Transit Tomorrow

Existing Conditions and Choices Report

Lane Transit District

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1 Introduction and Summary

Transit Tomorrow is a review of LTD's services, their performance, and the values they reflect.

What is Lane Transit District?

Lane Transit District (LTD) is the public transportation provider in the Eugene/Springfield metropolitan area and surrounding communities. LTD's district includes Eugene and Springfield, as well as Veneta, Junction City, Coburg, Lowell, Creswell, Cottage Grove, and the McKenzie River Highway corridor. LTD's transportation services include:

- **Fixed-route transit.** This includes all LTD bus routes, such as EmX, other metro area routes, and commuter routes to small towns and rural communities. These services are open to the general public. Anyone can ride.
- **Demand-response (RideSource).** This includes paratransit for persons with disabilities, non-emergency medical trips, and transportation for human services agencies. Only passengers meeting eligibility requirements (e.g. disability, Medicaid etc.) may ride.
- **Vanpools.** This is a specialized program for interested groups of commuters who work relatively far from home, near each other, and on similar schedules. LTD helps pay for a share of the rental and fuel costs of a shared van. Members of the group use the van to get to and from work.

LTD also serves as a source of public information on transportation through the Point2point **regional travel options** program. Point2point helps individuals and business understand the alternatives to driving alone. This includes transit, but also walking, cycling, and vehicle sharing.

Fixed-route buses are the largest component of LTD's service; they account almost 95% of LTD ridership.

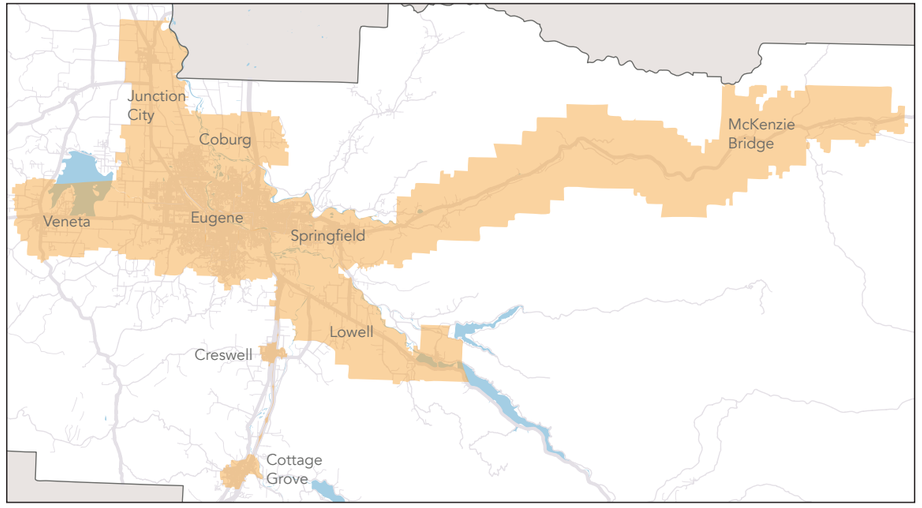

Figure 1: LTD district boundaries. The district extends beyond the metro area to cover significant portions of Lane County.

