# Columbia-Lombard Mobility Corridor Plan

## EXISTING CONDITIONS

| 05 | Problem statement |
| 06 | History of Columbia-Lombard |
| 07 | Land Use Context |
|     | Comprehensive Plan |
|     | Key Activity Centers & Places of Interest |
| 10 | Area Context |
|     | Employees to the North, Residents to the South |
|     | Jobs and Households |
|     | Neighborhood Demographics |
|     | Gentrification and Poverty |
| 15 | People Movement |
|     | Mode Share |
|     | Traffic Volumes |
|     | Corridor Travel Time and Delay |
|     | Trip Lengths |
|     | Transit Activity |
| 22 | Transportation context |
|     | Street Cross Sections |
|     | Street Classifications |
|     | Pedestrian Network |
|     | Pedestrian Crossing Gaps |
|     | Pavement Condition |
|     | Bicycle Network |
| 31 | Safety |
|     | Traffic Crashes |
| 32 | Known Issues on the Corridor |
| 34 | Funded and Planned Projects |
| 37 | Policy Review Summary |
|     | Appendix A |
|     | Policy Review |
|     | Appendix B |
|     | Traffic Counts (available on website) |
Due to aging infrastructure, gaps and deficiencies in the multimodal network, growing traffic congestion, major safety issues, and longer commuting distances, the Columbia/Lombard Mobility Corridor is not functioning as well as it should for the freight, transit, and active transportation modes that our policies tell us should be high priorities.

**KNOWN ISSUES**

- A lack of separation between modes, outdated roadway designs, and sub-standard infrastructure have led to major safety issues on both Columbia and Lombard. Both streets are on the designated Vision Zero High Crash Network because of high crash rates, especially those involving motor vehicles.

- The pedestrian, bicycle, and transit networks have major gaps and deficiencies, which means most commuters or visitors are reliant on personal vehicles that add to traffic congestion and increase cost of living.

- Widely spaced and difficult connections across the corridor mean residents of nearby neighborhoods in North and Northeast Portland have difficulty accessing jobs, parks, and services in the area.

- The street currently lacks adequate pedestrian facilities, crossings, and connections to employers, making accessing current and planned TriMet bus service difficult.

- At-grade railroad crossings, sub-standard over-crossings, missing connections and signals, and traffic bottlenecks have led to growing concerns about freight mobility and access in the corridor.

- The lack of traffic management systems means that freight operators and personal drivers alike do not have adequate information to respond to congestion issues and choose the most optimal routes.

- There is no clear understanding of how investments should be prioritized or how much they cost, leading to a lack of competition for possible local, state, and/or federal funding opportunities.

**FOCUS AREA**

The Columbia Lombard Mobility Plan focuses on the N/NE Columbia Boulevard and the parallel US 30 Bypass (portions of N/NE Lombard Street, NE Portland Highway, and NE Killingsworth) between Interstate Avenue and Interstate 205, including a buffer area of 1/2 mile to the north and south. On N Lombard Street between Interstate Ave and Woolsey Avenue, a more limited active transportation analysis will also be conducted.
The geographic area around the Columbia and Lombard corridors was formed by continual lava flows, shaping the Columbia Slough Watershed over many millennia. The land was home to Native American peoples, including the Multnomah and Chinook, long before settlers arrived. The study area includes land from a Native village site called Neerchokiko, upon which the Native American Youth and Family Center is located today.

From trading among Native peoples, to goods shipping and trading among settlers, the area has historically been an economically valuable transportation center. Over time it grew from access to river ports, to river ports and railroads, then with the addition of freeways, and then by opening the Portland International Airport (formerly the Portland Columbia Airport) in 1940. Despite the present-day industrial land use, managed waterways, and airport activity, the area is still home to a variety of wildlife. Beavers, coyotes, minks and river otters call the area home. So do twenty-eight species of fish and 175 species of birds, including the Bald Eagle.

There have been a variety of plans and visions for the corridor over the last century. The 1912 "Greater Portland Plan" of Edward Bennett called for Columbia Boulevard to be a boulevard "for street on which heavy traffic is eliminated...[and] should be widened, planted and developed to the utmost, and reserved for lighter and pleasure traffic." The plan was to maximize unobstructed views of Mt. St. Helens and Mt. Hood. In 1966, the Comprehensive Development Plan identified Lombard Street and Columbia Boulevard east of Interstate 5 as a freeway to define neighborhood boundaries and appeal to newly auto-oriented residents. Other plans have variously proposed park space, an Olympic area, and intersection improvements on or near the corridor.

While the plans for highway conversion were never fully implemented, Lombard Street and the railroad (east of Martin Luther King Jr. Boulevard) still function as a boundary separating the Woodlawn, Concordia, and Cully neighborhoods from the industrial and recreational areas to the north. This land north of Lombard Street (sometimes referred to as the Columbia Corridor) is predominantly zoned industrial, commercial, and open space. Portland City Council recognized the Columbia Corridor as an industrial sanctuary in 1989, aiming to protect the land use for new industry and middle-wage job-generation, which is critical to the city and region's economy. Recognizing the history of the corridor and its continual evolution, this plan will build on previous planning efforts to help guide future transportation investments.
The City of Portland Comprehensive Plan illustrates how N/NE Lombard Street generally serves as the dividing line between land zoned for industrial uses to the north and residential use to the south. Most of the land north of N/NE Lombard Street is designated as an “Industrial Sanctuary” in the 2035 Comprehensive Plan. Within the Industrial Sanctuary designation, nonindustrial uses are significantly restricted to facilitate freight mobility, retain market feasibility for industrial development, prevent land use conflicts, reduce human exposure to freight traffic and potential air quality, noise, and pedestrian safety impacts, and to preserve land for sustained industrial use. The corresponding zones are “General Industrial 1 (IG1),” “General Industrial 2 (IG2),” and “Heavy Industrial (IH).”

