



Agenda Linn-Benton Loop Board

Date: Tuesday, April 23, 2019
Time: 3:00 – 5:00 pm
Location: OCWCOG Downstairs Conference Room, 1400 Queen Ave, SE Albany OR
Conference: 541-497-7311, pin #841
Contact: Phil Warnock, Community & Economic Development Director, (541) 924-8474

1. **3:00 Call to Order** **Phil Warnock,
OCWCOG**

2. **3:05 Agenda Review** **Warnock**

3. **3:10 Public Comment** **Warnock**

4. **3:20 Election of Chair** **All**
Action Requested: Decision

5. **3:30 Loop Intergovernmental Agreement (IGA) Update** **Nick Meltzer,
OCWCOG**
Action Requested: Decision

6. **3:40 Minutes of February 26, 2019 Meeting (Attachment A)** **Chair**
Action Requested: Approval of February 26, 2019 Meeting Minutes

7. **3:45 Linn-Benton Loop Service Enhancement Plan (Attachment B)** **OCWCOG Staff**
The Board will review a final draft of the Loop Service Enhancement Plan.
Action Requested: Approval of Service Enhancement Plan

8. **4:15 Budget and Ridership Reports (Attachments C & D)** **Barry Hoffman,
City of Albany**
Action Requested: Information Only

9. **4:30 Future Budgets – Continued Discussion** **Chris Bailey,
City of Albany**

10. **4:45 Other Business** **Chair**

11. **5:00 Adjournment** **Chair**

The meeting location is accessible to persons with disabilities. Sign language, interpreter services or other accommodations can also be provided by contacting Emma Chavez at least 48 hours prior to the meeting. Emma can be reached at 541-967-8551 (TTY/TTD 711) or echavez@ocwcog.org.

**LINN-BENTON LOOP BOARD
DRAFT MEETING MINUTES
Tuesday, February 26, 2019
3:00 – 5:00 pm**

Oregon Cascades West Council of Governments
Upstairs Conference Room / 1400 Queen Ave. SE, Albany

Board Members: Dave Henderson, and Patrick Malone

Ex-Officio: Chris Bailey

TAC Members: Lisa Scherf

Staff: Nick Meltzer, Dana Nichols, Phil Warnock, and Emma Chavez

TOPIC	DISCUSSION	DECISION / CONCLUSION
1. Call to Order	The meeting was called to order at 3:10 pm by staff Phil Warnock. It was noted that Commissioner Patrick Malone is attending as the interim CAMPO representative.	
2. Agenda Review		There were no changes to the agenda.
3. Public Comment		There were no public comments.
4. Election of Chair		Members tabled this agenda item for the next meeting, in hopes that all members will be present.
5. Loop Intergovernmental Agreement (IGA) Amendment	Phil Warnock advised that the Linn-Benton Loop did not have an official Governing body Board for a long time. The Intergovernmental Agreement (IGA) codifies the Governance Board. There are three core members of the Board; AAMPO, CAMPO, and LBCC. OSU chose not to be an official Board member, but is a participant as a major funder of the Linn-Benton Loop. Staff Nick Meltzer went on to advise that Hal Brauner, previous City of Corvallis Councilor, served as the CAMPO representative on the Loop Board since its initiation. Upon Brauner's retirement at the end of 2018,	Pat Malone made a motion for staff to modify sections 3.1 and 3.1.4 of the IGA to add an At-large member position to the Loop Board. Consensus from the Loop Board.

	<p>AAMPO representative Commissioner Roger Nyquist requested for staff to look into updating the IGA to add an At-Large position to the Loop Board in order for Brauner to continue to serve as a member. Members of the Board agreed that staff should look into this update. The current Loop Board will need to decide on updating the IGA, and if the At-Large member would be a voting or non-voting member.</p> <p>Members fell into discussion and agreed that Brauner’s significant interest and background in the Loop are vital to the Loop Board, especially with two of the three Board members being new.</p> <p>Staff will draft the language which will result in modifications to sections 3.1 and 3.1.4 of the IGA. This language will be emailed out to the Loop Board for review. It will also be taken to the AAMPO and CAMPO Boards for approval.</p>	
<p>6. Minutes of November 27, 2018 Meeting</p>	<p>Pat Malone moved to approve the November 27, 2018 meeting minutes. Members met consensus.</p> <p>Meltzer noted that City of Albany staff Barry Hoffman did follow up with Staff on the Ridership and Revenue reports and provided corrected information which was forwarded to Board members.</p>	<p>Consensus by the Loop Board to approve the Minutes of November 27, 2018 meeting.</p>
<p>7. Linn-Benton Loop Service Enhancement Plan Update</p>	<p>Phil Warnock provided background information on the Linn-Benton Loop. He advised that Theresa Conley who had previously been staffing the Loop Board and TAC, had budgeted for a service enhancement plan. HB 2017 came along with funding and Local Plan requirements were included. COG took the funds that had already been budgeted and collected funds from partners for the current Service Development Plan. The Service Development Plan must be included when the QEs submit applications for funding.</p> <p>Meltzer provided a summary of the Service Development Plan work to date, and Dana Nichols reviewed the Service Development Plan phases.</p> <p>Discussion/Feedback:</p>	

	<ul style="list-style-type: none"> • Bailey advised that if you see a flat service, it is because there is only one bus. If the service doubled, you would see an increase in service. • When questioned how this relates to the concept of the Transit Hub at LBCC? Bailey stated that it does not necessarily, because there won't be multiple Loop busses at LBCC but it will help with efficiency. Meltzer also noted that Nelson Nygaard had advised that it would help the frequency. <p>Meltzer advised that staff was hoping to get the document in front of the Loop Board early due to the STIF deadline of May 1st. The plan must be accepted in order for the QEs to receive funds for their submitted applications.</p> <p>Lisa Scherf with Benton County advised that the STIF funds are being collected. The first round of opportunity will include three years' worth of funds.</p> <p>Loop Board members will email additional comments to Emma Chavez by Tuesday, March 5th in order for staff to provide updates to the TAC.</p>	
<p>8. Budget and Ridership Reports</p>	<p>Chris Bailey reviewed the ridership and budget reports.</p> <p>She noted that in December 2018, ridership was lower than it has been in many years. This could be due to LBCC being closed for a week longer than usual. Otherwise, the ridership remains similar to previous years. Meltzer noted that ridership is higher than prior to the recession even though gas prices are lower.</p> <p>Bailey stated that the ATS has received 57% of funding and spent half of this year's funds. Due to the federal shutdown, there is a couple months of backlog on the 5307 funds.</p> <p>Additionally, she noted that there had been incorrect reimbursement to a position, and ATS had to pay those funds back.</p>	
<p>9. Future Budgets</p>	<p>Bailey advised that budgets are developed in late January and that the City Council reviewed budgets prior to the Loop Board meeting. She</p>	

	<p>went on to advise that in the past, if there was with a discrepancy in the budget, staff always fell back on ATS to pay the difference, as the operator.</p> <p>Bailey went on to review next year's budget, noting that expenditures have outpaced the modest contributions from partners, and that there is no reserve fund.</p> <p>When asked where the Loop resides legally; Lisa Scherf explained that the Loop Board is the Governing Body and it is made up of the major funding contributors, minus OSU. Although, OSU participates via the Loop Technical Advisory Committee (TAC).</p> <p>Bailey went on to note that it would be helpful to have a Loop reserve account funded by the partners.</p> <p>Scherf stated that at the last Benton County STIF Advisory Committee, OSU indicated that they had not received a requests for an increase in their contribution and to Scherf it sounded like an invitation for the request.</p> <p>Bailey went on to advise that the main factors in the increase of the budget are increases PERS and health insurance costs across the board.</p> <p>Warnock questioned if there was opportunity to make a proposal to the colleges for each cycle.</p> <p>Scherf remembered that there was an initial intent to capture a percentage of ridership and in the contributions but it was not set up that way. She questioned if ridership could be a facture to the proposal.</p> <p>Bailey noted that last year, the schools were at 63% ridership, and that if members want a direction on a reserve amount; the City of Albany does a 5-15% reserve.</p>	
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	<p>Dave Henderson noted that based on ridership, there would be a 3% increase from each college but that there is still the concern of the reserve and he questioned if a surcharge of all funders could be included. This would help to build up, instead of going from 0% to 10%. He indicated that this would need to be discussed with AAMPO and CAMPO.</p> <p>Scherf advised that the City of Corvallis has already finished their budget work but that there are 5307 funds that could be tapped into. She advised that the City of Corvallis meets performance measures that get them a boost in 5307 funding. Those funds however, need to be matched.</p> <p>Bailey stated that she could calculate a beginning reserve fund and spread the cost between the partners.</p> <p>Pat Malone made a motion for ATS staff to come up with a proposal for a reserve (10% over 5 years). Dave Henderson seconded the motion. Members met consensus.</p>	
10. Other Business	Members received a summary of CWACT STIF discretionary applications. Warnock advised the CWACT Full Commission will be reviewing those on Thursday the 28 th and providing feedback to ODOT.	
11. Adjournment	Meeting adjourned at 5:03 pm.	



LINN-BENTON LOOP SERVICE DEVELOPMENT PLAN

Final Plan

April 2019



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Oregon Cascades West Council of Governments

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Cover photo: Linn-Benton Loop at the Corvallis Transit Center.

Source: City of Corvallis

ACKNOWLEDGEMENTS

Linn-Benton Loop Governing Board

Hal Brauner, City of Corvallis

Bruce Clemetsen, Linn-Benton Community
College (LBCC)

Dave Henderson, LBCC

Pat Malone, Benton County

Roger Nyquist, Linn County

Technical Advisory Committee (TAC)

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Tim Bates, City of Corvallis

Sarah Bronstein, Oregon State University

Barry Hoffman, City of Albany

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Nick Meltzer, Corvallis Area Metropolitan
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Lisa Scherf, City of Corvallis

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Project Management Team

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Community College (LBCC)

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Oregon State University Fall 2018
SUS 304 Students

Consultant Team

Nelson\Nygaard Consulting Associates:
Jamey Dempster, Paul Leitman,
Maggie Derk, and Oren Eshel

EXECUTIVE SUMMARY

The Albany and Corvallis areas are important centers in the Mid-Willamette Valley and serve as economic and educational hubs. Many people travel daily to and from the two cities, including residents, employers, visitors, and students. Future growth will further reinforce the symbiotic relationship in the region.

Public transportation is a key part of the region's transportation system: it provides a critical mobility for people who do not have access to a vehicle, provides an alternative to driving and parking on busy roads, and can help reduce personal vehicle emissions.

The Linn-Benton Loop ("the Loop") bus system connects Albany and Corvallis. It has been in service for almost 40 years, connecting people to education, work, shopping, and play.



The Linn-Benton Loop is an important service in the Mid-Willamette Valley.

Source: City of Corvallis

In 2019 public transportation providers in Oregon will begin receiving funds from the Statewide Transportation Improvement Fund (STIF). The transit funds were part of the legislature's

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transportation package passed in 2017 (House Bill 2017 Keep Oregon Moving). The Loop Governing Board has since then preliminarily agreed to plan for up to \$600,000 in service enhancements, based on each County contributing an additional \$300,000 each in new STIF revenues.

The Plan was developed in collaboration with the Linn-Benton Loop Technical Advisory Committee (TAC), and included analysis of the existing system and historical data, an on-board survey of Loop passengers in October 2018, and a regional stakeholders workshop in December 2018.



Stakeholders at the December 2018 workshop discuss the tradeoffs of proposed service options.

Source: Nelson\Nygaard Consulting Associates

Recommended Service Plan

The Linn-Benton Loop Service Development Plan (SDP) was developed to identify and prioritize service changes to the Loop. Recommendations described in this Plan include:

- Additional service frequency when demand is highest
- Bi-directional service to improve access, convenience, and reduce travel times
- Later service until 10:00 p.m.
- Maintain service to most locations that are served today.

The Linn-Benton Loop vision is to provide reliable and efficient transportation for commuters, students, residents, and visitors. The Loop strives to be a clear and easy-to-understand service.

The Linn-Benton Loop system will be composed of three routes:

- **Regional Route:** weekday and Saturday service between Oregon State University (OSU)/Downtown Transit Center, Linn-Benton Community College (LBCC) and Albany Station via OR-34 and OR-99E

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- **Campus Connector:** weekday service between OSU/Downtown Transit Center and LBCC via OR-34
- **US-20 Commuter:** weekday peak-hour service between OSU/Downtown Transit Center and Albany Station via US-20

Routes and service characteristics and the regional transit network are shown in **Figure 1** and **Figure 2** respectively.

Figure 1 Regional Transit Vision Routes

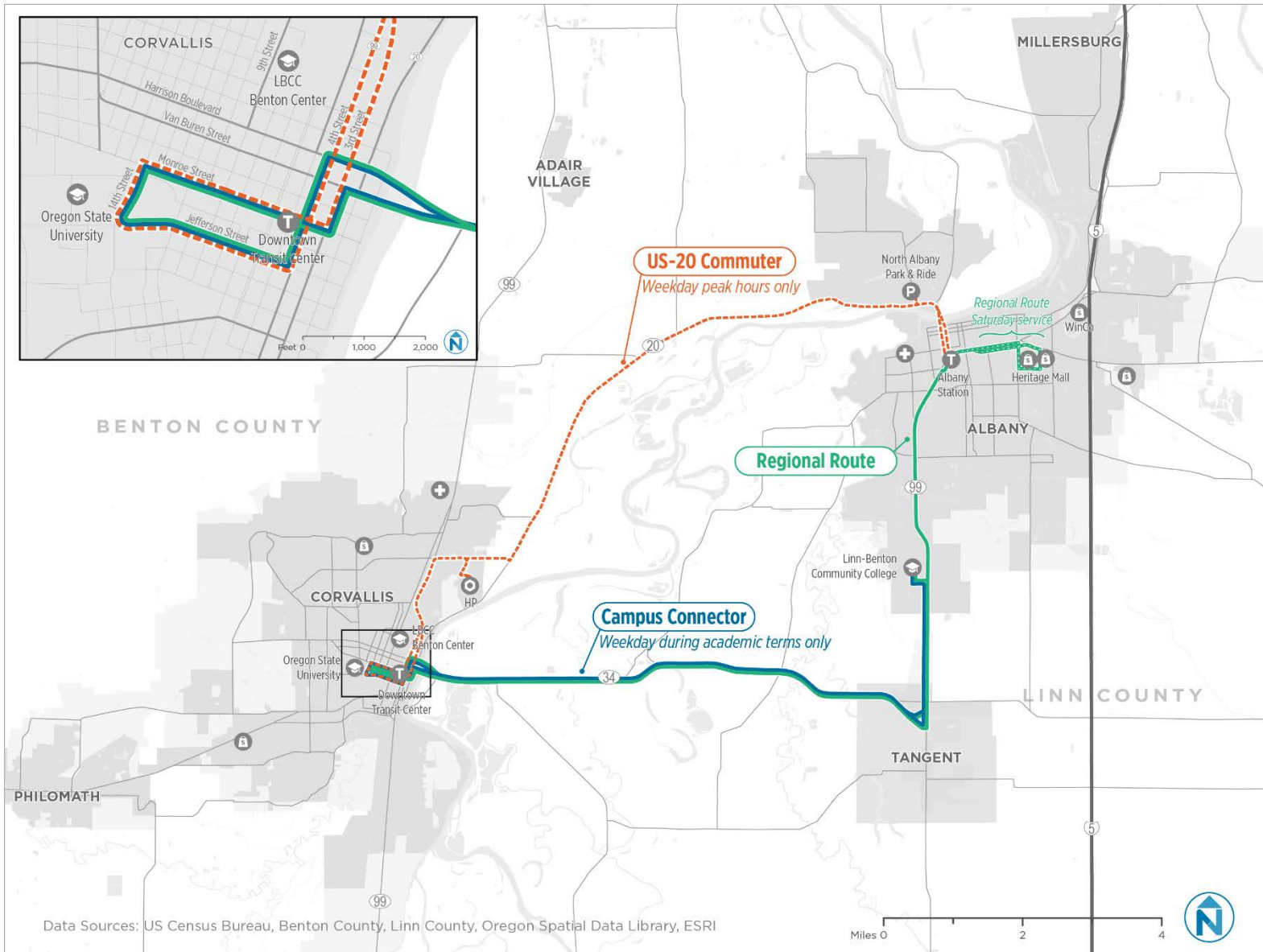
Route	Service Days	Time of Year	Hours of Service	Frequency (min)	Vehicles ^[A]
Regional Route ●	Monday-Friday	All year	6 am – 10:15 pm	75	1
	Saturday	All year	8 am – 6 pm	90	
US-20 Commuter ●	Monday-Friday	All year	6:00 – 9:00 am 4:30 – 7:30 pm	60	1 ^[B]
Campus Connector ●	Monday-Friday	OSU/LBCC academic term ¹	Midday: 9:30 am – 4 pm	30	
			AM/PM: 7 – 9:30 am & 4 – 7 pm	60	1

Notes:
 [A] Number of vehicles does not include spare vehicles necessary to support bus services.
 [B] Preliminary analysis suggests one vehicle could serve both the morning and afternoon Commuter route, and the mid-day Campus Connector; Campus Connector at 30 minute frequencies will require two vehicles.

¹ Fall, Winter and Spring terms only

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Figure 2 Regional Transit Vision Network



1 INTRODUCTION

The Loop is a public transportation partnership that links two communities to critical educational, employment, and activity centers. The Loop began operating in 1980 to provide transit service between Albany and Corvallis. Over the decades the route has expanded capacity on its busiest segments and is an integral part of the transit system in the region.

The Loop has financial, political, and public support from a broad base of partners, including Linn and Benton Counties, the Corvallis Area Metropolitan Planning Organization (CAMPO), Albany Area Metropolitan Planning Organization (AAMPO), Linn-Benton Community College (LBCC), Oregon State University (OSU), Oregon Department of Transportation (ODOT), Hewlett-Packard (HP), and Good Samaritan Regional Medical Center. Many regional partners and the public recognize there are opportunities to improve service and provide improved connectivity and access for people traveling between the two cities.



Source: NelsonNygaard

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In 2019 public transportation providers in Oregon will begin receiving funds from the Statewide Transportation Improvement Fund (STIF). The transit funds were part of the legislature's transportation package passed in 2017, a transit-specific fund developed after passage of Oregon House Bill 2017 (known as Keep Oregon Moving). The Loop Governing Board has since then preliminarily agreed to plan for up to \$600,000 in service enhancements, based on each County contributing an additional \$300,000 each in new STIF revenues. This SDP provides the specific steps and service adjustments for the Loop to achieve a 10-year transit vision using the additional funds from STIF. Recommendations from the plan include additional frequency of service on the busiest corridors when demand is highest, bi-directional service to enhance access and reduce travel times, extended service into the evening, and maintaining service to all major locations that are served today.

