



PRESENTATIONS and HANDOUTS

Regular Meeting on November 2, 2016

- 1. Pierce Transit *Destination 2040* Long Range Plan**
(PowerPoint Slides, for Discussion Item D-1)
- 2. Future Service Scenarios**
(Handout, for Discussion Item D-1)
- 3. Pierce Transit Comprehensive Route Network 2016 Route Analysis Moving Forward**
(PowerPoint Slides, for Discussion Item D-1)
- 4. 2016 Route Analysis Illustration Boards**
(Handout, for Discussion Item D-1)
- 5. Institutional Campus Review**
(Adobe Spark Presentation, for Discussion Item D-2)
<https://spark.adobe.com/page/Pjb3FoZ37aYcW/>





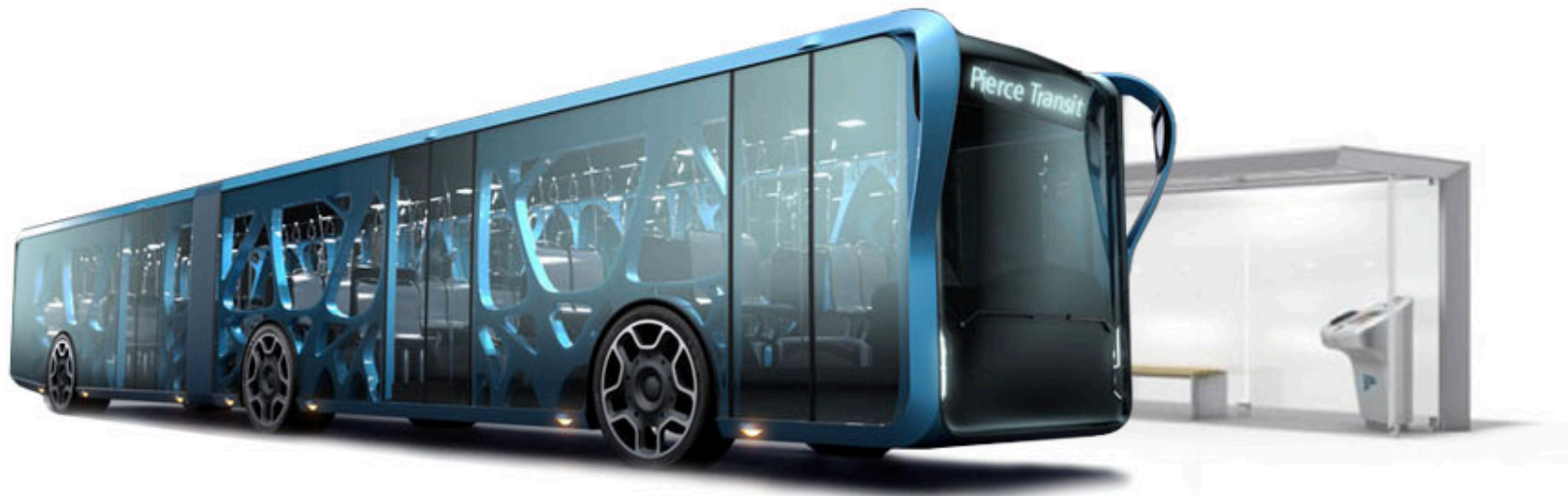
Pierce Transit Destination 2040 Long Range Plan

**Tacoma Planning Commission
November 2, 2016**

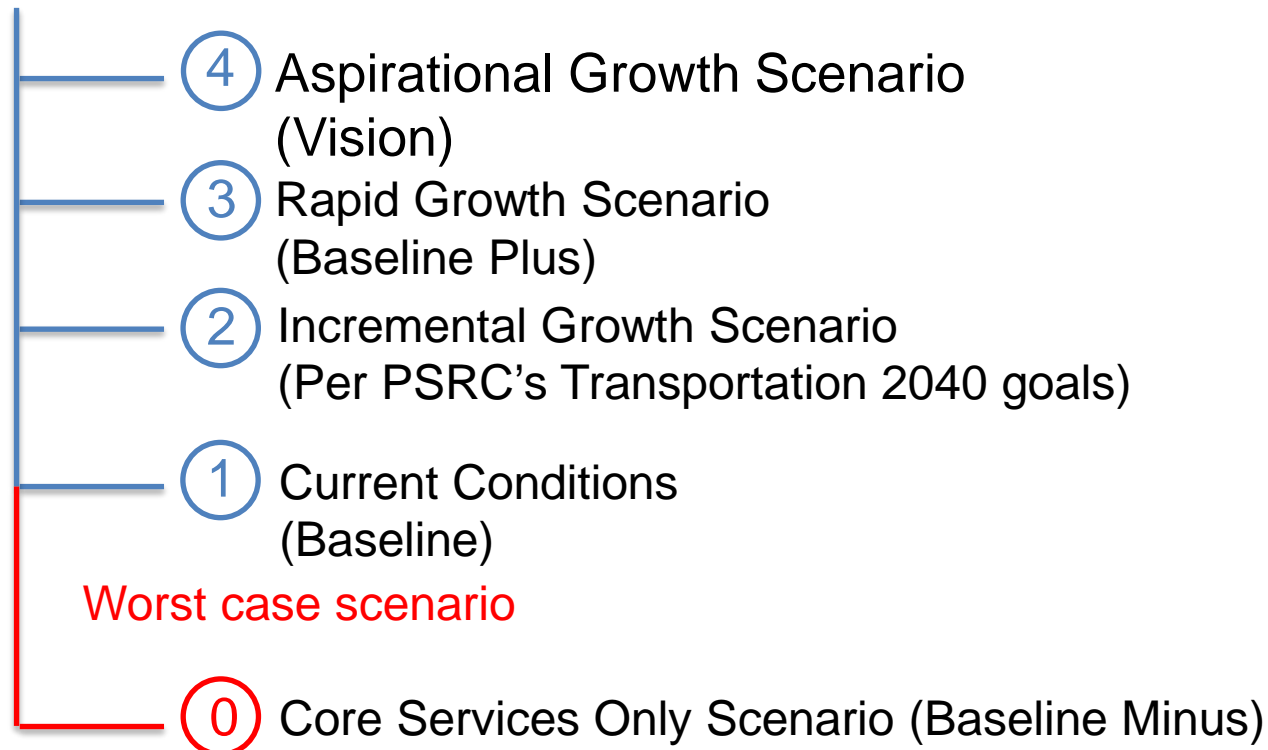
Darin Stavish, Principal Planner

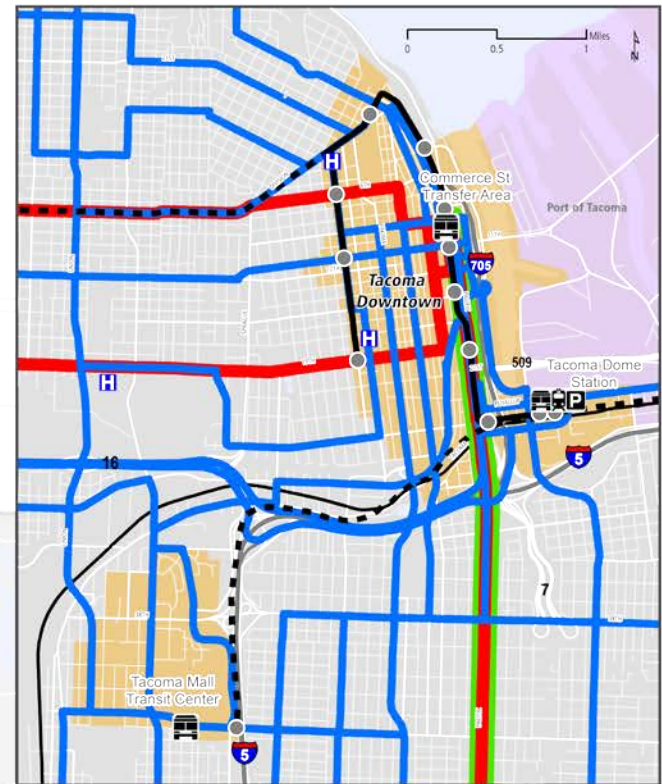
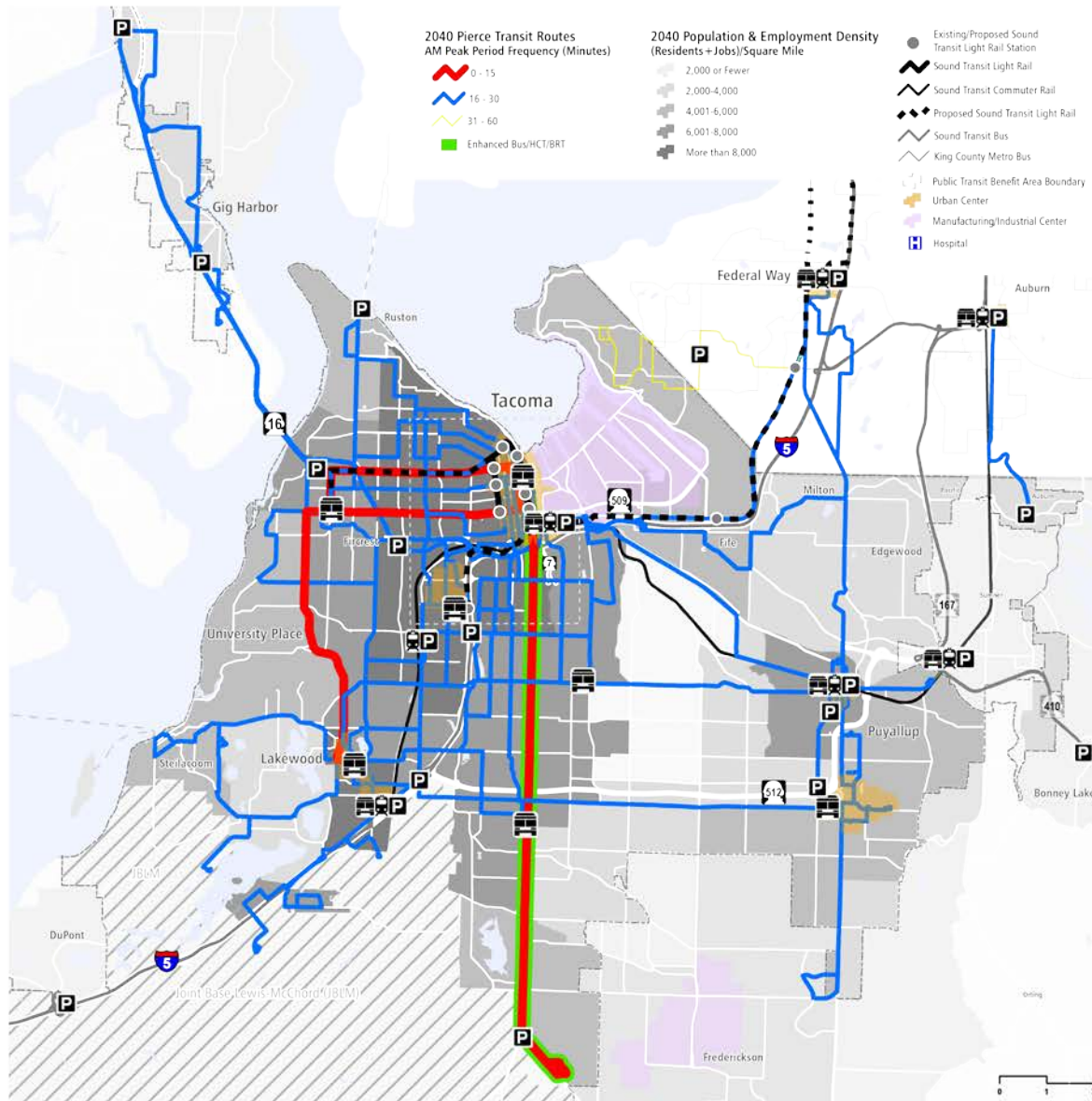
Two Key Long Range Transit Plan Components

- A range of future alternative service scenarios for growth through 2040.
- The PSRC's travel demand modeling and evaluation of the scenarios for potential ridership.



Introduction of Four Future Scenarios for either Constrained or Unconstrained Funding





Incremental Growth Scenario (per Transportation 2040)

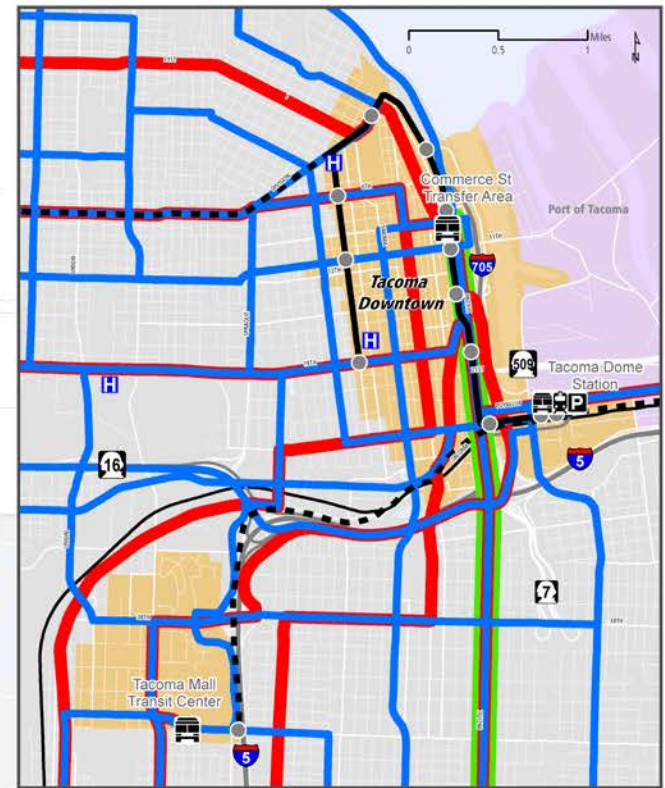
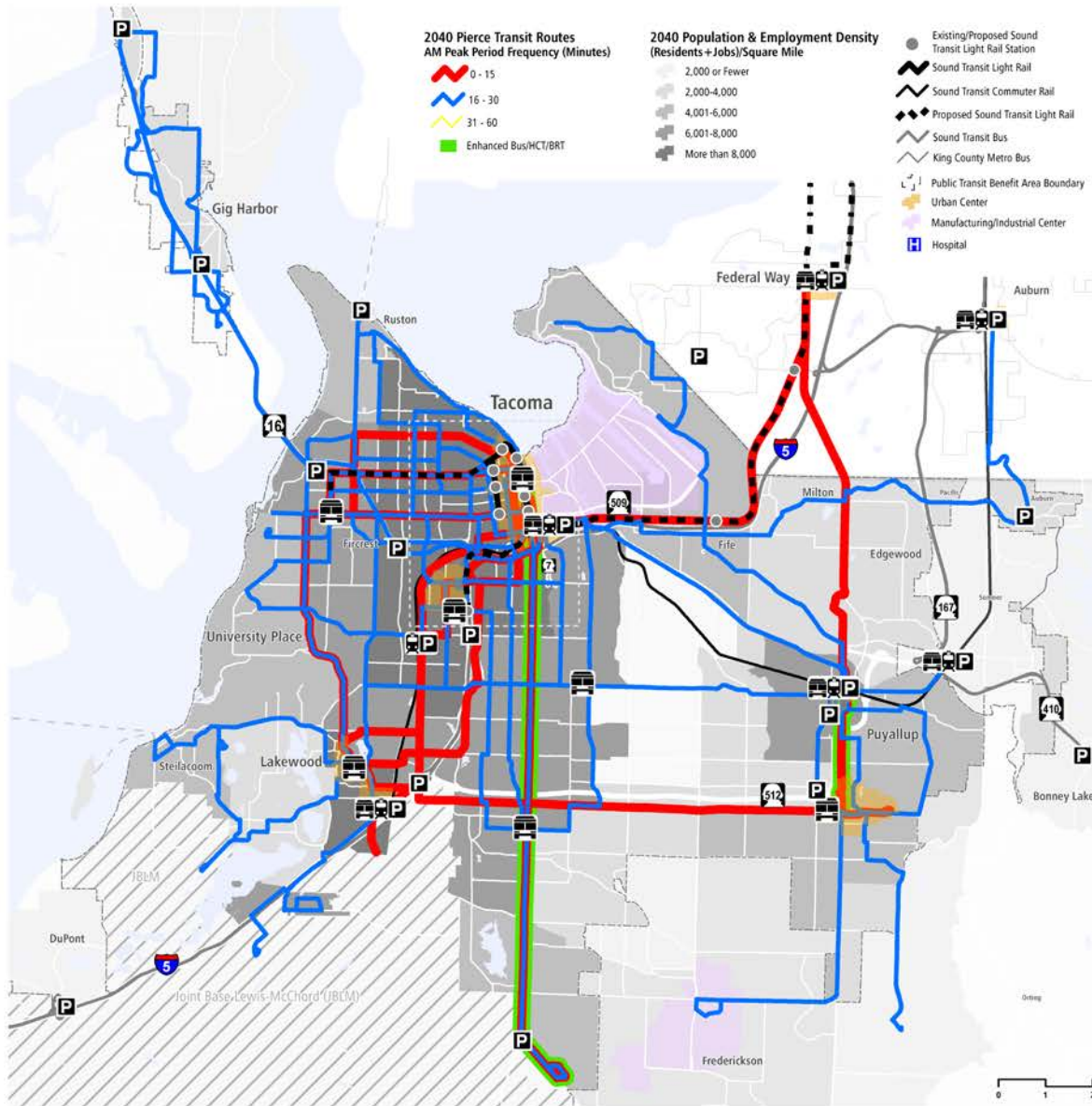
2.0% Annual Service Hour
Growth Rate

