Board of Commissioners Special Meeting Retreat Agenda September 15, 2022, 1:00 - 5:00 p.m.

Virtual Meeting Participation Information:

Dial: 1-253-215-8782 Meeting ID No. 82425814481 Webinar link: https://us02web.zoom.us/j/82425814481



Physical Meeting Location: Pierce Transit Training Center 3720 96th Street SW Lakewood, WA 98499

Call to Order Roll Call **CEO Mike Griffus** 1:00 – 1:10 p.m. **Welcoming Remarks** 1. **Workforce Update and Future Outlook Amy Cleveland** 1:10 – 1:40 p.m. 2. **Executive Director of Administration** 1:40 – 2:10 p.m. **Review of Route Productivity Performance** Ryan Wheaton **Standards and Farebox Recovery Rate** Executive Director of Planning & Community Development 2:10 – 2:30 p.m. **Break** 2:30 – 3:00 p.m. **Update on Public Safety Model and Grantley Martelly Chief Operating Officer Ambassador Program** 3:00 – 4:00 p.m. **Zero Emissions Initiatives – Future Adam Davis Planning and Challenges Executive Director of Maintenance** 4:00 – 4:15 p.m. **Break Review of Budget Methodologies in Chris Schuler** 4:15 – 4:45 p.m. Advance of the 2023 Budget Preparation **Chief Financial Officer** and Preliminary Review of 2023 Budget **CEO Mike Griffus Recap of Meeting Outcomes and Agency** 4:45 – 5:00 p.m. Goals & **Chair Campbell** 5:00 p.m. Adjournment

American Disability Act (ADA) accommodations are available with a 72-hour notice. Please contact the Clerk's office at 253-581-8066 for special accommodations.

Workforce Update and Outlook Pierce Transit Board Board Retreat 9.15.22

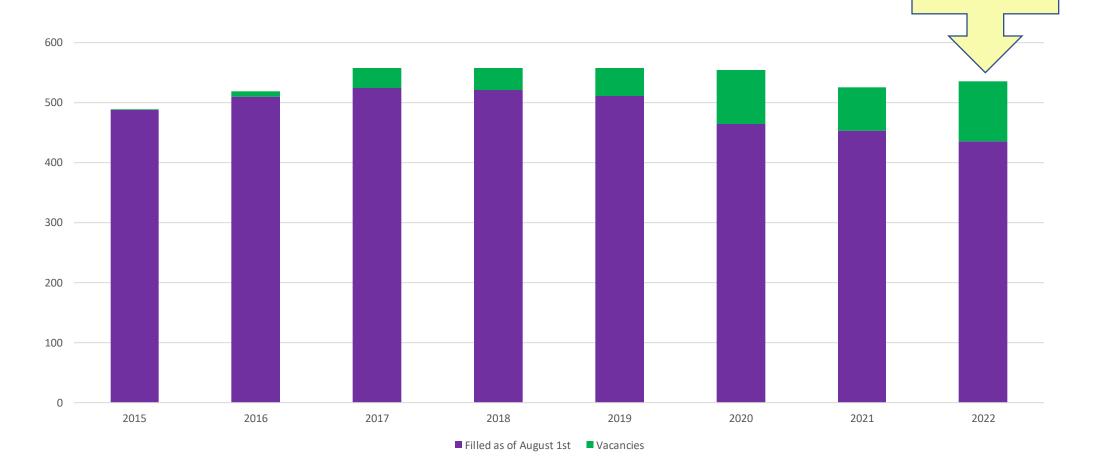
Workforce Update and Outlook

- Staffing Update
- Labor Force Conditions
- Public Sector Recruitment and Retention
- Solutions

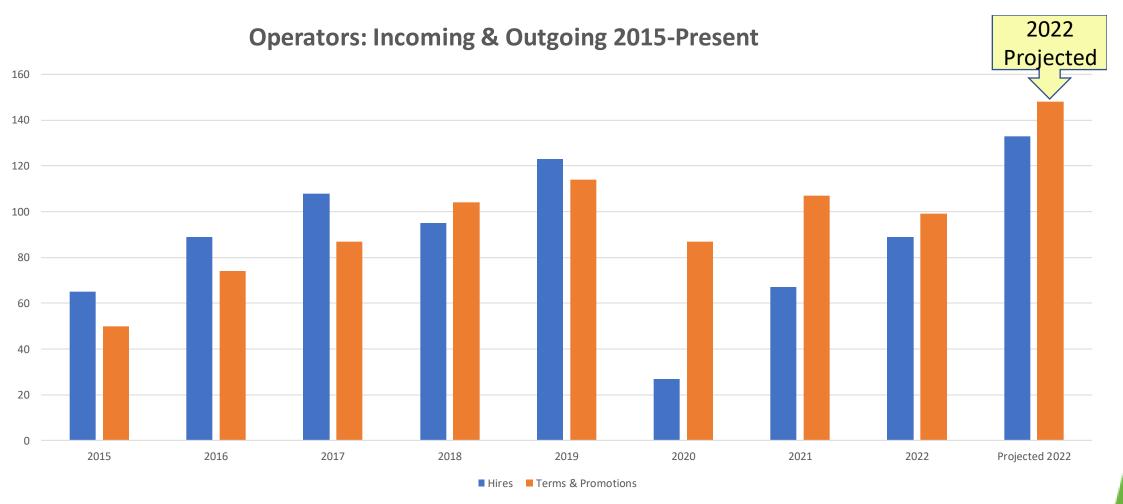
Pierce Transit's mission is to improve people's quality of life by providing safe, reliable, innovative and useful transportation services that are locally based and regionally connected.

Operator Vacancies

100 vacancies



Operator Staffing



Labor Force Conditions

- Baby Boomer exit
- Decline in labor force participation
- Diminishing birth rates
- Low unemployment
- Falling immigration

Laborforce participation rate, 1947-2012 and projected 2022

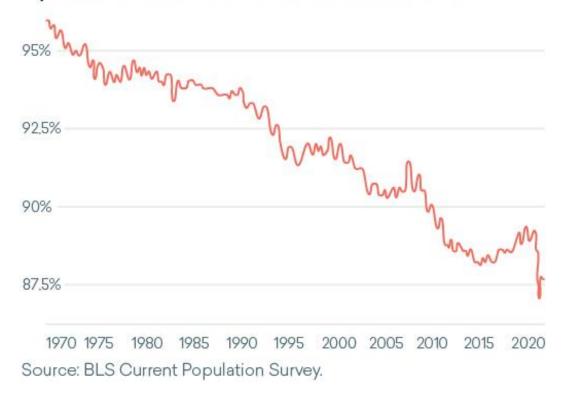


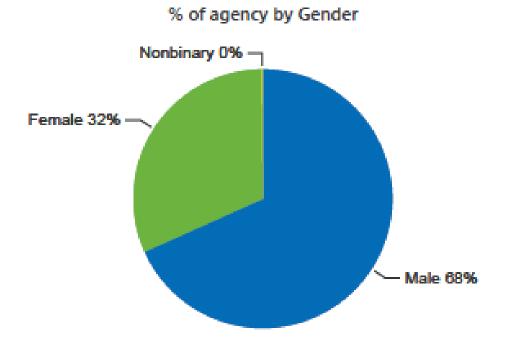
1947 1952 1957 1962 1967 1972 1977 1982 1987 1992 1997 2002 2007 2012 2017 Source: U.S. Bureau of Labor Statistics.