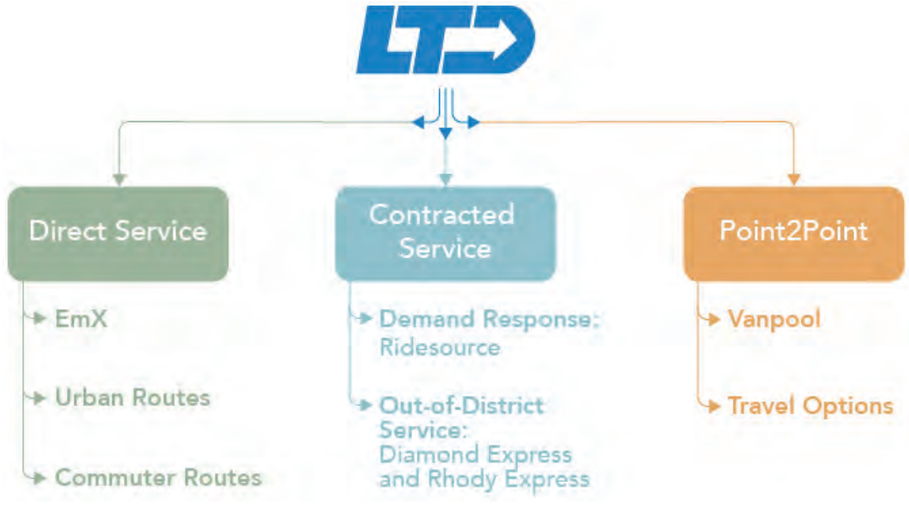

Figure 2: Organization of LTD services. LTD directly operates all fixed routes within the district, but contracts out demand-response service through the RideSource program. The Point2point program administers Valley Vanpool, in addition to coordinating efforts to inform the public of available non-driving travel options.

LTD's existing transit network (May 2018).

