Appendix B: Existing Conditions

Three Mile Lane Area Plan

May 2021

MEMORANDUM

Existing Land Use and Zoning Analysis

McMinnville Three Mile Lane Area Plan

DATE	January 25, 2019
TO	Heather Richards and Jamie Fleckenstein, City of McMinnville
FROM	Darci Rudzinski, Kate Rogers and Andrew Parish, Angelo Planning Group Ken Pirie and Morgan Maiolie, Walker Macy
CC	Michael Duncan, ODOT PMT

INTRODUCTION

The purpose of this memorandum is to describe the existing pattern of land use, zoning, property ownership, urban design, and other characteristics of the Three Mile Lane area. After listing existing conditions, this memorandum provides a synthesis of issues and opportunities for the Three Mile Lane area.

The Three Mile Lane study area is shown in Figure 1. For the purposes of this memorandum, the study area is segmented into several subareas to aid with analysis and interpretation. These subareas were delineated based on land uses, zoning designations, and site characteristics.

LAND USE AND ZONING

Existing Conditions

Land Uses

Figure 1 provides a map of the current land uses within the study area. Land use data was summarized and modified from tax assessor data provided by Yamhill County. Following the map is an overview of land uses in the study area, followed by more detailed descriptions by subarea.

As illustrated in Figure 2, the study area includes a wide range of land uses. South of Three Mile Lane, the study area is dominated by the McMinnville Municipal Airport (identified as public/institutional use), industrial, and vacant land. A few commercial and manufactured home uses are also identified to the west. North of Three Mile Lane, the uses are more mixed, with fewer large parcels except for the Evergreen Aviation & Space Museum complex. The north side includes single-family and multi-family uses, mobile homes, and commercial, industrial, and vacant uses. Land uses in the study area are further described by subarea in Table 1. A series of images (Figure 3) follows the land use table and illustrates some of the uses found in the study area.

Figure 1: Three Mile Lane Study Area

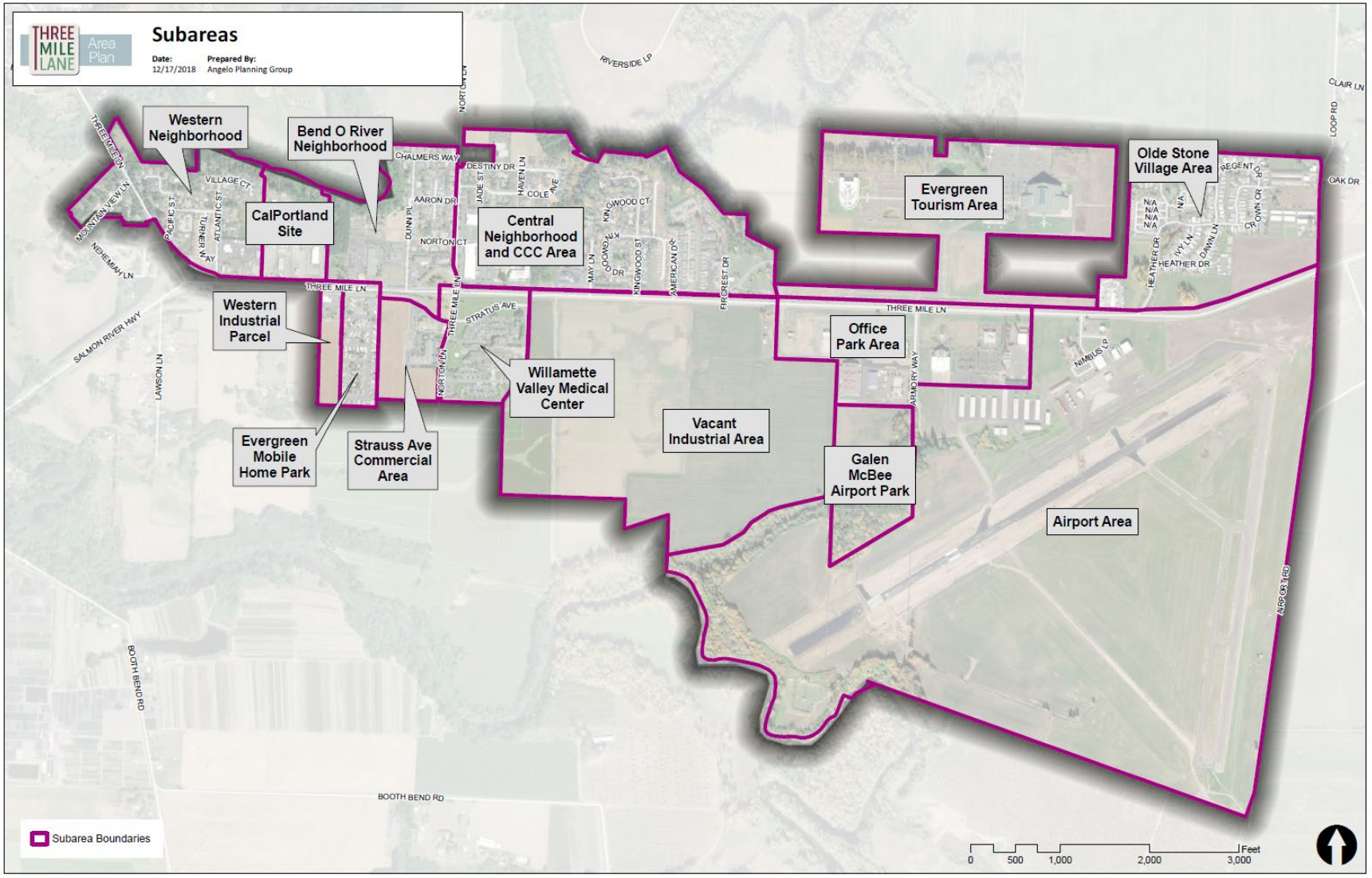


Figure 2: Study Area Land Uses

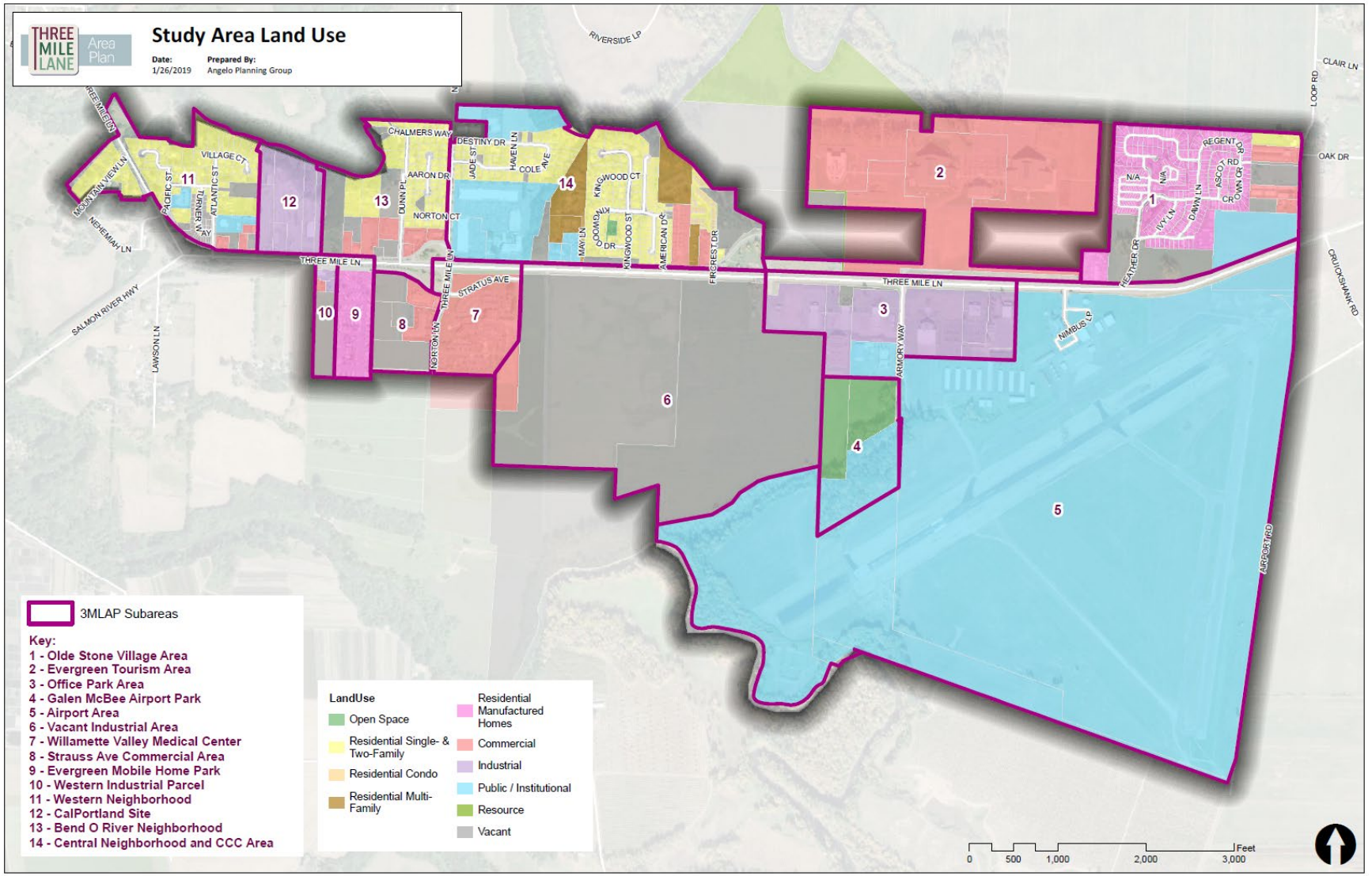


Table 1. Land Use Descriptions by Subarea

SUBAREA	LAND USE DESCRIPTIONS
1 - Olde Stone Village Area	• At the east end of the study area, this subarea is largely comprised of the Olde Stone Village mobile home park. There are a few commercial sites at the eastern end of the subarea, including a storage facility and animal shelter, and a few vacant sites along Three Mile Lane. There is also an RV sales lot along Three Mile Lane at the southwest corner of the subarea. • Olde Stone Village includes both manufactured homes on landscaped sites and RV trailers on concrete pads. The Village also includes recreational amenities at the center of the site.
2 - Evergreen Tourism Area	• The Evergreen Tourism Area is identified as commercial, and includes four large buildings devoted to tourist uses. Buildings are mostly surrounded by lawn and a few scattered trees. Large airplanes are permanently on display in front of the museum, and are a prominent feature in this area.
3 - Office Park Area	• The Office Park Area is identified as industrial, and is mostly developed with large office buildings sitting on large landscaped lots with surface parking.
4 - Galen McBee Airport Park	• The Airport Park subarea is a combination of open field and heavily wooded park space. A series of walking trails weave through the park and a parking lot sits at the entry.
5 - Airport Area	• The Airport Area is dominated by the McMinnville Municipal Airport, which is identified as a public/institutional use. Most of the land is occupied by the airport runways. •
6 - Vacant Industrial Area	• This subarea is vacant and portions may be in agricultural use.
7 - Willamette Valley Medical Center	• The Willamette Valley Medical Center occupies the entirety of this subarea. The large building is surrounded by surface parking and lawn area.
8 - Strauss Ave Commercial Area	• About a third of the Strauss Ave Commercial Area is developed with commercial uses, and the remainder is vacant. The commercial portion includes a Comfort Inn & Suites and an office building. • The existing Planned Development Overlay Ordinance for a portion of this area allows for senior living facilities. There has been development interest in more of a mix of residential and commercial uses in this subarea.
9 - Evergreen Mobile Home Park	• The Evergreen Mobile Home Park occupies the entirety of this subarea and is composed of manufactured homes and RVs.

10 - Western Industrial Parcel	• Close to Three Mile Lane/Stratus Ave in the Western Industrial Parcel, there is a small cluster of industrial and commercial buildings surrounding a large parking area. • The remainder of the subarea, to the rear of the industrial/commercial sites, is vacant.
11 - Western Neighborhood	• The Western Neighborhood is mostly residential, but includes a few commercial and vacant sites near Three Mile Lane, as well as a u-pick blueberry farm and fraternal/religious uses. • The commercial sites include a car repair shop and a gas station, and are characterized by older buildings and large, un-landscaped parking areas between the buildings and the street. • The Habitat for Humanity Aspire Subdivision is currently under construction near the middle of the subarea. A few homes have been built near NE Atlantic St and E Tilbury St. • The remaining area is identified as residential single- and two-family, and is characterized by older homes, some on larger lots.
12 - CalPortland Site	• The industrial site includes multiple buildings associated with the CalPortland concrete plant, as well as areas for aggregate loading/unloading and maneuvering of large vehicles.
13 - Bend O River Neighborhood	• This subarea includes a mix of commercial, residential, and vacant land uses and a range of building types. • The commercial area near Three Mile Lane includes a McDonald's and Red Lion Inn & Suites, as well as retail, office, and medical office uses. • The residential area to the north of the commercial sites includes single-family and duplex homes built in the 1980s and 1990s, plus a few large parcels with older homes.
14 - Central Neighborhood and CCC Area	• This subarea is fairly large and includes a mix of commercial, residential, public/institutional, vacant, and open space land uses. The residential portions contain a range of housing types. • The shopping center that includes Chemeketa Community College (CCC) and the movie theater is identified on the map as public/institutional, but also includes commercial uses. The buildings are surrounded by a large surface parking area. Commercial buildings appear to be underutilized, as evidenced by the amount of vacant parking spaces during the space utilization review (see TM2). • The residential area north of the shopping center/CCC is developed with newer single-family homes. The New Horizons Church sits adjacent to this neighborhood. • A cluster of medical clinics is located between the shopping center and residential area to the east. This area includes newer buildings surrounded by well-maintained landscaping. • A drainageway runs from Cumulus Ave north to the South Yamhill River, bisecting the sub area and reducing connectivity. • Behind the medical clinics is a cluster of two-story multi-family buildings.

	• To the east of Villa del Sol, the Kingwood neighborhood includes single-family and duplex homes. Newer single-family homes on NE American Dr have smaller lots. Between Kingwood and American Dr is a long site that is currently under development with single family homes. • At the east end of the subarea is the Fircrest Community Senior Living development, which includes mostly condos and a memory care center. The adjacent Parkland Village Retirement Community includes an assisted living facility and independent living units. The vacant property in this area (larger parcel east of Fircrest Senior Living development) was recently rezoned to R-4 and has building permits in for a 66-unit apartment complex.

