

+ UTA Future of Light Rail Study TAC and Stakeholders Meeting



July 20, 2021

Future of Light Rail Study

Copyright © Hatch 2020. All Rights Reserved.

HATCH LTK





Agenda

- Introductions
- Study Goals
- Study Progress – Where Are We?
- Phase 1 Public Survey Results
- Types of Long List Improvements
- Potential Benefits of Long List Improvements
- Discussion
 - What's Missing?
 - Planning for August 31 Stakeholder Meeting

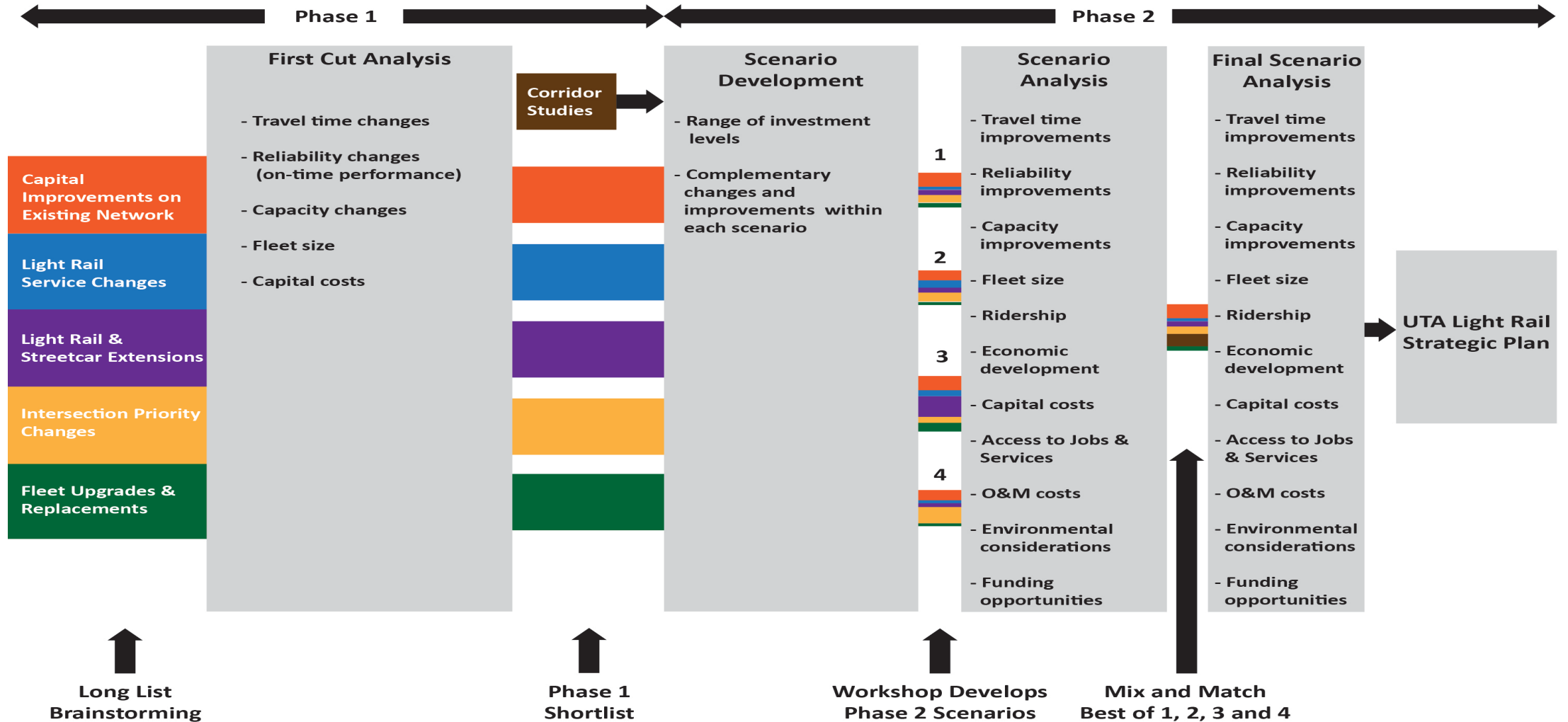


Study Goals

- Grow ridership
- Define appropriate span and frequency of service for current and projected demand
- Recommend necessary fleet modifications and facility needs
- Recommend projects that improve speed, reliability and safety of existing system
- Refine and define LRT expansion proposals or concepts

Study Process

Future of Light Rail Study



Phase 1 Accomplishments

Future of Light Rail Study



- Comprehensive TRAX fleet analysis and options for the future
- Created full TrainOps[®] simulation model to benchmark existing performance, analyze future improvements
- Evaluated wide range of capital investments
- Tested two levels of higher intersection priority for TRAX
- Evaluated service changes including 25% system service growth
- Investigated options to start service earlier/end later
- Public survey to understand perceptions of TRAX

Phase 1 Public Survey Results

Future of Light Rail Study



- UTA conducted a survey using the Open UTA Platform on TRAX customer satisfaction
- Survey open from February 8 to March 14, 2021
- 227 respondents

