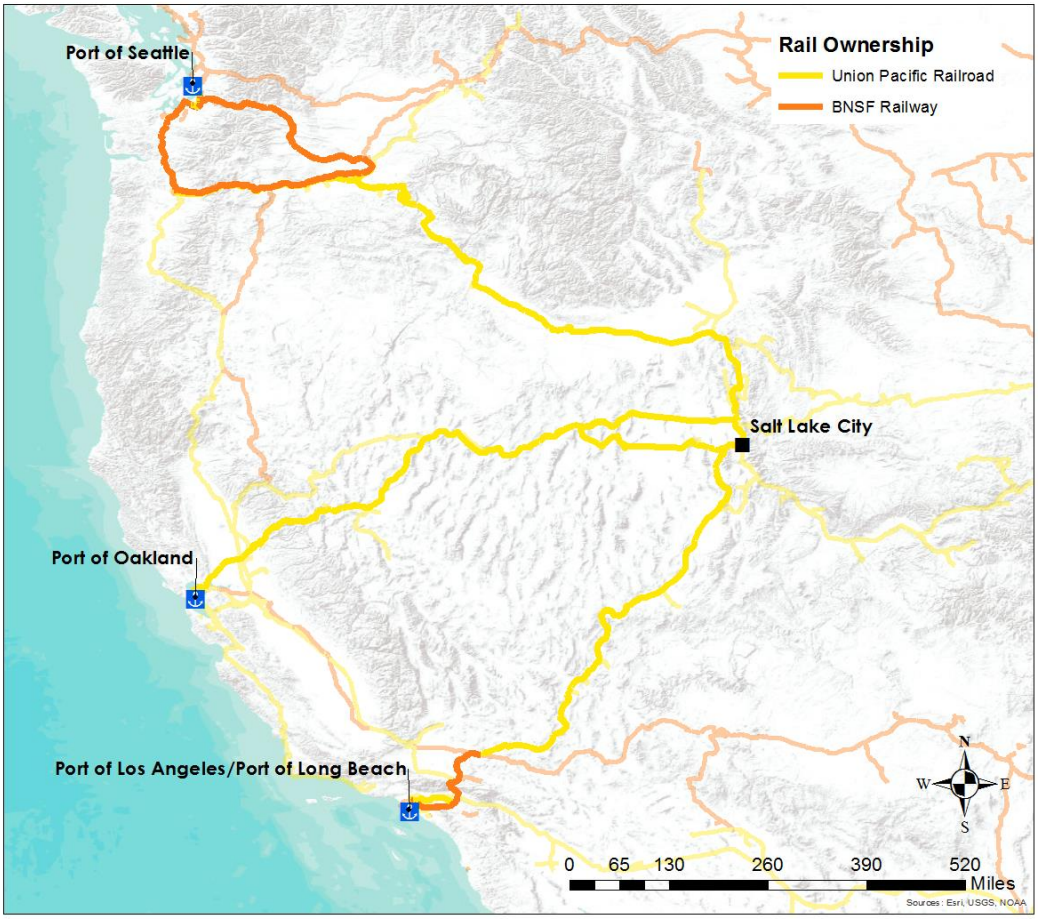
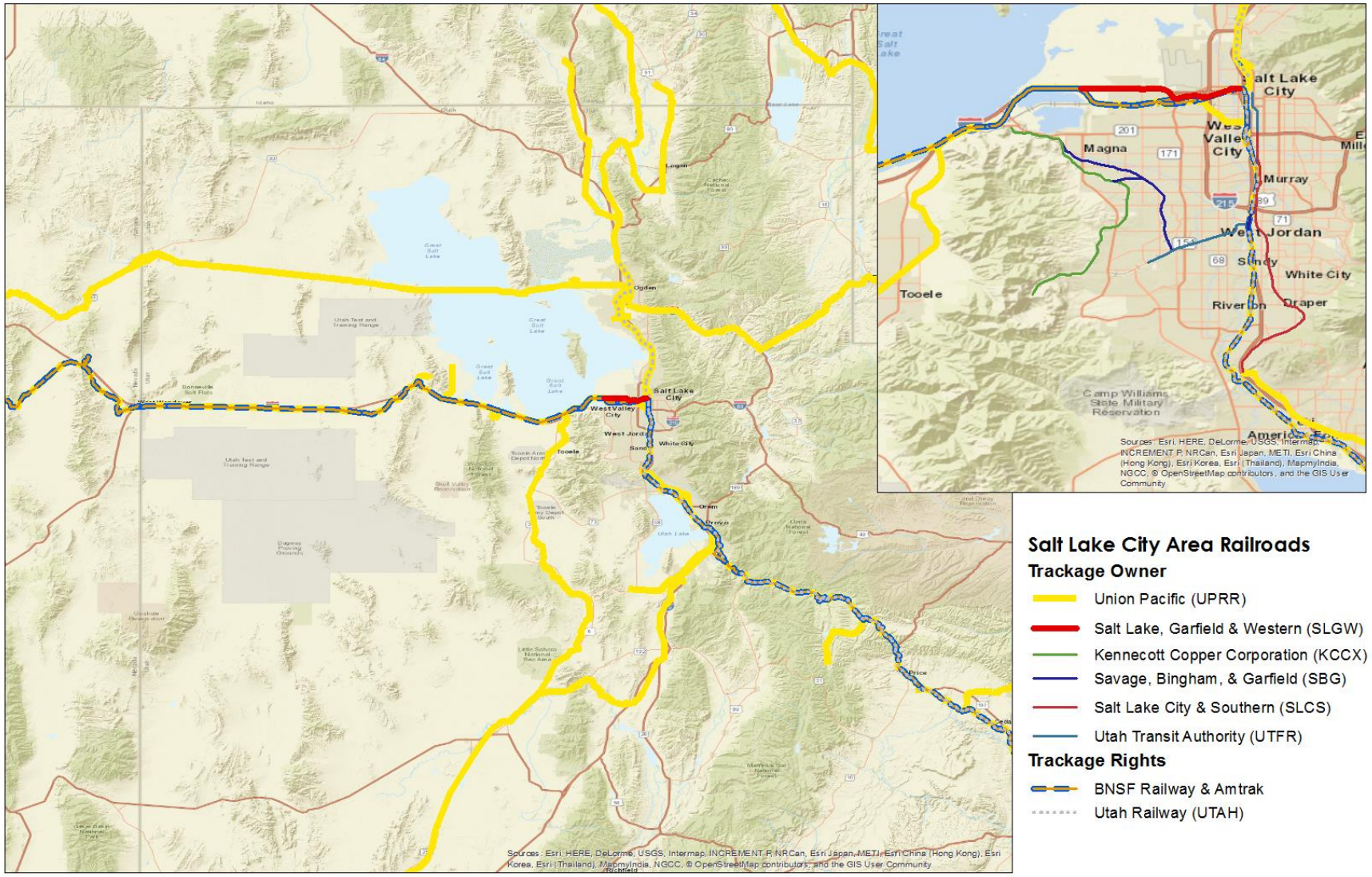


Figure 3.9 Railroad Service – Salt Lake Area



3.5 AIR CARGO CONNECTIVITY

SLC Airport air cargo is dominated by air freight integrator routes. Integrator airports are those the service the integrated express industry. In the US, those are: UPS, FedEx, and DHL. Figure 3.10 displays outbound air cargo, with Memphis (UPS), Louisville (FedEx), Oakland (UPS), and Boise (UPS) representing the top four destinations. SLC shipped about 175 million tons to other airports in 2016, with the top four garnering about 133 million of that total.[6]

Figure 3.10 2016 Outbound Air Cargo

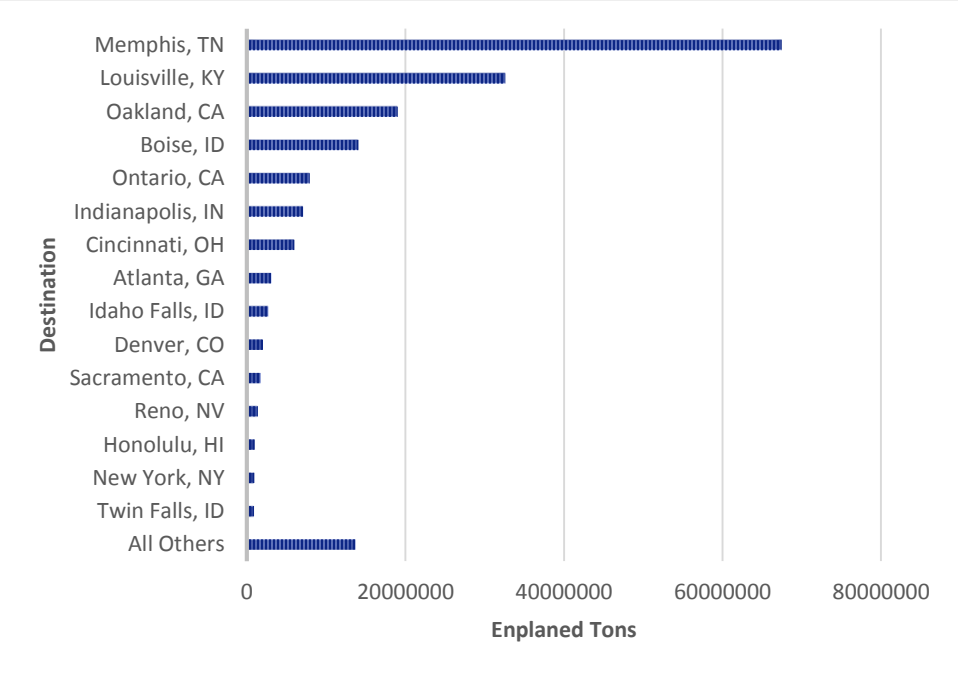


Figure 3.11 displays inbound air cargo, with Memphis (UPS), Louisville (FedEx), Oakland (UPS), and Ontario (UPS) representing the top four destinations. SLC received over 200 million tons from other airports in 2016, with the top four garnering about 150 million of that total.

[6] Source: Federal Aviation Administration, Calendar Year 2016

Figure 3.11 Inbound Air Cargo

3.6 FREIGHT FLOW SUMMARY

Commodity flow patterns illustrate the potential trade lanes that an inland port could serve. Commodity flows for the State of Utah and Salt Lake County specifically are derived from the Freight Analysis Framework (FAF) version 4.2. The FAF is a database maintained by the Federal Highway Administration and is largely based on data from the Census Bureau's Commodity Flow Survey. The FAF estimates flows of commodities between FAF regions for both a base year (2015) and a forecast year (2045). FAF regions are collections of counties that are similar in size to combined statistical areas (CSA). States that are very rural in nature may have only a single FAF zone representing the entire State (e.g. Montana, Mississippi, etc.). There are two FAF zones for Utah – Salt Lake City and the Remainder of Utah.

For this analysis we have analyzed commodity flow patterns for both the State of Utah as well as Salt Lake County. Note: a full set of supporting commodity flow graphics are available in Appendix B.

3.7 STATE OF UTAH FREIGHT FLOWS

Key highlights from State of Utah Freight Flows include:

Freight Measured by Tonnage

Total freight tonnage is projected to increase from 203 million tons annually to 294 million tons by 2045

- The outbound share of traffic is projected to increase by 4% in that time
- Modal split is dominated by truck and pipeline (~85%)
- Top freight generating counties are Salt Lake, Davis, and Tooele; each is projected to increase tonnage by more than 40%by 2045. Cache County (currently ranked 4th) is projected to increase by more than 70% in that time (Outbound trade is primarily shipped to Nevada (43%), Wyoming (14%), Idaho (11%), and California (10%). A number of other states represent smaller percentages of value. Growth is projected to increase moderately across all destinations, the highest being California (103%) and Texas (156%) (Figure 3.13).
- 51% of inbound tonnage originates in Wyoming. This figure is projected to increase by 39%by 2045. Colorado (12%) and California (9%) also ship to Utah. Tonnage increases are projected for Colorado (32%), California (68%), Idaho (66%), and Texas (80%) (Figure 3.14).
- Figure 3.12)
- Outbound trade is primarily shipped to Nevada (43%), Wyoming (14%), Idaho (11%), and California (10%). A number of other states represent smaller percentages of value. Growth is projected to increase moderately across all destinations, the highest being California (103%) and Texas (156%) (Figure 3.13).
- 51% of inbound tonnage originates in Wyoming. This figure is projected to increase by 39%by 2045. Colorado (12%) and California (9%) also ship to Utah. Tonnage increases are projected for Colorado (32%), California (68%), Idaho (66%), and Texas (80%) (Figure 3.14).

Figure 3.12 Top Utah Counties, by Total Tons

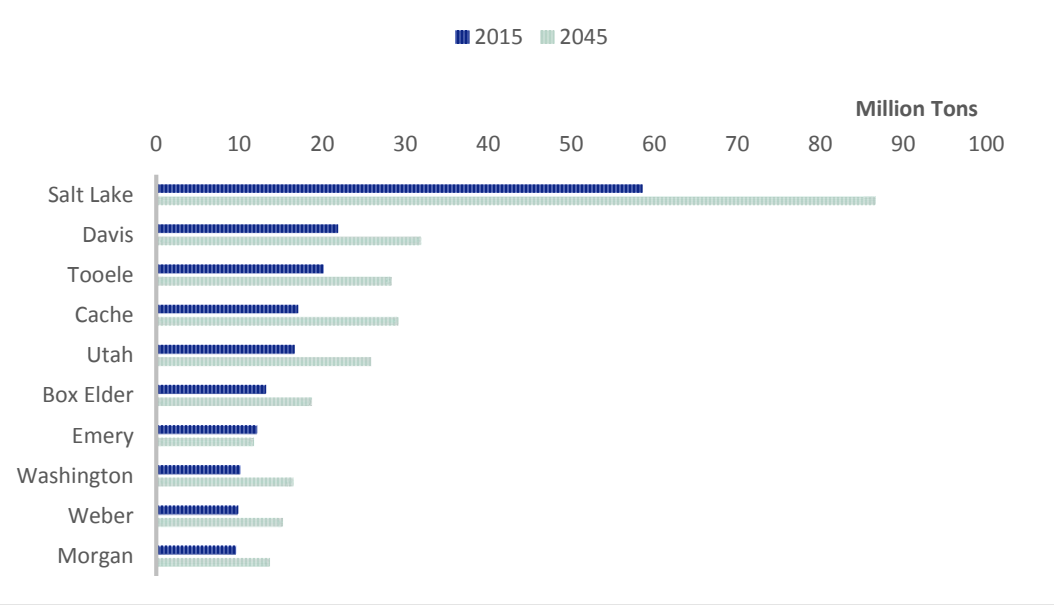


Figure 3.13 Outbound from Utah, by Tons

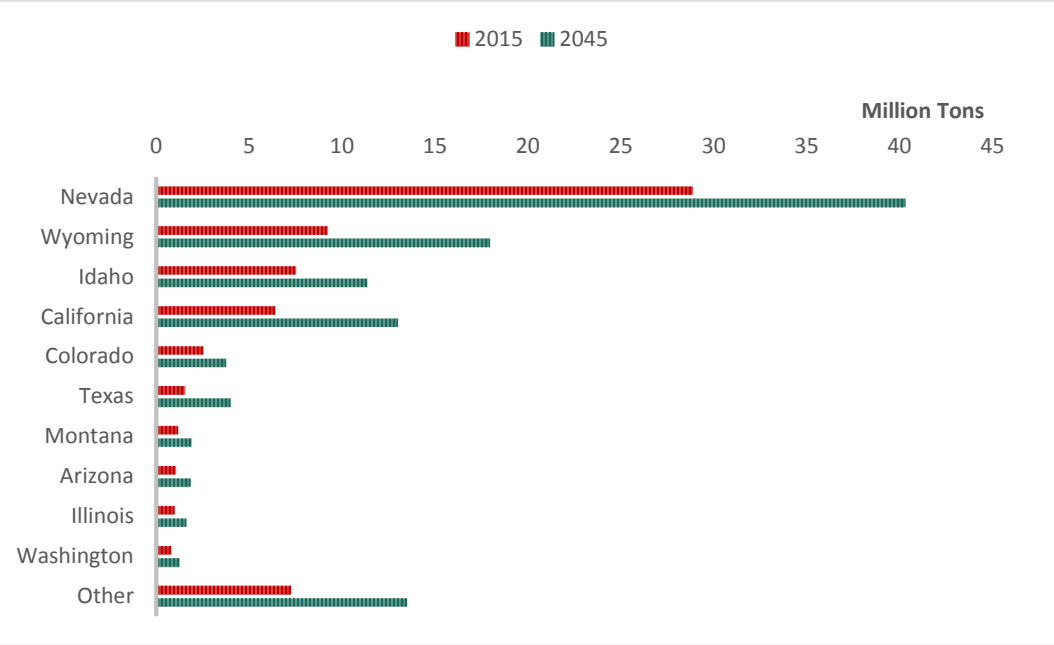
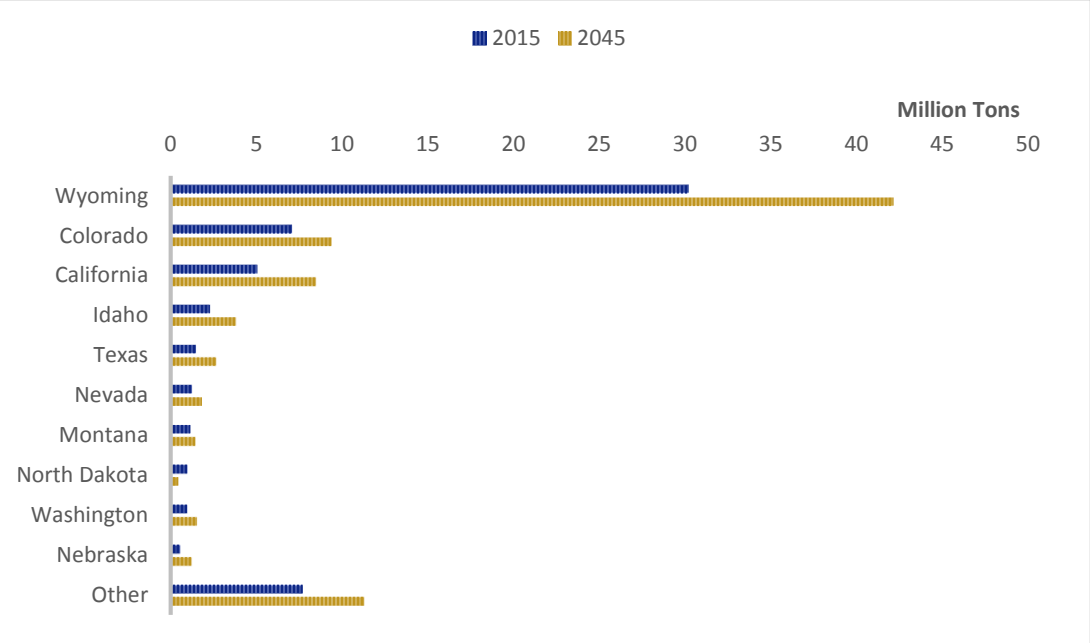


Figure 3.14 Inbound Tons to Utah, by Origin



Freight Measured by Value

Total freight value is projected to increase from $253 billion annually to $472 billion by 2045

- The outbound share of traffic is projected to increase by 5% in that time
- Modal split is dominated by truck, but is projected to shift from 63% in 2015 to 58% in 2045. Air cargo's share increases from 5% to 11%. The other modes only shift slightly
- Top freight generating counties are Salt Lake, Utah, and Davis; each is projected to generate substantial more value by 2045; 99%, 85%, and 90% respectively. Nearly every county in the state is projected to increase drastically in that time (Figure 3.15)
- Top destinations by value will continue to be dominated by California (14%), Nevada (13%), and Texas (7%). Substantial increases are projected for California (195%) and Texas (152%). The largest percent increase is projected for New York (251%) (Figure 3.16).
- Inbound trade is primarily from California (23%), followed by Wyoming (10%). A number of other states represent smaller percentages of value. Growth is projected to increase across all origins, though not as sharply as for outbound value (Figure 3.17).

Figure 3.15 Top Utah Counties, by Total Value

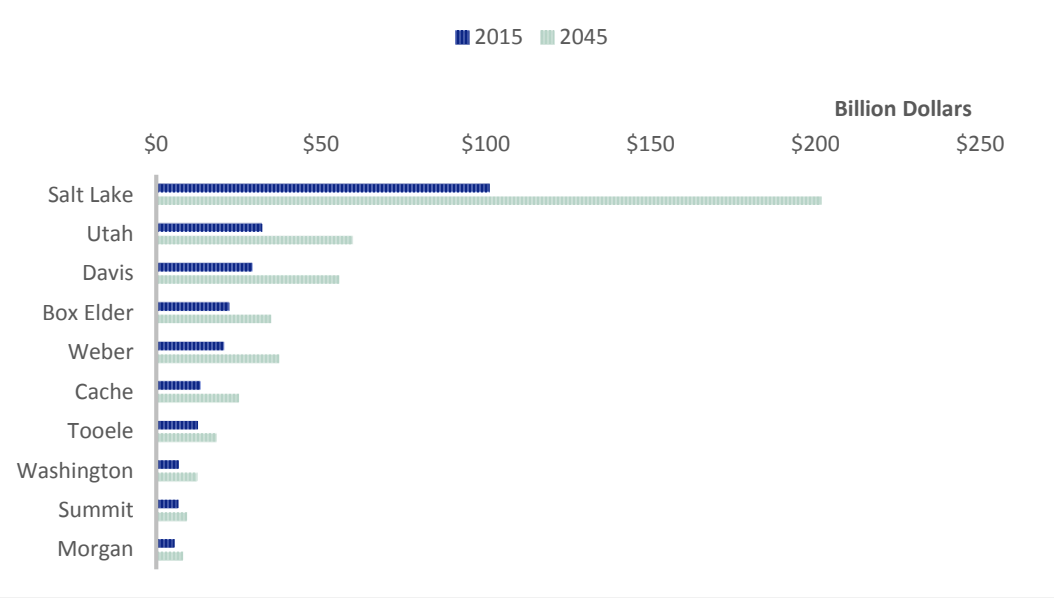


Figure 3.16 Outbound Value from Utah, by Destination

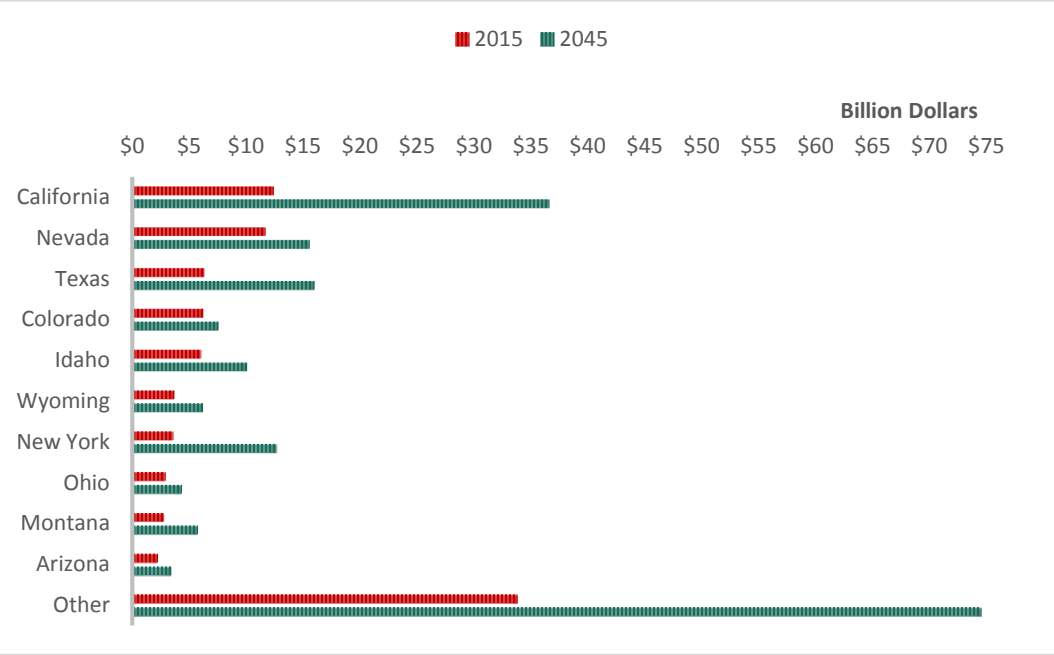
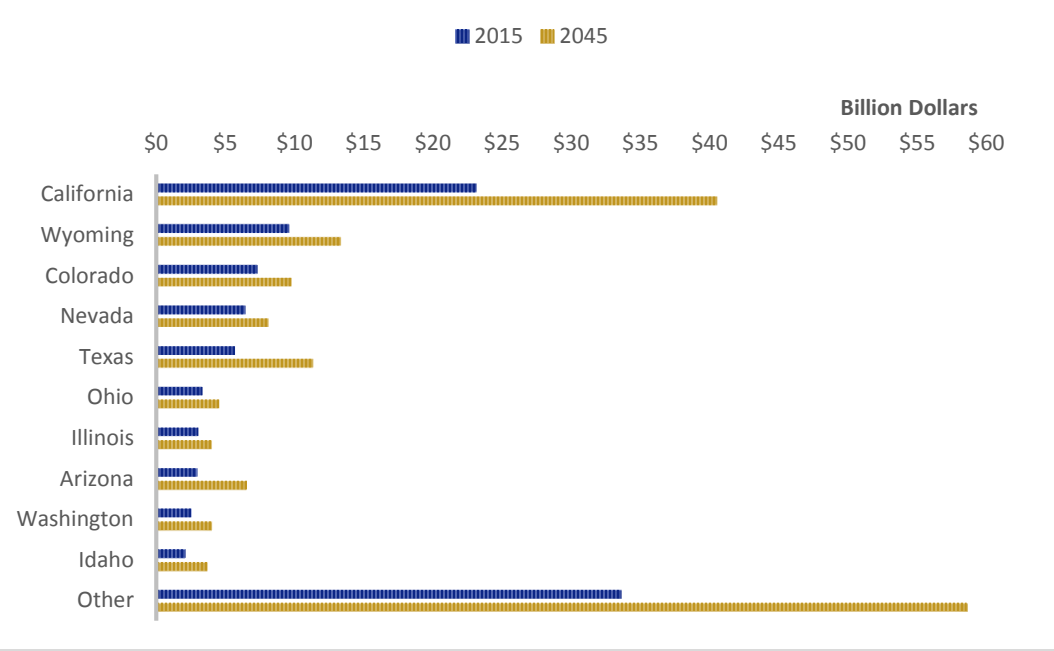


Figure 3.17 Inbound Value to Utah, by Origination



Foreign Trade

Total freight tonnage for international origins and destination countries is shown in Figure 3.18 and Figure 3.19. Key trends are that export tonnage is projected to increase sharply for all destinations, particularly Europe (3,833%) and Eastern Asia (629%). Import tonnage primarily originates in Canada and Eastern Asia, though substantial growth is expected for Canada (134%), Eastern Asia (272%), and Mexico (176%).

Figure 3.18 Export Tonnage through Utah Gateways, by Destination Country

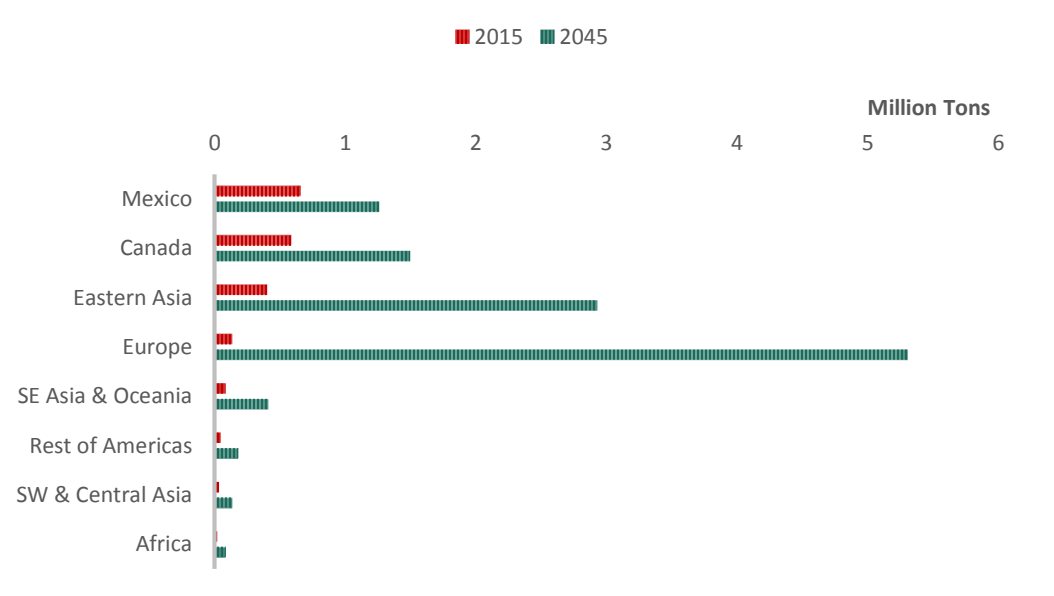
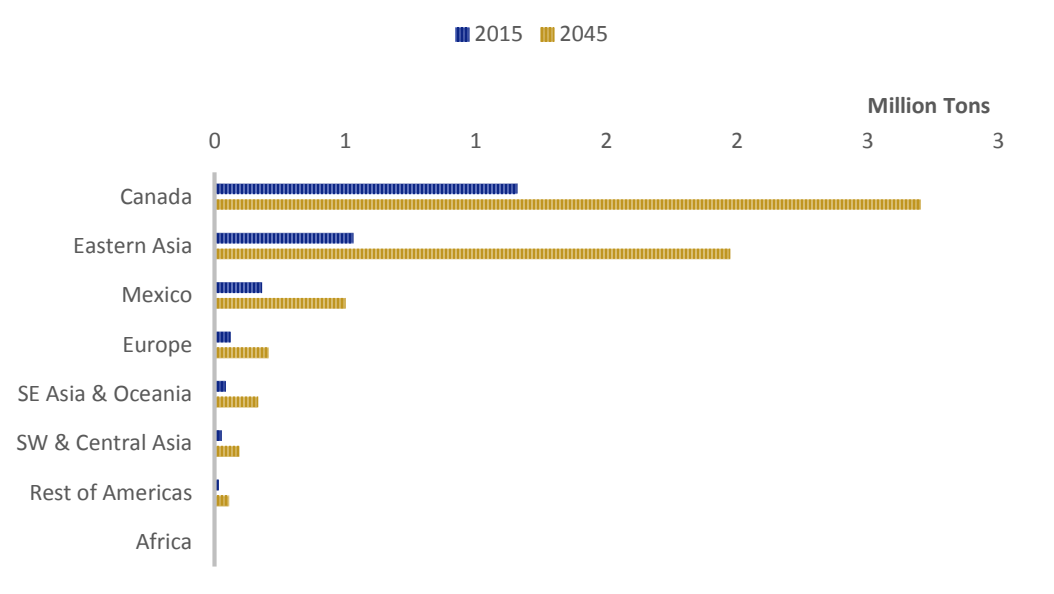


Figure 3.19 Import Tonnage through Utah Gateways, by Origin Country



Total freight value for international origins and destination countries is shown in Figure 3.20 and Figure 3.21. Key trends are that export value is also projected to increase sharply for all destinations, particularly Eastern Asia (396%) and Europe (434%). Import value primarily originates in Mexico, Eastern Asia, and Canada, with increases of 245%, 281%, and 235% respectively.

Figure 3.20 Export Value through Utah Gateways, by Destination Country

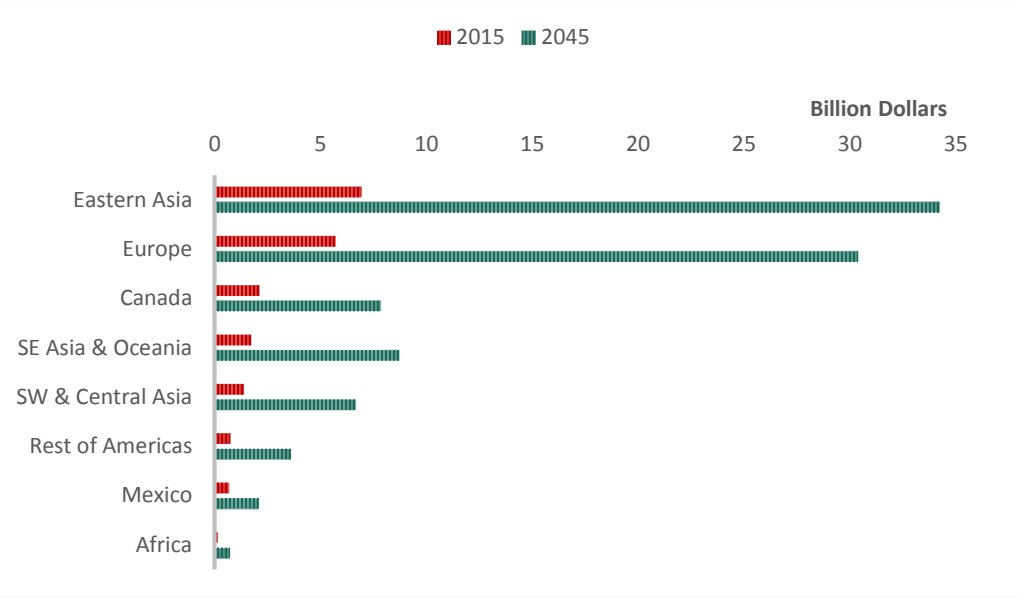
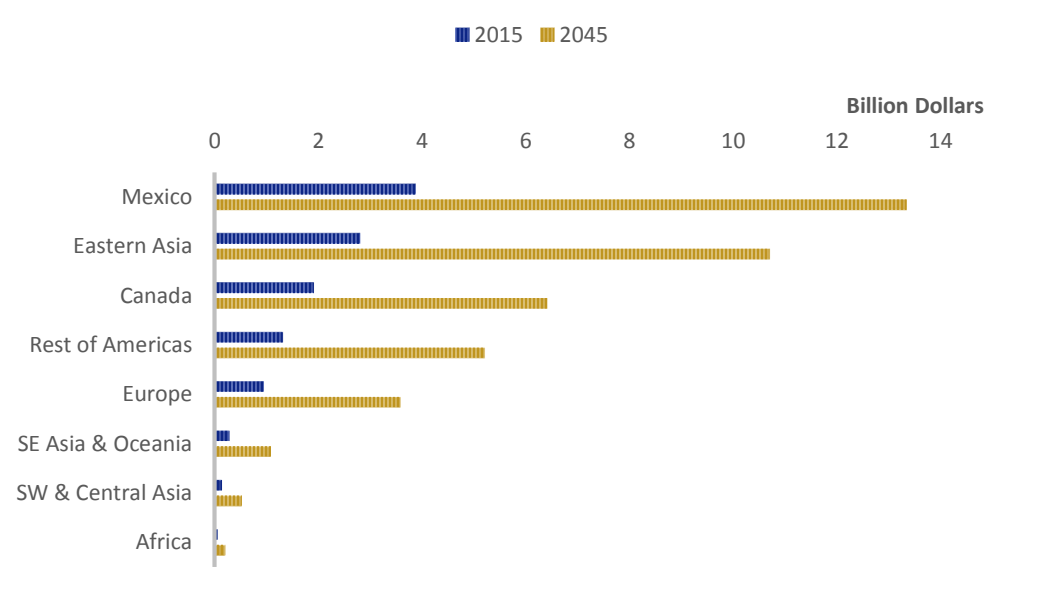


Figure 3.21 Import Value through Utah Gateways, by Origination Country



3.8 SALT LAKE COUNTY FREIGHT FLOW SUMMARY

Salt Lake County has been identified as a specific area of focus in investigating the potential for an inland port. Thus, it would be useful to examine commodity flows between Salt Lake County and the rest of the nation in addition to flows for the State of Utah as a whole. Because of this, we disaggregate the FAF commodity flow data down to the county level using a procedure that accounts for population, employment, the presence or absence of particular modes of transportation, and other factors. The results of that analysis are presented here.

3.9 INBOUND TO SALT LAKE COUNTY

Table 3.1 and Figure 3.22 present the top trading partners by State for the Salt Lake region based on commodity tonnages. In 2015, almost 54 percent of commodity flows by total tonnage were received from other Utah counties. Outside of Utah, Wyoming is the top inbound trading partner with a 22 percent share of inbound trade with the Salt Lake region. They are followed by California with a 5 percent share of inbound commodities by tonnage.

This trend is expected to remain constant as the Remainder of Utah is predicted to remain the Salt Lake region's top inbound trading partner despite a slight decrease in share of total inbound traffic – down to 52 percent. The Remainder of Utah is followed by Wyoming and California with 22 and 6 percent of commodities by tonnage, respectively. The compound annual growth rate for the top three inbound trading partners ranges from 1.1 to 1.8 percent, indicating a moderate pace of growth in inbound trade over the next 30 years. As Remainder of Utah, Wyoming, and California represent the largest inbound trading partners, freight-intensive industries in these areas are potential customers of an inland port.

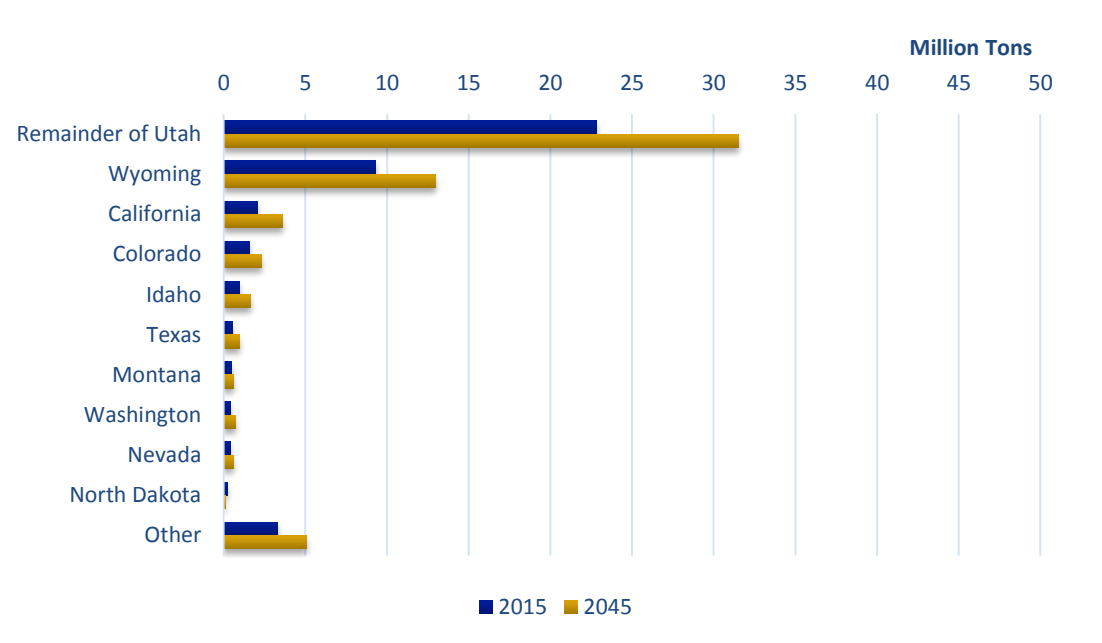
Table 3.1 Top Salt Lake County Trading Partners – Inbound

Origin	2015 Tonnage (Thousands)	2045 Tonnage (Thousands)	2015 % of Total	2045 % of Total	Compound Annual Growth Rate
Utah (except SLC)	22,793.1	31,527.8	54%	52%	1.1%
Wyoming	9,294.5	12,935.4	22%	22%	1.1%
California	2,100.8	3,609.5	5%	6%	1.8%
Colorado	1,597.2	2,285.7	4%	4%	1.2%
Idaho	996.9	1,636.6	2%	3%	1.7%
Texas	544.9	968.9	1%	2%	1.9%
Montana	486.0	615.7	1%	1%	0.8%
Washington	441.6	695.0	1%	1%	1.5%
Nevada	428.2	576.9	1%	1%	1.0%

Origin	2015 Tonnage (Thousands)	2045 Tonnage (Thousands)	2015 % of Total	2045 % of Total	Compound Annual Growth Rate
North Dakota	246.4	127.2	1%	<1%	-2.2%
All Other States	3306	5082	8%	8%	1.4%

Source: Freight Analysis Framework and Cambridge Systematics

Figure 3.22 Top Salt Lake County Trading Partners – Inbound



3.10 INBOUND TO SALT LAKE CITY VIA RAIL INTERMODAL

Rail intermodal traffic is a key freight movement that should be captured by an inland port in order for it to thrive. Given this observation it is important examine the Salt Lake City's primary trading partners for goods transported by rail intermodal. In the FAF database, rail intermodal is captured by the "multiple modes and mail" mode. Table 3.2 and Figure 3.23 illustrate the top inbound rail intermodal trading partners for Salt Lake County. In 2015, almost 19 percent (by tonnage) of inbound commodities by multiple modes and mail were received from California. This is important because it demonstrates the region's connectivity to the port markets that represent potential partners of an inland port. The Remainder of Nebraska is Salt Lake's second top inbound trading partner via multiple modes and mail (incl. rail intermodal) with 17 percent share of trade. They are followed by Wyoming with 8 percent of commodities by tonnage.

By 2045, California is estimated to remain the top inbound trading partner via multiple modes and mail for the Salt Lake region with a 33 percent share of total traffic. This is a significant increase over the 2015 value. California is followed by Remainder of Nebraska and Maryland with 14 and 8 percent of commodities by tonnage, respectively. The compound annual growth rate shows that California and Maryland will have a rapid increase in inbound tonnage to Salt Lake County over the next 30 years. Salt Lake County has direct access via rail and highway to California, which will help the inland port thrive given that California is expected to grow aggressively.

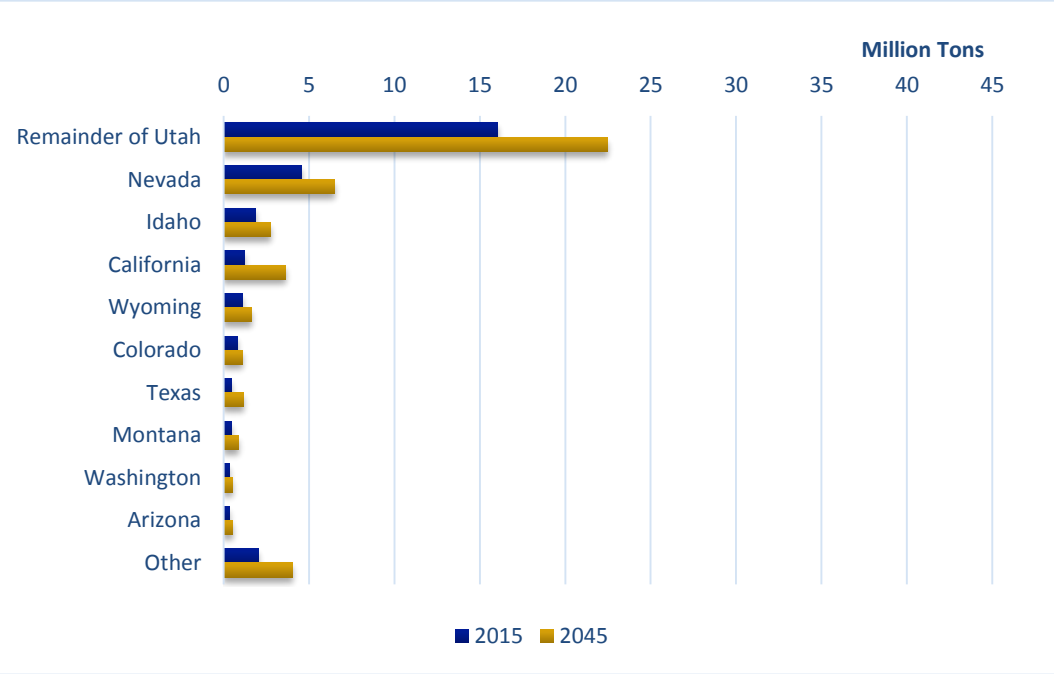
3.11 OUTBOUND FROM SALT LAKE COUNTY

Table 3.2 Top Salt Lake County Trading Partners – Outbound

Origin	2015 Tonnage (Thousands)	2045 Tonnage (Thousands)	2015 % of Total	2045 % of Total	Compound Annual Growth Rate
Utah (except SLC)	16,061.0	22,501.7	55%	50%	1.1%
Nevada	4,569.1	6,454.6	16%	14%	1.2%
Idaho	1,845.7	2,722.7	6%	6%	1.3%
California	1,214.5	3,611.3	4%	8%	3.7%
Wyoming	1,105.3	1,650.1	4%	4%	1.3%
Colorado	798.7	1,093.5	3%	2%	1.1%
Texas	480.8	1,170.3	2%	3%	3.0%
Montana	470.7	837.9	2%	2%	1.9%
Washington	345.3	532.0	1%	1%	1.5%
Arizona	309.8	541.5	1%	1%	1.9%
All Other States	2032	4015	7%	9%	2.3%

Source: Freight Analysis Framework and Cambridge Systematics

Figure 3.23 Top Salt Lake County Trading Partners – Outbound



4.0 Competitiveness

A customized competitiveness assessment model was developed to illustrate how a corporate decision maker might initially access location-influenced site options for a real-world project example. This work was based upon readily available data and prevailing industry knowledge. These models benchmarked Salt Lake City against competitors for each of four sectors (regional distribution, aerospace manufacturing, electronics manufacturing and e-commerce intermountain-west distribution), which illustrates how various location factors influence location decisions, identify location strengths, and suggest areas for improvement.

After a thorough review of the four selected sectors, their supply chains, and Salt Lake City's competitiveness, this region is very competitive within these sectors. However with each opportunity that the region competes for, it is imperative that Salt Lake City demonstrate that it can provide an overall supply chain management advantage including a better overall total landed cost, higher or very competitive levels of reliability and at least competitive delivery times.

In the course of conducting the Competitiveness Analysis, several observations were made that are important to note:

Overall the Salt Lake City region has an excellent business climate which is characterized by

- A very competitive tax structure
- Transport connectivity
- A well-educated and highly skilled workforce which is supported by an outstanding university and community college system
- A real estate community committed to competitively priced physical asset development
- A highly developed value-add from industry and research collaboration

- Salt Lake International Airport is an underutilized asset that is a competitive advantage in attracting manufacturers that rely on air to move their high value manufactured products
- Regional distribution can thrive based on Salt Lake's transport connectivity, but when Coastal California markets are part of a business model, Salt Lake City loses its cost and time competitive advantages

4.1 METHODOLOGY

The framework for the competitiveness assessment model included:

A specific project investment scenario defined for each industry segment, including product mix, employment, facility size, supply chain requirements and transport requirements. A series of review factors defined and organized by the broad categories shown in Table 4.1

Table 4.1 Competitiveness Review Factors

Transportation Costs
○ Point to point shipping costs of finished product
Time in Transit
○ Time in transit for finished product to market
Business Reliability
○ Labor union participation rates ○ Freight route security ○ Freight delays caused by weather ○ Trucking delays caused by congestion ○ Late pick-up time for integrators ○ Highway impediments
Facility availability and operating costs
○ Industrial building lease rates ○ Costs for fully serviced industrial land ○ Cost of electricity ○ Cost of gas ○ Total tax burden ○ Certified site program
Labor availability and costs
○ Unemployment rate ○ Worker availability within 45 minutes ○ Technical training for workers ○ University degrees for electrical engineers ○ Average hourly salary for sector employees
Headquarters considerations
○ Direct international commercial flights outside of Utah ○ Drive time to the closest airport with regularly scheduled service ○ Level of passenger service at nearest airport
Cost comparisons for each specific profile were developed from a mix of public and proprietary sources.

Cost comparisons for each specific profile were developed from a mix of public and proprietary sources.
Qualitative criteria was selected by the GLDPartners team based on interviews, research & past deal and sector experience.
Relative weights were developed among the main categories and for each criterion within a category as a proportion of 100. Weights vary for each supply chain profile depending upon nature of the scenario.
For each profile, candidate locations were scored based on quantitative factors using a 1-10 scale (with 10 being the best score). A very competitive total score normally ranges between 6 and 7 and a difference of more than .05 is considered quite substantial

Source: GLDP Analysis

How to Interpret the Results Table

- ✓ This is an objective numeric assessment of the key factors involved in a location decision process. There is little or no subjective input in evaluating the scoring results.
- ✓ Decision-makers will undertake their review of the Overall Competitiveness Analysis by first evaluating the overall score.
- ✓ Scores are based on a 0-10 scale, with 10 being the highest.
- ✓ Scores that are within .10 of each other should be considered statistically equal
- ✓ Scores that are within .25 of each other should be considered as close competitors
- ✓ Scores that are more than .25 of each other should be considered meaningfully different
- ✓ Even in the case of a high or competitive score, decision-makers will want to review areas of distinct weakness in an overall score as this can be a significant variable when making a final decision among close competitors
- ✓ Scores are already weighted to indicate relative importance of factors as they relate to each other – so the Overall Competitiveness Score should be a meaningful indication of the best choices.

4.2 AEROSPACE COMPONENT MANUFACTURING FACILITY

Table 4.2 Aerospace Component Manufacturing Overview

Background	A joint venture between a French and U.S. engine manufacturer to build composite fan blades and fan cases for new generation jet engines for Boeing and Airbus
Project	$100,000,000 investment to build a 275,000 sf building on 50 acres
Development Proposition	Build-to-suit
Jobs	130 growing to 400 engineers and technicians
Products Sourced	From across the US
Markets Served	Indianapolis, IN and Durham, NC
Modes Used	Truck and air integrators
SLC Competition	Salt Lake City, UT; Seattle, WA; Rochester, NH; and Wichita, KS

Source: GLDP Analysis

Figure 4.1 Aerospace Component Manufacturing Competitiveness

Site Decision Factors	Salt Lake City UT	Rochester NH	Wichita KS	Seattle WA
Transport Costs	0.55	0.9	0.85	0.4
Time in Transit	0.2	0.7	0.55	0.2
Reliability	1.75	1.35	1.1	1.1
Facility Availability and Operating Costs	2.1875	1.1875	2	1.625
Total Tax Burden	2	2	1.2	1.6
Labor Availability and Costs	2.075	2.075	1.9625	2.075
Competitiveness Score	**8.7625**	**8.2125**	**7.6625**	**7**

Results

This scenario points out very clearly that Salt Lake City offers a strong value proposition to a manufacturer of high value products when logistics costs are not the dominate factor. When the other costs of doing business dominate the site location process, the competitiveness of Salt Lake City shines. Salt Lake City's experience with composite materials in both suppliers and workers was also a factor in this scenario as the competitors for this project have strong industrial roots in composite materials.

4.3 CORPORATE HEADQUARTERS AND MANUFACTURING FACILITY

Table 4.3 Corporate Headquarters and Manufacturing Overview

Background	California privately held electrical engineering company that designs, develops and manufactures specialty custom air moving systems for the aerospace and defense industry. Interested in relocating their corporate headquarters and manufacturing operations out of California. They also have a manufacturing operation in the UK
Project	100,000sf modern office and manufacturing facility
Development Proposition	Build-to-suit
Jobs	90 jobs will be created over a five year period and will include engineers, machinists and senior executives with an average salary of $89,000
Products Sourced	Various, throughout the United States
Markets Served	Global
Modes Used	Truck and air. Products will primarily be shipped by integrators
SLC Competition	Las Vegas NV , Mobile AL, and Tucson, AZ

Source: GLDP Analysis

Figure 4.2 Corporate Headquarters and Manufacturing Competitiveness

Site Decision Factors	Salt Lake City UT	Las Vegas NV	Mobile AL	Tucson AZ
Transport Costs	0.65	0.68	0.475	0.65
Time in Transit	1.4	1.32	1.28	1.04
Reliability	1.25	1.36	1.3	1.27
Facility Availability and Operating Costs	1.75	1.55	1.75	1.55
Total Tax Burden	0.5	0.32	0.955	0.63
Labor Availability and Costs	1.35	1.14	1.11	1.26
HQ Considerations	1.5	1.5	0.36	0.24
Competitiveness Score	**8.4**	**7.87**	**6.73**	**6.64**

Results

In this scenario the competition is quite strong with two of the competitors considered as aerospace/defense manufacturing centers. However, the numbers clearly suggest a strong winner in Salt Lake City and especially its ability to support high-velocity supply chains to Europe which was an important issue for meeting the needs of this project scenario. Salt Lake International Airport provides a large competitive advantage.

4.4 E-COMMERCE FACILITY FOR A NATIONAL DEPARTMENT STORE CHAIN

Table 4.4 E-Commerce Facility Overview

Background	Large national department store chain is looking for a location for an e-commerce facility to serve the Intermountain West region. This will be the 5th e-commerce facility for the company as they look to become more competitive in the e-commerce arena. The company currently has thousands of retail locations around the U.S. which they have begun to downsize in space by 50% and all their new stores will be 32,000 sf instead of approximately 80,000 square feet. Only on-line orders will be handled in this facility.
Project	800,000 sf e-commerce fulfillment center
Development Proposition	Build-to-suit
Jobs	250
Products Sourced	From Asia through the Ports of LA and Long Beach by rail
Markets Served	Intermountain West
Modes Used	Truck and integrator airport
SLC Competition	Salt Lake City, UT; Reno, NV; Phoenix, AZ and Denver, CO

Source: GLDP Analysis

Figure 4.3 E-Commerce/Distribution Competitiveness

Site Decision Factors	Salt Lake City UT	Phoenix AZ	Reno NV	Denver CO
Transport Costs	1.65	1.5	1.45	1.4
Time in Transit	1.72	1.56	1.48	1.52
Reliability	1.9	1.8	1.7	1.8
Facility Availability and Operating Costs	.87	1.11	0.99	0.75
Total Tax Burden	2	1.2	2	1.6
Labor Availability and Costs	1.33	1.6	1.74	1.27
Competitiveness Score	**9.47**	**8.77**	**9.36**	**8.34**

Results

Salt Lake City's unique geographical location is clearly demonstrated in this scenario. The population in the Intermountain West is continuing to grow as is their online buying experience but the region does not offer the concentrations of population that are found in the more urban areas of the U.S. It is critical for an e-commerce operation to find that perfect location that allows them to serve the large Intermountain West region while at the same time minimizing their last mile logistics costs exposure. Salt Lake City serves that role perfectly. With its rail transport connectivity for inbound shipments from the west coast ports, its trucking hub, the airport's connectivity for high value e-commerce shipments and its access to population densities, Salt Lake City offers the best access for distribution in the Intermountain West region.

