UTA Board of Trustees Meeting

April 26, 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 April 12, 2023, Board Meeting Minutes

Recommended Action
(by acclamation)

Motion to approve consent agenda

Reports

Executive Director's Report

- Ski Season Planning Update

- Mobility Hubs Update

- UTA Conference Participation

- UTA Tribute - Sgt. Todd Watanabe

- UTA Tribute - Total Rewards Team

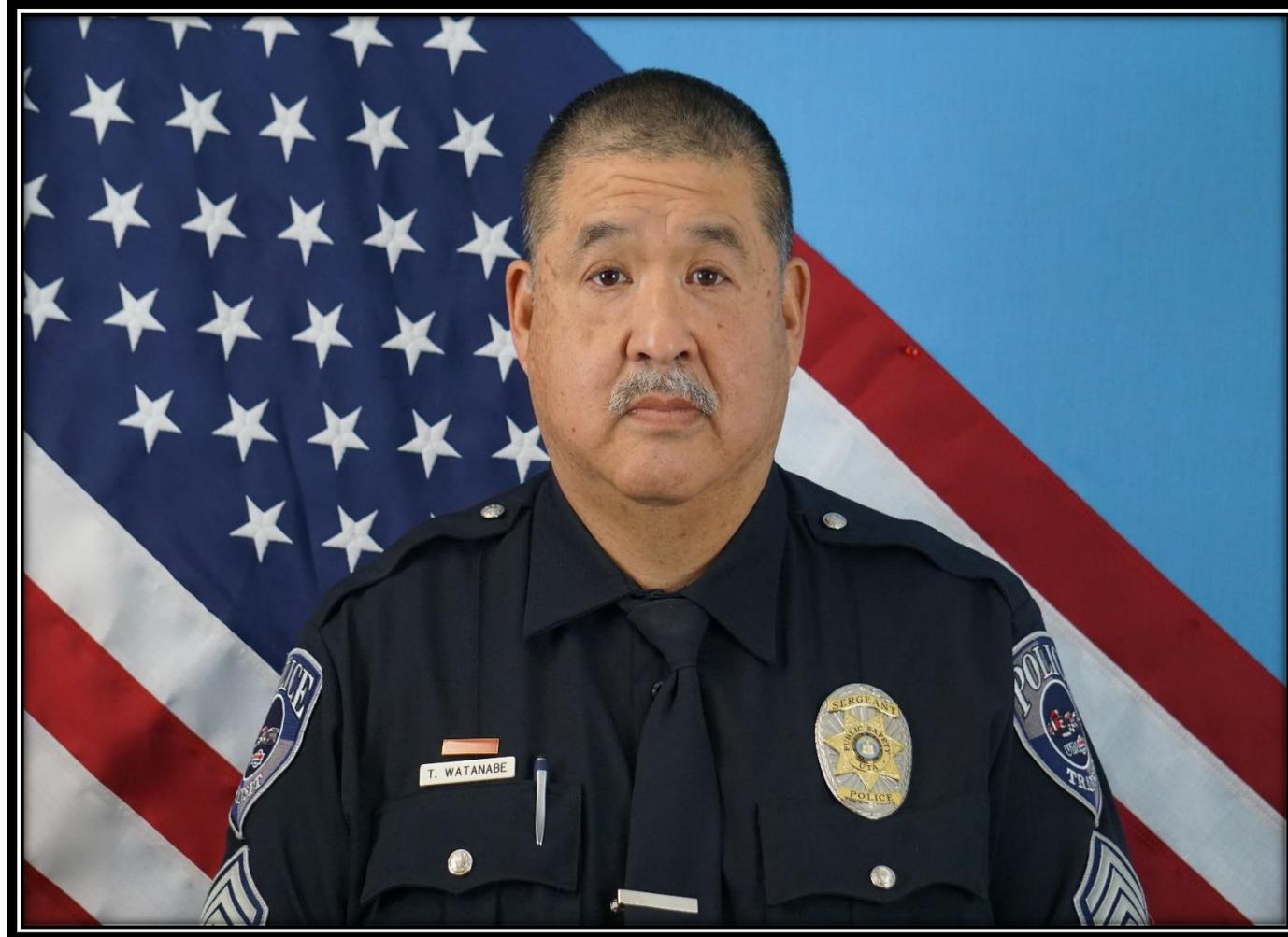# Ski Season Planning Update

Mobility Hubs Update

UTA Conference Participation

UTA Tribute
Sergeant Todd Watanabe

UTA Tribute
Total Rewards Team

Monthly Operating Financial Report February 2023

April 26, 2023

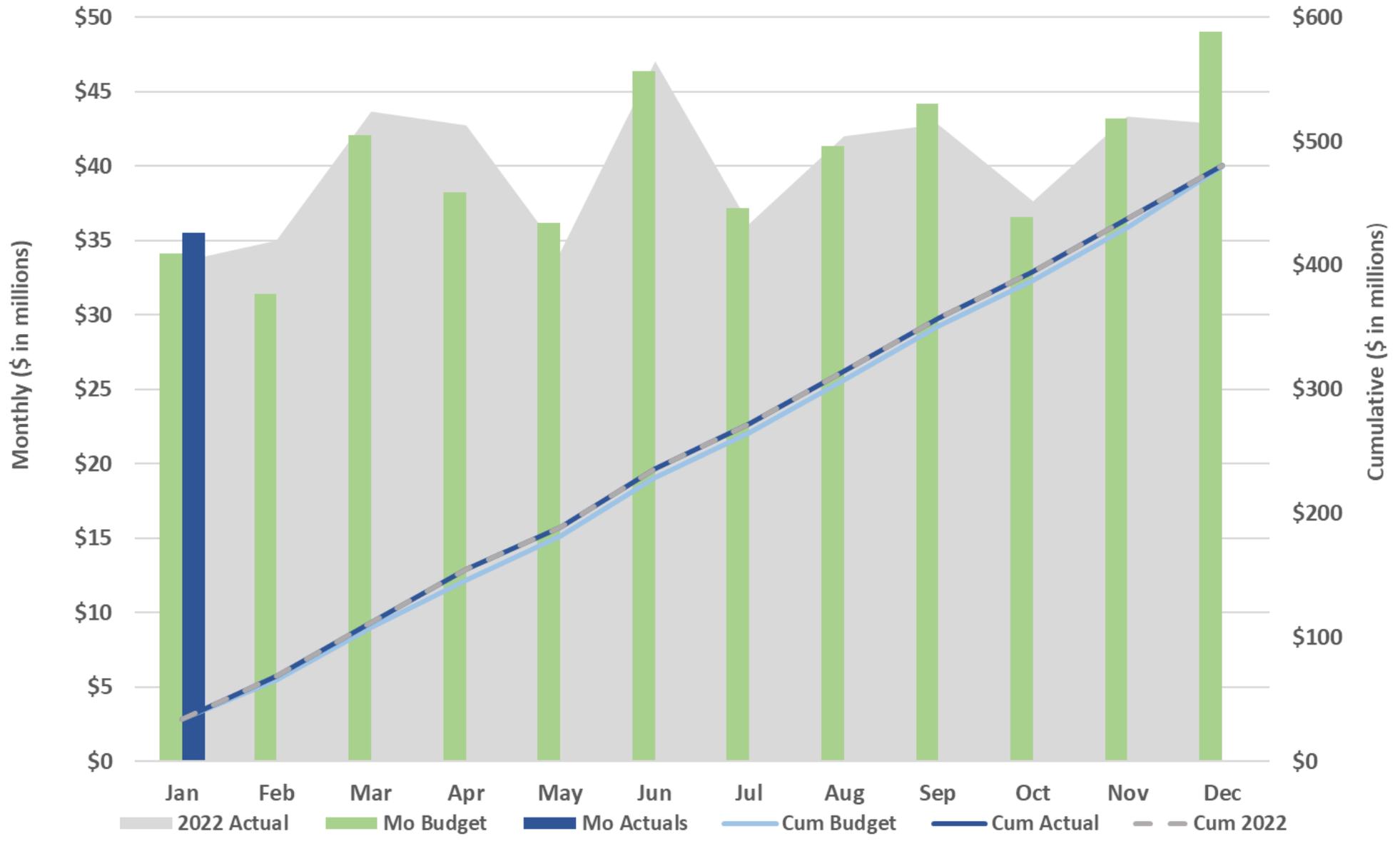# Utah Transit Authority

Board Dashboard: February 28, 2023

Financial Metrics	Feb Actual	Feb Budget	*Fav/ (Unfav)*	%	YTD Actual	YTD Budget	*Fav/ (Unfav)*	%
Sales Tax (Jan '23 mm $)	$ 35.5	$ 34.1	$ 1.45	● 4.2%	$ 35.5	$ 34.1	$ 1.45	● 4.2%
Fare Revenue (mm)	$ 2.0	$ 2.6	$ (0.59)	● -23.0%	$ 5.0	$ 5.6	$ (0.54)	● -9.7%
Operating Exp (mm)	$ 30.5	$ 31.9	1.39	● 4.4%	$ 58.2	$ 64.0	$ 5.82	● 9.1%
Subsidy Per Rider (SPR)	$ 9.74	$ 11.09	$ 1.35	● 12.2%	$ 9.69	$ 11.09	$ 1.40	● 12.6%
UTA Diesel Price ($/gal)	$ 3.49	$ 3.90	$ 0.41	● 10.5%	$ 3.42	$ 3.90	$ 0.48	● 12.4%
Operating Metrics	Feb Actual	Feb-22	F/ (UF)	%	YTD Actual	YTD 2022	F/ (UF)	%
Ridership (mm)	2.79	2.58	0.2	● 8.0%	5.49	4.75	0.7	● 15.4%

Energy Cost by Type (Three Month Average)

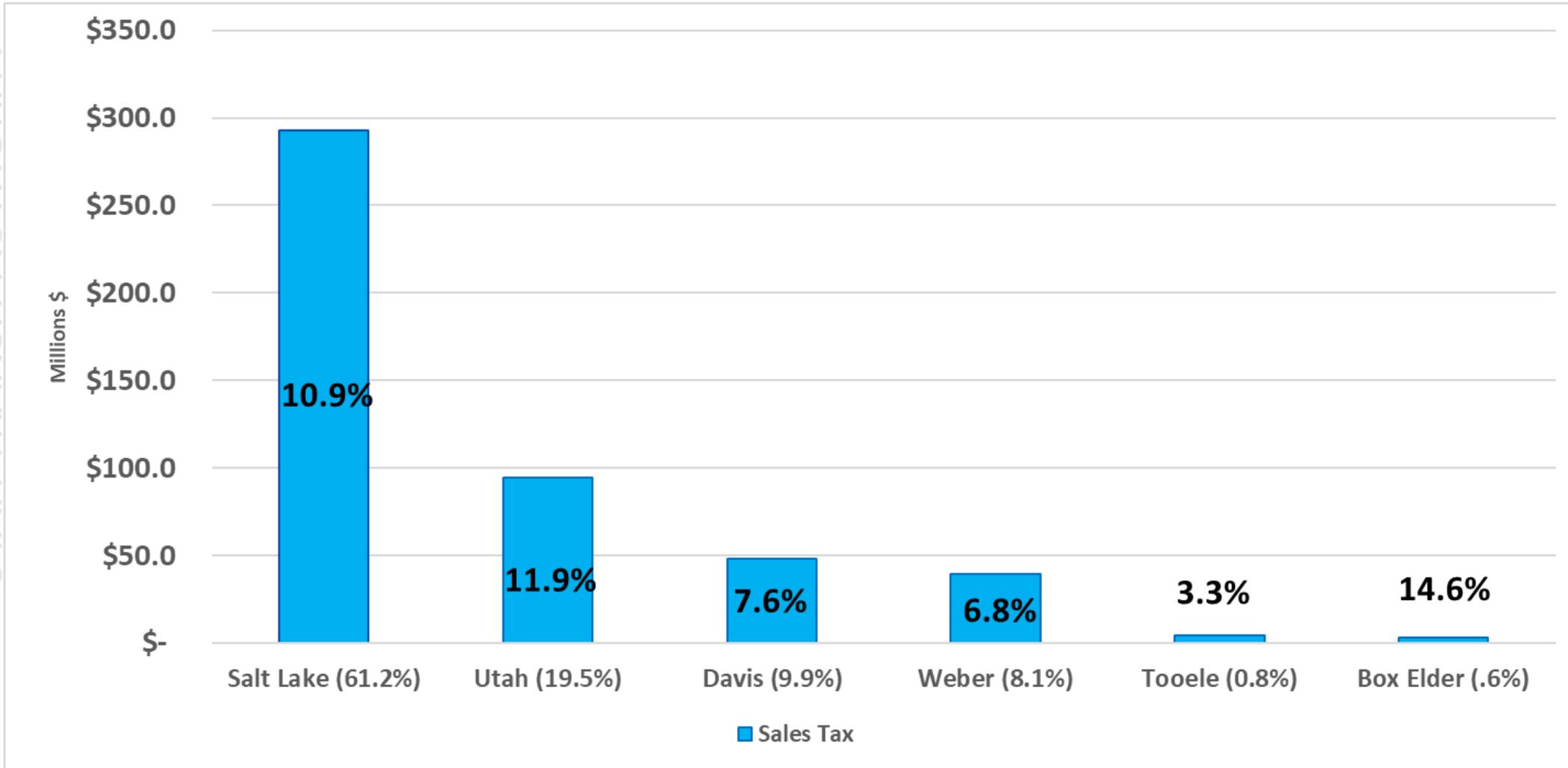|	
Diesel (Cost per Mile)	$ 0.67
Unleaded Gas (Cost per Mile)	$ 0.33
CNG (Cost per Mile)	$ 0.39
Bus Propulsion Power (Cost per Mile)	$ 1.53
TRAX Propulsion Power (Cost per Mile)	$ 1.21

2023 Sales Tax
January (YTD Variance +$1.45 million)

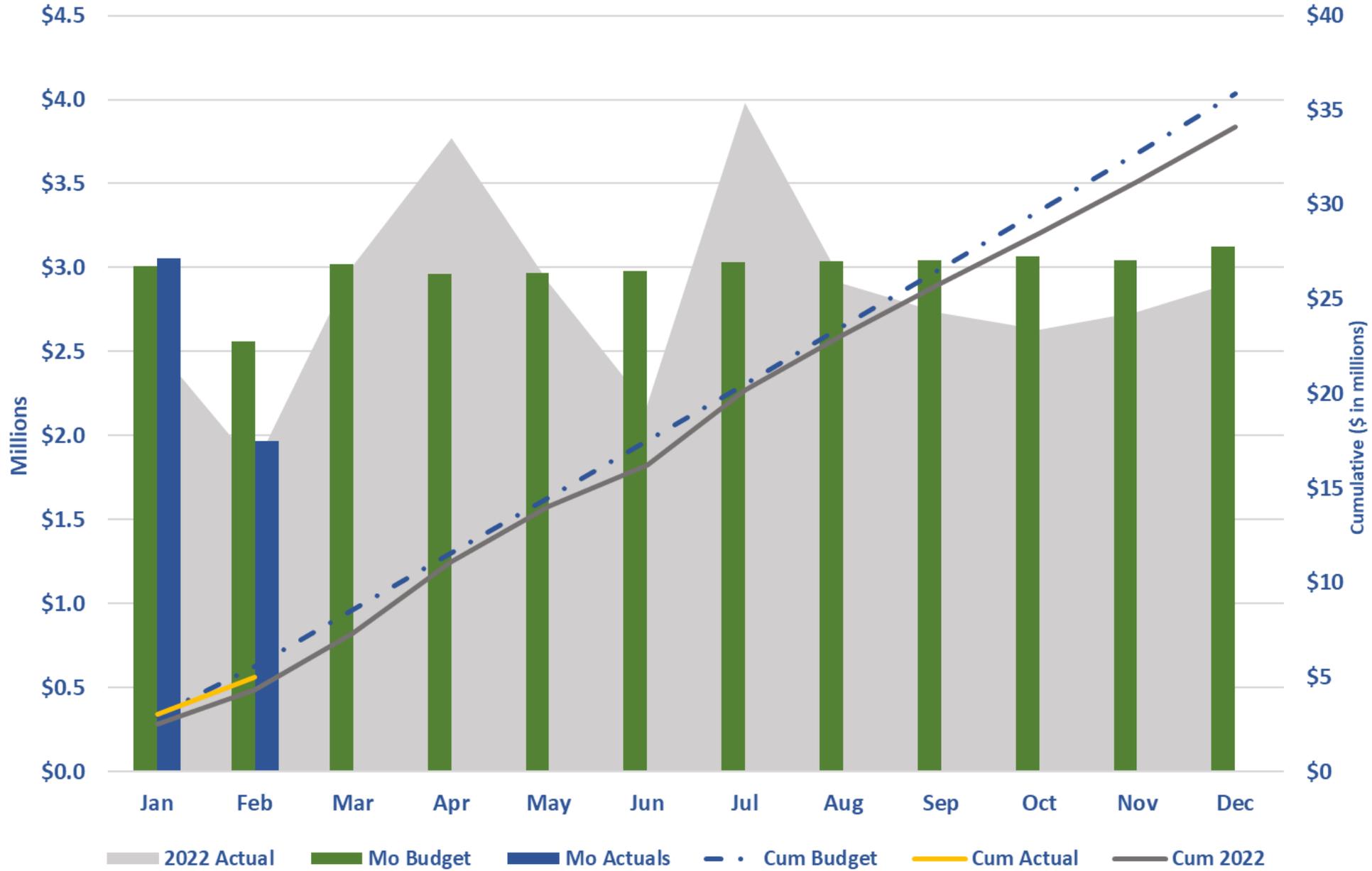Sales Tax Collections
(Percentage Growth for 12 months ended January 31, 2023)

