



35M MAX:

the First BRT in Salt Lake County



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Utah Transit Authority

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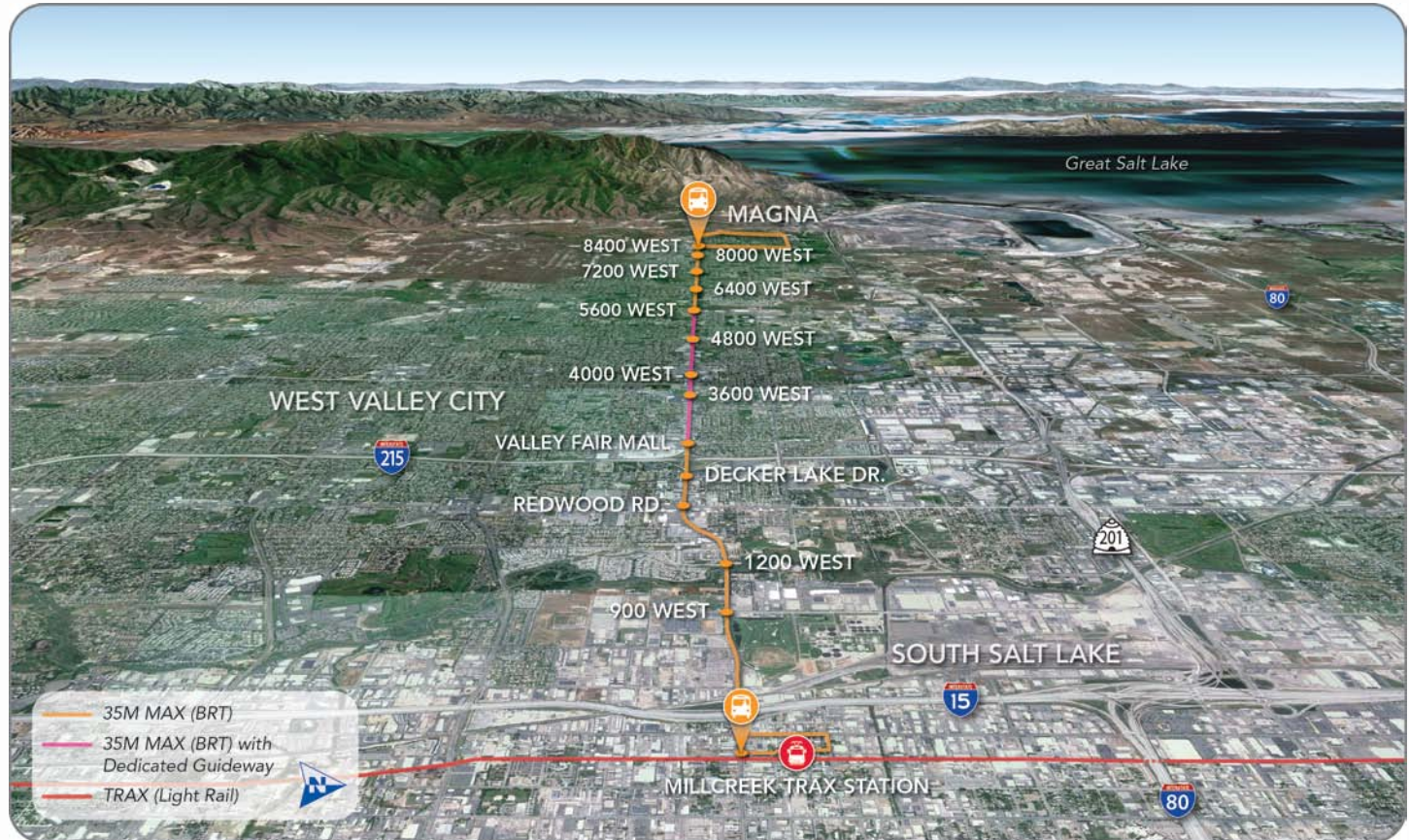


PROJECT

35M MAX BRT



35M MAX Project Map



BRT Type I – the MAX



- 10 miles, from Magna to 3300 South TRAX station.
- 14 stations one-way, with approximately .7 mile spacing.
- Extended hours and a 15 minute frequency to meet TRAX, (LRT system).
- Ridership is 4,200 riders per day; pre MAX ridership was 2,100 riders per day.





- Unique station canopies
- “MAX to TRAX” slogan
- Bus branding
- Bus stop signage



Reasons MAX is Faster

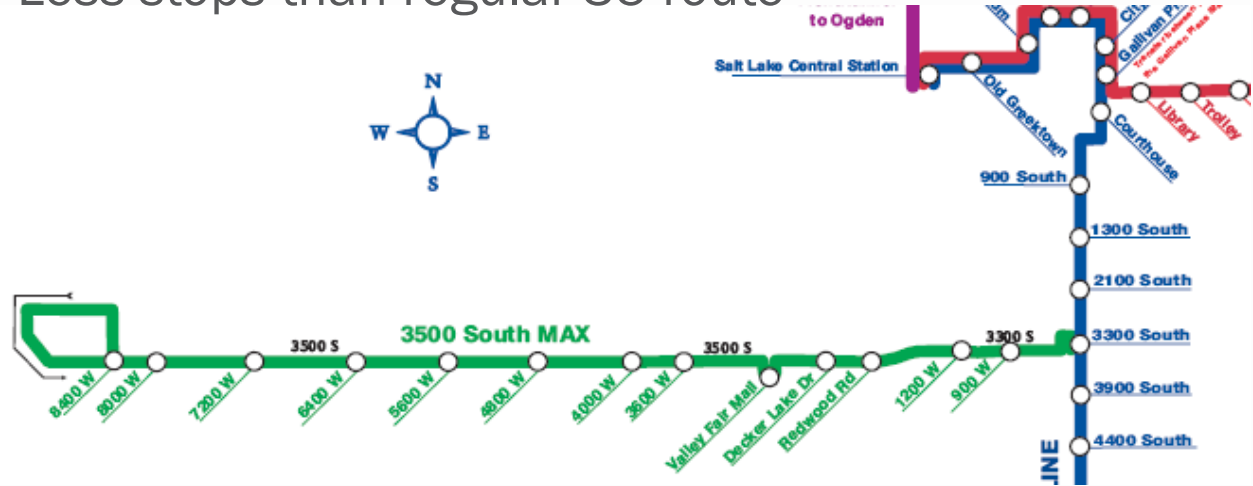


Traffic signal
priority



Off-board fare
collection

Less stops than regular 35 route



Boarding at three doors



Provides a Better Service ■



- Higher frequency and faster run time
- Exclusive lanes
 - One mile section through a heavily urbanized and congested portion of the route
- Single lane + signals
- Easily recognized and understandable system

