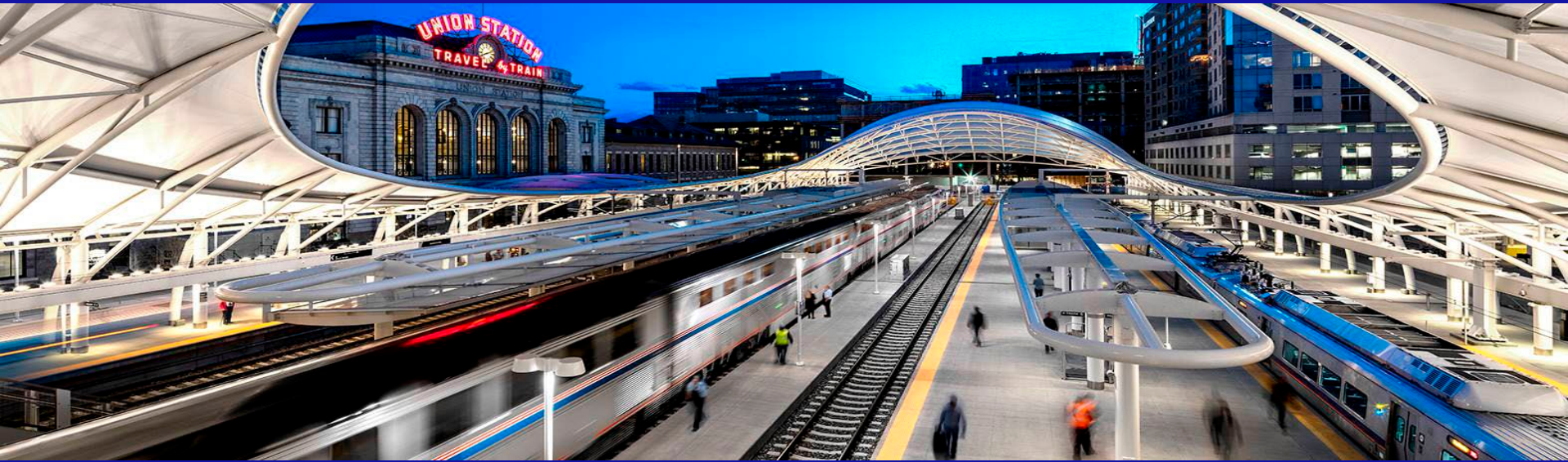


REGIONAL INTERMODAL RAIL TRANSIT SYSTEMS



**ENSURING OUR ECONOMIC AND
TRANSPORTATION FUTURE**

REGIONAL TRANSIT SYSTEMS

- Comprehensive transit system serving the mobility needs of an entire region
- Transit modes include Light Rail, Commuter Rail, Modern Streetcar, Enhanced Bus, Bus Rapid Transit, Bus
- Intermodal Hub provides central connection between modes
- Transit system operated by a Regional Transit Authority created by participating local governments



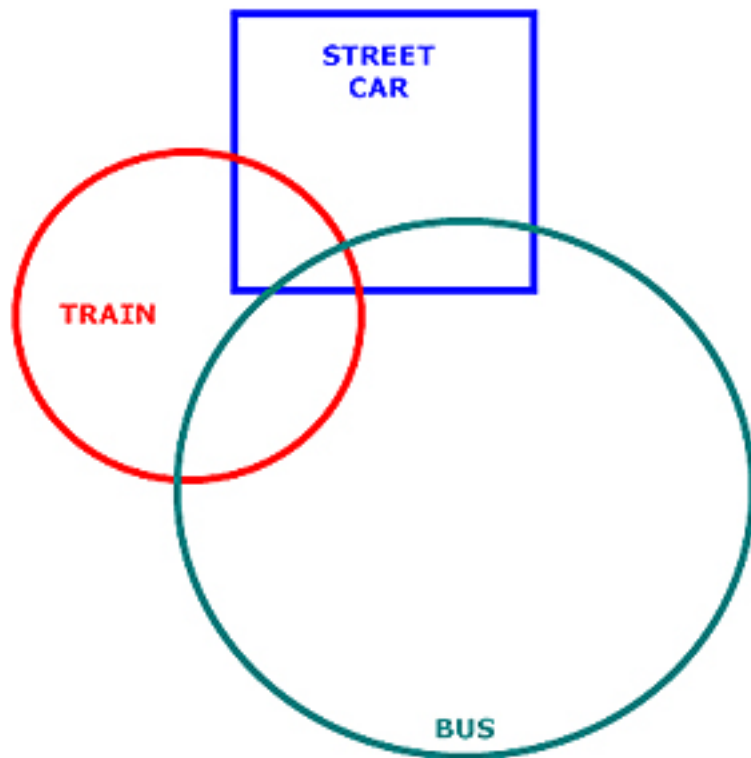
INTERMODAL TRANSIT



Dallas Union Station

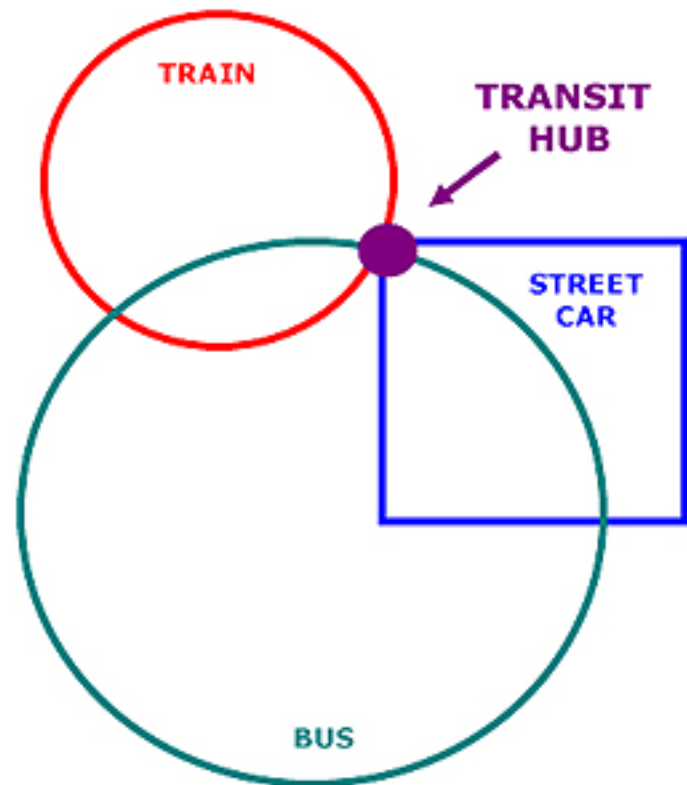
- Seamless movement of passengers from one mode of transit to another through a central hub
- Transit modes include Light Rail, Commuter Rail, Modern Streetcar, Enhanced Bus, Bus Rapid Transit (BRT), and Bus