PROCESS

The SDP was developed through a collaboration with the **Linn-Benton Loop Technical Advisory Committee (TAC)** based on an analysis of the existing system and historical data. Meeting with the TAC occurred monthly between September 2018 and February 2019.

Students in an OSU Sustainability Assessment course conducted an **on-board survey** of Loop passengers in October 2018 over a five day period. They collected 239 responses. The survey was used to understand who was riding the Loop (including their affiliation with local institutions and income levels) and the type of service improvements they were looking for most.

In December 2018, a Loop **regional stakeholders planning workshop** brought together regional transit providers, partners and advisors to discuss the range of service changes that could be implemented on the Loop. The workshop was designed to understand participants' priorities, weigh the tradeoffs of different operating models, and generate new ideas to address rider needs. The result of the workshop was draft service vision that included preferred frequency, alignment, and span.

Findings from technical analysis, input from TAC members, results from the on-board survey, and outcomes from the workshop were all used to develop the Linn-Benton Loop Service Development Plan.

2 ISSUES AND OPPORTUNITIES

This chapter presents key issues, findings, and opportunities for the Loop, and travel between Albany and Corvallis in general. These issues were identified through analysis, the on-board survey, and feedback from regional stakeholders.

The key findings include the following issues. These are presented in more detail on the following pages.

1. Commute trends indicate a demand for region transportation services.
2. Low-income populations in Linn and Benton Counties are increasing.
3. Most passengers on the Linn-Benton Loop live in households within incomes less than \$50,000, many of whom are students (based on 2018 passenger survey).
4. The Loop serves two limited markets: commuters and students.
5. There is limited service for people traveling across the region on weekends.
6. People who depend on transportation in the evening have unmet transit needs.
7. The Linn-Benton Loop is scheduled at frequencies that do not coordinate well with other regional schedules, presenting barriers for operations and passengers.
8. Ridership on the Linn-Benton Loop has remained relatively flat over the past several years, with a slight downward trajectory.
9. Most ridership on the Linn-Benton Loop is at LBCC, Downtown Corvallis, and OSU.
10. The top improvements for Linn-Benton Loop service are increased frequency and later service in the evening (based on 2018 passenger survey).
11. Many of the region's transit agencies have unique brands and provide information independently of each other.

1. Commute trends indicate a demand for regional transportation services.

Current commute travel patterns indicate that approximately 5,700 workers travel between Corvallis or Philomath and Albany, Millersburg, or Tangent on a daily basis (see **Figure 3**).² The largest flow is from people who live in Albany, Millersburg, or Tangent and commute to jobs in Corvallis or Philomath. Between 2009 and 2015, the strongest growth in travel flows has been

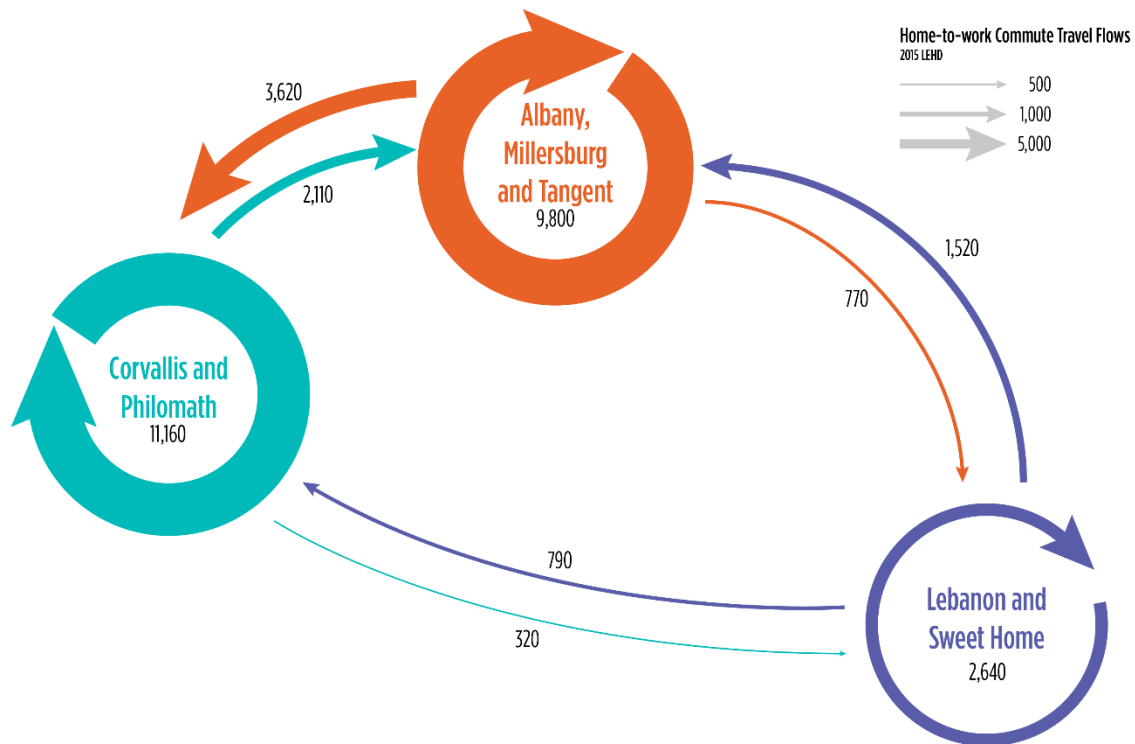
² This data is based on Longitudinal-Employer Household Dynamics (LEHD) data. It represents commute trips contained within the Corvallis, Albany, and Lebanon/Sweet Home areas. Residents of communities outside the region who commute to jobs in the region, and employees that live in the region but commute to jobs outside the region (such as to Salem, Eugene, or Portland) are not included in these values. LEHD data include information from IRS records that are based on addresses provided by employers. Some work location addresses may not be for actual location of employment, but for corporate or main offices. Therefore someone who lives in Corvallis may be shown as commuting out of the city, even though they work for a company within Corvallis city limits or telecommute.

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from people who commute between Lebanon/Sweet Home and the Albany area (29% increase) and between Lebanon/Sweet Home and the Corvallis areas (23%). Growth in commutes between Albany and Corvallis also grew notably (22%).

As population and employment grows in Linn and Benton Counties, travel demand between major cities within the region is likely to continue increasing. Transit service will be a key part of the transportation mix to provide people an option to avoid driving and for people who do not have access to a private vehicle. To accommodate future demand, transit services will need to operate more frequently and for longer periods of time.

Figure 3 Regional Commute Flows (2015)



Source: Longitudinal-Employer Household Dynamics (2015)

2. Low-income populations in Linn and Benton Counties are increasing.

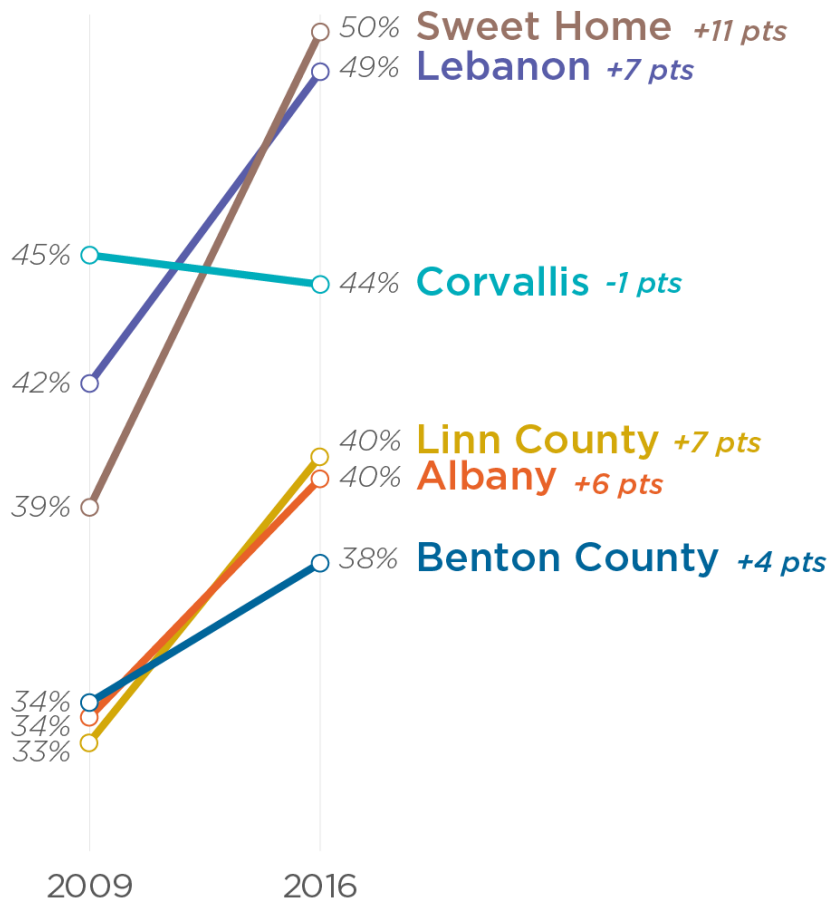
Low-income populations are defined in the STIF rules as households below 200% of the federal poverty level.³ Lebanon and Corvallis have the region's highest share of low-income households. Between 2009 and 2016, most jurisdictions saw increases in the percent of people defined as low-income (see **Figure 4**) and all jurisdictions experienced increases in the total number of households defined as low-income (see **Figure 5**). Geographically within the region, the density of low-income households at the Block Group level is highly concentrated in the region's cities (see **Figure 6**).

³ STIF guidance on estimating low-income households recommends applying the percent of population classified as low-income to the number of households.

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Low-income households benefit most from affordable, accessible, and reliable transit options. Future transit demand will be influenced by where low-income individuals live and work. As low-income households increase in the region, demand for transit service is expected to grow.

Figure 4 Percent of Households Defined as Low-Income (2009 to 2016)



Note: Low-income defined as people with incomes below 200% of the Federal Poverty Level.
Source: US Census Bureau, American Community Survey, 5-Year Estimates, 2005-09 to 2012-16, Table C17002

Figure 5 Number of Low-Income Households

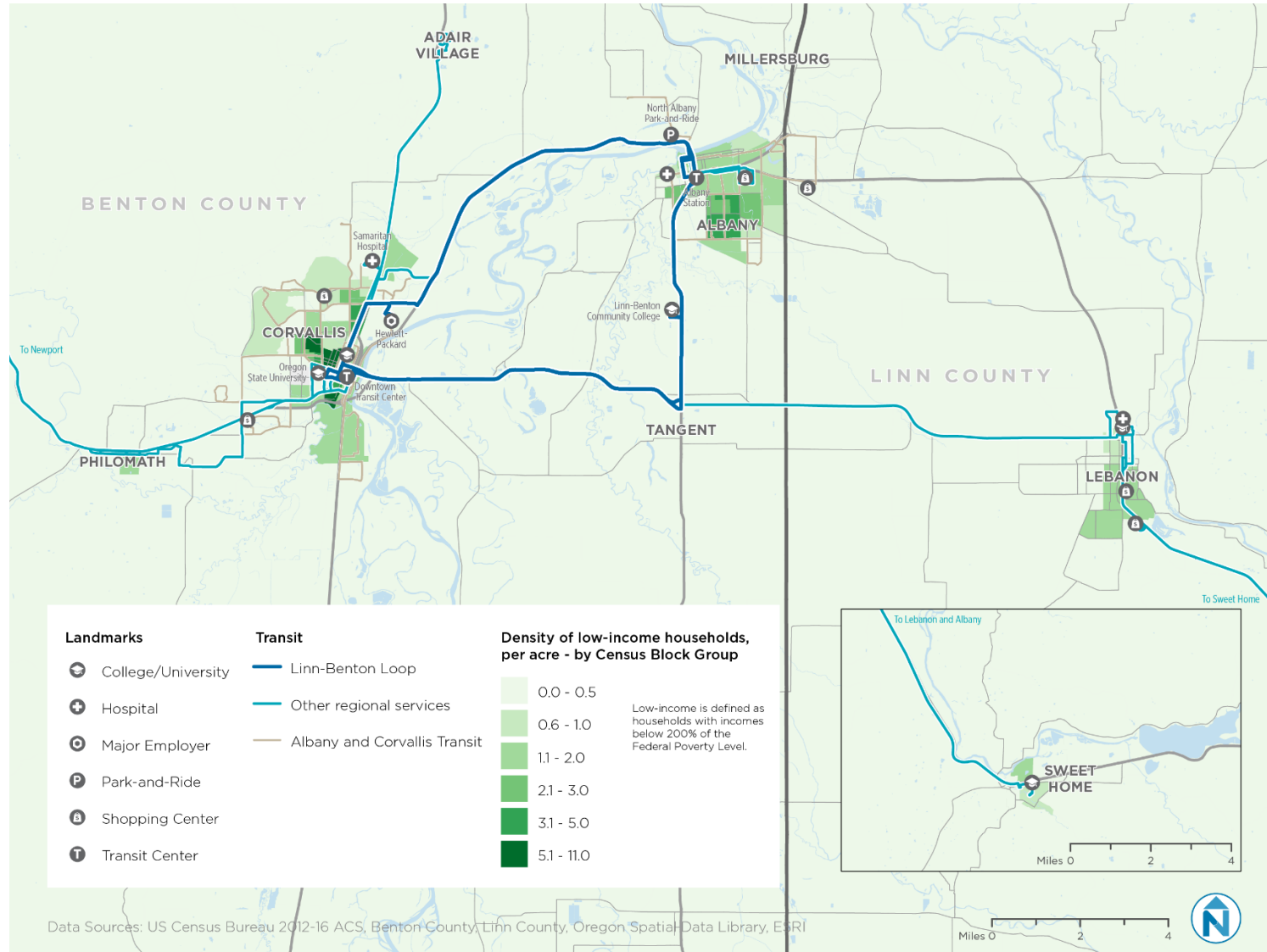
City / County	2009	2016	Change	Percent Change
Benton County	11,321	12,933	1,612	14.2%
Linn County	14,421	18,238	3,817	26.5%
Albany	6,236	7,841	1,605	25.7%
Corvallis	9,466	9,766	300	3.2%
Lebanon	2,405	3,257	852	35.4%
Sweet Home	1,283	1,770	487	40.0%

Notes: Low-income households calculated by dividing the total number of people with incomes below 200% of the Federal Poverty Level by the average household size of occupied housing units. American Community Survey data is an estimate and values from smaller communities have a higher margin of error.

Source: US Census Bureau, American Community Survey, 5-Year Estimates, 2005-09 to 2012-16, Table C17002 and Table B25010

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Figure 6 Density of Low-Income Households (by Census Block Group, 2016)



Note: American Community Survey data is an estimate and values from rural areas or Census Block Groups with few people have a high margin of error.

Sources: US Census Bureau, American Community Survey, 5-Year Estimates, 2012-16, Table C17002 and B25010

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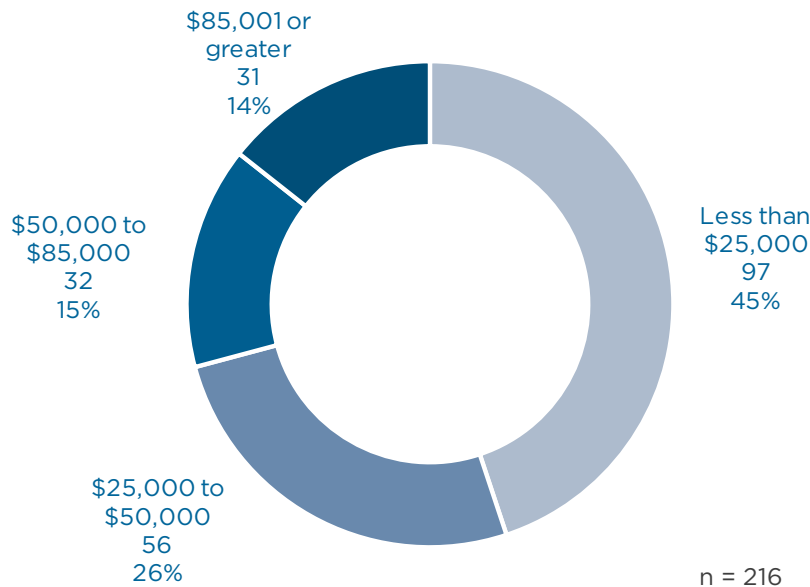
3. Most passengers on the Linn-Benton Loop live in households within incomes less than \$50,000, many of whom are students (based on 2018 passenger survey).

The Linn-Benton Loop on-board survey in October 2018 asked respondents to indicate their household income. The most common response, representing 45% of surveyed passengers, was less than \$25,000. Another quarter of respondents live in households with incomes between \$25,000 and \$50,000 (see **Figure 7**).

The survey also asked respondents for the number of people who live in their household. If a respondent answered both of these questions⁴, their responses were compared to determine if they lived in a low-income household (i.e., incomes below 200% of the federal poverty level based on total household income and number of residents). Based on this evaluation, approximately 64% of respondents were classified as low-income.

Transit service provides an important option for people who lack the financial means to own or operate a vehicle. Approximately two-thirds of the Loop ridership is low-income, indicating the important role the Loop serves in connecting low-income individuals in the region.

Figure 7 Household income of respondents



4. The Loop serves two limited markets: commuters and students.

As a large region, travel needs in the Linn-Benton County area are diverse. The Loop, as currently designed, primarily serves commuters and students at OSU and LBCC. However, travel between Corvallis and Albany includes more than just work week commuters, or students. People use the Loop to travel to and from work for non-traditional work shifts, to access healthcare facilities, and to go shopping and run errands.

⁴ 216 respondents provided their household income. 211 respondents provided their household size. 196 respondents provided responses to both questions.

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There are needs for additional transportation services to support regional mobility for all trip types. More frequent service throughout the day and longer spans of service on weekends are potential service adjustments that would expand the utility of the Linn-Benton Loop for more people.

5. There is limited service for people traveling across the region on weekends.

The Loop currently provides most service during the weekday, with a focus on serving commuters and college students. However, weekend travel needs are also present in the region, including needed connections to weekend jobs, shopping centers, and medical facilities. In addition to limited number of trips, the Linn-Benton Loop service on Saturday operates in the counter-clockwise direction only.

Weekend trips are not well served because the limited frequency reduces the usefulness of the service for spontaneous trips. Additionally, the one-way direction results in out-of-direction travel for all passengers; but is greatest for passengers who only travel a relatively short distance. For example, consider a passenger who needs to travel from Albany Station to LBCC (a distance of approximately three miles). To make the journey on the Loop on Saturday, they would need to travel all the way to Corvallis, a trip that would take approximately one hour.

6. People who depend on transportation in the evening have unmet transit needs.

Classes start as early as 6:20 am at OSU and at 7 am at LBCC – both before the Loop begins. The first Loop trip arrives (via US-20) at OSU at 7:05 am, and the first Loop trip arrives at LBCC at 7:25 am. Most students start classes later (between 8 and 9:30 am) and enrollment peaks at more than 10,000 students around 11 am. Class enrollment remains relatively high until after 5 pm when it begins to drop. Classes are in session on both campuses until after 9 pm.

