

## MEMORANDUM

**To:** Bill Needleman, City of Portland  
Kevin Donoghue, City of Portland

**From:** Jason Schrieber, Nelson\Nygaard

**Date:** April 18, 2008

**Subject:** Preliminary Alternative Transportation Strategies, Transit

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Building upon the needs assessment of Task 2 and the first public forum, Nelson\Nygaard has begun to develop a series of strategies for walking, biking, transit and driving on the peninsula. These strategies are an outgrowth of input we've received from the Peninsula Transit Committee, attendees at the public forum, and staff at Greater Portland METRO, South Portland Bus, Greater Portland Council of Governments, and the City of Portland. Our team has attempted to synthesize a list of strategies that encompasses the majority of concerns we've heard. To this mix, we've brought our professional experience to outline key solutions that can be implemented successfully within the geographic and operational limitations of the peninsula.

This memorandum is the first of three that will describe walking, biking, transit and driving strategies. Transit is a heavy focus of our analysis as it can be one of the most complex alternative transportation strategies to plan. Transit planning is always a battle over limited resources – trying to arranged service to serve as many people as possible as efficiently as possible. Even the best transit systems in the world do not satisfy everyone. METRO's 20-bus and 8-route system has done a good job serving a segment of metro-Portland's population for many years. However, METRO acknowledges that the existing route structure is in need of improvements to overcome decreased schedule adherence as a result of traffic growth in the region.

METRO has taken the pro-active step to begin an in-house route study with the goal of making necessary adjustments, especially to the ends of routes away from the peninsula where certain changes can reduce bus travel times to gain recovery time so that drivers may keep on schedule better. Other than committing to re-routing service to serve the new Mercy Hospital on the Portland Connector, METRO has largely left the on-peninsula routing to the Portland Peninsula Transit Study process. Our team has coordinated with METRO on the

suggestions below, and they have been received well. Nonetheless, this is an early stage in the service adjustment process, and continued coordination with METRO will occur over the coming months.

## **Two Priorities**

Transit service planning is always balancing the needs of two distinct priorities: 1) to provide “front-door” service to as many people as possible; and 2) to provide fast and frequent service that gets riders where they want to go quickly. Due to the nature of almost any community greater in size than a single acre, the first priority requires running service to many destinations on many streets, often with a large cost in time and equipment. Given limited resources, this service priority generally cannot be frequent or fast due to the number of destinations that must be served. Meanwhile, providing fast and frequent service also requires man-hour and equipment costs to keep many buses running simultaneously on the same corridor, but remote destinations may not be well-served.

METRO has been running a hybrid of these two service priorities, as most transit agencies attempt to do. Its eight routes fan out over greater Portland to serve as many destinations as possible, but these services come together near the peninsula’s transit hub, or “METRO Pulse,” with greater frequency along Forest and Washington Avenues and especially along Congress Street. However, since the more frequent service is limited to under 3 miles of downtown streets, METRO’s service has mostly benefitted those who are reliant on its near front-door service as their primary means of transportation. The vast majority of Portland residents commute and travel by other means.

As Portland has grown, peninsula traffic has driven many residents to alternative modes of transportation, only to discover that the transit system did not serve their needs. The February 21<sup>st</sup> public forum brought to pen and paper many of the frustrations with current METRO service, as experienced by over 100 concerned residents of Portland and nearby communities. These frustrations were clearly expressed in a series of marked-up maps, written comments, and recorded votes on a travel preference survey. The results of this forum are summarized in the following section. It should be noted that this input is from a very limited segment of METRO’s service area and does not reflect a statistical evaluation. Most notably, many underserved populations and lower-income households were not in attendance. Nonetheless, the participants served as “citizen-planners,” providing our team with valuable insight into how METRO’s service might be restructured.

## **Summary of Transit Comments from First Public Forum**

The following table summarizes the comments received at the forum through the mark-up session. They are organized by route-level alignment changes, changes to existing service, and a comment regarding a potential new alignment. Each comment also is integrated into the figure that follows the table.