2023 Passenger Revenue
February $(589K)

FTE Report
February 2023

Administrative FTEs	Feb-22 Actual	Feb 2023 Actual	Budget	Variance '23 Var	Percent
Admin Depts	484.8	535.5	607.3	71.8	11.8%
Operating Depts	367.5	355.0	383.5	28.5	7.4%
Total FTE	**852.3**	**890.5**	**990.8**	**100.3**	**10.1%**

Bargaining Unit FTEs	Feb-22 Actual	Feb 2023 Actual	Budget	Variance '23 Var	Percent
Admin Depts	35.0	69.0	42.0	(27.0)	-64.3%
Operating Modes					
Bus	978.0	935.0	1,103.0	168.0	15.2%
Light Rail	261.0	257.0	285.0	28.0	9.8%
Commuter Rail	104.0	99.0	103.0	4.0	3.9%
Riverside	146.0	151.0	159.0	8.0	5.0%
Asset Mgt	167.0	162.0	184.0	22.0	12.0%
Total FTE	**1,691.0**	**1,673.0**	**1,876.0**	**203.0**	**10.8%**

UTA
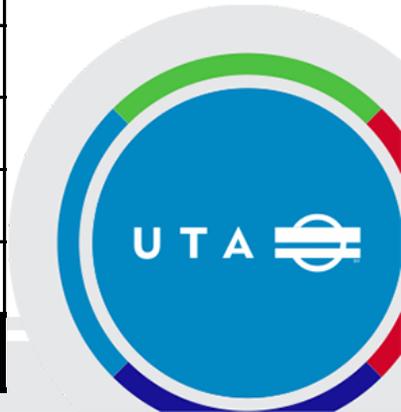
February 2023

MONTHLY RESULTS					FISCAL YEAR 2023 Dollars in Millions	YEAR-TO-DATE RESULTS				
Prior Year	Current Year					Prior Year	Current Year			
Actual	Actual	Budget	Variance			Actual	Actual	Budget	Variance	
					Revenue					
$ 28.1	$ 31.4	$ 31.4	$ -	0.0%	Sales Tax **(Feb accrual)**	$ 28.9	65.5	$ 65.5	$ -	0.0%
1.8	2.0	2.6	(0.6)	-23.0%	Fares	28.5	5.0	5.6	(0.5)	-9.7%
-	-	-	-	0.0%	Federal	130.6	-	-	-	0.0%
1.0	2.8	1.8	1.0	56.6%	Other *	30.1	5.3	3.5	1.8	50.6%
$ 30.9	$ 36.2	$ 35.7	$ 0.4	1.2%	**TOTAL REVENUE**	$ 218.1	$ 75.9	$ 74.6	$ 1.2	1.7%
					Expense					
$ 13.0	$ 14.2	$ 15.4	$ 1.2	7.7%	Salary/Wages	$ 13.5	$ 29.2	$ 30.8	$ 1.6	5.2%
6.1	6.7	7.9	1.2	15.6%	Fringe Benefits	7.3	14.2	15.8	1.6	10.2%
2.2	2.4	2.9	0.5	16.7%	Services	1.3	4.1	5.8	1.7	28.7%
1.1	2.3	1.9	(0.4)	-21.5%	Parts	0.9	4.2	3.8	(0.4)	-10.6%
1.2	3.1	3.0	(0.1)	-1.9%	Fuel	0.7	5.4	6.0	0.6	10.6%
0.4	0.7	0.5	(0.2)	-29.1%	Utilities	0.6	1.4	1.0	(0.3)	-28.8%
1.1	1.0	1.4	0.4	27.7%	Other	0.5	1.7	2.9	1.2	41.3%
(0.2)	(1.1)	(1.0)	(0.1)	14.3%	Capitalized Cost	(0.1)	(2.0)	(1.9)	(0.0)	0.6%
$ 24.8	$ 29.3	$ 32.1	$ 2.8	8.8%	**TOTAL EXPENSE**	$ 24.7	$ 58.2	$ 64.2	$ 6.0	9.4%
$ 6.8	$ 6.6	$ 6.6	$ (0.0)	0.0%	Debt Service	$ 6.8	$ 13.3	$ 13.3	$ (0.0)	0.0%
$ (0.7)	$ 0.3	$ (3.0)	$ 3.2	108.5%	**Contrib. Capital/Reserves**	$ 1.1	$ 4.4	$ (2.9)	$ 7.3	254.0%

*Does not include Sale of Assets   Favorable/(Unfavorable)

*Does not include Sale of Assets   Favorable/(Unfavorable)
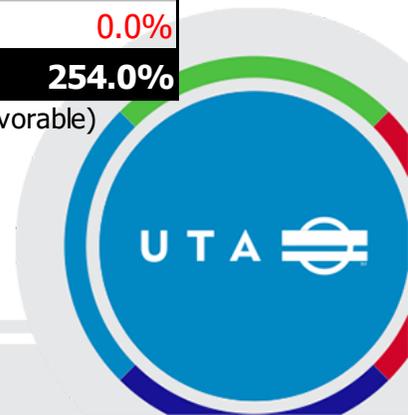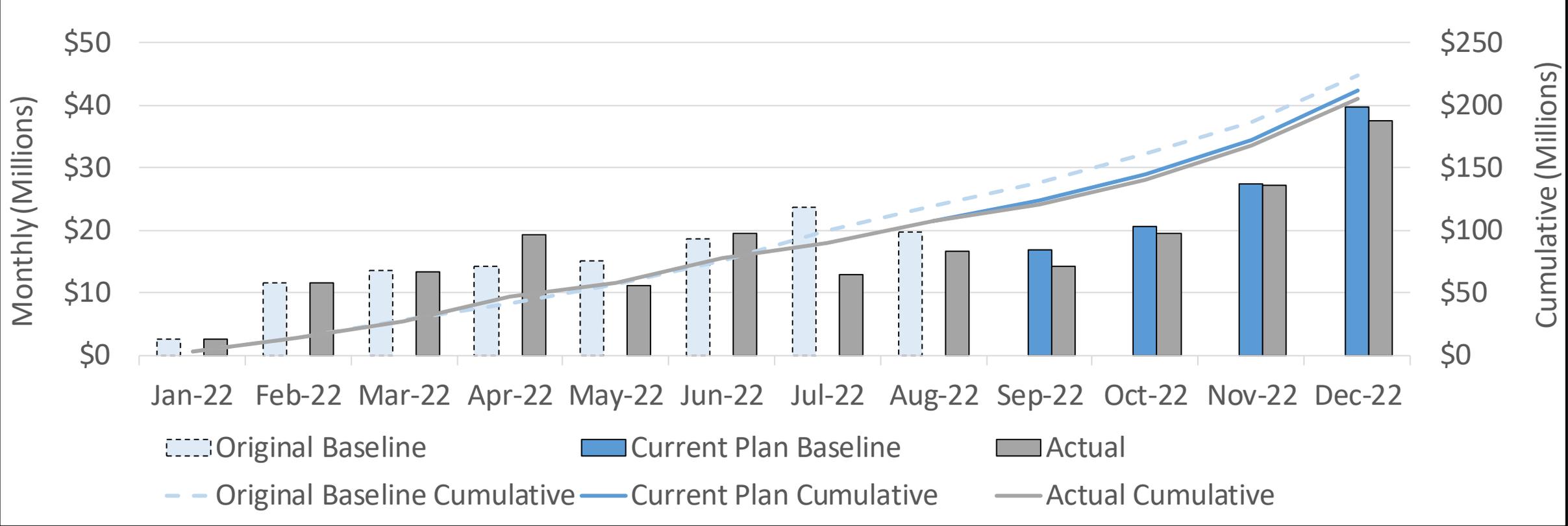
Questions?

Capital Program Update-
January – December 2022 (Final)
&
Through February 2023

April 26th, 2023

Program Summary

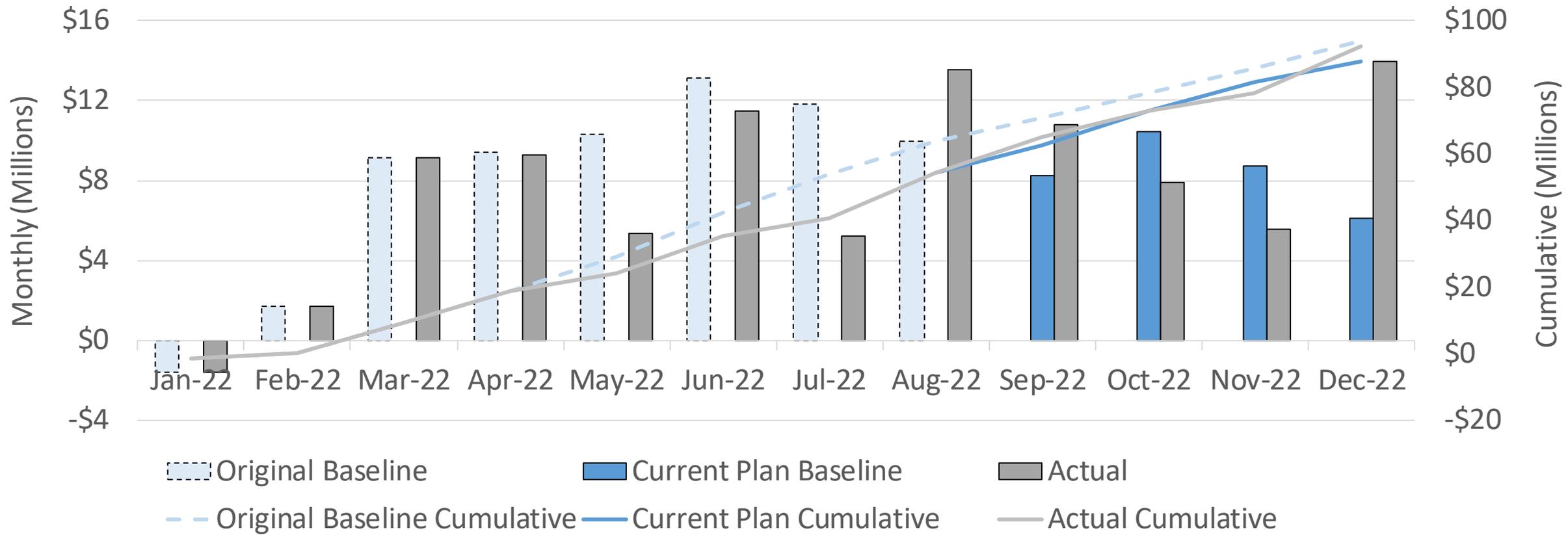2022 Capital Spending Program Summary- 205.3 M Spent of Planned 211.8 M, -3%

Capital Construction

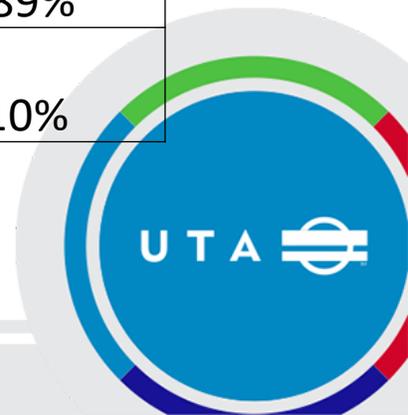
Capital Construction- 92.3 M Spent of Planned 87.6 M, 5%

Capital Construction - Project Variance

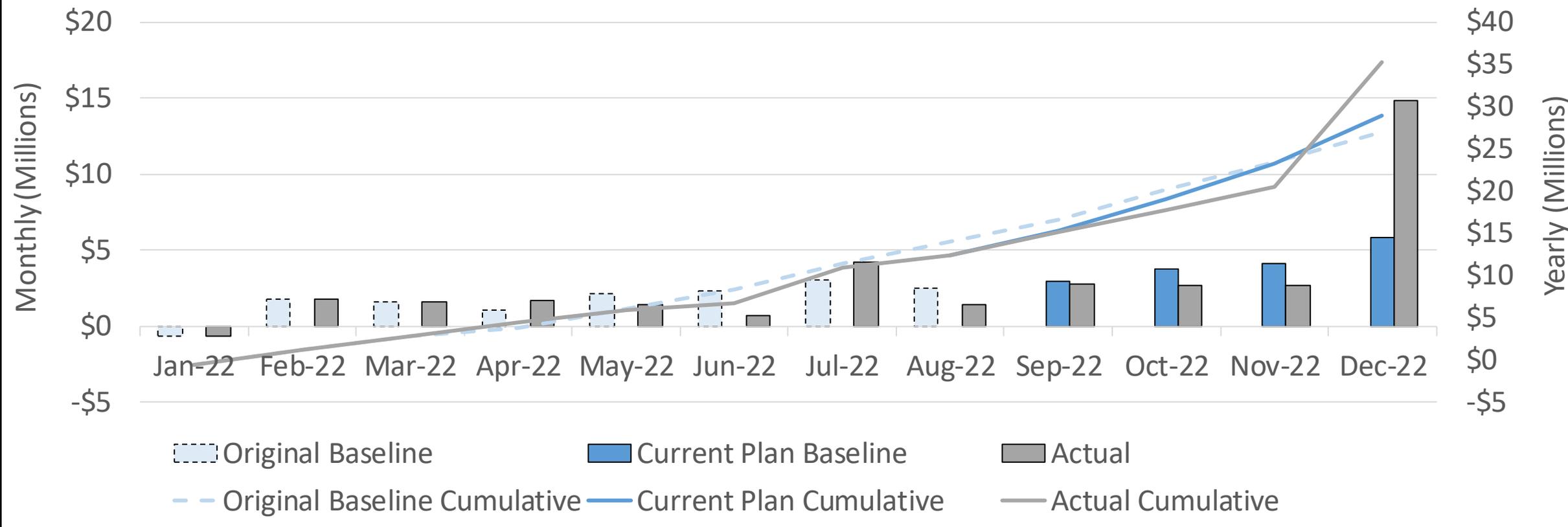| UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
MSP102 - Depot District	33,781,000	31,777,000	(2,003,000)	-6%
MSP232 - Northern Utah County Double Track	3,319,000	2,918,000	(401,000)	-12%
MSP228 - Operator Restrooms in Salt Lake County	207,000	10,000	(198,000)	-95%
MSP231 - Operator Shack at University Medical EOL	187,000	59,000	(128,000)	-68%
MSP272 - Trax Operational Simulator	112,000	213,000	101,000	90%
MSP122 - Positive Train Control	489,000	1,746,000	1,257,000	257%
MSP194 - 650 South Station	(1,536,000)	(177,000)	1,359,000	-89%
MSP185 - Ogden/Weber State University BRT	46,434,000	51,261,000	4,827,000	10%

Capital Development

Capital Development- 35.3 M Spent of Planned 29 M, 22%

Capital Development - Project Variance

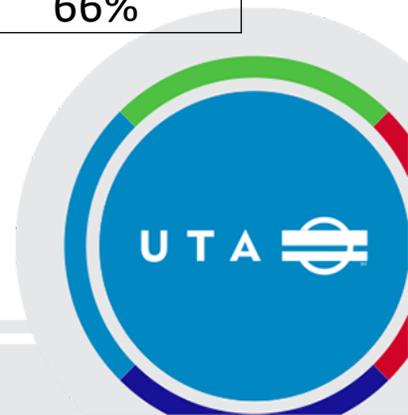| UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
MSP205 - TIGER Program of Projects	11,163,000	10,277,000	(885,000)	-8%
SGR407 - Bus Stop Enhancements	1,607,000	1,109,000	(498,000)	-31%
MSP140 - Box Elder Right of Way Preservation	810,000	354,000	(457,000)	-56%
MSP215 - Sharp-Tintic Rail Connection	281,000	44,000	(237,000)	-84%
MSP258 - Mt Ogden Admin Bldg expansion	210,000	61,000	(149,000)	-71%
MSP254 - TechLink Corridor	159,000	39,000	(120,000)	-75%
ICI185 - Passenger Info Improvements	433,000	581,000	148,000	34%

UTAH TRANSIT AUTHORITY

UTA

Capital Development - Project Variance (Continued)

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
SGR409 - System Restrooms	103,000	272,000	169,000	163%
MSP264 - South Valley Transit	60,000	257,000	197,000	327%
MSP096 - Provo-Orem BRT	66,000	574,000	508,000	767%
MSP253 - Mid-Valley Connector	1,563,000	2,339,000	776,000	50%
MSP265 - Program Management Support	2,347,000	3,389,000	1,042,000	44%
MSP216 - Point of Mountain AA/EIS	478,000	1,664,000	1,186,000	248%
MSP252 - FrontRunner Double Tracking	6,846,000	11,392,000	4,547,000	66%