The last trip from LBCC to Corvallis departs at 5:50 pm, and the last trip from OSU to Albany departs at 6:20 pm⁵. There are still more than 1,000 students actively in classes after service ends for the day.

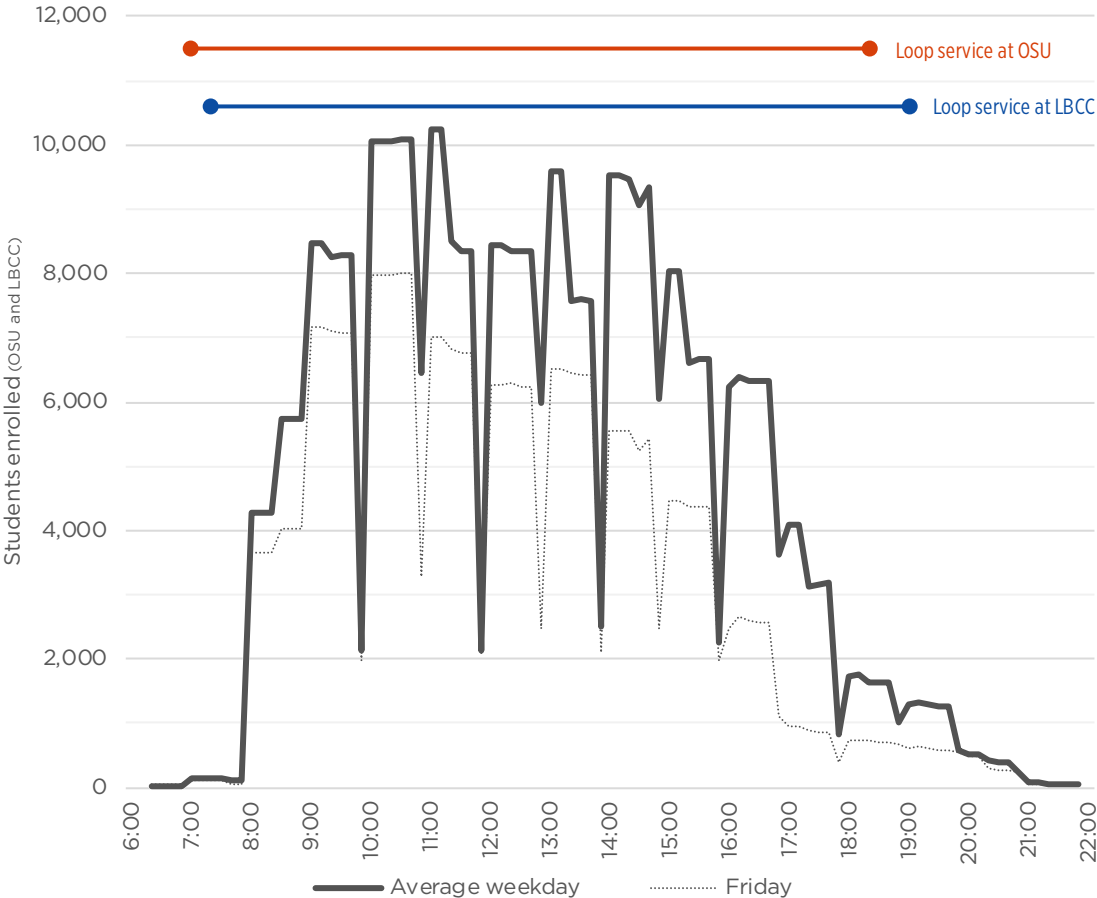
Figure 8 shows the total number of students enrolled in classes at both OSU and LBCC Main Campus by time of day. The span of Loop service at each campus is shown as the horizontal bars and faded backgrounds.

Service on the Linn-Benton Loop does not serve the needs of people who travel late in the evening, including students, faculty, staff, or other late evening non-university affiliated commuters. If these individuals lack access to a car, they may not have any dependable transportation from campus or work to return home. These limited hours may deter students and faculty at LBCC or OSU or regional employees from using the Loop.

⁵ The last direct trip from Corvallis to LBCC (via OR-34) departs the Downtown Transit Center at 4:35 pm. Passengers who catch the 6:20 pm trip can travel to LBCC via US-20 and Albany Station, with a 40-minute travel time.

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Figure 8 Student Class Enrollment at OSU and LBCC by Time of Day



Source: Oregon State University (Fall 2018) and Linn-Benton Community College (Fall 2018) schedules.

7. The Linn-Benton Loop is scheduled at frequencies that do not coordinate well with other regional schedules, presenting barriers for operations and passengers.

Most Loop trips in the morning and afternoon, in addition to the express trips between LBCC and Downtown Corvallis, cycle in approximately 75 minutes. Service at this frequency makes it difficult for passengers to easily remember the schedule, connect with other services, and get to and from classes consistently.

Service every 75 minutes means individual stops are never served at the same time each hour. This requires passengers to consult a schedule to know when the next bus arrives and makes the service more difficult to remember or understand. Passengers typically find it easier to remember a single time every hour, rather than mixed arrival times throughout the day.

Both CTS and ATS operate on a consistent schedule with pulses at their transit centers at the same times each hour. Because the Loop’s schedule does not match the local services, riders cannot connect to CTS or ATS consistently. The lack of consistent connections between the Loop and each city’s system limits how easily riders can make transit connections. Passengers who need

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to make connections and want to minimize their wait time must therefore travel at specific times throughout the day when connections are easiest.

Similar to connections to CTS and ATS, the Linn-Benton Loop does not coordinate well with class schedules at OSU and LBCC. The majority of classes at OSU and LBCC start or end hourly.⁶ During the midday, Loop service is hourly and this provides greater consistency for students to use the Loop to travel to or from classes. At LBCC – which has classes that start or end approximately every 30 minutes – there is a slight mismatch between service and class schedules. For example, midday Loop buses arrive at LBCC 45 minutes after the hour, and depart at the top of the hour. Classes that begin at the top of the hour are well served on both ends of the class if students can get between the bus stop and the class in 10 minutes. Classes that start at 30 minutes past the hour and end at 20 minutes past the following hour require at least 40–45 minutes of wait time before and after the classes. Hourly service would provide the greatest simplicity to passengers and allow the Loop to coordinate well with other transit providers and class schedules.

The Linn Shuttle connects with the Loop at LBCC and Albany Station. There is a similar mismatch between these schedules. While the Linn Shuttle schedule is not departing at consistent times each hour, a consistent Loop schedule would provide a base from which to coordinate transfers between the routes.

However, if service were to operate hourly using existing one-way loop structure and 75-minute cycle times, the Loop would require an additional bus and driver. Because the cycle time of the Loop trips are just over an hour, drivers would return to the starting point relatively soon after the previous trip had departed. Therefore, to maintain consistent hourly service, the drivers would need inefficient layover times between runs. In short, the Loop's existing cycle time limits opportunities to increase frequency of service in ways that are financially and operationally efficient.

8. Ridership on the Linn-Benton Loop has remained relatively flat over the past several years, with a slight downward trajectory.

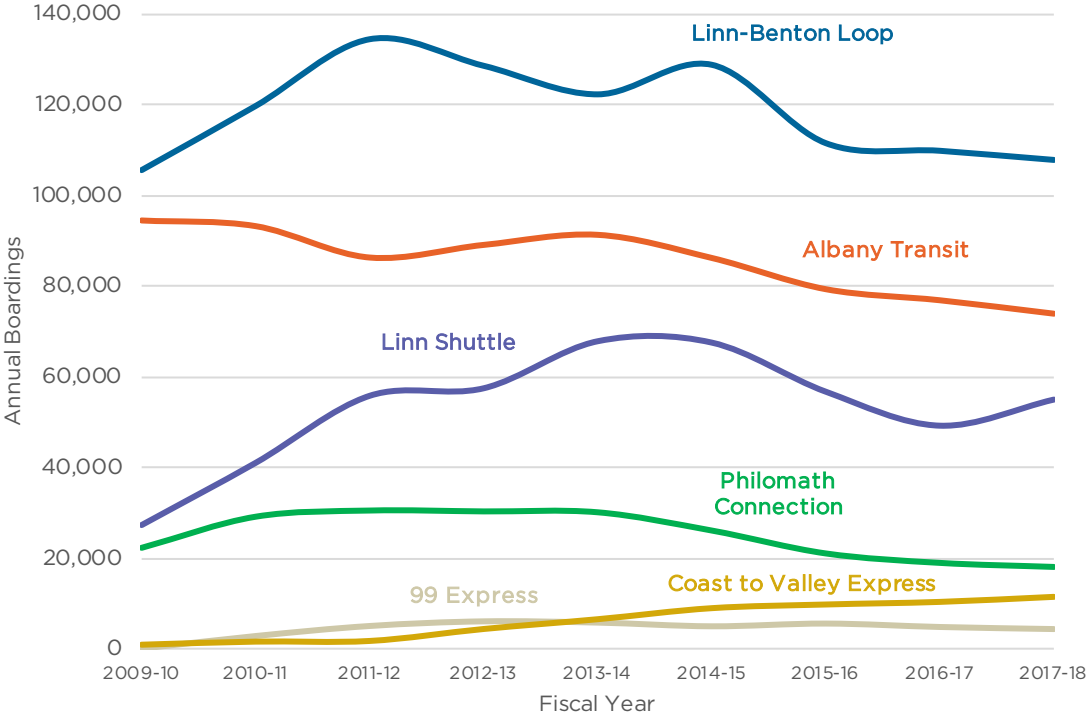
Ridership on the Linn-Benton Loop has remained relatively flat between 2009–10 and 2017–18. Although ridership grew more than 20% above 2009–10 levels between 2011 and 2014, ridership has returned to its 2009–10 level, at approximately 110,000 boardings per year (see **Figure 9**).

The Linn-Benton Loop has maintained strong ridership in the past decade, but has seen some small declines. These ridership trends are not consistent with the growth in the region's population, employment, and student enrollment. This suggests less transit use and reduced relevance of the Loop in the region's transportation system. However, as the Loop has not undergone significant changes in service for many years. This suggests service changes may be necessary to improve its usefulness for residents, employees, and students.

⁶ Most courses are scheduled from :00 to :50. Eighty-four percent (84%) of class enrollments at OSU, and 72% of class enrollments at LBCC are on this cycle. Three percent (3%) of class enrollments at OSU, and 12% of class enrollments at LBCC are in classes that start at a time other than the top of the hour.

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Figure 9 Ridership Trends (FY 2009–10 to FY 2016–17)



Sources: Benton County, Corvallis Transit System, Albany Transit System, Linn-Benton Loop

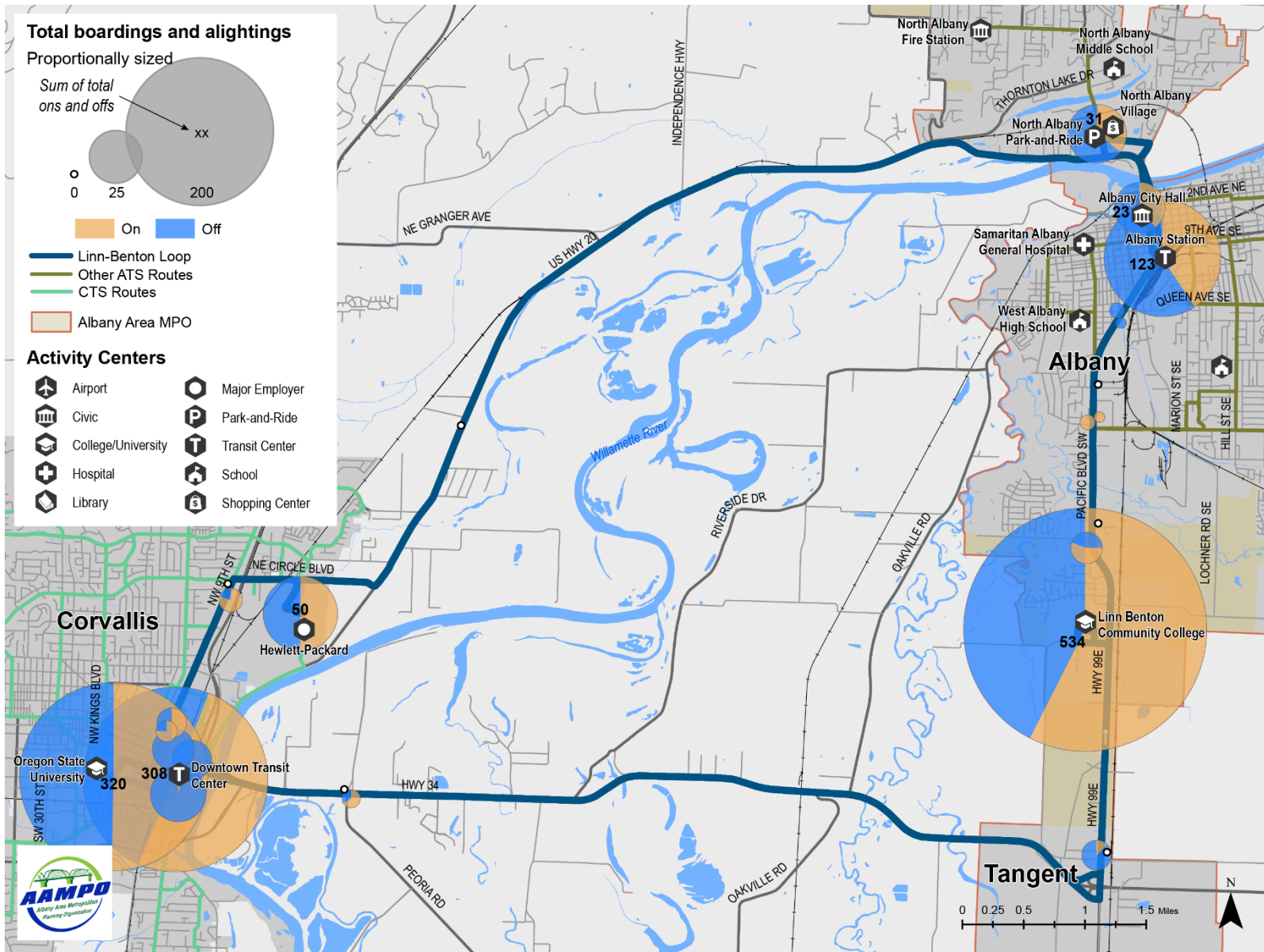
Note: Ridership on Corvallis Transit is not included because its ridership is almost ten times larger than the Linn-Benton Loop and does not compare well with the region's other transit services. Corvallis Transit served approximately 710,000 trips in 2009–10, 900,000 in 2010–11, and has ranged between 1,110,000 and 1,190,000 between 2011–12 and 2016–17.

9. Most ridership on the Linn-Benton Loop is at LBCC, Downtown Corvallis, and OSU.

The Loop's busiest stops are at LBCC, Corvallis' Downtown Transit Center, and OSU (**Figure 10**). Other stops with relatively high ridership are Albany Station, Hewlett-Packard, and North Albany Park-and-Ride. Service between LBCC and Downtown Corvallis via OR-34 has the highest demand and this corridor is likely to continue to have strong ridership and have the highest productivity in terms of riders per service hour.

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Figure 10 Loop Weekday Ridership by Stop (Fall 2014)



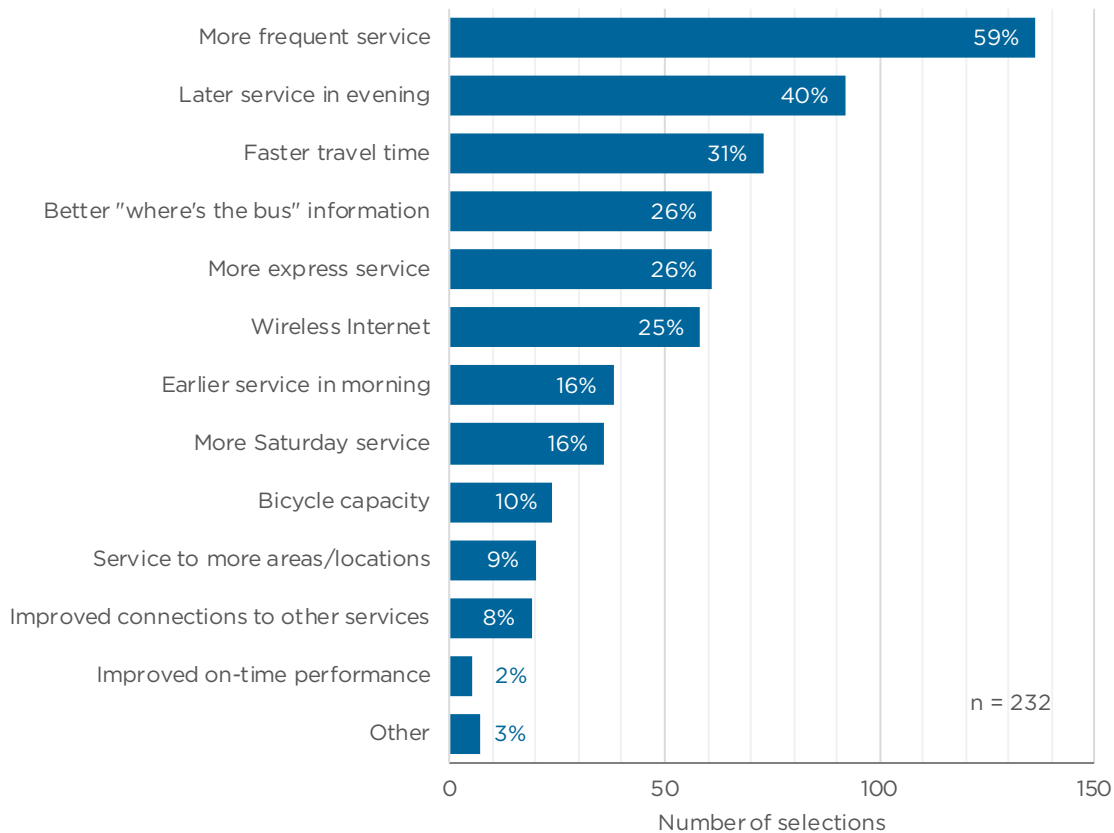
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10. The top improvements for Linn-Benton Loop service are increased frequency and later service in the evening (based on 2018 passenger survey).

The on-board survey of Linn-Benton Loop passengers asked respondents to select their top three improvements that would encourage them to ride more often. Twelve options were provided and respondents were given the option to provide their own improvement if it was not listed. The results (**Figure 11**) indicate frequency, span of service, reduced travel time, and improved information were the most supported improvements. More frequent service was selected much more often – 19 percentage points higher than later evening service – indicating there is broad support for Loop buses to run more often throughout the day.