4.5 REGIONAL FOOD DISTRIBUTION CENTER

Table 4.5 Regional Food Distribution Center Overview

Background	A food industry redistributor that buys full truckloads of product from 830 manufacturers and consolidates those products in 9 distribution centers located across the country. Their strategy is to add several new centers in strategic locations where their operations have been less efficient. The company then resells products in less-than-truckload (LTL) quantities to distributors on a weekly basis. The company owns and operates its own truck fleet. Would serve portions of 5 states.
Project	$45 million investment to include a combination of facilities under one roof totaling 163,000 SF including refrigerated, frozen and dry storage space, office as well as a 9,700 SF truck garage.
Development Proposition	Build-to-suit
Jobs	125 warehouse and distribution workers
Products Sourced	From across the US
Markets Served	Southern California, Southern Nevada, AZ, NM, and UT
Modes Used	Truck
SLC Competition	Kingman, AZ , Albuquerque, NM and Bakersfield, CA

Source: GLDP Analysis

Figure 4.4 Regional Food Distribution Competitiveness

Site Decision Factors	Salt Lake City UT	Kingman AZ	Albuquerque NM	Bakersfield CA
Transport Costs	1.25	2	0.75	1.625
Time in Transit	1.2	1.425	1.1625	1.35
Reliability	1.05	0.9375	0.6	0.7875
Facility Availability and Operating Costs	1.26	1.2375	1.17	1.3875
Total Tax Burden	1.5	0.9	0.6	0.3
Labor Availability and Costs	1.155	1.1475	1.3425	1.3025
Competitiveness Score	**7.415**	**7.6475**	**5.625**	**6.5525**

Results

In this example, given the relatively close overall scoring, Salt Lake City could be seen as a serious competitor to win this investment. But with closer examination, it is important to disaggregate the factors to understand the region's strengths and weaknesses. Again the specifics of the modelled example tell us that the Salt Lake City region won't compete well on its location for Southern California supply chain end-points when there are better situated regions.

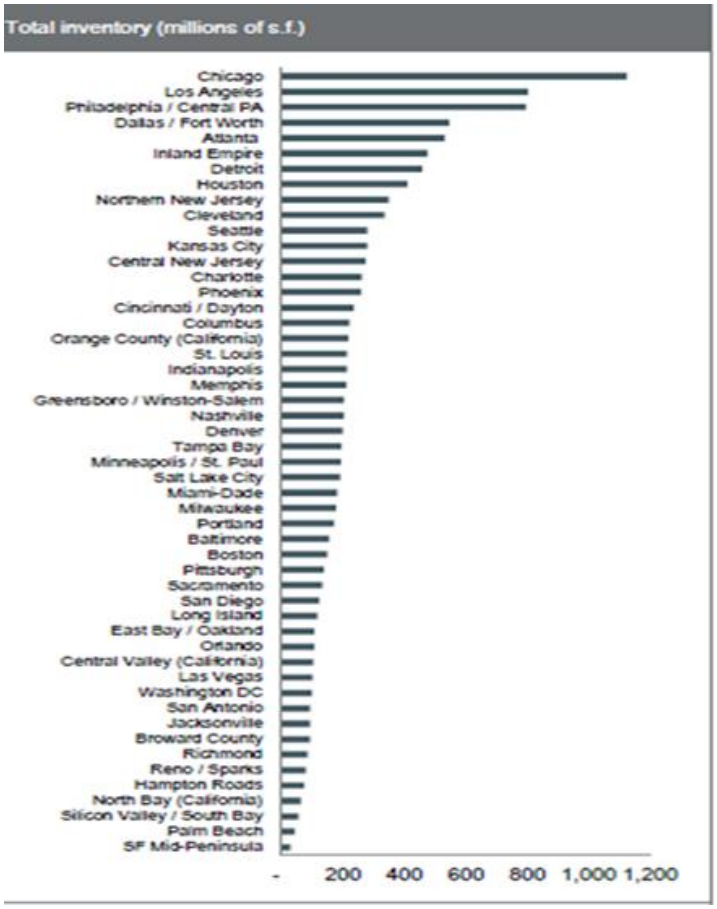
5.0 Market Demand

5.1 KEY MARKETS

The Salt Lake City region represents the 27th largest industrial property market in the US and is approximately the same size at the regional markets in Nashville, Denver, Minneapolis, and Miami (Figure 5.1). The Salt Lake City market is a fast-growing medium-sized market. At the end of 2017, the region enjoyed low vacancy rates and healthy net new absorption, which has led to rising rental rates and sale prices per square foot. As vacancy rates have declined, industrial rental rates grew by 5% in 2017

The regional economy has shown an underlying strength with lower than US-average unemployment at 3.4%. Unlike national trends, the Salt Lake region has experience a job growth rate that is almost double the national figure.

Figure 5.1 Metropolitan Industrial Markets: US (millions sf)



Responding to this economic growth, nearly 3 million sf has been completed with another 5 million sf of space under construction. The market has been led by large deals, with growth coming from local and inward investing companies, including Post Foods, UPS, Readerlink, Home Depot and Amazon. Other important deals have been signed by Veritiv Operating Company, Pharmatech and Hose Power USA. Year-to-date, leases of over 100,000 square feet have represented 51% of the 5.4 million square feet leased, which is a high figure. Local property brokerage offices are projecting continued strong tenant demand which will continue to keep available supply tight and to justify increasing rents.[7]

Figure 5.2 Salt Lake Region Industrial Market

Salt Lake Region Industrial Market, Q3, 2017	
Vacancy Rate (%)	3.3%
Net Absorption (year-to-date sf)	983,842

Source: NMKF

The market notably recorded four consecutive quarters with over 1.0 million sf leased and has seen 16 consecutive quarters of positive net absorption. Of the 5 million sf currently under construction, nearly 60% is already pre-leased, signaling a well-balanced market.[8]

The property market suggests that the greater Salt Lake City region is doing well, but it is that very strength that we believe can be a strong foundation for growth beyond what has been experienced to date. As has been reflected in the earlier described Competitiveness Assessment, the greater Salt Lake City market can be quite competitive for a range of new manufacturing and distribution investment. We believe that a state of the art Utah Global TradePort project would position Utah and the greater Salt Lake City region for a wider array of tech manufacturing, cargo consolidation and processing and super regional distribution.

As demonstrated in the Competitiveness Assessment model, building from some existing presence the Salt Lake City region can fare well in the following sectors: aerospace component manufacturing, e-commerce distribution, and corporate headquarters with manufacturing. For example, the region stands out due to the 2nd highest concentration of medical device jobs in the US (4.63X the national average).

Table 5.1 on the following page provides several examples of companies already present in the market in key sectors.

[7] Source: JLL

[8] Source: CBRE

Table 5.1 Key Market Representation in Salt Lake City

Autoliv

The world's largest automotive safety supplier with sales to all leading car manufacturers worldwide. Together with its joint ventures, Autoliv has over 70,000 employees in 27 countries, of whom 8000 are involved in research, development and engineering. In addition, the company has 22 technical centers around the world, including 19 test tracks, more than any other automotive safety supplier. The group is among the biggest Tier 1 automotive suppliers in the world, with annual revenues exceeding $10B, #283 on the Fortune 500. Headquartered in Stockholm, Sweden, the firm has two business segments: Passive Safety and Electronics. Its Utah presence is at: Autoliv Ogden Technical Center, Autoliv Brigham City and Autoliv Tremonton. Autoliv is an important player in an extremely fast growing autotech segment. An important key for Utah is that the company invests further, especially in the electronics area or active safety systems. Additional information is available at: https://www.autoliv.com/

Gossner Foods

One of the largest cheese manufacturers in the United States and specializes in producing about 30 types of cheese. The company also produces UHT shelf stable milk for retail sale and for the military. Gossner Foods has a contract to supply UHT milk to American troops stationed around the world. The company is headquartered in Logan and has plants in El Centro, California and Heyburn, Idaho, and employs more than 500 people. Gossner buys milk from 300 farms throughout Utah and Idaho. The firm's main cheese plant in Logan houses production processes and is adjacent to the Gossner milk plant. Additional information is available here: http://www.gossner.com/

IM Flash Technologies

A semiconductor fab producer joint venture between Intel and Micron, IM Flash created in 2006 to manufacture non-volatile memory for both companies for use in SSDs, phones, tablets and more. In 2015, IM Flash began manufacturing 3D XPoint™ technology, the first entirely new memory media in 25 years. Intel and Micron announced the completion of an expansion in Lehi, Utah. Additional information is available here: www.imflash.com/

Mity-Lite

Manufactures lightweight folding tables and chairs, including aluminum, Madera Laminate, and Madera Plywood tables; banquet, stacking, and folding chairs; portable dance floors; staging; and partitions. Additional information is available here: https://mitylite.com

Myriad Genetics

A molecular diagnostic company that employs proprietary technologies that permit doctors and patients to understand the genetic basis of human disease and the role that genes play in the onset, progression and treatment of disease. Myriad's discovery of the breast cancer gene, BRCA1 was universally acclaimed as a monumental achievement. Additional information is available here: https://myriad.com/

Stephen's Gourmet

Food brand owned by Indulgent Foods in Farmington known for its production of hot cocoa powder. Additional information is available here: https://www.indulgentfoods.com/

Ultradent

A global dental and orthodontic manufacturing company that has experienced continuous growth for over 30 years. The firm has vertically integrated disciplines in the areas of chemistry, engineering, automation, robotics and marketing. Ultradent's products are used worldwide by dentists, orthodontists, group practices, dental labs, government agencies, and universities. Additional information is available here: https://www.ultradent.com/en-us/Pages/default.aspx

United Technologies/ Rockwell Collins Inc.

Result of $23B corporate purchase and includes a facility with 150 employees in University of Utah Research Park. The Salt Lake City division of Rockwell Collins produces visual simulation programs to enhance training for commercial and military pilots. Additional information is available here: http://www.utc.com/Pages/Home.aspx and https://www.rockwellcollins.com/

USANA Health Sciences

Manufactures nutritional supplements and health care products. The firm's in-house research staff scientists are involved in cellular-science research and regularly collaborates with prominent institutions. Additional information is available here: https://www.usana.com/

The State of Utah is a regarded as a business-friendly state and the Salt Lake region is seen as a dynamic, high-quality business environment. Though there are challenges with the regional workforce from a supply perspective, the in-place workforce is highly educated well-positioned to support tech-manufacturing investment attraction. Looking forward and taking into account the region's competitiveness assessment, the Salt Lake region has the potential to continue to grow in a diversified business base in such areas as: aerospace, automotive technologies, medical devices, and pharma.

5.3 FREIGHT DEPENDENT MARKETS

In addition to the key market segments discussed above, Salt Lake County houses a substantial number of businesses that generate, consume, and process freight in some form. Traditionally, these have been broadly categorized as businesses involved in manufacturing, warehousing, wholesale trade, and related. Based on establishment data provided by EDCUtah, the next several graphics provide an overview of existing businesses in each of these sectors, by type and location.

Figure 5.3 Salt Lake County Manufacturing Firms, by Type

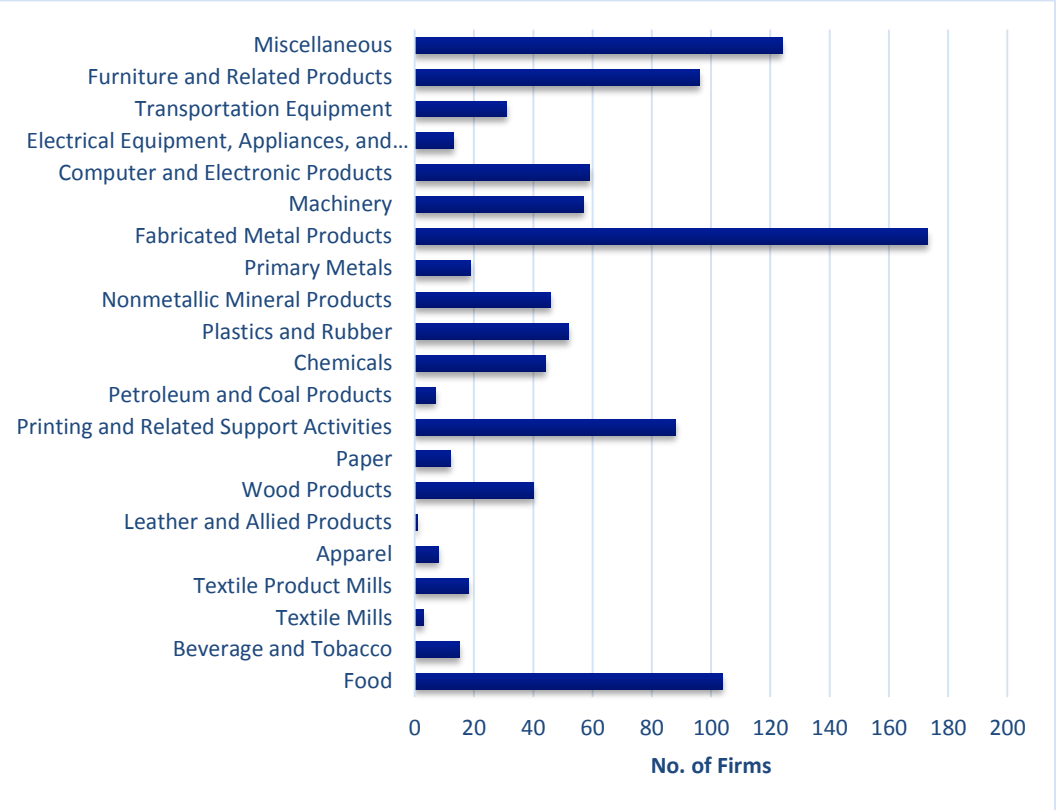


Figure 5.4 Salt Lake County Manufacturing Businesses

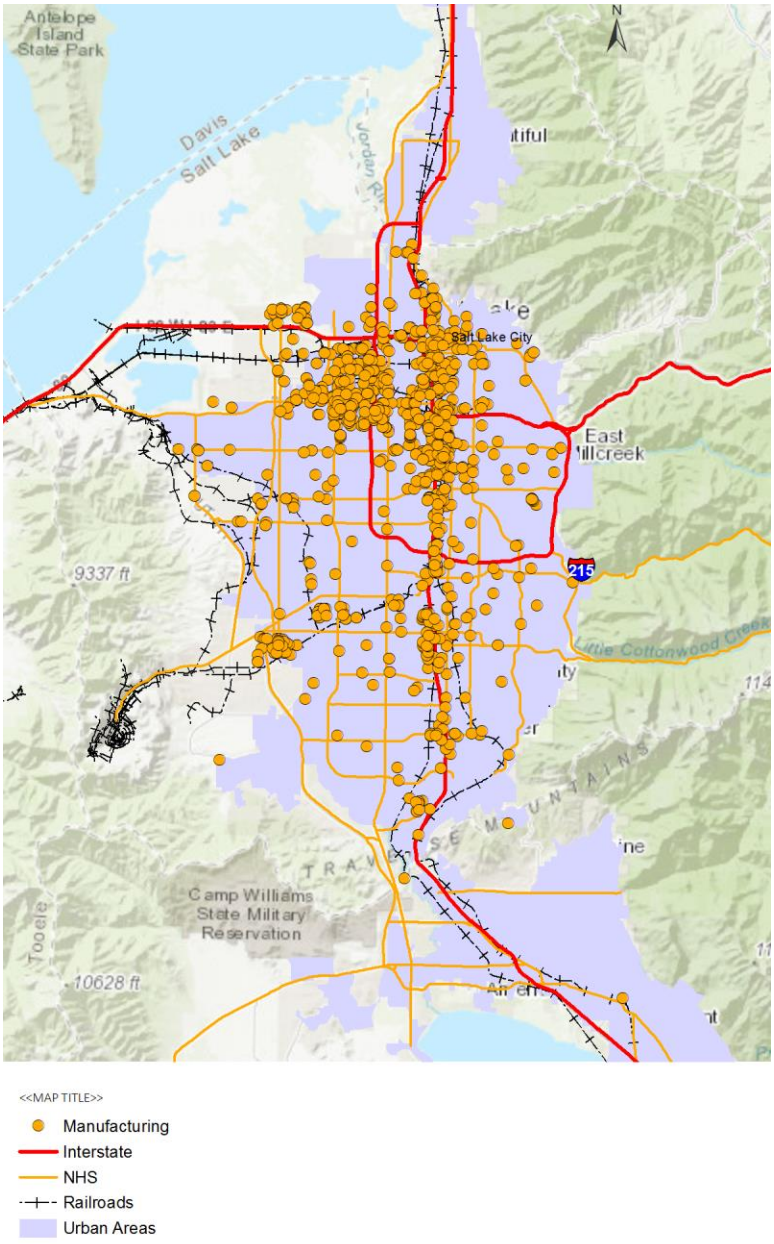


Figure 5.5 Salt Lake County Transportation and Warehousing Firms, by Type

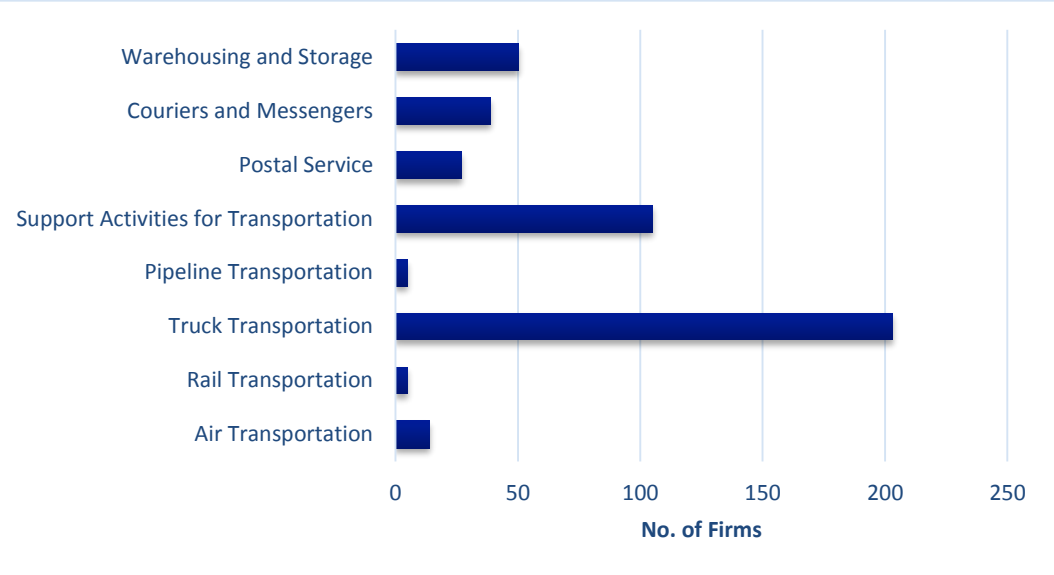


Figure 5.6 Salt Lake County Transportation and Warehousing Firms

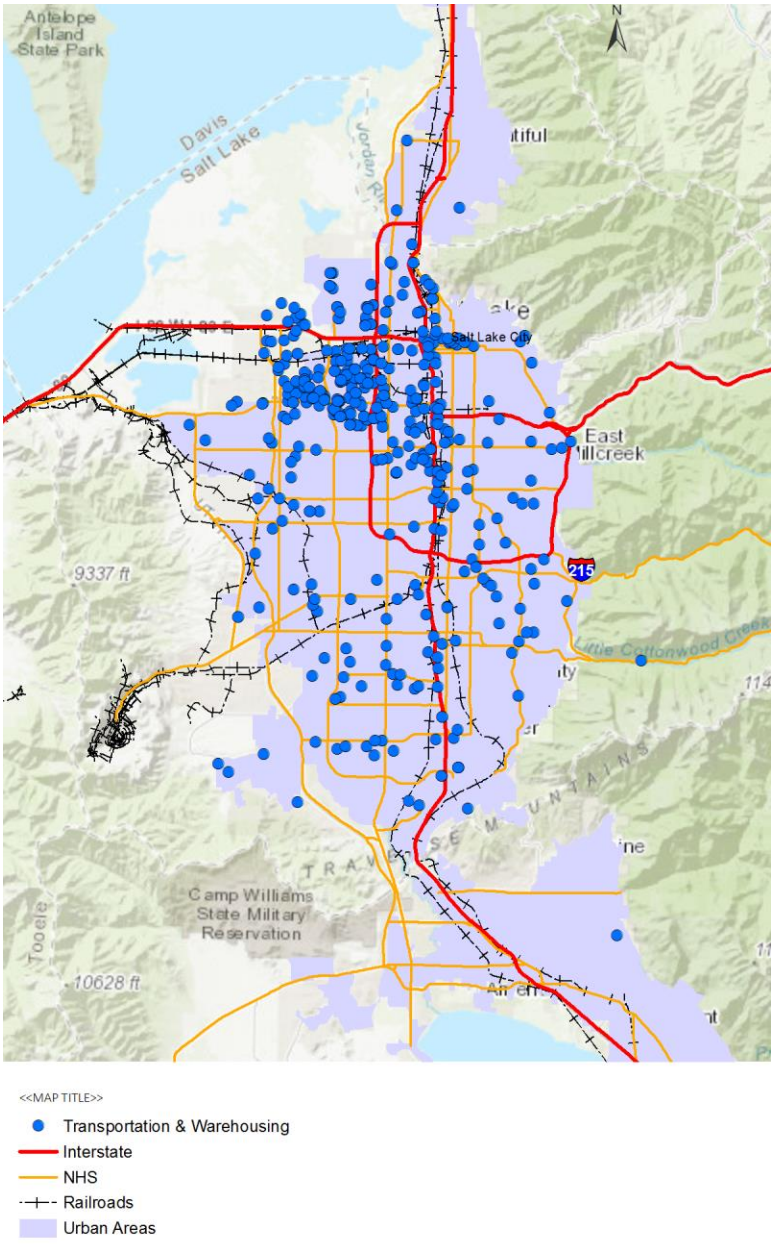


Figure 5.7 Salt Lake County Wholesale Firms, by Type

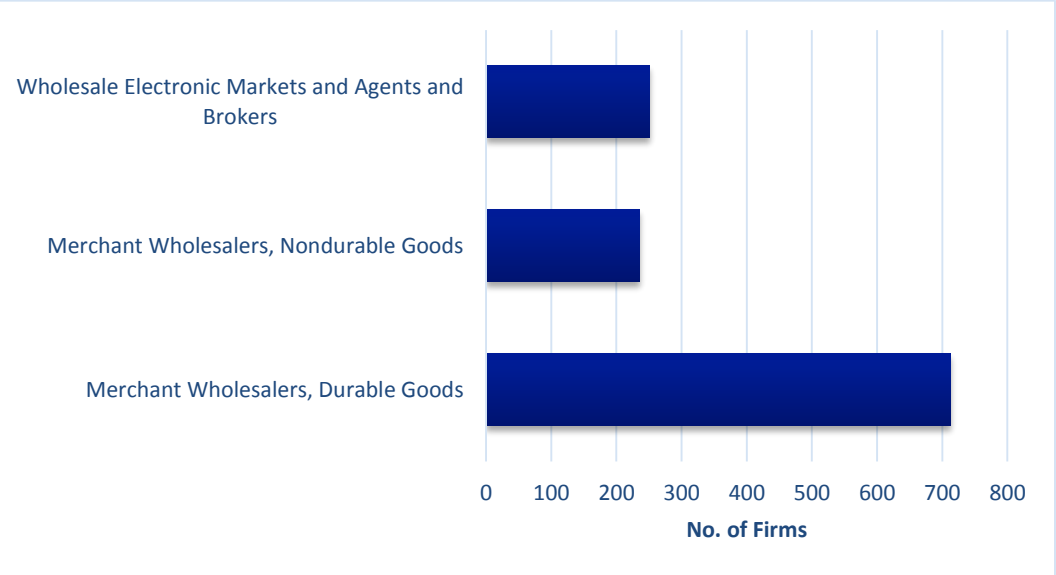
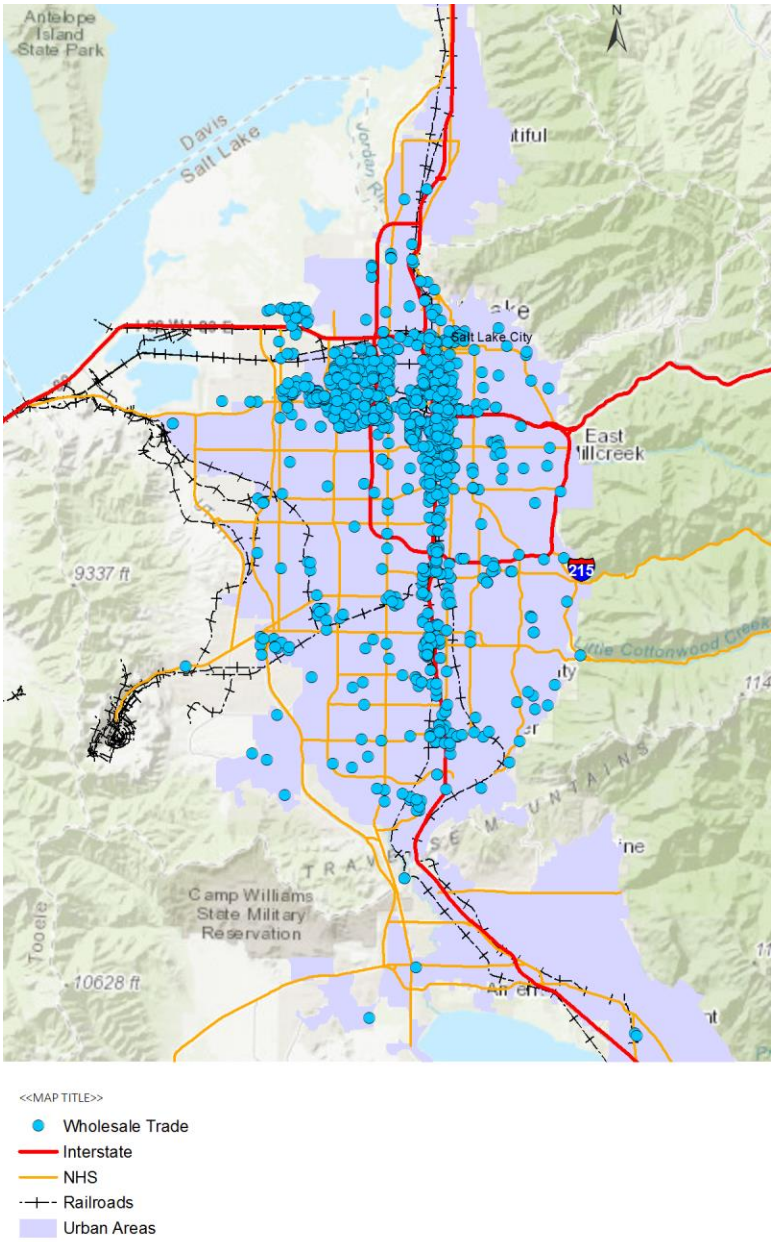


Figure 5.8 Salt Lake County Wholesale Trade Firms



6.0 Environment

Utah is a state of unique and great beauty and a place where its citizens and Government prize the role of playing environmental steward. The development of the Utah Global TradePort must have this in mind and the project must be undertaken from the outset with the objective to create a distinctively sustainable business environment. This project demands a farsighted business model that promotes a deep interconnection between creating economic prosperity and successfully coexisting in a sensitive urban environment. We'd like to see the project undertaken from the outset with the objective to be the most environmentally friendly project of its type in the world.

Source: *Port of Los Angeles*

The Utah Global TradePort has the chance to craft a seamless business strategy that produces a strong business product, but also a recognized advanced model for developing a sustainable large-scale industrial district. The project's long-timeline and scale affords a special opportunity to plan, develop and operate project that sets out from the beginning to become a global leader in sustainable economic development. If undertaken as a whole project, the State and its local government partners can assure a commitment to quality that would be unattainable if left to develop incrementally as a traditional organic industrial area.

There are a few business strategy considerations that should shape the project's focus on sustainability:

- The very nature of a project of this scale will require 20 years or more to develop. It is important to understand that practice and technology of truck transportation is changing extremely quickly. In only a few years, a range of sector-changing technologies will become commonplace – vastly

reducing mobile source pollutants. With new technologies that will allow for truck autonomy, truck platooning and alternate propulsion systems, there is little doubt that the negative environmental impacts will be vastly reduced over the development period of the project. Though a vastly larger scale, the experience at the Port of Los Angeles over the past ten years demonstrates how significant the powerful combination of management will and technological evolution can be, as the Port has reduced emissions by huge amounts

- By its business strategy, the Utah Global TradePort will establish a focus that emphasizes to the greatest degree the efficiencies associated with rail transportation. Cargo via rail has a far lighter impact on the environment, as even a single-stack freight train would replace over 110 trucks.
- The project should be master planned in a manner that supports logical and efficient internal and external truck circulation. Development and infrastructure phasing should promote adjacencies to other development, to the highway, airport and the rail intermodal facility.
- If the project is focused on outbound manufacturing, the ship-out element of the project will be via air (mostly on existing aircraft movements), truck or rail.
- The project is likely to accommodate some regional distribution development, but those projects would occur somewhere in the region in any case. To the extent that they are developed in a managed master plan development, there is some influence to manage impacts (design, truck technology, etc.
- The project may have some distribution development that is focused on a super-region, say within 300-500 miles from the Salt Lake City region. These activities may be truck or rail served with most of the transit outside of the Salt Lake City region. Again, being within a managed master planned environment will allow a higher degree of management of these issues.

The Utah Global TradePort can set-out to learn from the best examples of sustainable development and adapt a custom best practice model for Salt Lake City and Utah. Reviewing some best practice examples from California and Europe helps to paint a broad picture of how a project of scale could define a meaningful plan for sustainability.

6.1 BEST PRACTICES: PORT OF LOS ANGELES

California Environment Management Practices – Seaports have been recognized in California as a significant contributor to poor air quality. Collaboration between the California Air Resources Board and seaports has led to dramatic improvements in air quality near the ports and in the surrounding urban areas. Some of these best practices can be adapted to the Utah Global TradePort.

Source: *California Air Resources Board*

The Port of Los Angeles created the Air Quality Report Card as a transparent guide to see the progress of its ongoing clean air programs. The benefits of the Air Quality Report Card include:

- Reduced cancer risk by 85% over the last nine years - The Ports of Los Angeles and Long Beach established long-term goals for reducing emissions and the health risks associated with air pollution. The San Pedro Bay standard for reducing health risk mimics the state's goal to reduce the residential cancer risk 85% by 2020 compared with 2005. The goal was met that goal in 2014.
- Report Highlights Overall Pollution Reduction Progress - Under the Clean Air Action Plan, the Port made progress in reducing harmful emissions from all port-related sources including, ships, trains, trucks, small harbor craft and off-road cargo handling equipment. Progress to date in terms of gross reductions in pollutants are as follows:
    - Diesel Particulate Matter (DPM) 85%
    - Fine Particles (PM2.5) 83%
    - Course Particles (PM10) 84%
    - Nitrogen Oxide (NOx) 51%
    - Sulphur Oxide (SOx) 97%

The Port has made commitments to quality monitoring and is implementing a zero-emission vehicle program. In 2012, the Port successfully converted the entire fleet of heavy-duty vehicles to clean trucks and where technically feasible, all port vehicles will be powered by electric propulsion equipment. The Port has redefined how vessels are powered while in harbor, and at the dock face ships are required to be powered by electricity as opposed to burning dirty bunker fuel. In terms of addressing emissions from the thousands of trucks that deliver to and from the Port every day, the Port has instituted a series of measures including: a stringent

truck idling program and a requirement that all port-serving trucks have newer emission technology (post 2007). Additionally, the Port has undertaken a myriad of other measures to improve water quality and also make large investments in waterfront access and recreation.

6.2 BEST PRACTICES: WORLD LONDON GATEWAY

London Gateway – DP World London Gateway is a combination of deep-sea port and logistics park, offering port-centric logistics and investment solutions with unrivalled facilities and tri-modal connectivity.

The London Gateway Port accommodates large vessels in a location that is close to one of the largest consumer markets in Western Europe. The Port provides excellent accessibility, with road connections to the North, South, East and West via an eight-lane highway, and the UK's largest port rail terminal with hi-cube access to the country's major rail hubs. The London Gateway Logistics Park can accommodate over 9M sf of development and is designed to be the best connected, most integrated and most environmentally aware logistics services space in the UK.

Excerpts from London Gateway's sustainability strategy:

- Creation of an Advisory Committee on Sustainability including nationally and internationally recognized experts
- Defined a next-generation building guidelines, supported by PlanetMark certification of sustainability
- DP World London Gateway - Stanford Wharf Nature Reserve - During the development of DP World London Gateway, some areas of intermodal mudflat had to be removed to create the port's berths. These areas were feeding grounds for many important bird species. DP World London Gateway developed a solution to be able to offer the wildlife an equally suitable alternative.
- DP World Institute - Creating learning opportunities for busy employees spread across six continents, and speaking multiple languages, is quite a challenge. The DP World Institute, based out of DP World's head office in Dubai, was established to coordinate worldwide learning, using the best available methods, tools, expertise and resources. We work with leading international business schools, universities, professional bodies, consultants and in-house experts to design and deliver relevant, focused courses for individuals and organizations.
- Go Green - DP World London Gateway partnered with a number of other international port operators to launch the Go Green campaign. 38 DP World terminals across 29 countries organized activities which suited the local communities in which they operate. Each activity focused on one of three themes: reuse and recycle, climate change and communities.

- United for Wildlife - Committed to change - Illegal trade is one of the largest threats to the survival of some of the world's most iconic species. In particular, elephant ivory, rhino horn and big cats are traded across the world in large quantities. As a major port operator, we know there's a danger that criminals will attempt to ship illegal wildlife products via our terminals. To find out how we prevent this click here.
- CDP-Reporting Carbon Emissions - As a responsible business, we're committed to reducing greenhouse-gas emissions and improving our environmental performance. To do this right, we need to measure and monitor our progress, and report on this transparently. Since 2010, DP World has participated in CDP – the most respected initiative of its kind, which holds the most comprehensive set of global corporate environmental data.
- Apprenticeship program - DP World London Gateway's engineering apprenticeship scheme has been accredited by the Institution of Mechanical Engineers (IMechE).

For the Utah Global TradePort, it has the potential to develop from the ground up advanced model for environmental sustainability. A whole project approach allows for the project to be strategically designed to support economic growth while managing environmental impacts. As opposed to ad hoc industrial development, the Utah Global TradePort can drive a much higher standard of environmental stewardship. Some key elements that might be employed as the project were to create specific development and operational plans could include:

- Crafting a business model and physical design that will minimize truck trips and delivery distances
- Develop a port district sustainability strategy that would include limiting truck idling time, require zero-emission drayage equipment and new truck technology, manage point-source air emissions via an air quality management plan

7.0 Site Requirements

The Utah Global TradePort is a long-term multimodal project whose ultimate objective is to attract investment in logistics activity and export-oriented value-add manufacturing investment. The core elements of the project are:

1. Spine infrastructure - to and through the site, including road and rail infrastructure.
2. Cargo management infrastructure; including rail intermodal assets
3. Industrial Land
    a. Local distribution
    b. Super-regional distribution
    c. Airport-oriented high-velocity logistics
    d. Low intensity manufacturing
    e. Medium intensity manufacturing
    f. High intensity manufacturing
4. Interior Infrastructure
    a. Roads
    b. Rail lines
    c. Utility easements
    d. Environmental buffers
5. Ancillary Support Land
    a. Retail
    b. Restaurants
    c. Hotels

Considering the potential for approximately 7,000 acres of industrial development in the NWQ, even if the project is extraordinarily successful, the market won't be able to absorb this quantity of development land for decades. With a round assumption that the market and specifically this site could absorb 500,000 to 1,000,000 sf annually, the entire site would take around 40-45 years to complete. We suggest a practical timeline that doesn't go past 20-25 years is a wise starting point, and assuming the 1,000,000 sf annually, this would require in the neighborhood of 3500-4000 acres of development land.

Within that overall footprint and reviewing the practical lands available for industrial development in the NWQ, we believe that a first phase of approximately 1250 acres would make sense for the following reasons:

1. Create a development footprint that would be large enough to support and justify sizable infrastructure investment even if constructed in sections to meet demand in three year increments.
    a. In the case that a major infrastructure/property fund were involved in the project, the site will need to be large enough to demonstrate upward profitability, while also small enough to manage risks
2. Would provide for a range of property products, oriented to various markets as indicated above
3. Would allow for flexibility to allow for one or two major mega-size projects

Considering historic market absorption, market maturity, logical infrastructure investment period and risk management, the project could be developed in three phases as follows:

Table 7.1 Development Phases

Phase	Land Required	Potential Development	Potential Jobs
Phase 1	1250 acres	8.1 Million SF	4,000-8,000 Jobs
Phase 2	1250 acres	8.1 Million SF	4,000-8,000 Jobs
Phase 3	1250 acres	8.1 Million SF	4,000-8,000 Jobs
Total	**3750 acres**	**24.3 Million SF**	**12,000-24,000 Jobs**

Infrastructure Estimates

The following exhibits conceptual infrastructure that would be needed to support an Inland Port development. Also included herein are 'order of magnitude' projections of the potential costs of the infrastructure investment. The infrastructure elements addressed herein include:

- New industrial roads
- Associated street corridor drainage facilities
- Sanitary sewer collection system
- Water distribution system
- Railroad service facilities
- Natural gas system
- Electric power system
- Telecommunications system

Conceptual development plans were prepared showing potential street networks and rail lines. These plans were used to determine the planning level budgetary costs for the infrastructure elements.

Caveats and assumptions regarding the infrastructure costs:

- No land acquisition costs have been included
- No offsite infrastructure costs have been included
- No remediation of the landfill area has been included
- Roads were assumed to be industrial strength pavements;
- Road widths were assumed to be 30′ wide for 2- lanes and 60′ wide for 4-lanes
- Road rights of way were assumed to be 100′ wide corridors

The first area investigated was the land area lying north of I-80. The net area available for development north of I-80 is approximately 4,940 acres. The conceptual development plan shown on the following page shows a potential rail served Inland Port facility.

The table shown below shows a summary of the potential infrastructure investment costs based on the Inland Port conceptual development plan shown on the preceding page:

Table 7.2 Overall Infrastructure Cost Summary (With Rail Service)

ID Number	Construction Item	Totals ($mil)
1	New Roads and Corridor Drainage	$93.0
2	Sanitary Sewer System	$32.0
3	Water Supply System	$23.0
4	Rail Service	$23.0
5	Electric System	$9.0
6	Natural Gas System	$8.0
7	Telecommunications System	$3.0
	Total	**$191.0**

Note: See Appendix A for a breakdown of the infrastructure cost totals set forth in the table shown above.

A second conceptual development plan was prepared for the same area of land lying north of I-80. This conceptual development plan is shown on the following page. The difference is that this version shows a potential rail served Inland Port facility with an Intermodal Rail Yard. To reiterate, the net area available for development north of I-80 is approximately 4,940 acres.

The map shown on the next page is the area south of I-80 that is within the Northwest Quadrant. This area has recently benefited from significant light industrial development including a new major UPS facility. The area includes the Union Pacific intermodal yard and main line tracks and the rail service tracks of the Salt Lake Garfield & Western Railway Company.

There are approximately 1,200 acres available for development in the area between 5600 West and 7200 West and between the landfills on the south and I-80 on the north.

The table shown below shows a summary of the potential infrastructure investment costs based on the Inland Port conceptual development plan shown on the following page:

Table 7.3 Overall Infrastructure Cost – South of I-80

ID Number	Construction Item	Totals ($mil)
1	New Roads & Corridor Drainage	$16.5
2	Sanitary Sewer System	$6.5
3	Water Supply System	$4.5
4	Rail Service	$ -
5	Electric System	$1.5
6	Natural Gas System	$1.5
7	Telecommunications System	$0.5
	Total	$31.0

Note: See Appendix C for a breakdown of the infrastructure cost totals set forth in the table shown above.

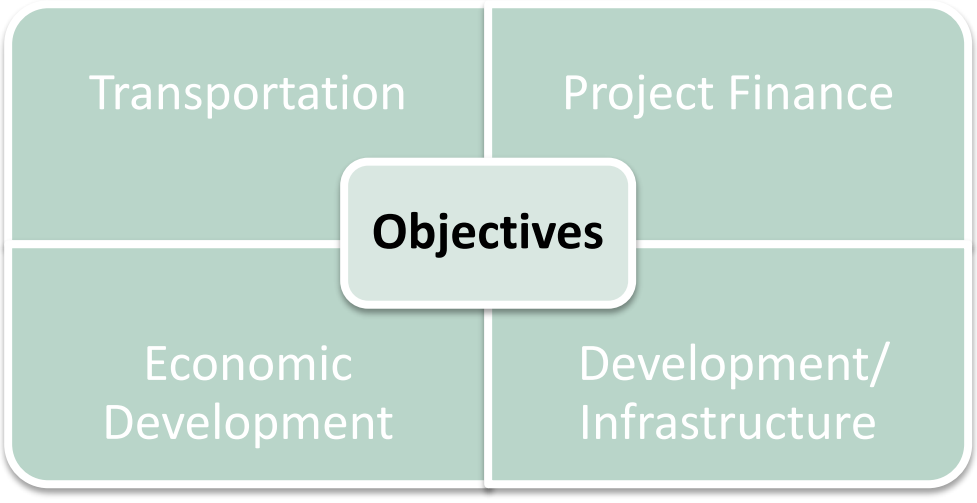
8.0 Recommended Next Steps

8.1 The Need for a Governance Model and Options

Due to the project's sheer size and its strategic ability to play a central role in developing the State's global and trade economy, the growth opportunity for the NWQ represents a substantial component of Utah's economic future. For this area to become a project of national scale for continental logistics, distribution and export-oriented manufacturing, a highly-structured business and development strategy must be created with a supporting governance structure.

Without an integrated business strategy, this area will be little differentiated from countless other industrial areas anywhere in the US. There are a number of locations in the nation with industrial land adjacent to a rail line and near to a rail intermodal facility but there are few examples of a trade port with highly developed logistics and manufacturing. The Utah Global Trade Port can differentiate itself from those transport-focused assets by adopting a structured business plan that creates a unique inland quadrimodal global trade port that includes the following: a logical multi-sector focused development plan, a well-engineered global logistics strategy, a focused inbound-outbound market development plan and a series of supporting business joint ventures and partnerships. The Utah Global TradePort must produce a high-detail business concept, including a range of amenities, managed incentives and a flexible market-oriented design, high attention to sustainability and environmental management.

Figure 8.1 Development Objectives



Increasingly, global companies are attracted to site locations that are purpose-designed as globally connected business settings, are highly planned high-quality settings with access to a range of amenities for their employees and are designed as flexible business environments allowing for facility growth and investment certainty. These site locations need to reflect their client company's corporate values and represent justifiable investment propositions – that can pass muster for investment committee approval.

Development Options

Essentially, we believe that Utah has three fundamental options in considering how to proceed. The alternative paths are:

Traditional Large-Area Industrial Development Model

The development can be crafted as a traditional planning and development project where the Government plays an early-stage enabler role, undertaking development planning and investing in support infrastructure allowing individual property owners to proceed with the development of their sites. This is a relatively organic method where Government in many instances plays the role of "first investor" and shoulders a substantial amount of risk.

- Roles of Government: long-term planning, infrastructure, broad marketing support
- Development Coordination: Low
- Risk: Largely on Government for early and overall offs-site infrastructure

Collaborative Logistics and Investment District Model

Government or a port authority-like entity plays coordinator and promotional roles, but non-development specific infrastructure investment is still the responsibility of the public sector.

- Roles of Government or Port Authority: long-term planning, infrastructure, specific business development, business partnership development/management
- Development Coordination: Medium – High
- Risk: Off-site infrastructure cost burden is mostly on Government

Integrated Global Logistics Hub Model

A port authority-like entity plays an integral role in master planning and as master developer, making direct business cases to global investors, and where Government seeks to minimize public investment in infrastructure and maximize private partner investment.

- Roles of Port Authority: long-term planning, development and management of infrastructure P3, master developing with key property interests, managed business development, creation of structured business partnerships with seaports, railroads, logistics investors
- Development Coordination: High
- Risk: Infrastructure cost burden is transferred to third-party investors, at least in part

In the end, we believe that a port authority-like vehicle should be created. There should be discussion about the options above though, and a view established about whether the authority should play an integral development role, or the role of enabler. It should be noted that enabling legislation was passed by the Utah Legislature in 1973 and this may prove to be a platform for creating a modern, fit for purpose entity today. The Utah Global TradePort would be organized as a public-private entity that can maximize the power of government, but function as a business entity.

The UGTP should have a primary mission of planning and delivering the project in the NWQ region of Salt Lake City, but also have authority and capability to deliver other related transport and logistics projects elsewhere in the State. This wider role would emphasize that the UGTP should be a focus point for the entire State of Utah and support to connecting and export-oriented infrastructure supporting a range of key industries including agriculture and natural resource extraction.

Though this would need to be developed further, the following represents the structure of an organization that plays a more integral development role. The authority would be a central organization representing State, local municipal, and property-owner interests would be shaped as follows:

- Powers and Authorities: Constructed to allow the Utah Global TradePort to undertake master planning for the NWQ, acquire and own real and transport assets and infrastructure, enter into joint ventures, issue debt and borrow.
- The Utah Global TradePort would function as an organization that can develop and carry out innovative financing to speed the development of infrastructure and reduce the burden on the public sector. The Utah Global TradePort would be constructed to position Utah as a recognized leader in joining private resources to accomplish public economic development objectives.
- Control and Reporting: The Utah Global TradePort should be governed by a Managing Board that is appointed by its government owner(s) and for it to provide maximum credibility in the investor, logistics and manufacturing marketplace, the Utah Global TradePort should have the full weight of the State of Utah behind it. Given its main current mission in the Salt Lake City region, it would be valuable to have both the City and County Government represented on the Board of Directors. The Board should be comprised of a range of local and non-local businesspeople with pertinent business expertise in such areas as: manufacturing, logistics, infrastructure development and planning, project finance and public-private finance, and transport facility ownership and development. This could include for example, a director of a major coastal seaport, an executive from a global third party logistics firm or a leader from a global infrastructure investment fund. The Utah Global TradePort should have a

fully transparent governance structure, whereby its Board of Directors should provide annual and bi-annual report updates to the State, local government partners and private partners. Further, the Utah Global TradePort should provide a forward five-year business plan to local government partners and the public.

- Logistics Sector Expertise and Relationships: The Utah Global TradePort would function as a State and local region partner to the logistics industry in a manner that is currently not possible. Today, in Utah there is no person or expertise representing the public that is of and understands the logistics industry. To illustrate, in states where there is a statewide seaport authority, the Port Authority Board, Director and staff are experts in the field and have deep and consistent business relationships in the field. Today, except for the SLC International Airport, in Utah there is no person or entity that has that those responsibilities. In the case of SLC international Airport, the Airport's role is somewhat narrow and limited to air service issues. With a Statewide port entity, the organization including its Board and Director would be able to craft partnerships and agreements with seaports, railroads and others.
- State and Local Economic Development Incentives: The Utah Global TradePort should have special tools to promote investment attraction. This would include financial incentives for investing businesses and workforce training support mechanisms.
- Organizational Scale: The UGTP is not envisioned to be a large organization and its staff size should be modest.
- Relationship to the Salt Lake City International Airport: Due to the necessity for the UGTP to support high-velocity supply chains and because of the adjacent location to the expanding Salt Lake City International Airport, we feel strongly that the UGTP and the Airport should be co-joined as partners. For the Utah Global TradePort to maximize its potential as a quadrimodal investment hub, it is critical that air cargo and related ground logistics be fully integrated. With significant potential for high-value manufacturing, ecommerce and logistics, it is critical that air cargo and lands associated with air cargo be integrated into the Utah Global TradePort in one way or another. It does not appear that SLC has made air cargo and related economic development a priority in the past and it makes little sense to keep this function separate.
- Sunset Provision: From our experience, it is vital for a mission-specific delivery entity to have a date certain sunset, or a date where it will go out of existence to coincide with the completion of its mission. The specifics should be reviewed to coincide with further specifics, but it may make sense for a 20-year sunset, combined with the requirement that the UGTP should return to the State every five years for a review and renewal.

By working in a coordinated manner under a common corporate structure, we believe that there will be increased returns to both local and state governments and also private property interests. By working in tandem under one business plan, we believe that the market will come to Utah faster and more substantially. In addition to a pure logistics product, by engineering the project to support high-value manufacturing the combined blend of economic activity represents a higher return to both public and private interests.

8.2 FUNDING STRATEGY RECOMMENDATIONS

There will be a range of costs associated with the development of an industrial district of national scale. In this case the NWQ area requires substantial infrastructure investment for the construction of roads, water, sewer, electric, gas, and telecom systems. Further investment may be needed for rail track, intermodal assets, onsite cargo management equipment and airport-related access infrastructure. Keys will be developing infrastructure with enough scale and at an investment pace that is leading the market.

Taken together over the period of development, the project would likely require hundreds of millions of dollars if core infrastructure, which would be developed to support potentially $3-5B of private plant and equipment investment. A project of this scale would probably develop over a 20-30-year period and would occur in development phases.

Critical investment planning factors:

1) For infrastructure investment efficiency, development must occur in an orderly and strategic manner; this means that an overall project vision and implementation plan would be crafted and agreed by participating parties.

2) Infrastructure should be built in cost-efficient phases and somewhat ahead of the demonstrated and current market, but in a manner that limits and manages risks.

Traditional Large-Area Industrial Development Funding Model

- Government and utility providers build core infrastructure to the property line; property owners develop vertical assets and construct infrastructure inside property line
- Core infrastructure investment leads the market and is ready as the market demands
- Core infrastructure (non-utility): Government pays; recoups investment via future tax revenues and economic development: typically funded through General Obligation bond debt or debt supported by future district tax revenues
- Private property investment undertaken by individual owners or development entities on behalf of ownership

- As development patterns are typically non-linear with inefficiencies, there is a corresponding inefficiency for public core infrastructure investment

Collaborative Logistics and Investment District Model

- Government and utility providers build core infrastructure to the property line; property owners develop vertical assets and construct infrastructure inside property line

Integrated Logistics and Investment District Model

- Due to its scale, duration, need for maximum investment efficiency and intention to limit the burden on the public – the project is developed as an integrated business structure including State, local government, private infrastructure investors, property ownership
- Assumptions: A larger integrated business structure will yield faster, more substantial and higher-returns for investors and for public economic development
- A share capital business entity is formed, and by formula provides private investors to participate and share project profitability
- Private investment is committed to core infrastructure, global scale partners can be attracted to implement the overall project; benefits: deep pockets, demonstrated commitment to State and long-term market for growth, brand, relationships

In any instance, we strongly suggest that the State and its local government partners not assume that it must be a public responsibility to invest substantial resources without clear expectations of the return to the public – including timing. The traditional model generally suggests that the State take all the risk in forward-funding infrastructure to the benefit of private property interests. The State should be an investor, but only as a partner. If there is a substantial upside growth, there is private risk capital that will be interested.

8.3 DEVELOPMENT PROCESS OVERVIEW

A. 2016 Salt Lake Inland Port Market Assessment

Salt Lake Inland Port Market Assessment Research Brief - August 2016

Authored by: Natalie Gochnour I Director, Kem C. Gardner Policy Institute

Summary of findings

1) Significant nationwide interest in inland port development—Logistics hubs that combine containerized rail, trucking interchange, and warehousing and distribution activity are experiencing notable growth .U .S . rail intermodal volume reached a record 13 .7 mil-lion containers and trailers in 2015 Driven in a large way by globalization, e-commerce, and environmental sensibilities, transportation investments that re-duce costs, save time, and minimizes the impact on the environment are becoming more and more at-tractive .

2) Salt Lake City favorably positioned—Salt Lake City is favorably positioned both geographically and economically. In terms of location, Salt Lake City sits at the center of the interior west and ties together the Intermountain West, central plains, northern plateaus, and west coast . The area benefits from direct rail connection to all major west coast terminals and access to major interstates in all directions (I-80 and I-70 East-West, and I-84 Northwest) .Economically, Salt Lake City offers economic advantages for freight movement such as lower wage costs . Business leaders also referenced Salt Lake City's competitive rates for transloading, faster clearance of car-go, cheaper holding costs at warehouse facilities, tax advantages compared to California, and the potential for faster deliveries.

3) Recent land use decisions make development of an inland port more attractive—The decision to relocate the Utah State Prison to Salt Lake City's northwest quadrant creates additional potential for government entities to collaborate and invest in infrastructure that services the prison and new economic development options like an inland port . In many ways, the development of a prison and inland port are complementary .

4) Transportation infrastructure investments are supportive; additional investment is needed —The $2 .6 billion rebuild of the Salt Lake City International Airport and more than decade-long surge of

transportation investment in the greater Salt Lake area's road system provide advantages to the development of an inland port . More investment is needed .The current epicenter for freight movement is the Union Pacific Intermodal Terminal . Although located in close proximity to I-80, SR-201 and I-215, for trucks to access these routes they must do so via 5600 West (S .R . 172), which is a narrow two-lane rural road with an at-grade crossing over the railroad at the busy west end of the intermodal terminal . Trucks and other highway traffic can be delayed up to 30 minutes when lengthy intermodal trains arrive or depart at their federally-mandated terminal speed of 10 MPH . This can result in back-ups of more than 500 vehicles extending north to I-80 and south to SR-201 .In addition, the Utah Department of Transportation reports that SR-172 (5600 West) between I-80 and SR-201 needs to be upgraded to a five-lane facility with full 10-foot shoulders for trucks, with realigned and more efficient access points at upgraded intersections, and grade separation over the Union Pacific tracks . Such a rebuilding will allow much faster and more efficient access not only to the intermodal terminal and its potential role as Utah's Inland Port, but to all the other warehouses and businesses that must use 5600 West .

5) Supply chain—Salt Lake City's northwest quadrant has emerged as a regional supply chain hub . That emergence is a result of a greatly diverse economy, large manufacturing base, and proximity to the regional population . The Mountain States and some coastal markets are accessible from Salt Lake City within the allowable National Transportation Safety Board window for a single driver shift . This proximity has driven advancements in the logistical coordination of packaging, over-the-road freight, air carriers, and rail access, and made Salt Lake City a critical component of the supply chain in the interior western United States .While Salt Lake City's immediate access to air, ground, and rail transportation provides the multi-modal options which today's supply chain professionals seek, to remain attractive will require ongoing investment. Transportation modalities must remain competitive. This means critical investment in, and connectivity among, the major nodes for each transportation modality. Any major infrastructure investment in a node itself (such as an inland port or airport) must see the accompanying investment in arterial thoroughfares and surface roads for the connectivity to happen. The ultimate benefit comes when a freight consumer has as many options as possible to avoid supply chain bottlenecks . As efficiency is the "name of the game," businesses will be focused on markets where multimodal transportation is not just available, but reliable, affordable, and in proximity to growing bases of population .

