Call to Order

Roll Call

1:00 – 1:10 p.m.  1. Welcoming Remarks  
CEO Mike Griffus

1:10 – 1:40 p.m.  2. Workforce Update and Future Outlook  
Amy Cleveland
Executive Director of Administration

1:40 – 2:10 p.m.  3. Review of Route Productivity Performance Standards and Farebox Recovery Rate  
Ryan Wheaton
Executive Director of Planning & Community Development

2:10 – 2:30 p.m. Break

2:30 – 3:00 p.m.  4. Update on Public Safety Model and Ambassador Program  
Grantley Martelly
Chief Operating Officer

3:00 – 4:00 p.m.  5. Zero Emissions Initiatives – Future Planning and Challenges  
Adam Davis
Executive Director of Maintenance

4:00 – 4:15 p.m. Break

4:15 – 4:45 p.m.  6. Review of Budget Methodologies in Advance of the 2023 Budget Preparation and Preliminary Review of 2023 Budget  
Chris Schuler
Chief Financial Officer

4:45 – 5:00 p.m.  7. Recap of Meeting Outcomes and Agency Goals  
CEO Mike Griffus
& 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

Filled as of August 1st

Vacancies

100
vacancies
Operator Staffing

Operators: Incoming & Outgoing 2015-Present

2020 Terms includes 24 layoffs
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](chart.png)

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

Average employee age

Current Pierce Transit operators by age group

- TRANSIT OPERATOR
- TRANSIT OPERATOR TRANEEE

Age group:
- <25
- <30
- <35
- <40
- <45
- <50
- <55
- <60
- <65
- >65

Employee count:
- <25: 9
- <30: 33
- <35: 44
- <40: 70
- <45: 96
- <50: 90
- <55: 137
- <60: 176
- <65: 341
- >65: 57

Employee count (by age group):
- >65: 36
- <65: 83
- <60: 98
- <55: 72
- <50: 40
- <45: 47
- <40: 28
- <35: 10
- <30: 5
- <25: 5
Public Sector Impacts

TREND: JOB POSTINGS & APPLICATIONS

THE NUMBER OF OPEN JOBS ARE UP BY 45% IN THE LAST YEAR FOR THE PUBLIC SECTOR.

NUMBER OF APPLICATIONS PER OPEN JOB ARE DOWN BY -56% 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.

Build Your Future in Fleet Maintenance!

Employee of the Year!

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
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

Women in Trades Event
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
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)*

**Passengers per Revenue Mile**

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

**Farebox Recovery**

*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 Service Hour

Passengers per Revenue Mile

Farebox Recovery

18 of 65

*2022 is using data from January to June
Calculation Methodology

1. 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

*Data derived from WSTA State Ridership Request – Average Weekday Ridership
2020-2022 Average Ridership Recovery

<table>
<thead>
<tr>
<th>Region</th>
<th>Average Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link</td>
<td>67.5%</td>
</tr>
<tr>
<td>Pacific</td>
<td>61.3%</td>
</tr>
<tr>
<td>Jefferson</td>
<td>56.9%</td>
</tr>
<tr>
<td>Ben Franklin</td>
<td>56.2%</td>
</tr>
<tr>
<td>C-Tran</td>
<td>56.0%</td>
</tr>
<tr>
<td>Pierce Transit</td>
<td>53.0%</td>
</tr>
<tr>
<td>Grant</td>
<td>52.9%</td>
</tr>
<tr>
<td>Asotin</td>
<td>52.8%</td>
</tr>
<tr>
<td>Everett</td>
<td>52.2%</td>
</tr>
<tr>
<td>River Cities</td>
<td>51.1%</td>
</tr>
<tr>
<td>Spokane</td>
<td>50.3%</td>
</tr>
<tr>
<td>Clallam</td>
<td>49.7%</td>
</tr>
<tr>
<td>Ellensburg</td>
<td>49.1%</td>
</tr>
<tr>
<td>Grays Harbor</td>
<td>46.8%</td>
</tr>
<tr>
<td>Skagit</td>
<td>45.6%</td>
</tr>
<tr>
<td>Island</td>
<td>43.1%</td>
</tr>
<tr>
<td>Community</td>
<td>42.8%</td>
</tr>
<tr>
<td>Intercity</td>
<td>40.6%</td>
</tr>
<tr>
<td>Yakima</td>
<td>40.2%</td>
</tr>
<tr>
<td>TWIN</td>
<td>39.9%</td>
</tr>
<tr>
<td>Mason</td>
<td>39.3%</td>
</tr>
<tr>
<td>King</td>
<td>39.0%</td>
</tr>
<tr>
<td>Okanogan County</td>
<td>36.4%</td>
</tr>
<tr>
<td>Kitsap</td>
<td>35.8%</td>
</tr>
<tr>
<td>Valley</td>
<td>35.1%</td>
</tr>
<tr>
<td>Sound</td>
<td>31.4%</td>
</tr>
<tr>
<td>Pullman</td>
<td>30.5%</td>
</tr>
<tr>
<td>Whatcom</td>
<td>0%</td>
</tr>
</tbody>
</table>