Earlier morning service, additional Saturday service, new service to more areas, and improved connections to other services were low on their list of priorities and suggests passengers prefer improvements to the existing services over adding service at times, on days and in places where none exist today (with the exception of later evening service). Faster travel time – selected by 31% of respondents – may be provided in coordination with more frequent service because reduced wait time at the start of a trip will reduce overall travel time, even without any increase in speed.

Figure 11 Top Service Improvement Requests



Source: Linn-Benton Loop 2018 Passenger Survey

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11. Many of the region’s transit agencies have unique brands and provide information independently of each other.

Many agencies and transit services operate in the Linn-Benton region, including two urban transit systems and six regional or intercity routes – each with their own unique name and branding. Each agency provides their own maps, schedules, fare information, and contact information on their independent websites. Some agencies provide additional information that others do not, such as trip planners and service alerts. Additionally, each agency provides different fare types and has different costs for riders.

Inconsistent information and branding can make connections to and from the Linn-Benton Loop more confusing for transit riders, and particularly new or inexperienced ones. The transit rider experience could be improved with consistent information and branding across the region. This can be accomplished through a regional effort, which could range from small changes (e.g., each organization reorganizes their webpages so they are consistent), to larger changes (e.g., developing a unified brand for services across the region).

Figure 12 Transit Brochures in the Linn-Benton Region



3 TRANSIT ENHANCEMENTS

OVERVIEW

This chapter describes the proposed 10-year operating plan to achieve the Loops service vision. This includes proposed route alignments, frequency, span, and days of service. This plan was established based on service requests from passengers, technical analysis, the workshop with regional stakeholders, and refinements based on TAC guidance.

The specific service improvements were grouped into three phases. All phases are constrained within the Loop's expected operating budget (\$1.1 million annually, or \$600,000 above today's operating budget).

Figure 13 provides the operational and financial assumptions used to develop the Linn-Benton Loop phasing plan.

Figure 13 Assumptions

Assumption	Value	Details
Weekday service days	252	5 days per week, 52 weeks per year, excluding eight holidays
Saturday service days	53	52 Saturdays per year, plus service on the day after Thanksgiving
OSU/LBCC Fall-Spring session days	165	Based on 2018–19 academic calendar
OSU/LBCC Summer semester days	53	Based on 2019 Summer academic calendar
Average operating speed	25 mph	Based on Loop data. Speeds range from 17 to 30 miles per hour (mph), average 25.7 mph
Revenue hour cost	\$105	2018–18 annual budget divided by annual revenue hours
Annual budget (2017–18)	\$500,000	2017–18 Loop operating budget (rounded)
Annual revenue hours (2017–18)	4,700	2017–18 Loop data (rounded)
Additional revenue from Oregon STIF	\$600,000	Estimated combined commitment from Benton and Linn Counties (\$300,000 each per year)
Total scenario planning budget	\$1,100,000	Existing annual budget + Additional STIF revenue

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VISION

The Linn-Benton Loop will continue to be a robust regional service for many years, connecting the Albany and Corvallis areas, and providing reliable service for residents, commuters, university students, and people making intercity connections at Albany Station.

The Linn-Benton Loop will be a regional transit service designed around three coordinated routes:

- The **Regional Route** will operate bi-directionally between Albany Station and Downtown Corvallis/OSU via OR-99E and OR-34, with a stop at LBCC. On weekdays it will operate for 16 hours per day from 6 am to 10:15 pm, with service every 75 minutes, using one vehicle. On Saturdays, it will operate for 10 hours, from 8 am to 6 pm with service every 90 minutes using one vehicle.
- The **Campus Connector** service will operate bi-directionally between LBCC and Downtown Corvallis/OSU via OR-34 on weekdays during OSU/LBCC academic term (i.e., no service during summer term or semester breaks). It will operate for 12 hours between 7 am and 7 pm. Buses will run every 60 minutes in the morning and afternoon, and every 30 minutes during the rest of the day. The 60-minute frequency will require one vehicle to operate, and the 30-minute frequency will require two vehicles. The second vehicle will be shared with the US-20 Commuter route, which runs only in the morning and afternoon.
- The **US-20 Commuter** service will operate bi-directionally between Albany Station and Downtown Corvallis/OSU via US-20, HP and OR-99W. Service will operate on weekdays with three bi-directional trips in the morning (6 am to 9 am) and three in the evening (4:30 pm to 7:30 pm). This route will require one vehicle.

Figure 14 summarizes the routes, and identifies key operational characteristics. **Figure 15** presents a map of the future system on weekdays, and **Figure 16** shows Saturday service.

Figure 14 Proposed Regional Transit Routes

Route	Service Days	Time of Year	Hours of Service	Frequency (min)	Vehicles ^[A]
Regional Route ●	Monday-Friday	All year	6 am – 10:15 pm	75	1
	Saturday	All year	8 am – 6 pm	90	
US-20 Commuter ●	Monday-Friday	All year	6:00 – 9:00 am 4:30 – 7:30 pm	60	1 ^[B]
Campus Connector ●	Monday-Friday	OSU/LBCC academic term ⁷	Midday: 9:30 am – 4 pm	30	
			AM/PM: 7 – 9:30 am & 4 – 7 pm	60	1

Notes:

[A] Number of vehicles does not include spare vehicles necessary to support bus services.

[B] Preliminary analysis suggests one vehicle could serve both the morning and afternoon Commuter route, and the mid-day Campus Connector; Campus Connector at 30 minute frequencies will require two vehicles.

⁷ Fall, Winter and Spring terms only

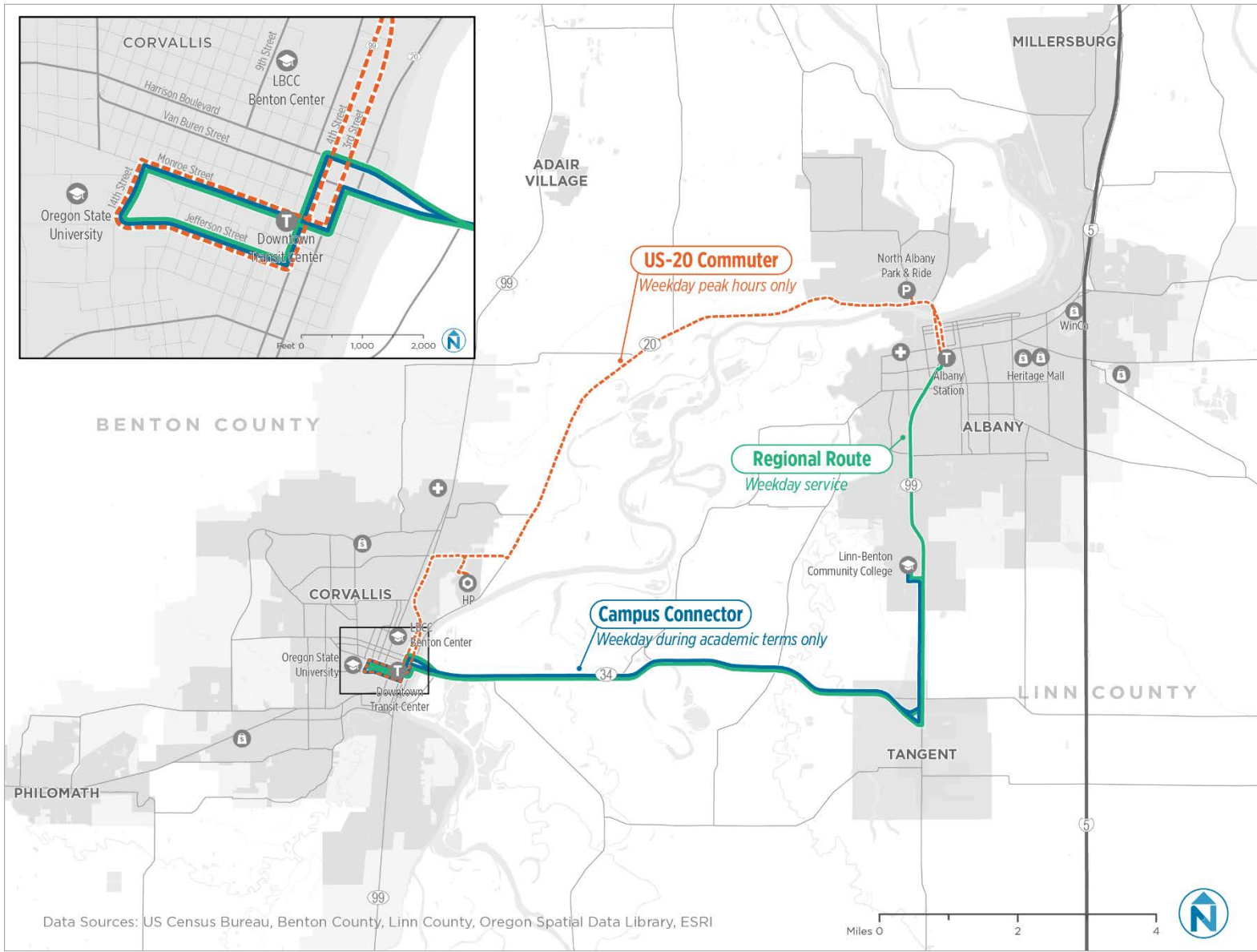
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Notable changes from the existing Loop service include:

- **Transforming the loop-based system to three independent bi-directional routes.** This allows the headways and service hours for each route to be scaled independently to accommodate demand within its service area. The bi-directional service design also makes the service easier to understand, which makes it easier for people to plan their trip and catch the bus.
- **Extended evening service on weekdays** until 10:15 pm between Albany Station, LBCC and Corvallis. Later service will accommodate student travel markets, and non-traditional employment schedules.
- **Direct midday service between Corvallis and Albany Stations** (via OR-34, LBCC and OR-99E). Passengers will no longer need to transfer to ATS at LBCC to travel between the region's two major transit centers during the midday.
- **Realignment of service in Corvallis off of 9th Street onto OR-99W** to reduce travel times and maintain three round trips between Downtown Corvallis/OSU, HP and North Albany. Service along 9th Street will continue to be provided by CTS (all day Monday through Saturday).
- **Reduce Saturday service to North Albany** (on US-20) and 9th Street in Corvallis. Saturday service will operate bi-directionally along OR-34 and OR-99E to provide consistency with weekday Regional Route service. To maintain service to Heritage Plaza in Albany, Saturday service frequency will operate consistently every 90 minutes.
- **The Campus Connector will supplement the Regional Route with more trips and increased capacity between OSU and LBCC** during the Fall, Winter and Spring academic terms. Service will operate at least hourly. In Phase 3 service will increase to every 30 minutes during most of the day.

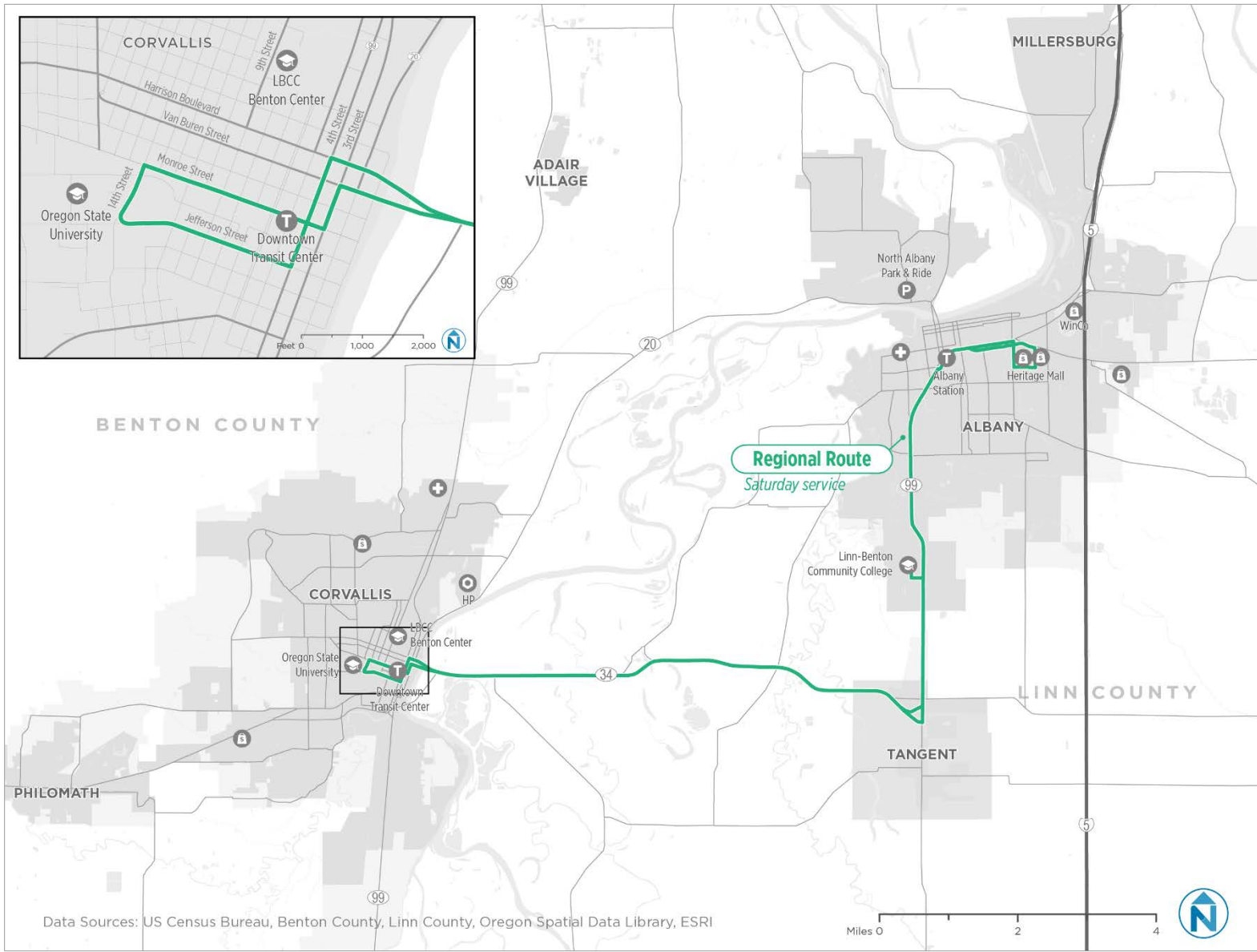
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Figure 15 Proposed Regional Transit Map (Weekdays)



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Figure 16 Regional Transit Map After Implementation (Saturdays)



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PHASING

The vision will be implemented in three phases. Service data are summarized in **Figure 17** and described in more detail below.

Figure 17 Phasing Summary

Service Details	Existing	Phase 1	Phase 2	Phase 3
		Nov 2019 – Dec 2020	Jan 2021 – Jun 2022	Jul 2022 - ongoing
Loops				
Frequency (min)	75	<i>no change</i>	-	-
Days of service	Monday-Friday and Saturday	<i>no change</i>	-	-
Span	Weekdays: 6:30 – 10 am / 3 – 7 pm Saturdays: 8 am – 6 pm	<i>no change</i>	-	-
Vehicles	1	<i>no change</i>	-	-
Express and Midday				
Frequency (min)	60-75	<i>no change</i>	-	-
Days of service	Monday-Friday	<i>no change</i>	-	-
Span	6:40 am – 5 pm	6:40 am – 9 pm	-	-
Vehicles	1	<i>no change</i>	-	-
Regional Route				
Frequency (min)	-	-	75 (90 on Saturday)	<i>no change</i>
Days of service	-	-	Monday-Friday and Saturday	<i>no change</i>
Span	-	-	Weekdays: 6 am – 10:15 pm Saturdays: 8 am – 6 pm	<i>no change</i>
Vehicles	-	-	1	<i>no change</i>
Campus Connector (during OSU/LBCC academic terms only)				
Frequency (min)	-	-	60	30 during midday
Days of service	-	-	Monday-Friday	<i>no change</i>
Span	-	-	7 am – 7 pm	<i>no change</i>
Vehicles	-	-	1	+ 1 (shared with US-20 Commuter)
US-20 Commuter				
Frequency (min)	-	-	60	<i>no change</i>
Days of service	-	-	Monday-Friday	<i>no change</i>
Span	-	-	6 – 9 am; 4:30 – 7:30 pm	<i>no change</i>
Vehicles	-	-	1	Bus shared with Campus Connector

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Phase 1 (November 2019 – December 2020)

The first phase of the Linn-Benton Loop service enhancement will continue the current operating pattern of service with the AM/PM Loops, Midday and Express services. However, service will be extended later in the day on the Afternoon Express to provide service for LBCC students who attend evening and night classes. Service will begin directly after STIF funds are disbursed in November 2019.

This change will not require any additional vehicles. However, the Loop will procure two vehicles during Phase 1 to support Phase 2 service enhancements, given that transit vehicles can take up to 18 months to receive.

The following are the specific tasks within this phase:

- Extend Afternoon Express by four hours to provide bi-directional service between LBCC and Downtown Corvallis every hour (i.e., extend end of service from 5 pm to 9 pm).
- Purchase two 40-foot buses to expand the Loop fleet to four vehicles.⁸ The new vehicles are expected to take 12-18 months to manufacture and deliver.
- In coordination with ATS and CTS, identify potential bus stop improvements, including new shelters, seating, lighting, and bus stop signage. Prioritize improvements at the busiest stops and where service will continue to operate in Phase 2 and Phase 3.
- Develop an outreach and marketing strategy to educate existing and potential riders on service changes in future phases including improved frequency and the new route structure.
- A brand “refresh” in Phase 2 could highlight the service changes. For example, the “Loop” name may not fit the new service design – although this should be tested with riders.
- Consider allocating funds into a reserve to support later capital purchases, or to cover unforeseen operations and maintenance expenses.

Phase 2 (January 2021 – June 2022)

Phase 2 will restructure the Linn-Benton Loop system into three coordinated routes in January 2021. The date may change based on vehicle delivery timelines and/or coordination with changes to CTS and ATS services.

Phase 2 maintains service at most locations where the Loop operates today. The frequency, span, and direction of service will change depending on location and time of day. This restructuring will allow service levels to be more easily adjusted without disrupting the entire network. The three routes are the Regional Route, Campus Connector and US-20 Commuter.

Like in Phase 1, Phase 2 includes funds for marketing, bus stops, and planning/coordination. Phase 2 includes \$110,000 annually in reserve funds to purchase a new vehicle every four years, consistent with the Albany Transit (dba Linn-Benton Loop) vehicle useful life benchmark (12 years for heavy duty buses).

⁸ The Loop's 2010 EIDorado vehicle will be retired in 2022 (the 2014 and 2017 Gillig buses will continue to operate). The net result will be four total vehicles. Three vehicles will be needed to operate Phases 2 and 3. The fourth vehicle will serve as a spare. In practice, in-service vehicles would be rotated to balance service across the Loop fleet.