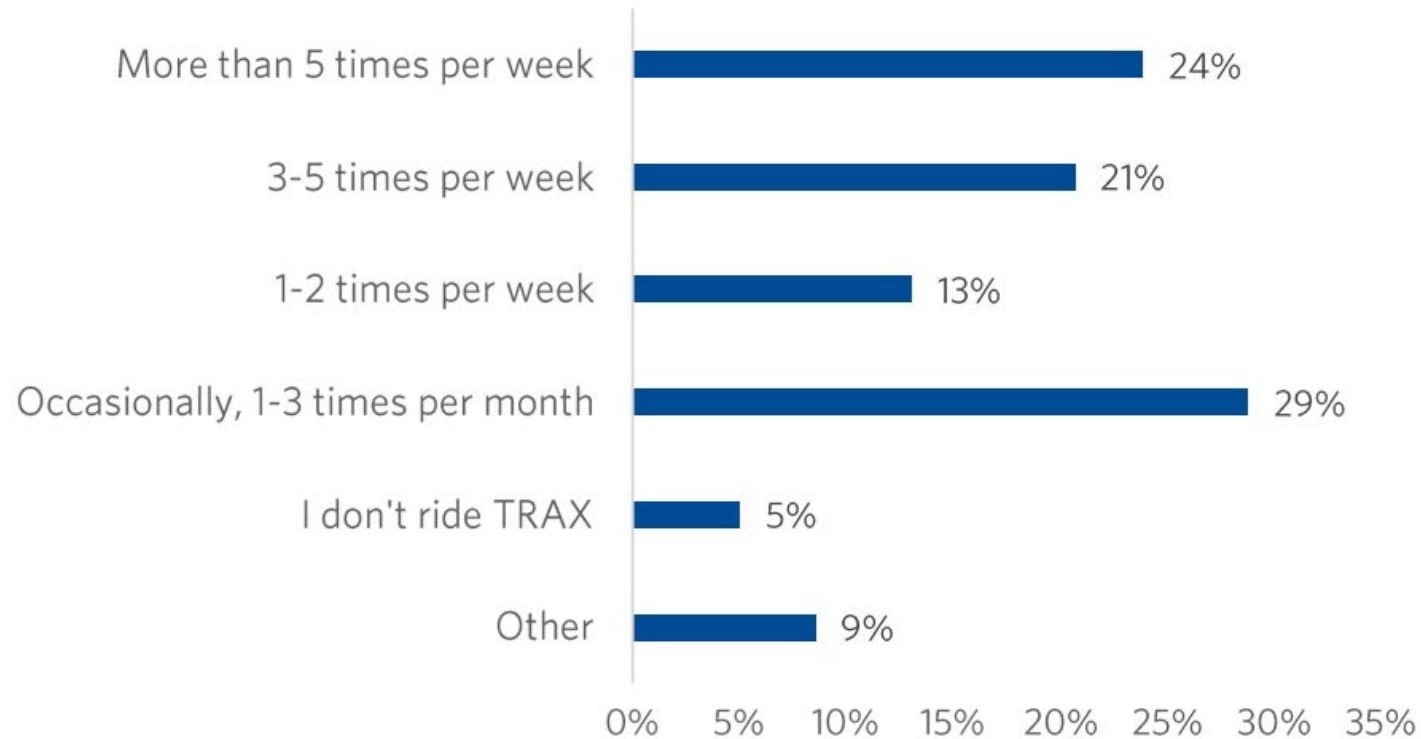
Phase 1 Public Survey Results (Cont.)

Ridership

Future of Light Rail Study



Frequency of S-Line/TRAX Use Prior to COVID-19

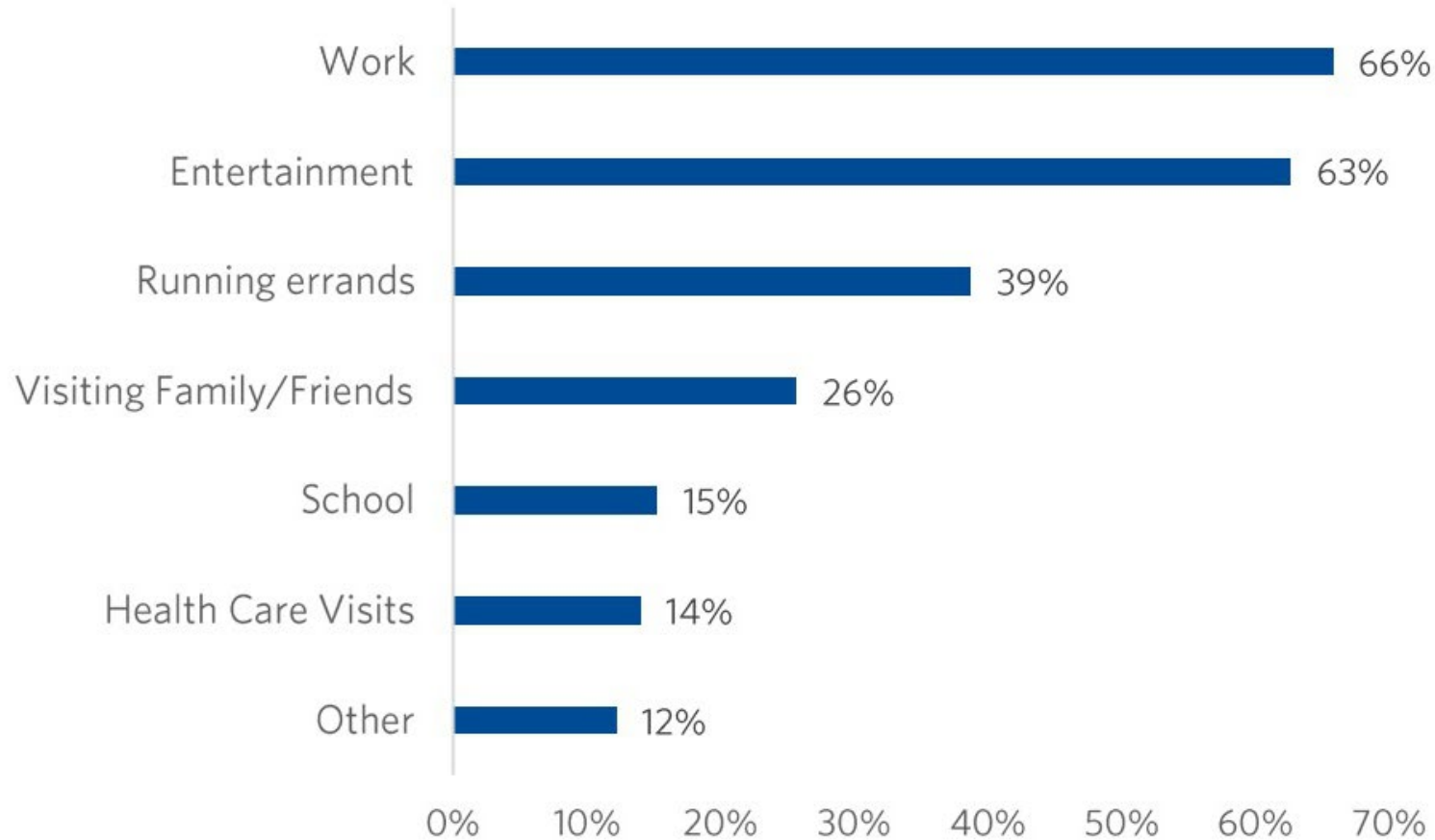


Phase 1 Public Survey Results (Cont.)

