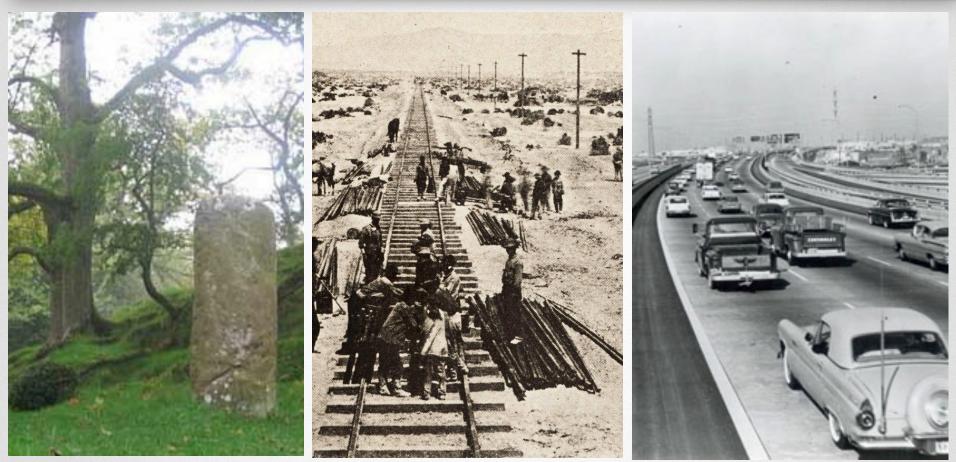
#### Utah: Transportation & Economic Development Crossroads of the West

Carlos Braceras Dan Kuhn May 2017



## Role of Transportation



Roman mile marker

Transcontinental railroad

Interstate highways



## Start with a Vision



Keeping Utah Moving

# MISSION

# Innovating transportation solutions that strengthen Utah's economy and enhance quality of life.



## **Transit: Economic Engines**

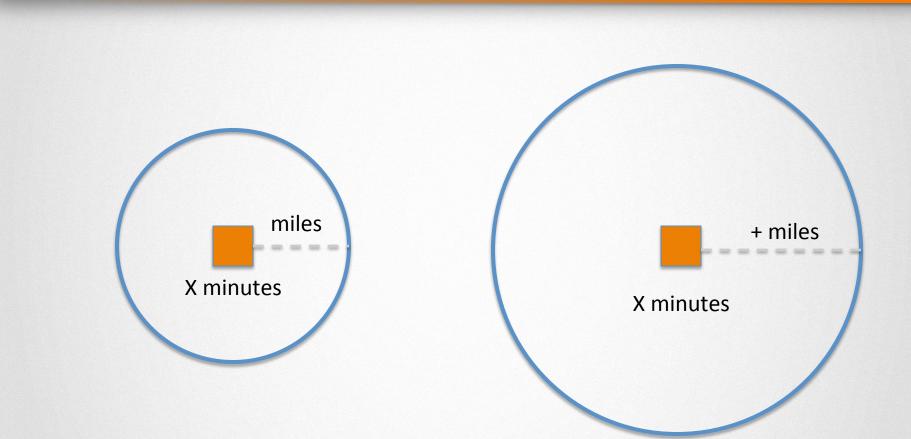




## Air Transportation: Connection to the World



#### Access and the Economy





# Quality of Life: Attracting and Retaining Talent



- Talent: Fast growing, young educated workforce
- Job opportunities: 40,000 new jobs in 2016
- Outdoors: Access to world class mountains, trails, lakes
- Community: Family, friends, neighbors



#### Freight in Utah: The Crossroads of the West Daniel B. Kuhn, UDOT Railroad & Freight Planner



# How It All Began

- Transportation technology has come a long way since the driving of the Golden Spike on May 10, 1869 at Promontory, Utah.
- Today, railroads join with highways, pipelines, and aviation in serving the economic and business needs of Utah and Western America.
- As in pioneer times, Utah is still "The Crossroads of the West."
- Let's examine how freight transportation contributes to Utah's vibrant economy and job growth.



# Trucking: Utah's Primary Freight Mode

Keeping Utah Moving

- Of all modes of transportation, trucking has the greatest impact on Utah's economy and business community, and is Utah's number one freight mode.
- Like the rest of America, Utah's logistics system is designed around trucks delivering most of what we use and consume.



# We All Depend on Truck Freight

- Take a moment to consider all that you use each day.
- From distribution warehouses to offices and retail businesses, trucks of all types and sizes deliver our daily necessities.
- Utah is one of America's most important trucking and warehousing centers.







