



**PIERCE TRANSIT  
BOARD OF COMMISSIONERS AND  
COMMUNITY TRANSPORTATION ADVISORY GROUP  
SPECIAL JOINT MEETING AGENDA**

**Pierce Transit Training Center, Rainier Room  
3720 96th Street SW, Lakewood, Washington**

**October 10, 2016, 3:00 PM**

**The Regular Board Meeting will be held subsequent to this meeting at 4:00 PM.**

**CALL TO ORDER**

**ROLL CALL**

**INTRODUCTIONS**

**DISCUSSION**

1. Comprehensive Route Analysis and Restructure  
Alternatives

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Consultant with Nelson Nygaard

**ADJOURNMENT**



# **Pierce Transit Comprehensive Local Fixed-Route Analysis**

## **Draft Service Restructure Alternatives**

**October 2016**



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# 1 INTRODUCTION

Pierce Transit will invest approximately 35,000 additional service hours into their fixed route system for calendar year 2017. There are two primary approaches that Pierce Transit can invest these resources.

The first is to add service back to the existing network. From an implementation and a messaging standpoint, this is the easiest path. The ridership growth results of this investment strategy are also relatively easy to predict, as historic ridership patterns are an indicator of the potential level of success.

An alternative strategy is to restructure service to better reflect changing travel patterns. Restructured service, along with the investment of additional hours, may allow Pierce Transit to improve service levels that appeal to a larger audience and more rapidly grow system ridership.

This document shows the two draft alternatives being considered as part of the 2017 service changes:

- **Alternative 1:** Existing system (baseline) + 35,000 service hours
- **Alternative 2:** Existing system restructure + 35,000 service hours

## INVESTMENT PRIORITIES

The public process, stakeholder discussions, and board outreach had a common theme of desired improvements. Improved route frequency and expanded span of service were the two most desired improvements. The Board also strongly indicated a desire to improve ridership levels. Improved frequencies generally lead to bigger ridership gains than expanded span of service. As a result, four different investment priorities were developed, which were applied to either expansion scenario. They are as follows:

1. Upgrade urban routes to 30-minute weekday peak frequency
2. Upgrade urban routes to 30-minute weekday midday frequency
3. Extend weekday urban route spans to 10 p.m.
4. Extend urban route Saturday span to 10 p.m.

## 2 ALTERNATIVE 1: UPGRADE EXISTING NETWORK

This section focuses on the recommendations to add back service to Pierce Transit's existing service network. The top priorities for additional investment are ensuring that all urban routes have 30-minute peak service and then every urban route having 30-minute midday service.

None of the routes are recommended for re-alignment in Alternative 1.

### IMPROVING PEAK SERVICE LEVELS TO EVERY 30 MINUTES

All urban routes that operate at 60-minute peak frequencies should be upgraded to 30-minute peak service. This recommendation improves service on 11 routes, including:

- Route 10
- Route 11
- Route 13
- Route 14
- Route 16
- Route 42
- Route 45
- Route 51
- Route 53
- Route 56
- Route 206

Six of the routes slated for improvement serve North Tacoma.

### IMPROVING MIDDAY SERVICE LEVELS TO EVERY 30 MINUTES

All urban routes that operate at 60-minute midday frequencies should be upgraded to 30-minute peak service. However, if peak service is upgraded to every 30-minutes for 11 routes, insufficient resources are available to upgrade all routes that are currently at 60-minute midday service. The existing midday ridership levels were examined and routes with higher ridership levels were prioritized. This recommendation improves service on 9 routes, including:

- Route 10
- Route 16
- Route 28
- Route 41
- Route 42
- Route 45
- Route 48
- Route 56
- Route 500

## SUMMARY OF ALTERNATIVE 1 IMPROVEMENTS

The addition of 35k annual service hours allows for frequency improvements for thirteen routes. All urban routes (Routes 1-57) would have peak frequencies of 30-minutes or better. The highest midday ridership routes would also be improved to frequencies of 30-minutes or better. Improvements to route frequency and/or span are shown in bold.

No weekday evening or any weekend improvements in span or frequency are recommended in Alternative 1.

**Figure 1 Alternative 1 Proposed Weekday Span and Frequency Improvements**

Route	Peak Frequency	Midday Frequency	Evening Frequency	Weekday Span
1 6 <sup>th</sup> Ave / Pacific Ave	15	15	30-60	Service Until 11:40 PM
2 Bridgeport / S 19th St	20	20	30-60	Service Until 11 PM
3 Lakewood/Tacoma	30	30	30-60	Service until 10 PM
4 112th St	30	30	30-60	Service until 9 PM
10 Pearl Street	30	<b>30</b>	60	Service until 7 PM
11 Pt. Defiance	<b>30</b>	60	-	Service until 6:30 PM
13 N 30th Street	<b>30</b>	60	-	Service until 5:30 PM
14 N Proctor District	<b>30</b>	60	60	Service until 7:00 PM
16 UPS- TCC	<b>30</b>	<b>30</b>	60	Service until 8:30 PM
28 S 12TH ST	30	<b>30</b>	60	Service until 8:30 PM
41 Portland Ave	30	<b>30</b>	60	Service until 8:30 PM
42 McKinley Ave	<b>30</b>	<b>30</b>	60	Service until 7:30 PM
45 Yakima	<b>30</b>	<b>30</b>	60	Service until 7:15 PM
48 Sheridan M St	30	<b>30</b>	60	Service until 9:30 PM
51 Union Ave	<b>30</b>	60	60	Service until 7:45 PM
52 Tac Mall Parkland	30	30	30-60	Service until 8:45 PM
53 University Place	<b>30</b>	60	60	Service until 8 PM
54 38th St	30	30	60	Service until 8:30 PM
55 Parkland Tac Mall	30	30	30-60	Service until 9 PM
56 56th St	<b>30</b>	<b>30</b>	60	Service until 7 PM
57 Tacoma Mall	30	30	60	Service until 8:30 PM
63 NE Tacoma	3 AM / 3 PM trips	-	-	Peak only
100 Purdy Gig Harbor TCC	60	60	60	Service until 7:30 PM
102 Gig Harbor/T. Express	4 AM / 5 PM trips	-	-	Peak only
202 72nd Street	30	30	30-60	Service until 9 PM
206 Pacific Hwy/Ft. Lewis	<b>30</b>	45	45-60	Service until 9 PM



**Comprehensive Local Fixed-Route Analysis | Service Improvement Summaries**  
Pierce Transit

Route	Peak Frequency	Midday Frequency	Evening Frequency	Weekday Span
212 Steilacoom	30	30	60	Service until 9 PM
214 Washington	30	30	30-60	Service until 8:30 PM
300 S Tacoma Way	30	30	30-60	Service until 9 PM
400 Puyallup/ Downtown T.	20	60	60	Service until 9 PM
402 Meridian/Federal Way	30	60	60	Service until 9 PM
409 Puyallup/72nd	60	60	60	Service until 7 PM
425 Puyallup Connector	30	30	-	Service until 6:30 PM
497 Lakeland Hill Connector	8 AM / 8 PM trips	-	-	Peak only
500 Federal Way	30	<b>30</b>	60	Service until 10:30 PM
501 Milton/Federal Way	60	60	60	Service until 9 PM

## 3 ALTERNATIVE 2: RESTRUCTURE SERVICE

This alternative first focuses on a restructure scenario which improves system connectivity and route directness complemented by frequency and span improvements on the restructured system. While coverage is reduced in some areas, passengers would benefit from 30-minute frequency on all trunk and urban routes (Routes 1-57, 202-214, 402, 500) with the exception of Route 501, as well as a longer span of service until 10 p.m.

