

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

April 13, 2016

Mayor Charlie Hales
Portland City Council
1221 SW 4th Avenue, Room 130
Portland, OR 97214

Re: **2035 Comprehensive Plan - Mixed Use Zones**
Transportation Analysis
Project Number 2160034.01

Dear Mayor Hales and Council Members:

Mackenzie has prepared this transportation analysis on behalf of the Retail Task Force and the International Council of Shopping Centers (ICSC) to address the potential traffic impacts of proposed mixed use zoning changes in the City of Portland.

Specifically, we have considered the impacts of reducing the opportunities for auto accommodating development as it pertains to larger grocery and discount stores. These uses are important for lower income residents and typically are accessed by automobiles. While some alternate travel occurs for these uses, customers are limited to what they can carry when biking or riding transit. Even with current zoning requirements, many of these users have located to the fringes of the City of Portland along 82nd Avenue and locations to the east or into the suburbs.

The analysis prepared by Eric Hovee identifies that many Portland residents travel outside of their local neighborhoods to access these types of retail uses – referred to as retail leakage. Not only does this result in retail dollars leaving the City, but can result in increased automobile travel distances, which leads to more congestion and greenhouse gas emissions. Impacts on congestion are difficult to measure without addressing specific locations, but the travel distances are more readily quantifiable.

We have considered two examples of existing retail uses that are located in or around the City of Portland where residents of the City are currently driving outside of the City or out to the fringes.

One user we considered was Costco. Costco serves the needs of consumers to buy bulk goods and groceries. At one point Costco had proposed locating a store in Northwest Portland but was unsuccessful in siting the store. Currently, residents of Portland shop at Costco stores located in Beaverton, Tigard, Clackamas, and Northeast Portland on 138th Avenue near Airport Way. Costco confirmed a significant number of City residents shop at these stores, and that these are all automobile trips.

In order to assess the potential reduction in travel distances, or vehicle miles traveled (VMT), we made an assessment of average travel distances for areas of Portland to each of the stores that residents would likely shop at. We then compared that distance to the distance they would have driven to a store in Northwest Portland. See the attached maps showing the location of existing Costco stores, the previously planned store location, and travel distances.



P 503.224.9560 • F 503.228.1285 • W MCKNZE.COM • RiverEast Center, 1515 SE Water Avenue, #100, Portland, OR 97214
ARCHITECTURE • INTERIORS • STRUCTURAL ENGINEERING • CIVIL ENGINEERING • LAND USE PLANNING • TRANSPORTATION PLANNING • LANDSCAPE ARCHITECTURE
Portland, Oregon • Vancouver, Washington • Seattle, Washington

Mayor Charlie Hales
Mixed Use Zones
Project Number 2160034.01
April 13, 2016
Page 2

On average, a trip to Costco for a Portland resident would be 6.2 miles less each way with the proposed Northwest Portland store location. Nearly all trips to a Costco are made by private vehicles. With an average of 14,000 daily trips for a Costco store, the VMT is estimated to be reduced by up to 86,800 miles per day or approximately 32 million miles annually.

We also looked at a number of other grocery retailers currently located along the 82nd Avenue corridor within Southeast Portland and Clackamas. We were able to obtain customer information from one of these retailers to confirm the effective service area of a store. The information is not included with this letter, as it is proprietary, but in general, the data show a market area extending west to the Willamette River in the area of Southeast Portland.

For this one store in particular, the percentage of customers traveling from the west or inner Southeast Portland is higher than those traveling from the east. This clearly shows customers are driving from inner Southeast Portland out to less dense areas of the city for these shopping opportunities. Again, we would note most customers buying groceries or large bulk items travel in automobiles.

For residents living between downtown Portland and the 82nd Avenue corridor, there is not an opportunity for pass-by trips during an evening commute. Instead, these customers would need to travel beyond their residence for these shopping opportunities, resulting in additional congestion and VMT.

In summary, by limiting the opportunity for locating auto-accommodating retail uses in close-in areas of the City and along high density corridors, City residents will continue to drive to the fringes of the City or to other nearby Cities for these shopping opportunities. The result will be increased congestion, increased VMT, increased greenhouse gas emissions, and loss of retail dollars for these neighborhoods of Portland.