2020.....488,000
2030.....595,000
2040.....726,000

2



Sources: Pierce Transit, Sound Transit, King County Metro, Puget Sound Regional Council, Pierce County



Aspirational Growth Scenario (The Vision—Within PTBA)

3.0% Annual Service Hour
Growth Rate

2020.....513,000
2030.....689,000
2040.....927,000

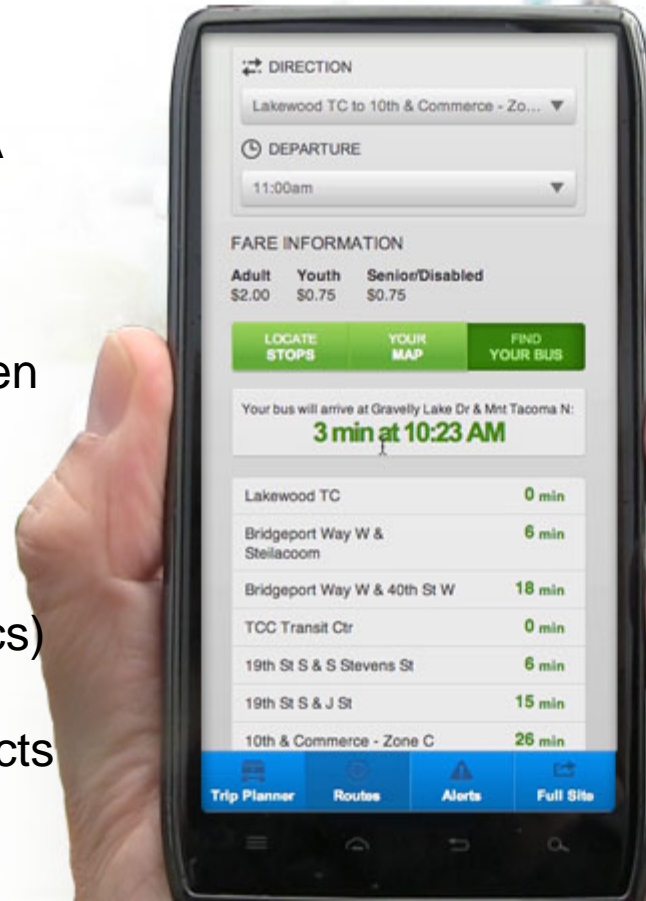
4a



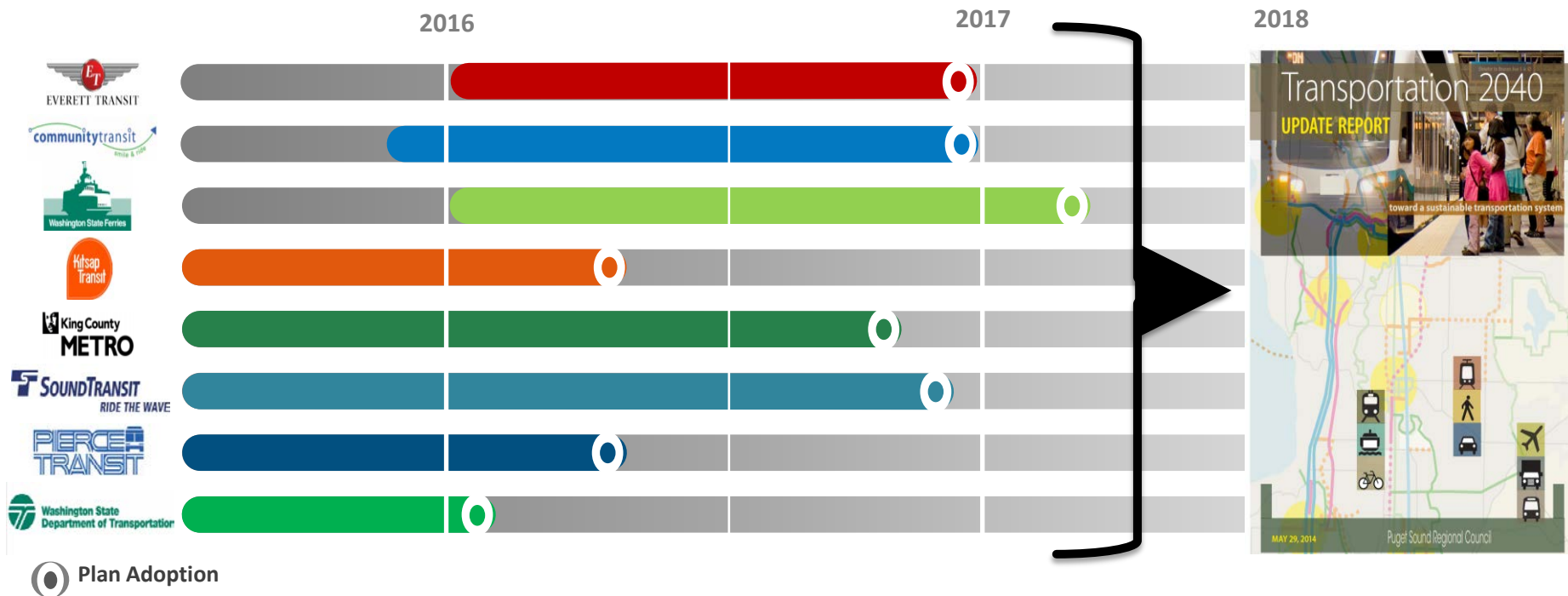
Sources: Pierce Transit, Sound Transit, King County Metro, Puget Sound Regional Council, Pierce County

Opportunities for Growth

- Underserved transit-dependent population areas; Pierce County-targeted infill areas within the PTBA (e.g., employment, housing)
- Evaluating the Pacific Avenue/SR 7 Corridor for a higher-capacity or even Bus Rapid Transit service
- Emerging Technologies
- Potential Riders (New Demographics)
- Regional Connections to ST3 Projects



Puget Sound Regional Council



- Foundational work for looking at transit in the region as a system
- Will identify synergies based on local input and places that need work
- A more cost-effective and less-duplicative system than in today's Plan
- The result will be a regionally integrated future transit network

FUTURE SERVICE SCENARIOS



DESTINATION 2040

Pierce Transit's Long Range Plan (LRP) – titled Destination 2040 – will serve as a comprehensive guiding documentation of the agency's vision and blueprint for providing dependable, safe, efficient, and fully integrated public transport services throughout the South Sound region of today, tomorrow, and beyond.



Destination 2040 lays out a **vision to expand transit service** to meet the county's growth

Pierce County is growing.

New residents need public services: schools, parks, water, sewer, and transportation. Investing in transit is an efficient use of our region's limited transportation dollars—it takes *fewer* resources to move *more* people by transit. Investments in transit will increase usage and provide numerous other benefits:

- Avoid costly roadway expansions
- Promote activity and public health
- Reduce pollution
- Save costs due to developers and employers having reduced parking requirements
- Attract jobs to Pierce County
- Promote urban infill projects

BY THE NUMBERS

10.3
million
ANNUAL
BOARDINGS



*2014 Counts

36 routes

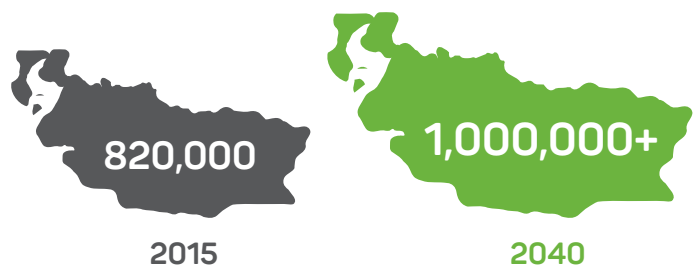


843
employees



147 buses
in the
fleet

The county's population is growing



FOUR FUTURES

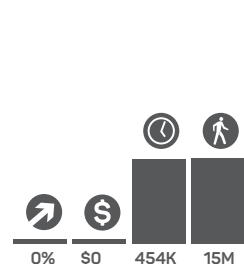
Expanded transit service—new routes, more frequent service, longer operating hours—will attract more riders. The four scenarios described below include both incremental and rapid growth, as well as a fiscally unconstrained future vision. They incorporate the regional transportation and growth projections for an integrated transportation network.



SCENARIO 1

BASELINE

0% service hour growth
\$0 additional investment needed
450K service hours
15M boardings



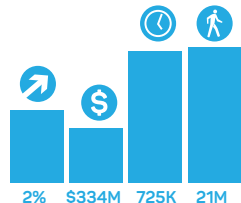
- Service remains essentially at 2015 levels



SCENARIO 2

INCREMENTAL GROWTH

2% service hour growth
\$334M additional investment needed
725K service hours
21M boardings



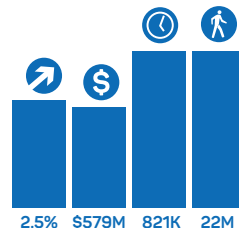
- Buses every 15 minutes along 19th Street and Bridgeport Way
- Buses every 20 minutes between Lakewood, Downtown Tacoma, and Puyallup; and to Lakewood Transit Center from Point Defiance and South Tacoma Way
- Double the frequency on 15 routes from every hour to every half hour
- Triple the frequency on two routes from every hour to every 20 minutes more early morning, night, and weekend service



SCENARIO 3

RAPID GROWTH

2.5% service hour growth
\$579M additional investment needed
821K service hours
22M boardings



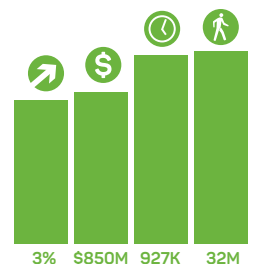
- Adding frequency to seven routes from every 30 minutes to every 20 minutes
- More frequent express service from Puyallup to Downtown Tacoma
- Buses every 10 minutes along 6th Avenue and Pacific Avenue



SCENARIO 4

ASPIRATIONAL GROWTH

3% service hour growth
\$850M additional investment needed
927K service hours
32M boardings



- New limited and express service to 6th Avenue, Pacific Avenue, Bridgeport Way, Point Defiance, Tacoma Mall, University Place, and South Hill
- Buses every 10 minutes between Lakewood, Downtown Tacoma, and every 20 minutes to Puyallup and downtown Tacoma
- Buses every 15 minutes from Downtown Tacoma to Tacoma Community College, along South Tacoma Way, and to Federal Way
- Buses every 10 minutes along Meridian

WHAT IS A SERVICE HOUR?

A service hour is one hour that an individual transit vehicle is on the road. For a transit system, service hours measure the number of transit vehicle hours that are provided across all routes in the system. Service hours are related to the frequency of service on each route. A single bus serving a route that takes one hour to complete counts as one service hour. Four buses will be needed to serve that route if buses arrive every 15 minutes. Four service hours would be needed to provide each hour of service, or 48 service hours if service is provided for 12 hours per day.



GET INVOLVED!

Destination 2040 will reflect the long-term vision for a transit system that meets your needs. To create the best possible plan, we need your input! Pierce Transit is seeking comments on the four future scenarios throughout fall 2015 and early 2016.

“

Pierce Transit provides 32,000 passenger trips per day.

- 2015 Count

”

PROJECT SCHEDULE

Stakeholder Input

nov 2015 - feb 2016



Draft Plan

jan 2016



..... Gather Public Input



Plan Adoption

apr 2016



The draft plan will be available online at:
www.piercetransit.org/destination-2040

Implementation

begins apr 2016

Translation Service is available in more than 200 languages, by calling Pierce Transit's Customer Service at 253.581.8000.

Llame al 253.581.8000. Habrá un representante y servicio de traducción en español disponible para atenderle.

Заказать услуги представителя с переводом на русский язык можно по телефону 253-581-8000.

Xin gọi 253-581-8000 để nói chuyện với Nhân Viên Đại Diện Ban Phục Vụ Khách Hàng là người sẽ cung cấp dịch vụ thông dịch Việt Ngữ.

Tawagan ang 253-581-8000 upang makipag-usap sa Representatibo ng Pangserbisyong Kustomer na magbibigay ng serbiyong pagsasalin ng wika sa Tagalog.

한국어 번역 서비스를 제공하는 상담원과 통화하시려면 253-581-8000 으로 전화하십시오.

អាចទំនាក់ទំនងភ្នាក់ងារសេវាបកប្រែភាសាខ្មែរ (កម្ពុជា) ដោយហៅតាមរយៈ លេខទូរស័ព្ទ ២៥៣-៥៨១-៨០០០ ។

Rufen Sie 253.581.8000. Ein Mitarbeiter wird zur Verfügung sein, um Sie mit Übersetzungen in Deutsch zu unterstützen.

Pierce Transit Comprehensive Route Network

2016»
ROUTE ANALYSIS
MOVING FORWARD



Agenda

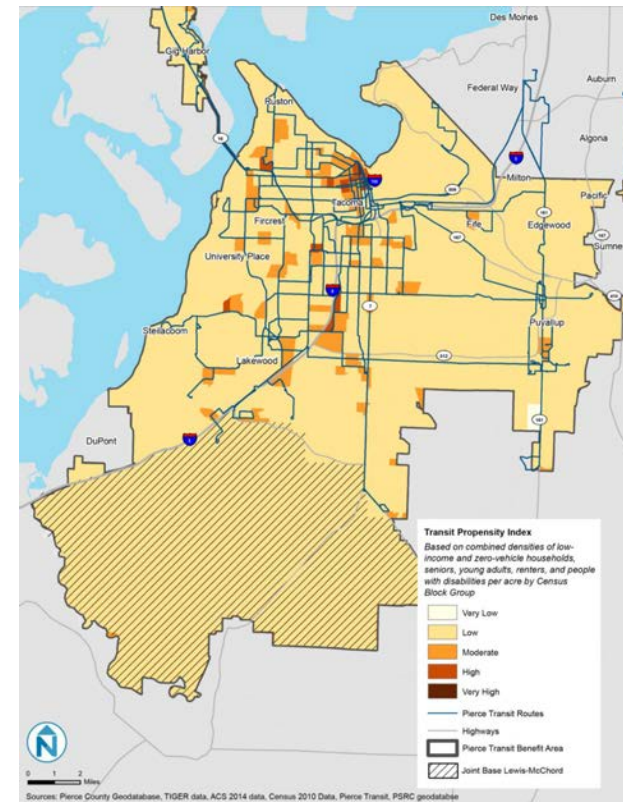


- Existing market assessment
- Existing service assessment
- Board and public priorities for service
- Expansion Alternative 1
- Expansion Alternative 2
- March 2017 Service Change – status quo or restructure
- Next Steps

Market Assessment Conclusions



- Elements assessed:
 - Population and employment densities
 - Socio-economic factors
- Market assessment indicates service is in areas where it needs to be based on land use