North of the rail line and west of NE 11th Ave is zoned “Heavy Industrial.” North of NE Lombard Street between NE 11th Avenue and NE 60th Avenue is primarily zoned “General Industrial 2,” although there are also pockets of “Open Space” and “Residential Farm/Forest.” Between Columbia and Lombard east of NE 60th Avenue to 1205 is a mix of general employment, residential, and open space zoning.

The area south of N/NE Lombard Street is primarily zoned for residential uses with varying densities, and some “Commercial Mixed Use.” There is a higher amount of mixed use zoning on N Lombard Street west of N Interstate Avenue.
There are several activity centers and places of interest along and adjacent to the Columbia and Lombard corridors. Many of the activities in the area are related to the movement of goods, as evidenced by the large number of freight-specific or freight-reliant companies, as well as major parcel delivery companies along or near the corridor. These companies depend on their proximity to major freeways, the Portland International Airport, rail lines, and one another.

There are also several community organizations in the area that generate significant activity. The Native American Youth and Family Center (NAYA), Oregon Humane Society, and Oregon Food Bank all provide several services to the community and attract large numbers of visitors.

Recreational centers also attract visitors to the region. The natural areas around the Columbia River Slough, the Columbia Slough Trail, golf courses, and parks offer a variety of play options. Adjacent to the corridor south of Lombard are a variety of schools including Woodlawn Elementary School, Faubian Elementary School, De La Salle North Catholic High School, and Concordia University.

Finally, there are two grocery stores, a transit hub at N Lombard Street and N Interstate Avenue, and a mix of smaller commercial businesses, restaurants, and bars. This mix of activity centers and key attractions speaks to the diversity of the corridor, as well as the challenge of providing all the uses and needs with appropriate and safe transportation options.
In general, the area context differs between north of Columbia Boulevard and south of Lombard Street, particularly east of Martin Luther King Jr. Boulevard.

The area to the north is primarily employment centers, with more than 27,000 jobs, and almost half of these providing yearly salaries of $40,000 or more. 75% of these jobs are held by employees with less than a bachelor's degree. For reference, the citywide median household income is $61,532, and 48% of Portland residents have attained at least a bachelor's degree. The area to the south of the corridors is primarily residential, but with a diversity of incomes, education levels, and races. The map below shows the wide range of equity scores across the corridor, with unusually high youth poverty rates to the east and far west.

The Portland Bureau of Transportation (PBOT) has committed to increasing diversity, advancing equity, and fostering inclusion in all aspects of the bureau’s work. To inform that work, guide investments, and achieve its Racial Equity Goals, PBOT has created an Equity Matrix that combines two major areas of marginalization (race and income) to estimate levels of vulnerability among a population. The map below shows equity scores for the census tracts in the residential areas south of the corridor. Darker shades indicate higher equity scores, meaning the communities in those areas are more likely to experience deeper socioeconomic vulnerability.

The other major indicator of vulnerability is limited English proficiency (LEP). The map highlights census tracts that have a higher percentage of residents with limited English proficiency than the city as a whole. Many of the census tracts with high equity scores also have higher portions of LEP residents than the citywide average of 3.8%.

Education level is another factor in life outcomes and access to opportunity. 48% of Portland residents have achieved a Bachelor's degree or higher. The map below compares each residential census tract with this citywide average.

The matrix shows deeper levels of marginalization in the census tracts on the eastern end of the study area. Three of these tracts have the highest possible vulnerability score (10), four have below average educational attainment, and two contain higher shares of LEP residents.
Looking at the current and future density of jobs and housing, it is clear most of the jobs are located north of N/NE Lombard Street. The study area for this plan is using a half-mile buffer to the north and south of the Columbia/Lombard corridors. While most of the 17,000 jobs in this study area are north of Lombard, there is additional clustering along N Lombard Street between Interstate Ave and N Woolsey Ave and the NE Portland Highway/NE Cully Boulevard/NE Killingsworth Street intersection. Other jobs are scattered throughout the study area.

By 2035 it is anticipated there will be approximately 36% more jobs within the plan study area, with more significant job clustering west and south of Martin Luther King Jr Boulevard. Outside of the study area, significant job growth is also expected northeast of the corridor in and around Cascade Station that could impact the movement of people and goods along the Columbia and Lombard corridors.

Almost all the residential households in the study area are currently south of N/NE Lombard Street east of Martin Luther King Jr. Boulevard, and on both sides to the west. By 2035 the number of household units is expected to increase by 25%, with much of the increase occurring through increased housing density west of I-5 and east of NE 43rd.

