



PAC Meeting #3

November 4, 2020

Meeting Purpose and Agenda Review

| ITEM | LEAD PRESENTER |
|---|--|
| Welcome, Meeting Purpose, Agenda Review | Brett Setterfield, Clackamas County |
| Overview of Future Solutions Strategies | Krista Purser, Kittelson Russ Doubleday, Kittelson |
| Overview of Outreach | Susie Wright, Kittelson |
| Next Steps, Final Questions, & Adjourn | Brett |

2020



1 - Project Management

| **Throughout**



2 – Public Engagement Plan and Existing Conditions **Winter**



3 – Need Analysis

| **Spring**



4 - Future Service Opportunities and Evaluation

| **Summer-Fall**



5 – Draft Clackamas County TDP

| **Fall**



6 – Final Clackamas County TDP

| **Winter**



7 – TDP Adoption

| **Winter**

2021

Project Tasks and Schedule

Future Solutions Strategies

Transit corridors and areas for future service were analyzed and prioritized using three metrics

- Travel demand on regional corridors

- Commuter demand on regional corridors

- Population and employment densities



New Transit Corridors

| Service Type | Transit District | Potential Service |
|----------------------------|------------------|---|
| New Regional Connections | N/A | Damascus and Boring on Highway 212 and/or Sunnyside |
| | N/A | Estacada, Molalla, and Woodburn on Highway 211 |
| | N/A | Estacada, Redland, and Oregon City |
| | TriMet | Tualatin, West Linn, and Oregon City on I-205 |
| | TriMet | West Linn, Lake Oswego, and Washington County |
| | TriMet* | Future C2C Corridor (Damascus, Happy Valley, Gresham) |
| New Local Service | TriMet* | Damascus |
| | TriMet* | Boring |
| | TriMet | Estacada and Eagle Creek |
| | TriMet | Clackamas Industrial Area |
| | TriMet | Jennings Lodge, Oak Grove, and Oatfield |
| Additional Transit Service | TriMet | Happy Valley |
| | TriMet | Oregon City |
| | CAT | Canby |
| | SMART | Wilsonville |

*Added to transit district in the future





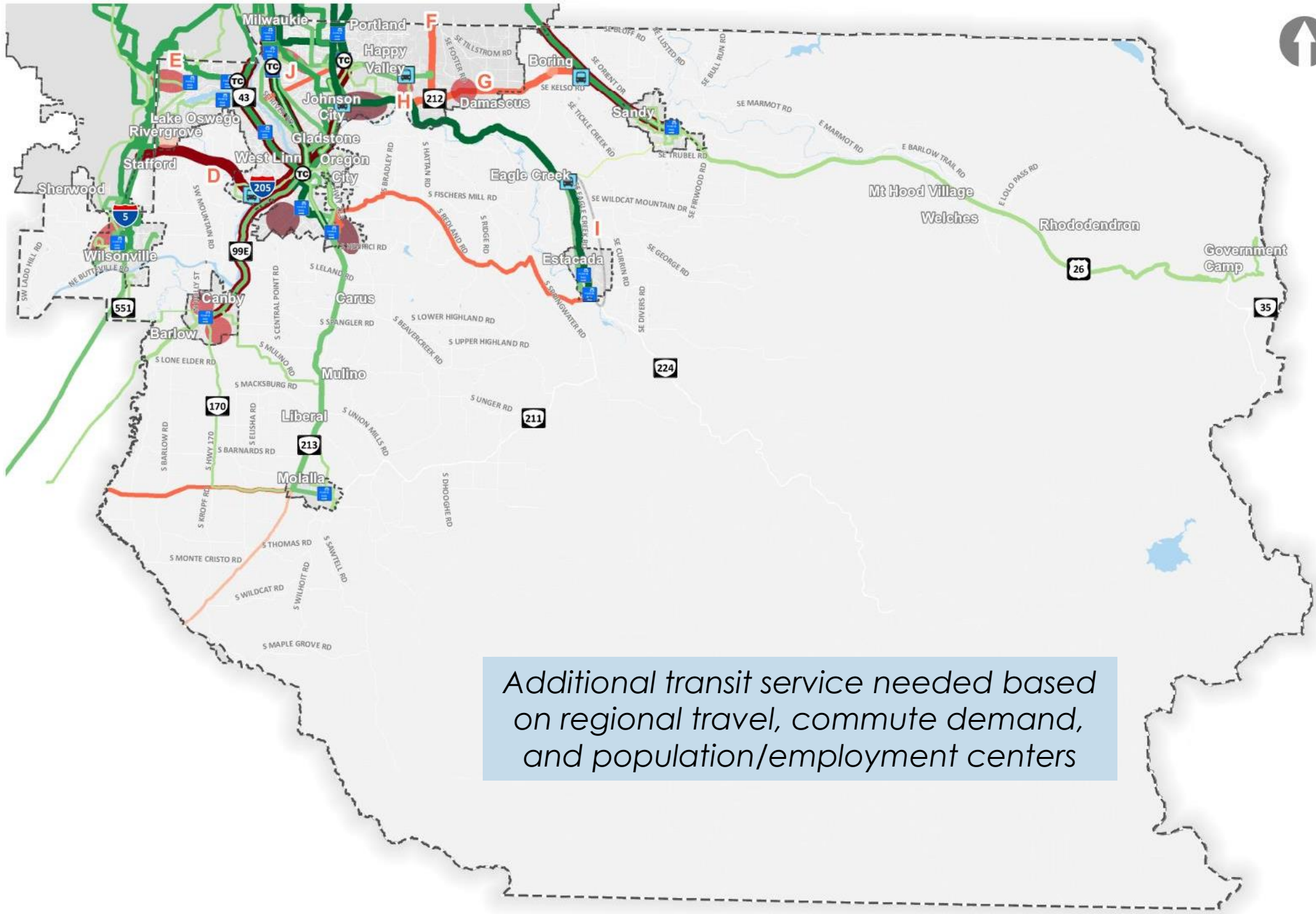
Additional Runs: Areas

- No Additional Runs
- 8 or Fewer Runs per Day
- 9 - 16 Runs per Day
- 17 - 32 Runs per Day
- 33 - 64 Runs per Day

Additional Runs: Corridors

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- Urban Growth Boundaries
- County Boundary





Additional transit service needed based on regional travel, commute demand, and population/employment centers

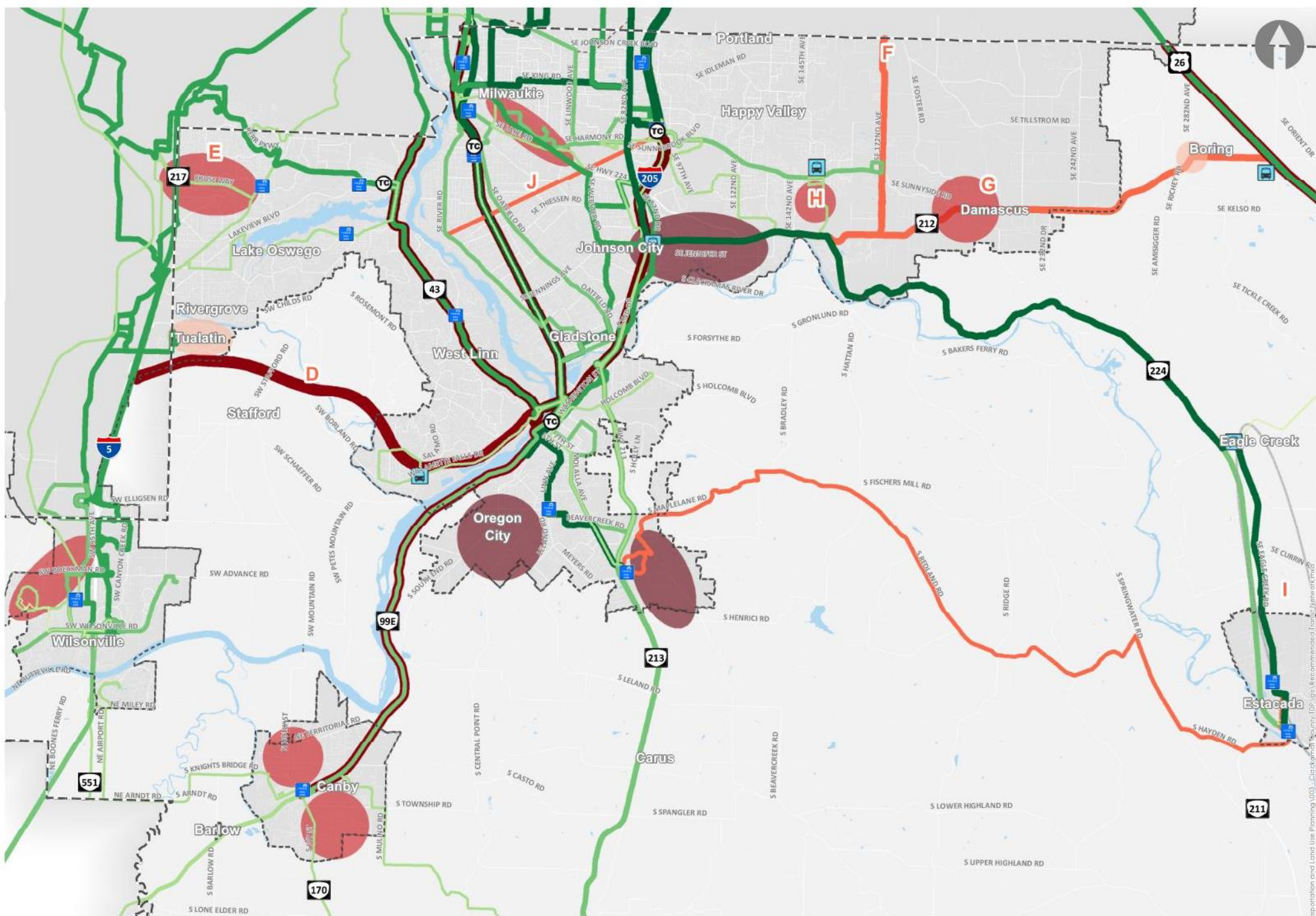
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-  Urban Growth Boundaries
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Future Service Opportunities

Identifying service types and routing for underserved transit corridors and areas

Some services have multiple options preliminarily recommended for implementation

Damascus and Boring on Highway 212 or Sunnyside Road (3 alts)

- A1. Sandy to Clackamas Town Center on Highway 212

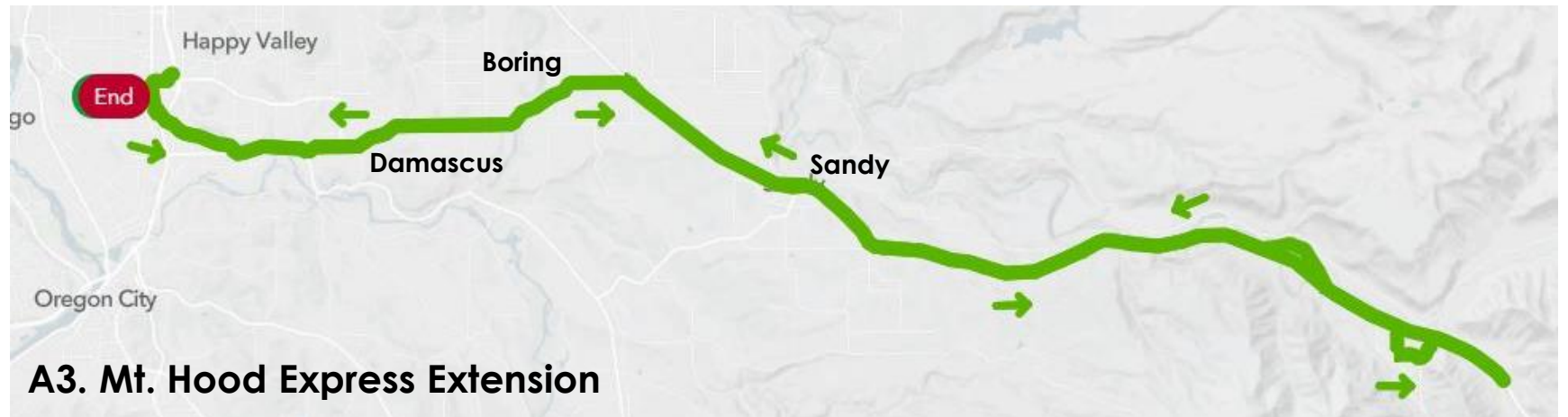


- A2. Sandy to Clackamas Town Center on Sunnyside Road



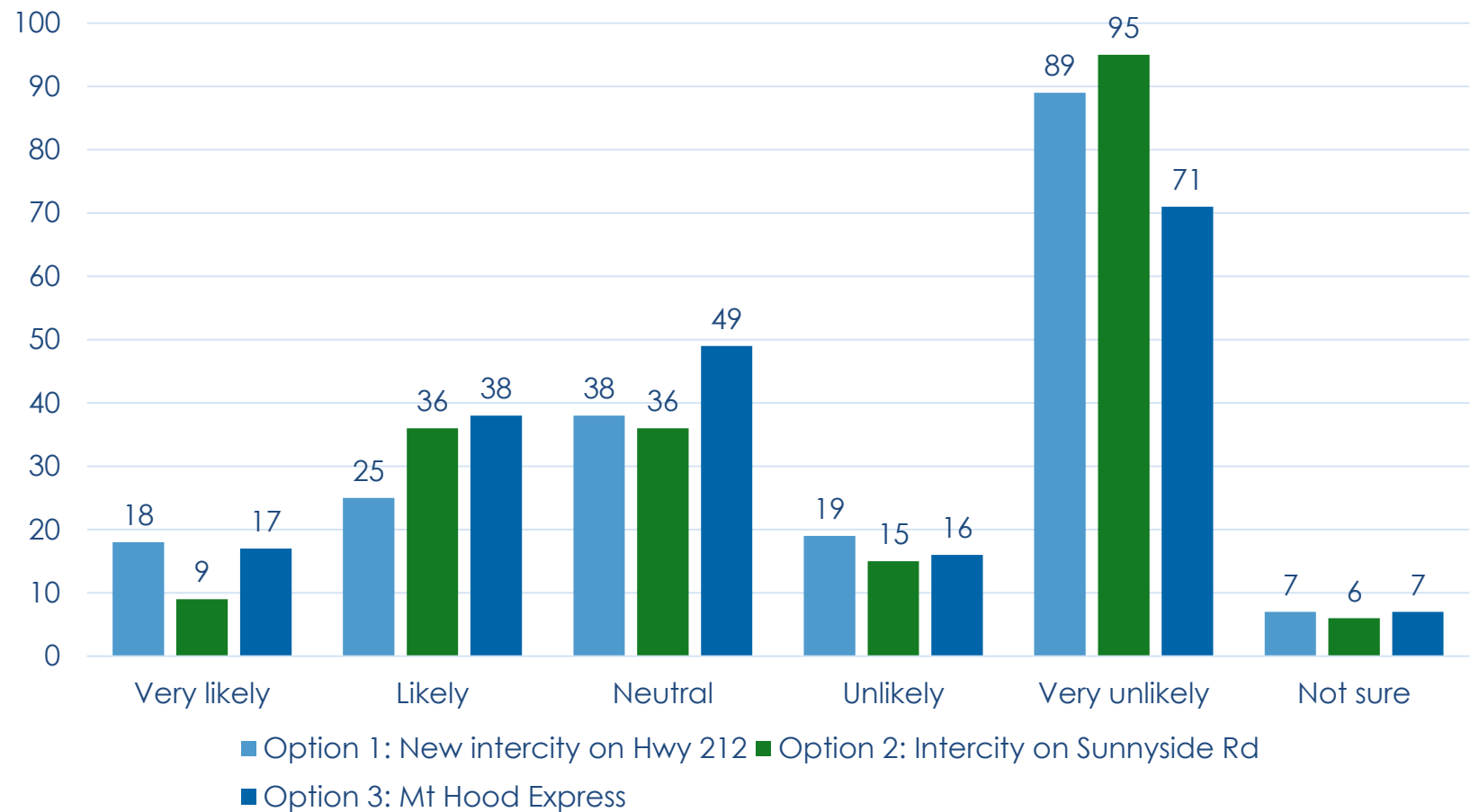
Damascus and Boring on Highway 212 or Sunnyside Road (3 alts)

- A3. Extending Mt. Hood Express to Clackamas Town Center
 - Reliability issues arise with long transit routes (such as scheduling and break down far from storage facilities)



Damascus and Boring on Highway 212 or Sunnyside Road

Sandy, Damascus, Boring and Clackamas Town Center



Estacada, Molalla, and Woodburn on Highway 211 (2 alts)