Service Evaluation Conclusions



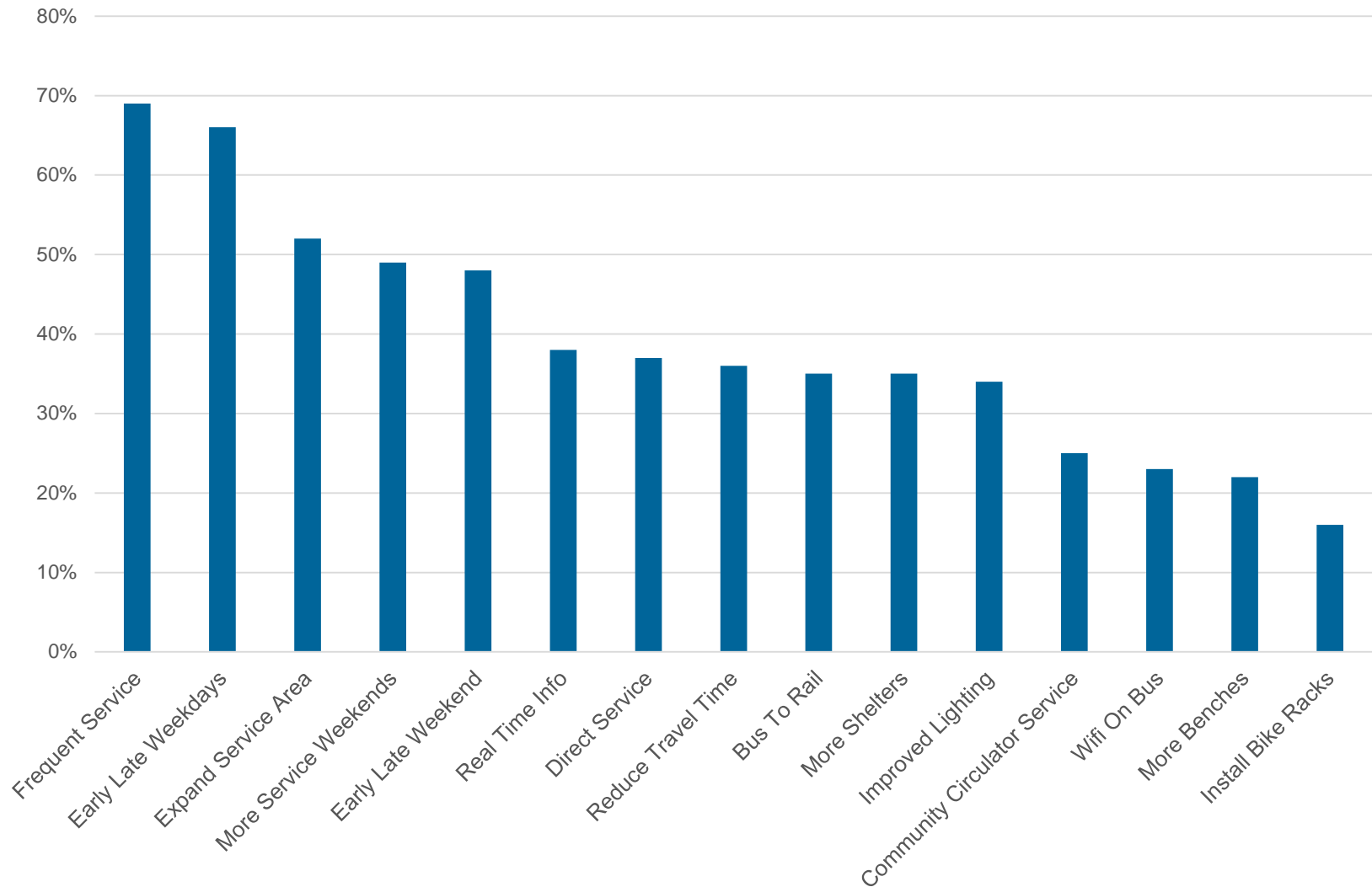
- Most routes are average
- Strong dependence on transfers
- Route structure is designed for timed transfers, but scheduling and frequency no longer support that
- Duplication of service
- Span of service is inadequate for many trip types

Board Priorities



- Overarching Goal: Improve ridership
- Attract more discretionary riders & commuters
- Tradeoff Preferences:
 - Improve service in high ridership areas
 - No clear direction on span vs. frequency
 - Improve service on weekdays
 - Reduce transferring
 - Improve route directness
 - Longer stop spacing

Public Priorities



Alternative 1 – Expansion Priorities



- Maintain existing route network to minimize impacts on existing customers
- Responding to Board and Public Priorities, prioritize investment in frequency to boost convenience and ridership
- Insufficient resources are available to meaningfully expand route frequency *and* span of service

Projected Result: Improved Ridership

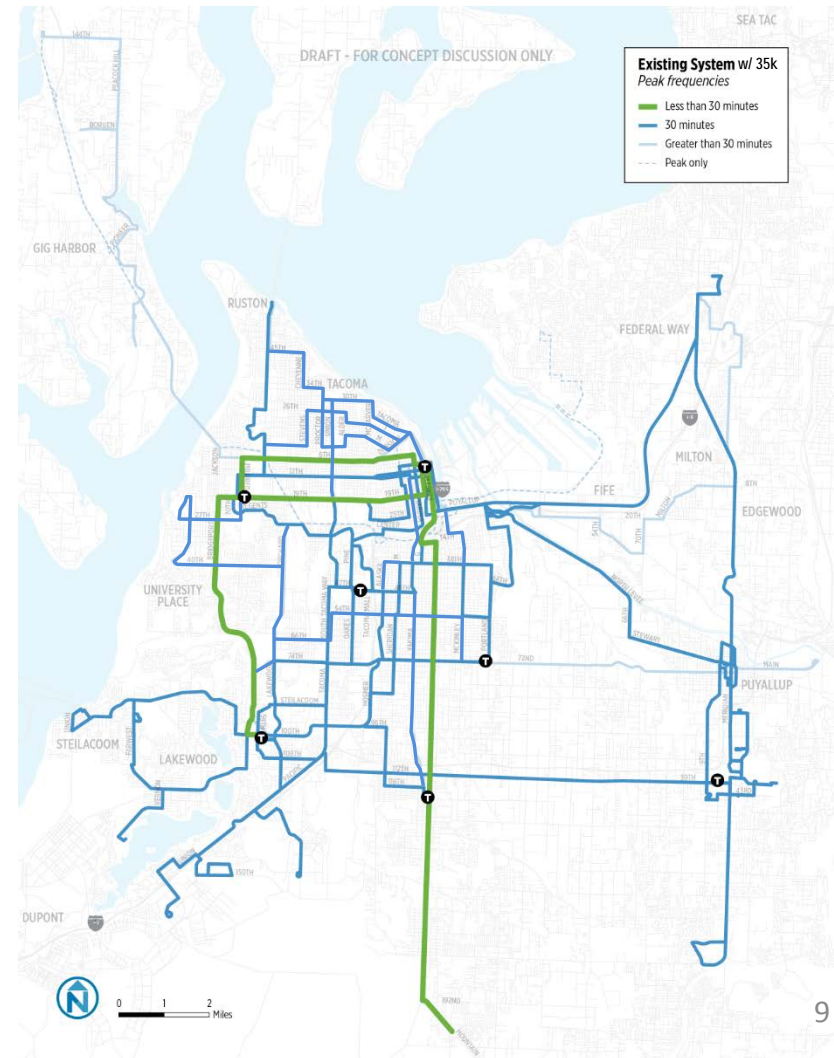
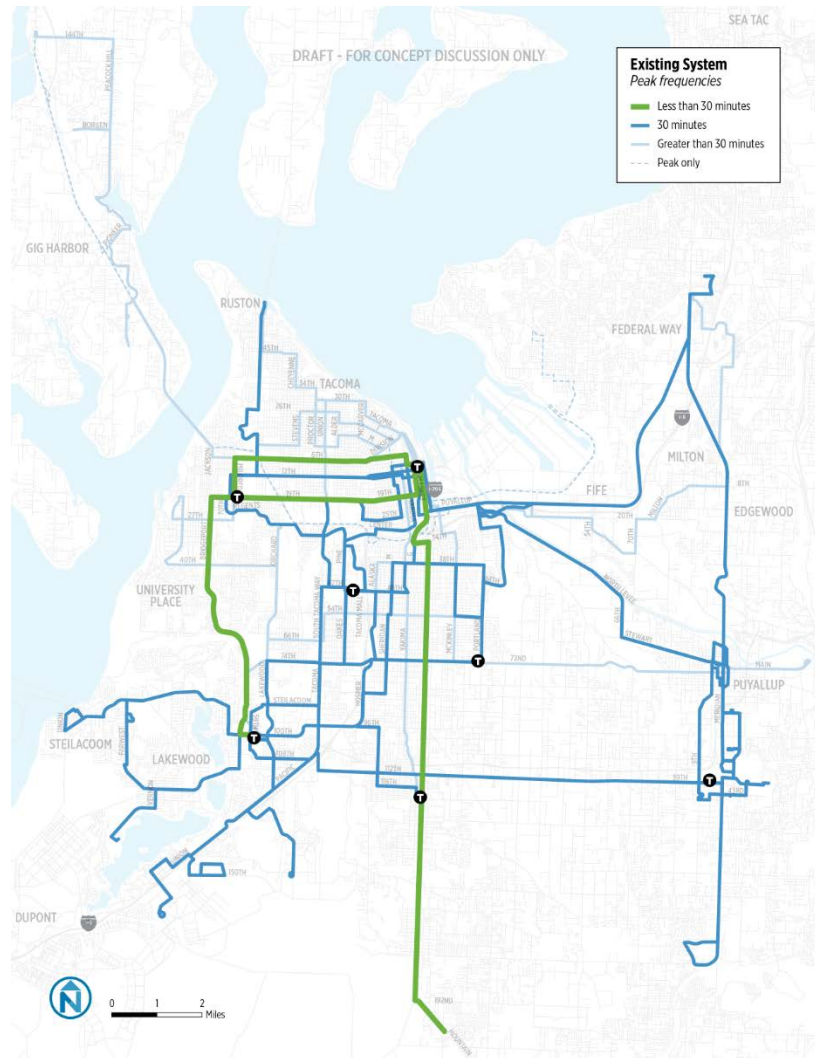
Alternative 1 – Expand Existing Network



- Add 35,000 hours to Existing Network
 - All urban routes have 30 minute weekday peak service
 - Improve midday weekday service on most urban routes
 - Urban routes without 30 minute midday service:
 - 11, 51, 53, 206
 - No routes with expanded span

Alternative 1- Expand Existing Network

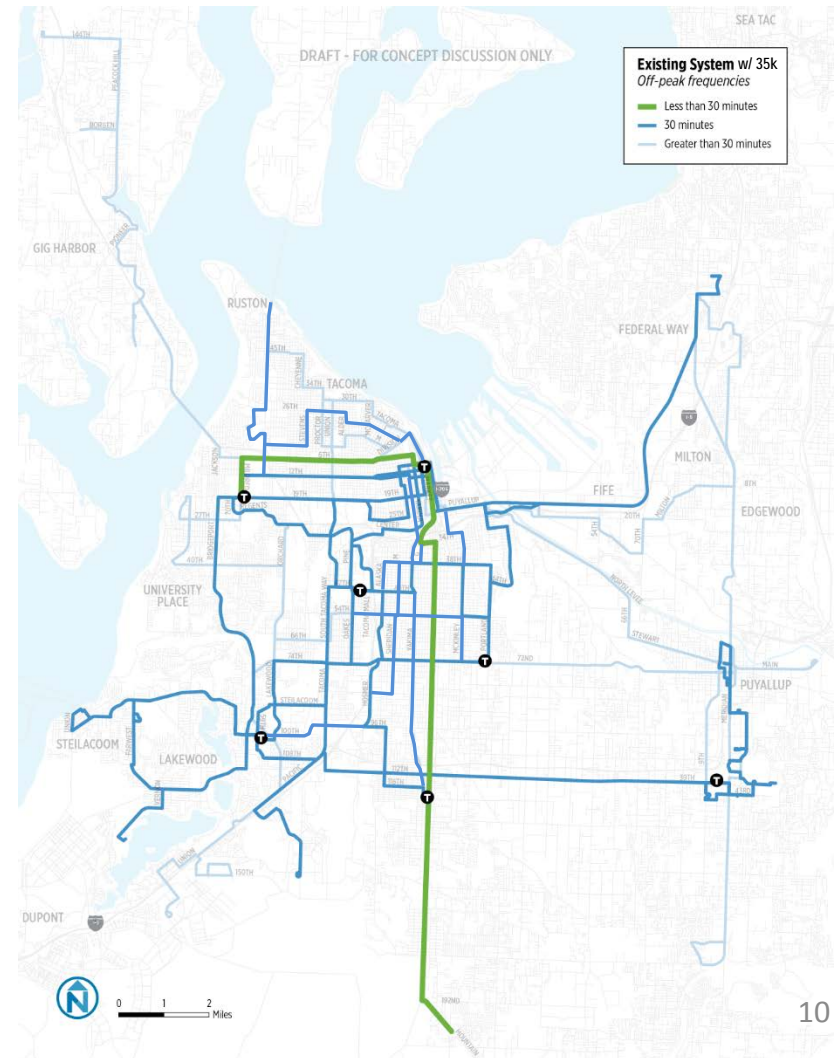
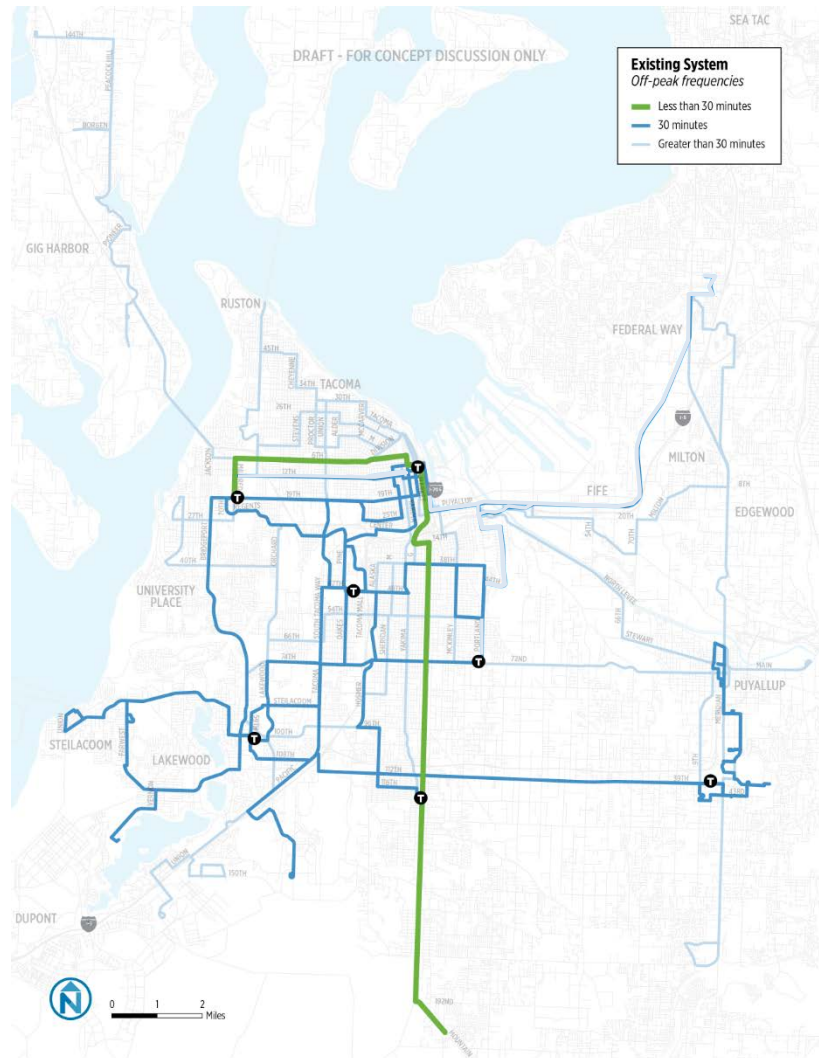
Weekday Peak Frequency Improvements