Future of Light Rail Study



Top Reasons for Using TRAX

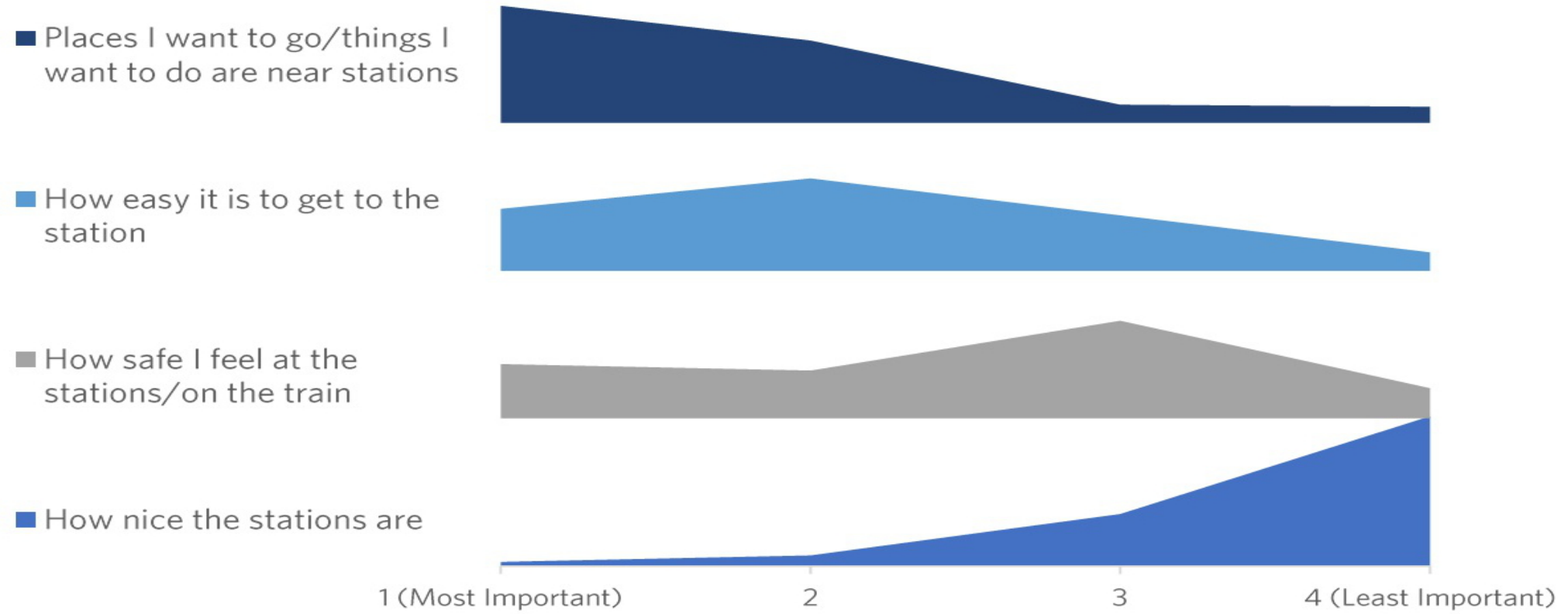




Phase 1 Public Survey Results (Cont.)



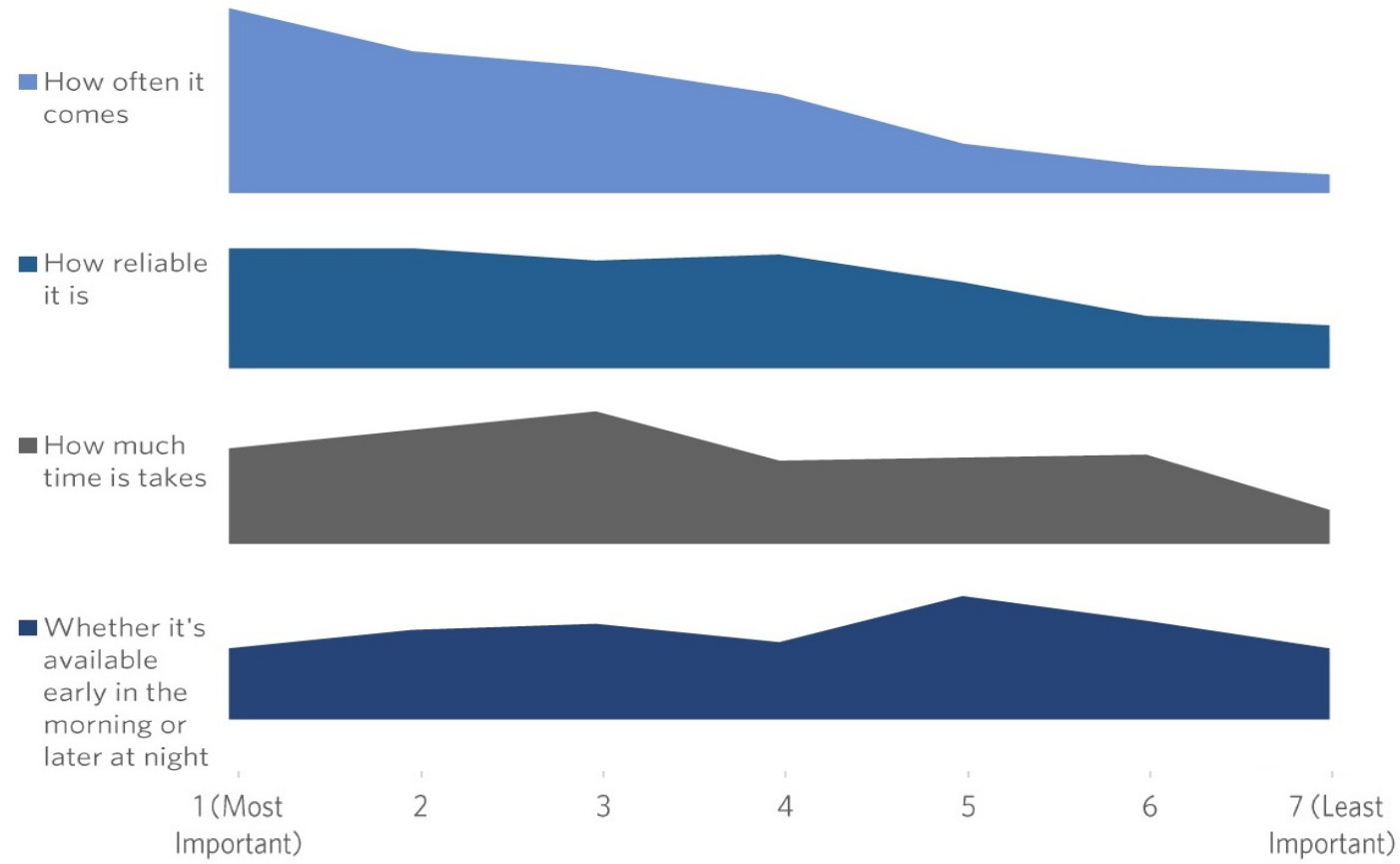
Ranking Importance of Non-Service Factors