Sincerely,



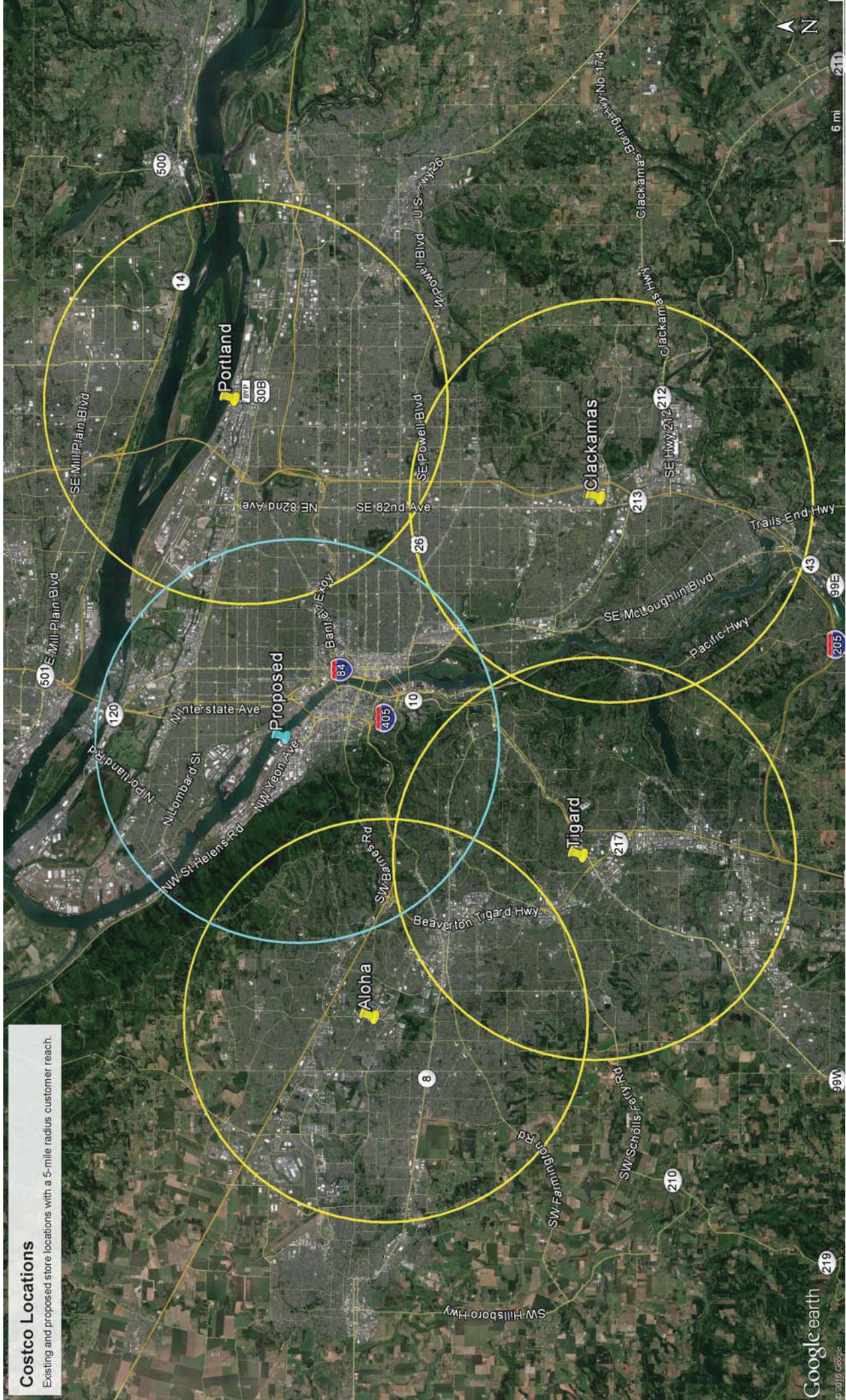
Brent Ahrend, PE
Traffic Engineer | Senior Associate

Enclosure: Costco Location and Travel Distance Information



Costco Locations

Existing and proposed store locations with a 5-mile radius customer reach.

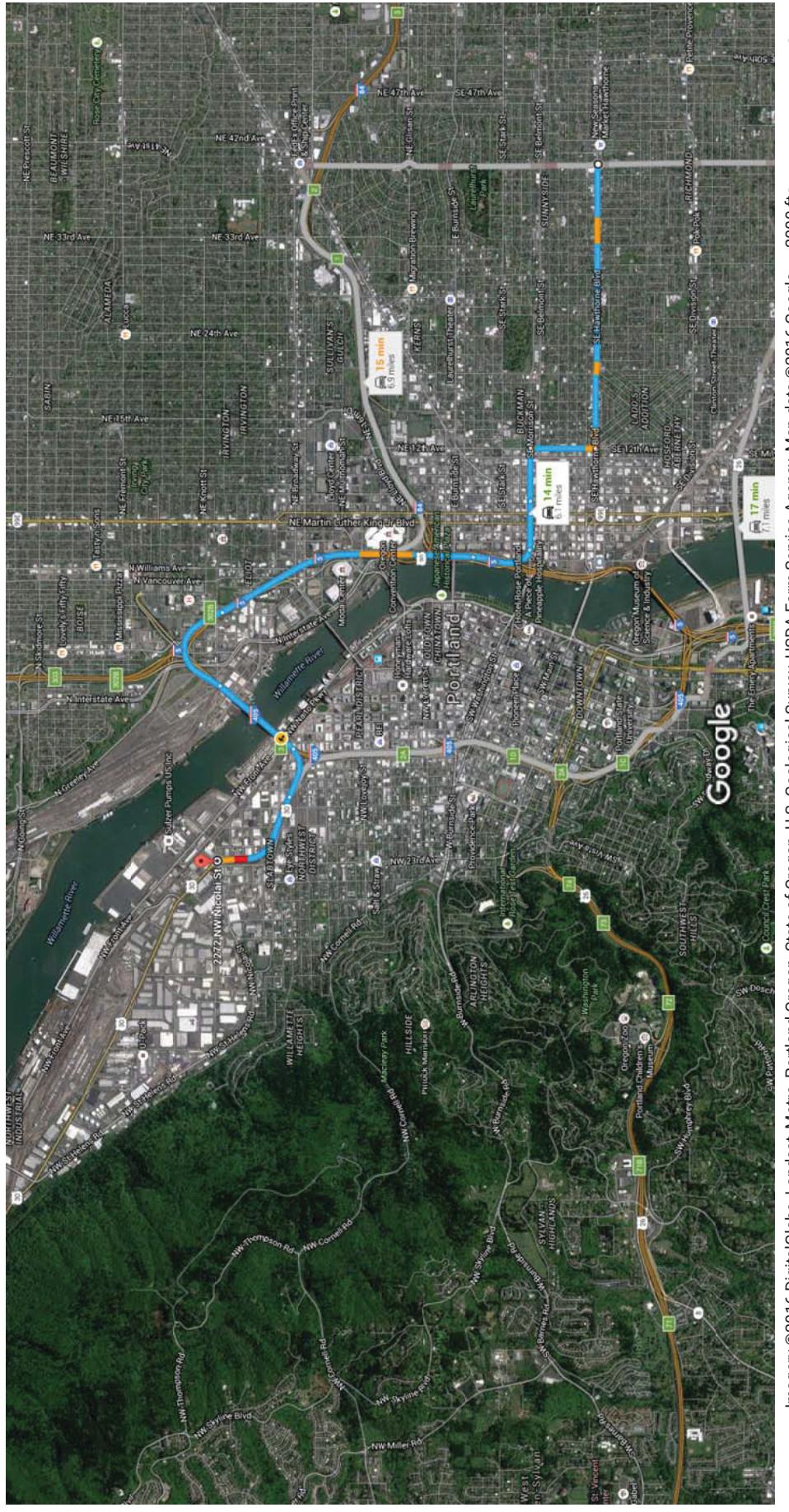


Travel Distances for Costco Locations					
To/From	Aloha	Tigard	Portland	Clackamas	Proposed
N Portland	14.9		9.3		4.7
Downtown	10.4	9.5			1.7
SE Portland			9.0	9.2	6.1
Proposed Location	Miles Traveled	Average Reduction			6.2