6) The location of a major shipping carrier in South Jordan is helpful—The presence and market influence of Orient Overseas Container Line (OOCL) could be a key building block to making Salt Lake

County a primary catchment area for shipping in the interior western United States . OOCL opened an office in South Jordan, Utah in 2013, which serves as their North American headquarters. OOCL is one of the top ten global container shipping companies in the world with 270 offices in 70 countries . They are members of the Ocean Alliance, which also includes China's Cosco Group and France's CMA CGM . OOCL employs approximately 200 people in Utah, with plans to grow, and provide a vital link to world trade.

7) Potential to become a jobs center—The creation of an inland port could provide significant job opportunities with attractive wages to residents .3It would encourage additional inbound trade, "last piece" manufacturing, warehousing and distribution jobs, local trucking and freight jobs, third-party logistic providers, freight forwarders and courier jobs, and other job opportunities . The full impact of these spinoff effects and how it relates to alternative economic development opportunities, tax revenue, and public expenditure is an area ripe for additional study .

8) Labor market conditions—Labor market conditions in Salt Lake City and Utah are favorable to an inland port, but present some challenges .4 The Salt Lake City and Utah economies continue to out-perform the national economy . Job growth is strong and unemployment rates are low. Wages are notably lower than many inland port cities, particularly California port cities. While wage rates are attractive to employers, Utah's low unemployment rate creates a labor supply challenge for many industries.

9) Rural Utah economic development—Rural Utah depends on transportation connections for the agriculture, mining, and manufactured products grown, mined, or assembled there . Rural Utah is also a natural location to relieve some of the growth pressures in urban Utah. An inland port facility could be an import-ant rural Utah economic development asset.

10) Master planning Salt Lake City's Northwest Quadrant—The vision and land use decisions in the northwest quadrant of Salt Lake City are of critical importance to the potential development of an inland port . This is an area of urgent concern because Salt Lake City recently adopted a new master plan for this area . The northwest quadrant includes approximately 19,000 acres west of Salt Lake City International Airport, from 4000 West to approximately 8800 West and from 2100 South to the north city limits . This vital area of real estate includes Salt Lake City's International Center, the Union Pacific Intermodal Hub, and portions of Interstate 80. It would also be the likely location of an inland port.

11) Investment and collaboration—The development of an inland port would require significant transportation investments and collaboration. These include land for increased intermodal lift capacity, trans-loading facility, highway improvements to provide access to lift facilities, support facilities for trucks and personnel to provide off loading and re-loading, short-haul rail capacity, and additional investments. In addition, formal and informal collaboration among the airport, air freight operators, and railroads would be essential. One community leader suggested the inland port could be used as a catalyst to bind state and local government together in productive ways.

12) Address warehousing and processing needs—An inland port would be advantaged by a set aside of land for a new warehousing district (zoning and dedicated use) and infrastructure to support a large warehousing district (roads, water, sewer, and utilities).

13) Role of Salt Lake City Redevelopment Agency—Tax increment would provide a significant source of funding for infrastructure improvements and incentives to support the creation and development of an inland port. The Redevelopment Agency of Salt Lake City has commenced the process of creating a Community Reinvestment Project Area within the portion of the Northwest Quadrant located north of Interstate 80. It is anticipated that a project area could be established by early 2017.

14) Governance and JPAs—There are many forms of port governance and studies on the topic indicate that there is no right, "one-size-fits-all," way to govern a port. Local, regional, and statewide circumstances, along with the port's strategic objectives, are key determinants. Every port governing body must consider and balance the needs of government regulators (or owners), port customers, community stakeholders, and managers (or shareholders).

15) Tax incentives—U.S. Port Authorities, despite governance structure type, generally offer public incentives, including tax credits, tax exemptions, and financing options.6 Performance-based tax credits, job tax credits, investment tax credits, sales and use tax exemptions, property tax exemptions, tax increment financing, industrial revenue bonds, education and training grants, and other funding options are among the incentives used to support port development.

16) Environmental impact—Many of the people interviewed suggested that enhanced rail freight will result in fewer trucks, less pollution and a reduced carbon footprint. Others noted the potential for increased highway congestion.The Gardner Policy Institute did not analyze these issues, but notes the comments of many of the subject matter experts involved. Because of the state of Utah and Salt Lake City's commitment to improving air quality, the environmental

impact of a proposed inland port deserves in-depth research and analysis .

17) Additional issues raised during the scoping process—These include the following:

    a. Rail competition. Union Pacific dominates long-haul freight movement in Utah . Although BNSF Railway provides limited manifest (multi-commodity) freight service to Northern Utah via a trackage rights agreement with Union Pacific, only the latter provides intermodal freight service between Salt Lake City and Pacific Gulf and Atlantic (via connecting eastern railroads) seaports . Some commented that rail costs are high in Utah and more competition would be helpful .

    b. Nationwide shortage of truck drivers. Experts estimate the trucking industry could use between 20,000 and 50,000 additional drivers right now to support current needs. The shortage of drivers is a major capacity constraint and may advantage rail freight .

    c. Private sector competition. One comment was made about how an inland port financed with public funds (all or a portion) may crowd out private investment and simply add another layer of government .

    d. Concern about Salt Lake City's permitting processes. Several people commented about Salt Lake City's reputation as a difficult place to do business . Zoning and permitting issues are of particular concern. The Salt Lake City Council has commissioned an audit of the city's permitting processes to address if permitting problems are a perception or a reality .

    e. Impact of Panama Canal. The 10-year, $5 .4 billion Panama Canal expansion opened in June 2016 .8The larger canal is expected to change shipping patterns and impact existing, expanding, and new ports . The expansion nearly triples the capacity of ships transiting the canal and allows supersized ships that carry nearly three times as many containers as before to pass through the canal . Estimates of the impact on west coast shipping vary, but one local expert suggested the impact will be modest, somewhere in the neighborhood of a 10-15 percent negative disruption .

B. Commodity Flow Charts

Figure B.2 2015 Total Utah Freight Tons

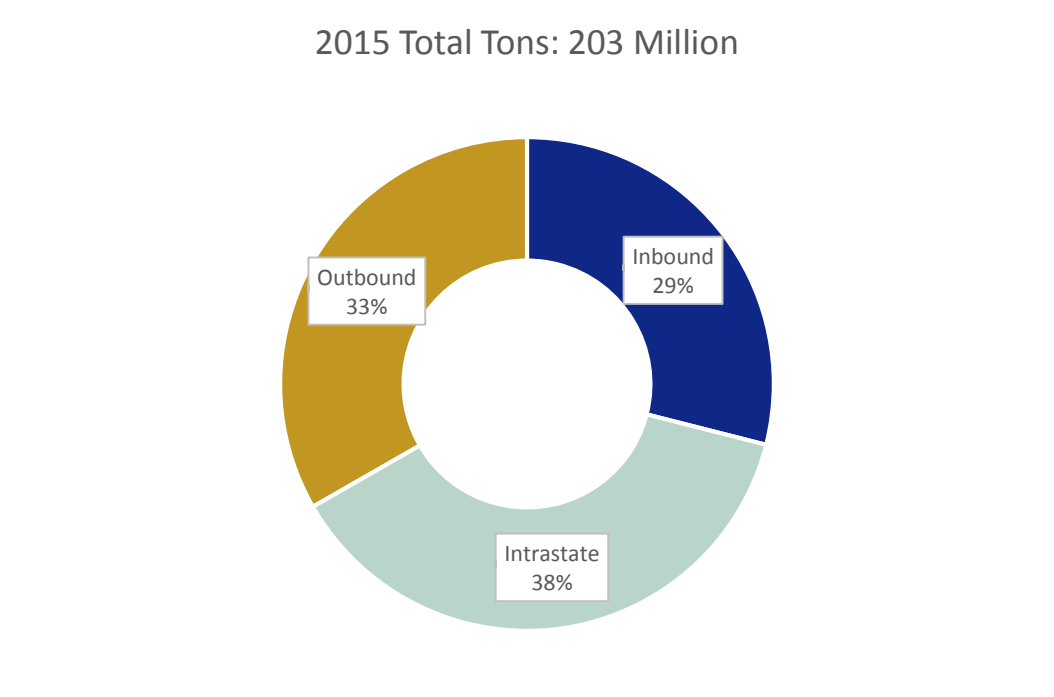


Figure B.3 2015 Total Utah Freight Value

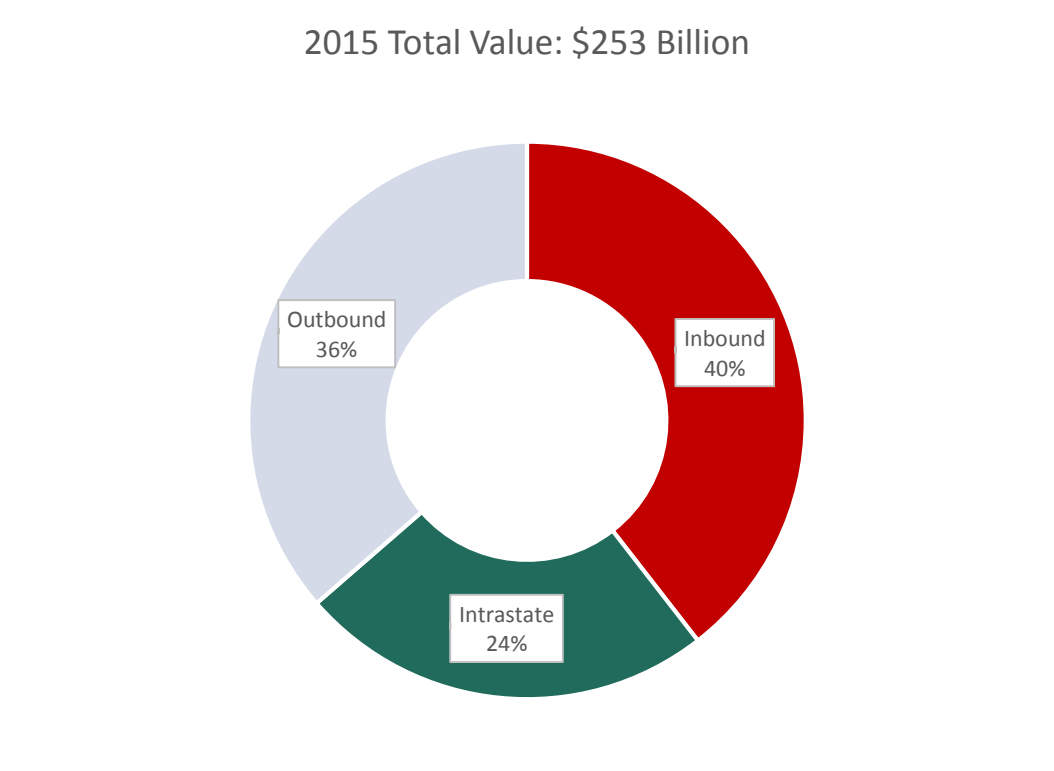


Figure B.4 2045 Projected Total Utah Freight Tonnage

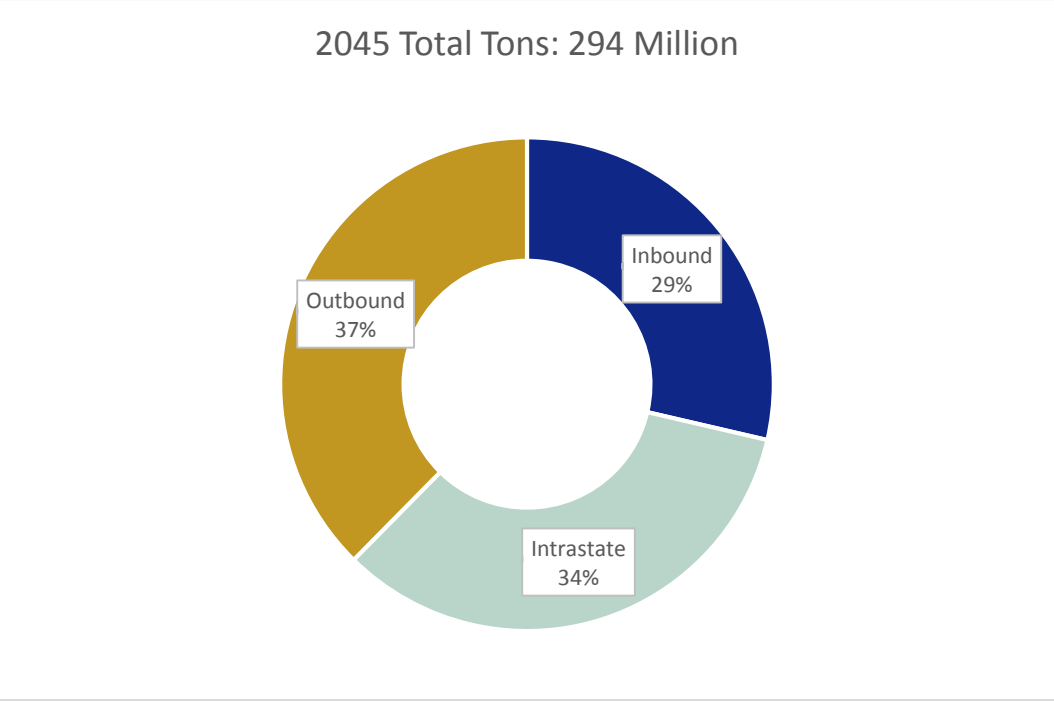


Figure B.5 2045 Projected Total Utah Freight Value

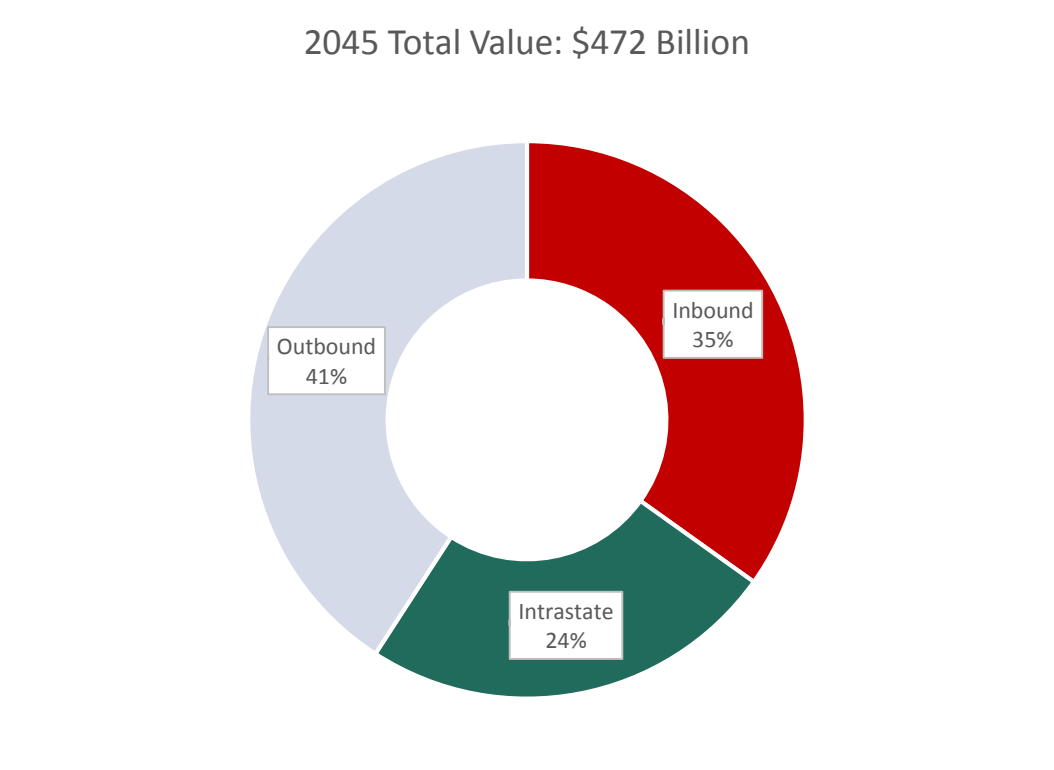


Figure B.6 2015 Total Utah Freight Tons, by Mode

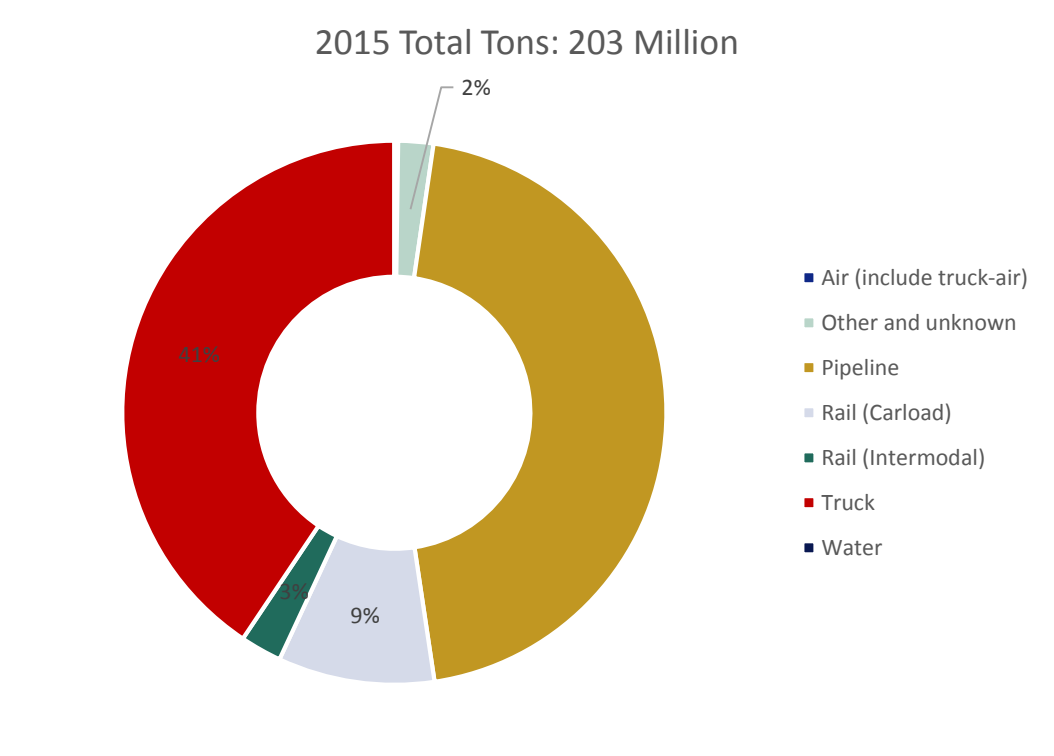


Figure B.7 2015 Total Utah Freight Value, by Mode

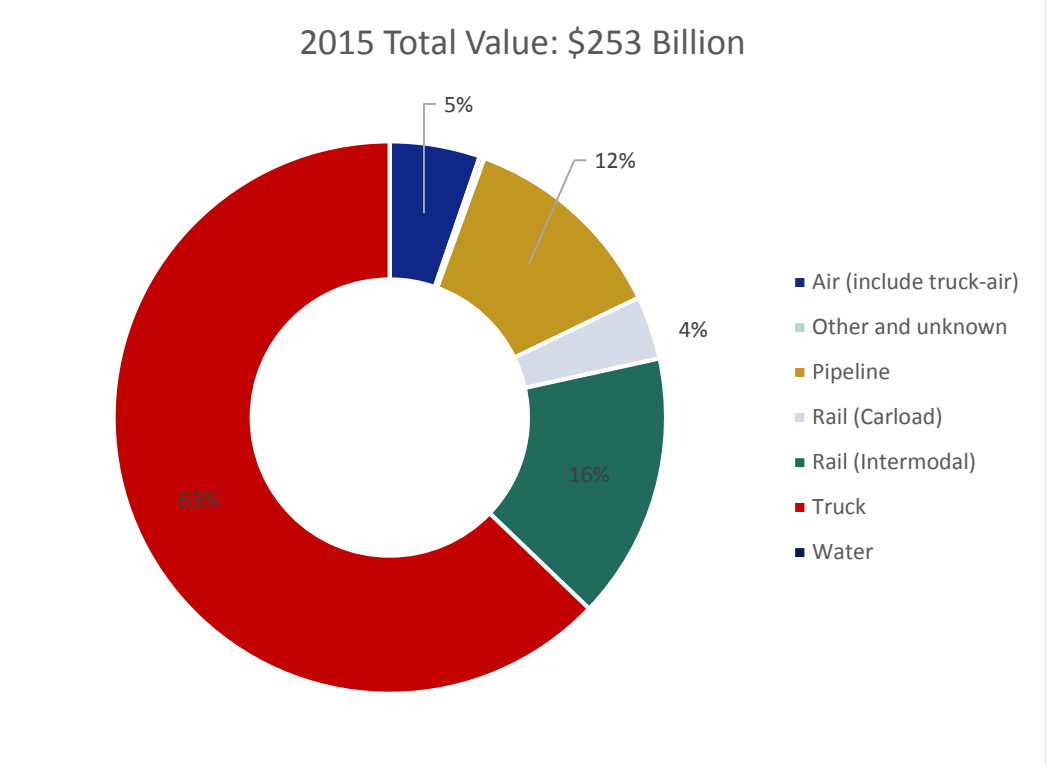


Figure B.8 2045 Total Utah Freight Tons, by Mode

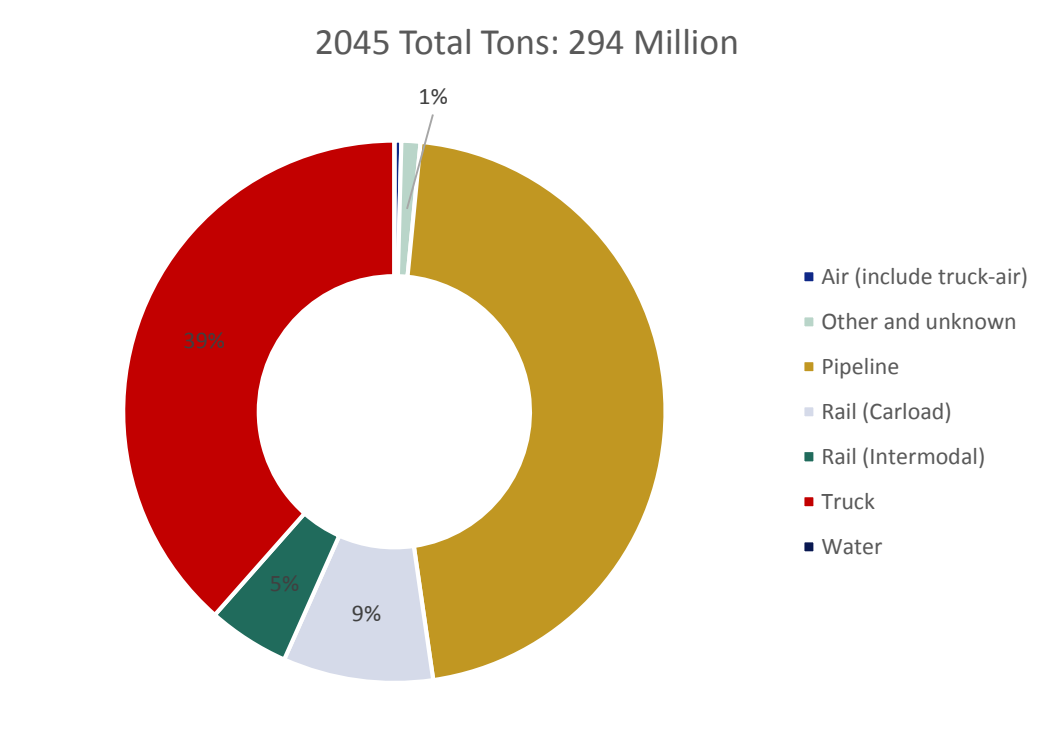
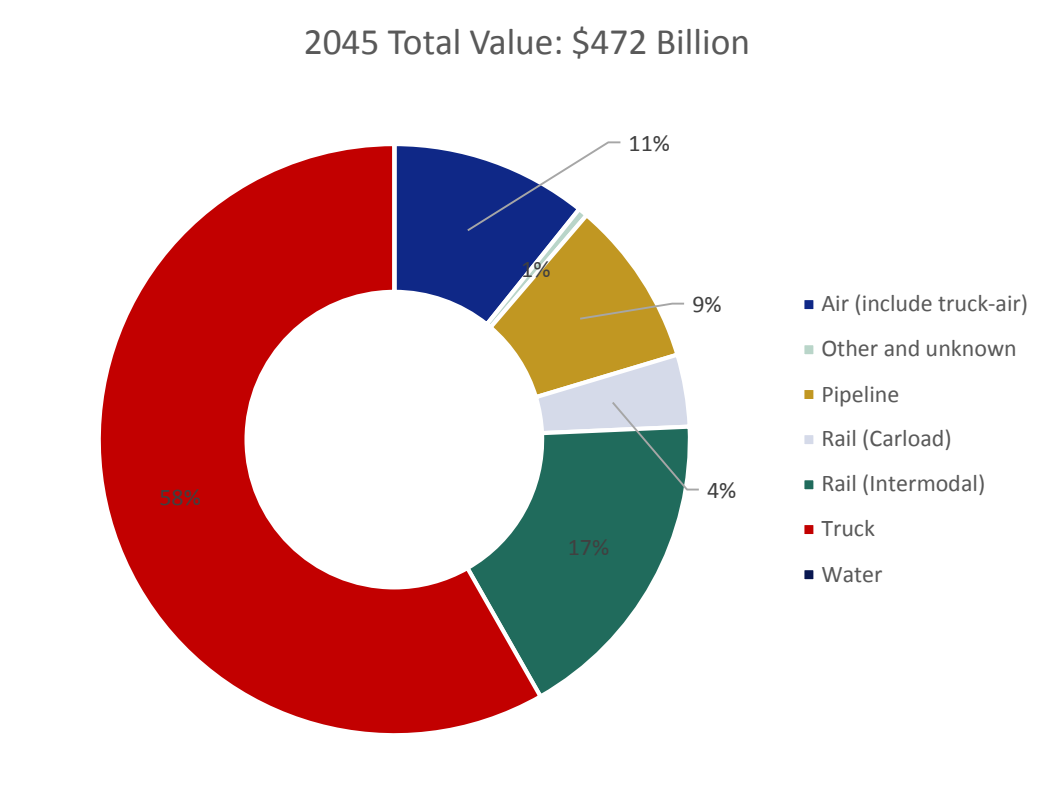


Figure B.9 2045 Total Utah Freight Value, by Mode



C. Competitiveness References

Sources used for competitiveness analysis were as follows:

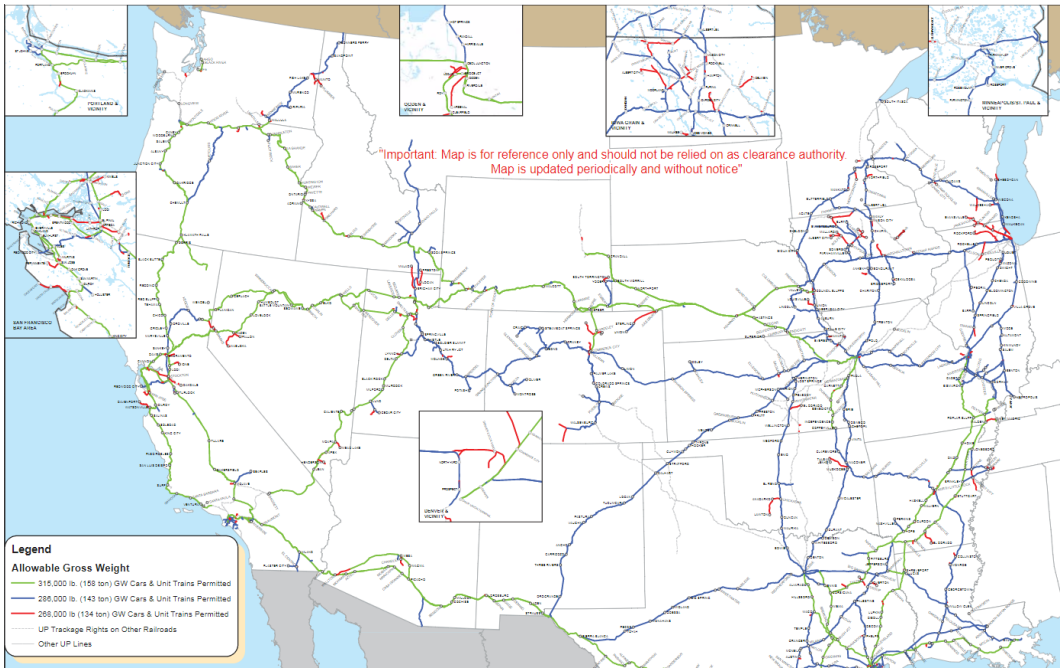
Table C.1 Competitiveness References

Demographic Data
U.S. Census Bureau
Bureau of Labor Statistics (BLS)
Economic Research Institute (ERI)
Transportation Costs
Freight Rate Index.com
Google Maps
Rand McNally Mileage Calculator
Business Reliability
Tom Tom Congestion Index,
BLS
Freight Delay by Weather TTI
Annual Truck Delay TTI
DAT Solutions
FreightWatch
RITA
Land and Building Availability and Cost
CBRE
Colliers
Labor Availability, Wages, Salaries, Statutory Plans and Benefits
BLS
ERI
Tax Fact KPMG
Mercer—U.S. Geographic Salary Differentials
Utilities
U.S. Energy Information Administration
Regional and Local Taxes

National Conferences of State Legislators
City of Albuquerque Treasury Department
State of New Mexico Taxation and Revenue
Kern County Treasurer and Tax Collector
California Franchise Tax Board
Arizona Department of Revenue
Mohave County Treasurer
Maricopa County Finance Department
Pima County Treasurer
Nevada Department of Taxation
Clark County Treasurer
Washoe County Treasurer
Utah State Tax Commission
Salt Lake County Auditor
Kansas Department of Revenue
Sedgewick County Clerk
Alabama Department of Revenue, Property Tax Division
Mobile County Treasurer
New Hampshire Department of Revenue Administration
Washington State Department of Revenue
King County, Department of Assessments
Pierce County
Kent Economic Development

D. Additional Rail Service Information

Figure D.1 Allowable Gross Weight - Rail



Source: UP Railroad

E. Infrastructure Cost Breakdowns

E.1 Cost Estimates – Rail Served Inland Port

NEW ROADS & CORRIDOR DRAINAGE					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
1	STREET PAVEMENT ON PREPARED BASE -2 LANES	85,200	LF	$ 350	$ 29,820,000
2	STREET PAVEMENT ON PREPARED BASE -4 LANES	9,500	LF	$ 620	$ 5,890,000
3	SIDEWALKS - BOTH SIDES	94,700	LF	$ 50	$ 4,735,000
4	TRAFFIC SIGNAL INSTALLATIONS	2	EA	$ 250,000	$ 500,000
5	STORM DRAINAGE SYSTEM	94,700	LF	$ 145	$ 13,731,500
6	BOX CULVERTS	6	EA	$ 50,000	$ 300,000
7	STREET LIGHTS	380	EA	$ 5,000	$ 1,900,000
8	STREET LIGHT CIRCUIT	94,700	LF	$ 10	$ 947,000
9	CORRIDOR LANDSCAPING	94,700	LF	$ 100	$ 9,470,000
10	MISCELLANEOUS & CONTINGENCIES	1	LS	$13,706,500	$ 13,706,500
	ROAD & DRAINAGE CONSTRUCTION COST TOTAL				**$ 81,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$12,000,000	$ 12,000,000
TOTAL PROJECT COST FOR NEW ROADS & CORRIDOR DRAINAGE					**$ 93,000,000**

SANITARY SEWER SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
11	SANITARY SEWER LINES (8" TO 18")	94,700	LF	$ 120	$ 11,364,000
12	SEWER MANHOLES	190	EA	$ 5,000	$ 950,000
13	SANITARY SEWER FORCE MAINS	28,000	LF	$ 100	$ 2,800,000
14	SEWER LIFT/PUMP STATIONS	4	EA	$ 2,000,000	$ 8,000,000
15	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 4,886,000	$ 4,886,000
	SANITARY SEWER CONSTRUCTION COST TOTAL				**$ 28,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 4,000,000	$ 4,000,000
TOTAL PROJECT COST FOR SANITARY SEWER SYSTEM					**$ 32,000,000**

WATER SUPPLY SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
16	WATER MAINS (12" TO 16")	94,700	LF	$ 160	$ 15,152,000
17	FIRE HYDRANT ASSEMBLIES	190	EA	$ 5,000	$ 950,000
18	WATER VALVES	380	EA	$ 1,500	$ 570,000
19	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 3,328,000	$ 3,328,000
	WATER MAIN CONSTRUCTION COST TOTAL				**$ 20,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 3,000,000	$ 3,000,000
TOTAL PROJECT COST FOR WATER SYSTEM					**$ 23,000,000**

RAIL SERVICE					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
20	RAIL LINE COMPLETE	43,600	LF	$ 380	$ 16,568,000
21	INTERMODAL YARD	0	LS	$ -	$ -
22	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 3,432,000	$ 3,432,000
	RAIL SERVICE CONSTRUCTION COST TOTAL				**$ 20,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 3,000,000	$ 3,000,000
TOTAL PROJECT COST FOR RAIL SERVICE					**$ 23,000,000**

ELECTRIC SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
23	UNDERGROUND POWER LINES	94,700	LF	$ 50	$ 4,735,000
24	ELECTRIC MANHOLES AND VAULTS	95	EA	$ 5,000	$ 475,000
25	PAD TRANSFORMERS	95	EA	$ 10,000	$ 950,000
26	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 1,640,000	$ 1,640,000
	ELECTRIC SYSTEM CONSTRUCTION COST TOTAL				**$ 7,800,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 1,200,000	$ 1,200,000
TOTAL PROJECT COST FOR ELECTRIC SYSTEM					**$ 9,000,000**

NATURAL GAS SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
27	NATURAL GAS LINES	94,700	LF	$ 60	$ 5,682,000
28	GAS VALVES & APPURTENANCES	95	EA	$ 1,000	$ 95,000
29	METERING STATION, FACILITIES & APPURTENANCES	1	EA	$ 50,000	$ 50,000
30	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 1,173,000	$ 1,173,000
	NATURAL GAS SYSTEM CONSTRUCTION COST TOTAL				**$ 7,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 1,000,000	$ 1,000,000
TOTAL PROJECT COST FOR NATURAL GAS SYSTEM					**$ 8,000,000**

TELECOMMUNICATIONS SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
31	FIBER OPTIC LINES / COPPER WIRE LINES	94,700	LF	$ 20	$ 1,894,000
32	TELECOMM PULL BOXES, MANHOLES & VAULTS	150	EA	$ 1,000	$ 150,000
34	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 556,000	$ 556,000
	TELECOMM SYSTEM CONSTRUCTION COST TOTAL				**$ 2,600,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 400,000	$ 400,000
TOTAL PROJECT COST FOR TELECOMMUNICATIONS SYSTEM					**$ 3,000,000**

E.2 RAIL SERVED WITH INTERMODAL RAIL YARD

NEW ROADS & CORRIDOR DRAINAGE					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
1	STREET PAVEMENT ON PREPARED BASE -2 LANES	96,000	LF	$ 350	$ 33,600,000
2	STREET PAVEMENT ON PREPARED BASE -4 LANES	7,000	LF	$ 620	$ 4,340,000
3	SIDEWALKS - BOTH SIDES	103,000	LF	$ 50	$ 5,150,000
4	TRAFFIC SIGNAL INSTALLATIONS	3	EA	$ 250,000	$ 750,000
5	STORM DRAINAGE SYSTEM	103,000	LF	$ 145	$ 14,935,000
6	BOX CULVERTS	6	EA	$ 50,000	$ 300,000
7	STREET LIGHTS	412	EA	$ 5,000	$ 2,060,000
8	STREET LIGHT CIRCUIT	103,000	LF	$ 10	$ 1,030,000
9	CORRIDOR LANDSCAPING	103,000	LF	$ 100	$ 10,300,000
10	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 14,535,000	$ 14,535,000
	ROAD & DRAINAGE CONSTRUCTION COST TOTAL				**$ 87,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 13,000,000	$ 13,000,000
TOTAL PROJECT COST FOR NEW ROADS & CORRIDOR DRAINAGE					**$ 100,000,000**

SANITARY SEWER SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
11	SANITARY SEWER LINES (8" TO 18")	103,000	LF	$ 120	$ 12,360,000
12	SEWER MANHOLES	206	EA	$ 5,000	$ 1,030,000
13	SANITARY SEWER FORCE MAINS	28,000	LF	$ 100	$ 2,800,000
14	SEWER LIFT/PUMP STATIONS	4	EA	$ 2,000,000	$ 8,000,000
15	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 4,810,000	$ 4,810,000
	SANITARY SEWER CONSTRUCTION COST TOTAL				**$ 29,000,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 4,000,000	$ 4,000,000
TOTAL PROJECT COST FOR SANITARY SEWER SYSTEM					**$ 33,000,000**

WATER SUPPLY SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
16	WATER MAINS (12" TO 16")	103,000	LF	$ 160	$ 16,480,000
17	FIRE HYDRANT ASSEMBLIES	206	EA	$ 5,000	$ 1,030,000
18	WATER VALVES	412	EA	$ 1,500	$ 618,000
19	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 3,622,000	$ 3,622,000
	WATER MAIN CONSTRUCTION COST TOTAL				**$ 21,750,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 3,250,000	$ 3,250,000
TOTAL PROJECT COST FOR WATER SYSTEM					**$ 25,000,000**

RAIL SERVICE					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
20	RAIL LINE COMPLETE	50,000	LF	$ 380	$ 19,000,000
21	INTERMODAL YARD	1	LS	$ 40,000,000	$ 40,000,000
22	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 11,700,000	$ 11,700,000
	RAIL SERVICE CONSTRUCTION COST TOTAL				**$ 70,700,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 10,300,000	$ 10,300,000
TOTAL PROJECT COST FOR RAIL SERVICE					**$ 81,000,000**

ELECTRIC SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
23	UNDERGROUND POWER LINES	103,000	LF	$ 50	$ 5,150,000
24	ELECTRIC MANHOLES AND VAULTS	103	EA	$ 5,000	$ 515,000
25	PAD TRANSFORMERS	103	EA	$ 10,000	$ 1,030,000
26	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 1,205,000	$ 1,205,000
	ELECTRIC SYSTEM CONSTRUCTION COST TOTAL				**$ 7,900,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 1,100,000	$ 1,100,000
TOTAL PROJECT COST FOR ELECTRIC SYSTEM					**$ 9,000,000**

E.3 COST ESTIMATES – AREA SOUTH OF I-80

NEW ROADS & CORRIDOR DRAINAGE					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
1	STREET PAVEMENT ON PREPARED BASE -2 LANES	17,000	LF	$ 350	$ 5,950,000
2	STREET PAVEMENT ON PREPARED BASE -4 LANES	0	LF	$ 620	$ -
3	SIDEWALKS - BOTH SIDES	17,000	LF	$ 50	$ 850,000
4	TRAFFIC SIGNAL INSTALLATIONS	2	EA	$ 250,000	$ 500,000
5	STORM DRAINAGE SYSTEM	17,000	LF	$ 145	$ 2,465,000
6	BOX CULVERTS	0	EA	$ 50,000	$ -
7	STREET LIGHTS	68	EA	$ 5,000	$ 340,000
8	STREET LIGHT CIRCUIT	17,000	LF	$ 10	$ 170,000
9	CORRIDOR LANDSCAPING	17,000	LF	$ 100	$ 1,700,000
10	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 2,425,000	$ 2,425,000
	ROAD & DRAINAGE CONSTRUCTION COST TOTAL				**$ 14,400,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 2,100,000	$ 2,100,000
TOTAL PROJECT COST FOR NEW ROADS & CORRIDOR DRAINAGE					**$ 16,500,000**

SANITARY SEWER SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
11	SANITARY SEWER LINES (8" TO 18")	17,000	LF	$ 120	$ 2,040,000
12	SEWER MANHOLES	34	EA	$ 5,000	$ 170,000
13	SANITARY SEWER FORCE MAINS	5,000	LF	$ 100	$ 500,000
14	SEWER LIFT/PUMP STATIONS	1	EA	$ 2,000,000	$ 2,000,000
15	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 942,000	$ 942,000
	SANITARY SEWER CONSTRUCTION COST TOTAL				**$ 5,652,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 848,000	$ 848,000
TOTAL PROJECT COST FOR SANITARY SEWER SYSTEM					**$ 6,500,000**

WATER SUPPLY SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
16	WATER MAINS (12" TO 16")	17,000	LF	$ 160	$ 2,720,000
17	FIRE HYDRANT ASSEMBLIES	34	EA	$ 5,000	$ 170,000
18	WATER VALVES	68	EA	$ 1,500	$ 102,000
19	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 908,000	$ 908,000
	WATER MAIN CONSTRUCTION COST TOTAL				**$ 3,900,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 600,000	$ 600,000
TOTAL PROJECT COST FOR WATER SYSTEM					**$ 4,500,000**

ELECTRIC SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
23	UNDERGROUND POWER LINES	17,000	LF	$ 50	$ 850,000
24	ELECTRIC MANHOLES AND VAULTS	17	EA	$ 5,000	$ 85,000
25	PAD TRANSFORMERS	17	EA	$ 10,000	$ 170,000
26	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 195,000	$ 195,000
	ELECTRIC SYSTEM CONSTRUCTION COST TOTAL				**$ 1,300,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 200,000	$ 200,000
TOTAL PROJECT COST FOR ELECTRIC SYSTEM					**$ 1,500,000**

NATURAL GAS SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
27	NATURAL GAS LINES	17,000	LF	$ 60	$ 1,020,000
28	GAS VALVES & APPURTENANCES	17	EA	$ 1,000	$ 17,000
29	METERING STATION, FACILITIES & APPURTENANCES	1	EA	$ 50,000	$ 50,000
30	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 213,000	$ 213,000
	NATURAL GAS SYSTEM CONSTRUCTION COST TOTAL				**$ 1,300,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 200,000	$ 200,000
TOTAL PROJECT COST FOR NATURAL GAS SYSTEM					**$ 1,500,000**

TELECOMMUNICATIONS SYSTEM					
ID NO.	CONSTRUCTION ITEM	QUANTITY	UNITS	UNIT PRICE	TOTALS
31	FIBER OPTIC LINES / COPPER WIRE LINES	17,000	LF	$ 20	$ 340,000
32	TELECOMM PULL BOXES, MANHOLES & VAULTS	25	EA	$ 1,000	$ 25,000
34	MISCELLANEOUS & CONTINGENCIES	1	LS	$ 75,000	$ 75,000
	TELECOMM SYSTEM CONSTRUCTION COST TOTAL				**$ 440,000**
	DESIGN & CONSTRUCTION ENGINEERING	1	LS	$ 60,000	$ 60,000
TOTAL PROJECT COST FOR TELECOMMUNICATIONS SYSTEM					**$ 500,000**

SLC · PORT
GLOBAL LOGISTICS CENTER

SLC PORT GLOBAL LOGISTICS CENTER

6620 WEST 700 NORTH, SALT LAKE CITY, UTAH

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

The SLC Port Global Logistics Center is strategically located off I-80 a few minutes west of Salt Lake City International Airport. Upon completion, Phase I will include up to 6 buildings totaling over 2.6 million square feet with building sizes ranging from 159,000 square feet to over 1 million square feet.

CBRE

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

PROPERTY SPECIFICATIONS

- Approximately 3,000 acre rail-served development
- Site of proposed Salt Lake City Inland Port/Intermodal Facility
- Approximately 50 million square feet of future entitled development
- Phase 1: +/-2.6 million square feet
- Future heavy haul roads to Intermodal Facility
- M-1 Light Industrial Global Trade Port Zoning
- Flat Topography
- Rocky Mountain Power 130 kVA substation (expandable)
- Future Foreign Trade Zone Designation
- Two (2) 21" forced sewer lines
- Redundant 24" steel water lines
- Direct access to I-80
- 5 minutes to Salt Lake International Airport (currently under $3.6 Billion expansion)
- 10 minutes to Salt Lake City's Central Business District (CBD)
- 10 minutes to I-15

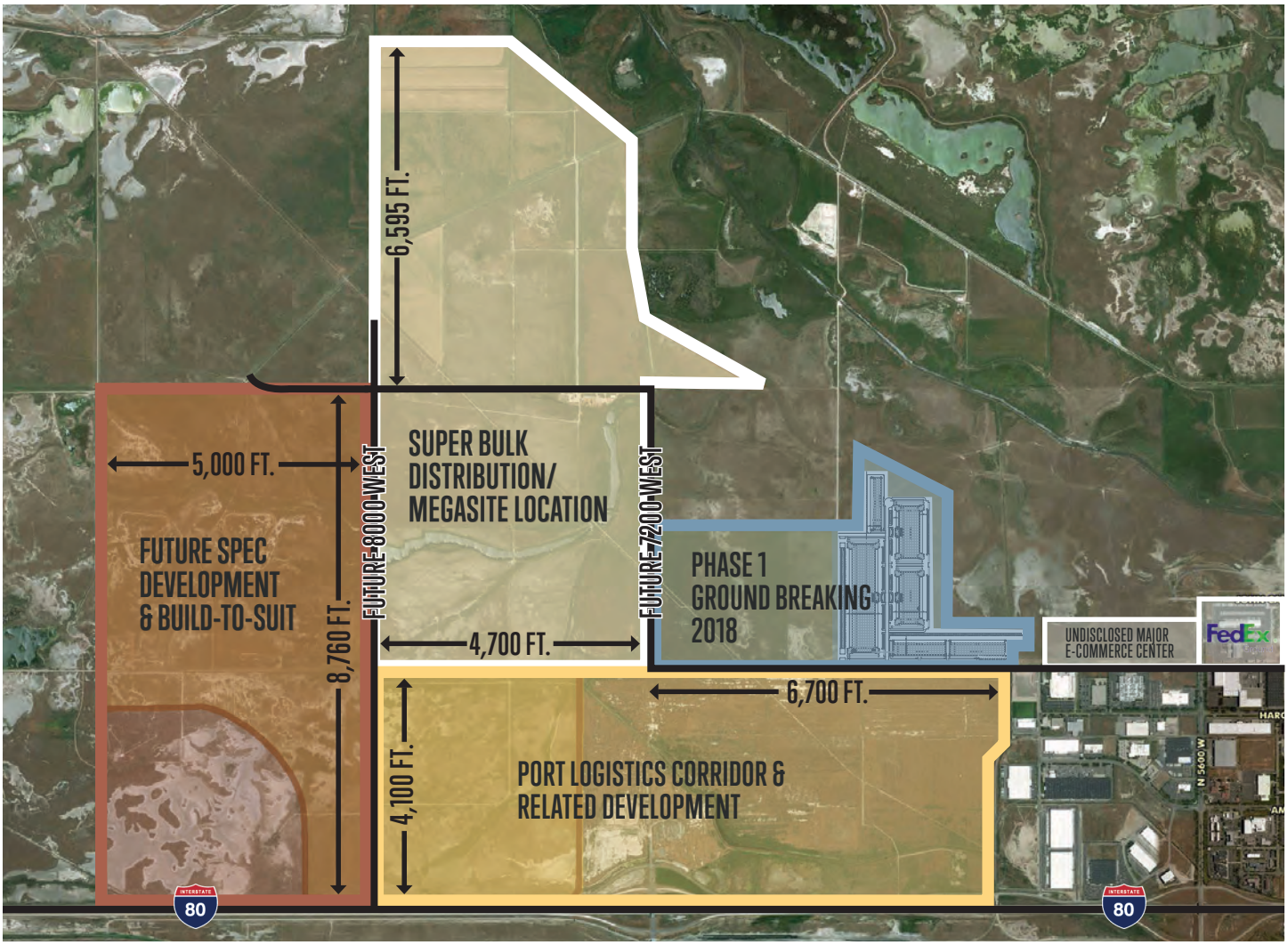
SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

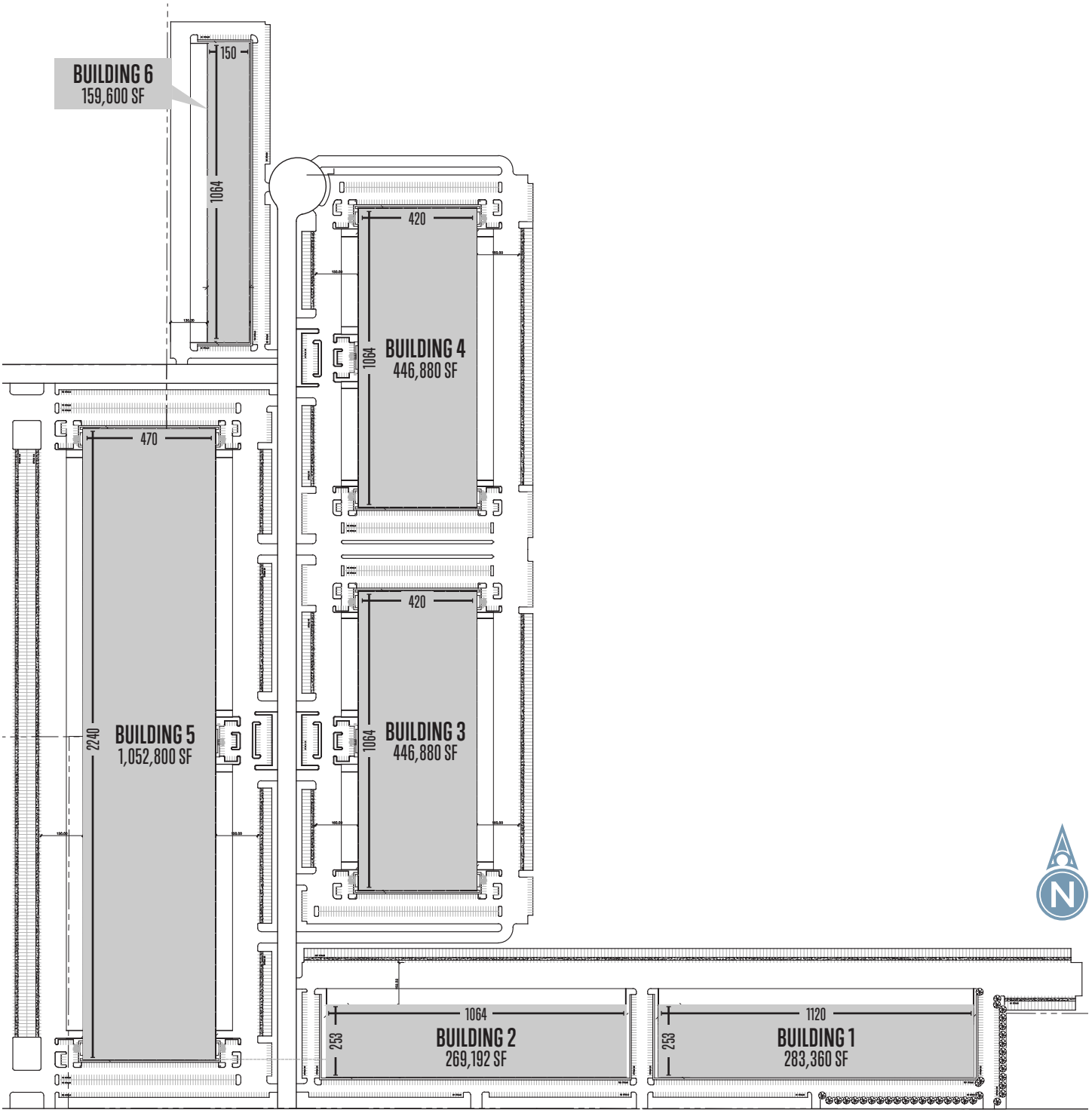
PHASE 1 SITE PLAN



SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development – Speculative/Build-to-Suit/Land for Sale

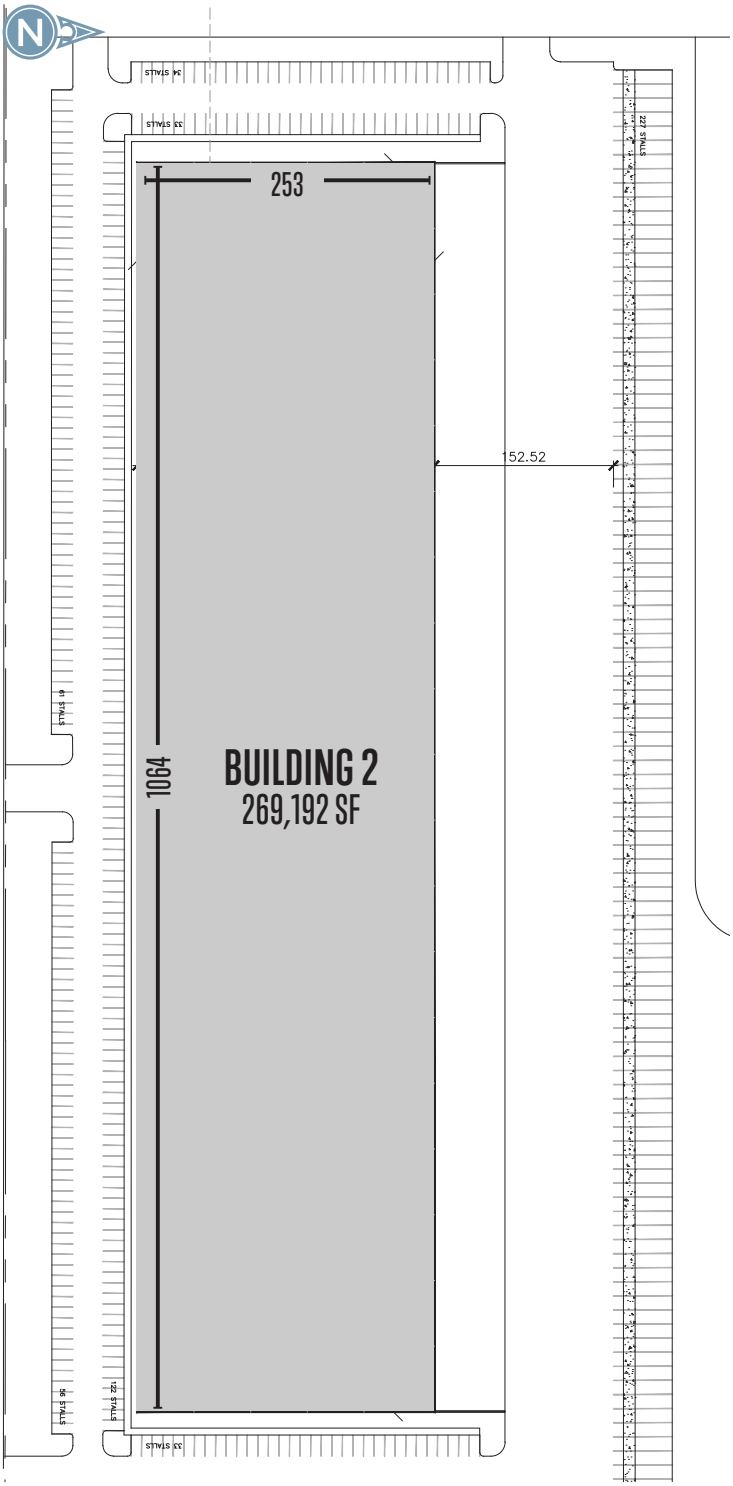
PHASE 1 SITE PLAN



SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development–Speculative/Build-to-Suit/Land for Sale