Phase 1 Public Survey Results (Cont.)



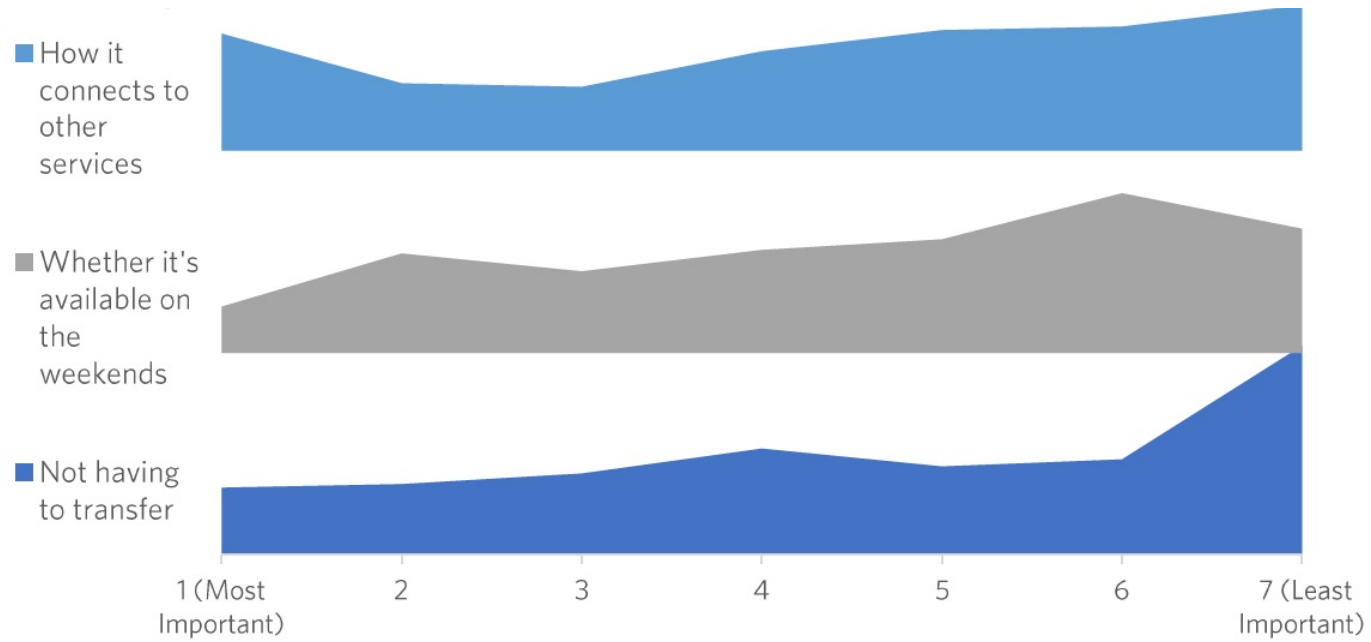
Ranking Importance of Service Factors





Phase 1 Public Survey Results (Cont.)

Future of Light Rail Study

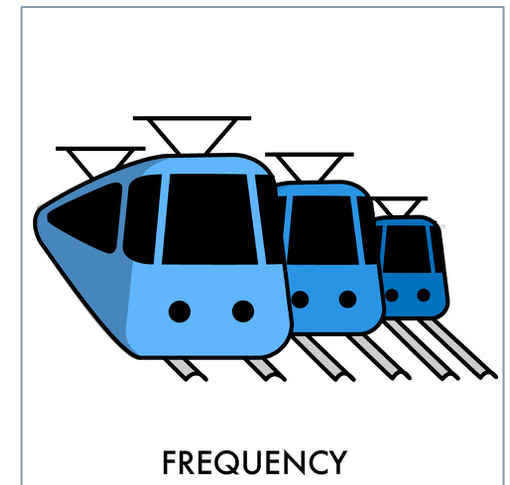
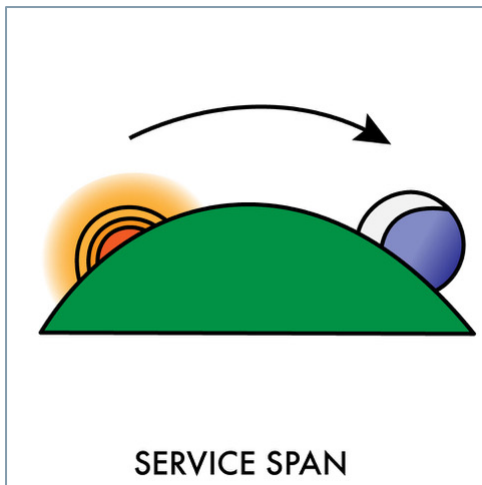
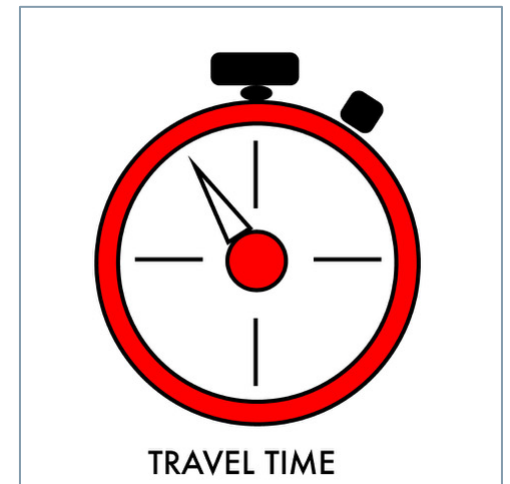
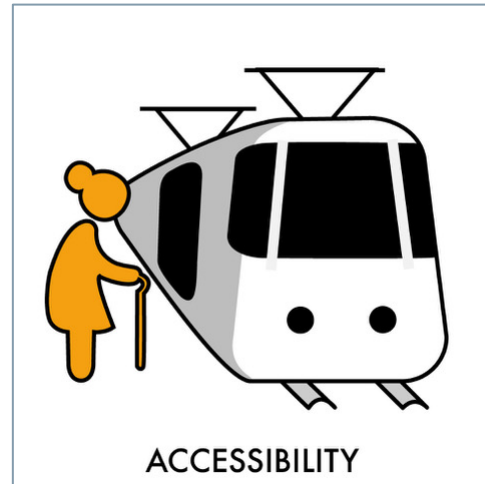