- B1. Woodburn to Molalla

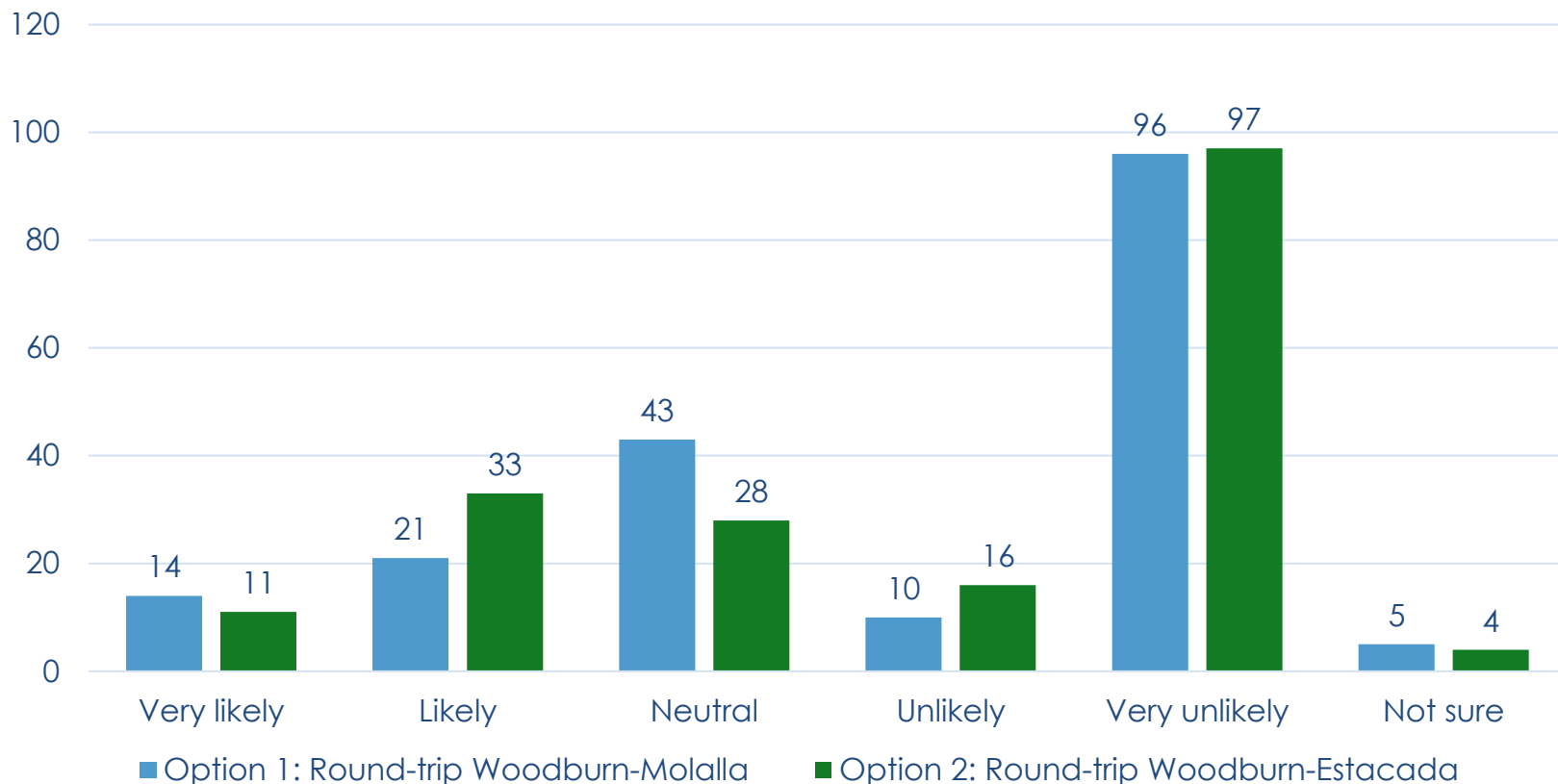


- B2. Woodburn to Estacada via Molalla
The number of people and jobs served within ¼-mile of both routes is similar



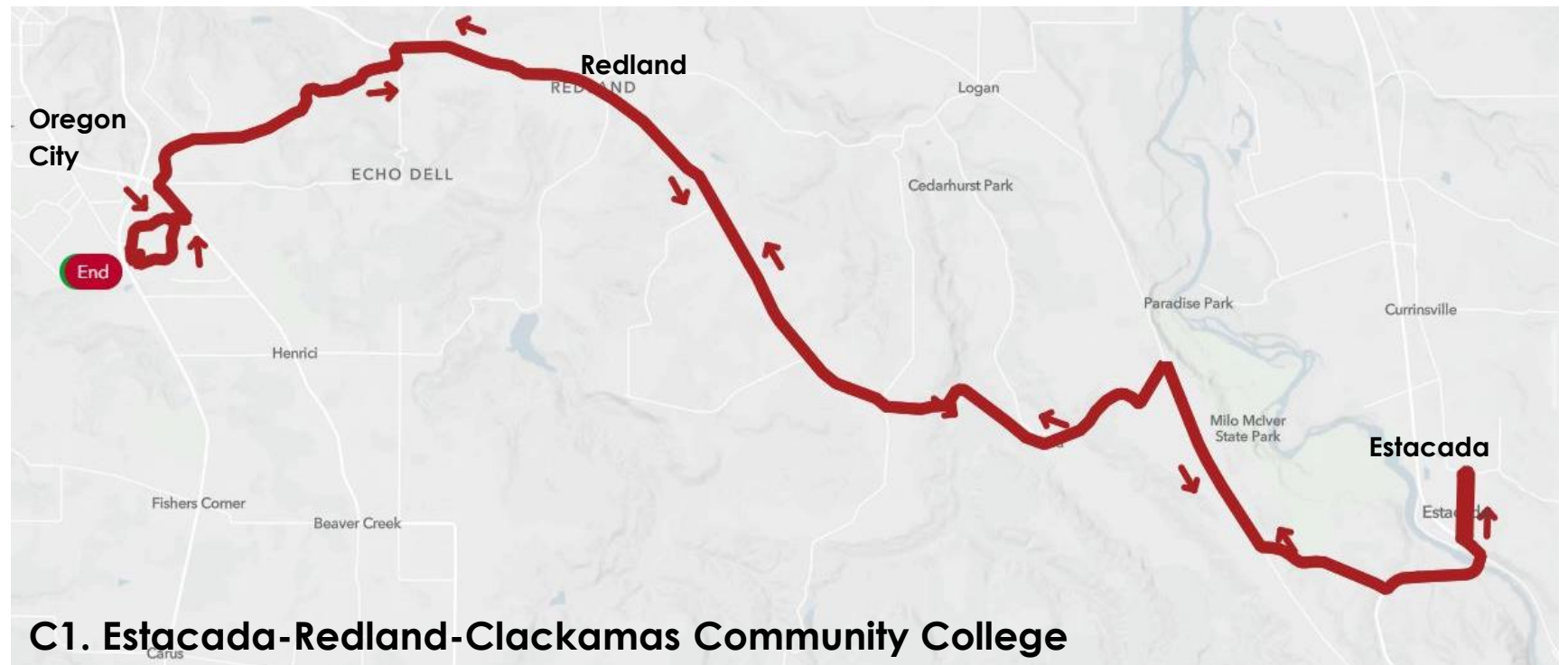
Estacada, Molalla, and Woodburn on Highway 211

Estacada, Molalla, and Woodburn on Highway 211



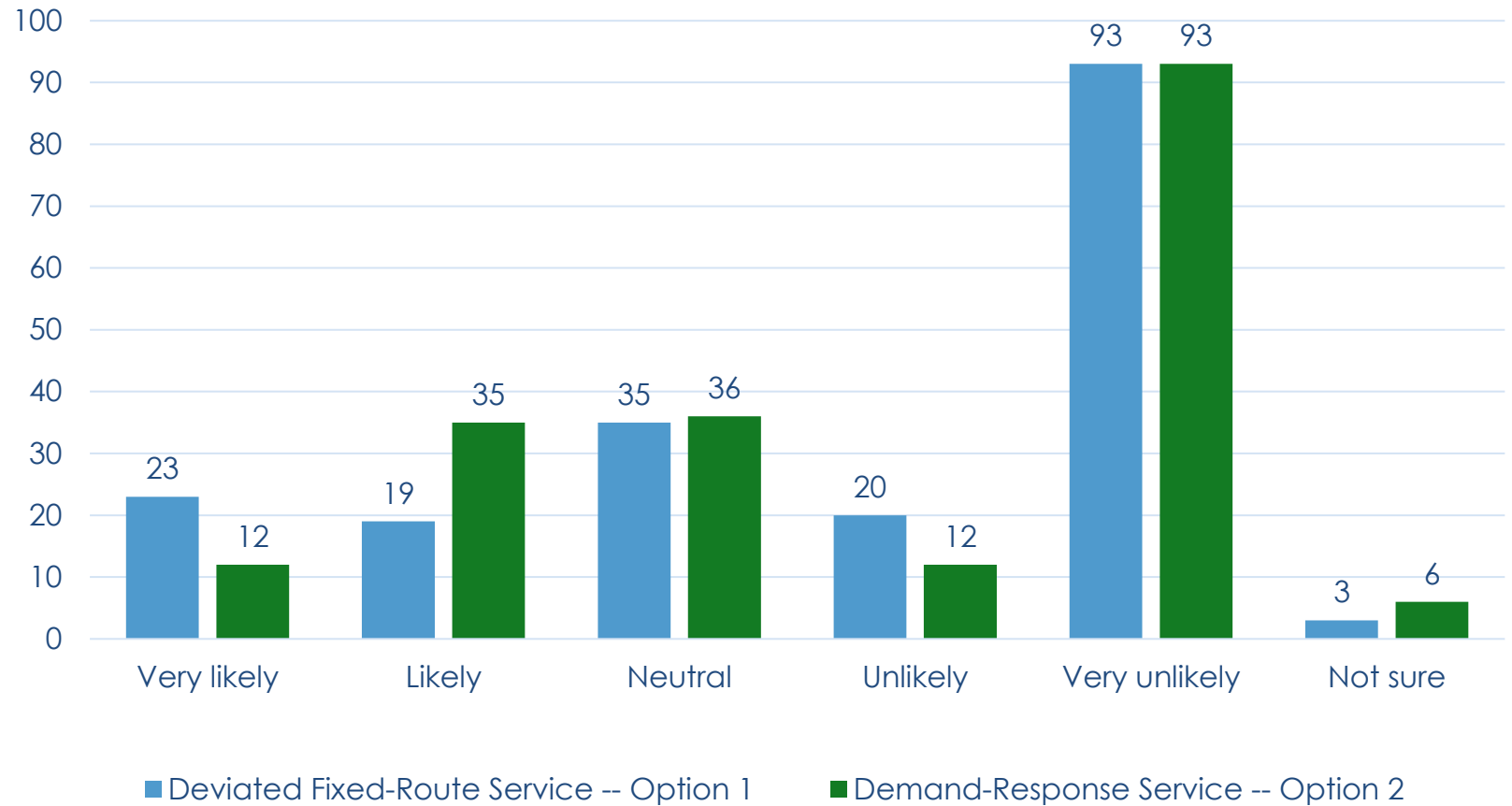
Estacada, Redland, and Oregon City (2 alts)

- C1. Deviated fixed-route service between Estacada, Redland, and Clackamas Community College
- C2. Demand-response service for Estacada and South Oregon City center around CCC
 - Demand-response service could serve all of Estacada and South Oregon City, including the Maplelane area



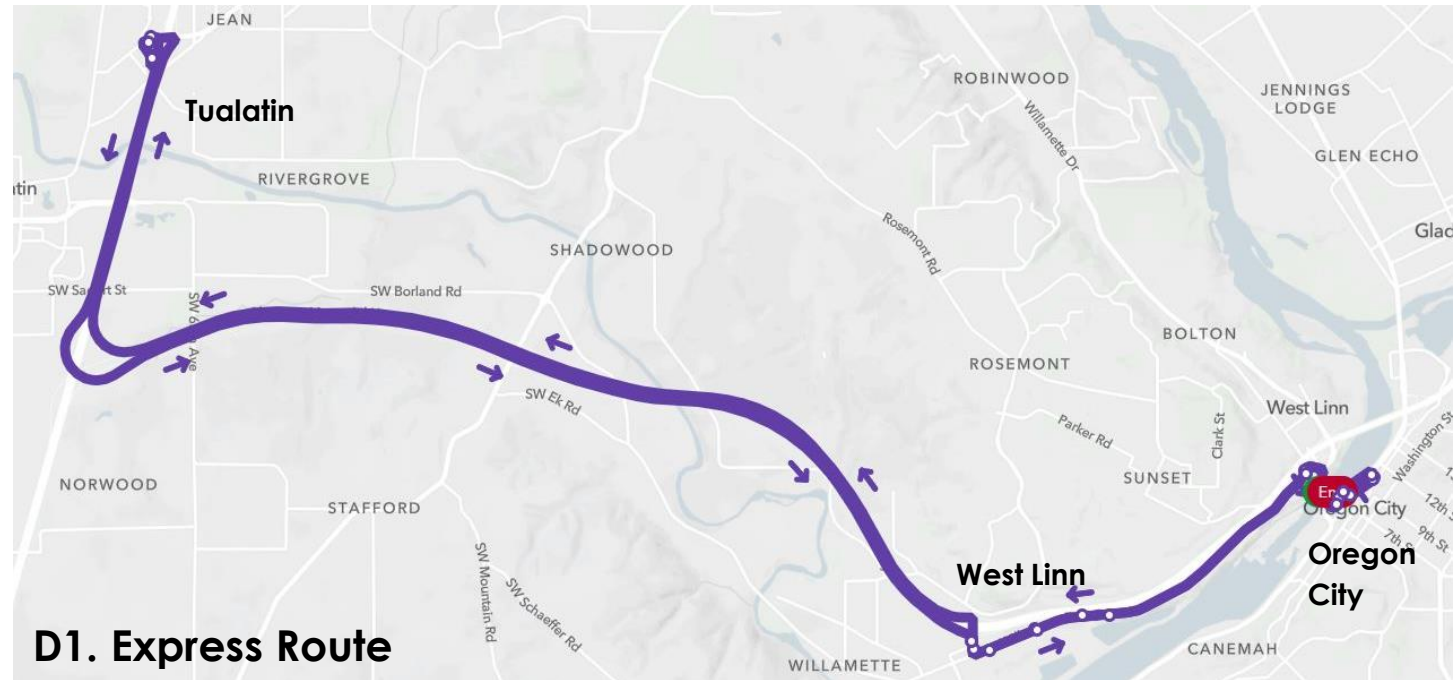
Estacada, Redland, and Oregon City

Estacada, Redland, and Oregon City



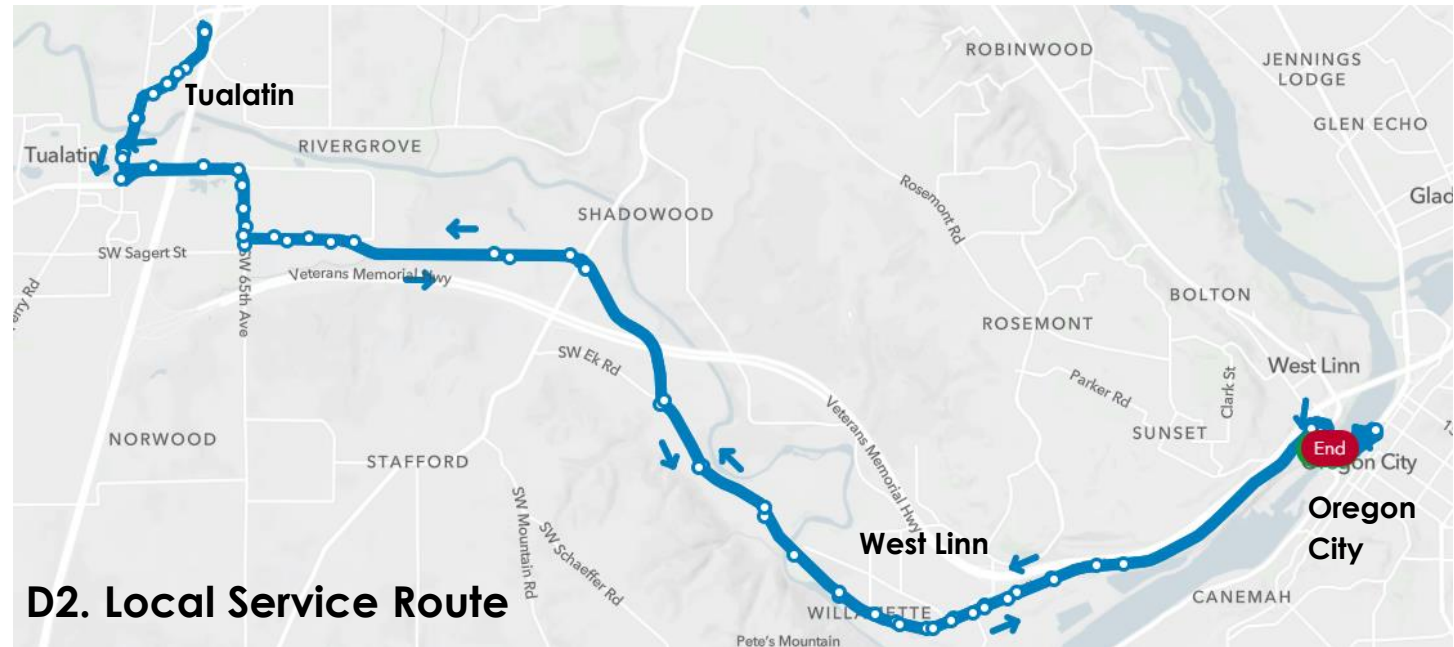
Tualatin, West Linn, and Oregon City on I-205 (2 alts)

- D1. An express route on I-205
 - An express route from Wilsonville to Clackamas Town Center is currently being studied by SMART (potentially with bus-on-shoulder service to bypass traffic)



