UTA Board of Trustees Meeting

March 22, 2023

Call to Order and Opening Remarks

Pledge of Allegiance

Safety First Minute

Public Comment

- Live comments are limited to 3 minutes per commenter
- Live comments may be heard from in-person attendees as well as Zoom attendees
- For comments via Zoom, use the “raise hand” function in Zoom to indicate you would like to make a comment
- Public comment was solicited prior to the meeting through alternate means, including email, telephone, and the UTA website
- Any comments received through alternate means were distributed to the board for review in advance of the meeting

Consent Agenda

a. Approval of March 8, 2023, Board Meeting Minutes

Recommended Action
(by acclamation)

Motion to approve consent agenda

Reports

Executive Director's Report

- UTA Tribute – Enterprise Strategy Office – Ridership Team
- Operator Tribute – Nick Pappas

UTA Tribute:
Enterprise Strategy Office – Ridership Team

Ridership Data Quality & FTA Recertification

Ridership Data Quality & FTA Recertification

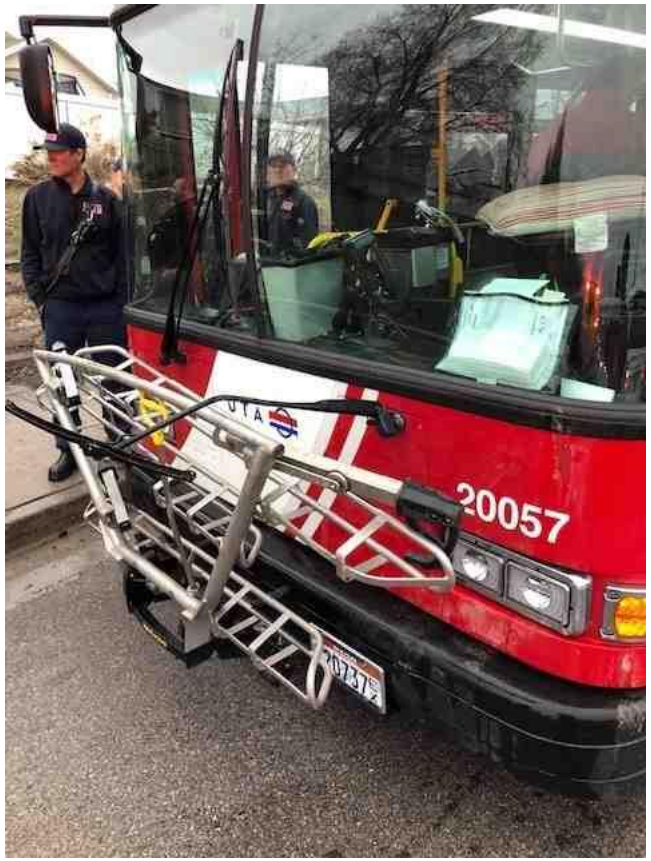
- FTA approval is required for the Utah Transit Authority to receive funding. UTA uses (APC) Automatic Passenger Counters for National Transit Database (NTD) ridership reporting to achieve certification requirements.
- UTA must compare manually collected data with processed APC data and demonstrate they are equivalent and/or any differences are justifiable. Differences must be less than 5 percent.
- Ridership data is monitored daily by the ridership team for quality assurance and monthly calibration reporting.
- Internal validations conducted annually to ensure reliability and accuracy of APC technology.
- 2022- FTA approved UTA's APC system for NTD reporting.

Ridership Data Quality & FTA Recertification

2022 APC Maintenance Plan and Validation Summary									
Mode	Vehicles equipped with APC technology	Vehicles validated	Number of Trips validated	Number of Passengers Boarding Manual UPT	Number of Passengers Boarding APC UPT	Total Calculated Manual PMT	Total Calculated APC PMT	Difference of APC and Manual	Difference of APC and Manual
Motor Bus - DO (MB)	418	210	1,007	13,035	13,454	59,312	58,341	3.16%	1.65%
Motor Bus - PT (MB)	12	5	22	96	97	786	804	1.04%	2.29%
Commuter Bus - (CB)	40	27	56	925	948	15,365	15,851	2.46%	3.11%
Commuter Rail - (CR)	38	33	46	2,867	2,909	81,801	85,387	1.45%	4.29%
Light Rail - (LR)	117	44	165	5,822	5,988	28,749	29,303	2.81%	1.91%
UTA Totals	625	319	1,296	22,745	23,396	186,013	189,686	2.82%	1.96%

Operator Tribute: Nick Pappas

EMPLOYEE RECOGNITION
OPERATOR NICK PAPPAS



Pension Committee Report

Government Relations Update

Financial Report – January 2023

Monthly Operating Financial Report
January 2023

March 22, 2023

Utah Transit Authority

Board Dashboard: January 31, 2023

UTAH TRANSIT AUTHORITY

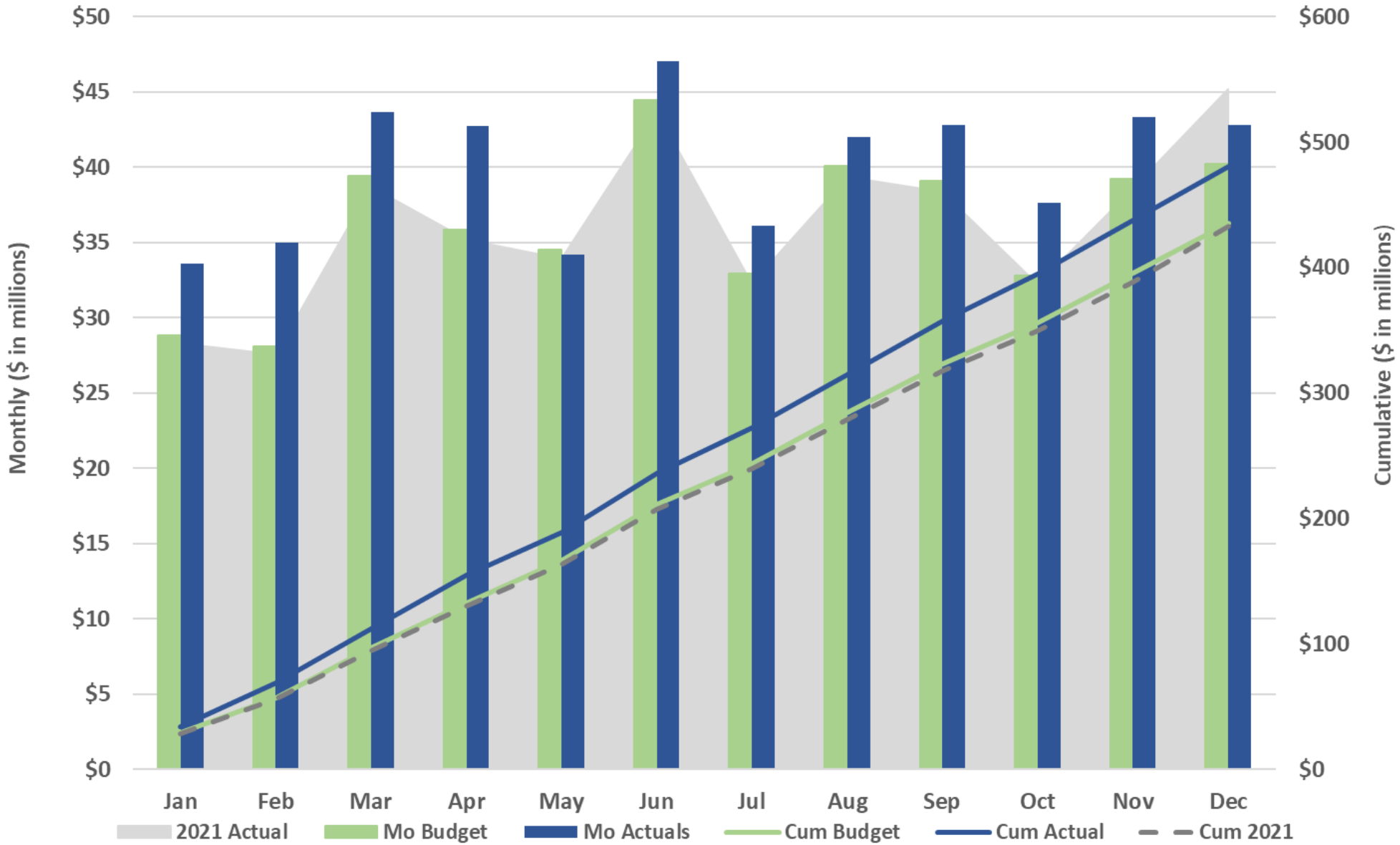
Financial Metrics	Jan Actual	Jan Budget	*Fav/ (Unfav)*	*%*	YTD Actual	YTD Budget	*Fav/ (Unfav)*	*%*
Sales Tax (Dec '22 mm $)	$ 42.8	$ 40.2	*$ 2.56*	*6.4%*	$ 480.9	$ 435.7	*$ 45.27*	*10.4%*
Fare Revenue (mm)	$ 3.1	$ 3.0	*$ 0.05*	*1.6%*	$ 3.1	$ 3.0	*$ 0.05*	*1.6%*
Operating Exp (mm)	$ 27.7	$ 32.1	*4.43*	*13.8%*	$ 27.7	$ 32.1	*$ 4.43*	*13.8%*
Subsidy Per Rider **(SPR)**	$ 9.13	$ 11.09	*$ 1.96*	*17.7%*	$ 9.13	$ 11.09	*$ 1.96*	*17.7%*
UTA Diesel Price ($/gal)	$ 3.35	$ 3.90	*$ 0.55*	*14.2%*	$ 3.35	$ 3.90	*$ 0.55*	*14.2%*
Operating Metrics	Jan Actual	Jan-22	*F/ (UF)*	*%*	YTD Actual	YTD 2022	*F/ (UF)*	*%*
Ridership (mm)	2.70	2.17	*0.5*	*24.1%*	2.70	2.17	*0.5*	*24.1%*