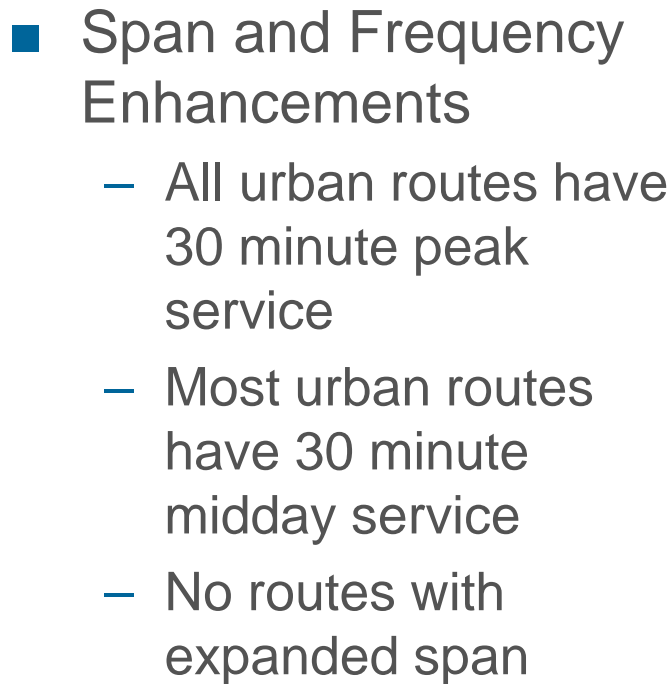
Alternative 1 – Expand Existing Network

Weekday Midday Frequency Improvements

2016
ROUTE ANALYSIS
MOVING FORWARD



Proposed System Map



Alternative 2 - Restructure Priorities



- Responding to Board and Public Priorities, invest in frequency and span of service to boost convenience and ridership
- Themes of restructuring
 - Simplify service
 - Reduce duplication
 - Improve peak and midday frequency on key routes
 - Improve access to key destinations
 - Minimize coverage losses
 - 6 routes impacted (13, 14, 51, 54, 55, 300)
 - Most will be consolidated with other routes

Projected Result: Improved Ridership
More than Alternative 1

Alternative 2 – Restructure & Added Service

Summary of Improvements

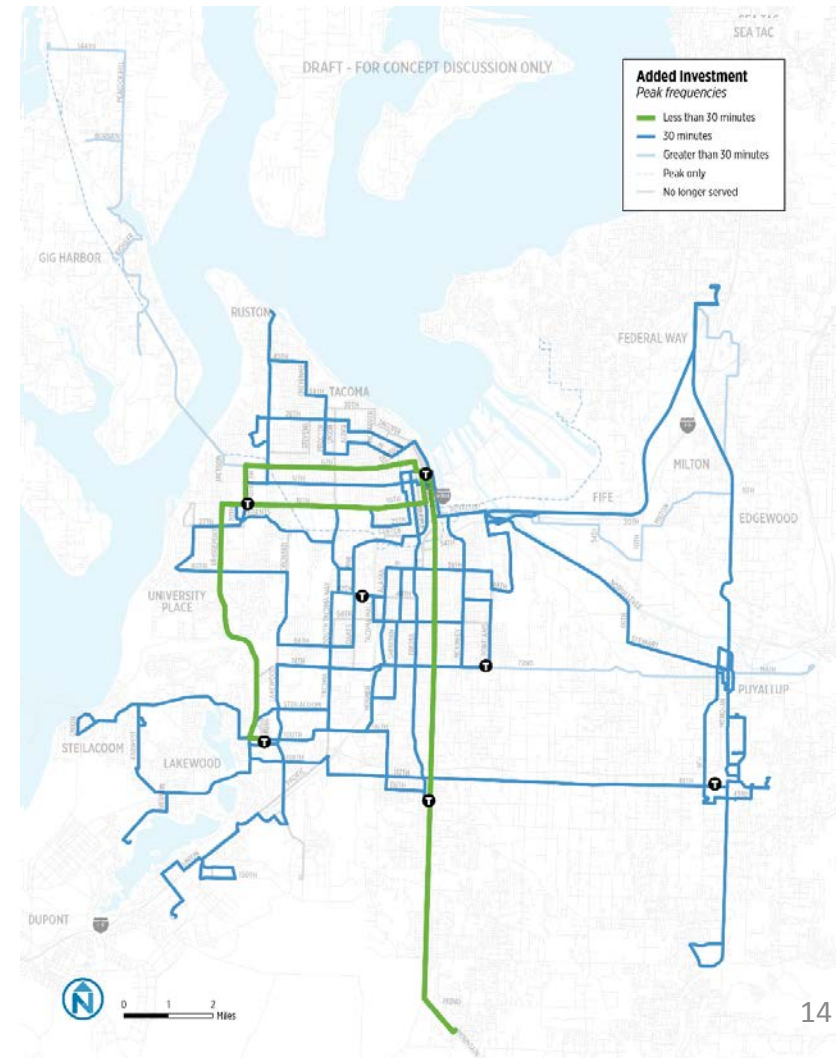
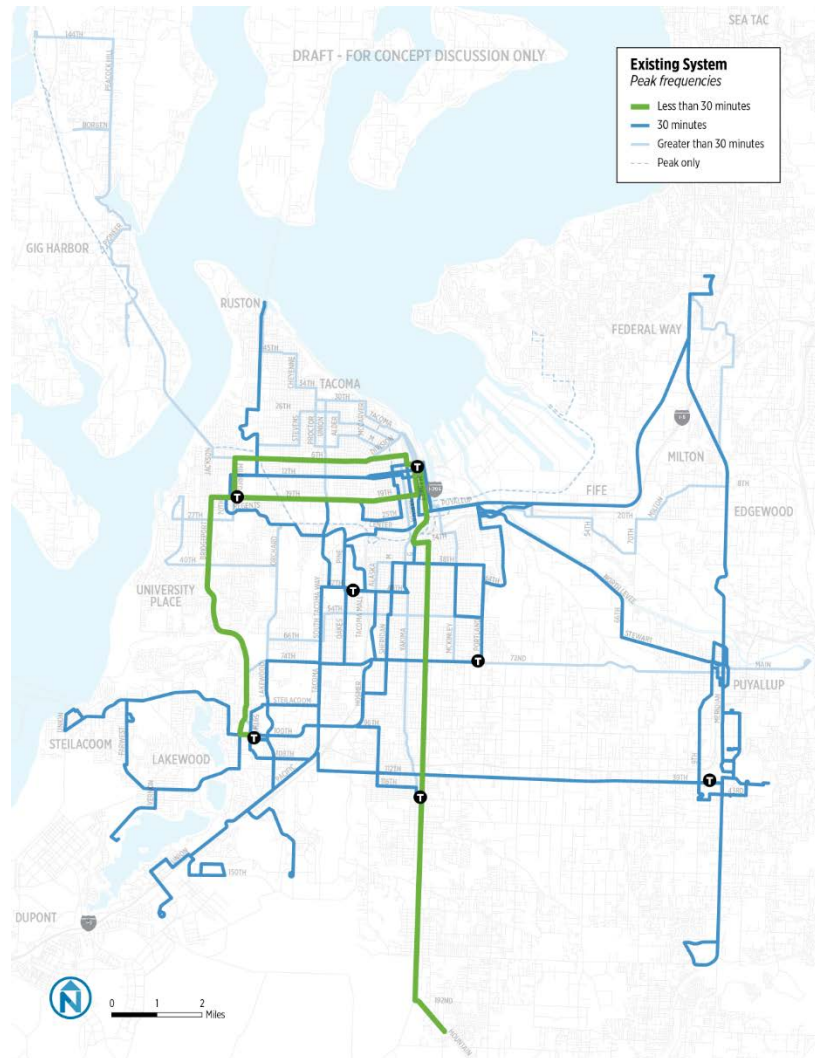


Restructured Network with 35,000 Hours

- Restructure network and add 35,000 Hours of service
 - All urban routes have 30 minute peak service
 - All urban routes have 30 minute midday service
 - Route 402 has both 30 minute midday and peak service
 - All urban routes have service to 10 p.m. and Routes 3 and 4 have expanded span

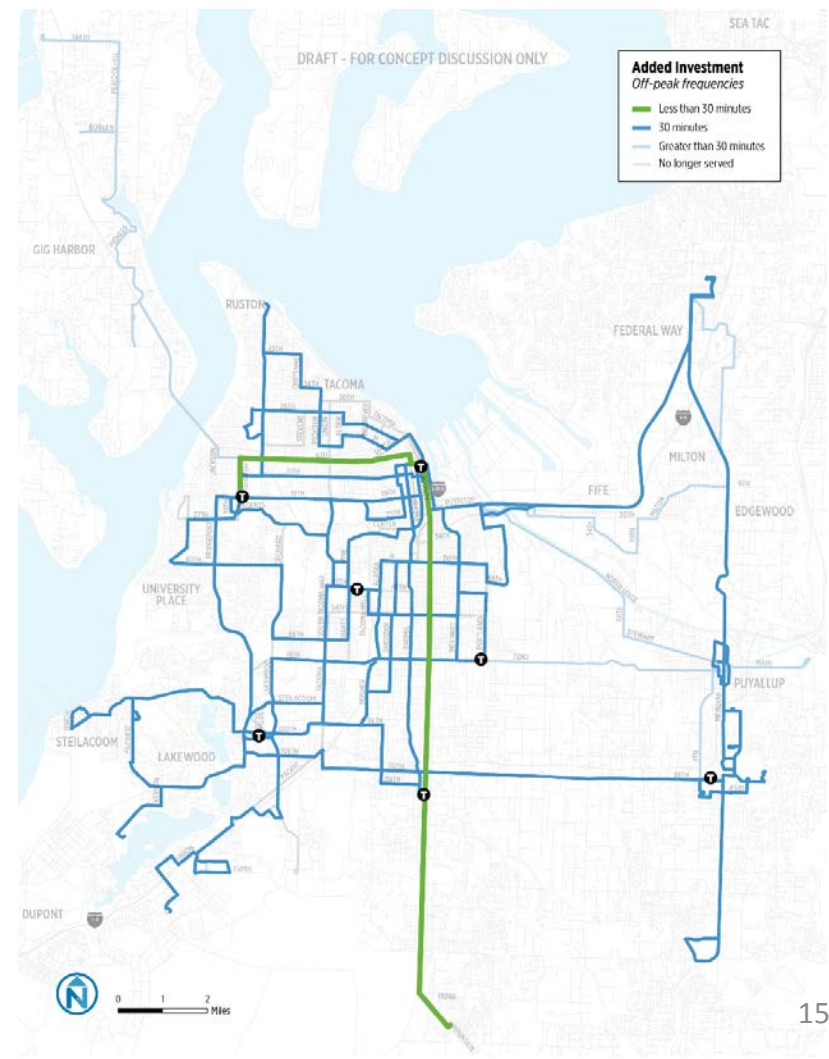
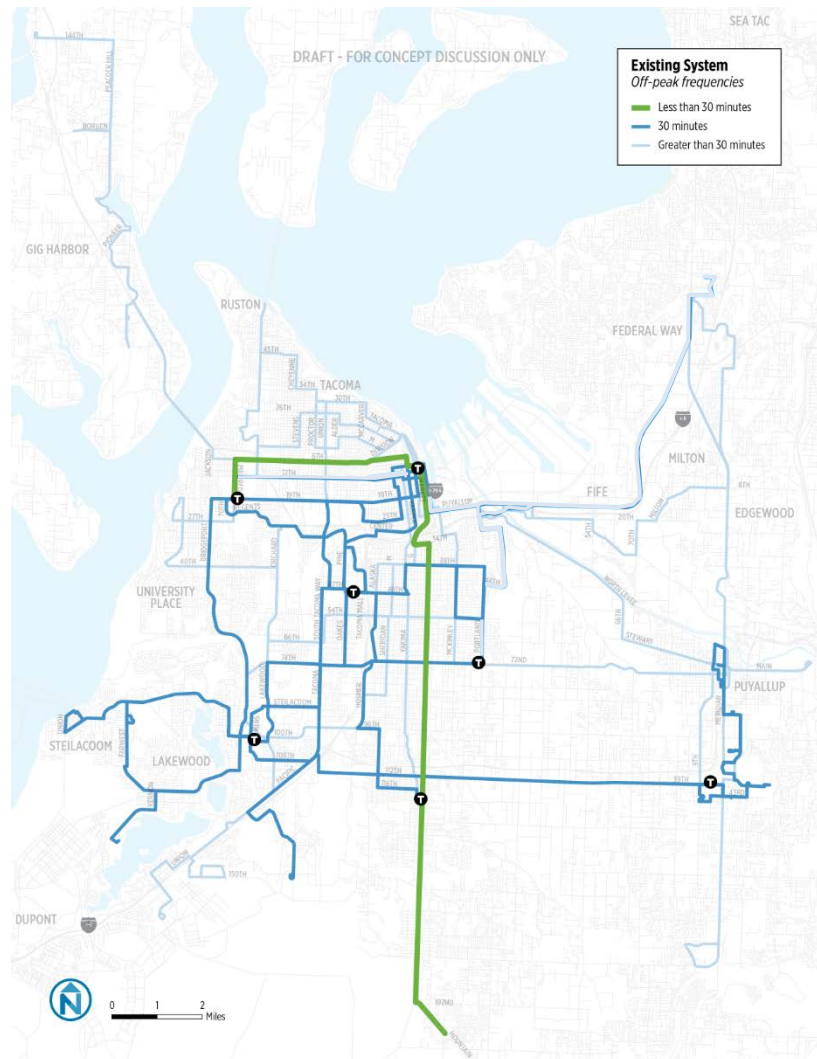
Alternative 2 – Restructure & Added Service

Weekday Peak Frequency Improvements



Alternative 2 – Restructure & Added Service

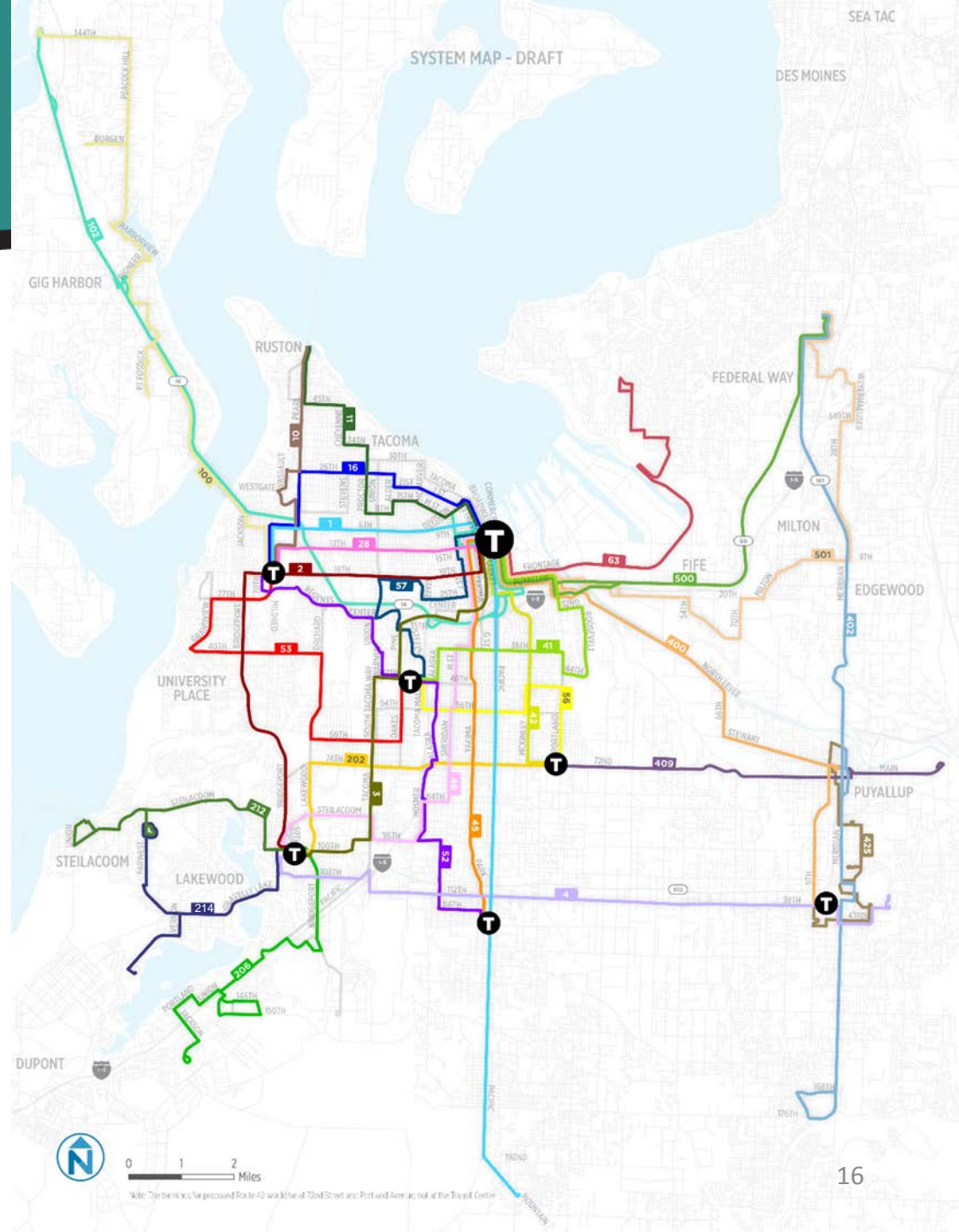
Weekday Midday Frequency Improvements



Alternative 2

Proposed System Map

- **Span and Frequency Enhancements**
 - All urban routes have 30 minute peak service
 - All urban routes have 30 minute midday service
 - Route 402 has both 30 minute midday and peak service
 - All urban routes have service to 10 p.m. and Routes 3 and 4 have expanded span

