

Pierce Transit's 2016 Comprehensive Local Fixed Route Redesign

APTA Sustainability & Multimodal Planning Workshop

Jason Kennedy
Peter Stackpole
Max Henkle
Thomas Wittmann

July 31, 2018

Agenda

- PT at a Glance
- Background
- 2016 Network Analysis
- Implementation
- Results / Lessons Learned
- Q&A



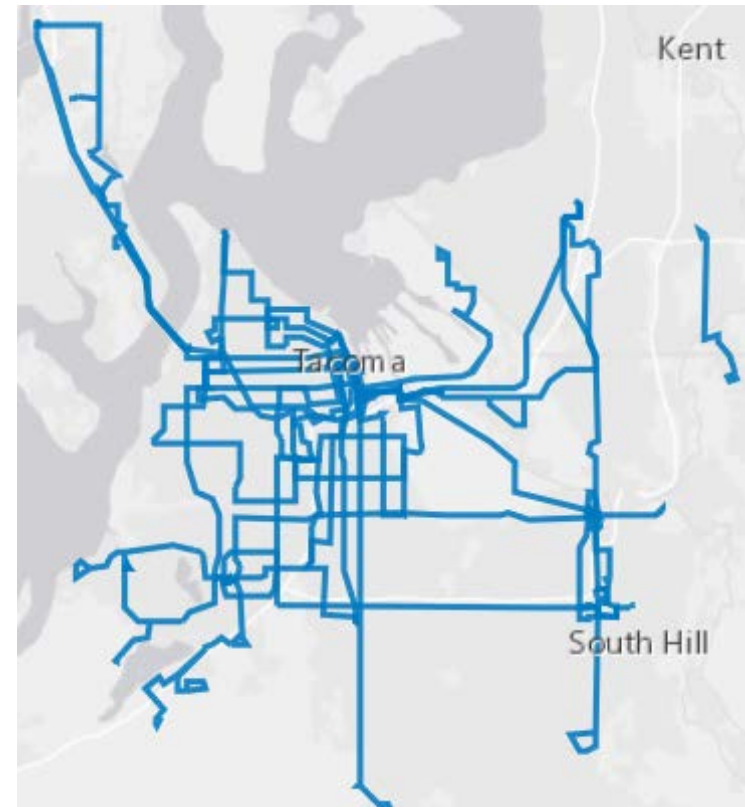
Pierce Transit At A Glance

- Medium sized agency based in Lakewood, WA
- 292 square miles serving ~70% of Pierce County's population (876,764 – 2017)
- Serves Tacoma and surrounding areas
 - Contracted express service for Sound Transit – King County



Pierce Transit At A Glance

- 30,000 average weekday boardings
- 29 of 32 fixed routes are local
- 158 buses
- 479K annual service hours on local fixed routes