Source: City of Portland Bureau of Planning and Sustainability
Portland’s population has grown by over 200,000 over the past thirty years, with its current population estimated at 648,121 in 2017 and a density of 4,857 people per square mile. The city’s population has been overwhelmingly white throughout most of its recent history, but as the population has grown, so has Portland’s racial and ethnic diversity.

With some exceptions, like the neighborhoods of Bridgeton and East Columbia, the majority of people in the study area live south of Lombard Street, although U.S. Census data uses Columbia Boulevard to divide census tracts north-south. While the city is predominantly white and not Hispanic or Latino, people of color make up a greater portion of the census tracts along these corridors (29.6%) than in the city overall (22.6%). This is especially true for Black and African American residents, who comprise 13.8% of this area but only 5.7% of all of Portland, as well as for Hispanic and Latino residents, who make up 15.3% of the area but 9.7% of the city. The map to the right shows the varied prevalence of residents of color (those who do not identify as White) in the census tracts around the project area.

Education levels in the neighborhoods near the Columbia/ Lombard corridors are lower than in the city as a whole. There is a greater concentration of residents over 25 who have completed less than a bachelor’s degree, and a smaller share of people with a bachelor’s degree or higher. Median household incomes vary, with lower incomes appearing on the west and especially eastern ends of the corridor and higher incomes in the Concordia/Woodlawn neighborhoods. Spanish is the second most common language spoken by residents in the area behind English, with both Spanish and Vietnamese spoken at higher rates than in Portland overall.

**RACE AND ETHNICITY**

- **White Alone:** 70.4%
- **Black or African American Alone:** 13.8%
- **Asian Alone:** 4.8%
- **American Indian and Alaska Native Alone:** 0.9%
- **Native Hawaiian or Other Pacific Islander Alone:** 0.9%
- **Some Other Race Alone:** 1.8%
- **Two or More Races:** 7.7%
- **Hispanic or Latino (all races):** 9.7%
- **All Races:** 77.4%

**EDUCATION**

- **Less than a Bachelor’s degree:** 70.4%
- **Bachelor’s degree or more:** 29.6%

**MEDIAN INCOME**

- **$20k - $40k:** 13.8%
- **$40k - $60k:** 4.8%
- **$60k - $80k:** 0.5%
- **$80k - $100k:** 0.6%
- **> $100k:** 2.3%

**DEMOGRAPHICS**

The two census tracts north of the corridor extend significantly beyond the project area and are low in population and population density. The northwesternmost tract has 3,448 residents with 342 people/square mile, and the northeasternmost tract has 1,531 residents with 160 people/square mile.
The Bureau of Planning and Sustainability (BPS) further addresses neighborhood vulnerability by determining risk or stage of gentrification in the 2018 Gentrification and Displacement Neighborhood Typology Assessment: Key Findings and Methodology Report. The 2035 Comprehensive Plan defines gentrification as "an under-valued neighborhood becoming desirable, resulting in rising property values and changes to demographic and economic conditions of the neighborhood, including a shift from lower-income to higher-income households and often changes in the racial and ethnic make-up of residents and businesses."

Gentrification has often led to the displacement of vulnerable communities. Examining an area’s risk or stage of gentrification can help promote a more equitable distribution of the benefits and burdens associated with public investment. The map below highlights which of the areas adjacent to the corridor are undergoing gentrification, showing that most are already experiencing some stage of gentrification.

Several areas on the western end of the corridor and one on the far eastern end are undergoing late (type 2) gentrification, where neighborhoods no longer have high shares of vulnerable populations and housing markets have experienced high appreciation. The Piedmont neighborhood area is affected by dynamic gentrification, meaning they still have higher shares of vulnerable populations but are experiencing loss of those groups, and their housing markets, though still low or moderate, have appreciated significantly.

The Cully neighborhood has begun gentrifying as well. In Early (type 1) gentrification, the area still has higher shares of vulnerable populations and has not yet experienced demographic changes. However, their historically low/moderate housing market is experiencing high appreciation.

The map also shows areas where poverty rates are higher than average for the youth or older adult population. People younger than 18 and older than 65 often experience unique barriers to mobility due to physical and social constraints associated with their age. Tract 74 contains the highest rate of youth poverty in the city, with 73% of youth living in poverty. Tracts on the eastern and western ends of the corridor are also home to alarmingly high percentages of impoverished youth.

Citywide Poverty Rates:
- 10% of families
- 19% of youth under 18
- 12% of adults over 64
Most people who live near the Columbia and Lombard corridors commute to work in a single-occupancy vehicle. Nonetheless, despite infrastructure that favors motor vehicles, there are still high rates of people commuting on public transit, by bicycle, walking, or working from home.

The commute modes closely align to those in the broader Portland area, with slightly more people commuting by car, truck, or van, and slightly less commuting by walking or working from home. Note that these commute mode percentages do not capture where residents are commuting to or the routes they are choosing, simply the percentage of census tract residents choosing each mode. More analysis on commute routes and corridor use can be found below.

Both Columbia Boulevard and Lombard Street are key routes to move people and goods along the corridor as well as to locations outside locally and beyond. Traffic volumes (seen on pages 16-17) evidence that traffic volumes generally peak during the morning and evening commutes but are quite steady between 6am and 6pm. More information about peak travel times and delay can be seen on page 18.