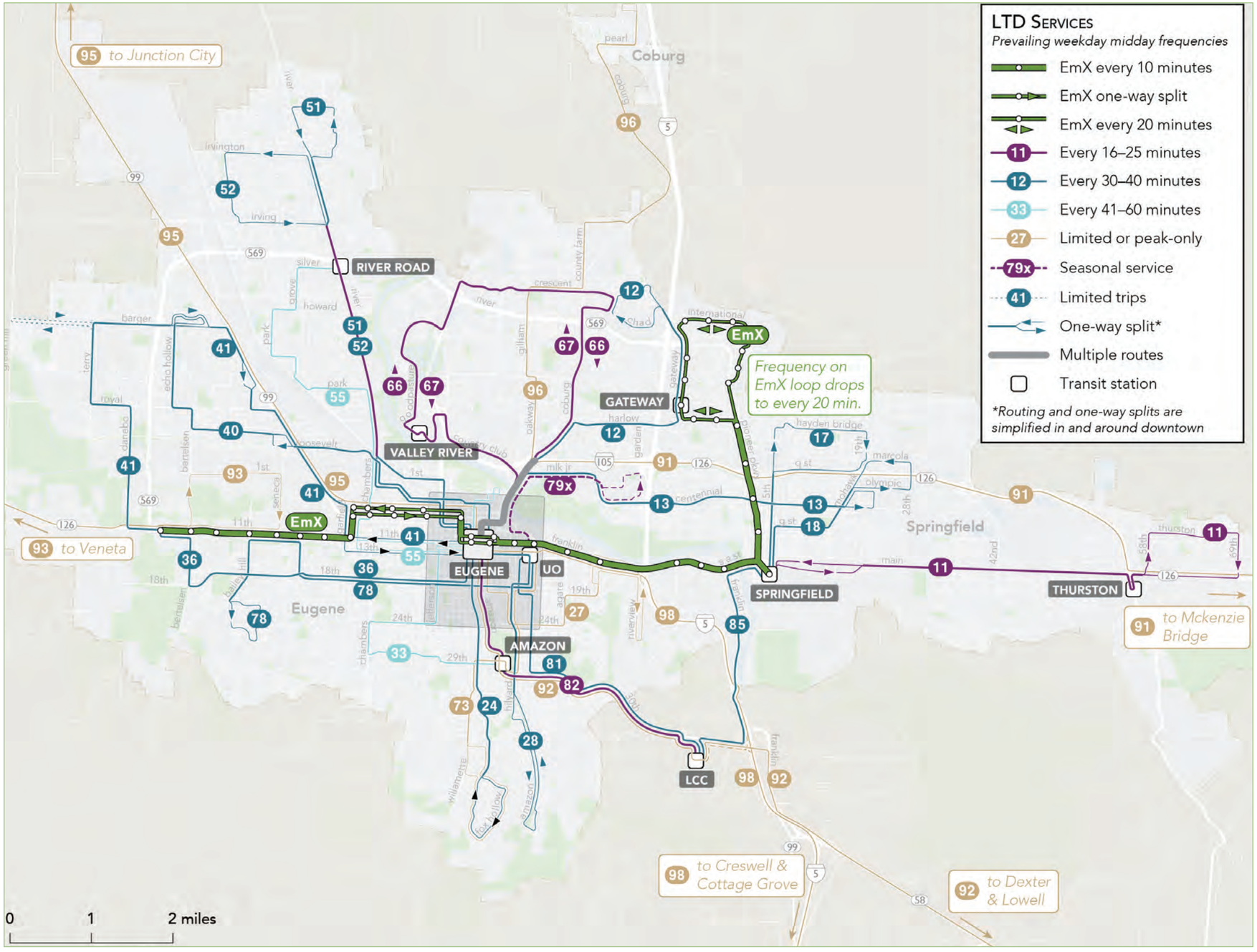

Figure 3: LTD bus network in the Eugene/Springfield metro area. This includes EmX (in green), other lines that travel within the urbanized area (Routes 1 to 85), and connections to nearby communities (Routes 91 to 98).

Where does transit fit in our region's transportation system?

Transit Tomorrow and our mobility

In the right conditions, transit can do two things:

- Extend how far people can go on foot, or on a bicycle, providing some of the benefits of access to a private vehicle.
- Replace driving trips in times and places where driving a car is inconvenient or too expensive.

But transit can't meet every transportation need at all times. Walking and biking will be more useful for many shorter trips. Longer, very urgent, or more isolated trips may always require a car.

Transit Tomorrow will focus on how to improve mobility in our region, focusing on transit specifically. But the goal isn't to create a bus system that competes with every other mode at all times. Rather, we are seeking to understand the best way to use buses to get the outcomes most valued by the community.

Why focus on transit?

Transit can't serve every trip, but it has many personal and community benefits, such as:

- **Transit is very inexpensive.** LTD's day pass costs $3.50. According to AAA, it costs about $15 per day to own a car. Transit can help improve individuals' economic freedom by reducing the amount of money they spend on transportation.
- **Transit can move many people.** The average LTD bus carries 45 passengers per hour, and operates 12 to 16 hours per day. Most cars carry one or two people, and sit parked most hours of the day.
- **Transit requires very little space.** A typical sedan requires 70 square feet of road space for a single person. A typical bus carries ten to 60 people on 400 square feet of road space. That's up to ten times less road space per person!
- **Transit requires less fuel, and produces fewer emissions than driving alone.** A diesel bus gets 4 to 8 miles per gallon. That means it only takes 5 passengers on board to make a bus more fuel efficient than most cars.
- **Transit is available to everyone.** Not everyone can drive or cycle for their travel needs, and not everyone wants to. Transit allows all individuals the freedom not to rely on a personal vehicle, and not to depend on friends and family for transportation.