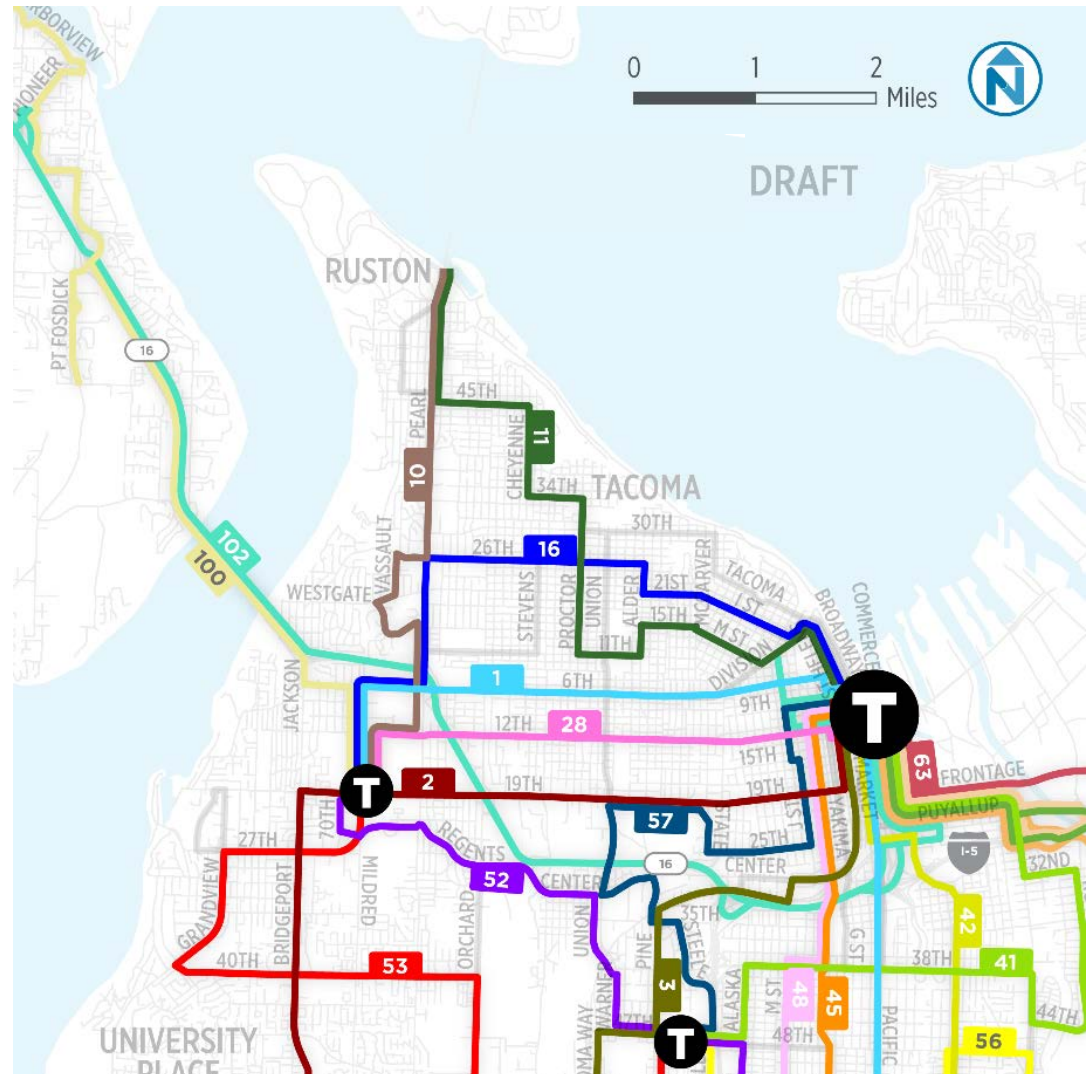


Alternative 2 – Restructure & Added Service

North Tacoma Summary



- Operate consolidated routes later and more frequently
- North Proctor and Stadium District is connected to Downtown Tacoma with 15-minute service
- Elimination of Routes 13 and 51
- Route 14 consolidated with realignment of Routes 11 and 16
- Old Town could be served by new Trolley service to Ruston

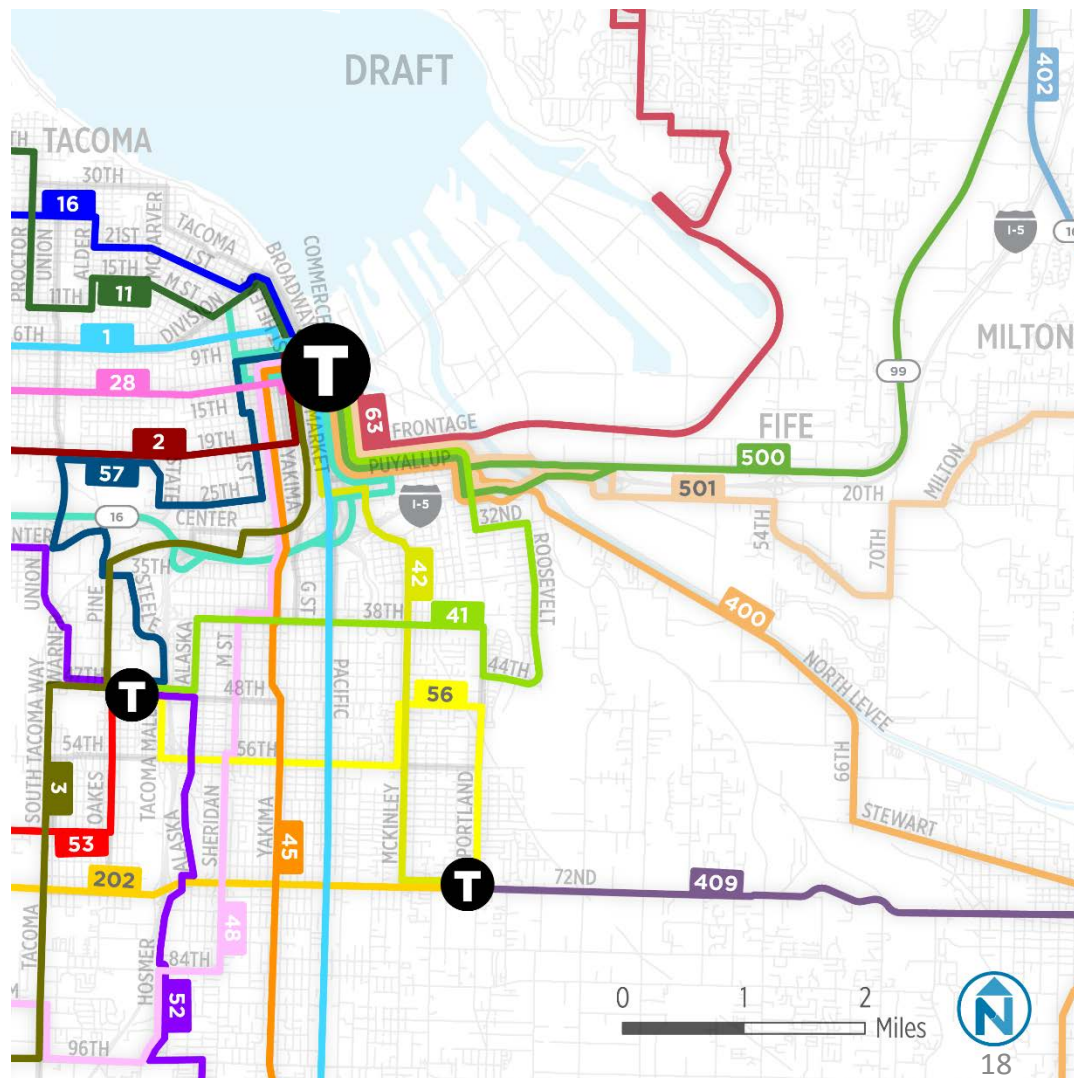


Alternative 2 – Restructure & Added Service

East Tacoma Summary



- Consolidate services and create interlined East Tacoma grid
- Operate consolidated routes later and more frequently
- Create 15-minute service corridor on Yakima between downtown Tacoma and 38th Street
- Route 54 consolidated with Route 41
- Route 55 consolidated with Route 52

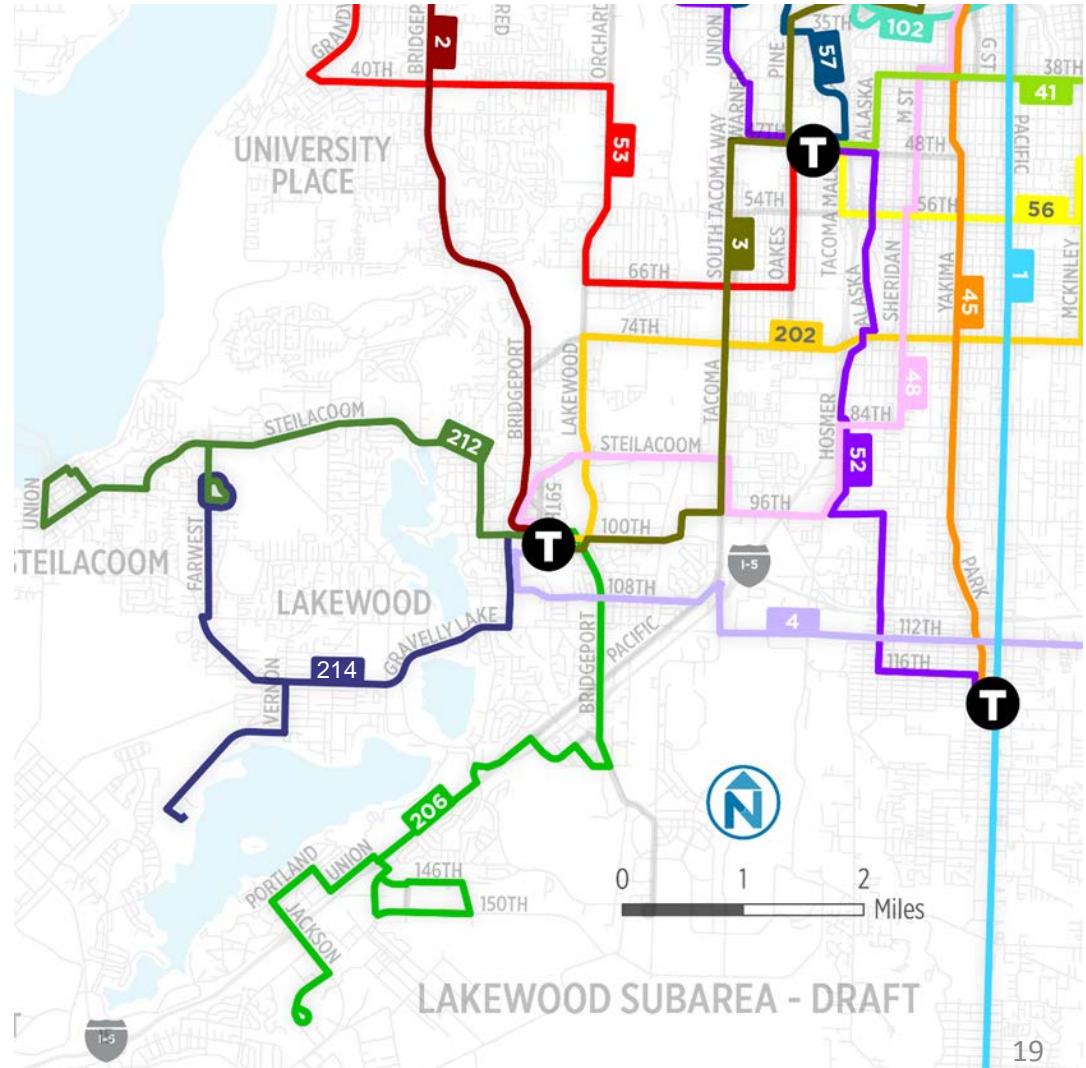


Alternative 2 – Restructure & Added Service

Lakewood Summary



- Operate routes later and more frequently
- Adjust Route 3 to serve highest potential ridership corridor between Lakewood and Tacoma
- Portions of Route 300 would be consolidated into Routes 3 and 206
- Access to North JBLM (Commissary) would be through connection with GO Transit
- Remove less utilized cross-town to North Tacoma



Comparison of Alternatives



■ Alternative 1: Expanded Existing Network

- All urban routes have 30 minute peak service
- Most urban routes have 30 minute midday service
- No routes with expanded span

Summary:

Maximizes coverage, but much of network is infrequent and without evening service

■ Alternative 2: Restructure and Added Service

- All urban routes have 30 minute peak and midday service
- Route 402 improved to 30 minute midday service
- All urban routes have service to 10 p.m.

Summary:

Some existing ridership patterns change, but most of the network operates later and more frequently

Alternative 2 is Recommended



- Better meets board and public priorities of improving frequency and span of service
- Higher potential for immediate and sustained ridership gains
- Allows for cost effective expansion of weekend frequency and span of service
- Sets table for corridor investment between Lakewood, Tacoma Mall, and downtown Tacoma

- | | |
|--|------------|
| ■ Refine Draft Recommendations | Sept / Oct |
| ■ Board Study Session | Oct. 10 |
| ■ Public Outreach | October |
| ■ Public Hearing on Pref. Alternative / Title VI | Nov. 14 |
| ■ Refinements if needed | November |
| ■ Board Adoption | Dec. 12 |
| ■ Scheduling / Permitting | December |
| ■ Schedules Finalized | Dec. 22 |
| ■ Service Implemented | March 12 |



How did we get here?

By taking your priorities into account.

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%
Provide real-time info at bus stops	Real-time bus arrival information signs would be provided to allow riders to see when the next bus is coming.	330	531	38%
Provide more direct service to downtown Tacoma	More service is added and routes are reconfigured to improve access and reduce the number of transfers to reach downtown Tacoma.	319	542	37%
Reduce travel time by removing stops	Routes have fewer stops, resulting in higher speeds and reduced travel time. Average walk distance to a transit stop would be increased.	312	549	36%
Add more bus service to rail stations	The number of bus trips to Sounder Stations for regional connectivity to Sounder trains and Sound Transit Express buses would be increased.	305	556	35%
More shelters at bus stops	More shade and shelter at bus stops improve conditions when waiting for the bus and attract new customers.	303	558	35%
Improve lighting at bus stops	Illuminated bus stops provide improved customer security and operational safety.	289	572	34%
Provide more community-based circulator service	Increase the number of local circulator services, for example the Puyallup Connector and Gig Harbor Trolley.	216	645	25%
Wi-Fi on bus	Offer free Wi-Fi internet service onboard to improve passenger experience.	199	662	23%
More benches at bus stops	More benches at bus stops improve conditions when waiting for the bus and attract new customers.	193	668	22%
Install bike racks at bus stops	Additional bike racks at stops to encourage ridership and free bike capacity on buses.	135	726	16%

Priority 1



Priority 2



Buses that come more often during weekdays was the highest priority. Buses that run earlier and later on weekdays was the second priority.

* As of 2016-08-16. Number of Build Your Own System responses = 861



We developed two alternatives. Here's what they are and how they stack up.