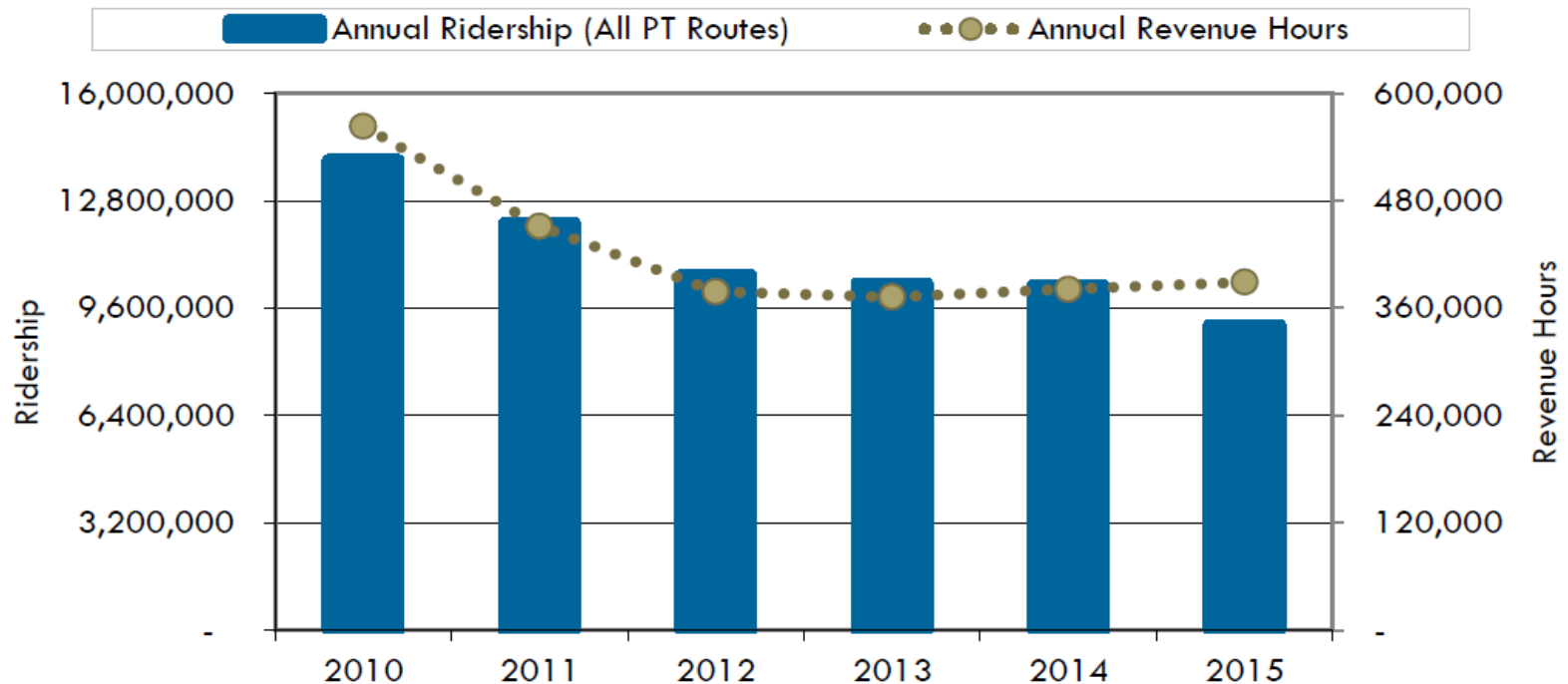


Background

- Great Recession 2007-2009
 - Reduction in sales tax revenue resulted in *33% fewer service hours*
- Reduction of PBTA service area in 2012
 - 5 jurisdictions removed themselves further reducing taxing area for PT
- Decline in ridership
 - Mirrored trend around the U.S.

Background

- Recovery (2010 – 2015)
 - Continue decline in ridership



Background

- Sales tax revenue returned
- Small restorative efforts didn't see impact to ridership
 - Many routes operating on 60-minute headways
 - Unclear if 2015 network pairing with 2015 transit demand
- Decision made to take comprehensive look at local fixed route system

2016 Comprehensive Local Fixed Route Analysis

- PT hired consultant Nelson\Nygaard in late 2015
- Assessment of network conducted in 2016
 - Leading to implementation in early 2017
- Project's goal was to assess network and make recommendations to improve performance/ridership

2016 Comprehensive Local Fixed Route Analysis

- Major products/tasks of project
 - Existing conditions assessment
 - Public outreach campaign
 - Service plan alternatives with recommendations

2016 Comprehensive Local Fixed Route Analysis

- Existing conditions assessment
 - Market analysis
 - Overview of current local fixed route service
 - Summary of system/route performance
 - Transfer analysis
 - Route profiles
 - Interviews
 - Board of Commissioners and PT Executives

2016 Comprehensive Local Fixed Route Analysis

- Public outreach and feedback campaign
 - Two rounds of open houses
 - “Build Your Own System” on project website
 - \$20 to put towards preferences – trade offs had to be made
 - Social media, news releases, printed brochures, website
 - Presentations to stakeholder groups