20 of 65
2020-2022 Average Ridership Recovery (Comparable Agencies)

- LINK: 67.5%
- PACIFIC: 61.3%
- BEN FRANKLIN: 56.9%
- CTRAN: 56.2%
- PIERCE TRANSIT: 56.0%
- GRANT: 53.0%
- ASOTIN: 52.9%
- EVERETT: 52.8%
- RIVERCITIES: 52.2%
- SPOKANE: 51.1%
- CLALLAM: 50.3%
- ELLensburg: 49.7%
- GRAY'S HARBOR: 49.1%
- SKAGIT: 46.8%
- ISLAND: 45.6%
- COMMUNITY: 43.1%
- INTercity: 42.8%
- YAKIMA: 42.0%
- TWIN: 40.6%
- MASON: 39.9%
- KING: 39.3%
- OKANAGAN COUNTY: 39.0%
- KITSAP: 36.4%
- VALLEY: 35.8%
- SOUND: 35.1%
- PULLMAN: 31.4%
- WHATCOM: 30.5%
**Passengers per Service Hour**

**PROPOSED RECOVERY STANDARD**

<table>
<thead>
<tr>
<th>Year</th>
<th>Trunk Routes</th>
<th>Urban Routes</th>
<th>Suburban Routes</th>
<th>Community Connector Routes</th>
<th>Express Routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022*</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Yellow</td>
</tr>
<tr>
<td>2021</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Yellow</td>
</tr>
<tr>
<td>2020</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Yellow</td>
</tr>
<tr>
<td>2019</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Yellow</td>
</tr>
<tr>
<td>2018</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
<td>Yellow</td>
</tr>
<tr>
<td>2017</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

*2022 is using data from January to June*
PROPOSED RECOVERY STANDARD

<table>
<thead>
<tr>
<th>Year</th>
<th>Trunk Routes</th>
<th>Urban Routes</th>
<th>Suburban Routes</th>
<th>Community Connector Routes</th>
<th>Express Routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022*</td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
</tr>
<tr>
<td>2021</td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
</tr>
<tr>
<td>2020</td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
</tr>
<tr>
<td>2019</td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
</tr>
<tr>
<td>2018</td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
</tr>
</tbody>
</table>

Legend:
- **NOT RUNNING**
- **UNSATISFACTORY**
- **MARGINAL**
- **SATISFACTORY**
- **EXCEEDS**

*2022 is using data from January to June*
2022 is using data from January to June

PRE-COVID STANDARD

2022
2021
2020
2019
2018
2017

Trunk Routes
Urban Routes
Suburban Routes
Community Connector Routes
Express Routes

NOT RUNNING  UNSATISFACTORY  MARGINAL  SATISFACTORY  EXCEEDS

*2022 is using data from January to June
Staff researched current performance standards and ideas on an interim approach.

- **JUN-SEPT 2022**
  - Board Study Session
  - Presentation on Performance Standards

- **OCTOBER 2022**
  - Pierce Transit customer survey

- **SEPT-OCT 2022**
  - Service recovery planning
    - (goal date of 2025 back to pre-pandemic fixed route service levels)

- **JAN-MAY 2023**
  - Board adopts interim recovery performance standards (24 months)
  - Brief BOC on 2023 Performance with interim standards

- **FEBRUARY 2024**
  - Final report/recommendations to Board on Service Recovery and findings from outreach
  - Development of Destination 2050 (Final Standards)

- **MAR-DEC 2024**
  - MARCH
    - Initial Service Adjustments
  - FEB-MAR
    - Public engagement
  - MAR-MAY
    - Service recovery planning workgroup
Route Productivity Analysis

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
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
- **Tacoma Mall TC**  Fully staffed
  - Covered by 1 officer per day, 2 shifts, (7 days per week): 4am – 11:59pm
- **Tacoma Community College TC** 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