UTAH TRANSIT AUTHORITY

UTA

Infrastructure SGR Projects
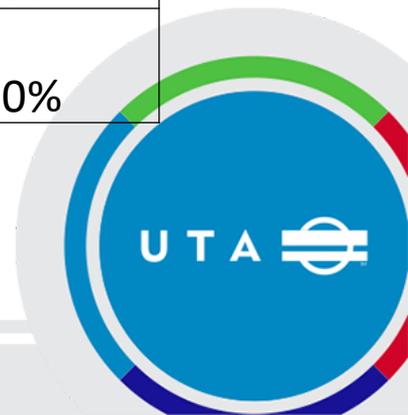

Infrastructure SGR Projects- 22.5 M Spent of Planned 22.5 M, 0%
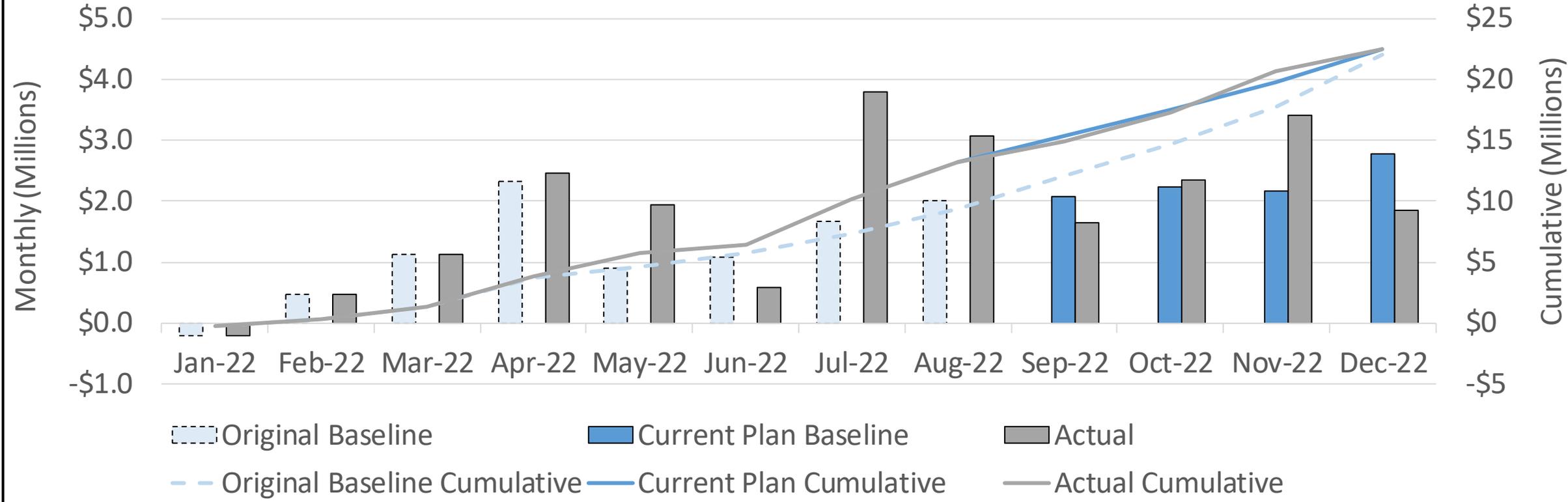
Infrastructure SGR - Project Variance

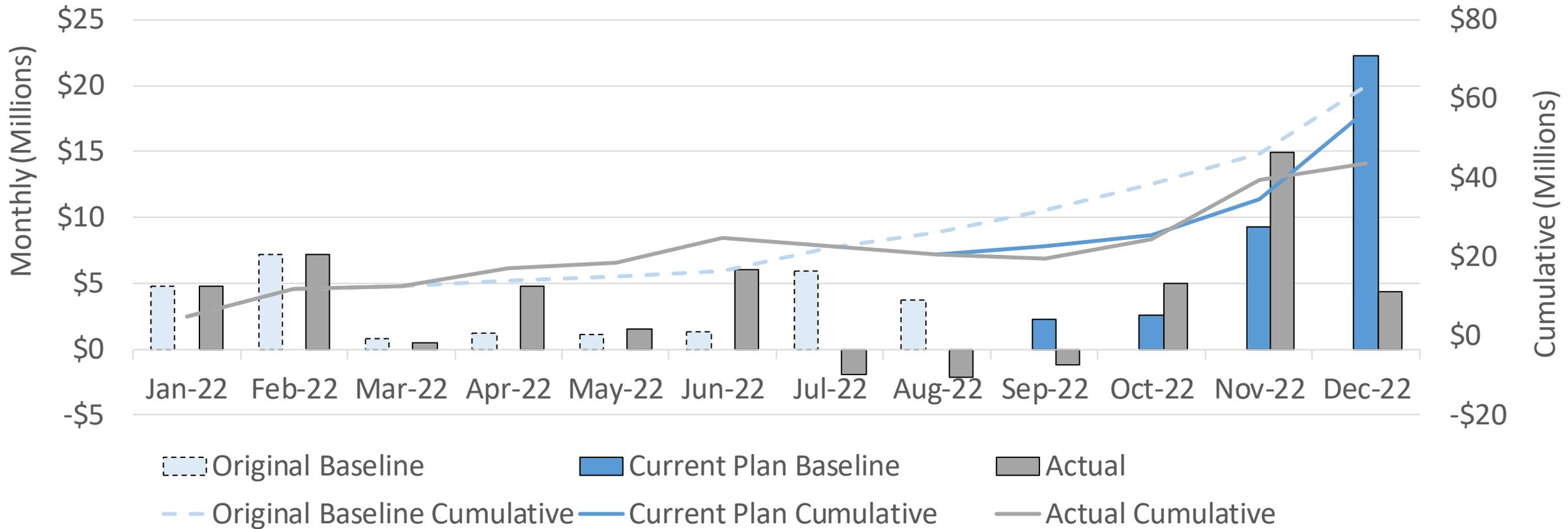| UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
SGR397 - Traction Power Rehab/Replacement	10,413,000	9,258,000	(1,155,000)	-11%
SGR404 - Rail Switches/Trackwork Controls	1,684,000	963,000	(720,000)	-43%
SGR403 - Train Control Rehab/Replacement	2,010,000	1,858,000	(153,000)	-8%
MSP241 - Queue Cutter Projects with UDOT	47,000	(57,000)	(104,000)	-220%
SGR398 - OCS Wire Survey	1,481,000	1,592,000	111,000	7%
MSP189 - Signal Pre-emption Projects w/UDOT	77,000	190,000	113,000	147%
SGR393 - Grade Crossings Rehab/Replacement	1,901,000	2,713,000	812,000	43%
SGR385 - Rail Rehab and Replacement	3,594,000	4,681,000	1,087,000	30%

Revenue Service Vehicles

Revenue/Service Vehicles- 43.8 M Spent of Planned 57 M, -23%

Revenue Service Vehicles – Project Variance

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
REV236 -VW battery buses	7,850,000	1,104,000	(6,746,000)	-86%
REV209 -Paratransit Vehicle Replacement	4,527,000	259,000	(4,268,000)	-94%
REV212 -Park City Lo/No Grant	2,045,000	285,000	(1,759,000)	-86%
SGR391 -Commuter Rail Vehicle Rehab and Replacement	772,000	(25,000)	(796,000)	-103%
REV234 -Tooele County Microtransit & Vehicle Electrification	931,000	145,000	(786,000)	-84%
SGR040 -Light Rail Vehicle Rehab	7,867,000	7,357,000	(511,000)	-6%

UTAH TRANSIT AUTHORITY

UTA

Revenue Service Vehicles – Project Variance (Continued)

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
REV232 - Van Pool Replacement	2,920,000	2,564,000	(356,000)	-12%
REV224 - Bus Engine/Trans/Comp Rehab/Replace	1,714,000	1,408,000	(306,000)	-18%
MSP247 - Light Rail Seat Replacement	2,600,000	2,400,000	(200,000)	-8%
REV211 - Bus Replacement	22,536,000	25,114,000	2,578,000	11%

UTA

Facilities/SGR – Project Variance

Faciliites SGR Projects- 3.8 M Spent of Planned 5.1 M, -26%
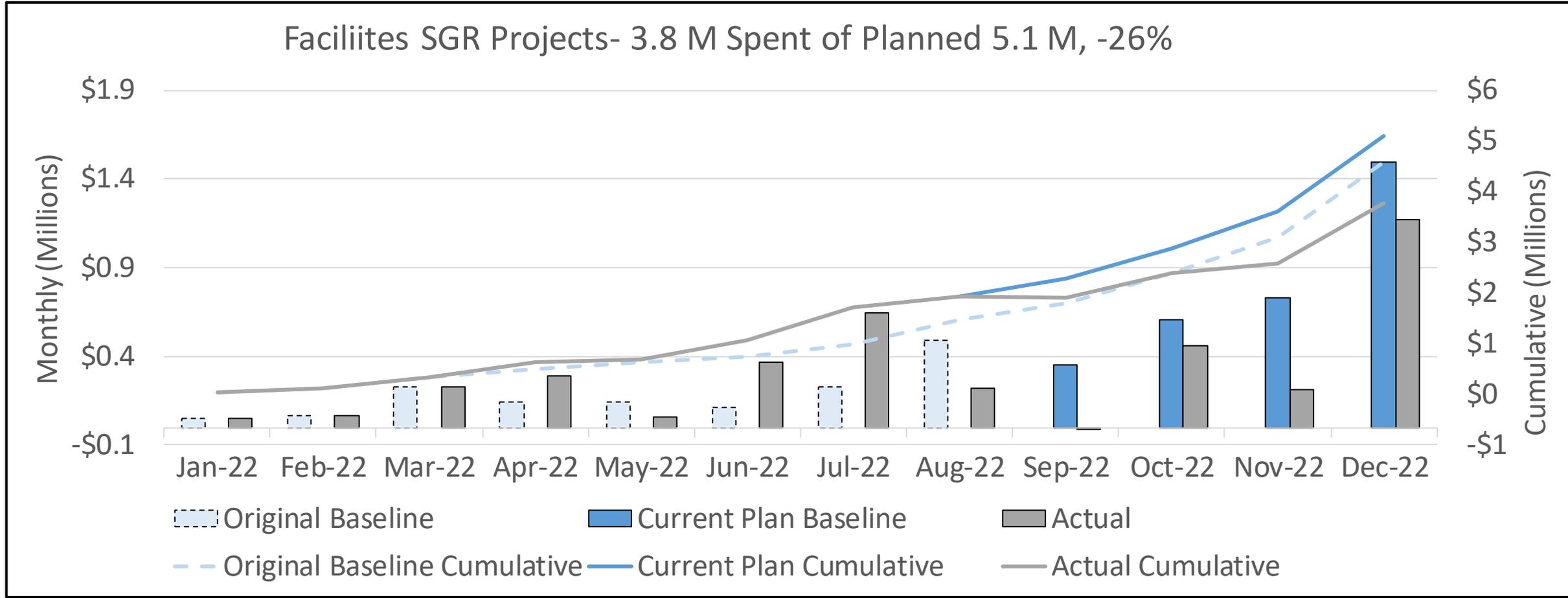
Legend:
- Original Baseline
- Current Plan Baseline
- Actual
- Original Baseline Cumulative
- Current Plan Cumulative
- Actual Cumulative

UTA TRANSIT AUTHORITY

Facilities/SGR - Project Variance

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
FMA672 - Park and Ride Rehab/Replacement	1,078,000	446,000	(632,000)	-59%
FMA653 - Facilities Rehab and Replacement	2,313,000	1,684,000	(629,000)	-27%
FMA673 - Stations and Platforms Rehab/Replace	459,000	(117,000)	(576,000)	-126%
FMA652 - Equipment Managed Reserve	970,000	542,000	(428,000)	-44%
FMA683 - Apprenticeship Training Aids	-	163,000	163,000	
FMA678 - Meadowbrook Flooring/Lighting	1,000	207,000	205,000	15975%
FMA679 - Building Remodels/Reconfiguration	156,000	639,000	484,000	311%
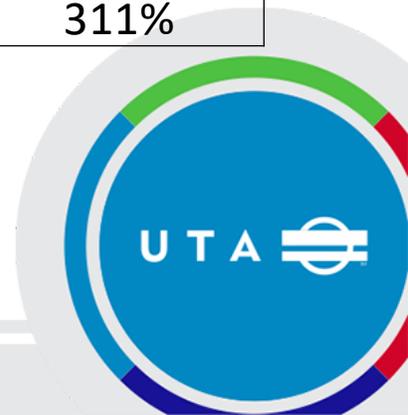
Safety and Security

Safety and Security- 1.3 M Spent of Planned 1.5 M, -13%
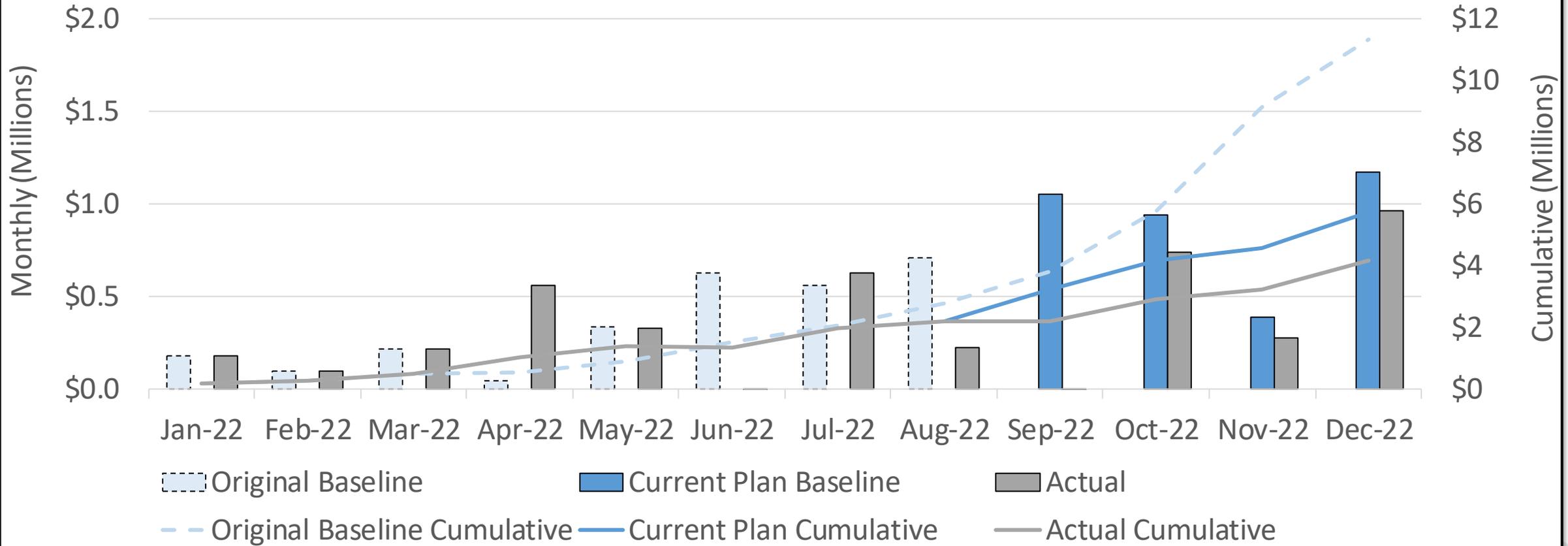
Safety and Security - Project Variance

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
FMA682 -Police CAD/RMS w Optional Taser/Body Cams	350,000	-	(350,000)	-100%
FMA539 -Tasers	112,000	-	(112,000)	-100%
FMA645 -Camera Sustainability	290,000	396,000	107,000	37%

Information Technology Projects

Information Technology Projects- 4.2 M Spent of Planned 5.8 M, -27%

Information Technology - Project Variance

UTA Capital Program Delivery	YTD Current Plan	YTD Actual Expend	YTD Variance $	YTD Variance %
ICI217 - Transit Management Sytem	2,784,000	1,616,000	(1,168,000)	-42%
ICI001 - Passenger Information	848,000	4,000	(844,000)	-100%
ICI201 - Server, Storage Infrastructure Eq & SW	243,000	560,000	317,000	131%

2023 Reporting Changes

- All project budget categories will be shown

  - Planning, Real Estate, & 5310 will be shown

- Anticipated changes to variance table

  - Become more visually intuitive

    - (probably a couple reporting sessions out)