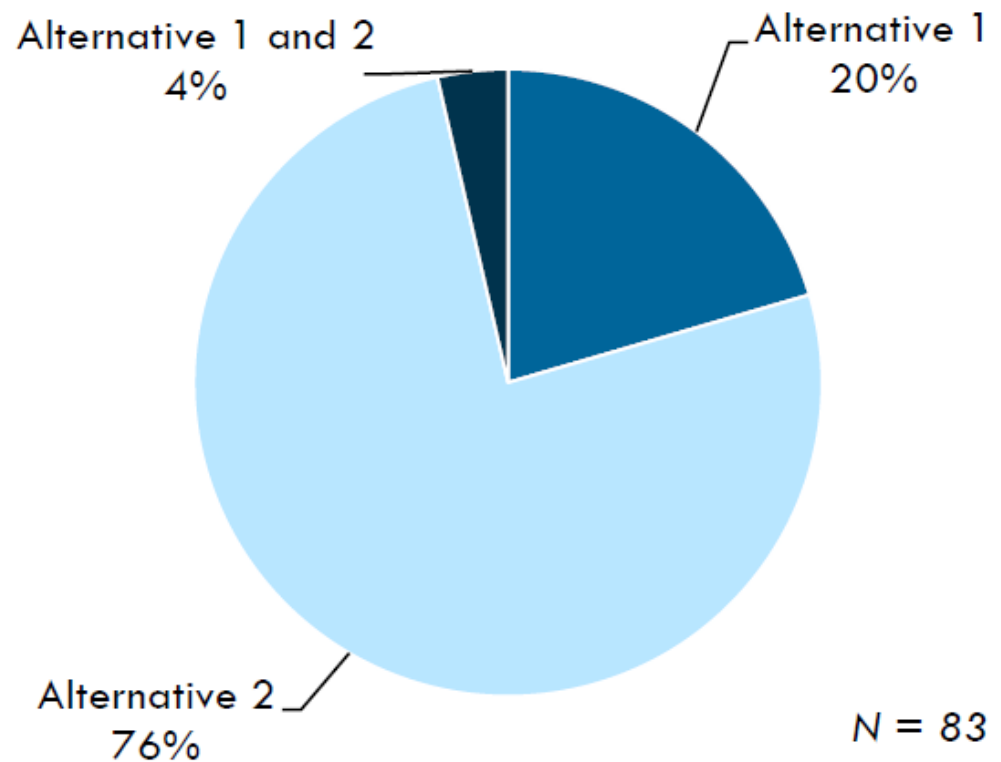
2016 Comprehensive Local Fixed Route Analysis

Results From "Build Your Own System" Tool

Strategy	Description	Y	N	Percent "Yes"
Provide more frequent service on weekdays	Routes operate more frequently than they do today. For example, a route that currently runs every 30 minutes would run every 15 minutes.	591	270	69%
Provide earlier and later service on weekdays	Routes run earlier and later than they do today. For example, a route that currently runs between 6am-8pm would run between 5am-10pm.	568	293	66%
Introduce service to new areas	Expand service to areas or destinations that are currently unserved.	445	416	52%
Provide more frequent service on weekends	Routes operate more frequently on Saturdays and Sundays. For example, a route that currently runs every 60 minutes would run every 30 minutes.	422	439	49%
Provide earlier and later service on weekends	Route run earlier and later than they do today. For example, a route that currently runs between 9am-7pm would run between 8am-9pm.	411	450	48%

2016 Comprehensive Local Fixed Route Analysis

- Two service plan alternatives developed
- 2nd round of open houses
- Over 300 people provided feedback
 - Only 83 directly responded to a particular alternative



2016 Comprehensive Local Fixed Route Analysis

- Service Alternative Plan #1
 - No route realignments – status quo
 - 30-minute peak frequency on all urban routes
 - 30-minute midday frequency on highest midday ridership routes
 - No weekday evening or weekend improvements to span or frequency
 - Not favored by public, Board or PT planning staff