Labor Force Participation

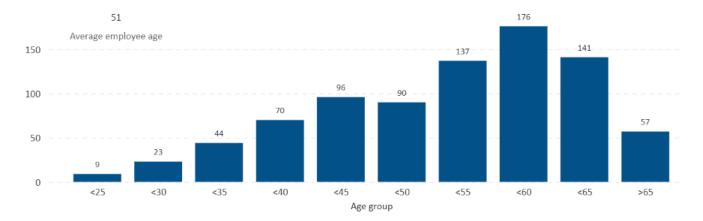
Prime-age male labor force participation rate plummeted from 94% in 1980 to 89% in 2019



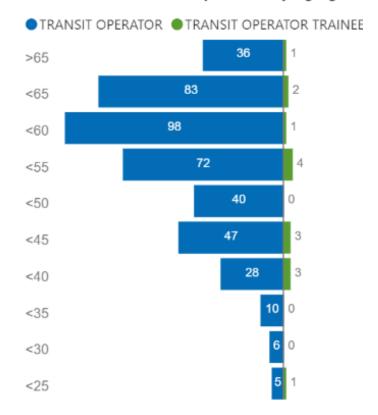


Pierce Transit Employee Data

Current Pierce Transit employees by age



Current Pierce Transit operators by age grou



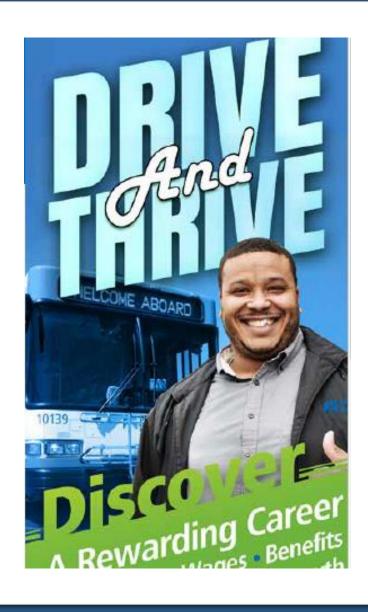
Public Sector Impacts

NEOGOV

THE NUMBER OF OPEN JOBS ARE UP BY 450 IN THE LAST YEAR FOR THE PUBLIC SECTOR NUMBER OF APPLICATIONS PER OPEN JOB ARE DOWN BY 560 IN THE PUBLIC SECTOR NUMBER OF APPLICATIONS PER OPEN JOB ARE DOWN BY IN THE PUBLIC SECTOR

Focus Areas

- Understand local workforce
- Partner with colleges, trades, high schools
- Evaluate job requirements
- Onboard and train timely
- Value workers we have-employee engagement
- Employee development career paths



Operator Recruitment

- Strong Operator recruitment campaign since early 2021
- Increase in Trainee rate of pay from \$23.37 to \$25.29







Great Career. Happy You.

...the math checks out.



Maintenance Recruitment

Marketing Efforts Completed:

- Large Billboard on Hwy 509
- 40 SHUTTLE Queen Ads
- 5 new KING KONG Ads
- 12 Shelter Ads
- Filled the 6 Bus Lot and PM Tech jobs

Employee of the Year!



Public Safety Officer Recruitment

- Wage rate recently increased
- 3 previous employees returned
- Added to Recruitment Referral Incentive
- New marketing effort underway

Relief Transit Operator - \$1000 Referral Incentive

Journey Level Mechanic - \$1000 Referral Incentive

Public Safety Officer - \$1000 Referral Incentive







Soon to Launch:

New marketing to continue to attract veterans to our organization





Active Outreach



Attended 33 events year-to-date in 2022



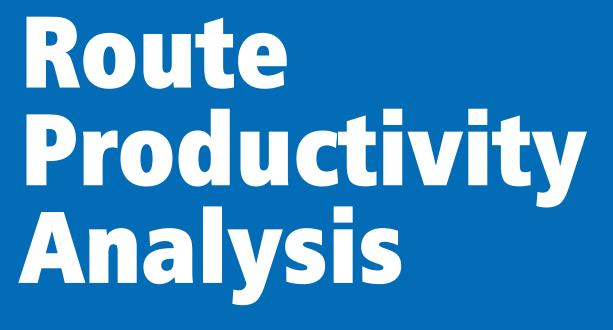
Harrison Prep Youth Summit





Workforce Outlook

- COVID significant impact
- Economic and labor force factors persist
- Attract and retain talent
 - Total compensation, career development, flexibility, empowerment, DEI
- New recruitment and retention strategy



September 15, 2022

Our Standards Defined



Passengers per Service Hour

One hour that an individual transit vehicle is on the road (calculated by dividing total service hours by total passengers)



The miles that vehicles are scheduled to or actually travel while in revenue service (calculated by dividing total passengers by total revenue miles)



The ratio of fare revenues to direct operating expenses (calculated by dividing total fare revenues by total operating costs)

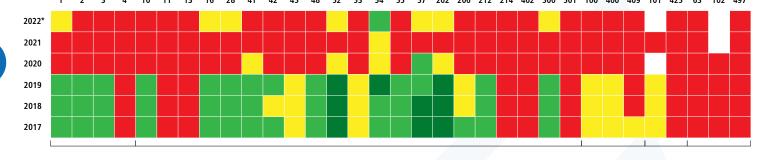
Analysis Using Current Standards



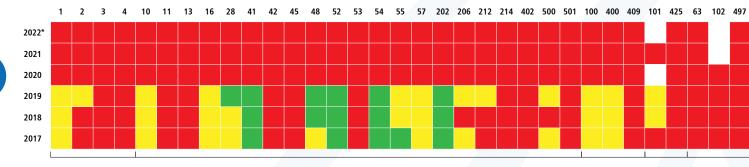




Passengers per Revenue Mile



Farebox Recovery \$



NOT RUNNING

UNSATISFACTORY

MARGINAL

SATISFACTORY

EXCEEDS

18 of 65
*2022 is using data from January to June

Calculation Methodology





Identify comparable State of WA Urban transit agencies:

Ben Franklin Transit ◆ Tri-Cities, WA

C-TRAN ♥ Vancouver, WA

Community Transit ♥ Everett, WA

Everett Transit ♥ Everett, WA

Spokane Transit ♥Spokane, WA

2

Determine the Pre-COVID Baseline*

Gathered by taking the average of January and February 2020 average weekday ridership for each agency 3

Average the average weekday ridership and divide by the baseline for each agency/year*

2020: March — December January & February used as baseline

2021: January – December Full year

2022: January – May Most recent data available

4

Take the average recovery percentages of all 5 agencies for each year

2020:

46% average recovery

2021:

52% average recovery

2022:

56% average recovery

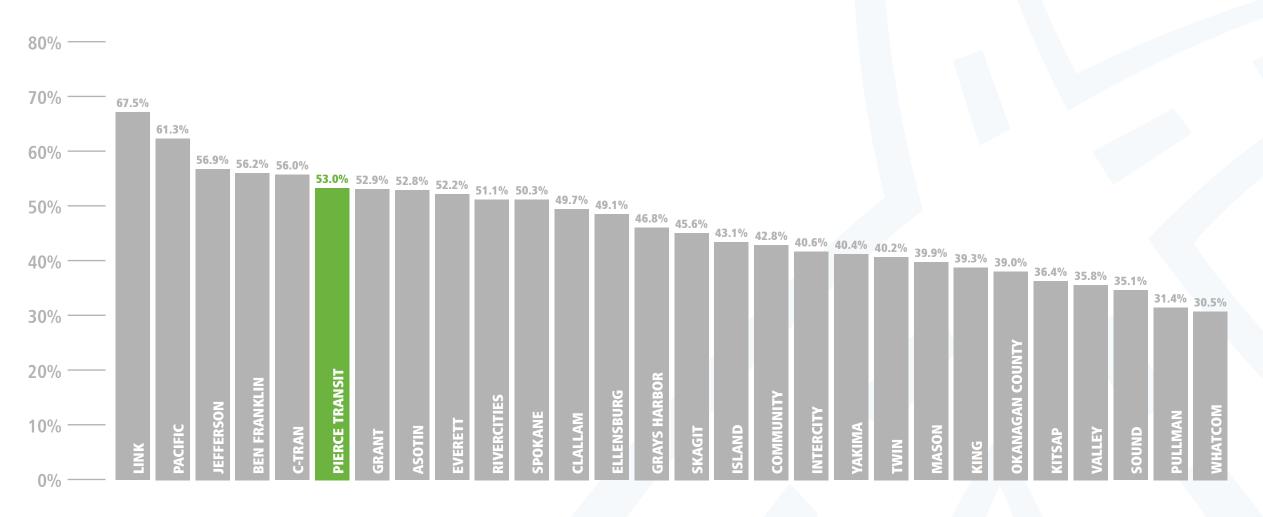
5

Multiply each year's average recovery by the old performance standards per metric

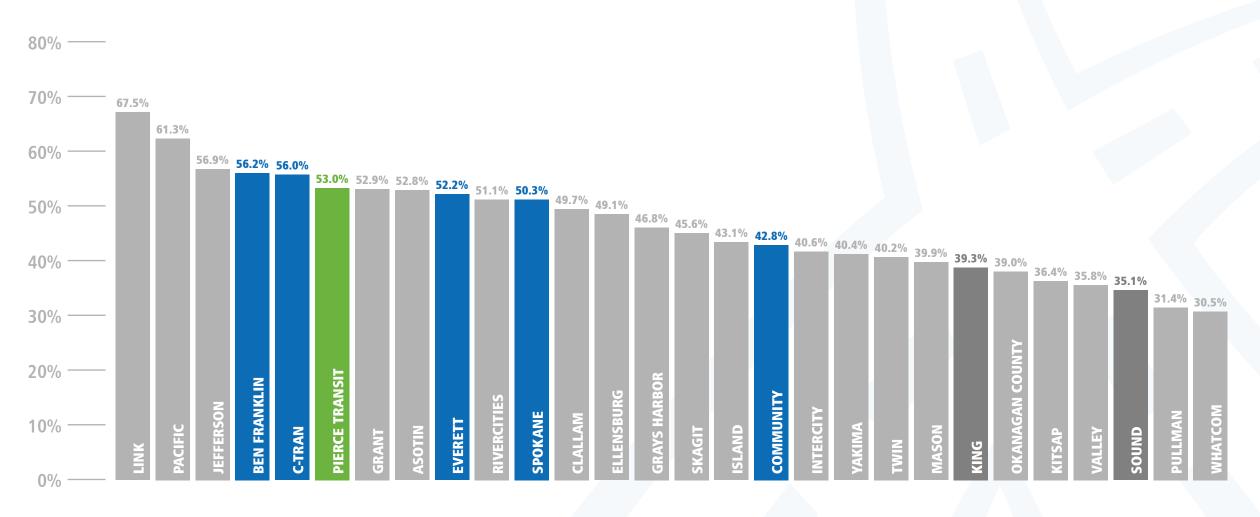
This was used to create the Passengers per Service Hour metrics and the Passengers per Revenue Mile metric

2020-2022 Average Ridership Recovery





2020-2022 Average Ridership Recovery (Comparable Agencies)