Exclusive Lane Operation



3500 South Center Lane



MAX TO TRAX

08102

VAN HOOB

08102

MAX

Canopies and Platforms

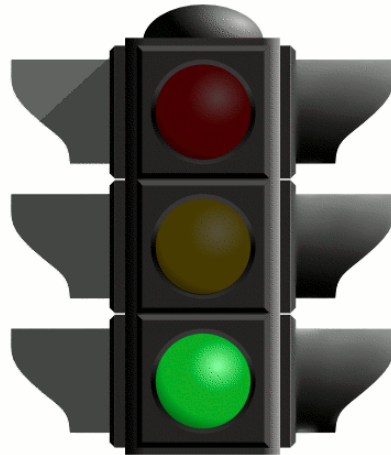


Center running canopy



Side running canopy

Single Lane and Signal Priority ■



- Single lanes + signals
- Traffic weaving + signal priority

MAX TVM vs. TRAX TVM



- Repurposed parking ticket vending machines
- Accepts cash and gives change
- Real time credit card processing
- Cost per machine = \$15,000
 - Standard transit TVM are \$50,000 + per machine
- Real time online back office

Features of the Vehicle



Social seating



Stop request buttons at all exits and seats



Rear window



Improved ADA ramp, restraints, and all-low floor configuration



Center lane construction (1 mile) =	\$1,300,000
ROW costs =	\$6,950,000
Station canopies =	\$2,000,000
Bus procurement (14 buses + parts) =	\$6,500,000
Total project costs =	\$16,700,000

System Enhancements

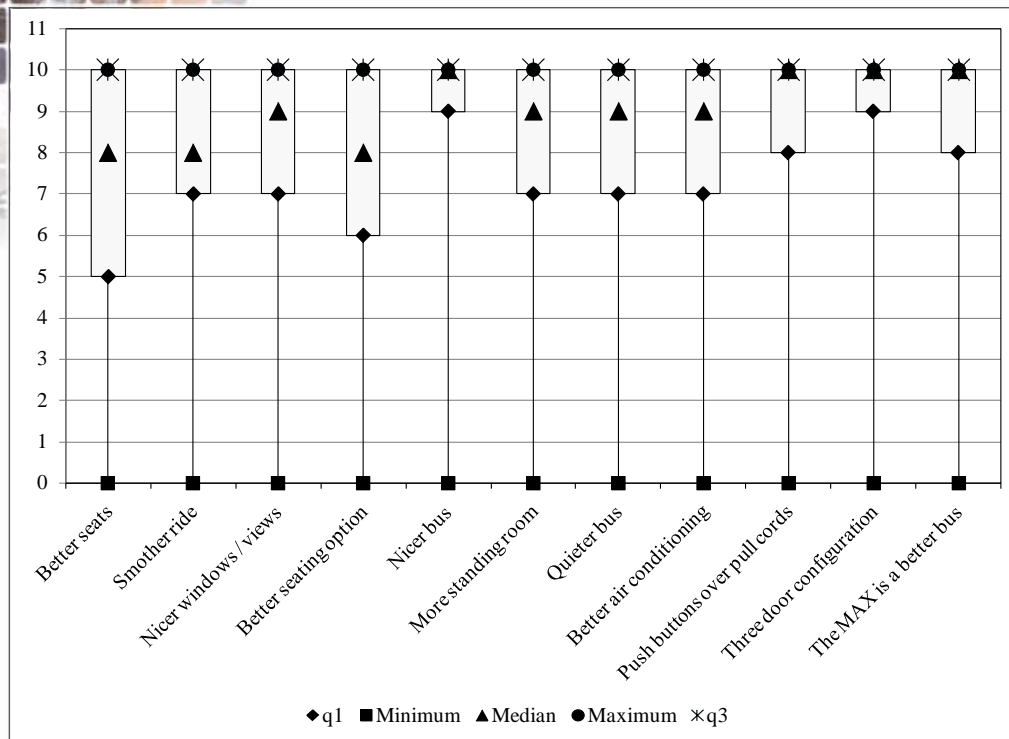
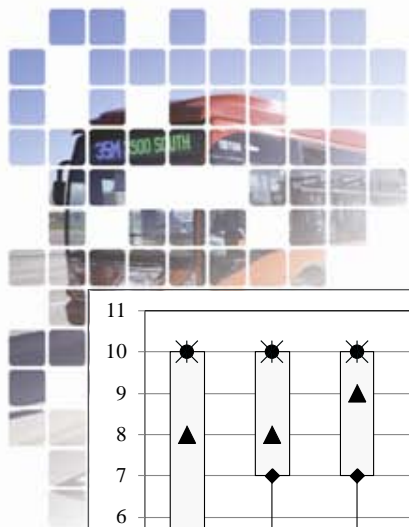
- West Valley light rail connection at the West Valley Hub, opening August 2011
- Future center station at 3000 West