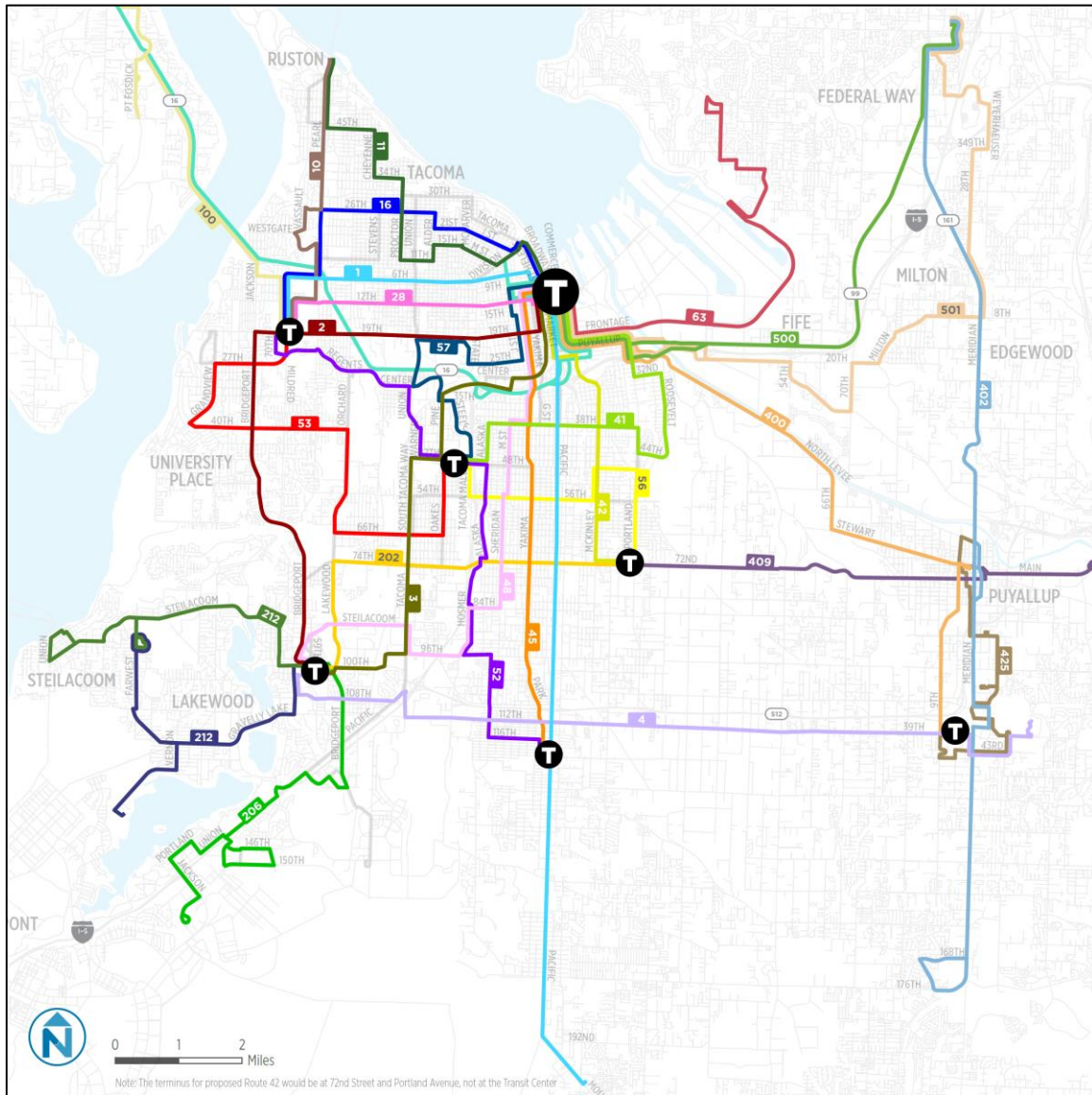
### RESTRUCTURE THEMES

Best practices for route design and standards were considered when creating route recommendations for Pierce Transit. While it is unlikely that a single service type will be able to meet the competing mobility needs of all transit users, there are certain principles that can be applied to nearly all transit services to improve the overall passenger experience.

- **Service should be simple:** First and foremost, for people to use transit, service should be designed so that it is easy to use and intuitive to understand. This applies not only to the routing and scheduling of service, but also to the information presented to customers at the stop and on passenger information materials.
- **Route deviations should be minimized:** As described above, service should be as direct as possible. Consistent with this idea, the use of route deviations—traveling off the most direct route—should be minimized. However, there are instances when the deviation of service from the most direct route is appropriate—for example, to provide service to major shopping centers, employment sites, schools, etc. In these cases, the benefits of the deviation must be weighed against the inconvenience caused to passengers already on board.
- **Reduce Duplication:** Service hours should be allocated so that multiple routes are not overlapping on each other, which reduces ridership potential and increases costs. If routes do overlap, every effort should be made to schedule routes to leverage the overlap to create better corridor frequencies.
- **Improve peak and midday frequency on key routes:** A large number of Pierce Transit routes are hourly at some point in the day. Market research clearly shows that thirty-minute service or better is necessary to make the service attractive enough for non-captive riders.
- **Minimize coverage losses:** Areas that currently have service are likely to have the highest needs. In addition, taking away service from any customer is a step that must be taken very carefully, as the impacts to individuals can be profound. Coverage reduction should only be considered when ridership levels are exceptionally low and the corresponding cost per rider is high.

These principles offer a foundation for the improvement of transit service throughout the PBTA.

Figure 2 Alternative 2 Proposed Route Map



## SUB-AREA SERVICE SUMMARIES

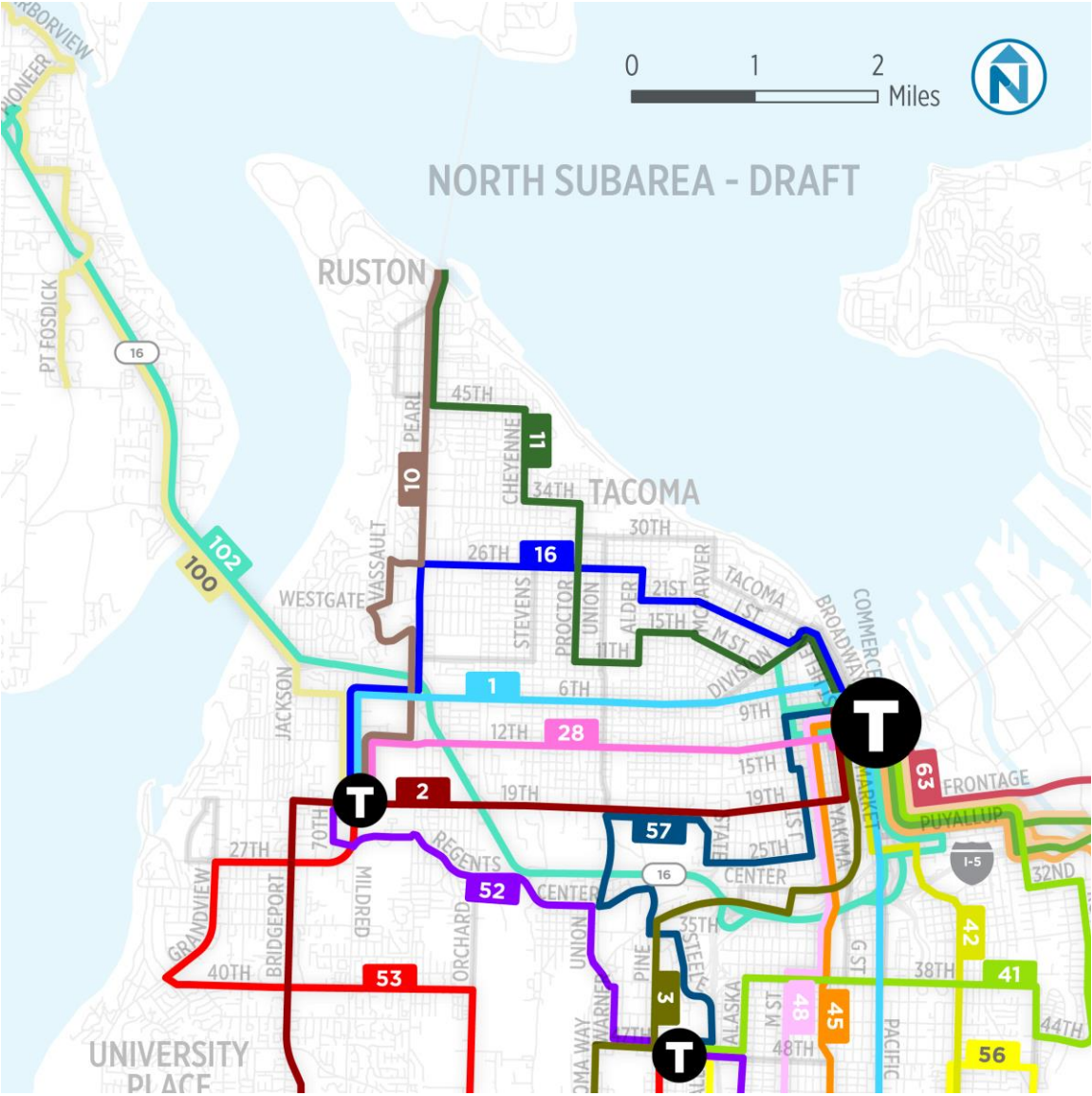
### North Tacoma

Tacoma's North End is currently served by six different routes. Most of these routes operate only hourly with limited spans of service that preclude many work trips. Accordingly, almost all North End routes underperform; they are among the least efficient and effective of all Pierce Transit routes. Due to low ridership and significant overlap between routes, a full restructure of North Tacoma is proposed. The restructure consists of consolidating multiple routes and results in a network that still serves the vast majority of North Tacoma residents, but at higher service levels and later evening service times.

In Alternative 2, multiple routes would be consolidated into three different routes, all of which operate every 30-minutes between 6 a.m. and 6 p.m. and also operate until 10 p.m. In addition, with proposed route scheduling, the Stadium District and the north end of the Proctor District would be connected to downtown Tacoma with 15-minutes service.

While the majority of North Tacoma customers would receive better service under Alternative 2, there are areas where service would no longer be available. Old Town is the only location with more than five riders that would no longer be within easy walking distance of service. This would negatively affect approximately 10 boardings daily. A potential mitigation would be to extend the proposed Ruston-Downtown Tacoma Trolley (summer 2017) through Old Town.

Figure 3      Alternative 2 North Tacoma Route Recommendations



## East Tacoma

East Tacoma is served by eleven different routes. Some, such as Route 1, have great frequency and late evening service. However, most operate hourly for much of the day. Many of the routes overlap each other and serve the same markets. Consolidating service in multiple different corridors will allow Pierce Transit to operate East Tacoma service more frequently and later, and also operate more efficiently as a result.