Alternative 1

- Route network stays the same
- Peak frequency is improved on urban routes
- Midday frequency is improved on most urban routes
- No span improvements

Route	Frequency			Weekday Span
	Peak	Midday	Evening	
1 6th Ave / Pacific Ave	15	15	30-60	4:35 AM – 11:41 PM
2 Bridgeport / S 19th St	20	20	30-60	5:45 AM – 11:11 PM
3 Lakewood/Tacoma	30	30	30-60	5:16 AM – 10:10 PM
4 112th St	30	30	30-60	6:15 AM – 9:03 PM
10 Pearl Street	30	30	60	6:13 AM – 7:06 PM
11 Pt. Defiance	30	60	-	6:23 AM – 6:38 PM
13 N 30th Street	30	60	-	5:40 AM – 5:22 PM
14 N Proctor District	30	60	60	6:00 AM – 6:51 PM
16 UPS- TCC	30	30	60	5:45 AM – 8:24 PM
28 S 12TH ST	30	30	60	6:40 AM – 8:38 PM
41 Portland Ave	30	30	60	5:10 AM – 8:34 PM
42 McKinley Ave	30	30	60	6:45 AM – 7:34 PM
45 Yakima	30	30	60	5:45 AM – 7:15 PM
48 Sheridan M St	30	30	60	5:20 AM – 9:28 PM
51 Union Ave	30	60	60	5:46 AM – 7:44 PM
52 Tac Mall Parkland	30	30	30-60	6:15 AM – 8:40 PM
53 University Place	30	60	60	6:15 AM – 8:05 PM
54 38th St	30	30	60	6:19 AM – 8:32 PM
55 Parkland Tac Mall	30	30	30-60	6:15 AM – 9:10 PM
56 56th St	30	30	60	7:15 AM – 7:07 PM
57 Tacoma Mall	30	30	60	6:05 AM – 8:35 PM
63 NE Tacoma	3 AM / 3 PM	-	-	Peak only
100 Purdy Gig Harbor TCC	60	60	60	6:38 AM – 7:31 PM
102 Gig Harbor/Tac Express	4 AM / 5 PM	-	-	Peak only
202 72nd Street	30	30	30-60	6:00 AM – 9:11 PM
206 Pacific Hwy/Ft. Lewis	30	45	45-60	5:29 AM – 9:10 PM
212 Steilacoom	30	30	60	5:30 AM – 9:03 PM
214 Washington Blvd	30	30	30-60	6:15 AM – 8:20 PM
300 S Tacoma Way	30	30	30-60	6:27 AM – 8:59 PM
400 Puyallup/ Downtown Tac	20	60	60	4:47 AM – 8:53 PM
402 Meridian/Federal Way	30	60	60	5:05 AM – 8:58 PM
409 Puyallup/72nd	60	60	60	6:45 AM – 7:37 PM
425 Puyallup Connector	30	30	-	9:15 AM – 6:39 PM
497 Lakeland Hills Connector	8 AM / 8 PM	-	-	Peak only
500 Federal Way	30	30	60	5:14 AM – 10:36 PM
501 Milton/Federal Way	60	60	60	5:57 AM – 9:10 PM

Alternative 2

- Route network is restructured to simplify service, reduce duplication, and improve frequency and span
- Peak frequency is improved on urban routes
- Midday frequency is improved on all urban routes
- All urban routes operate until 10 PM

Route	Frequency			Weekday Span
	Peak	Midday	Evening	
1 6th Ave / Pacific Ave	15	15	30-60	4:30 AM – 11:30 PM
2 Bridgeport / S 19th St	20	20	30-60	5:45 AM – 11 PM
3 Lakewood/Tacoma	30	30	30-60	5:15 AM – 10:10 PM
4 112th St	30	30	30	6:15 AM – 10 PM
10 Pearl Street	30	30	30-60	6:15 AM – 10 PM
11 Pt. Defiance	30	30	60	6:15 AM – 10 PM
16 UPS- TCC	30	30	60	5:45 AM – 10 PM
28 S 12TH ST	30	30	60	6:45 AM – 10 PM
41 Portland Ave / 38th Street	30	30	60	5:10 AM – 10 PM
42 McKinley Ave	30	30	60	5:30 AM – 10 PM
45 Yakima	30	30	60	5:45 AM – 10 PM
48 Sheridan M St	30	30	60	5:20 AM – 10 PM
52 TCC Tac Mall Parkland	30	30	30-60	6:15 AM – 10 PM
53 University Place	30	30	60	6:15 AM – 10 PM
56 56th St	30	30	60	6 AM – 10 PM
57 Tacoma Mall	30	30	60	5:30 AM – 10 PM
63 NE Tacoma	3 AM / 3 PM	-	-	Peak only
100 Purdy Gig Harbor TCC	60	60	60	6:45 AM – 7:30 PM
102 Gig Harbor/Tacoma Exp	4 AM / 5 PM	-	-	Peak only
202 72nd Street	30	30	30-60	6 AM – 10 PM
206 Pacific Hwy/Ft. Lewis	30	30	30-60	5:30 AM – 10 PM
212 Steilacoom	30	30	60	5:30 AM – 10 PM
214 Washington	30	30	30-60	6:15 AM – 10 PM
400 Puyallup/Tacoma	20	60	60	4:45 AM – 9 PM
402 Meridian/Federal Way	30	30	60	5 AM – 9 PM
409 Puyallup/72nd	60	60	60	6:45 AM – 7:15 PM
425 Puyallup Connector	30	30	-	9:15 AM – 6:30 PM
497 Lakeland Hill Connector	8 AM / 8 PM	-	-	Peak only
500 Federal Way	30	30	60	5:15 AM – 11 PM
501 Milton/Federal Way	60	60	60	6 AM – 9 PM

30

Improvement

Blue cells represent an improvement in service

2016

ROUTE ANALYSIS

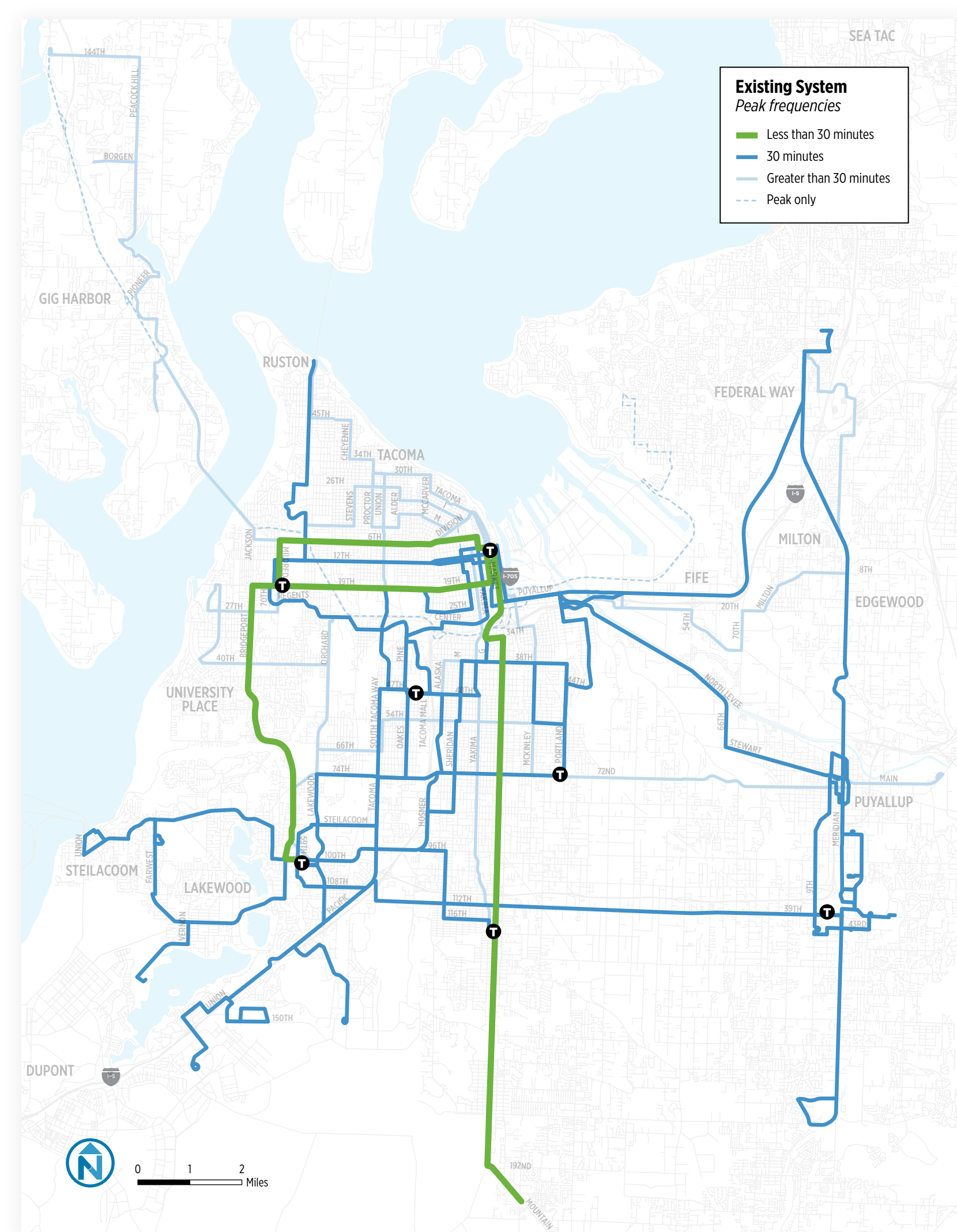
MOVING FORWARD



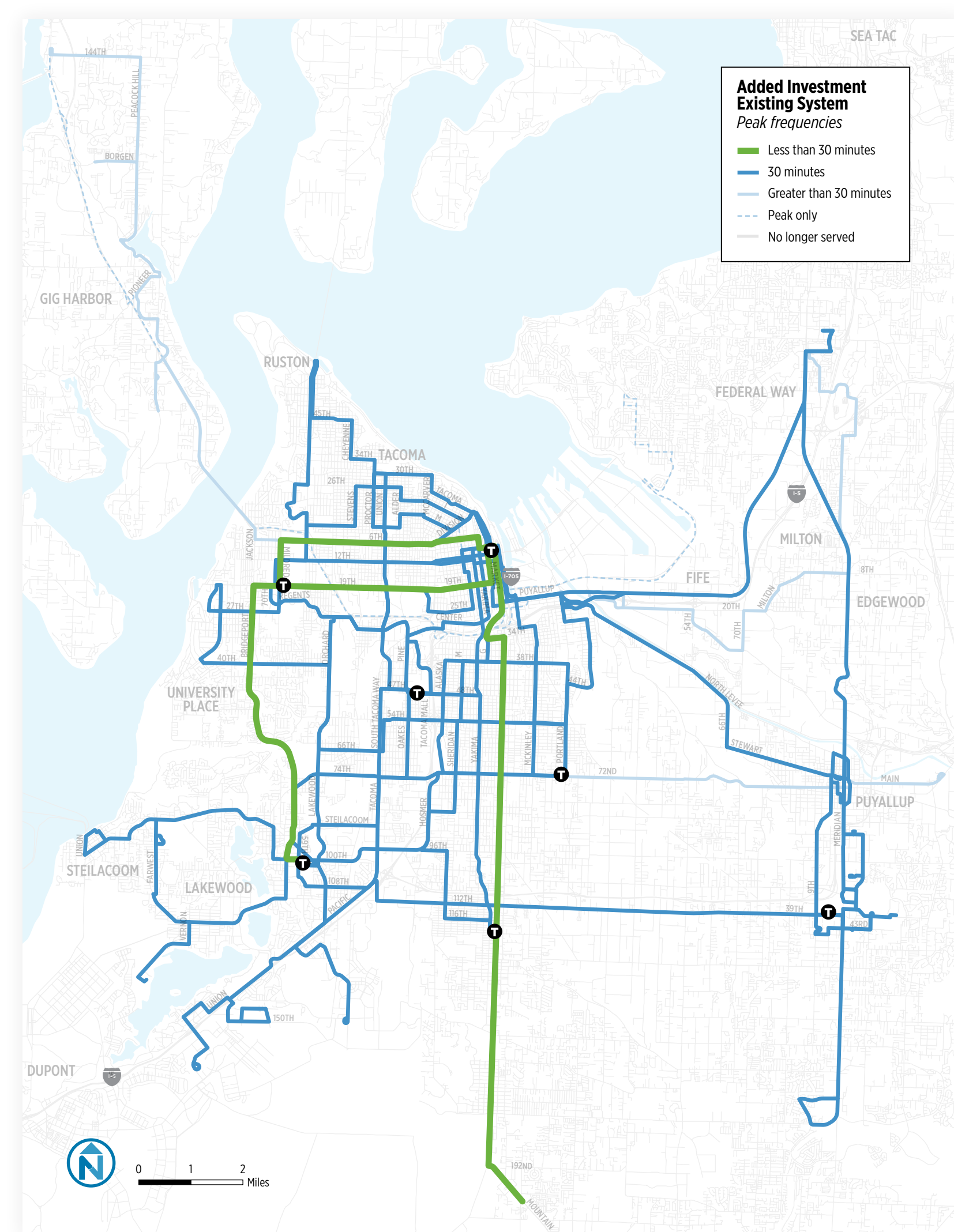
How often does the bus come on weekdays?