Energy Cost by Type (Three Month Average)

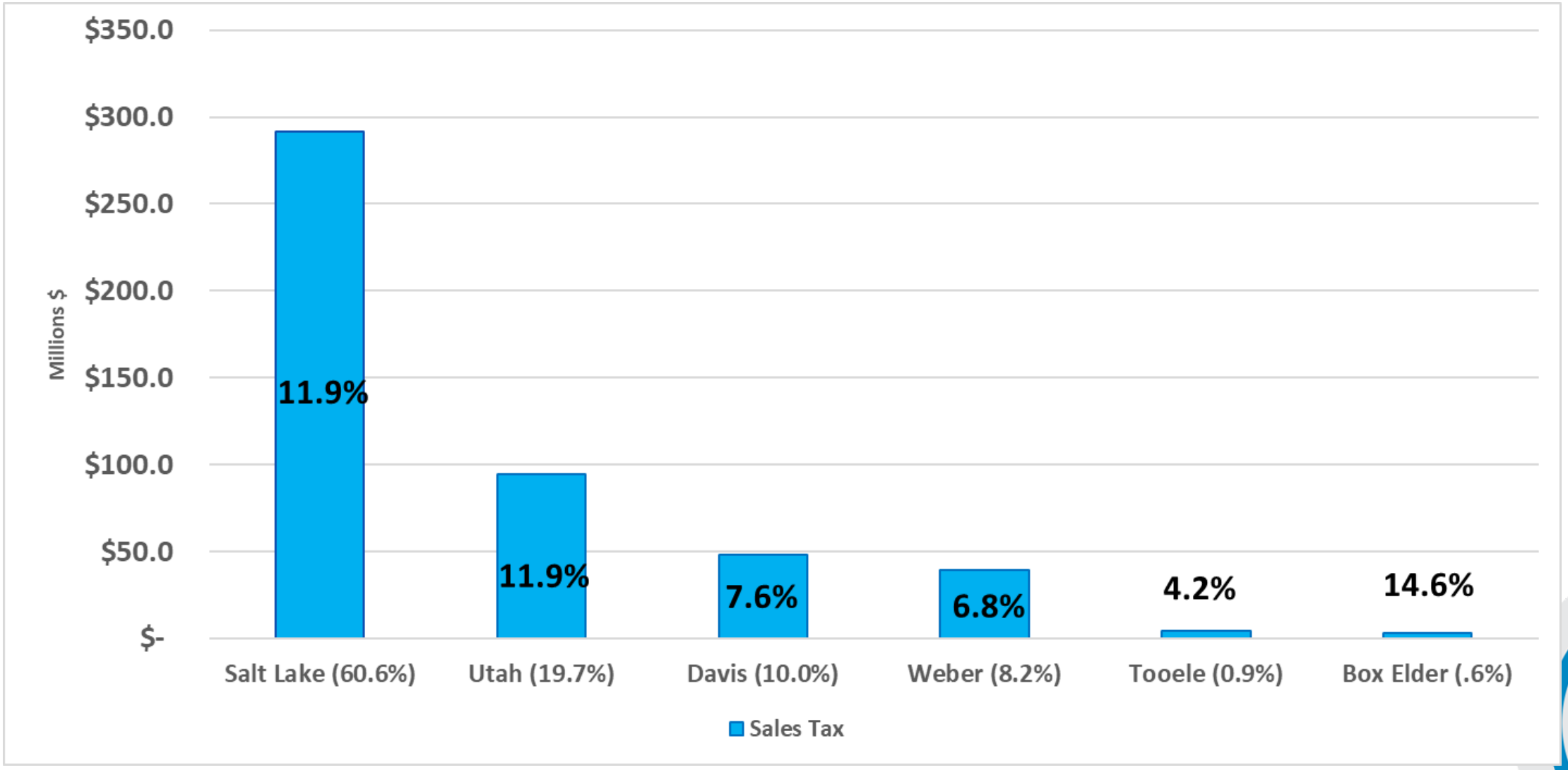
Diesel (Cost per Mile)	$ 0.69
Unleaded Gas (Cost per Mile)	$ 0.37
CNG (Cost per Mile)	$ 0.45
Bus Propulsion Power (Cost per Mile)	$ 1.45
TRAX Propulsion Power (Cost per Mile)	$ 0.89

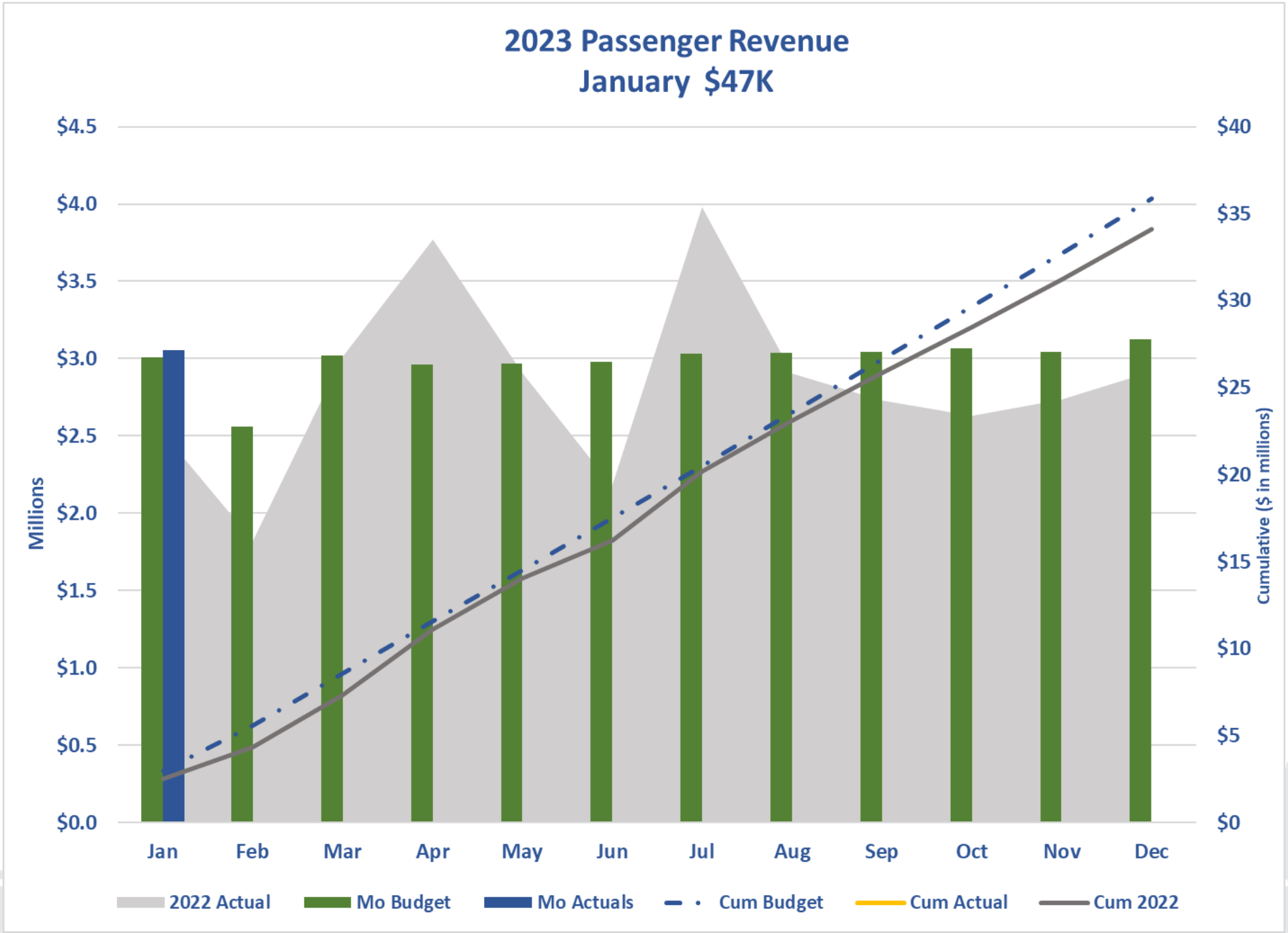
2022 Sales Tax

December (YTD Variance +$45.2 million)



Sales Tax Collections
(Percentage Growth for 12 months ended December 31, 2022)





FTE Report
January 2023

Administrative FTEs	Jan-22 Actual	Jan 2023 Actual	Jan 2023 Budget	Variance '23 Var	Variance '23 Percent
Admin Depts	491.3	531.0	607.3	76.3	12.6%
Operating Depts	354.5	356.5	383.5	27.0	7.0%
Total FTE	**845.8**	**887.5**	**990.8**	**103.3**	**10.4%**

Bargaining Unit FTEs	Jan-22 Actual	Jan 2023 Actual	Jan 2023 Budget	Variance '23 Var	Variance '23 Percent
Admin Depts	44.0	56.5	42.0	(14.5)	-34.5%
Operating Modes					
Bus	942.5	943.5	1,103.0	159.5	14.5%
Light Rail	260.0	258.0	285.0	27.0	9.5%
Commuter Rail	92.0	99.0	103.0	4.0	3.9%
Riverside	142.0	151.0	159.0	8.0	5.0%
Asset Mgt	167.0	163.0	184.0	21.0	11.4%
Total FTE	**1,647.5**	**1,671.0**	**1,876.0**	**205.0**	**9.7%**