The percentage of trucks using the road is higher on both streets than Portland in general, although Columbia Boulevard has much higher percentages (14-20%) than Lombard Street (8-10%). Truck volumes are relatively steady on both corridors between 6am and 3pm, when they start to decline. So while overall traffic volumes are highest during the afternoon commute, the morning hours are when truck traffic overlaps with general commute traffic.
PEOPLE MOVEMENT

COLUMBIA
TRAFFIC VOLUMES

24,500 ADT
3,400 trucks

27,000 ADT
5,100 trucks

25,300 ADT
5,100 trucks

23,500 ADT
4,500 trucks
PEOPLE MOVEMENT

LOMBARD

TRAFFIC VOLUMES

21,100 ADT
1,600 trucks

29,000 ADT
2,900 trucks

36,500 ADT
3,600 trucks

EXISTING CONDITIONS 17
The maps below illustrate the normal, free flow travel times along segments of the Columbia and Lombard corridors and the normal time it takes to travel those segments during the average peak travel time:

Lombard Street between Cully Boulevard and Denver Avenue experiences little delay with the average peak travel time only one minute more than free flow travel times. Eastbound travel on NE Killingsworth Street from Cully Boulevard to Sandy Boulevard experiences two minutes more of delay during peak times, a more significant delay given the short length of the segment. It is also near capacity during the PM rush hour, according to 2016 modeling. The greatest delays are on Columbia Boulevard between NE 82nd Ave and Interstate Ave, where peak hour travel times are on average four minutes longer than free flow travel times.

The segment of Columbia Boulevard between NE 82nd Avenue and NE 47th Avenue was also analyzed, as the road narrows from five travel lanes to three east of NE 60th Avenue. This segment experiences one minute of peak hour delay for traffic heading west, and two minutes of delay for traffic heading east. City of Portland modeling data indicates that the eastbound segment is also at or over capacity during the PM peak hour. These corridor travel times do not include the additional delays on the approaches to, or on, freeways or other regional travel routes. More discussion of regional congestion and delay, specifically concerning freight, can be found on page 25 below.

DATA SOURCE: Oregon iPeMS data, May 1- May 31 2019, City of Portland Visum modeling
To better understand commute patterns, an analysis was conducted of where employees live that work in the area between Lombard Street and Marine Drive, and I-5 and I-205. As seen on the map, employees in this area come from all over the region.

This dispersion of employees means the commute trips are on average longer than others in Portland. Almost a third of employees travel between 10 and 24 miles. With limited transit options, most of these trips to employment opportunities must be taken by motor vehicle. However, there are also large numbers of employees that live directly west, south and east of the corridors.

More generally, for those traveling along the Columbia or Lombard corridors in an automobile, the average trip length is approximately 10 miles. Of that trip, around 2 miles occur on either N/NE Columbia Boulevard or N/NE Lombard Street. With each corridor roughly 6.5 miles in length, this means that most of those accessing the corridor by automobile are using approximately one-third of the corridor as part of their trip.

### Auto trip lengths for those who travel on Columbia or Lombard in the project area

<table>
<thead>
<tr>
<th>Trip origin</th>
<th>Average trip length (mile)</th>
<th>Average trip length on corridor (mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All origins</td>
<td>10.3</td>
<td>2.3</td>
</tr>
<tr>
<td>From NE Portland</td>
<td>9.4</td>
<td>1.9</td>
</tr>
<tr>
<td>From Portland</td>
<td>10.3</td>
<td>2.3</td>
</tr>
<tr>
<td>From outside Portland</td>
<td>16.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**WHERE CORRIDOR EMPLOYEES ARE COMMUTING FROM**

On average, people employed in this area commute much farther than the average person employed in Portland.

- **55%**
  - of employees travel less than 10 miles
  - Citywide, 79% of employees travel less than 10 miles

- **31%**
  - travel between 10 and 24 miles
  - Citywide, 15% of employees travel between 10 & 24 miles
There are currently limited options for accessing the corridor by transit. Bus line 75 provides access to NE Columbia Boulevard between NE 33rd Ave and NE 52nd (NAYA). The same line provides access to NE Lombard Street between Martin Luther King Jr Boulevard and the St. Johns neighborhood. Additionally, bus line 70 provides access to NE Columbia Boulevard between NE 21st and NE 33rd Avenue, as well as NE 33rd Drive, NE 21st Avenue and NE Riverside Way north of NE Columbia Boulevard.

The highest number of boardings and alightings in the corridor occur on NNE Lombard Street between Martin Luther King Jr. Boulevard and N Peninsular Avenue. As seen on the map, there are also significant ridership numbers along Martin Luther King Jr. Boulevard, N Dekum Street, and NE Killingsworth Street.

General congestion on the corridors, especially during peak times, is an issue that impacts transit reliability and performance. As seen, there are a number of locations where transit delay is an issue particularly when buses are approaching an intersection.

While these routes currently face issues of delay, there are a number of projects planned for the area intended to improve transit access in the future. Metro has plans to extend Line 11 service on Columbia Boulevard between N Vancouver Avenue and Interstate 205, although a timetable for this addition has not been determined.

Finally, a job connector shuttle is funded and being planned that will provide access from fixed-route transit lines to specific areas within the Columbia Lombard corridor. The specific route and timetable has not yet been established, but will provide transit to some of the lower density employment areas along the corridor not able to be served by traditional transit service.
Corridor snapshots

High speeds combined with low-quality and intermittent sidewalks, substandard bike lanes, and few opportunities to cross make a treacherous place to walk and bike to access jobs and other corridor amenities.