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Phase 3 (July 2022 – ongoing)

Phase 3 will enhance the service established in Phase 2, with the Regional Route and US-20 Commuter continuing to operate as in Phase 2. The Campus Connector will increase service frequency from every 60 to 30 minutes between 9:30 am and 4 pm. This is when Loop vehicles are most full today.

The Campus Connector hourly service will remain unchanged from 7 am to 9:30 am, and from 4 pm to 7 pm. The route will operate when OSU and LBCC classes are in session, but not during semester breaks, including winter, spring and summer breaks. The vehicle for this 30-minute service will also serve the US-20 Commuter route.

Phase 3 includes funds for ongoing planning/coordination and marketing. Although planned for implementation in July 2022, Phase 3 may be implemented earlier or later based on agency capacity.

FINANCIAL PLAN

Figure 18 provides the financial details of the Enhancement Plan, including the source of funds for operations, vehicles, and bus stops and the expected available budget. The financial plan includes \$600,000 in new revenue annually from the STIF Formula Fund.

Each phase fits within this budget. The amount assumes \$300,000 each from Linn and Benton Counties, which are the STIF Qualified Entities receiving STIF funds and responsible for developing and submitting the STIF Plans.

Regional stakeholders may consider other funding sources to supplement existing revenues and improve service. Any new funding options will require further analysis to determine consistency with local and state laws, effectiveness, and expected ongoing revenue potential. For more information on these options, see Technical Memorandum #2.

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Figure 18 Expenditure Details (Fiscal Year Ending)

Fund	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	<i>Existing</i>	<i>Phase 1</i>	<i>Phase 1 / 2</i>	<i>Phase 2</i>	<i>Phase 3</i>	<i>Phase 3</i>	<i>Phase 3</i>	<i>Phase 3</i>	<i>Phase 3</i>	<i>Phase 3</i>	<i>Phase 3</i>
Task 1: Operations											
STIF Formula	-	\$47,000	\$212,000	\$352,000	\$465,000	\$465,000	\$465,000	\$465,000	\$465,000	\$465,000	\$465,000
Federal	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000	\$241,000
Other State	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Local	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000	\$166,000
Other	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000
Subtotal	\$500,000	\$547,000	\$712,000	\$852,000	\$965,000	\$965,000	\$965,000	\$965,000	\$965,000	\$965,000	\$965,000
Task 2: Vehicles											
STIF Formula ^[3]	-	-	\$528,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000
Discretionary ^[1]	-	-	\$352,000	-	-	-	-	-	-	-	-
Subtotal	\$0	\$0	\$880,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000
Task 3: Planning, Bus Stops and Marketing											
STIF Formula	-	\$40,000	\$50,000	\$120,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Subtotal	-	\$40,000	\$50,000	\$120,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
EXPENDITURES	\$500,000	\$587,000	\$1,642,000	\$1,082,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000
Total Revenue	\$500,000	\$587,000	\$1,642,000	\$1,082,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000
Existing	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
STIF^[2]	-	\$87,000	\$1,142,000	\$582,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000

Note: All figures in constant 2018 dollars; it is assumed that both costs and revenues will increase with inflation over time. Vehicle match is typically 20% in both federal and STIF Discretionary programs, but can be as low as 10% for qualifying projects.

[1] Discretionary funds represent any non-STIF Formula revenue sources, whether from state, federal or other agencies.

[2] Includes STIF Formula and STIF Discretionary funds.

[3] FY 2021 STIF Formula funds include \$440,000 for one vehicle, plus \$88,000 in matching funds for a potential STIF Discretionary grant award, to fund another vehicle.

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FUTURE CONSIDERATIONS

The funding amounts assumed in the phasing plan are estimates that could change in the future, based on increases or decreases in employment, wages, and taxpayer compliance rates in both Linn and Benton Counties. The lists below present an array of potential options for how to adjust service plans based on funding levels. The two counties and the Linn-Benton Loop Governing Board will need to work collaboratively to identify the service changes that make sense based on available funding, regional priorities, and how far along the region is to achieving the regional transit vision.

Additional funds available

If there are additional funds available, the following are potential options that could be considered to expand service:

- Invest in AVL technology to provide bus tracking and real-time arrival information to passengers. Purchase real-time displays for busiest stops.
- Extend the Campus Connector and/or Regional Route to the Benton Center in Corvallis on weekdays.
- Extend the Regional Route to Albany Heritage Mall on weekdays.
- Extend the Regional Route to Albany WinCo on Saturdays (or all week – Monday through Saturday).
- Add extra trips on the US-20 Commuter (new midday trips or more frequent peak hour service).
- During academic terms, expand the hours of the day when the Campus Connector operates every 30-minutes, rather than only between 9:30 am and 4 pm.
- Use three buses on the Regional Route to provide 30-minute frequencies between Albany and Corvallis. Eliminate the Campus Connector.
- Add Sunday service.

Insufficient funds available

If there are insufficient funds to proceed with the next phase of the enhancement plan, the priority should be to maintain service and defer additional enhancements until funding is available. However, if funding levels drop below the level needed to sustain service, the following should be considered:

- Use local funds to provide stopgap funding (either public funds, or contributions from local/regional intuitions and businesses).
- Reduce frequency on the Campus Connector to every 60 minutes.
- Eliminate the Campus Connector and provide service on OR-34 and OR-99E with the Regional Route only.
- Terminate US-20 Commuter in Corvallis at HP or 9th & Circle and ensure timed transfers with CTS.
- Eliminate or reduce frequency on the US-20 Commuter.

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- Eliminate or reduce service on the Regional Route between LBCC and Albany Station. Ensure timed transfers to/from ATS at LBCC for people traveling between Corvallis and Albany Station.
- Eliminate Saturday service to Heritage Plaza.

CAPITAL, MARKETING AND OTHER SUPPORTIVE ELEMENTS

Successfully implementing the service improvements depends upon investments in capital elements (including vehicles, bus stops, and real-time bus arrival infrastructure) as well as marketing and planning efforts. These elements serve important functions in the transit system by improving passenger comfort and convenience and enhancing the overall operation of the system.

Vehicles

The vision requires the purchase of one additional vehicle for service (for a total of three buses) and a second additional vehicle as a spare. The current fleet includes one 35-foot bus, one 40-foot bus, and one 32-foot bus used as a spare vehicle. Due to high passenger loads, future vehicles are expected to be large heavy-duty buses to ensure sufficient capacity and reduce likelihood of pass-ups. The plan also includes funding for a new replacement vehicle every four years to maintain a state of good repair and ensure the system is able to provide effective service. Each vehicle costs approximately \$440,000, although grants should be pursued to leverage local funds.

Planning, Bus Stops, Marketing and Other Supportive Elements

The elements outlined below are provided with the funding listed under Task 3 in **Figure 18**. Specific line items are not identified for each element; the Linn-Benton Loop and its regional partners should adjust funding levels between these elements as needs or priorities are determined.

Planning and Coordination

Loop operators and regional stakeholders should continually keep an eye toward future service changes and trends in regional travel needs and travel demand, while also ensuring existing services continue to provide efficient and reliable service to passengers. An effective transit operator continually evaluates and monitors service to identify needs and make changes or adjustments as issues arise. Additionally, transit service needs to be well coordinated with other regional services to ensure effective outcomes for the region and the people who depend on the services.

Bus stops

Transit trips require at least some time spent waiting at a bus stop. Bus stop amenities should be provided at stops with the highest number of passenger boardings, with consideration for stops likely to serve more people with disabilities or older adults. Amenities may include new shelters, seating, lighting, and bus stop signage. A high-end shelter with a bench costs approximately \$20,000 (including the cost of installation). Large passenger information boards with maps and schedule information cost approximately \$750 each.

Real-time arrival information and displays

Provide real-time arrival information and displays, and coordinate implementation with other regional service providers. Real-time arrival information helps passengers know when to expect

LINN-BENTON LOOP SERVICE DEVELOPMENT PLAN | FINAL PLAN
Oregon Cascades West Council of Governments

the bus. Studies have shown real-time arrival reduces perceived wait time by passengers.⁹ At a basic level, real-time arrivals can be provided by telephone, text messages, or an app-based system. Some agencies have invested in real-time arrival displays at bus stops that update automatically to show the wait time for the next several bus arrivals. Maximize service delivery efficiency and coordination by coordinating and integrating technology with Corvallis Transit System, Albany Transit System and the Linn Shuttle. A single real-time arrival display costs approximately \$15,000 each.

Marketing and Information

The Loop should provide information on upcoming service changes in advance and inform passengers in real-time about delays and service disruptions. The change from Phase 1 to Phase 2 will likely be the most significant adjustment of the Linn-Benton Loop service since its inception in 1980. It will require the Linn-Benton Loop to provide detailed and effective outreach to inform and educate the public about the major service changes and how to navigate the new system once it is operational.

Marketing plays a critical role in attracting new riders, retaining existing riders, and building support from community members, businesses and partner agencies. Marketing includes publishing maps and schedule materials, providing information on a website and through social media, and providing advertising and targeted marketing and training programs.

MEASURING SUCCESS

The table in **Figure 19** presents the evaluation of the service enhancements through Phase 3. The metrics demonstrate an increase in service span, increased frequency, more trips between most destination pairs, and improved connectivity.

The most notable result of the evaluation is the significant increase in total trips available by market. Trips available by market is a numerical measure that represents both access to people and jobs and frequency of service provided to those people and jobs. It multiplies the number of people or jobs within ¼ mile of stops on each route by the number of trips. The numbers for each route were added together to represent the overall scenario totals.

The four metrics (population, jobs, low-income households, and students) all have significant changes, increasing by more than 200%. These values indicate that people, jobs, and households within ¼ mile of stops would have much more frequent service than the existing service.

The number of people, including low-income households, and jobs within ¼ mile of bus stops on weekdays in Phase 3 is expected to be slightly reduced from the existing service. This is a result of consolidating the routing in downtown Corvallis for consistency between routes and moving the Commuter service from 9th Street to US-20 to maintain consistent cycle times. However, the “trips available by market” measure demonstrates the Phase 3 service increases the total number of trips available to people (including in low-income households) and jobs. Specific bus stop and route alignments should be further evaluated in detail before implementing expanded service; any adjustments to stop locations may impact these evaluation results. Access and coverage metrics on Saturday are reduced due to the elimination of service on US-20 and 9th Street.

⁹ Rabi Mishalani, Mark McCord and John Wirtz. “Passenger Wait Time Perceptions at Bus Stops: Empirical Results and Impact on Evaluating Real-Time Bus Arrival Information.” *Journal of Public Transportation*, Vol. 9, No. 2, 2006.
https://www.nctr.usf.edu/jpt/pdf/JPT_9-2_Mishalani.pdf

LINN-BENTON LOOP SERVICE DEVELOPMENT PLAN | FINAL PLAN
Oregon Cascades West Council of Governments

Figure 19 Service Evaluation

Category	Metric	Detail	Existing	Phase 3	Difference
Cost	Annual operating cost	-	\$ 500,000	\$ 1,100,000	+ \$ 600,000
Schedule and Frequency	Days of operation	-	Monday-Saturday	Monday-Saturday	--
	Service span (hours)	Monday-Friday	12.5	16	+ 3.5
		Saturday	9	10	+ 1
	Headway (minutes)	Monday-Friday	60-75	30-75	New 30-min service
		Saturday	65-90	90	Consistently 90-min
	Number of weekday vehicle trips connecting select destinations (trips in each direction)	North Albany Park-and-Ride to HP	3	6	+ 3
		North Albany Park-and-Ride to LBCC	11 (including ATS)	8 (on ATS only)	- 3
		LBCC to DTC	12	31 ^[A]	+ 19
		LBCC to OSU	8	31 ^[A]	+ 23
		Albany Station to DTC	6	19	+ 13
Quality of Service	Travel times on weekdays between select destinations (in minutes; during OSU/LBCC academic term)	North Albany Park-and-Ride to HP	15	15	--
		North Albany Park-and-Ride to LBCC	20 on Loop 30 on ATS	30 on ATS	--
		LBCC to DTC	25	25	--
		LBCC to OSU	25	25	--
		Albany Station to DTC	40	30	- 10 ^[B]
	Transit connectivity and integration (Percent of trips with connections to Linn-Benton Loop within 20 minutes at LBCC, DTC or Albany Station based on conceptual Loop schedules and existing ATS, CTS and Linn Shuttle schedules)	ATS	44%	50%	+ 6 pct pts
		CTS	24%	83%	+ 59 pct pts
Access and coverage	Population within ¼ mile of stops	Monday-Friday	9,600	6,300	- 3,300 (- 34%) ^[C]
		Saturday	7,700	7,400	- 300 (- 4%)
	Low-income households within ¼ mile of stops	Monday-Friday	2,100	1,200	- 900 (- 43%) ^[C]
		Saturday	1,600	1,600	--
	Jobs within ¼ mile of stops	Monday-Friday	9,300	6,200	- 3,100 (- 33%) ^[C]
		Saturday	7,100	6,800	-300 (- 4%)
	Total weekday trips available by passenger market (vehicle trips * passenger market size)	Population	102,000	326,000	+ 224,000 (+ 217%)
		Low-income households	15,000	45,000	+ 30,000 (+ 200%)
		Jobs	99,000	300,000	+ 201,000 (+ 203%)
		Students	867,000	3,108,000	+ 2,241,000 (+ 258%)

Notes: [A] In Phase 3, there will be 31 bi-directional trips each weekday between LBCC and Corvallis. All trips will serve the Downtown Transit Center and OSU. Today, there are 12 trips, but only 8 of these also serve OSU. [B] The decrease of 10 minutes is a result of traveling on OR-99W instead of 9th Street, and the faster assumed operating speed. [C] The reduction in access comes as a result of increased trips on core segments and elimination of stops along 9th Street in Corvallis. Passengers will be able to rely on CTS or ATS for local service to connect to the Loop

FUND 213: Public Transit
DEPT 50: Public Works
PROG 1107: Linn-Benton Loop

City of Albany, Oregon
Revenue/Expenditure Report

Print Date: 04/02/2019
Period: 15 - JUNE ADJUSTED
100.00% of Fiscal Year: 2019

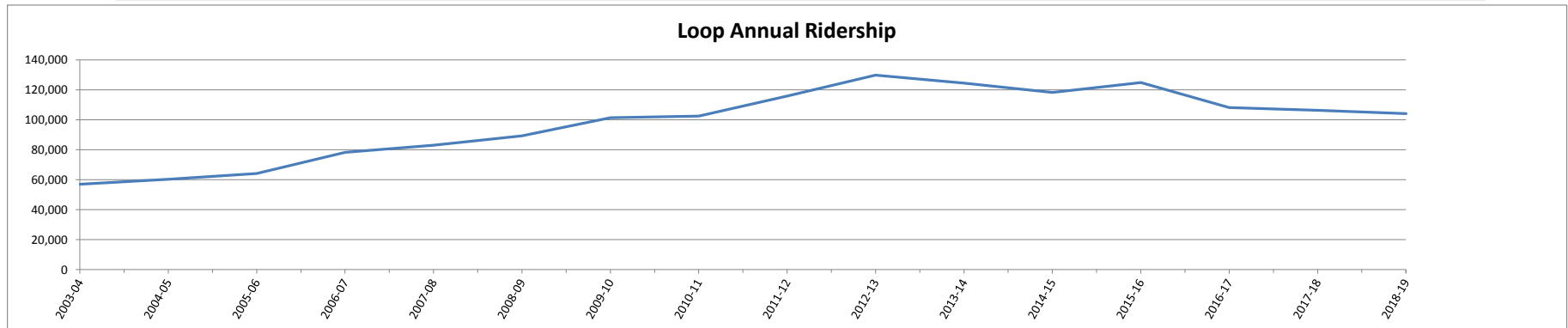
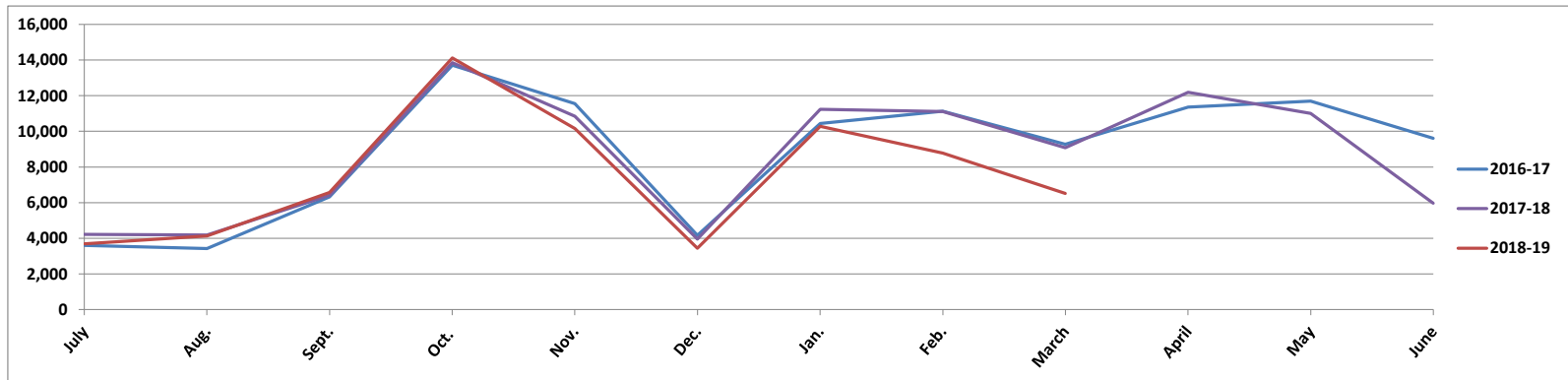
ACCT#	DESCRIPTION	Current Budget	Current Month	Year to date	Budget Balance	% Used
General Revenues						
42030	FTA Section 5310 Grant	27,500	-	12,490.00	15,010.00	45%
42045	FTA Section 5307	324,500	-	119,973.00	204,527.00	36%
42816	Special Transit Fund: Linn Co	17,000	-	8,160.00	8,840.00	48%
42817	Special Transit Fund: Benton Co	22,000	-	11,000.00	11,000.00	50%
42835	LBCC Partnership	117,300	-	117,300.00	-	100%
42836	OSU Partnership	117,300	-	117,300.00	-	100%
43301	Bus Fares	25,000	-	16,925.15	8,074.85	68%
####	Bus Fares	-	-	38.19	(38.19)	-
48010	Interest	300	-	(1,150.35)	1,450.35	-383%
Total General Revenues		650,900	-	402,035.99	248,864.01	57%
Transfers In						
49308	From Albany Transit	-	-	100,000.00	(100,000.00)	-
Total Transfers In		-	-	100,000.00	100,000.00	-
Beginning Balance						
49905	Beginning Balance	25,000	-	(106,067.58)	131,067.58	-424%
Total Beginning Balance		25,000	-	(106,067.58)	131,067.58	-424%
TOTAL REVENUES		675,900	-	395,968.41	279,931.59	58%
Personnel Services						
51001	Wages & Salaries	236,200	-	152,593.88	83,606.12	65%
52001	Temporary Employees	25,000	-	9,653.66	15,346.34	39%
53001	Overtime	2,000	-	6,408.79	(4,408.79)	320%
56001	Employer Paid Benefits	210,000	-	111,633.54	98,366.46	53%
Total Personnel Services		473,200	-	280,289.87	192,910.13	59%
Materials & Services						
60101	Contractual Services	3,600	-	2,380.93	1,219.07	66%
60211	Insurance & Bonds	5,500	-	5,045.89	454.11	92%
60216	Software License Fees	600	-	-	600.00	-
61006	Advertising & Publications	500	-	-	500.00	-
61010	Duplication & Fax	1,300	-	1,004.88	295.12	77%
61011	Education & Training	800	-	146.67	653.33	18%
61024	Materials & Supplies	3,000	-	2,978.67	21.33	99%
61026	Meetings & Conferences	300	-	-	300.00	-
61027	Memberships & Dues	500	-	400.00	100.00	80%
61033	Printing & Binding	800	-	615.00	185.00	77%
61040	Uniforms	500	-	134.93	365.07	27%
61041	Vehicle Fuel Charges	40,000	-	23,286.29	16,713.71	58%
63006	Power & Light	300	-	1,001.82	(701.82)	334%
63007	Heating & Fuel	300	-	170.17	129.83	57%
63009	Telephone	1,000	-	696.15	303.85	70%
63011	Water Service	900	-	1,024.14	(124.14)	114%
63015	Stormwater Service Charges	500	-	73.44	426.56	15%
65006	Maint: Building	4,100	-	2,625.03	1,474.97	64%
65008	Maint: Communications Equipment	500	-	-	500.00	-
65513	Vehicle Maintenance	40,000	-	24,577.50	15,422.50	61%
66010	Central Service Charges	36,900	-	27,675.00	9,225.00	75%
66011	Equipment Replacement	7,300	-	5,474.97	1,825.03	75%
66014	Information Technology Services	8,100	-	6,075.00	2,025.00	75%
66015	IT Equipment Replacement	300	-	225.00	75.00	75%
66017	Public Works Administration Charges	25,400	-	15,326.87	10,073.13	60%
66030	Building Maintenance Charges	5,500	-	4,124.97	1,375.03	75%
66505	Physical Exams & Medicals	300	-	372.50	(72.50)	124%
66511	Flexible Spending Admin Fees	200	-	125.44	74.56	63%
67010	Safety Recognition Program	100	-	-	100.00	-
69015	Reserve: Operating	13,600	-	-	13,600.00	-
Total Materials & Services		202,700	-	125,561.26	77,138.74	61%
TOTAL EXPENDITURES		675,900	-	405,851.13	270,048.87	60%
REVENUES LESS EXPENDITURES		-	-	(9,882.72)		