RESULTS

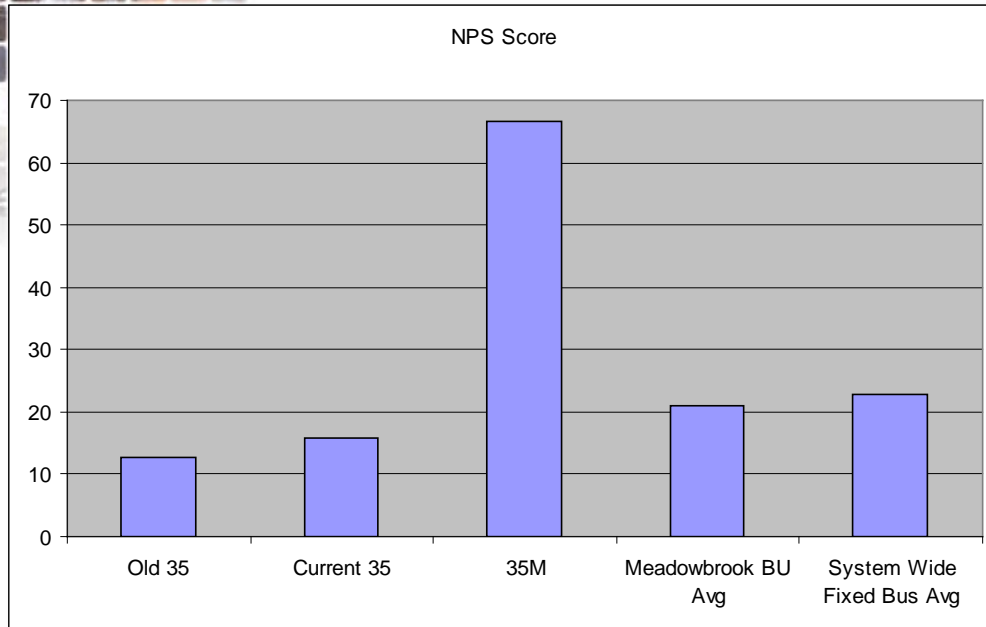
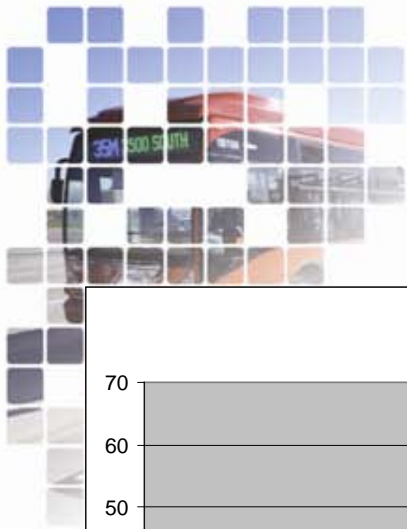
What our Customers Think of the Bus



Vehicle Attributes Survey

- New buses scored very high in passenger surveys.
- Survey Replies:
 - The MAX is quieter than other buses.
 - The MAX has windows with nicer views outside.
 - The MAX offers a smoother ride.
 - Overall, the MAX is better than other UTA buses.

What our Customers Think of the Service



Net Promoter Score

**Ridership has increased from
2100 riders per day to 4200 riders per day**

- “Service is great.”
- “Put more MAX on every route in the valley.”
- “I like the express bus (MAX 35M) because it take me fasters to work than the normal 35.”
- “I like the fast travel time from stop to stop.”
- “This is my first time on this new system, but it seems that it’s going to be a success.”
- “Very good service! Thank you!”



The system has between 85-97% on-time reliability.