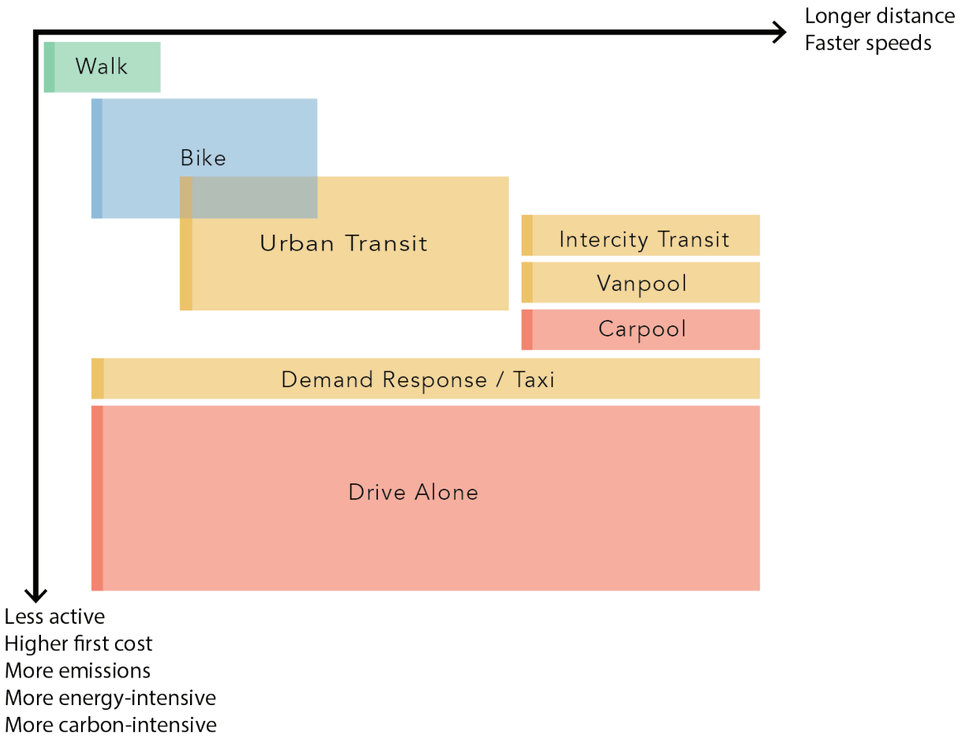

Figure 4: Different transportation modes are useful for different types of trips. When conditions are right, transit can extend the reach of biking or walking trips, or replace driving.

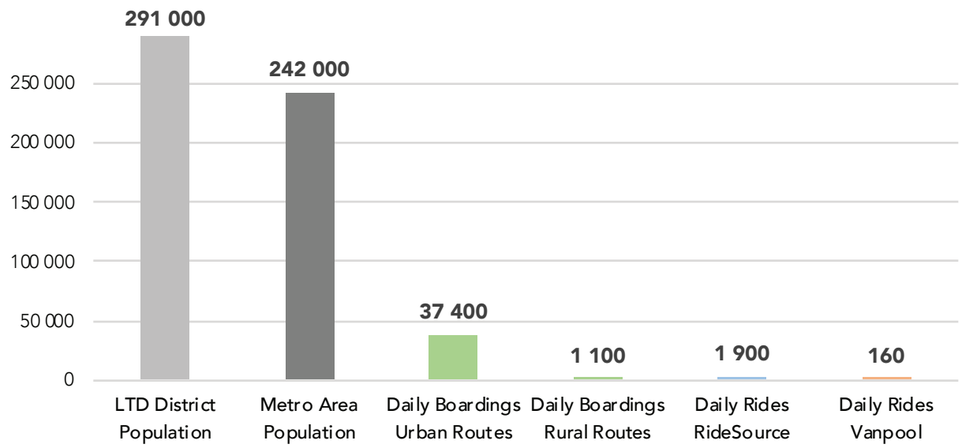

Figure 5: A sense of scale. Nearly 300,000 people live in LTD's service district; transit receives about 40,000 boardings per weekday. The vast majority of boardings are on buses in the metro area.

How do LTD's services perform?

How do we measure LTD's performance?

Many different measures provide insights into the effectiveness and efficiency of LTD's services. But LTD's performance as a transit agency isn't just a function of its services. Factors outside the agency's control also have a direct bearing on the likely performance of any public transit.