LINN-BENTON LOOP
WEEKDAY RIDERSHIP
REGULAR LOOP PLUS LOOP EXPRESS
2018 -2019

MONTH	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July	2,794	3,260	3,237	3,319	3,692	3,975	6,391	4,709	4,781	5,911	6,036	6,045	6,106	5,512	3,606	4,223	3,690	-533	-14.4%
Aug.	2,859	2,249	3,143	3,663	3,912	4,140	5,245	3,599	4,261	6,502	5,977	5,331	4,798	4,562	3,430	4,174	4,122	-52	-1.3%
Sept.	2,425	2,812	3,526	4,240	4,920	4,992	5,614	5,125	6,442	8,303	7,293	4,621	6,751	5,228	6,314	6,418	6,570	152	2.3%
Oct.	6,973	8,460	7,934	10,139	11,093	11,539	14,446	13,013	13,527	16,046	16,490	16,516	18,648	15,384	13,712	13,861	14,128	267	1.9%
Nov.	4,800	5,342	6,705	8,422	8,681	8,640	9,643	10,056	11,917	13,440	12,245	12,095	11,667	11,153	11,557	10,843	10,156	-687	-6.8%
Dec.	3,178	3,412	3,145	3,717	3,338	3,310	5,646	5,393	5,625	5,598	4,600	6,418	7,496	5,860	4,163	3,946	3,442	-504	-14.6%
Jan.	6,021	5,895	6,530	7,684	8,204	9,075	10,557	11,888	12,667	12,462	14,039	13,599	13,391	11,979	10,439	11,241	10,276	-965	-9.4%
Feb.	6,666	6,175	5,868	7,990	8,299	9,152	9,589	10,608	11,415	13,078	13,188	10,736	12,417	10,205	11,126	11,122	8,787	-2,335	-26.6%
March	4,736	5,714	5,907	6,801	7,096	7,232	7,830	9,314	10,529	10,733	9,846	9,521	10,281	10,350	9,270	9,072	6,510	-2,562	-39.4%
April	6,766	6,836	7,172	7,886	8,952	10,437	11,054	11,963	13,566	14,659	14,149	13,926	13,892	11,548	11,365	12,197		-12,197	0.0%
May	5,902	6,206	6,764	8,885	9,237	9,753	9,219	10,487	13,261	14,507	13,320	12,161	11,885	10,555	11,700	11,001		-11,001	0.0%
June	3,937	3,955	4,185	5,474	5,575	6,927	6,201	6,225	7,922	8,604	7,202	7,311	7,461	5,883	9,616	5,961		-5,961	0.0%
Sub Total*	57,057	60,316	64,116	78,220	82,999	89,172	101,435	102,380	115,913	129,843	124,385	118,280	124,793	108,219	106,298	104,059	67,681	-36,378	-53.7%
Saturday	0	0	0	0	1,938	2,643	2,931	3,325	3,804	4,459	4,108	3,977	3,923	3,376	3,629	3,871		-3,871	0.0%
Grand Total	57,057	60,316	64,116	78,220	84,937	91,815	104,366	105,705	119,717	134,302	128,493	122,257	128,716	111,595	109,927	107,930	67,681	-40,249	-59.5%

*Reg Loop and Express Loop

**Try Transit Week Occurs in October



LINN-BENTON LOOP
LBCC PASS PROGRAM
2018 - 2019

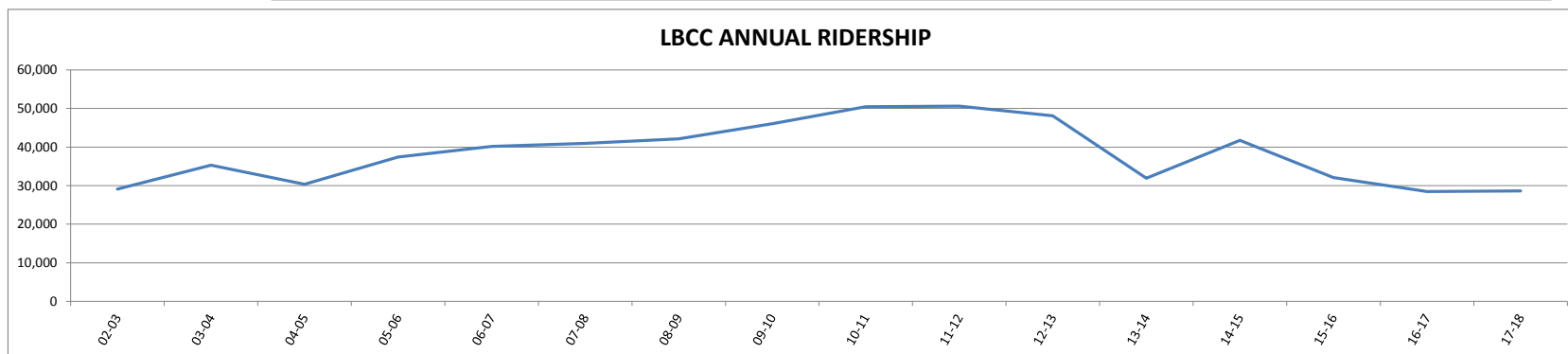
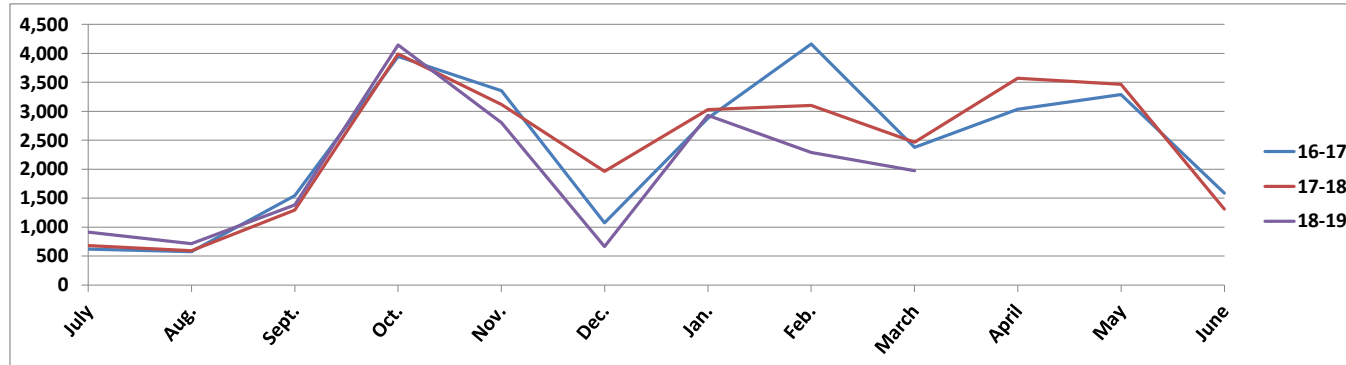
MONTH	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	+/-	Ratio
July	792	1,124	1,056	856	818	1,166	1,587	1,134	1,384	1,419	1,309	1,262	1,244	821	619	684	912	228	25.0%
Aug.	737	422	706	731	732	981	1,146	573	791	1,322	1,158	940	911	1,008	577	591	713	122	17.1%
Sept.	454	777	960	1,774	1,741	1,668	1,259	1,489	2,087	2,279	2,169	737	1,588	1,133	1,542	1,297	1,384	87	6.3%
Oct.	4,155	6,251	4,411	5,373	6,314	6,374	7,050	6,695	6,574	7,500	7,074	4,947	7,217	5,789	3,950	3,991	4,148	157	3.8%
Nov.	2,921	3,396	3,564	4,598	4,892	4,544	4,692	5,376	5,655	6,169	5,599	3,719	5,092	2,945	3,356	3,120	2,803	-317	-11.3%
Dec.	1,326	1,706	1,071	1,175	1,151	773	2,135	1,873	1,746	1,521	1,114	1,489	2,547	1,297	1,076	1,962	663	-1,299	-195.9%
Jan.	3,500	4,046	3,538	3,810	4,365	4,500	4,949	5,795	6,187	5,098	5,913	3,936	5,381	4,276	2,883	3,030	2,931	-99	-3.4%
Feb.	3,290	4,190	3,366	4,342	4,719	4,582	4,467	5,150	5,143	5,746	5,836	2,983	4,678	3,043	4,164	3,103	2,288	-815	-35.6%
March	2,407	3,320	2,877	3,456	3,569	3,253	3,441	4,250	4,675	4,426	4,036	2,489	3,613	3,448	2,379	2,464	1,974	-490	-24.8%
April	4,205	4,419	3,826	4,248	4,772	5,350	5,121	5,855	7,049	6,234	6,063	3,788	4,973	4,348	3,037	3,573		-3,573	0.0%
May	3,689	3,954	3,658	4,998	4,857	4,962	4,188	5,443	6,512	6,174	5,574	3,549	2,946	2,902	3,290	3,465		-3,465	0.0%
June	1,582	1,707	1,310	2,055	2,249	2,798	2,124	2,422	2,632	2,703	2,265	2,046	1,547	1,104	1,586	1,314		-1,314	0.0%
TOTAL	29,058	35,312	30,343	37,416	40,179	40,951	42,159	46,055	50,435	50,591	48,110	31,885	41,737	32,114	28,459	28,594	17,816	-10,778	-33.6%
Sat	0	0	0	0%	232	356	535	683	791	760	627	594	525	425	554	609		-69	-16.2%
Grand Total	29,058	35,312	30,343	37,416	40,411	41,307	42,694	46,738	51,226	51,351	48,737	32,479	42,262	32,539	29,013	29,203	17,816	9,783	30.1%

5 days averaged; passes not counted during Try Transit Week.

Sept 2002: College classes began approximately 2 weeks later than usual.

July 2003: Cut 4 runs.

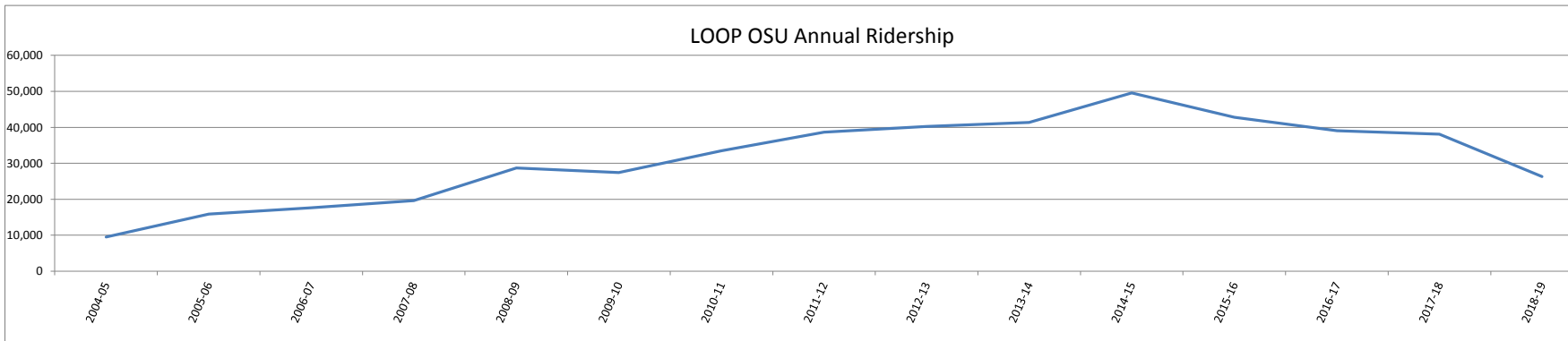
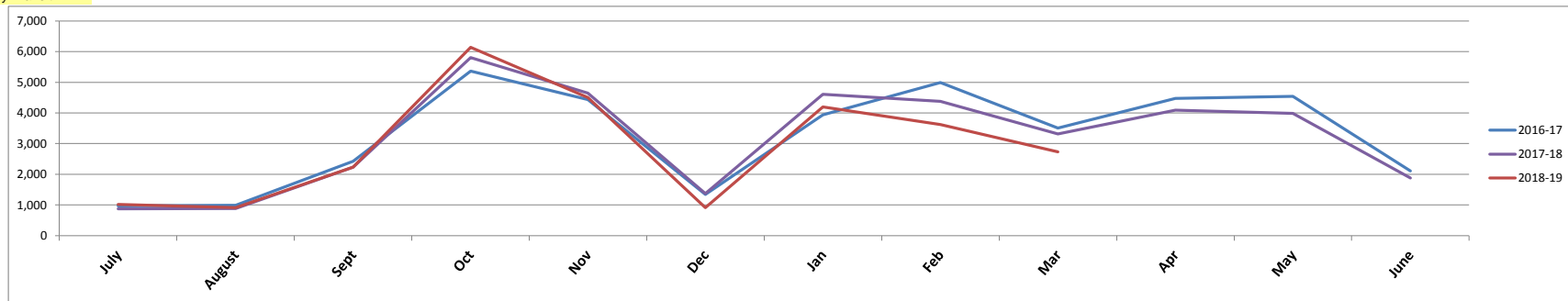
Jan. 2004: 2 snow days + MLK day.



LINN-BENTON LOOP
 OSU PASS PROGRAM
 2018-2019

MONTH	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July	153	467	1,126	849	1,786	1,001	837	1,301	1,652	1,783	1,826	1,366	970	873	1,017	144	14.2%
August	564	590	854	869	1,262	662	849	1,390	1,582	1,439	1,337	1,202	988	880	909	29	3.2%
Sept	532	1,007	1,171	1,089	1,217	1,191	1,685	2,250	2,140	1,242	2,033	1,875	2,428	2,236	2,232	-4	-0.2%
Oct	1,068	1,866	2,278	2,308	3,962	3,841	4,295	5,071	5,717	6,213	7,959	6,872	5,370	5,802	6,142	340	5.5%
Nov	1,073	1,648	1,870	1,863	2,629	2,720	3,971	4,237	4,020	4,448	5,190	4,381	4,435	4,644	4,507	-137	-3.0%
Dec	488	730	705	719	1,379	1,259	1,587	1,297	1,239	2,035	2,770	1,893	1,343	1,372	906	-466	-51.4%
Jan	1,068	2,254	1,607	2,175	3,345	3,418	4,099	3,749	4,711	5,084	5,658	5,399	3,934	4,612	4,199	-413	-9.8%
Feb	975	1,615	1,623	2,092	3,108	3,046	3,499	4,123	4,619	3,949	5,223	4,890	4,991	4,379	3,623	-756	-20.9%
Mar	832	1,230	1,320	1,546	2,185	2,553	2,986	3,080	3,111	3,206	4,235	4,345	3,505	3,318	2,734	-584	-21.4%
Apr	1,064	1,577	1,885	2,227	3,355	3,476	4,191	4,943	4,992	5,005	6,259	4,864	4,476	4,094		-4,094	0.0%
May	1,029	1,822	2,045	2,238	2,842	2,942	3,529	4,763	4,443	4,362	4,647	4,038	4,540	3,984		-3,984	0.0%
June	661	1,102	1,168	1,621	1,654	1,335	1,931	2,440	2,036	2,588	2,442	1,636	2,107	1,881		-1,881	0.0%
Sub Total	9,507	15,908	17,652	19,596	28,724	27,444	33,459	38,644	40,262	41,354	49,579	42,761	39,087	38,075	26,269	64,344	-44.9%
Saturday	0	0%	502	400	592	600	639	834	814	743	771	771	581	709		709	0.0%
Grand Total	9,507	15,908	18,154	19,996	29,316	28,044	34,098	39,478	41,076	42,097	50,350	43,532	39,668	38,784	26,269	3,864	-15.7%