January 2023

MONTHLY RESULTS					FISCAL YEAR 2023 Dollars in Millions	YEAR-TO-DATE RESULTS				
Prior Year Actual	Current Year Actual	Budget	Variance			Prior Year Actual	Current Year Actual	Budget	Variance	
					Revenue					
$ 28.9	$ 34.1	$ 34.1	$ -	0.0%	Sales Tax **(Jan accrual)**	$ 28.9	34.1	$ 34.1	$ -	0.0%
2.5	3.1	3.0	0.0	1.6%	Fares	28.5	3.1	3.0	0.0	1.6%
-	-	-	-	0.0%	Federal	130.6	-	-	-	0.0%
1.2	2.6	1.8	0.8	44.7%	Other *	30.1	2.6	1.8	0.8	44.7%
$ 32.6	**$ 39.7**	**$ 38.9**	**$ 0.8**	**2.1%**	**TOTAL REVENUE**	**$ 218.1**	**$ 39.7**	**$ 38.9**	**$ 0.8**	**2.1%**
					Expense					
$ 13.5	$ 13.8	$ 15.4	$ 1.7	10.7%	Salary/Wages	$ 13.5	$ 13.8	$ 15.4	$ 1.7	10.7%
7.3	7.5	7.9	0.4	4.8%	Fringe Benefits	7.3	7.5	7.9	0.4	4.8%
1.3	1.7	2.9	1.2	40.8%	Services	1.3	1.7	2.9	1.2	40.8%
0.9	1.9	1.9	0.0	0.4%	Parts	0.9	1.9	1.9	0.0	0.4%
0.7	2.3	3.0	0.7	23.1%	Fuel	0.7	2.3	3.0	0.7	23.1%
0.6	0.7	0.5	(0.1)	-28.6%	Utilities	0.6	0.7	0.5	(0.1)	-28.6%
0.5	0.6	1.4	0.8	54.9%	Other	0.5	0.6	1.4	0.8	54.9%
(0.1)	(0.8)	(1.0)	0.1	-13.2%	Capitalized Cost	(0.1)	(0.8)	(1.0)	0.1	-13.2%
$ 24.7	**$ 27.7**	**$ 32.1**	**$ 4.4**	**13.8%**	**TOTAL EXPENSE**	**$ 24.7**	**$ 27.7**	**$ 32.1**	**$ 4.4**	**13.8%**
$ 6.8	$ 6.6	$ 6.6	$ 0.0	0.0%	Debt Service	$ 6.8	$ 6.6	$ 6.6	$ 0.0	0.0%
$ 1.1	**$ 5.4**	**$ 0.1**	**$ 5.3**	**3946.3%**	**Contrib. Capital/Reserves**	**$ 1.1**	**$ 5.4**	**$ 0.1**	**$ 5.3**	**3946.3%**
	Favorable/(Unfavorable)								Favorable/(Unfavorable)	

Questions?

Contracts, Disbursements, and Grants

Contract: Next Generation Fare Collection System (Scheidt & Bachmann, Inc.)

Integrated System for Collecting Fares

Competitive Bid Process

- Request For Proposal (RFP) published in May 2022
- 7-member cross-functional selection committee
- Each bidder within competitive range delivered on-site demonstration of their proposed solution
- Selection committee was informed by agency reference checks, subject matter experts, and extended back-office system evaluations in sandbox environments
- Selection committee visited two peer-agency sites
- Scheidt & Bachmann (S&B) was selected as the vendor that will be responsible for replacing UTA's fare collection system

SCHEIDT&BACHMANN

CT transit

Transpo

Massachusetts Bay Transportation Authority

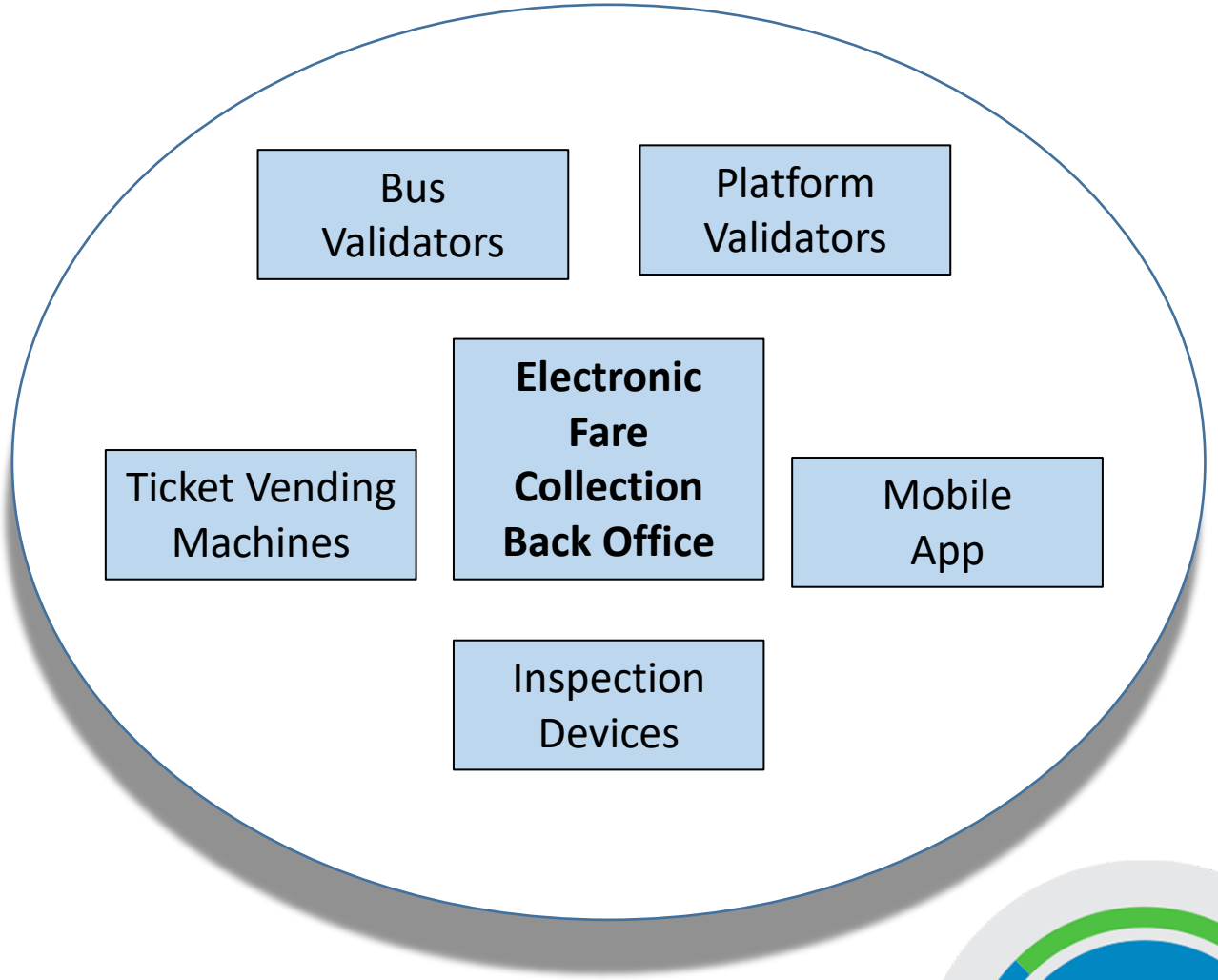
MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

UTAH TRANSIT AUTHORITY

UTA

Program Scope

- Deliver supportable fare system hardware.
- Integrate ticket vending machines (TVM) and mobile app solutions with electronic fare collection (EFC) so that more riders can enjoy paying their transit fares with prepaid and reloadable accounts.
- Continue to collect rich ridership data that can inform system planning and marketing initiatives.
- Deliver a fare collection system that is fully compliant with Payment Card Industry security standards.



Out of Scope: Bus Fareboxes

Program Schedule

Phase	Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Cost (M)
Phase-C	Contract Process												
Phase-1	Program Planning & Design												$ 5.6
	Ticket Vending Machines (TVM)												4.5
Phase-2	Bus / Rail Validators												7.2
Phase-3	e-Fare Inspection Devices												1.2
	Vend FAREPAY at TVMs												0.7
	Web Interfaces												0.9
Phase-4	Mobile App as Token												0.7
	Final System Acceptance												3.4
Phase-5	Ongoing Maintenance & Support												8.0
													$32.2

Next Steps

- Program Kickoff
- Program Planning
- Phase 1 Quality Management Plan
- Finalize Service Level Agreement

Contract: Next Generation Fare Collection System (Scheidt & Bachmann, Inc.)

Recommended Action (by acclamation)

Motion to approve the contract with Scheidt & Bachmann, Inc., for Next Generation Fare Collection System, as presented.

Contract: Bus Camera Hardware and Software (Trivitri, Inc.)

Recommended Action (by acclamation)

Motion to approve the contract with Trivitri, Inc.,
for Bus Camera Hardware and Software, as presented.

Contract: 11 and 15 Passenger Vanpool Replacement Vehicles (Larry H. Miller Chevrolet)

Recommended Action (by acclamation)

Motion to approve the contract with Larry H. Miller Chevrolet, for 11 and 15 Passenger Vanpool Replacement Vehicles, as presented.

Change Order: 2022 Transit Bus Replacement – Modification No. 002 to Ninth Order (Gillig, LLC)

Recommended Action (by acclamation)

Motion to to approve modification 002 to the Ninth Order on the 2022 Transit Bus Replacement contract with Gillig, LLC, as presented

Change Order: Battery Electric Buses and Associated Charging Equipment Modification No. 002 - Preproduction Changes for Base Order Buses (Gillig, LLC)

Recommended Action (by acclamation)

Motion to approve Modification No. 002 to the Battery Electric Busses and Associated Charging Equipment contract with Gillig, LLC for Preproduction Changes for Base Order Buses, as presented

Change Order: Battery Electric Buses and Associated Charging Equipment Modification No. 003 - Price Increase for Base Order Buses (Gillig, LLC)

Recommended Action (by acclamation)

Motion to approve Modification No. 003 to the Battery Electric Busses and Associated Charging Equipment contract with Gillig, LLC for a Price Increase for Base Order Buses with Gillig, LLC, as presented

Change Order: TIGER Program Change Order No. 83 – 300 North Salt Lake Overhead Pedestrian Bridge Elevator Structure Modifications (Granite Construction Company)

Recommended Action (by acclamation)

Motion to approve the TIGER Program Change Order No. 83 with Granite Construction Company for the 300 North Salt Lake City Overhead Pedestrian Bridge Elevator Structure Modifications, as presented

Change Order: Organization Development and Leadership Coaching Task Order No.1 – Change Order No.1 – Additional Coaching, Strategy, and Assessment Services (SISU Consulting Group, Inc.)