2023 Project Budget Reporting Plan

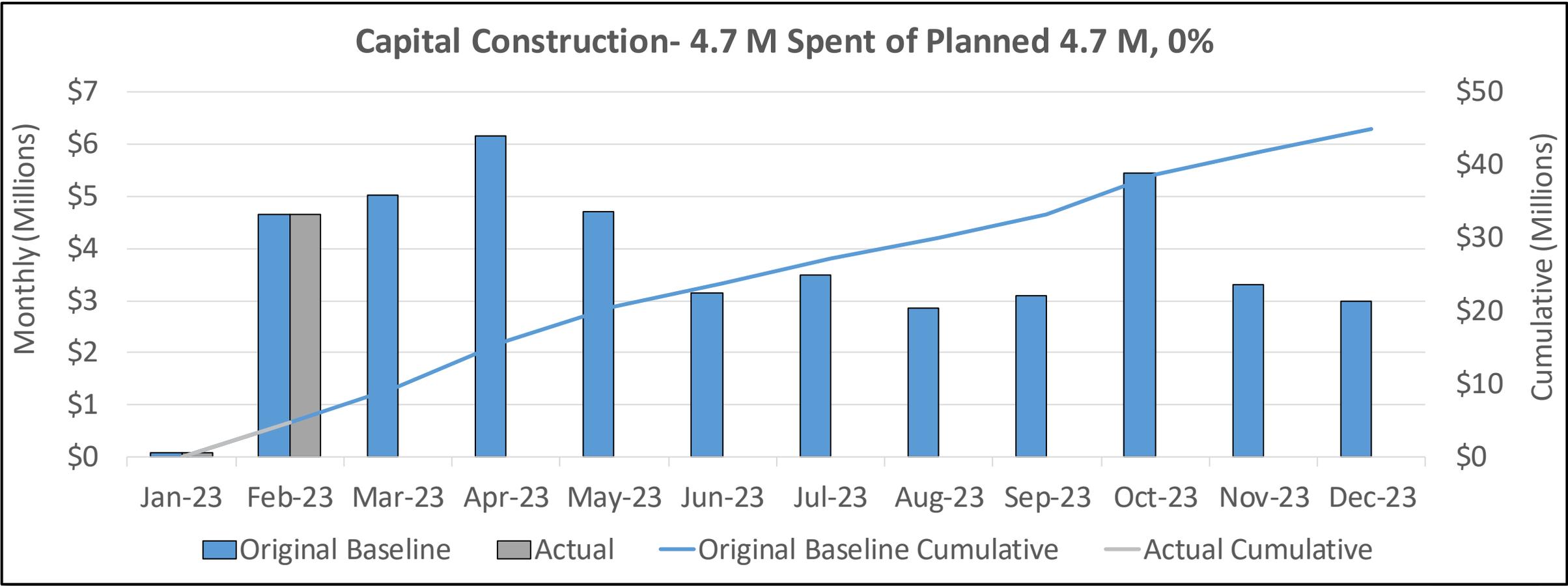### 2023 Capital Spending Program Summary- 10.3 M Spent of Planned 10.3 M, 0%

Legend: Original Baseline · Actual · Original Baseline Cumulative · Actual Cumulative
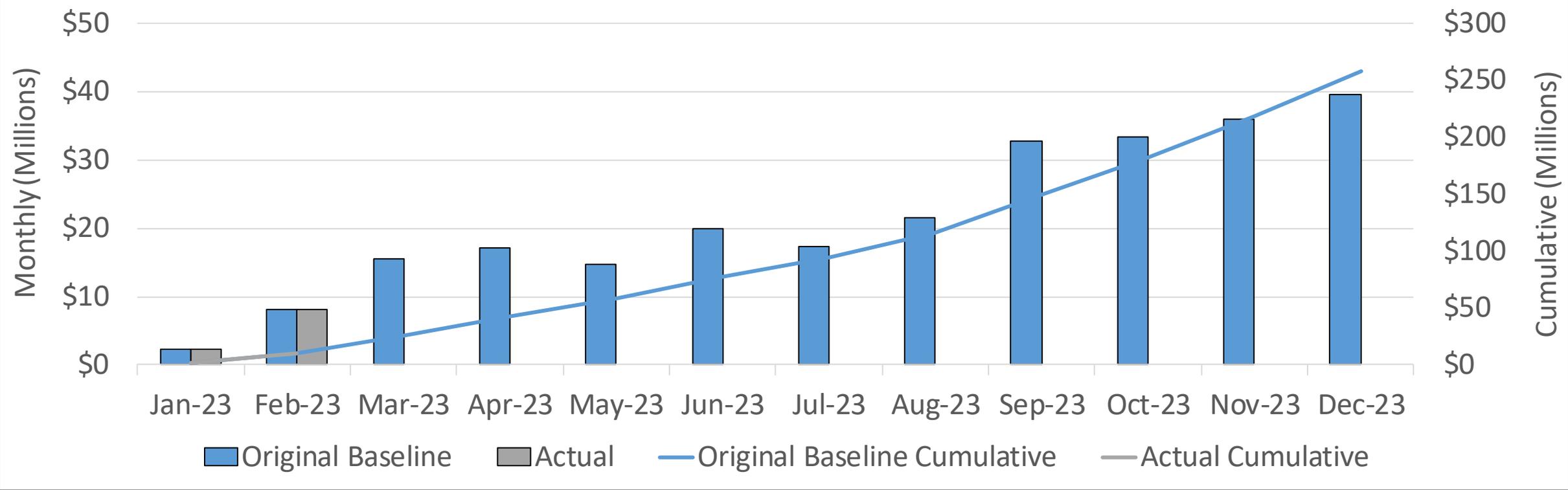
Early expectations are $258 Million spent for 2023

Capital Construction- 2023 Plan

Capital Construction- 4.7 M Spent of Planned 4.7 M, 0%

Capital Development- 2023 Plan

Capital Development- 0.6 M Spent of Planned 0.6 M, 0%
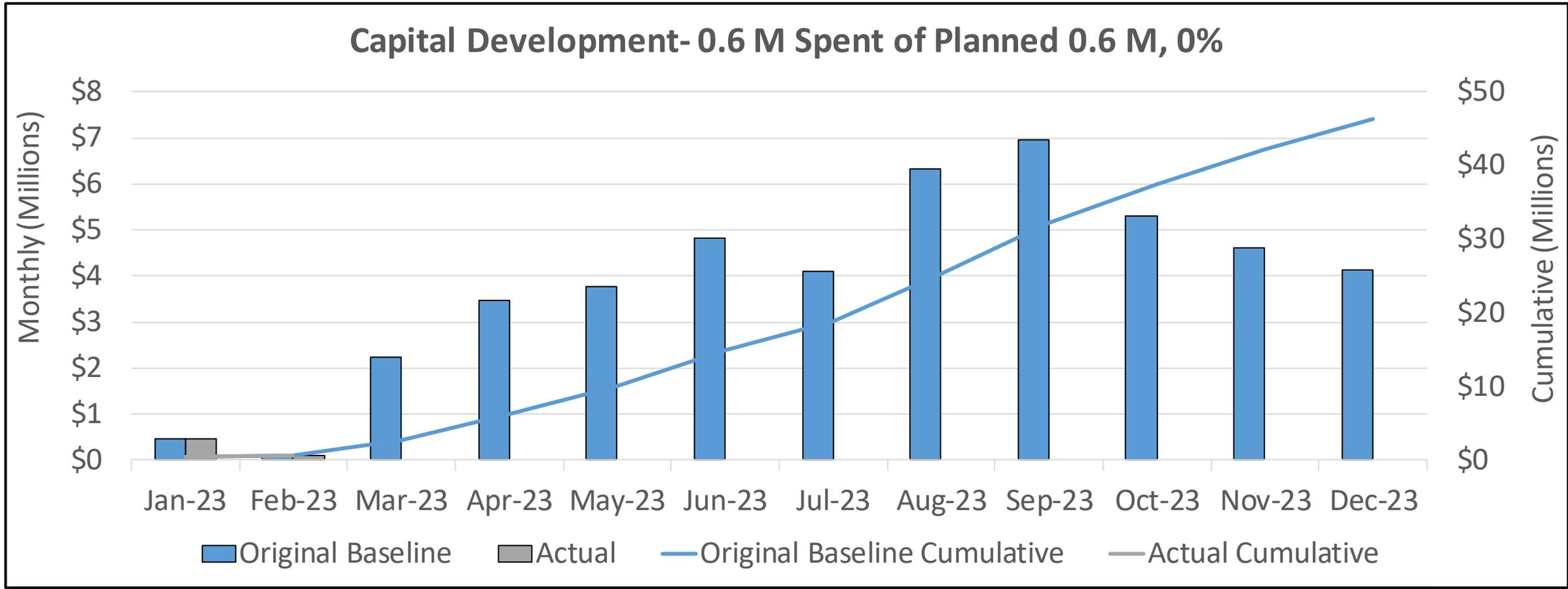
Facilities- SGR- 2023 Plan

Faciliites SGR Projects- 0.7 M Spent of Planned 0.7 M, 0%
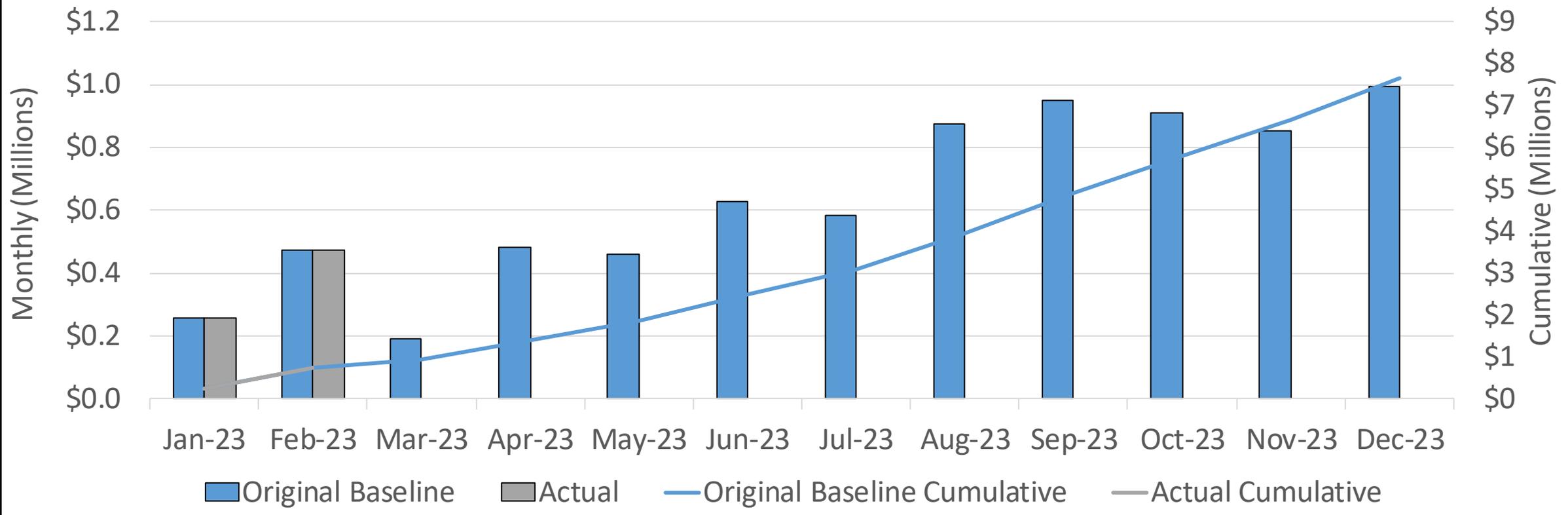
Information Technology- 2023 Plan

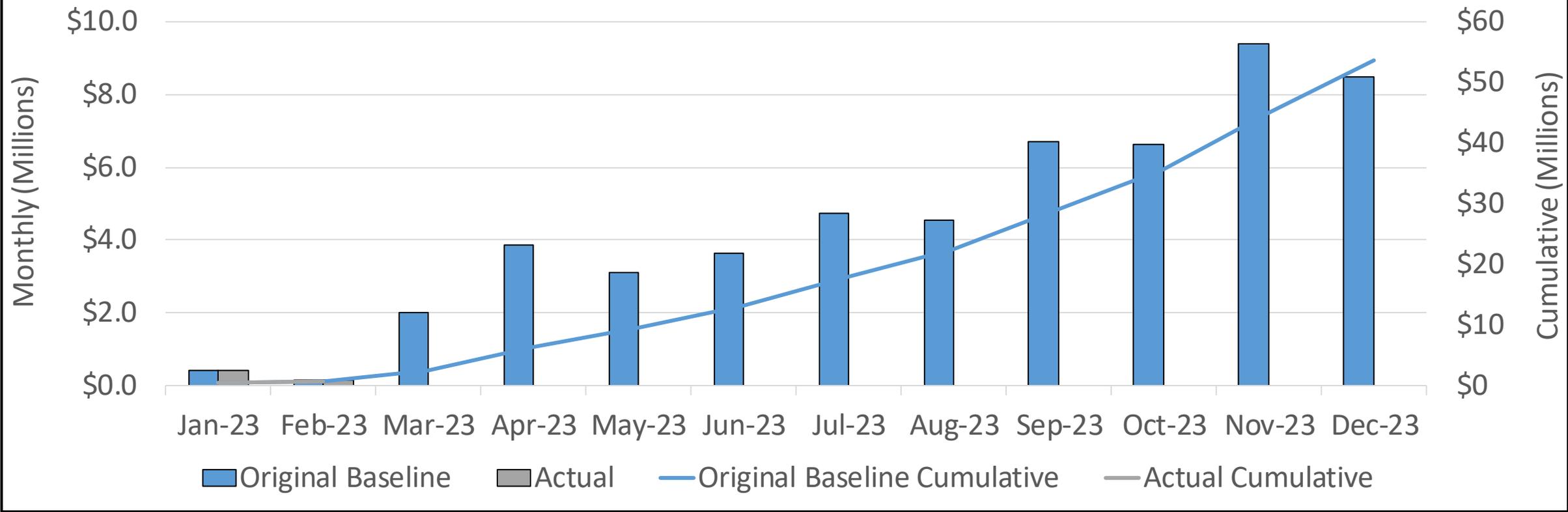Information Technology Projects- 0.8 M Spent of Planned 0.8 M, 0%

Legend: Original Baseline, Actual, Original Baseline Cumulative, Actual Cumulative
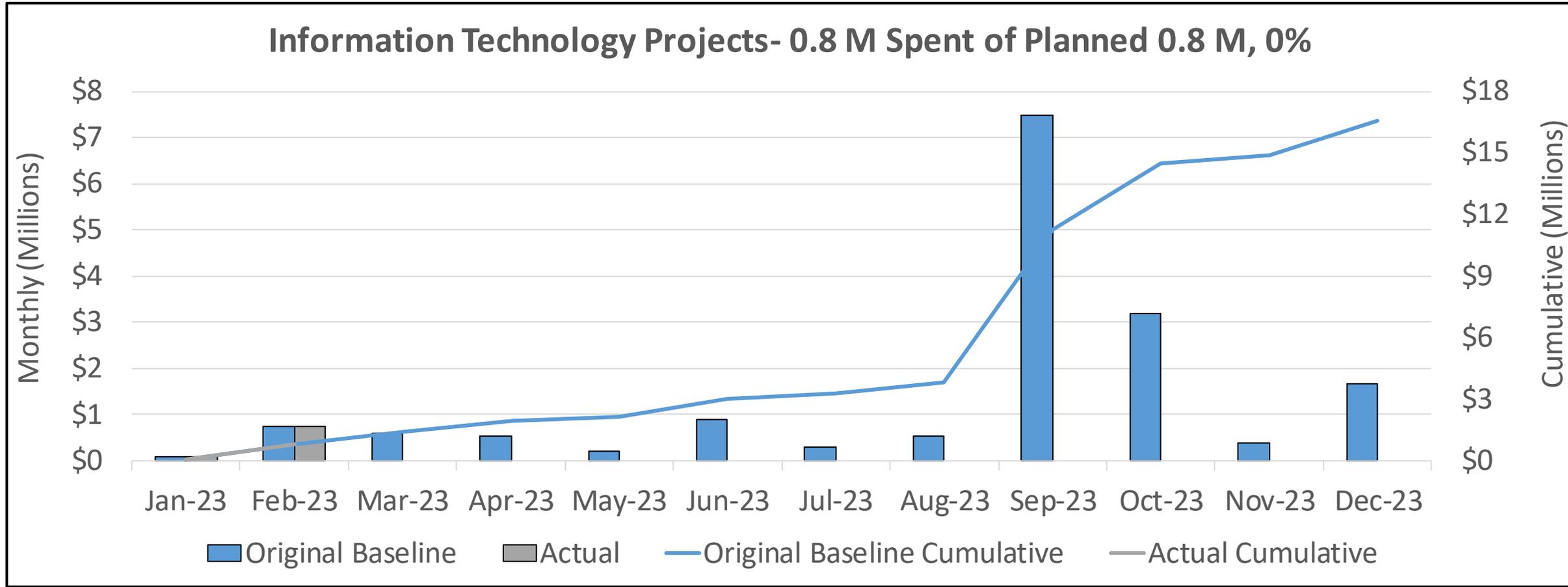
Infrastructure SGR- 2023 Plan
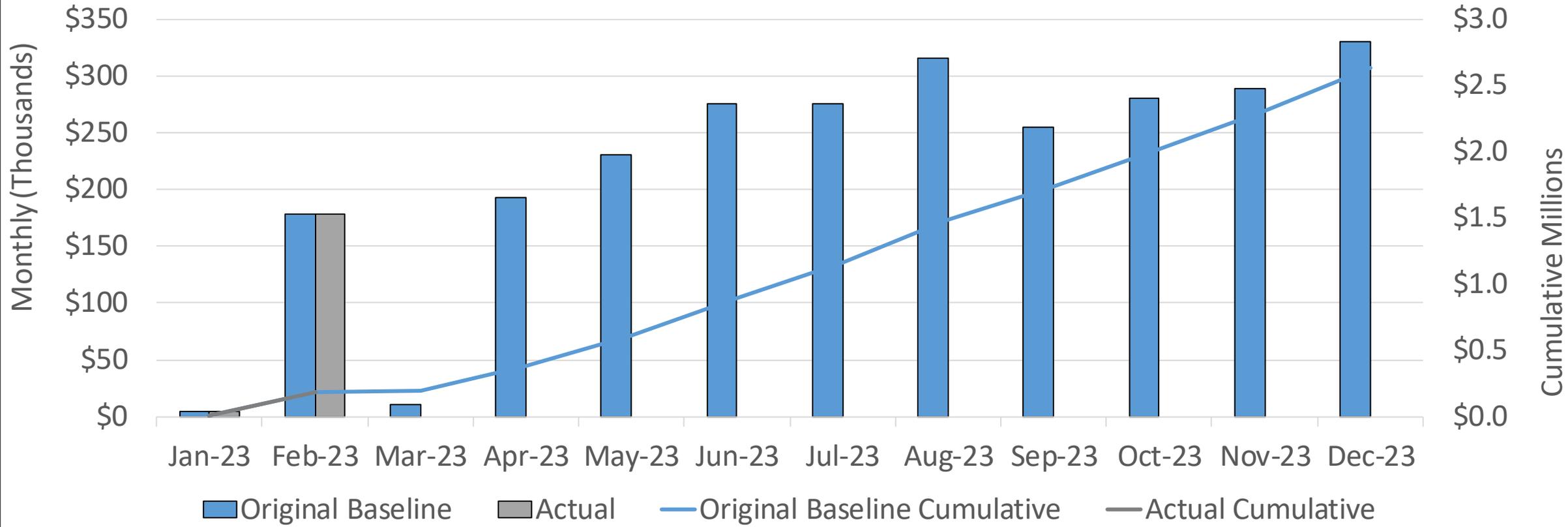