MULTIMODAL VS. INTERMODAL



MULTIMODAL TRANSIT SYSTEM

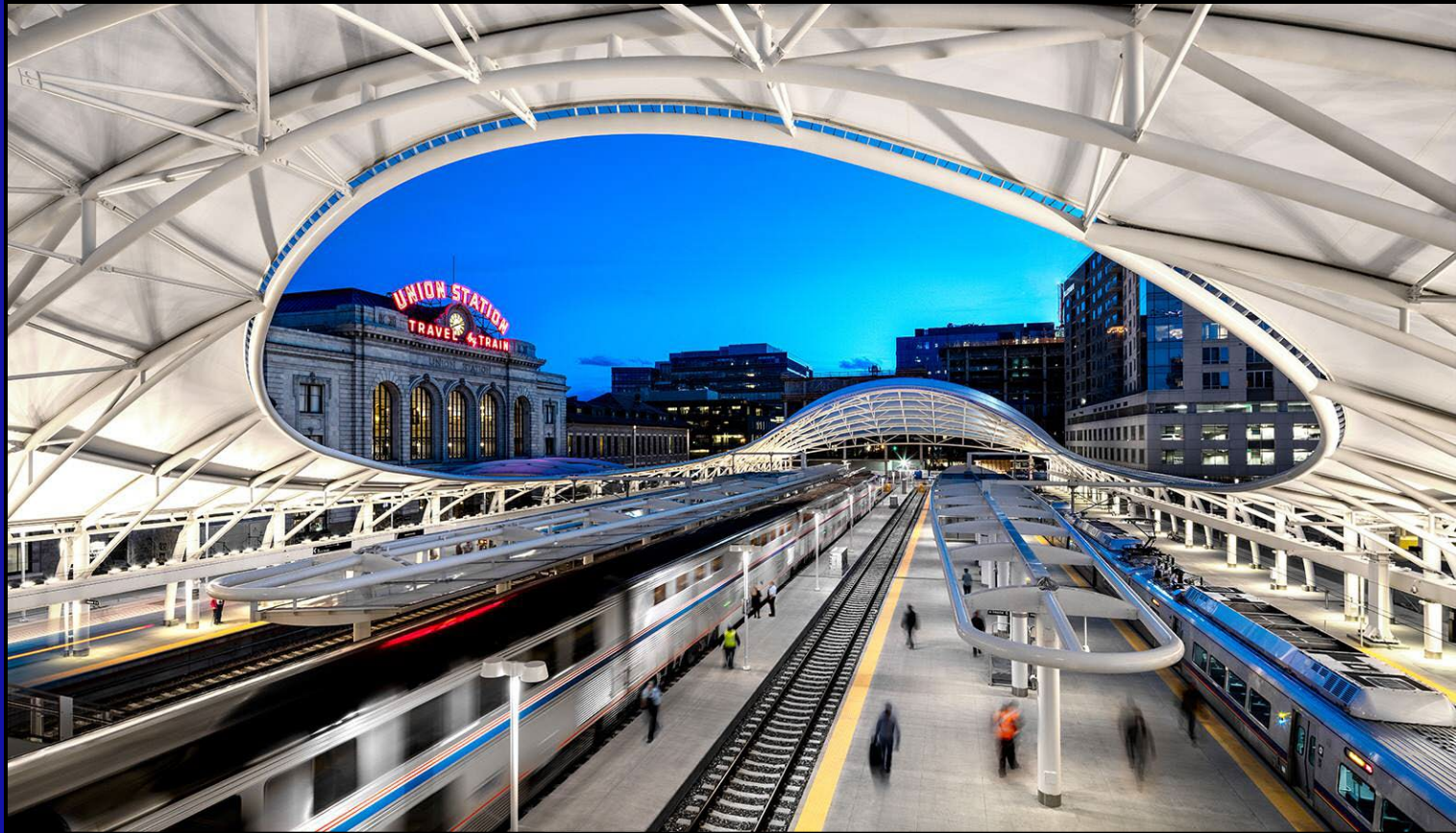
"**Multimodal transportation.** The movements of passengers or freight within a set of transport modes offering connections between a set of origins and destinations. Although intermodal transportation is possible, it does not necessarily occur."



INTERMODAL TRANSIT SYSTEM

"**Intermodal transportation.** The movements of passengers or freight from one mode of transport to another, commonly taking place at a terminal specifically designed for such a purpose."

INTERMODAL HUBS



Denver Union Station

- Central link for regional transit system
- Connect Commuter Rail, Light Rail, Streetcar, Bus systems
- Provide efficient passenger transfer between transit modes

LIGHT RAIL



San Diego



Charlotte

- Smaller, lighter rail vehicles with faster acceleration
- Electric powered motors using overhead wire system
- Operates within its own grade-separated right-of-way...not FTA approved for use in mixed rail traffic...can operate in a dedicated street lane
- Shorter distance operation with more stations closer together
- Less passenger and seating capacity...no restrooms...no worktables
- Cost: **\$100-\$200 million per mile**

COMMUTER RAIL



San Francisco



Salt Lake City



Albuquerque

- Larger rail vehicles with separate diesel-electric locomotive and passenger cars
- Operates in existing rail right-of-way on existing at-grade tracks
- Longer distance operations with fewer stations
- Slower acceleration but higher speeds
- Comfortable seating, Wi-Fi, worktables, restrooms
- Serves commuters and local users
- Cost: \$25-\$50 million per mile

IT'S NOT JUST FOR COMMUTERS

MODERN STREET CARS

Atlanta



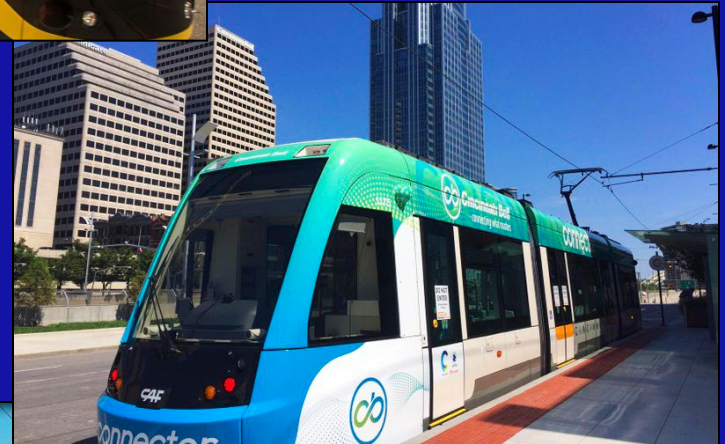
Kansas City



Dallas



Cincinnati



IMPORTANT "LAST MILE" TRANSIT COMPONENT

BENEFITS OF RAIL TRANSIT

- Provides safe, energy-efficient transportation option
- Generates economic development
- Enhances quality of life
- Reduces emissions
- Ensures economic competitiveness with peer cities – attract and retain businesses, jobs and residents
- Protects our economic and transportation future from high fuel costs and time wasted in traffic



QUALITY OF LIFE BENEFITS

- Provides affordable, efficient transportation options for traveling to work, school, entertainment, medical offices, civic facilities, and other public destinations
- Improves personal mobility and freedom for all citizens
- Saves on fuel and maintenance costs by lowering vehicle miles traveled
- Reduces time spent in traffic, allowing more time for work, family, personal interests, or relaxation.
- Promotes better health by encouraging walking, biking, and daily exercise
- Eases traffic and congestion
- Improves air quality, health and the environment by lowering emissions



ECONOMIC BENEFITS

- Stimulates transit-oriented development
- Generates economic activity and growth
- Attracts new residents and businesses
- Enhances business, retail and entertainment districts
- Accelerates urban renewal and core area revitalization
- Raises property values
- Increases local and state tax revenues
- Provides valuable cost savings for transit users

TRANSIT-ORIENTED DEVELOPMENT



**Downtown
Plano Before
and After
DART Station**



- Urban Renewal
- Core Revitalization
- Residential Development
- Retail Development
- Commercial Development

- Increased Business Revenue
- Increased Property Values
- Increased Tax Revenues
- Improved Quality of Life



Denver Union Station – Before and After

SIGNIFICANT FISCAL IMPACT

Dallas Area Rapid Transit - DART

Potential Fiscal Impacts of Existing and Proposed
Transit-oriented Development in the Dallas Area Rapid Transit Service Area
Annual Estimates at Buildout

Description	Value
Announced Value	\$ 4,902,800,000
Announced Value Attributable to DART	\$ 4,255,700,000
Cities	
Taxable Property Value	\$ 2,843,779,000
Property Tax Revenues	\$ 16,785,000
Taxable Retail Sales	\$ 665,552,000
Sales Tax Revenues	\$ 6,656,000
Total Revenue to Cities	\$ 23,531,000
Counties	
Taxable Property Value	\$ 2,842,259,000
Property Tax Revenues	\$ 6,593,000
School Districts	
Taxable Property Value	\$ 2,904,207,000
Property Tax Revenues	\$ 46,380,000
Community College Districts	
Taxable Property Value	\$ 2,736,047,000
Property Tax Revenues	\$ 2,306,000
Hospital District	
Taxable Property Value	\$ 2,633,261,000
Property Tax Revenues	\$ 6,688,000
State of Texas	
Sales Tax Revenues	\$ 41,597,000
Total State and Local Tax Revenues	\$ 127,095,000*

* Includes local property taxes and state and local sales taxes. Sources: Dallas Central Appraisal District, Media reports, Chambers of Commerce, Developers, DART, Authors' estimates.