Google Maps

1500-1576 SE Cesar Estrada Chavez Blvd, Portland, OR 97214 to 2272 NW Nicolai St

SE Portland Customers Traveling to Proposed Location



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google

via SE Hawthorne Blvd

12 min without traffic

14 min

6.1 miles

via I-84
12 min without traffic

15 min
6.9 miles

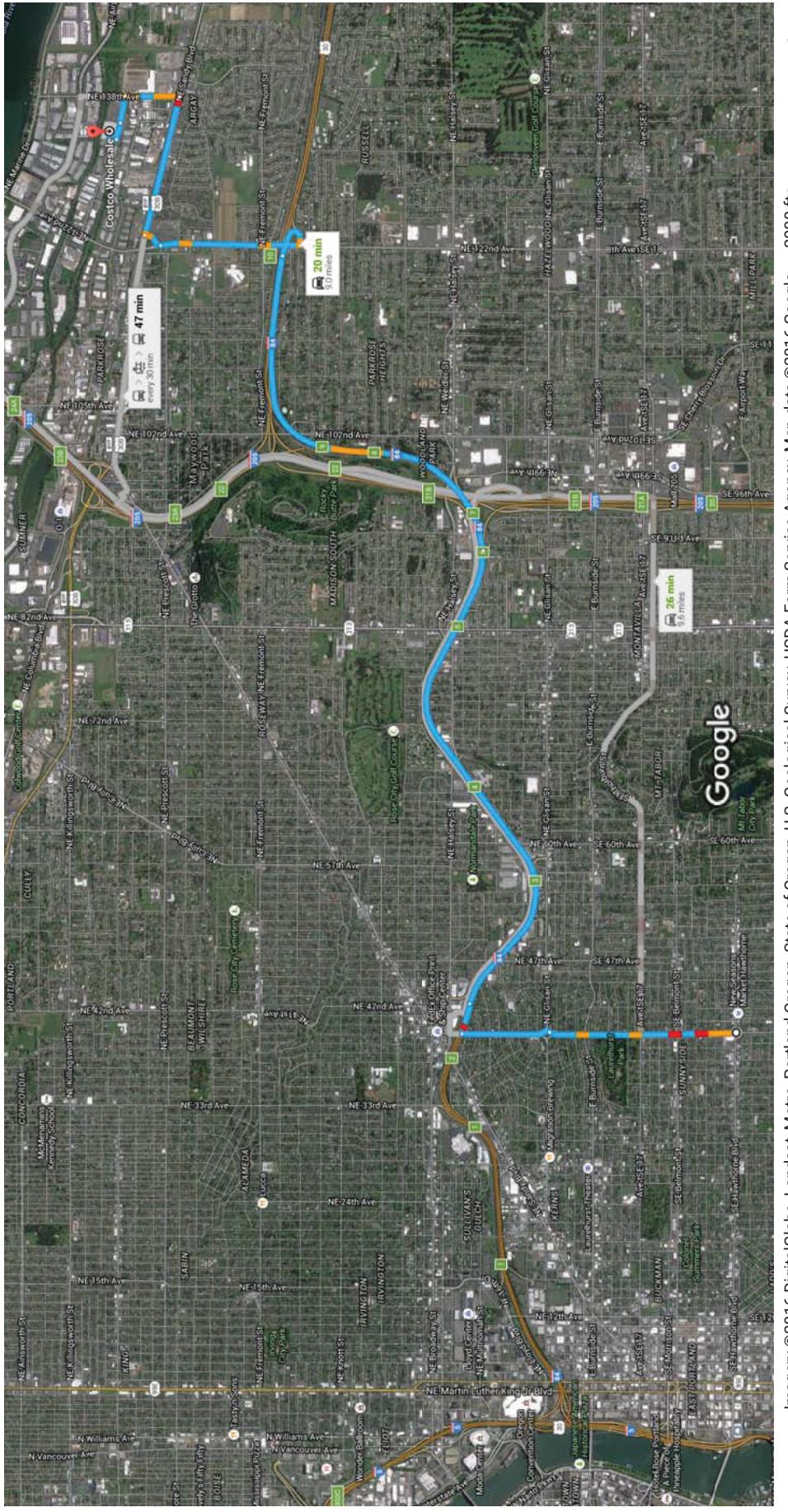
via SE Powell Blvd
15 min without traffic

17 min
7.1 miles



1500-1576 SE Cesar Estrada Chavez Blvd, Portland, OR 97214 to Costco Wholesale

SE Portland Customers Traveling to NE Portland Location



<https://www.google.com/maps/dir/1500-1576+SE+Cesar+Estrada+Chavez+Bld,+Portland,+OR+97214/Costco+Wholesale,+No...>