2016 Comprehensive Local Fixed Route Analysis

- Service Alternative Plan #2
 - System redesign
 - Frequency and span of service improvements
 - 30-minute frequency on all trunk and urban routes (except one urban route)
 - Longer weekday span of service
 - Extended from 6-8pm on most urban routes to 10pm
 - Major enhancement in the overall usability of the system
 - Public's preferred alternative
 - Board's and PT planning staff preference

2016 Comprehensive Local Fixed Route Analysis

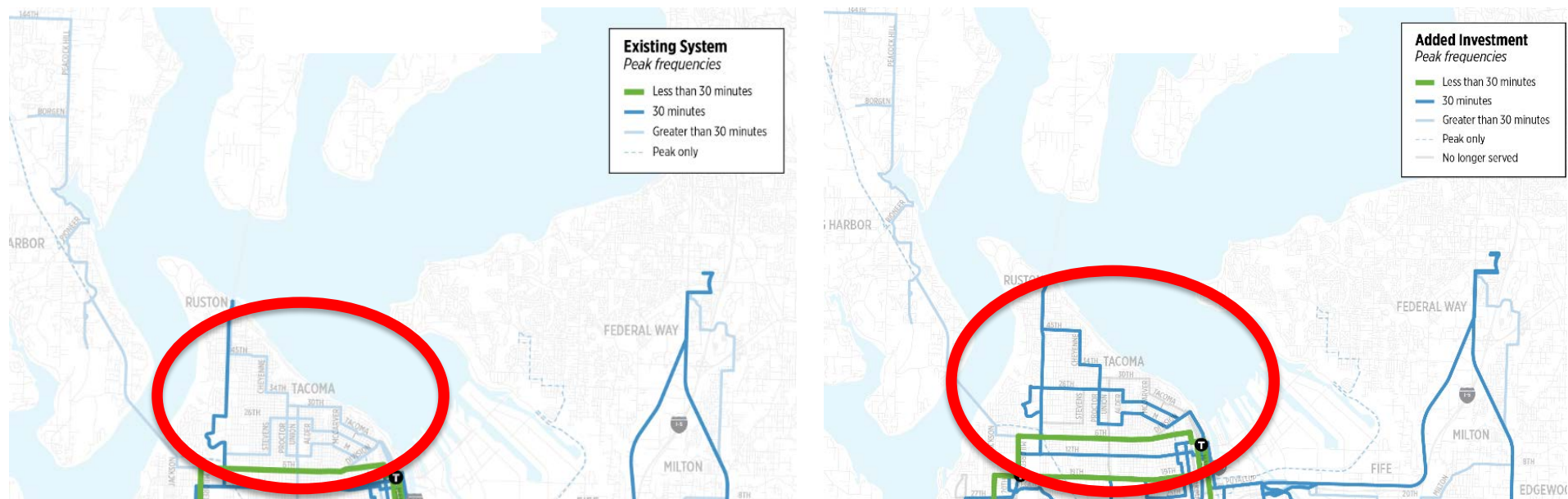
- Board of Commissioners Approval Process
 - Two alternatives proposed in November 2016
 - Study session prior
 - Public meeting - resulted in additional feedback
 - PT's planning staff and consultant recommended Alternative #2
 - Board concurred with some slight modifications
 - Approval in December 2016 of modified Alternative #2

Implementation

- Phased approach to implementation
 - Over three service changes
 - First round prior to Board adoption
 - Bulk in March 2017 in conjunction with network restructure

Implementation Period	Hours
September 2016	10,000
March 2017	35,000
September 2017	12,000
Total	57,000