Recommended Action
(by acclamation)

Motion to approve the Organization Development and Leadership Coaching Task Order No.1, Change Order No.1, for Additional Coaching, Strategy and Assessment Services with SISU Consulting Group, Inc., as presented

Pre-Procurements

- Route Restoration & Equity Index
- On-Board Rider Survey
- Davis-SLC Community Connector Environmental/Design

Service and Fare Approvals

Fare Agreement: Ski Bus – Amendment 3.1 (Davis County)

Recommended Action (by acclamation)

Motion to approve the Ski Bus Fare Agreement – Amendment 3.1 with Davis County, as presented.

Discussion Items

Bus Transit Signal Priority Overview

Bus Transit Signal Priority Project Overview

Shaina Quinn, Innovative Mobility Solutions Program Manager
Casey Brock, Bus Communications Supervisor
Blaine Leonard, Utah Department of Transportation (UDOT) Transportation Technology Engineer

MSP270

Intro: What is Transit Signal Priority (TSP)?

A technology that helps to reduce the waiting time for public transit vehicles at intersections

In partnership with UDOT, the UTA TSP project modifies traffic signal timing by allowing a longer green light for buses that are late

Benefits

TSP can reduce transit travel time, increase reliability, and improve the overall customer experience

Specific examples of reduced bus travel times in other cities

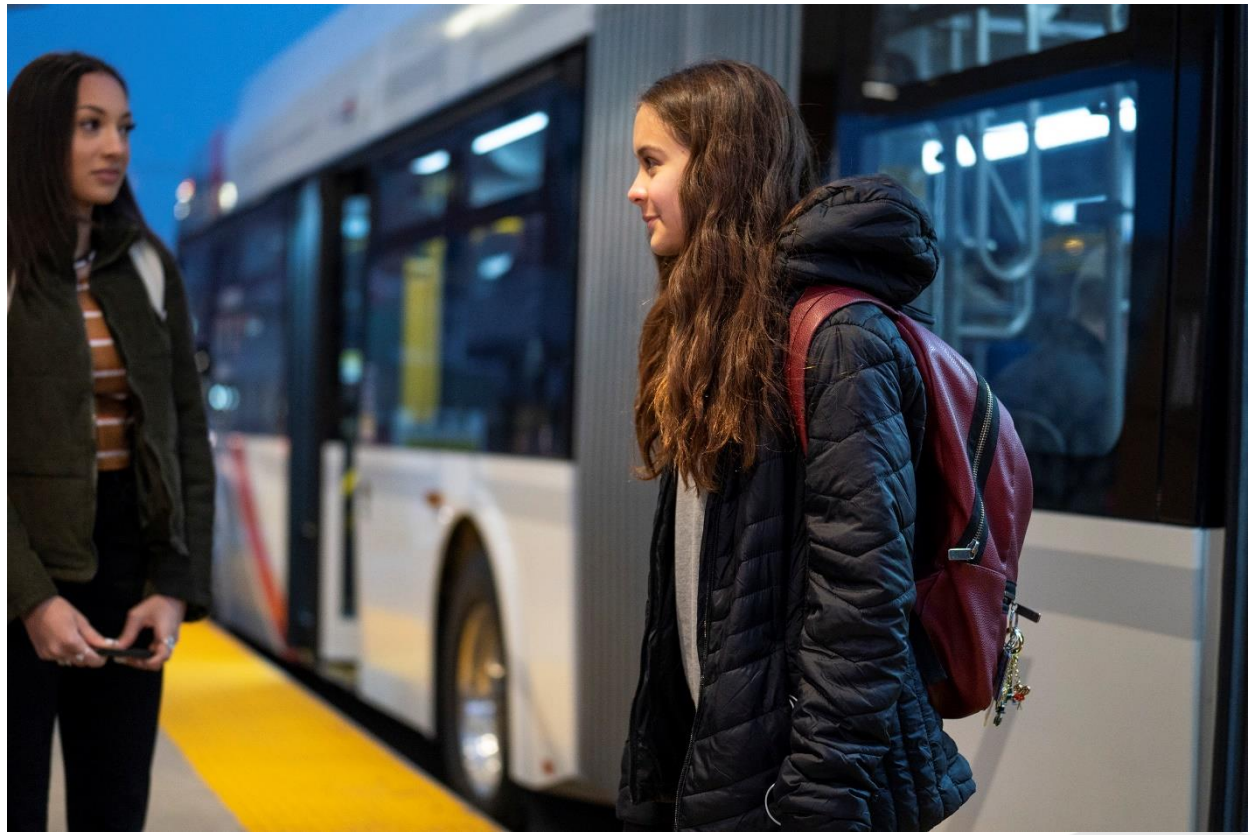
- 8-10% in Seattle, Los Angeles, and Portland
- 4-15% in Minneapolis
- 15% in Chicago

UTA has benefited from TSP increasing bus reliability

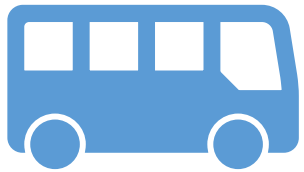
- Route 217: On-time reliability +5% with 19% less schedule variability
- UVX: Large improvements in reliability

New Benefits Anticipated

- Reduce bus travel times by **15%** while maintaining **88%** reliability
- Innovative, new connected corridor and connected vehicle applications
- Potential for:
  - Increased ridership as TSP makes bus travel more attractive to customers
  - New safety applications
  - Reduced emissions
  - Increase Route efficiency by redefining what 'late' means



Costs



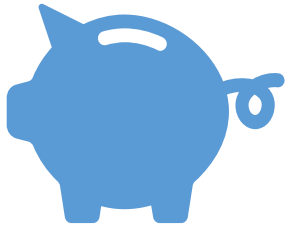
Total cost of implementing TSP is $2.7 million over 5 years

Equipment: $6,200 per bus installed

Operations & Maintenance: $70,000 per year

Mobilization: Varies by installation plan

Recognize UDOT's significant partnership



Potential cost savings and return on investment hinges on reducing transit delays

Increases efficiency, if possible, to "cut a bus"

Uses less fuel

Cost savings from faster bus service may fully offset Operations & Maintenance (O&M) and fund additional service

Technology

- Technology:
  - "Vehicle to Everything" (V2X) technology – a transportation-specific wireless technology licensed by the Federal Communications Commission in an allocated spectrum
  - Short-range, two-way, low-latency (very fast communication)
  - Communications are secured – prevents misuse, hacking, and interference
  - Standards-based technology – non-proprietary, available from multiple vendors
  - Customization built by UDOT – adapt to UTA on-board systems, determine bus lateness
- The technology has evolved
  - Earlier deployments (Redwood Road / Utah Valley Express or UVX) used "Dedicated Short-range Radio Communication" (DSRC) Technology
  - Current deployments use "C-V2X" technology
  - UDOT is replacing the DSRC technology to conform to the new standard

Technology, cont.

- There are other technologies that enable TSP
  - We chose V2X because it can do more than TSP – a versatile, multi-capable technology
  - Ultimate goal is safety – crash avoidance
  - UDOT uses this technology to:
    - Improve snowplow performance
    - Send a warning into a vehicle about an icy road or sharp curve
    - Working on applications to warn about pedestrian presence
- The on-board system connects to the vehicle CAN bus (J1939)
  - Reports information about vehicle movements – speed, braking, windshield wipers, etc.
  - This facilitates safety-based applications
  - Data can be mined to study operations and conditions

Compatibility

- Compatibility: Is TSP compatible with other transit technologies and systems already in use by UTA? Such as the Automatic Vehicle Location (AVL) system, and real-time passenger information displays.
- Information Technology (IT) support for TSP bus communications: installations / coordination with Operations / IT programming / Data monitoring / Mobile Data Device (MDD) transition / Sign out for TSP
- Future inclusion on new fleet orders / Diesel & electric buses
- Enabling Operations & Maintenance (O&M) / State of Good Repair (SGR)
- How do we know if the technology is working?

Implementation

What are we trying to accomplish?

Better Customer Experience

What does good look like?

Cut travel times by 15%, keep 88% reliability

What does the data say?

Existing travel times TBD, reliability TBD%

What are we going to do?