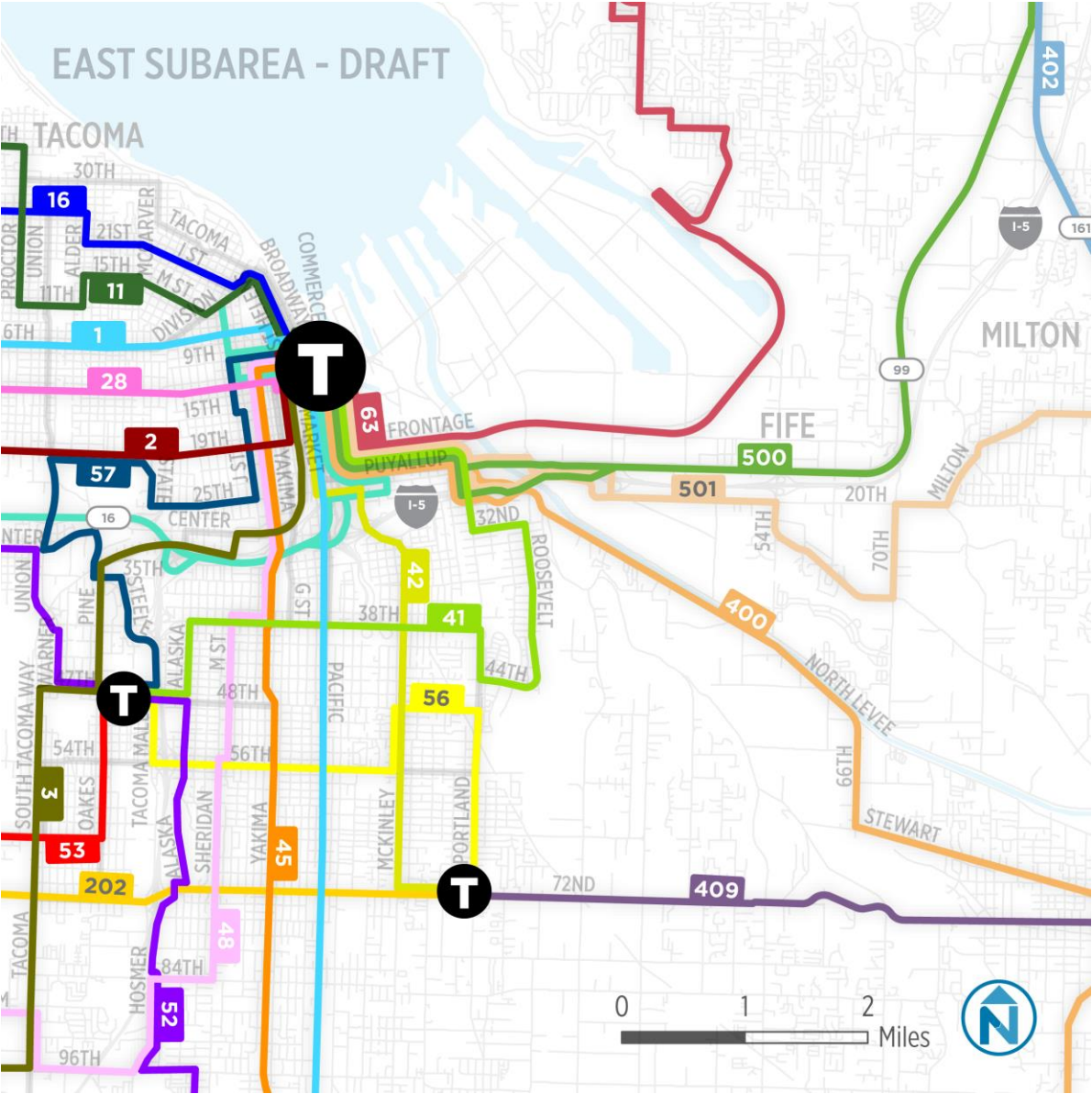
Two recommendations are made to consolidate service.

- **Combine East/West and North/South Corridors:** Routes 41 and 54 should be combined into one route that provides the Salishan area with bi-directional, frequent service to downtown Tacoma, Tacoma Dome, and the Tacoma Mall. Likewise, Routes 56 and 42 should be interlined (or connected) to provide anyone living on McKinley Avenue and Portland Avenue a one-seat ride to the Tacoma Mall as well.
- **Consolidate service between East Tacoma and Downtown:** Currently, three routes provide service between East Tacoma between I-5 and Pacific Avenue. The schedules for all three are uncoordinated, despite all three routes being just over 0.5 miles apart. Routes 53, 45, and 48 should be consolidated into two routes that operate a coordinated schedule between S. 38<sup>th</sup> Street and downtown Tacoma. Rather than having multiple routes coming hourly, one corridor with service every 15-minutes could be operated.

Span and frequency improvements are made for all routes in East Tacoma as well.



Figure 4      Alternative 2 East Tacoma Route Recommendations



## Lakewood

Eleven different routes converge on the Lakewood Transit Center, including three of the regional trunk routes. Many of the routes in Lakewood overlap each other. The recommended changes for the Lakewood area are designed to reduce overlap, redesign a major trunk route (Route 3) to operate more effectively as a regional connection between Lakewood, Tacoma Mall and downtown Tacoma, and improve frequency and span of service.

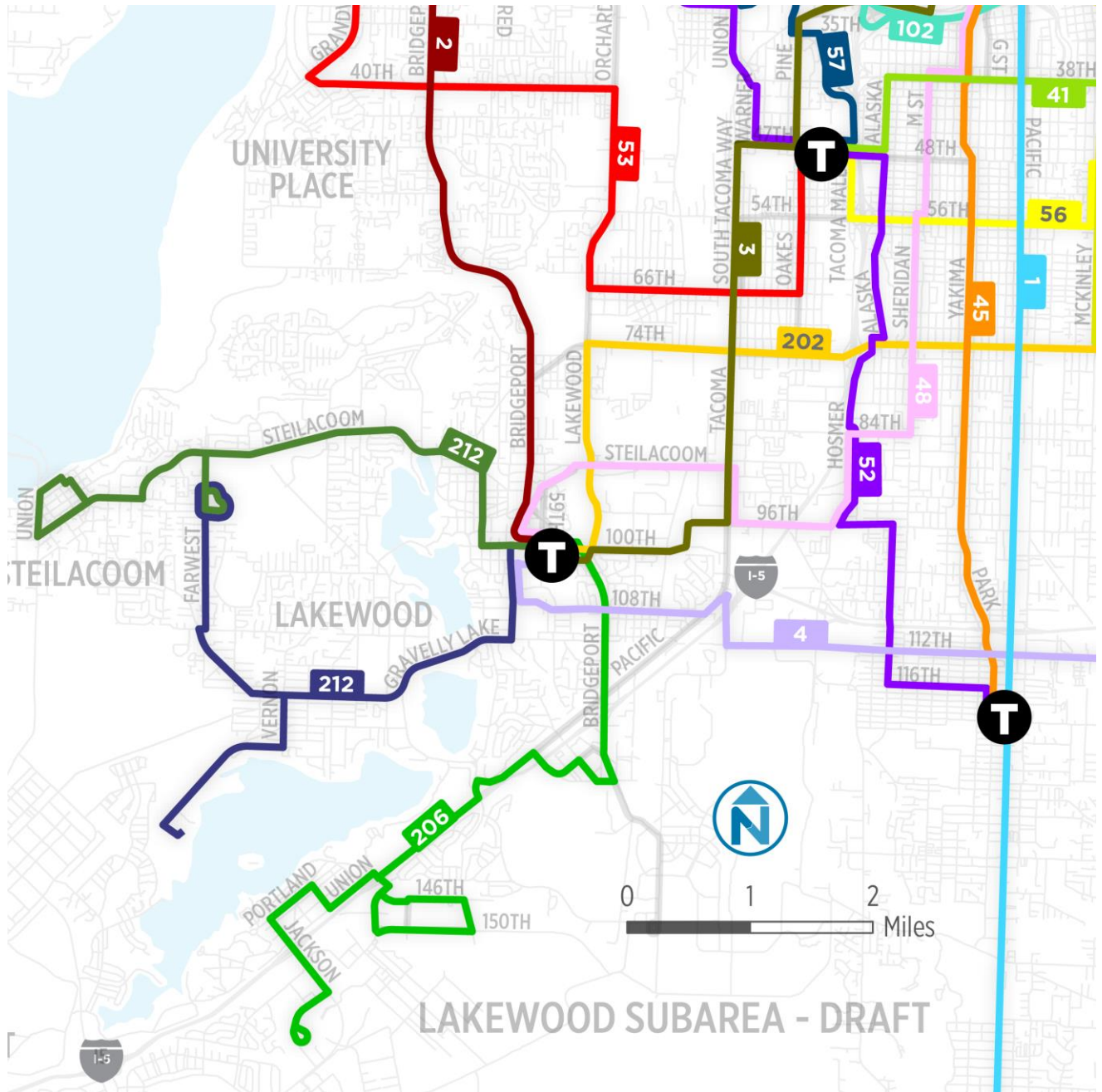
One of the primary recommendations is to restructure Route 3 to operate along a likely high capacity transit alignment connecting Lakewood, Tacoma Mall, and downtown Tacoma. A restructured Route 3 would operate on S. Tacoma Way and replace the existing Route 300.

The crosstown function of Route 51 has not performed up to expectations in both the short- and long-term. Due to low performance, and the fact that almost all of this route's alignment overlaps those of other routes, this crosstown service is consolidated with other routes. Service into the Springbrook neighborhood would continue to be provided by a revised route.

Span and frequency improvements are made for most routes in Lakewood as well.



Figure 5 Alternative 2 Lakewood Route Recommendations



## Other Areas

Routes serving Puyallup, Milton, Federal Way, and Fife did not have recommendations that adjusted the route alignments. Select routes serving these areas have recommended improvements to route frequency and span of service.

## INDIVIDUAL ROUTE RECOMMENDATIONS

This section describes the individual route recommendations. Routes without any alignment changes are discussed first, followed by an in-depth description of each proposed route change.

### Routes with No Change Recommended

Ten routes do not have any routing, frequency, or service span change recommended. Most of these are in the more suburban areas of NE Tacoma, Milton, Fife, and Puyallup. These routes include:

- Route 1
- Route 2
- Route 63
- Route 100
- Route 102
- Route 400
- Route 409
- Route 425
- Route 497
- Route 501

All other routes have some recommendation on routing, span, or frequency.

## ROUTE 3: LAKEWOOD-TACOMA

### Recommendations

The span and frequency of Route 3 would be similar to today's service levels.

Route 3 would be revised to create a direct, fast route between downtown Tacoma, Tacoma Mall, and Lakewood. Specific routing recommendations include:

- In Downtown, shift the alignment from Tacoma Avenue to Jefferson and Pacific Avenues to better serve UW-Tacoma and major employers.
- Utilize M Street between Center and S. Tacoma Way to avoid an at-grade rail crossing
- In order to speed regional travel time, Route 3 should no longer serve the Tacoma Mall Transit Center. Stops along 47<sup>th</sup> and Pine Streets would provide access to the Mall and transfers.
- Between the Tacoma Mall and Lakewood, Route 3 would replace Route 300 on S. Tacoma Way. S. Tacoma Way has higher ridership than does Oakes and more opportunity for ridership growth. A restructured Route 53 would continue to serve Oakes between the Mall and 56<sup>th</sup> Street.
- Utilize 96<sup>th</sup> St./100 St. in Lakewood to travel between the Lakewood Transit Center and S. Tacoma Way, replacing existing Route 48 service on that segment. Route 48 would continue to serve Steilacoom Way segment currently served by Route 3.