Infrastructure SGR Projects- 0.6 M Spent of Planned 0.6 M, 0%

Planning- 2023 Plan

Planning- 0.2 M Spent of Planned 0.2 M, 0%

Real Estate and TOC- 2023 Plan

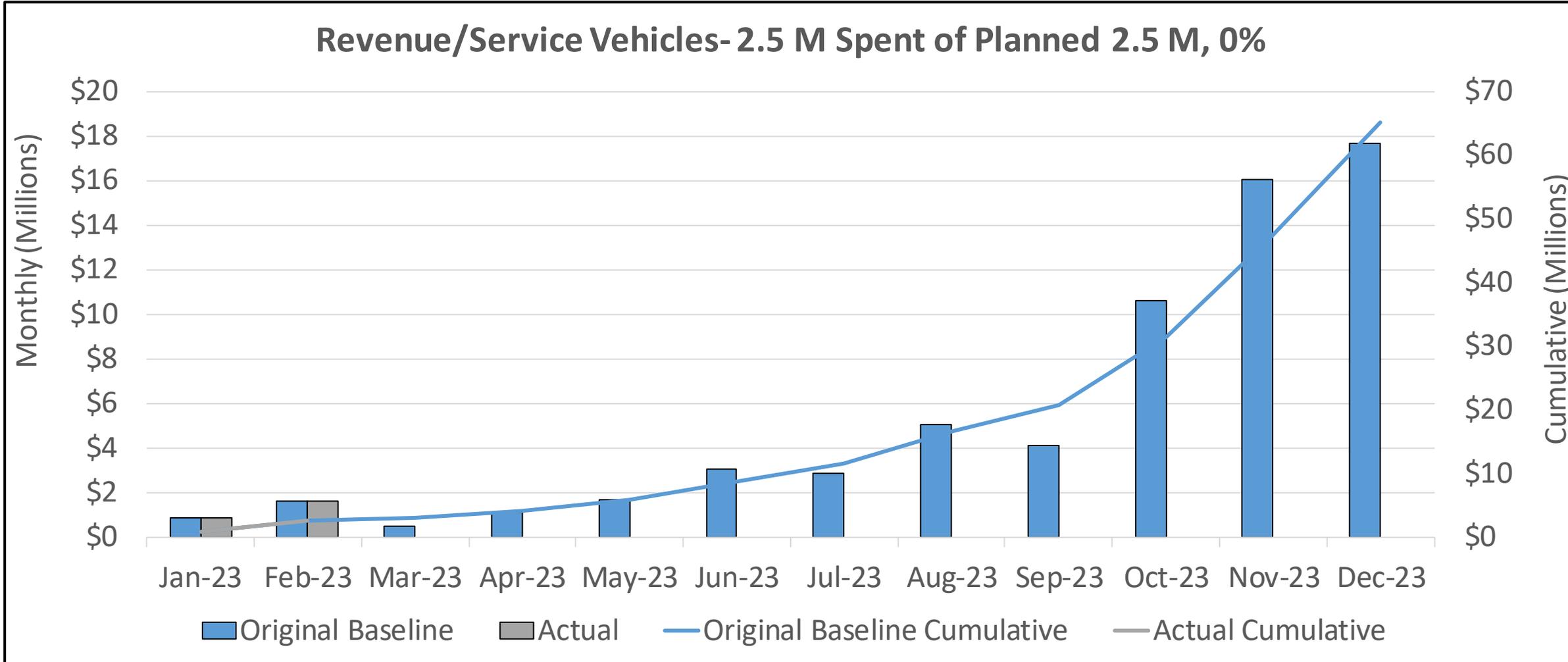Real Estate and TOC- 0.1 M Spent of Planned 0.1 M, 0%

Legend: Original Baseline, Actual, Original Baseline Cumulative, Actual Cumulative
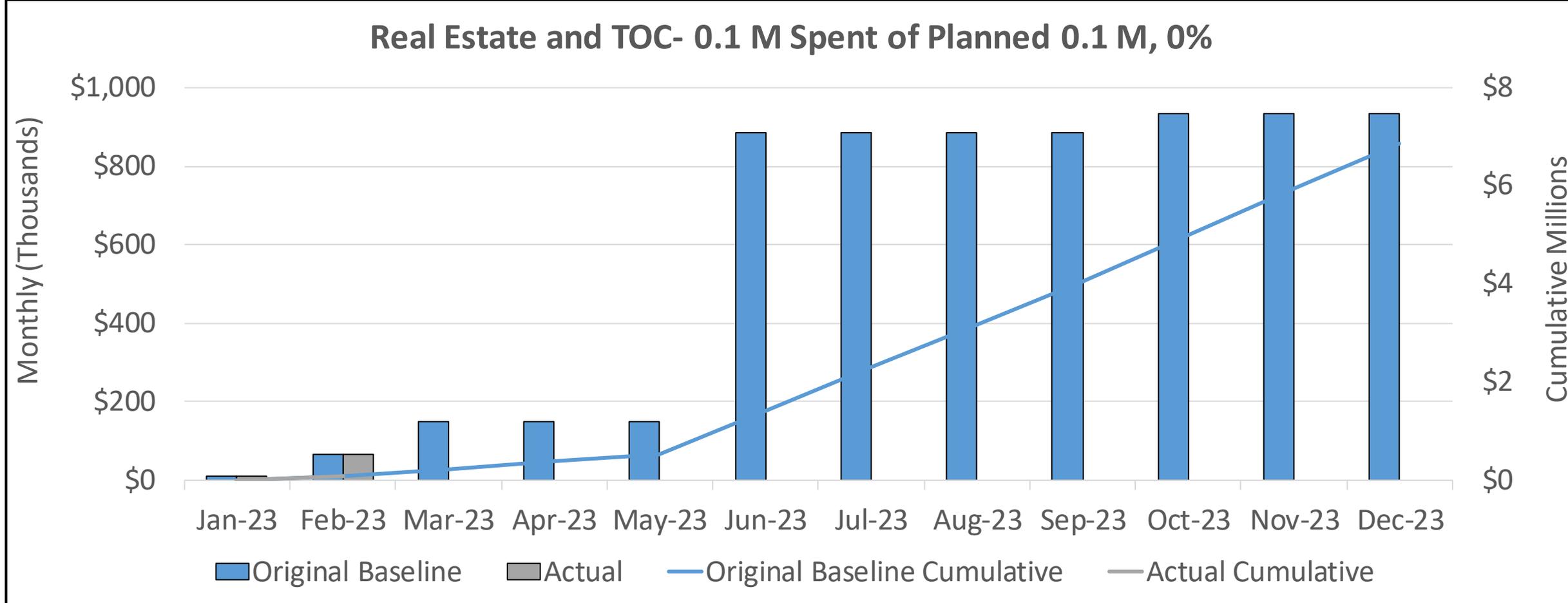
Revenue/Service Vehicles- 2023 Plan

Revenue/Service Vehicles- 2.5 M Spent of Planned 2.5 M, 0%

Legend: Original Baseline, Actual, Original Baseline Cumulative, Actual Cumulative

Safety & Security- 2023 Plan

Safety and Security- 0 M Spent of Planned 0 M, 0%
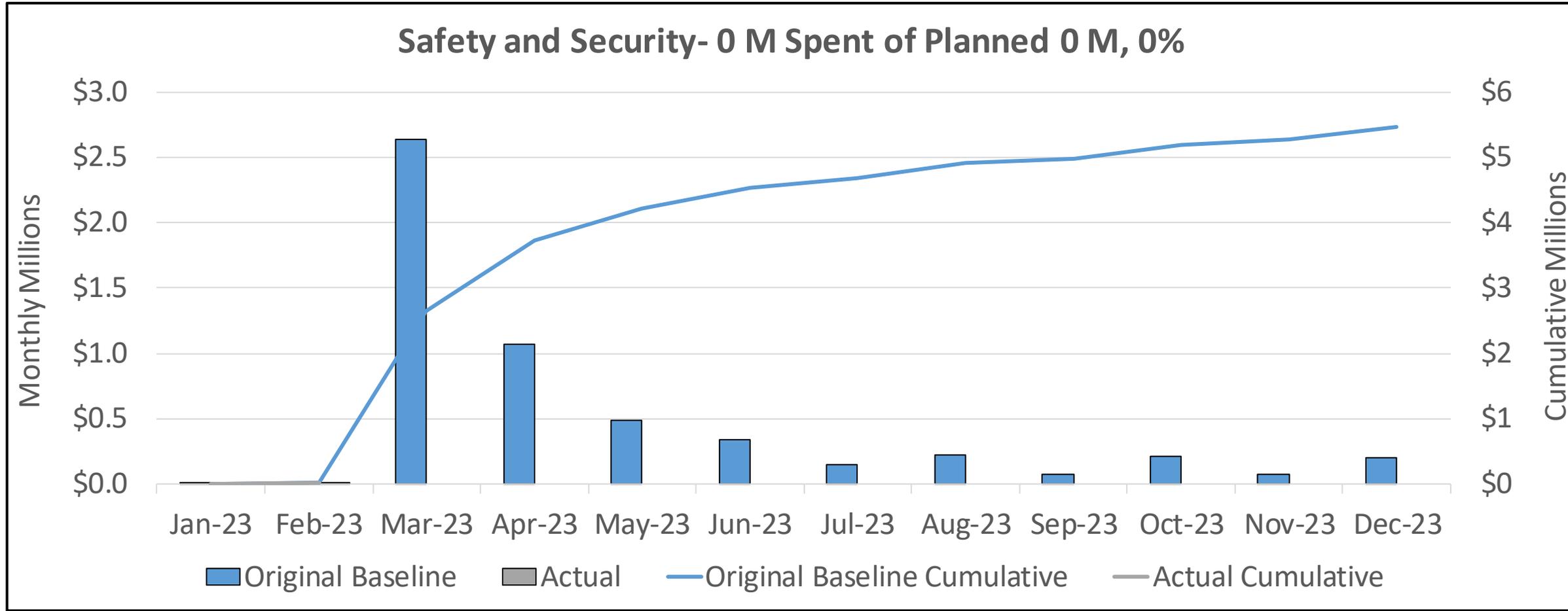
5310 Projects- 2023 Plans
(Highly dependent on sub-recipient activity)
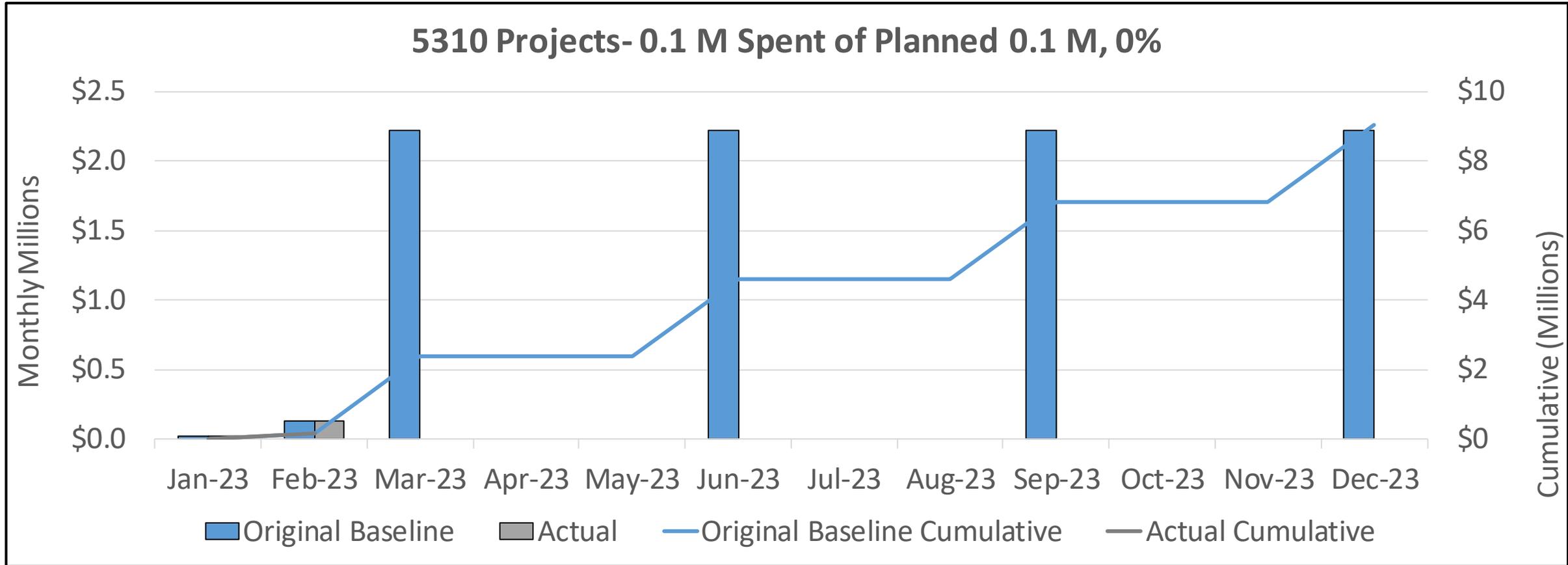
Project Highlights
REV234- Tooele Electrification Project

Current Project Status Highlights:

- Expect to start testing vans Spring 2023
- 70% (7 of 10) Ford E-Transit vans have been delivered
- Electrical design work 100% complete
- Overnight chargers 75% installed
  - Fast chargers to be installed this summer
- Plan to transition fleet by early fall
- Performance evaluation completes project by end of 2023

Questions?

Resolutions

R2023-04-07 – Resolution Declaring Official Intent of the Utah Transit Authority to Reimburse Itself for Certain Capital Expenditures Through Lease Financing

Resolution R2023-04-07
Official Intent to Reimburse
2023 Lease Financing

April 26, 2023

Capital Budget
Revenue & Non-Revenue Service Vehicles

Vehicle/Equipment Replacement	Amount
Buses	$32,500,000
Paratransit	$8,000,000
Comet Cars	$4,000,000
Vanpool Vans	$2,500,000
Non-Revenue Service Vehicles	$1,500,000
Totals	$48,500,000

Timing Issue
Delivery vs. Financing

- Vehicle and equipment acquisition and delivery dates vary throughout the year

- Most efficient to execute one lease

- Federal law[1]:
  - Financed items may purchased up to 60 days before financing close
  - Financed items may be purchased more than 60 days before financing close if an intent to reimburse resolution is adopted

[1] 26 CFR § 1.150-2

Proposed Intent to Reimburse Resolution

- Establishes maximum reimbursement authorization up to $49,500,000

- Allows lease financing for budgeted items purchased from January 1, 2023 until lease financing close

Recommended Action
(by roll call)

Motion to approve Resolution R2023-04-07 Declaring Official Intent of the Utah Transit Authority to Reimburse itself for Certain Capital Expenditures Through Lease Financing, as presented.