via I-205 N
26 min
9.6 miles
22 min without traffic

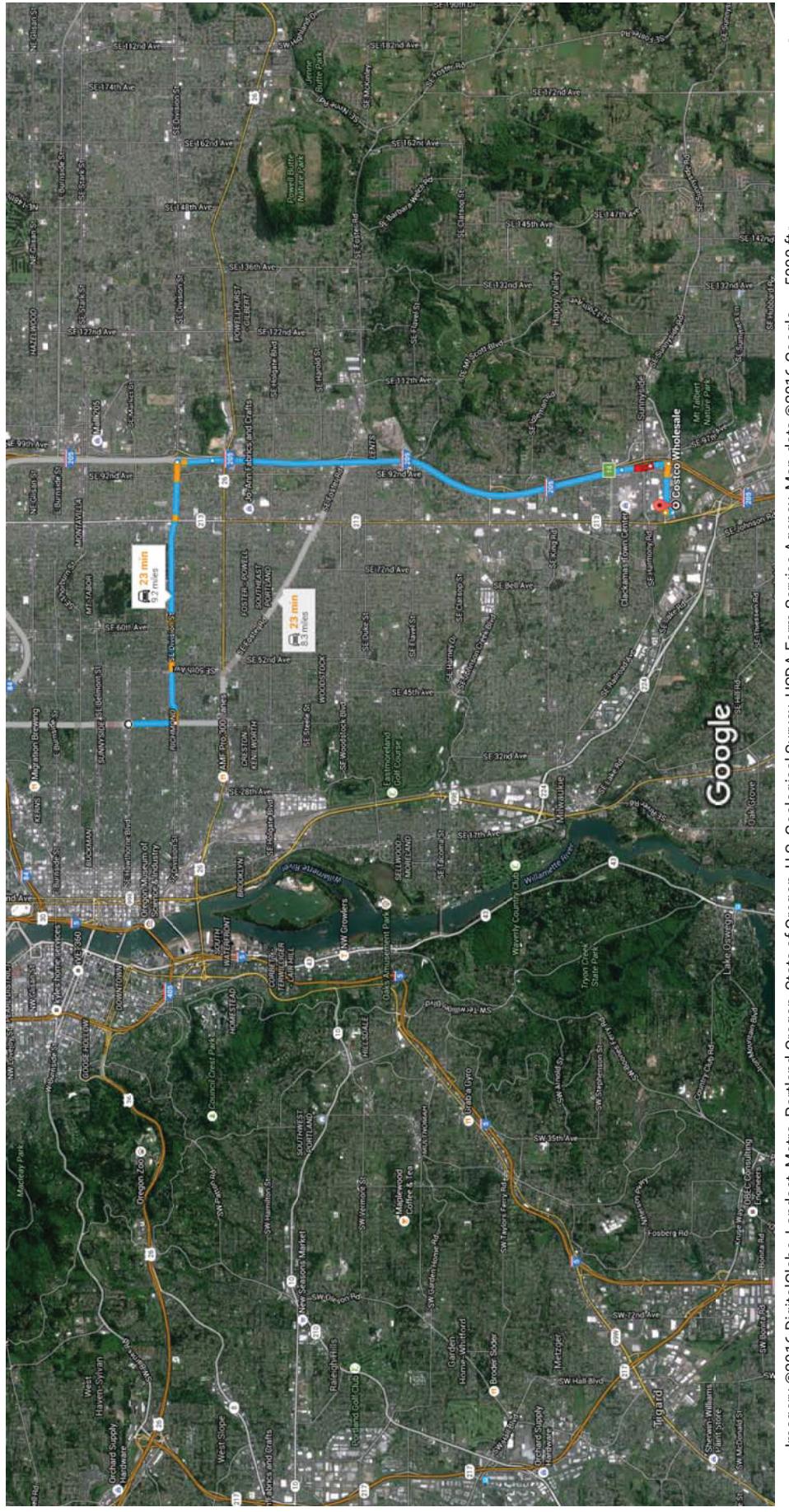
1:11 PM–1:58 PM
47 min
 MAX Red Line
 I-75
 I-21