Peak

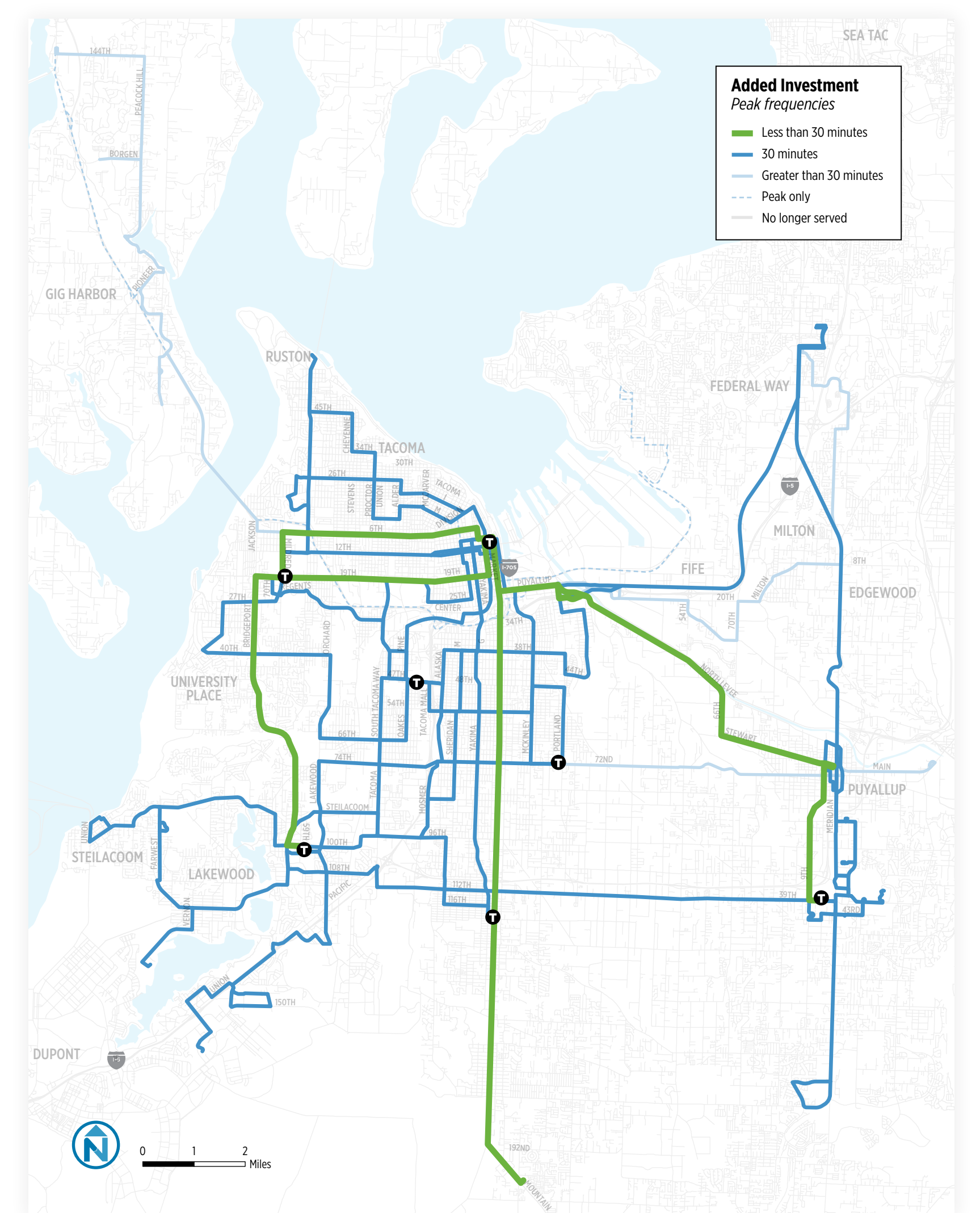
Existing System



Alternative 1

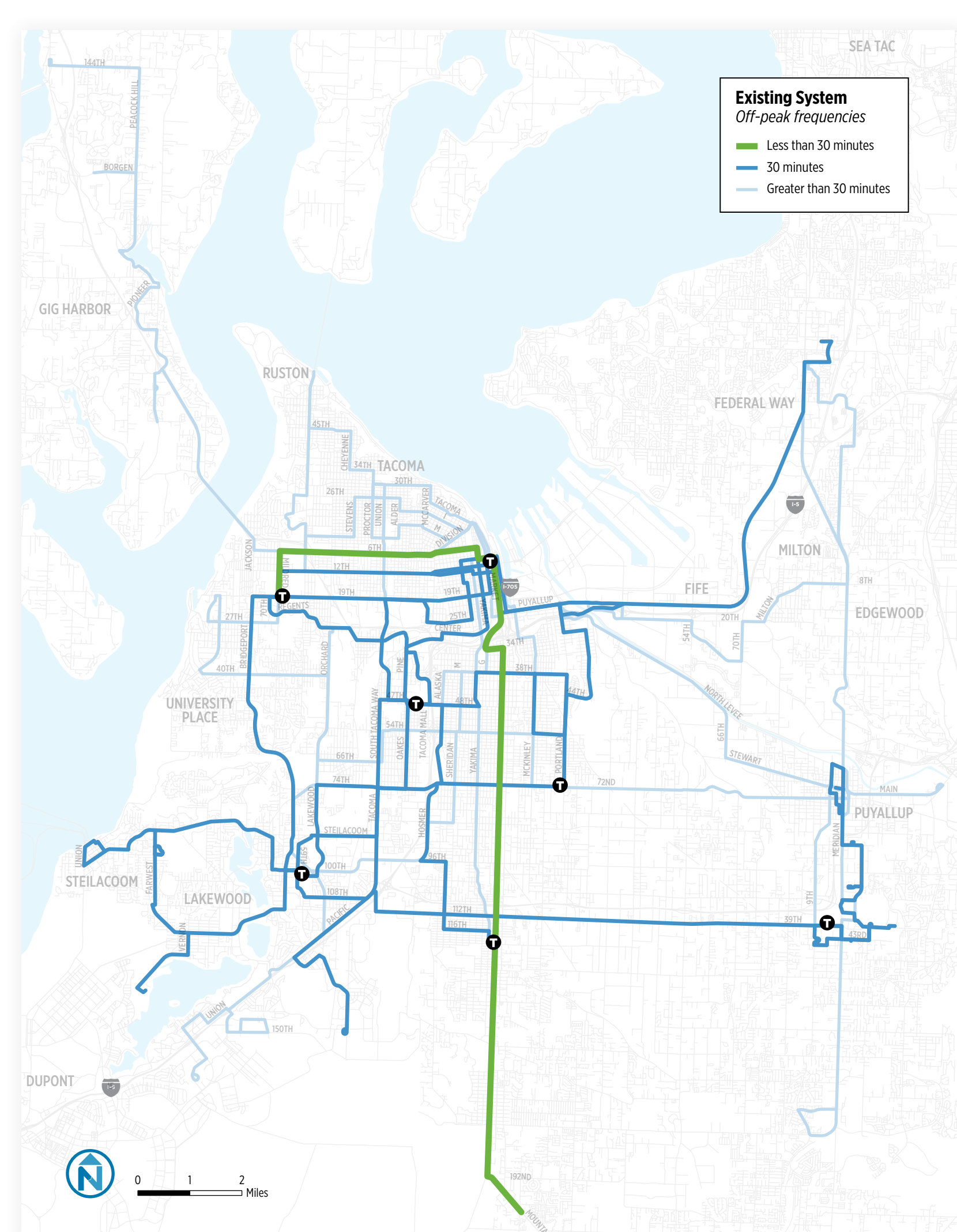


Alternative 2

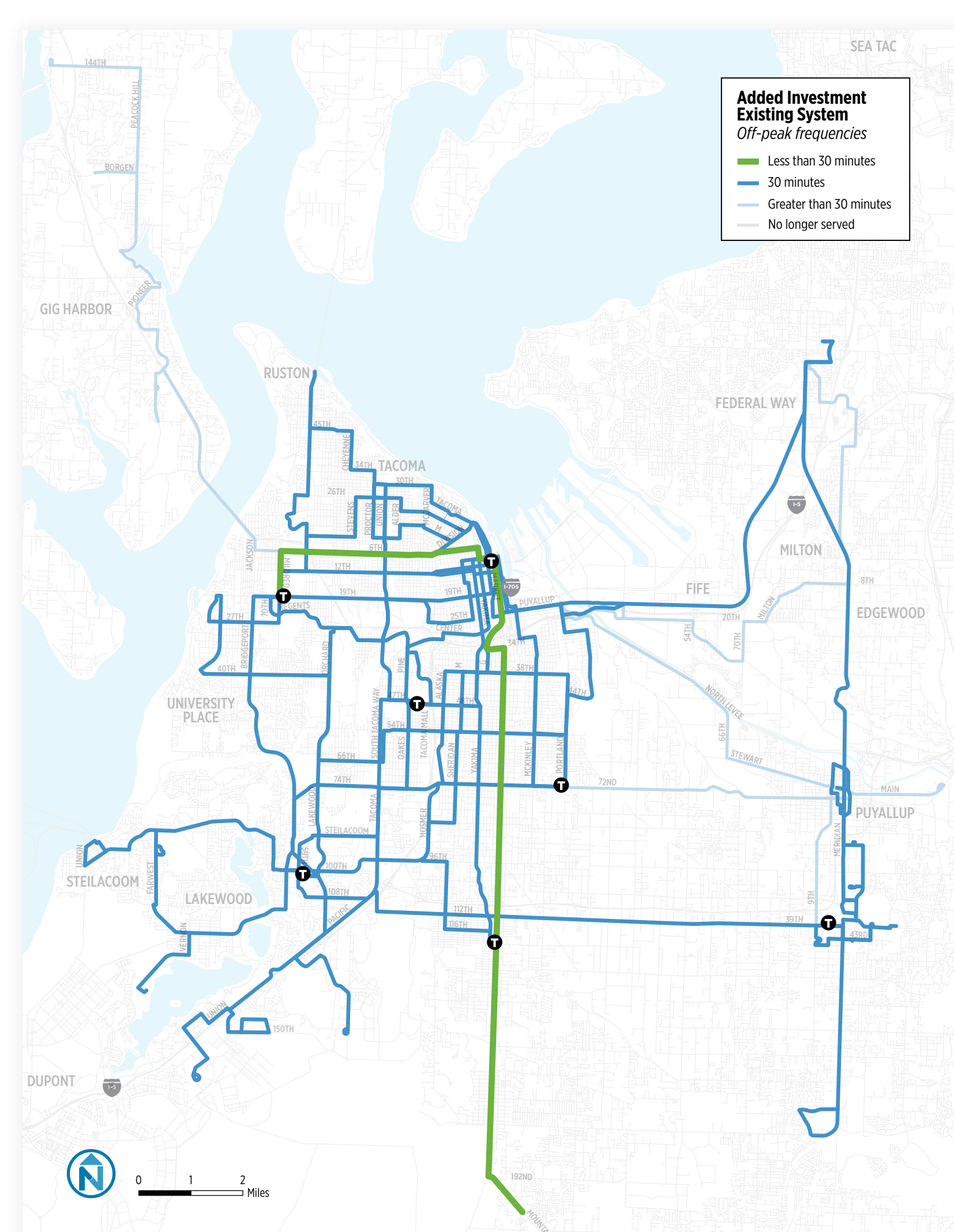


Midday

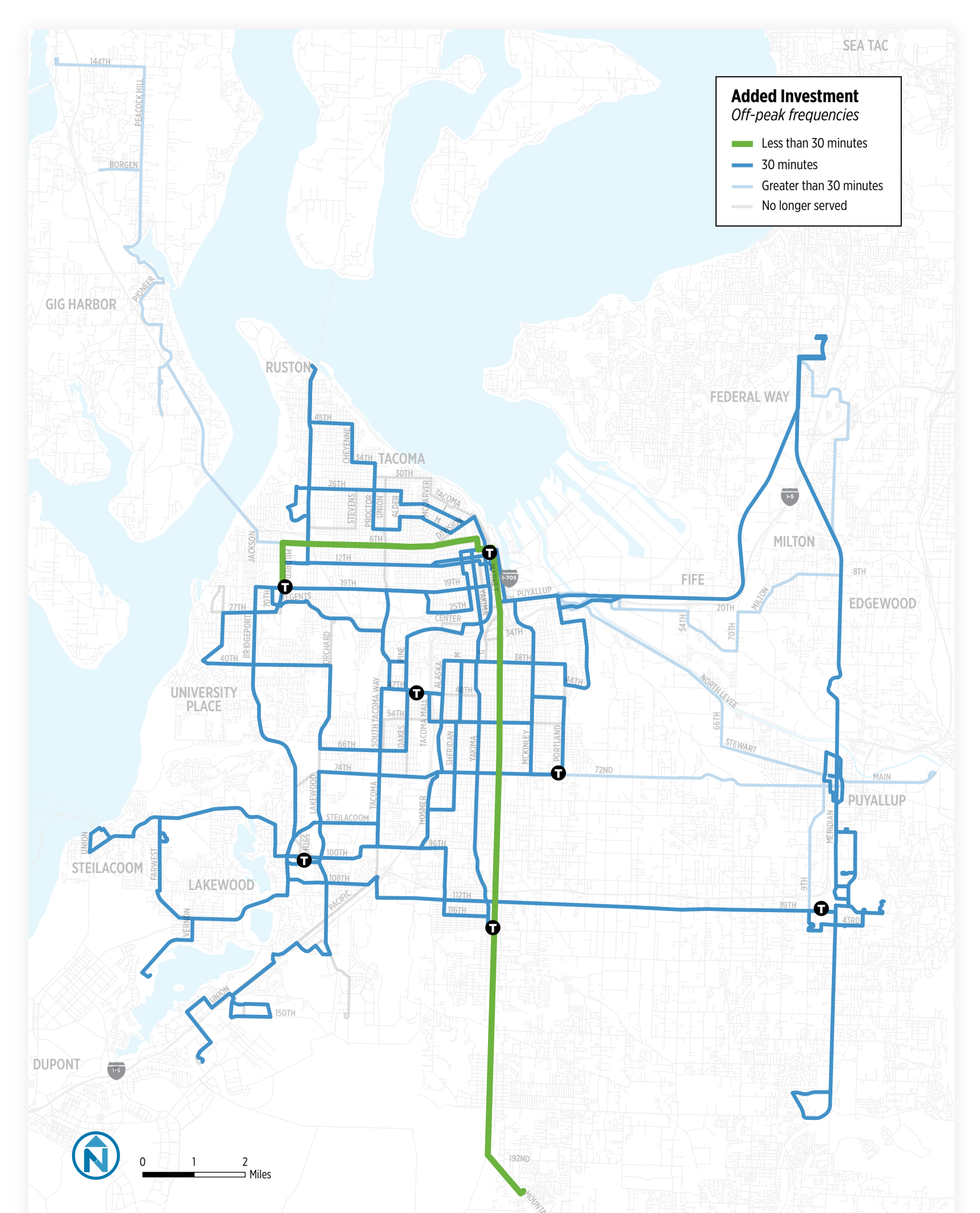
Existing System



Alternative 1



Alternative 2



2016

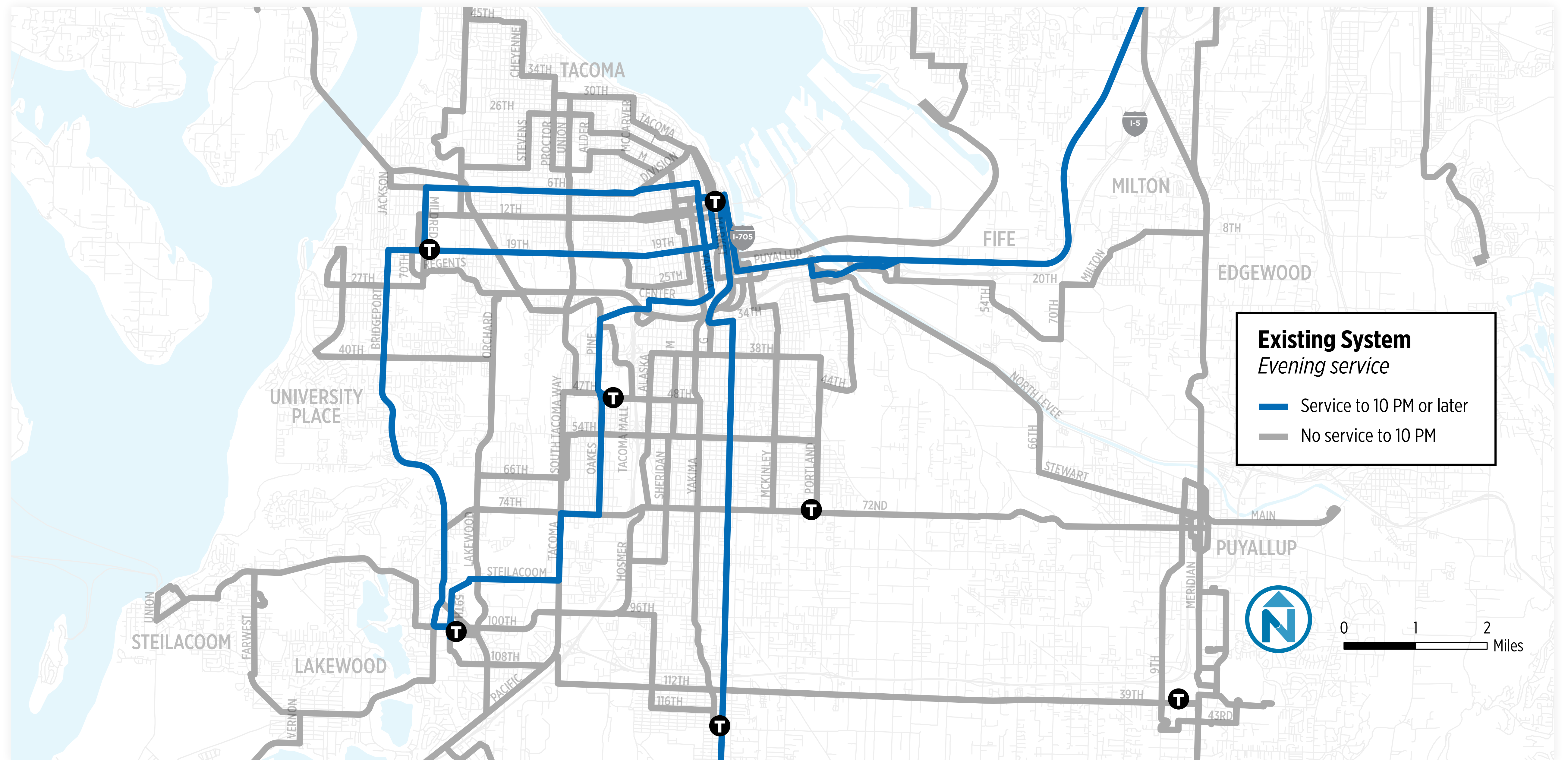
ROUTE ANALYSIS

MOVING FORWARD

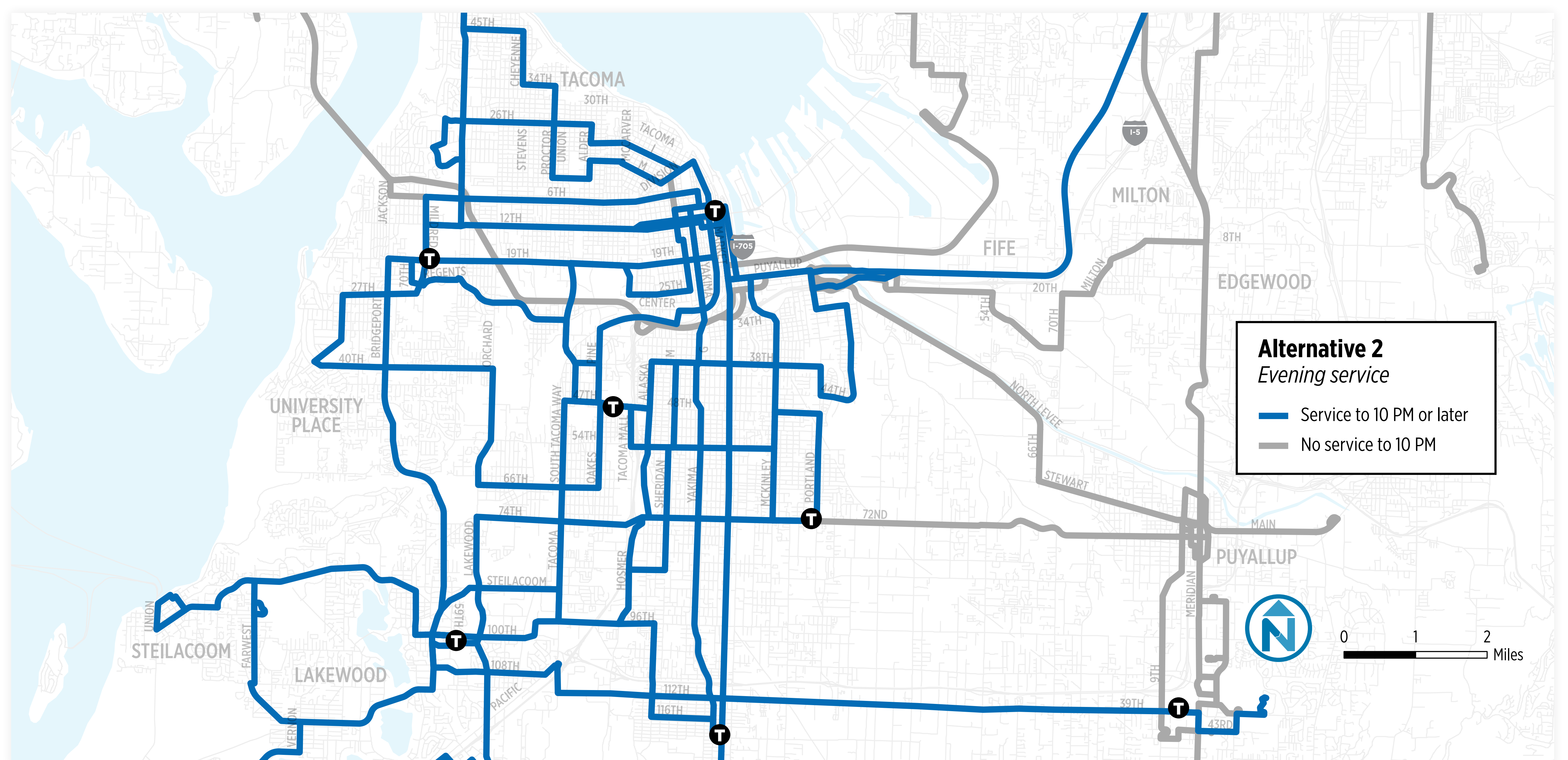


Which buses run until 10 PM or later?

Existing System and Alternative 1



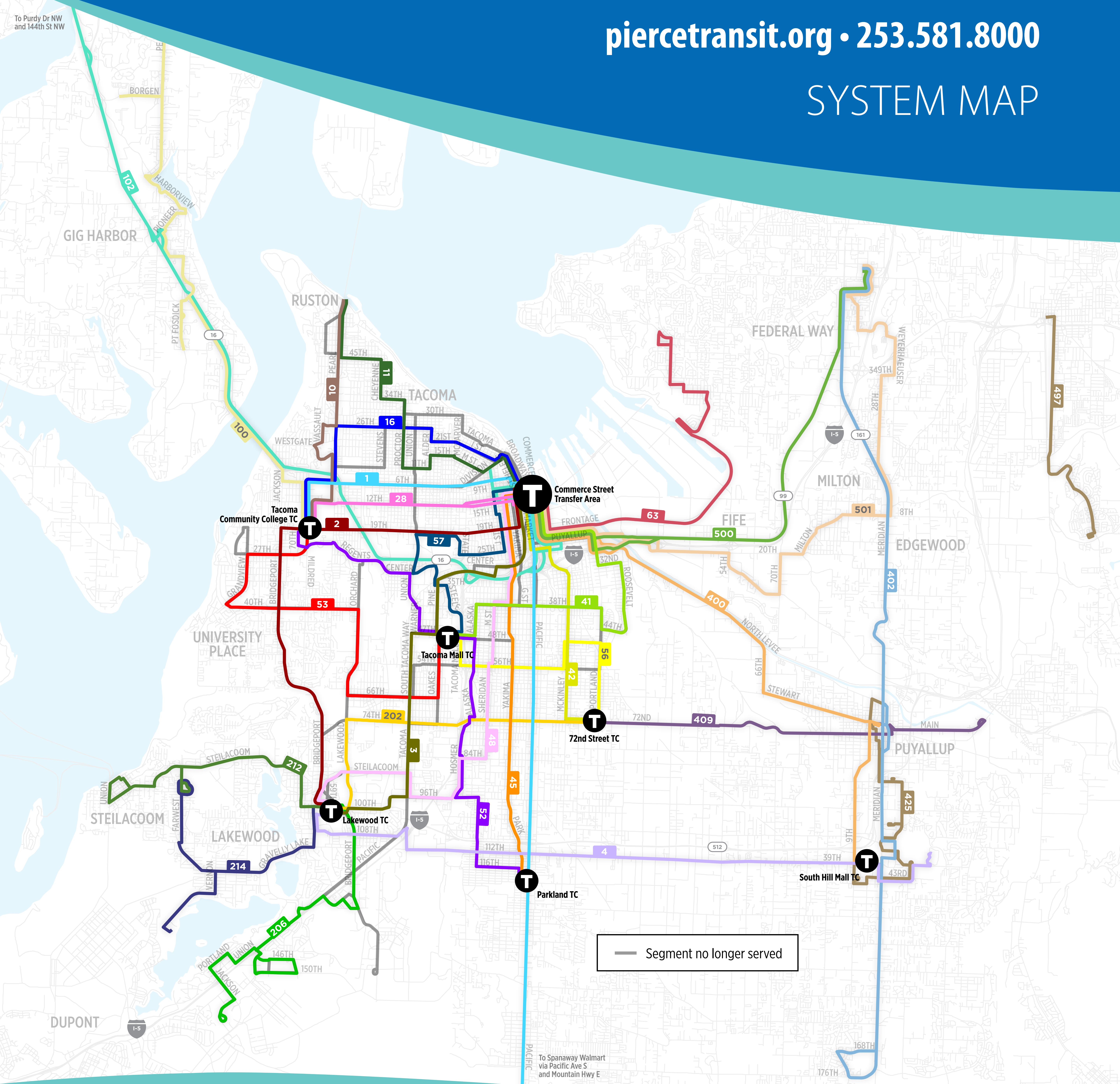
Alternative 2



Pierce Transit Alternative 2

piercetransit.org • 253.581.8000

SYSTEM MAP



Alternative 2 under consideration

Pierce Transit Alternative 2

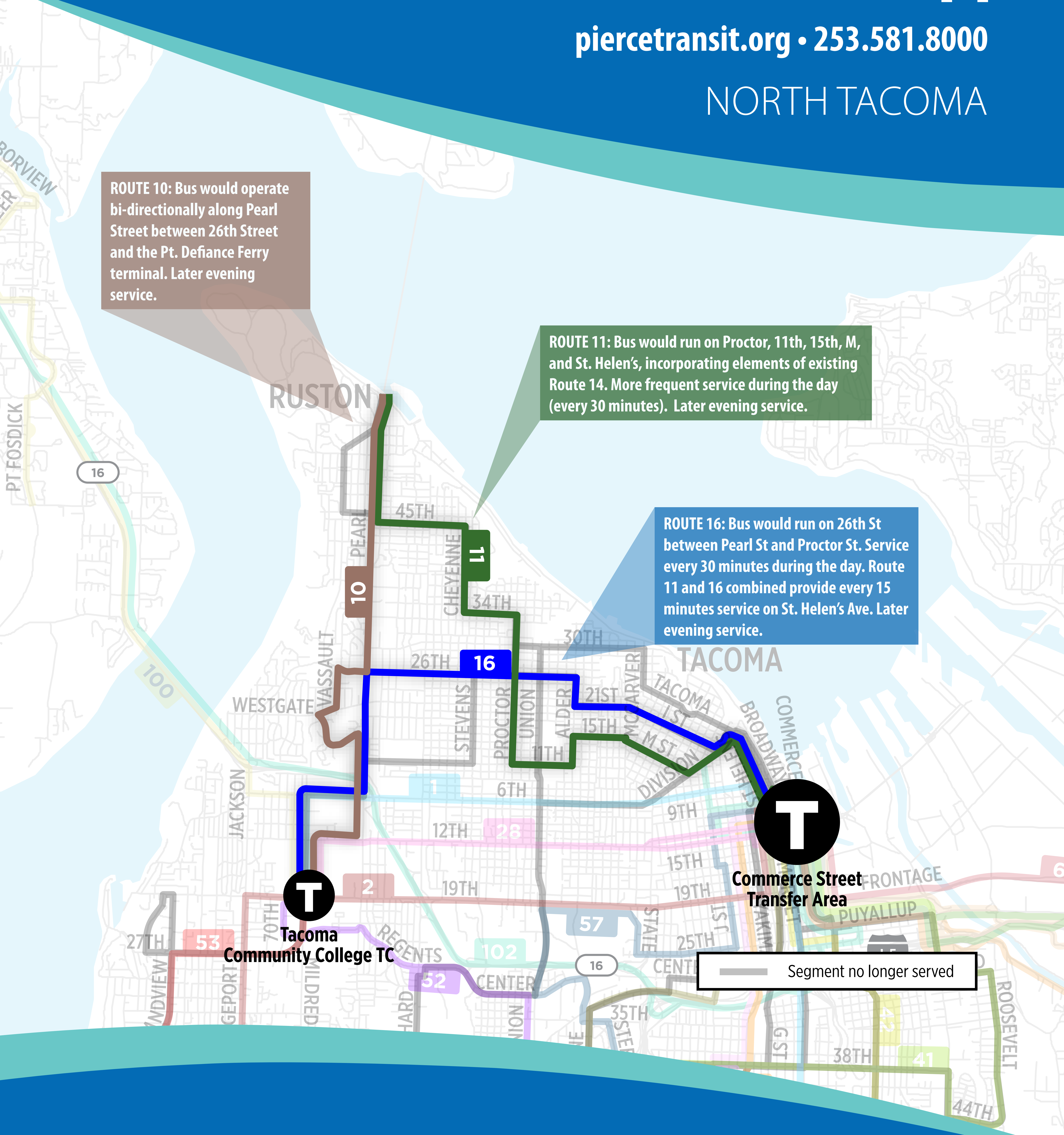
piercetransit.org • 253.581.8000

NORTH TACOMA

ROUTE 10: Bus would operate bi-directionally along Pearl Street between 26th Street and the Pt. Defiance Ferry terminal. Later evening service.

ROUTE 11: Bus would run on Proctor, 11th, 15th, M, and St. Helen's, incorporating elements of existing Route 14. More frequent service during the day (every 30 minutes). Later evening service.