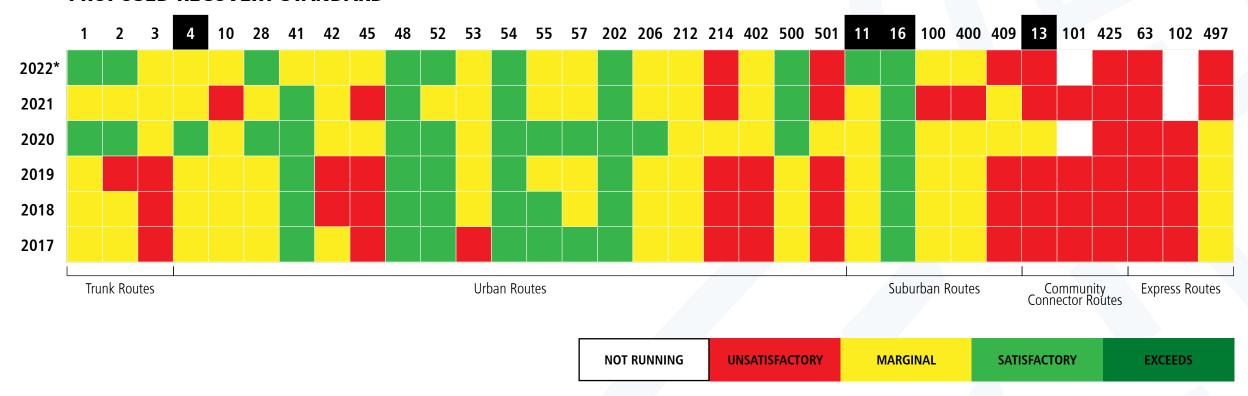




Passengers per Service Hour



PROPOSED RECOVERY STANDARD

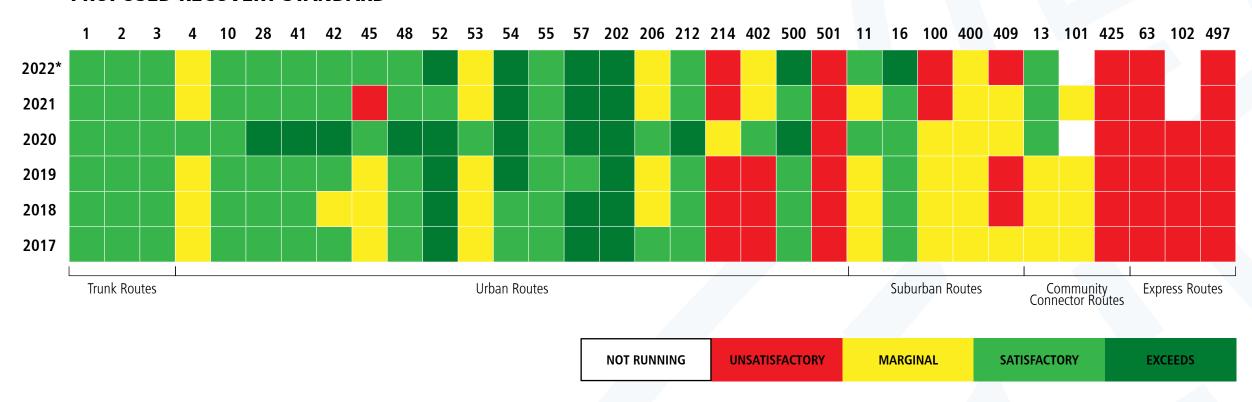




Passengers per Revenue Mile

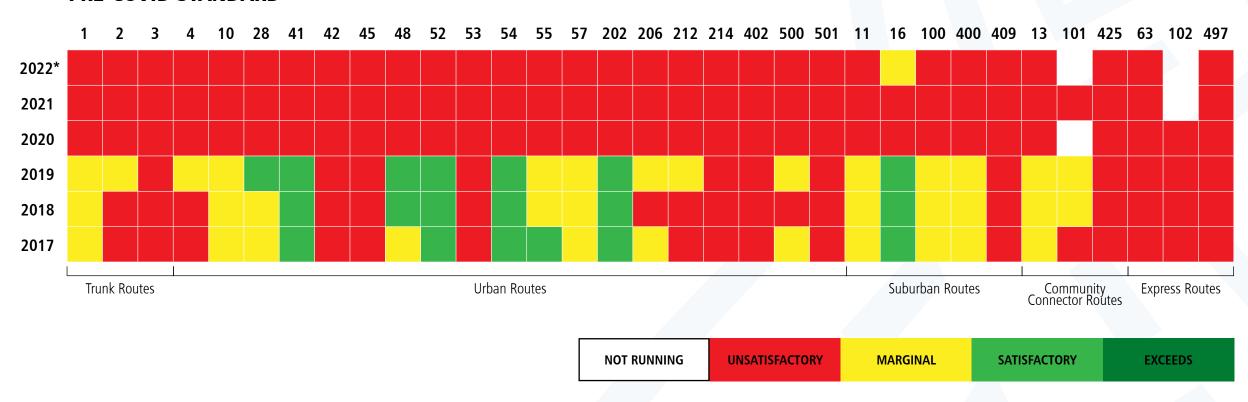


PROPOSED RECOVERY STANDARD



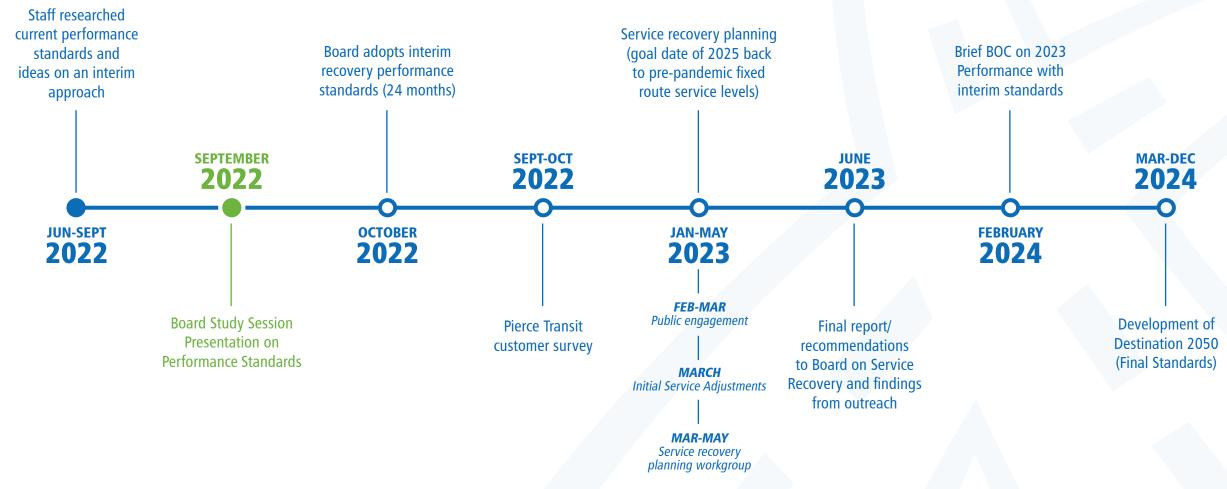


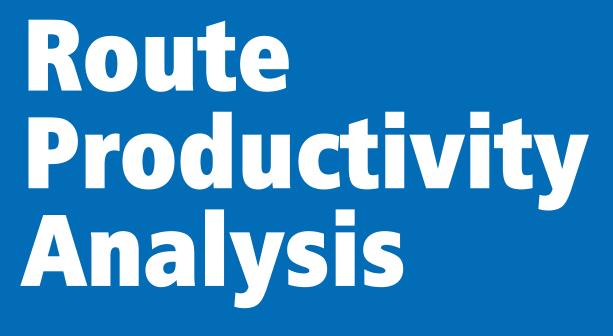
PRE-COVID STANDARD



Timeline for Recommendation







September 15, 2022

Pierce Transit



System Public Safety & Security Plan 2022-2024



Pierce Transit Approach

4-Legged Stool:

PCSD

Local PDs

PSO

Security Services



Pierce County Sheriff's Department

- PCSD Expiration 12/31/2022 no extensions
 - Current staffing
 - Public Safety Chief
 - Investigator
 - Sergeant
 - Utilizing extra duty PCSD
 - Covered shifts, staffing varies (7 days per week): 6am 11:59pm
 - Concluding contract negotiations for command staff personnel for 2023





Pierce County Sheriff's Department



Contract for 2023

- PCSD has informed Pierce Transit they will offer a Chief and an Investigator position for 2023, the Sergeant position will not be offered.
- PCSD has informed Pierce Transit effective 1/1/23 they will stop allowing deputies to work extra duty for Pierce Transit in the City of Tacoma, they will allow deputies to work extra duty in unincorporated Pierce County. Pierce Transit has requested more notice, that deputies be allowed to work in the city of Tacoma through 7/31/23. This has been denied.
- Effective 1/1/23 there will be no dedicated law enforcement working for Pierce Transit in the City of Tacoma. All Pierce Transit calls in Tacoma needing a fully commissioned law enforcement officer will be handled via 911.