BUILDING 2 FLOOR PLAN



BUILDING 2 SPECIFICATIONS:

REAR LOAD FACILITY

Building Size:	269,192 Sq. Ft.
Divisible to:	+/-28,000 Sq. Ft.
Dimensions:	253' deep x 1064' wide
Typical Column Spacing:	56' x 50', 60' staging bays
Truck Court:	152.52'
Ceiling Clearance:	32 Feet
Construction Type:	Concrete Tilt
Fire Suppression:	ESFR
Floor Slab:	6" reinforced

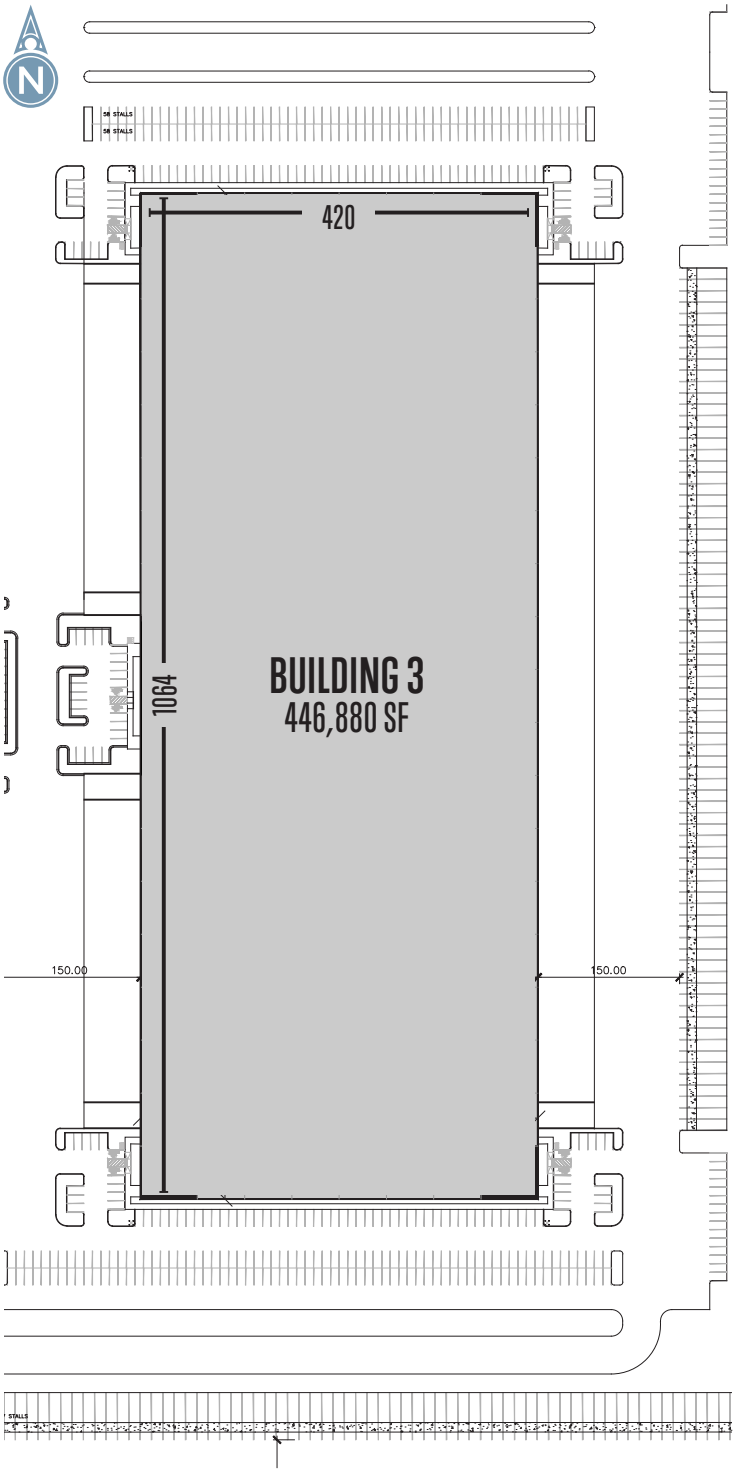
Dock High & Grade Level Loading

Trailer Parking:	+/-115 stalls
Employee Parking:	+/-339 stalls

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development–Speculative/Build-to-Suit/Land for Sale

BUILDING 3 FLOOR PLAN



BUILDING 3 SPECIFICATIONS:

CROSS DOCK FACILITY

Building Size:	446,880 Sq. Ft.
Divisible to:	+/-112,000 Sq. Ft.
Dimensions:	420' deep x 1064' wide
Typical Column Spacing:	56' x 50', 60' staging bays
Truck Court:	150'
Ceiling Clearance:	36 Feet
Construction Type:	Concrete Tilt
Fire Suppression:	ESFR
Floor Slab:	6" reinforced

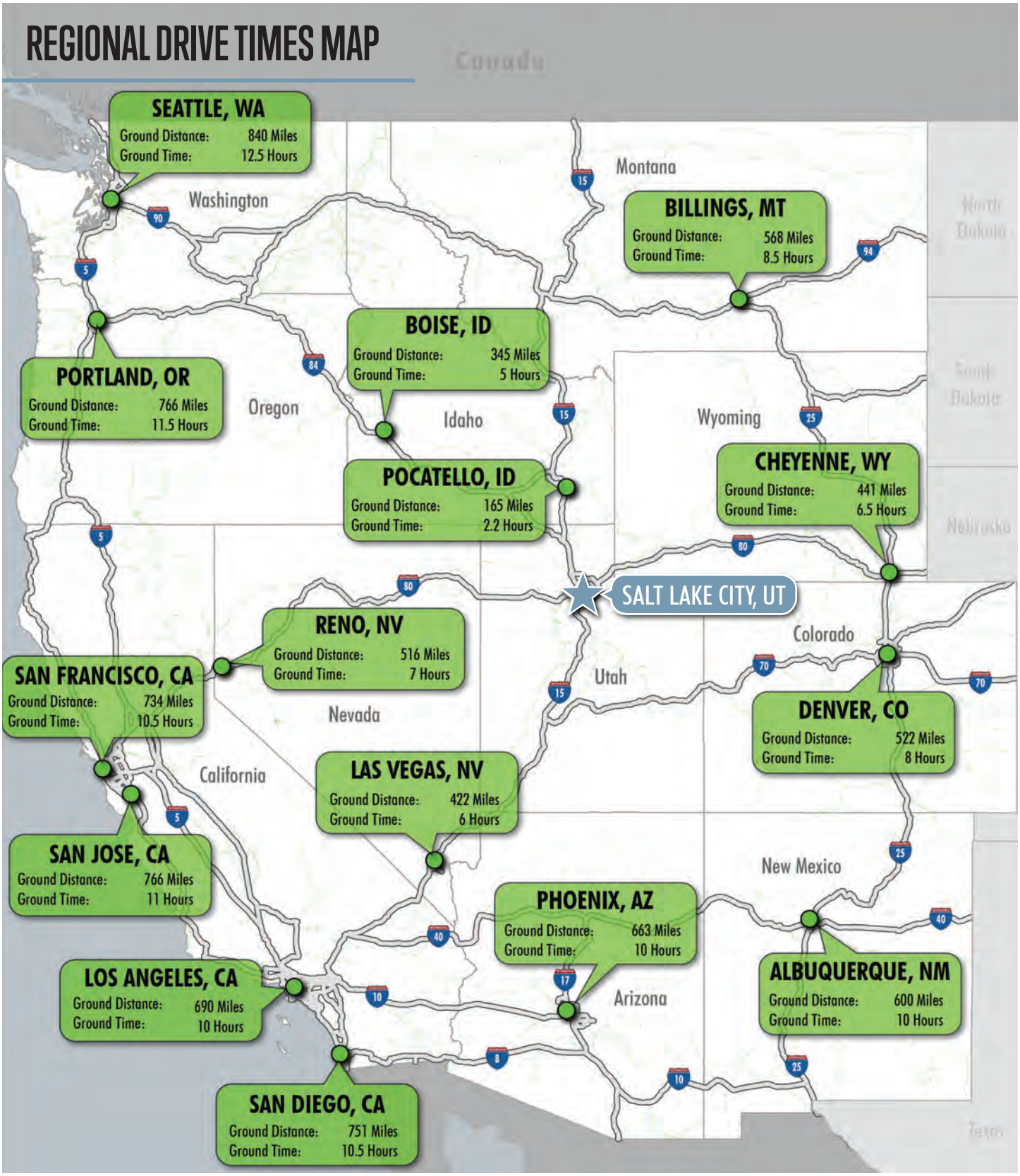
Dock High & Grade Level Loading

Trailer Parking:	+/-124 stalls
Employee Parking:	+/-404 stalls

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development–Speculative/Build-to-Suit/Land for Sale

REGIONAL DRIVE TIMES MAP



SLC PORT GLOBAL LOGISTICS CENTER

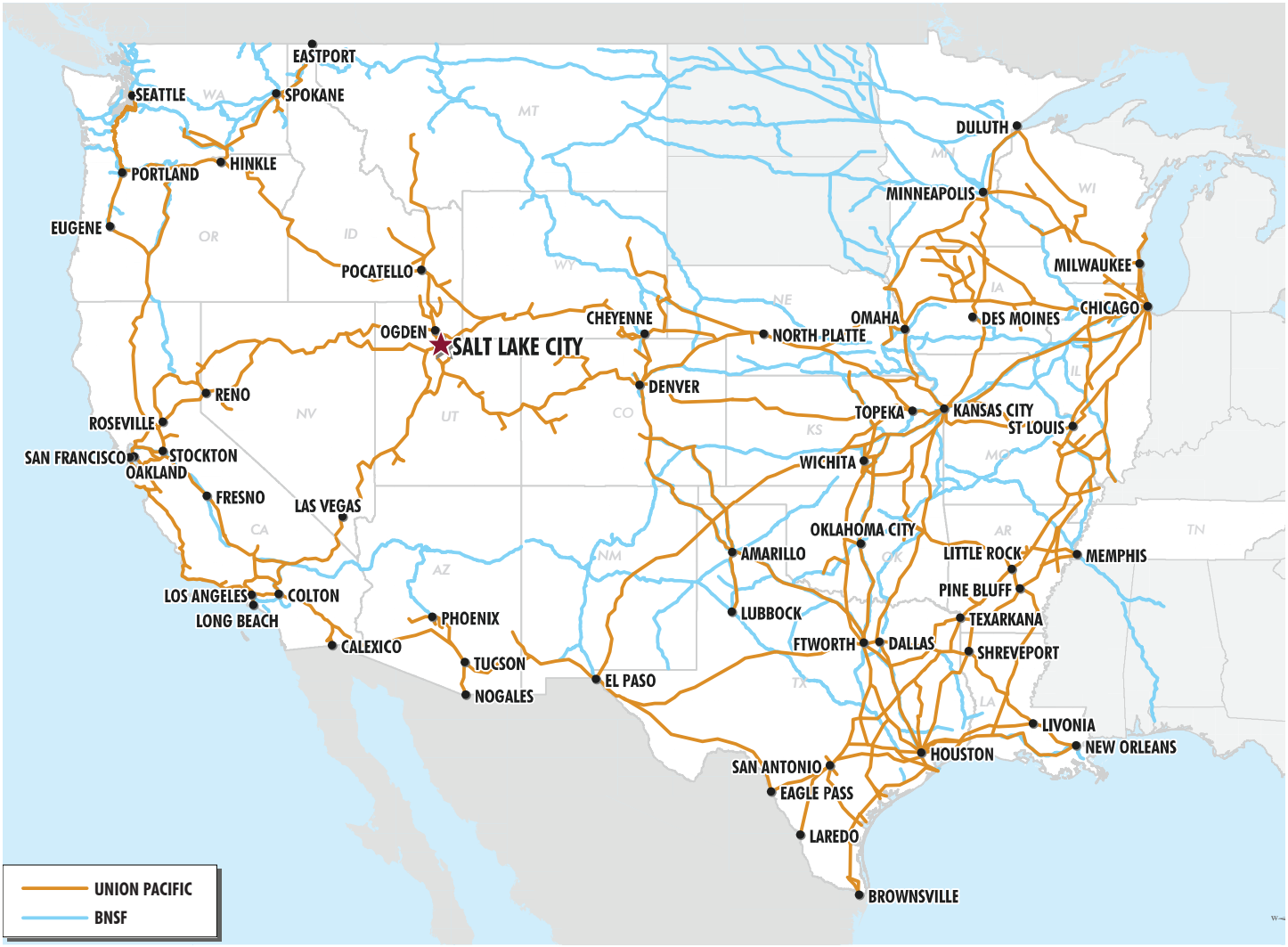
+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

UNION PACIFIC & BNSF INTERMODAL CONNECTIVITY - PORTS

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

UNION PACIFIC & BNSF INTERMODAL CONNECTIVITY - CITIES



SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development—Speculative/Build-to-Suit/Land for Sale

WHY UTAH?

#1 Pro-Business State for 43rd Consecutive Year (Polina and AEDI, 2015)

#1 State for Business (Wall Street, 2016)

#1 State Economic Outlook Rankings (ALEC, 2017)

#3 Highest GDP Growth (WalletHub)

#3 Best States for Business 2017 (Forbes, 2017)

#10 America's Fastest Growing Cities (Forbes, 2017)

#14 Best States for Business & Careers (Forbes, 2017)

#3 Best Cities for Young Professionals (Forbes, 2017)

14 World-Class Ski Resorts
- Alta
- Park City
- Snowbird
- Deer Valley

#10 Best Places to Live (U.S. News & World Report/ Outside Magazine)

#9 ACSM American Fitness Index 2017

#7 Best States (McKinsey & Company)

6.08 ¢/KWH Rocky Mountain Power rates among nation's lowest (Edison Electric Institute, 2016)

Located in Equal Distances from all Major Western Markets

Within 2.5 Hour Flight of More than Half of the U.S. Population

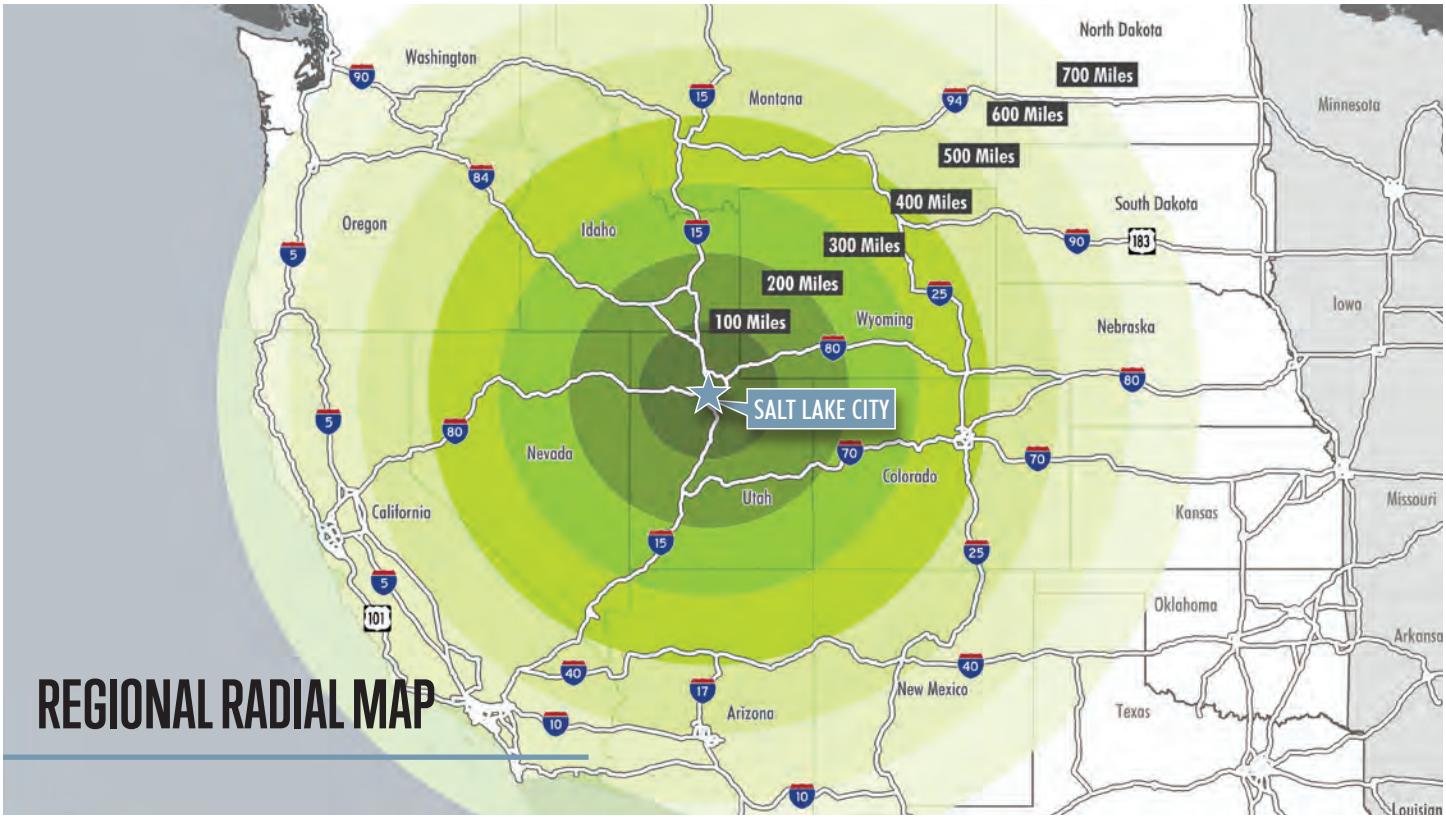
Ranked One of the Most "Outdoorsy" States in the U.S.

Provo & SLC - Best U.S. Cities to Live in if you like the outdoors

Top Mountain Bike Destinations North America (Singletracks, Nat'l Geographic)

SLC PORT GLOBAL LOGISTICS CENTER

+/-3,000-Acre Industrial/Intermodal Development–Speculative/Build-to-Suit/Land for Sale



REGIONAL RADIAL MAP

2016

100 MILES	▶▶▶	2,771,300
200 MILES	▶▶▶	3,469,056
300 MILES	▶▶▶	4,428,051
400 MILES	▶▶▶	12,694,367
500 MILES	▶▶▶	17,736,198
600 MILES	▶▶▶	59,125,428
700 MILES	▶▶▶	75,787,173

2021

100 MILES	▶▶▶	2,997,749
200 MILES	▶▶▶	3,722,470
300 MILES	▶▶▶	4,725,702
400 MILES	▶▶▶	13,651,515
500 MILES	▶▶▶	18,883,782
600 MILES	▶▶▶	62,263,850
700 MILES	▶▶▶	79,775,490

Source: U.S. Census Bureau, Census 2010. Esri forecasts for 2016 and 2021. Esri converted Census 2000 data into 2010 geography.

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matt.mcafee@cbre.com

Hello Speaker Hughes,

As a heads up in advance of the Tuesday meeting, I wanted to share some of the items that have been mentioned in recent days by Council Members:

- What is the description of the State's proposal – boundaries being considered and timeline, etc.?

- There is a lot of focus on the governance model at this time. Is the governance model referenced by the State the only way to reach the vision that all parties seem to support?

- What is the timing for the development of a business plan, and would it make sense to leave the governance question open while the business plan is developed?

- What does the State deem to be the highest and best use for the NWQ?

- Both the public and private sector are always balancing competing needs. How does the State envision that being achieved with this proposed entity?

- We've heard the assertion that too many acres are set aside for environmental protection. How would you see the entity balancing the development demands against the environmental protections that are in place?

- How would transparency and accountability to the public be addressed with the proposed structure?

- To whom would this new jurisdiction answer?

- How would ownership, operations and maintenance of utilities be addressed; how would public safety be funded and managed?

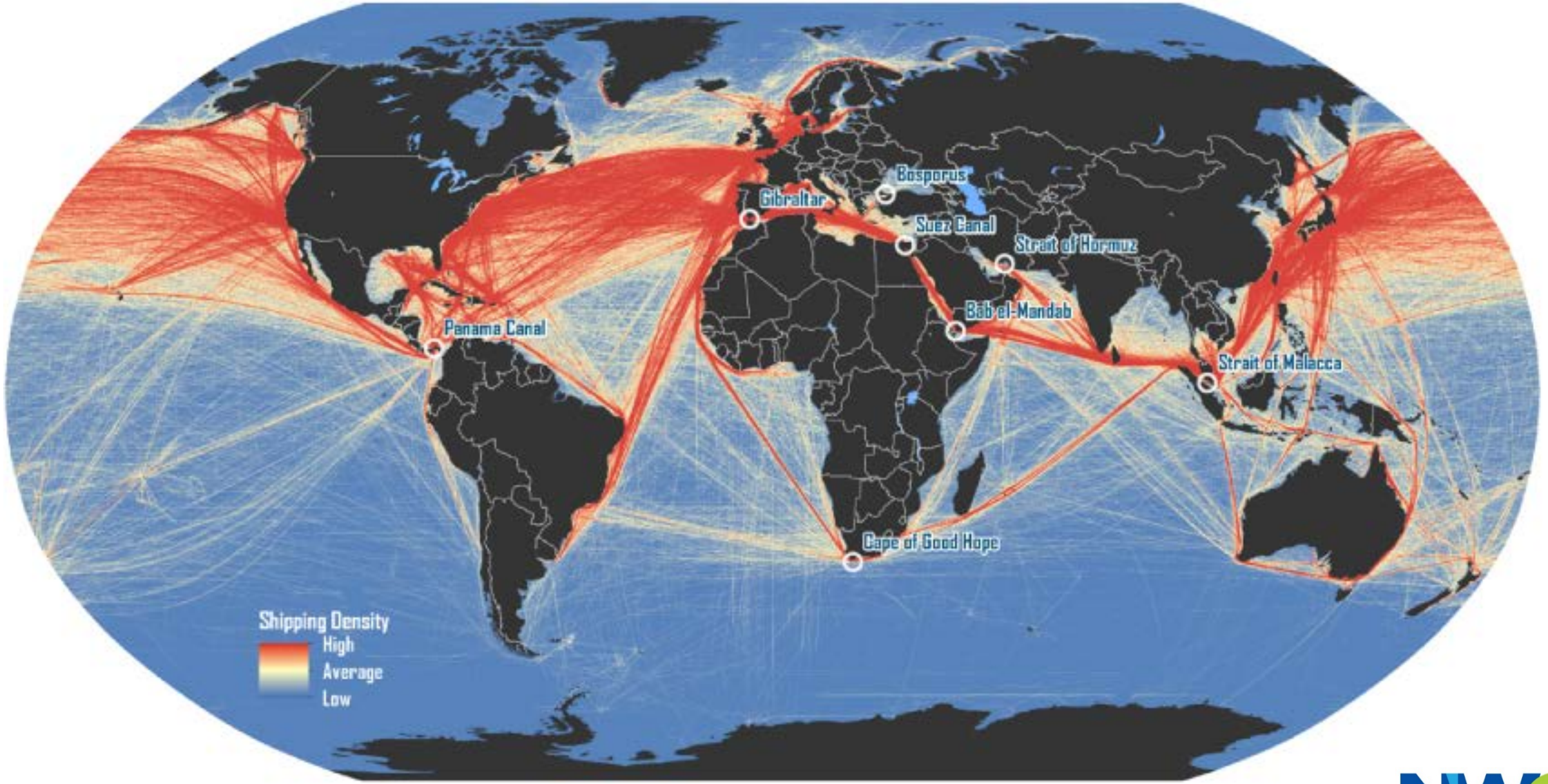
- If the taxpayers are concerned or have input, to whom would they direct that input. Who would represent taxpayers?

- How would the landfill clean-up be impacted and addressed?

- At Thursday's meeting, there was mention of aligning the tax structure to match the changing economy. Could you tell us more about that?

- How would the proposal impact the authority of existing taxing entities?
  - Salt Lake City
  - Salt Lake County
  - State of Utah
  - School District
  - Library
  - Metro Water
  - Mosquito Abatement

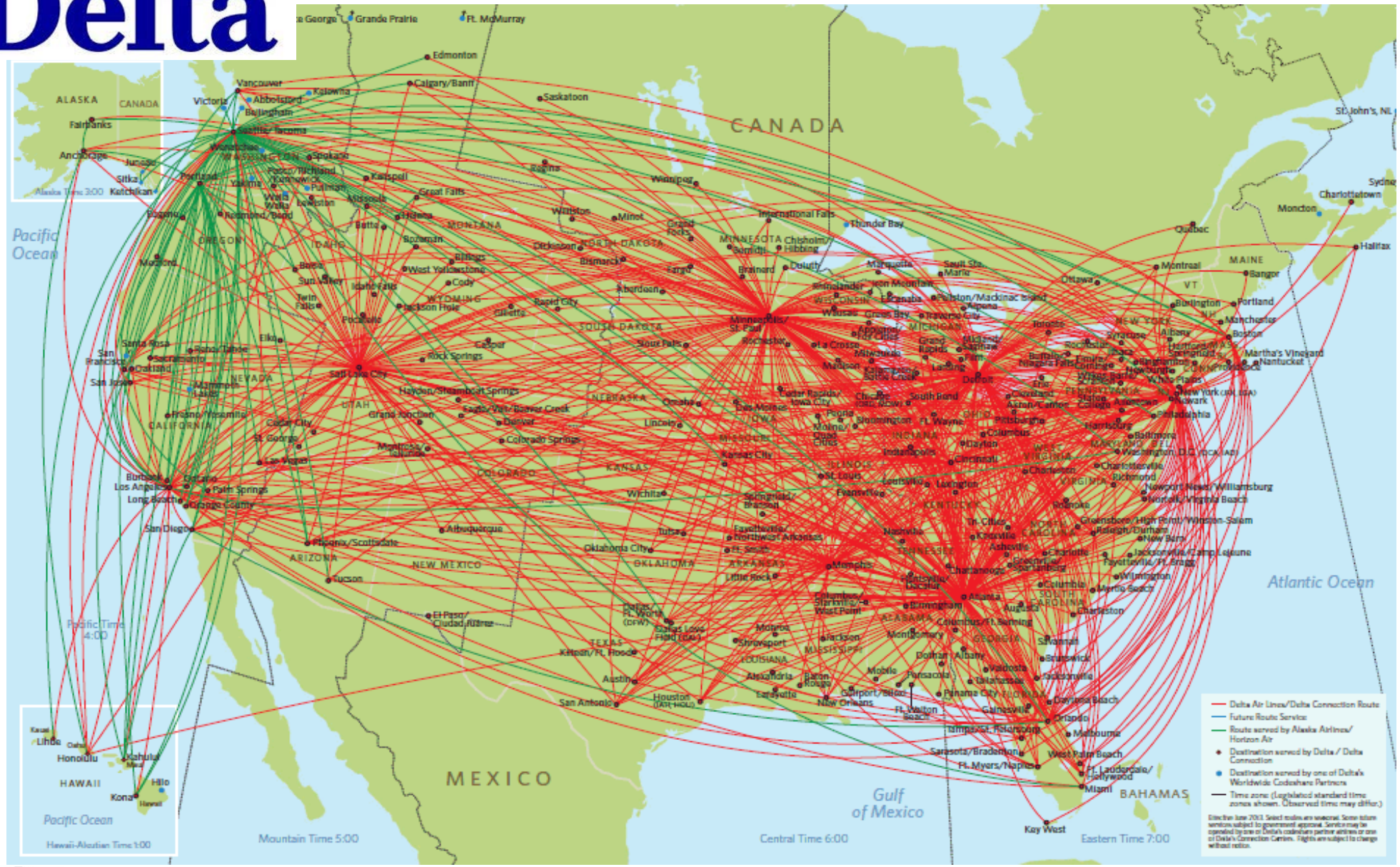
SHIPPING LANE DENSITY MAP



PRICE REAL ESTATE

NWQB DOES BUSINESS

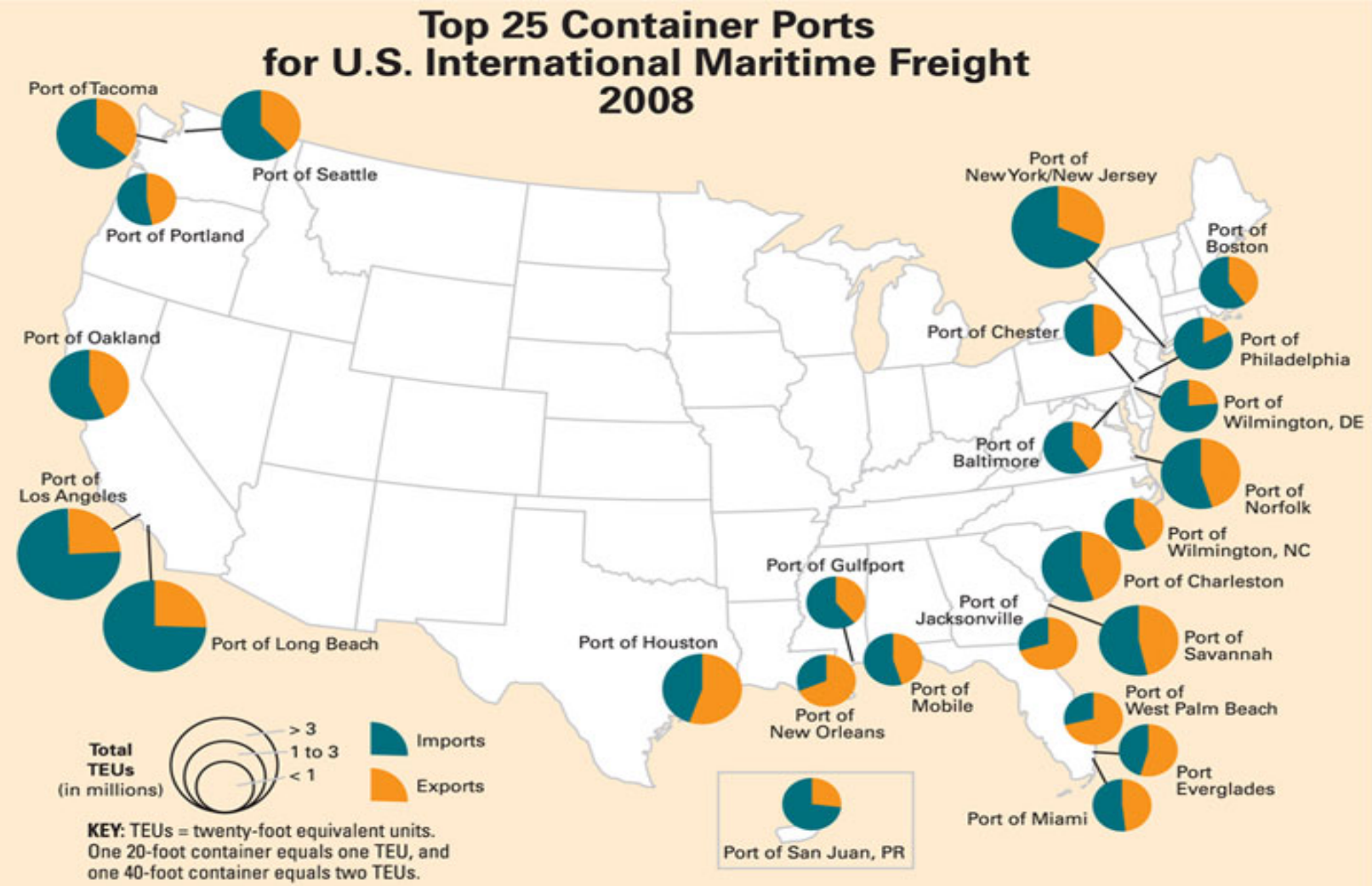
Delta



PRICE REAL ESTATE

NWQB DOES BUSINESS

TOP 25 CONTAINER PORTS

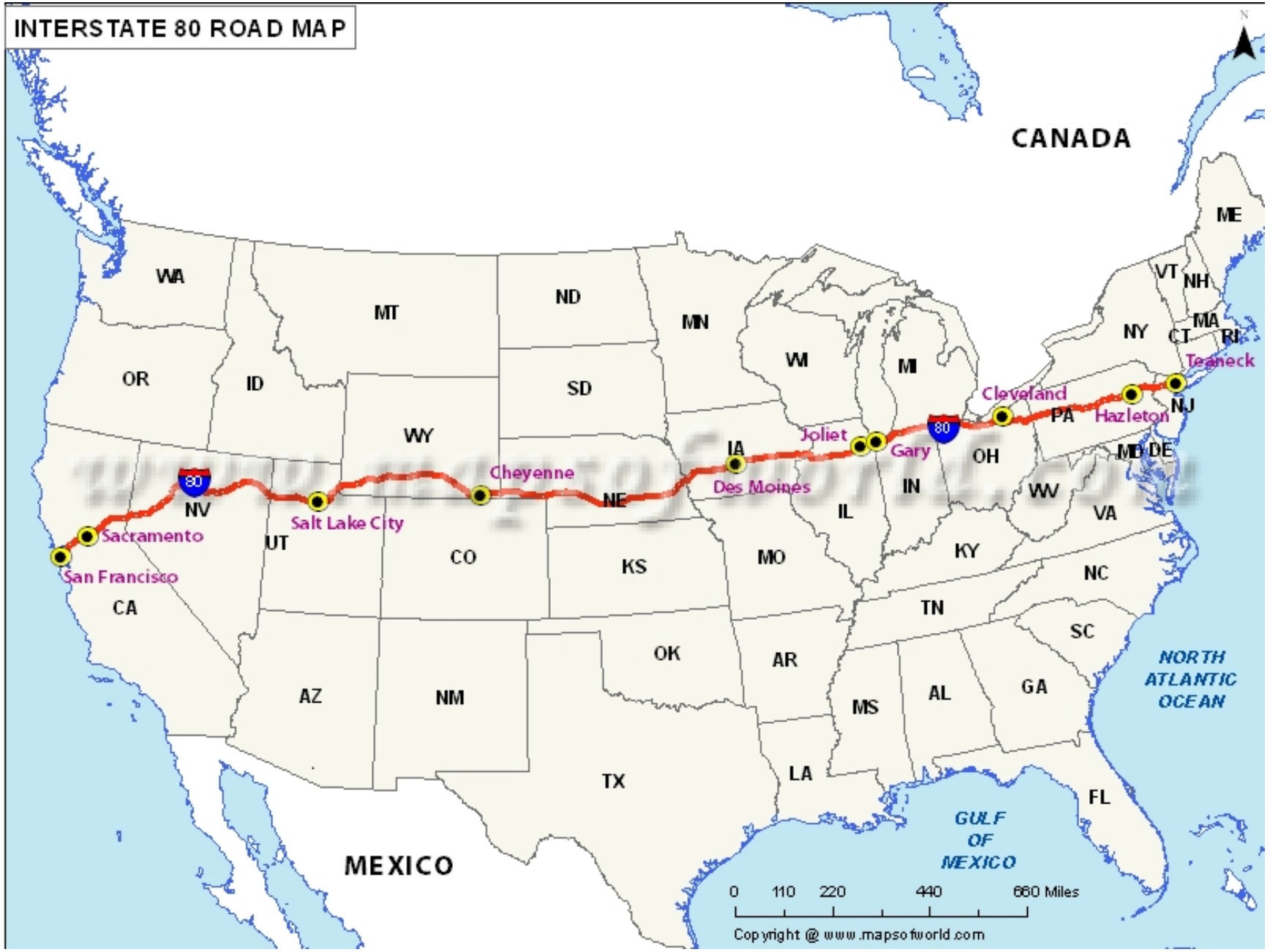


NOTE: The data in this figure include only loaded containers in U.S. international maritime activity and cover U.S. imports, exports, and transshipments. Therefore, the trade levels will be greater than those reported from U.S. international trade statistics, which exclude transshipments. The data also exclude military shipments.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, based on data from U.S. Department of Transportation, Maritime Administration, which are drawn from The Journal of Commerce, Port Import Export Reporting Service (PIERS), available at *www.marad.dot.gov*, as of March 30, 2009.

UNION PACIFIC RAIL MAP

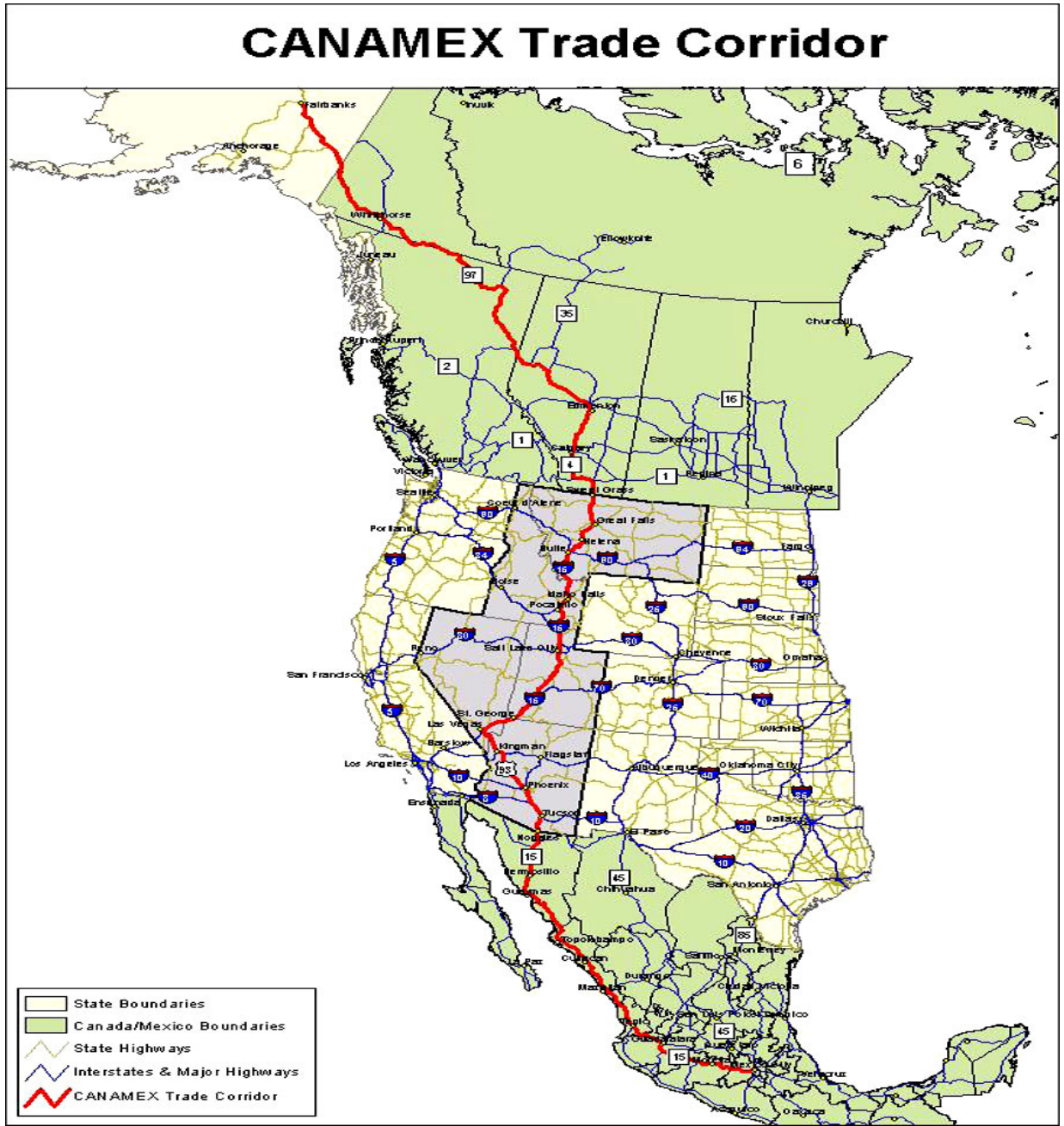
I-80 INTERSTATE MAP



PRICE REAL ESTATE

NWQB DOES BUSINESS

CANAMEX INTERSTATE MAP



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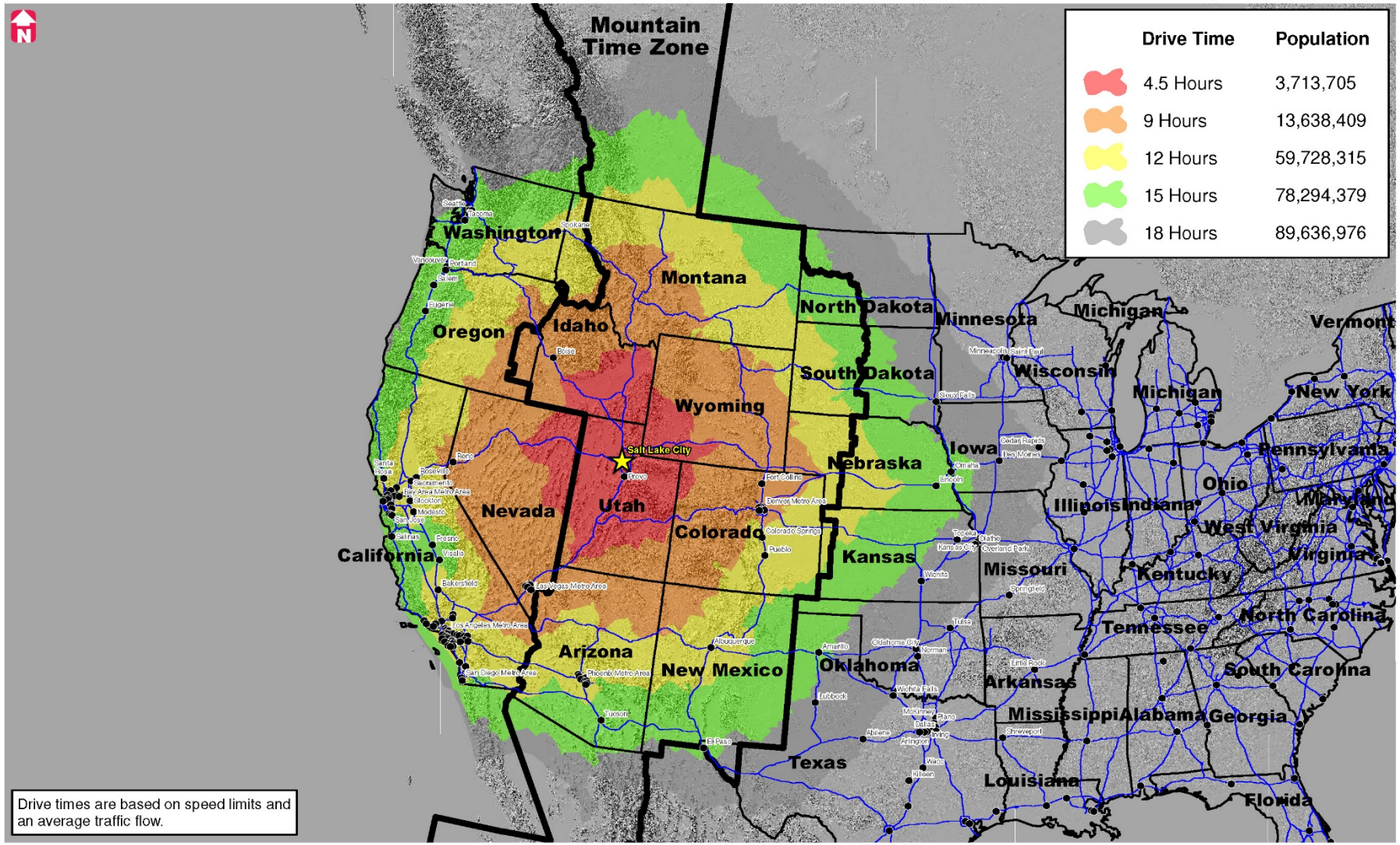
NWQB DOES BUSINESS

DRIVE TIMES

Salt Lake City, Utah



Kyle Roberts, CCIM, SIOR

Newmark Grubb ACRES

376 East 400 South, Suite 120 | Salt Lake City, Utah 84111

Office 801.578.5555 | Fax 801.578.5500

www.ngacres.com

0 250 500 Miles

Map Data and/or Imagery Courtesy of Esri

PRICE REAL ESTATE

NWQB DOES BUSINESS

Utah Inland Port Feasibility Study

presented to

Utah Inland Port Advisory Committee

presented by

Bob Gollnik

Adam Wasserman

Lois Yates

December 8, 2017

CAMBRIDGE SYSTEMATICS

GLDPARTNERS

PRICE REAL ESTATE

NWQ DOES BUSINESS

Logistics Position
Commercial Vehicles

Salt Lake City – Pacific Northwest

- Distance: 840 Miles
- Service Time: 14.5 hours
- Corridor(s): I-84, I-32

Salt Lake City – Port of Oakland

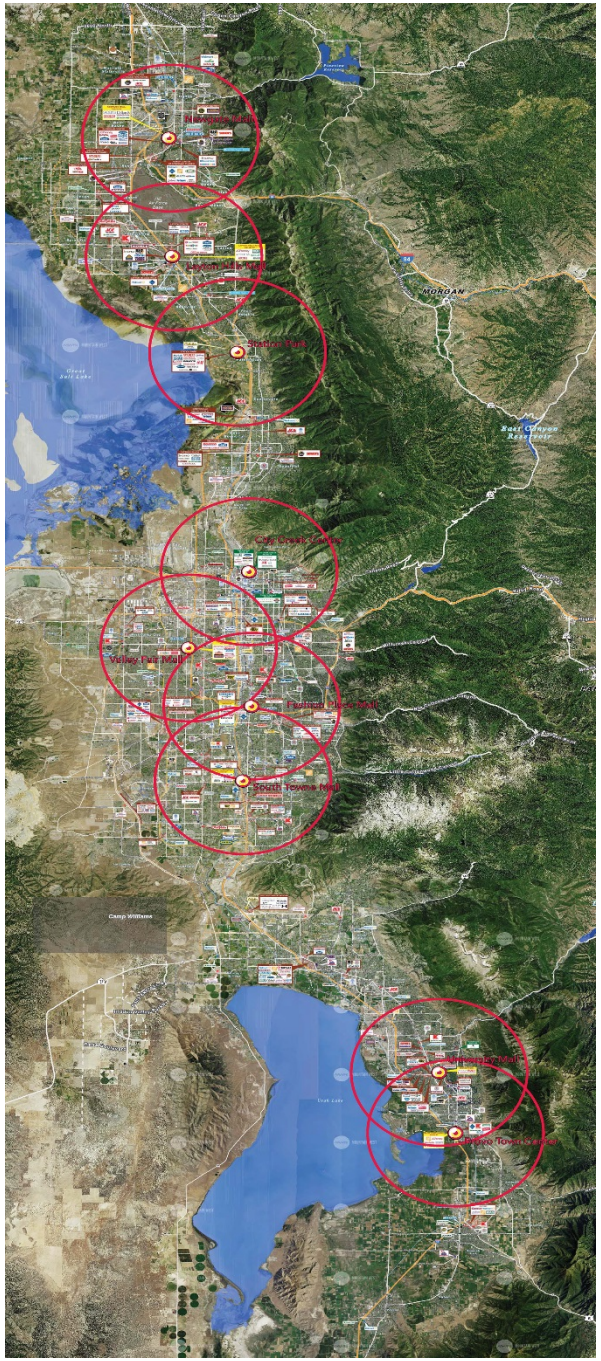
- Distance: 725 Miles
- Service Time: 12.5 Hours
- Corridor(s): I-80

Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: 705 Miles
- Service Time: 12 Hours
- Corridor(s): I-15

*Note: Distance and times are approximate

Wasatch Front Regional Malls



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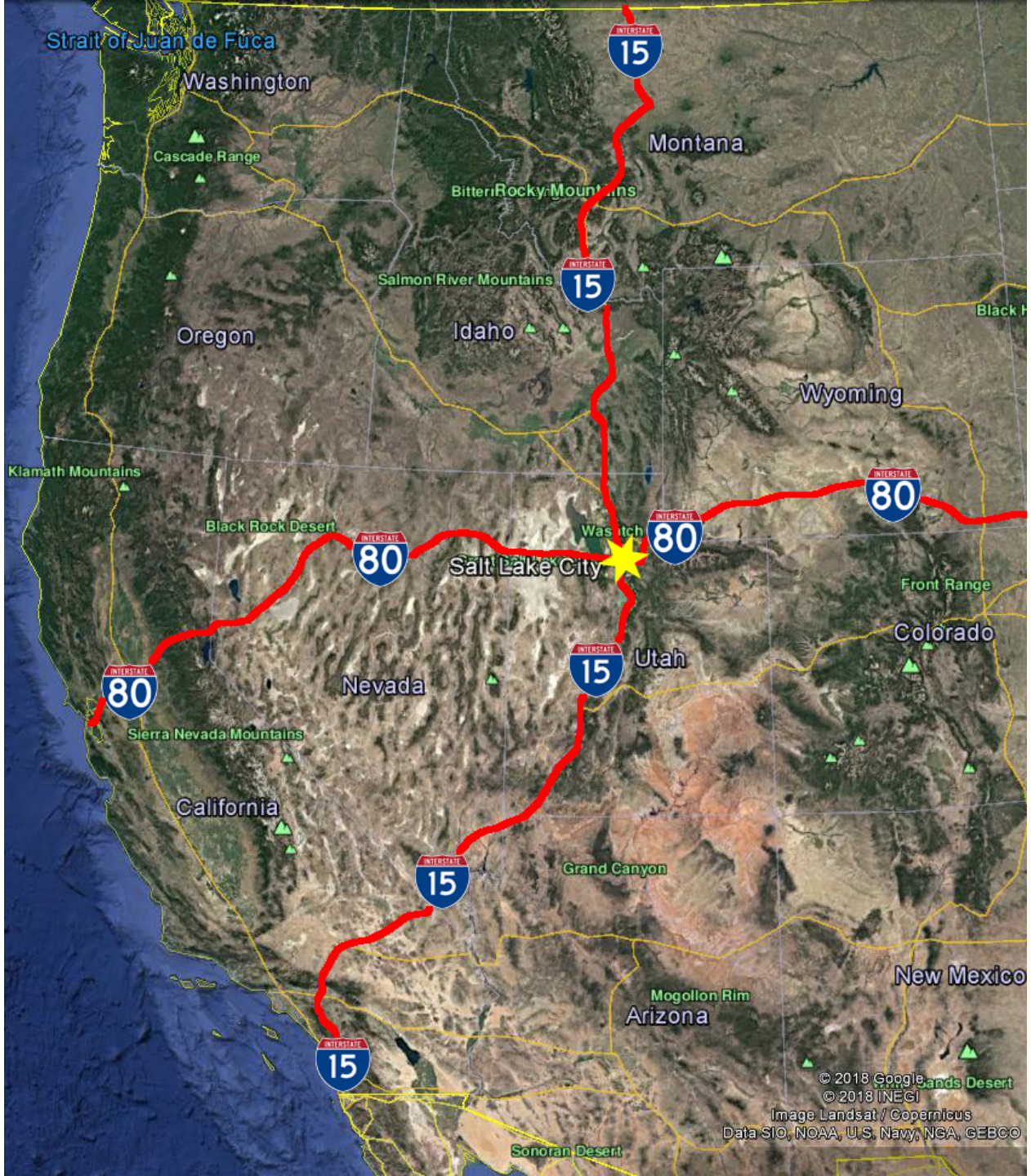


PRICE REAL ESTATE

NWQB DOES BUSINESS

BUSINESS INSIDER

Hayley Peterson
1/3/2018

A tsunami of store closures is about to hit the US — and it's expected to eclipse the retail carnage of 2017

Retailers are bracing for a fresh wave of store closures in 2018 that's expected to eclipse the rash of closures that rocked the industry last year.

"Landlords are panicking," said Larry Perkins, CEO and founder of the advisory firm SierraConstellation Partners. "The last year was pretty apocalyptic from a retail standpoint, and the macro issues haven't changed. There will continue to be a high degree of bankruptcies and store closures."

2017 was a record year for both store closures and retail bankruptcies.

Dozens of retailers including Macy's, Sears, and JCPenney shuttered an estimated total of 9,000 stores — far exceeding recessionary levels — and 50 chains filed for bankruptcy over the course of the year.

PRICE REAL ESTATE

NWQB DOES BUSINESS

BUSINESS INSIDER

Hayley Peterson
1/3/2018

The loss of even one anchor tenant can trigger a decades-long downward spiral for mall owners.
That's because the malls don't only lose the income and shopper traffic from that store's business. The closure often triggers co-tenancy clauses that allow the remaining mall tenants to exercise their right to terminate their leases or renegotiate the terms, typically with a period of lower rents, until another retailer moves into the vacant anchor space.
That's good news for retailers looking to grow their physical assets — it means they are more likely to score low rent and favorable lease terms.
But it's terrible news for retail landlords, some of whom are now trying to stop the bleeding by suing the companies that are closing stores.

Mall owners are suing retailers to keep stores open

Simon Property Group, one of the biggest mall operators in the country, sued Starbucks this year after the coffee chain said it that it planned to close all 379 stores in its Teavana chain, 77 of which are located in Simon Property Group malls.
The mall owner demanded that Starbucks keep running the tea shops located in its malls, arguing in part that their closure would reduce traffic to surrounding stores.
A judge ruled in Simon Property Group's favor in December and ordered Starbucks to keep operating the Teavana stores in question.
Whole Foods was also recently sued for a store closure. The grocery chain closed a Seattle-area store and the owners of the property sued the company for breaking its long-term lease.
A judge has since ordered Whole Foods to reopen the store, which Whole Foods had closed in October.
As mall operators become increasingly desperate to keep the lights on, many more retailers could find themselves in court, fighting to shut down dying stores.

Not all retailers and shopping malls are doomed

To be sure, there are still hundreds of high-performing shopping malls in the US that are expected to remain immune from the fallout of shrinking retailers.
Only the lowest-performing malls — of which there are roughly 300 — are in danger of going out of business.
There are also plenty of retailers, mostly discounters, that are growing their physical assets while others shrink.
Dollar General, Dollar Tree, Lidl, Aldi, Ross Stores, and TJ Maxx are planning to open hundreds of new stores next year.
"Retail isn't going away by any means," Perkins said. "We just got a little bit out of control with the volume of retailers and the number of stores."