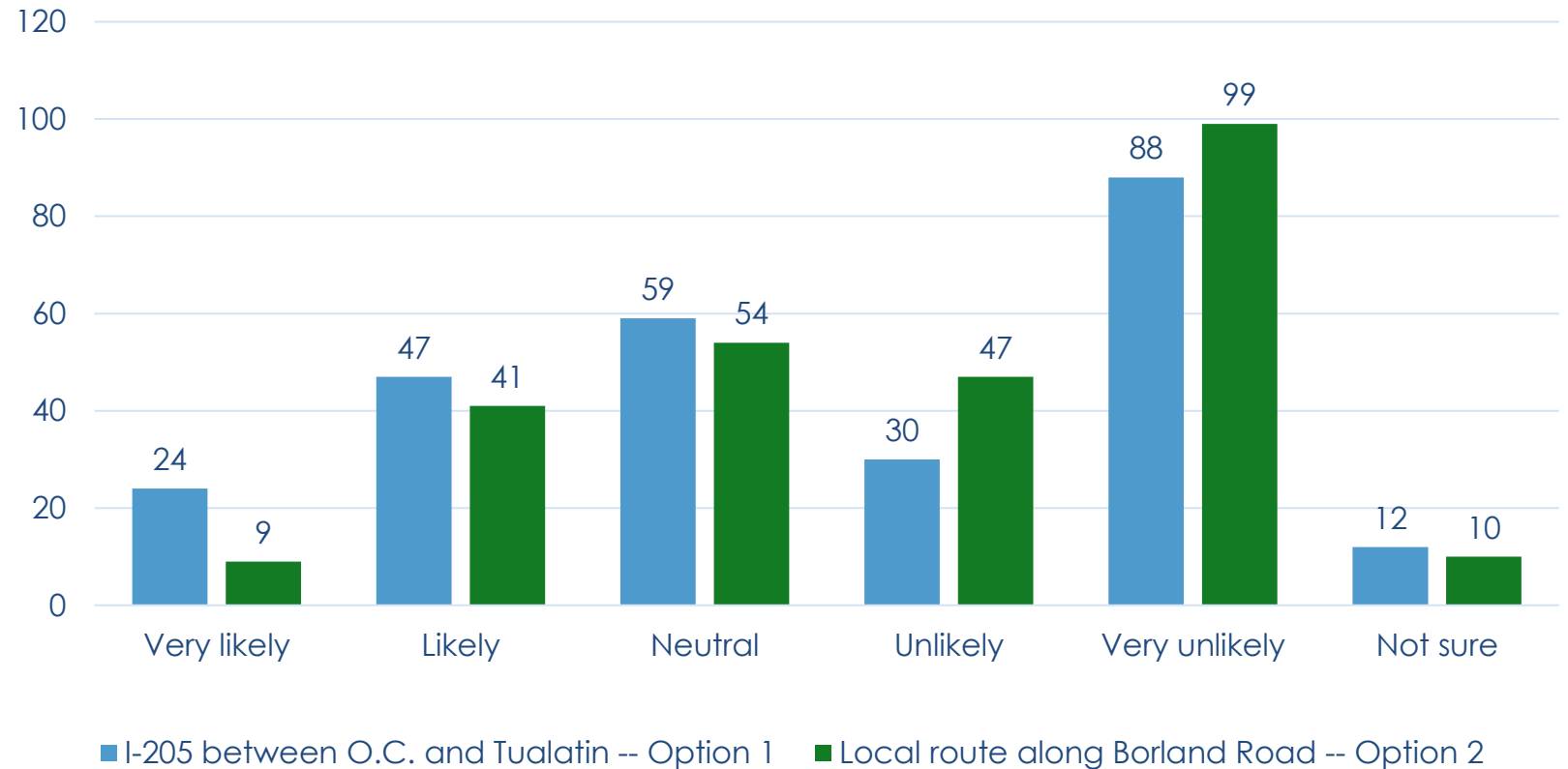
Tualatin, West Linn, and Oregon City on I-205 (2 alts)

- D2. A local service route along Borland Road
- The local v. express route will be further explored as part of the ongoing Clackamas County Shuttle Planning Project



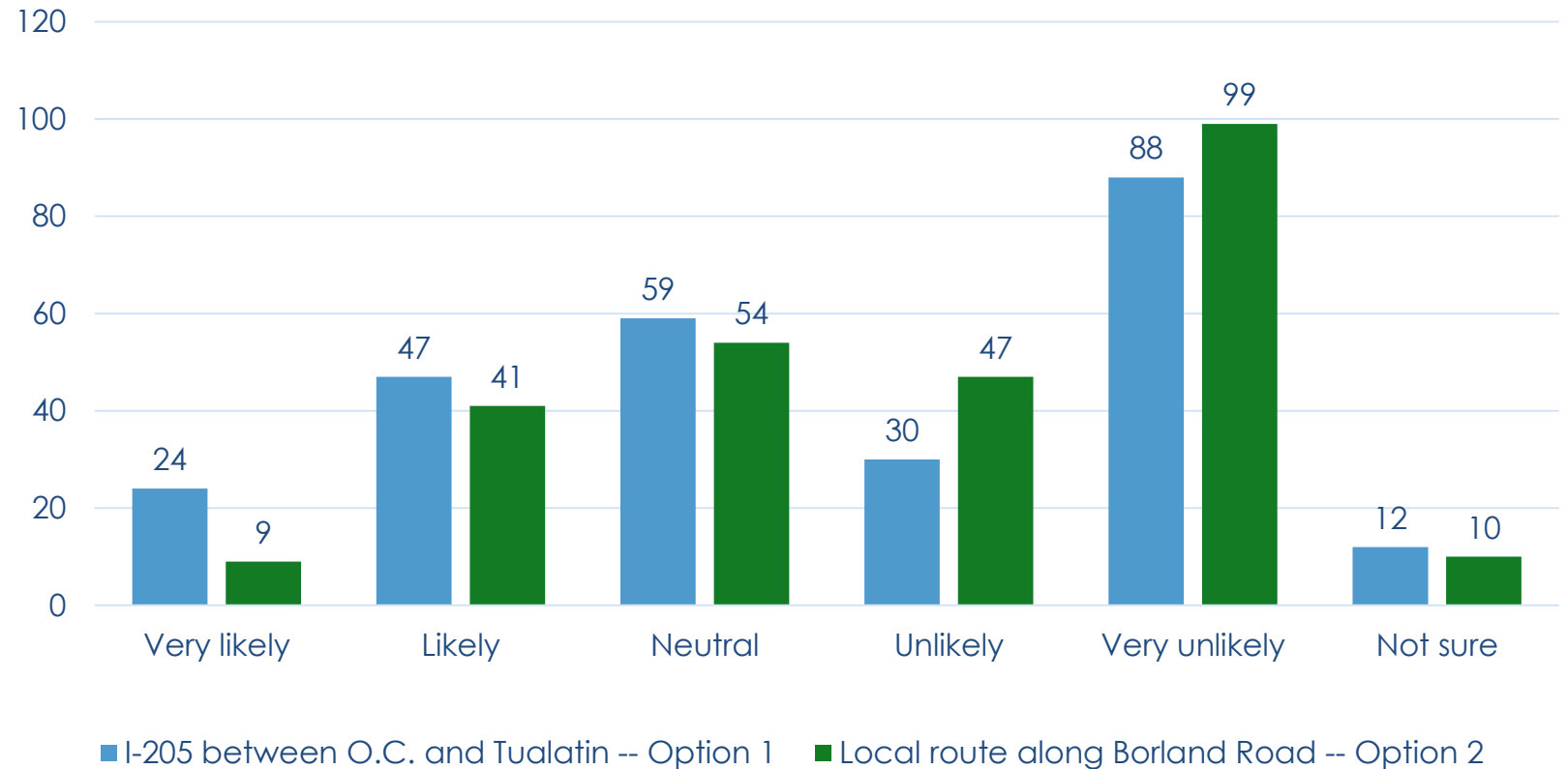
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Tualatin, West Linn, and Oregon City



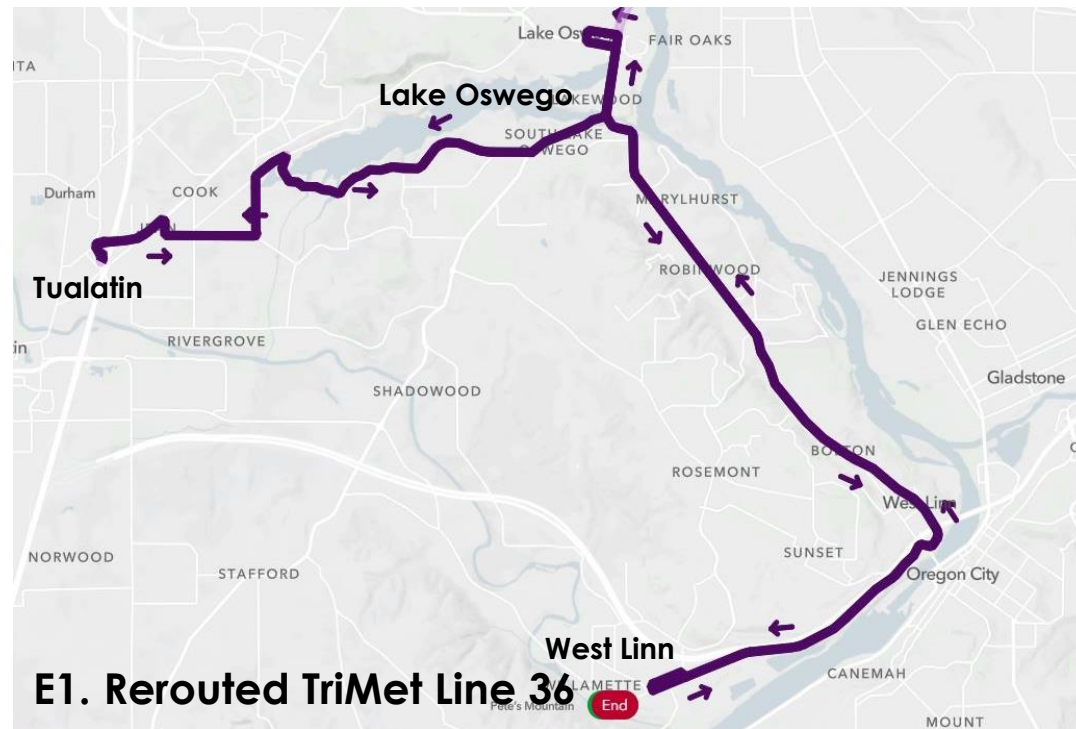
Tualatin, West Linn, and Oregon City on I-205 (2 alts)

Tualatin, West Linn, and Oregon City



West Linn, Lake Oswego, and Washington County (3 alts)

- All three alternatives have considerable out-of-direction travel
- E1. Extend TriMet Line 36 to West Linn



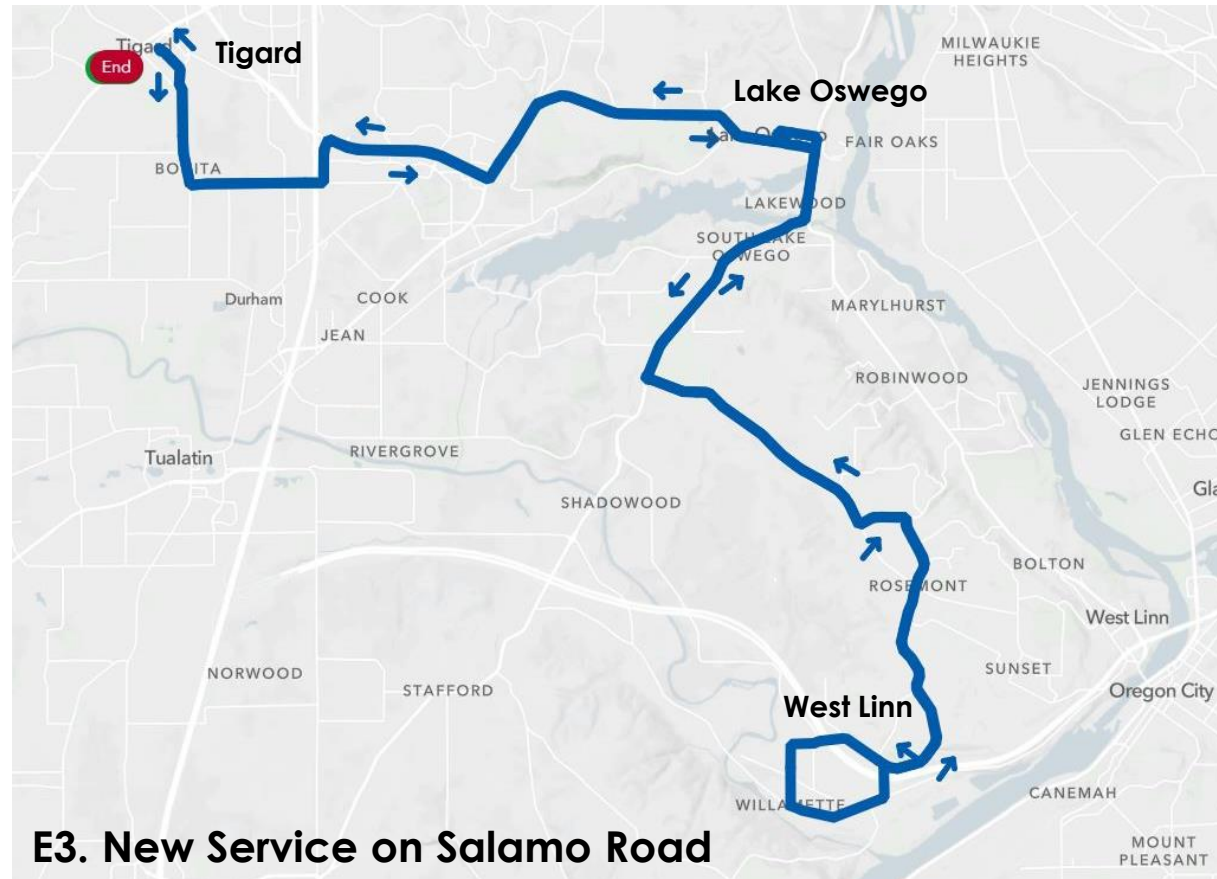
West Linn, Lake Oswego, and Washington County (3 alts)

- E2. Extend TriMet Line 37 to West Linn
 - TriMet's SW Service Enhancement Plan identifies Line 37 reroute into Tigard



West Linn, Lake Oswego, and Washington County (3 alts)

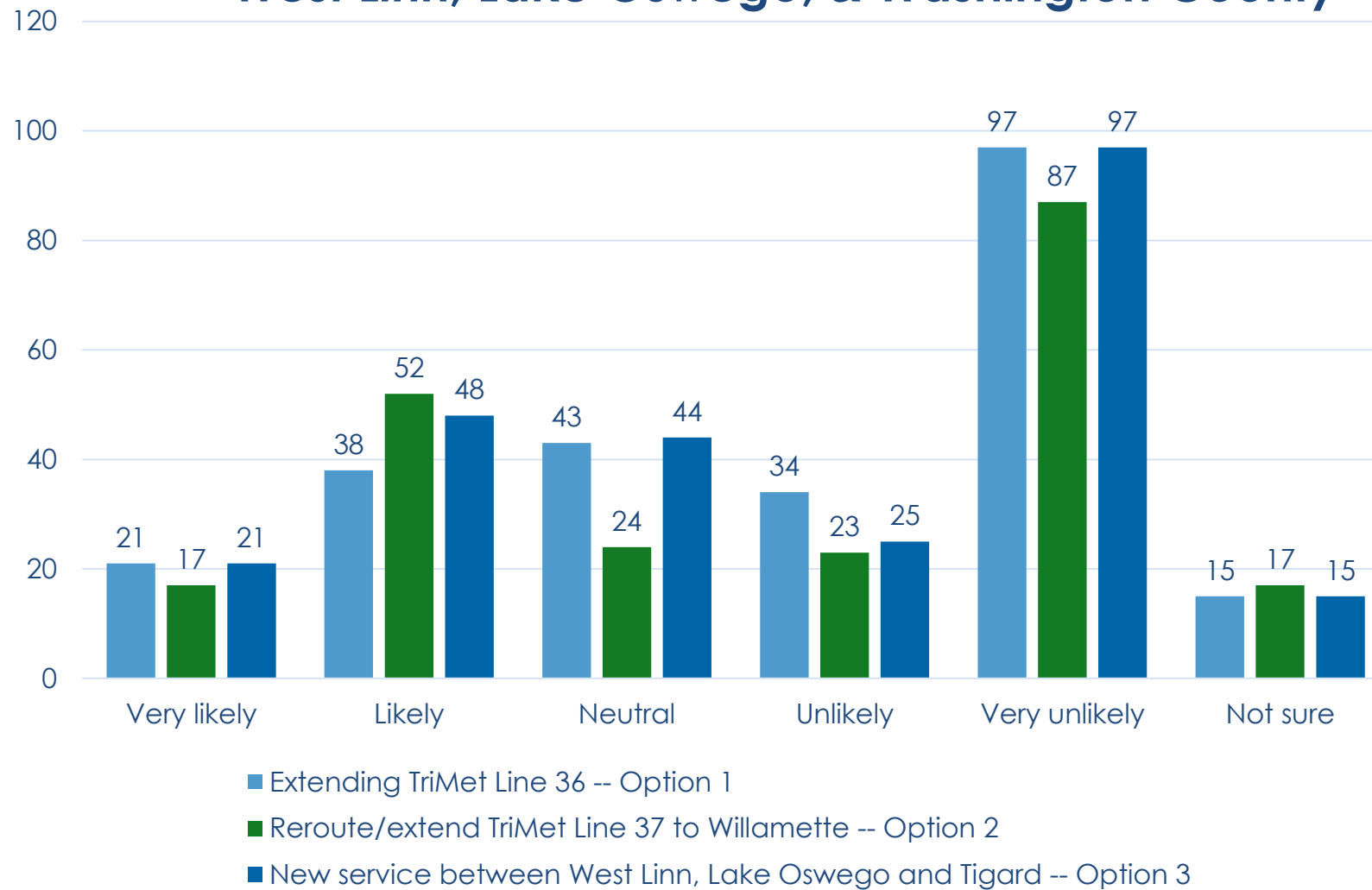
- E3. Add new service between West Linn, Lake Oswego, and Tigard on roads east of Highway 43
 - TriMet's SW Service Enhancement Plan identifies a new route on Salamo Road/Rosemont Road parallel to Hwy 43