Figure 3: Select Images of Land Uses in the Study Area

Evergreen Tourism Area

Office Park Area

Galen McBee Airport Park

Willamette Valley Medical Center

Strauss Ave Commercial Area

Evergreen Mobile Home Park

Western Neighborhood

CalPortland Site

Bend O River Neighborhood

Bend O River Neighborhood

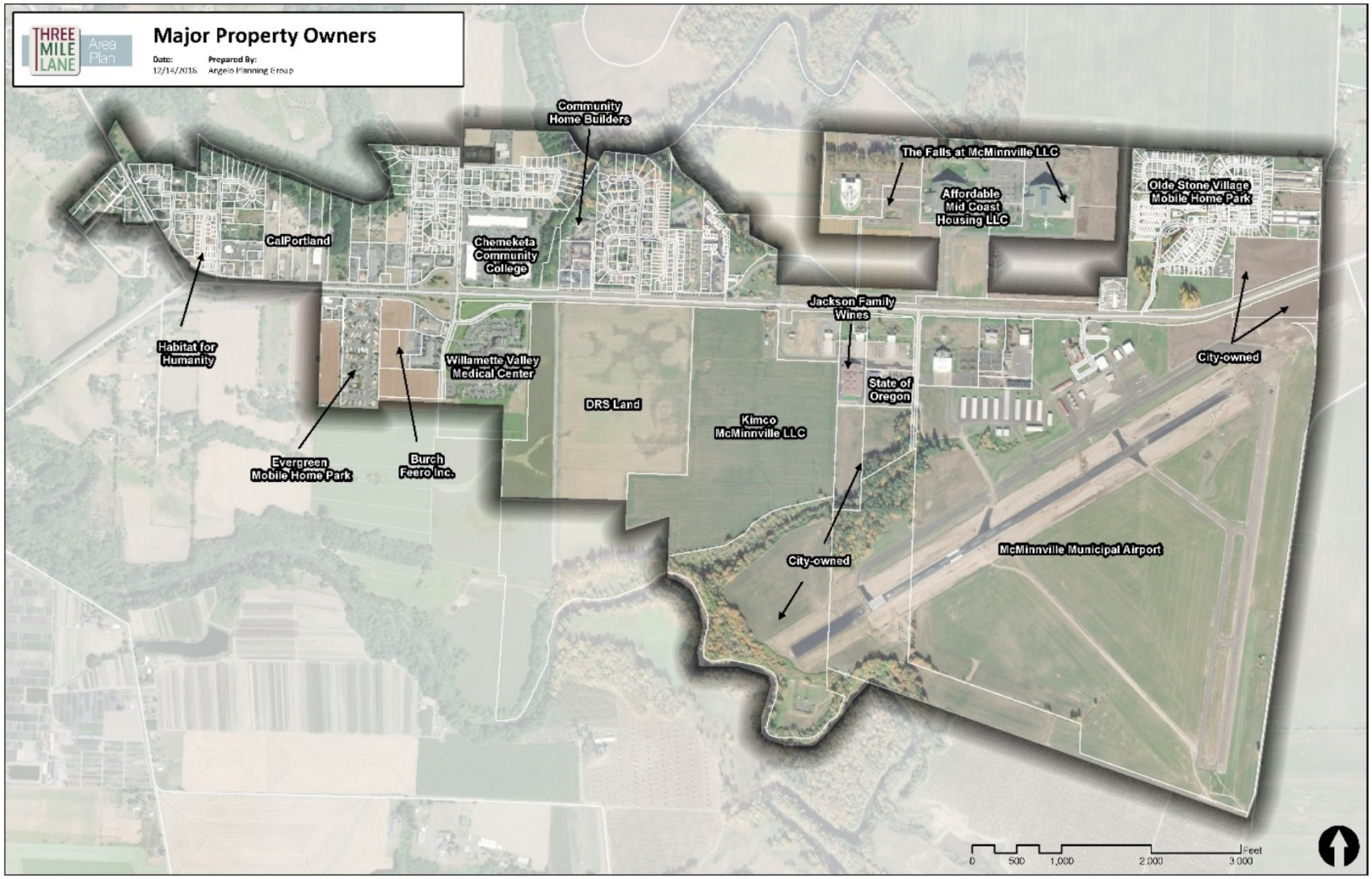
Central Neighborhood and CCC Area

Central Neighborhood and CCC Area

Property Ownership

Figure 4 provides a map of major property owners in the study area. The City of McMinnville owns a significant portion of the study area—mostly around the airport, but also the two vacant properties at the east end of Three Mile Lane, as well as the public parks. The two large vacant sites to the west of the airport are owned by DRS Land and Kimco McMinnville LLC. Chemeketa Community College owns the entire shopping center in which its campus sits. The Falls at McMinnville LLC owns the Wings & Waves Waterpark and The Falls Event Center sites, but the Evergreen Aviation & Space Museum site is owned by Affordable Mid Coast Housing LLC. The museum itself is a nonprofit, and leases out the buildings. Other major landowners include Olde Stone Village, Baker Rock Resources West LLC, which owns the CalPortland site, and Habitat for Humanity, which owns the Aspire Subdivision in the Western Neighborhood Subarea.

Figure 4: Ownership Map for Major Properties



Comprehensive Plan Designations

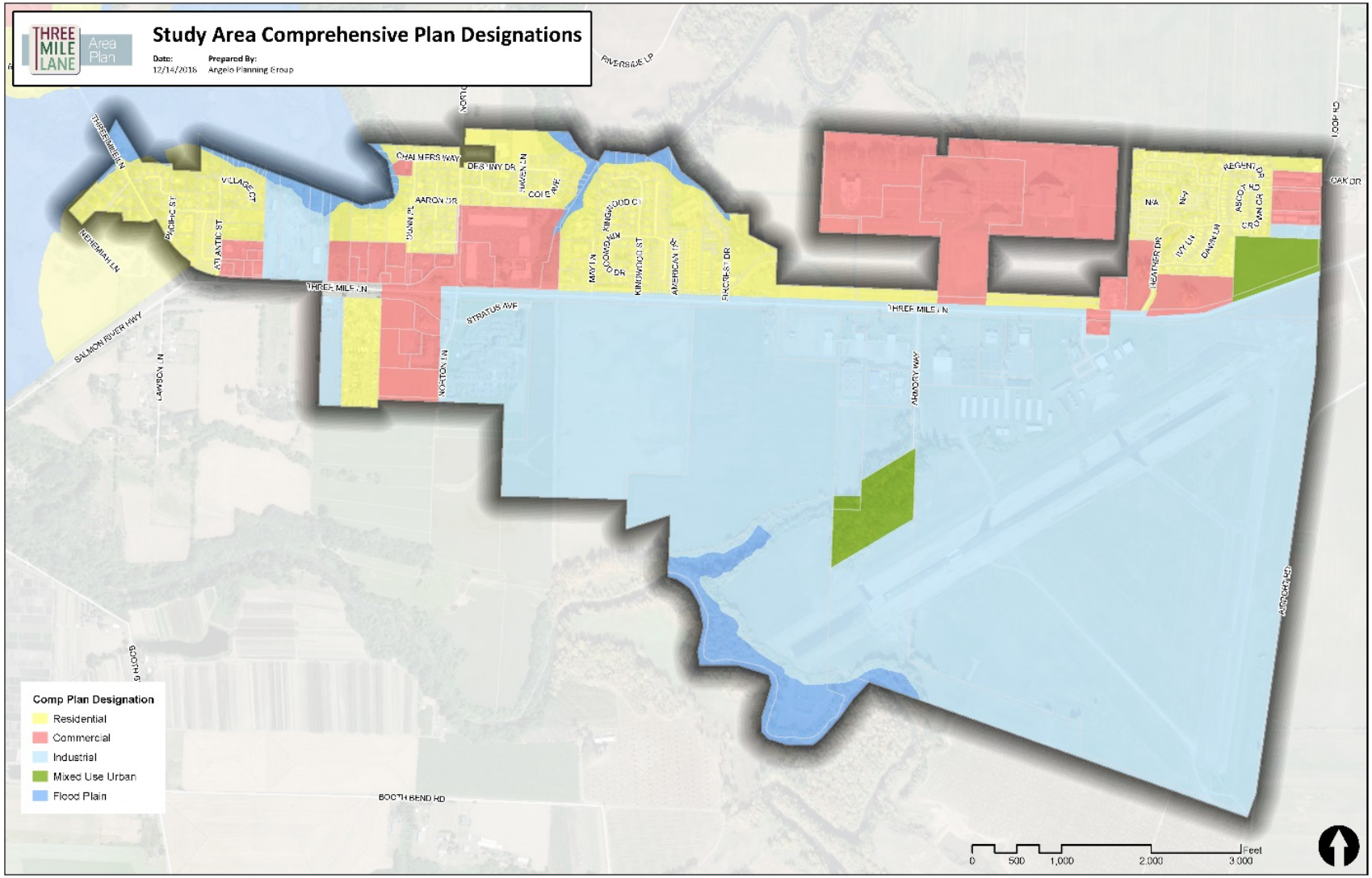
Figure 5 provides a map of the current comprehensive plan designations within the study area and Table 2 provides a description of each designation. Nearly all of the land in the study area south of Three Mile Lane is designated for Industrial use. Exceptions include a few Commercial parcels, a small area of Residential (the Evergreen Mobile Home Park), Galen McBee Airport Park, which is designated as Mixed Use Urban, and the Floodplain designation along the South Yamhill River.

The area north of Three Mile Lane contains a greater mix of comprehensive plan designations, with Residential and Commercial accounting for the greatest land area. There is also one area designated as Industrial (the CalPortland site), and one large vacant, City-owned parcel at the east end of the study area designated as Mixed Use Urban.

Table 2: Comprehensive Plan Designations Summary

COMPREHENSIVE PLAN DESIGNATION	DESCRIPTION
Residential	This designation covers all the zoning designations from R-1 through R-4, and any additional zones that may be created for residential uses.
Commercial	This designation covers all the commercial zoning designations, from C-1 to C-3, including the Office Residential zone, and any future zoning categories created for commercial uses.
Industrial	This designation covers all the industrial zones, from M-L through M-2, and any future industrial designations.
Mixed Use Urban	The Mixed Use Urban designation is applied to certain parcels of land which are located along Three Mile Lane for which the best future land use is undetermined. Development for these parcels will be judged individually against the criteria set out in the Three Mille Lane Planned Development Overlay.
Flood Plain	This designation corresponds to the flood plain zoning classifications.

Figure 5: Comprehensive Plan Map



Zoning Designations

Figure 6 provides a map of the base zoning designations within the study area, based on City of McMinnville GIS data.

The study area includes 11 different zones. High-level summaries of each zone, including its purpose, allowed uses, and development standards, are provided in Table 3. The predominant zoning designation (by acreage) within the study area is industrial. Most of the land in the study area south of Three Mile Lane is designated General Industrial (M-2) or Limited Light Industrial (M-L). Much of this industrial land is occupied by the McMinnville Municipal Airport. On the north side of Three Mile Lane, there are large areas zoned General Commercial (C-3), including the area that includes the Evergreen Aviation & Space Museum; a small area zoned Travel Commercial (C-2); and a mix of residential zoning. There is also one area zoned Office/Residential (O-R), between the R-1 and C-3 areas in the Central Neighborhood. Most of the area zoned for Single-Family Residential (R-1 and R-2) is found in the Western and Central Neighborhoods. Multiple-Family Residential (R-4) zoning is found in separate areas within the study area—including the two large mobile home parks, and in the Western Neighborhood, Bend O River, and Central Neighborhoods.

Additionally, there are many Planned Development Overlays within the Three Mile Lane area, which include regulations that may vary from the standard requirements of the underlying zone. These overlays are shown in Figure 7: Planned Development Overlays In the Three-Mile Lane AreaFigure 7.