THE WALL STREET JOURNAL.

https://www.wsj.com/articles/online-retailers-new-warehouses-heat-up-local-job-markets-1491739203

LOGISTICS REPORT

Online Retailers' New Warehouses Heat Up Local Job Markets

Fulfillment centers for online retailers are offering flexible work schedules, gift cards, bonuses and raises to attract workers

Luis Ramirez works as a 'picker' at a Redlands, Calif., distribution center, collecting fashion items from stock shelves to fill online orders.

Emory Montgomery works at the warehouse, operated by Radial for fashion retailer Zara, organizing outgoing packages. Radial recently raised pay at the facility by 5% to 7%.

Judith Lopez has worked at the packing station at the Redlands facility for two years and lives in nearby San Bernardino.

Cameron Mitchell has worked for close to two years at the warehouse, which is surrounded by other distribution centers.

It doesn't take much to lure workers away. "A guy who makes $10 an hour, you offer $10.25, he's going to leave," said Tom Landry, president of Allegiance Staffing, which supplies logistics and manufacturing workers. "That's another tank of gas."

Employees prep and ship internet orders at packing stations in the Redlands distribution center.

Some warehouse operators are adding part-time positions or compressed shifts that pack 36 hours of work into three days, in hopes of luring students, working parents or retirees. Some firms are tapping local organizations and community colleges. Incentives deployed each fall for the holiday rush, like performance pay, are becoming more common year-round.

"It's almost like peak [season] is never ending," said Meghan Henson, chief human resources officer at XPO Logistics Inc., which operates warehouses for large retailers like IKEA. "If a warehouse is going up down the block, we want to find out what they're paying."

Luis Ramirez, 26 years old, joined Radial in 2014, after hearing it was paying $10 an hour at a new distribution center for Zara, a retail unit of Inditex SA . That was 50 cents an hour more than he earned at a warehouse job he got through a staffing agency.

Mr. Ramirez earned a $200 attendance bonus during therecent holiday season and said Zara gives out $100 gift cards at the end of the year. Employees also can get paid more if they exceed targets during busy times, when apparel goes on sale. "For picking, the rate is 65 [clothing items] an hour," Mr. Ramirez said. Workers who exceed 70 items an hour "get a dollar extra for every hour you hit that rate." He said he plans to stayat Radial for now.

Nancy Loera packs items to be shipped from the Redlands warehouse. Radial recently raised pay at the warehouse by 5% to 7%.

Raising pay can reduce employee turnover and save companies money on training. Experienced workers tend to be more productive, said David Caines, chief operating officer at logistics provider Kenco.

Some companies are investing in automated systems so their facilities can handle more orders without hiring additional staff. Software can direct workers to the right shelf faster and reduce errors.

CNNMoney

Jobs everywhere! Except at stores

by Chris Isidore @CNNMoney
January 5, 2018: 1:18 PM ET

The job market looks like it doing well right now. Unless you head to the mall.
Record numbers of store closings and a surge in retail bankruptcies, as well as the shift to online shopping, have forced retailers to slash jobs even as other employers scramble to find qualified workers.

The sector lost a total of 66,500 jobs in 2017.

General merchandise stores, the segment that includes department stores, were hit the hardest, losing 90,300 jobs, according to the Friday's December jobs reportfrom the Labor Department. Clothing stores cut another 28,600 jobs. Drug stores lost 18,400.

These job losses tend to hit the young, elderly, women and minorities the hardest. About 60% of department store employees are female, compared to 47% of workers overall. Minorities, the elderly and teenagers are also far more likely to find jobs in department and discount stores than they are elsewhere. Teenagers hold 8% of department store jobs, compared to 3% of jobs overall.

China will be middle-income by 2030,with spending on cars, luxuries, health to rise

Nyshka Chandran | @nyshkac
13 Hours Ago

CNBC

China will become a middle-class society by 2030, based on income measures, new research suggests.

The world's number-two economy is currently at an early-to-middle stage of development in terms of per capita consumption, roughly at the level of Malaysia in the 2000s, the Economist Intelligence Unit (EIU) said in a new report on Wednesday.

But as the low-income proportion of population shrinks, around three-quarters of Chinese will likely be defined as "middle income" in 15 years' time, the report said.

ChinaFotoPress - Getty Images

Almost 40 percent of the population were in the low-income bracket—defined as having an annual personal disposable income below $2,100

Bloomberg

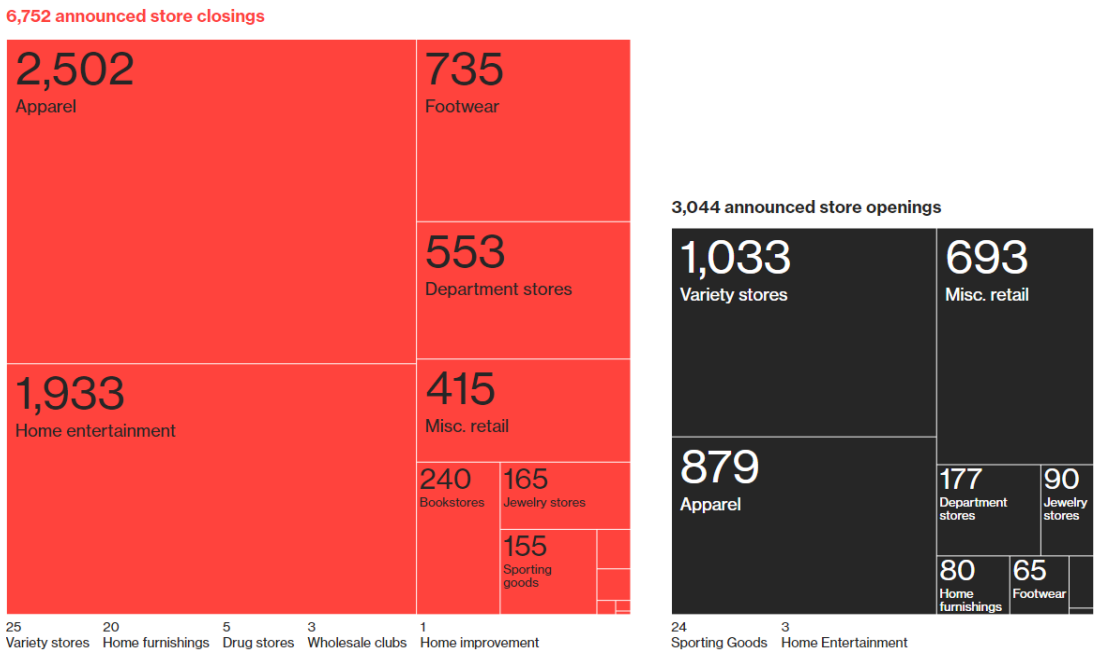
America's 'Retail Apocalypse' Is Really Just Beginning

By Matt Townsend, Jenny Surane, Emma Orr and Christopher Cannon
November 8, 2017

The so-called retail apocalypse has become so ingrained in the U.S. that it now has the distinction of its own Wikipedia entry.

The industry's response to that kind of doomsday description has included blaming the media for hyping the troubles of a few well-known chains as proof of a systemic meltdown. There is some truth to that. In the U.S., retailers announced more than 3,000 store openings in the first three quarters of this year.

Clothing stores and entertainment chains lead store closing surge
Q1–Q3 2017 data



Source: ICSC Research Team and PNC Real Estate Research

PRICE REAL ESTATE

NWQB DOES BUSINESS

BUSINESS INSIDER

Dennis Green
2/2/2018

Amazon is tightening its ‘iron grip’ online

PRICE REAL ESTATE

NWQB DOES BUSINESS

amazon

KEY ACQUISITIONS
IN BILLIONS

CASH ● STOCK ● U UNDISCLOSED

2017	Whole Foods	$13.70 ●
2009	Zappos	$1.20 ●
2014	Twitch	$0.97 ●
2012	Kiva Systems	$0.78 ●
2017	Souq.com	$0.65 U
2010	Quidsi	$0.55 ● ●
2015	Elemental Tech	$0.50 ●
2015	Annapurna Labs	$0.37 U
2008	Audible	$0.30 ●
1999	Alexa	$0.25 ●
2013	Goodreads	$0.15 U
2010	Woot	$0.11 ●
1999	Accept.com	$0.10 U
1998	IMDB	$0.06 ● ●

WHOLE FOODS MARKET

At $13.7B in cash, Whole Foods is Amazon's boldest acquisition yet. The move signals Amazon's ambition, which is to become a transcendent brand that touches many aspects of daily life.

amazon robotics

Kiva Systems became Amazon Robotics, a subsidiary that manufactures mobile robotic fulfillment systems for Amazon's array of warehouses.

NASH HOLDINGS LLC

KEY ACQUISITIONS
IN BILLIONS

Washington Post	$0.25

The Washington Post

In 2013, Bezos locked up one of the world's most trusted publishers for $250 million, and has big plans to redefine the company through the use of technology.

The Columbian

By JOSEPH PISANI, Associated Press
Published: February 4, 2018, 6:00 AM

Amazon's ripple effect:
Health care just the latest industry the e-commerce titan seeks to upend

Health care

Details on the new health care company Amazon announced with Berkshire and JPMorgan are slim. But experts say Amazon has the ability to shake up the industry.

It already has a connection with shoppers if the company wants to expand beyond employees, says Kate McCarthy, a senior analyst at Forrester. And it has the infrastructure, too: Amazon lockers, which are already in many supermarkets and convenience stores, could be used to deliver prescriptions, says McCarthy. "Amazon can do just about anything," she says.

But the complex world of health care regulation may slow it down.

It's a "complicated space," says Idris Adjerid, a professor at University of Notre Dame's Mendoza College of Business.

PRICE REAL ESTATE

NWQ DOES BUSINESS

Walmart

Walmart Agrees to Acquire Jet.com, One of the Fastest Growing e-Commerce Companies in the U.S.

ECOMMERCE

Deal Positions Walmart for Expanded e-Commerce Growth and Customer Reach

BENTONVILLE, Ark. and HOBOKEN, N.J., August 8, 2016 – Wal-Mart Stores, Inc. and Jet.com, Inc. today announced they have entered into a definitive agreement for Walmart to acquire Jet for approximately $3 billion in cash, a portion of which will be paid over time. Additionally, $300 million of Walmart shares will be paid over time as part of the transaction.

The acquisition will build on and complement the significant foundation already in place to serve customers across the Walmart app, site and stores and position the company for even faster e-commerce growth in the future by expanding customer reach and adding new capabilities. The acquisition, which is subject to regulatory approval, has been approved by the Boards of Directors for both companies and is expected to close this calendar year.

"We're looking for ways to lower prices, broaden our assortment and offer the simplest, easiest shopping experience because that's what our customers want," said Doug McMillon, president and CEO, Wal-Mart Stores, Inc. "We believe the acquisition of Jet accelerates our

PRICE REAL ESTATE

NWQB DOES BUSINESS

Forbes

Walmart Vs. Amazon: A Surprising Turn In The Battle For E-Commerce Glory

By Tom Popomaronis, Contributor
Published: December 20, 2017, 12:51 PM

There is a constant battle brewing over e-commerce supremacy. Two of the U.S. industry leaders are fighting it out to see who will reign supreme in the hearts, minds, and wallets of consumers. In one corner of the ring you have Amazon, renowned champion of e-commerce retail in America. In the other corner of the ring, you have the challenger Walmart, who continues feverishly maneuvering to dethrone the current retail champion.

While you might think this is a battle Amazon is destined to win, don't count Walmart out in this battle for e-commerce glory. Market intelligence leader, SimilarWeb, shared its insights on the digital factors impacting the Walmart and Amazon battle — the data might surprise you.

Walmart's online conversion is improving (but Amazon's is, too)

Both e-commerce leaders have seen an increase in the percentage of visitors that end up purchasing (conversion rate). Walmart's conversion rate for desktop shoppers rose to 4.7% in September, up 45% over the preceding two years, according to SimilarWeb. Over the same period, Amazon's conversion rate rose 16% to 8.6%.

The White House
Office of the Press Secretary
For Immediate Release
July 10, 2015

FACT SHEET: Investing in Manufacturing to Create High-Paying Jobs and Strengthen the Middle Class

Administration Designates an additional 12 Communities to Receive Federal Support for Local Plans through the Investing in Manufacturing Communities Partnership

Manufacturing helped build the American middle class and fuel the world's most innovative economy—and it's doing so again today. After a decade of decline in the 2000s, when 40 percent of all large factories closed their doors, American manufacturing is on the upswing. U.S. manufacturing is growing faster than the economy overall for the first time since the 1990s. U.S. manufacturers are consistently adding new jobs, nearly 900,000 since February 2010 alone.

To build on this progress, U.S. Secretary of Commerce Penny Pritzker is announcing 12 new designated Manufacturing Communities today, as part of the second round of the Administration-wide initiative led by the Commerce Department, 'Investing in Manufacturing Communities Partnership' (IMCP) competition. These communities forged strong economic development plans and deep partnerships between the public and private sectors, positioning themselves for strong economic growth in the years ahead. To recognize their promise and their success, IMCP communities around the country are receiving visits today from senior administration officials from the Departments of Transportation, Agriculture, Commerce, and Labor, the Small Business Administration, the Delta Regional Authority, and the Environmental Protection Agency.

Strong foundations for durable manufacturing growth are based on local strategies, which take advantage of communities' existing strengths. The IMCP seeks to enhance the way we leverage federal economic development funds to encourage American communities to focus not only on attracting individual investments one at a time, but

transforming themselves into globally competitive manufacturing hubs. This Administration-wide initiative, coordinated by the U.S. Department of Commerce, brings together the resources of multiple federal departments and agencies involved in economic development to better leverage federal programs and resources behind locally-driven manufacturing strategies.

Eleven federal agencies, with more than $1 billion in economic development funds, will be able to build on the designees' plans to better support strong local public-private partnerships that bolster regional manufacturing. Each designated community will also receive a federal liaison and branding and promotion as a designated Manufacturing Community to help attract additional private investment and partnerships.

All designated IMCP regions and those that applied are being invited to attend the Investing in Manufacturing Communities Partnership Summit in Washington, DC on Oct. 21st – 22nd, 2015, providing an opportunity to share best practices in attracting manufacturing investment.

The 12 newly designated Manufacturing Communities are –

1. The Greater Pittsburgh Metals Manufacturing Community in Pittsburgh, PA, led by Catalyst Connection

2. The Alamo Manufacturing Partnership in the San Antonio, TX metropolitan area, led by the University of Texas at San Antonio

3. The Louisiana Chemical Corridor stretching from New Orleans, LA to Baton Rouge, LA, led by Louisiana State University

4. The Madison Regional Economic Partnership (MadREP) in the Madison, WI region, led by the eponymous non-profit,

5. The Made in the Mid-South Manufacturing Alliance spanning five counties surrounding Memphis, TN, led by the Greater Memphis Chamber

6. The Greater Peoria Economic Development Council, leading a five county region in central Illinois

7. The Minnesota Medical Manufacturing Partnership in Minneapolis, MN, led by GREATER MSP

8. The South Central Idaho region led by the Region IV Development Association in Twin Falls, ID

9. The Utah Advanced Materials and Manufacturing Initiative in the Wasatch Front region of Utah, led by the University of Utah

10. The Pacific Northwest Partnership Region in Oregon and Southwest Washington, led by Business Oregon

11. The Connecticut Advanced Manufacturing Communities Region, an eight county area centered on Hartford, CT, led by the State of Connecticut Department of Economic and Community Development.

12. The Central Valley AgPlus Food and Beverage Manufacturing Consortium in Fresno, led by California State University

Progress on the First Round of 12 Investing in Manufacturing Communities Partnership Communities

Progress is already on display in the first round of communities designated as Manufacturing Communities in 2014. In addition to making progress on their local manufacturing strategies, these 12 communities are attracting increased public and private investment, including over $100 million in new federal economic development investments, on the basis of their strong local plans to increase competitiveness, jobs, and growth.

- The Southwestern Ohio SOAR partnership has shown how smart investments in regional competitiveness can translate into broader manufacturing growth. Leveraging its strong local strategy and $20 million of federal investments, it has attracted new private sector commitments to the region's manufacturing base of more than $500 million.
- Portland, ME is leveraging the IMCP designation to help upgrade the Port of Portland for the first time in 30 years, with a new $9 million grant from the state of Maine helping to attract three times that amount in private sector funding.
- Wichita State University in Kansas received a grant from the Commerce Department's Economic Development Administration to purchase laboratory equipment for a new Multi-Robotic Additive Manufacturing Center, and to develop a new Innovation Campus. Airbus has committed already to moving as many as 400 aerospace engineers to the new campus after it is built.

- Southern California's designation as a manufacturing community helped Chaffey College secure a $15 million grant from the U.S. Departments of Labor and Education to create an advanced manufacturing training center. This center will train workers for the highly technical, highly skilled jobs needed to grow the industry and the economy of the region.
- The Puget Sound Regional Council, as part of an effort led by the state of Washington, was awarded a $4.3 million grant from the Department of Defense to transition Washington's defense-sector advanced manufacturing capabilities to new applications.
- The Department of Transportation has made infrastructure investments aimed at spurring local economic development and access to jobs in Investing in Manufacturing Communities Partnership communities across the country -- including $20 million to upgrade and expand the Port of Seattle.

12 New Investing in Manufacturing Communities Partnership Designated Communities

The Greater Pittsburgh Metals Manufacturing Community (Catalyst Connection, Pittsburgh, PA) – Since the time of Andrew Carnegie, the greater Pittsburgh region has been known as the birthplace of American steel. Today, the Greater Pittsburgh Metals Manufacturing Community is proposing to build on its historic strengths to win the next generation of metals manufacturing, using innovative technologies like 3D printing, robotics, and advanced materials. In doing so, the region is bringing together partners old and new, such as TechShop, Carnegie Mellon University, and the United Steel Workers, who are working to launch an apprenticeship program for workers in manufacturing start-ups. Finally, in the home of some of the oldest metal manufacturers in the United States, this Manufacturing Community is also creating a supportive ecosystem for manufacturing start-ups to scale through hardware design centers such as Alpha Lab Gear.

The Minnesota Medical Manufacturing Partnership (GREATER MSP, Minneapolis and Rochester, MN region) – The Minnesota Medical Manufacturing Partnership first got its edge in medical device manufacturing when it pioneered the battery-operated pacemaker in in 1949. Today, the region—which is home to the Mayo Clinic, Medtronic, and numerous medical manufacturing start-ups—leads the nation in bring new medical devices to market, with 40% of all new devices approved over the past five years hailing from the region. To ensure that even more of the devices emerging from the region's research are manufactured in Minnesota, the Partnership is attracting new venture capital firms and strengthening the supplier network that support "spinouts" from the region's new Mayo Clinic Business Accelerator.

Central Valley AgPlus Food and Beverage Manufacturing Consortium (California State University, Central Valley region surrounding Fresno, CA) – Taking its products from farm to fork, the Central Valley AgPlus consortium is working to move the food processing industry in California, the state's third largest in manufacturing, up the value chain while pioneering new drought-resistant, water-efficient technologies. Critically aware that global food production consumes 70% of the world's fresh water resources, the AgPlus Consortium will work to pilot water-saving technologies in the Valley and scale them to reach the rest of the world. To do so, they will leverage incubators, testing facilities, and world-leading research at the region's colleges and universities.

Connecticut Advanced Manufacturing Communities Region (The State of Connecticut Department of Economic and Community Development, four county region centered on Hartford, CT) – The Connecticut Advanced Manufacturing Communities Region is positioning itself to soar on growth in aerospace technologies and the latest class of submarines, after pioneering in aerospace and naval manufacturing for 100 years. To help small manufacturers keep pace with advances in these areas, the region has created a $30 million Manufacturing Innovation Fund, which serves to finance technology upgrades and workforce training for small cutting-edge companies. Through the nation's first Green Bank, the region is keeping energy costs and carbon emissions low for energy-intensive manufacturing. Other new efforts to upgrade a network of Advanced Manufacturing Centers in the region's community colleges will ensure that the region's next generation of manufacturing workers can fill the jobs coming on the market.

The Alamo Manufacturing Partnership (The University of Texas at San Antonio, The San Antonio, TX metro area) – The South Texas region is partnering with major manufacturers like Toyota, Caterpillar, and Lockheed Martin to train workers for today's jobs in advanced transportation equipment manufacturing. This partnership has already produced the 90-day "Just-in-Time Training Program for Manufacturers," which rapidly gives workers the skills to help the region's manufacturing grow. The region is also home to the nationally renowned Alamo Academies, a network of career academies that prepare high school students for college and high-wage careers in industry.

The Utah Advanced Materials and Manufacturing Initiative (The University of Utah, the highly urbanized region of the Wasatch Front) – Increased manufacturing of advanced composite materials, like the carbon fiber used in race cars and airplanes, requires a new set of

skills for Utah's workforce. To meet this challenge, the region is creating a network of Local Solutions Centers, where industry can conduct proof-of-concept research and development while teaching students how to manufacture new technologies. The Initiative will also better connect nimble small suppliers in the Utah Supplier Network to large manufacturers looking to in-source composites manufacturing to Utah.

The Louisiana Chemical Corridor (Louisiana State University, stretching from New Orleans, LA to Baton Rouge, LA) – Fueled by low-cost natural gas and petroleum feedstock, the Louisiana Chemical Corridor is home to the largest installation of refineries and chemical processing plants in the country, including one of the four largest refineries in the Western Hemisphere. The Value Louisiana Initiative is working to sustain that strength, spurring the region's advanced manufacturing industry to take the lead on sustainable chemical manufacturing, opening new biodiesel refining plants and companies focused on commercializing bioplastics in the area. The region's partners are exploring new capital access programs to spur innovation in this field, including loan and manufacturing bonds that help small companies receive financing and scale up in the region.

The Pacific Northwest Partnership Region (Business Oregon, Oregon and Southwest Washington) – Applying the latest in advanced materials science, the Pacific Northwest Partnership Region proposes to grow its natural resource-based economy by developing a manufacturing cluster focused on wood products and cross-laminated timber in the greater Portland, OR area. As strong as steel or concrete and capable of framing 14-story skyscrapers, but made from a renewable resource, cross-laminated timber has yet to be commercially manufactured in the United States. Through new research translation out of its Signature Research Centers—as well as demonstration projects at Oregon State University, the Oregon Zoo, and the Glenwood Riverfront Redevelopment—the region aims to showcase the capabilities of this material while building its production capacity.

The South Central Idaho Region (Region IV Development Association, six county region surrounding Twin Falls) – The six-county South Central Idaho community contains a leading sustainable-food production, processing, and science cluster. Rapid advances in technology are changing the game; for example, the job description for a potato-line worker now requires programming skills and the ability to operate sophisticated automated machinery. However, with an unemployment rate close to 3%, finding

workers with the skills to fill these jobs is an increasing challenge. To meet that challenge, the region is ramping up efforts to train youth in food sciences and advertise good careers available in these industries. In addition, the region is working to strengthen connections between laboratories, factories, and farmers and manufacturers, while exploring new multi-modal freight models to help the region's products reach markets even faster and fresher than today.

Greater Peoria (Greater Peoria Economic Development Council, five county region around Peoria, IL) – Known as the Earthmoving Capital of the World, Greater Peoria builds giant excavators, industrial cranes, and earth movers of Titanic proportions. Its exports are no less sizeable, with more exported merchandise per capita than anywhere else in the nation. While building on this strength, the region also recognizes a need to diversify its supply chain to better weather the ups and downs of global markets. The region is forming a privately-led manufacturing network to recruit new large manufacturers into the region and, through supplier teaming, encourage its small manufacturers to pursue customers outside of the earthmoving industry.

The Made in the Mid-South Manufacturing Alliance (The Greater Memphis Chamber, five county region around Memphis, TN) – The Mid-South Manufacturing Alliance is leveraging its region's significant transportation and logistical strengths to grow a hub in medical device manufacturing. As part of the Greater Memphis Global Trade Hub the region has four class I railroads, FedEx's World Hub, the International Port of Memphis, and over 184 million square feet of warehouse and distribution space. However, training its workforce to keep up with the opportunities in this growing sector presents a challenge. To keep pace with this growth and ensure the gains are broadly distributed, the Made in the Mid-South Manufacturing Alliance is establishing a jobs-driven training coalition to prepare and credential workers for jobs in medical device manufacturing.

The Madison Regional Economic Partnership (MadREP, Madison, WI region) – Specializing in food processing and beverage production, the Madison Regional Economic Partnership's region is home to large food manufacturers like Kraft Foods, Organic Valley, Frito-Lay, and many more, as well as, the numerous small suppliers and farms in their supply chain and the nation's only Master Cheesemaker certificate program. To stay on the cutting edge of food manufacturing, the region is expanding efforts to commercialize new technologies coming out of the University of Wisconsin – Madison

and evaluating new investments in a traceable food supply chains, allowing it to get a competitive lead by tracing the final destination and freshness of its products.

Salt Lake County Regional Export Plan

April 2016

A part of The Global Cities Initiative,
a joint project of Brookings and JPMorgan Chase

SALT LAKE COUNTY REGIONAL DEVELOPMENT

Table of Contents

"It's time for new economic development efforts that focus on real market expansion. That means we bridge the divide between international customers and Salt Lake County's small to medium size companies offering goods and services. We want to strengthen our global competitiveness and advance broad prosperity for our metropolitan region."

Mayor Ben McAdams

SALT LAKE COUNTY REGIONAL DEVELOPMENT

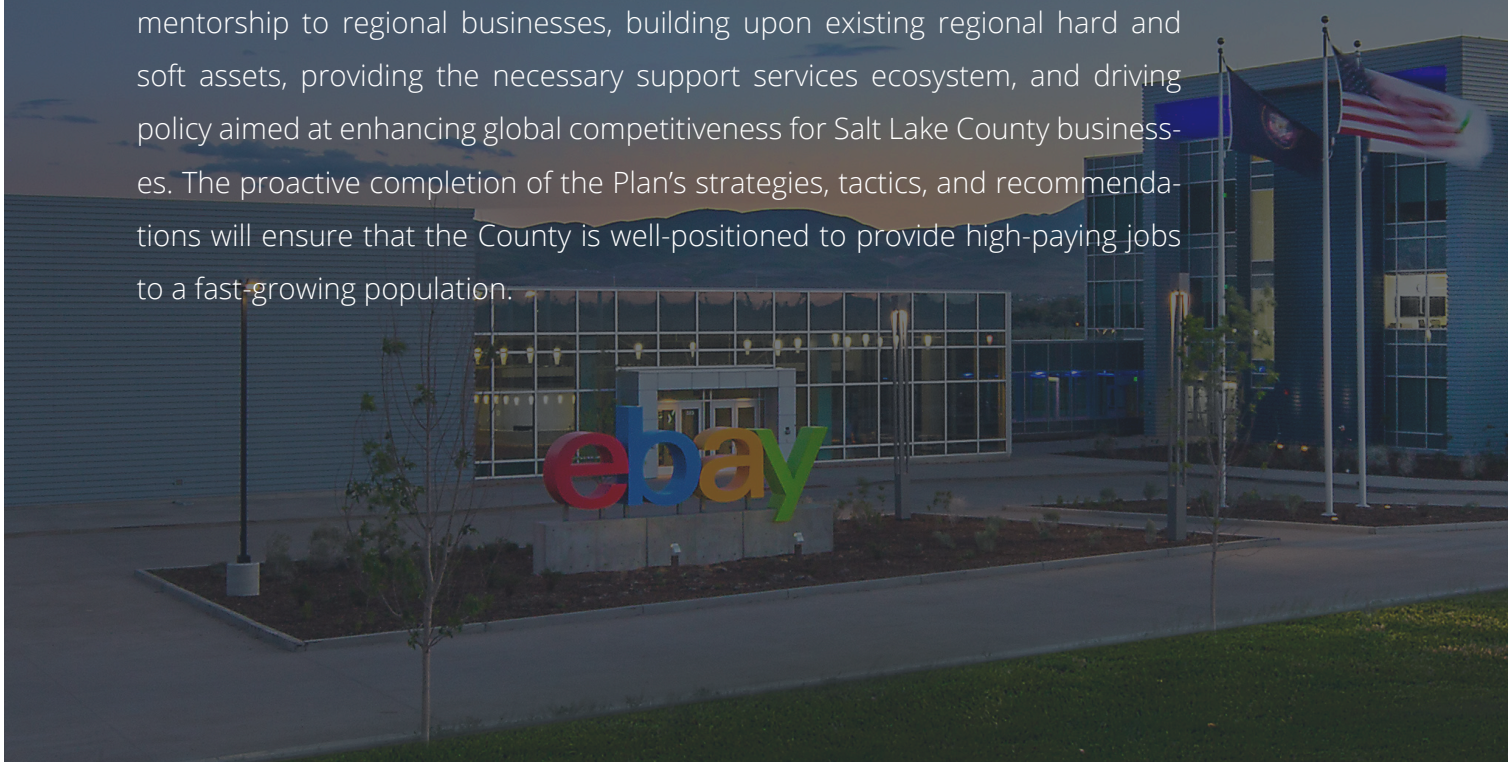
01

Executive Summary

Through a coordinated effort led by Salt Lake County Mayor Ben McAdams' office, the Salt Lake Metro Region has begun to address the opportunities and challenges brought by globalization through the development of a market-driven plan aimed at expanding exports and international investment. The *Salt Lake County Regional Export Plan* aims to increase small and medium enterprise export activities in alignment with the County's "Future We Choose" strategy, which focuses on building a healthy community made up of healthy people, healthy places, expanded opportunities, and responsive government.

The Plan reveals that the County is responsible for 47% of Utah's exports; however, more than 30% of the County's exports are from one industry. The Plan also details the export challenges and puzzlement that the region's smaller companies face, specifically cultural, governmental, and contractual issues. A key finding from the Plan is the underutilization of the County's unique hard (i.e., transportation infrastructure) and soft (i.e., linguistic diversity) assets.

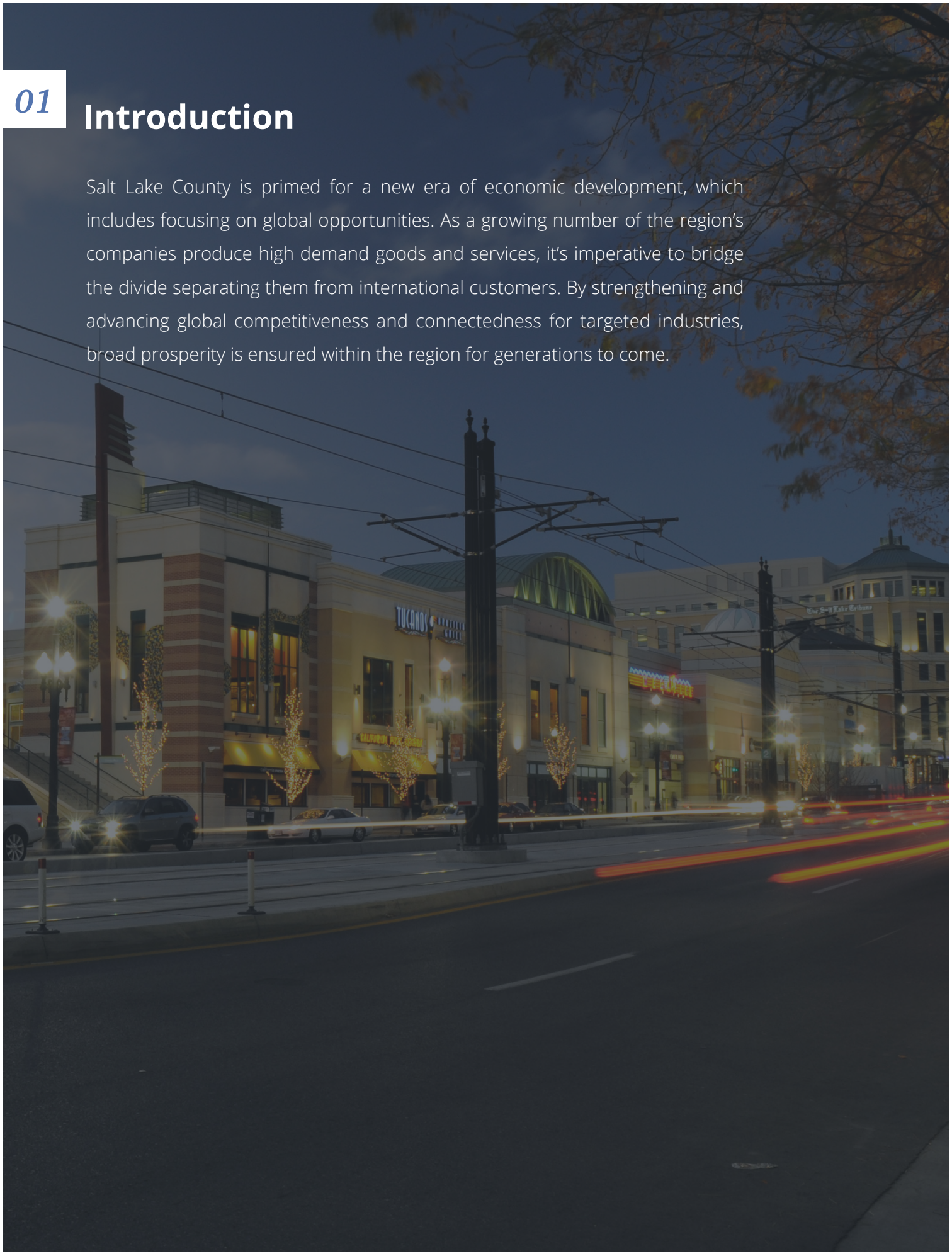
In response to these key findings, Salt Lake County, with the assistance of World Trade Center Utah, will implement a tactile approach to expanding global competitiveness for midmarket threshold exporters by providing education and mentorship to regional businesses, building upon existing regional hard and soft assets, providing the necessary support services ecosystem, and driving policy aimed at enhancing global competitiveness for Salt Lake County businesses. The proactive completion of the Plan's strategies, tactics, and recommendations will ensure that the County is well-positioned to provide high-paying jobs to a fast-growing population.



01

Introduction

Salt Lake County is primed for a new era of economic development, which includes focusing on global opportunities. As a growing number of the region's companies produce high demand goods and services, it's imperative to bridge the divide separating them from international customers. By strengthening and advancing global competitiveness and connectedness for targeted industries, broad prosperity is ensured within the region for generations to come.



The measurable economic success of the Salt Lake Metro is a direct result of the shared vision of the region — a vision where the collective participants develop innovative and structured partnerships to achieve goals and address issues while actively choosing its future. Salt Lake Regional Government and the State of Utah are known for cross-governmental collaboration and public-private partnerships that leverage the region's invaluable assets with great success. Salt Lake County Mayor Ben McAdams, in close coordination with stakeholders throughout the Metro Region, is spearheading efforts to capitalize on opportunities and overcome challenges brought by globalization through the development of a market-driven plan aimed at expanding exports and international investments.

Mayor Ben McAdams announced in January of 2015 that the Salt Lake County region ("the County") would join the Global Cities Initiative – a five-year collaboration sponsored by the Brookings Institution and JPMorgan Chase. The initiative supports the development and implementation of comprehensive regional strategies to increase international connections and competitiveness. It encourages broad-based stakeholder engagement to ensure a shared sense of mission and ownership. Throughout this effort, Mayor McAdams has solicited input and feedback from businesses and coordinated with several community partners, including World Trade Center Utah, the Utah Governor's Office of Economic Development, Economic Development Corporation of Utah, the Salt Lake Chamber, Salt Lake Community College, several small chambers of commerce, and business leaders within the region. The Kem C. Gardner Policy Institute at the University of Utah also assisted with outreach and analysis for the market assessment. The result is a targeted set of measures behind which the community can unite to generate increased opportunity, wealth, and prosperity.

02

Why Export?

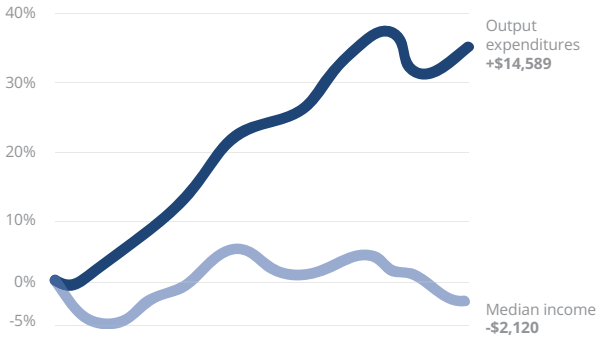
"Simply put, the community of Salt Lake County wants to expand our economic development efforts with purpose. For too long we have been reactive, accepting, even incenting, company relocations and expansions without a macro view of how that relocation or expansion fits within our community's fabric. We want to embark upon new economic development efforts with an eye toward true market expansion which means bridging the divide between international marketplaces and our small to medium size business community."

Mayor Ben McAdams

02 Why Export?

The Salt Lake County regional economy has recovered well in the wake of the Great Recession; however, it is not clear that individuals and families of today, and the future, will be better off. As evidenced in the graph below, total per capita income annual growth is slowing, while output per capita expenditures are increasing.

Change in Output Per Capita and Median Household Income (since 1990)[1]



Individual income is not keeping up with the cost of living and the region's population is expected to grow dramatically.[2] It's imperative that high paying jobs are secured in the present and a long term strategy is in place to secure the future of the region.

Exports and internationally focused firms can play a significant role in diversifying and expanding a regional economy. To maintain a robust economy and capitalize on expanding international markets, the regional economy must grow and diversify its export portfolio. This can be done by increasing the number of companies exporting and helping them expand their customer base overseas.

Firms that export goods and services return approximately 18%[3] in higher wages, lower unemployment levels, increase worker productivity, and directly contribute to Gross Metropolitan Product (GMP), Gross State Product (GSP), and Gross Domestic Product (GDP). The majority of future GDP growth is projected to occur outside the United States and the world's purchasing power is significantly larger than the domestic national market. This is a sizable opportunity for businesses in the region to take advantage of the growing global middle class of consumers and to address the critical need of future growth.

Nationally, only 1% of new job growth is attributable from traditional firm recruitment economic development activities; however, increased exporting activity accounts for nearly 6,000 new jobs created for each $1 billion in export value.[4] Expanding export activity from the region's private sector goods and services businesses is critical to creating and maintaining innovative businesses that are competitive at home and abroad.

1 - Data from the Brookings Institution. 2 - Utah Foundation. (2014). A Snapshot of 2050.
3 - Riker, D. (2015). Export Intensive Industries Pay More on Average.
4 - Data from the International Trade Administration.

Defining Our Future

Salt Lake County joined the Global Cities Initiative to provide a defined process, expertise, and a network to navigate the global exporting forum. This export plan is part of a greater regional economic development effort being lead by the County with the support of many local, state, and national partners. The new approach comes from a recognition that the conventional wisdom around local and regional economic development has significant flaws because it is not having impact on the household and individual level. The traditional approach to economic development focuses on spending millions of dollars on tax breaks and incentives to produce marginal returns at best. In Salt Lake County, this has been done in the form of tax incremental financing, which typically focused on retail development driven by developers and local communities needing sales tax revenue. Under the leadership of Mayor McAdams, the Salt Lake County Regional Government analyzes the regional economy in a comprehensive and collective fashion using innovation and data to produce outcomes reflective of the community's shared value system.

> ***"States and localities spend $50 billion to $80 billion on tax breaks and incentives each year in the name of economic development, despite a mountain of evidence showing that tax incentives produce mostly marginal returns … Some incentives can bring solid benefits or address key market gaps, such as tax credits to remediate polluted sites or incentives to targeted suppliers that strengthen an existing industry cluster. Many more are questionable in form and focus: tax increment financing to support suburban malls and sports arenas; tax rebates for businesses to move from this town to that and back again; subsidies to build far-flung industrial parks and office towers … At worst, the prevalent use of tax incentives, coupled with multiple separate taxing jurisdictions in a region, pit jurisdictions against one another in ways that erode value in the economy and drain precious resources away from the people and assets that matter."***
>
> Amy Liu[5]

5 - Liu, A. (2016). Remaking Economic Development: The Markets and Civics of Continuous Growth and Prosperity.

03 Defining Our Market

Historical Legacy

Salt Lake County was officially created on January 31, 1850 - just three years after Mormon Pioneers arrived in the region. Since then, the ideals of a globally connected community have long been present. The region served as a vital trading point during The California Gold Rush, with local produce and livestock swapped for textiles and manufactured goods from the east. The First Transcontinental Railroad was completed just north of Salt Lake City (66 miles northwest at Promontory Summit), forever changing the nature of long-distance trade, making travel and the exchange of goods from coast to coast cheaper, faster, and easier. Thereafter, a link to the region was completed, corresponding with the discovery of rich pockets of gold and silver in the Wasatch Mountains. The population doubled by the 1880s, with manufacturing, agriculture, and trade serving as the basis of a thriving cosmopolitan commercial center. The County's entrepreneurial, outward facing population has become a thriving community where approximately 120 languages are spoken, with Spanish, Chinese, and Pacific Island languages among the most common.[6]

Defining Our Metro Region

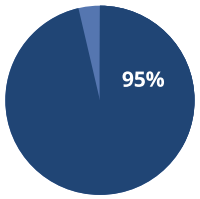
Salt Lake County is home to 17 cities including Salt Lake City, which serves as the State Capital, and 5 townships. With a total population of approximately 1.14 million people, the County hosts 37% of the total population within the State of Utah. The County is part of the Salt Lake City Metropolitan Statistical Area (MSA) that includes both Salt Lake and Tooele Counties. Almost 80% of Utah's population lives in the valley located west of the Wasatch Mountain Range, commonly referred to as the Wasatch Front.

The County, considered to be a part of the Crossroads of the West, is home to a major transportation hub. Hosting air service from the Salt Lake City International Airport, rail service from the Union Pacific Intermodal Terminal, and interstate service from I-15 and I-80, this zone of the region has long been considered the inland port of the state.[7]

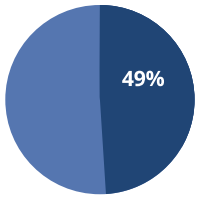
6 - Data from the United States Census Bureau.

7 - Utah Governor's Office of Economic Development. (2015). Business in Utah.

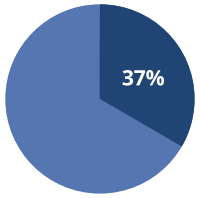
SLCo Population Comparisons



Salt Lake City MSA



Wasatch Front



Utah

At the state level, the Utah Governor's Office of Economic Development employs an industry cluster strategy that targets sectors with high growth potential. Cluster industries employed more than 193,000 Utahns, with an average wage of $66,865 in 2014. This wage was significantly above the state average of $42,180.[8]

Utah's Targeted Economic Clusters:

- Aerospace and Defense
- Energy and Natural Resources
- Financial Services
- Life Sciences
- Outdoor Products
- Software Development and Information Technology[9]

8 - Data from the Utah Governor's Office of Economic Development.
9 - Sourced from the Utah Governor's Office of Economic Development.

The following tables display the County's highest employing and paying sectors for the third quarter of 2015:

Largest Industry Sector by Average Employment[10]

Industry Sector	Average Employment
Health Care and Social Assistance	73,948
Retail Trade (44-45)	69,599
Education Services	56,532
Manufacturing (31-33)	53,797
Admin., Support, Waste Management, Remediation	51,884
Administrative and Support Services	50,553
Professional Scientific and Technical Services	49,892
Accommodation and Food Services	48,233
Finance and Insurance	44,286

Highest Paying Industry Sectors by Average Monthly Wages[11]

Industry Sector	Average Monthly Wage
Mining	$6,986
Unclassified Establishments	$6,183
Professional Scientific and Technical Services	$6,056
Utilities	$6,010
Management of Companies and Enterprises	$5,765
Finance and Insurance	$5,517
Wholesale Trade	$5,457
Information	$5,331
Manufacturing (31-33)	$4,776

10 - Data from the Utah Department of Workforce Services.
11 - Data from the Utah Department of Workforce Services.

Measuring Our Market

The research methodology for the market assessment included firm-level surveys with the regional business community and face-to-face interviews. The survey received more than 300 responses and 45 companies were interviewed.

Highlighted Survey Findings:

- Nearly 60% of respondents did not consider themselves exporters.
- Top export destinations: Canada, China, Australia, Japan, Germany, Korea, and Mexico.
- Top export challenges: foreign government regulations and policies, global sales contracts, and lack of export knowledge.
- Potential services requested: training workshops, mentorship programs, networking opportunities, and individualized export business coaching.

Highlighted Interview Findings:

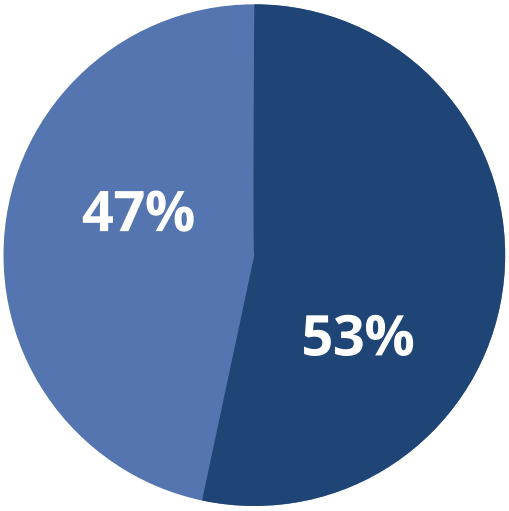
- All of Utah's targeted economic clusters were represented.
- Several companies had no desire to export.
- Lack of profitability was a commonly mentioned export barrier.
- One company was an industry leader and in more than 80 countries.
- One company launched a crowdfunding campaign leading to international growth.

Measuring Our Exports

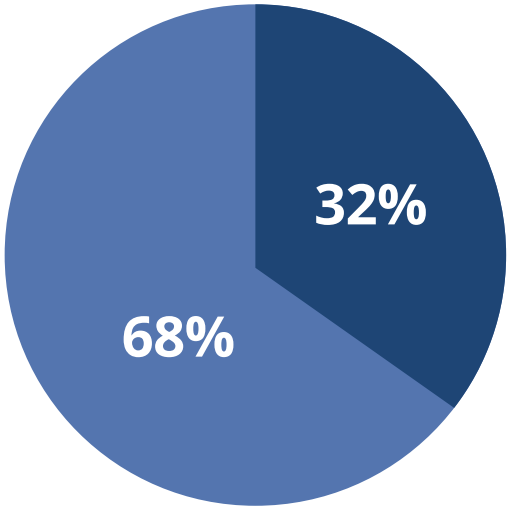
The State of Utah exported $21.6 billion in 2014, which ranked 30th among all 50 states.[12] The ranking moved up five spots from 2003; however, the state is much stronger than that figure portrays. Utah accounts for 14.5% of the nation's export share of GDP, which ranks 10th and has gone up 26 points in the last 11 years.

The Salt Lake City MSA had an $11.42 billion nominal export value in 2014. Salt Lake County, excluding Tooele County, accounted for $10.24 billion, which represents 47% of the State of Utah's $21.6 billion export activity. Sixty-eight percent of the County's exports were goods and 32% were services.

Total Utah Exports



Salt Lake MSA Goods & Services Exports



12 - Data from the Brookings Institution.

Export Destinations

The Port of Hong Kong is Utah's largest export destination.[13] The majority of Utah exports enter the Chinese market through this port before moving inland. This concentration leaves much upside for future diversification into other foreign markets.

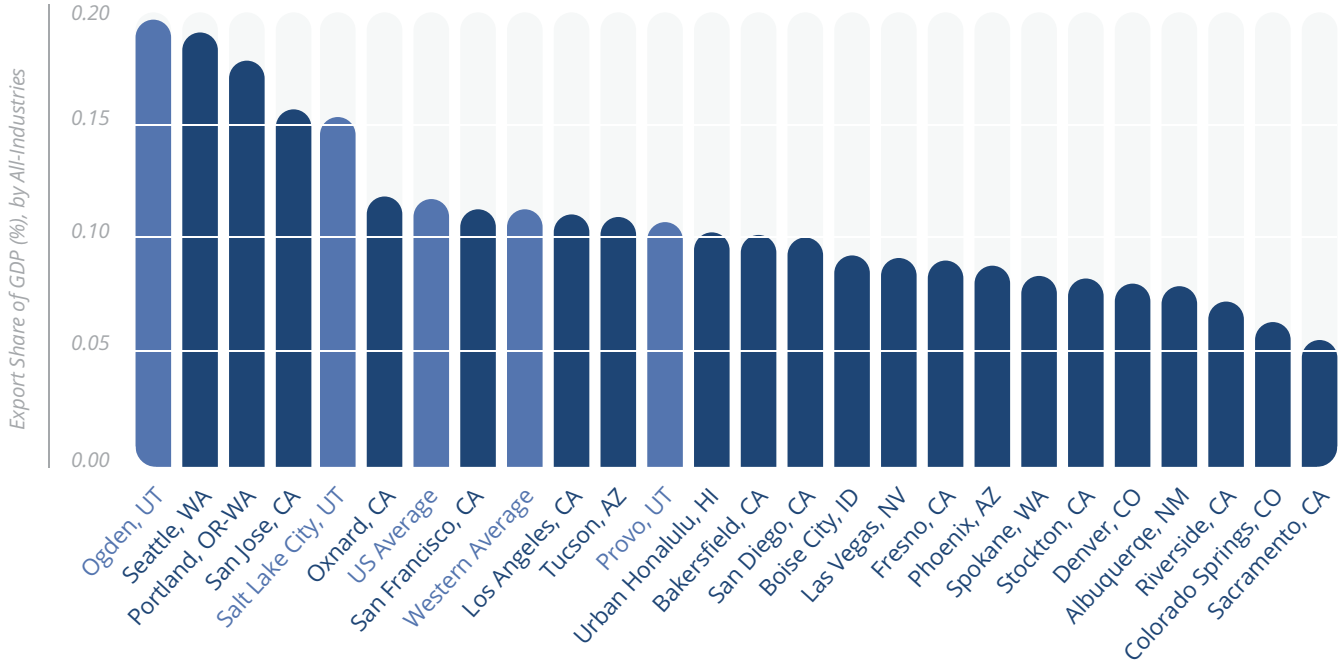
Top 10 Destinations for Utah Goods Exports by Country[14]

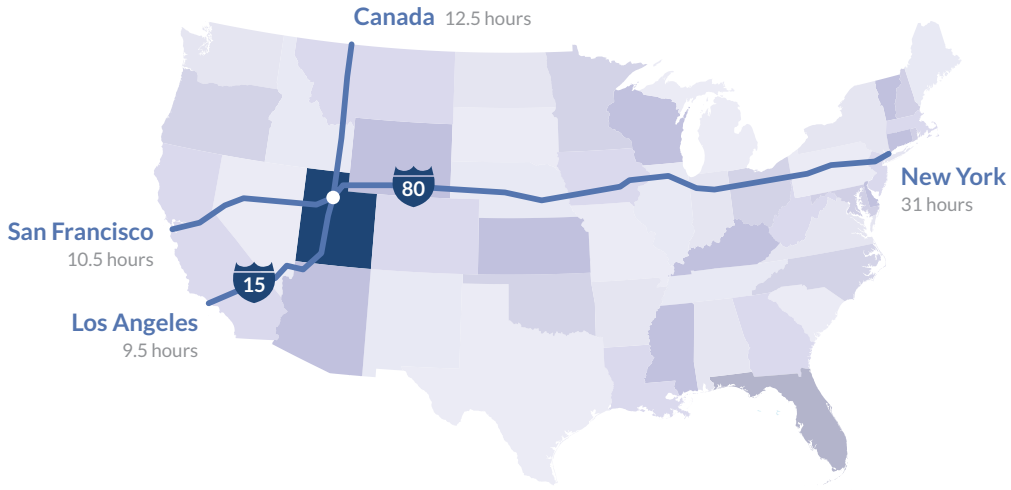
13 - Data from the United States Census Bureau Foreign Trade Division.
14 - Data from the United States Census Bureau Foreign Trade Division.

Peer Performance

The chart below displays where the region ranks in export intensity (i.e., the ratio of exports to sales) against the national average and other western U.S. metropolitan areas. Neighboring Ogden, Utah, also located in the Wasatch Front, has a higher export intensity than the Salt Lake Metro. This is likely attributed to Ogden's focused recruitment of outdoor product companies, including Amer Sports - the producer of Salomon, Wilson, Atomic, Arc'teryx, Mavic, Suunto, and Precor.

Peer Export Intensity[15]



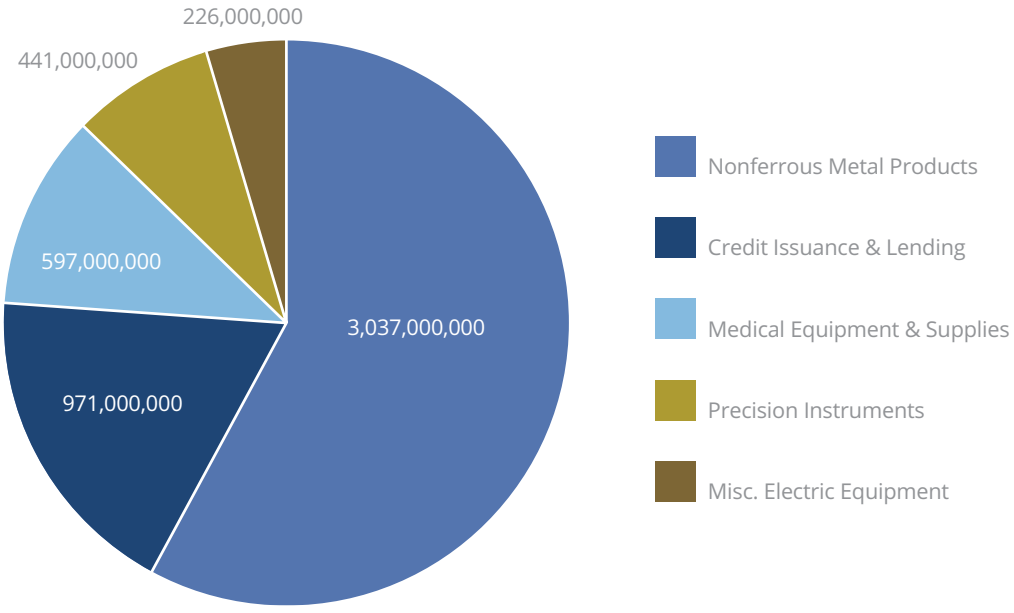


15 - Data from the Brookings Institution.

1 One-third of the region's export portfolio is one industry sector, while the remainder is comprised of a diverse set of industries.