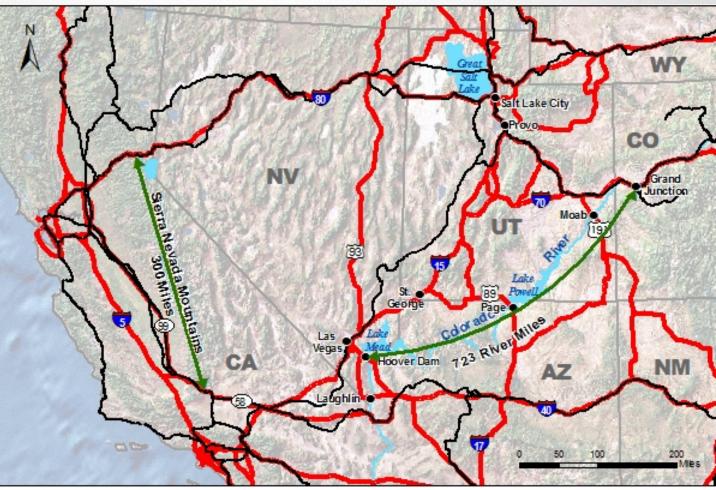
# Utah: Highway Freight Center of the West

- Utah is at the hub of seven major long distance highway freight routes.
- Utah's strategic location affects freight moving across America.
- Disruptions on Utah's freight highways impacts the Nation.
- Distant highway issues impact freight flow and business in Utah.



# **Geography Impacts Ground Transportation**

- Humboldt River Corridor (Nevada).
- Sierra Nevada Mountain Range (California).
- Colorado River Canyons (Grand Jct. to Hoover Dam).
- From pioneer trails to today's railroads and highways, geography affects freight corridors.



## Much of America's Food is Trucked Through Utah

- C.R. England, one of America's largest temperature controlled (refrigerated) truck companies, is one of several headquartered in Salt Lake City.
- Approximately half of C.R. England's more than 4,500 trucks pass through the Wasatch Front every week, most traveling on I-80, I-15, and I-84.



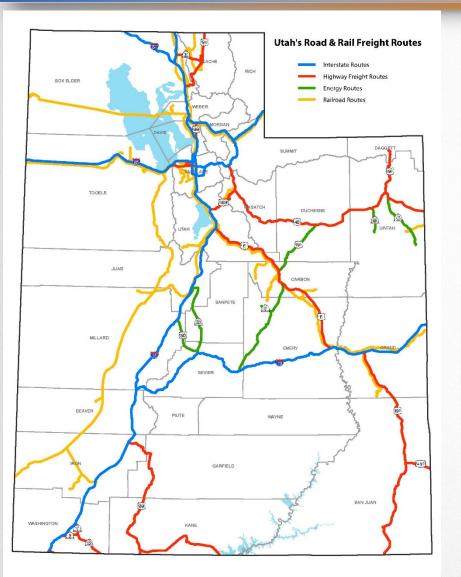
# Refrigerated Freight Flow through Utah

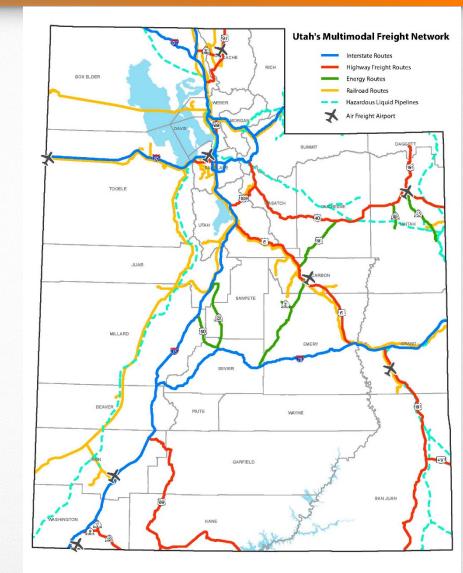
- Refrigerated produce is extremely sensitive to delays in transport.
- Temp-controlled trucks constitute approximately 30 percent of total truck traffic on Utah Interstates, and approaches 50 percent in certain areas of the West during summer and fall harvest.





## Utah Freight Networks

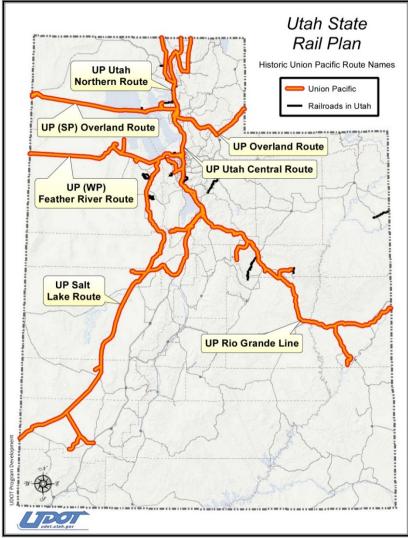




# Utah's Railroad Freight Network

- This map identifies each major railroad mainline serving Utah by its historic name and former owner.
- Today, these mainlines linking Utah with the rest of America are all part of the Union Pacific Railroad (UP).
- BNSF Railway operates freight service via trackage rights between Denver, CO and Stockton, CA over UP's Rio Grande Line and Feather River Route through Provo and Salt Lake City.