Google Maps

Google Maps

1500-1576 SE Cesar Estrada Chavez Blvd, Portland, OR 97214 to Costco Wholesale

SE Portland Customers Traveling to Clackamas Location



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google

via I-205 S

18 min without traffic

23 min

9.2 miles
Drive 9.2 miles, 23 min

23 min

12.4 miles

via SE Foster Rd and I-205 S
18 min without traffic

23 min
8.3 miles

via SE Division St and I-205 S
19 min without traffic

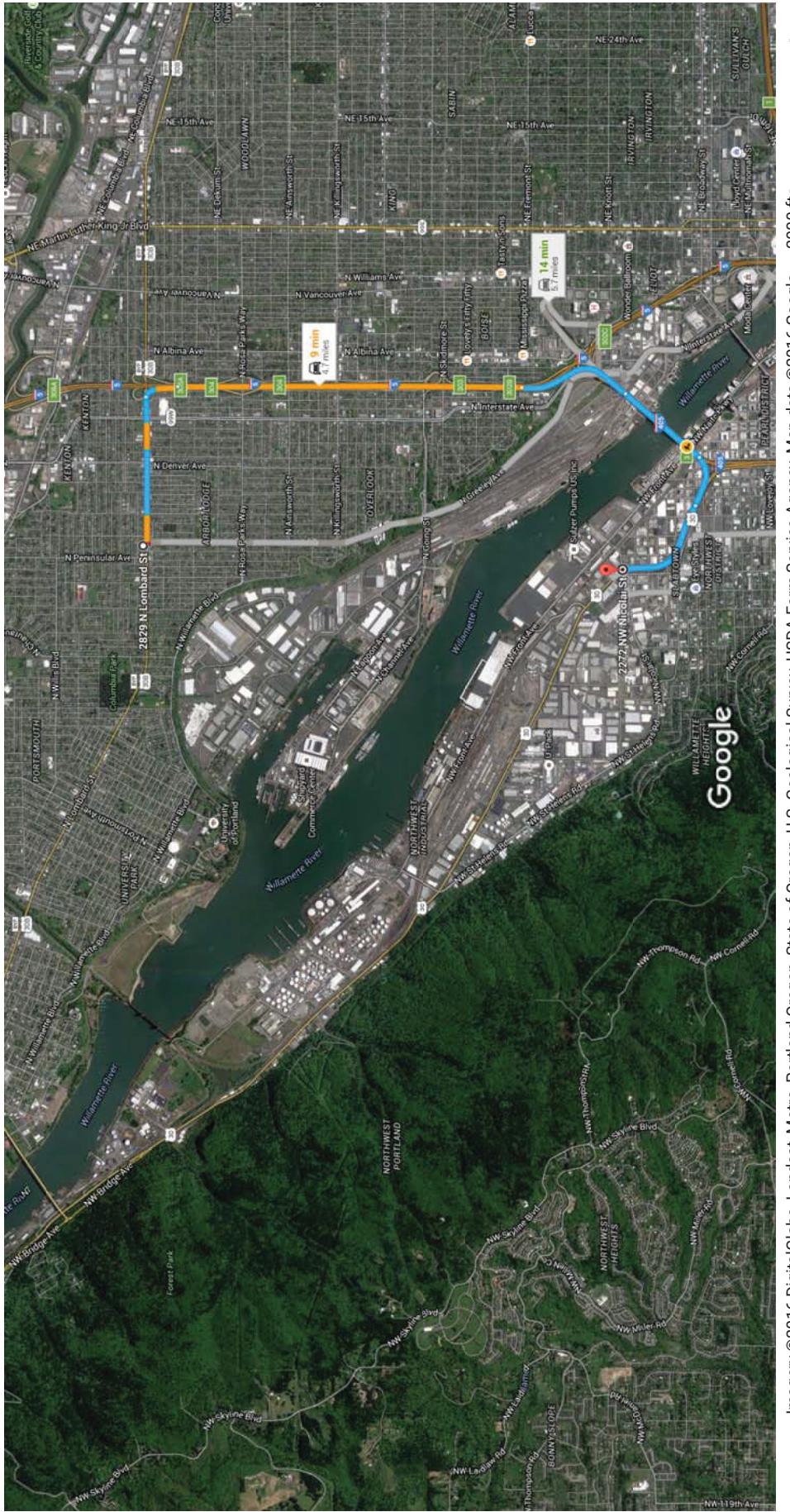
23 min
9.2 miles

Google Maps

Google Maps

2829 N Lombard St, Portland, OR 97217 to 2272 NW Nicolai St, Portland, OR 97210

North Portland Customers Traveling to Proposed Location