NE Lombard Place is a key connection between NE Columbia Blvd and NE Lombard St, particularly for Over-Dimensional freight. Complex intersections at both ends of the street make using this link a stressful and potentially hazardous experience for all corridor users.
Portland's Transportation System Plan (TSP) is a 20-year plan that guides transportation policies and investments. The plan's street classifications outline what streets and areas are intended to serve various transportation modes. It also outlines a prioritization of modes for people movement, placing walking first, followed by bicycling, transit, automated multi-passenger vehicles, other shared vehicles, and finally low/no occupancy vehicles.

Both corridors are identified in the TSP as “City Walkways,” and there is a pedestrian district identified to the south of N Columbia Boulevard near N Denver Avenue and N Interstate Avenue. In PedPDX (adopted June 2019), N Lombard Street is a Major City Walkway west of Martin Luther King Jr. Boulevard and as part of a pedestrian district between N Mobile Avenue and Interstate 5.

Martin Luther King Jr. Boulevard between the corridors is designated a “Major City Walkway.” The entire Lombard corridor is identified as a “City Bikeway,” as well as N Columbia Boulevard west of Martin Luther King Jr. Boulevard and west of NE 82nd Avenue. A number of “Major City Bikeways” are designated on routes that intersect the corridor, including N Interstate Avenue, N Vancouver Avenue, and NE Cully Boulevard/NE Alderwood Road. The section of NE Columbia Boulevard between NE 33rd Avenue and NE 52nd Avenue is designated as a “Major Transit Priority,” as well as N Lombard Street west of Martin Luther King Jr. Boulevard and NE Killingsworth Street west of NE 82nd Avenue. The rest of the Columbia corridor is designated a “Transit Access Street.”

The entirety of the Columbia corridor in the study area is identified as a “Priority Truck Street” in the TSP, as well as Lombard east of Martin Luther King Jr. Boulevard. To the east NNE Lombard Street is a “Truck Access Street.” Additionally, many streets to the north of the Columbia corridor are also “Priority Truck Streets,” including: N Denver Avenue, Martin Luther King Jr. Boulevard, NE 47th Avenue, NE Cornell Road, NE Alderwood Road, and NE 82nd Avenue. Both Interstate 5 and Interstate 205 are designated as “Regional Truckways.”

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Both the Columbia and Lombard corridors are designated as "Major Emergency Response" routes. The street design classification for the Columbia corridor is an "Industrial Road," as well as Lombard east of Martin Luther King Jr. Boulevard. Between Martin Luther King Jr. Boulevard and Interstate 5 N/NE Lombard Street is designated a "Civic Corridor," and to the west of Interstate 5 a "Civic Main Street." For the traffic classification, Martin Luther King Jr. Boulevard divides the classifications on the corridor. N Columbia Boulevard to the west of Martin Luther King Jr. Boulevard is a "Regional Trafficway/Major City Traffic Street," the same classification of Lombard to the east. Columbia to the east is designated as a "Major City Traffic Street," and Lombard to the west is a "District Collector Street." Martin Luther King Jr. Boulevard is also a "Regional Trafficway" north of Lombard.

For more information about street classifications, consult the Portland 2035 Transportation System Plan.
A strong local economy has contributed to increased congestion, decreased travel speeds, and unreliable trip times on many of the region’s freeways and other main arterials. This not only impacts commute and general trip times, but also directly affects freight and commerce. While previously freight companies could rely on off-peak hours to move goods and services throughout the region, increased congestion can mean missed delivery schedules and increased shipping costs. It also makes the region less competitive economically for manufacturing and distribution jobs.

According to Metro’s 2018 Regional Freight Strategy, the region’s traded sector industries are anchored by six core clusters: clean technology and green cities; computers and electronics; health sciences and technology; metals and machinery; software and media; and sporting equipment, apparel and design.

As seen below, population and employment growth has led to even more dramatic increases in hours of congestion and daily vehicle hours of delay. Many of the trucks that begin or end using the Columbia or Lombard corridors utilize the region’s freeways to move goods around Portland and beyond. More than 18 thousand trucks cross the I-5 bridge between Oregon and Washington, and almost 9 thousand use I-205 north of the Portland International Airport. Congestion on and near these regional freeways inhibit the ability of businesses to connect to the global marketplace.

By 2035, freight tonnage is expected to double from 2007 numbers. And more facilities, such as the United States Post Office, continue to develop on or near the Columbia and Lombard corridors to benefit from the access to air, roads, and rail. This means increased truck volumes both on the corridors and regionally.

From ODOT’s “Portland Region 2018 Traffic Performance Report”

**Regional growth**

Percent change from 2015-2017

| Source: U.S. Census, Oregon Employment Department, Metro, ODOT corridor total |
|------------------|------------------|------------------|------------------|
| 2015            | 2017            |
| Daily vehicle hours of delay | 67.2k | 80.7k |
| Hours of congestion | 112.3 | 127.3 |
| Employment METRO REGION | 1.15M | 1.26M |
| Population METRO REGION | 2.40M | 2.56M |
| Freeway length LANE MILES | 567 | 568 |
| +20.0% | +20.0% |
| +13.4% | 12.6% |
| +9.6% | 13.3% |
| +3.3% | +0.2% |
| 80.7k hours | 127.3 hours | 1.26M jobs | 2.48M people | 568 miles |

**Existing Conditions**

25
TRANSPORTATION CONTEXT

PEDESTRIAN NETWORK

While some sidewalks exist on both Columbia and Lombard, there are multiple gaps in the pedestrian network that make walking uncomfortable and unsafe. Additionally, there are a lack of enhanced crossings that make it difficult for pedestrians to safely and efficiently get from one side of a corridor to the other.