# California's Seaports are Utah's Global Gateways

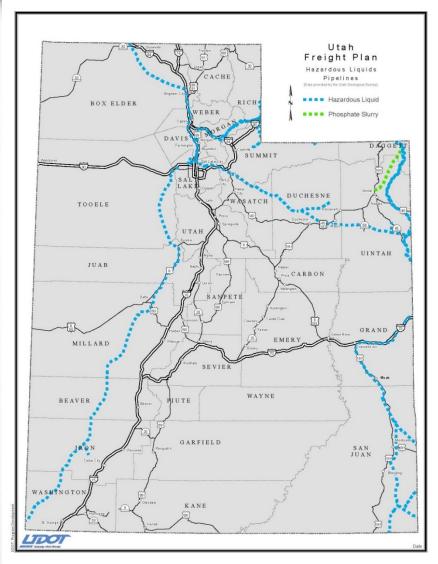
- Most of Utah's international freight passes through Los Angeles and Long Beach (bottom), which are North America's busiest intermodal seaports.
- Utah's other major intermodal port is in Oakland (top).
- Union Pacific's Salt Lake City Intermodal Terminal (SLCIT) is the primary intermodal facility in the Mountain West.
- Adequate truck access to SLCIT is essential for Utah's growing economy and potential Inland Port project.
- Without trucking, intermodal freight would not exist.

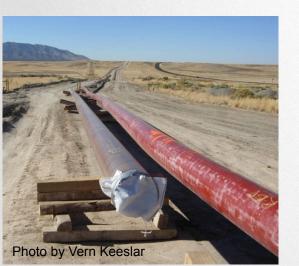


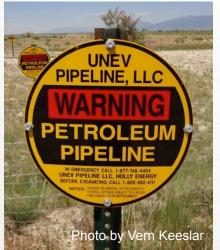


# Utah's Pipeline Networks

- There are at least 15 pipeline owners/operators in Utah.
- Liquid pipelines include both crude oil and refined petroleum products.
- Pipelines serving Utah extend as far distant as Las Vegas, NV, Spokane, WA, Billings, MT, and Edmonton, AB.



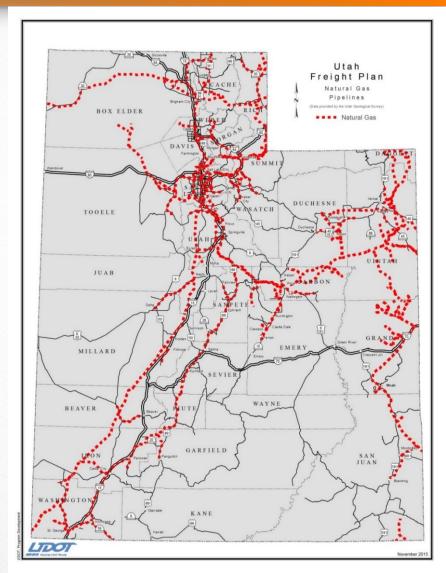




# Natural Gas

- There are at least 28 natural gas pipeline owners/operators in Utah.
- Natural gas transmission pipelines are traditionally much larger in diameter, and under higher pressure than crude oil or refined petroleum pipelines.





# Utah's Air Freight

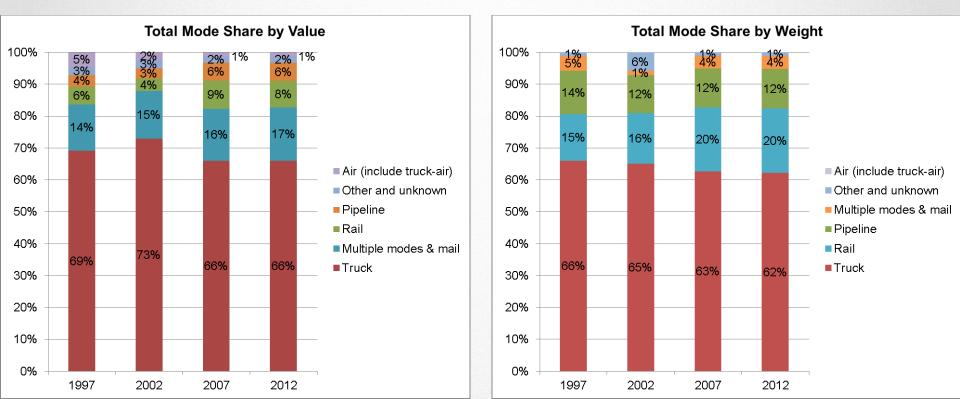
- Salt Lake International Airport is an important regional air cargo hub; however, aviation handles a relatively small fraction of all Utah freight.
- Major national air cargo hubs are located in the Central and Eastern Time Zones.
- Regional air cargo operations, such as St. George, Cedar City, Price, and Vernal are important to business and economic development in those areas.
- Maintaining adequate truck access that links air cargo terminals to Utah's freight highways is essential to freight mobility and our economy.