Transit Tomorrow starts with this Choices Report, which examines how LTD is performing through a comprehensive lens. In this report:

- **Chapter 2: How Transit Works** explains what makes transit service valuable, and how land use, neighborhood design and street design contribute to how useful a bus network can be.
- **Chapter 3: Market and Needs Assessment** describes how the location of population, jobs, and universities in the Eugene/Springfield area influence the demand for transit service.
- **Chapter 4: The Fixed-Route Network** is a detailed look at LTD's existing network. This includes facts, analysis and discussion on topics like the following:
  - » How LTD's bus routes combine to form a network, and the ways in which different routes complement and conflict each other.
  - » How well the existing network does (or doesn't) facilitate access to jobs and opportunity.
  - » The relationship between ridership and service levels and how that has changed over time.
  - » How ongoing changes in revenues and service costs are influencing the amount and types of service LTD can provide.
- **Chapter 5: Demand Responsive Services** describes how LTD's unique RideSource model combines ADA-required paratransit with medical and human services transportation, and how that is beneficial to riders, to the agency and to the general public.
- **Chapter 6: Travel Options (Point2point)** describes LTD's regional travel options program, how its activities interact with transit and the overall transportation system, and opportunities to further increase its reach.

Key Findings

The following is a selection of the most important findings of this Choices Report:

- **Most people can access an LTD bus route within a short walk, but few have access to frequent service.** As a result, public transit is not a viable transit option for many people, even though it reaches nearly everyone in the Eugene/Springfield metro area within a half-mile.
- **The usefulness of LTD's transit network depends a lot on your location.** People who live or work near more frequent services can use transit to reach far more places in the same amount of time than people elsewhere. Because of its frequency and speed, the EmX provides more benefit than any other LTD bus route. When transit is more useful to reach places quickly, it is a more viable alternative to driving.
- **Ridership responds strongly to frequency.** Transit's usefulness is strongly correlated to how often the bus comes. LTD's more frequent routes attract more riders per hour of service than routes that operate every 30 minutes or less often. And system ridership is much lower in the evenings and weekends, when most routes operate only every 60 minutes, and some routes don't operate at all.
- **Most of LTD's network is centered around timed connections that take place every 30 minutes at Eugene Station.** This timed connection provides significant benefit to riders on less frequent routes, allowing them to travel across town without long waits for a transfer. But it doesn't fix the long wait at the bus stop (or knowledge of the schedule) required in the first place.
- **Quality of service on LTD's more frequent routes is negatively impacted by the desire to make timed connections.** Frequent routes are useful in part because riders know they can show up anytime, and the bus will come shortly. Requiring frequent routes to make timed connections requires scheduling uneven waits or holding buses for several minutes at transfer locations. Added time waiting at a bus stop (or while a bus holds) makes frequent transit a less viable alternative to driving than it otherwise might be.
- **LTD has made significant investments in infrastructure on selected corridors. These investments support frequent service, and improve the pedestrian and cycling environment.** Development of EmX and its Gateway and West Eugene extensions served as the catalyst for improved pedestrian and bicycle facilities near transit stops. This is also reflected in the ongoing MovingAhead and Main/McVay studies defining the types of infrastructure that would best support frequent transit service in other corridors.
- **The University of Oregon is the largest single source of transit ridership in the region.** At least 17% of all LTD weekday trips start or end within one block of UO. The vast majority of these (74%) take place on EmX.
- **Ridership on most LTD routes is down 20% since 2011, but ridership on EmX is up 35%.** Ridership losses have been especially significant (-50%) on the 70- and 80-series routes that are specifically geared to providing service to UO and LCC.
- **The amount of service LTD provides is vulnerable to increasing costs and swings in the economy.** Most of LTD's revenue comes from a local payroll tax; this is significantly and immediately impacted during recessions. Furthermore, the cost of providing service has increased much faster than inflation in recent years.
- **LTD's RideSource program provides both all-purpose ADA paratransit and externally funded non-emergency medical transportation. This reduces the amount of local public funds required for paratransit, while increasing the total amount of transportation provided to special-needs populations.** The whole community benefits, as funds that would otherwise be necessary for paratransit are instead available for fixed route service that is available to the general public. In many other communities, a significant portion of trips taken on paratransit are medical in nature, but are paid for by the transit agency's general funds.
- **The Point2point travel options program leverages LTD's investments in service and infrastructure, by ensuring that more people are aware of the different travel options available to them.** Point2point's emphasis extends beyond transit to cover events and information campaigns that promote walking, cycling, carpooling and vanpools.