ADDITIONAL ANNUAL TAX REVENUES AS A RESULT OF DART TRANSIT-ORIENTED DEVELOPMENT

Source: Center for Economic Development and Research, University of North Texas, 2007

TRANSIT WILL SPUR ECONOMIC GROWTH

Milwaukee Journal Sentinel – February 20, 2010

“Economic development is about people. The better we move people, the more business we generate.”

“Economic success in the 21st century requires making our region attractive to an educated workforce. Corporations have discovered that a good transit system is essential to recruiting such talent.”

“Good transit is not a partisan issue.”

NATIONAL TRENDS – HOUSING AND TRANSIT

- Over the next 20 years, the housing market will be dominated by retiring Baby Boomers and a younger labor force with a preference for smaller households and access to transit.
- Transit system availability will become increasingly important in meeting the mobility needs of aging Baby Boomers
- Generation Y and Millennials have lower rates of car ownership and show a strong preference for urban style housing served by an effective transit system.
- As the U.S. labor force shrinks with the retirement of the Baby Boomers, availability of transit will be an important factor in retaining and attracting this young labor force, which will be critical to the economic success of businesses and cities.

USER COST SAVINGS

- Public transportation saves people time and money.
- American Public Transportation Association (APTA) studied urban areas where both bus and rail service are available to commuters - they observed the following:
- Per year, riders saved:
 - **4,400 miles of driving**
 - **223 gallons of gas**
 - **273 hours stuck in traffic**
 - **\$10,000 in fuel and maintenance costs**



Source: American Public Transit Association

TRANSPORTATION SYSTEM BENEFITS

- Transit provides valuable transportation options and improves mobility
- Transit increases transportation system capacity without creating additional traffic and congestion
- Transit does not replace automobiles and roadways, but is an effective means to address traffic and congestion issues related to population growth
- Growing cities with premium transit have slower rates of growth in vehicle miles traveled (VMT), especially during peak travel periods
- Reduced VMT growth translates into more efficient use of transportation funds



MODEL SYSTEM – SALT LAKE CITY



LIGHT RAIL

**SALT LAKE CITY
INTERMODAL HUB**



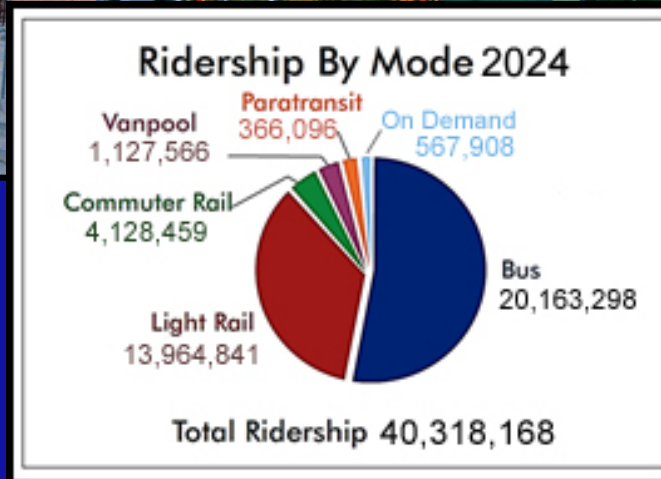
**MODERN
STREETCAR**



BRT



COMMUTER RAIL



ENHANCED BUS

UTAH TRANSIT AUTHORITY



Primary City: Salt Lake City

RTA Created: 1970

Governance: 3-member Board of Trustees appointed by municipal and county officials

Funding: Dedicated Transit Sales Tax: 0.626% to 0.7875% by County

System:

Bus Routes – 120

Bus Rapid Transit (MAX) Lines – 2

Light Rail (TRAX) Lines - 3

Commuter Rail (Frontrunner) Lines – 1
(88 miles – Ogden-Salt Lake-Provo)

Commuter Rail Trains – 6

Streetcar Lines – 1

Ridership (2024):

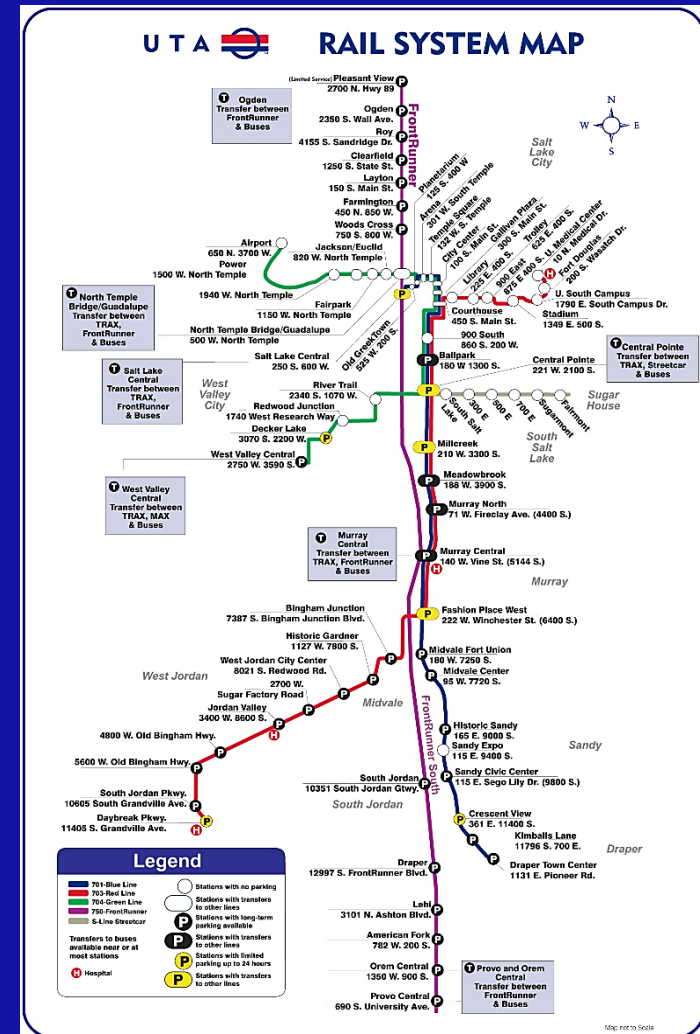
Bus/BRT – 20,163,298

Light Rail – 13,964,841

Commuter Rail – 4,128,459

Vanpool/Paratransit/On Demand – 2,061,570

Total – 40,318,168

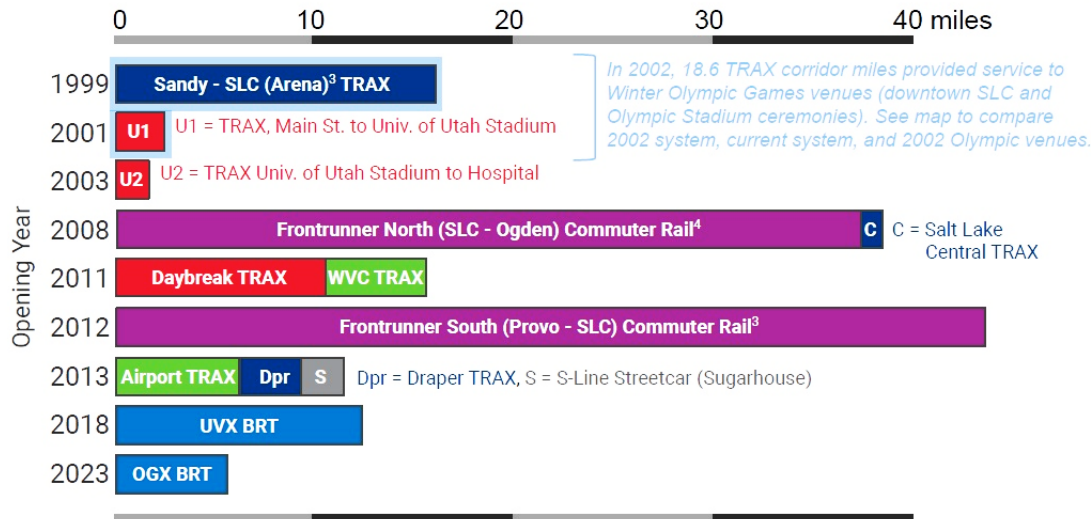


UTA RAIL AND BRT TIMELINE

From 0 to 145 Miles in 24 Years

New Corridor Miles of UTA Rail and BRT, by Year (1999-2023)

The graph below shows new corridor miles¹ over the past 24 years of Utah Transit Authority project openings along the Wasatch Front. Taken together, a total of 129 miles of rail transit corridor and 16 miles² of Bus Rapid Transit corridor are currently operating. The colors and labels shown reference the current transit route that originally utilized the constructed project.