Local Police Departments



- City of Lakewood Expiration 12/31/2023 with two one-year extensions
 - Covered by 1 officer, 2 shifts per day (7 days per week): 6am 11:59pm
- City of Federal Way Expiration 12/31/2023 with no extensions
 - Covered by 1 officer, 3 shifts per day (7 days per week):
 5am 8am / 4pm 7pm / 9pm 11:59pm



- City of Puyallup 5-year contract
 - Covered by 1 officer, 2 shifts per day (M Fri): 7am 11pm
 - Start date September 6, 2022





PT Public Safety Officers



- Public Safety Officers (PSO)
 - Currently have 11 of 17 positions filled.
 - 5 PSO candidates currently in hiring process.
 - 10 currently scheduled for interviews through September.
 - Current coverage includes 24/7 coverage, shifts vary by time of day.
 - Once fully staffed coverage plan is:
 - 5 officers, 7 days per week: 6am 4pm
 - 4 officers, 7 days per week: 4pm 11:59pm
 - 2 officers, 7 days per week: 9pm 7am



Contracted Security Guard Service



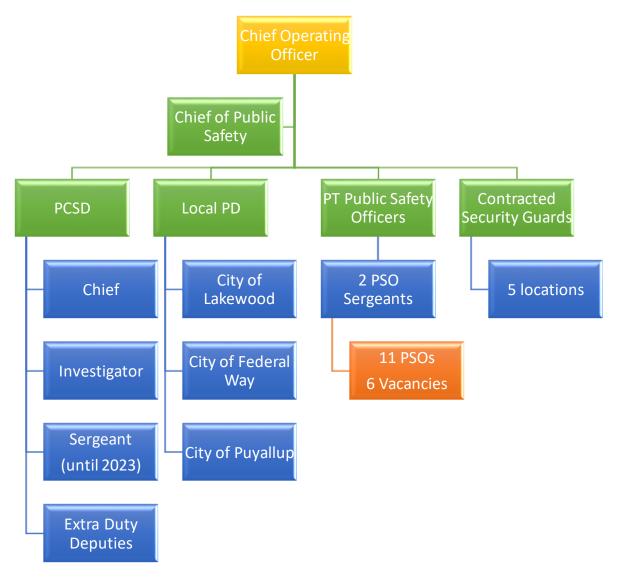
Allied Universal Security

Started service in July 2022

- Commerce Street Fully staffed
 - Covered by 4 officers per day, 2 shifts, (7 days per week): 4am 11:59pm
- <u>Tacoma Mall TC</u> Fully staffed
 - Covered by 1 officer per day, 2 shifts, (7 days per week): 4am 11:59pm
- <u>Tacoma Community College TC</u> Once fully staffed coverage will be:
 - Covered by 1 officer per day, 2 shifts, (7 days per week): 4am 11:59pm
- 72nd St TC Once fully staffed coverage will be:
 - Covered by 1 officer per day, 2 shifts, (7 days per week): 4am 11:59pm
- First Transit Added after contract start as a permanent post fully staffed
 - Overnight 1 officer per day, 1 shift, (7 days per week): 10pm 6am



Public Safety & Security Overview



Developing Transit Ambassadors

Current System Configuration

Service Supervisors

Security Guards

Public Safety Officers



Roles In the System

- Pierce Transit does not conduct fare enforcement
- Educates customers on fare policies and on obtaining fares through mobile ticketing apps. Ticket vending machines and vehicle farebox.
- Answers questions regarding transportation services, routes, schedules, stop locations, trip planning.
- Refers complaints to appropriate authority for investigation and resolution
- Works with Customer Service for system changes and improvements

Behavioral Health Partnerships

Current System Configuration

Service Supervisors

Security Guards

Public Safety Officers



Roles In the System

- Partnered with Youth Crisis, Adult Crisis and Mobile Community Intervention Response services.
- To get appropriate help to customers when they need services rather than a law enforcement response.
- Service Supervisors have been trained to recognize the need and call for assistance.
- Will utilize internal trainers and online training with PSOs and Security Guards.



Zero Emissions Initiatives Future Planning and Challenges

Presented by:

Adam Davis – Executive Director of Maintenance Nathan Groh – Zero Emissions Fleet Coordinator

9.15.2022

Agenda



☆ Status Quo



(%) Carbon Offset Credits



Main Challenges



Grants



Fleet Transition Plan

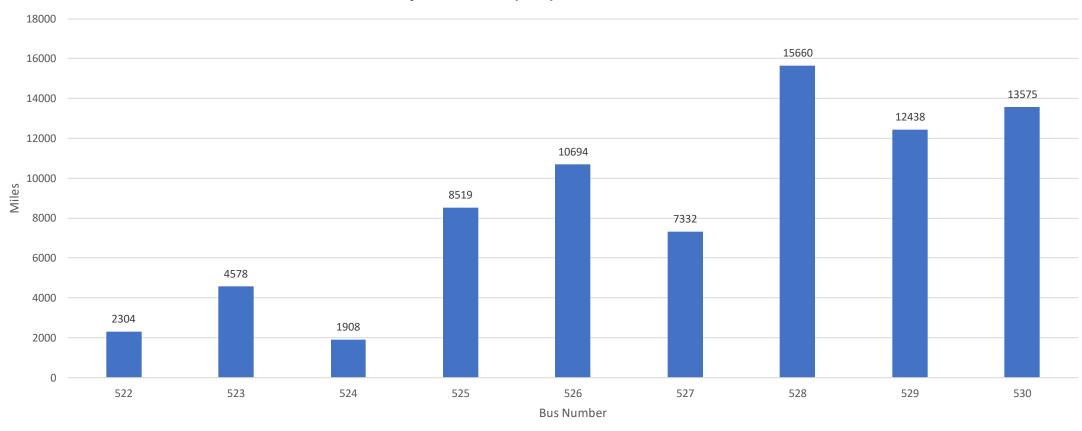


Electrification Areas



BEB Fixed Route – Distance Driven 2022

Battery Electric Bus (BEB) Distance Driven 2022



Note: 77k total miles vs. 325k for 9 CNG buses



Status Quo

- Laying the foundational 'building blocks' to support our sustainable fleet efforts moving forward
- Fleet Transition Plan w/ HDR
- 9+3 electric buses range: 150 miles vs. 400 miles for CNG
- 19 routes receive some level of BEB deployment
- Examining electrification options in Vanpool and Support Fleet



Status Quo cont.