How much access to opportunity does LTD's existing network provide?

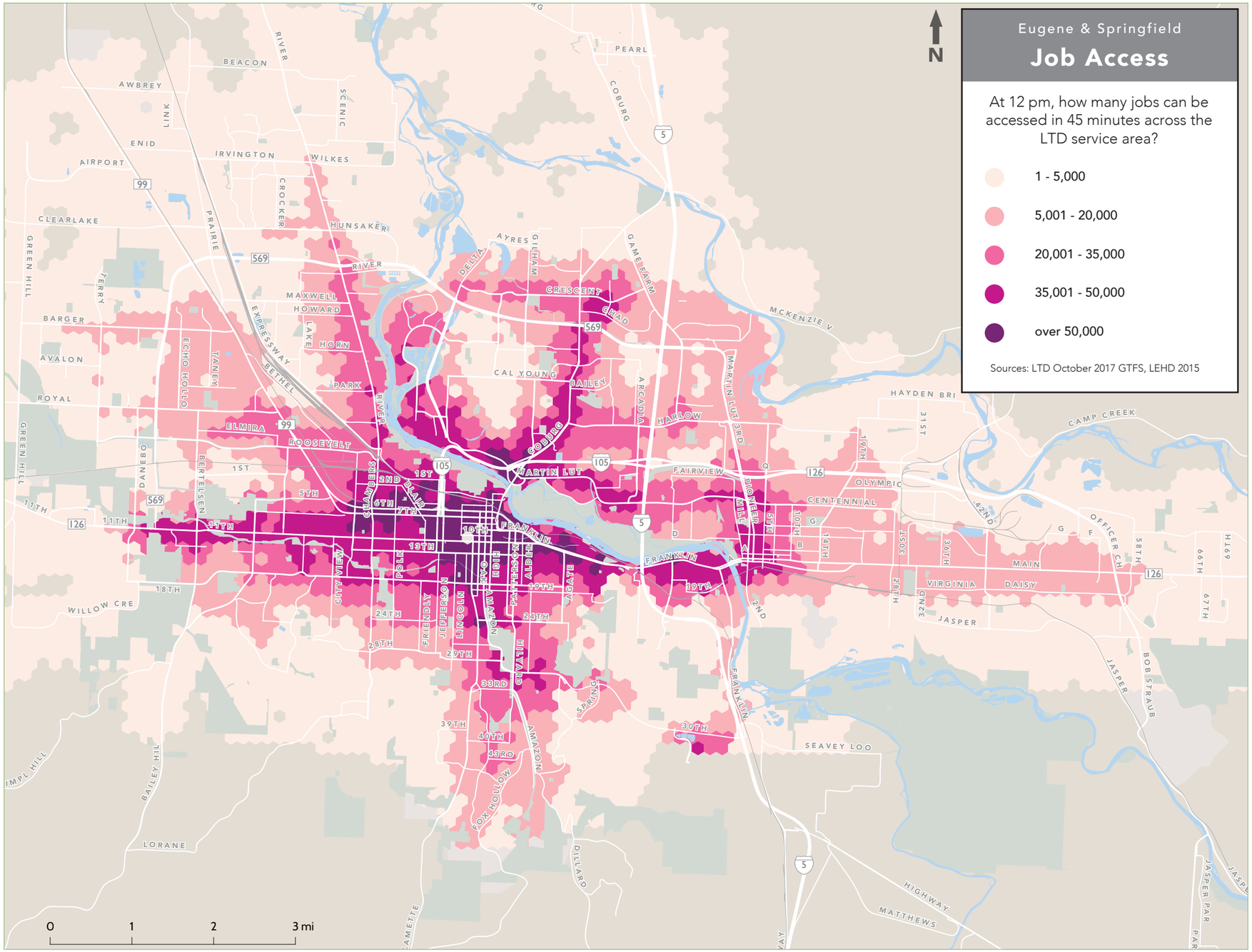

Figure 6: Number of jobs that can be reached from any location in the Eugene/Springfield metro area within 45 minutes by transit and walking at 12 PM (noon) on a weekday. High job access is an indicator that the transit network is providing access to many opportunities, including shopping, education and socializing. On this map, darker shades of purple tend to indicate a combination of nearby employment, and access to higher-frequency transit. EmX provides the most job access, but other higher-frequency routes also provide significant benefits, such as Routes 66/67 on Coburg Road and Routes 51/52 on River Road.

Transit Tomorrow will examine what future LTD service could and should look like.

What choices does the system reflect?

Transit Tomorrow is a unique opportunity to rethink the purpose of LTD's transit system, and how it relates to other ways of getting around such as walking, cycling and driving.

The amount and types of transit service available today reflect not only technical decisions, but also value judgements about what LTD should and should not provide.

For example, a quick look at the network map in Figure 3 (see page 6) shows that the existing bus network provides some level of service within a half-mile of nearly all developed areas in Eugene and Springfield. As shown in Figure 7, over 90% of the metro area's residents live within a half-mile of a bus stop.

This is not necessarily a given: there are benefits and costs to deciding to serve the entire metro area. On the one hand, it ensures that nearly everyone is at least near a lifeline service to Downtown Eugene or Springfield. On the other hand, it means finding ways to operate in neighborhoods that were never designed with transit service in mind.

Transit Tomorrow will re-examine some of these choices. We've summarized the most important trade-offs in this Choices Report, as **Chapter 7: Key Choices,** asking you to consider some of the choices LTD is facing:

» ***How should we balance high ridership and extensive coverage?*** Is it more important to provide frequent service for long hours in places that will attract the most riders, or to get a little bit of service as close as possible to every possible place?