R2023-04-08 – Resolution Granting General Expenditure and Disbursement Authority to Non-Inventory Vendors

Payroll Vendors Included in the 2023 Resolution

Vendor	Purpose	Annual Amount (based on 2021 actuals)	Annual Amount (based on 2022 actuals)	Annual Amount 2023 Not to Exceed
Payroll				
Amalgamated Transit Union	Union Dues from Employees	573,590	555,817	592,232
Cambridge Associates	Pension Contributions	25,077,086	27,101,006	27,981,789
IRS	Employee Payroll Taxes	36,433,259	39,522,667	40,807,154
Mutual of America	457 Plans	2,834,056	3,297,597	3,404,769
Office of Recovery Services	Utah State Child Support	445,964	379,345	460,458
UTA/Joint Insurance Trust	Health insurance (Collective Bargaining)	27,122,351	27,868,553	28,774,281
Utah State Tax	Employee Payroll Taxes	6,960,108	7,449,982	7,692,106
Vantagepoint Transfer Agents (Mission Square)	457 Plans	6,178,720	6,772,765	6,992,880
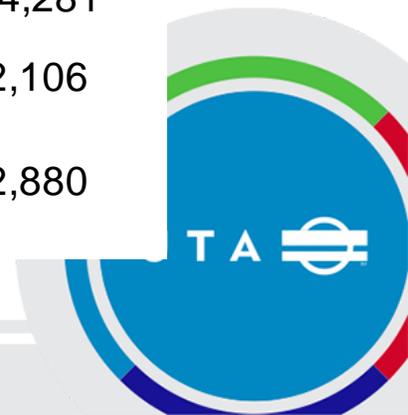
Utility Vendors Included in the 2023 Resolution

Vendor	Purpose	Annual Amount (based on 2021 actuals)	Annual Amount (based on 2022 actuals)	Annual Amount 2023 Not to Exceed
Utilities				
AT&T ++	Cellular Connection to Buses	387,747	422,451	436,181
Century Link (QWEST) +++	Internet Connection	560,331	238,000	578,542
Dominion Energy (Questar)	Natural Gas	808,717	627,647	835,000
FirstNet	Cellular Phone Contract	517,296	557,947	576,080
Murray City Utilities	Electric, Water and Sewer	534,652	509,647	552,028
Rocky Mountain Power	Electricity	7,210,909	7,439,542	7,681,327
Salt Lake City Corp. ++	Electric, Water and Sewer	200,309	207,277	214,014

Governments and Debt Vendors Included in the 2023 Resolution

Vendor	Purpose	Annual Amount (based on 2021 actuals)	Annual Amount (based on 2022 actuals)	Annual Amount 2023 Not to Exceed
Government				
Utah Attorney General's Office	Legal Services	1,321,679	1,656,786	1,710,632
Debt				
Utah County	4th Quarter Cent Sales Tax Agreement with Utah County	13,897,910	3,374,292	3,375,285

UTAH TRANSIT AUTHORITY

UTA

Recommended Action
(by roll call)

Motion to approve Resolution R2023-04-08 Granting General Expenditure and Disbursement Authority to Non-Inventory Vendors, as presented

R2023-04-09 – Resolution Appointing Viola Miller as Officer and Treasurer of the Authority

Viola Miller

UTA's new CFO effective May 1st

Experience:
- 25 years in financial management and analysis

- MBA in Finance and Strategic Management

- Senior Director, Operating Budget for Washington Metropolitan Area Transit Authority (WAMATA)

Recommended Action
(by roll call)

Motion to approve Resolution R2023-04-09 Appointing
Viola Miller as Officer and Treasurer of the Authority, as presented

Contracts, Disbursements, and Grants

Contract: Nexan Assureon Archive and Backup System for UTA Business Data
(Ramsys Storage Solutions, LLC.)

Recommended Action
(by acclamation)

Motion to approve the contract with Ramsys Storage Solutions, LLC. for Nexan Assureon Archive and Backup Systems for UTA Business Data, as presented

Contract: 2023 Microsoft Azure Software Services (SHI International Corp.)

Recommended Action
(by acclamation)

Motion to approve the contract with SHI International Corp for 2023 Microsoft Azure Software Services, as presented

Contract: HVAC Replacement at Meadowbrook Building 1
(Carrier Corporation)

Recommended Action
(by acclamation)

Motion to approve the contract with Carrier Corporation for HVAC Replacement at Meadowbrook Building 1, as presented

Contract: Seven Replacement Vehicles for Police Department
(Ken Garff West Valley Ford)

Recommended Action
(by acclamation)

Motion to approve the contract with Ken Garff West Valley Ford for Seven Replacement Vehicles for the Police Department, as presented

Contract: Civil Contractor Services for Battery Electric Bus Charging Infrastructure (Cache Valley Electric Company)

Recommended Action
(by acclamation)

Motion to approve the contract with Cache Valley Electric Company for
Civil Contractor Services for Battery Electric Bus Charging Infrastructure, as presented

Change Order: On-Call Systems Maintenance Task Order #23-012 - 5300 S. to 5400 S. Construction (Rocky Mountain Systems Services)

Recommended Action
(by acclamation)

Motion to approve On-Call Systems Maintenance Task Order #23-012 with Rocky Mountain Systems Services for Construction at 5300 S. to 5400 S., as presented

U T A

Change Order: Program Management Services Change Order #23-01 – Services Increase (HNTB Corporation)

Recommended Action
(by acclamation)

Motion to approve the Program Management Services Change Order #23-01 with HNTB Corporation for Services Increase, as presented

Service and Fare Approvals

Fare Agreement: Special Events Agreement for Ogden Twilight Concert Series
(Ogden City Corporation)

Recommended Action
(by acclamation)

Motion to approve the Special Events Fare Agreement with Ogden City Corporation for the Ogden Twilight Concert Series, as presented

Fare Agreement: Special Events Agreement for Salt Lake Twilight and Kilby Court Concert Series (S&S Presents)

Recommended Action
(by acclamation)

Motion to approve the Special Events Fare Agreement with S&S Presents for the Salt Lake Twilight and Kilby Court Concert Series, as presented

Discussion Items

FrontRunner Rail Safety

FRONTRUNNER RAIL SAFETY OVERVIEW

Board of Trustees

April 26, 2023

PRESENTERS

- **Safety (Introduction)**
  - Sheldon Shaw, Director of Safety and Security

- **Positive Train Control**
  - Jared Scarbrough, Director of Capital Construction

- **Vehicle Maintenance and Operations**
  - Zach Thomas, Acting Commuter Rail General Manager

- **Maintenance of Way/Inspections**
  - Kevin Anderson, Director of Maintenance Support

UTA'S POSITIVE TRAIN CONTROL (PTC)
E-ATC

What is ATC

- **ATC: Automatic Train Control**
  - A system arranged so that its operation will automatically result in the following:

    a) Train will initiate a full-service application of the brakes, when requested by the ATC system, and will continue either until the train is brought to a stop, or, under the control of the operator, its speed is reduced at a predetermined rate.

    b) When operating under a speed restriction, an application of the brakes, requested by the ATC system, when the speed of the train exceeds the predetermined rate and which will continue until the speed is reduced to that rate. (ie train is not braking "fast enough")

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AUTOMATIC TRAIN CONTROL OVERVIEW

ATC System
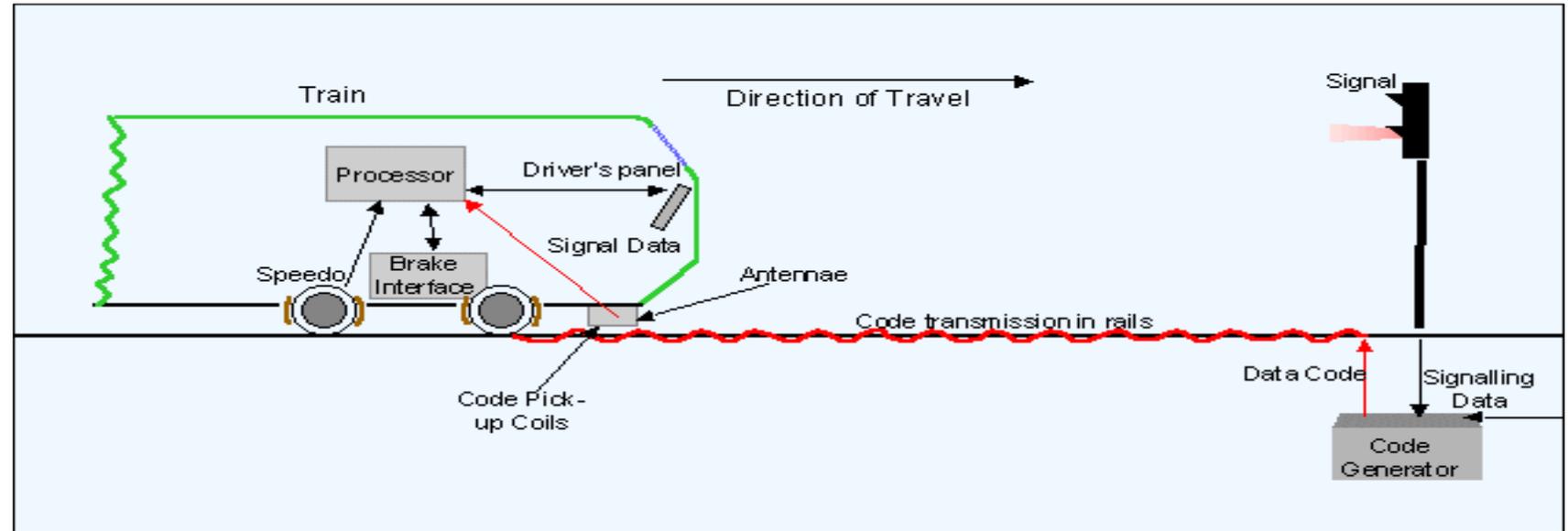
Wayside (Interlockings, Cut-Sections, and Grade Crossings)

- Wayside Segment sends speed/signal information out via rails

Onboard (Locomotive and Cab Car)

- Onboard system interprets speed codes from rail and determines whether train is adhering to proper speed
- If train is over the speed as governed by wayside logic, warning is given to operator
    - If warning is not heeded within allowable timeframe, train shuts down, safely comes to stop
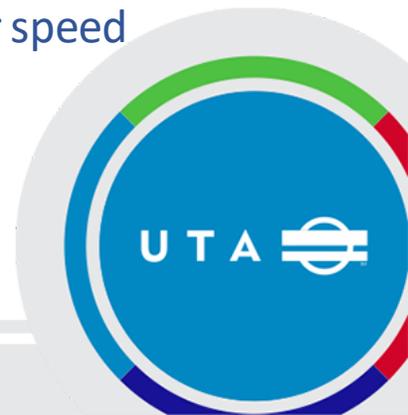
AUTOMATIC TRAIN CONTROL OVERVIEW

UTA's ATC PENALTY CURVE
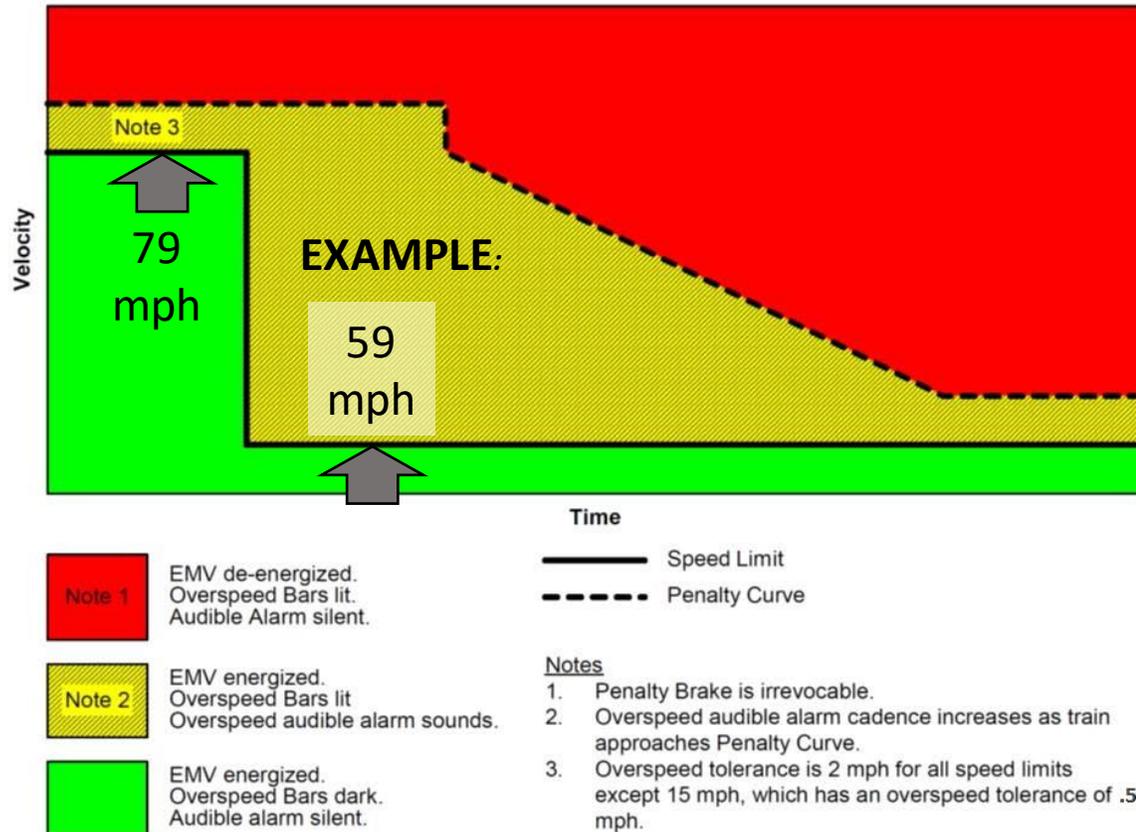
OPERATOR'S ASPECT DISPLAY UNIT (ADU)
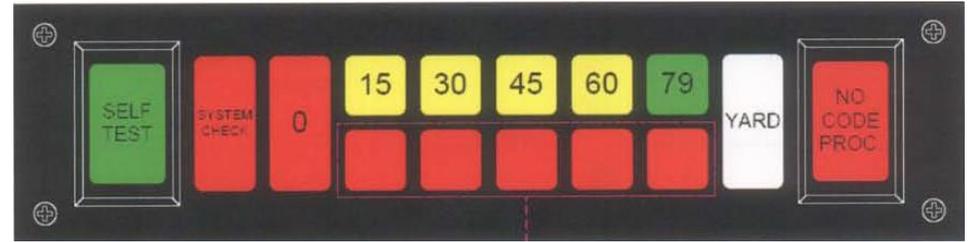
ENHANCED- Automatic Train Control (E-ATC)

UTA's COMPLIANCE BEFORE PTC (ATC):

- **Automatic Train Control (ATC) Cab Signaling PTC Requirements met already**
  - Red signal enforcement- preventing Train to Train collisions (Existing ATC system met PTC Requirement)
  - Speed enforcement with cab signaling (Partially met PTC Requirement)
  - Switch Position in proper position (Existing ATC system met the PTC Requirement)
  - Broken Rail Detection

UTA'S ADDITIONAL COMPLIANCE AFTER PTC (E-ATC):

- **Enhanced Automatic Train Control (E-ATC) Cab Signaling**
  - Permanent Speed Enforcement
    - Civil Engineering speeds enforced by E-ATC (129 FRN Curves & 146 FRS Curves Analyzed for PTC)
  - Temporary Speed Restriction (TSR)
    - Work Zones, areas with restricted track speed conditions, etc.
  - Mandatory Directive Enforcement
    - Credible report of a highway-rail grade crossing warning system failure-> mandatory directive will be issued
    - 0 Speed or 15mph speed MD available at UTA, enforced in both directions

Maintenance of Way Systems Compliance Department

- **Code of Federal Regulations**

- UTA's System Compliance Department is dedicated to inspecting all rail functions. These inspections include crossings, signals, and switches, along with the actual rail. UTA follows the Code of Federal Regulations for all rail system inspections