# Freight Modes by Value and Weight

- In Utah, as with most of America, trucking is the dominate freight mode.
- Without safe and efficient highway freight movement, Utah's economy would be significantly impacted.
- Notice that pipelines are a close third to railroads in terms freight tonnage moved in Utah.



# Utah's Freight Employment by Mode



In 2015, the trucking industry in Utah employed 21,519 people with an average annual salary of \$43,980.



In 2015, the railroad industry in Utah employed 1,558 people with an average annual salary of \$68,304.



In 2015, the pipeline industry in Utah employed 272 people with an average annual salary of \$106,704.



In 2015, the aviation industry in Utah employed 6,164 people with an average annual salary of \$72,048.

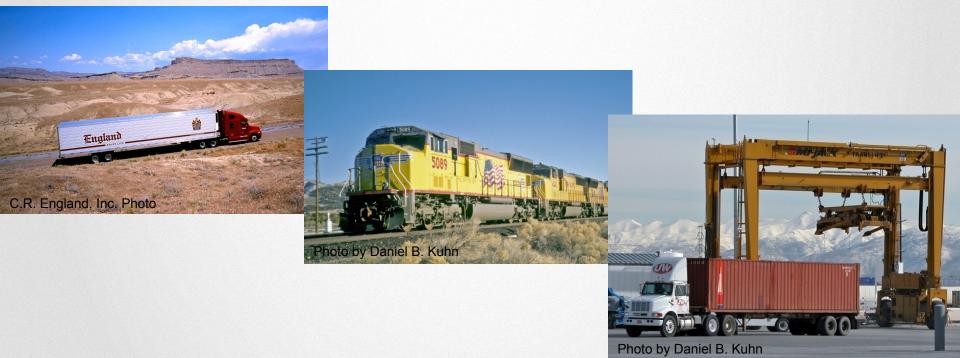


In 2015, the warehouse and storage industry in Utah employed 9,680 people with an average annual salary of \$41,568.



## Summary

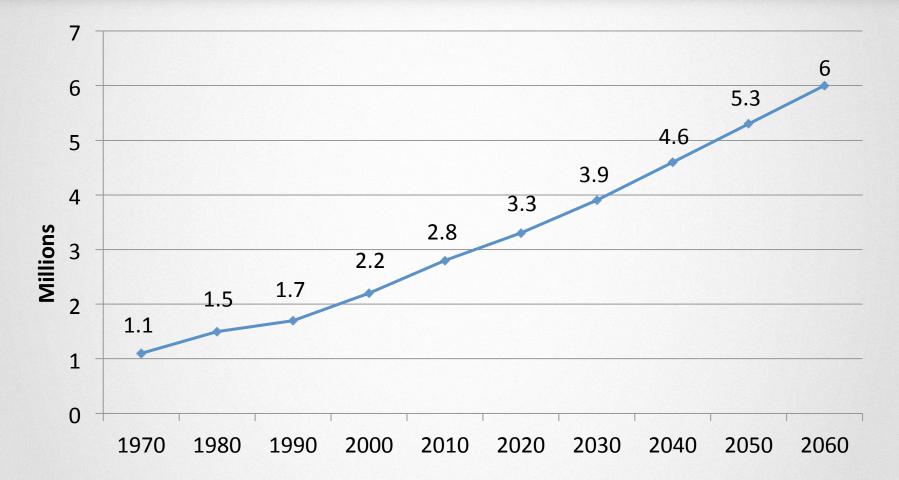
- Utah is a strategic hub for highway, rail/intermodal, pipeline and air freight operations that impact our businesses and quality of life.
- As a result, a large part of Utah's economy is transportation and distribution oriented, and we have a major impact on national freight flow.
- Maintaining freight transportation infrastructure is vital to Utah's economy, both now and in the future.



# **Building Connections**



#### Challenge and Opportunity: Utah's Population Growth





## Supporting Vision for Communities



Keeping Utah Moving



#### Utah Transportation & Economic Developent Crossroads of the West