Deploy C-V2X TSP on Core Routes & BRT

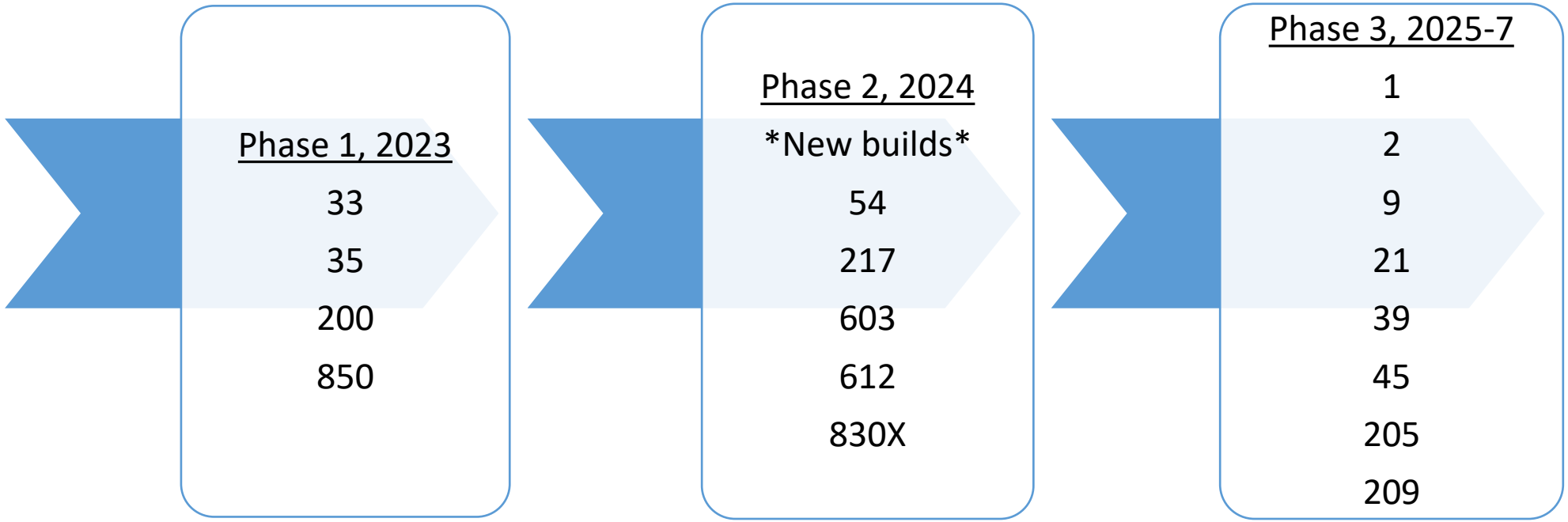
When?

Now through 2027

How well is it working?

- Measure Key Performance Indicators (KPIs)
- Milestones by garage

Implementation, cont.



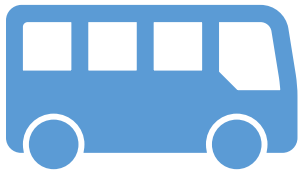
Impact

Expected overall impact of TSP on the transportation system

Minimal impact on cross-street traffic flow

Positive impact on safety

Positive impact on air quality, ridership, equity



Potential risks or unintended consequences

TSP can’t do it alone

Evolving system

UDOT + many other partners

Address through collaboration, agreements, regional planning, etc.

Questions & Discussion

Thank you

2022 Continuous Improvement Team Highlights

UTA Continuous Improvement Team 2022 Report

Presenter: Alisha Garrett

Board Meeting: 3/22/23

Who We Are

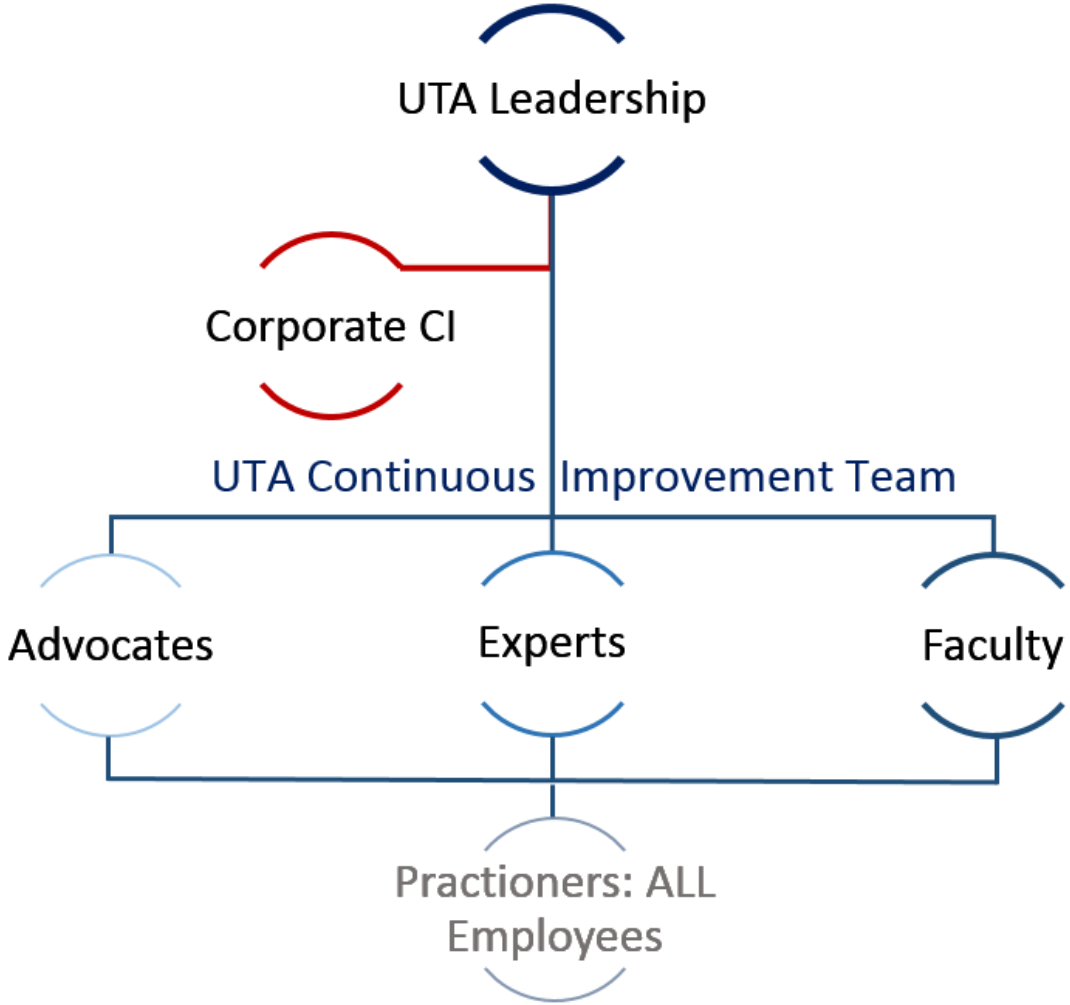
- **Our Mission:**

The Continuous Improvement Team is a go-to **resource** to deepen understanding of the UTA Way. We offer **learning** opportunities, skill development, project support and **empower** employees to deliver **quality** results that **improve** our customers' experience and make UTA a great place to work.

- **Our Vision:**

Improving the work is the work!

Our Structure



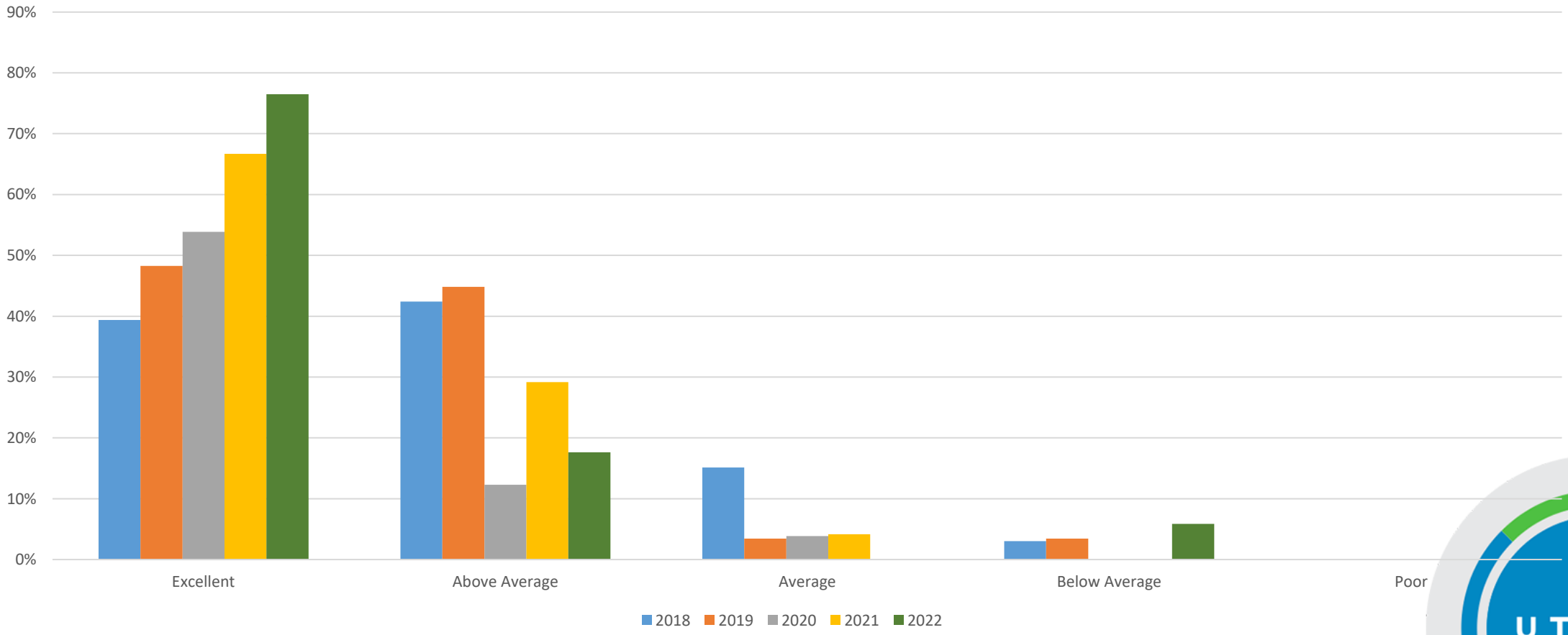
2022 CI Team Demographics

- 41 Team Members in 2022
- 24 Departments represented
- 8 members have promoted or taken on a new role in 2022
- 2 members promoted externally