Average Travel Time from 8400 West to 3300 TRAX

Car	MAX	Local Route
25 minutes	29 minutes	35-39 minutes

Average Travel Time in the Dedicated Lane

Car	MAX	Local Route
4 ½ minutes	3 minutes	-----



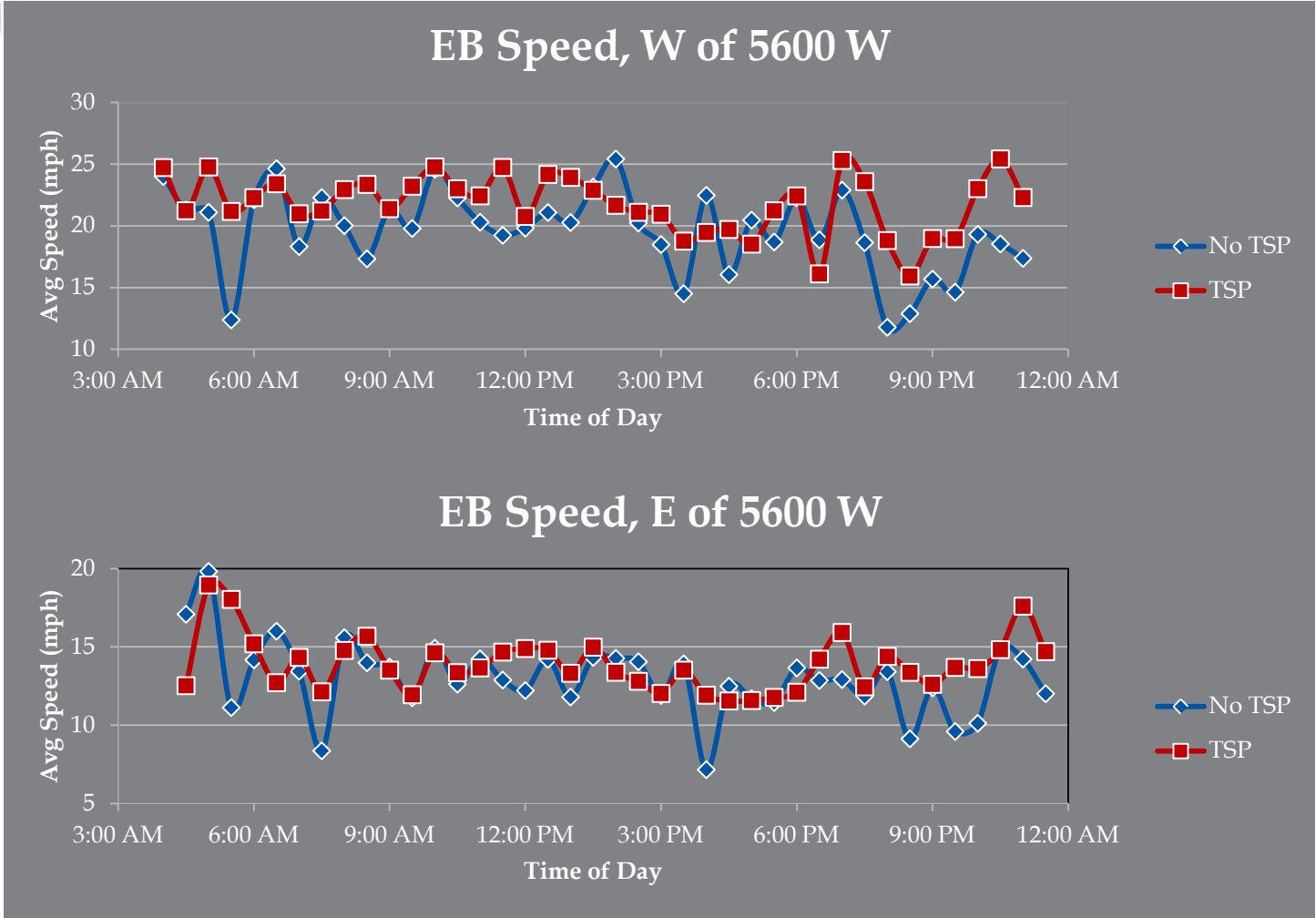
West of 5600 West

- Average travel time
 - No TSP: 19.6 mph
 - TSP: 21.8 mph
- Morning peak (7-9 am)
 - No TSP: 19.9 mph
 - TSP: 22.0 mph
- Evening peak (4-6 pm)
 - No TSP: 20.0 mph
 - TSP: 20.3 mph

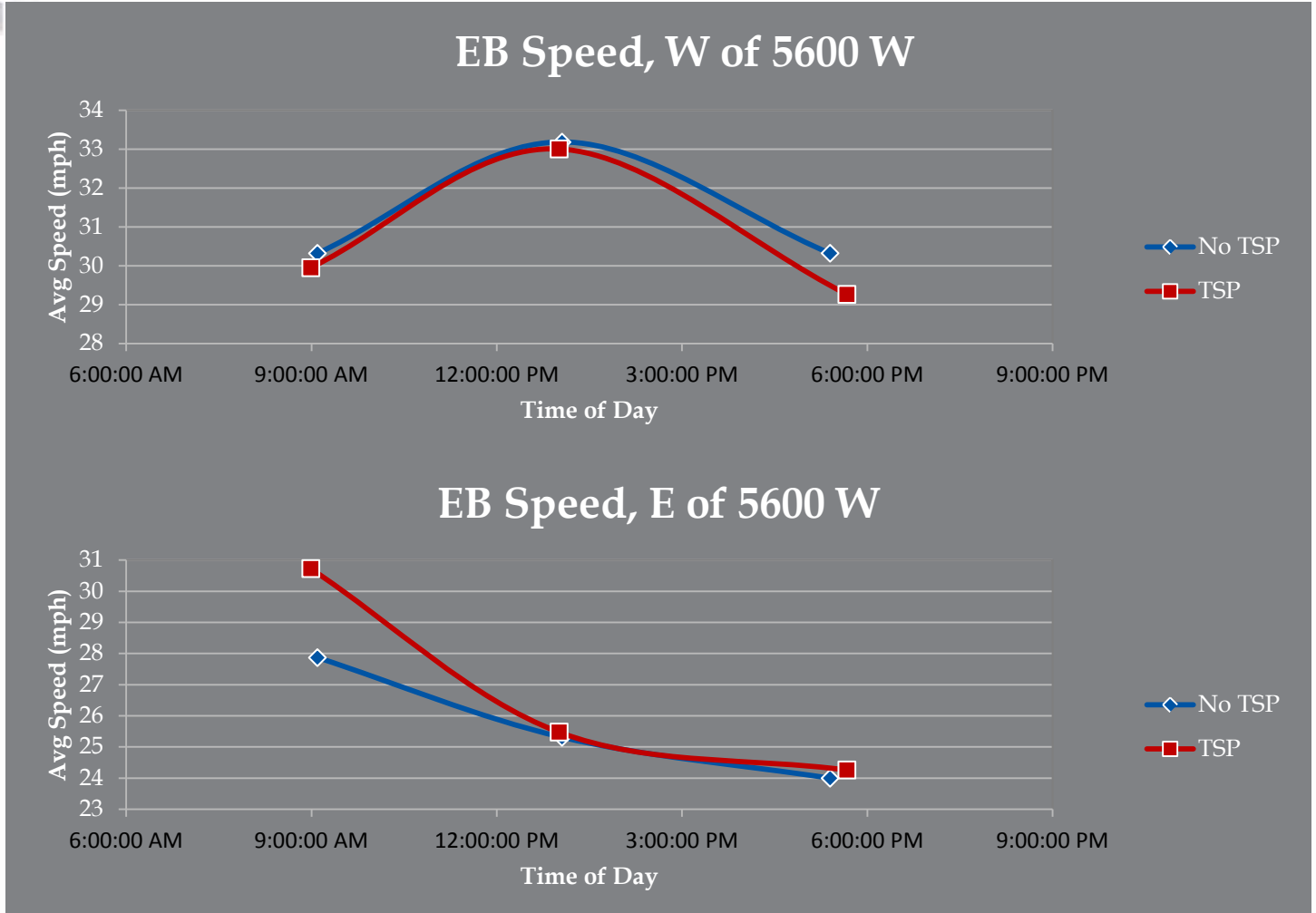
East of 5600 West

- Average travel time
 - No TSP: 13.0 mph
 - TSP: 13.9 mph
- Morning peak
 - No TSP: 13.0 mph
 - TSP: 14.1 mph
- Evening peak
 - No TSP: 11.3 mph
 - TSP: 11.8 mph