### Benefits and Impacts

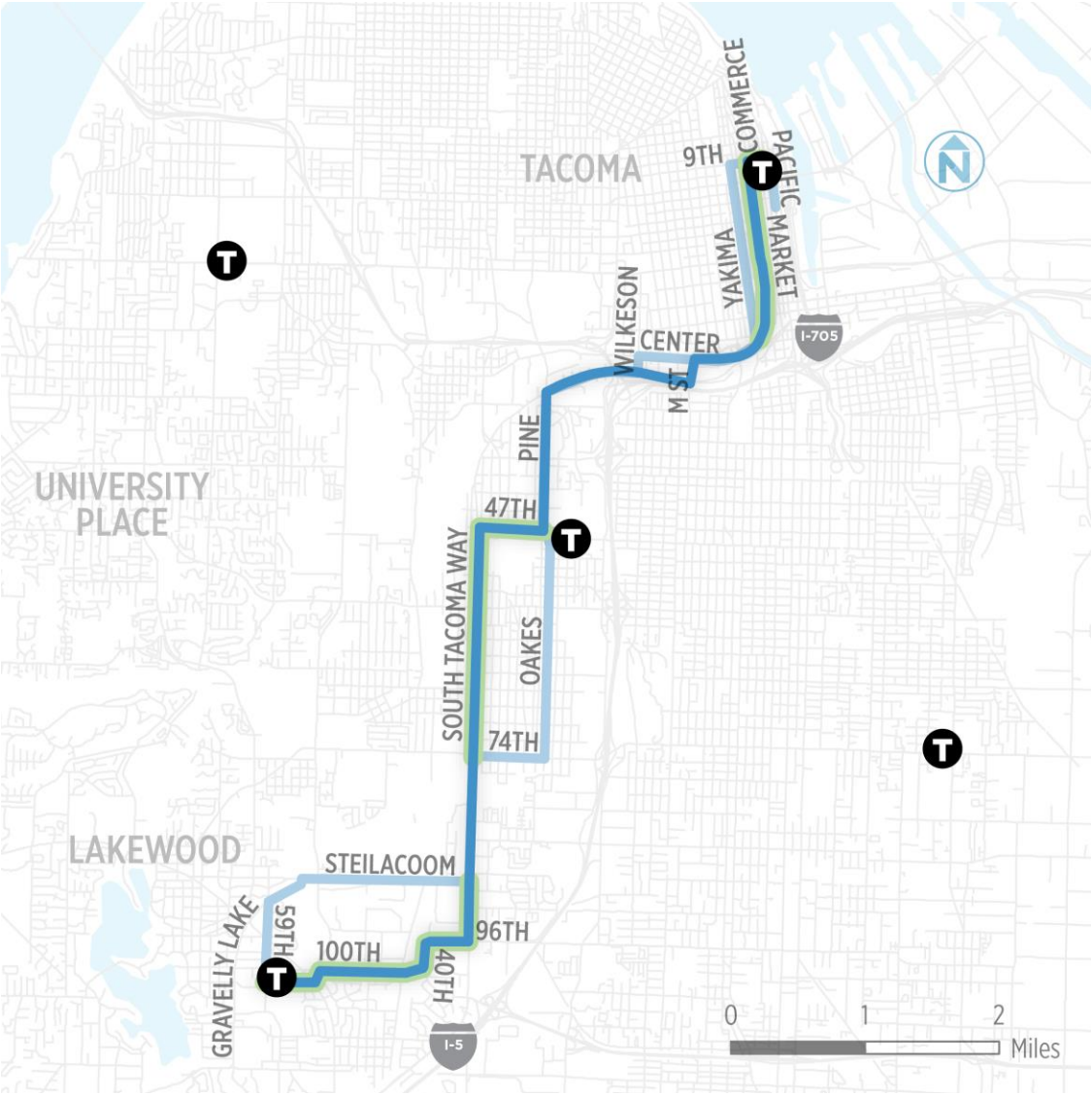
- Providing more direct service along major arterials will help enhance regional mobility by improving access between key destinations.
- With the realignment there will be no service on Oakes St. between 56<sup>th</sup> and 74<sup>th</sup> Streets.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	30	30-60	5:16 AM-10:10 PM
Proposed	30	30	30-60	5:16 AM-10:10 PM

Weekend service levels would be comparable to today's service levels.

Figure 6      Route 3 Proposed Changes



## ROUTE 10: PEARL STREET

### Recommendations

Improve Route 10 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

Route 10 should be revised to improve directness of service, simplify the alignment, and focus on the higher demand areas. Specific recommendations include:

- Operate bi-directionally along Pearl Street between 26<sup>th</sup> Street and the Pt. Defiance Ferry terminal.

### Benefits and Impacts

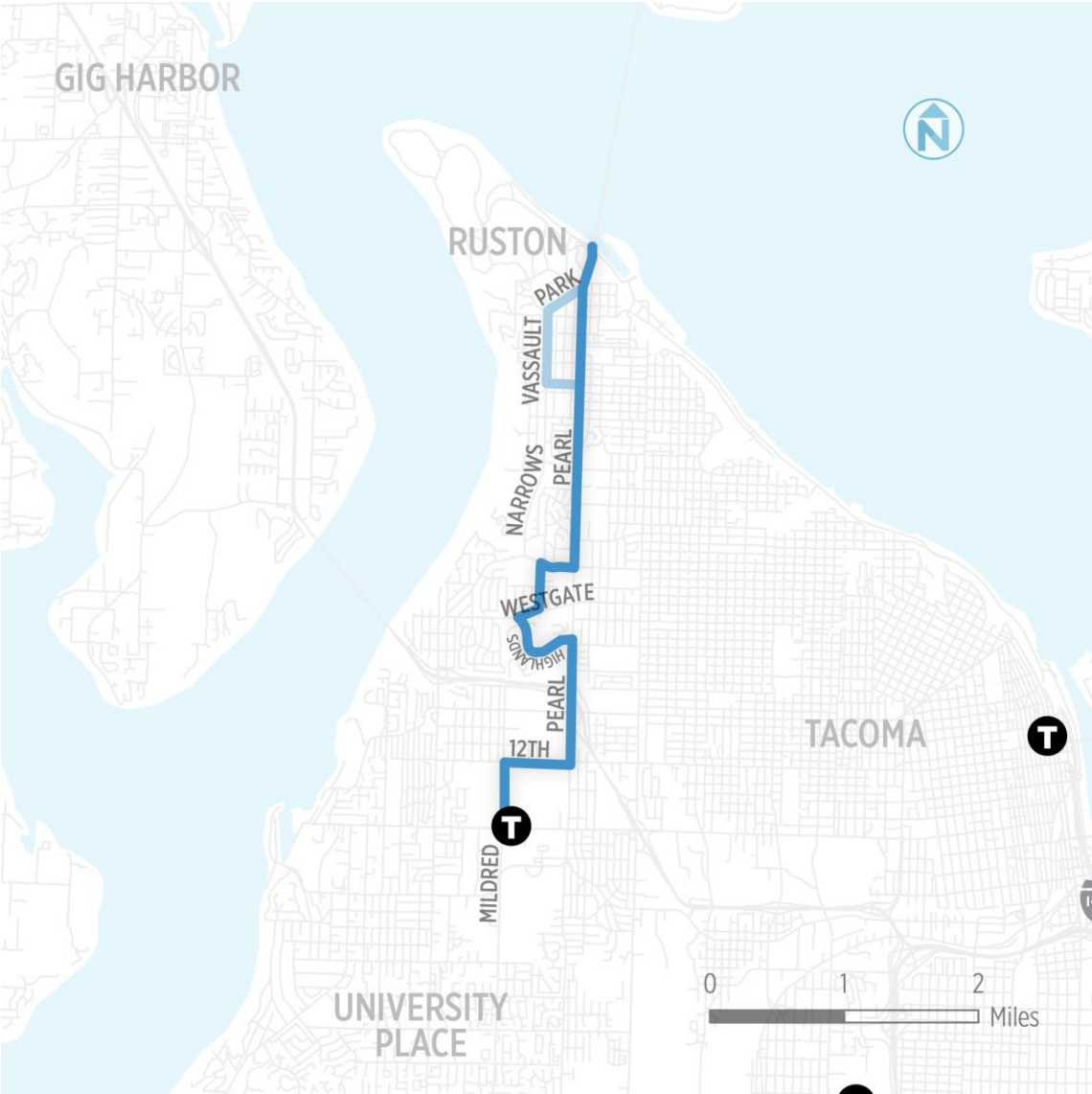
- Provides more direct service by eliminating the one way couplet.
- Market research has shown that one-way mid-route alignments separated by a quarter mile reduce ridership. While some existing passengers on Vassault would need to walk further to access Route 10, overall ridership should increase on Route 10.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	30	30	6:13 AM-8:10 PM
Proposed	30	30	30-60	6:13 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

Figure 7      Route 10 Proposed Changes



## ROUTE 11: PT. DEFIANCE

### Recommendations

Improve Route 11 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

The alignment of Route 11 should be adjusted to better serve higher ridership areas and reduce duplication with other routes. Specific recommendations include:

- Between Proctor and 26<sup>th</sup> Street and the Stadium District, Route 11 should be consolidated with Route 14's alignment. This will reduce the duplication with Route 1 service on 6<sup>th</sup> Street.
- Between the Stadium District and downtown Tacoma, utilize St. Helens instead of Broadway. With both Routes 11 and 16 utilizing St. Helens, their schedules may be off-set to provide effective 15-minute service between Downtown, the Stadium District and the north end of the Proctor District.

### Benefits and Impacts

- More frequent service and later evening service.
- When scheduled in conjunction with Route 16, 15-minute all-day service between downtown, the Stadium District, and the north end of the Proctor District.
- Existing Route 11 passengers would continue to have Route 1 service on 6<sup>th</sup> Street and be within a ¼ mile walk of service on Proctor Street.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	-	6:23 AM-6:38 PM
Proposed	30	30	60	6:23 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.