E3. New Service on Salamo Road

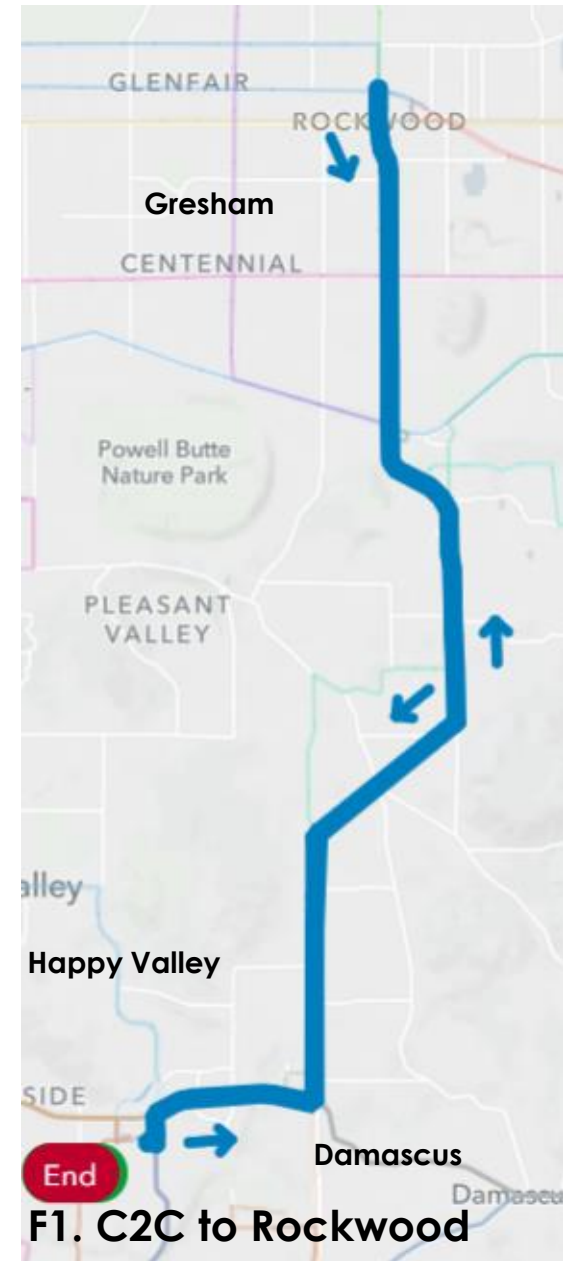
West Linn, Lake Oswego, and Washington County

West Linn, Lake Oswego, & Washington County



Damascus, Happy Valley, and Gresham on the future C2C Corridor (2 alts)

- Both routes assume construction of a new 172nd-190th Connector, which completes the C2C mainline
- F1. New service to Rockwood MAX
 - Connects with frequent service routes on Powell, Division, and the MAX Blue Line

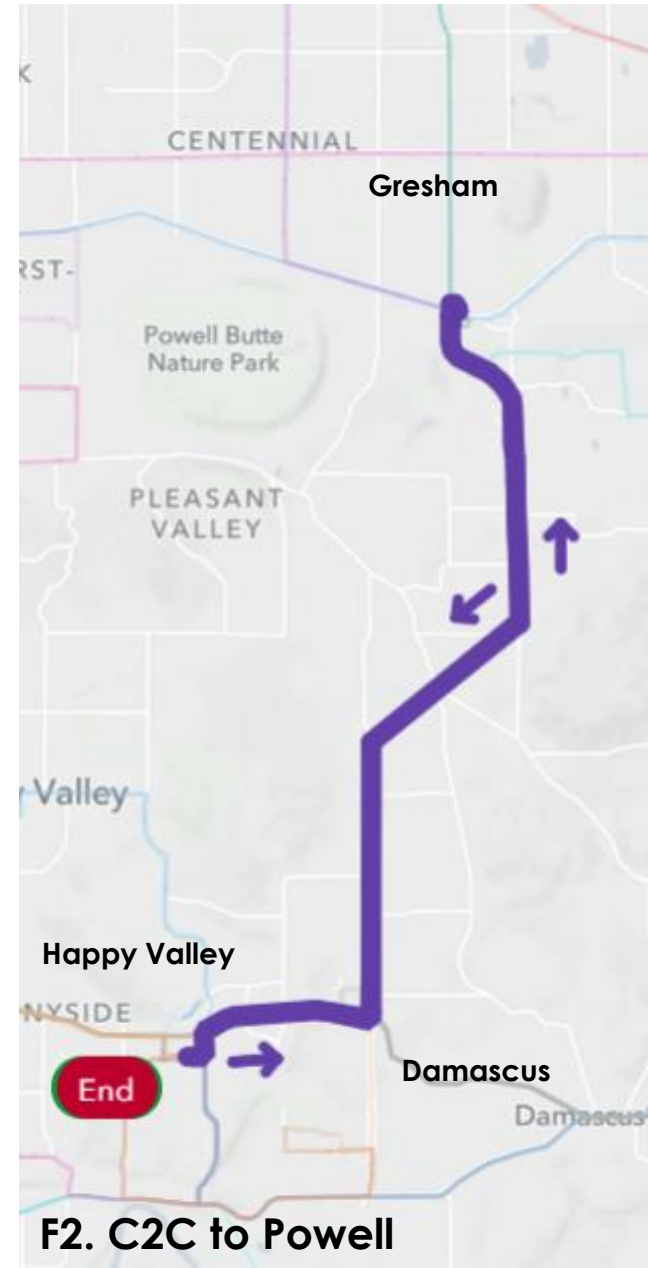


F1. C2C to Rockwood



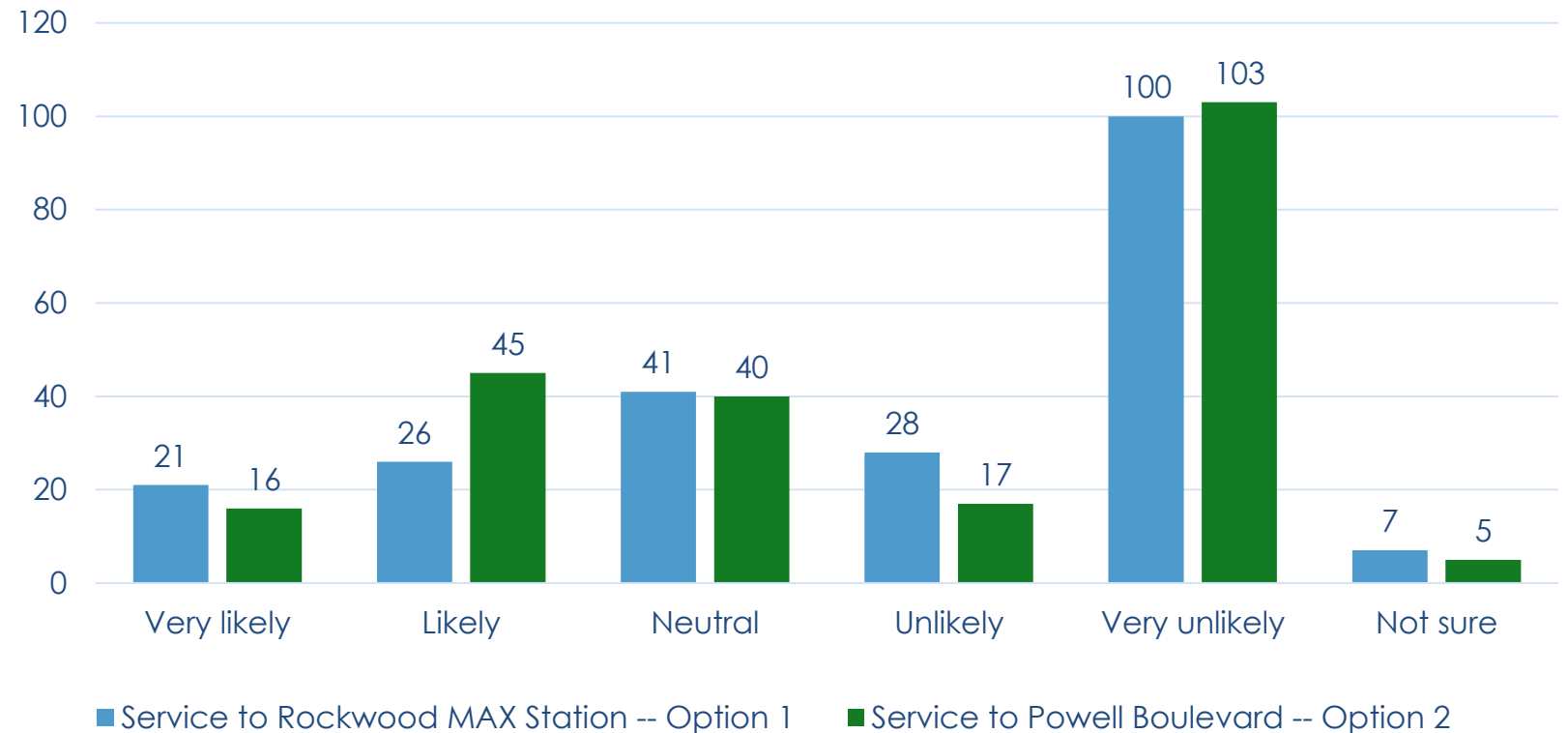
Damascus, Happy Valley, and Gresham on the future C2C Corridor (2 alts)

- F2. New service to Powell Boulevard
 - Connects with frequent service routes on Powell



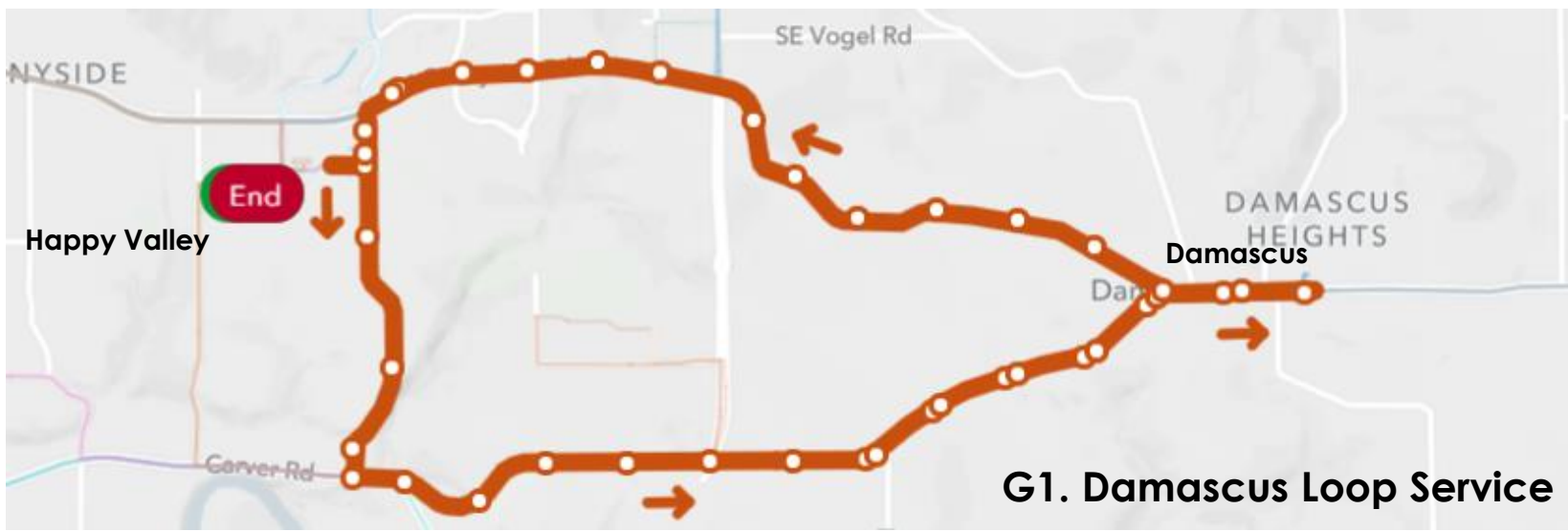
Damascus, Happy Valley, and Gresham on the future C2C Corridor

Damascus, Happy Valley, and Gresham on the Future C2C Corridor



Damascus (and Boring) (3 alts)

- G1. Loop service in Damascus



Damascus (and Boring) (3 alts)

- G2. Line service in Damascus

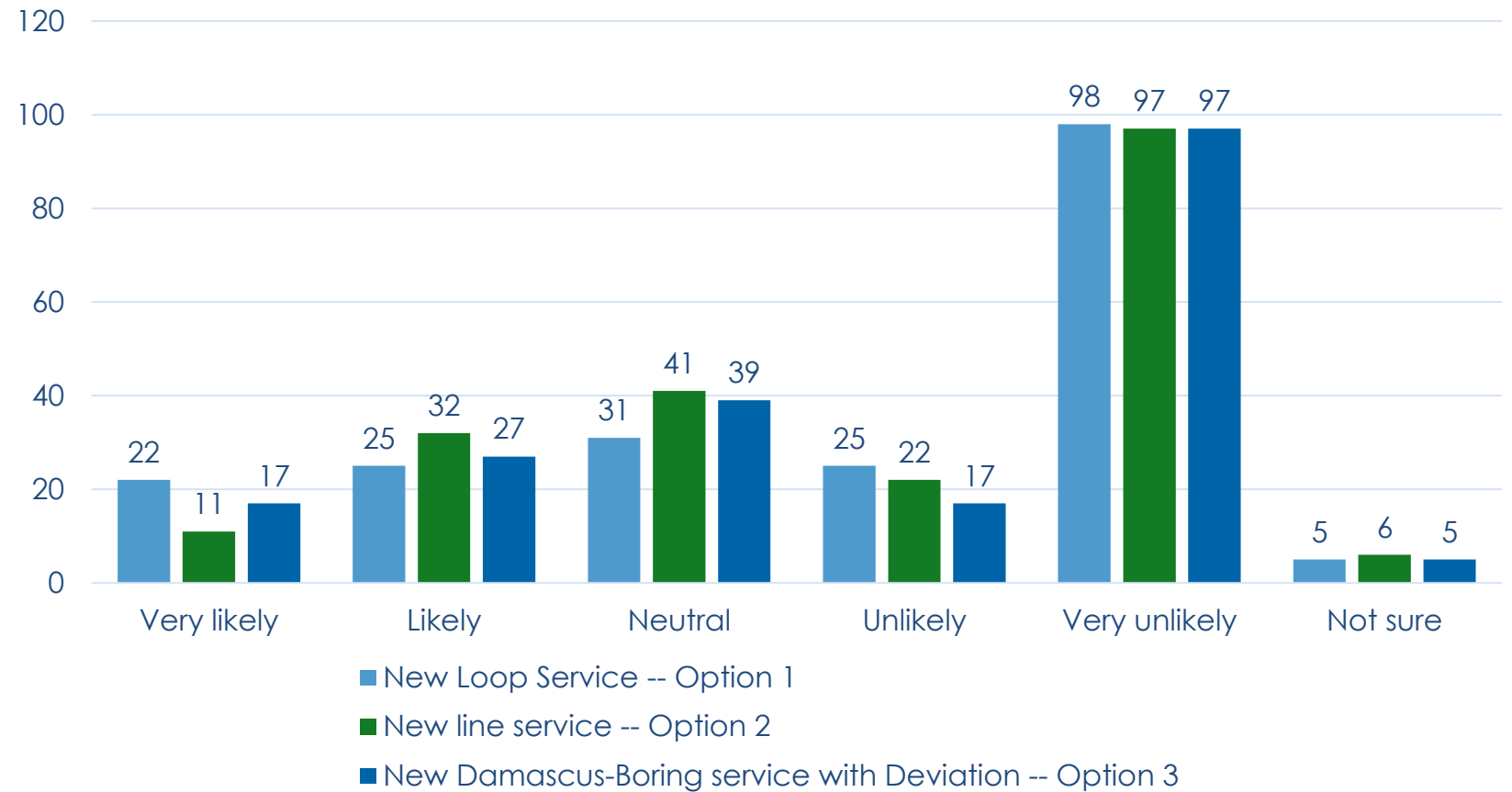


- G3. Deviated-fixed route service between Damascus and Boring
 - With low population density along the route, service deviation could expand ridership