July 2004: Begin pass program
 Try Transit



LINN-BENTON LOOP
OSU PASS PROGRAM
2018-2019

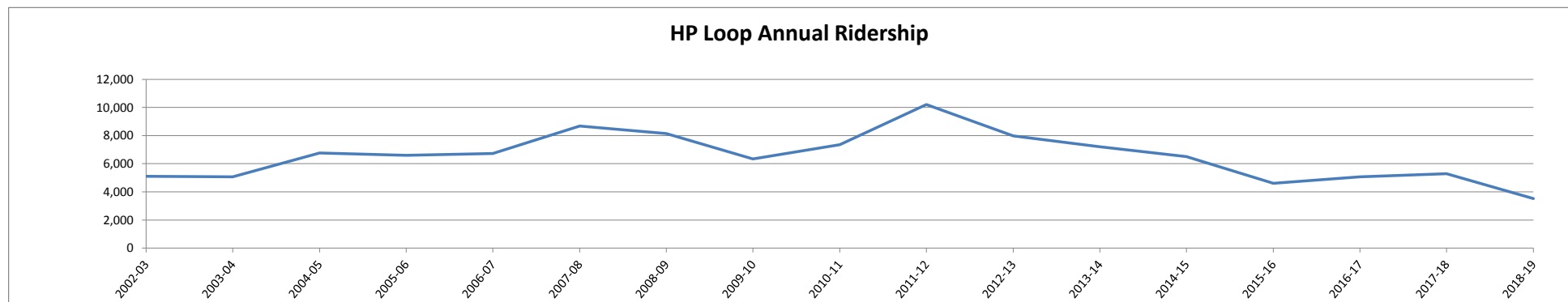
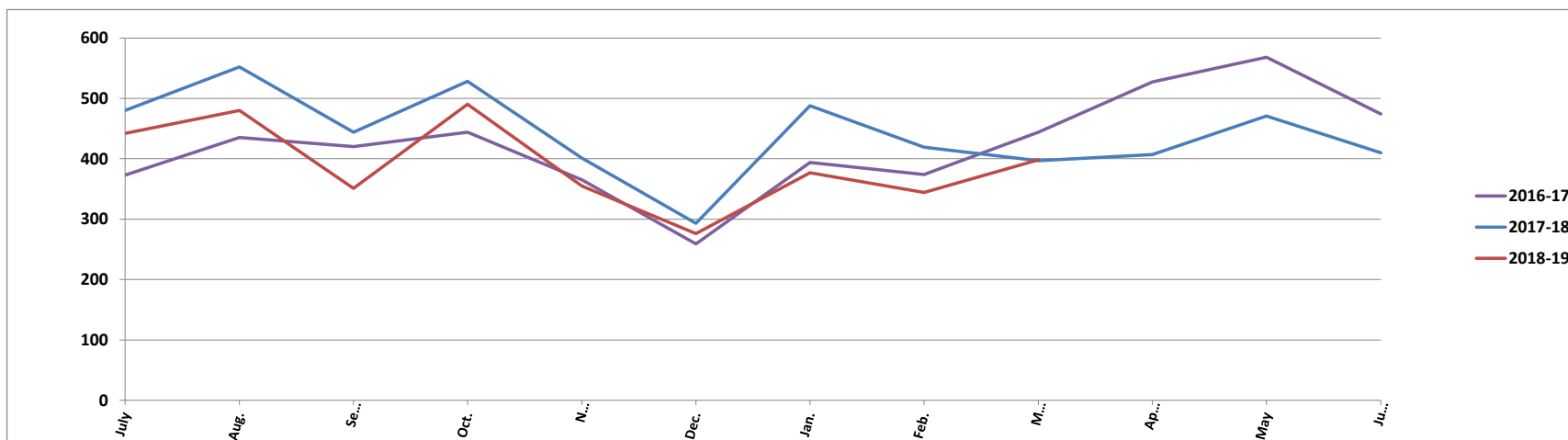
Attachment D



**LINN-BENTON LOOP
HEWLETT PACKARD
PASS PROGRAM
2018-19**

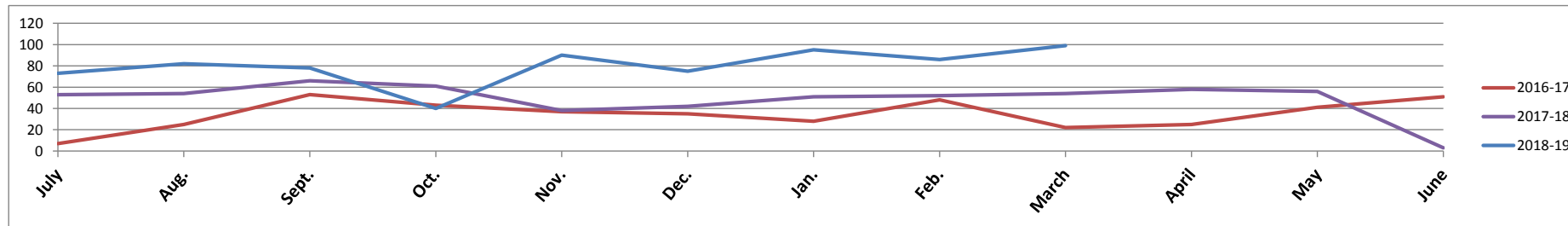
MONTH	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July	336	501	540	551	580	627	1,091	496	532	766	819	592	599	458	373	480	442	-38	-8.6%
Aug.	423	370	525	591	655	728	954	512	554	921	699	733	518	342	435	552	480	-72	-15.0%
Sept.	405	385	463	712	460	656	949	536	598	802	607	699	688	375	420	444	351	-93	-26.5%
Oct.	467	412	551	708	524	666	847	619	544	950	755	700	696	420	444	528	490	-38	-7.8%
Nov.	313	262	550	528	520	709	648	547	520	732	587	553	476	328	365	401	355	-46	-13.0%
Dec.	307	262	377	359	385	453	473	313	401	520	398	378	406	272	259	293	276	-17	-6.2%
Jan.	476	363	529	570	526	700	563	631	570	842	693	733	557	371	394	488	377	-111	-29.4%
Feb.	500	388	480	463	499	638	443	514	583	812	723	531	535	440	374	419	344	-75	-21.8%
March	572	432	695	465	595	819	448	617	800	858	684	635	570	438	444	397	398	1	0.3%
April	494	477	707	437	577	852	550	528	685	933	664	602	515	364	527	407		-407	0.0%
May	407	547	714	605	744	775	527	533	724	1,046	688	535	459	381	568	471		-471	0.0%
June	409	666	625	612	656	1,063	645	490	848	1,017	666	516	488	425	474	410		-410	0.0%
Sub Total	5,109	5,065	6,756	6,601	6,721	8,686	8,138	6,336	7,359	10,199	7,983	7,207	6,507	4,614	5,077	5,290	3,513	8,803	-50.6%
Saturday	0	0	0	0	5	25	6	11	6	29	18	4	5	5	11	6		-6	0.0%
Grand Total	5,109	5,065	6,756	6,601	6,726	8,711	8,144	6,347	7,365	10,228	8,001	7,211	6,512	4,619	5,088	5,296	3,513	-1,783	-50.8%

July 2003: Cut 4 runs. Sept. 2003: Runs restored.

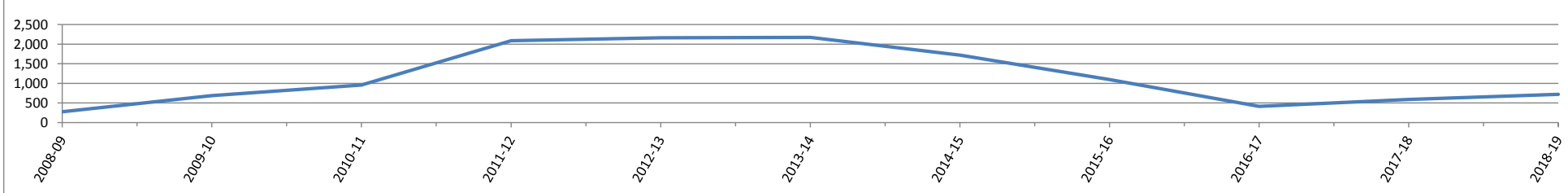


MONTH	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July		95	91	105	196	245	210	105	7	53	73	20	27.4%
Aug.		42	102	123	191	222	172	129	25	54	82	28	34.1%
Sept.		54	95	127	225	159	153	133	53	66	78	12	15.4%
Oct.		26	57	160	249	207	185	138	43	61	40	-21	-52.5%
Nov.	14	45	48	178	162	147	147	98	37	38	90	52	57.8%
Dec.	17	58	54	134	124	129	178	110	35	42	75	33	44.0%
Jan.	8	45	66	169	188	206	102	121	28	51	95	44	46.3%
Feb.	18	53	33	202	160	161	118	103	48	52	86	34	39.5%
March	15	57	59	220	160	189	99	84	22	54	99	45	45.5%
April	82	58	116	194	204	162	117	34	25	58		-58	0.0%
May	57	72	125	235	172	165	99	22	41	56		-56	0.0%
June	65	82	112	239	130	180	141	22	51	3		-3	0.0%
Sub Total	276	687	958	2,086	2,161	2,172	1,721	1,099	415	588	718	1,306	18.1%
Saturday	3	2	5	16	34	14	11	11	13	2		1,416	0.0%
Grand Total	279	689	963	2,102	2,195	2,186	1,732	1,110	428	590	718	2,722	17.8%

*This does not include the Saturday Loop.



Good Sam Annual Loop Ridership

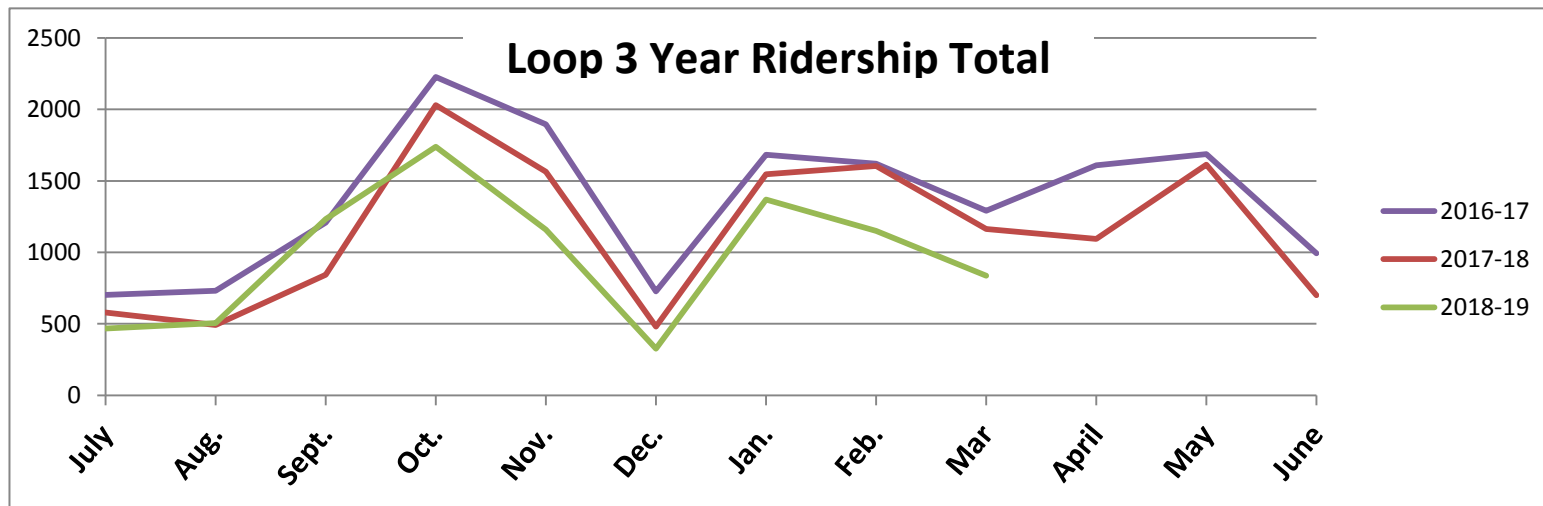


LINN-BENTON LOOP

LOOP EXPRESS

2018-2019

MONTH	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
July		754	822	702	578	466
Aug.		569	665	730	491	505
Sept.		317	987	1207	842	1233
Oct.	2,180	3,259	2365	2227	2029	1739
Nov.	1,892	2,019	1606	1895	1563	1158
Dec.	745	1,125	827	727	480	325
Jan.	2,180	2,221	1869	1682	1546	1369
Feb.	1,584	1,811	1790	1621	1604	1150
Mar	1,334	1,450	1519	1292	1163	837
April	2,167	2,106	1847	1608	1094	
May	1,779	1,819	1554	1687	1613	
June	941	1,156	923	994	700	
TOTAL	14,802	18,606	16,774	16,372	13,703	8,782

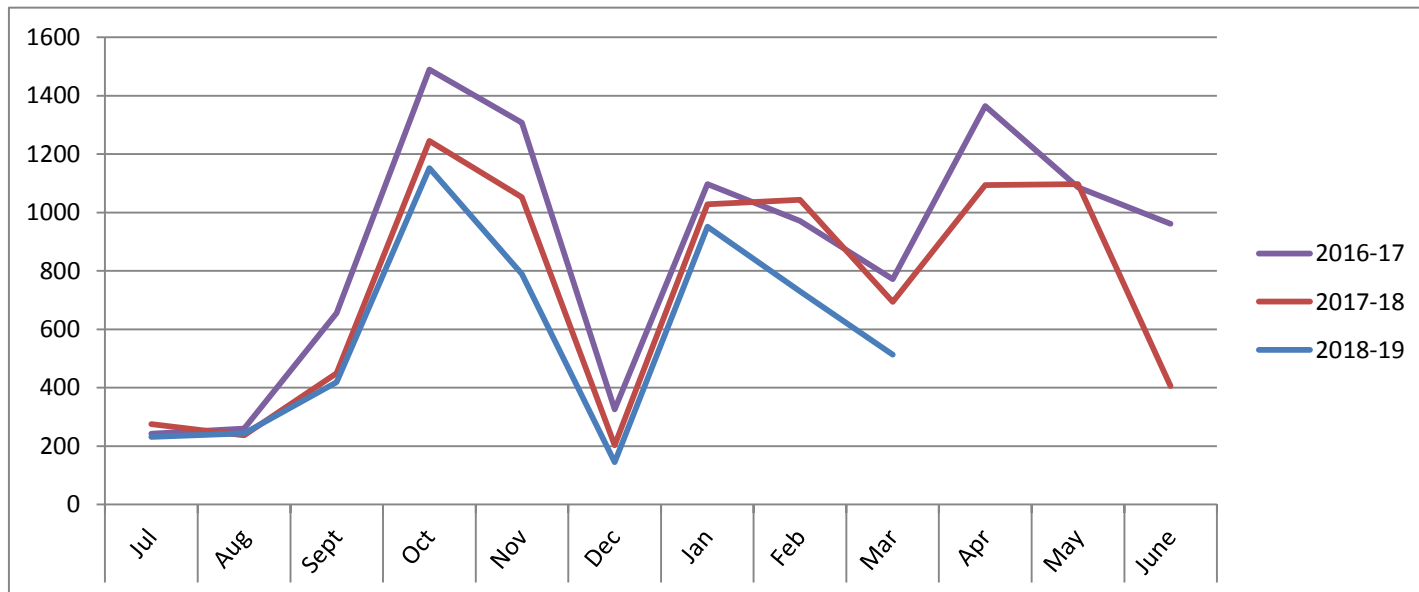


LOOP EXPRESS

LBCC PROGRAM

2018-2019

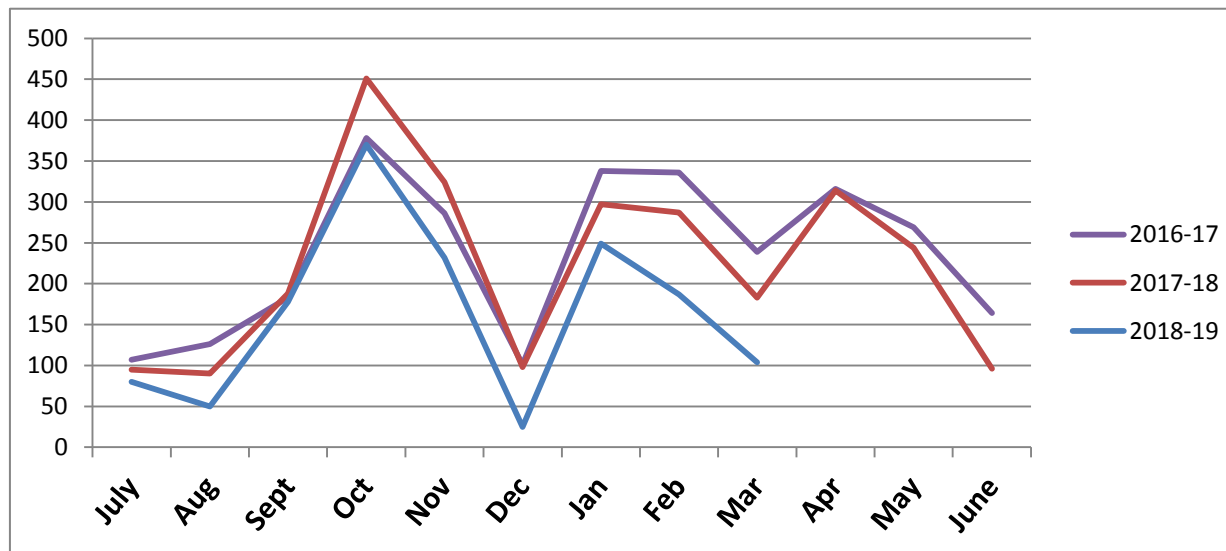
MONTH	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Jul		685	382	242	275	231
Aug		665	280	260	237	243
Sept		566	458	655	449	419
Oct	1,475	2,133	1488	1489	1245	1152
Nov	1,315	1,395	1019	1307	1052	789
Dec	433	691	425	325	203	145
Jan	1,342	1,525	1174	1097	1028	951
Feb	964	1,178	1137	971	1043	730
Mar	791	908	843	772	694	513
Apr	1,261	1,333	1201	1364	1094	
May	1,116	1,092	919	1086	1097	
June	509	604	376	961	406	
TOTAL	9,206	12,775	9,702	10,529	8,823	5,173