Average Speed (UTA) Eastbound



Average Speed (UDOT) Eastbound





East of 5600 West

- Average travel time
 - No TSP: 12.9 mph
 - TSP: 14.1 mph
- Morning peak (7-9 am)
 - No TSP: 15.2 mph
 - TSP: 16.4 mph
- Evening peak (4-6 pm)
 - No TSP: 11.2 mph
 - TSP: 12.0 mph

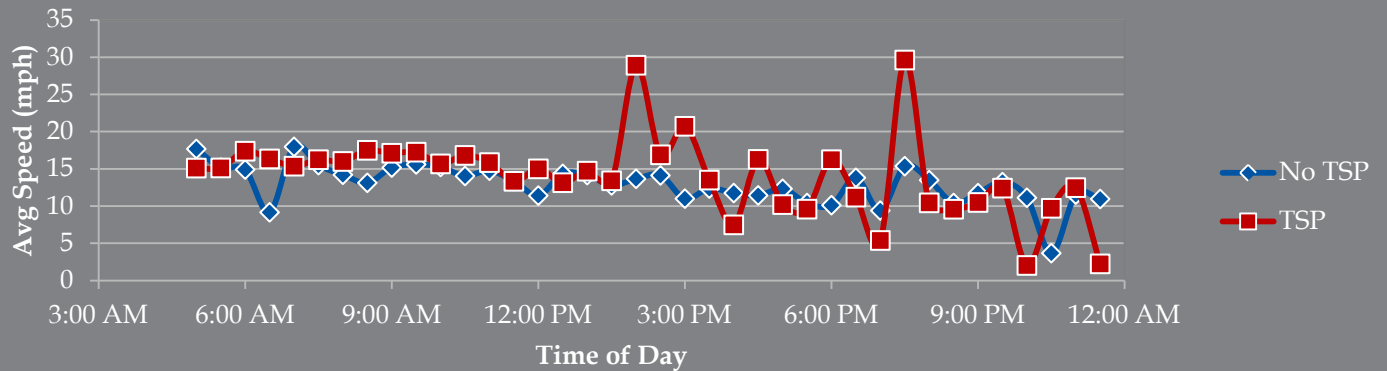
West of 5600 West

- Average travel time
 - No TSP: 19.7 mph
 - TSP: 20.7 mph
- Morning peak
 - No TSP: 21.1 mph
 - TSP: 22.6 mph
- Evening peak
 - No TSP: 18.1 mph
 - TSP: 19.4 mph