via I-5 S

7 min without traffic

9 min

4.7 miles

Drive 4.7 miles, 9 min

via N Greeley Ave
12 min without traffic

12:09 PM—1:03 PM
 

Google Maps

14 min
5.7 miles

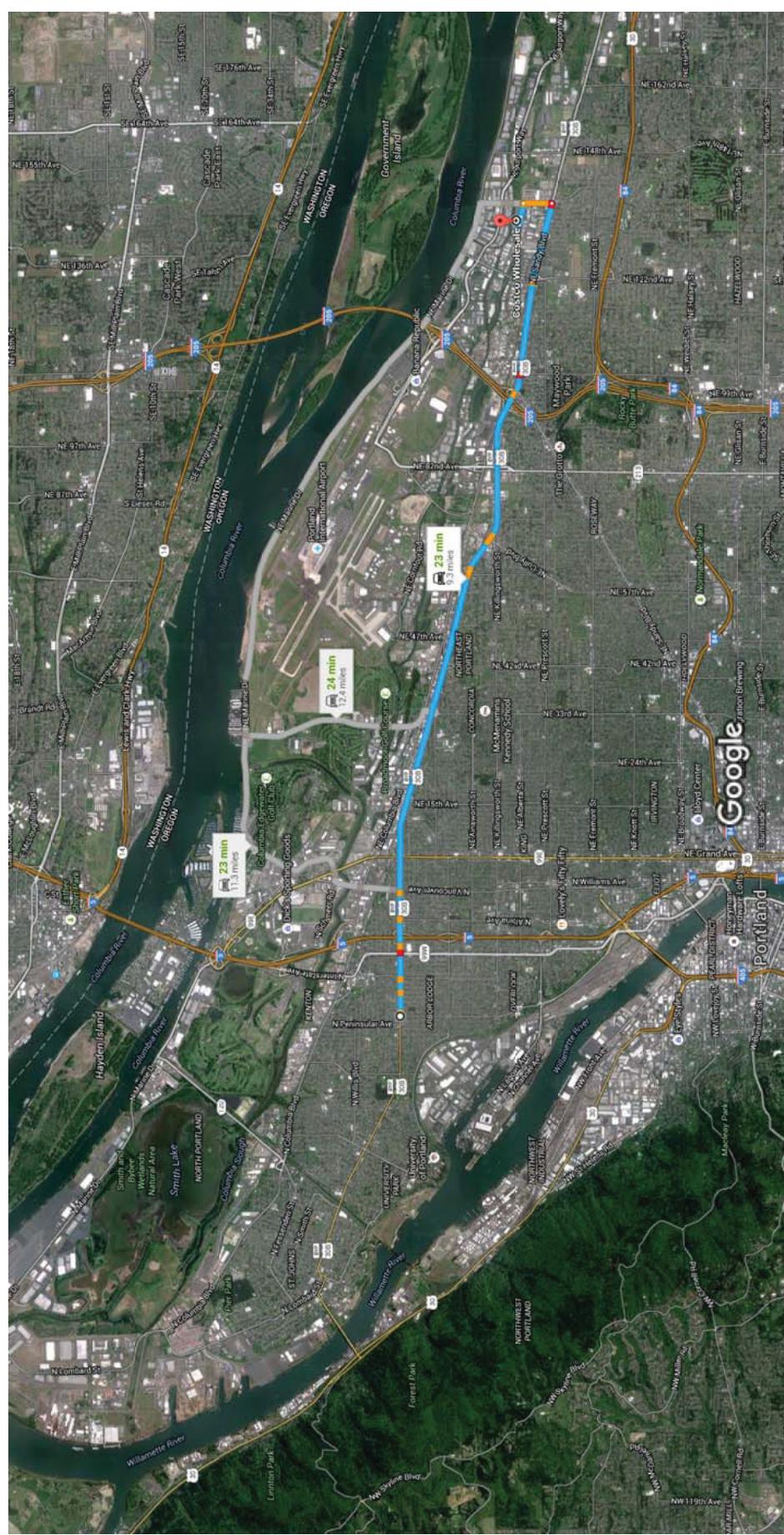
54 min

Google Maps

2747-2829 N Lombard St, Portland, OR 97217 to Costco Wholesale

North Portland Customers Traveling to NE Portland Location

Drive 9.3 miles, 23 min



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google

5000 ft

via US-30BYP E

21 min without traffic

23 min

9.3 miles

via NE Marine Dr
21 min without traffic

23 min
11.3 miles

via N Lombard St and NE Marine Dr
22 min without traffic