The map below identifies where sidewalks currently exist. Columbia Boulevard has sidewalks on both sides of the street for most of the corridor. However, gaps on one or both sides still exist including at dangerous locations such as the NE 33rd Avenue bridge and the intersection with NE 42nd/NE 47th Avenues. The Lombard corridor has an almost complete sidewalk network to the west of NE 8th Avenue, but lacks any sidewalks between NE 8th Avenue and NE 60th Avenue. Additionally, there are inadequate facilities where Lombard Street crosses Interstate 5 and NE 82nd Avenue. Where sidewalks exist on the Lombard and Columbia corridors, they are uncomfortable for pedestrians. They are primarily along the curb with little buffer between the sidewalk and motor vehicle travel lanes.

There are also very few sidewalks on streets to the north of Columbia Boulevard, and where they exist they are not typically complete. This limits the ability of pedestrians to safely access jobs and recreational activities and discourages walking trips.

The map also evidences the disparity in sidewalks between different parts of the City. While there is a fairly complete sidewalk network south of Lombard Street and west of NE 42nd Avenue, large network gaps exist to the east of NE 42nd Avenue. North of Columbia Boulevard there are very few sections of connected sidewalks.

The map below does not illustrate existing sidewalk condition or level of comfort for pedestrians. This can vary depending on the width of the sidewalk and how far away from the road the facility is located.
PedPDX, adopted in June 2019, identifies both Columbia and Lombard as priorities for sidewalk gap completion and addressing crossing deficiencies. NE Columbia Boulevard east of NE 60th is identified as a Tier 3 Crossing Gap need, and the majority of N/NW Lombard Street is identified as a Tier 1 or Tier 2 need. NE Portland Highway between NE Cully Boulevard and NE Killingsworth is identified as a Tier 1 need.

PedPDX also identifies potential crossing deficiencies, which are existing marked pedestrian crossings that may not meet the City of Portland’s guidance for crosswalk design. None of these are located on the Columbia or Lombard corridors, as there limited existing marked pedestrian crossings.

There are also multiple priority sidewalk gaps along the corridor that were identified as priorities in the plan. NE Lombard between NE 42nd Avenue and NE 60th Avenue is identified as a Tier 2 priority. Tier 3 priorities include: N Columbia Boulevard west of N Borthwick Avenue and between NE 53rd Drive and NE 52nd Avenue; Lombard between N Montana Avenue and N Mississippi Avenue and between NE 8th Avenue and NE 42nd Avenue; and NE Killingsworth between NE 82nd Avenue and NE Columbia Parkway.

The tier level determines the priority level for funding, and while in theory Tier 1 projects will be completed before Tier 2 or 3, other factors will be considered in identifying near term sidewalk and crossing implementation opportunities, including leverage opportunities, funding sources, project readiness, and feasibility.
Adequate pavement condition is important for safe and reliable movement of people and freight. PBOT’s target is to maintain 80% of busy streets in Fair or better condition, and 70% of residential streets in Fair or better condition. Unfortunately, the condition of both busy and residential streets has been declining since 2015. Only 50% of busy streets and 36% of residential streets met the target of Fair or better in 2017.

The majority of Columbia Boulevard is in Fair or better condition, and the section of N Columbia Boulevard between N Kerby Avenue and N Interstate Place will soon be resurfaced with Fixing Our Streets funding. The Oregon Department of Transportation also plans to resurface N Lombard Street between N Woolsey Avenue and N Delaware Avenue as part of a multimodal safety project. However, there are still sections of both Columbia and Lombard that are poor and have no current plans for resurfacing.

Sufficient lighting is also important for providing safe transportation facilities. The map below illustrates where lighting is present or absent along the Columbia and Lombard corridors, as well as whether it is only on one side of the street or both sides.
The bicycle facilities that exist along, near, and across the Columbia Lombard corridors are limited and sporadic. On the corridors, there are striped bicycle lanes along NE Lombard Street/NE Portland Highway/NE Killingsworth Street between NE 11th Avenue and Interstate 205, as well as on NE Columbia Boulevard between NE 82nd Avenue and NE Killingsworth Street.

In addition, north-south bicycle lane connections exist on N Interstate Avenue, N Vancouver Avenue, N Denver Avenue, NE 33rd Drive, and on Martin Luther King Jr. Boulevard north of NE Columbia Boulevard. Despite the presence of these facilities, many suffer from a lack of adequate separation and width, connectivity with other routes, and continuity through bridges or underpasses.

In the future, a funded project on NE 42nd Avenue/NE 47th Avenue/Comfoot Road will construct separated bicycle facilities, and a project on N Lombard Street between N Woodley Avenue and N Delaware Avenue will add bicycle facilities.