Figure 6: Zoning Map

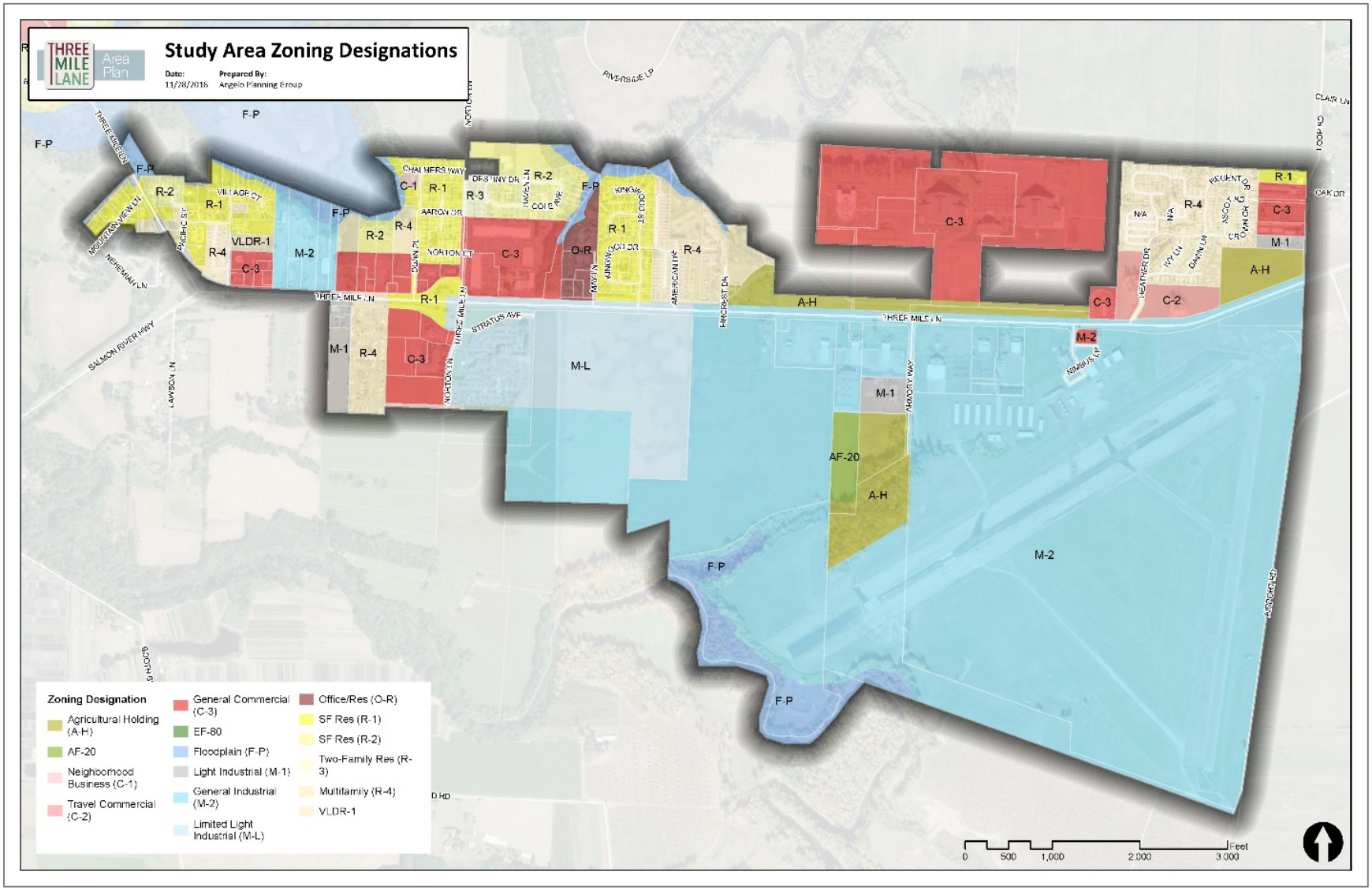


Figure 7: Planned Development Overlays In the Three-Mile Lane Area

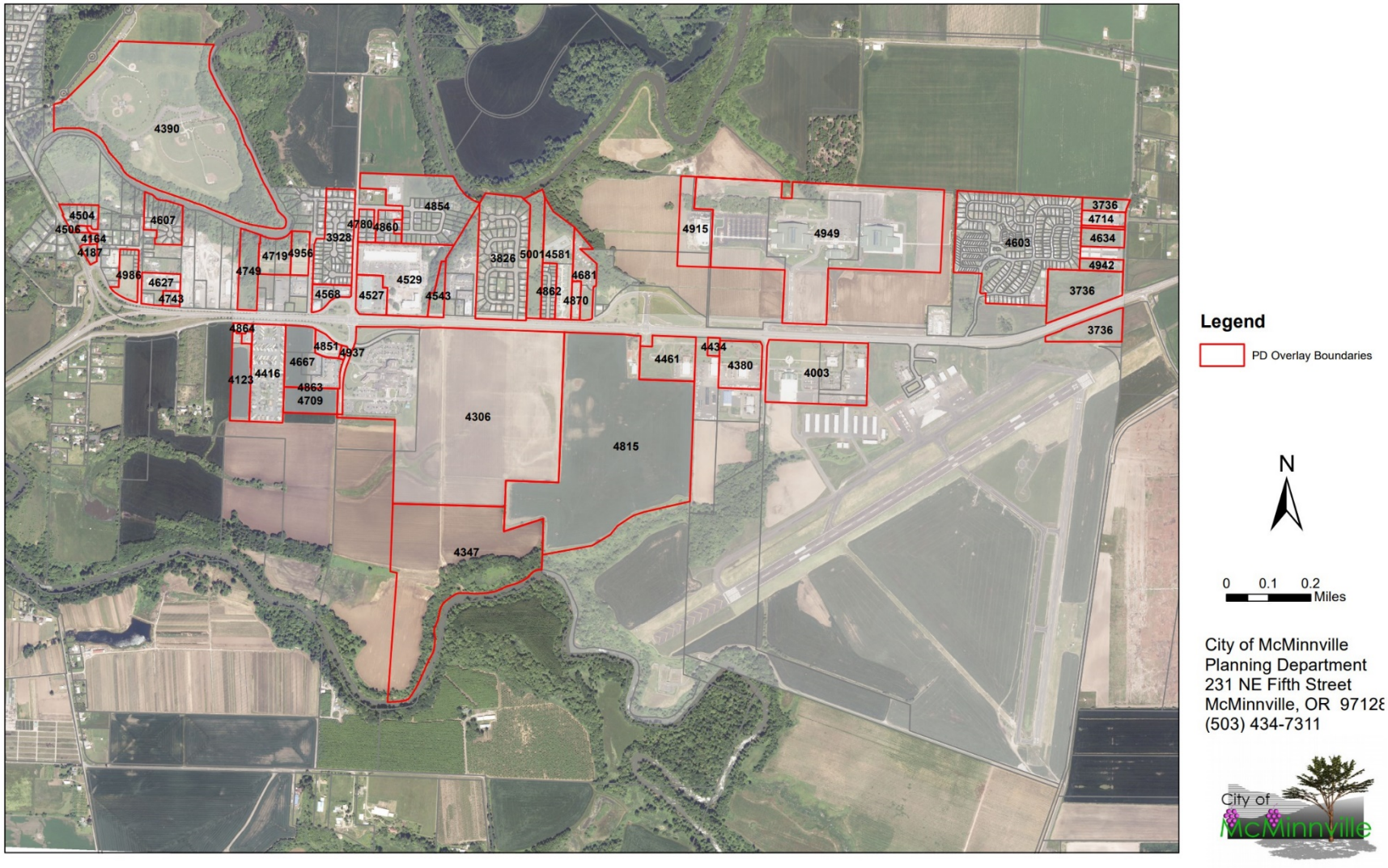


Table 3: Zoning Designations Summary

ZONING DESIGNATION	TOTAL ACRES	DESCRIPTION AND SUMMARY OF PERMITTED USES	SUMMARY OF DEVELOPMENT STANDARDS
INDUSTRIAL ZONES			
M-L: Limited Light Industrial	92 acres	The M-L zone is intended to create, preserve, and enhance areas containing manufacturing and related establishments with limited external impact and with an open and attractive setting. Among the permitted uses are certain types of light manufacturing, aerospace industries, warehousing, wholesale distribution, hospitals/medical offices, and tasting rooms. Privately owned facilities for "leisure time activities" are allowed as conditional uses.	• Max. height: 60 ft • Min. setback from Three Mile Lane: 120 ft from centerline. • No other min. setbacks, except adjacent to a residential zone (20 ft). • All development subject to approval by the Planning Commission, which will examine impacts such as noise, traffic generation, air and water pollution, and appearance in reviewing developments.

M-1: Light Industrial	14 acres	The purpose of the M-1 zone is to provide appropriate locations for light industrial activities and to buffer these activities from adjacent commercial and residential development through the application of site development and environmental standards.
		Permitted uses include all uses permitted in the M-L zone, plus a wider range of manufacturing, assembly, packaging, or treatment of products from previously prepared or processed materials. Additional permitted uses include warehousing, wholesaling, and limited commercial uses.
			• Max. height: 80 ft
			• Min. setbacks:
			  ○ Adjacent to residential zone/use: 40 ft
			  ○ Adjacent to commercial zone/use: 15 ft
			  ○ Adjacent to public roadway: 15 ft
			• Buffering and screening required adjacent to a residential or commercial zone/use or public roadway.

M-2: General Industrial	744 acres	Permitted uses include all uses permitted in the M-1 and M-L zones, plus general manufacturing and airports. Privately owned facilities for "leisure time activities" are allowed as conditional uses.	• Max. height: 80 ft • No min. setbacks, except adjacent to a residential zone (50 ft).
COMMERCIAL ZONES			
C-2: Travel Commercial	11 acres	The C-2 zone primarily accommodates travel-related uses. Permitted uses include lodging, short-term rentals, RV parks, restaurants, and gas stations. Conditional uses include commercial recreation facilities.	• Max. height: 45 ft • Min. front setback: 30 ft • No min. side/rear setbacks except adjacent to a residential zone (15 ft side; 20 ft rear).

C-3: General Commercial	153 acres	The C-3 zone accommodates a wide range of commercial uses. Permitted uses include large format ("big box") retailers, movie theaters, offices, hospitals, RV parks, and mini-storage. Multi-family dwellings and condos are also permitted.	• Max. height: 80 ft • No min. setbacks, except adjacent to a residential zone (20 ft).
O-R: Office/ Residential zone	9 acres	The O-R zone falls within the Commercial Comprehensive Plan designation. The purpose of the O-R zone is to: • Provide a transition and buffer area between commercially zoned and residentially zoned areas; • Provide an incentive for the preservation of old and historical structures; and • Serve as a buffer zone along major arterials between the roadway and the interior residential areas. Permitted uses include single-family dwellings (including common-wall), two-family dwellings, multi-family dwellings, condos, personal services, offices, artist studios, and short-term rentals.	• Max. height: 35 feet • Min. front setback: 15 ft • Uses are subject to limitations and site requirements to reduce impacts on adjacent residential uses.
RESIDENTIAL ZONES			
R-1: Single-Family Residential	68 acres	Permitted uses include single-family dwellings, Class A mobile homes, two-family dwelling on a corner lot, common-wall single-family dwellings on individual lots, ADUs subject to specific standards, home occupation, parks, and short-term rentals subject to specific standards.	• Max. height: 35 feet • Min. front setback: 20 ft • Density – min. lot area per family: 9,000 sf (except min. lot area is 9,000 sf for a two-family corner lot)
R-2: Single-Family Residential	27 acres	Permitted uses in the R-2 zone are similar to those permitted in the R-1 zone.	• Max. height: 35 feet • Min. lot size: 6,000 sf • Min. front setback: 20 ft • Density – min. lot area per family: 7,000 sf (except min. lot area is 8,000 sf for a two-family corner lot)
R-3: Two-Family Residential	3 acres	The R-3 zone permits two-family dwellings on interior lots in addition to corner lot. Other permitted uses are similar to R-1 and R-2.	• Max. height: 35 feet • Min. front setback: 15 ft • Density – min. lot area per family: 4,000 sf (except min. lot area is 8,000 sf for two families, for common-wall single-family dwellings on individual lots)

R-4: Multiple-Family Residential	97 acres	The R-4 zone permits multi-family dwellings and condos. Other permitted uses are largely similar to R-3.	• Max. height: 60 feet • Min. front setback: 15 ft • All yards shall be increased 1 ft for each 2 ft of building height over 35 ft. • Density – min. lot area per unit: 1,500 sf per unit with 2 bedrooms or fewer; 1,750 sf per unit with three bedrooms
AGRICULTURAL ZONES			
AH: Agricultural Holding	49 acres	The purpose of the AH zone is to provide for the continued practice of agriculture in areas where municipal sewer and water service exists or where an adopted city policy affecting the expansion of such services exists. Uses must be consistent with the comprehensive plan designation. Permitted uses are limited to farming, single-family dwellings, and sewage pump stations. Parks are allowed as conditional uses.	• Max. height: o 25% of lot depth or 60 ft max. o Single-family dwellings: 35 ft • Min. front setback: 30 ft

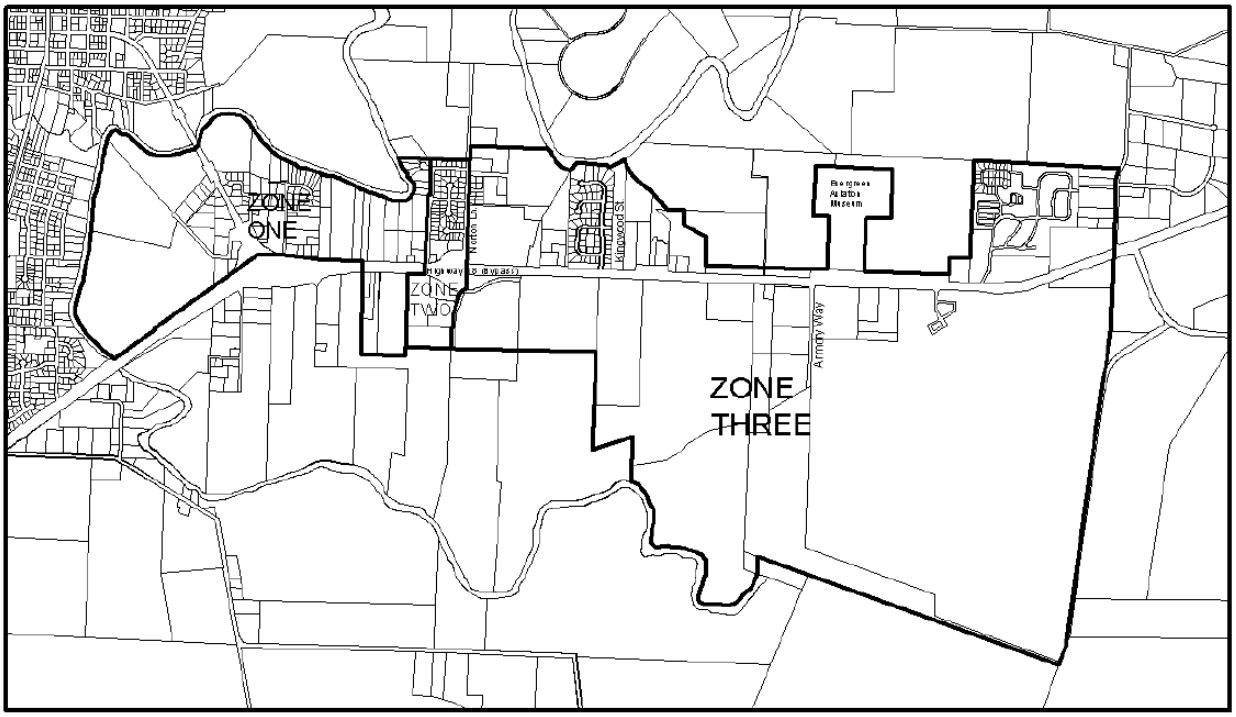
Three Mile Lane Overlay District

The Three Mile Lane Planned Development Overlay covers the entirety of the study area (see Figure 8). The overlay district was adopted in 1981 (Ordinance No. 4131) and amended in 1994 (Ordinance No. 4572). As stated in the original ordinance, the overlay was established to ensure: high quality and design; compatibility of living and working environments; provision of open spaces and parks; and buffering of residential uses from the highway. The 1994 amendments were adopted to replace outdated policies, as well as to regulate commercial signage along the Three Mile Lane corridor.