Figure 8      Route 11 Proposed Changes





## ROUTE 13: N. 30<sup>TH</sup>

## ROUTE 14: PROCTOR DISTRICT

### Recommendations

Routes 13 and 14 are two of the lowest productivity routes operated by Pierce Transit. While some route segments have some riders, others, such as the extension to Tacoma Dome, carry very few riders. Large stretches of both routes are duplicated by existing service.

Route 13 and 14 should be consolidated with Routes 11 and 16. Improvements to both Routes 11 and 16, including all-day weekday 30-minute service and evening service to 10 p.m. will serve existing North Tacoma riders more effectively, and improve ridership levels over the existing Routes 11, 13, 14, and 16 levels.

### Benefits and Impacts

- Most existing Route 13 and 14 riders would have more frequent and later service than today. In some cases, a longer walk to service would be required.
- In North Tacoma, Old Town is the only area with significant ridership that is not within a ¼ mile of either Route 11 or 16. There are approximately 10 total boardings in Old Town. Service to Old Town may continue to be provided by new Trolley service between downtown Tacoma and Point Ruston proposed for the Summer of 2017.

### Existing and Proposed Weekday Frequency and Span

#### Route 13

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	-	5:40 AM-7:20 PM
Proposed				

#### Route 14

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	-	6:00 AM-7:50 PM
Proposed				

## ROUTE 16: DOWNTOWN TACOMA

### Recommendations

Improve Route 16 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

The alignment of Route 16 should be adjusted to better serve higher ridership areas. Specific recommendations include:

- Operate on 26<sup>th</sup> Street between Pearl and Proctor Streets to better connect higher density residential and commercial areas on Pearl Street to downtown Tacoma. With the exception of high school ridership, Route 16 serves few passengers on either Stevens or 11<sup>th</sup> Streets.
- In conjunction with Route 11 recommendations, operate Route 16's schedule to offset Route 11's, which will provide effective 15-minute service between Downtown, the Stadium District and the north end of the Proctor District.

### Benefits and Impacts

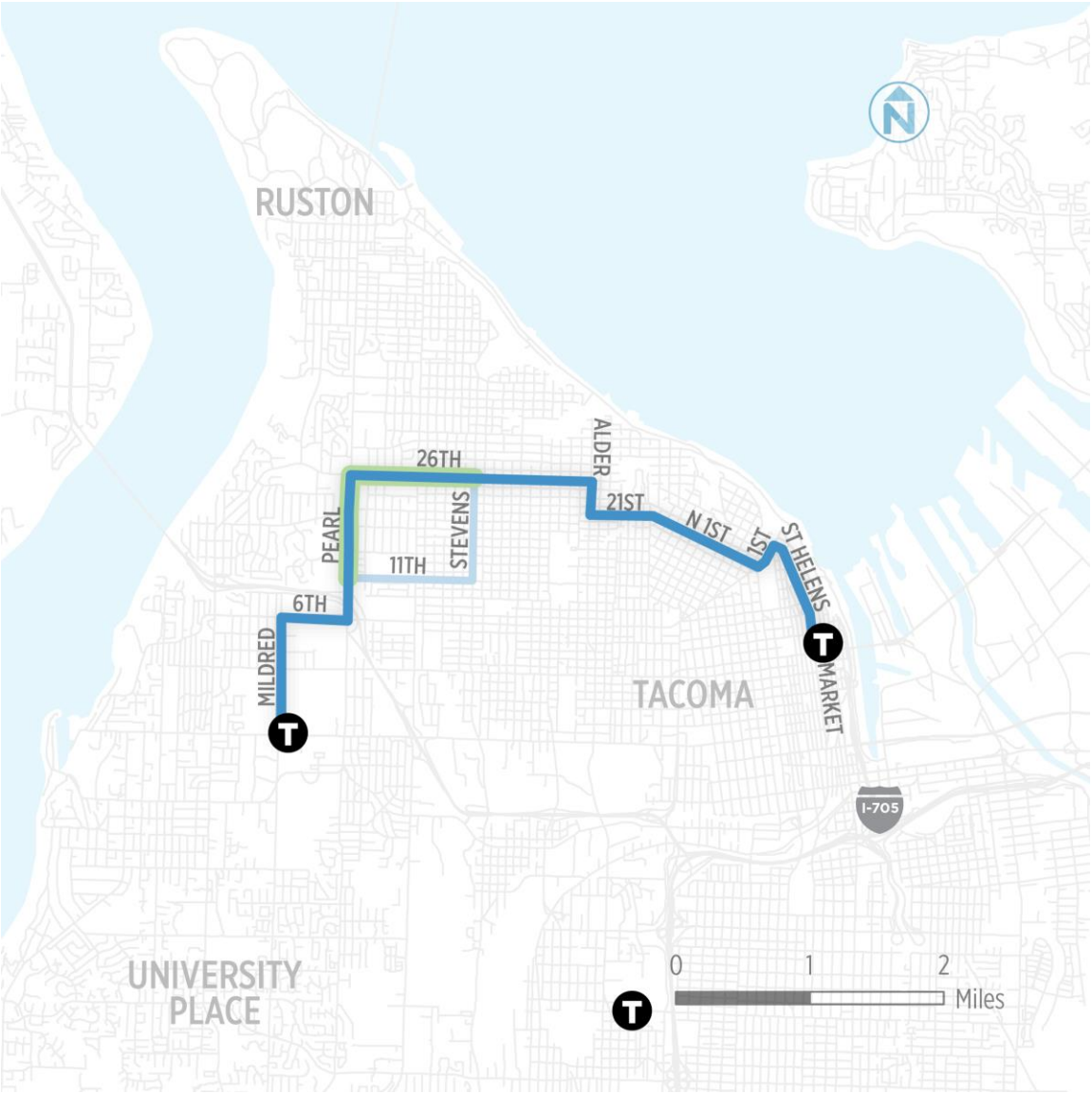
- More frequent service and later evening service
- When scheduled in conjunction with Route 16, 15-minute all-day service between downtown, the Stadium District, and the north end of the Proctor District.
- Existing passengers on Stevens and 11<sup>th</sup> Streets would need to walk further to access service.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	60	5:45 AM-8:24 PM
Proposed	30	30	60	5:45 AM-10:00 PM

Weekend service levels would be comparable to today's service levels

Figure 9      Route 16 Proposed Changes



## ROUTE 41: PORTLAND AVE

## ROUTE 54: 38TH STREET

### Recommendations

Routes 41 and 54 connect East Tacoma with downtown Tacoma and the Tacoma Mall area respectively. In order to reduce duplication of service, and provide Salishan residents a more direct connection to the Tacoma Mall, Routes 41 and 54 should be consolidated into one route.

The consolidated Route 41 should operate weekdays until 10 p.m.

The consolidated route would utilize the existing Route 41 between downtown and S. 44<sup>th</sup> Street. From S. 44<sup>th</sup> Street, Route 41 would continue to the Tacoma Mall via Portland Avenue, 38<sup>th</sup>, Alaska, and 48<sup>th</sup>.

Existing Route 41 passengers on Portland Avenue between S. 48<sup>th</sup> Street and S. 72<sup>nd</sup> Street would continue to be served by a restructured Route 56. Route 56 would be interlined with Route 42, so that a one-seat ride from Portland Avenue to Downtown Tacoma is still available.

### Benefits and Impacts

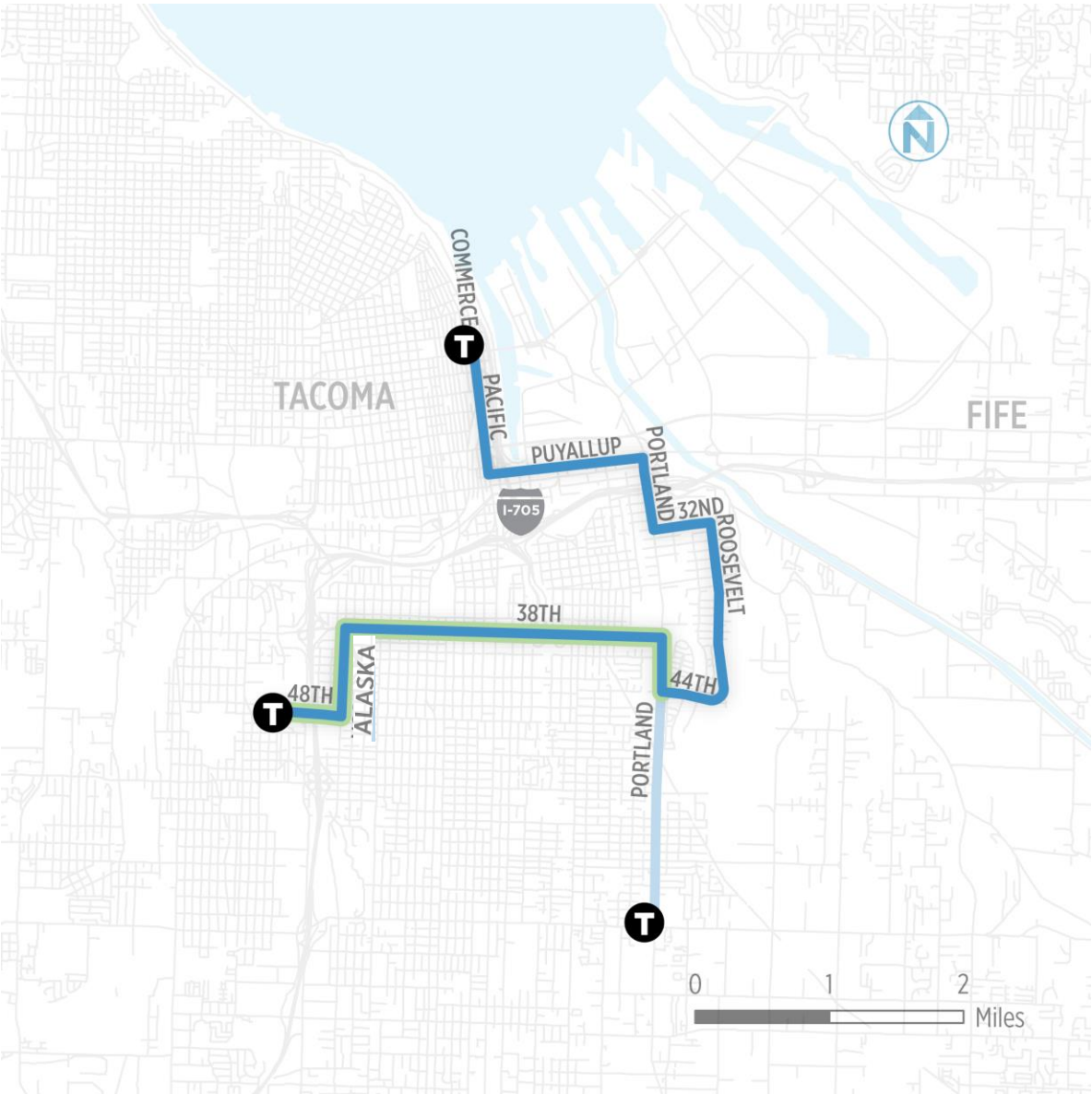
- Later evening service to existing Route 41 and 54 patrons.
- Simpler route structure, with less overlapping routes serving the same markets.
- The majority of both Route 54 and 42 riders would continue to use the same stops they use today. All existing Route 54 and 42 passengers would continue to have service to their current stops.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	60	60	5:10 AM-8:34 PM
Proposed	30	30	60	5:10 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