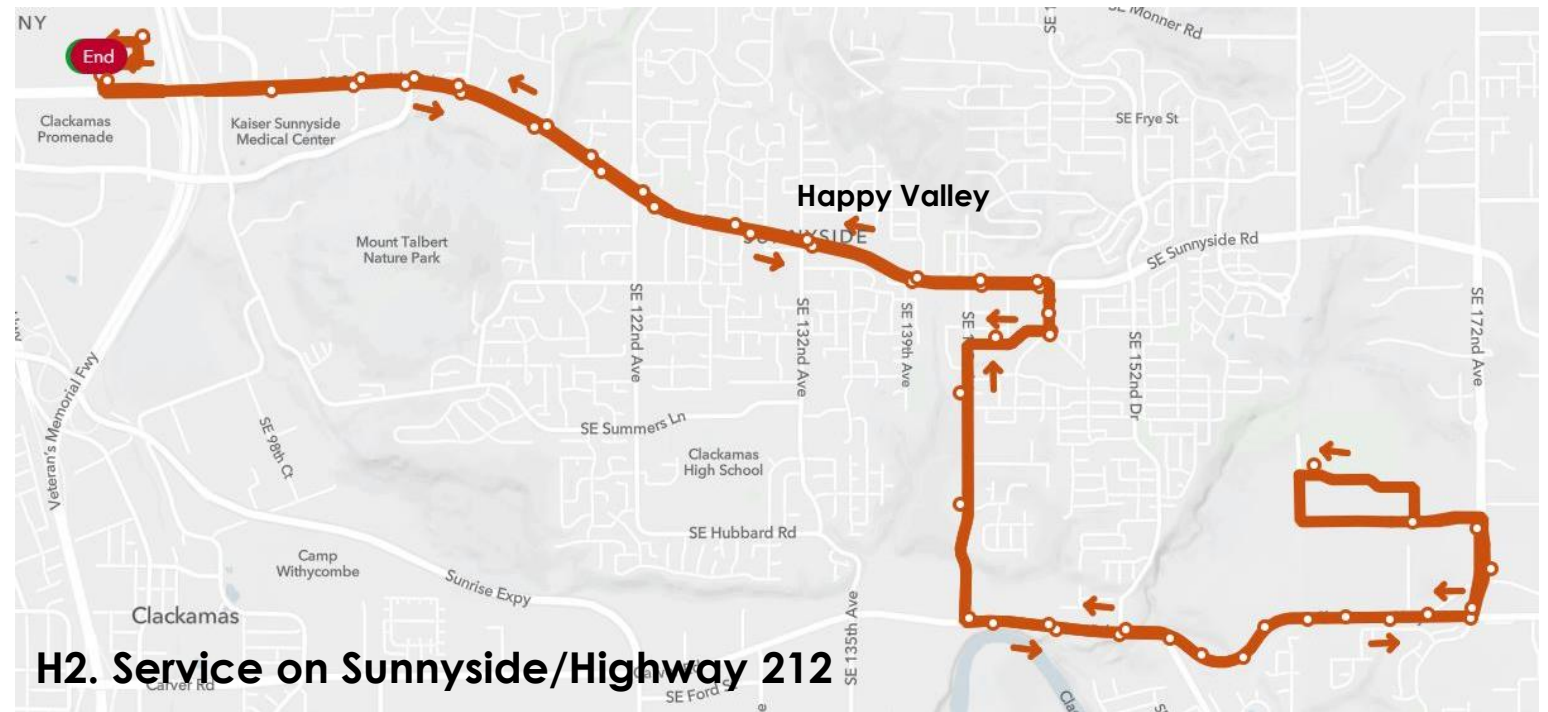
Damascus and Boring

Damascus and Boring



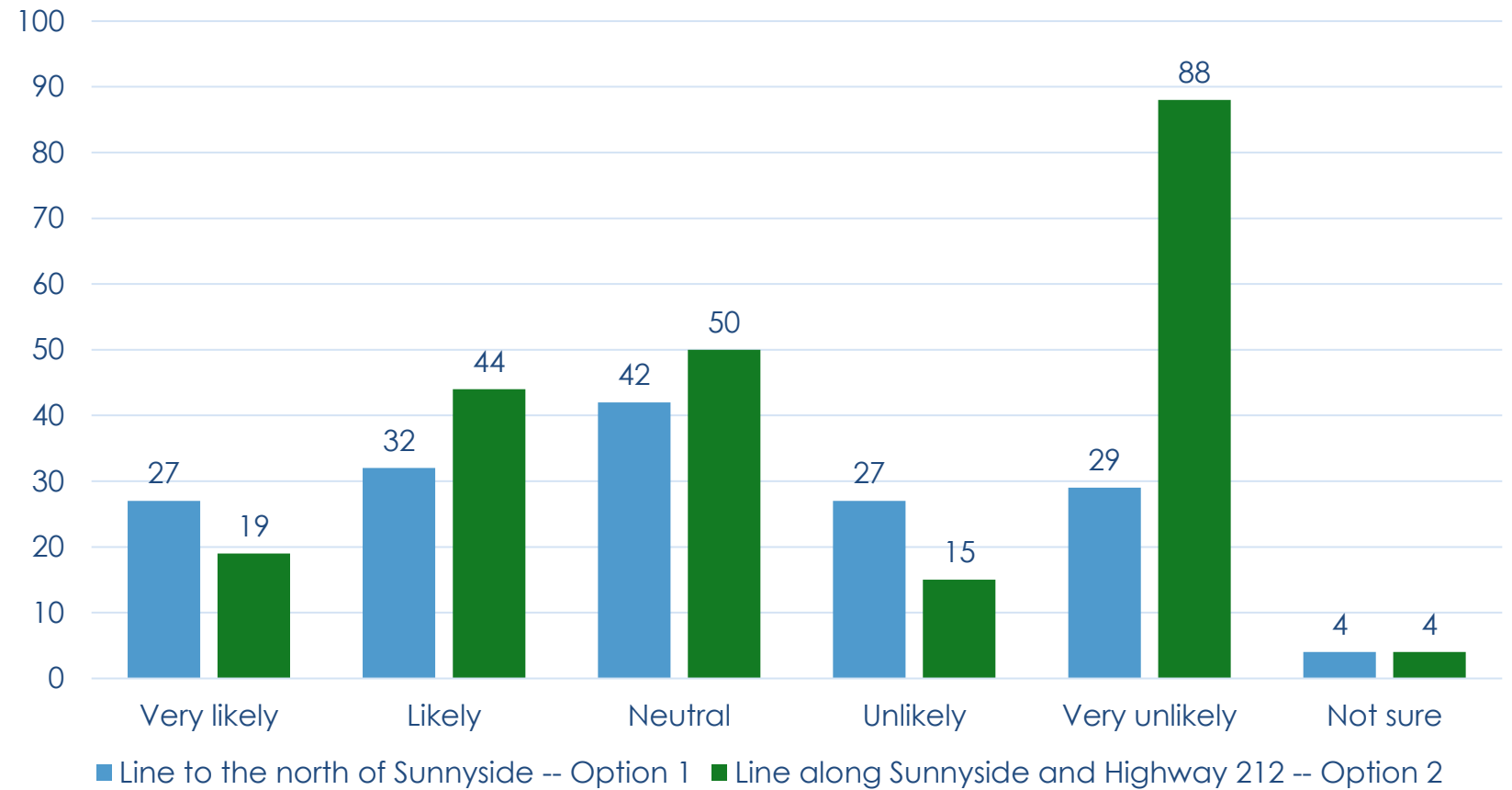
Happy Valley (2 alts)

- H2. New line service on Sunnyside and Highway 212



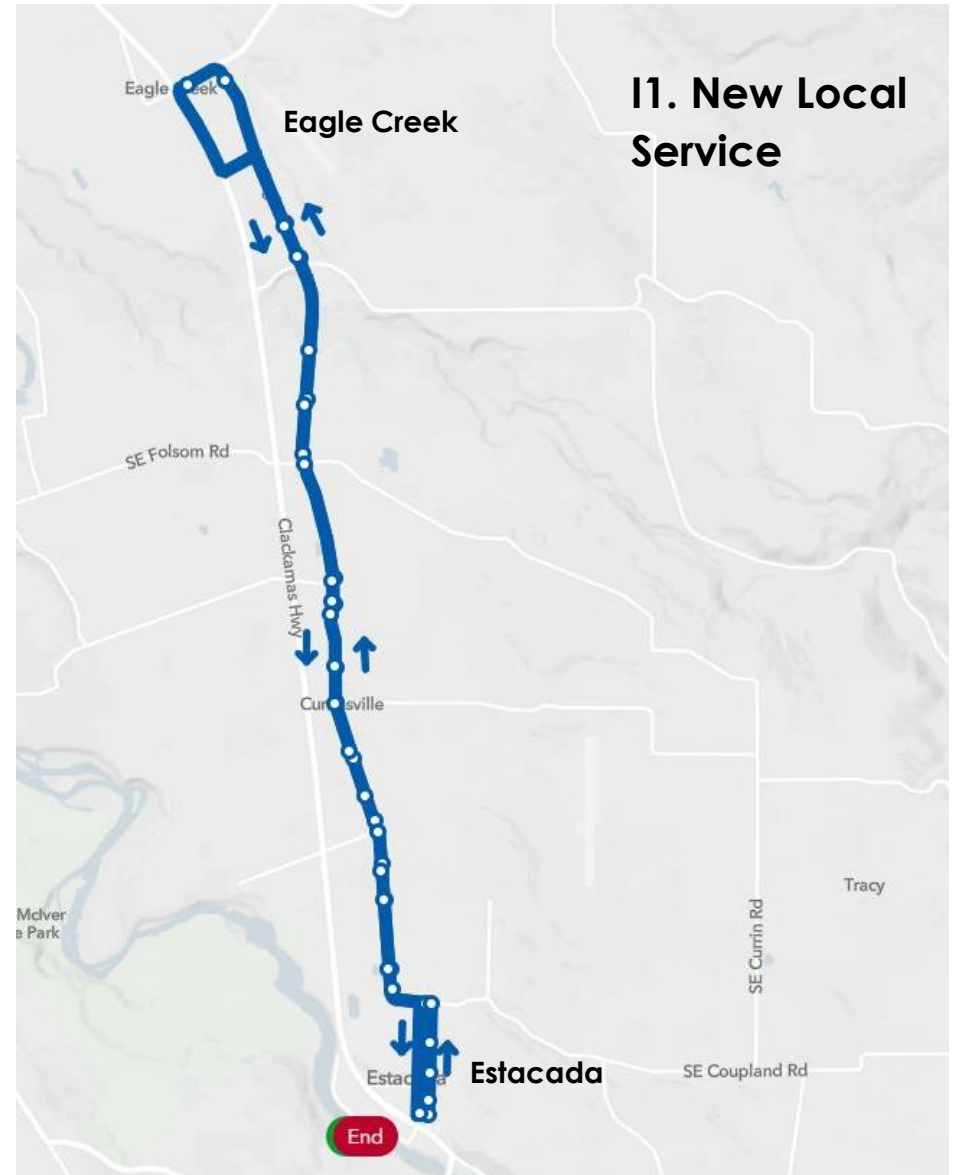
Happy Valley

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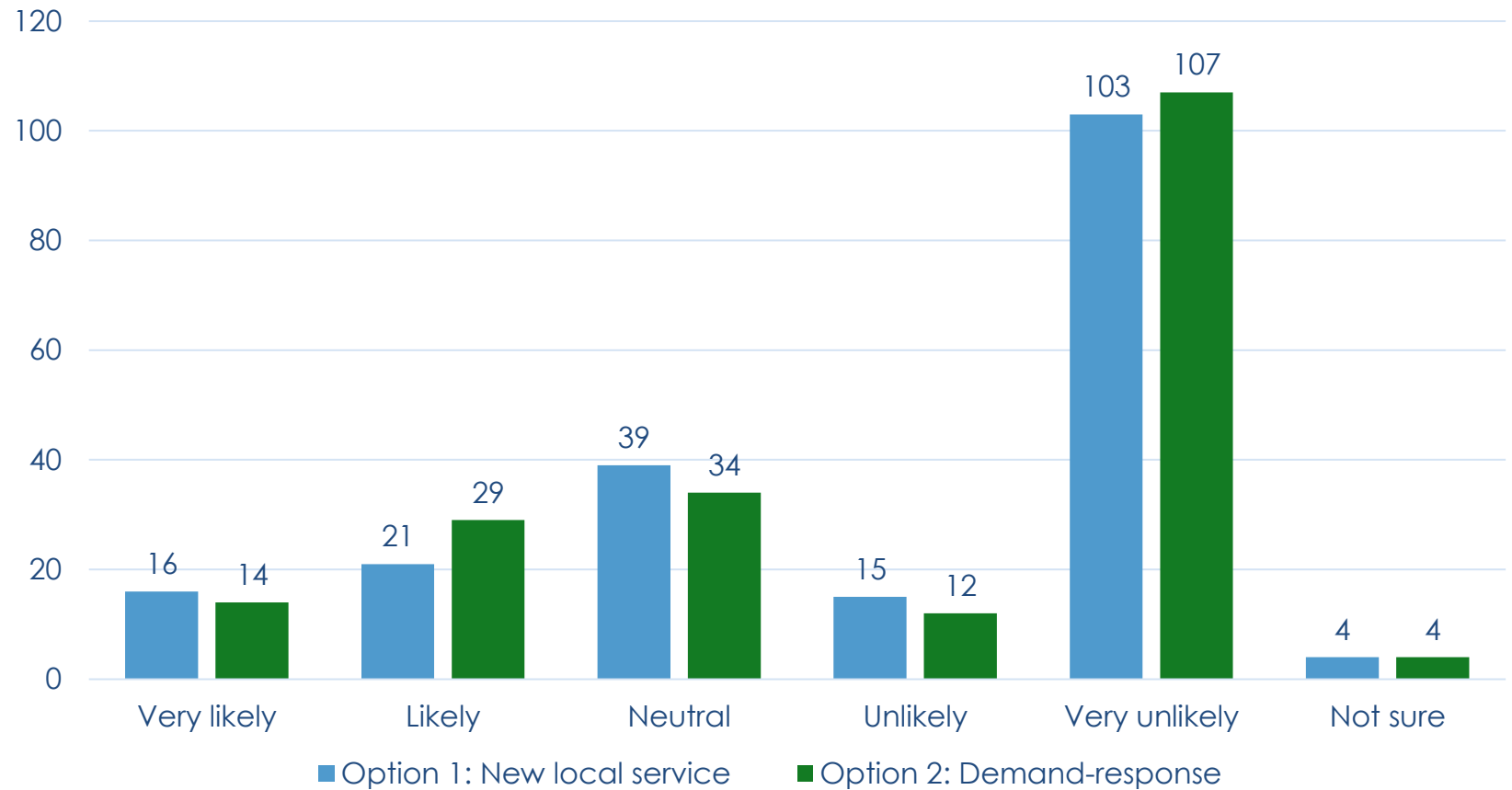
Estacada and Eagle Creek (2 alts)

- I1. New local service between Estacada and Eagle Creek
- I2. New demand-response service
 - A demand-response route could be covered in the Estacada-Redland-Oregon City option



Estacada and Eagle Creek

Estacada and Eagle Creek



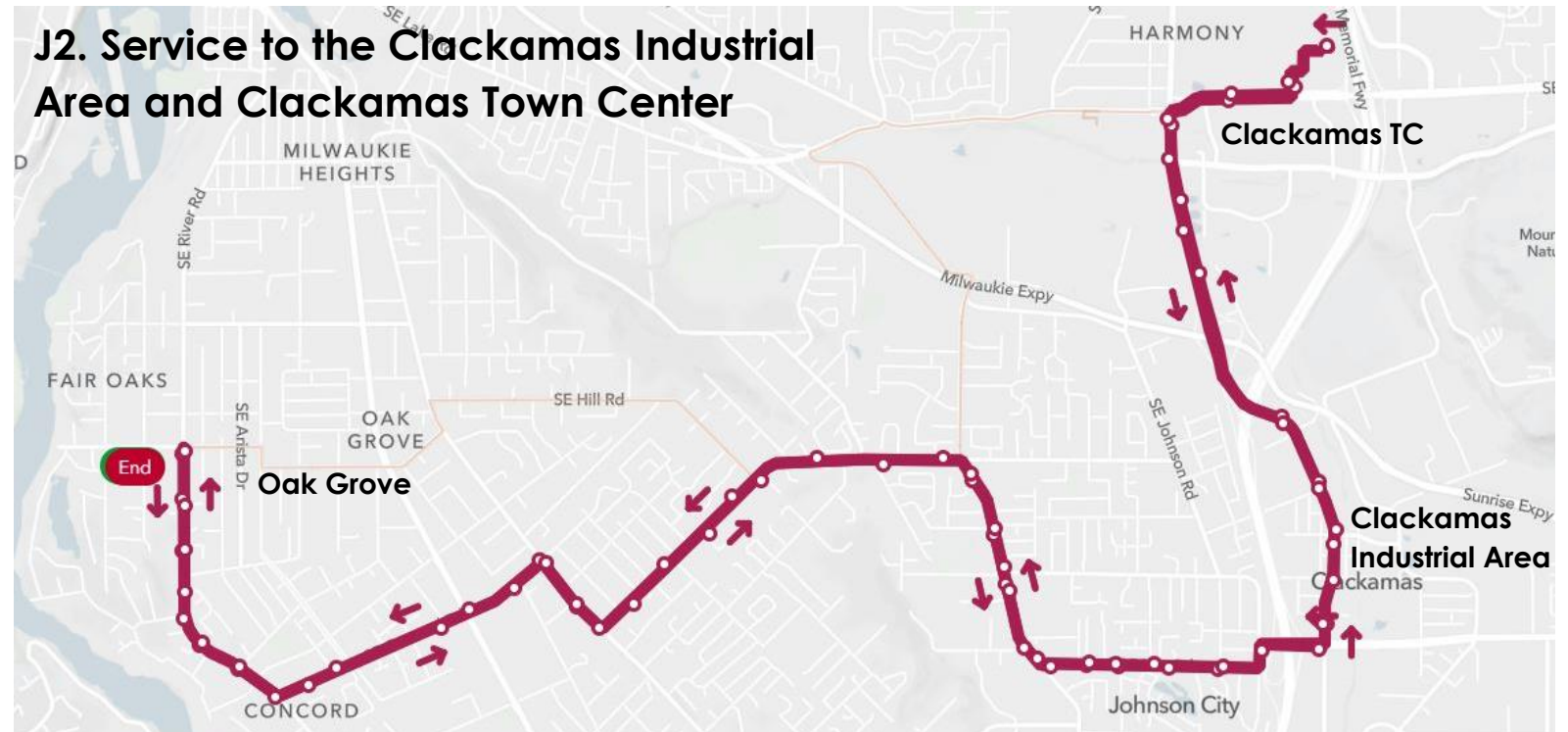
Jennings Lodge,
Oak Grove, and
Oatfield (3 alts)

- J1. Service to Clackamas Town Center



Jennings Lodge, Oak Grove, and Oatfield (3 alts)

- J2. Service to the Clackamas Industrial Area and Clackamas Town Center
 - By serving the Clackamas Industrial Area, this route could serve significantly more residents and jobs than service just to Clackamas Town Center