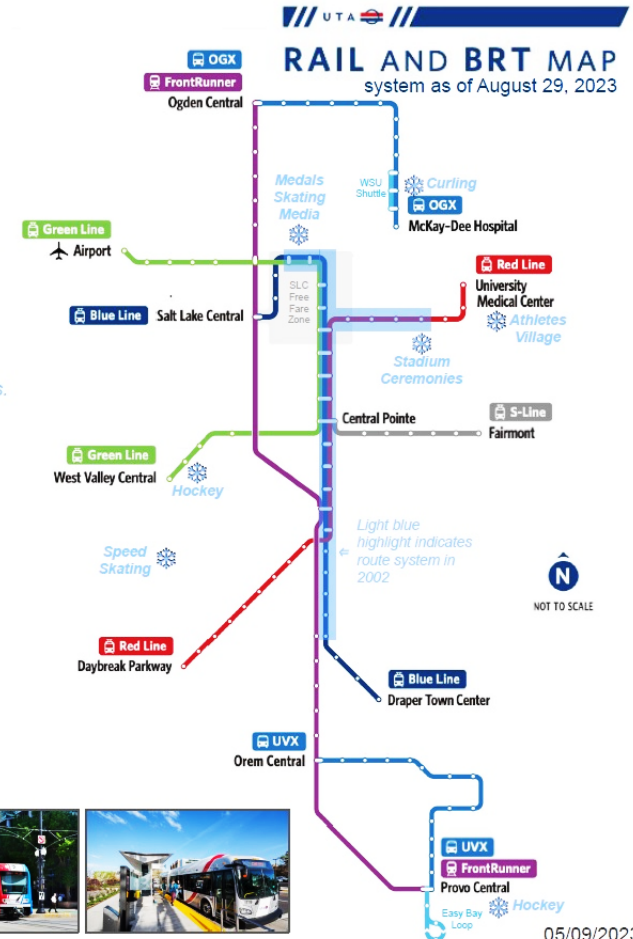


¹ Corridor miles are miles of transit infrastructure – as depicted on the schematic map at right – and does not include double tracking or use by concurrent TRAX routes.

² BRT corridor mileage includes the full routes, including 5.3 miles (UGX) and 1.7 miles (OGX) of bus-only lane configurations.

³ Infill stations: Sandy Expo (2006), 900 S (2005), 600 S (2022), Vineyard (2022)

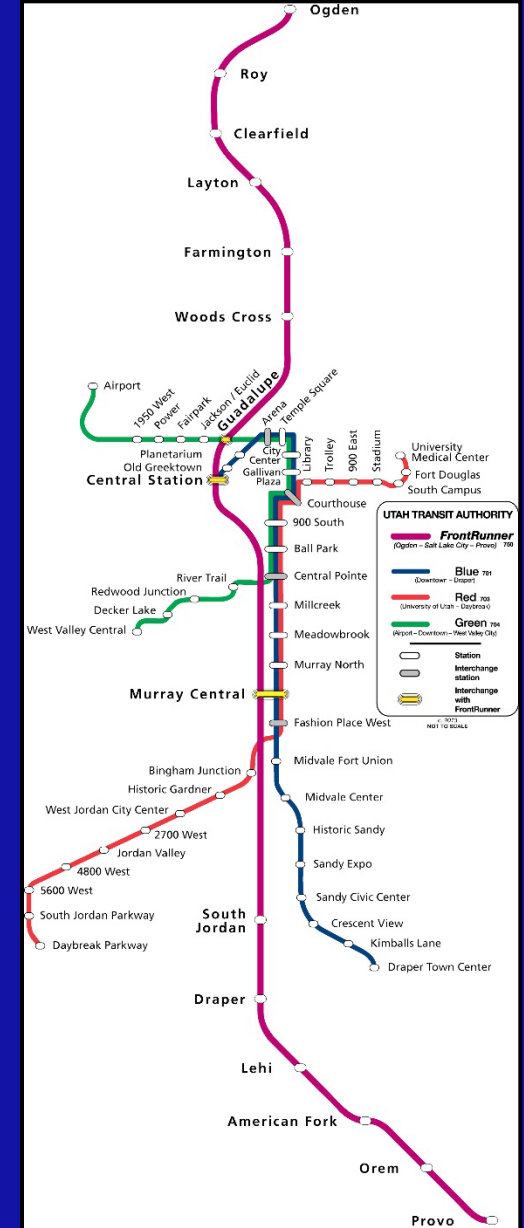
⁴ Does not include the 6.2 mile Pleasant View segment that is currently not in service.



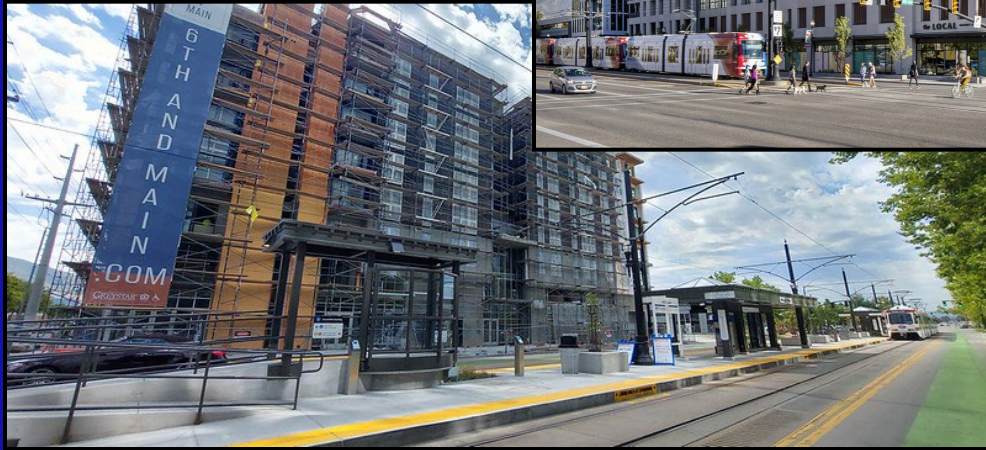
UTA FRONTRUNNER



- Commuter Rail Service Connecting Salt Lake City, Provo and Ogden
- Intermodal Hub in downtown Salt Lake City
- Serves Hill Air Force Base
- 2024 Ridership: 4,128,459



SALT LAKE CITY TRANSIT-ORIENTED DEVELOPMENT



- Transit-oriented development investment continues to accelerate near TRAX Light Rail, Frontrunner Commuter Rail, and S-Line Modern Streetcar stations
- Total private TOD investment has exceeded \$10 billion

LESSONS FROM SALT LAKE CITY

"Salt Lake City's light rail and commuter rail system of the City and suburbs was particularly important to spurring private development."

"The linked rail and streetcar system helped inspire growth that also included people moving to downtown Salt Lake City about as fast as the city could handle."

"Our ridership has doubled projections. Rail transit is making a huge difference in both where people concentrate their economic investments, but also in relieving congestion and providing a pretty clear path to what our future of surface transportation will be."

*Comments by Salt Lake City Mayor Ralph Becker at
2012 OKC Mayor's Economic Development Roundtable*

THE LATEST FROM SLC

“This past year was incredibly successful for us...ridership was up 15.5%”

“People are using transit, not only to get to work, but they’re using it all day...they’re using it on the weekends...they’re choosing it as an alternative to using an automobile because they are tired of traffic.”

“We’re fully staffed and have the team ready to roll out additional services in 2025. We’re not taking the foot off the pedal...we’re going to continue to hire and add service.”