Figure 10      Route 41 Proposed Changes



## ROUTE 42: MCKINLEY AVENUE

### Recommendations

Improve Route 42 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

Interline Route 42 with Route 56. The deviation into the 72<sup>nd</sup> Street Transit Center would no longer be made to improve speed and reliability.

### Benefits and Impacts

- More frequent service, earlier morning service, and later evening service
- The interline with Route 56 gives McKinley Avenue residents the ability to access the Tacoma Mall area without needing to transfer.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	60	6:45 AM-7:30 PM
Proposed	30	30	60	5:30 AM-10:00 PM

Weekend service levels would be comparable to today's service levels

## ROUTE 45: YAKIMA AVENUE

### Recommendations

Improve Route 45 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

Coordinate Route 45 and the restructured Route 48 schedules so that between S. 38<sup>th</sup> and downtown Tacoma, Yakima Avenue has all-day 15-minute service on weekdays.

### Benefits and Impacts

- More frequent service and later evening service

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	60	5:45 AM-7:15 PM
Proposed	30	30	60	5:45 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

## ROUTE 48: SHERIDAN-M ST

### Recommendations

Improve Route 48 span and frequency so that it operates every 30 minutes between 6 a.m. and 6 p.m. weekdays and has service until 10 p.m.

In order to create a high-frequency corridor connecting S. 38<sup>th</sup> Street and downtown Tacoma, Route 48's alignment should be modified to use Yakima Avenue. The schedule between S. 38<sup>th</sup> Street and downtown should be coordinated with Route 45, so that between the two routes service operates every 15-minutes during the day (approximately 6 AM to 6 PM) and every 30-minutes during off-peak times.

In Lakewood, in conjunction with the Route 3 restructure, Route 48's alignment would utilize Steilacoom Boulevard between S. Tacoma Way and the Lakewood Transit Center. Route 3 would serve the existing 100<sup>th</sup> Street alignment.

### Benefits and Impacts

- More frequent service and later evening service.
- Creating a high-frequency corridor on Yakima Avenue between downtown and S. 38<sup>th</sup> Street will improve transfers and attract more riders.

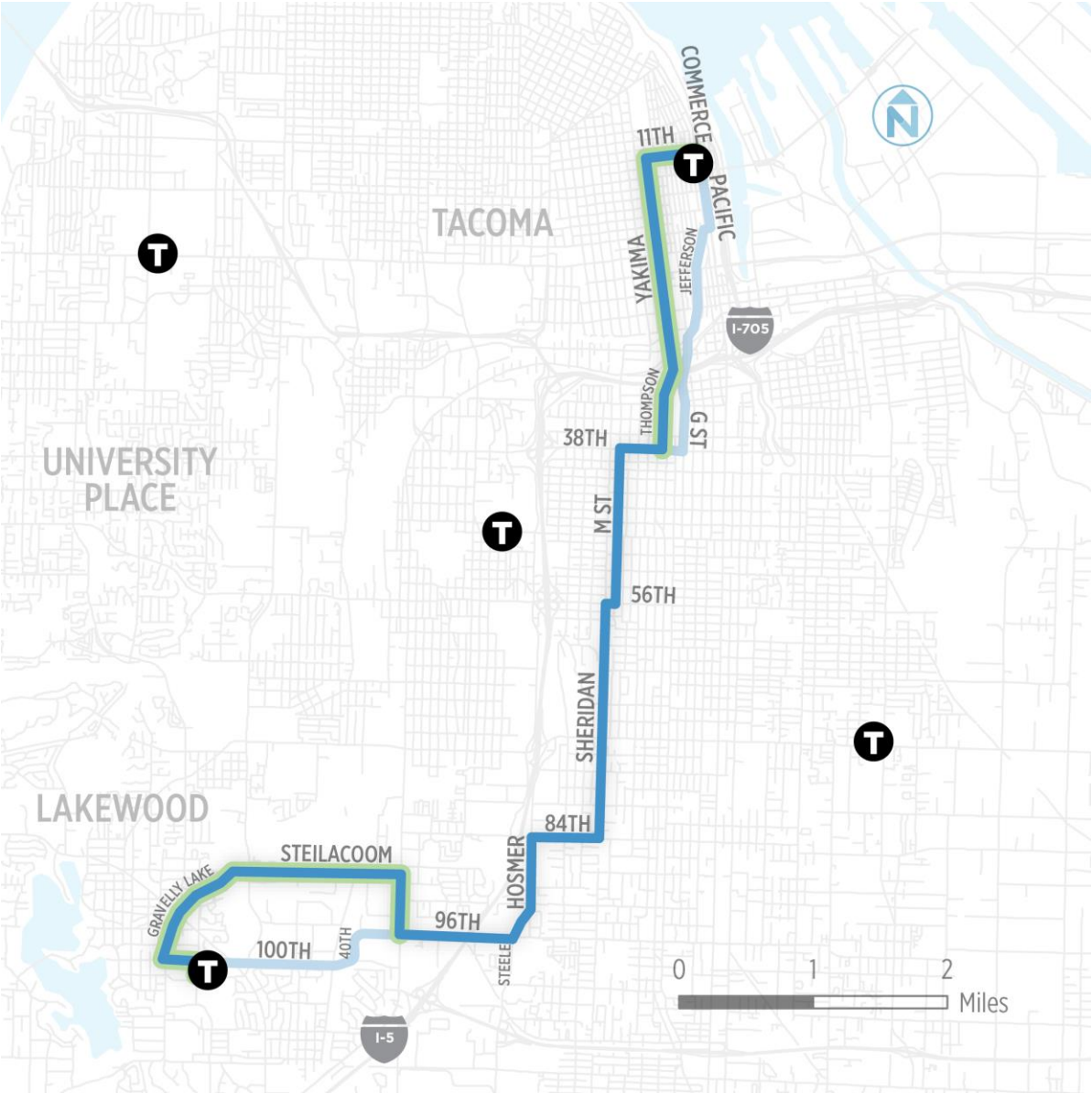
### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	60	60	5:20 AM-9:28 PM
Proposed	30	30	60	5:20 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.



Figure 11      Route 48 Proposed Changes



## ROUTE 51: UNION AVENUE

### Recommendations

Route 51 is one of the lowest productivity routes operated by Pierce Transit. It provides a crosstown service between North Tacoma and Lakewood. Most of the existing alignment is duplicated by other routes. Route 51 does not have a defined market.

Route 51 should be deleted. Virtually all of Route 51's alignment would continue to have service. In Lakewood, Routes 206 and Route 2 service would still be available to current Route 51 riders. North of Lakewood, Routes 53 and 52 provide coverage.

### Benefits and Impacts

- Almost all existing riders would continue to have service on Routes 2, 206, 52, or 53, although a transfer and longer travel times would be required.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	-	6:00 AM-7:50 PM
Proposed	-	-	-	-

## ROUTE 52: TCC-TACOMA MALL

## ROUTE 55: PARKLAND-TACOMA MALL

### Recommendations

Routes 52 and 55 are solid performers that operate at 30-minute frequencies on weekdays. Route 52 would be combined with Route 55 to create one single route that connects TCC, Tacoma Mall, and the Parkland Transit Center.

The routing of the combined route would be identical to the existing Routes 52 and 55, with one change by the Tacoma Mall. The new combined route would no longer stop in the Tacoma Mall Transit Center. Transfers to other routes would take place on streets adjacent to the Mall.

The extended Route 52 would operate every 30-minutes on weekdays between 6 a.m. and 6 p.m. and have service until 10 p.m.