**Transit Issues and Opportunities, First Public Forum**

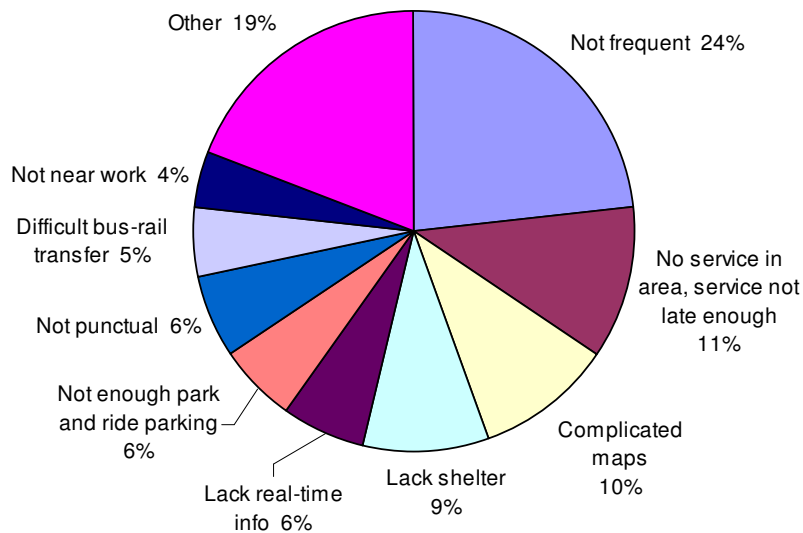
Focus	Comment	Location			
<b>Route Level</b>					
Improve connection		Airport	To		
Improve connection		Train Station	To		
Free dedicated lane BRT		Congress St	Along		
Commuter bus		West End	Between	West End	Outer Portland
Commuter bus		East End	Between	East End	Outer Portland
Commuter bus		Bayside	Between	Bayside	Outer Portland
Lack connection		Waterfront	Between	Forest Ave	Congress St
Loop bus		Downtown Waterfront	Along	Downtown Waterfront	Commercial St
Loop bus		West End Waterfront	Along	West End Waterfront	St Johns St
Loop bus		Back Cove Waterfront	Along	Back Cove Waterfront	Marginal Way
Loop bus		East End Waterfront	Along	East End Waterfront	Eastern Promenade
New route		Westbrook	Between	Westbrook	Maine Mall
Dedicated lane BRT		Penninsula	Between	Penninsula	Maine Mall
Dedicated lane BRT		Penninsula	Between	Penninsula	Augusta
Indirect route		Westbrook	Between	Elm St	Maine Mall
New bus stop		Bedford St	Intersection	Bedford St	Durham St
Extend #4X		Riverside	Area	Riverside	Warren Ave
Create Peninsula Loop		Commercial St	Area	Commercial St	Marginal Way
New route, no Loop		Congress St	Along	East Promenade	Bus Terminal
New route		Washington Ave	Along	Congress St	Casco Bay Ferry
New Route		Franklin St	Along		
New Route		Outer Brighton	Along	Outer Brighton	Congress St
Higher frequency		#1 Route	Along		
Shuttle		Commercial St	Along	State St	Franklin Art
Extend S Portland line to Murray Hill		Commercial St	Along		
Eliminate loop		Congress St	Along		
Add bus stop		Marginal Way	Intersection	Marginal Way	Elm St
Add bus stop		Marginal Way	Between	Elm St	Franklin Art
New route to/from bus terminal		Congress St	Along		
New route from outer Foxes to Congress		Congress St	Along		
New route		Franklin Art	Between	Washington Ave	Casco Bay Term
New route from Outer Brighton via Law Scho		Congress St	Along		
<b>New Alignment</b>					
Use existing line to extend east		Springfield ML Terminal	Along		
<b>Service</b>					
Create new all-day trolley line		Congress St	Along		
Create new all-day trolley line		Deering Ave	Along		
Create new all-day trolley line		Forest Ave	Along		
Create new all-day trolley line		Preble St	Along		
Create new all-day trolley line		Elm St	Along		
Create new all-day trolley line		Washington Ave	Along		
Lack queue space		Metro Pulse	At		
Lack queue space		Metro Pulse	At		
Improve service		Western Suburbs	Area		
Need shelter		Post Office	Metro Stop		
Need shelter		USM	Metro Stop		
Need shelter		Libbytown	Metro Stop		
Need announcements and signs		PULSE	Metro Stop		
Create hub		Maine State Pier	Intersection	Franklin Art	Commercial St
Confusing signage		Center St	Intersection	Center St	Congress St
Uncleared snow blocks bus stops		Washington Ave	Intersection	Washington Ave	Congress St
Uncleared snow blocks bus stop		Forest Ave	Intersection	Forest Ave	Noyes St
Uncomfortable facility		MetroPulse	Area		
METROPulse inadequate		Elm St			
Service to Mercy Hospital		Fore River Pkwy	Along		
Commuter rail along existing tracks		County Way	Along		
No detour		St John St	Along		
Add indoor bus stop		Bedford St	Intersection	Bedford St	Forest Ave
Express bus to Yarmouth, Freeport, Brunswick		Hwy 26	Along		



At the conclusion of the transit mark-up session, participants were asked to vote for the reasons that they did not ride transit more frequently. Participants were limited to 6 votes, requiring them to prioritize their issues. Some common responses were listed to prompt feedback, but all participants were encouraged to write-in their own issues with transit service in Portland. All responses are summarized in the following table and chart.