PUBLIC SUPPORT

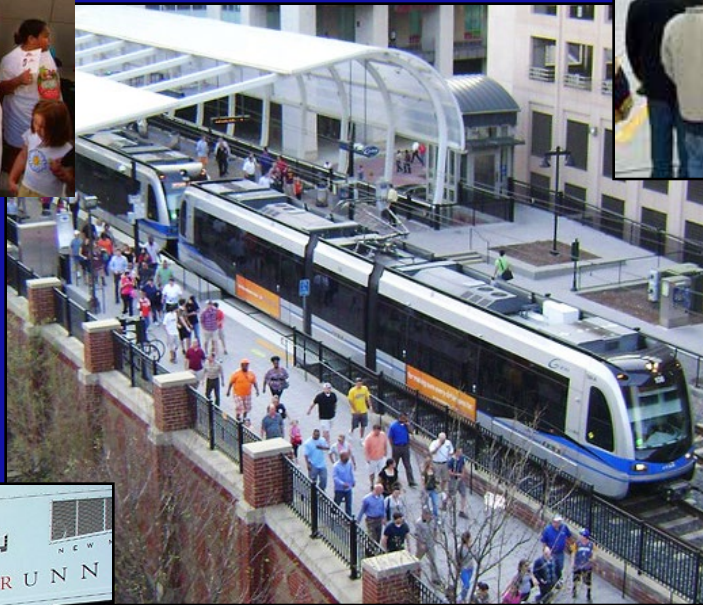
Dallas



Seattle



Charlotte



Albuquerque



Minneapolis



REGIONAL ADVANTAGE

“Competition is intensifying between cities and regions to create the amenities and the business climate that will attract highly skilled workers.”

“Studies show that business locations near high quality urban settings with clean, efficient rail transportation are a priority for young knowledge workers who are choosing a job.”

"It is the ability to attract talent that creates regional advantage: Those that have the talent win, those that do not lose."

PEER CITY TRANSIT SYSTEMS

RAIL TRANSIT DEVELOPMENT



2023 SYSTEM RIDERSHIP

Houston	77,189,800
Denver	65,175,290
Atlanta	64,306,800
Dallas	50,463,300
Phoenix	36,374,000
Salt Lake City	35,058,000
Austin	25,229,400
St. Louis	19,528,200
Tucson	17,361,800
Charlotte	13,476,600
Cincinnati	13,091,500
Kansas City	12,006,600
Albuquerque	7,491,900
Memphis	3,122,700
Oklahoma City	2,888,600
Birmingham	1,792,000

OKC...BACK OF THE PACK

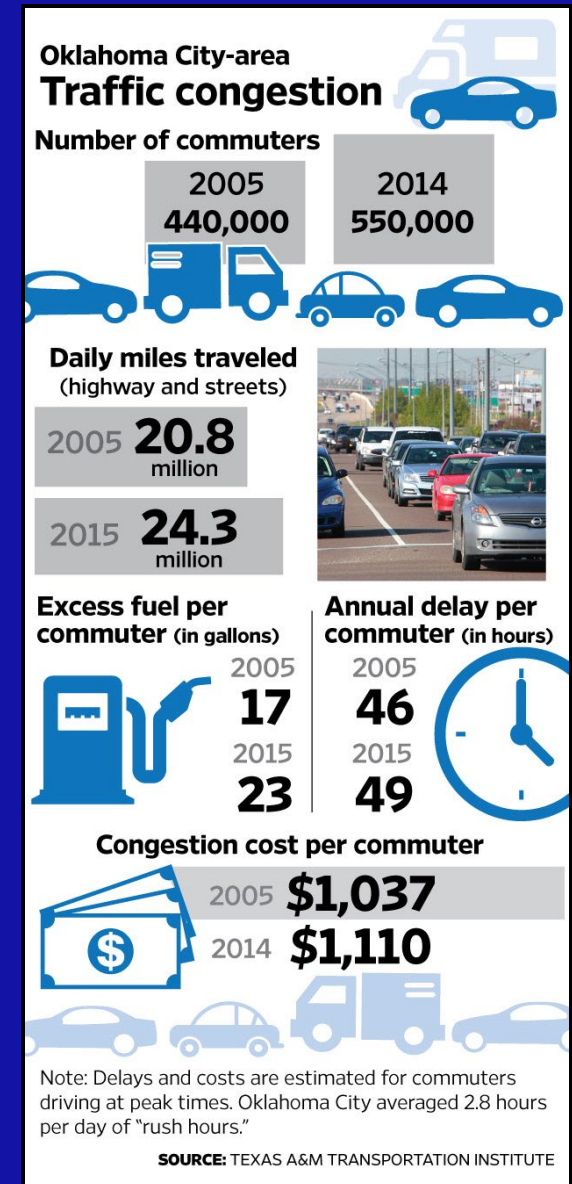
- Oklahoma City ranked **last** out of 50 largest metropolitan areas as best prepared for \$4 gasoline ¹
- Oklahoma City ranked **84th** out of 100 metropolitan areas in serving the transit needs of its workforce ²
- **Cause: Lack of regional transit system**

¹ From: *Major US Cities Preparedness for an Oil Crisis: Which Cities and Metropolitan Areas are Best Prepared for \$4 a Gallon Gasoline and Beyond.* A Study by Warren Karlenzig of Common Current. March 2008

² From: *Missed Opportunity: Transit and Jobs in Metropolitan America.* A Study by the Brookings Institute. May 2011

OKC...TIME FOR REGIONAL TRANSIT

- Increasing peak hour traffic congestion and delays in all major transportation corridors
- Population growth above the national average with increasing VMT
- Significant job growth in core areas with increasing commute times for employees
- Urban core densification with substantial housing growth and a young work force population in need of access to regional transit



MAKING REGIONAL TRANSIT WORK

- Public, political and business support
- Establish Regional Transit Authority (RTA)
- Create Regional Transit District (RTD) and secure dedicated funding source
- Develop intermodal hub, Commuter Rail, Light Rail, Bus Rapid Transit, Modern Streetcar, and bus system



REGIONAL SUPPORT

Q10: In the future, which of the following ways would you prefer to travel in Central Oklahoma? (choose three*)

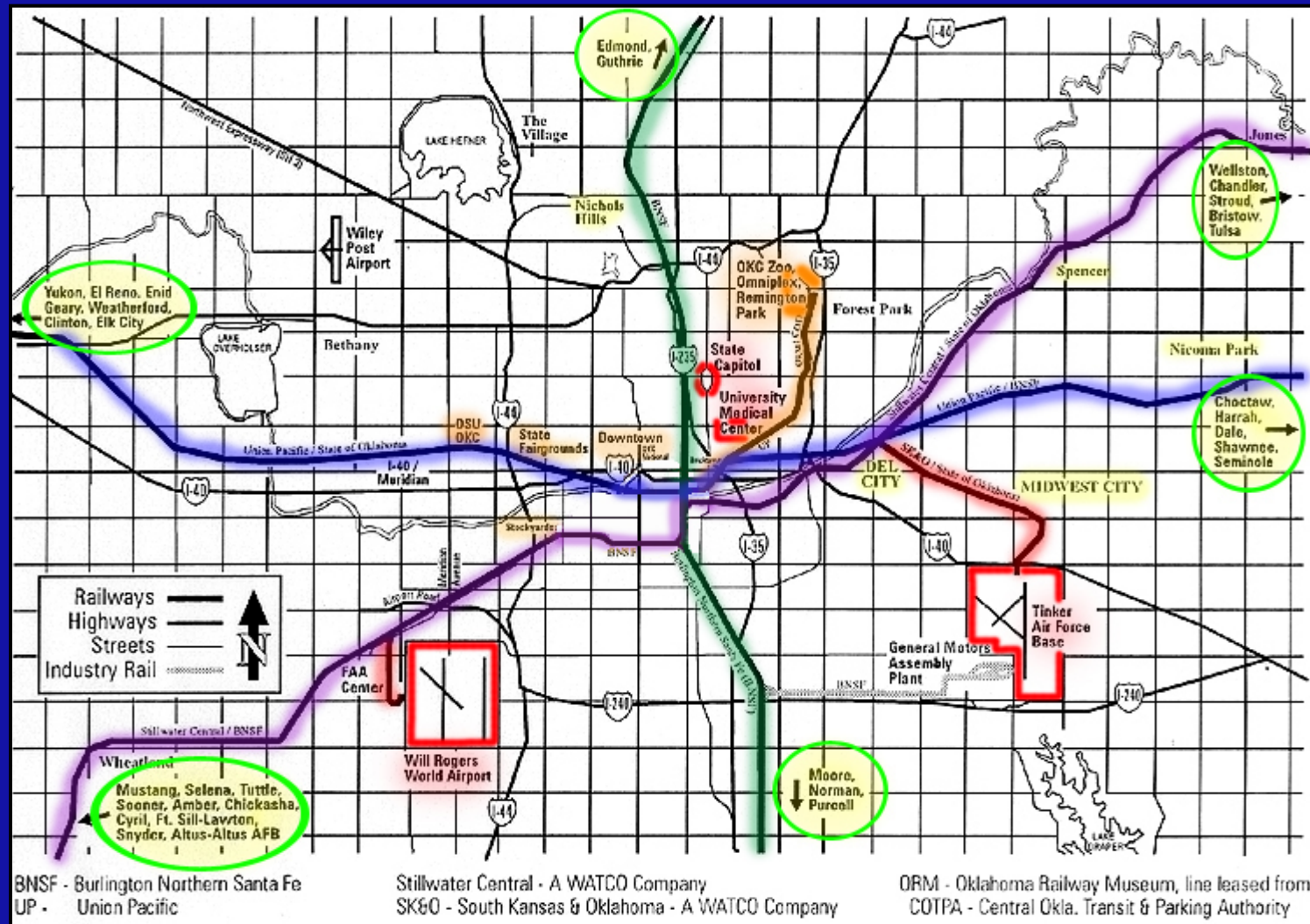
	Response Total	Response Percent*
Rail	1146	63 %
Car	1074	59 %
Bus	619	34 %
Bike	512	28 %
Walk	277	15 %
Carpool	199	11 %
Other	67	4 %
Total Respondents	1817	
Skipped Question	76	