Monthly Inspections

- 62 Crossings
- 86 Switches

- 121 Signals
- Rail within Entire Alignment
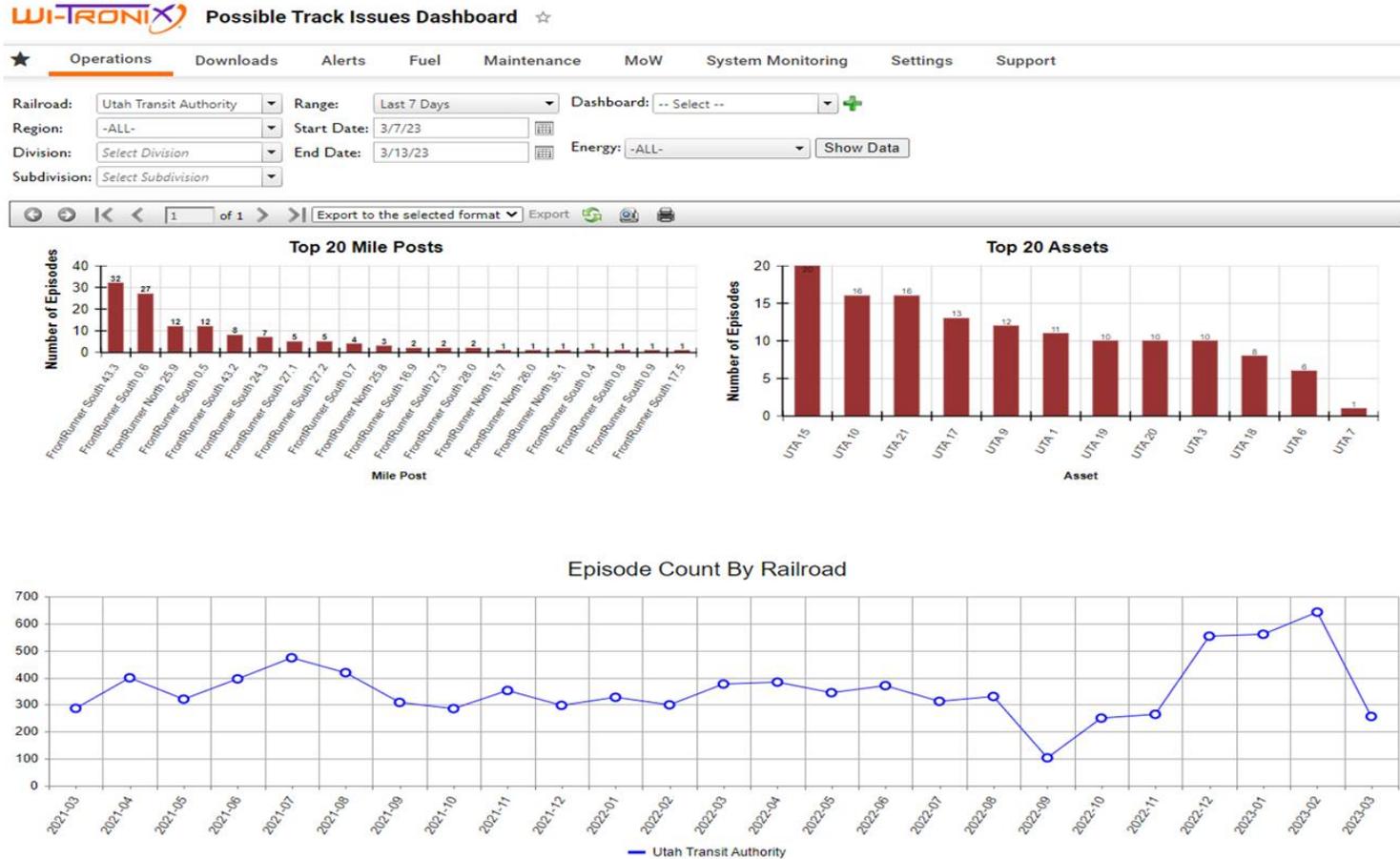
- Cab Signals and Wayside Signals
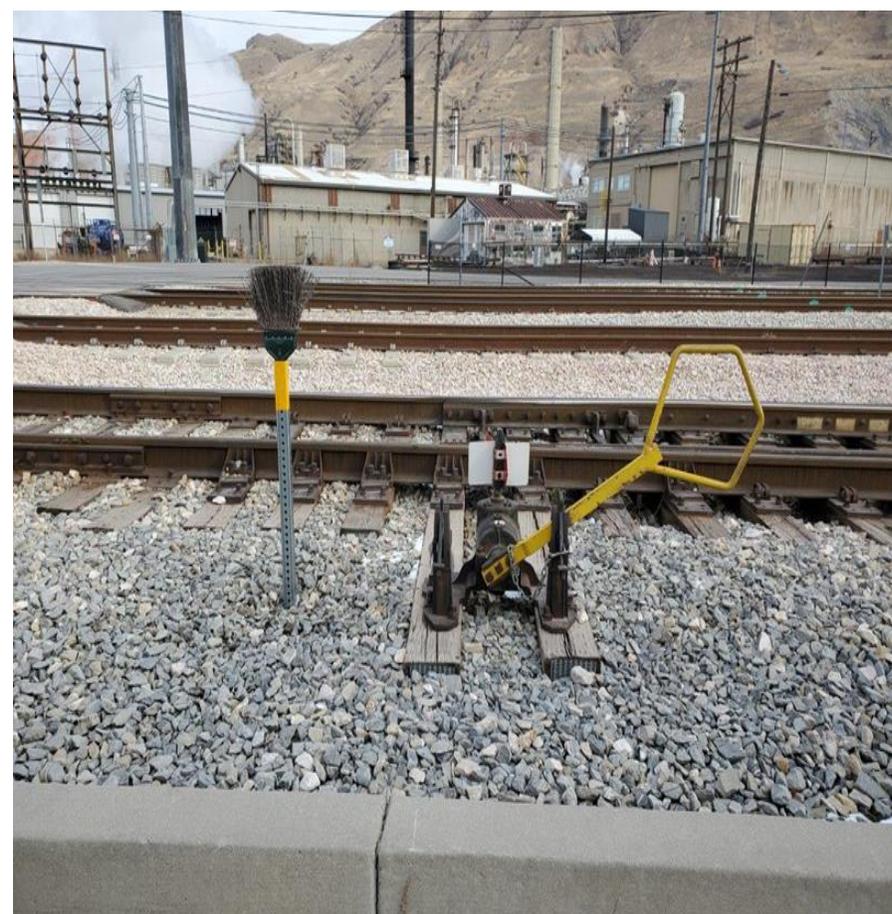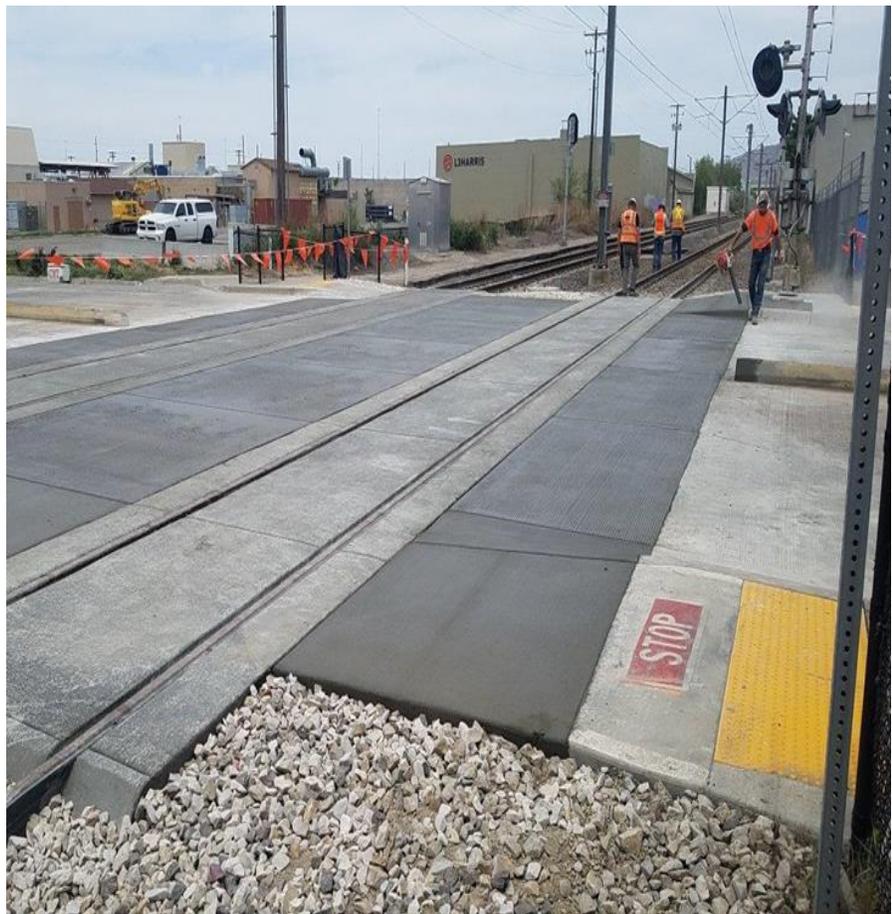
FRA Quarterly Records and System Spot Checks

Annual Inspections

- Herzog Ultrasound
- UTA Track Geometry

Wi-Tronix Daily Review

Commuter Rail Vehicle Maintenance

- **Inspections:**
  - Each train is inspected every calendar day that it is in operation.
    - Brake valves and air lines
    - Brake shoes
    - Wheels, axles and bearings
  - Brake Tests
    - Class I and IA air brake tests are done each day prior to service.
    - Class 2 and Running brakes tests are done at the EOL prior to each trip
  - Preventative Maintenance
    - 92, 184, 276 and Annual PM Inspections
    - Inspections include SCAT tests, wheels, brakes, engines, cars, HVACs, etc.
    - Annual Inspections build on each other to include more each time
    - Federal Standard vs UTA Standard
  - Employee Reporting
    - All operator reported issues are tracked and relayed to the maintenance team

Commuter Rail Operations

- Dispatch:
  - Control Room is staffed 24/7/365
  - Able to enforce stop signals and speed restrictions
  - Camera visibility at each station and many crossings throughout the entire alignment
  - Can monitor each grade crossing for health issues
  - Freight only crosses our tracks to service industry
  - Direct phone line to UP dispatch center and Signal Operation Center

Questions?

UTA Active Transportation to Transit Plan (AT3P)

ACTIVE TRANSPORTATION TO TRANSIT PLAN (AT3P)

Board of Trustees
April 26, 2023

What is Active Transportation ("AT")?

How do people get to and from Transit?

How Did Riders use AT with Transit?

67% — AT Both Ends
30% — AT One End; Non-AT One End
3% — Non-AT Both Ends
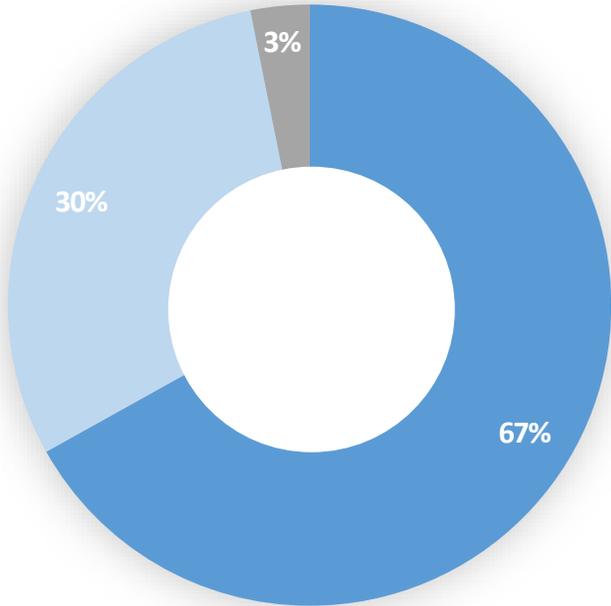
■ AT Both Ends   ■ AT One End; Non-AT One End   ■ Non-AT Both Ends
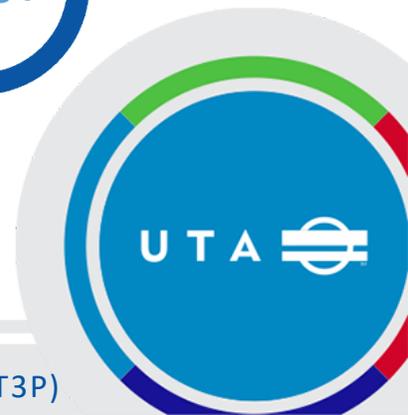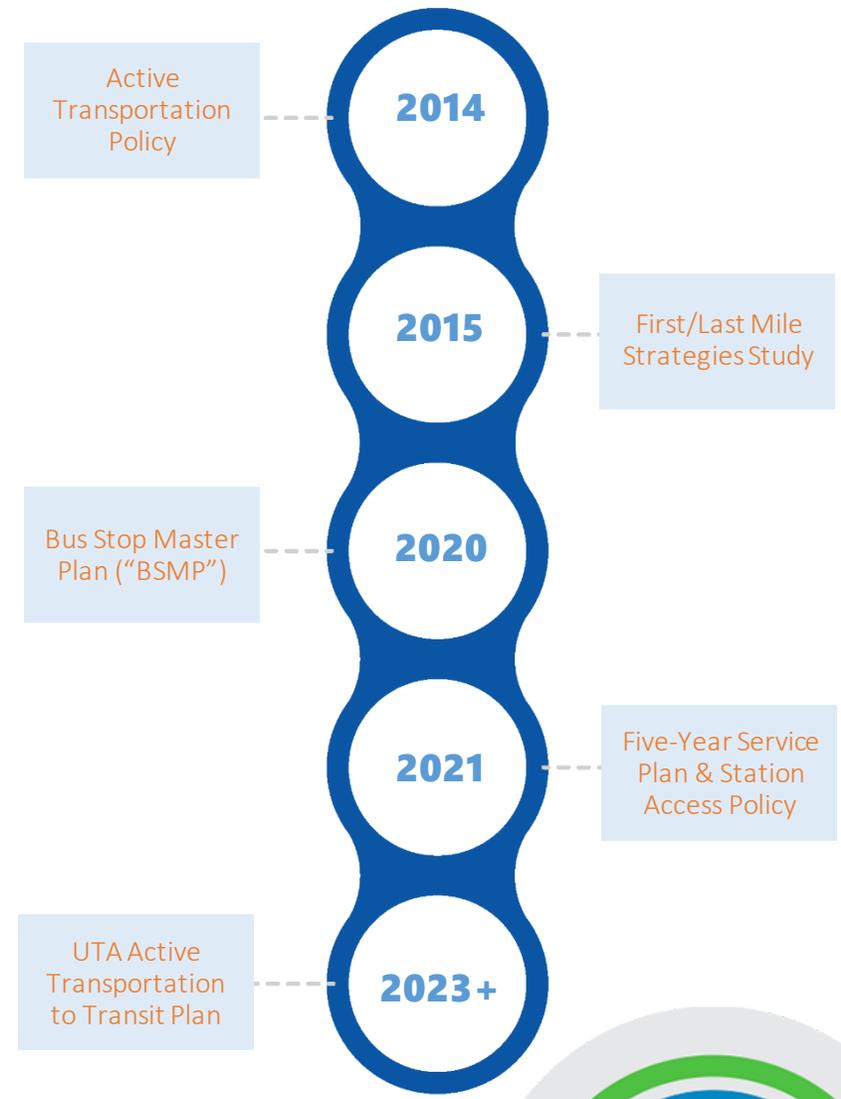
Top 10 Ways of Getting to and from Transit (%)

■ RESPONDENTS   ■ ESTIMATED TRIPS

- Walk - Walk
- Drove alone - Walk
- Kiss-N-Ride - Walk
- Personal Bike - Personal Bike
- Carpooled - Walk
- Drove alone - Kiss-N-Ride
- Kiss-N-Ride - Kiss-N-Ride
- Personal Bike - Walk
- Wheelchair - Wheelchair
- E-scooter (e.g. Lime, Bird, etc) - Walk
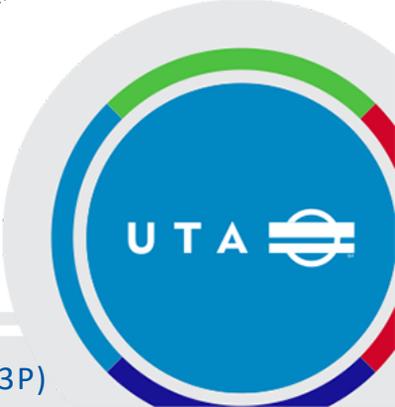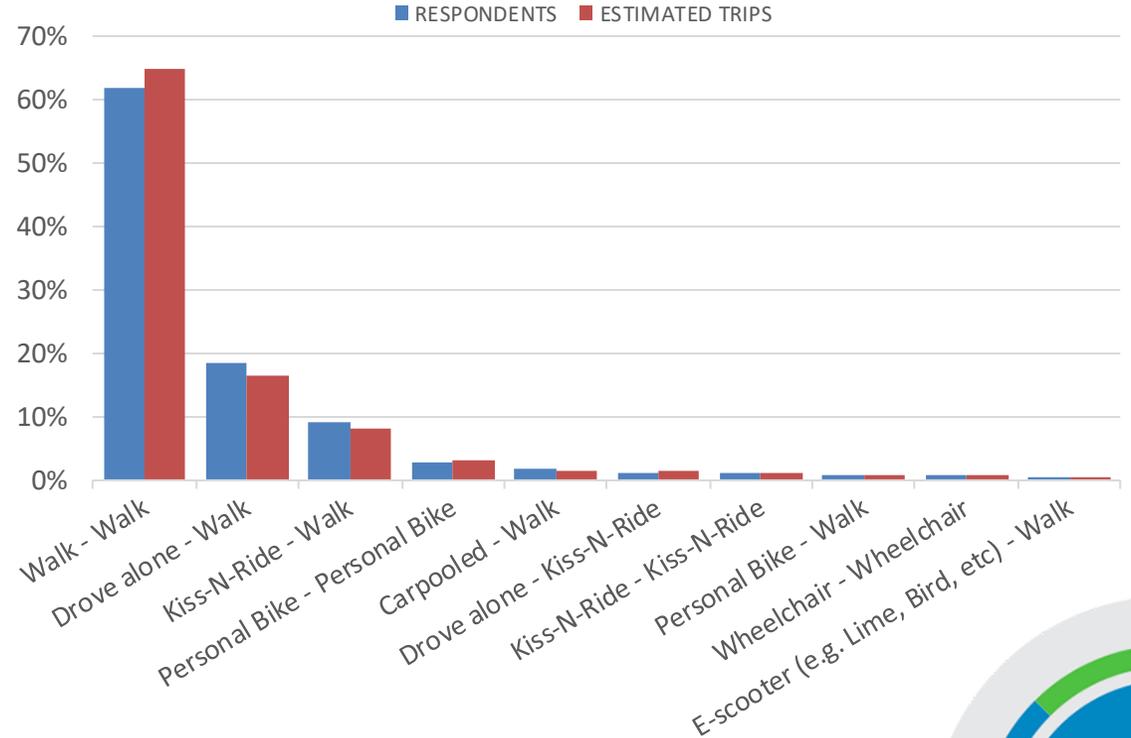
BEFORE
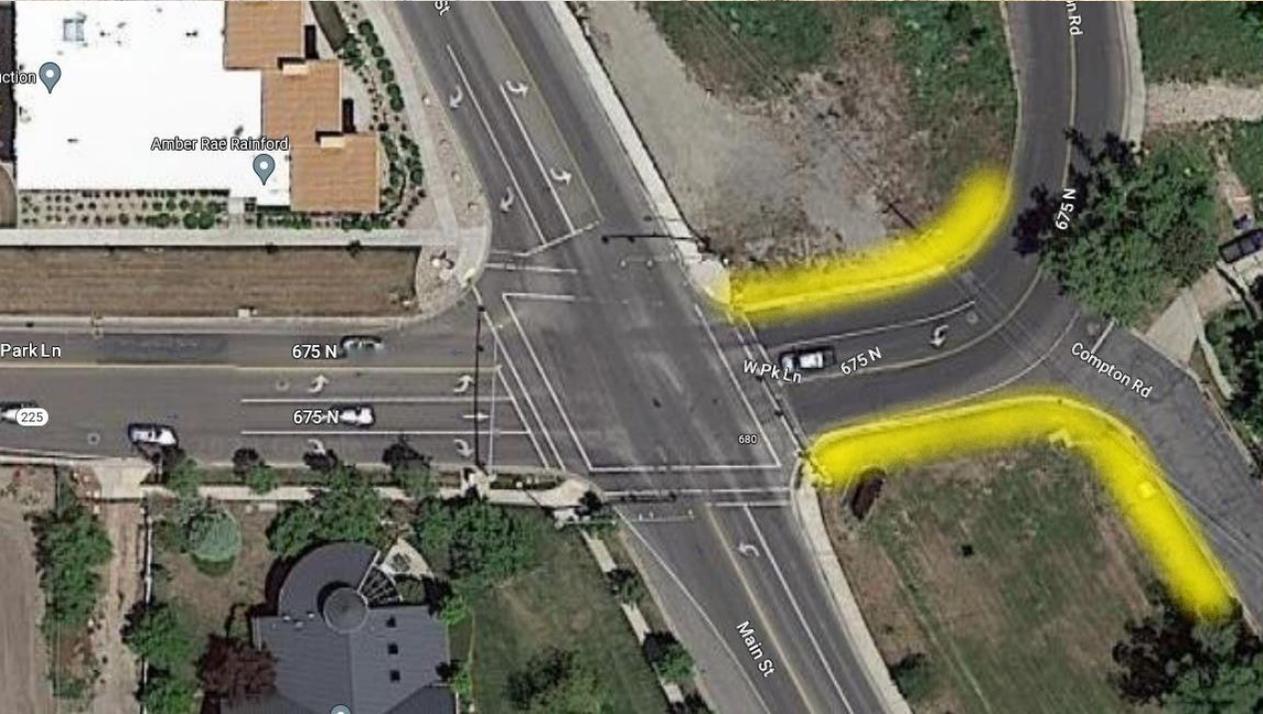
AFTER