The overlay ordinance outlines a number of policies related to the development of properties in the Three Mile Lane area, including provisions for setbacks, access, landscaping and buffering, and desired housing types. These provisions are summarized below.

- 120 foot setback from the centerline of Three Mile Lane required
- Access requirements:
  - Minimize access onto Three Mile Lane
  - Provide on-site circulation systems connecting to adjoining properties
  - Provide acceleration-deceleration lanes and left-turn refuges when necessary
  - Provide bikeway connections
- Landscaping and buffering along the highway frontage may be required
- Mixed housing-type residential developments encouraged
- Temporary signage allowed

Figure 8: Three Mile Lane Planned Development Overlay



The ordinance also outlines a set of detailed provisions related to commercial signage. As described in the ordinance, signage in areas designated as commercial and industrial are subject to approval by the Three Mile Lane Design Review Committee. The committee may consider design aspects such as color, material, size, form, relationship to site and building design, and other aspects related to compatibility. The ordinance identifies three "sign zones" (shown in Figure 8), each with a set of specific policies related to the types of signs permitted, maximum height, maximum square footage, regulations related to illumination, and relation to building size (for wall-mounted signs).

While the Three Mile Lane Planned Development Overlay regulates certain aspects of development within the study area (highway setbacks, access, signage, etc.), development in this area is largely regulated by the underlying base zones, which are described above.

Airport Overlay Zone

Properties within the study area are also subject to standards in the Airport Overlay Zone, which is intended to prevent structures or uses that obstruct the safe flight of aircraft in the vicinity of the McMinnville Municipal Airport. As illustrated in Chapter 17.52 of the Zoning Ordinance, the Airport Overlay defines four different zones, based on proximity to expected flight paths: the Runway Protection Zone, Approach Zone, Horizontal Zone, and Conical Zone. While no development is permitted within the Runway Protection Zone, each of the remaining zones has a separate set of use and development standards. The Approach Zone is the most restrictive and prohibits structures over 209 feet, places of public assembly, and residential density greater than one dwelling per 20 acres. Height allowances in the Horizontal and Conical Zones are less restrictive. Since the

underlying base zones within the study area have much lower height limits, the Airport Overlay Zone height limits will not come into play.

Land Use Issues and Opportunities

Development Opportunities

The existing land use/zoning conditions in the Three Mile Lane study area present a number of opportunities for future development. South of Three Mile Lane, there is a significant quantity of vacant land (over 200 acres) that is largely served by existing infrastructure. Most of this vacant land is found in a few large parcels, which could be ideal for large-scale and cohesive development. Most of the vacant land is zoned for industrial use—either M-2, which allows a wide range of manufacturing and other industrial uses, or M-L, which allows a more limited range of light industrial uses. These sites are located along Highway 18/Three Mile Lane, which connects metropolitan Portland to the coast and provides significant opportunities for freight movement.

The owners of these parcels have also expressed interest in collaborating with the City in a master planning process for this area. The properties fall within an Opportunity Zone, which is a federal program that aims to encourage new development by incentivizing private investment through tax deferrals on capital gains from projects or businesses. The Opportunity Zone funds must be invested by the end of 2019; as such, the Three Mile Lane Area Plan process will serve an important role in facilitating the investment of funds by this deadline. The economic analysis associated with the 3MLAP process will likely inform any master plan developed for these sites, and may reveal that they present a better opportunity for mixed-use or commercial development. If that is the case, the industrial properties would need to be rezoned.

The adjacent McMinnville Municipal Airport also provides a singular opportunity for air transportation and additional development. The City-owned property has room to develop more aviation-related industrial uses. One of the opportunities identified by area stakeholders is for the airport to be better utilized for tourism uses, and to cater to businesspeople with the ability to work remotely. McMinnville's location at the heart of Oregon wine country makes it a desirable destination for executives and entrepreneurs. There may be opportunities, for example, to provide taxi service to Silicon Valley or to provide hangars for executive jets.[1]

The study area also includes a number of amenities and attractors, including the airport; Evergreen Space & Aviation Museum, water park, and event center; the Yamhill River; and a number of large employers, including a hospital and clinics, and industrial and office sites. Given the density of employment, there may be opportunities to develop more amenities for employees as well as uses related to goods and services for business support.

Within the mixed residential and commercial areas on the north side of Three Mile Lane, there are smaller-scale development and infill opportunities. The Land Use map in Figure 2 shows a number of vacant sites in the Western, Bend O River, and Central Neighborhoods. Many of these sites are zoned commercial (C-3), and some are zoned residential (mostly R-4). Most of the sites have direct

[1] The City anticipates updating its Airport Layout Plan in 2021, an effort which may be influenced with the 3MLAP process.

access to the frontage road along Cumulus Avenue. The vacant site in the Strauss Ave Commercial Area has similar development potential. There may also be redevelopment opportunities for some of the older commercial sites in these areas, some of which have large, underutilized parking lots. Because of the diversity of land uses and transportation access (including transit along Three Mile Lane), there may be opportunities for mixed-use development in these areas. The C-3 zone permits multi-family dwellings and condominiums, and requires no minimum setbacks except adjacent to residential zones.

Two large vacant parcels at the east end of the study area, which are owned by the Airport. The parcel on the north side of Three Mile Lane is zoned Agricultural Holding (A-H), and the Comprehensive Plan designation is Mixed Use Urban, however proximity to the airport runway limits development potential.

Zoning Barriers

Despite the opportunities in the study area, the existing zoning designations could pose some barriers to development of pedestrian-friendly, mixed-use projects.

The City does not have a dedicated mixed-use zoning district. The C-3 commercial zone does permit multi-family uses, so mixed-use development is possible in this zone, but it is not required or incentivized in any way.

The R-4 zone requires that minimum setbacks must increase by 1 foot for each 2 feet of building height over 35 feet. That means that a 60-foot building (the maximum height allowed in the zone) would have the following setbacks:

- Front: 27.5 feet (base minimum is 15 ft)
- Side: 18.5 feet (base minimum is 6 ft)
- Rear: 32.5 feet (base minimum is 20 ft)

These are large setbacks for a multi-family or mixed-use development, and may serve to limit the density that is achievable on R-4-zoned sites.

Parking standards may also present barriers to mixed-use development. The minimum parking requirement for multi-family dwellings is 1.5 spaces per dwelling with less than 3 bedrooms, 2 spaces per dwelling unit with 3 or more bedrooms, and 1 space per dwelling unit which is expressly reserved for senior or handicapped persons. This means that 1.5 spaces are required even for studio and 1-bedroom apartments. The Model Development Code for Small Cities[2] recommends 1 parking space per dwelling unit regardless of the number of bedrooms. Surface parking can occupy significant amount of space on a site and limit the developable area; high minimum parking standards make development more difficult to finance. In addition, parking is currently allowed to be located between buildings and the street. Locating parking areas adjacent to the sidewalk is not conducive to a pedestrian-friendly environment.

[2] State of Oregon Transportation and Growth Management, *Model Development Code for Small Cities*, 3rd Edition.

Mixed Use Zoning Review

The City of McMinnville is interested in studying the feasibility of mixed-use development within the Three-Mile Lane study area. As part of this effort, this memorandum provides a brief review of existing mixed-use zones and overlay zones within the City of McMinnville in order to determine whether existing zones/overlays might facilitate desired development within the study area, or whether new tools are needed.

Existing City Zoning

While the City of McMinnville does not have an explicitly mixed-use zone, some existing zones have mixed-use characteristics, described below.

- The Office/Residential zone allows both residential uses (similar to R-4) and office/commercial uses. The zone is intended as a buffer between single family homes and commercial uses.
- The C-3 General Commercial Zone permits a variety of commercial and residential uses. Condominiums and multi-family dwellings are permitted subject to the provisions of the R-4 zone, and multi-family dwellings of a higher density than normally allowed in R-4 is conditionally allowed in the C-3 zone (however, only within the "Core Area" of downtown). As mentioned previously, the C-3 zone does not incentivize or encourage mixing of uses.

Planned Development Overlays (PDOs)

McMinnville has several existing planned development overlays, including Three Mile Lane. McMinnville's Planned Development Overlay is intended to "encourage mixed uses in a planned area" through greater flexibility and planning commission/council oversight. The application process for a Planned Development overlay is similar to a zone change. Additionally, there are many PD overlays for specific developments within the Three-Mile Lane area, as noted previously. A brief description of some of these overlay zones follows.

- The Three Mile Lane Overlay (described in detail in the Land Use and Zoning Existing Conditions section) covers the project study area and primarily regulates setbacks, signage, and landscaping in the area.
- NE Gateway Planned Development Overlay is "designed to guide the transition of a light and heavy industrial area to a vital, mixed use, pedestrian-friendly neighborhood, consistent with the vision described in the adopted NE Gateway Plan." This PDO provides a design framework and specific use standards that allows for a complementary mix of uses to include residential, employment, cultural/tourism, education, and neighborhood-scale support services. In addition, the PDO includes design standards and guidelines that are intended to reflect the area's unique character and history, while promoting an attractive, walkable, and vibrant neighborhood. Contains several subareas with different zoning and intent. Allowed uses and development standards differ by subarea.

Implementing Mixed-Use Concepts within the Three Mile Lane Area Plan: Base Zone versus Overlay Zones

The implementation of the Three Mile Lane Area Plan will be addressed more specifically in later steps of the process. Table 4 summarizes general points about the use of base zones versus overlays to provide initial high-level thoughts on regulatory approaches.

Table 4 Evaluation of Base Zones and Overlay Zones

Base Zones	Overlay Districts
Base zones implement comprehensive plan designations and can regulate development in a number of ways. Generally, only one base zone will apply to a given property.	*Overlay districts apply to land across multiple zoning designations. They can guide development by modifying base zones - allowing or prohibiting uses, establishing additional design guidelines, and other means.*
• Existing base zones within the City of McMinnville likely do not meet the mixed-use intent of the study area • After creating a new base zone, the City or property owners may apply the zone in appropriate parts of the city outside of the study area. • New base zones might be appropriate for larger parcels that are currently undeveloped, if property owners are willing (i.e. within the Vacant Industrial subarea). Properties that have existing development, or smaller vacant parcels adjacent to existing development may be more problematic to re-zone.	• An overlay zone for the study area currently exists, and modifying its language may be simpler than creating a new zone or overlay. • An overlay zone could use “subareas” where localized regulations are desired, while creating other regulations that apply generally to the rest of the overlay area. • It may be more difficult to apply this language to other parts of the city, if that is desired, unless a new overlay is created for that area. • Using an overlay zone creates another layer of complexity for property owners and developers. However, since an overlay zone already exists for the area, this is the case today. New code language must be clear about which set of regulations apply in case of conflict.

URBAN DESIGN

Existing Conditions

Table 5 includes descriptions of the urban design and site characteristics typically found in each subarea. The Three-Mile Lane Study Area Map is included again in this section for ease of reference.