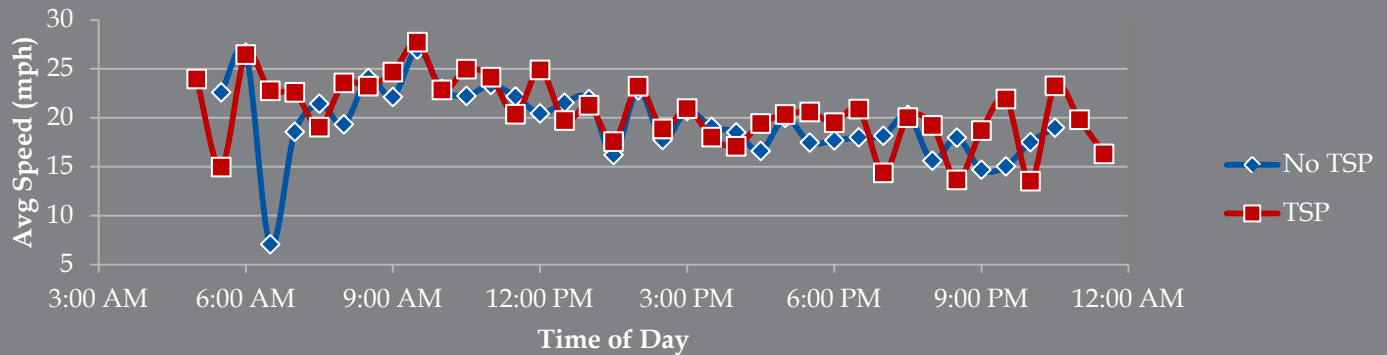
Average Speed (UTA) Westbound



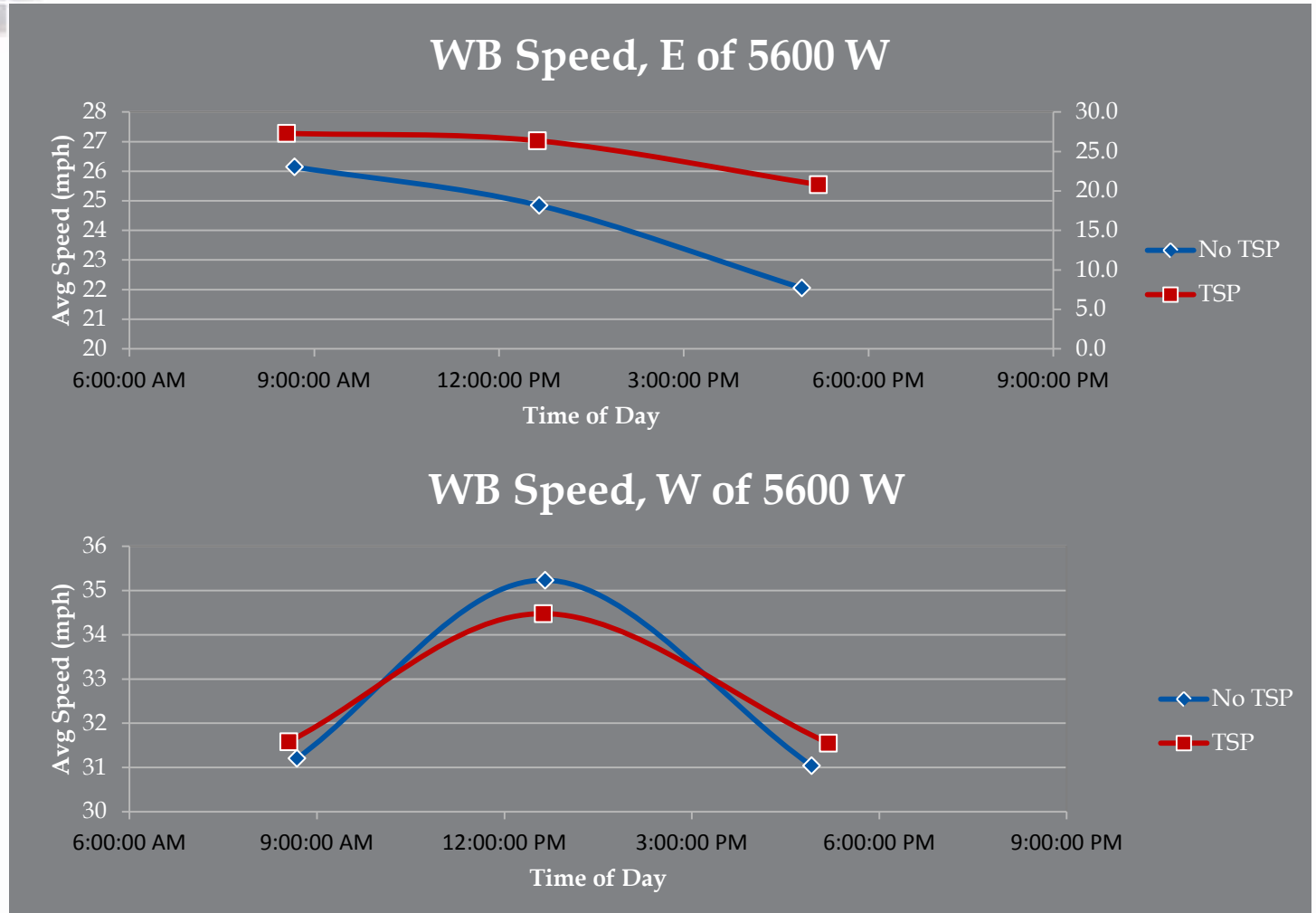
WB Speed, E of 5600 W



WB Speed, W of 5600 W



Average Speed (UDOT) Westbound





- Travel time – TSP helps westbound travel more than eastbound, lower travel time
- Travel speed – TSP helps eastbound travel, faster travel speed
 - Has greater impact west of 5600 West (where signals are free) (UTA data)
 - UDOT data shows greater impact east of 5600 West (coordinated signals)
- Travel speed – TSP helps westbound travel as well, faster travel speed
 - Has a greater impact east of 5600 West (where signals are coordinated) (UTA and UDOT data)



- Big increase in ridership
- Customers like the system and service
- Buses are a good fit and work well
- TVMs work well
- Center lane operation is effective with 15 minute headways
- TSP helps improve travel time consistency
- Far side and limited stops improve overall travel time