Q11: What are your top three priorities for the transportation system within Central Oklahoma? (choose three*)

	Response Total	Response Percent*
Develop passenger rail	1003	56 %
Maintain roads and bridges	891	50 %
Improve public bus system	619	35 %
Add more bicycle paths/bike lanes	582	33 %
Add more sidewalks/walking paths	469	26 %
Expand interstate rail (Amtrak)	451	25 %
Improve interchanges on interstates	241	14 %
Add lanes to interstates	233	13 %
Improve traffic signals/intersections	227	13 %
Increase transportation services for elderly and disabled	226	13 %
Add lanes to roads	206	12 %
Total Respondents	1782	
Skipped Question	111	

STRONG OKC METRO AREA SUPPORT FOR RAIL TRANSIT

OKC METRO AREA RAIL NETWORK



**SIGNIFICANT OPPORTUNITIES FOR
COMMUTER RAIL SERVICE**

OLD GENERATION COMMUTER RAIL



Albuquerque



Salt Lake City



Minneapolis

- MotivePower MPXpress diesel-electric locomotives with Bombardier bi-level passenger coach cars
- Commuter Rail vehicle of choice throughout US for last 30 years
- Technology improvements making MPXpress obsolete and less favorable for new commuter rail systems

NEW GENERATION COMMUTER RAIL



Siemens Charger - San Diego

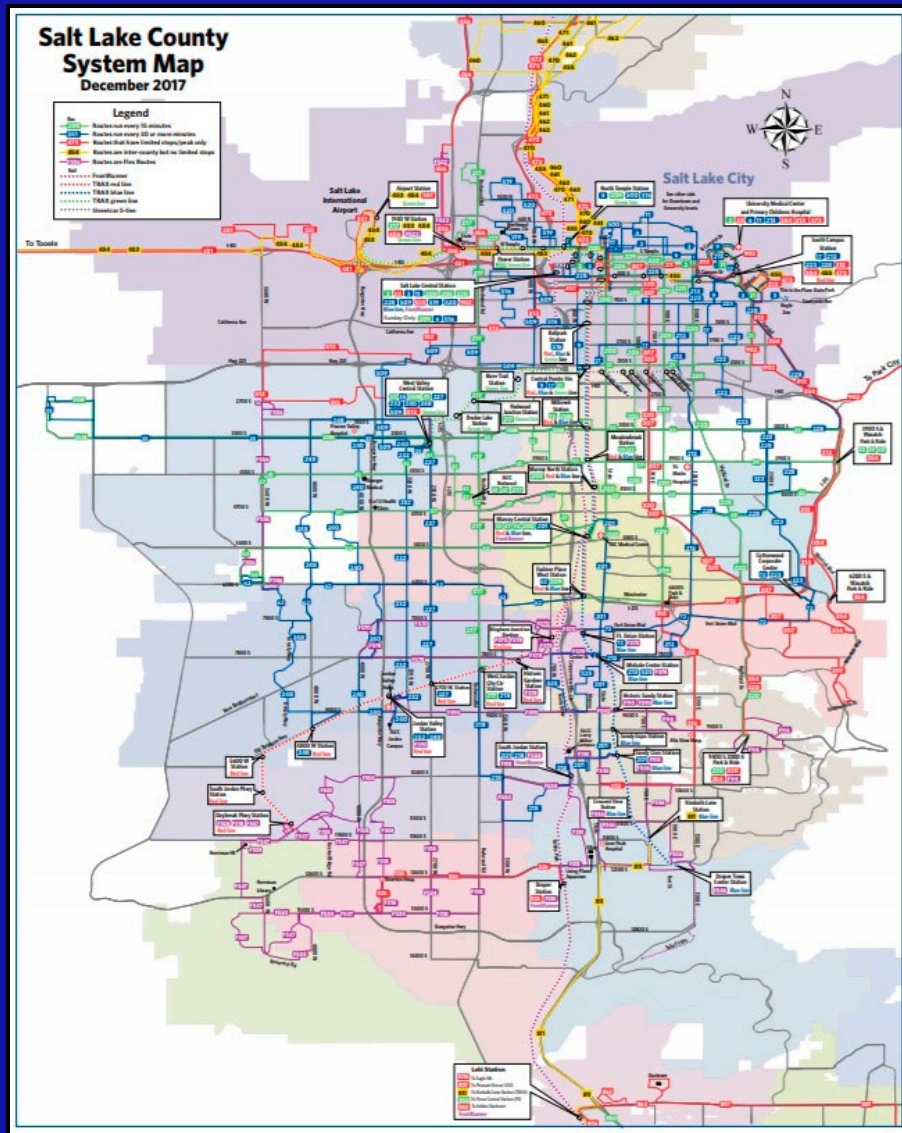


Stadler FLIRT DMU - Fort Worth



- Siemens Charger locomotives with Alstom coach cars and Stadler FLIRT DMU vehicles
- Powerful, fuel-efficient diesel-electric engines-motors...meets EPA Tier 4 emissions standards
- Faster acceleration than older MPXpress models...higher speeds than light rail
- Longer distance operations than light rail...more stations than older generation commuter rail
- Improved seating and passenger capacity...restrooms...worktables...bike racks...Wi-Fi

IT'S NOT ALL ABOUT TRAINS



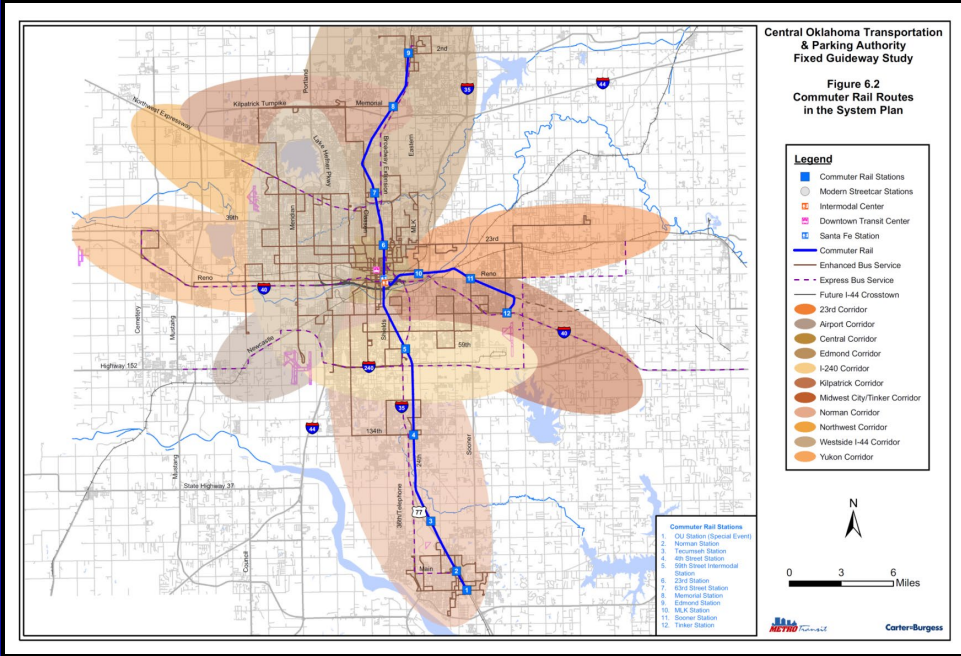
- Comprehensive bus system is the backbone of the regional transit system
- Bus system expansion required to provide connecting service when rail transit operations begin