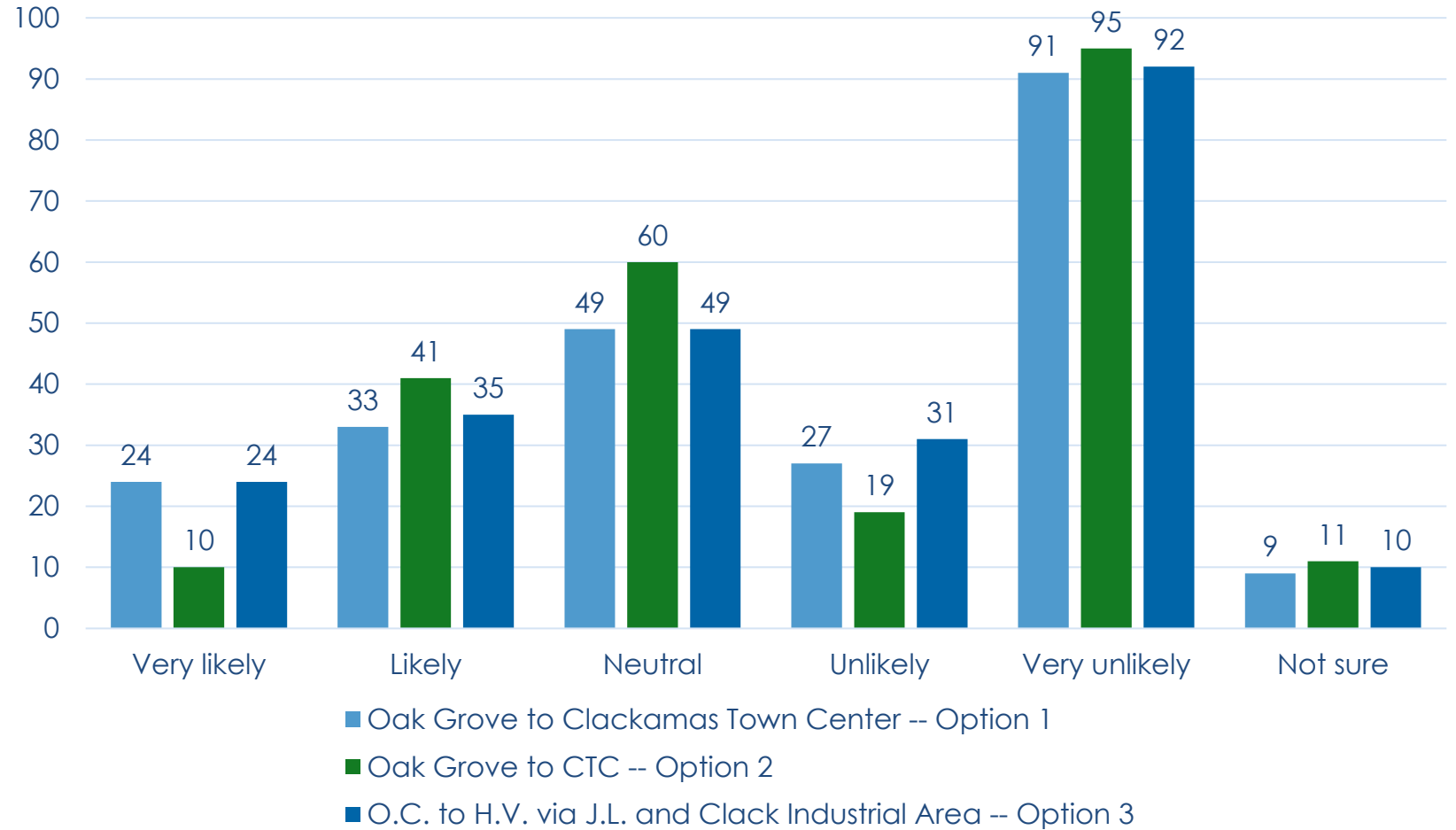
Jennings Lodge,
Oak Grove, and
Oatfield (3 alts)

- J3. Service to Oregon City and Happy Valley
 - This route is identified as a new route in TriMet's SE Service Enhancement Plan



Jennings Lodge, Oak Grove, and Oatfield

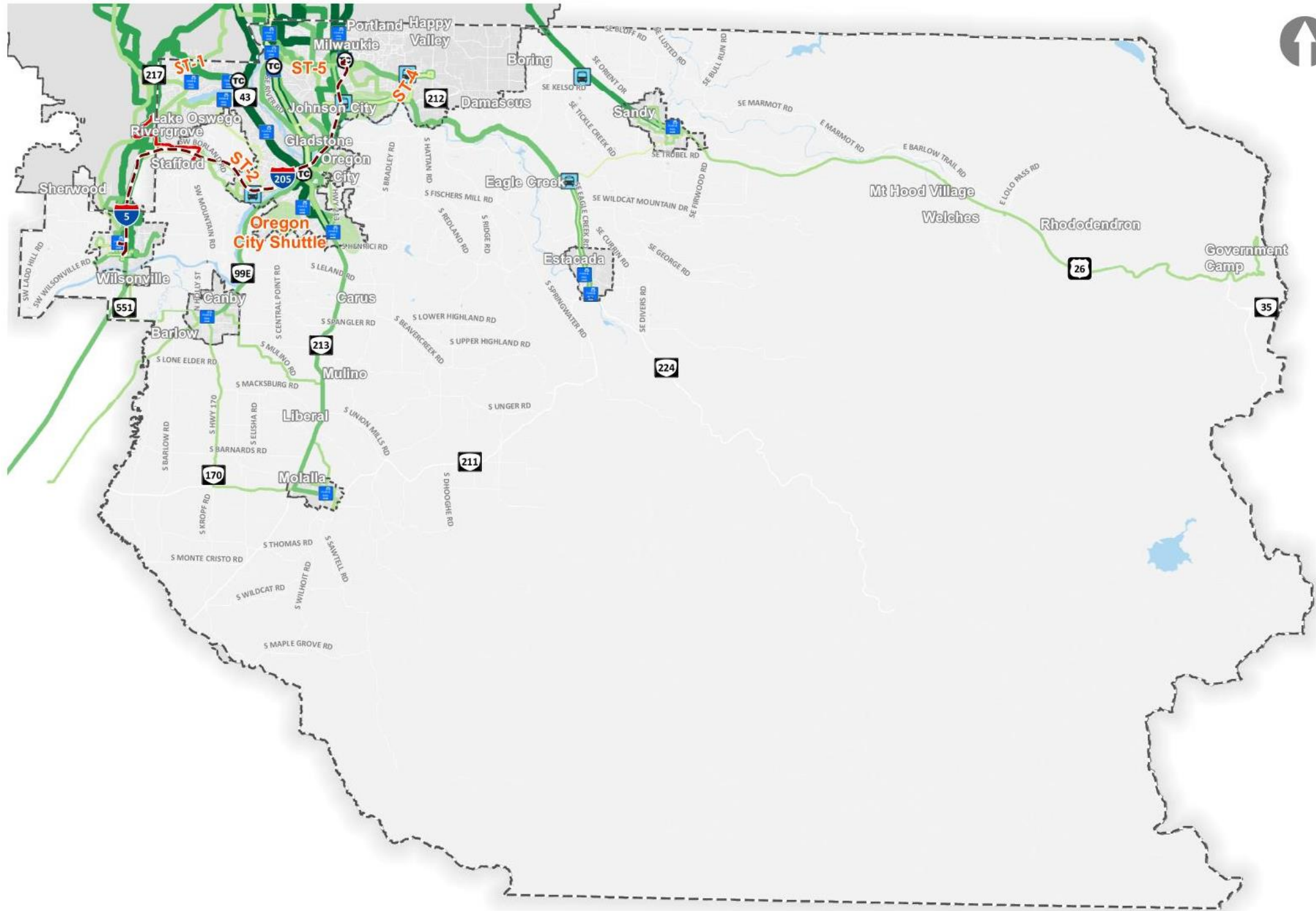
Jennings Lodge, Oak Grove, and Oatfield



Short-Term Recommendations

| ID | Corridor or Area | Runs per Day | Additional Runs | Recommendation |
|------|--|--------------|-----------------|---|
| ST-1 | Highway 43: Oregon City to Portland ¹ | 47 | 48 | Implement 15-minute service on Line 35, new service on Rosemont Road |
| ST-2 | I-205: Oregon City to I-5 Interchange ¹ | 0 | 47 | Implement hourly service on Borland Road and hourly express service on I-205 (about 28 runs per day combined) |
| ST-3 | East Tualatin ¹ | 0 | 8 | Hourly service provided by Ride Connection route |
| ST-4 | Jennings Lodge-Oak Grove-Oatfield ¹ | 0 | 16 | New hourly Happy Valley-Oregon City service (about 8 runs per day) |
| ST-5 | Milwaukie Industrial Area ¹ | 33 | 31 | Implement hourly shuttle service Expand Line 152 service hours (about 12 runs per day) |

- The Oregon City and Clackamas Industrial Area shuttles are set to begin service around the beginning of 2021



**Short-Term Recommendations:
Routes**

- 8 or Fewer Runs per Day
- 9 - 16 Runs per Day
- 17 - 32 Runs per Day
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- 65 or More Runs per Day

**Short-Term Recommendations:
Areas**

- 9 - 16 Runs per Day

Planned Services

- - - Wilsonville to Clackamas Town Center
- - - Tualatin Shuttle (New)
- Mobility Hub
- Transit Centers
- Park and ride lots
- Urban Growth Boundaries
- County Boundary






**Short-Term Recommendations:
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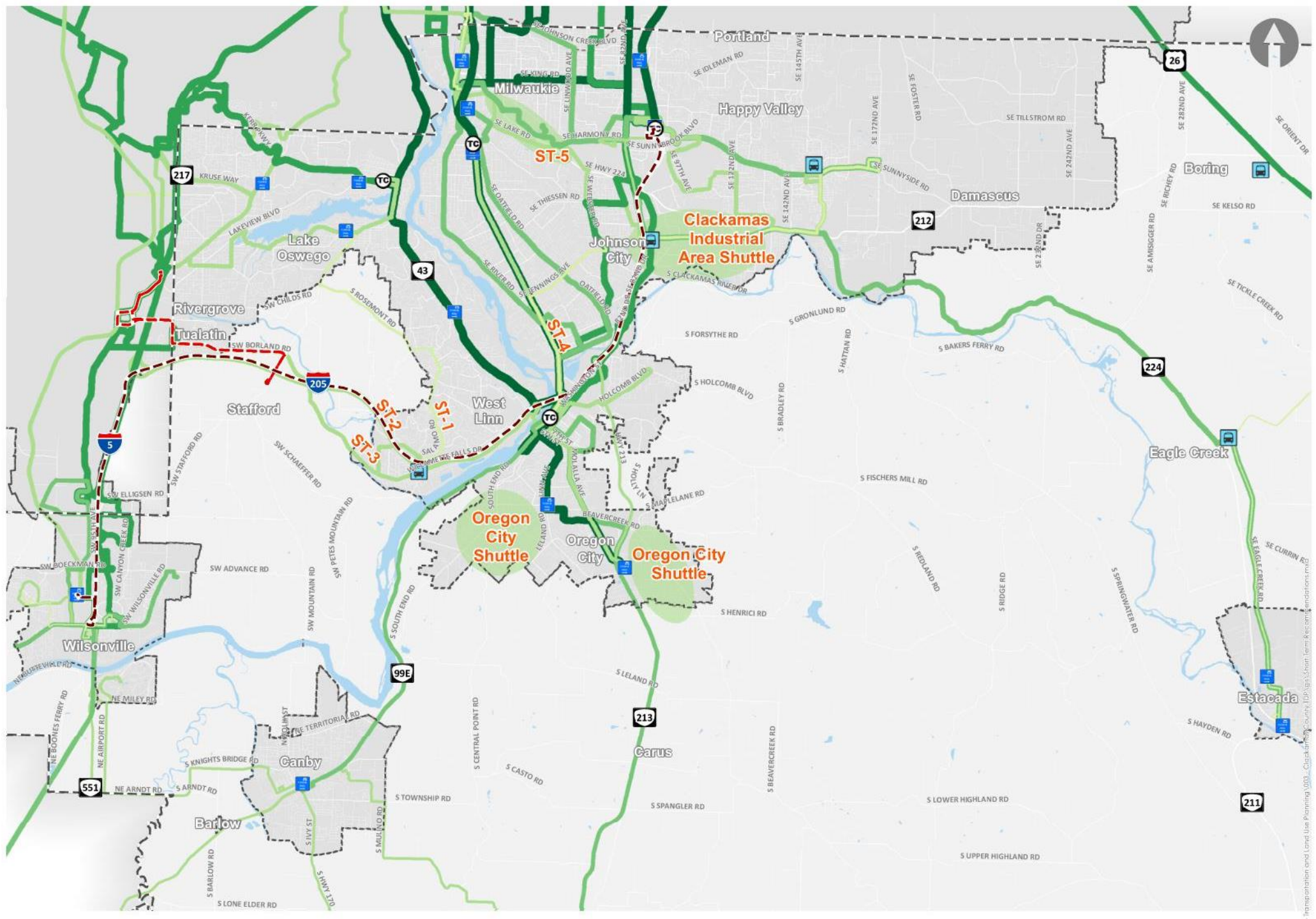
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**Short-Term Recommendations:
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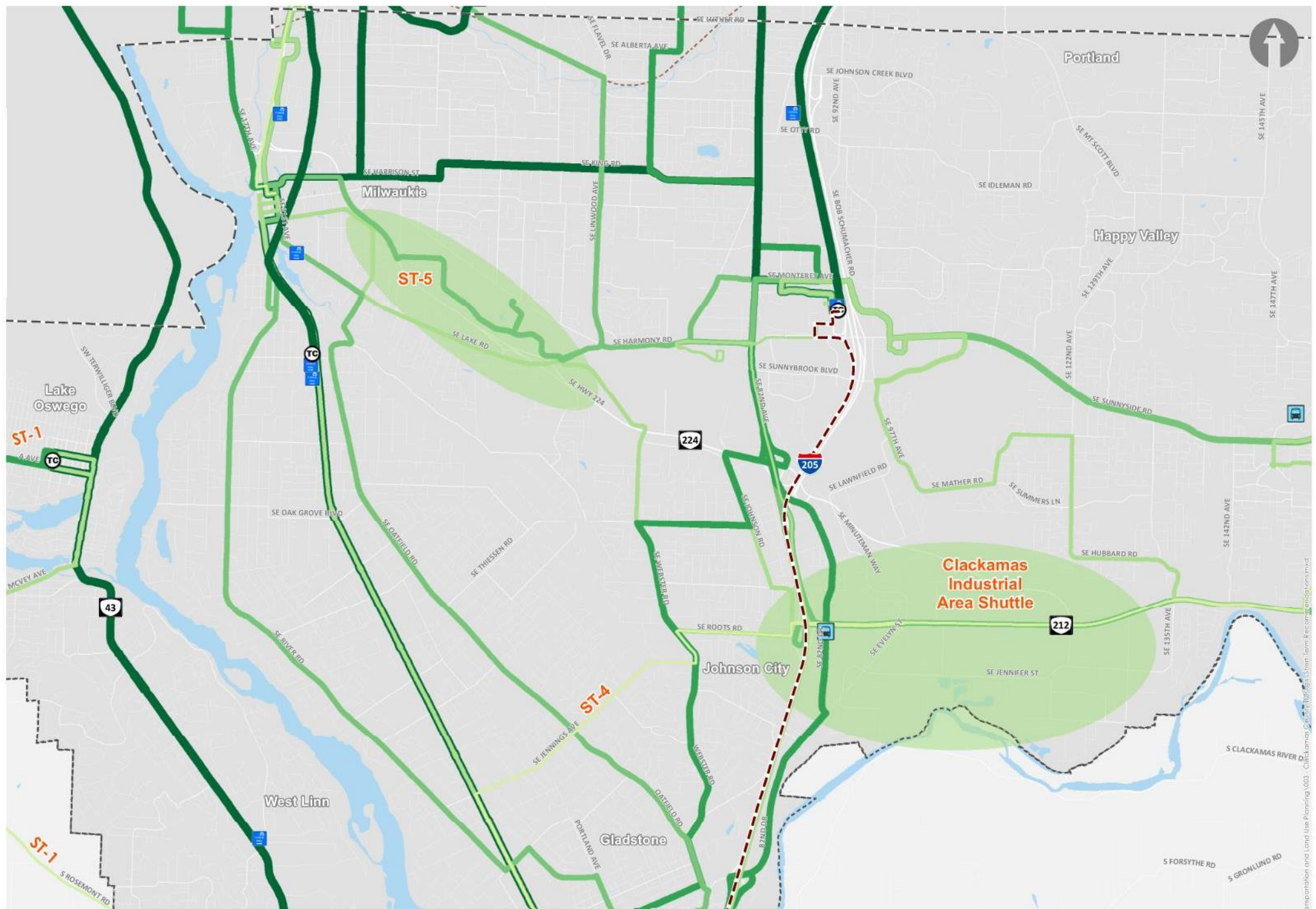
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Mid-Term Recommendations

| ID | Corridor or Area | Runs per Day | Additional Runs | Recommendation |
|------|--|--------------|-----------------|---|
| MT-1 | I-205: Oregon City to I-5 Interchange ¹ | 28 | 19 | Evaluate service Consider increased service span and frequency to add runs to service |
| MT-2 | Milwaukie Industrial Area ¹ | 45 | 19 | |
| MT-3 | I-205: Oregon City to Clackamas Town Center ¹ | 69 | 18 | Implement 20-minute headways on Line 79 (about 50 runs per day) |
| MT-4 | West Lake Oswego/Kruse Way ¹ | 12 | 20 | Expand service hours beyond peak periods and improve headways to 30 minutes during AM peak hour (about 10 runs per day) |
| MT-5 | Wilsonville (West Wilsonville) ¹ | 16 | 19 | Expand service hours beyond peak periods per SMART's Transit Master Plan (about 10 runs per day) |
| MT-6 | Happy Valley ¹ | 16 | 19 | Establish hourly service (10 runs per day) |

Mid-Term Recommendations

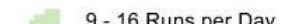

| ID | Corridor or Area | Runs per Day | Additional Runs | Recommendation |
|-------|--|--------------|-----------------|---|
| MT-7 | Canby (North and South) ² | 16 | 19 | Implement local service as established in CAT's Master Plan (about 10 runs per day) |
| MT-8 | Jennings Lodge-Oak Grove-Oatfield ¹ | 8 | 8 | Establish hourly service from Oak Grove (about 8 runs per day) |
| MT-9 | Damascus/Boring ¹ | 0 | 19 | Establish hourly service (about 10 runs per day) |
| MT-10 | Highway 99E: Oregon City to Canby ² | 26 | 14 | Establish 30-minute headways during the entire day (about 8 runs per day) |
| MT-11 | Highway 212: I-205 to US 26 ² | 0 | 14 | Establish hourly service (8 runs per day) |
| MT-12 | Estacada-Redland-Oregon City ¹ | 0 | 11 | Establish hourly service focused on the CCC schedule (about 11 runs per day) |






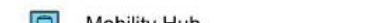
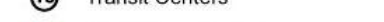
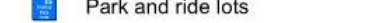
Medium-Term Recommendations: Routes