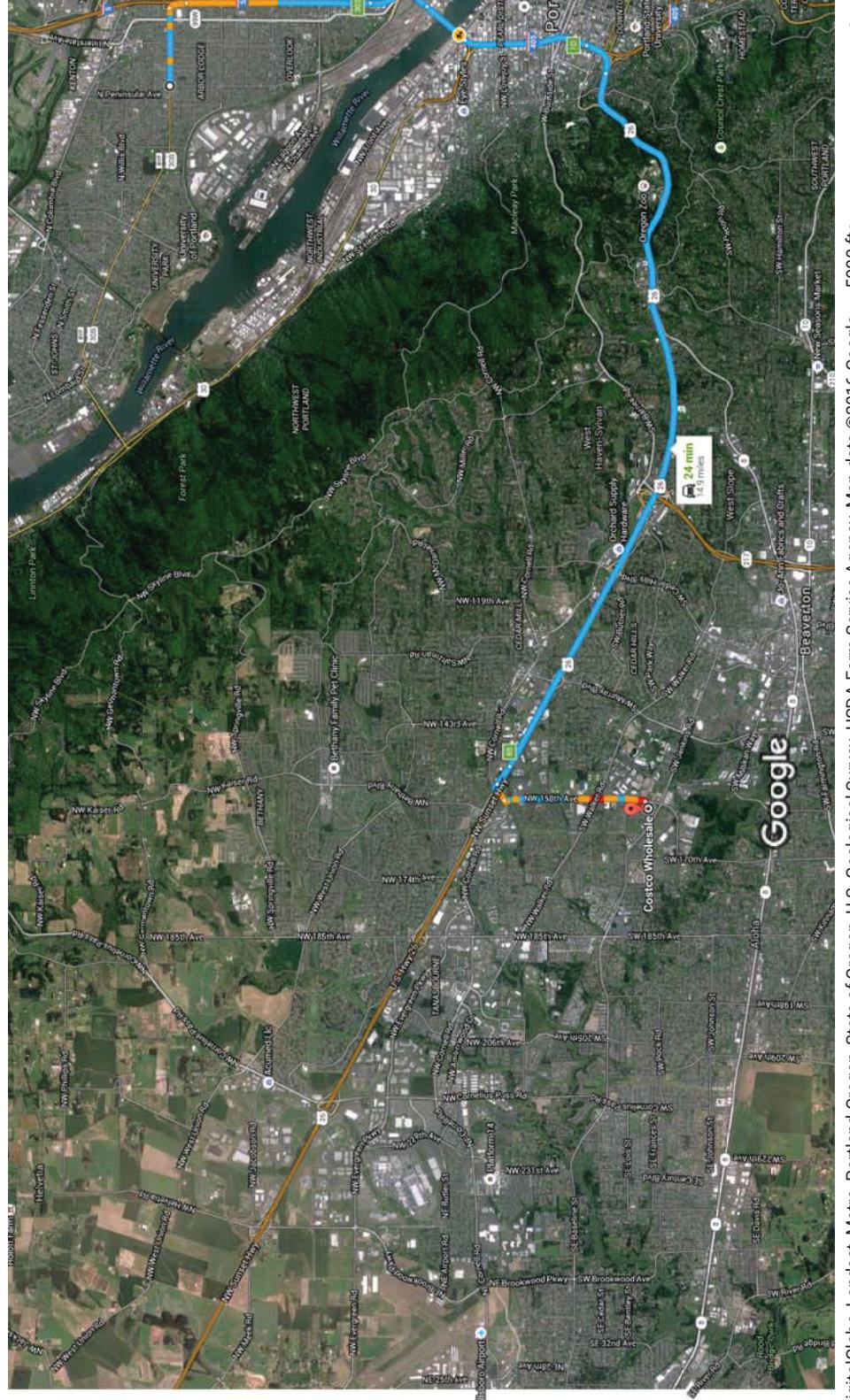
24 min
12.4 miles

Google Maps



2747-2829 N Lombard St, Portland, OR 97217 to Costco Wholesale, Beaverton, OR

North Portland Customers Traveling to Aloha Location



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google

via US-26 W

21 min without traffic

24 min

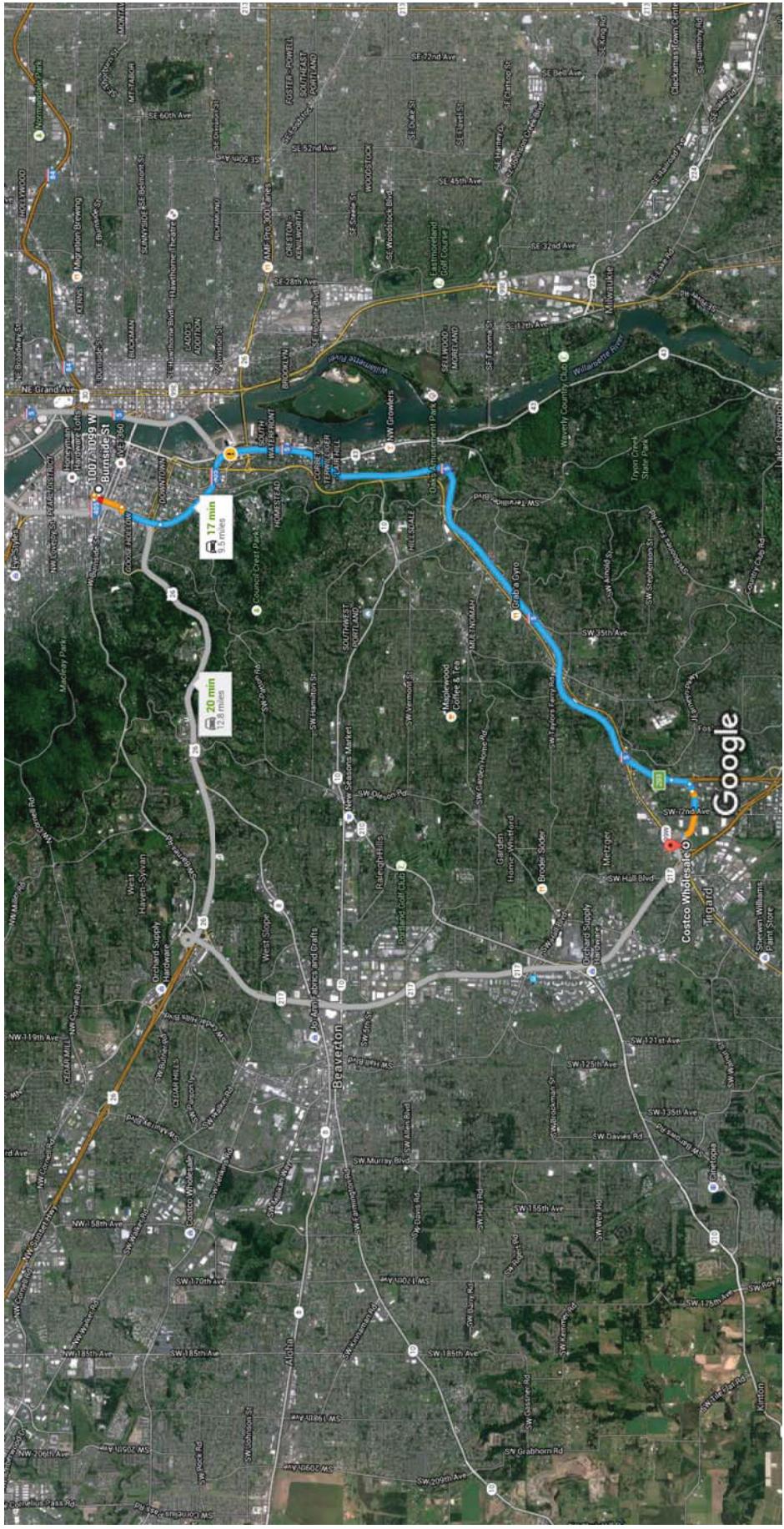
14.9 miles

Google Maps

Google Maps

1007-1099 W Burnside St, Portland, OR 97209 to Costco Wholesale

Downtown Portland Customers Traveling to Tigard Location



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google
Drive 9.5 miles, 17 min
via I-5 S
14 min without traffic