### Benefits and Impacts

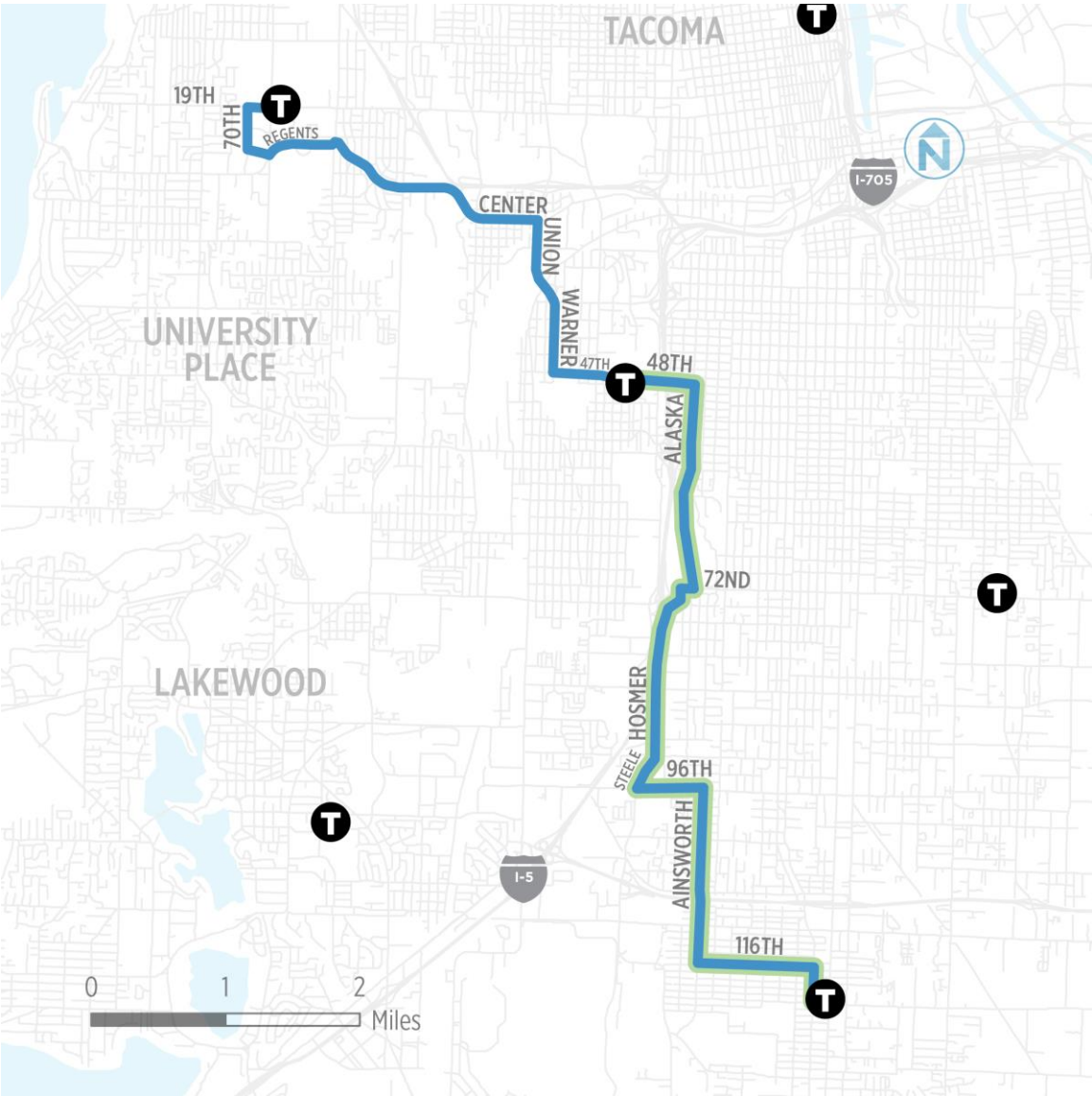
- Later evening service would be available, allowing Mall employees to work the evening shift and still catch the bus home.
- Passengers currently transferring between Routes 52 and 55 would no longer need to exit a vehicle. Their travel times would be reduced by at least 5 minutes, and up to 55 minutes depending on the time of day and direction of travel.
- Speed and reliability of Route 52 and Route 55 would be improved because less time is spent accessing the Tacoma Mall Transit Center.
- Existing passengers transferring to other routes at the Tacoma Mall Transit Center would potentially need to do so at other locations.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	30	30-60	6:15 AM-8:40 PM
Proposed	30	30	30-60	6:15 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

Figure 12      Route 52 Proposed Changes



## ROUTE 53: UNIVERSITY PLACE

### Recommendations

Route 53 currently operates like two separate routes that have been added to each other. At the Tacoma Mall Transit Center, two thirds of the existing ridership turns over. Between the Tacoma Mall Transit Center and downtown Tacoma, Route 53 duplicates multiple other routes. It does not have a unique market connecting the Mall to either East Tacoma or from East Tacoma to downtown Tacoma.

In order to reduce duplication of service, Route 53 would operate only between TCC and the Tacoma Mall Transit Center. It would also be rerouted along Oakes Street to provide coverage where Route 3 was realigned along S. Tacoma Way.

The restructured Route 41 would continue to provide a link between the Tacoma Mall Transit Center and East Tacoma. Routes 1, 45, and 48 would continue to provide service between East Tacoma and downtown Tacoma.

Route 53's frequency would be improved to every 30-minutes between 6 a.m. and 6 p.m. and would operate until 10 p.m.

### Benefits and Impacts

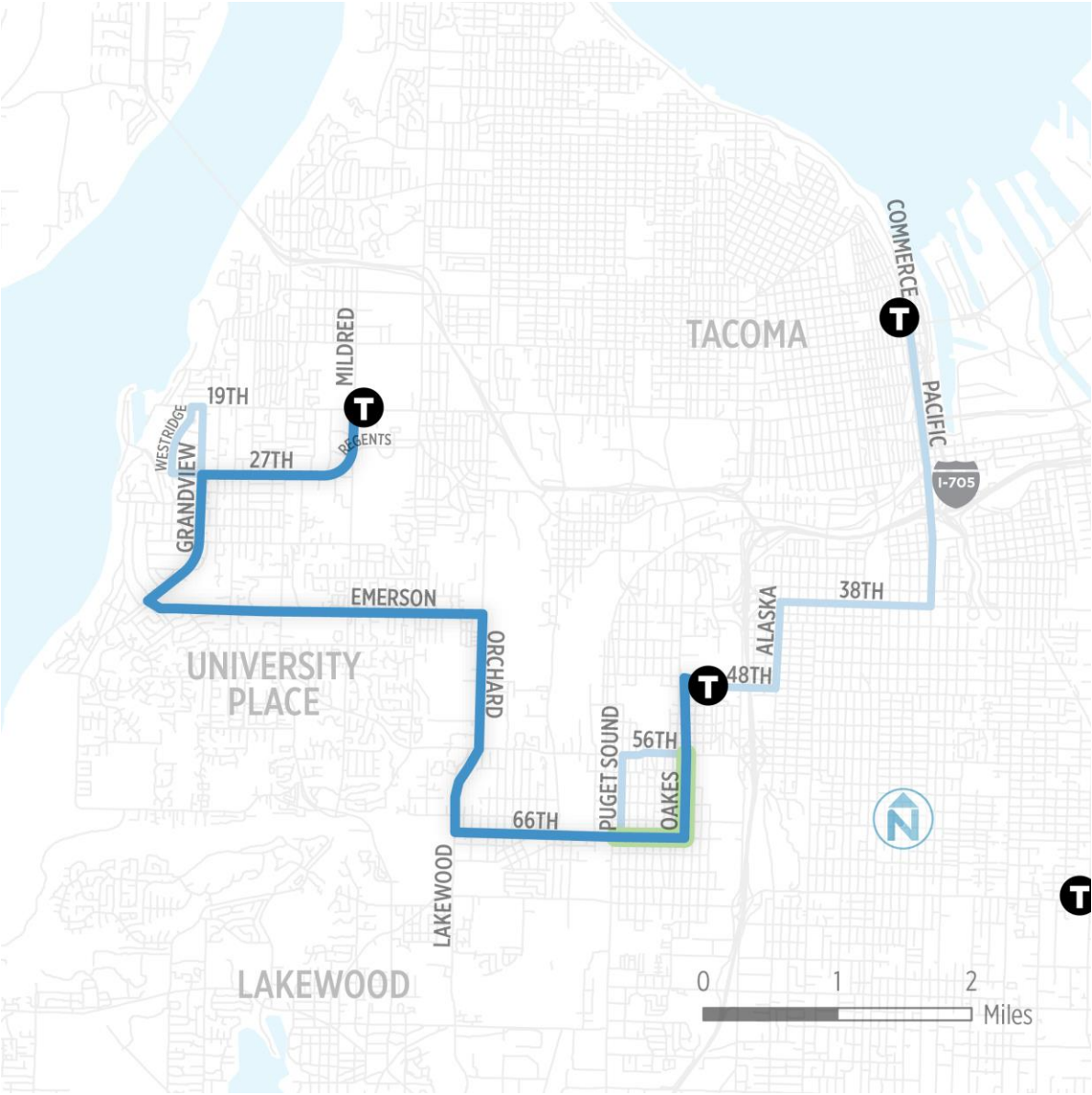
- Later evening service would be available, allowing Mall employees to work the evening shift and still catch the bus home.
- Reducing the duplication of service between Route 53 and other routes will result in Routes 41, 45, and 48 operating more efficiently.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	60	6:15 AM-8:00 PM
Proposed	30	30	60	6:15 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

Figure 13      Route 53 Proposed Changes



## ROUTE 56: 56TH ST

### Recommendations

Route 56 is a crosstown connecting the 72<sup>nd</sup> Street Transit Center and the Tacoma Mall. It duplicates segments of Route 41 on Portland Avenue. In order to reduce duplication of service, Route 56's eastern alignment should be adjusted to cover more of Portland Avenue. The route would deviate from 56<sup>th</sup> Street via McKinley and 48<sup>th</sup> Street to Portland Avenue. Also, the western portion of the route alignment would utilize Tacoma Mall Boulevard to serve the businesses on that segment. The Tacoma Mall Boulevard recommendation presumes that bus stops will be able to be placed on this roadway.

Route 56 would be interlined with Route 42, so that every patron on Portland Avenue would still have a one-seat ride to downtown Tacoma. Route 56 would not directly serve the 72<sup>nd</sup> Street Transit Center, but pass by it on 72<sup>nd</sup> Street. This will improve the reliability of the route, and improve customer travel times.

Route 56's frequency would be improved to every 30-minutes between 6 a.m. and 6 p.m. and would operate until 10 p.m.

### Benefits and Impacts

- More frequent service, an earlier start time, and later evening service benefit all customers.
- Serves more employment opportunities along Tacoma Mall Boulevard. Passengers on Oakes would continue to have the option to use the restructured Route 53.
- Existing passengers on 56<sup>th</sup> Street between McKinley and Portland would need to walk further to access service.