The Primary Metal Manufacturing (PMM) industry sector accounts for the majority of the region's exports. This sector has built a strong export foundation for the region, but export diversification is needed to achieve market stabilization and sustainability. The pie chart below highlights the region's top five industry sectors with a location quotient greater than 1.5. As an example, a location quotient of 1.0 in mining means that the region and the nation are equally specialized in mining; while a location quotient of 1.5 or greater means that the region has a higher concentration in mining than the nation.[16] Generally, these industries create jobs that pay higher wages. Diversifying this existing portfolio is important to sustaining and growing the region's trade economy and job growth.

Total Export Value ($) of Industry Sectors that Specialize in the Regional Economy



16 - Sourced from the U.S. Department of Commerce Bureau of Economic Analysis.

2 Businesses are content with domestic market and exporting is an afterthought.

The market assessment revealed that a majority of companies in the region do not identify as exporters even in cases where they are selling to other countries. Nearly every company was satisfied to be operating their business locally. Quality of life, ease of doing business, the state's competitive tax structure, and connectivity to state and local political leaders were cited as the main reasons to remain domestic. These companies also expressed strong concerns about dealing with rules and regulations in foreign markets.

Top reasons for not exporting:

- Companies lack basic knowledge about exporting fundamentals and opportunities.
- The strength of the domestic market makes exporting seem undesirable.
- Smaller companies lack bandwidth and/or financial resources.

3 Smaller regional companies have higher barriers to exporting.

Expanding to foreign markets is easier for larger firms in the region because they have the resources to address language, cultural, governmental, and contractual issues. Exporting is more challenging for smaller companies.

Challenges in home market:

- Low unemployment rates make it difficult for companies to find talent.
- Software companies, specifically, are struggling to fill workforce needs.
- Regulations in foreign markets are burdensome and expensive for smaller companies.
- Access to capital needed for expansion is limited, especially for companies looking to grow from the $100 million to $1 billion range.
- It is difficult for younger companies to access debt financing.

Challenges in foreign market:

- Companies are not experienced with international government relations.
- Burdensome regulations such as product registration, CE marking, lack of regulation uniformity, and associated increased costs of expanding into new markets.
- Currency fluctuations and limited purchasing power of international buyers.
- Business costs driven up by duties and taxes.
- Upgrading or finding new distributors is time consuming.

The companies that are already exporting were oftentimes influenced by factors placed on them from foreign markets. Typically, foreign involvement was reactionary, rather than proactive.

International market factors:

- Demands of customers pulled business into international markets.
- International market was more viable for businesses product offering(s).
- Reactionary response to demand.
- Business had relationship with international stakeholder (or domestic partner with understanding of foreign markets).
- Marketing strategy pushed business into international markets.
- Domestic sales and relationships turned into international sales through word of mouth and reputation.

4 Advanced Industry clusters in the regional economy produce higher wages for workers.

Advanced Industries in the County pay $21,630 more than the average ($48,780) across all industries and are growing 3.5% compared to the national average of 2.7%. Advanced Industry workers receive 30% higher wages than the region's median income for all industries. Also, Advanced Industries provide 11% of all jobs in the region and contribute $11 billion in total output.[17]

Advanced Industries include:

- Medical Equipment & Supplies
- Aluminum Products
- Metal Ore Mining
- Precision Instruments
- Misc. Electrical Equipment
- Magnetic & Optical Media
- Audio & Video Equipment
- Miscellaneous Goods
- Misc. Nonmetallic Mineral Products

5 Export support services are not understood and opportunities go unrecognized.

Businesses are often unaware of export services provided, and accessing these services is difficult because of agency overlap and lack of knowledge about exporting opportunities. The majority of companies interviewed were not aware of the resources available to help them expand internationally. They were generally confused about who they should talk to or what programming is available regarding education and services. Most companies interviewed had never taken advantage of government and/or nonprofit export services.

17 - Data from the Utah Department of Workforce Services and Brookings Institution.

6 The region has a multitude of available hard and soft assets to support export-related activities.

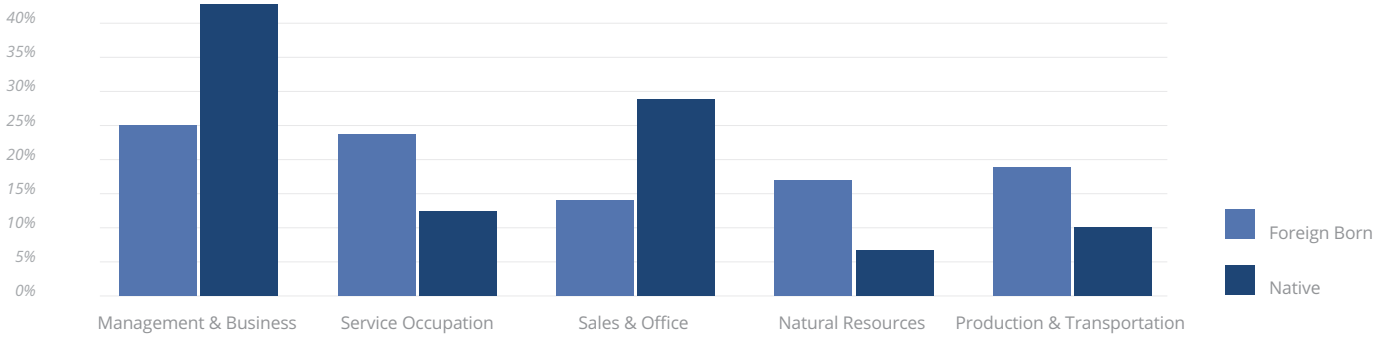
The County's hard infrastructure assets provide a foundation to support both existing export activities and expanded efforts. The region is often referred to as the "Crossroads of the West" because of the convergence of multiple forms of transportation that service commercial activities throughout the Intermountain West.

Regional hard assets:

- Interstates 15 and 80
- Union Pacific Intermodal Terminal
- Salt Lake City International Airport
- Foreign Trade Zone #30
- Broad range of industrial, warehousing, and distribution facilities

Along with an established transportation infrastructure system, the regional economy has other attributes to assist in expanding its global position. Per capita, Utah is the most linguistically diverse region in the U.S.[18] In addition to the more than 120 languages spoken, the County has a growing immigrant population entering the workforce. More than 132,000 County residents are foreign born. Approximately 43% have had at least some college or postsecondary education and more than 10,000 are currently enrolled in a college or university. Approximately 70% of the County's foreign born residents are currently in the labor force and approximately 7% are starting their own businesses.[19] This burgeoning population further adds to the international connectedness of the region, thus increasing the opportunities for export related business activities.

Salt Lake County Employment by Industry



18 - Sourced from Time, Inc.
19 -Data from the Salt Lake County Office of Community Innovation.

Regional soft assets:

- Seventeen active industrial bank charters
- Cross-sectoral dedication to global positioning and economic development
- Multilingual workforce
- Well established international connectivity

These assets have yet to be employed in a collective fashion to support a unified export plan despite efforts dating as far back as 1989 when the County completed the *Salt Lake County Inland Port Authority Feasibility Study*. The recommendation was to establish an inland port authority that could play a key role in the marketing and promotion of trade and transportation-related services and facilities.

7 Middle market firms represent strong potential for export growth.

Research from the Brookings Institution has shown that under-exporting companies with $20 to $500 million of annual revenue stand to benefit the most from exporting. These companies are positioned to take on the risk, and leverage their economies of scale and internal resources to expand into new markets. During the market assessment, more than 600 middle market companies were identified to have strong export potential in the County.[20]

> ***"Engaging in global markets dramatically expands a firm's strategic options for future growth. An exporting company can do the following: cultivate new business partnerships (suppliers, distributors, etc.), become more valuable suppliers to their multinational customers, enter into international joint ventures or pursue acquisitions abroad, obtain access to new technology or process innovations, become the U.S. distributor for other products made abroad and attract strategic foreign investors or even outright buyers. More than five million people in the U.S. work for foreign-owned firms."***
>
> **Marek Gootman et al.[21]**

20 - Data from the Utah Department of Workforce Services.

21 - Gootman et al. (2014). Accelerating Exports in the Middle Market: Global Opportunities for U.S. Firms and Metro Areas.

05 Goals and Objectives

Goals:

The goal of the *Salt Lake County Regional Export Plan* is to expand and diversify the regional economy by educating and growing small and medium enterprise export activities. The intent is to strengthen existing jobs, while also creating new high paying jobs within the region. This will be done in alignment with the Salt Lake County "Future We Choose" strategy, which focuses on building a healthy community made up of healthy people, healthy places, expanded opportunities, and responsive government.

Objectives:

- Increase awareness of export activity by catalyzing a cultural shift toward stronger global fluency.
- Identify and assist small and medium businesses within the region to expand their products and services into new international markets.
- Increase Advanced Industries regional export intensity by 5% annually.
- Collectively and systematically utilize regional assets to expand export opportunities.

Core Strategies

The core strategies and tactics provided in this section were derived through a comprehensive market analysis and planning effort that involved the steering committee and other community stakeholders. The key findings (Section 4) highlight both opportunities and deficiencies within the region's export ecosystem. Focusing on these strengths and weaknesses provides a framework for the following strategies and tactics:

1 Identify and expand global competitiveness for middle market threshold exporters.

Further defining the County's 600 plus middle market companies, and engaging them on export-related opportunities, will provide a targeted approach to outreach and resource deployment.

Tactics

- Partner with the Utah Department of Workforce Services to have export-focused questions included in annual company research.
- Continue one on one interviews with small and medium enterprises to identify expansion opportunities.
- Build a pipeline of qualified companies that can make immediate use of existing export resources.
- Engage regional foreign born workforce to facilitate global connectedness.
- Expand existing and establish new public-private partnerships to provide organizational and operational structure — focusing on professional resources, funding sources, programmatic resources, export tools, and regional export zones for existing and potential exporters.

Potential services include:

- Private equity and venture capital
- Governmental services
- Debt financing
- Legal services
- Real estate and development services
- Federal, state, and regional programs
- Inland port services and other infrastructure requirements

2 Create a global positioning strategy for targeted Advanced Industry clusters.

Coordinate with the Utah Governor's Office of Economic Development's existing cluster program that focuses on: aerospace and defense, energy and natural resources, financial services, life sciences, outdoor products, and information technology to identify the top two region-specific clusters poised for global expansion.

Tactics

- Align with existing state branding and marketing efforts.
- Create a regional branding strategy for the identified industry clusters.
- Establish a global incubator and knowledge transfer program.
- Actively recruit, retain, and expand firms associated with identified clusters.
- Target existing and create new incentives for cluster expansion.
- Support technology that reduces barriers to global markets and partner with providers of Internet-enabled small and medium-sized enterprises.

3 Expand and use the established export services ecosystem.

Financially and programmatically align with World Trade Center Utah to make use of their role as coordinator of export services within the state.

Tactics

- Partner with the World Trade Center Utah to deliver services.
- Create a regional export advisory committee to guide activities.

- Streamline and coordinate existing export services offered by the State of Utah, United States Commercial Service, Small Business Administration, Export Import Bank of the United States, and local universities.
- Create new programs to enhance or fill gaps in the existing regional export support ecosystem.
- Create a communication and outreach strategy:
  - Increase fundamental global awareness and overcome parochial views to inspire exporting, cultivate international connections, and spur regional investment in trade support activities.
  - Develop a readiness assessment system that will allow companies to self-assess and can be used by support professionals to help their clients assess their readiness for international markets.

4 Build innovative mentorship opportunities for existing regional businesses.

Align with existing resources in the region to create mentorship opportunities for targeted industries by utilizing talent within organizations, such as: local chambers, ethnic resource groups, government agencies, nonprofits, business associations, and colleges/universities.

Tactics

- Develop mentorship teams with executive-level expertise.
- Leverage existing mentorship groups provided by existing organizations in the region.
- Create industry-specific programming, while also targeting at-risk and/or disadvantaged populations.

5 Enhance and improve the region's transportation and freight infrastructure.

The region is rich with hard infrastructure, support services, financial resources, and a well-educated and diverse workforce. When collectively deployed, these assets will provide the foundation for a future that is well-equipped to respond to market fluctuations within the U.S. and abroad.

Tactics

- Leverage legislative authority to establish an inland port system.
- Develop coast and inland point relationships for export-related trade.
- Market ancillary facilities and services nationally and internationally.
- Further employ Foreign Trade Zone #30 to amplify exporting activities.

07 Implementation and Performance

The *Salt Lake County Regional Export Plan* was developed in partnership with several key strategic stakeholders, and their assistance is vital in assuring the successful implementation and evaluation of this plan. The World Trade Center Utah served a significant role in the development of this plan, and the County has appropriated 2016 budget funds to engage their expertise in implementing the strategies and tactics outlined.

World Trade Center Utah's work will include providing export services to companies within the County. Evaluation and reporting mechanisms will be developed from the research tools employed during the planning process in order to monitor the overall performance of this initiative. The collected information from service providers, companies, and other parties will be compiled into a reporting tool that will be made available to the public at large. The County will also form a standing committee to provide guidance and input to partners and staff responsible for the outcomes of this effort.

08 Policy Summary

Salt Lake County is well-positioned to focus on an export strategy aimed at providing high-paying jobs to the growing population. The policy recommendations below were derived during the planning process for the *Salt Lake County Regional Export Plan*. These policies will support existing and new exporters within the region.

Recommendations

- Minimize redundancy and develop an efficient network of professional support services for regional exporters by leveraging existing institutional, governmental, and NGO resources.
- Establish regional finance programs specifically for exporters within the County.
- Redesignate and expand Foreign Trade Zone #30.
- Establish a regional inland port authority within the County.
- Encourage the passage of the Trans-Pacific Partnership.
- Improve small and medium enterprise data collection methods and tools (qualitative and quantitative) on the state and regional level.
- Collaborate with organizations like the Partnership for a New American Economy to designate the County as a welcoming community to its foreign born population.

09 Acknowledgments

Salt Lake County, in partnership with World Trade Center Utah, the business community, and our regional and state partners will lead the implementation effort of the *Salt Lake County Regional Export Plan*. Our regional partners will meet regularly to assess progress and monitor compliance of all formal partnerships and agreements in accordance with this effort.

Special Thanks To:

Lead Agency:

Salt Lake County Office of Regional Development

Core Partners:

Salt Lake County Council
JPMorgan Chase
Brookings Institution
World Trade Center Utah

Champion Partners:

Governor's Office of Economic Development
Economic Development Corporation of Utah
Salt Lake Chamber
Kem C. Gardner Policy Institute at the University of Utah

Steering Committee:

Air & Sea International
Beehive Startup
BioUtah
CAO Group
Connor Sport Court
David Eccles School of Business at the University of Utah
Dyatronics Corporation
eBay
IM Flash Technologies
inthinc Technology Solutions, Inc.
Kaddas Enterprise Inc.
Kirton | McConkie Attorneys at Law
MDG Sales LLC
Parr Brown Gee & Loveless
Price Real Estate
Rio Tinto
Salt Lake City Corporation
Salt Lake Community College
Sorenson Genomics
U.S. Commercial Service Utah
U.S. Small Business Administration – Utah
U.S. Translation Company – Peru
Utah Bankers Association
Utah Manufacturers Association
Utah State Legislature
Wells Fargo Commercial Bank
Zions Bank

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The Salt Lake County Regional Export Plan is available online at: www.slco.org/regional-export-plan

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SALT LAKE COUNTY
REGIONAL DEVELOPMENT

Utah Inland Port Feasibility Study

presented to

Utah Inland Port Advisory Committee

presented by

Bob Gollnik

Adam Wasserman

Lois Yates

December 8, 2017

CAMBRIDGE SYSTEMATICS

GLDPARTNERS

Agenda

- Introductions
- Overview of Process
- Review of Findings
- Review of Recommendations
- Next Steps
- Discussion

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Project Structure

- Review of Inland Ports
- Site Review
- Logistics System Review
- Market Depth
- New Infrastructure
- Environmental Management
- Business Strategy
- Governance
- Recommendations

Review of Inland Ports
What is an Inland Port?

- No formal global definition of the term “inland port”.
- In the United States, the term “inland port” is typically used to describe a (typically maritime-connected) logistics market that is located at a non-maritime inland location. *Inland ports are typically planned around rail intermodal facilities, but not all intermodal locations are inland ports.*

Seaport Owned or Seaport as a Partner

- Virginia; Port of Virginia VIP
- South Carolina; Greer
- Georgia; Cordelle

Inbound Distribution – Property/Railroad Interests

- Illinois; Joliet Intermodal Centers
- Kansas; Logistics Park Kansas City
- Texas; Alliance Global Logistics Hub

Source: *GLDPartners, CBRE Inland Port Logistics Annual Report 2016*

Inland Port Review
What is a Utah Inland Port?

- Definition of Utah Inland Port
  - Balanced in and out
  - Balanced distribution and manufacturing
  - Must be quadrimodal
  - Proximity to seaport hubs
  - Strategic asset mix
    - Site sizes and configurations
    - Industry diversity
  - Must be a managed product – otherwise it's just an industrially zoned area

For the purposes of this presentation and the report, we use Global TradePort

Generic Site Requirements

- Sizeable industrial development land asset(s)
- Appropriate surrounding uses
- Transportation access
  - Road
  - Rail
  - Air
  - Oriented well to ocean
- In a market that has an ability to compete for key investment types

Site Review

- Site: Northwest Quadrant – North and South of I-80
  - 5,000-6,000 total acres
  - Direct intermodal rail and carload rail, long-haul corridors, and airport access
  - Multiple property owners
  - Existing assets and infrastructure
  - Challenges:
    - Soils Concerns
    - Landfill
    - Roadway congestion
    - Environmental sensitivity

LOGISTICS SYSTEM REVIEW

Source: *FlightAware*

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Logistics Position Commercial Vehicles

Salt Lake City – Pacific Northwest

- Distance: 840 Miles
- Service Time: 14.5 hours
- Corridor(s): I-84, I-32

Salt Lake City – Port of Oakland

- Distance: 725 Miles
- Service Time: 12.5 Hours
- Corridor(s): I-80

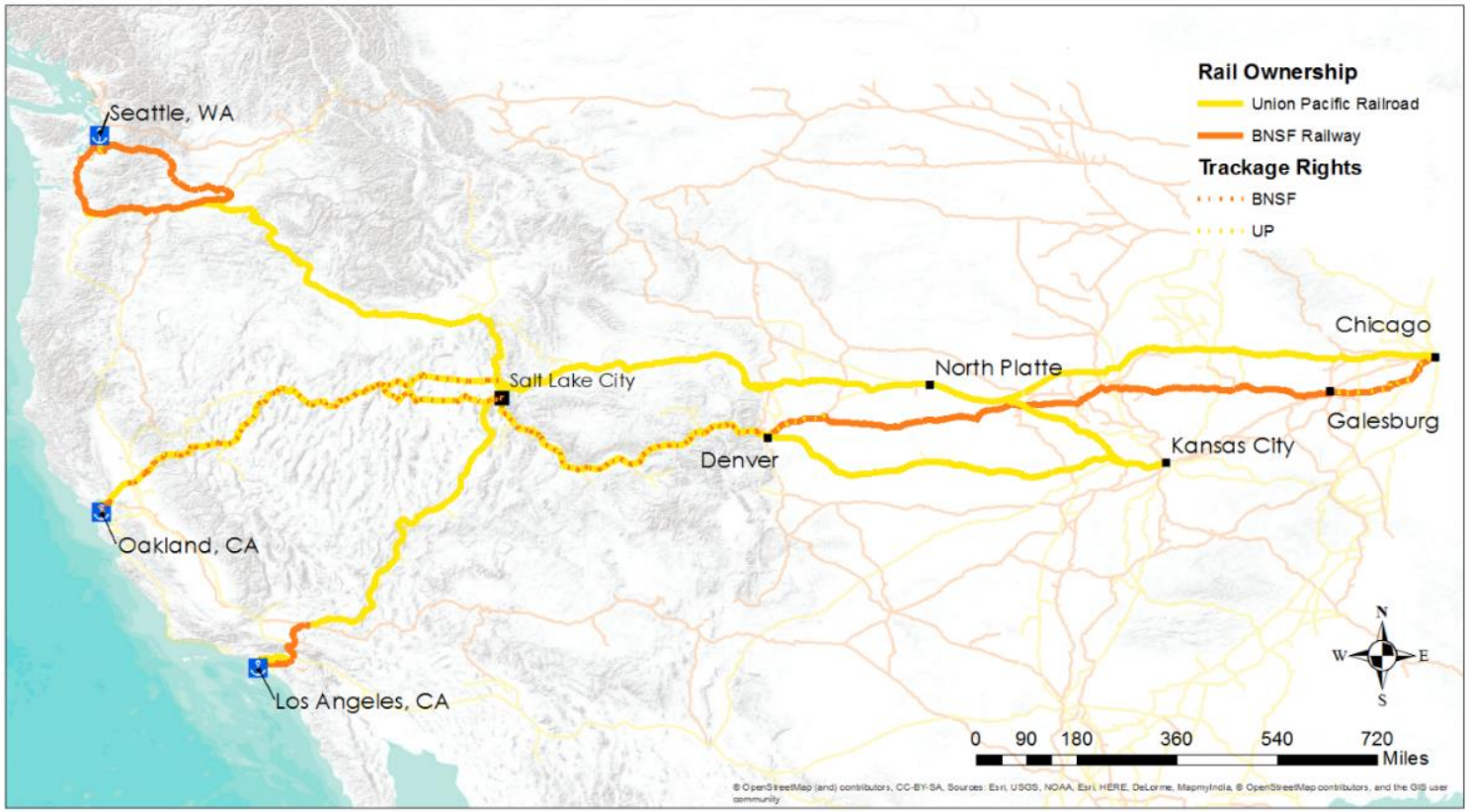
Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: 705 Miles
- Service Time: 12 Hours
- Corridor(s): I-15

*Note: Distance and times are approximate

Logistics Position
Rail Service

- Efficient connectivity via Union Pacific's Central Corridor between Chicago, Denver, and the Ports of Los Angeles, Long Beach, and Oakland
- Long-standing history of trackage and haulage rights for BNSF on the Corridor



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Logistics Position
Rail Service

Salt Lake City – Pacific Northwest

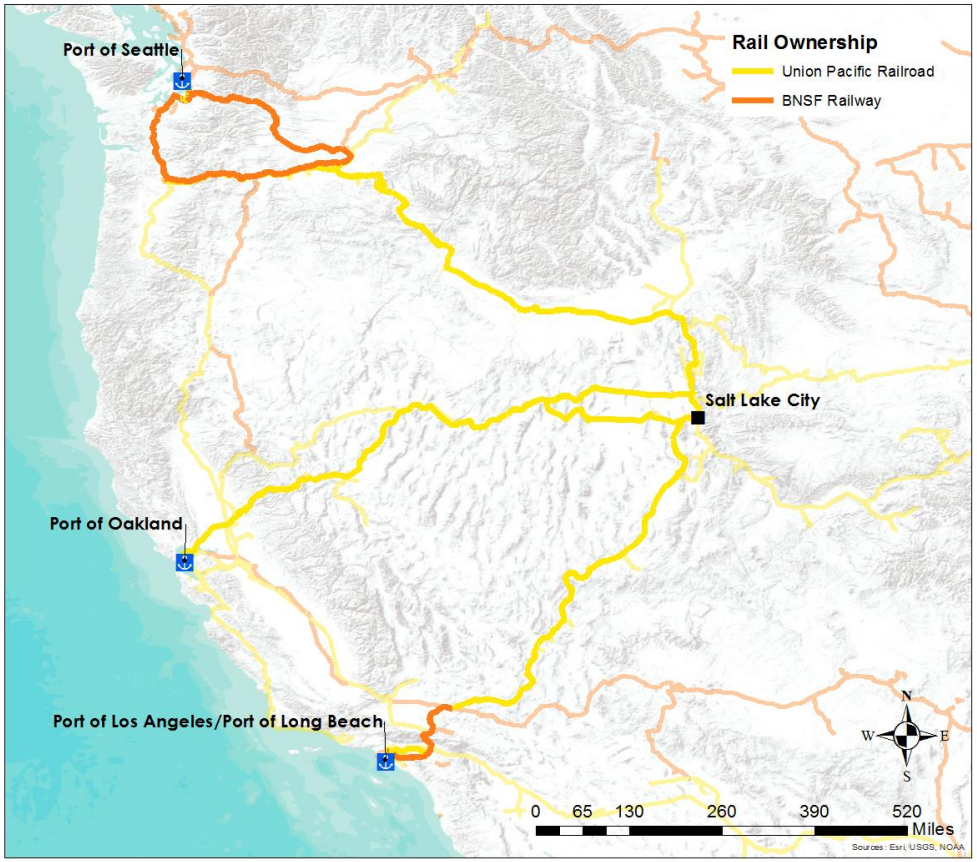
- Distance: 870 Miles (BNSF: 1370 Miles)
- Service Time: Not currently served
- Ownership: Segments of BNSF and UP

Salt Lake City – Port of Oakland

- Distance: 840 Miles
- Service Time: 3 Days
- Ownership: UP (BNSF Trackage Rights)

Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: UP: 740 Miles BNSF: 1265 Miles
- Service Time: 3 Day Intermodal (UP)
- Ownership: UP from SLC to Barstow



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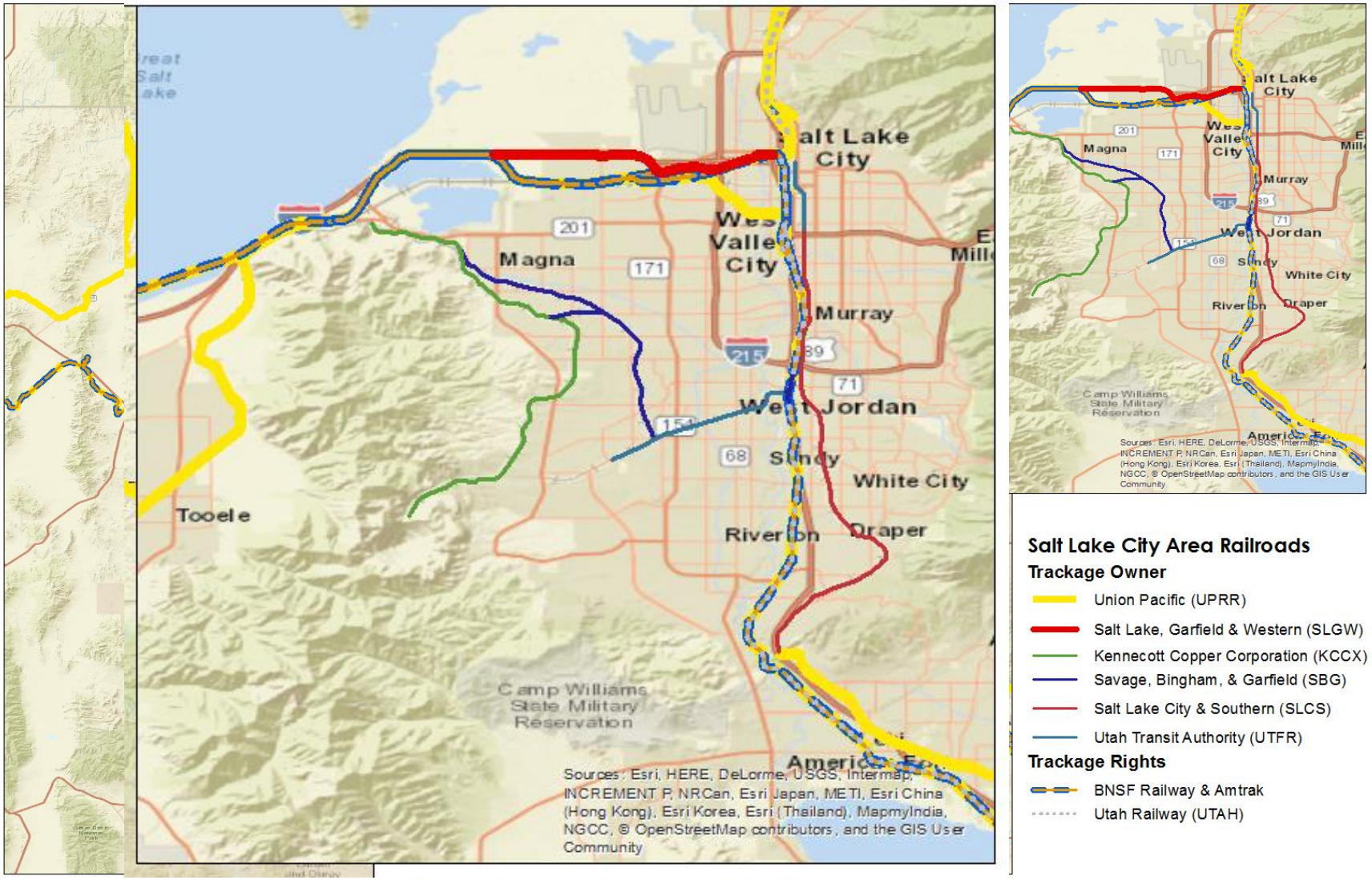
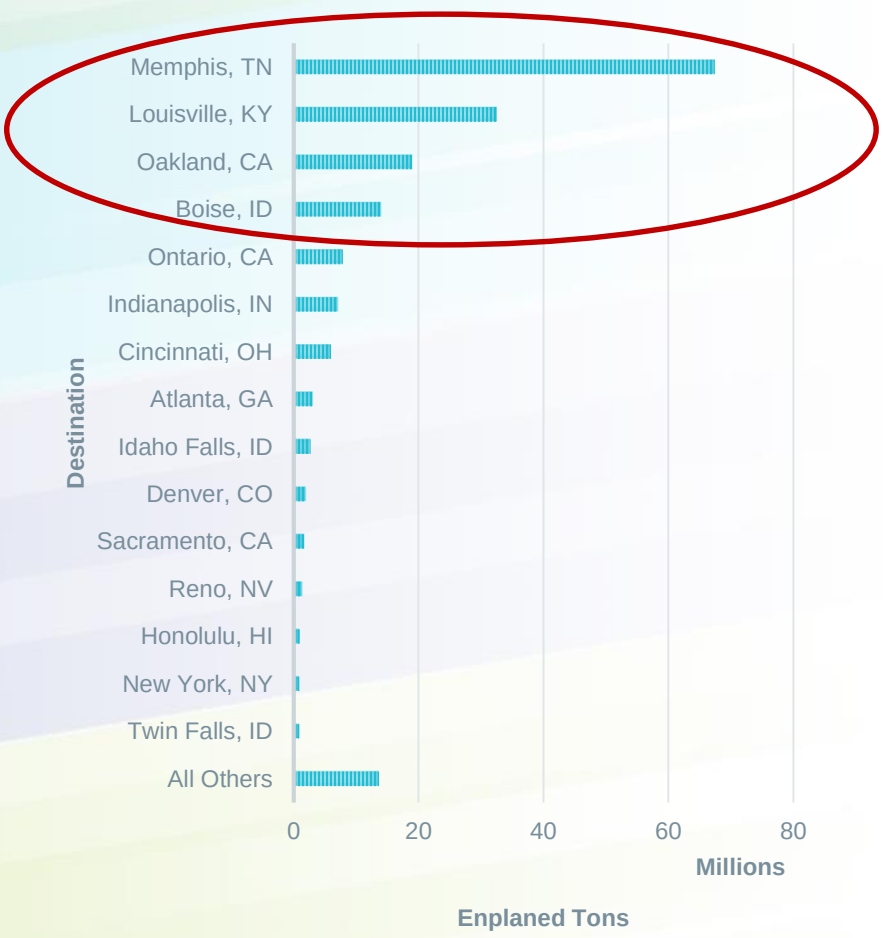
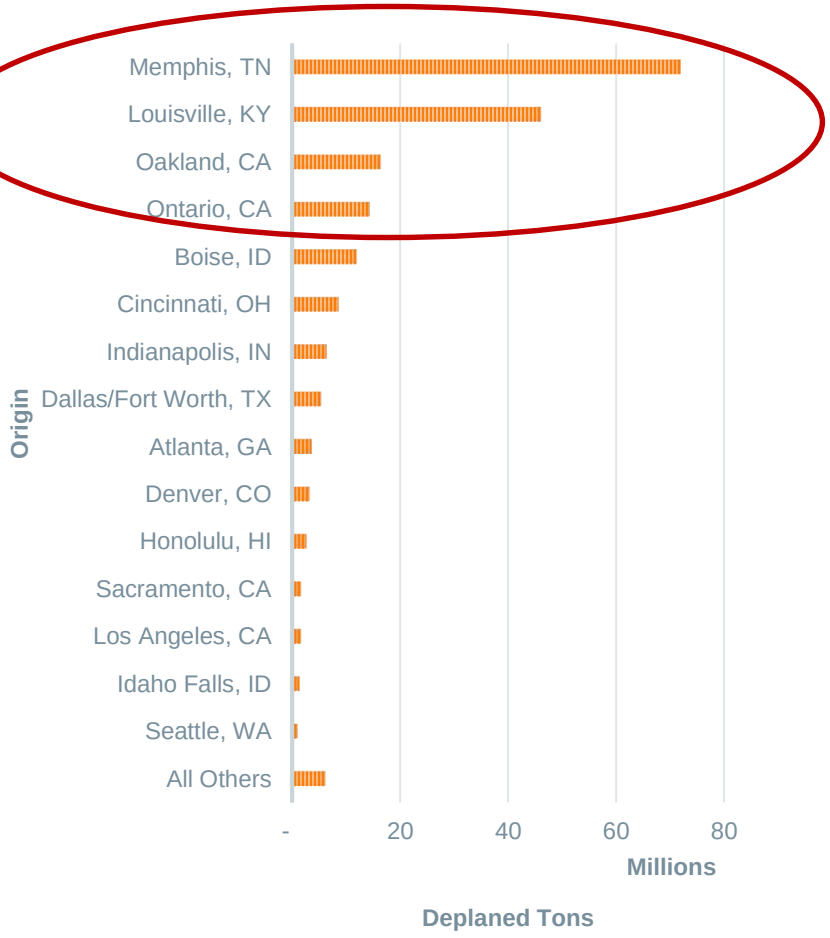
 *Note: Distance and times are approximate

Logistics Position
Rail Service



Logistics Position
Air Cargo





Source: Federal Aviation Administration, CY 2016

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MARKET DEPTH

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Market Depth - Overall Industrial Market

National

- Industrial market has been growing quickly
- The market has been shaped by:
  - » High rates of economic growth
  - » Ecommerce growth has dominated in some markets
  - » Impact of restructured supply chains
  - » Adjustments in trade relationships
  - » (Some) level of reshoring
- The outlook is tied to economic growth and structure of trade relationships, current view is strong

Regional

- Seen nationally as a healthy mid-sized market; similar in gross size to larger metropolitan region
- Vacancy rates are low
- Asset values are rising
- Land supply is an important factor
- Market has recently been substantially driven by large transactions

Market Depth- Utah and Salt Lake City Region Market

- Competitiveness analytics demonstrate that Utah & Salt Lake City's economic growth opportunities are based upon a strong and favorable business environment that is fueled by a competitive tax climate and a favorable legal and regulatory environment
- Utah enjoys a strong workforce and education system
- Region enjoys a strategic locational advantage for some supply chains, including a range of both distribution and manufacturing
- Rail connectivity is strong, but with a lesser level of competition than preferred
- UP intermodal facility in-place and with existing capacity
- The new airport asset should lead to even stronger and more competitive passenger service; strong Delta hub, but concerned about an overreliance on Delta ; airport has relatively uncongested skies and large aeronautical and non-aeronautical land assets

Competitiveness Analysis How it Works

- Data-driven exercise to evaluate real-life investment projects
- Literally a reverse-model of a site selection project
  - » Define sectors
  - » Specify a model project
    - – Product, supply chain, logistics, labor, land/building, regulatory
- Define competitor markets
- Customize model to the specific nature of the model project
- Assign weighting to factors reflecting levels of importance to that situation
- Evaluate and provide ranking to approximately 40 business factors

Results: a highly detailed numeric comparison that is the baseline that site selection professionals and corporate executives would use to determine how one region fares versus another

Competitiveness Target Sectors

- Manufacturing and Distribution
  - » Aerospace Component and Manufacturing
  - » Corporate Headquarters & Manufacturing
  - » E-Commerce Facility - National Chain Store
  - » Regional Food Distribution Center

Source: *Wall Street Journal*

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Market and Competitiveness
Aerospace Component Manufacturing

Background	A joint venture between a French and U.S. engine manufacturer to build composite fan blades and fan cases for new generation jet engines for Boeing and Airbus
Project	$100,000,000 investment to build a 275,000 sf building on 50 acres
Development Proposition	Build-to-suit
Jobs	130 growing to 400 engineers and technicians
Products Sourced	From across the US
Markets Served	Indianapolis, IN and Durham, NC
Modes Used	Truck and air integrators
SLC Competition	Salt Lake City, UT; Seattle, WA; Rochester, NH; and Wichita, KS

Site Decision Factors	Salt Lake City UT	Rochester NH	Wichita KS	Seattle WA
Transport Costs	0.55	0.9	0.85	0.4
Time in Transit	0.2	0.7	0.55	0.2
Reliability	1.75	1.35	1.1	1.1
Facility Availability and Operating Costs	2.1875	1.1875	2	1.625
Total Tax Burden	2	2	1.2	1.6
Labor Availability and Costs	2.075	2.075	1.9625	2.075
Competitiveness Score	8.7625	8.2125	7.6625	7

Market and Competitiveness
Corporate Headquarters & Manufacturing

Background	California privately held electrical engineering company that designs, develops and manufactures specialty custom air moving systems for the aerospace and defense industry. Interested in relocating their corporate headquarters and manufacturing operations out of California. They also have a manufacturing operation in the UK
Project	100,000sf modern office and manufacturing facility
Development Proposition	Build-to-suit
Jobs	90 jobs will be created over a five year period and will include engineers, machinists and senior executives with an average salary of $89,000
Products Sourced	Various, throughout the United States
Markets Served	Global
Modes Used	Truck and air. Products will primarily be shipped by integrators
SLC Competition	Las Vegas NV , Mobile AL, and Tucson, AZ

Site Decision Factors	Salt Lake City UT	Las Vegas NV	Mobile AL	Tucson AZ
Transport Costs	0.65	0.68	0.475	0.65
Time in Transit	1.4	1.32	1.28	1.04
Reliability	1.25	1.36	1.3	1.27
Facility Availability and Operating Costs	1.75	1.55	1.75	1.55
Total Tax Burden	0.5	0.32	0.955	0.63
Labor Availability and Costs	1.35	1.14	1.11	1.26
HQ Considerations	1.5	1.5	0.36	0.24
Competitiveness Score	8.4	7.87	6.73	6.64

Market and Competitiveness
E-Commerce Facility - National Chain Store

Background	Large national department store chain is looking for a location for an e-commerce facility to serve the Intermountain West region. This will be the 5th e-commerce facility for the company as they look to become more competitive in the e-commerce arena. The company currently has thousands of retail locations around the U.S. which they have begun to downsize in space by 50% and all their new stores will be 32,000 sf instead of approximately 80,000 sq ft. Only on-line orders will be handled in this facility.
Project	800,000 sf e-commerce fulfillment center
Development Proposition	Build-to-suit
Jobs	250
Products Sourced	From Asia through the Ports of LA and Long Beach by rail
Markets Served	Intermountain West
Modes Used	Truck and integrator airport
SLC Competition	Salt Lake City, UT; Reno, NV; Phoenix, AZ and Denver, CO

Site Decision Factors	Salt Lake City UT	Phoenix AZ	Reno NV	Denver CO
Transport Costs	1.65	1.5	1.45	1.4
Time in Transit	1.72	1.56	1.48	1.52
Reliability	1.9	1.8	1.7	1.8
Facility Availability and Operating Costs	.87	1.11	0.99	0.75
Total Tax Burden	2	1.2	2	1.6
Labor Availability and Costs	1.33	1.6	1.74	1.27
Competitiveness Score	9.47	8.77	9.36	8.34

Market and Competitiveness
Regional Food Distribution Center

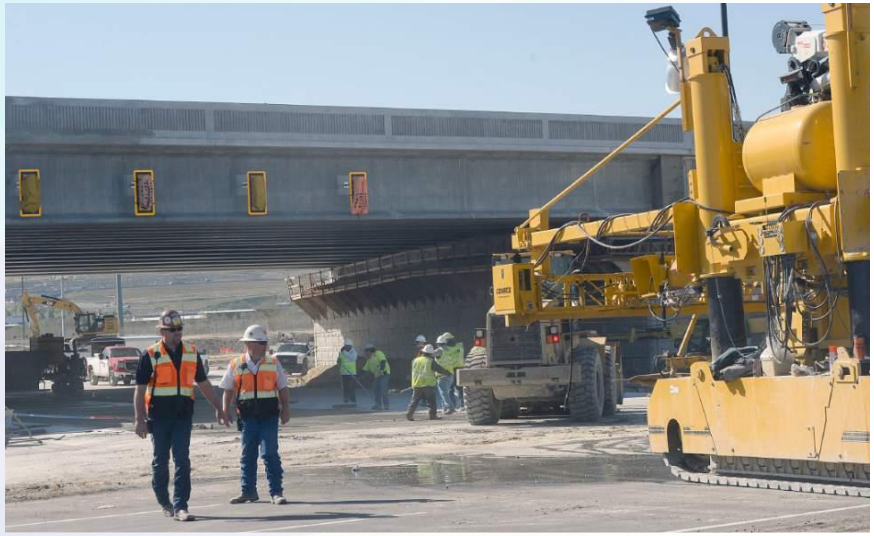
Background	A food industry redistributor that buys full truckloads of product from 830 manufacturers and consolidates those products in 9 distribution centers located across the country. Their strategy is to add several new centers in strategic locations where their operations have been less efficient. The company then resells products in less-than-truckload (LTL) quantities to distributors on a weekly basis. The company owns and operates its own truck fleet. Would serve portions of 5 states.
Project	$45 million investment to include a combination of facilities under one roof totaling 163,000 SF including refrigerated, frozen and dry storage space, office as well as a 9,700 SF truck garage.
Development Proposition	Build-to-suit
Jobs	125 warehouse and distribution workers
Products Sourced	From across the US
Markets Served	Southern California, Southern Nevada, AZ, NM, and UT
Modes Used	Truck
SLC Competition	Kingman, AZ , Albuquerque, NM and Bakersfield, CA

Site Decision Factors	Salt Lake City UT	Kingman AZ	Albuquerque NM	Bakersfield CA
Transport Costs	1.25	2	0.75	1.625
Time in Transit	1.2	1.425	1.1625	1.35
Reliability	1.05	0.9375	0.6	0.7875
Facility Availability and Operating Costs	1.26	1.2375	1.17	1.3875
Total Tax Burden	1.5	0.9	0.6	0.3
Labor Availability and Costs	1.155	1.1475	1.3425	1.3025
Competitiveness Score	7.415	7.6479	5.625	6.7525

Project/Market Requirements

- Should assume that the project requires 500,000-1,000,000 sf net new absorption annually over life of the project
- Community should have value-add production activity as objective; so a careful balance of distribution and manufacturing
- Must have a balance of onsite demand for inbound and outbound cargo movement
- Project site and phasing should allow company expansions/growth in Utah onsite

NEW INFRASTRUCTURE



Source: *Utah DOT*

Source: *Holubar Construction*

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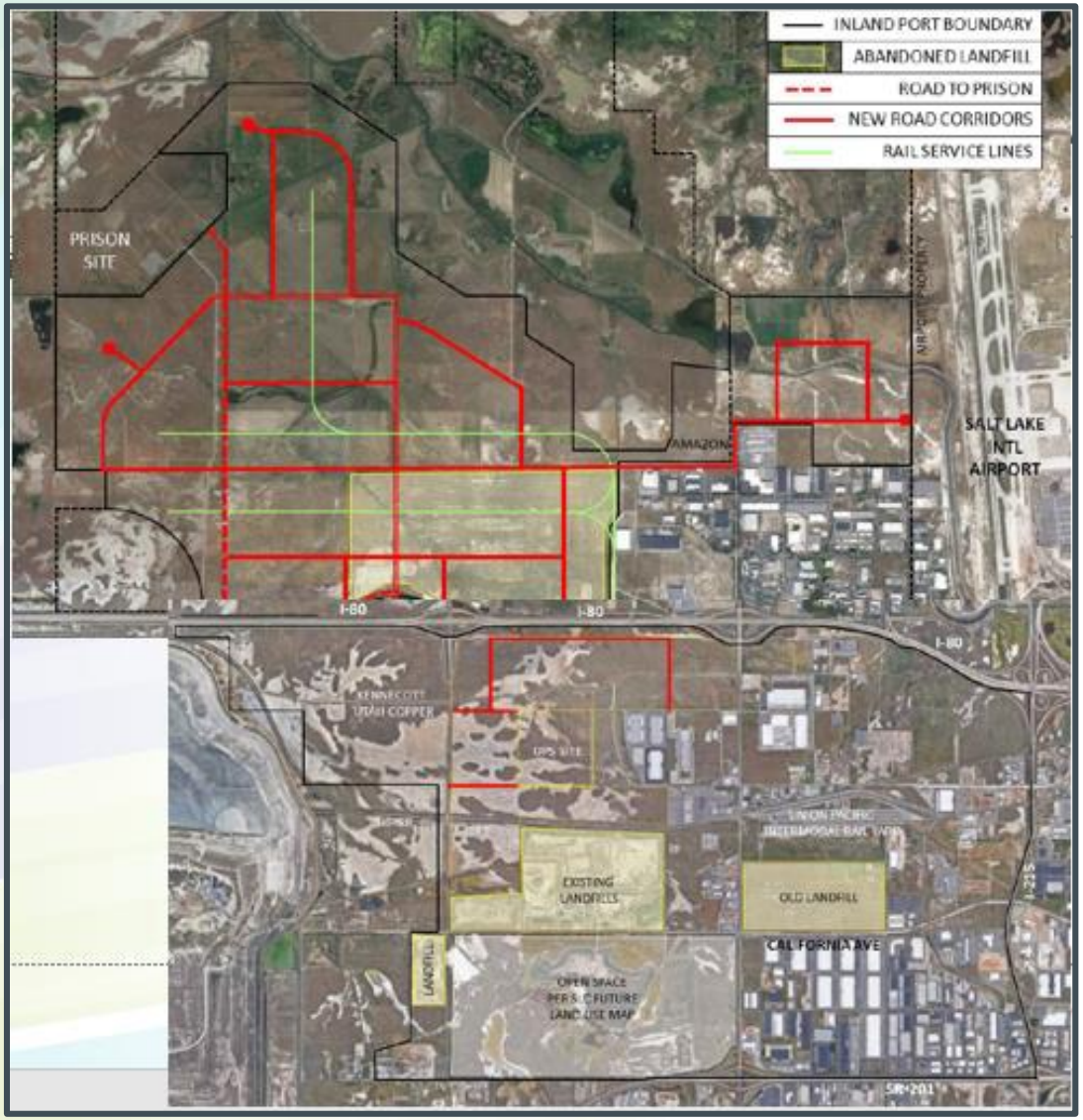
Development and Infrastructure Strategy

- Practice Strategic Managed Scalability
  - Minimize early investment
  - Take advantage of existing infrastructure and connectivity
    - South: existing infrastructure, access to intermodal, land availability, highway
    - North: existing infrastructure, access to airport
- To be developed and matched to infrastructure plan, assumes 5,000-6,000 acres total developable
- Likely investment phases:
  - Minimum of 1,000 acres
  - Large enough to allow for investment efficiency
  - Supporting an array of targets, mix of site products
  - Early phase will look different than latter phases
  - Key is to agree to a managed risk strategy
- Important to:
  - Access airport assets and land adjacent to existing airport reservation for high-velocity manufacturing and product distribution; supporting air cargo development
  - Maximize proximity and access to existing rail intermodal facility
  - Coordinate with State/Municipal transportation planning efforts

Infrastructure



- Assumes TradePort includes property north & south of I-80
- Road & rail to key sites
- Range of site categories: large-scale/regional distribution center, manufacturing, high-velocity
- Total estimated infrastructure cost are at minimum $225M, including the following improvements:
  - Roads
  - Rail
  - Water
  - Telecommunications
  - Electric/Gas
  - Sanitary Sewer

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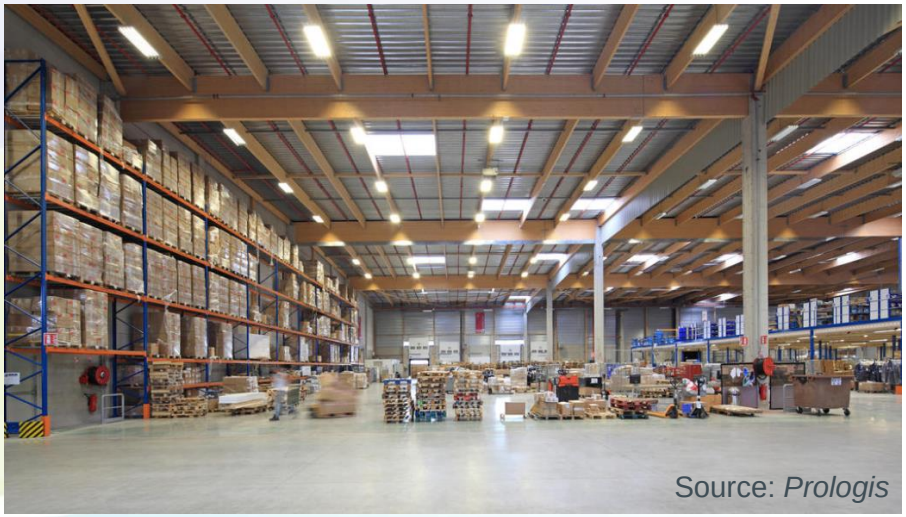
ENVIRONMENTAL

Source: *California Air Resources Board*

Source: *Port of Los Angeles*



Source: *Prologis*

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Environmental Management & Strategy

- Large industrial district impacts
  - Emission sources: mobile-source and point-source
  - Impacts are shaped by market & mode
- We believe that Utah and Salt Lake City region can create a model project that is built around environmental sustainability objectives
- Key Strategy Issues:
  - Inbound --- Outbound Balance is Important
  - Distribution vs. clean/tech manufacturing
- Project's timeline & scale creates special opportunity *to plan, develop and operate* project that sets-out from the beginning to be a global leader in sustainable economic development
- Project planning should allow for high-efficiency development and transportation
- Transportation technologies will impact
- Will require an active strategy and cohesive business management and delivery plan
- Performance management plan

Environmental Management Best Practices

Best Practices: Port of Los Angeles

- Created Air Quality Report Card as a transparent guide to see the progress of its ongoing clean air programs
- Under the Clean Air Action Plan, the Port made progress in reducing harmful emissions from all port-related sources including, ships, trains, trucks, small harbor craft and off-road cargo handling equipment

Best Practices: World London Gateway

- Creation of an Advisory Committee on Sustainability including nationally and internationally recognized experts
- Defined a next-generation building guidelines, supported by PlanetMark certification of sustainability
- DP World London Gateway - Stanford Wharf Nature Reserve

BUSINESS STRATEGY

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Business Strategy

- Define as a product, not an area
- Clear view of market
  - Investment, type, sector, timing
- Infrastructure to support market plan
  - Delivery plan, financing
- Delivery structure
- Establish formal business partnerships

Airport Collaboration

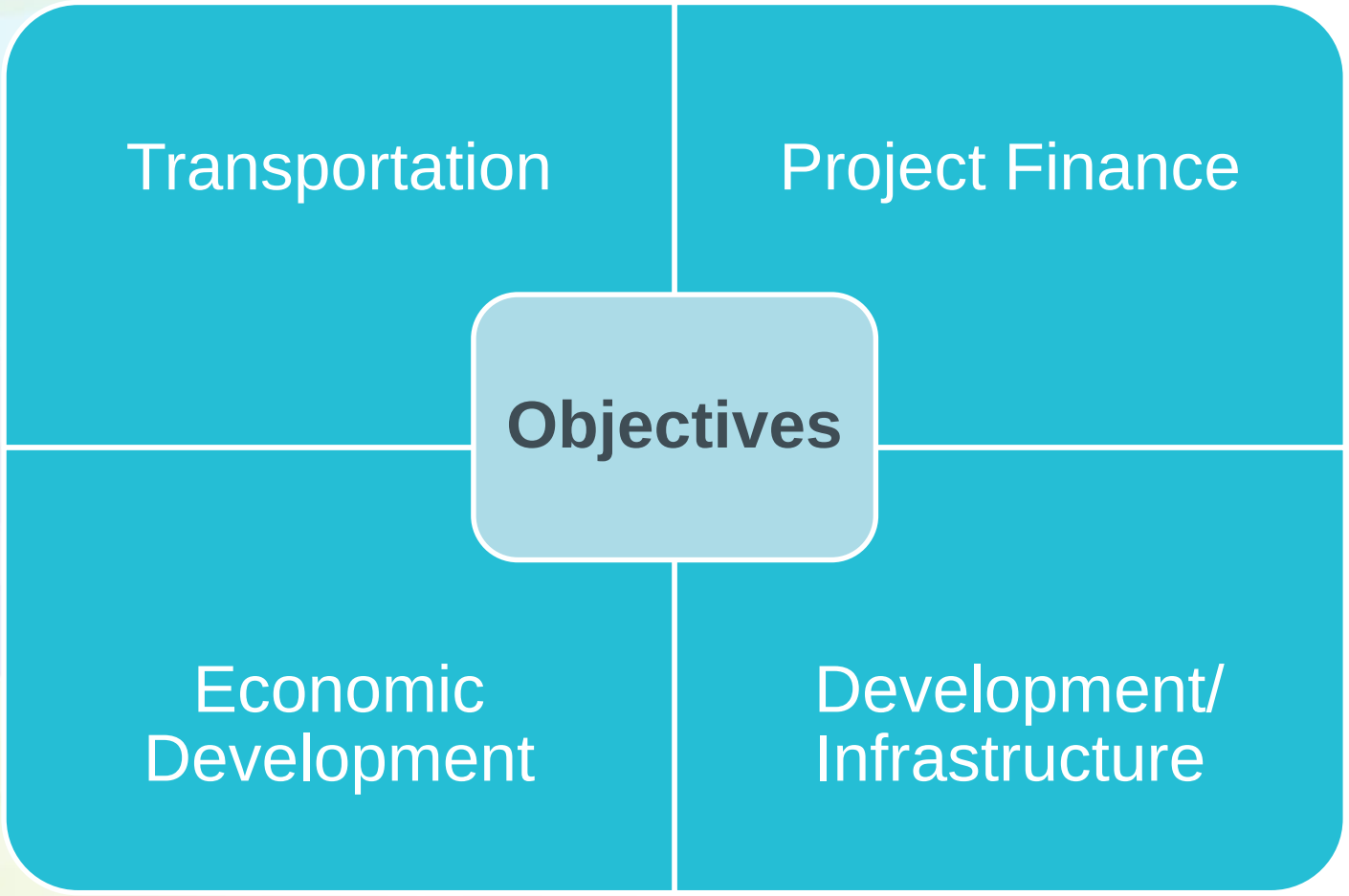
- Airport is undergoing a dramatic rebuild project
- Cargo has been relatively light and there is gulf of opportunity to join-up airport growth, economic development and technology investment
- Global TradePort project is about joining-up investment attract and transport infrastructure and economics
- Global TradePort should be integrated with Airport business and development strategy
- Airport assets, adjacent and nearby industrial assets should be hugely valuable, especially in a region that seeks to further establish itself as a technology hub

GOVERNANCE

CAMBRIDGE SYSTEMATICS

GLDPARTNERS

Public Development Entities/Port Authorities: Objectives



CAMBRIDGE SYSTEMATICS

GLDPARTNERS

Governance Model For Utah/SLC

Objective: Typically, to facilitate physical development including core infrastructure; project finance, economic development, can support Statewide objectives

Functional Role: Master planner, typically does not own/operate logistics infrastructure, role in property and infrastructure, marketing

Typical Powers: Can issue debt, take risk, own/operate assets, enter into JV partnerships

Finances: Is a direct and/or indirect property and infrastructure investor and manages private investors relationships

Ownership: Public with plans for 3P to attract risk capital

Keys to Success

- Active management strategy
- Public finance expertise
- Public sector shouldn't assume all the risk
- Partnerships – logistic-economic-development-supply chain
- Organization that outlasts political cycles
- Representing the state, region, and city globally
- Environmental management strategy
- Access and expand airport cargo capabilities
- Consider statewide needs and assets for future integration

NEXT STEPS

QUESTIONS AND DISCUSSION

CAMBRIDGE SYSTEMATICS

GLDPARTNERS

SALT LAKE COUNTY

INLAND PORT AUTHORITY FEASIBILITY STUDY

VOLUME 1: EXECUTIVE SUMMARY AND MAIN REPORT

SUBMITTED TO:

Division of Job Training and Development
Salt Lake County Government
2001 S. State Street
Salt Lake City, Utah 84190-3710

PREPARED BY:

LEEPER, CAMBRIDGE & CAMPBELL, INC.
700 N. Fairfax Street, Suite 502
Alexandria, Virginia 22314

January 1990

The preparation of this report to examine the feasibility of establishing an inland port authority in Salt Lake County was financed through a grant agreement between Salt Lake County and the Department of Housing and Urban Development under provisions of Title I of the Housing and Community Development Act of 1974.