Types of Long List Improvements

- Capital improvements (on existing TRAX)
- Light Rail service changes
- Light rail and streetcar extensions
- Intersection priority changes
- Fleet upgrades and replacements

Potential Benefits of Long List Improvements



Capital Improvements (On Existing TRAX)

Future of Light Rail Study

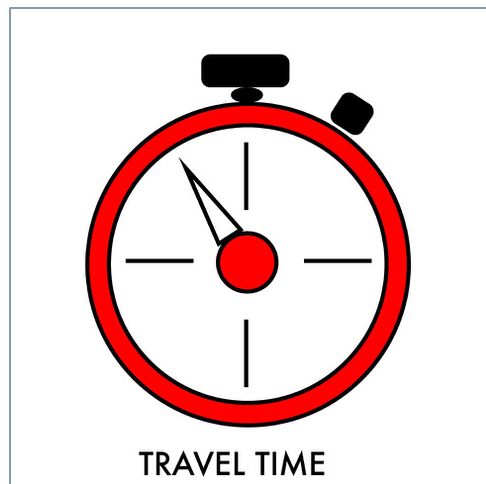


Trunk Line Curve Speed Improvements (CAP-1)

Future of Light Rail Study



- *Upgrade Draper-Ballpark from 55 MPH to 65 MPH where feasible,*
 - *Requires replacement of oldest TRAX fleet to accrue full benefits*