» ***How should we balance walking and waiting?*** Is it more important to have a bus stop very nearby, or to know that if you walk a little farther the bus will come sooner and move more quickly?

» ***Does LTD's network need small adjustments, or a major overhaul?*** Is it more important to make small improvements to the system we already have, or does it need to be redesigned completely from a blank slate?

None of these questions have "correct" answers: there are valid reasons to go either way, or to fall anywhere in between the two extremes.

Ridership vs. Coverage

The most basic choice is the degree to which the transit system should be pursuing ridership or coverage. Pursuing high ridership or high coverage leads to substantially different outcomes.

Pursuing high ridership means focusing service on places where many people go, and designing service so the bus is always coming soon. Service focused primarily on ridership:

- Expands the range of trips for which transit is a viable option.
- Limits the amount of car traffic, congestion and pollution.
- Reduces the amount of public subsidy required for transit.

Pursuing high coverage means reaching as many places as possible with a basic level of service. Service focused primarily on coverage:

- Ensures every neighborhood has access to the transit system.
- Provides lifeline access to critical services for all.
- Doesn't provide a viable transportation option for most people.

LTD can pursue high ridership and extensive coverage within the same budget, but not with the same dollar. The more it does of one, the less it does of the other.

Walking vs. Waiting

Another way to think about the question of ridership and coverage is to think specifically about how far a person should have to walk to reach a bus stop, and how long they should have to wait, on average, before the next bus comes.

Walking and waiting are important to consider on their own, because both of these activities add time and inconvenience to any transit trip, and different people have a wide variety of preferences regarding each.

A transit system designed to minimize how far people walk requires many routes near each other. This means most routes will be infrequent.

Conversely, a transit system designed to minimize waits requires high frequencies. In that case, many people need to walk longer distances to reach service.