LOOP EXPRESS OSU PROGRAM

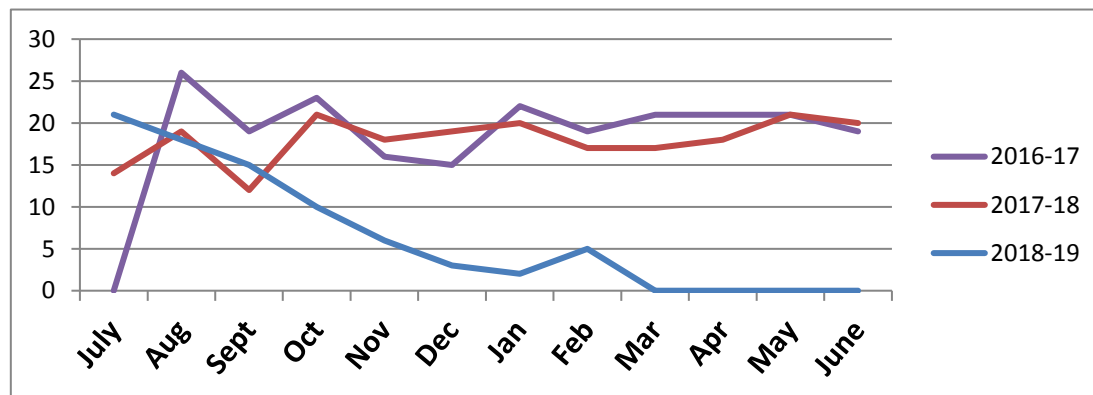
2018-2019

MONTH	-Benton	2014-15	2015-16	2016-17	2017-18	2018-19
July		328	245	107	95	80
Aug		329	202	126	90	50
Sept		189	267	183	188	178
Oct	524	737	596	378	451	370
Nov	420	423	429	286	324	232
Dec	180	247	171	101	98	25
Jan	590	573	459	338	297	249
Feb	447	432	392	336	287	187
Mar	356	357	371	239	183	104
Apr	620	548	410	316	314	
May	481	480	326	269	244	
June	242	256	133	164	96	
TOTAL	3,860	4,899	4001	2843	2667	1475



LOOP EXPRESS SAMARITAN PROGRAM 2018-2019

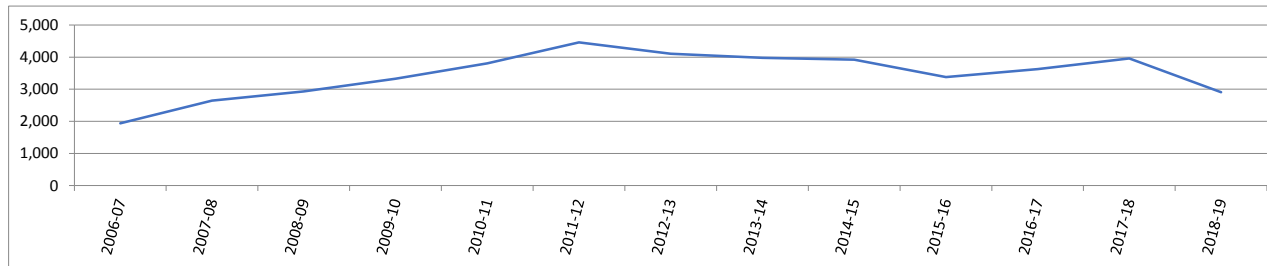
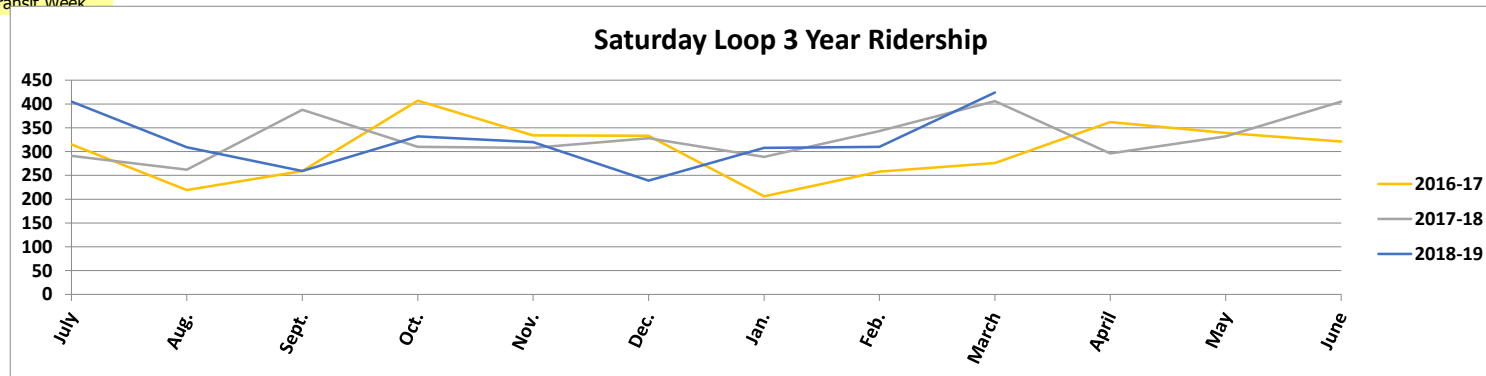
MONTH	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
July		42	0	0	14	21
Aug		73	1	26	19	18
Sept		27	2	19	12	15
Oct		28	3	23	21	10
Nov		17	0	16	18	6
Dec		47	3	15	19	3
Jan		12	2	22	20	2
Feb	25	1	1	19	17	5
Mar	30	0	3	21	17	0
Apr	27	2	6	21	18	
May	30	0	4	21	21	
June	25	1	1	19	20	
TOTAL	137	250	26	222	216	80



**LINN-BENTON LOOP
SATURDAY SERVICE
2018-2019**

MONTH	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July		93	147	160	250	356	252	262	274	195	315	291	405	114	28.1%
Aug.	90	245	241	227	235	339	267	400	353	325	219	262	309	47	15.2%
Sept.	185	229	227	209	294	323	494	324	317	247	259	388	259	-129	-49.8%
Oct.	212	171	239	303	349	497	321	307	436	375	407	310	332	22	6.6%
Nov.	165	217	334	388	350	366	318	444	346	282	334	308	320	12	3.8%
Dec.	199	226	184	161	180	353	407	232	244	239	333	328	239	-89	-37.2%
Jan.	160	175	358	356	331	354	265	309	344	314	206	289	308	19	6.2%
Feb.	177	235	235	264	345	369	377	227	298	251	258	343	310	-33	-10.6%
March	206	257	232	334	349	399	385	421	342	271	276	406	424	18	4.2%
April	176	253	242	320	472	337	294	323	295	333	362	296		-296	0.0%
May	147	275	251	357	340	367	319	400	403	246	339	332		-332	0.0%
June	221	267	241	246	309	399	409	328	271	298	321	405		-405	0.0%
Totals	1,938	2,643	2,931	3,325	3,804	4,459	4,108	3,977	3,923	3,376	3,629	3,958	2,906	-1,052	-36.2%

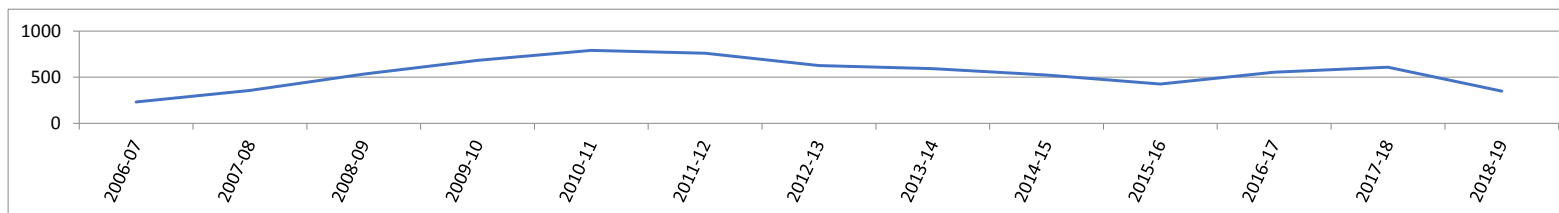
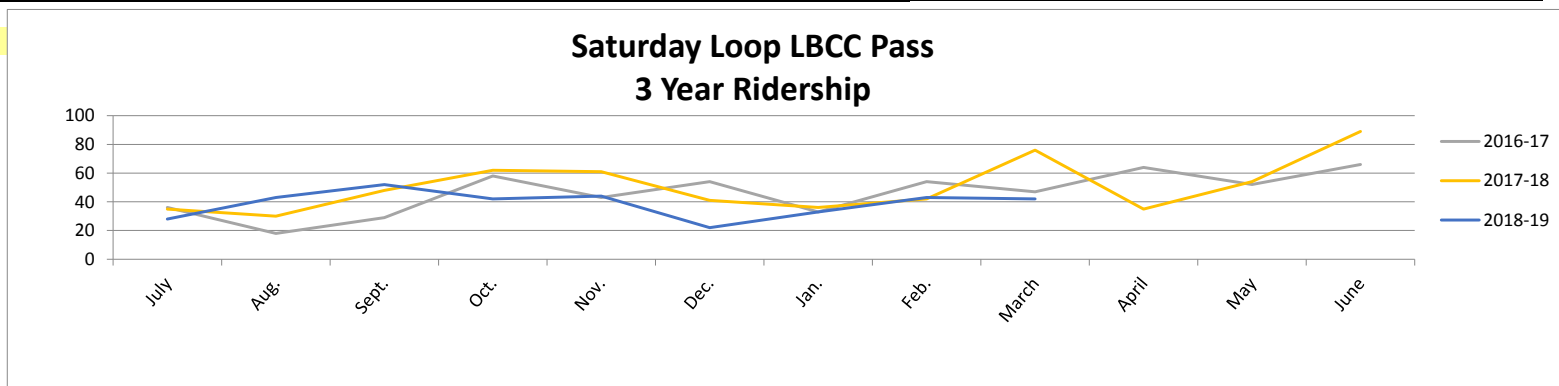
Oct. Try Transit Week



LINN-BENTON LOOP LBCC PASS PROGRAM SATURDAY SERVICE 2018-2019

MONTH	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July		8	16	18	37	44	56	51	35	19	36	35	28	-7	-25.0%
Aug.	12	2	30	31	33	48	28	48	42	36	18	30	43	13	30.2%
Sept.	17	18	31	22	35	44	56	43	35	27	29	48	52	4	7.7%
Oct.	22	12	23	46	72	66	38	48	56	39	58	62	42	-20	-47.6%
Nov.	28	16	50	74	69	75	55	70	57	41	43	61	44	-17	-38.6%
Dec.	33	37	50	41	40	84	57	32	37	23	54	41	22	-19	-86.4%
Jan.	19	24	74	66	92	69	61	61	43	34	33	36	33	-3	-9.1%
Feb.	19	43	48	70	82	68	53	31	45	41	54	42	43	1	2.3%
March	23	54	50	95	84	72	68	52	40	31	47	76	42	-34	0.0%
April	19	58	53	85	86	63	39	63	52	54	64	35		-35	0.0%
May	13	42	58	83	92	45	50	59	48	40	52	54		-54	0.0%
June	27	42	52	52	69	82	66	36	35	40	66	89		-89	0.0%
Totals	232	356	535	683	791	760	627	594	525	425	554	609	349	-260	-74.5%

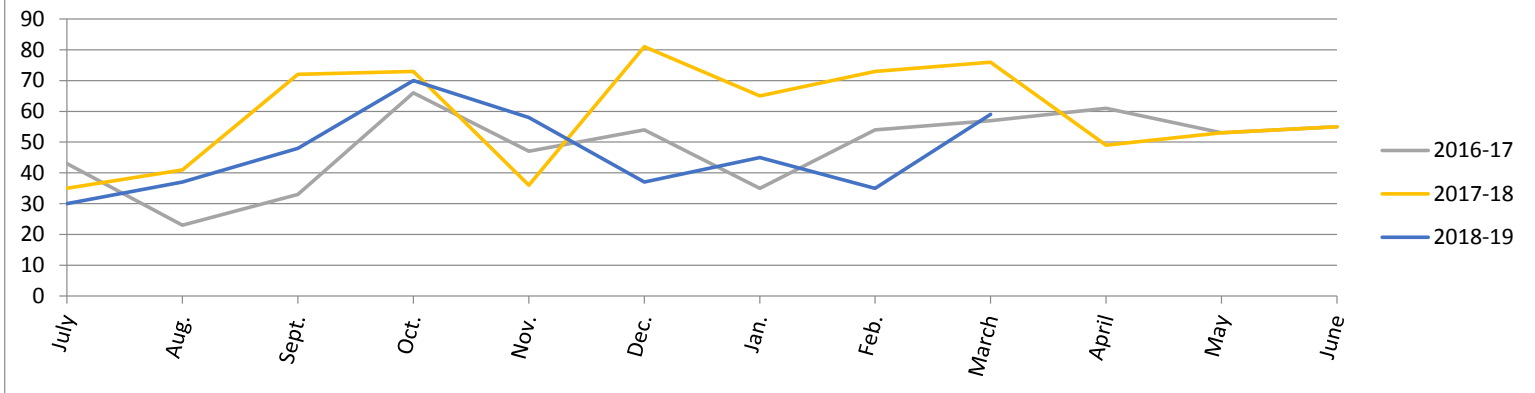
Oct. Try Transit Week



LINN BENTON LOOP OSU PASS PROGRAM SATURDAY SERVICE 2018-2019

MONTH	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July		19	35	27	21	37	38	40	34	39	43	35	30	-5	-16.7%
Aug.	15	37	46	28	47	37	45	75	42	58	23	41	37	-4	-10.8%
Sept.	50	23	30	32	69	62	123	72	64	41	33	72	48	-24	-50.0%
Oct.	48	24	44	59	65	125	89	51	80	50	66	73	70	-3	-4.3%
Nov.	52	24	50	53	78	65	54	98	92	38	47	36	58	22	37.9%
Dec.	45	30	27	32	18	47	74	43	52	37	54	81	37	-44	-118.9%
Jan.	69	28	89	92	59	68	50	71	61	71	35	65	45	-20	-44.4%
Feb.	64	36	48	51	62	69	70	37	55	10	54	73	35	-38	-108.6%
March	45	40	43	62	48	81	98	78	80	66	57	76	59	-17	0.0%
April	43	28	52	57	81	60	61	72	72	61	61	49		-49	0.0%
May	25	53	73	83	60	91	52	48	88	35	53	53		-53	0.0%
June	46	58	55	24	31	92	60	58	51	42	55	55		-55	0.0%
Totals	502	400	592	600	639	834	814	743	771	548	581	709	419	-290	-69.2%

Oct. Try Transit Week

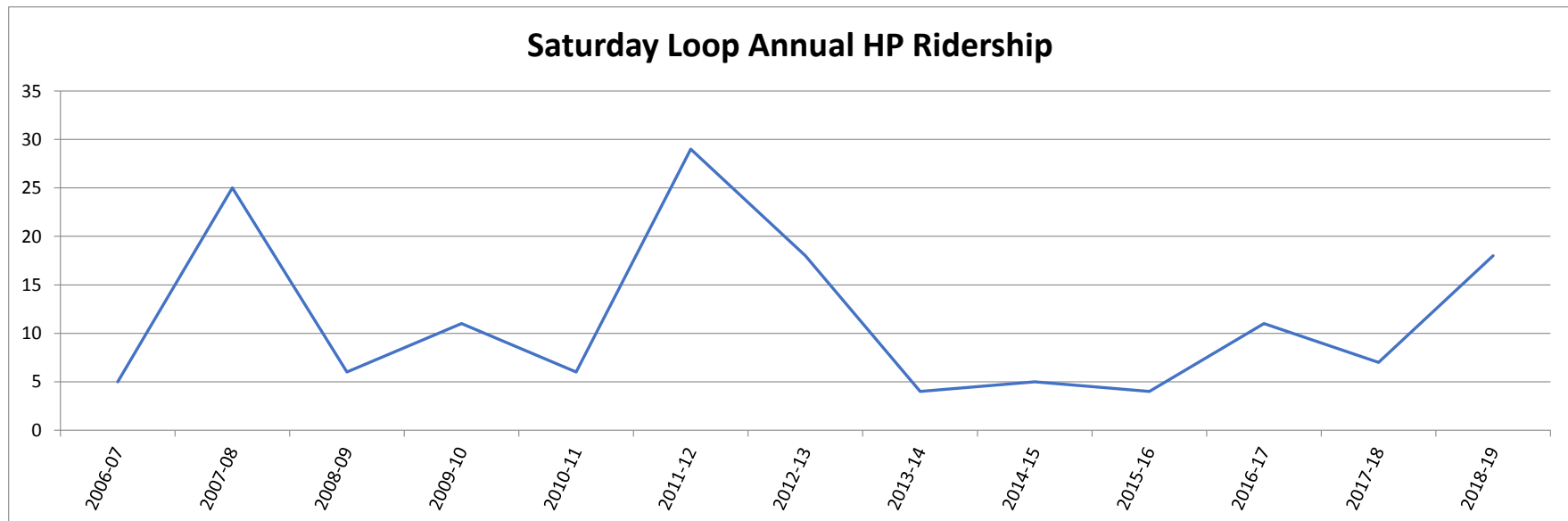


Saturday Loop OSU Annual Ridership



LINN BENTON LOOP HP PASS PROGRAM SATURDAY SERVICE 2018-2019

MONTH	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July		0	0	0	0	0	1	3	2	2	2	1	1	0	0.00%
Aug.	0	0	0	1	0	0	7	0	3	0	2	0	0	0	0.00%
Sept.	1	0	0	3	0	0	2	0	0	2	3	0	0	0	0.00%
Oct.	2	0	0	2	0	1	3	1	0	0	0	0	4	4	100.00%
Nov.	0	1	1	2	0	0	3	0	0	0	0	3	1	-2	-200.00%
Dec.	2	3	0	1	0	0	0	0	0	0	2	0	0	-2	0.00%
Jan.	0	5	4	0	0	1	1	0	0	0	2	0	6	-2	100.00%
Feb.	0	4	0	0	1	3	0	0	0	0	0	0	0	0	0.00%
March	0	6	0	0	0	6	0	0	0	0	0	0	6	0	0.00%
April	0	3	0	2	3	4	0	0	0	0	0	0		0	0.00%
May	0	2	1	0	2	9	0	0	0	0	0	2		2	0.00%
June	0	1	0	0	0	5	1	0	0	0	0	1		1	0.00%
Totals	5	25	6	11	6	29	18	4	5	4	11	7	18	11	61.11%



LINN-BENTON LOOP SAMARITAN PASS PROGRAM SATURDAY SERVICE 2018-2019

MONTH	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	+/-	Ratio
July	0	0	2	0	0	3	2	2	2	0	3	3	100.00%
Aug.	0	0	0	0	4	4	1	6	1	0	0	0	0.00%
Sept.	0	0	0	0	3	0	1	6	0	0	1	1	100.00%
Oct.	0	0	2	0	3	2	2	3	0	0	0	0	0.00%
Nov.	1	0	0	2	3	3	0	10	4	0	1	1	100.00%
Dec.	0	0	0	3	3	1	0	1	4	0	0	-4	0.00%
Jan.	1	0	1	5	3	0	0	1	0	0	0	0	0.00%
Feb.	0	0	0	0	0	0	0	1	0	0	0	0	0.00%
March	1	0	0	4	5	0	0	3	0	2	0	2	0.00%
April	0	0	0	0	4	1	2	4	0	0		0	0.00%
May	0	0	0	1	5	0	2	3	2	0		-2	0.00%
June	0	2	0	1	1	0	1	1	0	0		0	0.00%
Totals	3	2	5	16	34	14	11	41	13	2	5	3	0.6

Oct. Try Transit Week