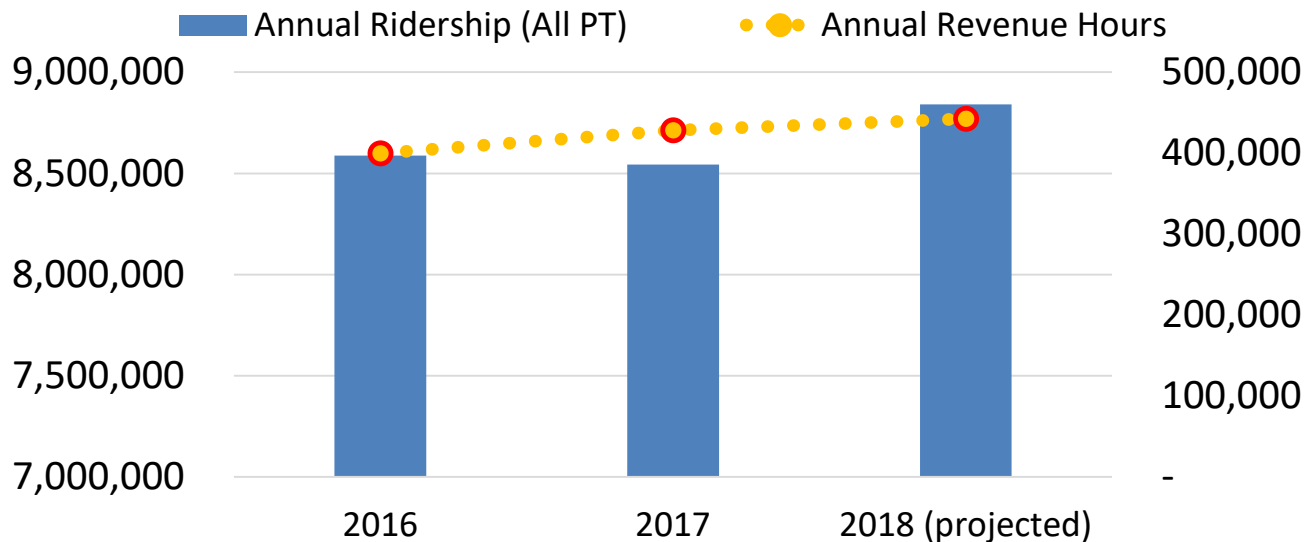
Implementation



- Weekday frequency
 - All-day (6AM-6PM) 30-minute frequency or better on most urban routes