- Vanpool ridership survey examining electrification options for the future
- Vanpool workplace charging partnerships
- TPU hydrogen study Pacific Northwest Hydrogen Association
- Significant hurdles to overcome to meet electrification goals



Main Challenges for Zero Emissions (ZE) Expansion

- Extremely High Upfront and <u>Unfunded</u> Costs Vehicles and Infrastructure
- Low Reliability for E-buses
- Significant Depot and En-route Infrastructure Needs
- Replacement Ratio at Current Status 1.5-10x
- MOBI NOT ZE SPECIFIC Lacks Charging Capacity and Facility and Infrastructure Capacity to Transition to Full Zero Emission Fleet Without Further Changes to the Current Lot Configuration or Exploring Off-Site Options



Fleet Transition Plan w/ HDR



- 1. Project Management
- 2. State of the Industry Report
- 3. Existing Conditions and Zero Emissions Bus Feasibility Analysis
 - A. Research and Data Collection
 - B. Operational Review
 - C. Zero Emission Solution Options
 - D. Facility and Maintenance Reviews
 - E. Fleet Transition Options and Phasing
 - F. Financial and Economic Analysis
- 4. Final Report and Recommendations



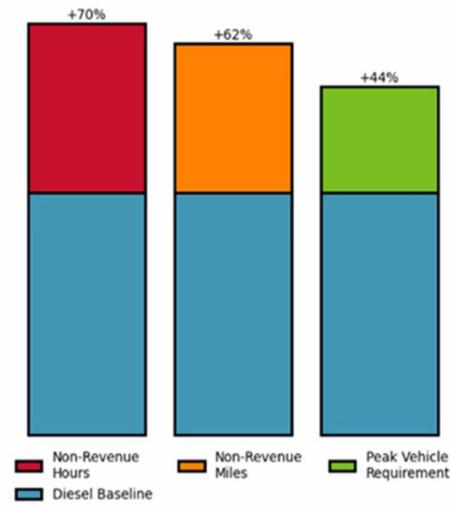
HDR Transition Plan Timeline

TASKS	J	un		lul	A	ug	S	ер	0)d	N	ov	D	ec	J	an	F	eb	M	tar
Task 1: Project Management																				
1.1 Kickoff and Bi-Weekly Meetings		*	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1.2 Project Management Plan						X														
1.3 Stakeholder Engagement								•		•	X									
Task 2: State of the Industry Report																				
2.1 Draft State of the Industry Report								X												
Task 3: Existing Conditions/ZEB Analysis																				
3.1 Fleet Data Evaluation							X													
3.2 Policy and Legislation Impacts to ZEB Technology							X													
3.3 Energy and Fuel Consumption Analysis									X											
3.4 Implementation Analysis									X											
3.5 Operations and Maintenance Scenarios (Transition Scenarios)									Х											
3.6 Capital Infrastructure Investment Needs, Costs, and Schedule													X							
3.7 Lifecycle Economic Analysis for Transit Bus Technology Scenarios													X							
3.8 Availability of Current and Future Resources													X							
3.9 Equity Analysis and Ethics Memo - Combined Into 1.3 Above											X									
Task 4: Final Report & Recommendations																				
4.1 Draft Report																X				
4.2 Final Report																		X		



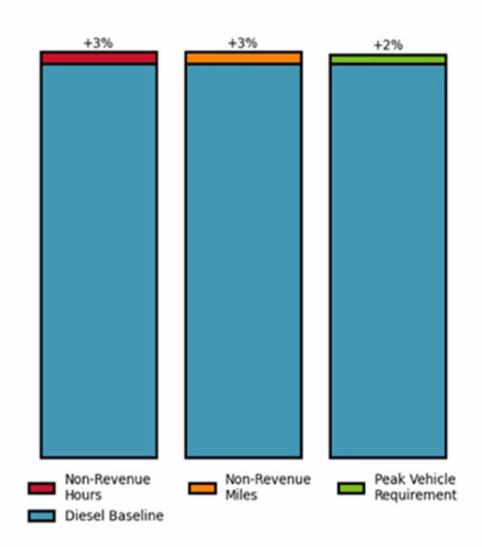
Key Takeaways: BEB Depot Charging Only

- Revenue Hours & Miles remain the same
- Non-Revenue Hours: 70% increase
- Non-Revenue Miles: 62% increase
- Peak Vehicle Requirement: 44% increase
 - Increase Fleet from 128 to 184 buses
 - ➤ 56 more vehicles required
- At least 44 Depot Chargers will be required
- Pierce Transit can deploy 29 BEBs before fleet increases will be required



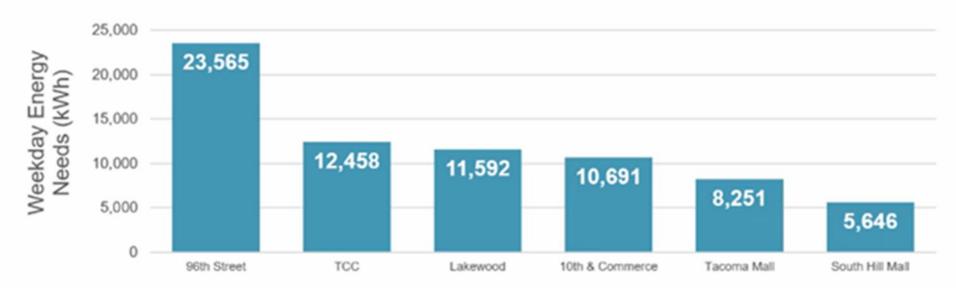
Key Takeaways: BEB Depot + En-Route Charging

- Revenue Hours & Miles remain the same
- Non-Revenue Hours: 3% increase
- Non-Revenue Miles: 3% increase
- Peak Vehicle Requirement: 2% increase
 - Increase Fleet from 128 to 131 buses
 - 3 more vehicles required



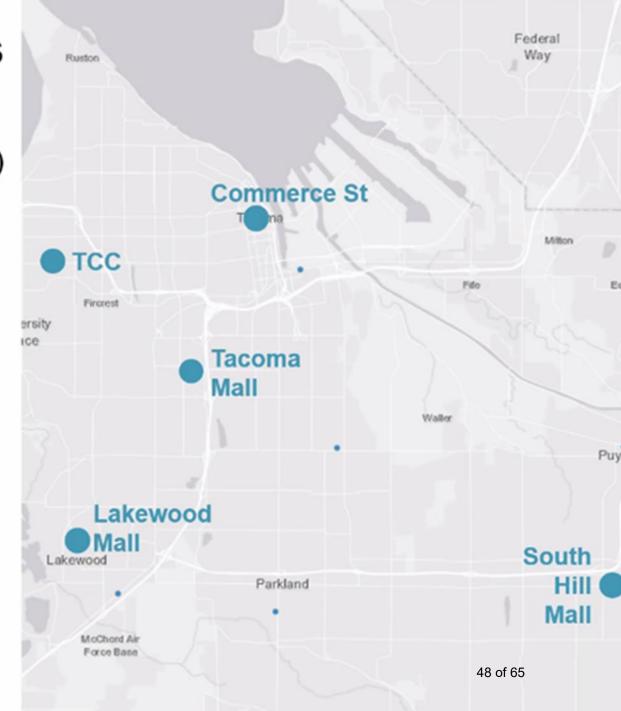
Key Takeaways: BEB Depot + En-Route Charging

- At least 11 Depot Chargers will be required at 96th Street
- Up to 18 En-Route Chargers could be required:
 - 10th & Commerce Transit Center: 4 Chargers (1.2 MW)
 - Lakewood Transit Center: 4 Chargers (1.2 MW)
 - TCC Transit Center: 4 Chargers (1.2 MW)
 - Tacoma Mall Transit Center: 3 Chargers (0.9 MW)
 - South Hill Mall Transit Center: 3 Chargers (0.9 MW)