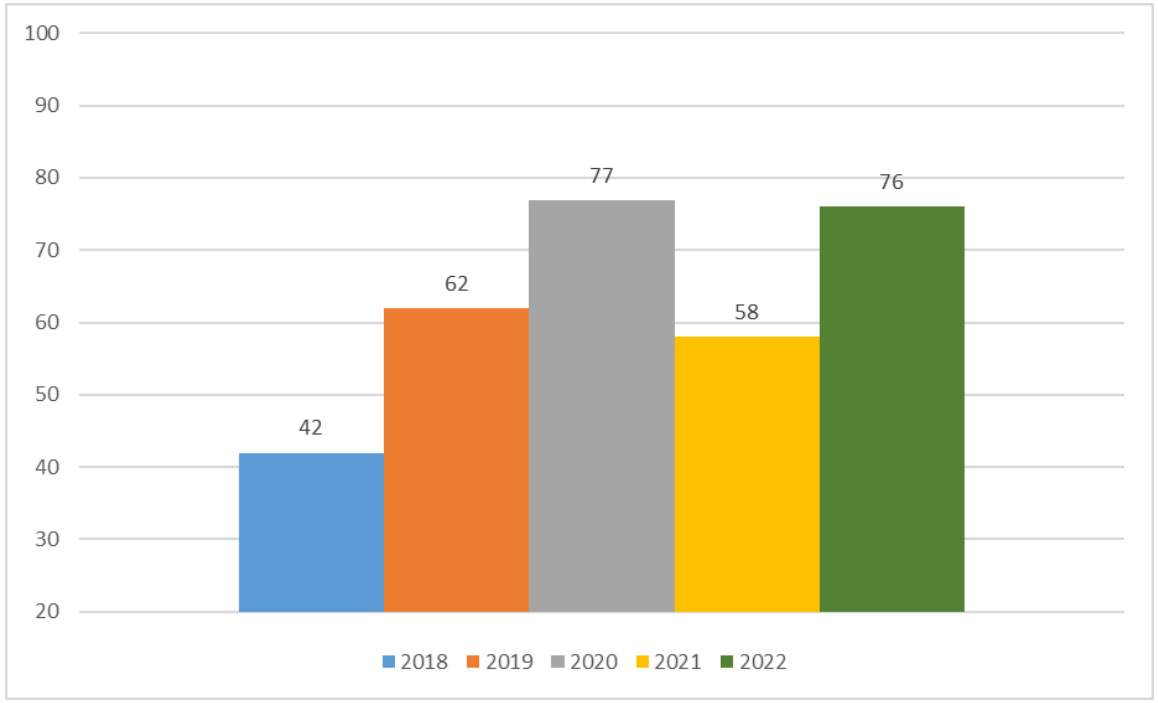
4 Core Goals of UTA's CI Team

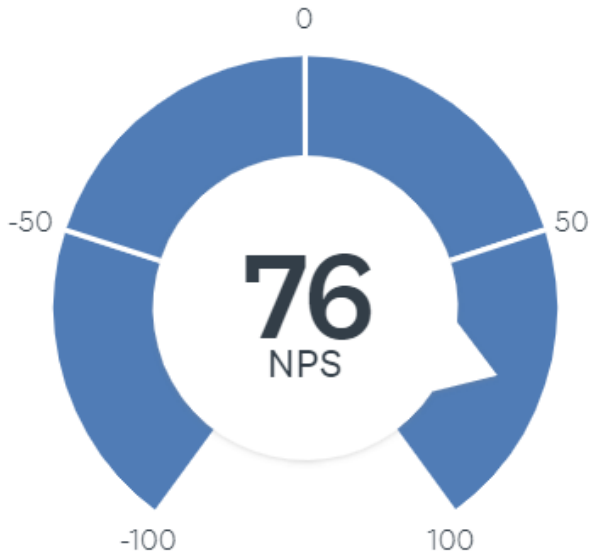
- LEARN
- APPLY
- SUPPORT
- COACH & MENTOR

Value of Participating on the Team



Net Promoter Score





Site Tours- Learning From Others

Internal

- **Community Engagement**
- Ramp Shop - Sustainability
- Meadowbrook Maintenance

Site Tours- Learning From Others

Internal

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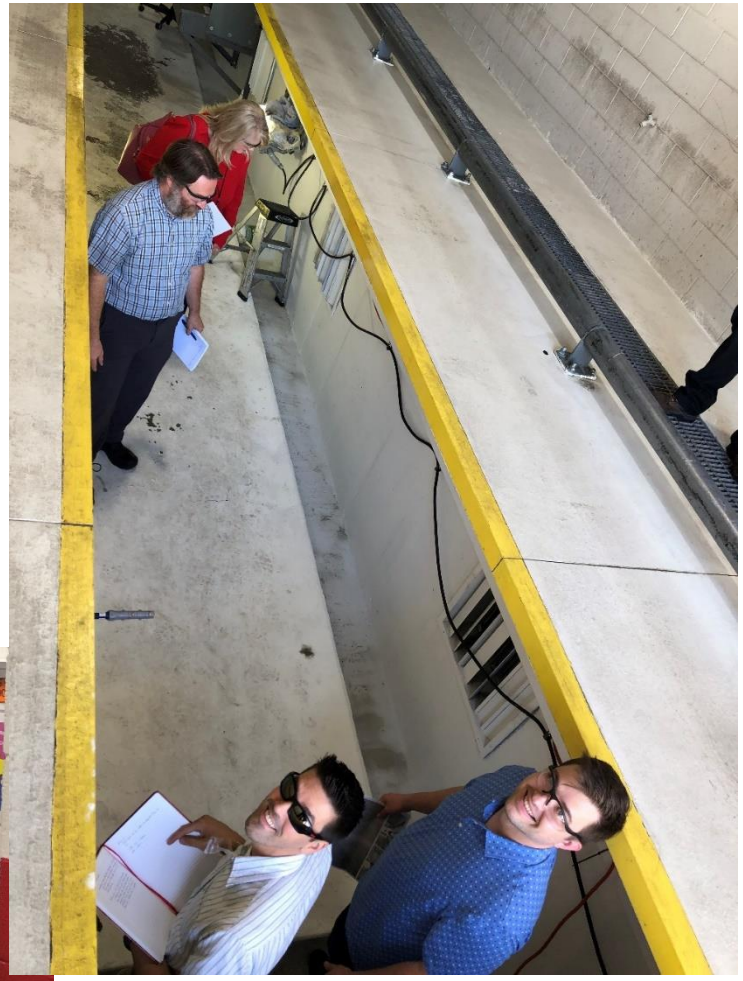
Site Tours- Learning From Others

Internal

- Community Engagement
- Ramp Shop - Sustainability
- **Meadowbrook Maintenance**



Snack & Shares - Learning from Others

- Informal
- Sharing
- Practicing
- Tools

CI Team Certifications

- 5 people achieved their Advocate Certification
  - 4 people actively pursuing
- 5 people achieved their Expert Certification
  - 2 people actively pursuing
- 3 people achieved their Faculty Certification
  - 1 person actively pursuing
  - 5 people maintained Faculty certification

Advocate Certification

- Andy Dew
- Derek Kuraitis
- Jake Ekker
- James Larson
- Luwanna Fitzgerald

- Connor Holman*
- Juliana Brine*
- Kristina Barrett*
- Lori Coca*

* Certification in progress

Expert Certification

- Carson Casey
- James Duran
- Jeanette Lancaster
- Nick Wilcox
- Trevyn Hatch
- Jordan DiRaddo*
- Riley Williams*