Figure 1. Three Mile Lane Study Area

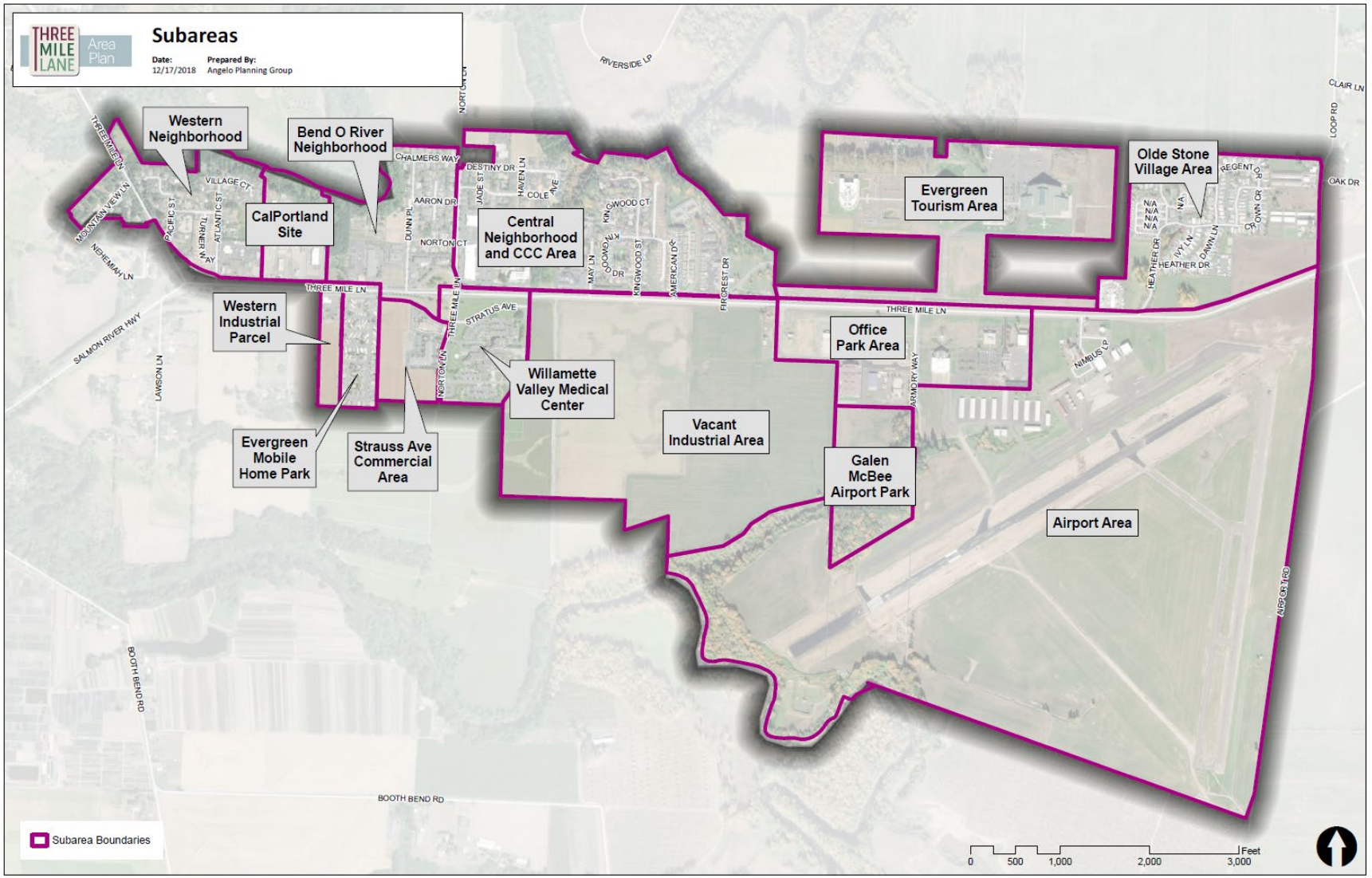


Table 5: Urban Design Summaries by Subarea

SUBAREA	SITE DESIGN QUALITIES
1 - Olde Stone Village Area	• This subarea is largely comprised of the Olde Stone Village mobile home park. The park is set back about 250' from Three Mile Lane at its nearest point, and separated from Three Mile Lane by a large open agricultural field. Parking is provided in driveways or carports. The community does not include sidewalks but has an internal walking trail loop. • The few commercial sites east of Olde Stone Village face onto SE Loop Road and have a low-density auto-oriented commercial/industrial character. • The community includes several large, mature trees with defining character, most notably at the entrance on NE Laurel. A central park is connected by a walking path to the Evergreen Tourism Area.
2 - Evergreen Tourism Area	• This area includes 4 large buildings set back about 930' from Three Mile Lane and fronted by agricultural land to the south and west that is currently growing grapes. A smaller chapel building is located at the northern edge of the subarea, behind a mature grove of oak trees. The large newer buildings have a cohesive architectural style inspired by regional agricultural forms and designed by a single architecture firm. The buildings are large volume exhibit display spaces with very tall ceilings. Several large airplanes are permanently on display outside and are a prominent feature in this area. • Sites are characterized by large lawn areas, some building-related landscape with trees and shrubs, and large surface parking areas located between and behind the buildings.
3 - Office Park Area	• This office park area consists of mostly large, 2-story buildings on large, landscaped lots. Buildings are set about 260' back from Three Mile Lane, and there is some parking and vehicle circulation between buildings and the street. • A prominent feature in this area is the old grain elevator building located adjacent to Cumulus Avenue, which inspired the design for the nearby Jackson Family Winery and processing center.
4 - Galen McBee Airport Park	• This area consists of open field and heavily wooded park space. The 21-acre park is accessible from SE Armory Way, and a small surface parking lot at the end of this street is available to visitors. • The wooded park area includes two loop trails that cross a small tributary stream that flows into the South Yamhill River and pass by several pieces of concrete artwork. The southern edge of this park area is defined by dramatic views to Mt Hood and Mt Jefferson on sunny days. Trails emerge from the park into nearby fields and the adjacent airport taxiways, which may require future security fencing.
5 - Airport Area	• The airport area is dominated by the airport runway zone and related airplane taxiways storage and maintenance facilities. A cluster of buildings closer to Three Mile Lane are mostly 1-story. Operations from a flight training business are common, with low-flying helicopters.

	• The Comcast site has a large parking lot along the highway that is screened by an evergreen hedge. Chain-link fencing surrounds the entire airport area.
6 - Vacant Industrial Area	• This area is currently made up of open fields, actively farmed. A gravel road accesses these parcels directly off Highway 18.
7 - Willamette Valley Medical Center	• The medical center consists of one large, 4-story modern building set 450' back from Three Mile Lane. There is one large surface parking lot located between the medical center and Three Mile Lane with an 80' setback from the road. Two smaller surface lots are located to the side and rear.
8 - Strauss Ave Commercial Area	• This area consists of a new restaurant, a 3-story hotel designed in a general Northwest style, surrounded by parking at the corner of Stratus Ave and Norton Lane and a 1-story strip office building to the south surrounded by parking lots. The roadway along Stratus Ave is lined with street trees that help screen the parking lot. This street and SE Norton Lane include curb-tight sidewalk and highway-scale cobra street-lighting. • The remainder of the subarea is comprised of open fields including one farmed parcel that is currently marketed for sale. PD ordinance 4709 and 4863 allow for senior condos, senior apartments, or assisted living facilities.
9 - Evergreen Mobile Home Park	• Mobile homes are set about 75' from Three Mile Lane and 30' from SE Stratus Ave, the latter of which provides access to the site at two points. Facing Three Mile Lane, the manufactured homes are mostly older without much site landscape. There is a row of RVs parked on a concrete pad along the property frontage. The 10-acre site is narrow and layout of this and other adjacent parcels could benefit from coordinated site planning. • Homes to the rear of the park appear to be newer and are larger than those fronting Three Mile Lane. • Roadways do not include sidewalks.
10 - Western Industrial Parcel	• Along Three Mile Lane, this subarea includes a small cluster of single-story commercial buildings (logging supply and transmission service) surrounding a large parking/service area with minimal site landscaping. • Fields sit behind the commercial buildings and include a U-Pick Blueberry patch.
11 - Western Neighborhood	• The Western Neighborhood is mostly residential, but includes a few commercial sites near Three Mile Lane. Generally, homes do not face the roadway and the streetscape is dominated by rear fences. • The commercial sites are characterized by older 1-story buildings with large, un-landscaped parking areas between the buildings and the street. • A Habitat for Humanity development is currently under construction near the middle of the subarea. A few of the 2-story homes have already been built. • The remaining single-family area is characterized by older 1- and 2-story homes on larger lots. • At the far northwest edge of the study area, the highway is bordered by open fields as the bridge rises over the S Yamhill River.

12 - CalPortland Site	• The industrial site includes multiple buildings associated with the CalPortland concrete plant. The site is largely covered by paving, and a narrow landscape strip separates the site from NE Cumulus Ave, although the site generally presents a negative visual character to passing vehicles and pedestrians. • The industrial site fronts the wooded South Yamhill River on its northern edge and a large grove of fir trees frames the eastern edge of the parcel.
13 - Bend O River Neighborhood	• This subarea includes a mix of commercial and residential land uses and a range of building types. • The commercial area near Three Mile Lane includes restaurant, hotel, retail, office, and medical office uses. Buildings are 1- to 3-stories and a few have well-maintained landscaping between the building and the street. A few parcels along Three Mile Lane are vacant. • The residential area to the north of the commercial sites includes 1- and 2-story single-family and duplex homes built in the 1980s and 1990s, plus a few large parcels (2-3 acres) with older homes with Yamhill River frontage.
14 - Central Neighborhood and CCC Area	• This subarea is fairly large and includes a diverse mix of commercial, worship and residential land uses and a range of building types. • The shopping center that includes Chemeketa Community College (CCC) and the movie theater is characterized by large, mostly 1-story commercial buildings surrounding a large surface parking area. CCC itself is a new building with 3 stories. The campus has attractive site landscaping, including several mature oak trees. Additional parking is located between the building and the street and an off-street walking path extends from NE Cumulus Avenue through the landscaped highway frontage and north of NE Norton Lane. • A paved roadway connecting Chemeketa Community College to Cumulus Ave is blocked by a fence and sign that reads “Emergency Vehicles Only.” • The single-family residential area north of the CCC/shopping center site is mostly developed with newer homes and includes New Horizons Church and a few vacant parcels. • A cluster of medical clinics is located between the shopping center and residential area to the east. This area includes newer, single-story apartment buildings surrounded by well-maintained landscaping. • Behind the medical clinics are a cluster of well-designed two-story multi-family buildings (Villa del Sol), which house migrant farm workers and include community gathering spaces. • The Kingwood neighborhood to the east includes older one-story single-family and duplex homes on mid-size lots. Newer single-family homes on NE American Dr have smaller lots and typically two stories. • A long site between Kingwood and NE American Dr is currently under development with narrow lot single family homes with exposed stormwater collection bioswales along the streets. • The Fircrest Community Senior Living development at the east end of the subarea includes mostly 2-story condos and a memory care center. The adjacent Parkland Village Retirement Community includes 1-story independent living units.

	• There are large, mature trees near CCC and in two forested drainages to the east of CCC and east of Fircrest Assisted Living that connect to the South Yamhill River.

Urban Design Issues and Opportunities

Below is an initial list of the urban design issues and opportunities that will be considered moving forward in the Three Mile Lane Area Plan process.

Circulation

- Highway 18/Three Mile Lane. This important connection into/out of McMinnville is also a significant barrier, effectively separating residential and commercial uses north of the highway from the uses south of the highway. This barrier with limited crossings may provide an opportunity to envision and design for the north and south sides of Three Mile Lane to function independently in the way these neighborhoods serve non-vehicular users.
- Internal circulation for many of the developments and subdivisions in the study area is focused inward within narrow parcels developed independently, with few (if any) connections to neighboring developments and large vacant parcels between subareas. This requires the use of Cumulus Ave, Stratus Ave, or Three Mile Lane to travel east or west. Both Cumulus Ave and Stratus Ave are interrupted at various points along the corridor. There are significant opportunities to increase east-west connections like those seen between Old Stone Village and the Evergreen Tourism Area or between the airport area and Willamette Valley Medical Center.
- Natural Resources in the area (the South Yamhill River and other water bodies), along with the shape of the Urban Growth Boundary in this area, make new roadway connections challenging in some areas. Parts of the study area are very close to amenities in Joe Dancer Park, but the only bridge accessing that part of the city is indirect and has small sidewalks and no bicycle lane. Improving non-motorized connections between areas that currently support pedestrians and cyclists and improving wayfinding would better connect people in Three Mile Lane to the rest of the city. Similarly, the South Yamhill River and Airport Park could provide welcome connections to the outdoors to Three Mile Lane residents and employees.

Building Design

- Many of the existing employers and other uses lack pedestrian access and are surrounded by large parking lots. A pedestrian-friendly development would generally have little or no setback from roadways and offer street-facing entrances, rather than orienting toward parking lots. The visual and aural presence of Highway 18 and required regulatory setbacks make this challenging.
- The large amount of land around buildings makes densification and the creation of walkable communities possible in some areas and the Three Mile Lane area as a whole may benefit from strategically locating denser, more walkable development near supportive uses.
- The typical goal of a walkable urban frontage may not be appropriate for a busy highway, but streets perpendicular to the highway (or parallel, interconnecting parcels) can be the focus of building orientation and streetscape.

- Three-Mile Lane is a prominent gateway to the City of McMinnville. As such, parking, storage, and blank walls should minimized along Highway 18 frontage to encourage a more cohesive visual character to area visitors and people passing through on their way to the Oregon Coast.
- Larger buildings such as Chemeketa CC are an appropriate scale for highway frontage.
- Future buildings can be oriented to the stunning visual character of the area, which includes beautiful oak and fir forests, large actively-farmed fields, views west to the Coast Range and east to Mt Hood and Mt Jefferson.
- The architectural design language of several buildings is clearly inspired by regional barn and farmhouse vernacular and examples like the Jackson Family Winery and Villa Del Sol have a distinct design integrity. However, this may not be an appropriate predominant style for all future building design, which should allow for contemporary design that responds to site and program.

Open Space

- Galen McBee Airport Park has the potential to be a great community asset, but is only accessible via Three Mile Lane today and there is minimal wayfinding signage to direct area visitors to the park. There is great opportunity to add connections to this asset and extend trail loops to access the South Yamhill River. With future airport expansion, this park may require security fencing to stop trail users from walking onto runways.
- The area is characterized by large open fields, which reflects and honors McMinnville's agricultural heritage and its strategic position in the heart of the region's wine country. Future development should strive to maintain views of these spaces and even consider the potential for what the Urban Land Institute terms "Agri-hoods," where active farming is incorporated into new mixed-use community design.
- Existing mature oak and fir stands also lend a distinct natural character to the area and future development should continue to be encouraged to incorporate trees and plant new groves to complement protected ones.
- The north and south edges of the study area offer beautiful natural edges to future development and may be more appropriate for residential uses. A transect of uses could be considered, from commercial and light industrial along Highway 18, and residential uses farther away north and south.
- Land for future riverfront trails should be reserved if possible.

MEMORANDUM

Existing Transportation Operations and Safety Analysis

McMinnville Three Mile Lane Area Plan

DATE	February 28, 2019
TO	Heather Richards and Jamie Fleckenstein, City of McMinnville Michael Duncan, ODOT
FROM	Andrew Mortensen, Matthew Hartnett, EIT, and Cameron Grile, PE, David Evans and Associates, Inc.
CC	PMT

1 INTRODUCTION AND PURPOSE

The City of McMinnville, in partnership with the Oregon Department of Transportation (ODOT), is updating the Three Mile Lane Overlay/Area Plan (3MLAP), which was originally drafted in 1997. The Plan will be used to help guide future land use planning and investments in transportation operations, maintenance, and facilities. Consulting firm David Evans and Associates (DEA), and the Angelo Planning Group, are assisting the city with the Plan.

The purpose of the memorandum is to summarize the current transportation operations and safety analysis within the study area. Consistent with the project's scope of work, this memorandum summarizes the following:

- Multimodal Travel Volumes in the study area (Section 2)
- Current Transportation System (Section 3), including:
  - Pedestrian System – Network, performance (Pedestrian Multimodal Level of Service), safety evaluation and qualitative walkability assessment
  - Bicycle System – Network, performance (Bicycle Level of Traffic Stress), safety evaluation and qualitative bikeability assessment
  - Transit System – Study area network, performance (Transit Multimodal Level of Service) and safety evaluation
  - Vehicle System – Turn movements and system operations at key study area intersections (as outlined in the Methodology Memorandum[1] as attached in Appendix A), including:
    - Volume-to-capacity (v/c) ratio
    - Turn movements
    - 95th percentile queues
  - Off-Street Parking Inventory and Utilization

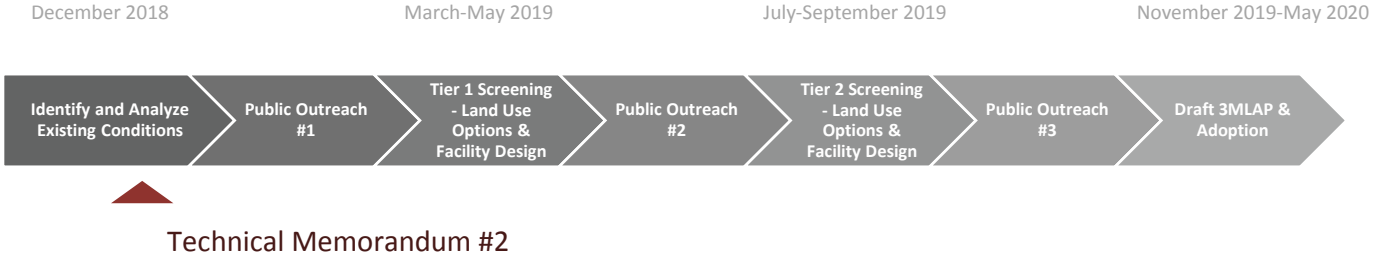
[1] Methodology Memorandum McMinnville Three Mile Lane Area Plan, David Evans and Associates, Inc., December 10, 2018.