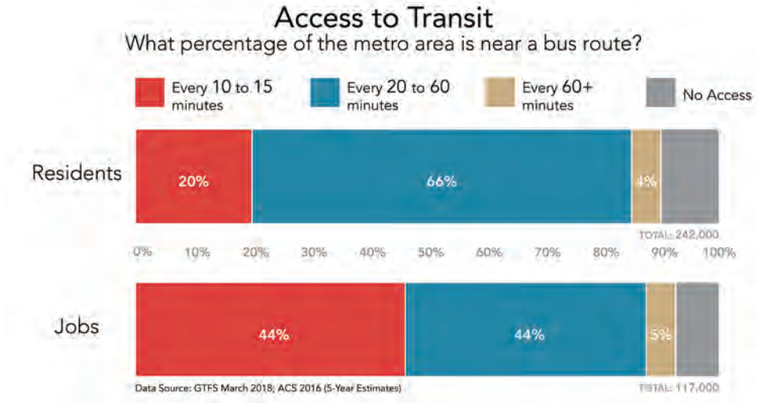

Figure 7: Percentage of the Eugene/Springfield metro within a half-mile of an LTD bus route. The network is designed to get some service within a half-mile of almost everyone. As a result, the percentage of the population near frequent service (in red) isn't very high. This isn't the only possible choice: if LTD served fewer places, more of its routes could run every 10 to 15 minutes. What is more valuable?

Adjustments vs. Overhaul

As a general rule, the more a transit system changes, the more disruption it produces in existing riders' lives. On the other hand, a bigger change can make it possible to achieve much greater benefits for the community as a whole.

To date, LTD customers have experiences seasonal adjustments to routes and schedules, three times per year. Some of these changes, like the route changes and frequency improvements associated with EmX extensions, have been larger than others.

Transit Tomorrow is an opportunity to consider whether the community would generally prefer LTD to make improvements to the network in its current form, or to rethink the network from the ground up.

Community input is critical in making the decisions on LTD's future service.

What is the public input process?

Transit Tomorrow will combine technical analysis and broad-based community input to develop a public transit network for the future. Along the way, we'll take the following steps:

- **June 2018: Choices Report.** This report provides facts and analysis about the existing network, and describes the general choices and trade-offs that LTD will need to weigh in designing future service.
- **July - August 2018: Public Input on Values and Priorities.** LTD will be presenting key information online and at community events, and seeking public feedback through a variety of channels, including:
  - » Meeting the public at community events, and holding dedicated listening sessions.
  - » Online open house seeking public feedback: http://openhouse.jla.us.com/transit-tomorrow
  - » Project web page: www.ltd.org/transit-tomorrow
  - » Project e-mail address: transit-tomorrow@ltd.org
- **August - December 2018: Analyze Public Input and Design Alternatives.** LTD will use public feedback to help guide the design of up to three different alternatives for future service. Each alternative will reflect a different direction and set of priorities.
- **Winter 2019: Public Review of Alternatives.** LTD will ask the public for feedback on the alternatives. Each alternative will illustrate the real-world consequences of applying different values to the transit network, so that members of the public can make more informed judgements on the type of service they'd prefer.
- **Early Spring 2019: Refine Alternatives.** Community input will help LTD understand which alternative(s) should be studied further. LTD will develop more detailed plans.
- **Late Spring 2019: Board Decision.** Taking into account public feedback and the refined alternative(s), the LTD Board of Directors will make a decision on the preferred structure of the future transit network. Depending on community input, the future network could be similar to what exists today, or it could be very different.
- **2020: Service Changes**. LTD will make regular seasonal adjustments to service throughout this process. If the preferred version of the future network looks very different from existing service, significant service changes will likely come in 2020.

Figure 8: Project and community input timeline. LTD will seek public feedback in two phases. The first phase will focus on the public's values and priorities. This will help LTD design several alternative visions for future service. In the second phase of input, LTD will share these alternatives, so the public can see the real-world consequences of different priorities. Public feedback on alternatives will be critical in shaping the final LTD Board decision, leading to possibly significant changes in the LTD transit network in 2020.