**Transit Survey Voting Response Summary**

Transit Issues (92 responses)	Total Points	% of Total Points
Not frequent	109	23%
No service in area, service not late enough	52	11%
Complicated maps & schedules	47	10%
Lack shelter	43.5	9%
Lack Real-time info	30	6%
Not enough park and ride parking	29	6%
Not punctual	28	6%
Difficult bus-rail transfer	23	5%
Not near work	19	4%
Bus stops inadequate, inconvenient, poorly lit, no crosswalk, no snow removal, no posted info	17	4%
Not comfortable/welcoming	16	3%
Not near home	13	3%
Don't ride, other modes more convenient	10	2%
Stops too often	8.2	2%
Other (including fare and routing suggestions,)	8	2%
High fares	6	1.3%
Difficulty boarding & exit	5	1%
Lack of information	4	0.9%
Fare paying too slow	2	0.4%
<b>Total</b>	<b>469.7</b>	<b>100%</b>



## Transit Planning Framework

Nelson\Nygaard's preliminary list of transit strategies for the peninsula attempt to address a number of concerns heard at the forum as well as from local governments and agencies. We are also attempting to address several competing priorities, including:

- Serving existing critical destinations with door to door service (METRO's attempt to do the same on the peninsula has resulted in the circuitous Route 8)
- Serving existing neighborhoods with more frequent service, especially in response to increased interest in alternative modes
- Serving future development areas that do not currently have service in an attempt to establish transit ridership from the start
- Providing a higher-level of frequency and lower travel times to compete directly with drive-alone commuting
- Reducing the number of transfers that must be made with better through connections

All of these priorities cannot be fully achieved at the same time without significant investment in transit funding. Part of our mission is to recognize the financial realities that METRO and the City are facing, especially as budgets tighten in a flattening economy with spiking fuel prices. In the short-term, this means that Portland and METRO will have to make certain trade-offs to achieve all or part of these priorities. The trade-offs to weigh are likely to include the following:

- Serving key front-door destinations from alternate locations (i.e. serving Maine Medical Center from Congress Street, serving Kennedy Park from Washington Avenue, serving Hannaford's from Preble Street Extension)
- Diverting faster through-route service to serve key front-door destinations (i.e. re-routing Forest Avenue service to serve USM or Hannaford's, re-routing Congress Street service to serve Roosevelt Tower)
- Pulling routes from existing service areas to increase performance on parallel corridors (i.e. moving Park Avenue service to Congress Street, moving North Street service to Washington Avenue, serving Bayside (Marginal Way) from Preble)
- Eliminating the 30-minute "pulse" of METRO Pulse to increase service frequency
- Relocating METRO Pulse to enable routes to travel through the Monument Square area as opposed to turning them around at the Pulse

While our team recognizes the need to prepare a set of strategies that can be implemented almost immediately, we have also sought to look towards the future and provide a series of implementable stages for transit service that will build-off of our short-term suggestions as additional funding becomes available or necessary. The draft strategies are organized in three time periods:

- The short-term fully fiscally-constrained future, which assumes that any proposed changes must occur without any new operating or expansion capital. However, these strategies may be implemented as soon as possible.
- A medium-term future (approximately 5 years) that attempts to provide idealized transit service that is sized to the region’s population but requires a certain level of additional public or private financing to achieve.
- A long-term future (over 20 years) that presents realistic and implementable solutions for Portland that can be achieved with a moderate investment and a unified commitment by government, agencies and the community. These strategies are intended to be a seamless evolution of our medium-term strategy recommendations.

The following matrix is a decision-making tool that illustrates the key factors our team must weigh when developing solutions:

Strategy / Policy Objectives	Key Considerations
<p><u>LOCAL PENINSULA</u></p> <ul style="list-style-type: none"> <li>• Provide comprehensive transit access to Bayside and Ocean Gateway, in addition to Congress Street / Monument Square</li> <li>• Give peninsula residents convenient access to Hannaford</li> <li>• Serve Maine Medical Center and West End</li> <li>• Maintain a front door stop at Franklin Tower</li> <li>• Serve DHS on Marginal Way</li> <li>• Serve Kennedy Park</li> <li>• Overcome I-295 barrier to pedestrians and cyclists by linking USM with Bayside and Monument Square</li> </ul>	<ul style="list-style-type: none"> <li>• Service to Bayside will be underutilized until more build-out is achieved</li> <li>• Sacrificing front-door service for higher-frequency service</li> <li>• Through-routing to connect Eastern Waterfront requires changes to ends of routes</li> </ul>
<p><u>NEAR-BY PARK AND RIDE</u></p> <ul style="list-style-type: none"> <li>• Serve parking lots on or adjacent to the peninsula</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination with private shuttles &amp; TDM plans</li> </ul>
<p><u>COMMUTER SERVICE (ZOOM) South, North, and West</u></p> <ul style="list-style-type: none"> <li>• Provide express bus routes to outlying park and ride locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination with Maine DOT to expand parking</li> </ul>