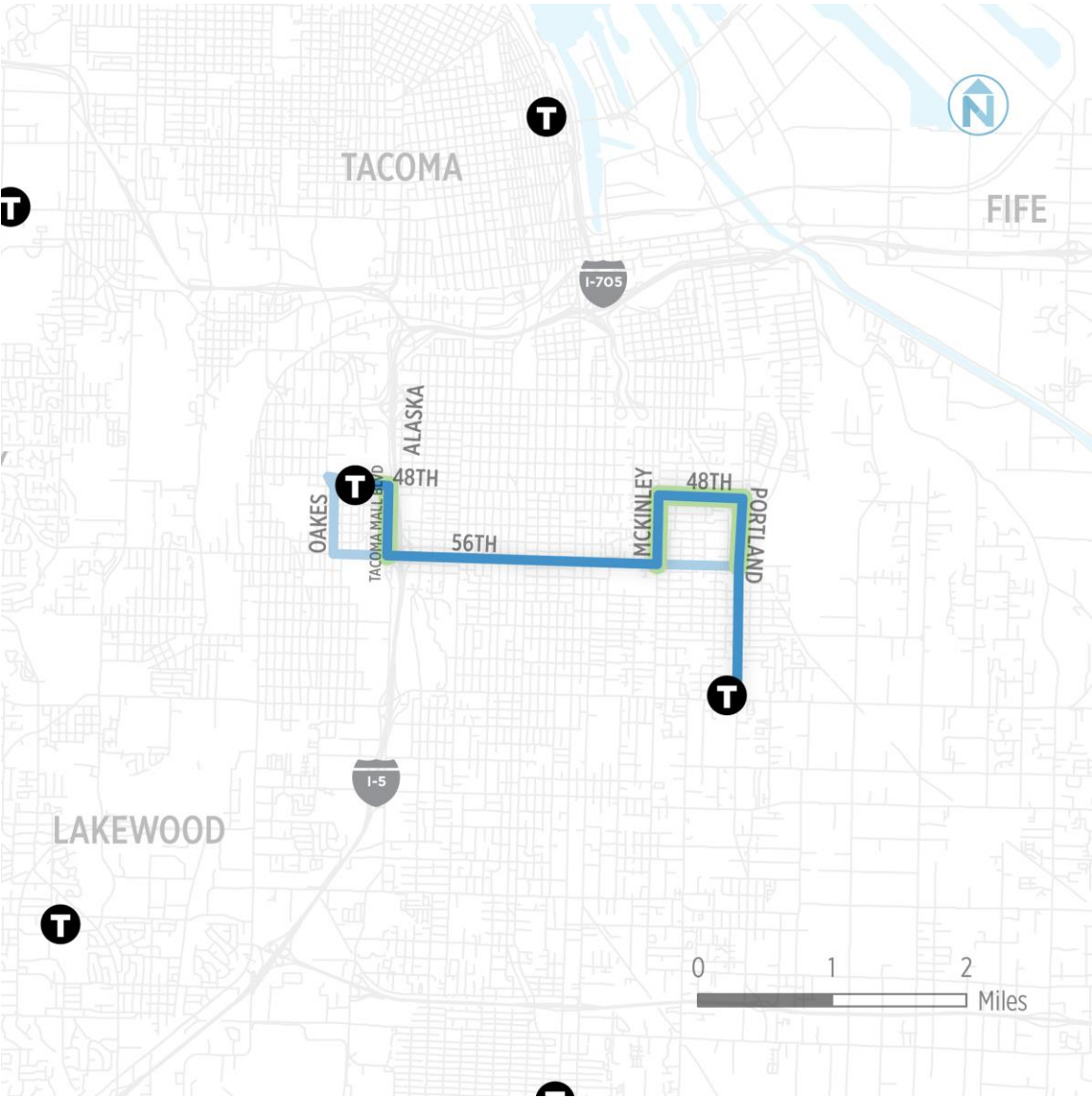
### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	60	60	60	7:15 AM-7:07 PM
Proposed	30	30	60	6:00 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.



Figure 14      Route 56 Proposed Changes





## ROUTE 206: PACIFIC HWY/TILLICUM/MADIGAN

Route 206 connects the Lakewood Transit Center with Madigan Hospital. It also serves multiple low-income areas. Route 206 passes within 1/3 of a mile of the Springbrook neighborhood, which currently has Route 51 connecting it with the Lakewood Transit Center.

In order to reduce duplication of service, Route 206 should be deviated into the Springbrook neighborhood via Bridgeport Way. This will add several minutes to existing Route 206 travel times to points further south. However, in conjunction with the routing change, Route 206's midday frequency would be improved to every 30 minutes, and service would operate until 10 p.m. on weekdays.

### Benefits and Impacts

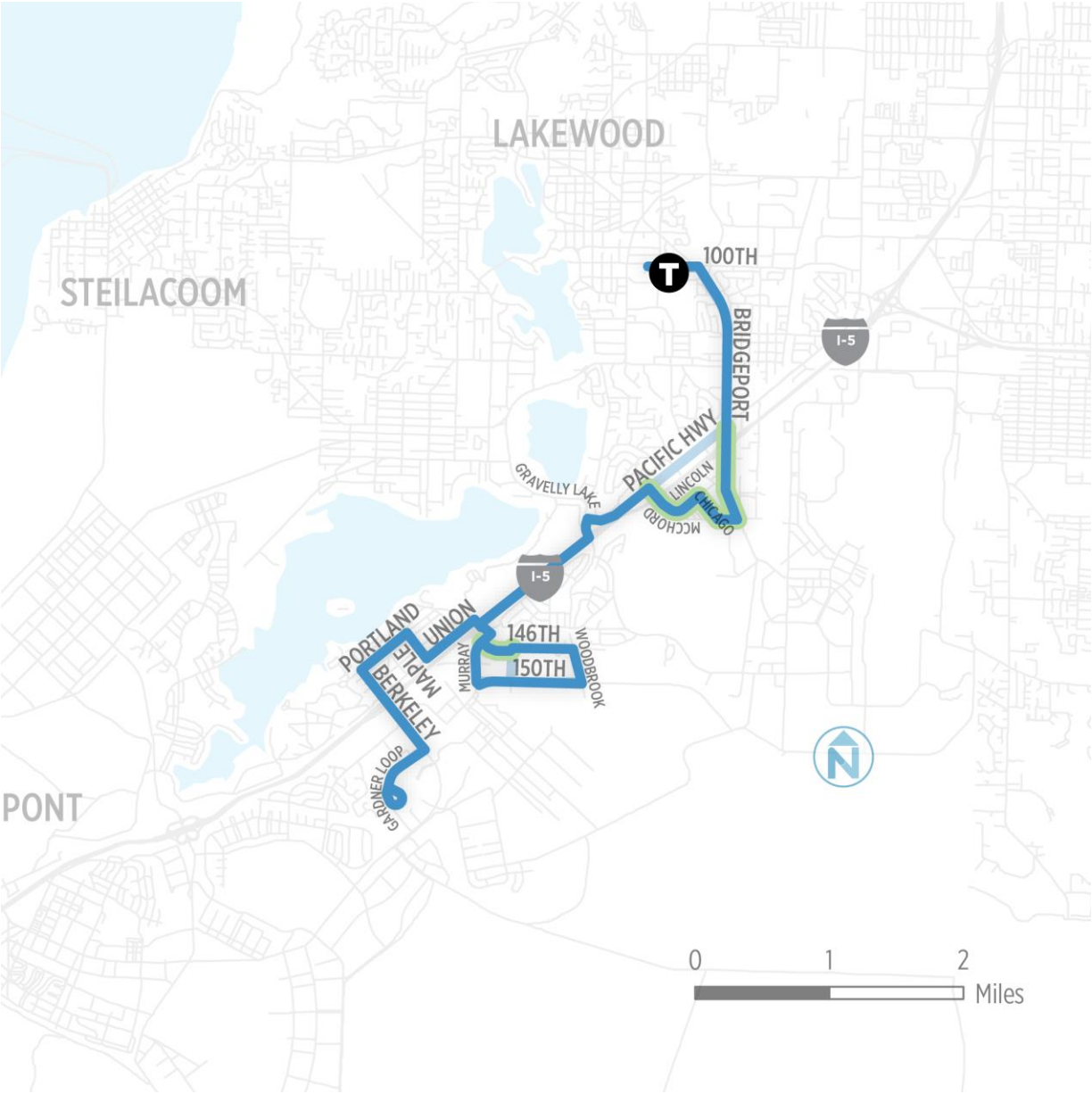
- Riders would receive 30-minute midday service and service until 10 PM.
- Slightly longer travel time for residents of American Lake Gardens and Madigan Hospital.

### Existing and Proposed Weekday Frequency and Span

Scenario	Peak Headway	Midday Headway	Evening Headway	Service Span
Existing	30	40-45	40-60	5:29 AM-9:10 PM
Proposed	30	30	40-60	5:29 AM-10:00 PM

Weekend service levels would be comparable to today's service levels.

Figure 15      Route 206 Proposed Changes



## SUMMARY ALTERNATIVE 2 SPAN AND FREQUENCY IMPROVEMENTS

In Alternative 2, a total of 21 routes have improved span and frequency. Alternative 2 introduces all-day (approximately 6 AM – 6 PM) 30-minute frequency on urban routes (Routes 1-57, 202-214, 402, 500), as well as a longer span of service until 10 PM on those routes (except Route 402). Under this alternative, improvements to route frequency and/or span are shown in **bold**.

Figure 16 Alternative 2 Proposed Weekday Span and Frequency Improvements

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

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Route	Peak Frequency	Midday Frequency	Evening Frequency	Weekday Span
425 Puyallup Connector	30	30	-	Service until 6:30 PM
497 Lakeland Hill Connector	8 AM / 8 PM trips	-	-	Peak only
500 Federal Way	30	<b>30</b>	60	<b>Service until 11 PM</b>
501 Milton/Federal Way	60	60	60	Service until 9 PM