- Crash Analysis examining the most recent five-year crash history (2012-2016) of the study area using methods outlined in the Methodology Memorandum and summarized by mode as noted above
- Key Findings (Section 4)

1.1 FINDINGS FROM MEMORANDUM USED TO GUIDE PLAN UPDATE

As shown below, findings from *Technical Memorandum* #2 will have important input to key tasks of the Three Mile Lane Area Plan (3MLAP).

3MLAP Project Timeline



1.2 ORGANIZATION OF THE MEMORANDUM

The memorandum is organized in four major sections as follows:

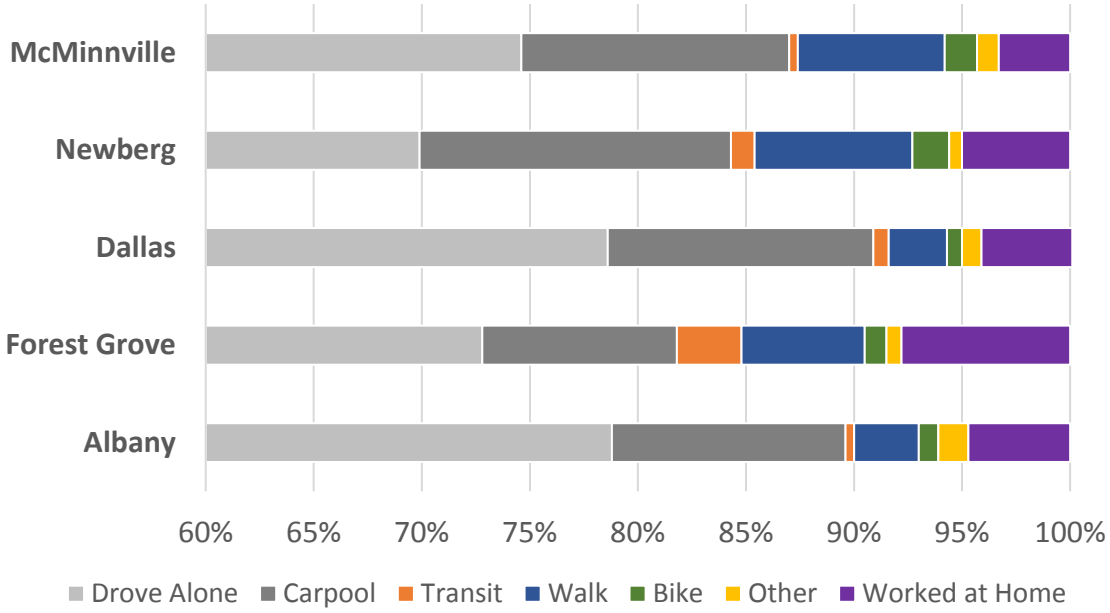
2 MULTIMODAL TRAVEL VOLUMES

2.1 COMMUTE-TO-WORK MODE SHARE

Resident workers in McMinnville are most likely to drive alone (75%) during their commute-to-work trip.[2] A notable portion of the work force either shares a ride (12%) or walks to work (7%). Three percent of McMinnville resident workers telecommute, and another 2% commute by bike. Less than 0.5% of McMinnville workers use transit for their commute.

Compared to neighboring cities in the Willamette Valley, McMinnville's drive-alone commute-to-work mode share is roughly average (see **Figure 1**). McMinnville has among the highest commute mode shares for carpool, walk, and bike, but has the lowest rate of transit commuting, compared to neighboring communities.

Figure 1. City Comparisons: Commute-to-Work Mode Share



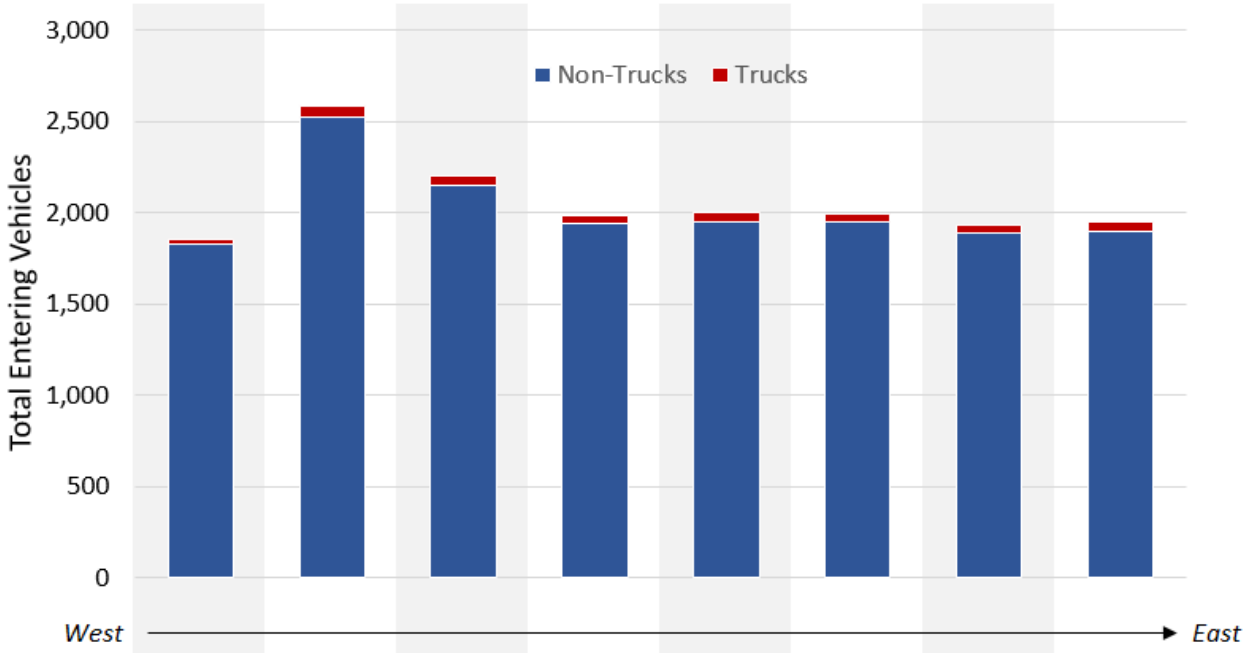
Given the relative isolation of 3MLAP study area residents, their commute-to-work, drive-alone mode share is likely higher than the McMinnville average.

2.2 MULTIMODAL TRAFFIC COUNTS

Figures 2 and **3** summarize the total vehicle, truck, bicycle, and pedestrian volumes during the PM peak hour (4:15-5:15 PM) for the ten study intersections (see Figure 12). **Figure 2** summarizes these volumes for the eight study intersections on OR 18 (Three Mile Lane), and **Figure 3** shows volumes by mode for the intersections of Norton Lane and Stratus Avenue, and Norton Lane and Cumulus Avenue.

[2] U.S. Census Bureau, 2012-2016 American Community Survey

Figure 2. PM Peak Hour Total Vehicle, Truck, Bike, and Pedestrian Counts, Three Mile Lane Intersections



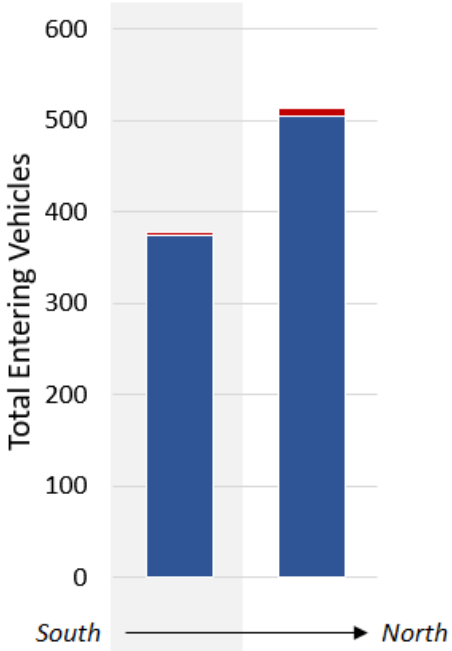
Intersecting Street		1st St	Norton Ln	Cumulus Ave	Armory Way	Cirrus Ave	RV Park	Loop Rd	Cruick-shank Rd
	Count	1,823	2,520	2,150	1,935	1,949	1,944	1,886	1,895
	Percent	98.3%	97.7%	97.7%	97.7%	97.6%	97.6%	97.5%	97.4%
	Count	31	59	50	45	47	47	48	50
	Percent	1.7%	2.3%	2.3%	2.3%	2.4%	2.4%	2.5%	2.6%
	Count	3	0	0	0	0	0	0	0
	Count	15	5	0	5	0	0	0	0

Counts shown in top row of table include all non-truck vehicular traffic; Trucks are defined as Single Unit Trucks, Single Trailer Trucks, and Multi Trailer Trucks; Data Source: ODOT, 2018

Intersection vehicle counts are highest at the intersection of OR 18 and Norton Lane. Study area pedestrian and bicycle counts are highest at the Three Mile Lane/First Street intersection, nearest the city center. There is relatively little or no bicycle travel on OR 18 east of the Three Mile Lane interchange.

Figure 4 summarizes traffic volumes by time of day for the intersection of OR 18 (Three Mile Lane) and Norton Lane. The chart indicates the morning peak period (beginning about 7:30 a.m.), a slightly lower noontime peak, and the afternoon peak period beginning at about 4:00 p.m. - 4:30 p.m.

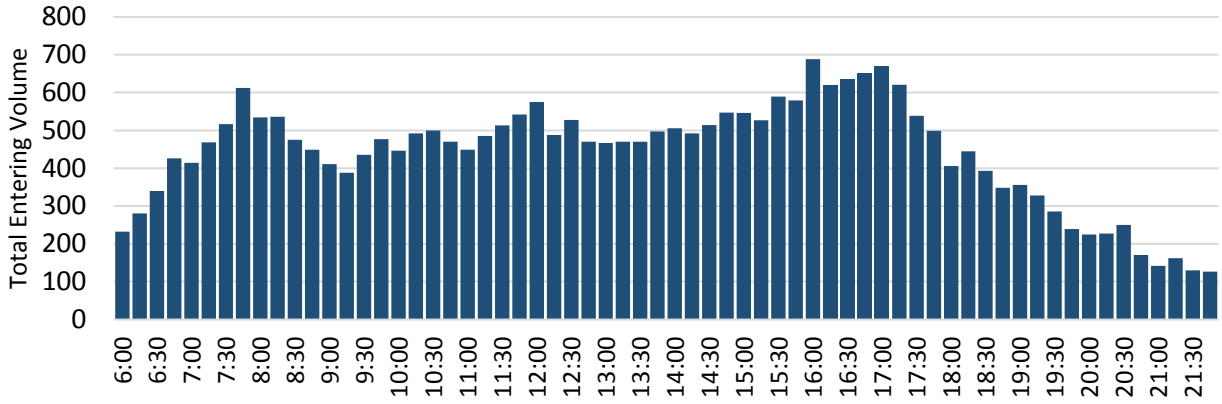
Figure 3. PM Peak Hour Total Vehicle, Truck, Bike, and Pedestrian Counts, Norton Lane Intersections



Intersecting Street		Stratus Ave	Cumulus Ave
	Count	374	505
	Percent	98.9%	98.4%
	Count	4	8
	Percent	1.1%	1.6%
	Count	0	1
	Count	1	11

Data Source: ODOT, 2018

Figure 4. Total Entering Vehicle Volumes by Time of Day, OR 18 & Norton Lane



Data Source: ODOT, 2018

3 CURRENT TRANSPORTATION SYSTEM

Figure 5 maps the existing street network in the study area by functional classification. OR 18 is classified by ODOT, while other facilities are classified by the City of McMinnville or Yamhill County (see the City of McMinnville 2010 Transportation System Plan).

Figure 5. Street Functional Classification

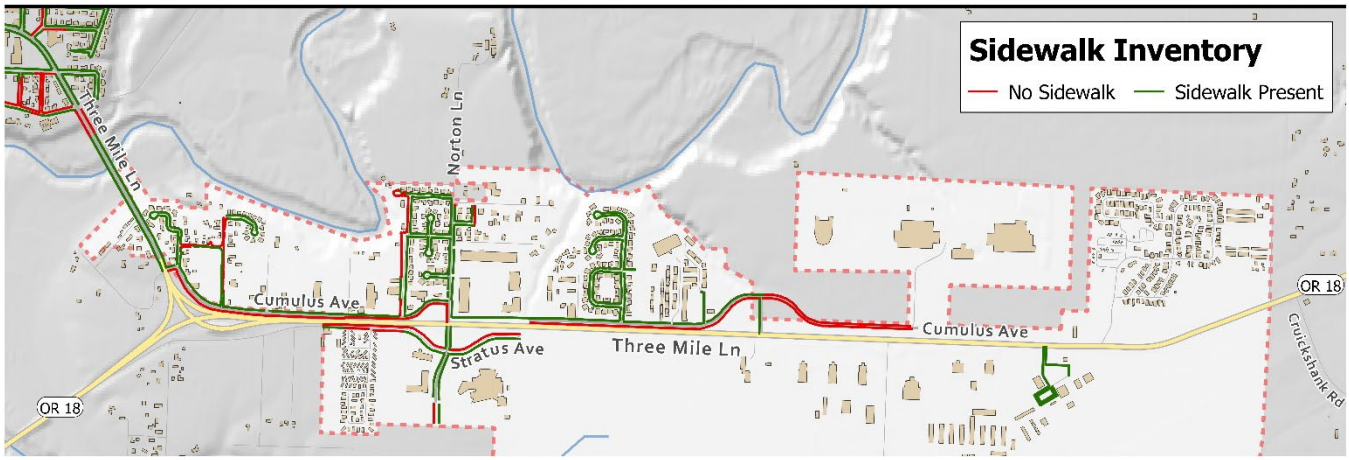
3.1 PEDESTRIAN SYSTEM

3.1.1 Sidewalks and Pathways

Figure 6 illustrates the sidewalk network in the 3MLAP study area. While OR 18 lacks sidewalks or separated pathways, sidewalks are present on one side along most of Cumulus and Stratus Avenues (near the hospital), and on both sides of Norton Lane. While there are small gaps in the network, there is relatively good coverage in residential areas within the study area west of the intersection of OR 18 and Cumulus Avenue, with the exception of the mobile home park on Stratus Avenue. East of the intersection of OR 18 and Cumulus Avenue, there are very few sidewalks.