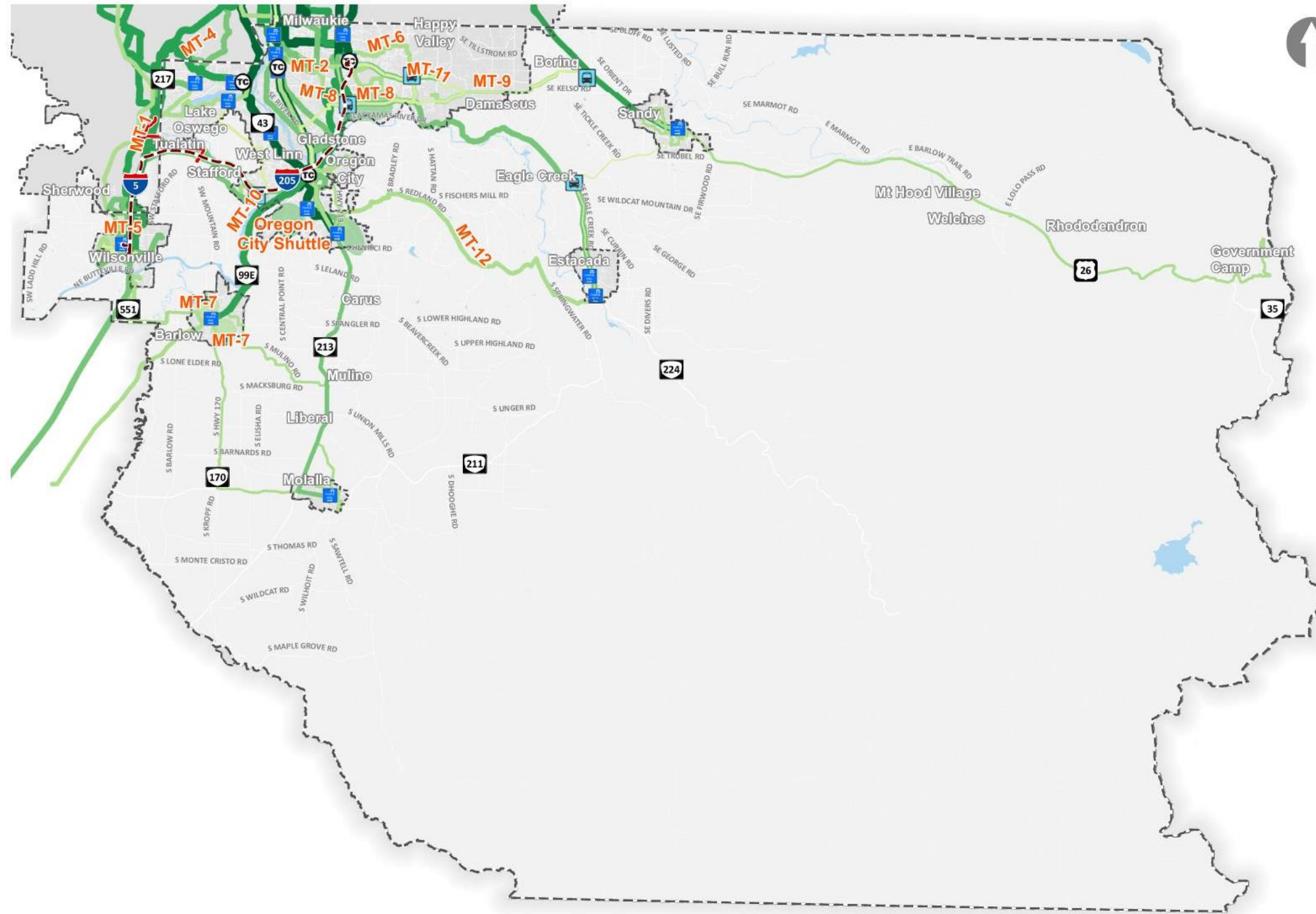
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**Medium-Term Recommendations:
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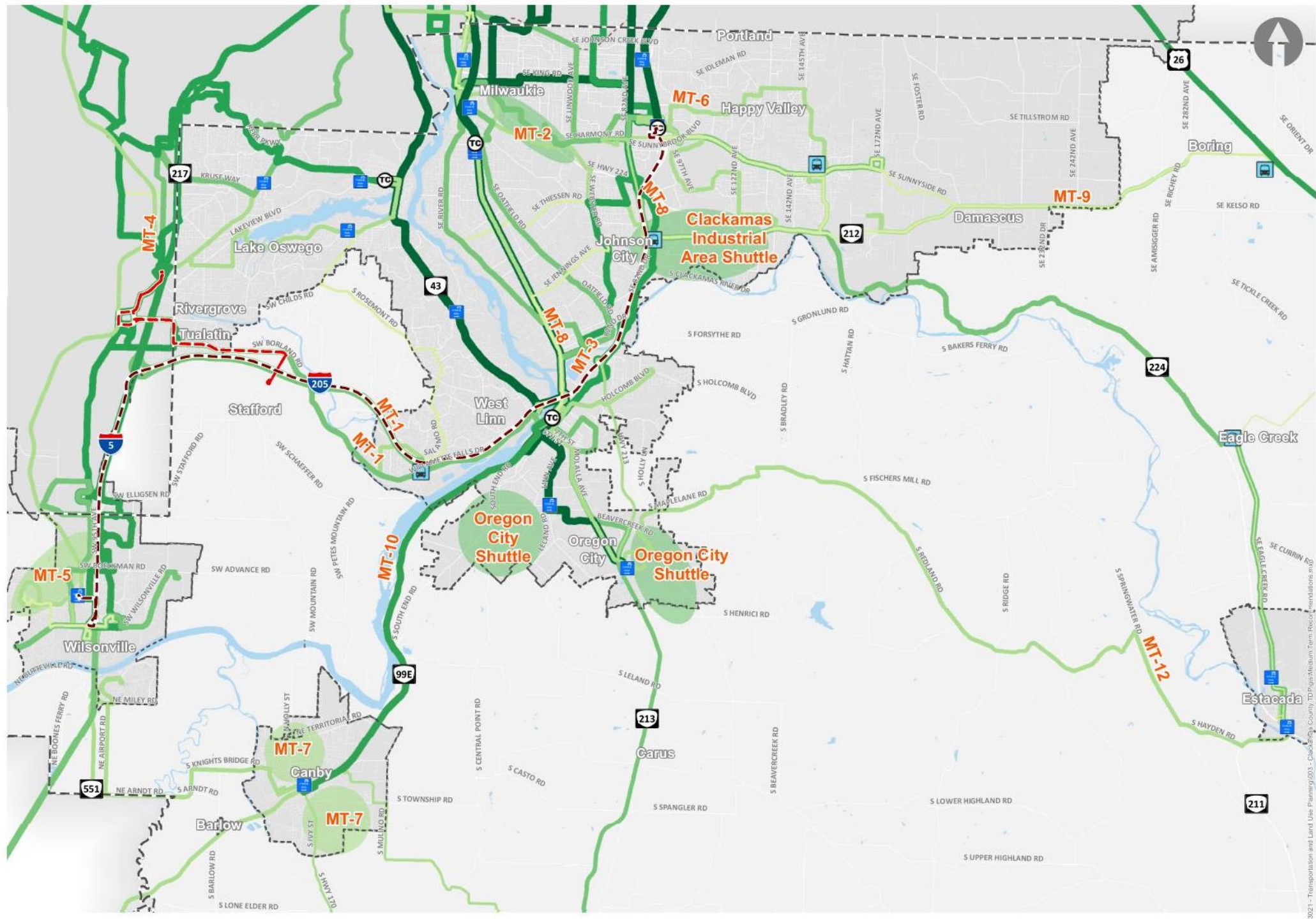
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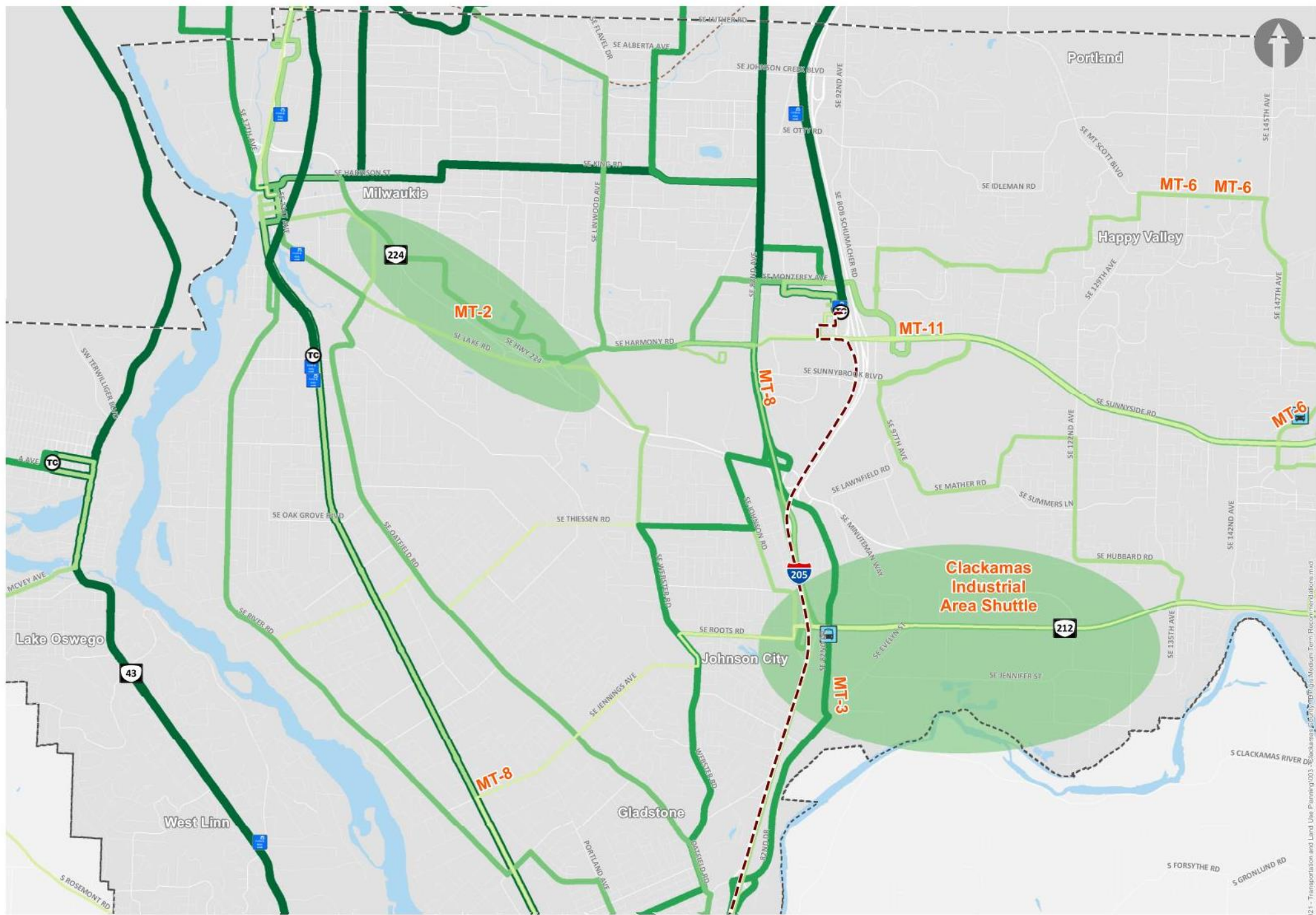
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Long-Term Recommendations

| ID | Corridor or Area | Runs per Day | Additional Runs | Recommendation |
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| LT-1 | I-205: Oregon City to I-5 Interchange ¹ | 38 | 9 | Evaluate service. Consider increased service span and frequency to add about 10 runs per day. |
| LT-2 | Milwaukie Industrial Area ¹ | 55 | 9 | |
| LT-3 | I-205: Oregon City to Clackamas Town Center ¹ | 84 | 3 | |
| LT-4 | West Lake Oswego/Kruse Way ¹ | 22 | 10 | |
| LT-5 | Wilsonville (West Wilsonville) ¹ | 26 | 9 | |
| LT-6 | Happy Valley ¹ | 26 | 9 | |
| LT-7 | Canby (North and South) ² | 26 | 9 | |
| LT-8 | Damascus/Boring ¹ | 10 | 9 | |
| LT-9 | Highway 99E: Oregon City to Canby ² | 34 | 6 | |
| LT-10 | Highway 212: I-205 to US 26 ² | 8 | 6 | |

Long-Term Recommendations

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| LT-11 | Highway 99E: Oregon City to Portland ¹ | 84 | 11 | Add 11 runs per day on Line 99, maintain existing 20-minute headways with extended hours |
| LT-12 | Highway 211: Molalla to Woodburn ² | 0 | 10 | Establish hourly service |
| LT-13 | C2C Corridor ¹ | 0 | 10 | Establish hourly service |
| LT-14 | Highway 213: South of Molalla ² | 0 | 8 | Establish hourly service |
| LT-15 | US 26: West of Sandy ² | 33 | 3 | Add 3 runs per day, maintain 30-minute headways with added hours |
| N/A | Estacada and Eagle Creek ¹ | Covered by SAM's Sandy & Estacada service | | |
| | I-205: North of Clackamas Town Center ¹ | Monitor potential increases to transit demand | | |
| | Highway 224: Highway 212 to Estacada ¹ | | | |
| | Highway 213: Oregon City to Molalla ² | | | |
| | Highway 99E: South of Canby ² | | | |
| | US 26: East of Sandy ² | | | |
| | Boring ¹ | | | |

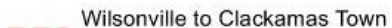






**Long-Term Recommendations:
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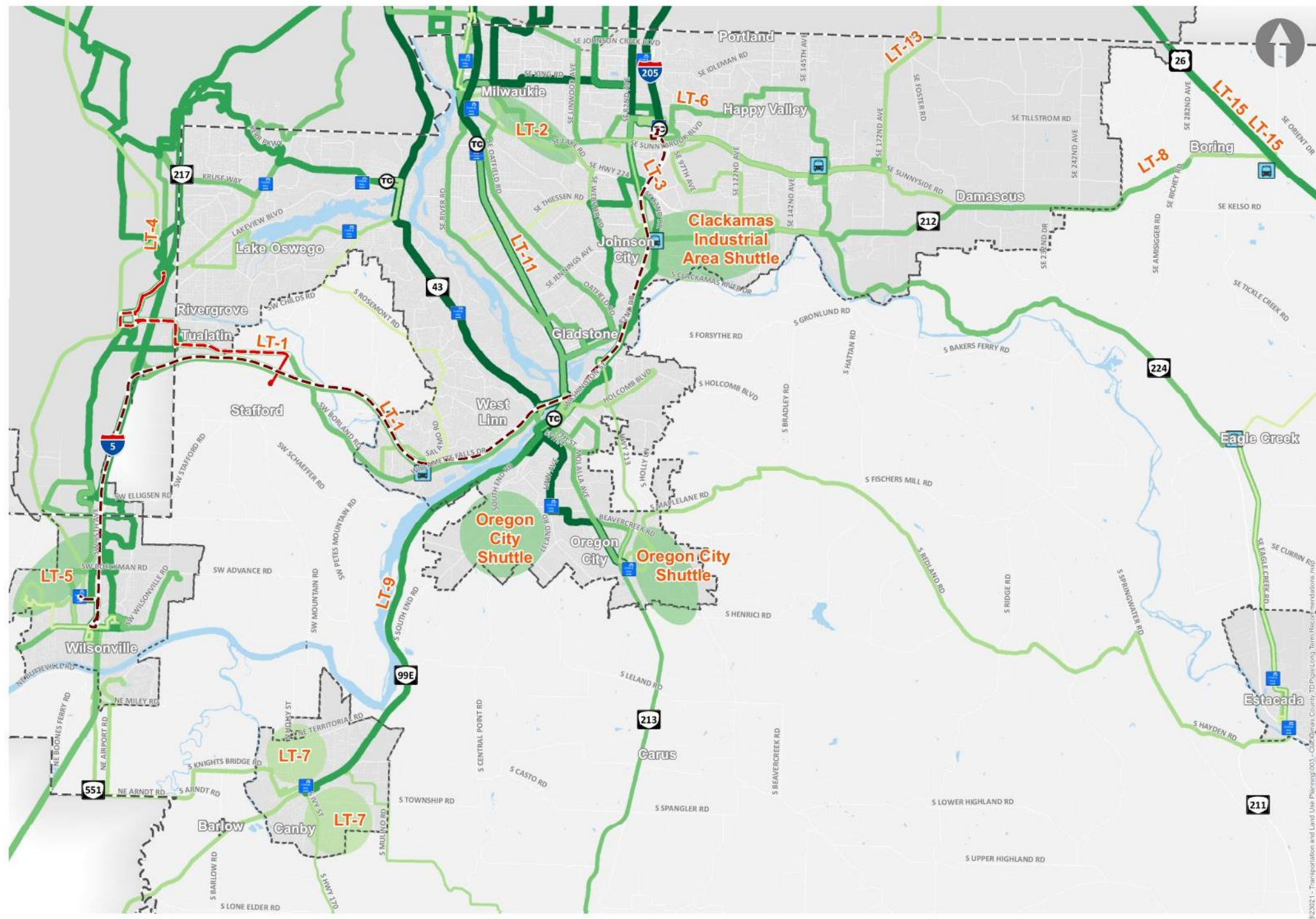
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Long-Term Trips

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Planned Services



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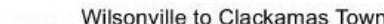