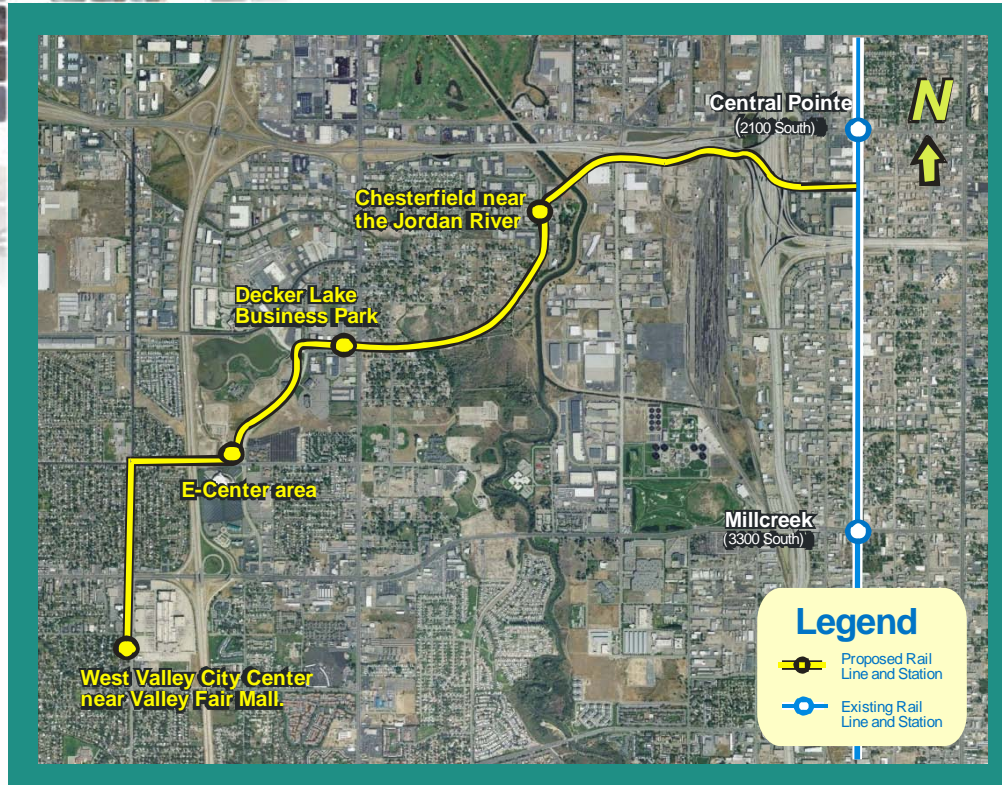
NEXT STEPS

Project Overview

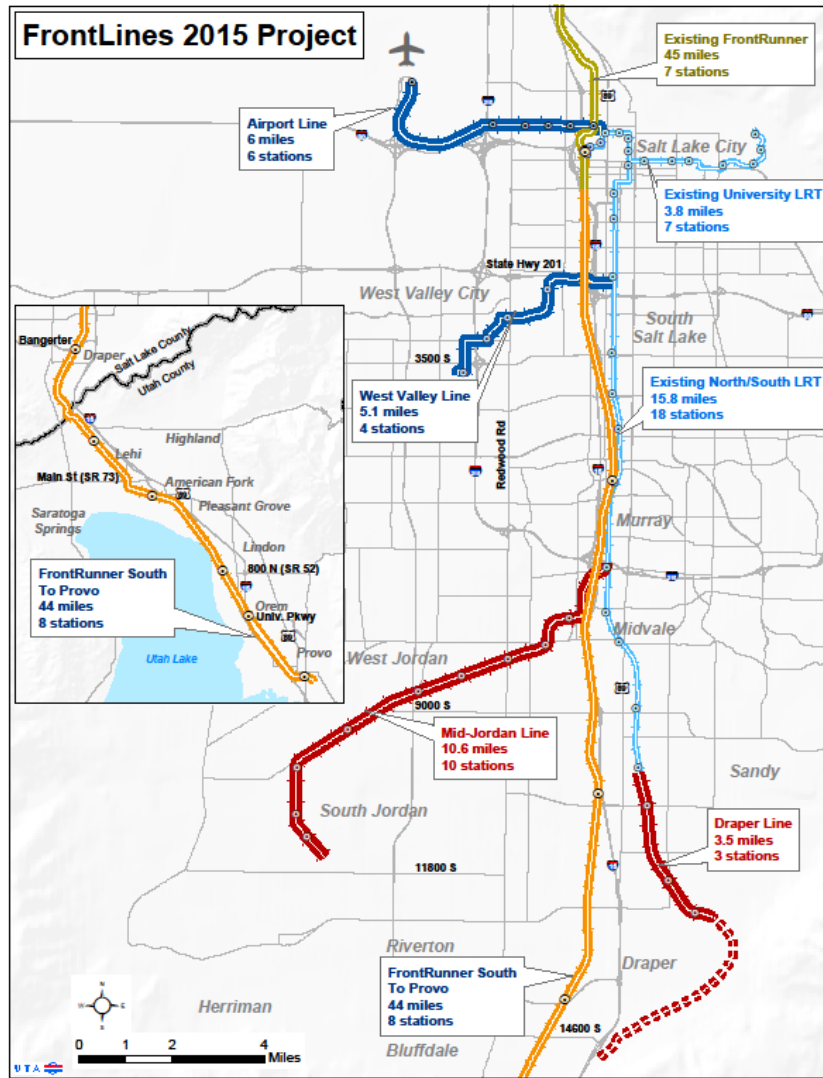
- 5.0 miles
- Four proposed stations
- 15-minute frequency
- Projected ridership of 9,000 - 12,000 in 2025
- Completing Draft EIS
- Preliminary engineering underway

Accelerated Schedule

- Open for service in 2012
- Estimated cost: \$250 - \$290 million



Role: Overall Project Manager
Draft Environmental Impact Statement

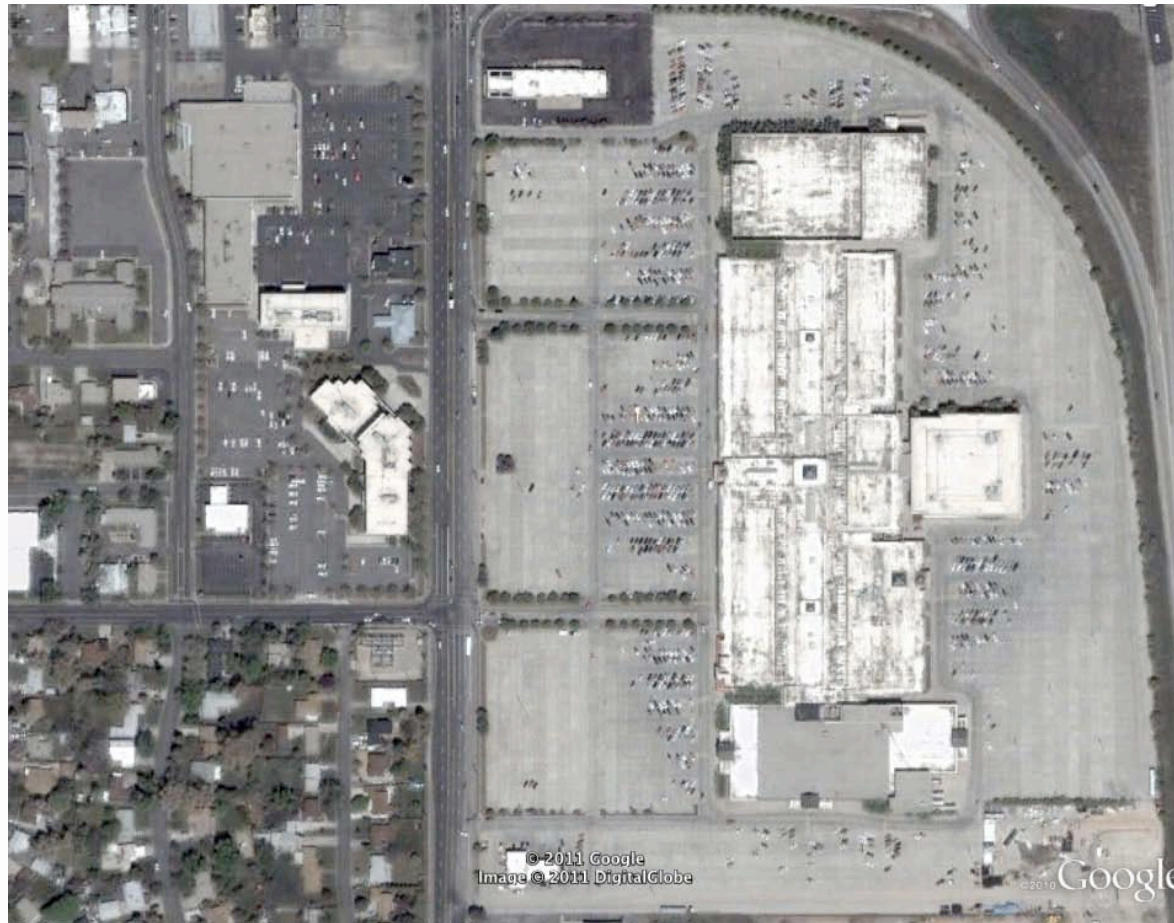


- UTA's largest project in its history
- Sixth largest rail project (U.S. and Canada)
- Building 70 miles of rail in seven years
- One project that includes five lines
- Mid-Jordan TRAX
- West Valley TRAX
- FrontRunner South
- Draper TRAX
- Airport TRAX