Light Rail Service Changes

Future of Light Rail Study



Span of Service Improvements

Future of Light Rail Study

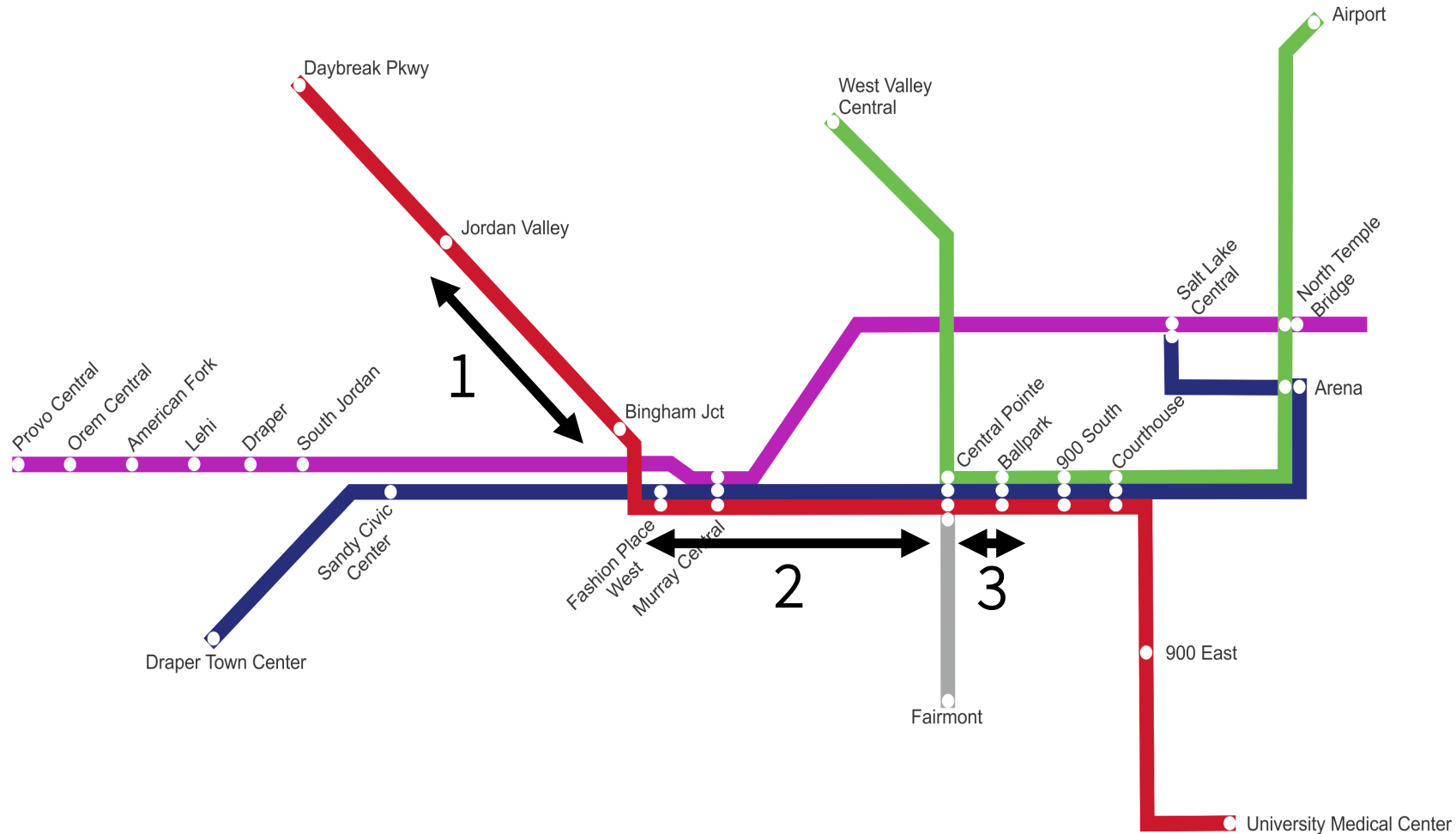


- Span of service refers to how early and how late TRAX carries passengers.
- Span of service is important to early and late shift workers including medical personnel, airport workers, warehouse, and service industry jobs. It also provides flexibility and assured returns from entertainment and sporting events.
- At present, latest trains to downtown leave from branch stations before 10:30 p.m., latest trains from downtown leave before 11:15 p.m.
- Two Span of Service Improvements have been identified.

Span of Service Improvements

- TRAX span of service is constrained by the need to allow freight service during overnight hours in three segments

Future of Light Rail Study



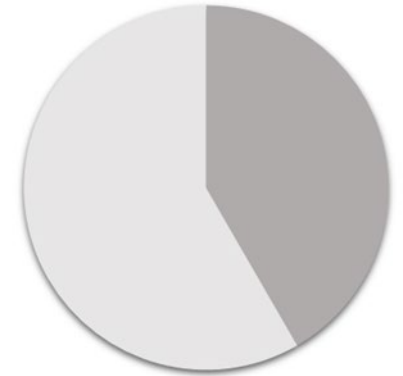
Span of Service Improvements – Recommended Paths Forward

Future of Light Rail Study

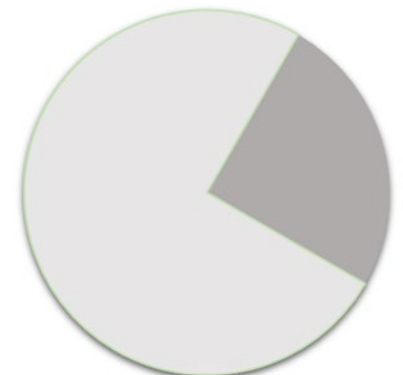


- Focus on North-South Trunk Line
- Negotiate to reduce North-South Line freight window from 5 hours to 3 hours
 - Red, Blue & Green Line light rail service could operate later and potentially start earlier
 - May impact TRAX maintenance efficiencies in non-temporally separated segments
- The freight carrier will expect to be compensated for any such renegotiation
- Provides opportunity for reinforcing the role of TRAX in regional transportation by serving third shift jobs and late-night entertainment

5 hour window



3 hour window



Operate All-night Green Line Service to Airport (SVC-1)

Future of Light Rail Study



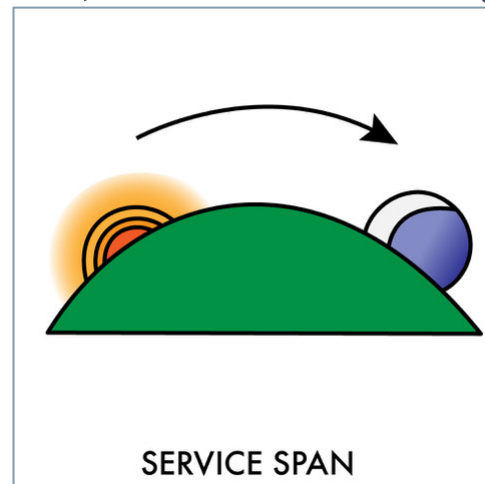
- *Would provide 24-hour service between West Valley, Downtown and Airport*
 - *Would support early morning/late night travelers as well as first and third shift workers.*
 - *Would require "buy out" to relocate rail freight service of one customer just north of Central Pointe Station*



Operate all TRAX Lines Later in Evening and/or Start Earlier in Morning (SVC-2)



- *Requires negotiation with freight railroads using UTA tracks to reduce allowed time for freight service, providing that time to TRAX operation*
 - *Could apply to full TRAX network except for Red Line, Fashion Place West to Daybreak (too much freight activity there for any change)*

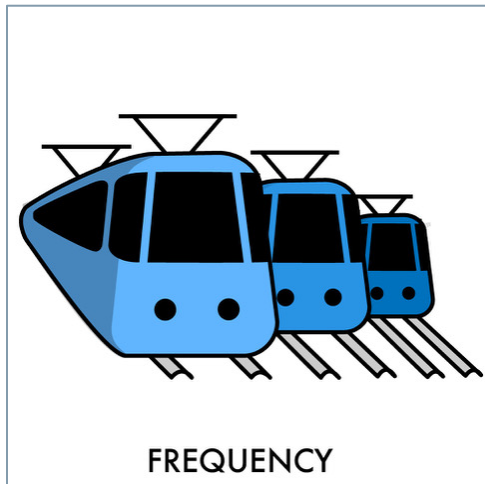


Improve Branch Headways from 15 Minutes to 12 Minutes (SVC-3)

Future of Light Rail Study



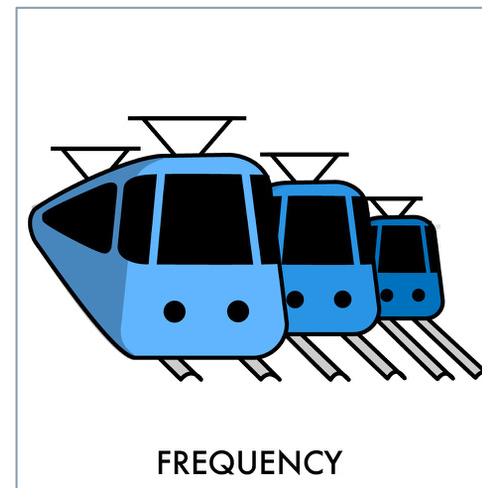
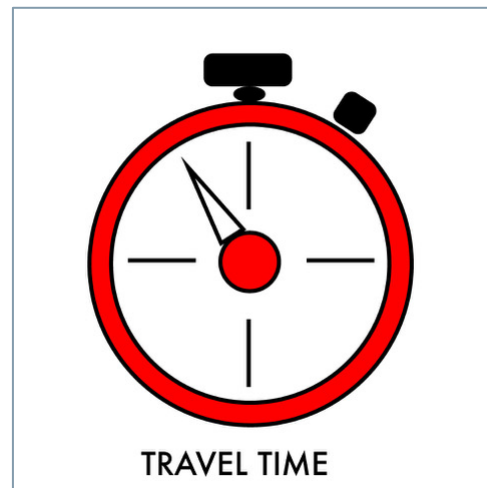
- *25% increase in service all day long,*
 - *Phase 1 Study found signal system can support this*
 - *Separate UTA Study found that traction power upgrades required*