**Long-Term Recommendations:
Routes**

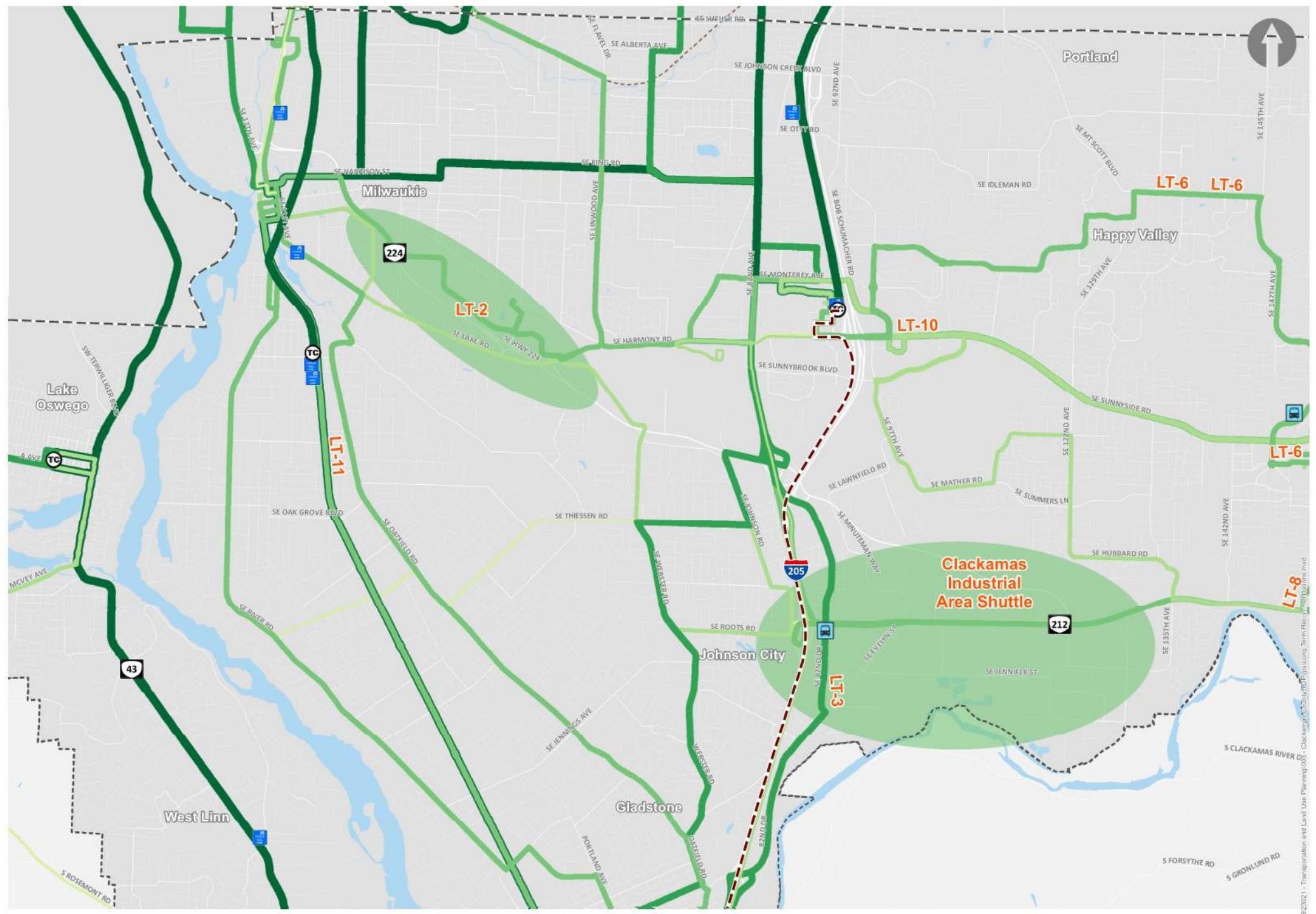
-  8 or Fewer Runs per Day
-  9 - 16 Runs per Day
-  17 - 32 Runs per Day
-  33 - 64 Runs per Day
-  65 or More Runs per Day

Long-Term Trips

-  9 - 16 Runs per Day
-  17 - 32 Runs per Day

Planned Services

-  Wilsonville to Clackamas Town Center
-  Tualatin Shuttle (New)
-  Mobility Hub
-  Transit Centers
-  Park and ride lots
-  Urban Growth Boundaries
-  County Boundary



Transit- Supportive Improvements and Strategies

Transit Center and Stop Improvements

- Transit Centers and Major Stops
 - The location should consider pedestrian access to destinations
 - Clear sight lines, adequate lighting
 - Plan to accommodate 20-year growth for buses and amenities
- Bus Stops
 - A shelter generally includes a windscreen, bench, trash can, and passenger information
 - Benches at lower-ridership stops are a low-cost way to provide a basic amenity to riders

Bicycle and Pedestrian Facilities

- Provide low-stress bicycle facilities to key transit stops
- Transit centers in downtown cores generally have good sidewalk coverage, but sidewalks are limited elsewhere

Transit- Supportive Improvements and Strategies

Land Use and Code Strategies

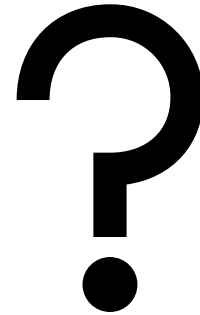
- Regulatory elements and code strategies can determine whether an area is conducive to successful transit service
 - Agency coordination
 - Transit-supportive land uses
 - Development standards that encourage transit ridership
 - Access
 - Parking

Information and Technology

- There are several ways to improve the ridership experience:
 - Online/mobile trip planning tools
 - Real-time vehicle arrival information
 - Fare payment options beyond cash

Questions?

- What are your thoughts on the initial priorities for short-, mid-, and long-term?
- What considerations do you have for the routing alternatives?
- What questions or comments do you have about the supporting strategies (bicycle and pedestrian access, land use policy, information and technology, etc.)?



Overview of Outreach

Targeted CPO meetings

Outreach to specific community groups

Online Survey



Targeted CPO Meetings and Community Groups

- The TDP project team attended several CPO and Hamlet meetings
 - Jennings Lodge CPO
 - Hamlet of Beavercreek
 - Oak Grove Community Council
 - Firwood Neighbors
 - Bridgeport Elementary School PTO (10/21)
 - North Clackamas Parks and Recreation District (10/27)
 - Hispanic Interagency Networking Team (HINT, November)
- The survey link was shared with groups who we were not able to meet with
- Reached out to several other CPO's and organizations, who were either not meeting or haven't responded yet

Online Survey

- <https://openhouse.jla.us.com/cctdp>
- September 23rd - October 25th
- Emailed to near 50 community organizations, neighborhood associations, etc., posted on NextDoor and social media
- 337 participants as of October 18th

Online Survey

- The survey is divided into three groups: “West TriMet Area,” “East TriMet Area,” and “Southeast Clackamas County”
 - Within each group, there are transit alternatives located inside that area
 - The alternatives are shown on a map, and the survey asks a couple of questions
 - People can answer to as few or as many routes as they want

Questions

How likely are you to use Option 1, a new express route along I-205 between Oregon City and Tualatin?

(Check one.)

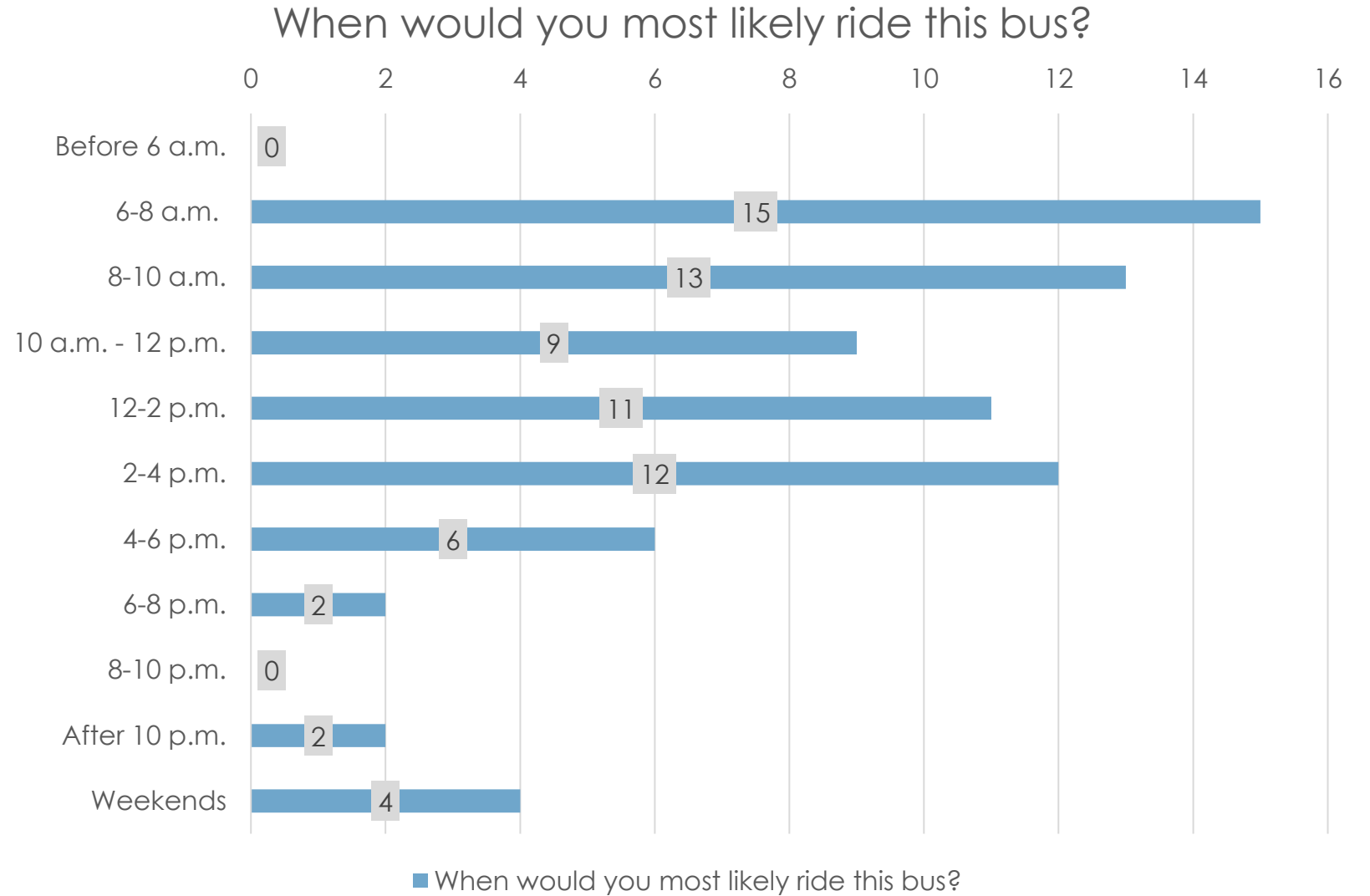
| | | | | | |
|------------------|-------------|--------------|---------------|--------------------|-----------------|
| 1 Very likely | 2 Likely | 3 Neutral | 4 Unlikely | 5 Very unlikely | <i>Not sure</i> |
|------------------|-------------|--------------|---------------|--------------------|-----------------|

How likely are you to use Option 2, a local route along Borland Road?

(Check one.)

| | | | | | |
|------------------|-------------|--------------|---------------|--------------------|-----------------|
| 1 Very likely | 2 Likely | 3 Neutral | 4 Unlikely | 5 Very unlikely | <i>Not sure</i> |
|------------------|-------------|--------------|---------------|--------------------|-----------------|

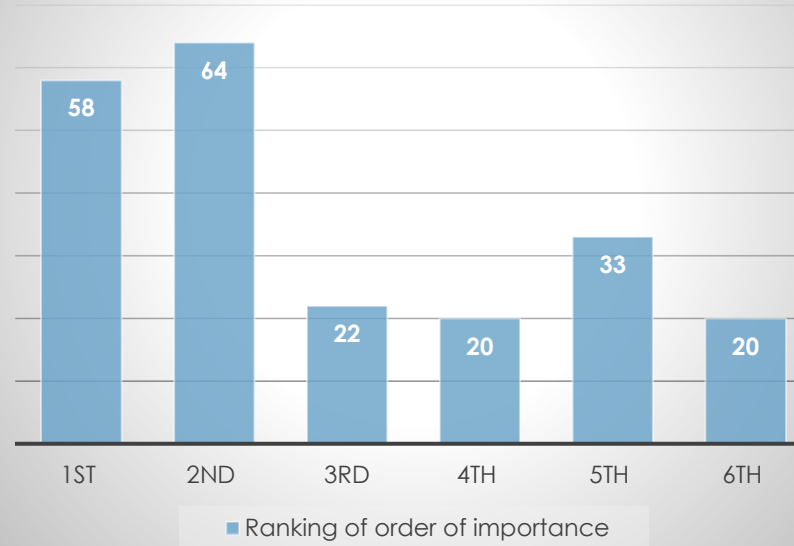
Tualatin to West Linn to Oregon City



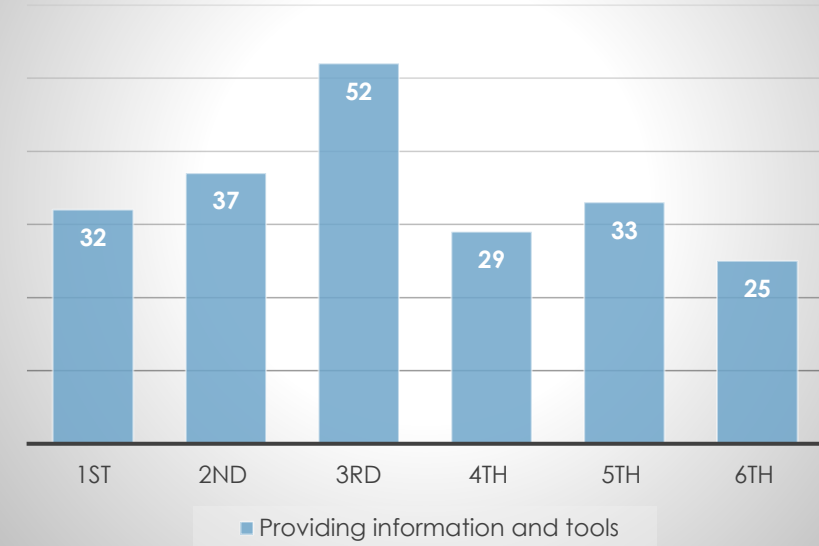
Providing new connections and new local services



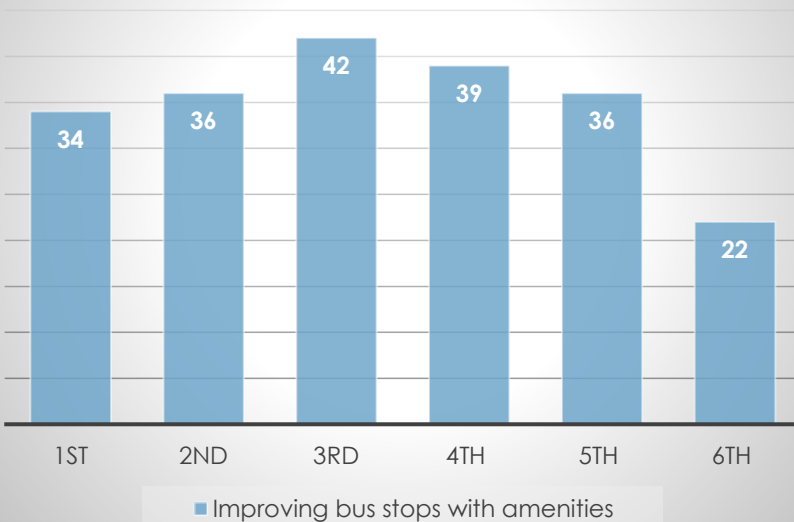
Enhancing and improving existing services



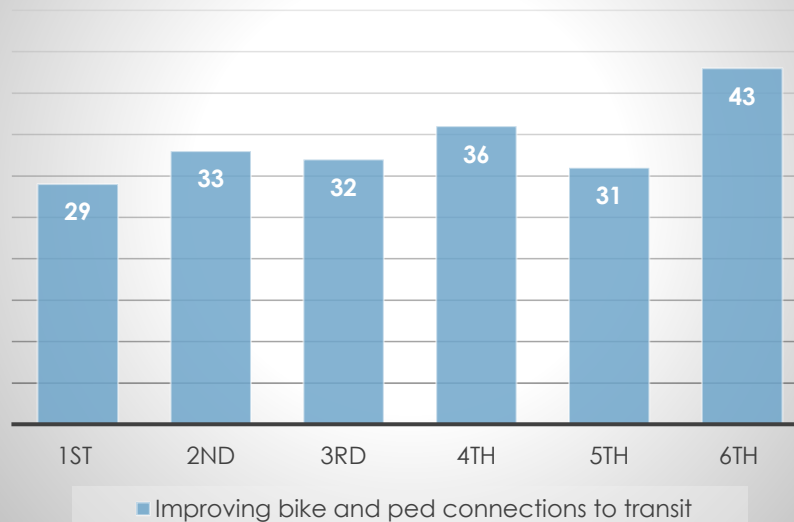
Providing information and tools



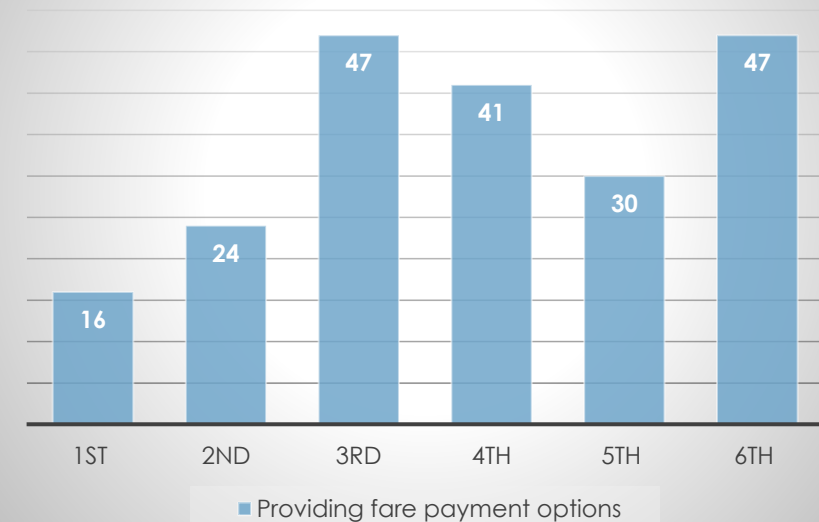
Improving bus stops with amenities



Improving bike and ped connections to transit



Providing fare payment options



Next Steps

- Review public, TAC, and PAC feedback related to transit service options
- Revise preferred opportunities based on collective input
- Draft the TDP – Reconnect with TAC and PAC