EXECUTIVE SUMMARY

The development of an Inland Port Authority in Salt Lake County is the result of the combined efforts of the Inland Port Task Force, comprised of representatives of various public and private sector entities, and the staff of the Salt Lake County Division of Job Training and Development. They have been assisted in their efforts by Leeper, Cambridge & Campbell, Inc., a transportation and economic research consulting firm based in Alexandria, VA and author of this report.

Principal Findings

A. Legislative Authority

- The need for a port authority mechanism within the State of Utah was recognized over a decade ago, as evidenced by State Legislation passed in 1974, granting the "Authority of state or political subdivisions to establish port authority" (Chapter 22, Sections 11-22-1 and 11-22-2).

B. Public/Private Sector Support

- Currently, there is no central agency or department responsible for or responsive to freight transportation matters. Across virtually all trade and transportation sectors, persons expressed positive views on the various roles which a port authority could play, i.e.:

  - A "port authority" would play a positive role in organizing and marketing local advantages and resources on a consistent and long-range basis, something which they as individual firms may not have the resources or time to do. This would involve exploring relationships with, among others, coastal ports, carriers, terminal operators, warehouse/distribution centers.

  - A port authority might assist railroads by contracting a ramp operator to provide services such as clearing containers off rail ramps when the containers are not in use or providing equipment repair and maintenance services.

  - A port authority could match the transportation requirements of various shippers/consignees and carriers and equipment. This could develop into providing a third party logistics function or, at a minimum, ensure that such comprehensive services are available to industry in the region and that carriers

get better utilization from their equipment. Such a service could improve service levels and reduce costs.

- A port authority could serve as an intermediary to shippers and carriers in resolving problems or conflicts which arise with respect to facilities, service, or regulatory matters. This would include working with public officials at various levels to ensure that, prior to implementing new government policies, there has been a thorough evaluation of the impact policies might have on trade and transportation. Examples include the current issues of night-time noise restrictions at airports, overweight containers on the highways, and rail line abandonments.

- A port authority would play a key role in the marketing and promotion of trade and transportation-related services and facilities.

C. Transportation Facilities and Services

- The Salt Lake County region has in place significant transportation infrastructure, including:

  - 1700 miles of railroad track which converge in the Salt Lake-Ogden area. The region is served by two Class I railroads--the Southern Pacific/Denver Rio Grande and the Union Pacific.

  - Over 48,000 miles of highways and roads, including major portions of, and easy access to, various interstate arteries, namely I-15, I-70, I-80, I-84, and I-215. More than 40 interstate motor carriers serve the region, many of which maintain terminals with interchange facilities in the Salt Lake area.

  - Modern passenger and freight facilities at Salt Lake City International Airport. The Airport Authority has acquired adequate property for future expansion of both passenger and freight facilities and services.

- The trade, transportation and development potential associated with this infrastructure has not been realized; specifically:

  - Although they have major facilities in the region, the two Class I railroads admit they have focussed little attention on development or expansion in the Salt Lake area.

- Most of the major motor carriers have unused capacities and could easily handle increased service demands.

- Less attention has been focussed on air cargo development than on passenger service development in the region.

- Salt Lake and the State of Utah have not been active participants in recent air service and gateway proceedings, specifically the U.S.-Japan Air Service case, in which Delta has applied for authority in markets other than Salt Lake. This raises the question of whether Delta is adequately promoting/utilizing the Salt Lake hub operation.

- In general, shippers/consignees in the region have realized few, if any, transportation cost or service advantages normally associated with a well-developed transportation infrastructure.

The Port Authority could work with carriers, facility owners/operators, shippers, and the Airport Authority to encourage mutually beneficial utilization and improvement of both services and facilities.

D. Ancillary Facilities and Services

o The Salt Lake region has in place a broad range of industrial, warehousing and distribution facilities, including over eighty (80) industrial parks, many of which are underutilized. The Salt Lake region has been less successful than areas in Nevada and Colorado in establishing itself as a distribution center.
A jointly funded, cooperative and targeted approach, directed by the Port Authority, could assist owners and operators of in marketing their facilities and the Utah region.

o Utah lags behind other states in the region in terms of its business climate rating, despite the fact Utah offers many of the same incentives, advantages, and opportunities.

With support from all levels of government and the private sector, it is felt that an Inland Port Authority in Salt Lake County, the first such authority in the State of Utah, could play an important role in helping improve this business climate image.

o The region's foreign-trade zone facility, operating under a grant issued in 1974, is underutilized and has not been

effectively marketed. Few companies in the area know of the zone's existence and even fewer have any awareness of how their operations might benefit from zone use. Neither the current zone administrator (the Redevelopment Authority) nor the zone operator has the personnel, budget or expertise to carry out this task.

As is the case with many zones throughout the U.S., the Salt Lake Port Authority could assume the role of foreign-trade zone marketing and oversight of the day-to day operations. The authority could also work with local industry to examine ways in which they might benefit from use of the general-purpose facility or possible from subzone status.

- o There are fourteen (14) local freight forwarders (mostly air freight) in the Salt Lake region. Their efforts to expand operations and increase level of activity at Salt Lake have been hampered by (1) the relatively small volume of cargoes generated locally and (2) the distances to major western markets (e.g., 10 hours to Denver, 12-13 hours to Los Angeles).

  Here again, the Authority could play a key role in identifying opportunities and matching shipper needs with forwarder services.

E. Trade Development

- o There appears to have been little attention devoted to cooperative efforts among states in the region with respect to trade development or with West Coast ports in examining potential coast/inland point relationships; specifically:

  - The planning of international trade efforts and placement of overseas trade missions for Utah and other Western states have not been optimized.

  - The West Coast port ranges all face some type of constraint to handling/realizing future growth; namely:

    - The Los Angeles/Long Beach area, which comprises the largest U.S. container complex, is struggling with a large and ever-growing population and the attendant growth in traffic congestion, air pollution, and a shortage of land for expansion.

    - The San Francisco/Oakland area is limited landside by tunnel clearances which restrict double-stack service. This problem is being addressed by various carriers who recognize the future growth potential in the region. Constraints are also

imposed by the continued conflicts over use and development of waterfront properties.

- The Pacific Northwest ports, which are less congested and as much as two days closer by sea to the Far East than are the California ports, lack the population needed to attract local imported cargo or domestic backhauls. More than 75% of the containers entering the PNW ports are destined inland, compared to only about 50% in Southern California.

The Salt Lake region must initiate dialogue with both West Coast port regions and the carriers serving those regions to identify and assess ways in which cooperative ventures might alleviate current and future problems faced by both the ports and the carriers.

o Shifting trade patterns, primarily from all-water to land-sea routings, have been occurring throughout the 1980s. This trend is likely to continue, and even expand, in response to improved land-sea intermodal service and changes in vessel size and technology.

It is in the best interests of business in Utah and the intermountain region to position themselves to quickly and effectively respond to the transportation and market impacts of these shifts.

o Intermodal movement of Far East traffic has grown dramatically, with West Coast ports handling more than three-quarters of the nation's import and export movements.

The Salt Lake region must find ways to exploit its locational advantages through better use of and possible expansion of its facilities and services.

o It has been forecast that by the year 2000, 70 percent of the air freight market will be international, dominated by the trans-Pacific. It is further anticipated that combination carriers will become a dominant force in the freight market.
Both could translate to opportunities for the Salt Lake region which, while generating less international passenger traffic, could afford shippers faster clearance if facilities and services were expanded. There needs to be an assurance that Delta is adequately promoting and utilizing its Salt Lake hub and representing the interests of the Salt Lake region.

- CSL Intermodal (a unit of the multi-modal CSX Corporation which includes Sea-Land, CSX Rail, CMX Trucking, and a barge line) has announced they plan a major expansion within 1990 in the Los Angeles basin and to broaden their Kansas City market. They are looking at entering into joint agreements with other railroads for use of intermodal facilities.

  Such proposed service and facility developments may represent opportunities for the Salt Lake region. The formation and implementation of a port/freight transportation authority, whose mission is to identify and explore such opportunities, is a step toward realizing them.

- A recent survey of Salt Lake area shippers identified a need for assistance in exporting activities, particularly in the areas of market research and transportation.

  The Port Authority could afford the opportunity to address these needs by encouraging improved and expanded use of existing resources.

- Local efforts, such as the University of Utah's IMPART program, and regional efforts, such as those proposed by the Western Governors' Association, are resources upon which the County and the proposed Port Authority can build and enhance its activities and services.

- While economic development efforts are underway at the local, county, and state levels, as well as within the private sector, none of these agencies or programs include specific strategies relating to freight transportation. The Port Authority will fill this critical void within the region.

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Recommendation

It is recommended that Salt Lake County, under existing State enabling legislation, take action to establish a regional inland Port Authority. It is recommended this be accomplished through a 3-phase program:

- **PHASE I: IMPLEMENTATION OF PORT AUTHORITY WITHIN COUNTY GOVERNMENT STRUCTURE**

Actions: Direct the County Legal Department to develop a resolution for consideration by the Salt Lake County Commission.

Hold Public Hearing(s) on the County resolution. Upon passage of resolution, proceed with remaining implementation activities.

Designate interim staff and County department/ division/office through which implementation activities will be directed.

Prepare/issue press release.

Interim staff to coordinate with and seek advice and counsel from Inland Port Task Force on the following items:

- Port Authority Name
- Port Charter
- Location of Initial Office
- Review of Final Report/Recommendations
  - Port Authority Structure
  - Port Authority Activities
  - Staffing Requirements
  - Timetable
  - Budgets/Funding
  - Original Directors/Incorporators

Initiate formal dialogue/communications with those agencies and entities which are not represented on Inland Port Task Force, but which will benefit from/contribute to the Port Authority. This should include entities within Utah and the intermountain region.

Interim staff to develop business plan and marketing strategy for presentation and approval by County Commission.

Interim staff to outline requirements for Phase II contractual arrangement between the County and a private/quasi-private entity for the future operation and administration of the Port Authority.

Interim staff and County legal staff to draft Articles of Incorporation and By-Laws for a private, non-profit corporate entity with which the County could contract for services in Phase

II. This should include determination of the size, composition, duties, compensation, authority, terms, and appointment procedures of the Board of Directors.

Staff review and familiarization with various trade and transportation publications as well as organizations and activities.

Time Frame: January through June 1990

- **PHASE II: ESTABLISH QUASI-INDEPENDENT PORT AUTHORITY**

Actions: County Commission and Interim Staff to solicit, review and select a private/quasi-private, non-profit corporation to assume responsibility for administration and operation of the Port Authority, with oversight by the County Commission.

Hold organizational meeting to elect officers and approve initial business and marketing plans.

Establish bank accounts and qualify to do business in Utah and possibly other jurisdictions.

Select, furnish, and equip facility for Port Authority offices and operations.

Recruit and hire staff or contract for outside professional services to fulfill duties for the following job categories:

- Executive Director
- Marketing Coordinator
- Transportation Specialist
- Administrative/Accounting Assistant
- Secretary/Receptionist

NOTE: Initially, one individual may assume duties and responsibilities within more than one job category or outside professional services may be utilized until full-time personnel are warranted.

Effect transfer of selected trade-related activities and services from County (or other public sector agencies) to Port Authority.

Effect transfer of foreign-trade zone oversight and administration from RDA to Port Authority.

Membership and staff involvement in various trade and transportation professional organizations and activities, including:

- American Association of Port Authorities
- National Association of Foreign-Trade Zones
- Council of Logistics Management
- Western Governors' Association

Subscription to publications of and participation in conferences and seminars sponsored by the above-listed organizations, as well as the following:

- American Trucking Associations
- Association of American Railroads
- Container & Intermodal Institute
- Intermodal Transportation Association
- Air Transport Association
- Air Freight Association
- Transportation Research Board
- Transportation Research Forum

Arrange a series of "get acquainted" trips to give Port Authority staff an opportunity to introduce themselves to key personnel within the public and private sector, become familiar with programs and facilities, and to publicize the Utah Port Authority operation. These tours would include:

- Washington, D.C. area, specifically Congressional offices, government agencies and industry associations.

- West Coast port regions, specifically port authority personnel, carriers, and brokers/forwarders.

- Intermountain region, specifically meetings with trade and transportation officials with whom the Utah Port Authority might consider joint marketing and promotion efforts.

Begin development of a full-range of value-added services, as well as facilities, which could be implemented, provided or promoted by the Port Authority (see Phase III for recommended services and facilities).

Time Frame: June 1990 to December 1991

- **<u>PHASE III</u>: SELF-SUPPORTING QUASI-INDEPENDENT PORT AUTHORITY**

Actions (in addition to actions specified in Phase II):

Development and aggressive marketing of a range of value-added services and/or facilities (either independently or through cooperative ventures). These services/facilities will include:

- Contract rate negotiations
- Third-party logistics support
- Joint marketing of transportation facilities and services
- Trade opportunity services
- Trade and transportation research facilities and service, including on-line database services and Trade Consulting services
- Export Trading Company formation and operation
- Foreign-Trade Zone administration and marketing
- Foreign Sales Corporation creation
- Seminars and Trade Missions planning and execution
- World Trade Center facility development
- Warehousing/Distribution Services
- Intermodal Services and Facilities Contracts

Establish a fee structure for specific services, such as subscriptions and on-line charges for publications and data services.

Establish an hourly rate schedule for professional and research assistance provided on an individual basis.

Formulate and implement an evaluation procedure for assessing how effective the Port Authority is in meeting its stated goals and objectives and to assist in updating and revising marketing and operating plans.

Time Frame: Projected to be attained within 3 years of Port Authority implementation.

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Final Report

The final report from which this Executive Summary was prepared is available from the Salt Lake County Division of Job Training and Development. The report is presented in two volumes: Volume 1 is the main report comprised of seven chapters:

I: Introduction - The background of the project and the objective and components of the research effort.

II: Situation Analysis - Overview of the current transportation and trade environment, with a focus on the Salt Lake region.

III: Inland Port Authority Concept - Defining the Port Authority concept and the role it plays in the trade, development, and transportation environment throughout the U.S., as well as in Utah and the intermountain region.

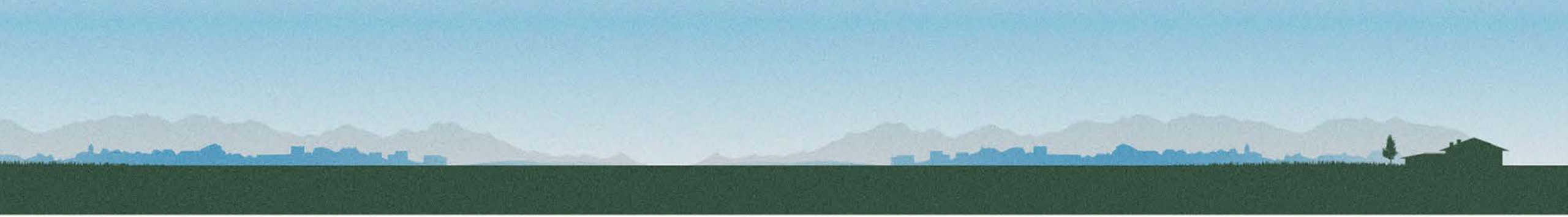
IV: Market Evaluation - Analysis of the potential market and role of the Port Authority in exploiting that market.

V: Formation and Implementation of the Salt Lake Inland Port Authority - The basis for Salt Lake County's capability to implement the project through a 3-phase implementation program, including actions to be taken, budget requirements and funding sources, staffing recommendations, and time frame for each phase.

VI: Marketing Strategy - A proposed marketing strategy and specific activities to be undertaken by the Port Authority.

VII: Staff, Facilities and Equipment - The initial requirements for staff, facilities and equipment and estimates of initial startup costs.

Volume 2 provides a number of appendices of supporting data and information.



Military Installation Development Authority

Cameron Diehl

Executive Director, Utah League of Cities and Towns

State priority: prison relocation, Point of the Mountain, Northwest Quadrant

Many Jurisdictions

- Bluffdale
- South Jordan
- Riverton
- Herriman
- Draper
- Lehi
- Saratoga Springs
- Eagle Mountain
- Sandy
- Salt Lake County
- Utah County
- State

Resolution 2017-001A:

(C) Now, therefore, we the members of the Utah League of Cities and Towns, resolve that:

1. Cities and towns within the State of Utah commit that they are willing and ready to collaborate and partner with the State, the business community, and other stakeholders to pursue a broad range of future economic development opportunities, including those in proximity to State transportation infrastructure.

2. Cities and towns cannot support development proposals, task forces, commissions, districts, development authorities or other legislation that would deprive local municipalities of their traditional local land use authority on private property, or deprive them of control of tax increment generated within their jurisdiction without their consent.

3. League staff should seek appropriate opportunities to communicate the principles contained within this resolution with State legislative leaders.

MIDA: Military Installation Development Authority

- Independent, nonprofit, political subdivision whose purpose is to facilitate the development of land within a project area
- MIDA board: 7 voting members; can have non-voting members
  - 5 appointed by governor, 3 of which have to be adjacent city officials
  - 1 appointed by Senate President, 1 appointed by Speaker of the House
  - Sen. Jerry Stevenson, Sen. Stuart Adams, Clearfield Mayor Mark Shepherd, Bluffdale Mayor Derk Timothy, former Roy Mayor Joe Ritchie, Director of Veterans and Military Affairs Gary Harter, GOED Deputy Director Ben Hart, Mike Ostermiller
- MIDA staff: 5 people
- $3.8 million budget in FY 2017

MIDA: Military Installation Development Authority

- Exercise police power
- Enter into lease agreements
- Collect fees and taxes
  - Property tax
  - Municipal energy tax
  - Telecommunications tax
  - Transient room tax
  - Resort communities tax
- Borrow money
- Bond authority

- Project area is NOT subject to
  - LUDMA
  - Local business license, franchise, health, or land use ordinances
- Project area shall include military land and may include public/private land if adjacent city/county leg. body consents

MIDA Project Funding

Development Fund

- **Source:**
  - Property Tax Increment
  - Sales Tax
  - Resort Communities Tax
- **Use for:**
  - MIDA Operations
  - Development
  - Infrastructure

Property Taxes

75%

- Counties
- Other taxing entities
- For 25 years

25%

County & City

other taxing entities -- goes directly to entity

Sales Taxes

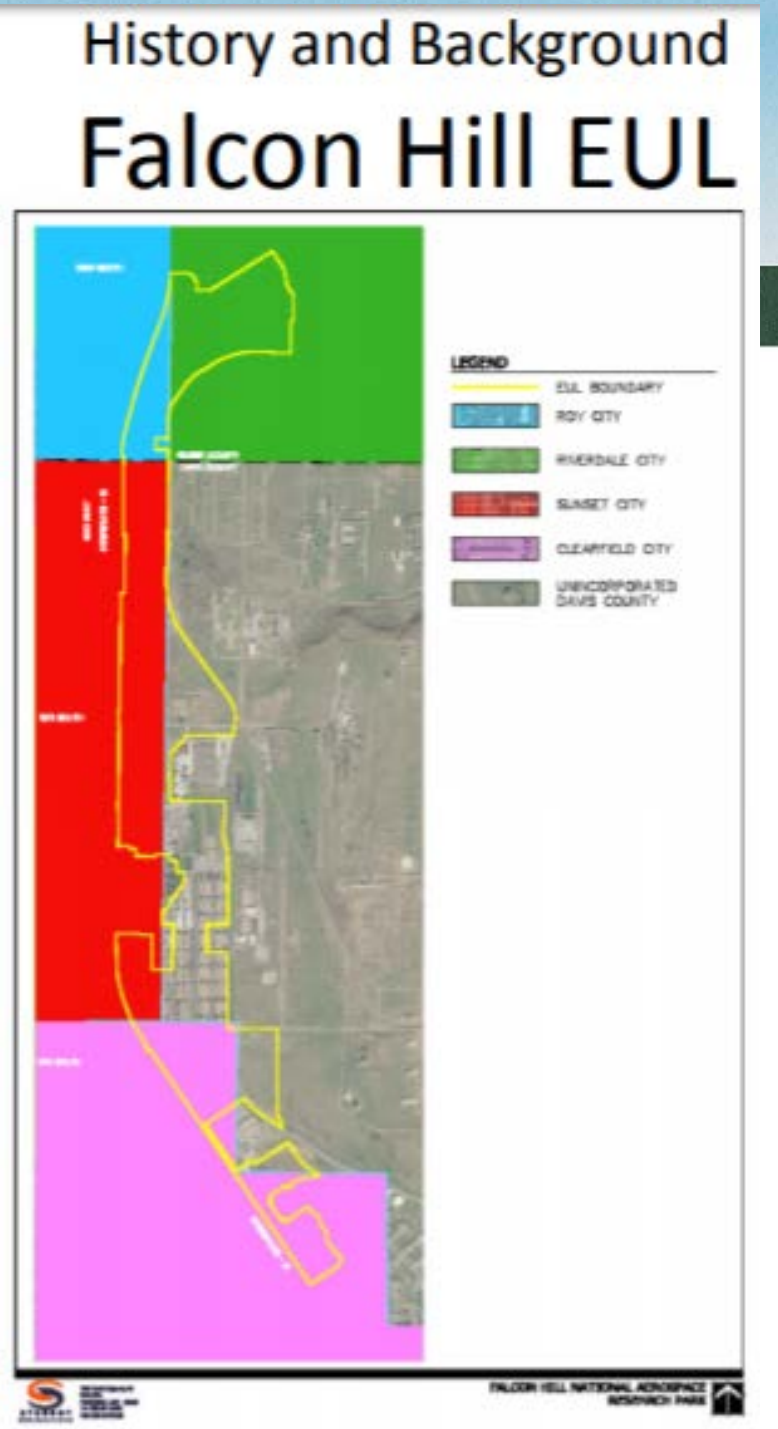
- .5% Point of Sale
- 1.1% Resort Communities Tax
- Can Be Used in Either Fund

Municipal Services Revenue

- **Source:**
  - 25% county & city property taxes
  - Energy Tax (6%)
  - Telecom Tax (3.5%)
  - Transient Room Tax (.5%)
  - Sales Tax
  - Resort Communities Tax
- **Use for:**
  - MIDA Operations
  - Provide Municipal Services
  - Remainder to county

MIDA projects

- “Enhanced use leasing: lease underutilized federally owned lands for 50 years
  - Falcon Hill, 550 acre commercial development adjacent to Hill AFB along I-15
  - Largest Air Force EUL in USA
  - 50% Woodbury Corp. and 50% Hunt Co., aerospace research park inside and outside the fence
  - Runway at East Gate (Hill AFB)
  - Bluffdale NSA facility (MIDA did offsite utilities)
  - Military Recreation facility in Wasatch County (6 acres of 2300 acre project near Deer Valley; military & private land)
- One-stop-shop for municipal services (regulatory, land use, utilities, economic development, infrastructure)



MIDA from 2008-2014

- Legislature has appropriated $20.89 million to MIDA
- $2.5 million in tax increment bonds
- Projects built with funds:
  - Rebuilt 650 North road to Hill
  - Install infrastructure
  - New Hill West Gate
  - New Hill Security Forces Building
  - New commercial building for Air Force
- Private investment of $53 million
- Planned as of 2014: 100k sq. ft. flex building inside the fence ($10 million) and 75k sq. ft. building outside the fence ($12 million)

- Hill Air Force Base
- Utah Test and Training Range
- Utah National Guard
  - Camp Williams
  - Salt Lake Air Base
- Dugway Proving Ground
- Tooele Army Depot
- Fort Douglas
  - US Army Reserve
  - US Navy Reserve
  - US Marine Corps Reserve

Crossroads of the West Port Authority proposal

- “Want a jurisdiction that is the equivalent of a planning commission and council and structure to oversee the entire area and be a value add to all stakeholders”
- 9 members of authority
  - Utah Senate
  - Utah House of Representatives
  - Governor appointment
  - World Trade Center
  - Executive Director
  - Private sector
  - 7 county CIB or other county
  - Salt Lake County
  - ***Salt Lake City***

- “This is a regional project and bigger than a city or county”
- “Want stability … urgency … vision … do not want to be vulnerable to politics”
- Bring together manufacturing, freight, commercial rail and trucking, highways, air cargo integration

RESOLUTION 2017-001

September 2017

(A) Title: Encouraging Economic Development while Preserving Local Land Use Authority and Local Control of Tax Increment

(B) We, the members of the Utah League of Cities and Towns find:

Whereas, economic development is important to the prosperity of the State of Utah and the prosperity and future growth of local cities and towns; and

Whereas, the vast majority of economic development occurs on privately owned property within the boundaries of cities and towns; and

Whereas, cities and towns have utilized their traditional land use authority to enable these economic development opportunities; and

Whereas, the preservation of this local land use authority on private property is essential so that cities and towns can ensure that economic development occurs, but in a manner, location and scale that are appropriate and compatible with the long range plans for the local community; and

Whereas, cities and towns have also utilized tax increment financing, made available through the creation of Community Reinvestment Areas, to incentivize economic development or redevelopment and to help defray the costs of infrastructure necessary for that development; and

Whereas, the preservation of this local control of tax increment is also essential in order for cities and towns to have the resources necessary to facilitate economic development, but also to ensure that the local community will have sufficient funds to provide the municipal services that will be needed as that development occurs; and

Whereas, in recent years local municipalities have worked in cooperation with the State of Utah, the business community, and other stakeholders to support and promote economic development opportunities, which has resulted in an extraordinary level of economic prosperity within the State of Utah; and

Whereas, local municipalities are eager to promote and pursue further opportunities for economic development, particularly in proximity to state transportation infrastructure and in partnership with the State, while preserving their traditional local land use authority on private property and local control of tax increment;

(C) Now, therefore, we the members of the Utah League of Cities and Towns, resolve that:

1. Cities and towns within the State of Utah commit that they are willing and ready to collaborate and partner with the State, the business community, and other stakeholders to pursue a broad range of

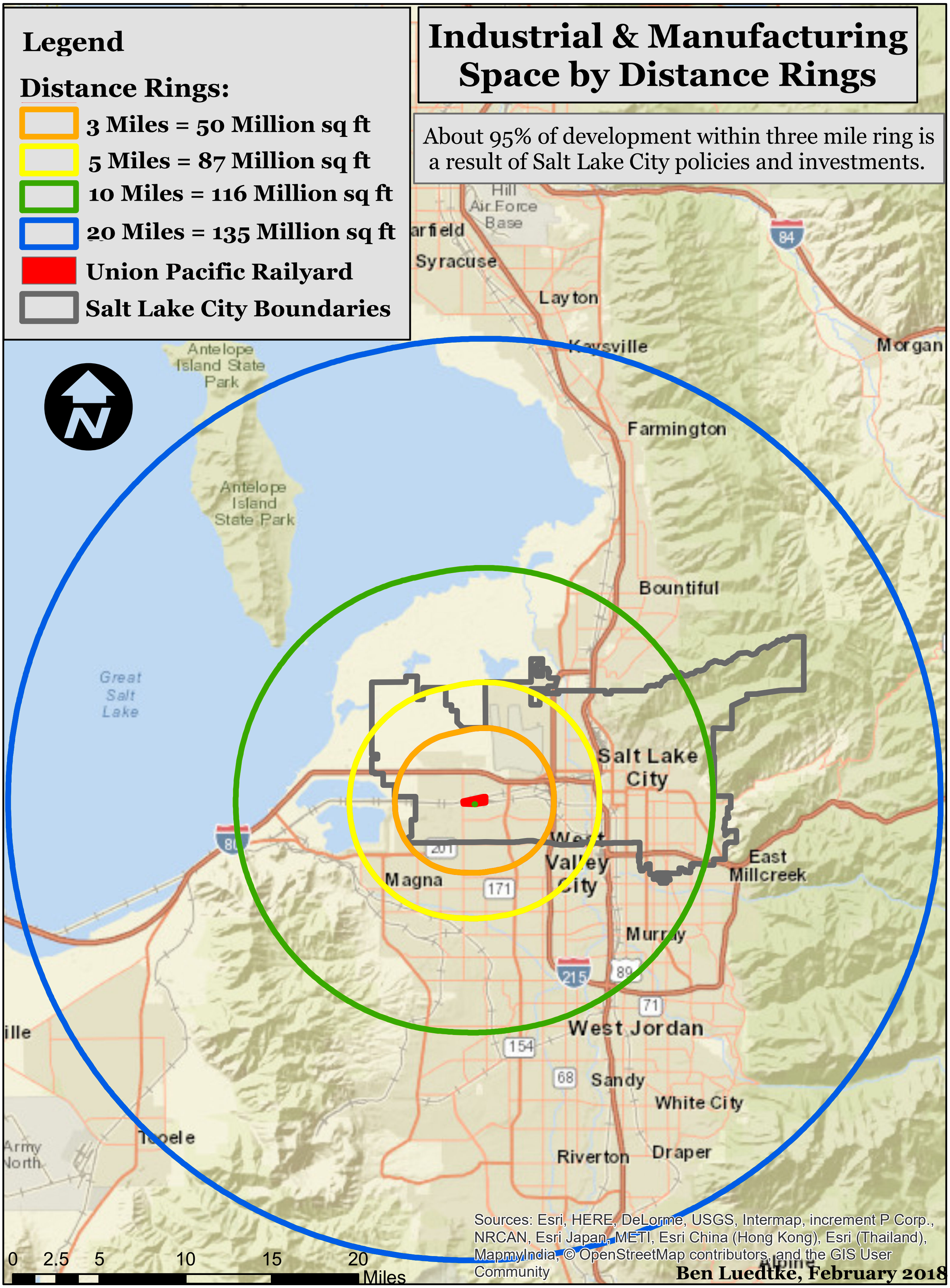
future economic development opportunities, including those located in proximity to State transportation infrastructure.

2. Cities and towns cannot support development proposals, task forces, commissions, districts, development authorities or other legislation that would deprive local municipalities of their traditional local land use authority on private property, or deprive them of control of tax increment generated within their jurisdiction without their consent.

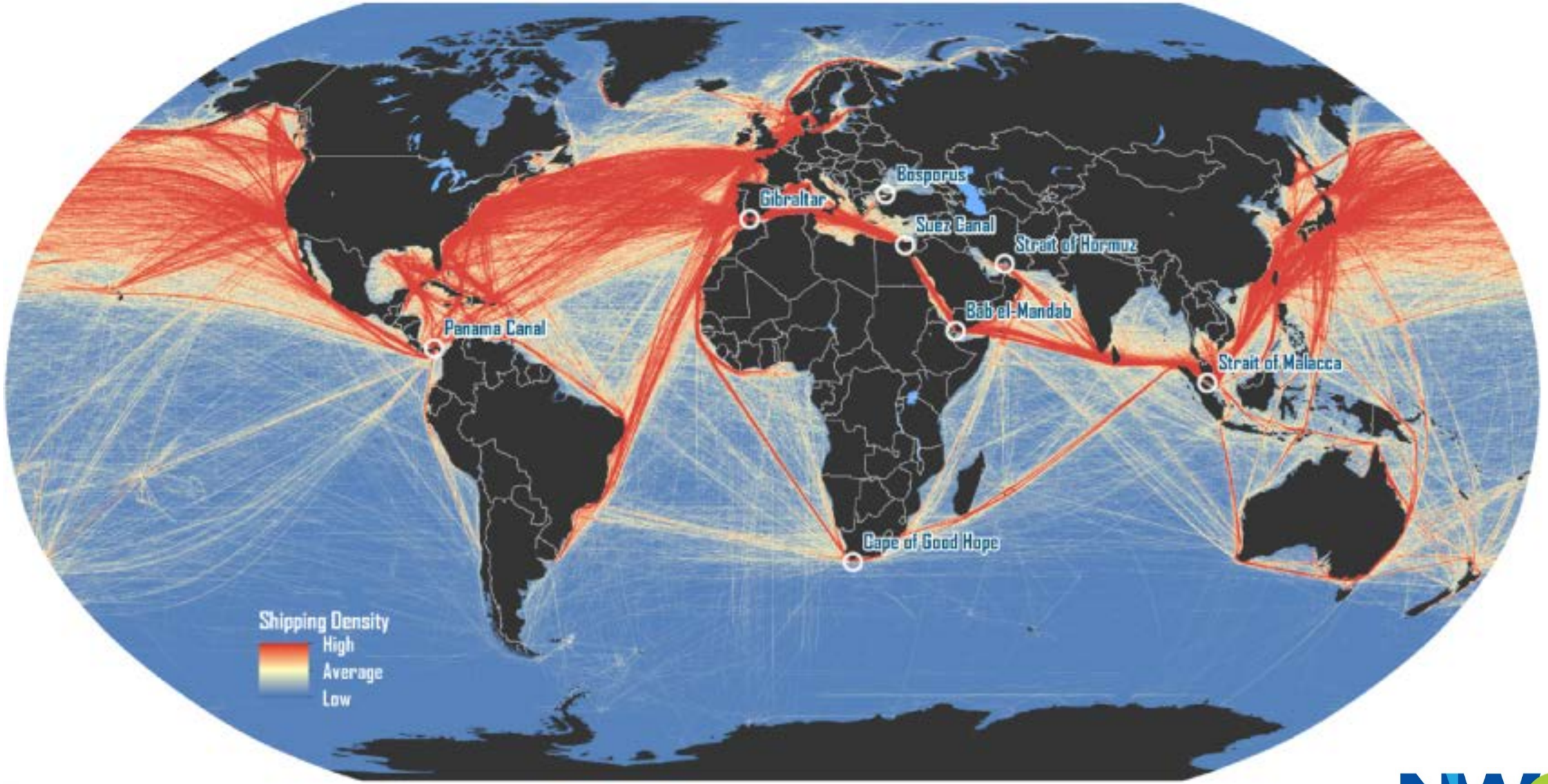
3. League staff should seek appropriate opportunities to communicate the principles contained within this resolution with State legislative leaders.

Submitted by

Mayor Bill Applegarth, Riverton City


Industrial & Manufacturing Space by Distance Rings
About 95% of development within three mile ring is a result of Salt Lake City policies and investments.
Legend
Distance Rings:
3 Miles = 50 Million sq ft
5 Miles = 87 Million sq ft
10 Miles = 116 Million sq ft
20 Miles = 135 Million sq ft
Union Pacific Railyard
Salt Lake City Boundaries
N
Hill Air Force Base
Syracuse
Layton
Kaysville
Morgan
84
Antelope Island State Park
Farmington
Antelope Island State Park
Bountiful
Great Salt Lake
Salt Lake City
80
201
Magna
171
Valley City
East Millcreek
Murray
215
89
71
West Jordan
154
68
Sandy
White City
Tooele
Riverton
Draper
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
0 2.5 5 10 15 20
Miles
Ben Luedtke, February 2018

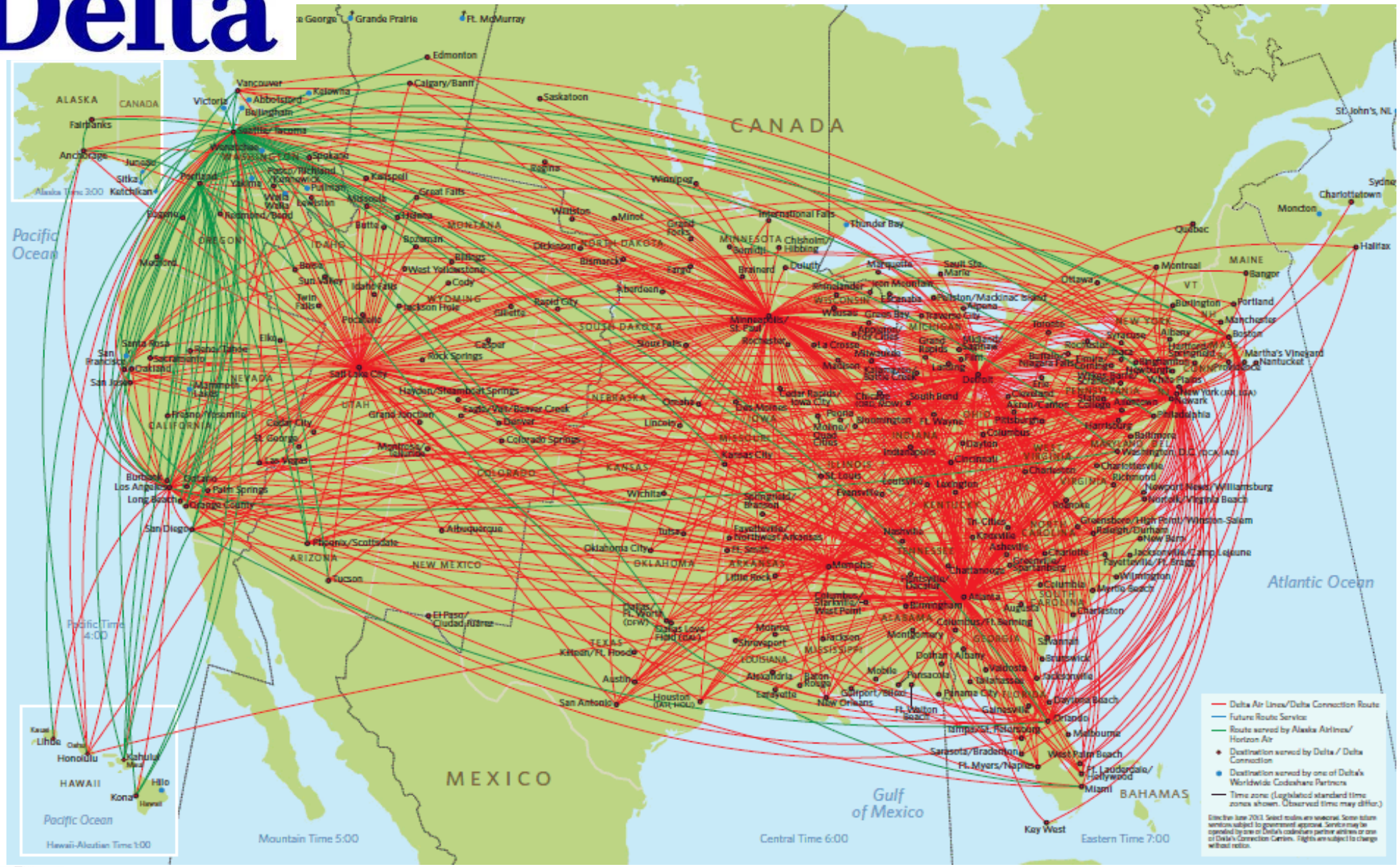
SHIPPING LANE DENSITY MAP



PRICE REAL ESTATE

NWQB DOES BUSINESS

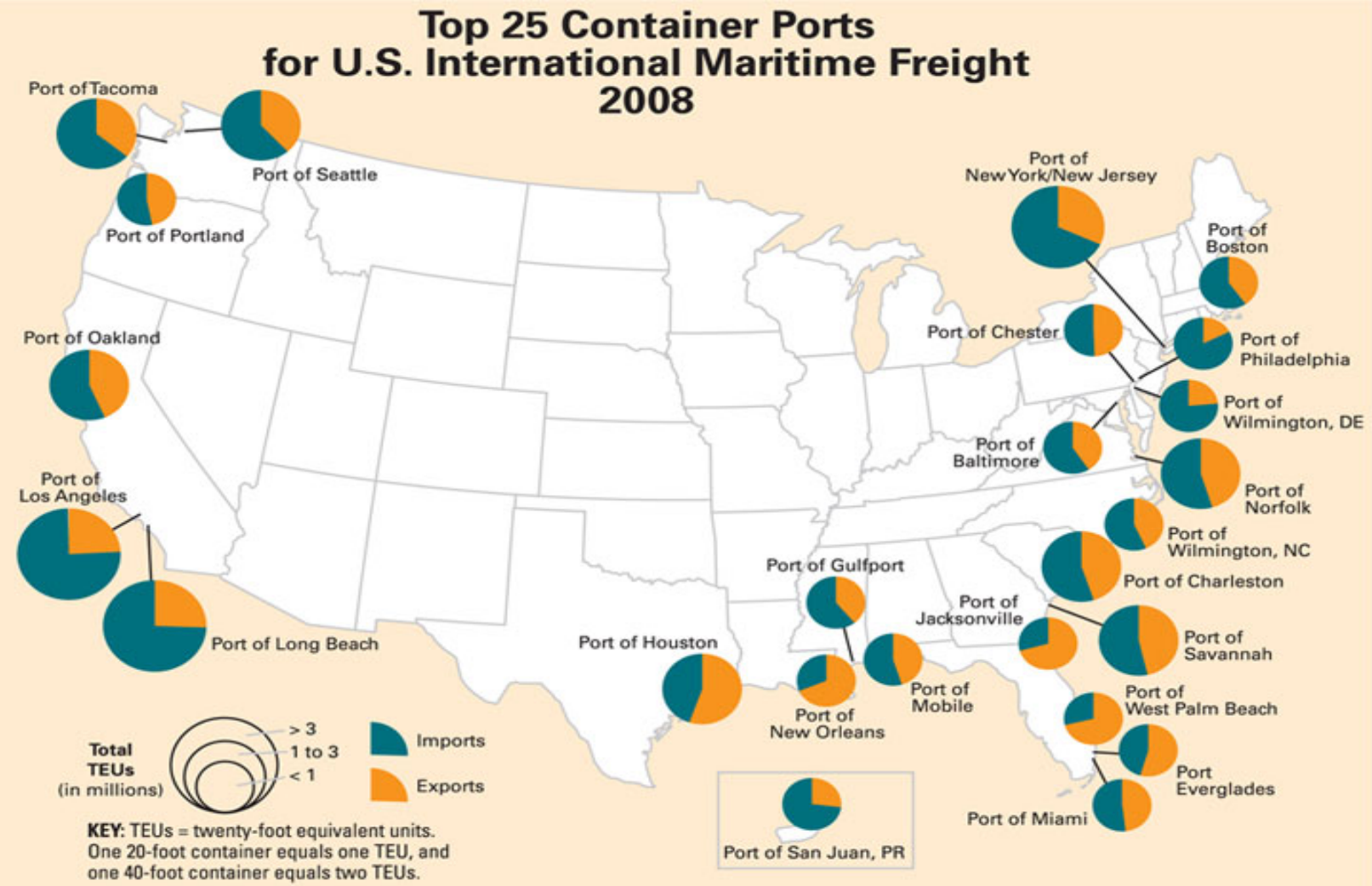
Delta



PRICE REAL ESTATE

NWQB DOES BUSINESS

TOP 25 CONTAINER PORTS

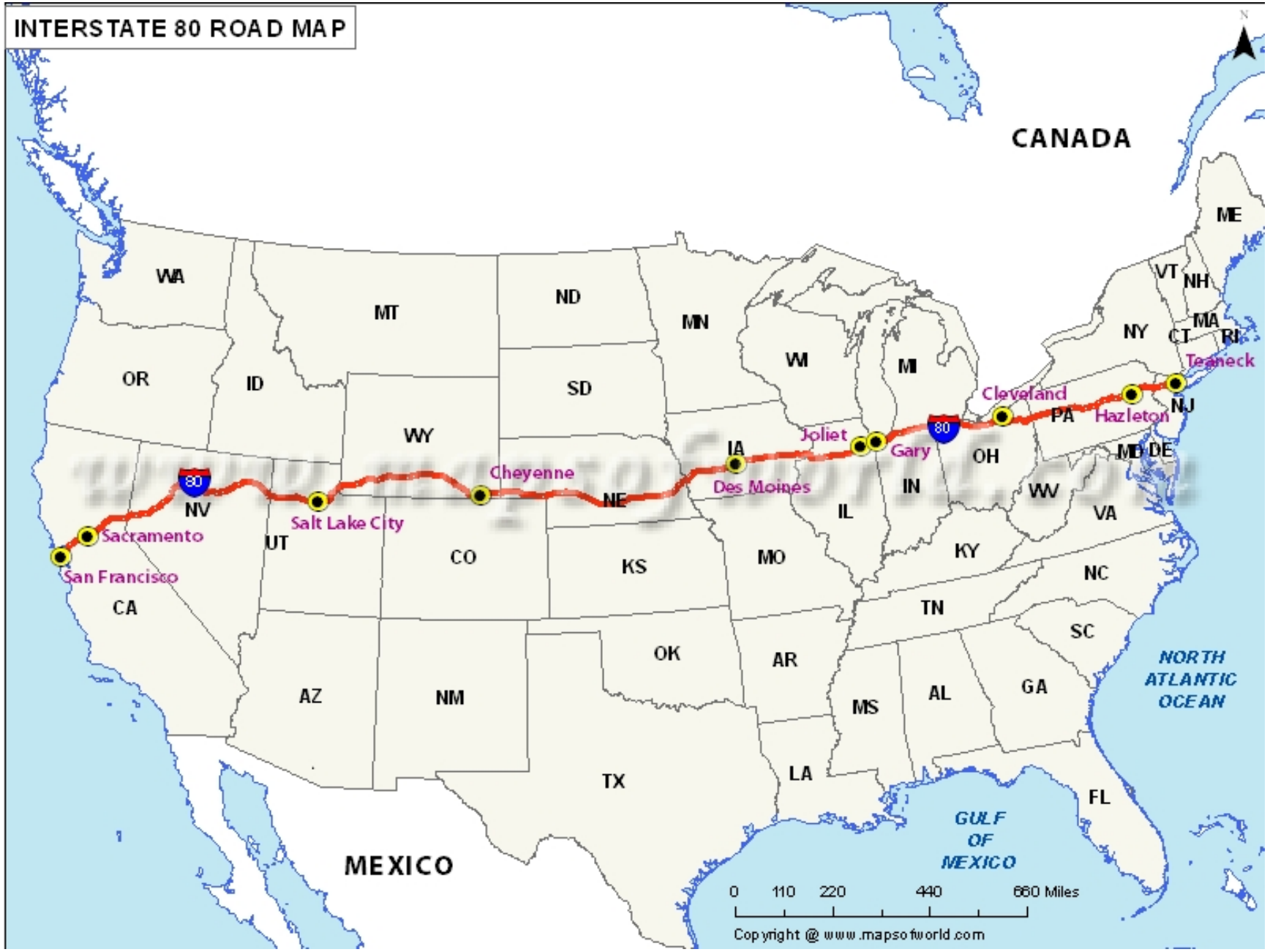


NOTE: The data in this figure include only loaded containers in U.S. international maritime activity and cover U.S. imports, exports, and transshipments. Therefore, the trade levels will be greater than those reported from U.S. international trade statistics, which exclude transshipments. The data also exclude military shipments.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, based on data from U.S. Department of Transportation, Maritime Administration, which are drawn from The Journal of Commerce, Port Import Export Reporting Service (PIERS), available at *www.marad.dot.gov*, as of March 30, 2009.