In recent years, private development has completed new sidewalk construction within new subdivisions (not illustrated in Figure 6), and the City of McMinnville has completed a number of new sidewalks and curb ramps along the north side of Cumulus Avenue.

Figure 6. Existing Pedestrian Network



3.1.2 Curb Ramps

In 2017 ODOT conducted a limited inventory and evaluation of intersection curb ramps on state highways, and in 2006, McMinnville conducted its curb ramp inventory. McMinnville's inventory indicated that older sidewalks and curb ramps constructed in the area generally did not meet accessibility guidelines in support of the American's with Disability Act (ADA). Since 2006, the city has constructed new sidewalks and replaced several older curb ramps along Cumulus Avenue, west of Norton Lane. Subdivisions that are under development, or that have been developed within the last ten years have constructed curb ramps and sidewalks that are generally compliant with ADA policy and design guidance.

The intersections of OR 18 at Norton Lane and Cumulus Avenue include sidewalk, curb ramps, and pedestrian signal buttons that provide general accessibility for a range of pedestrian use, including for those who are mobility-impaired. The remaining intersections along OR 18 do not have sidewalks or curb ramps.

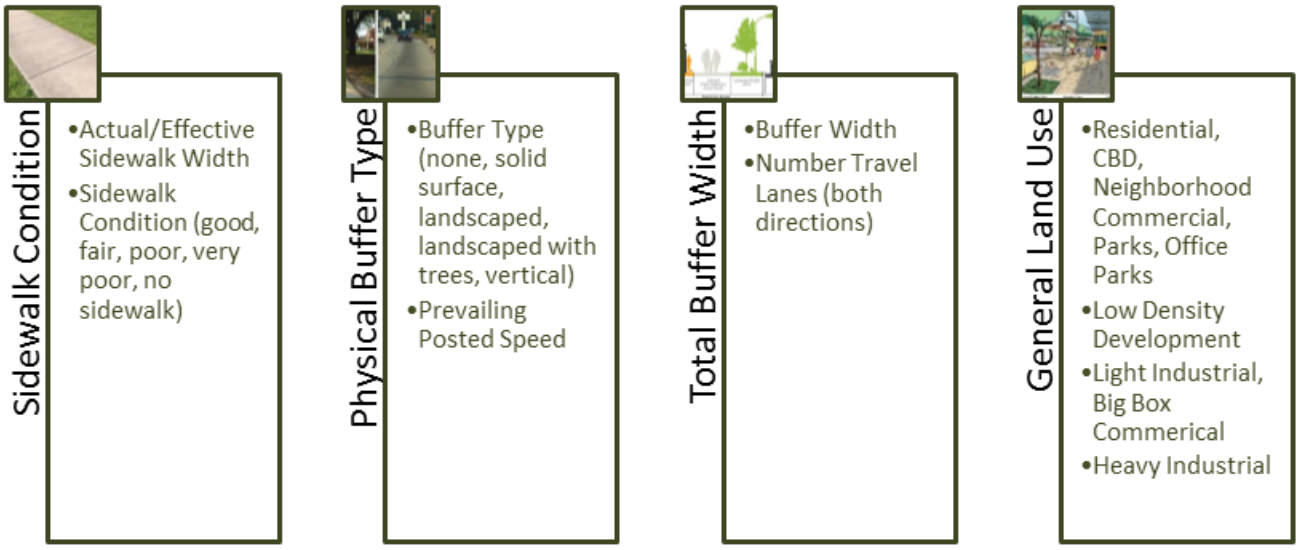
3.1.3 Pedestrian System Performance

ODOT's Analysis Procedures Manual (APM) provides a detailed description of recommended multimodal analysis methodologies. For pedestrian analysis within the study area, the Pedestrian Level of Traffic Stress (PLTS) is applied.

The PLTS methodology classifies street segments according to the level of pressure or strain, or comfort level, experienced by pedestrians and other sidewalk users. Other users include non-motorized forms of transportation as well as motorized power chairs and scooters.

Methodology

PLTS incorporates street data to estimate the pedestrian's view of comfort and perceived safety. Separate PLTS scores are estimated for the following categories:



The four PLTS levels are defined in **Figure 7.**

PLTS Targets

PLTS 2 is generally a reasonable minimum target for pedestrian routes. This level of accommodation will generally be acceptable to the majority of users. Higher stress levels may be acceptable in limited areas depending on the land use, population types, and roadway classifications, but they will generally not be comfortable for most users. Each land use has specific needs for the pedestrian network and study areas should have multiple targets for the different areas.

A target of PLTS 1 is appropriate for areas like downtown cores, medical facilities, areas near assisted living/retirement centers, near transit stops, and in areas where heavily used by children. Downtown cores, for example, should have wide sidewalks with street furniture. Roadways near medical facilities and residential retirement complexes should have sidewalks in good condition with adequate width.

PLTS Scores

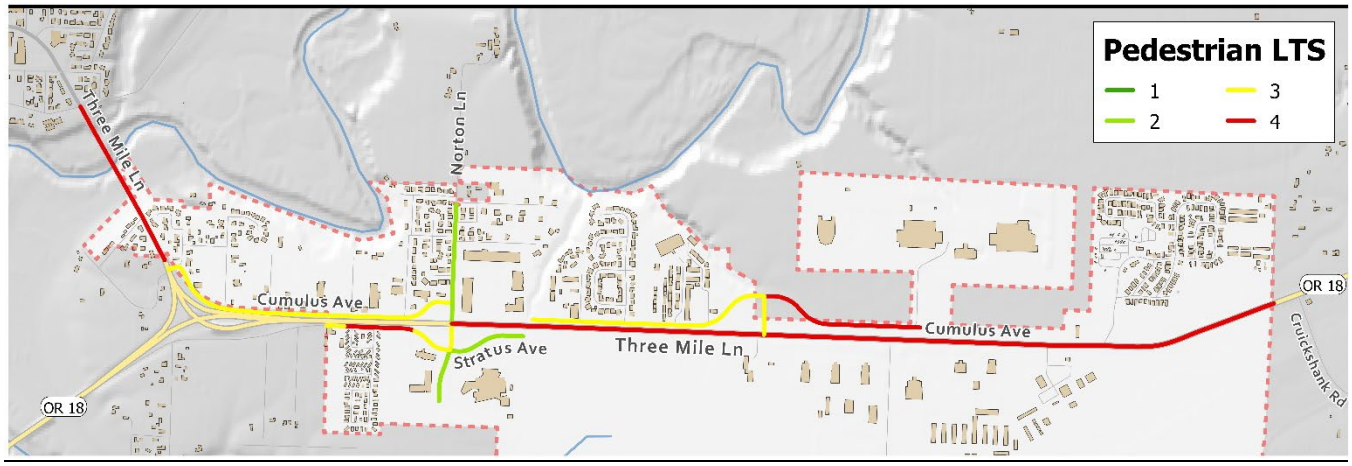
Consistent with the APM, street segments within the study area which are within the worst of the four PLTS categories are reported and mapped. **Figure 7** illustrates the PLTS scores for OR 18 and McMinnville's collector street network within the 3MLAP study area. Key PLTS findings are:

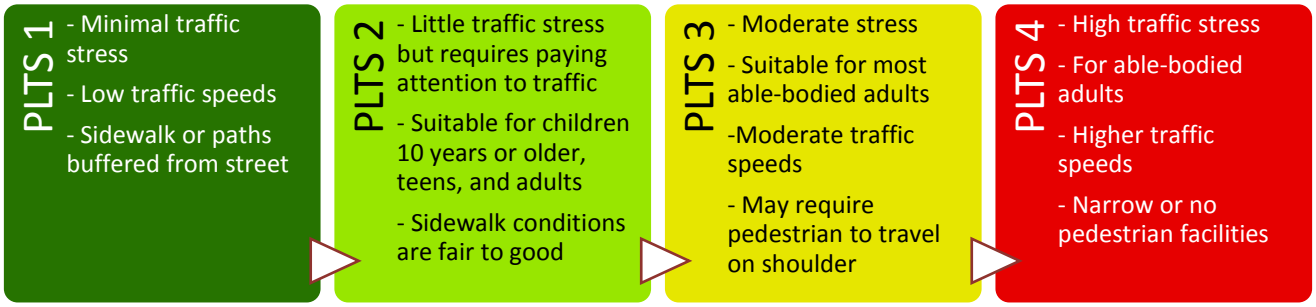
- Norton Lane north of OR 18 and south of Stratus Avenue has curbside sidewalks on each side and is posted at 25 mph. These lower speed limits contribute toward the PLTS 2 score.
- Three Mile Lane is posted at 35 mph and the sidewalks across the Yamhill River Bridge are narrow – these factors contribute towards the PLTS 4 score.
- South of the bridge, Three Mile Lane is posted at 40 mph and has curbside sidewalks. A PLTS 4 score is due to the higher posted speed limit.
- Although Cumulus Avenue has sidewalks on the north side, the posted speed limits (35 mph) and lack of buffer between the sidewalk and vehicle travel lanes result in a PLTS 3 score. A wider sidewalk and/or a new buffered bike lane on Cumulus Avenue would raise the PLTS score to 2.
- The lack of sidewalks on OR 18 and portions of Stratus and Cumulus Avenues result in PLTS 4 scores.

Pedestrian Features Along Cumulus Avenue

Limited Sidewalk Width on Yamhill River Bridge

Figure 7. Pedestrian Level of Traffic Stress





3.1.4 Pedestrian Safety Evaluation

For the five-year period (2012-2016), there were three crashes involving pedestrians within the study area. **Table 1** summarizes the location, severity, and possible contributing factors for these crashes. As shown, the higher vehicle speeds are likely a contributing factor to the severity of pedestrian injuries during collisions. The absence of street lighting and lack of sidewalks are also possible contributing factors to these pedestrian crashes.

3.1.5 Qualitative Assessment - Walkability

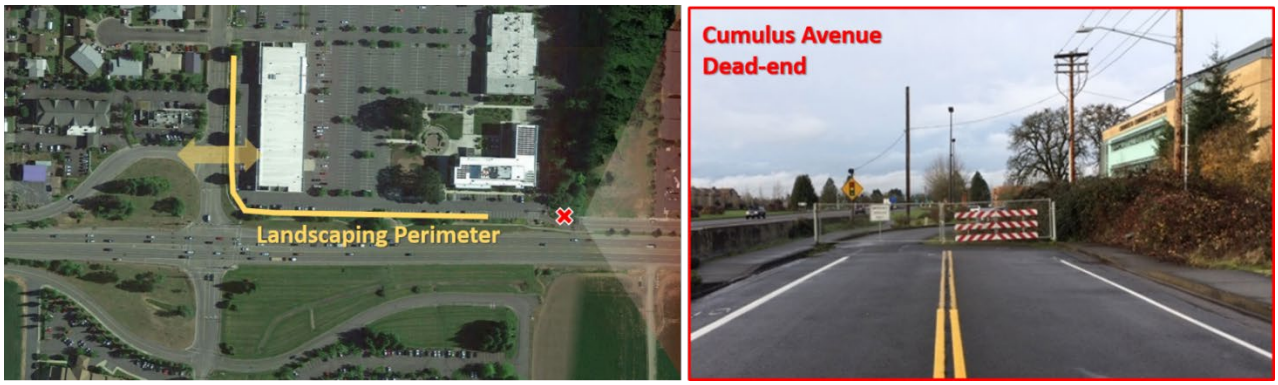
Many of the key existing streets and intersections in the 3MLAP study area arguably contain essential but limited pedestrian features. Some of the sidewalks are older, but are functional; and the system provides a baseline, though minimal, connected network within the study area. Linkage to the McMinnville city center is limited to the Yamhill River Bridge.

Table 1. Pedestrian Crashes, 2012-2016

Location	Crash Severity	Light Condition	Posted Speed (mph)	Drugs/ Alcohol?	Driver Action	Pedestrian Action
Cumulus Avenue (0.3 mile west of Norton Lane)	Pedestrian sustained moderate injuries	Dark (no street light)	35	No	Failure to yield right-of-way	-
Stratus Avenue (0.2 mile west of Norton Lane)	Pedestrian sustained serious injuries	Day	35	No		Pedestrian in roadway (no sidewalk in location)
OR 18 at Norton Lane	Pedestrian sustained minor injuries	Dark (with street light)	45	Yes	Disregarded traffic signal	-

In general, the primary transportation system design of the study area has historically been more focused on automobile capacity and circulation. Older pedestrian design features like curb-tight sidewalks are considered to be minimal under current guidelines. The existing pedestrian realm lacks important features that would otherwise contribute toward a safer and more inviting walking environment on Norton Lane, Cumulus Avenue, and Stratus Avenue.

Also, the original factory outlet mall development poses a barrier to more direct pedestrian and bicycle travel along Cumulus Avenue and the crossing of Norton Lane. This makes access more difficult for residents east of Norton Lane who walk and cycle to McMinnville's central city. The landscaping perimeter provides only an informal and substandard pedestrian link to Norton Lane, and the absence of a designated crosswalk at the Norton Lane and Cumulus Avenue intersection makes walking more difficult in the corridor.