Results

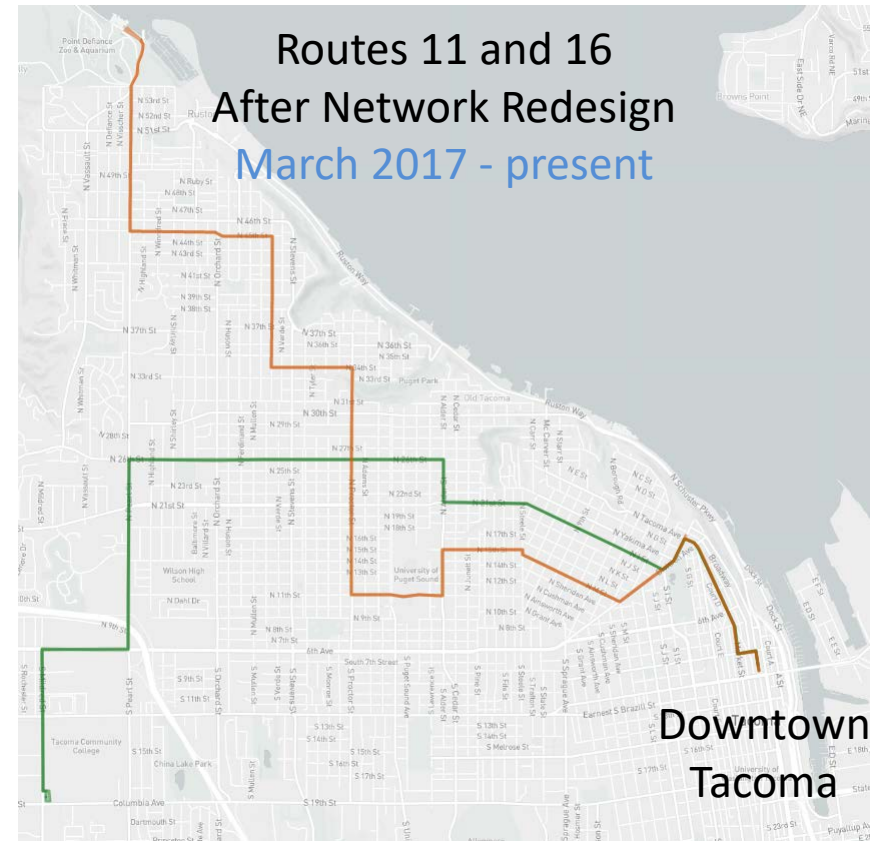
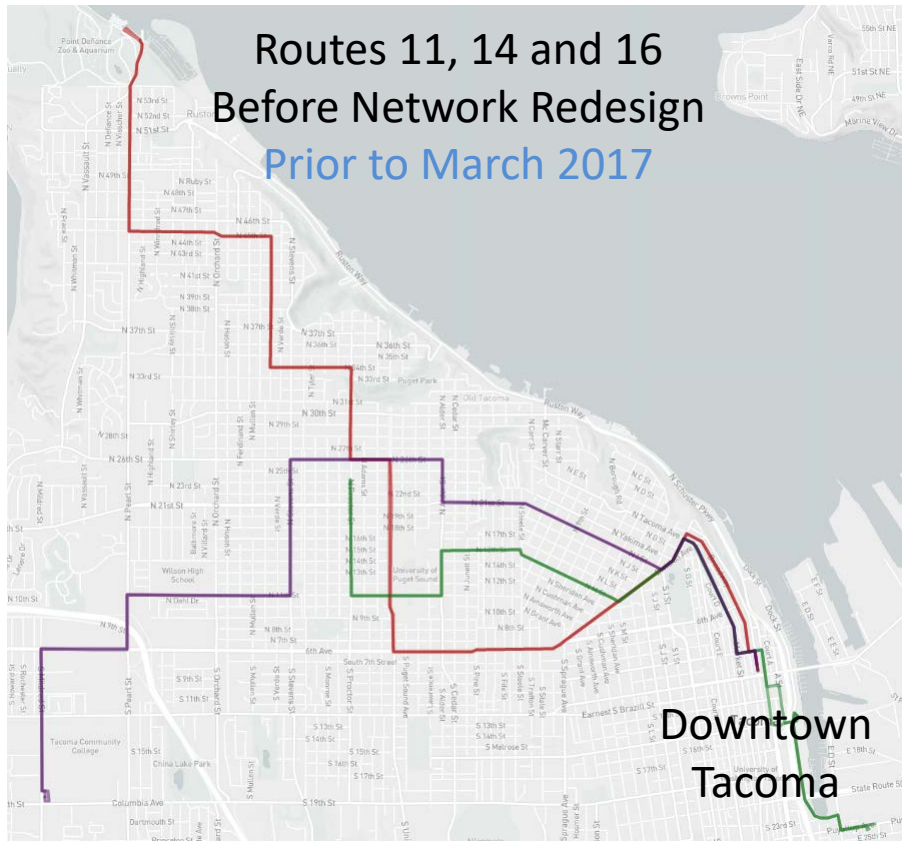
- Increase in year over year ridership
 - +2.8% Q2 2018 vs Q2 2016
- Annual ridership projected to be +3.5% from 2017