New Direct Service, University to Salt Lake Central (SVC-4)



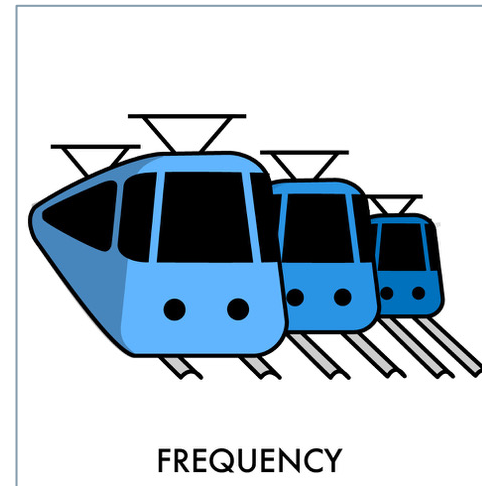
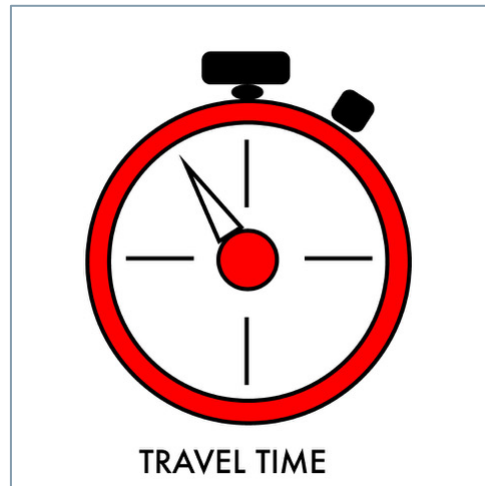
- *Would provide direct ("one seat ride") service between University and Salt Lake Central, eliminating need to transfer and reducing trip times. Could be achieved through a new service or by rerouting existing service*



New Direct Service, University to Salt Lake City International Airport (SVC-5)



- *Would provide direct ("one seat ride") service between University and the Airport, eliminating need to transfer and reducing trip times. Could be achieved through a new service or by rerouting existing service*



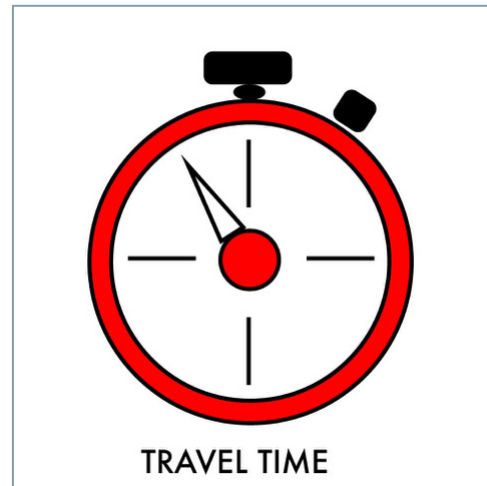
Intersection Priority Changes

Future of Light Rail Study



Intersection Priorities – Modest Improvements

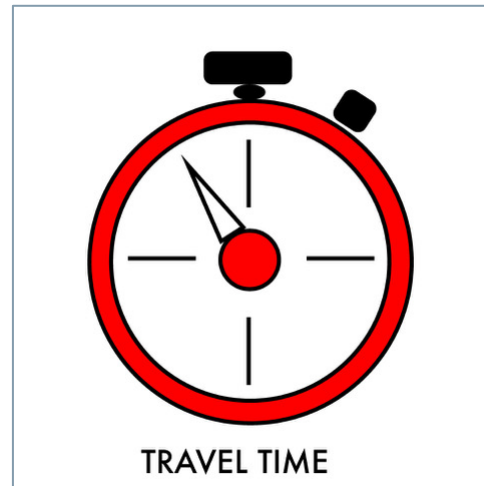
- *Salt Lake City and UDOT intersection changes to improve TRAX priority, likely to be acceptable*



Intersection Priorities – Medium Improvements



- *Salt Lake City and UDOT intersection changes to improve TRAX priority identified by UTA Light Rail Business Unit, may not be acceptable*

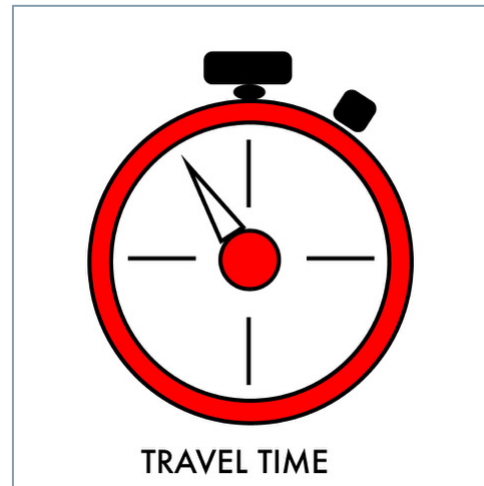
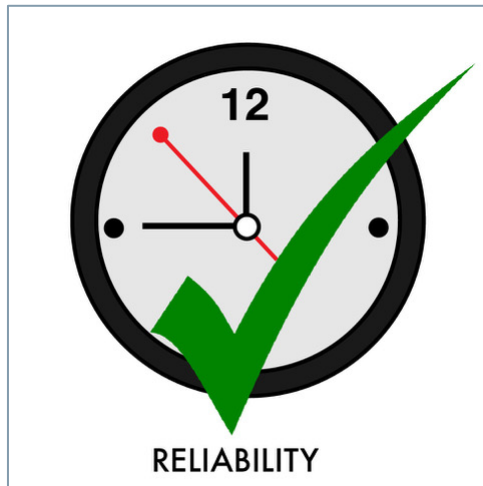