17 min
9.5 miles

via I-405 N and I-5 S
16 min without traffic

18 min
12.4 miles

via US-26 W and OR-217 S
18 min without traffic

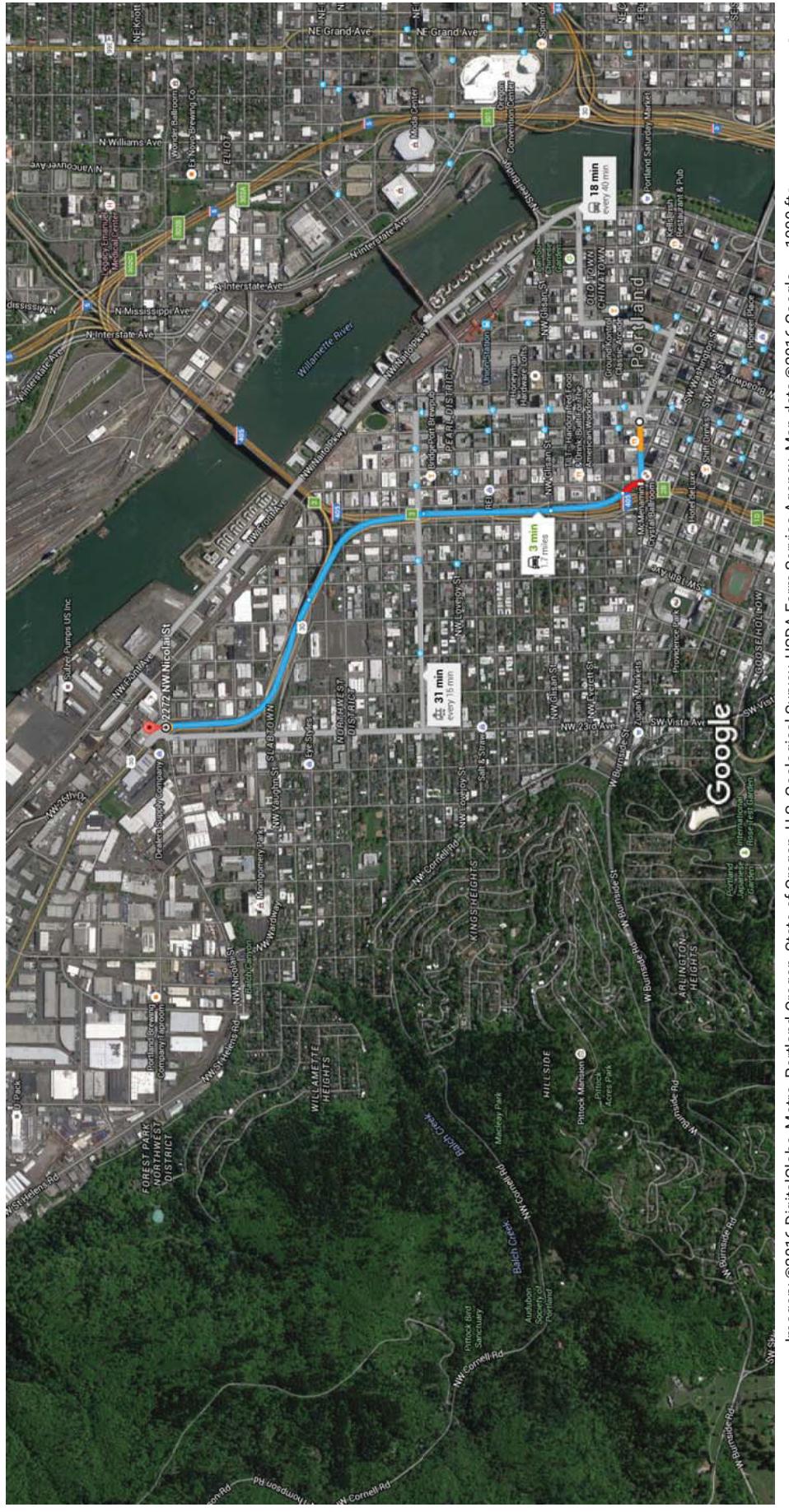
20 min
12.8 miles

[Google Maps](#)

Google Maps

1007-1099 W Burnside St, Portland, OR to 2272 NW Nicolai St, Portland, OR 97210

Downtown Portland Customers Traveling to Proposed Location



4/5/2016 https://www.google.com/maps/dir/1007-1099+W+Burnside+St,+Portland,+OR/2272+NW+Nicolai+St,+Portland,+OR+97210/@...

12:08 PM–12:26 PM
16

12:17 PM–12:48 PM
Portland Streetcar - NS Line

Google Maps

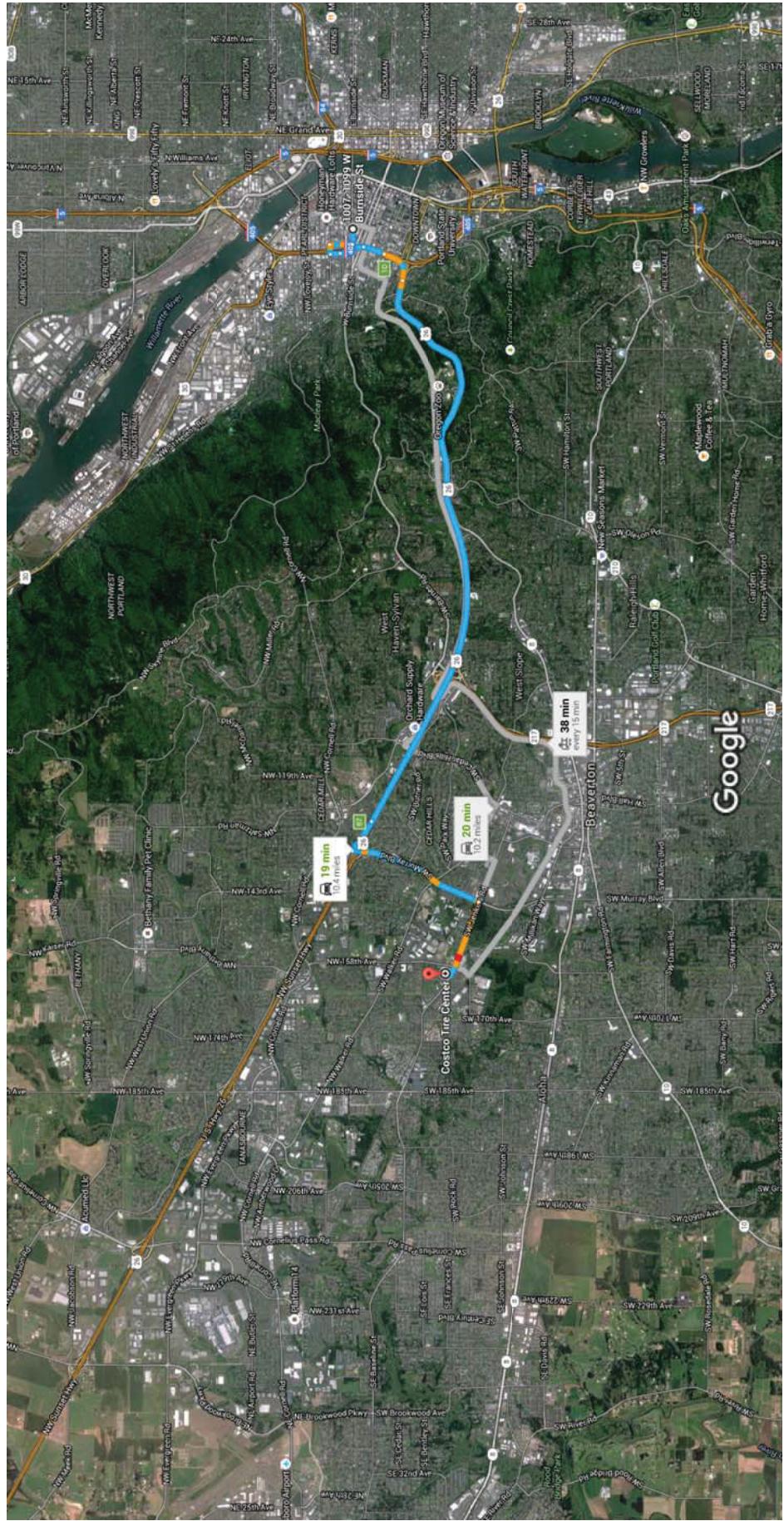
18 min

31 min

Google Maps

1007-1099 W Burnside St, Portland, OR 97209 to Costco Tire Center

Downtown Portland Customer Traveling to Aloha Location



Imagery ©2016 DigitalGlobe, Landsat, Metro, Portland Oregon, State of Oregon, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2016 Google

via US-26

16 min without traffic

19 min

10.4 miles

via US-26 W and SW Jenkins Rd
18 min without traffic

12:13 PM–12:51 PM
 MAX Blue Line

Google Maps

20 min
10.2 miles

38 min