Chief Operating Officer

Chief of Public Safety

PCSD
- Chief
- Investigator
- Sergeant (until 2023)
- Extra Duty Deputies

Local PD
- City of Lakewood
- City of Federal Way
- City of Puyallup

PT Public Safety Officers
- 2 PSO Sergeants
- 11 PSOs
- 6 Vacancies

Contracted Security Guards
- 5 locations
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
- Main Challenges
- Fleet Transition Plan
- Carbon Offset Credits
- Grants
- 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 **Unfunded** 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
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

<table>
<thead>
<tr>
<th>TASKS</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1: Project Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Kickoff and Bi-Weekly Meetings</td>
<td>✭</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>1.2 Project Management Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✭</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>1.3 Stakeholder Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Task 2: State of the Industry Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Draft State of the Industry Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✭</td>
</tr>
<tr>
<td>Task 3: Existing Conditions/ZEB Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Fleet Data Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✭</td>
<td>•</td>
</tr>
<tr>
<td>3.2 Policy and Legislation Impacts to ZEB Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✭</td>
<td>•</td>
</tr>
<tr>
<td>3.3 Energy and Fuel Consumption Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.4 Implementation Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.5 Operations and Maintenance Scenarios (Transition Scenarios)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.6 Capital Infrastructure Investment Needs, Costs, and Schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.7 Lifecycle Economic Analysis for Transit Bus Technology Scenarios</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.8 Availability of Current and Future Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3.9 Equity Analysis and Ethics Memo - Combined Into 1.3 Above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Task 4: Final Report &amp; Recommendations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Draft Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✭</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>4.2 Final Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*Note: ✭ indicates a priority task.*
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
  5. 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

Executive Team Create Budget Assumptions

Monitor Budget & Make Needed Revisions

Board of Commissioners Develop Budget Requests

Division Directors Review Division Budgets with CFO

Executive Team Review & Refine Agency-Wide Budget

Board of Commissioners Review & Refine Agency-Wide Budget

Present Budget
- CTAG (10/27)
- BOC Study Session (11/14)
- Public Hearing (11/14)

Board of Commissioners Adopts Annual Budget (12/12)

Public Hearing (11/14)

Board of Commissioners Adopts Annual Budget (12/12)
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

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

<table>
<thead>
<tr>
<th></th>
<th>Fixed Route</th>
<th>SHUTTLE</th>
<th>Vanpool</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ridership</strong></td>
<td>89%</td>
<td>5%</td>
<td>7%</td>
<td>6,086,923</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>72%</td>
<td>19%</td>
<td>9%</td>
<td>1,031,722</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Miles</strong></td>
<td>66%</td>
<td>16%</td>
<td>18%</td>
<td>16,218,294</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

---

**2023 Budgeted Positions - 986**

- Service Delivery & Support: 69%
- Executive: 1%
- Administration: 3%
- Planning & Community Development: 4%
- Maintenance: 19%
- Finance: 4%
### 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
- **Total Revenue** $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
- **Total Expenditures** $223,084,350

---

### Operating Sources of Funds

- **Sales Tax** 50%
- **Sound Transit** 21%
- **Use of Reserves** 21%
- **Grants** 5%
- **Other** 1%

### Operating Uses of Funds

- **Service Delivery** 42%
- **Capital Contributions** 25%
- **Maintenance** 16%
- **Administrative** 15%
- **PC Grant Exchange** <1%
- **Insurance** 2%
- **Other** 1%
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

Total Revenue $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

Total Expenditures $337,019,480

Capital Sources of Funds
- Grants 81%
- Capital Contributions 19%
- Other <1%

Capital Uses of Funds
- Revenue Vehicles 8%
- Base Facilities 18%
- Passenger Facilities 3%
- Technology 5%
- Other 66%
## Peer Comparison

### Agency Profile

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

### Local Fares

<table>
<thead>
<tr>
<th>Agency</th>
<th>Sales Tax Rate</th>
<th>Adult</th>
<th>Discounted</th>
<th>Adult Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pierce Transit</td>
<td>0.6%</td>
<td>$ 2.00</td>
<td>$ 1.00</td>
<td>$ 62.00</td>
</tr>
<tr>
<td>Kitsap Transit</td>
<td>0.8%</td>
<td>$ 2.00</td>
<td>$ 1.00</td>
<td>$ 50.00</td>
</tr>
<tr>
<td>InterCity Transit</td>
<td>1.2%</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Community Transit</td>
<td>1.2%</td>
<td>$ 2.50</td>
<td>$ 1.25</td>
<td>$ 90.00</td>
</tr>
</tbody>
</table>

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.
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