Intersection Priorities – Extensive Improvements

Future of Light Rail Study



- Additional Salt Lake City and UDOT intersection changes to improve TRAX priority identified by UTA Light Rail Business Unit, not likely to be acceptable due to longer motorist wait times*

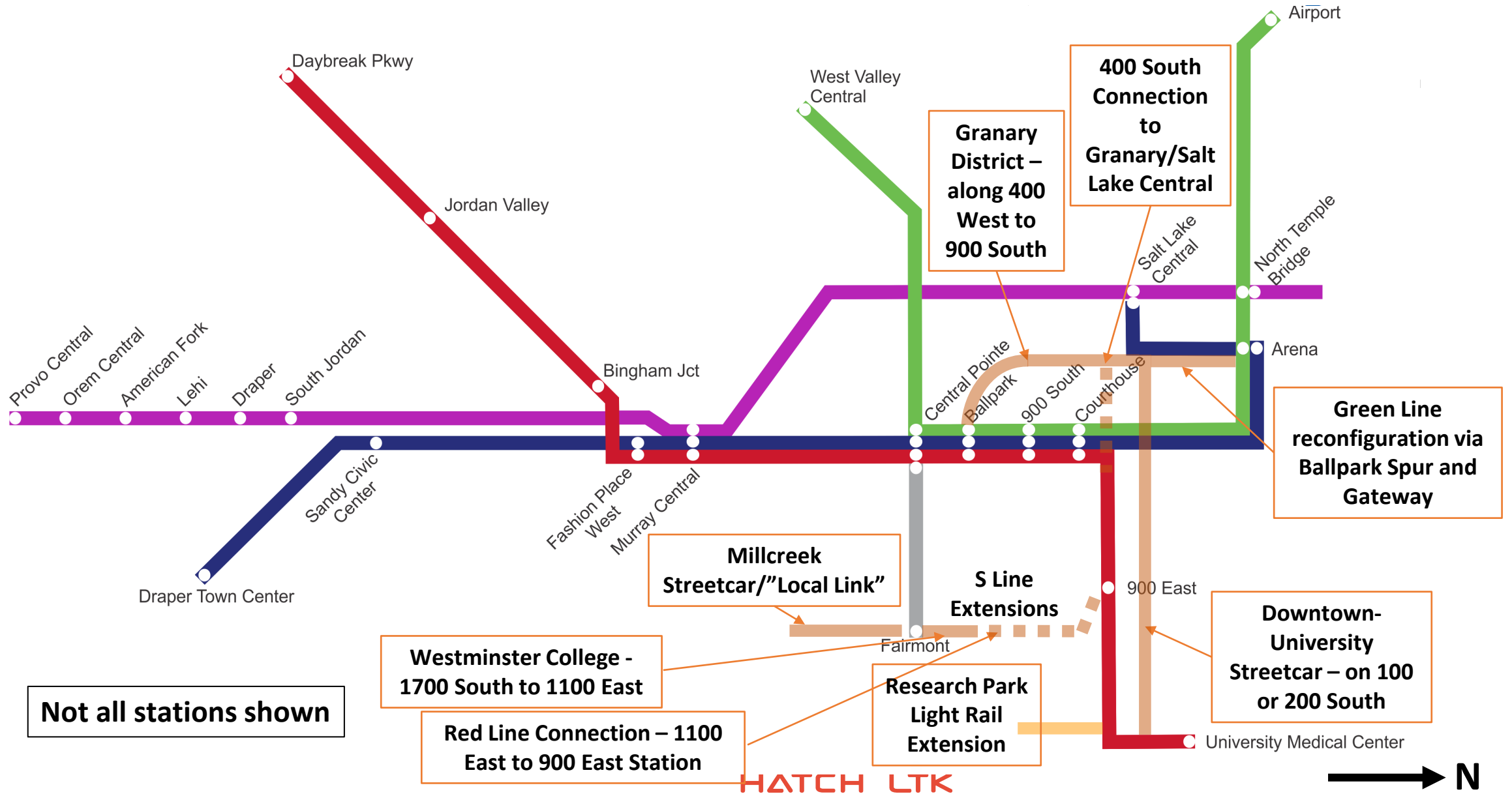


Light Rail and Streetcar Extensions

Future of Light Rail Study



Potential Light Rail and Streetcar Extensions



You Are Invited – August 31 Workshop, UTA HQ, 8:30 to Noon

Future of Light Rail Study



- Collaborative session with TAC and stakeholders to develop four broadly contrasting scenarios for evaluation,
- Verify what elements should be included, prioritized, or discarded?
- **Activity #1:** Work to determine how scenarios should be structured to reflect priorities shared by stakeholders, the public, and technical analysis.
- Breakout-group exercise facilitated by project team and UTA.
 - What would be the primary goals/themes of individual scenarios? Ridership? Reliability? Accessibility? Enhanced Service Delivery/Span of Service? Comfort/convenience?
 - What new travel markets need to be served by the scenarios?



August 31 Workshop (Cont.)

- **Activity #2:** Develop four broadly contrasting scenarios that reflect the priorities and goals identified by stakeholders, the public, and technical analysis.
 - Technical team to provide guidance on scenario elements that could be common to all scenarios, scenario elements that are complementary to each other, and individual capital and operational pieces that could be unique to different scenarios
 - Breakout groups to develop individual scenarios to consider, reflecting specific goals/priorities and identifying the relevant characteristics of each scenario
 - Discuss how scenarios can be organized so that a lay audience can discern and differentiate between scenarios
- TAC/Stakeholder group discussion of proposed scenarios and modifications as needed
- Discuss expectations for roles of stakeholders, community leaders and the public in reviewing the scenarios

Discussion



- Did anything you heard today surprise you?
- Did anything you heard today concern you?
- Are there any additional TRAX system improvements that should be added for Phase 2?
- How should the Stakeholders Meeting work to develop four broadly-contrasting Scenarios for further analysis in this phase of the Study?