ROUTE 16: Bus would run on 26th St between Pearl St and Proctor St. Service every 30 minutes during the day. Route 11 and 16 combined provide every 15 minutes service on St. Helen's Ave. Later evening service.



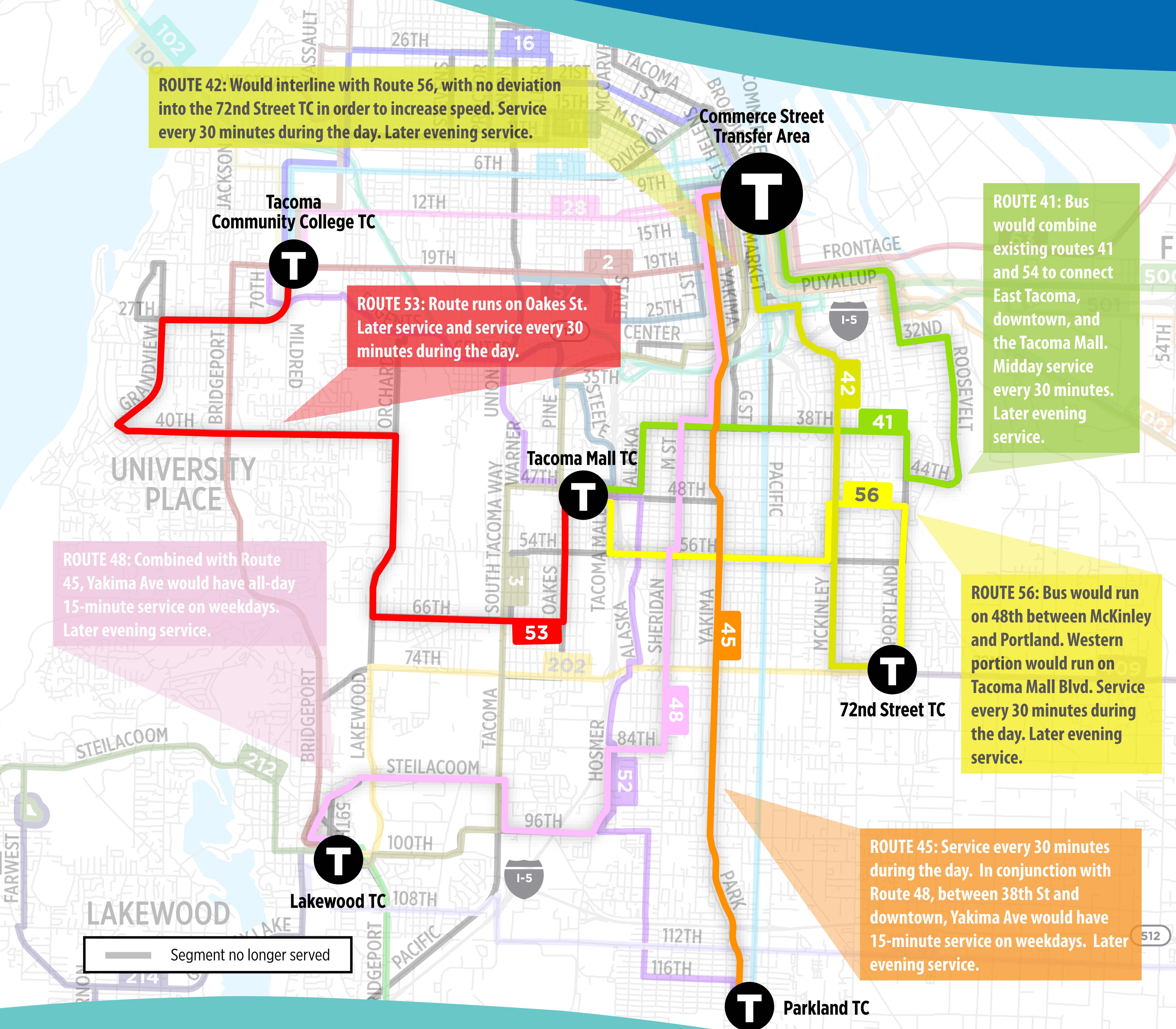
Alternative 2 under consideration

Pierce Transit Alternative 2



piercetransit.org • 253.581.8000

EAST TACOMA



Alternative 2 under consideration

Pierce Transit Alternative 2

piercetransit.org • 253.581.8000

LAKEWOOD

Segment no longer served

Route 3: Bus would run on Jefferson Ave and Pacific Ave downtown; and M St between Center and S Tacoma Way. Route would no longer serve Tacoma Mall TC, but stops on Pine would serve the mall. Route 3 would replace current Route 300 by serving S Tacoma Way rather than Oakes; and Route 48 by serving 96th St/100th St in Lakewood. Later evening service.

ROUTE 206: Bus would deviate into the Springbrook neighborhood via Bridgeport Way. More frequent service during the day (every 30 minutes). Later evening service.

Route 48: In conjunction with Route 45, Yakima Ave would have 15-minute service on weekdays between 38th St and downtown. Route 48 would operate on Steilacoom Blvd west of S Tacoma Way. Later evening service.

Alternative 2 under consideration