Within the Columbia Lombard study area are also neighborhood greenways, residential streets that are designed to prioritize bicycling and enhance conditions for walking. These provide an alternative east-west option along NE Bryant Street, NE Durham Avenue, and NE Holman Street. However, these streets divert riders far from the corridor (more than ½ mile in some places) and do not provide easy access to various points along the corridor.

Recommendations for future bicycle network improvements, both in the City and specific to the Columbia Lombard corridor, derive from the City’s “Portland Bicycle Plan for 2030” adopted by City Council in 2010. Recommendations for this corridor include bicycle facilities on N Columbia Boulevard between Argyle Way and Martin Luther King Jr. Boulevard, and Lombard Street where facilities do not currently exist. Additionally, facilities are called for on many of the north-south routes that intersect with Columbia or Lombard and do not currently have bicycle facilities, as well as completion of the Columbia Slough Trail that would provide an alternative parallel route to Columbia Boulevard.
The City of Portland is working to eliminate deaths and serious injuries through the Vision Zero program, adopted in 2015. More than half of deadly crashes occur on just 8% of Portland’s streets, and both Columbia and Lombard are identified as corridors on this high crash network. Additionally, the intersection of NE Killingsworth at the Interstate 205 off-ramp is one of the 30 most dangerous intersections in the City.

The map below highlights all crashes involving people walking or biking, as well as serious or fatal crashes involving people in cars between the years 2012 and 2016. The sole pedestrian fatality and majority of injuries have occurred on N/NE Lombard Street west of Martin Luther King Jr. Boulevard. The other injuries on Columbia and Lombard primarily occurred at intersections, although some of these are currently unsignalized or lack pedestrian enhancements.

Most bicycle crashes also occurred on N/NE Lombard Street west of Interstate 5, although the sole fatality occurred on NE Lombard Street under the NE 42nd Avenue bridge. Other crashes occurred sporadically throughout the corridor.

Motor vehicle crashes are evident throughout the corridor, but the serious and fatal crashes are more clustered and in different locations than the majority of bicycle and pedestrian crashes. Multiple fatal crashes occurred on or around the NE 33rd Avenue and NE 42nd Avenue bridges, and clustering of serious injuries occurred at the intersections of Martin Luther King Jr. Boulevard/NE Columbia Boulevard, Martin Luther King Jr. Boulevard/NE Lombard Street, the NE 33rd Avenue-Columbia Boulevard Ramp, NE Lombard Street and NE 60th Avenue, NE 89th Avenue and NE Killingsworth Street, and NE Killingsworth Street/Interstate 205. Alcohol and/or drugs were contributing factors in many of the serious and fatal crashes.

Not identified on the map are crashes that have occurred between 2017-2019. In just the first half of 2019 there have been three fatalities on the corridor: one involving a person on a bicycle, one involving a person walking, and one involving a person in a vehicle.
As noted previously, the Columbia and Lombard corridors are suffering from a number of issues: aging infrastructure, gaps and deficiencies in the multimodal network, traffic congestion, increased trucking activity, and safety issues. The map to the right more identifies some of the specific locations along the corridor where there is a known deficiency or need.

Several items on the corridor constrain or impact freight movement, including a height constraint on N Columbia Boulevard at Interstate 5, low vertical clearance on NE 60th Avenue between NE Columbia Boulevard and NE Lombard Street, congestion on freeways, and railroad crossing issues at NE Cully Boulevard and NE Lombard Place/NE 11th Avenue. These issues force trucks to use alternative routes and increase the risk of hazard and delay.

There are many locations on the corridor where pedestrian crossings are needed, especially in the section of N Lombard Street between Rodney Avenue and Wayland Avenue. However, in some of these same locations, as well as many others, there are congestion issues. There are several gaps in the bicycle network, both to the north of N/NE Columbia Boulevard along the Columbia Slough Trail as well as on sections of Columbia and Lombard. Some of these also correlate with known freight needs such as on Martin Luther King Jr. Boulevard between N/NE Columbia Boulevard and N/NE Lombard Street.

Additionally, many signals on the corridor need signal updates or improvement to function adequately, and several intersections are over capacity or confusing. This can lead to unpredictable behavior by drivers and increase delay.

The map to the right identifies a number of issues identified by previous planning efforts and stakeholders. It is anticipated that more needs will be identified through public engagement and additional discussions with stakeholders.
Some of the issues along the corridor were identified in previous planning efforts and are being addressed by funded projects along or near the corridor.

These funded projects include: a safety and multimodal improvement project on N Lombard Street between N Woolsey Avenue and N Delaware Avenue; a roadway reconstruction project on NE 47th Avenue; a new street connection between NE 46th Avenue and NE 47th Avenue; replacement of the NE 42nd Avenue bridge with improved multimodal access; a new signal at NE Columbia Boulevard and NE 42nd Ave; a new multi-use path section on NE Elrod Drive west of NE 33rd Avenue and adjacent to NE Cornfoot Road; and a signal upgrade at NE Columbia Boulevard and NE Alderwood Road. Additionally, several funded projects are occurring south of the Lombard corridor in the Cully neighborhood.

Many other improvements are planned but not currently funded. These projects are in various stages of project development. For more information about the origin of the funded and planned projects, see the Policy Scan in the appendix of this report.
There are a significant number of local, regional, and state policies that must be considered as part of the Columbia Lombard Mobility Plan. The following is a summary of relevant policies; a more extensive analysis can be found in the Appendix.