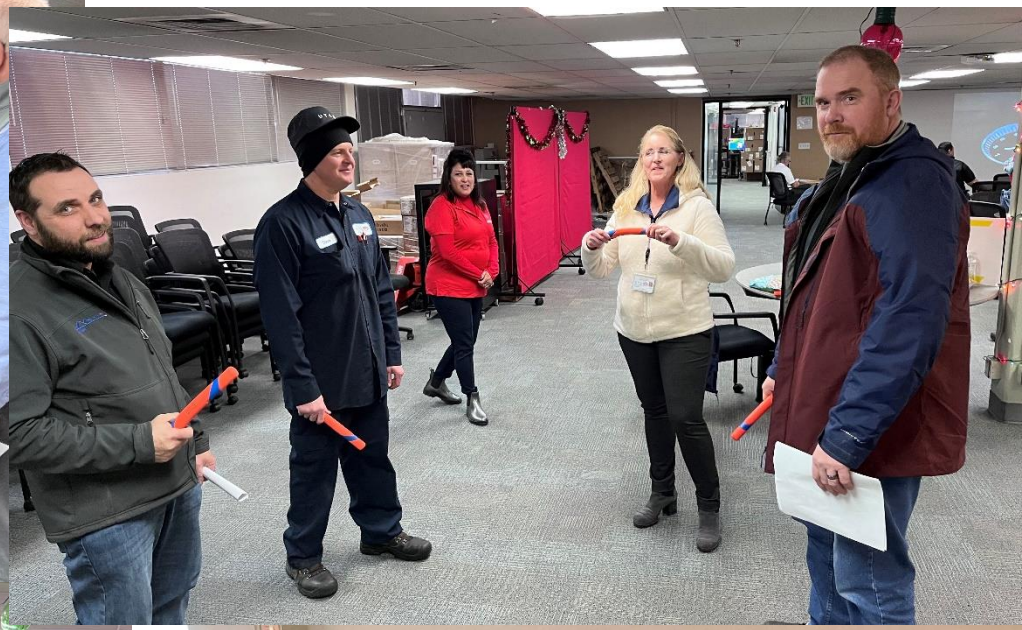
* Certification in progress

Faculty Certification

- Denny Guymon
- Derick Lee
- Jordan King
- Alex Beim*

* Certification in progress

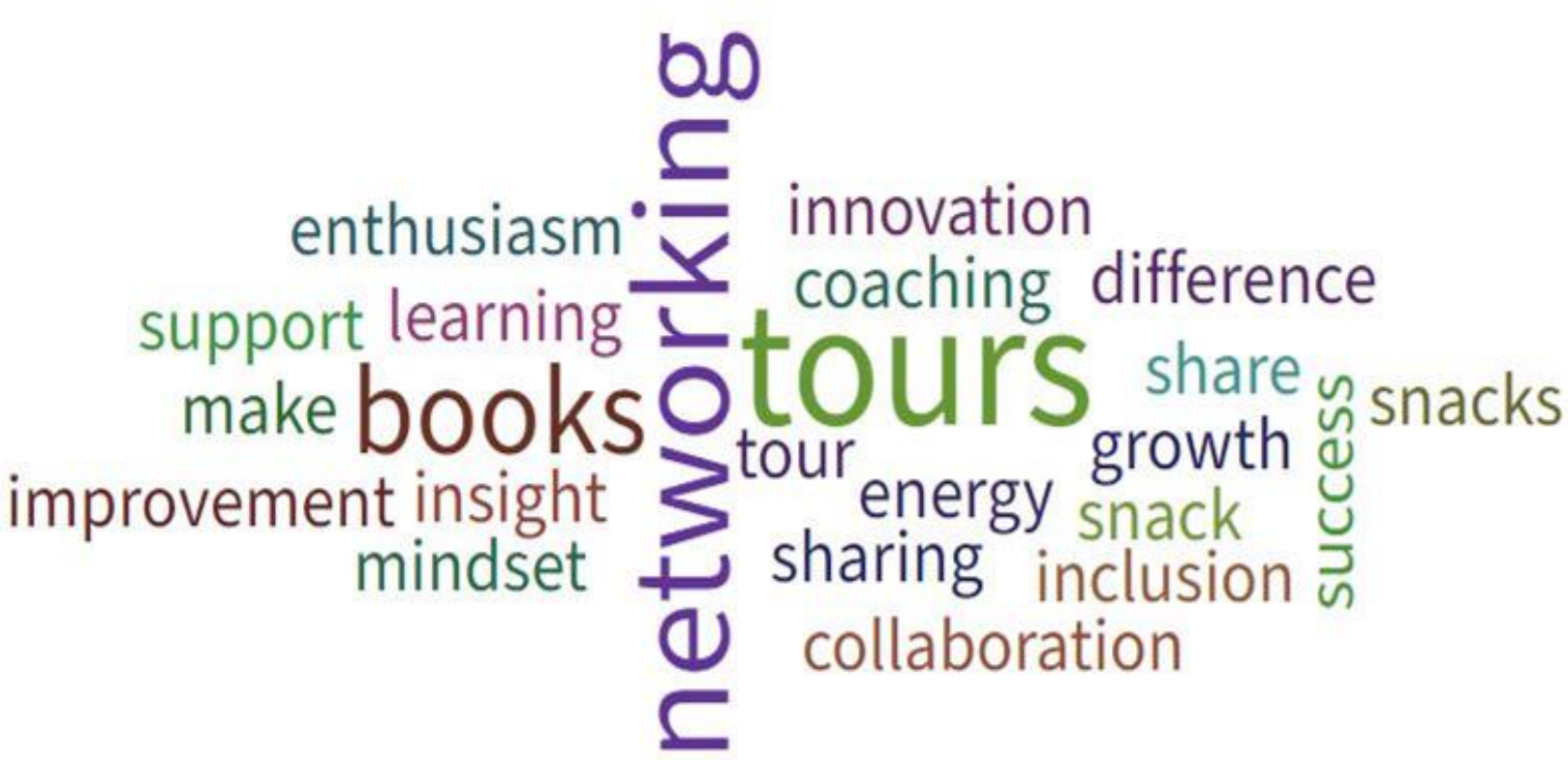
CI Meet & Greet



CI Team Project Highlights

- Team Members have been busy all year helping make improvements to their work, their teams work and finding better ways of serving our customers.
- Results:
  - Improved efficiency
  - Improved service to customers
  - Improved communication
  - Improved quality
  - Improved learning
  - And so much more!!!

Favorite Part of Being on the Team



Parting Words from the Team

- “I am grateful for the opportunity to have a mentor. I feel this makes a big difference in my success.”

- “I love continuous improvement and process development. I learned cool ideas like PDCA, visual Boards, 3 voices, process mapping, change management, effective metrics and more.”

* Please note not all team members are featured

April 2023 and August 2023 Change Days

Change Day Update

April 16, 2023

August 20, 2023

April 2023

- Ski service ends for the season
- Park City, Wildcat Shuttle move to off-season service
- Schedule adjustments on routes 455, 470, 612
- Minor timing adjustments for reliability, to prevent holding

August 2023

- OGX Service Begins
- Increased TRAX Service
- Discontinue Park City Service
- Flex Route Improvements
- FrontRunner Schedule
- Contingency Improvements

Park City/Salt Lake City Connect

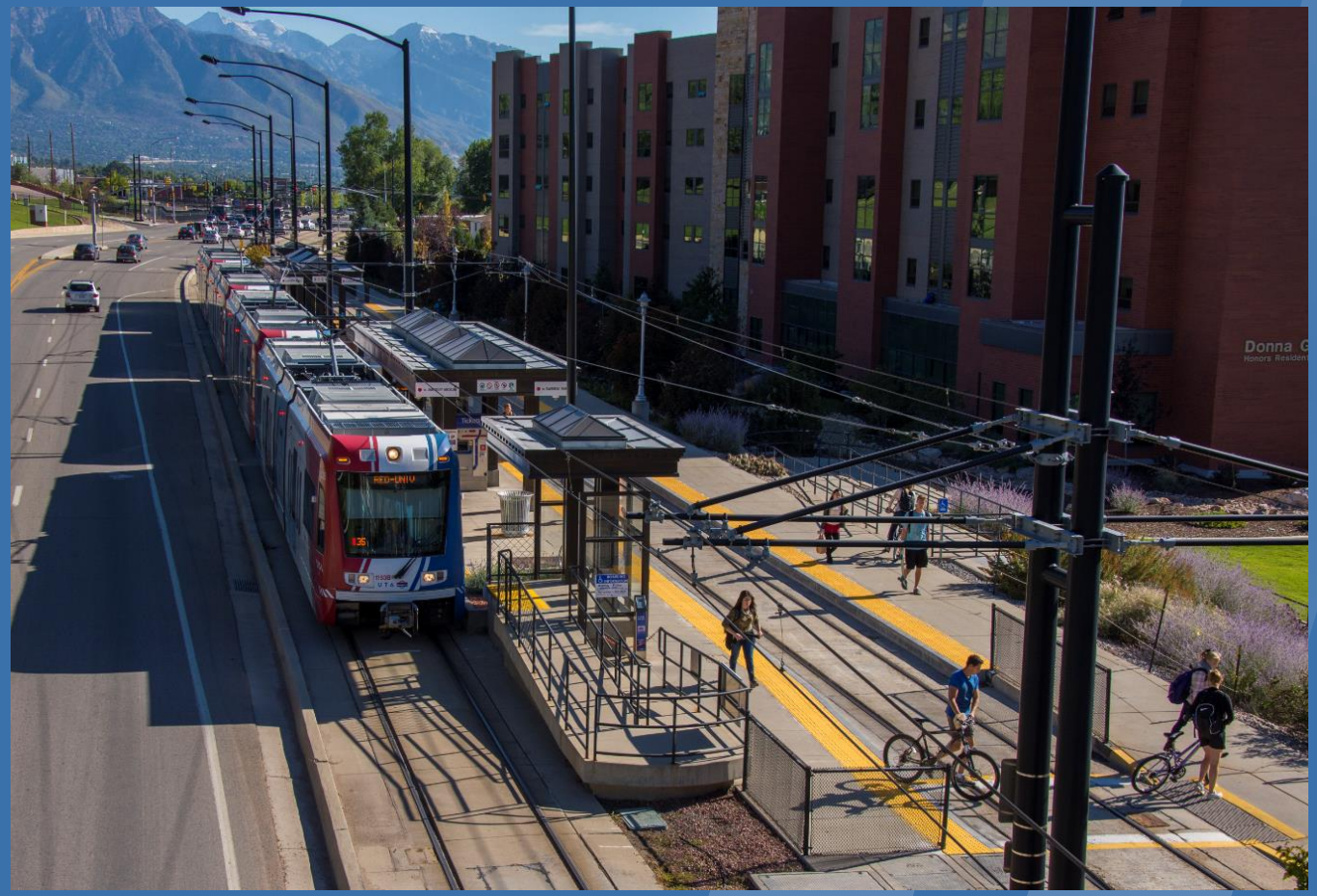
- Discontinue Routes 901 and 902. High Valley Transit to operate Route 107

Bus Rapid Transit in Ogden

- New OGX service replaces route 603 and 650
- Route 602 (Wildcat Shuttle) adjusted to match OGX schedule