AFTER

How is UTA Involved in AT?

PLANS & STUDIES

POLICY

COMMITTEES

UTA

COMMITMENTS

RESOURCES

DATA

Active Transportation Policy — 2014

First/Last Mile Strategies Study — 2015

Bus Stop Master Plan ("BSMP") — 2020

Five-Year Service Plan & Station Access Policy — 2021

UTA Active Transportation to Transit Plan — 2023+
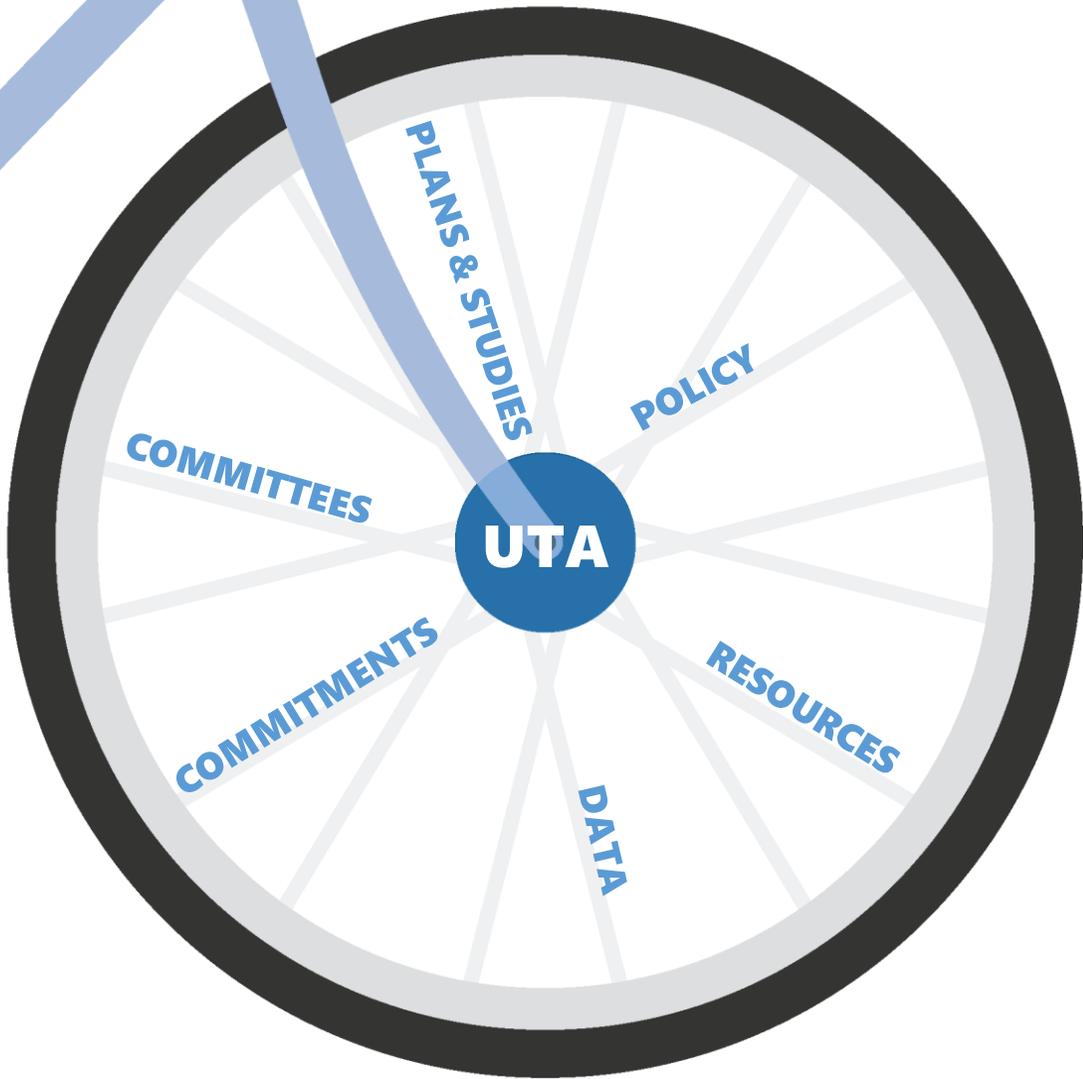
Why does UTA need an AT3P?

Moving Utahns to a Better Quality of Life

Achieving Organization Excellence

Generating Critical Economic Return

Exceeding Customer Expectations

Building Community Support
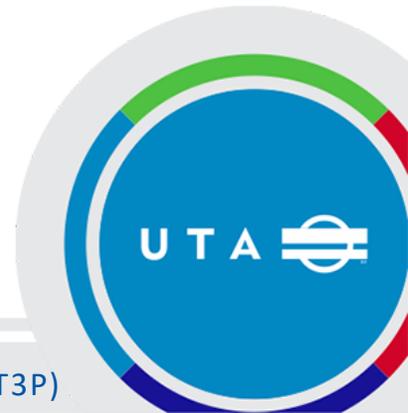
Why does UTA need an AT3P?
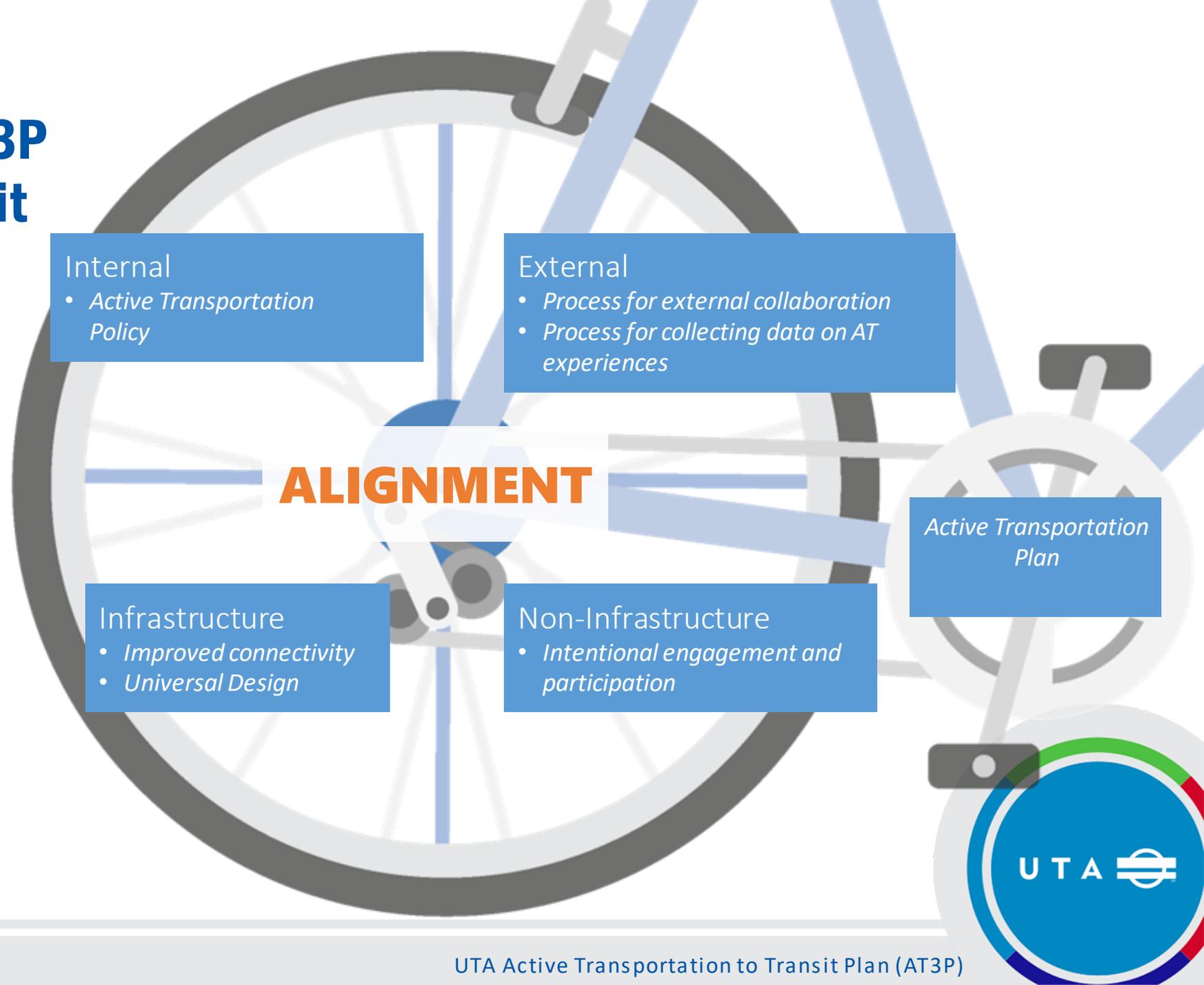
AT3P

Infrastructure
- Connections
- Safe crossings

Non-Infrastructure
- Policies and process
- Community need
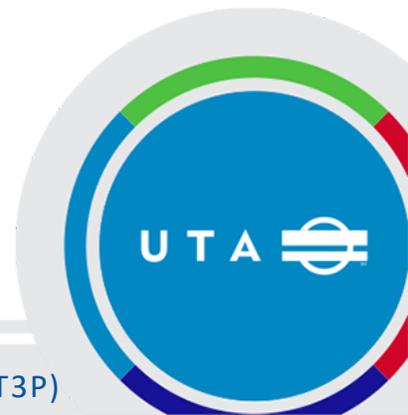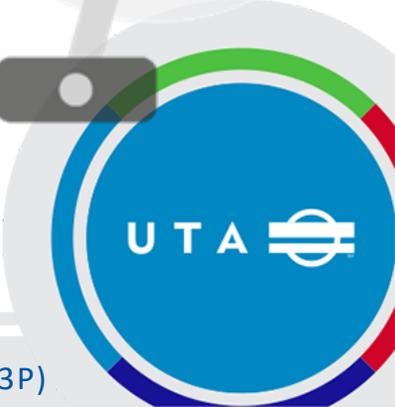
Phase I

Anticipated completion: Spring 2023

- Understanding of AT to transit accessibility challenges

- Prioritization framework and methodology for improvements

- Best practices and policies

- Vision for actionable paths forward to improve AT to transit

Deliverables:
- Story Map
- Plan document

Bike on bus training

Bike ramp at transit station
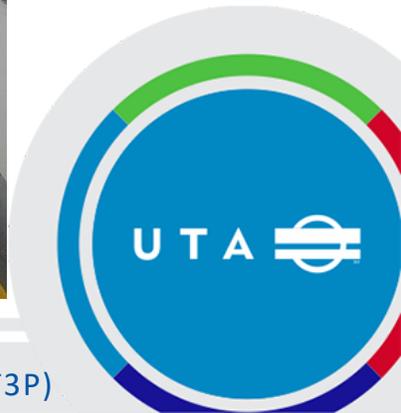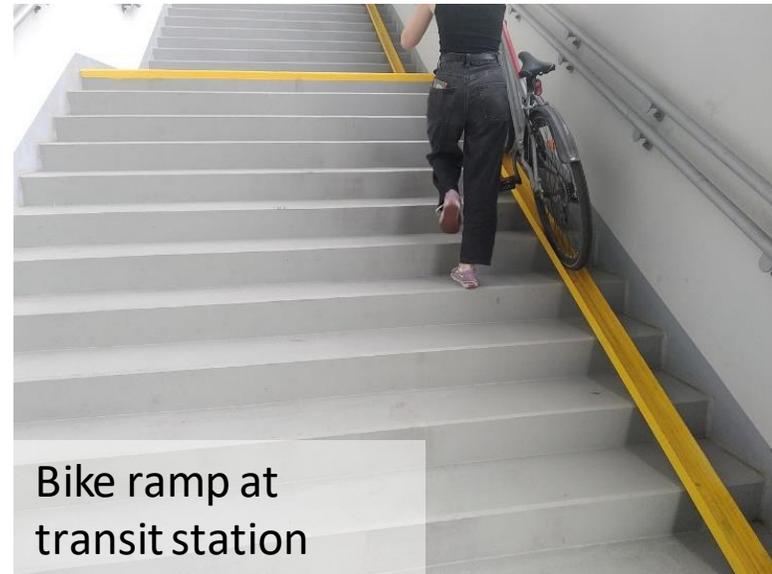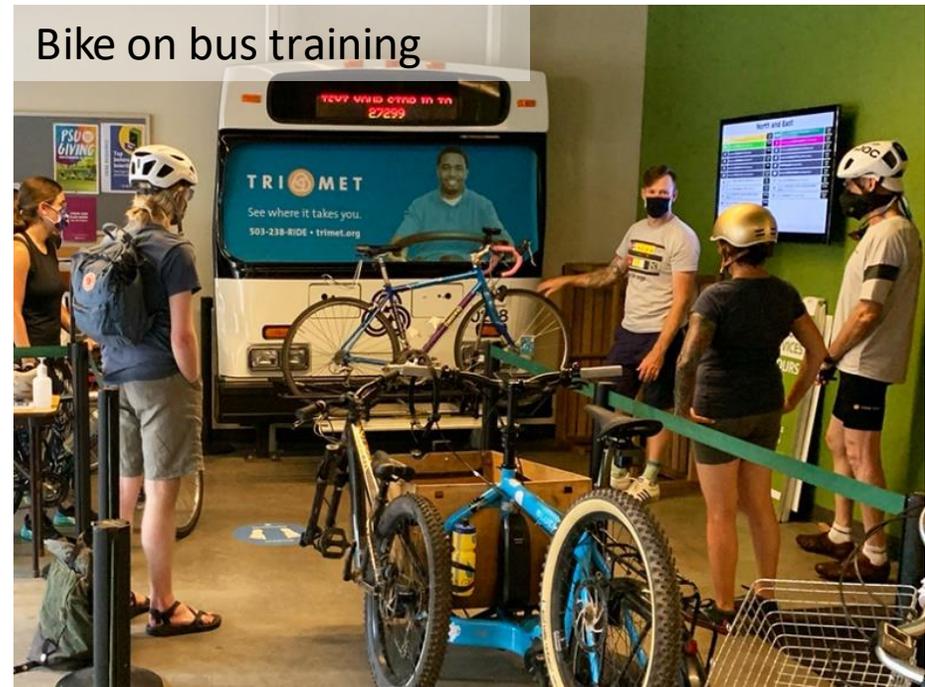
What to Expect from Phase II

- Public survey of AT barriers and experience

- Pilot project

- Updates to Active Transportation Policy

UTA

Other Business

a. Next Meeting: Wednesday, May 10, 2023, at 9:00 a.m.

Adjourn