UTA Bus System

- 120 bus routes
- 2 BRT lines
- 480 bus fleet
- 66,300 daily ridership

OKC IMPORTANT FIRST STEPS: 2005 FIXED GUIDEWAY STUDY



- Recommended Commuter Rail between Oklahoma City, Norman, Edmond, and Midwest City
- Recommended Downtown OKC Modern Streetcar for “last mile” transit component
- Identified Santa Fe Station as future intermodal transit hub

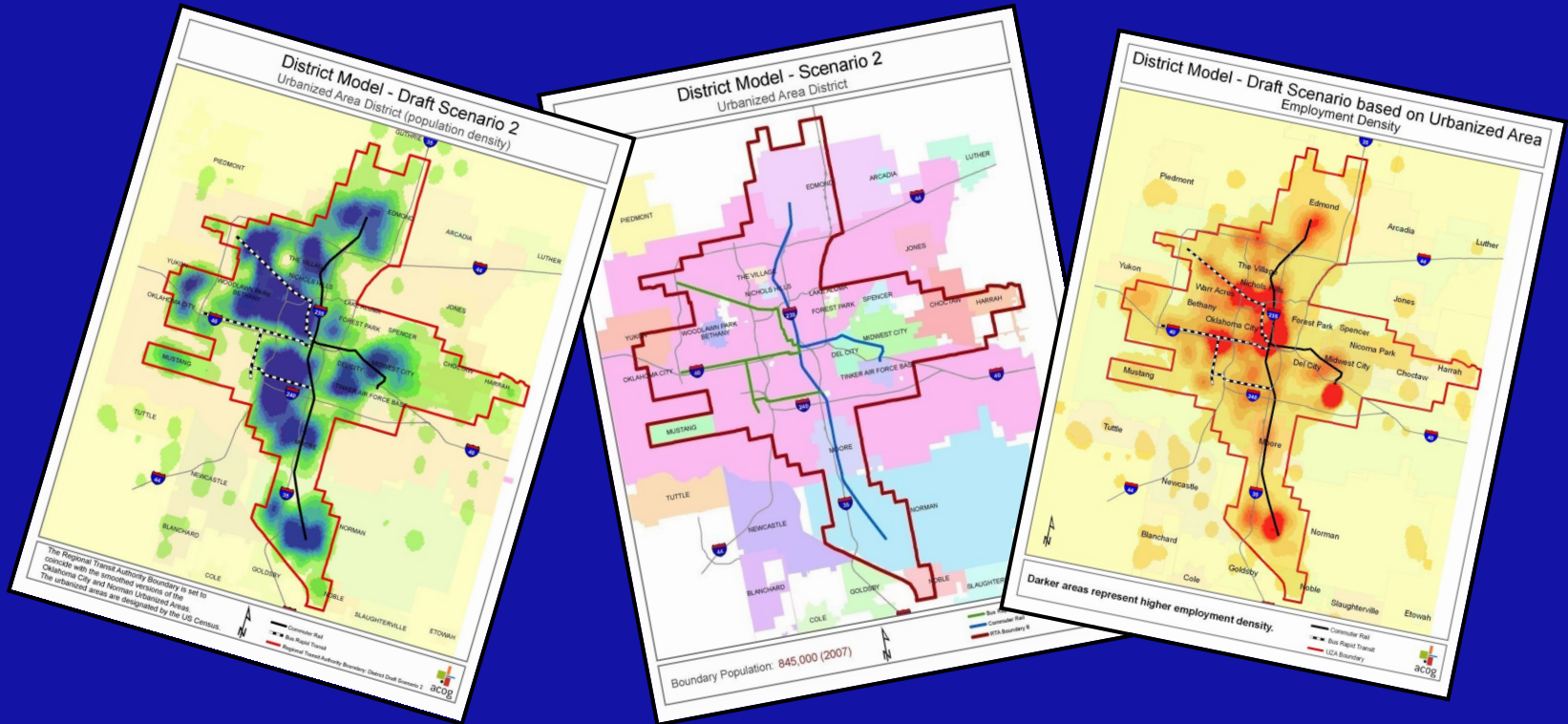
BIG STRIDES

- 2009-2010 - ACOG developed framework for Regional Transit Authority and Regional Transit District
- 2011 - ACOG completed Intermodal Hub Study
- 2014 - OKC acquired Santa Fe Station
- 2014 - ACOG completed Commuter Corridor Analysis
- 2014 - HB 2480 signed by Governor allowing for RTAs
- 2015 - OKC metro area cities authorized Regional Transit Authority Task Force to develop RTA
- 2017 - OKC redeveloped Santa Fe Station
- 2018 - OKC completed development of 6.9 mile downtown modern street car system
- 2019 - OKC, Norman, Edmond, Moore, Midwest City and Del City created the Regional Transportation Authority of Central Oklahoma



Association of Central
Oklahoma Governments

REGIONAL TRANSIT DIALOGUES



- Municipal, business, and other local metro area leaders developed recommendations for future regional transit governance, financing, and system operations

REGIONAL TRANSIT AUTHORITY TASK FORCE



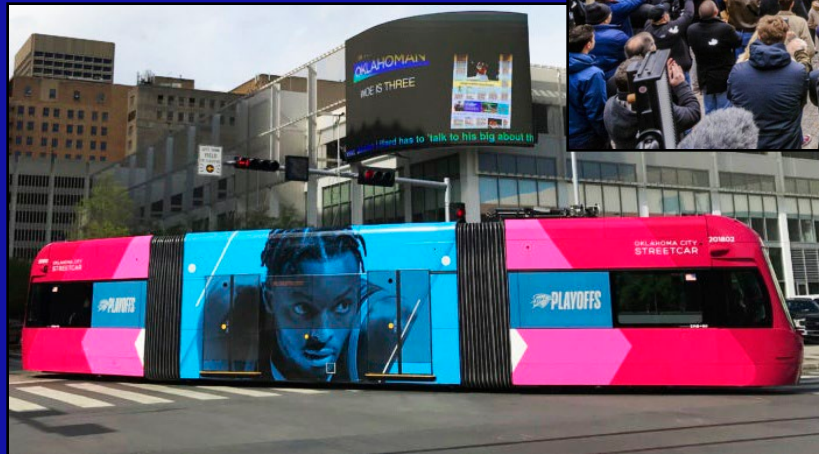
OKC metro area mayors create RTA Task Force

SANTA FE INTERMODAL STATION



Ready to serve regional transit system

OKC STREETCAR



First component of future rail transit system

OKC STREETCAR SYSTEM



CONNECTING:

- HOUSING
- EMPLOYMENT
- RETAIL
- ENTERTAINMENT
- HEALTH
- EDUCATION

SERVING:

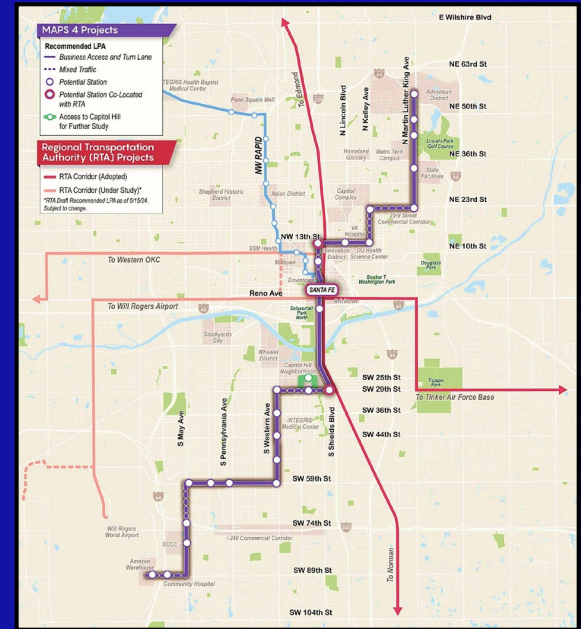
- SANTA FE STATION
- CENTRAL BUSINESS DISTRICT
- BRICKTOWN
- AUTOMOBILE ALLEY
- MIDTOWN
- SCISSORTAIL PARK
- OKC CONVENTION CENTER
- MYRIAD GARDENS
- OKLAHOMA MEMORIAL
- ST. ANTHONY'S
- OKC THUNDER ARENA

"Last Mile" transit service from Santa Fe Station

OKC BUS RAPID TRANSIT



RAPID NW



RAPID NE AND SW

- Rapid NW first OKC BRT line...opened December 2023...first year ridership 450,000
- Rapid NE and SW currently in planning and development
- BRT lines to connect to Santa Fe Station as integrated components of future comprehensive regional transit system

REGIONAL TRANSPORTATION AUTHORITY OF CENTRAL OKLAHOMA



OKC, Norman, Edmond, Moore, Midwest City and
Del City create first Regional Transportation
Authority in Oklahoma

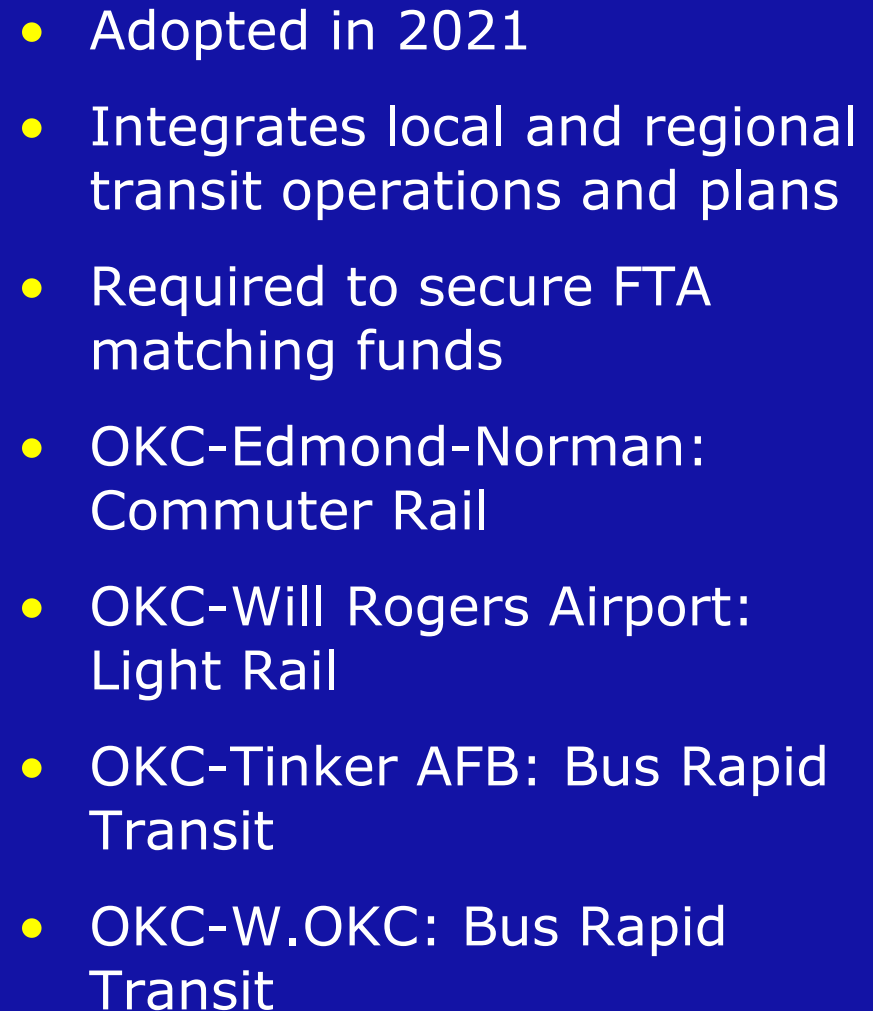
BENEFITS OF CREATING AN RTA

- Create single governance structure for managing development and operation of regional transit system
- Formalize collaboration among cities in regional transit decisions, funding, operations and maintenance
- Provide transit services in an efficient, seamless manner
- Focus on regional transit perspective, rather than city by city, for a robust metropolitan-wide system
- Facilitate the implementation of a regional dedicated funding source for transit
- Improve ability to successfully compete for federal transit funding
- Coordinated planning for development near transit stations
- Provide single point of contact to work with large business, developers, universities, sports teams, and other major activity generators to enhance visitor experience with additional mode options

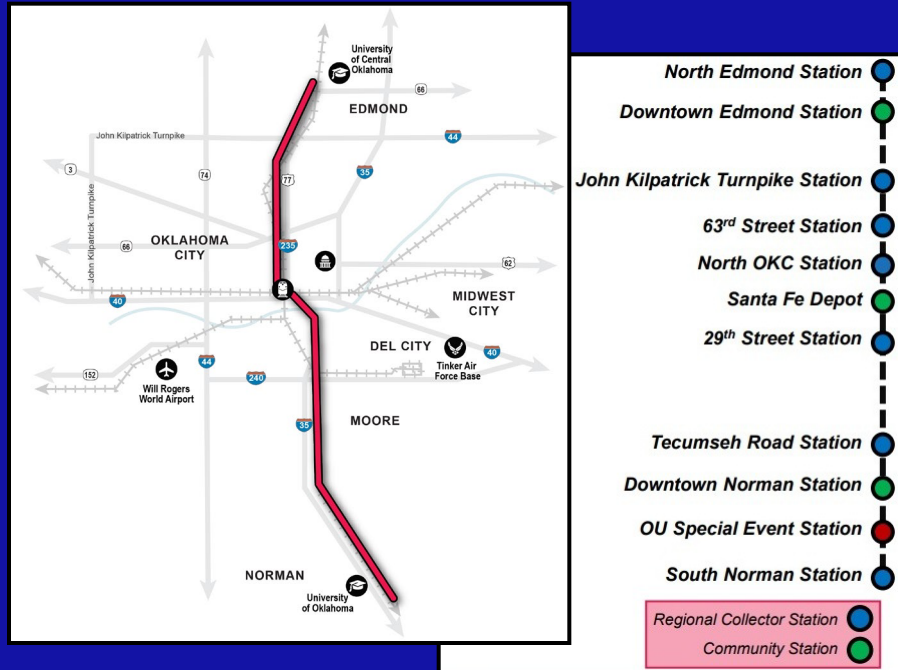


REGIONAL TRANSPORTATION AUTHORITY OF CENTRAL OKLAHOMA

- 7-Member Board of Directors...Former Governor Brad Henry, Chair
- Currently funded by member cities contributions
- Embark providing staff support until permanent funding established
- Legal and planning consultants under contract with RTA
- Working with FTA to qualify RTA to receive federal funding grants
- Contract being finalized with BNSF for commuter rail operations
- Regional transit system plan approved
- Locally Preferred Alternatives approved for N/S Commuter Rail, E/W Bus Rapid Transit, and DT/Airport Light Rail
- Preparing for referendum on dedicated RTA funding source



REGIONAL TRANSIT – PHASE ONE



- OKC-Edmond-Norman Commuter Rail service
- Ten stations, including OU Special Event station for Sooner football games
- OKC Santa Fe Station serves as central intermodal hub
- Daily and weekend service with higher frequency during morning/evening rush hour and special events
- Special front door service to OKC Thunder games



TIMELINE TO REGIONAL TRANSIT

OKC REGIONAL TRANSIT TIMELINE 20 YEARS OF DEDICATED EFFORTS