West Valley Intermodal Center



- Budget \$10.5 million
- Final project cost \$6.7 million
- West Valley paid local match





Concept Plan





Concept Plan





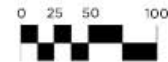


Promenade



West Valley Promenade

5.10.2011



GSBS
ARCHITECTS



Plaza





Residential





Valley Fair Mall





Valley Fair Mall





Valley Fair Mall

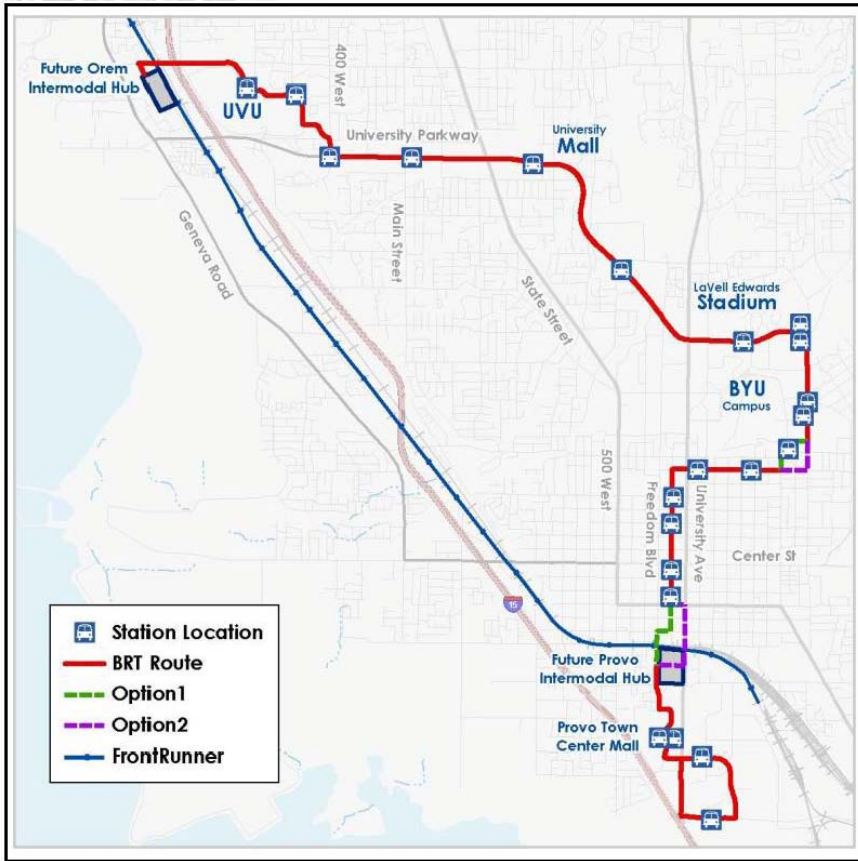


Long Range Plan Projects

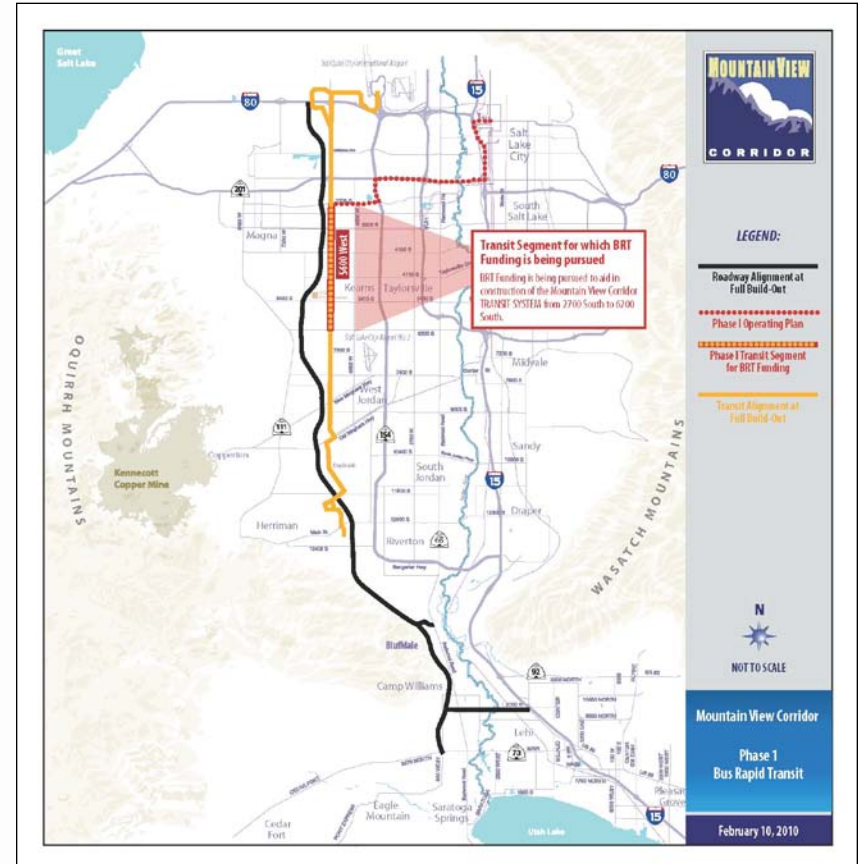
- Long range transportation plans (WFRC/MAG)
 - 76 miles of added commuter rail
 - 27 miles of added light rail
 - **180 miles of bus rapid transit (BRT)**
 - **106 miles of enhanced bus**
 - 11+ miles of streetcar
 - Double the number of UTA buses
- Transit-oriented development (TOD)
 - 150 potential station sites in 2040 plan
- Energy diversification (CNG, electric, hydrogen)



UTA BRT Planned Corridors



Provo - Orem BRT



5600 West (MVC) BRT