Each of these considerations affects the preliminary strategies identified in the following matrix of short, medium and long term horizons.

	Short Term, No/Low Cost	Medium Term / Cost	Longer Term / Cost
<b>Local Peninsula</b>	<ul style="list-style-type: none"> <li>• Revise existing routes to serve locations now served by circuitous/confusing Route 8.</li> <li>• Adjust routes to operate with consistent 30 and 60-minute headways.</li> <li>• Provide consistent 15-minute headways on key peninsula route segments by overlapping routes and staggering departures.</li> <li>• Adjust existing routes to add more service to the waterfront and Bayside.</li> <li>• Provide direct link from Portland Transportation Center to USM / Hannaford / downtown / waterfront.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace Route 8 with dedicated peninsula bus routes that link:                             <ul style="list-style-type: none"> <li>○ USM / Hannaford / Bayside / Monument Square, with possible extension to Ocean Gateway</li> <li>○ MMC and West End with Monument Square, Bayside, and/or waterfront</li> <li>○ Kennedy Park and Franklin Tower with DHS, Hannaford, and downtown transit hubs.</li> </ul> </li> <li>• Revise existing routes to serve the Portland Transportation Terminal and the new Mercy Hospital site, without diverting Maine Mall buses.</li> <li>• Use signal prioritization and other techniques to help move buses through congested areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Bus Rapid Transit or Diesel Light Rail, with shorter bus links to destinations not on the dedicated bus or rail route.</li> <li>• Include cross-peninsula configuration, to ensure direct access to Ocean Gateway, Congress Street, and Bayside.</li> <li>• Develop pedestrian-friendly bus/rail transfer facilities in Bayside, near to Ocean Gateway, and elsewhere</li> <li>• Ensure that short and medium-term decisions are consistent with a long-term vision that provides a meaningful alternative to the current reliance on automobiles</li> </ul>
<b>Park &amp; Ride</b>	<p>Work with Maine Medical Center to improve peripheral parking arrangements</p>	<ul style="list-style-type: none"> <li>• Possible MDOT/hospital partnership to develop and share a parking structure at the Portland Transportation Terminal</li> <li>• Identify other adjacent lots and shuttle opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Develop appropriate levels of parking at rail / bus terminals</li> </ul>
<b>Commuter</b>	<p>Develop a parking lot and design Yarmouth Express shuttle service</p>	<ul style="list-style-type: none"> <li>• Expand existing park and ride lots</li> <li>• Develop Brunswick-Freeport-Yarmouth ZOOM</li> <li>• Lewiston-Auburn ZOOM</li> <li>• ZOOM service for Gorham and points west</li> </ul>	<ul style="list-style-type: none"> <li>• Develop improved dedicated park and ride lots</li> <li>• Increase commute hour frequencies</li> <li>• Provide all-day service for a variety of travel purposes</li> </ul>

## **Next Steps**

Specific transit alignments are in development as examples of how to meet the short, medium and long-term needs of the peninsula. Our team also is correlating specific alignments to population and employment centers (see Appendices). After additional input from City Staff, METRO, South Portland Bus and the Committee is received, these alignments will be illustrated for detailed review. The suggested park & ride and commuter strategies will then be developed in greater detail once local circulation changes are more concrete.

Based on discussions with local stakeholders, our team also is investigating several progressive transit concepts that could integrate well with the short-term alignments, including:

- Direct service to downtown originating at the Portland Transportation Center
- A dedicated bus pull-out serving USM
- Interlining South Portland Bus service with METRO routes in downtown
- A secondary transit hub located in Bayside at the City's Public Works yard
- Two-way circulation on Preble and Elm Streets to calm traffic and allow the utilization of a more accommodating transit hub, such as the vacant Portland Public Market
- Traffic restrictions on Congress to create a hybrid transit mall
- A waterfront streetcar

These concepts will be investigated further as to whether they can work successfully without significant adverse impacts to existing service or other modes of transportation.