Possible En-Route Locations

- 12 Transit Centers (identified using GTFS)
- 8 Transit Centers have Layover Time
- 5 Transit Centers are Good Candidates for En-Route Charging
 - 1. Commerce St Transit Center
 - 2. Lakewood Transit Center
 - 3. TCC Transit Center
 - 4. Tacoma Mall Transit Center
 - South Hill Mall Transit Center



Key Takeaways: Hydrogen Fuel Cell Bus Analysis

- Hydrogen buses can replace Diesel Buses 1-to-1
 - Revenue Hours & Miles: 0% increase
 - Non-Revenue Hours & Miles: 0% increase
 - Non-Revenue Miles: 0% increase
 - Peak Vehicle Requirement: 0% increase
- Hydrogen Requirements
 - Weekday Hydrogen Requirement: 2,860 kg
 - Weekly Hydrogen Requirement: 16,820 kg
 - 31 hours of refueling time needed per day
 - At least 2 dispensers are required (refueling would take all night with only 2 dispensers)
 - · More dispensers may be needed to maintain current operations



Zero+ Modeling Next Steps

- Identify any modeling changes that are needed
 - Which en-route locations to include
 - Number of en-route chargers at each location
- Electric
 - Extract data for financial modeling
 - Life-cycle cost analysis (capital and operational)
- Hydrogen
 - Infrastructure requirements (tanks, dispensers, etc.)
 - Life-cycle cost analysis (capital and operational)

Carbon Offset Credits

- WA State Clean Fuels Program Rule
- Electricity supplied as a transportation fuel

"The owner of the electric-charging equipment may generate credits from each piece of equipment."



Grants

- FTA Low or No Emissions Vehicles, request for 3 additional BEBs and charging infrastructure for the base - May 2022 – AWARDED
- WSDOT Green Transportation Grant
 - Due Sep. 29, 2022
 - Evaluation of Utility Grid Infrastructure and Sufficiency at 6 Locations



Vanpool

- Current practice: 15-passenger vans or Chrysler Pacifica Plug-in Hybrid Electric Vehicles (PHEVs)
 - Pacifica PHEVs can travel up to 32 miles on a single charge electric only.
- Other alternatives b/c of 6+1 seating requirement
 - Toyota Highlander Hybrid (non-PHEV)
 - Ford Explorer Hybrid (non-PHEV)





Support Fleet

Looking at electrification avenues for:

- Maintenance Vehicles
- Supervisor Vehicles
- Relief Vans
- Shuttle Vehicles



Closing Comments

- We have an experienced team here at PT
- Scheduling site visits at neighboring locations
 - Twin Transit
 - Link Transit
 - Sunline Transit
- Partnering w/ contact at WSDOT for shared charging infrastructure opportunities
- Various electric vehicle and bus demos from other agencies
- APTA involvement BEB Vehicle and Infrastructure Safety
- Results of the HDR Zero Emissions Study will Guide the Agency

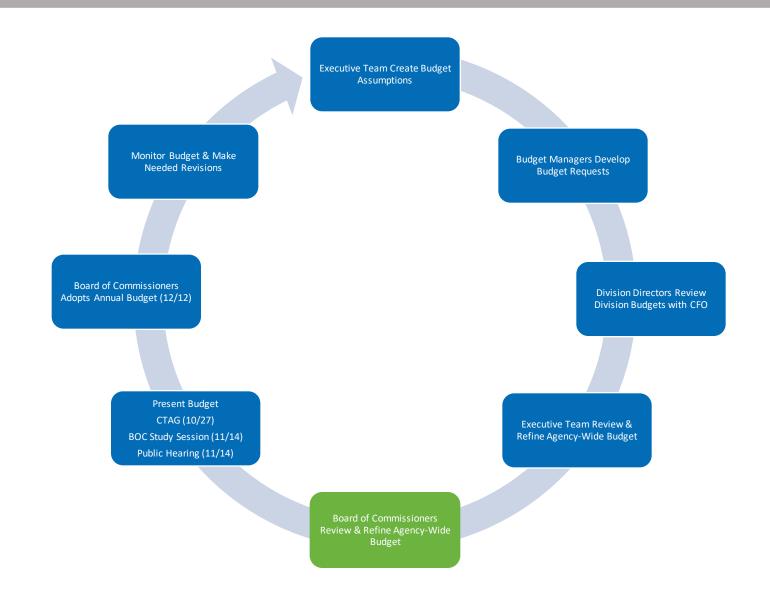


Thank You!





Budget Process



2023 – 2028 Major Budget Assumptions

1. Sales Tax

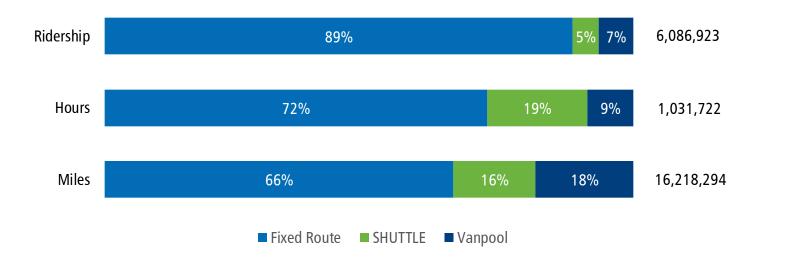
- a. 2023 Budget 2.96% over current 2022 Year-End Estimates
- b. 2024 2028 3.76% average increase year-over-year

2. Fare revenue

- a. Average fare per boarding at \$1.00 less 16% to account for youth ride free began September 2022
- b. 2023 budget is 19% less than budgeted in 2022
- 3. Employee Wage Increases
 - a. 2023 4.57% average general wage adjustments and step increases
 - b. 2024-2028 4.17%
- 4. Benefits holding at 39% of wages 2023-2028
- 5. Added 10,000 BRT Hours in 2027 to PT Fixed-Route
- 6. Anticipating reduction in ST service due to light rail extension in 2025 of 3.7% and a second reduction in 2027 of 17%

Planned Service

	2022	2022	2023	Budget to	% Change	YE Est to	% Change
	Budget	YE Est	Budget	Budget	22B to 23B	Budget	22YE to 23B
PT	500,000	435,000	475,000	(25,000)	-5.00%	40,000	9.20%
ST	334,217	258,617	271,300	(62,917)	-18.83%	12,683	4.90%
SHUTTLE	161,848	133,512	195,422	33,574	20.74%	61,910	46.37%
Vanpool	80,000	80,000	90,000	10,000	12.50%	10,000	12.50%
Total Agency Hours	1,076,065	907,129	1,031,722	(44,343)	-4.12%	124,593	13.73%



Personnel Changes

The 2023 Budget includes 986 positions, 965 full-time equivalents (FTE). The budget also accounts for changing four Intern positions from dollars to FTEs beginning in 2023. There is a net increase of 1 position from the 2022 Budget and includes the following changes:

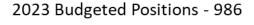
15 New Positions

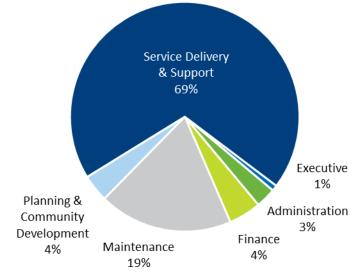
- 1 Records Management
- 1 Contract Coordinator
- 1 Transit System Maintenance Worker
- 1 Community Dev Coordinator
- 1 ADA Eligibility Analyst
- 1 Instructor

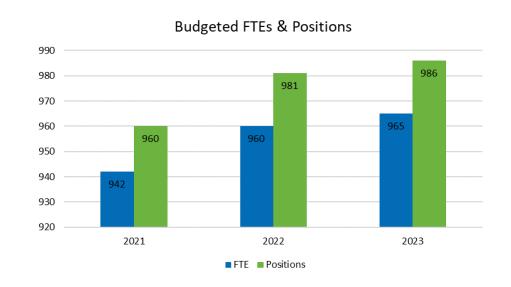
- 1 Equity & Engagement Manager
- 3 Fleet Care Attendant
- 1 Transit Facilities Specialist
- 1 Grants Coordinator
- 1 Service Supervisor
- 2 Division Assistant

14 Position Reductions

14 Relief Transit Operators





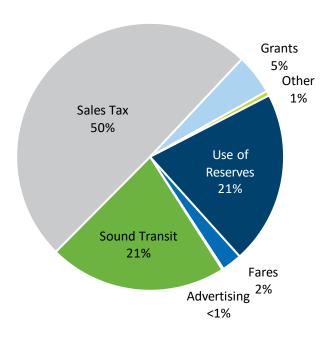


Budget Overview - Operating

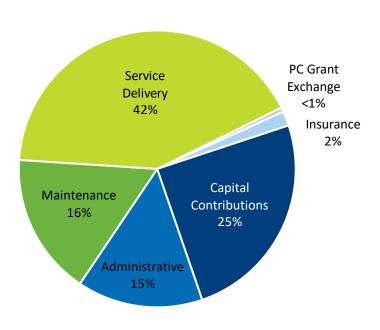
2023 Budget Appropriations

Revenue	
Fares	\$ 5,446,210
Advertising	350,000
Sound Transit	47,986,720
Sales Tax	110,557,130
Grants	10,795,670
Other	1,298,270
Use of Reserves	46,650,350
	\$ 223,084,350
Expenditures	
Personnel	\$ 112,639,380
Supplies	19,413,680
Services	9,285,890
Insurance	8,378,240
Utilities	1,687,100
Repairs	676,250
Rentals	506,840
Other	13,161,870
Contracted Services	836,690
PC Grant Exchange	1,150,000
Capital Contributions	55,348,410
	\$ 223,084,350

Operating Sources of Funds



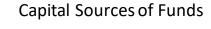
Operating Uses of Funds

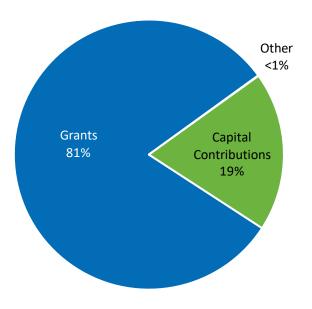


Budget Overview - Capital

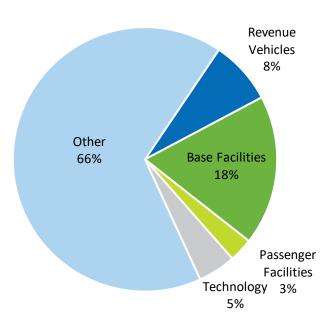
2023 Budget Appropriations

Revenue	
Grants	\$ 234,531,590
Other	175,000
Capital Contributions	55,348,410
Use of Reserves	46,964,480
	\$ 337,019,480
Expenditures	
Revenue Vehicles	\$ 26,252,730
Base Facilities	61,899,580
Passenger Facilities	9,831,360
Technology	15,595,150
Other	223,440,660
	\$ 337,019,480





Capital Uses of Funds



Peer Comparison

	Agency Profile							
Agency	Service Population	Service Area (Sq Mi)	FTA Urbanized Zone Area	Vehicles Operated at Maximum Service				
Pierce Transit	575,963	292	Seattle	514				
Kitsap Transit	254,183	396	Bremerton	257				
InterCity Transit	192,400	101	Olympia	289				
Community Transit	829,856	258	Seattle	666				

		Local Fares							
Agency	Sales Tax Rate	Adult		Discounted		Adult Monthly			
Pierce Transit	0.6%	\$	2.00	\$	1.00	\$	62.00		
Kitsap Transit	0.8%	\$	2.00	\$	1.00	\$	50.00		
InterCity Transit	1.2%	\$	-	\$	-	\$	-		
Community Transit	1.2%	\$	2.50	\$	1.25	\$	90.00		

The above performance analysis utilizes the 2020 National Transit Database (NTD) reporting. The selection of comparison transit agencies is based on proximately to Pierce Transit, annual expenditure and services provided.

	Motor Bus								
Agency	Operating Expenses	Vehicle Revenue Miles	Vehicle Revenue Hours	Unlinked Trips	Fare Revenue				
Pierce Transit	67,727,590	4,271,293	388,929	4,755,960	4,461,166				
Kitsap Transit	26,831,268	2,134,714	122,574	1,220,764	1,905,331				
InterCity Transit	24,648,174	1,515,742	119,381	1,851,237	8,674				
Community Transit	88,919,609	6,207,498	437,507	4,445,897	4,209,241				

	SHUTTLE								
Agency	Operating Expenses	Vehicle Revenue Miles	Vehicle Revenue Hours	Unlinked Trips	Fare Revenue				
Pierce Transit	11,976,001	1,184,490	82,899	150,289	180,140				
Kitsap Transit	13,299,912	839,090	57,380	135,989	100,856				
InterCity Transit	15,843,190	1,010,160	83,571	143,104	-				
Community Transit	9,926,526	679,859	36,370	69,387	134,061				

Agency	Vanpool								
	Operating Expenses	Vehicle	Vehicle						
		Revenue	Revenue	Unlinked Trips	Fare Revenue				
		Miles	Hours						
Pierce Transit	3,836,144	3,015,970	83,295	397,472	1,750,544				
Kitsap Transit	860,783	419,490	13,981	77,466	175,381				
InterCity Transit	2,303,078	1,626,197	42,809	284,796	299,046				
Community Transit	3,387,575	2,068,568	64,978	302,038	1,509,559				

Looking Ahead...

- Increase service delivery by attracting & retaining Operators
- Bus Rapid Transit (BRT)
- Maintenance & Operations Base Improvements (MOBI)
- Transition fleet to Zero Emissions
- Pursue additional funding through grants and TIFIA loans
- Explore revenue options