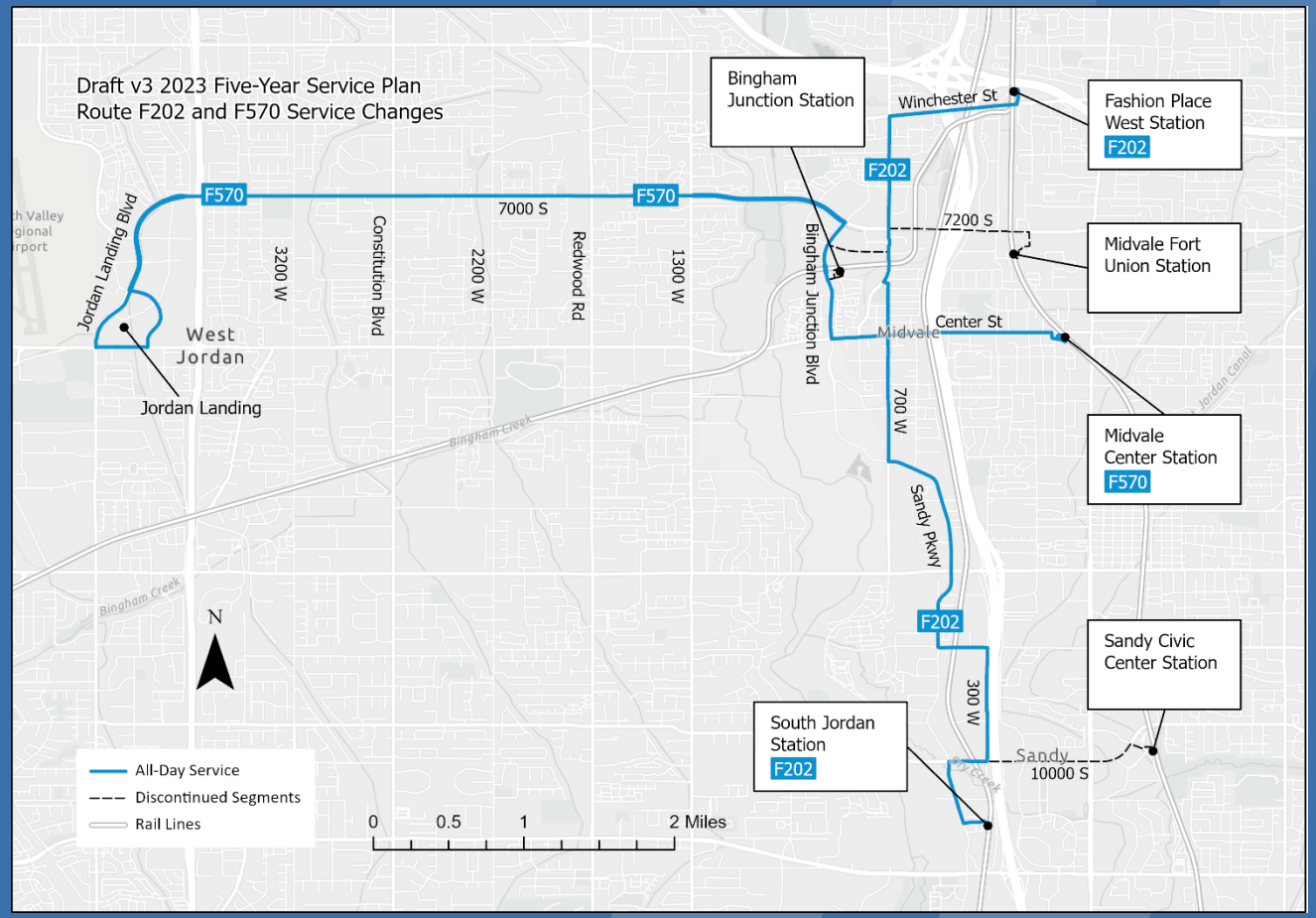
TRAX Service Improvements

- TRAX and S-Line increased to 15-minute service on Saturdays



Flex Route Improvements

- Routes F202 and F570 adjusted to improve reliability, increase coverage
- Additional stops on route F638 within Brigham City

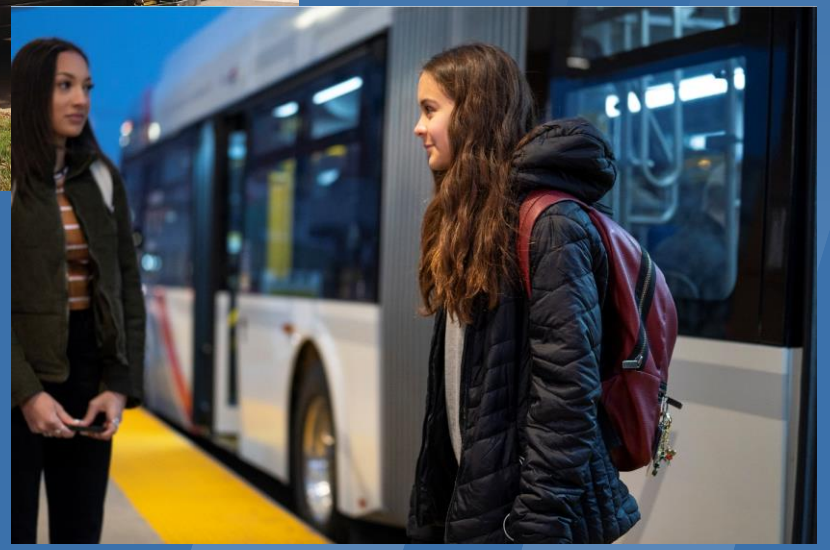


FrontRunner Schedule Adjustments

- Adjusted to improve turnaround times, increase reliability

Contingency Service Improvements

- Restore service on Routes 39, 201, and 218
  - Final go/no go decision by May 1st
- Implement UVX service to Provo Airport
  - Re-evaluate as part of August 2024 change day



Next Steps

Public outreach

- Public Meeting: April 6, 6pm
- Public Comment Period: March 22 – April 21, 2023
- Information-sharing, communication

Title VI Analysis

Final Service Plan Presentation to Board of Trustees

Implement Service

Closed Session

a. Strategy Session to discuss Collective Bargaining and Strategy Session to discuss the Purchase, Exchange or Lease of Real Property

Recommended Action
(by acclamation)

Motion to move to closed session to discuss collective bargaining and the purchase, exchange, or lease of real property

Closed Session

Open Session

Resolutions

R2023-03-03 Resolution Authorizing the Purchase of Real Property in Weber County, Utah from Tinslee Meadows, LLC (Parcel 130; Project MSP-140)

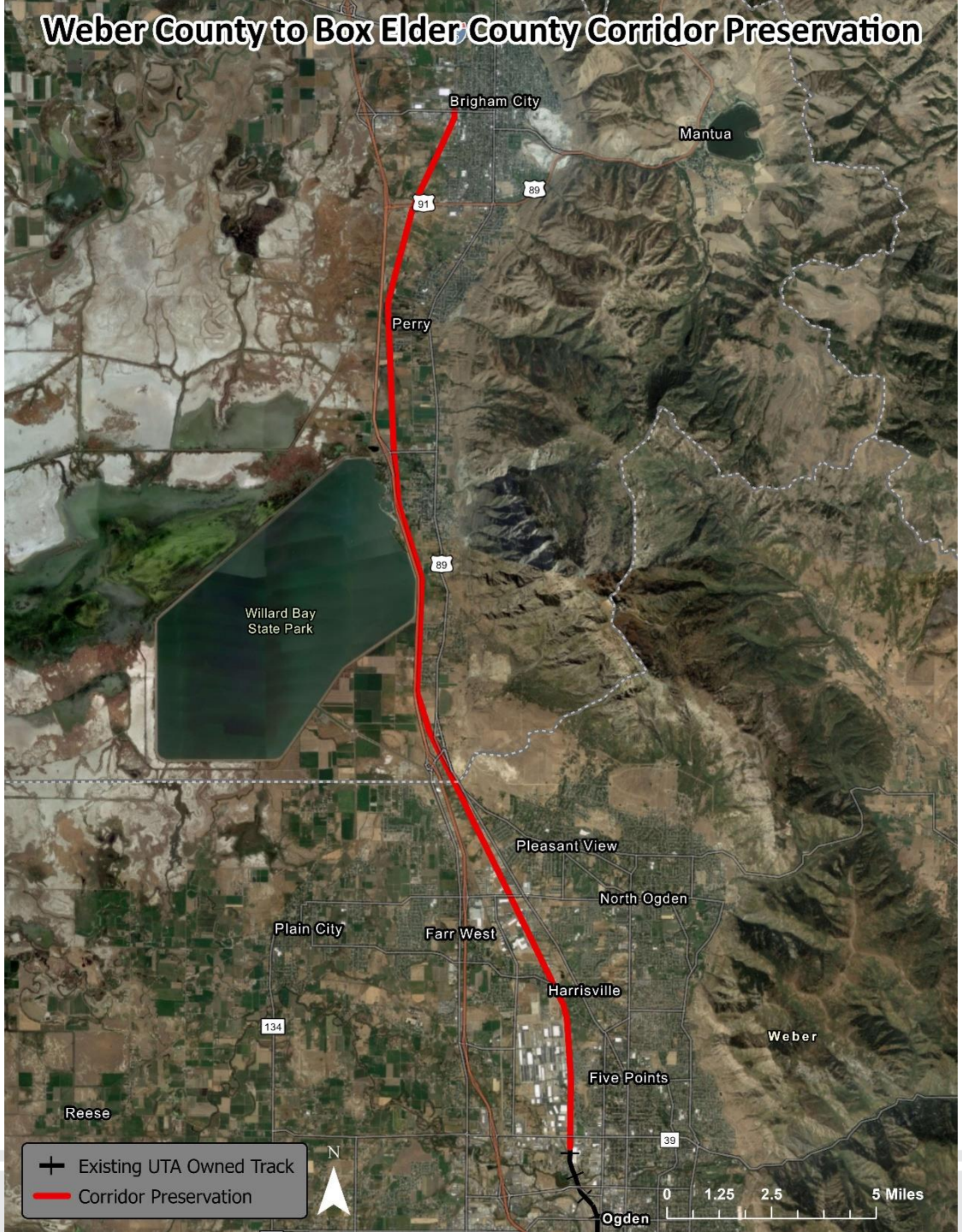
Tinslee Meadows Property Purchase

Weber County to Box Elder County Corridor Preservation

Project Overview

- In 2007 Box Elder County residents passed the second quarter sales tax to support the extension of commuter rail to Brigham City
  - UTA is using the sales tax to acquire property in Box Elder County
  - No dedicated funding in Weber County, but grant funds have been allocated to the project
- The 2019-2050 Regional Transportation Plan identifies the need to preserve corridor for a future transit line between Ogden and Brigham City
- UTA is working to preserve corridor to the east of Union Pacific's track for future commuter rail
  - Total Project Length: 19.5 Miles

Weber County to Box Elder County Corridor Preservation



Questions?

Recommended Action
(by roll call)

Motion to approve R2023-03-03 Resolution Authorizing the purchase of Real Property in Weber County, Utah from Tinslee Meadows, LLC (Parcel 130; Project MSP-140)

Other Business

a. Next Meeting: Wednesday, April 12, 2023, at 9:00 a.m.

Adjourn