In general, one of the most significant policies that helps the City prepare long-term for and manage expected population and employment growth is the Comprehensive Plan. The 2035 Comprehensive Plan (adopted in 2018) outlines several policies related to employment area, transportation, recreation, and neighborhoods. Specific to transportation, the Transportation System Plan (TSP) is the 20-year plan to guide policies and investments in Portland by: supporting the City’s commitment to Vision Zero by saving lives and reducing injuries to all people using our transportation system; helping transit and freight vehicles to move more reliably; reducing carbon emissions and promoting healthy lifestyles; keeping more money in the local economy, as we spend less on vehicles and fuel; and creating great places.

Regionally, every four years Metro updates the Regional Transportation Plan that guides and coordinates investments in the regional transportation system, which serves Clackamas, Multnomah, and Washington counties. The plan establishes policies and priorities for: travel by motor vehicle, transit, foot and bicycle, movement of goods and services; and street design and the efficient management of the overall system. The 2018 RTP includes an updated list of projects of regional significance and aligns with the TSP.

There are also several mode-specific policies with implications for planning in the corridor.

The most recent is PedPDX, the Citywide Pedestrian Plan anticipated to be adopted in June 2019. The plan identifies the key strategies and tools PBOT will use to make Portland a great walking city for everyone, and prioritizes sidewalk and crossing improvements.

In 2018, the Regional Freight Plan was updated as the Regional Freight Strategy, providing a coordinated vision and approach for enhancing freight and goods movement and prioritizing freight investments based on clear priorities.

The 2018 Regional Transit Strategy (RTS) sets regional transit policy and a framework for working towards implementing a regional transit system.

In 2017 ODOT developed the Freight Highway Bottlenecks Project (FHPB) to identify locations on Oregon’s highway network that were experiencing significant freight truck delay, unreliability and increased transportation costs.

The Oregon Freight Plan was adopted in 2011 and revised in 2017. It provides a roadmap for the Oregon Department of Transportation (ODOT), other state and local agencies, tribal governments and the private sector to work together to preserve and enhance the state’s freight system.

The Regional Active Transportation Plan (ATP) was adopted in 2014 and provides a vision, plan and policies for communities in our region to increase transportation options and support economic development, healthy active living, and equity.

The 2013 Port of Portland Rail Plan identifies facility improvements both within the Port and around the region that will help the Port retain its competitive advantage.

The 2011 Airport Futures plan, a collaborative effort between the City of Portland, Port of Portland, and the Portland-Vancouver metropolitan community, created an integrated long-range development plan for Portland International Airport (PDX).

The Portland Bicycle Plan for 2030 was adopted in 2010, which updated the TSP, including bicycle classifications, recommended bikeway network (including suggested bicycle facilities), and programs to support bicycling.

Other plans and strategies are focused specifically on safety.

The 2018 Regional Safety Strategy provides a specifically urban-focused overarching data-driven framework for increasing traffic safety on roadways in the greater Portland area. The plan focuses on strategies and actions drawn from best-practices and proven to reduce traffic related deaths and serious injuries. Columbia and Lombard streets are identified as high injury corridors in census tracts with higher than regional average concentrations of People of Color, English language learners.

The City’s Vision Zero Action Plan, adopted in 2016, looks at equitable and data driven actions that will eliminate deaths and serious injuries for all who share Portland streets by 2025.

The State and local policies have also been developed to address climate change.

The Statewide Transportation Strategy (STS) was initiated out of legislative direction to examine ways that transportation can reduce greenhouse gas (GHG) emissions and help achieve Oregon reduction goals.

The 2015 Climate Action Plan outlines the actions the City of Portland and Multnomah County will take in the next five years to keep Portland on the path of reducing local carbon emissions.

Finally, there are a number of policy documents and plans with a more specific focus on the Columbia Lombard corridor.

The 2016 TriMet North/Central Service Enhancement Plan is a future vision for transit service in North Portland, northwest Portland, Northeast Portland west of I-205, Southeast Portland west of I-205 and north of Division, and downtown.

In 2013 Portland City Council approved rezoning of the Colwood Golf Course, addressing a needed increase in the supply of industrial land while ensuring 85 acres would remain as open space.

In 2012, the Cully Commercial Corridor and Local Street Plan was adopted that includes a set of strategic rezoning proposals to meet the community’s goal for a vibrant pedestrian-oriented Cully commercial corridor area with more neighborhood serving businesses.

The same year, the Columbia Multimodal Corridor Study looked at current and future congestion and travel times in order to identify bottlenecks that will erode the Corridor’s transportation advantage.

In 2006, the Portland Freight Master Plan identified projects, programs, and activities to improve freight reliability and efficiency to support long-term economic development. It is scheduled to be updated in 2019-2020.

Almost 20 years ago, in 1999 the Columbia Corridor Transportation Study developed a comprehensive vision for transportation policy and improvements in the area from Rivergate Industrial District to the City of Troutdale.

Other plans and projects in the area include the Cully-Concordia Community Assessment and Action Plan, Delta Park Widening Project, Hayden Island Plan, and the St. John’s Truck Strategy.

For a more detailed summary of relevant plans and policies, please see the Appendix.