UNION PACIFIC RAIL MAP

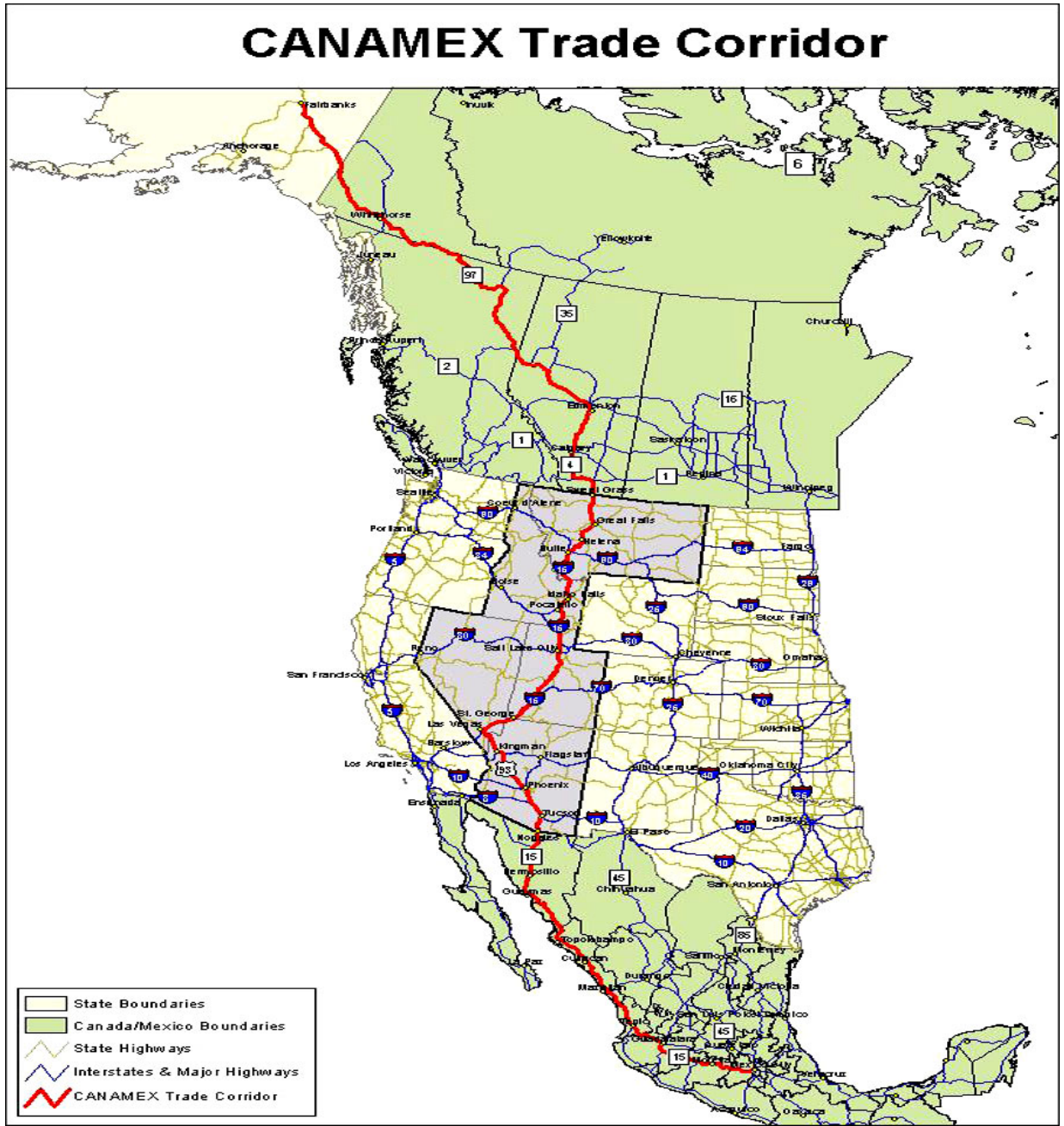
I-80 INTERSTATE MAP



PRICE REAL ESTATE

NWQB DOES BUSINESS

CANAMEX INTERSTATE MAP

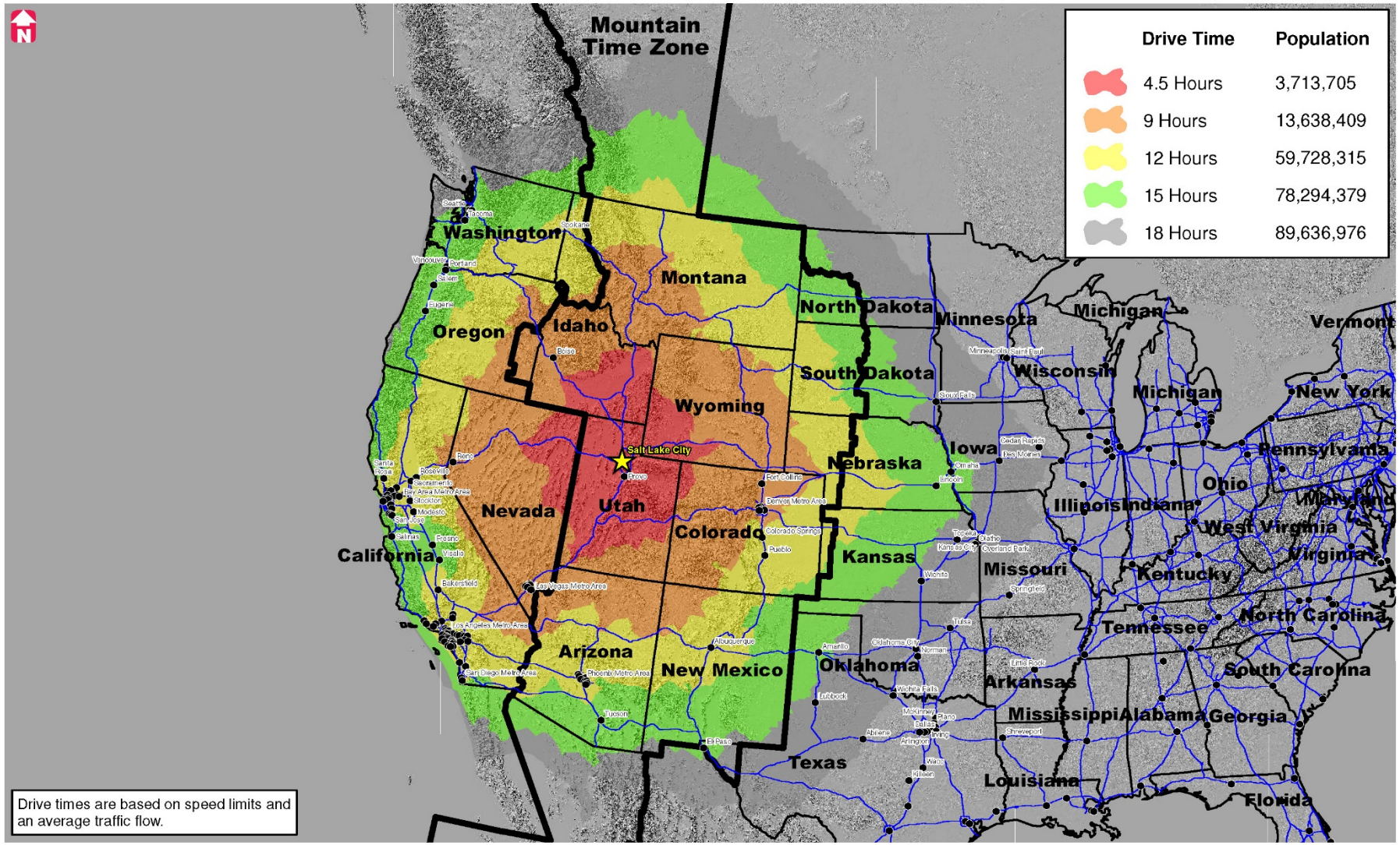


PRICE REAL ESTATE

NWQB DOES BUSINESS

DRIVE TIMES

Salt Lake City, Utah



Kyle Roberts, CCIM, SIOR

Newmark Grubb ACRES

376 East 400 South, Suite 120 | Salt Lake City, Utah 84111

Office 801.578.5555 | Fax 801.578.5500

www.ngacres.com

0 250 500 Miles

Map Data and/or Imagery Courtesy of Esri

PRICE REAL ESTATE

NWQB DOES BUSINESS

Utah Inland Port Feasibility Study

presented to

Utah Inland Port Advisory Committee

presented by

Bob Gollnik

Adam Wasserman

Lois Yates

December 8, 2017

CAMBRIDGE SYSTEMATICS

GLDPARTNERS

PRICE REAL ESTATE

NWQ DOES BUSINESS

Logistics Position
Commercial Vehicles

Salt Lake City – Pacific Northwest

- Distance: 840 Miles
- Service Time: 14.5 hours
- Corridor(s): I-84, I-32

Salt Lake City – Port of Oakland

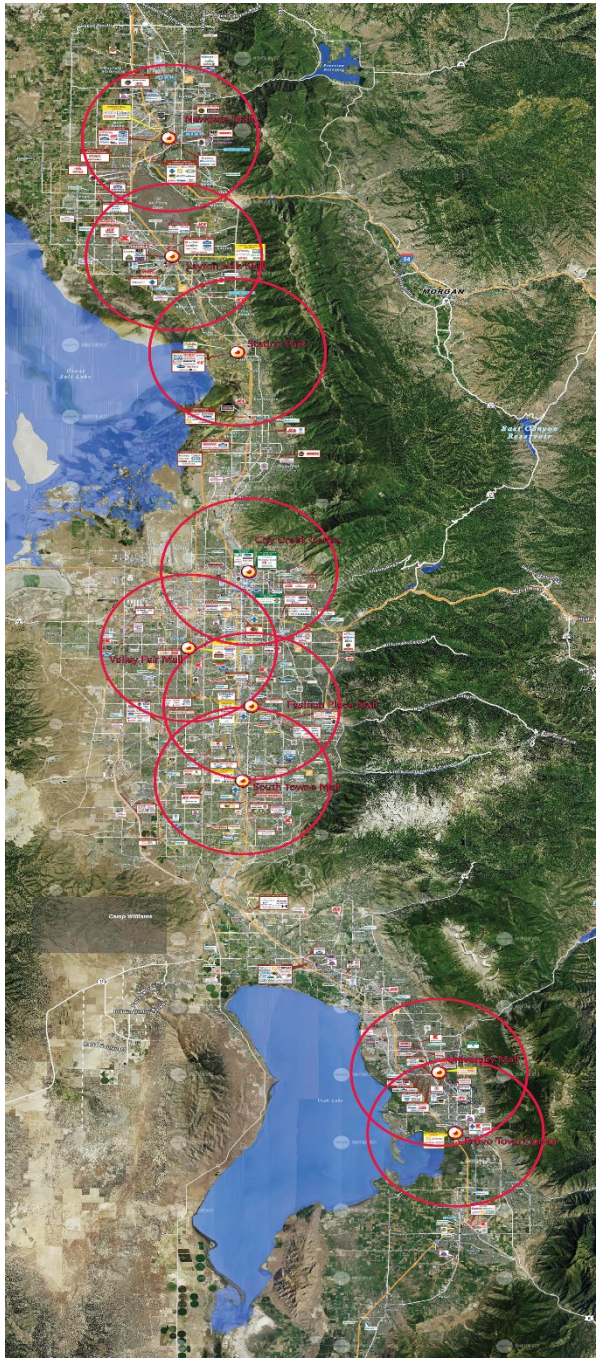
- Distance: 725 Miles
- Service Time: 12.5 Hours
- Corridor(s): I-80

Salt Lake City – Port of Los Angeles/Port of Long Beach

- Distance: 705 Miles
- Service Time: 12 Hours
- Corridor(s): I-15

*Note: Distance and times are approximate

Wasatch Front Regional Malls



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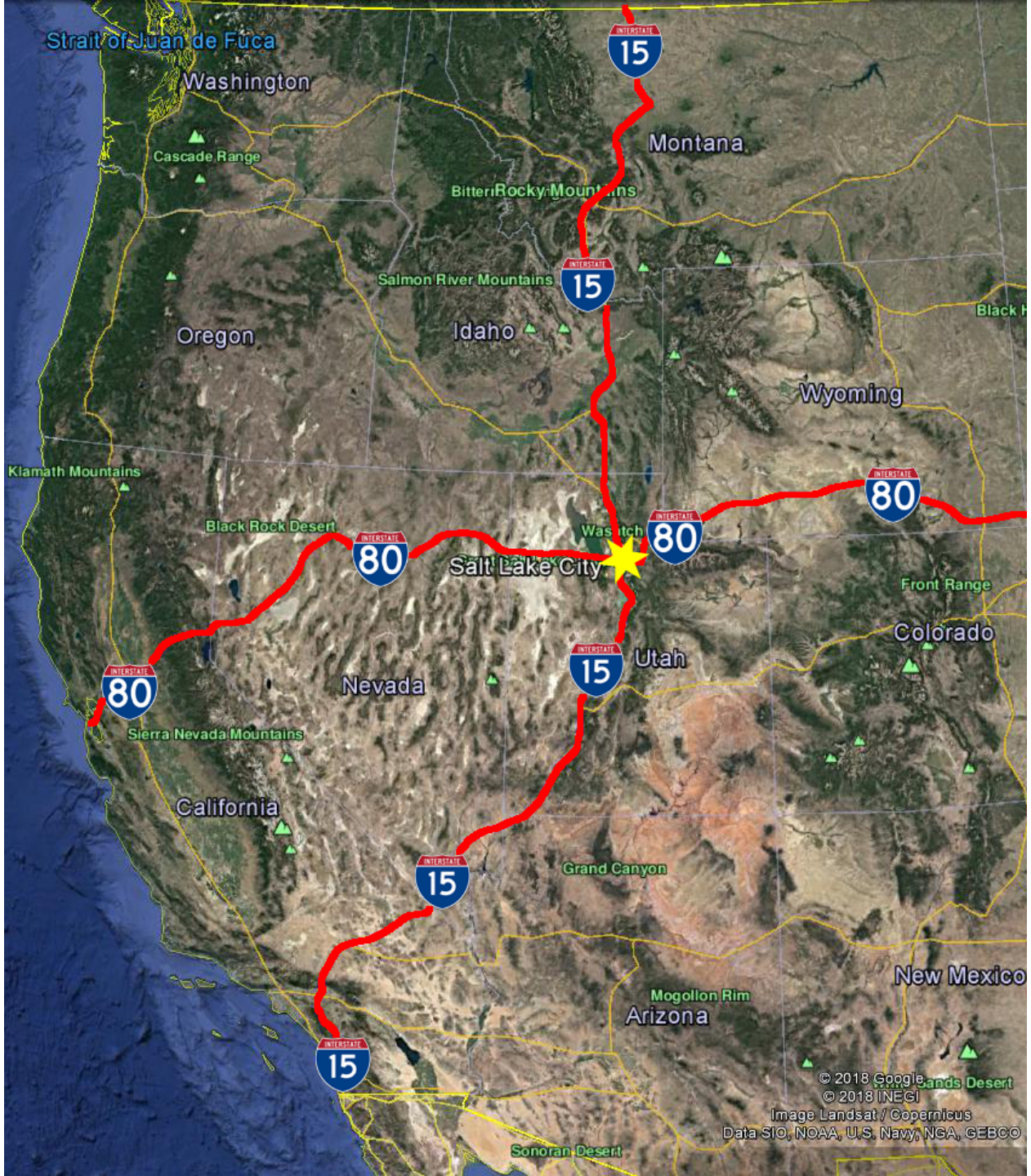


PRICE REAL ESTATE

NWQB DOES BUSINESS

BUSINESS INSIDER

Hayley Peterson
1/3/2018

A tsunami of store closures is about to hit the US — and it's expected to eclipse the retail carnage of 2017

Retailers are bracing for a fresh wave of store closures in 2018 that's expected to eclipse the rash of closures that rocked the industry last year.

"Landlords are panicking," said Larry Perkins, CEO and founder of the advisory firm SierraConstellation Partners. "The last year was pretty apocalyptic from a retail standpoint, and the macro issues haven't changed. There will continue to be a high degree of bankruptcies and store closures."

2017 was a record year for both store closures and retail bankruptcies.

Dozens of retailers including Macy's, Sears, and JCPenney shuttered an estimated total of 9,000 stores — far exceeding recessionary levels — and 50 chains filed for bankruptcy over the course of the year.

PRICE REAL ESTATE

NWQB DOES BUSINESS

BUSINESS INSIDER

Hayley Peterson
1/3/2018

The loss of even one anchor tenant can trigger a decades-long downward spiral for mall owners.
That's because the malls don't only lose the income and shopper traffic from that store's business. The closure often triggers co-tenancy clauses that allow the remaining mall tenants to exercise their right to terminate their leases or renegotiate the terms, typically with a period of lower rents, until another retailer moves into the vacant anchor space.
That's good news for retailers looking to grow their physical assets — it means they are more likely to score low rent and favorable lease terms.
But it's terrible news for retail landlords, some of whom are now trying to stop the bleeding by suing the companies that are closing stores.

Mall owners are suing retailers to keep stores open

Simon Property Group, one of the biggest mall operators in the country, sued Starbucks this year after the coffee chain said it that it planned to close all 379 stores in its Teavana chain, 77 of which are located in Simon Property Group malls.
The mall owner demanded that Starbucks keep running the tea shops located in its malls, arguing in part that their closure would reduce traffic to surrounding stores.
A judge ruled in Simon Property Group's favor in December and ordered Starbucks to keep operating the Teavana stores in question.
Whole Foods was also recently sued for a store closure. The grocery chain closed a Seattle-area store and the owners of the property sued the company for breaking its long-term lease.
A judge has since ordered Whole Foods to reopen the store, which Whole Foods had closed in October.
As mall operators become increasingly desperate to keep the lights on, many more retailers could find themselves in court, fighting to shut down dying stores.

Not all retailers and shopping malls are doomed

To be sure, there are still hundreds of high-performing shopping malls in the US that are expected to remain immune from the fallout of shrinking retailers.
Only the lowest-performing malls — of which there are roughly 300 — are in danger of going out of business.
There are also plenty of retailers, mostly discounters, that are growing their physical assets while others shrink.
Dollar General, Dollar Tree, Lidl, Aldi, Ross Stores, and TJ Maxx are planning to open hundreds of new stores next year.
"Retail isn't going away by any means," Perkins said. "We just got a little bit out of control with the volume of retailers and the number of stores."

THE WALL STREET JOURNAL.

https://www.wsj.com/articles/online-retailers-new-warehouses-heat-up-local-job-markets-1491739203

LOGISTICS REPORT

Online Retailers' New Warehouses Heat Up Local Job Markets

Fulfillment centers for online retailers are offering flexible work schedules, gift cards, bonuses and raises to attract workers

Luis Ramirez works as a 'picker' at a Redlands, Calif., distribution center, collecting fashion items from stock shelves to fill online orders.

Emory Montgomery works at the warehouse, operated by Radial for fashion retailer Zara, organizing outgoing packages. Radial recently raised pay at the facility by 5% to 7%.

Judith Lopez has worked at the packing station at the Redlands facility for two years and lives in nearby San Bernardino.

Cameron Mitchell has worked for close to two years at the warehouse, which is surrounded by other distribution centers.

It doesn't take much to lure workers away. "A guy who makes $10 an hour, you offer $10.25, he's going to leave," said Tom Landry, president of Allegiance Staffing, which supplies logistics and manufacturing workers. "That's another tank of gas."

Employees prep and ship internet orders at packing stations in the Redlands distribution center.

Some warehouse operators are adding part-time positions or compressed shifts that pack 36 hours of work into three days, in hopes of luring students, working parents or retirees. Some firms are tapping local organizations and community colleges. Incentives deployed each fall for the holiday rush, like performance pay, are becoming more common year-round.

"It's almost like peak [season] is never ending," said Meghan Henson, chief human resources officer at XPO Logistics Inc., which operates warehouses for large retailers like IKEA. "If a warehouse is going up down the block, we want to find out what they're paying."

Luis Ramirez, 26 years old, joined Radial in 2014, after hearing it was paying $10 an hour at a new distribution center for Zara, a retail unit of Inditex SA . That was 50 cents an hour more than he earned at a warehouse job he got through a staffing agency.

Mr. Ramirez earned a $200 attendance bonus during therecent holiday season and said Zara gives out $100 gift cards at the end of the year. Employees also can get paid more if they exceed targets during busy times, when apparel goes on sale. "For picking, the rate is 65 [clothing items] an hour," Mr. Ramirez said. Workers who exceed 70 items an hour "get a dollar extra for every hour you hit that rate." He said he plans to stayat Radial for now.

Nancy Loera packs items to be shipped from the Redlands warehouse. Radial recently raised pay at the warehouse by 5% to 7%.

Raising pay can reduce employee turnover and save companies money on training. Experienced workers tend to be more productive, said David Caines, chief operating officer at logistics provider Kenco.

Some companies are investing in automated systems so their facilities can handle more orders without hiring additional staff. Software can direct workers to the right shelf faster and reduce errors.

CNNMoney

Jobs everywhere! Except at stores

by Chris Isidore @CNNMoney
January 5, 2018: 1:18 PM ET

The job market looks like it doing well right now. Unless you head to the mall.
Record numbers of store closings and a surge in retail bankruptcies, as well as the shift to online shopping, have forced retailers to slash jobs even as other employers scramble to find qualified workers.

The sector lost a total of 66,500 jobs in 2017.

General merchandise stores, the segment that includes department stores, were hit the hardest, losing 90,300 jobs, according to the Friday's December jobs reportfrom the Labor Department. Clothing stores cut another 28,600 jobs. Drug stores lost 18,400.

These job losses tend to hit the young, elderly, women and minorities the hardest. About 60% of department store employees are female, compared to 47% of workers overall. Minorities, the elderly and teenagers are also far more likely to find jobs in department and discount stores than they are elsewhere. Teenagers hold 8% of department store jobs, compared to 3% of jobs overall.

China will be middle-income by 2030,with spending on cars, luxuries, health to rise

Nyshka Chandran | @nyshkac
13 Hours Ago

CNBC

China will become a middle-class society by 2030, based on income measures, new research suggests.

The world's number-two economy is currently at an early-to-middle stage of development in terms of per capita consumption, roughly at the level of Malaysia in the 2000s, the Economist Intelligence Unit (EIU) said in a new report on Wednesday.

But as the low-income proportion of population shrinks, around three-quarters of Chinese will likely be defined as "middle income" in 15 years' time, the report said.

ChinaFotoPress - Getty Images

Almost 40 percent of the population were in the low-income bracket—defined as having an annual personal disposable income below $2,100

amazon

KEY ACQUISITIONS
IN BILLIONS

CASH ● STOCK ● U UNDISCLOSED

2017	Whole Foods	$13.70 ●
2009	Zappos	$1.20 ●
2014	Twitch	$0.97 ●
2012	Kiva Systems	$0.78 ●
2017	Souq.com	$0.65 U
2010	Quidsi	$0.55 ● ●
2015	Elemental Tech	$0.50 ●
2015	Annapurna Labs	$0.37 U
2008	Audible	$0.30 ●
1999	Alexa	$0.25 ●
2013	Goodreads	$0.15 U
2010	Woot	$0.11 ●
1999	Accept.com	$0.10 U
1998	IMDB	$0.06 ● ●

WHOLE FOODS MARKET

At $13.7B in cash, Whole Foods is Amazon's boldest acquisition yet. The move signals Amazon's ambition, which is to become a transcendent brand that touches many aspects of daily life.

amazon robotics

Kiva Systems became Amazon Robotics, a subsidiary that manufactures mobile robotic fulfillment systems for Amazon's array of warehouses.

NASH HOLDINGS LLC

KEY ACQUISITIONS
IN BILLIONS

Washington Post	$0.25

The Washington Post

In 2013, Bezos locked up one of the world's most trusted publishers for $250 million, and has big plans to redefine the company through the use of technology.

Bloomberg

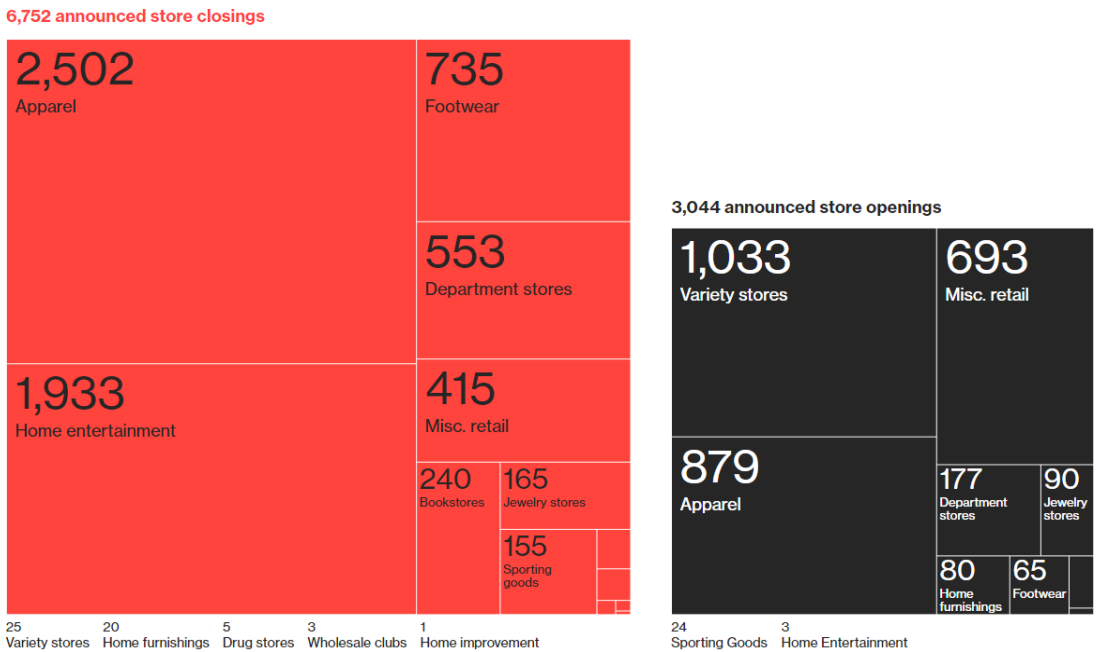
America's 'Retail Apocalypse' Is Really Just Beginning

By Matt Townsend, Jenny Surane, Emma Orr and Christopher Cannon
November 8, 2017

The so-called retail apocalypse has become so ingrained in the U.S. that it now has the distinction of its own Wikipedia entry.

The industry's response to that kind of doomsday description has included blaming the media for hyping the troubles of a few well-known chains as proof of a systemic meltdown. There is some truth to that. In the U.S., retailers announced more than 3,000 store openings in the first three quarters of this year.

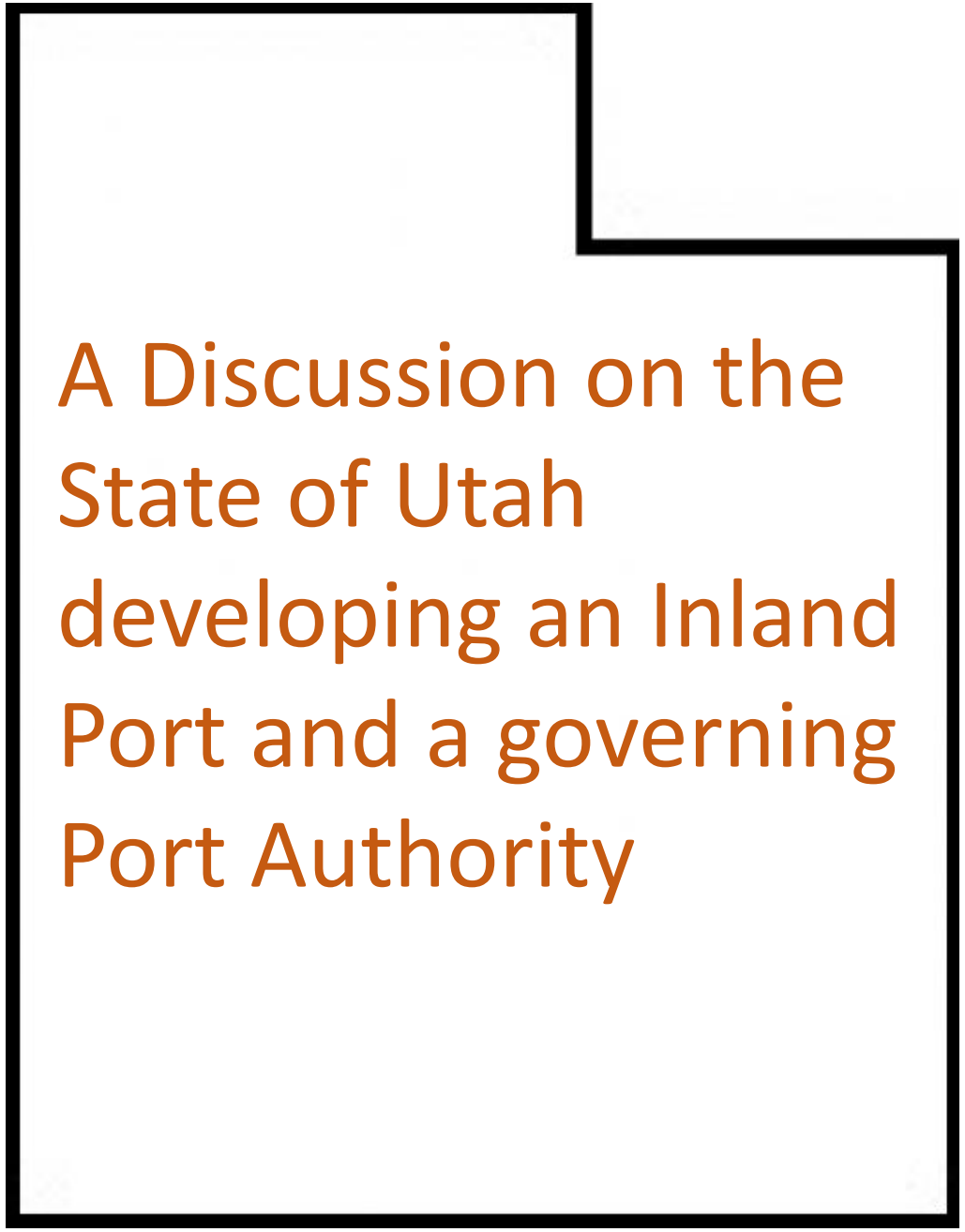
Clothing stores and entertainment chains lead store closing surge
Q1–Q3 2017 data



Source: ICSC Research Team and PNC Real Estate Research

PRICE REAL ESTATE

NWQB DOES BUSINESS


A Discussion on the State of Utah developing an Inland Port and a governing Port Authority

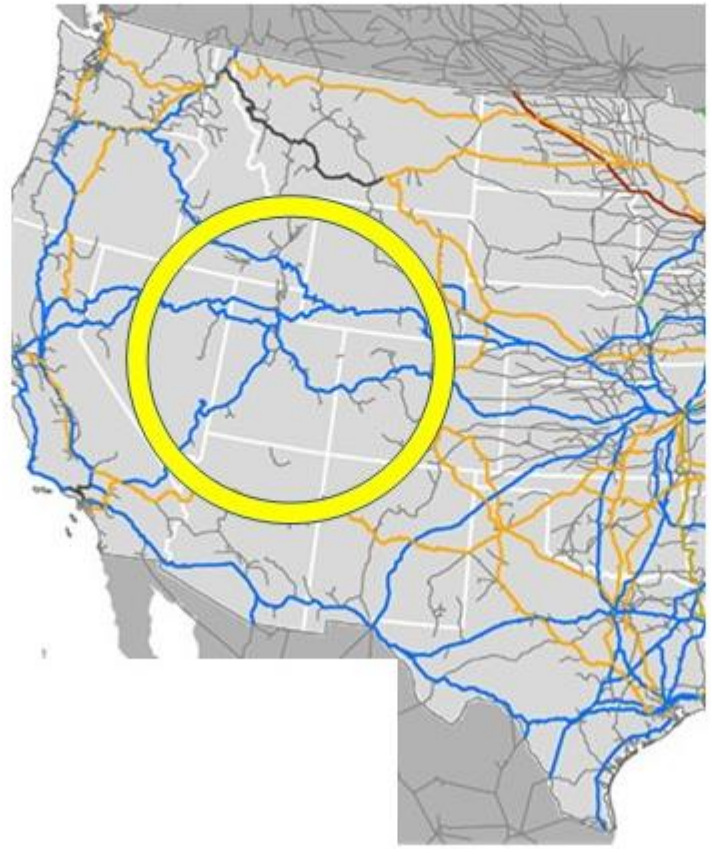
To capitalize on increasing metropolitan land values, Singapore recently picked up and moved their entire port operation miles upriver. Singapore officials to us, “We don’t play small ball.”

Taken on State of Utah Trade Mission, August 28, 2017

Utah: Crossroads of the West

CROSSROADS
INTERSTATE ROAD NETWORK

CROSSROADS
INTERSTATE RAIL NETWORK



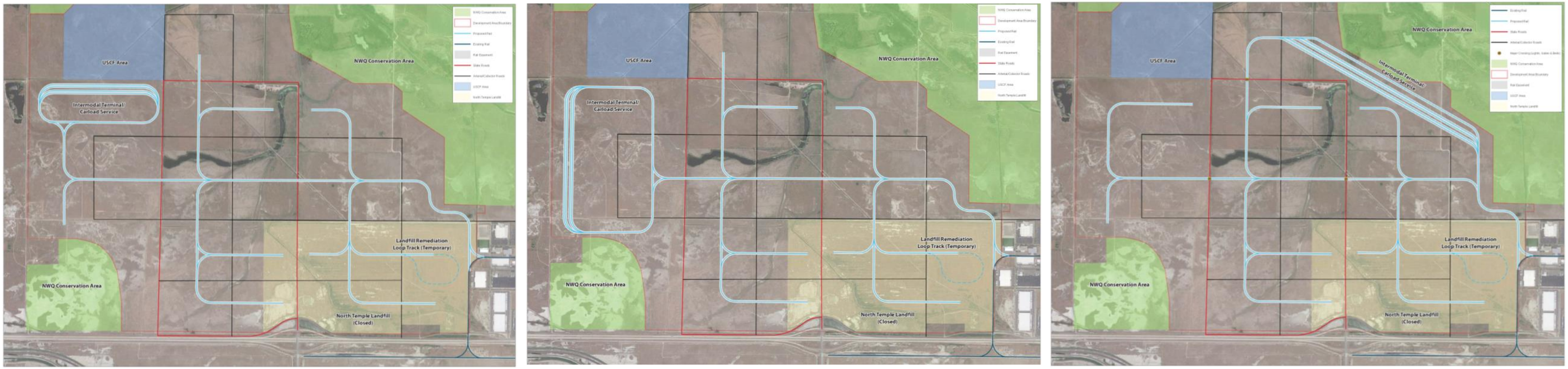
CROSSROADS
AIR TRANSPORT NETWORK

CREATING A SECURE U.S. CUSTOMS CLEARING ZONE, AND BENEFITTING FROM THE ASSOCIATED ECONOMICS, IS IN THE PUBLIC INTEREST

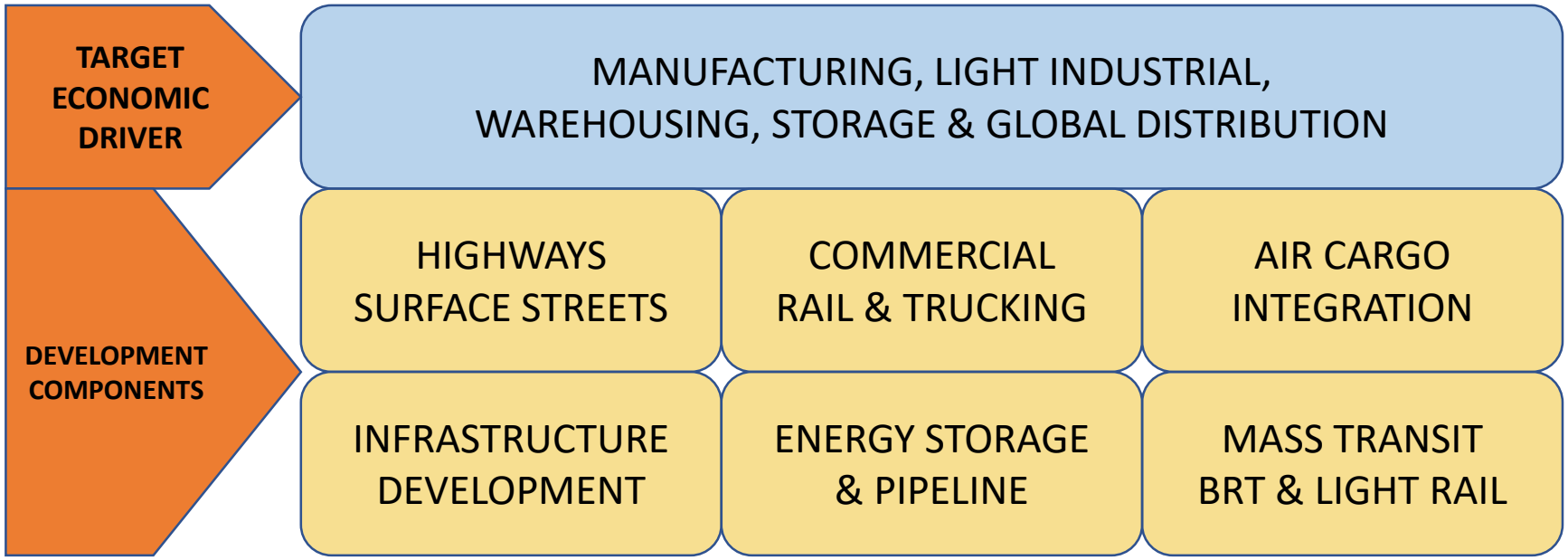
☐ PRIVATE INTEREST

☑ PUBLIC INTEREST

Optional NWQ track configurations including an intermodal rail facility that could be secured for a Customs clearinghouse



INLAND PORT COMPONENTS THAT NEED A GOVERNING AUTHORITY

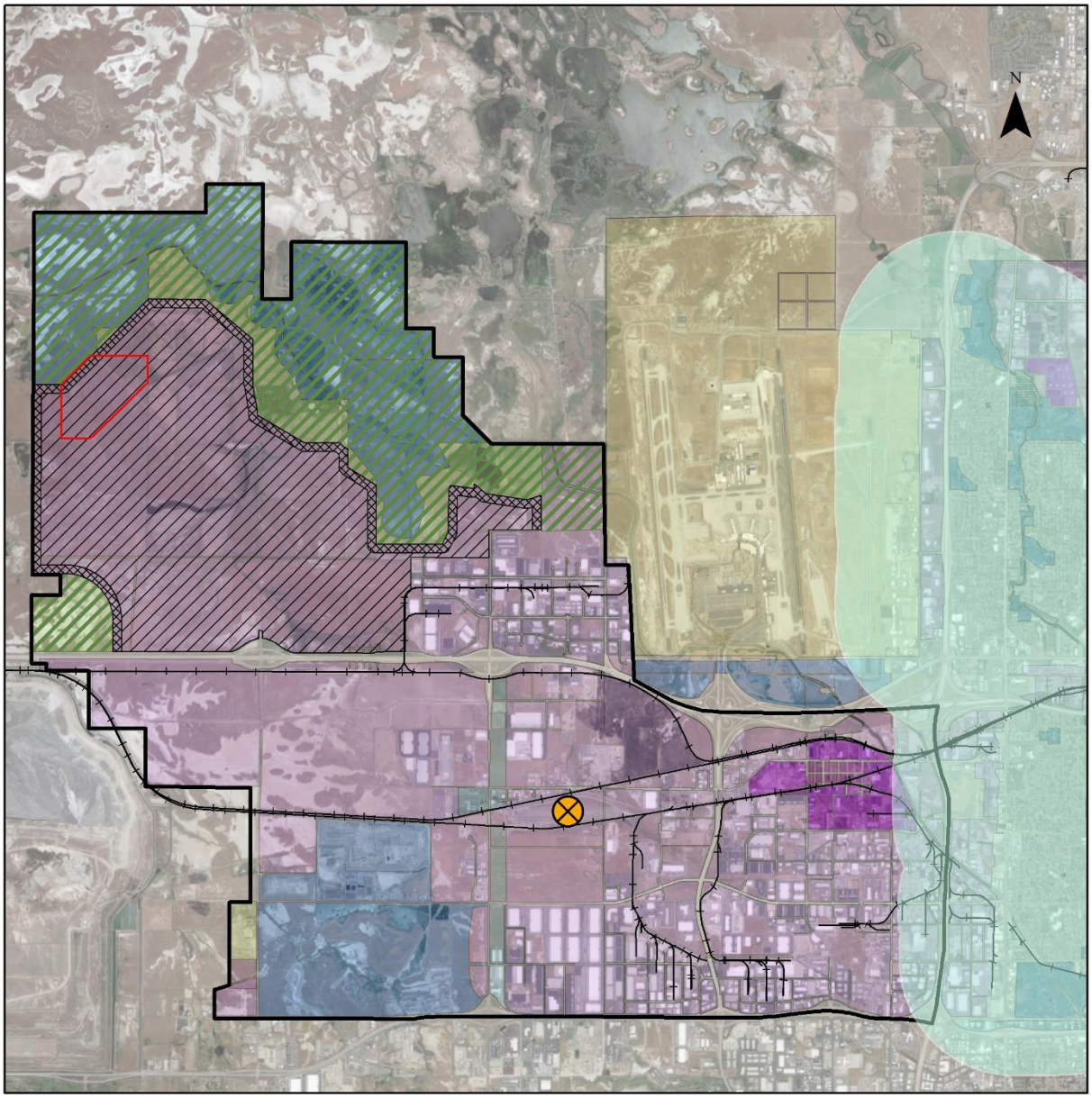


CROSSROADS OF THE WEST (XW) PORT AUTHORITY		
UTAH SENATE	WORLD TRADE CENTER UTAH	SALT LAKE COUNTY
UTAH HOUSE	EXECUTIVE DIRECTOR	SALT LAKE CITY
GOVERNOR APPOINTMENT	PRIVATE SECTOR	7 COUNTY CIB OR OTHER COUNTY

Utah:
Crossroads
of the ~~West~~ World.

(We don’t play small ball, either.)

Potential Global Trade Port Locations and Zoning



0 1 2 4 Miles

Legend

- Prison Site
- Residential Area One Mile Buffer
- NWQ Boundary
- Existing Rail

Northwest Quadrant Overlay

- Development Area
- Eco-Industrial Buffer Area
- Natural Area
- Existing Railroad Freight Terminal

ZONING

- AG
- AIRPORT
- CG
- M-1
- M-2
- OS

THE OTHER NORTH WEST QUADRANT

NWQ SOUTH OF I-80

NORTH I-80 – EAST – SOUTH 1300 S EAST 4800 W

RIVERBEND MANAGEMENT

"In the past 10 years, as it relates to our 360 acre land holding which is South of I-80, we have had a positive, productive and effective working relationships with Salt Lake City, UDOT, Public Utilities, and the State. Last week we submitted our first of many building permit applications for approval. Building 1 is the first step in completing a multi phased world class industrial park."

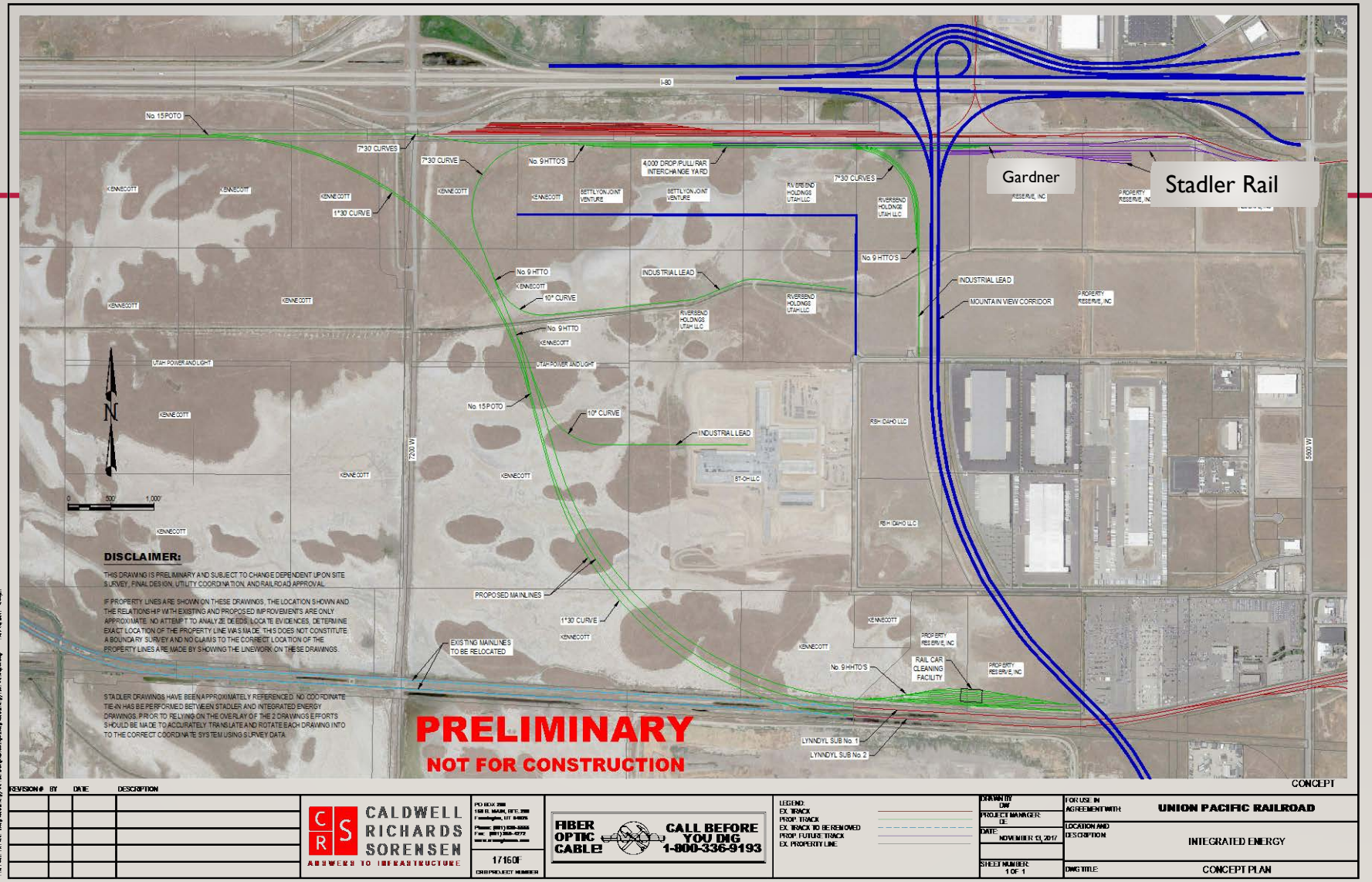
Best,

Devin Belnap | Riverbend Management
Director of Real Estate Development
208-534-7865 office
208-681-9828 cell
dbelnap@rbm.us
rbm.us

UPS FACILITY TO START A NEW TREND IN AUTOMATION

RAILROADS AND ACCESS TO MARKETS IS OUR HISTORY

CONCEPTUAL RAIL ALIGNMENT



CONCEPT

REVISION #	BY	DATE	DESCRIPTION

CALDWELL RICHARDS SORENSEN
ANSWERS TO INFRASTRUCTURE

PO BOX 298
188 E. MAIN, STE. 200
Farmington, UT 84025
Phone: (801) 939-9355
Fax: (801) 866-4779

1/160F
CRS PROJECT NUMBER

FIBER OPTIC CABLE!
CALL BEFORE YOU DIG 1-800-336-9193

LEGEND:
EX. TRACK
PROP. TRACK
EX. TRACK TO BE REMOVED
PROP. FUTURE TRACK
EX. PROPERTY LINE

DRAWN BY: DW
PROJECT MANAGER: DE
DATE: NOVEMBER 13, 2017
SHEET NUMBER: 1 OF 1

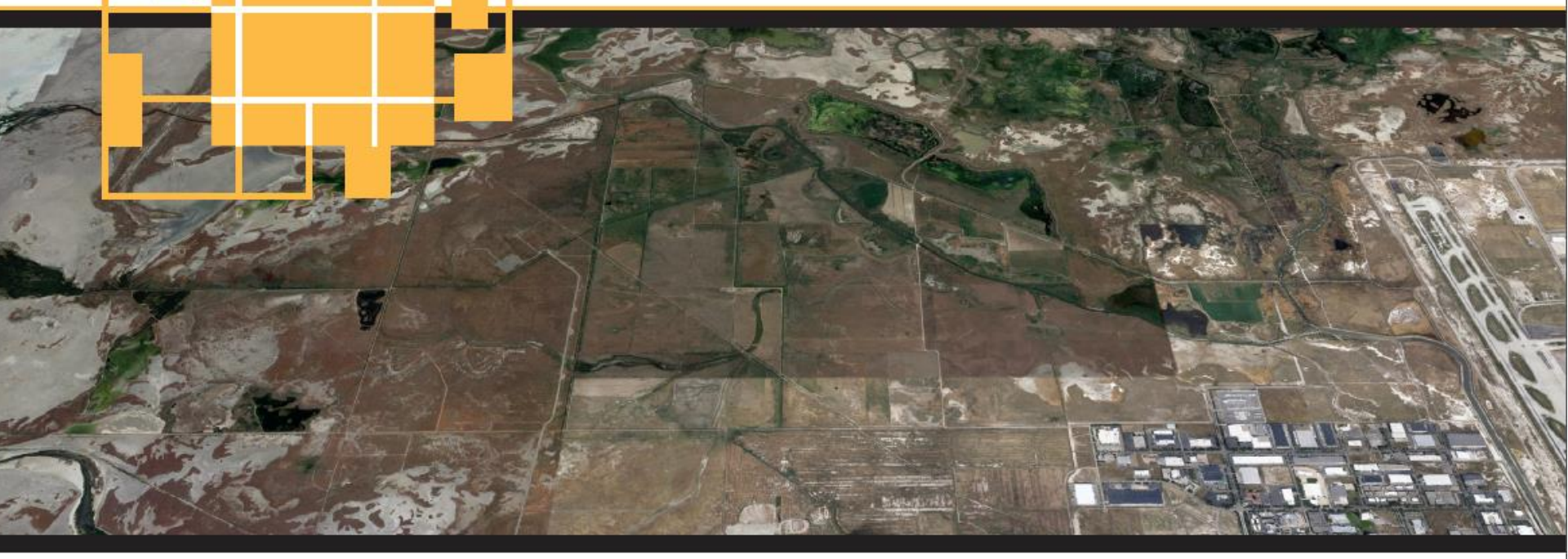
FOR USE IN AGREEMENT WITH: UNION PACIFIC RAILROAD
LOCATION AND DESCRIPTION: INTEGRATED ENERGY
DWG TITLE: CONCEPT PLAN

STRATEGIC PARTNERSHIPS

WHAT IS NEEDED

- ❑Power
- ❑Sewer
- ❑Water
- ❑Roads
- ❑Communications
- ❑Leadership, Investment,
- ❑All pulling on the rope together (Same end)

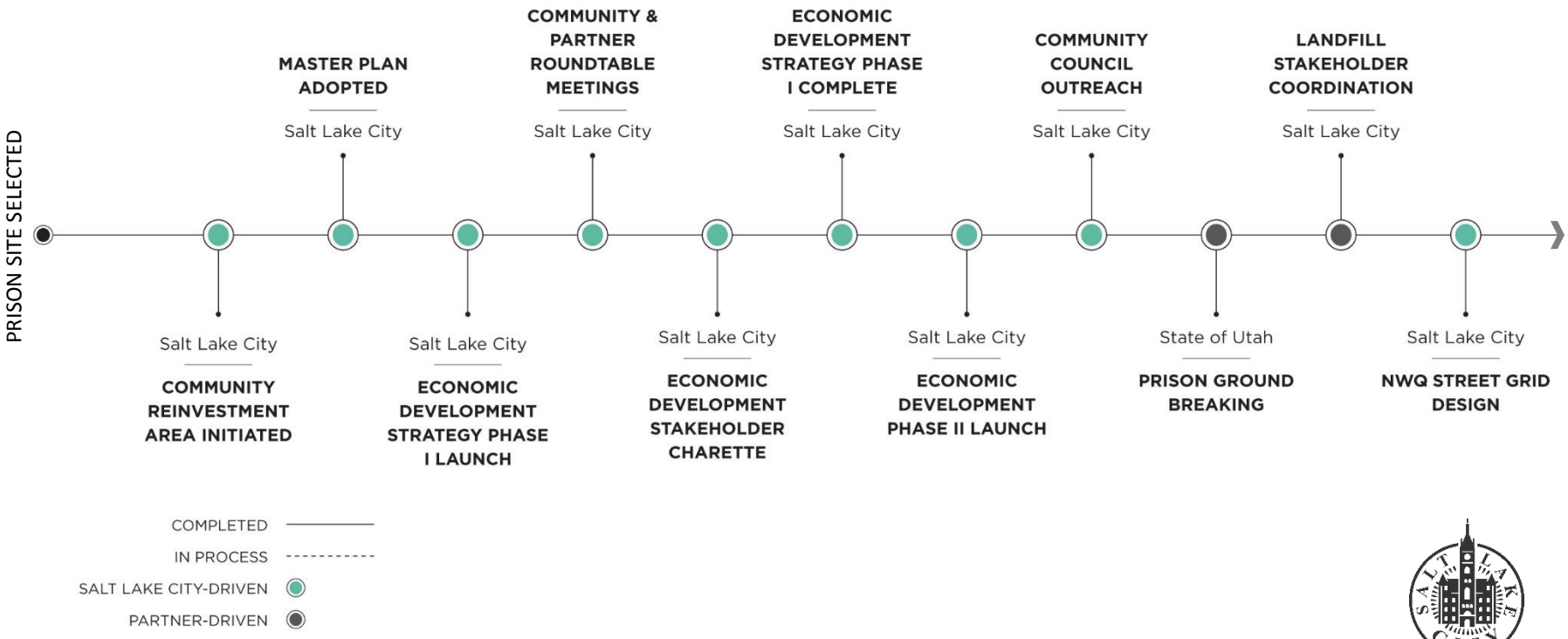
SALT LAKE CITY
NORTHWEST QUADRANT



PROGRESS TIMELINE 1

Vision

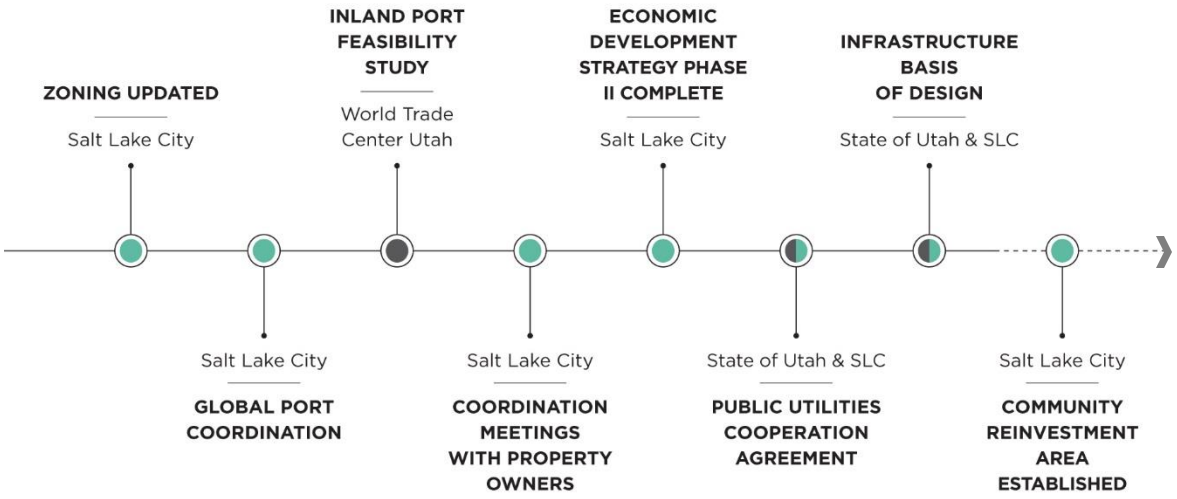
JULY 2016 – MARCH 2017



PROGRESS TIMELINE 2

Strategy
APRIL 2017 – DECEMBER 2017

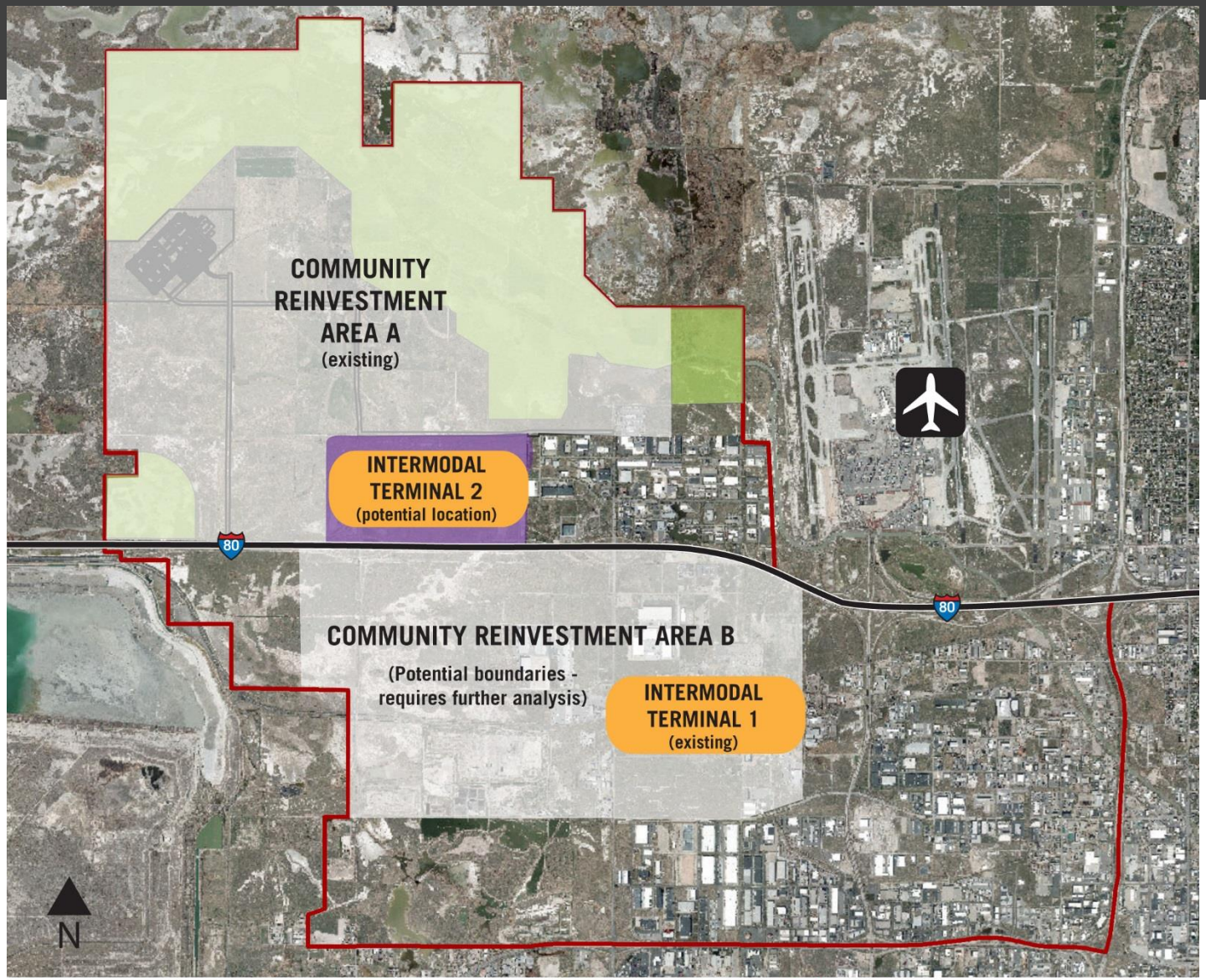
Implementation
JANUARY 2018 --->



COOPERATIVE PARTNERSHIP

RDA & ECONOMIC DEVELOPMENT COORDINATION

NORTHWEST QUADRANT NORTH & SOUTH: Potential for Nodes of Economic Activity



*DRAFT: For discussion purposes only