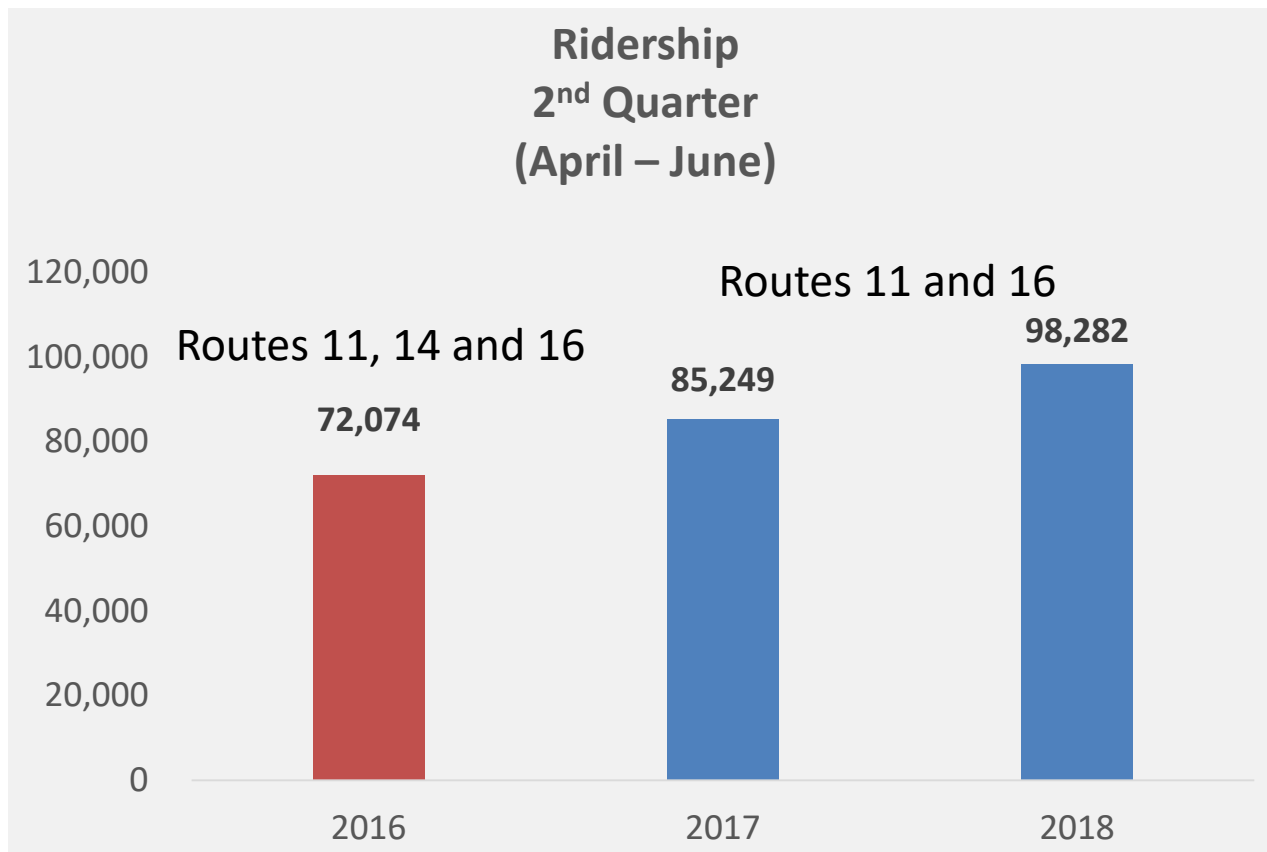
Results

- Most routes changed are experiencing a growth in boardings
- Many routes not changed are experiencing a decline in overall boardings
- Passenger per service hour stabilizing/steady – not on continued decline
- Minimal complaints regarding the changes
 - Mostly from areas that saw removal of service
 - Some will be addressed in future service changes

Results



Results



Conclusions and Lessons Learned

- Overall system appears to be functioning better than prior to redesign
- Run times of new segments could have used some more attention
 - Adjustments made in following schedule change
- Increases in frequency and span of service appear to have made a difference
 - Results are matching the spirit of the intent of this initiative

Questions?

Jason Kennedy
Planner Analyst

jkennedy@piercetransit.org

253.581.8135