Development Patterns that Form Pedestrian Barriers

The 3MLAP will include further study and identification of supporting streetscape and network concepts that contain several important pedestrian features:

- Wider sidewalks – in context with adjacent land use
- Landscaped (with street trees) or hardscaped buffers between the street and sidewalk
- On-street bicycle lanes that further buffer the pedestrian from the street
- Pedestrian scale lighting that helps improve pedestrian visibility and safety
- Supplemental pedestrian crossing designs to increase motorist awareness and improve pedestrian safety
- Transit stop shelters and benches to improve rider comfort and access
- Possible new walking/cycling connector across Yamhill River to Joe Dancer Park

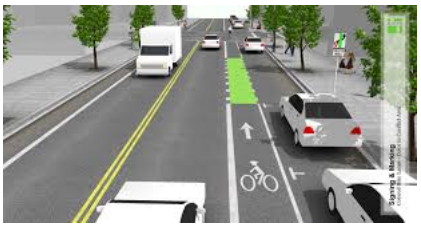
Features to Enhance the Pedestrian Realm
Source: NACTO

3.2 BICYCLE SYSTEM

3.2.1 Bicycle Facilities

Bicycle facilities provide improved mobility for users riding to the city center and seeking active transportation options that support a healthy lifestyle. Compared to pedestrian travel, bicycling is more suitable for longer trips. Bicycle facilities include bike lanes, bike boulevards (shared lane), cycle tracks and shared-use paths as illustrated in **Figure 8**.

Figure 8. Bicycle Facility Types



Bike Lane

Raised Cycle Track

Buffered Bike Lane

Two-Way Cycle Track

Shared Lane

Shared-Use Path

Source: NACTO

Designated bicycle facilities are very limited in the 3MLAP study area. The only arterial, collector street or state highway with bicycle facilities is Cumulus Avenue, which has bike lanes extending from the Chemeketa Community College (where Cumulus Avenue dead-ends) to the three-legged intersection of Cumulus Avenue, north of its intersection with OR 18.

3.2.2 Bicycle System Performance

The absence of continuous on-street bicycle lanes or parallel paths along Norton Lane and Cumulus Avenue constitute gaps in the bicycle network within the 3MLAP study area. Both streets have posted speeds of 35 mph and above, and therefore buffered bike lanes or entirely separated bicycle facilities would likely make these streets more attractive to cyclists. Improved OR 18 crossings for cyclists would also contribute to establishing a more comprehensive bicycle network.

Bicycle Level of Traffic Stress (BLTS)

BLTS serves as a high-level inventory and bikeability/connectivity performance rating, classifying street segments according to the level of pressure or strain experienced by cyclists.

Methodology

BLTS uses data on the characteristics of bike facilities and streets to estimate cyclists' likely view of comfort and perceived safety. The data used to calculate BLTS may differ based on the type of bike facility being evaluated. For separated bike facilities, most – if not all – of the characteristics used to calculate BLTS may not be applicable, in which case a BLTS of 1 would be assigned. For on-street facilities, the following data are factored into the calculation of BLTS:

- The number of vehicle travel lanes
- Posted speed
- Total buffer width
- Bike lane blockages

BLTS uses four levels of traffic stress as shown in **Figure 9**.

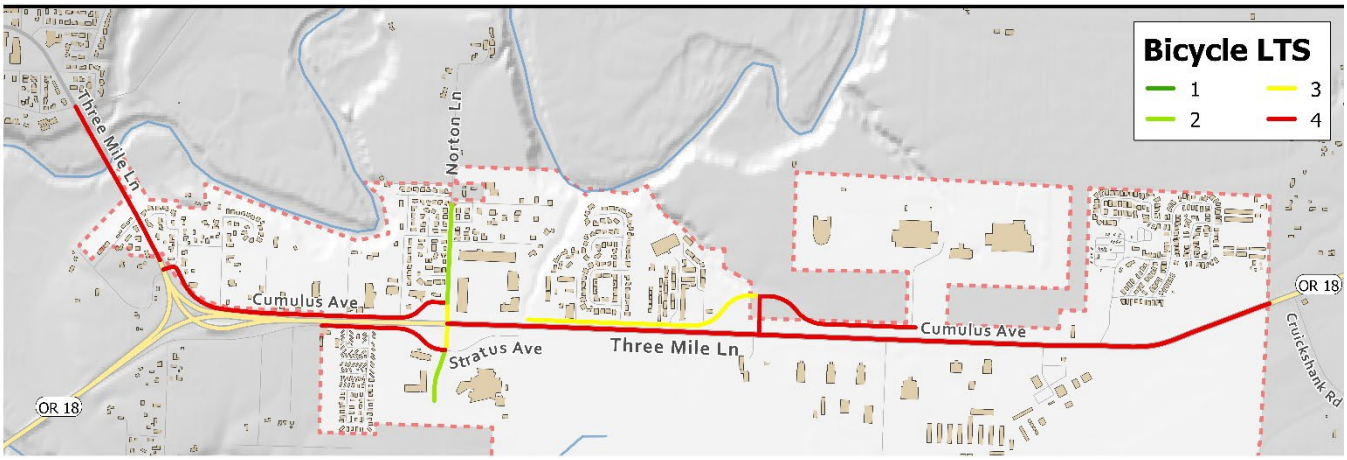
BLTS Targets

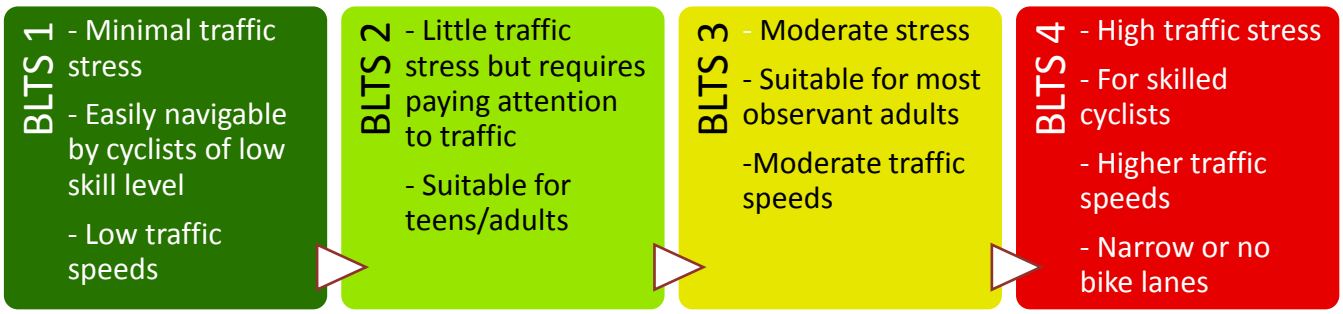
Similar to PLTS, BLTS 2 is generally a reasonable minimum target for bicycle routes and will provide reasonable accommodation for most cyclists. Higher stress level bicycle routes may still see significant use among confident and skilled cyclists but will not be attractive to other users. For bike routes used frequently by younger children, it is recommended that a target of BLTS 1 be used wherever possible. A target of BLTS 1 may also be established for other areas with certain land use, demographic, and network characteristics (e.g., downtown cores and transit stops).

BLTS Scores

Figure 9 illustrates the current BLTS rating of the collector and arterial streets, and state highways in the 3MLAP study area.

Figure 9. Bicycle Level of Traffic Stress





Key BLTS findings are:

- With two exceptions, all study area collector and arterial streets and OR 18 lack bike lanes and have posted speed limits of 35 mph or greater; thus these areas score high levels of traffic stress (BLTS 4).
- Cumulus Avenue, east of Chemeketa Community College, has on-street bike lanes and a posted speed limit of 35 mph, resulting in moderate levels of traffic streets (BLTS 3).
- With a posted speed limit of 25 mph, Norton Lane scores a BLTS 3 immediately north and south of OR 18, and a BLTS 2 elsewhere, even in the absence of bike lanes due to its lower posted speed limit of 25 mph.
- Creating attractive, low-stress bicycle facilities on key routes in the study area will require examining traffic calming design adaptations, lower speed limits, and the addition of buffered bike lanes or separated pathways.

3.2.3 Bicycle Safety Evaluation

For the five-year period between 2012-2016, three crashes involving cyclists occurred within the study area. **Table 2** summarizes the location, severity, and possible contributing factors for these crashes.

Table 2. Bicycle Crashes, 2012-2016

Location	Crash Severity	Light Condition	Posted Speed (mph)	Drugs/ Alcohol?	Driver Action
Driveway along Norton Lane (near Cumulus Avenue)	Cyclist sustained moderate Injuries	Dusk	25	No	Reckless driving; driving too fast for conditions
Kingwood St & Kingwood Dr	Cyclist sustained minor Injuries	Day	< 25	No	Failure to yield right-of-way
OR 18 (near Cumulus Avenue)	Cyclist sustained moderate Injuries	Day	55	No	Careless driving; driver drowsy/fatigued

3.2.4 Qualitative Assessment - Bikeability

The Qualitative Multimodal Assessment for bicycles is similar to the assessment used for pedestrians. For study area segments, the factors listed below will be considered:

- Bicycle facility type
- Buffering from traffic lanes
- Grade
- Pavement condition
- Obstructions
- On-street parking
- Number of travel lanes
- Travel speeds

The 3MLAP study area has very limited bicycle facilities, and often the only option available to cyclists is to ride in general purpose travel lanes. Major streets in the area are generally flat with good pavement conditions, vehicular traffic volume and travel speeds are relatively high (35 mph and higher), and cyclists are required to share the travel lane with motor vehicles. The lack of separate bike lanes, buffered bike lanes, or separated facilities contribute to a poor overall environment for cyclists seeking to travel within the study area network.

OR 18 has high travel speeds, long crossing distances and represents a major barrier for crossing cyclists.

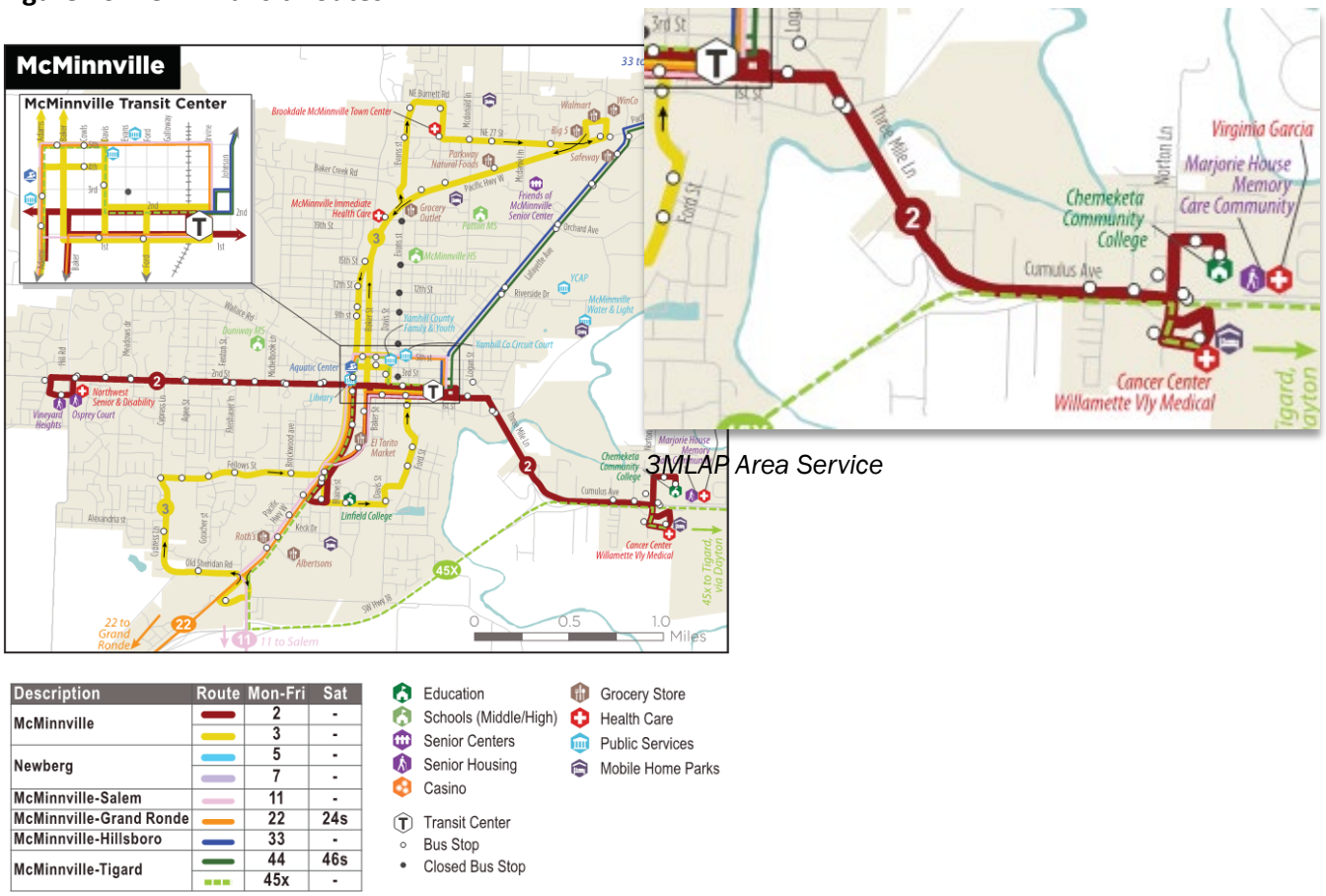
3.3 TRANSIT SYSTEM

As shown in **Figure 10**, Yamhill County Transit Area (YCTA) operates 11 routes, including four (4) local fixed routes in McMinnville and Newberg; and seven (7) commuter routes that operate Monday - Friday to Salem, Grand Ronde, Hillsboro and Tigard. As shown in Figure 10, YCTA's Route #2 links the west and downtown areas of McMinnville to the 3MLAP study area with Willamette Valley Medical Center and Chemeketa Community College which occur as the end destinations. There are intermittent, flag stops along Norton Lane and Cumulus routes. Flag stops are noted along Route #2, and allow customers to flag down a YCTA bus where safe and convenient.

YCTA Service on Cumulus Avenue

Weekday service on Route #2 occurs hourly, with buses departing from the city center at 7:00 a.m. and the last bus departing at about 5:00 p.m. There is no Saturday service on Route #2.

Figure 10. YCTA Transit Routes



Description	Route	Mon-Fri	Sat
McMinnville		2	-
		3	-
Newberg		5	-
		7	-
McMinnville-Salem		11	-
McMinnville-Grand Ronde		22	24s
McMinnville-Hillsboro		33	-
McMinnville-Tigard		44	46s
		45x	-

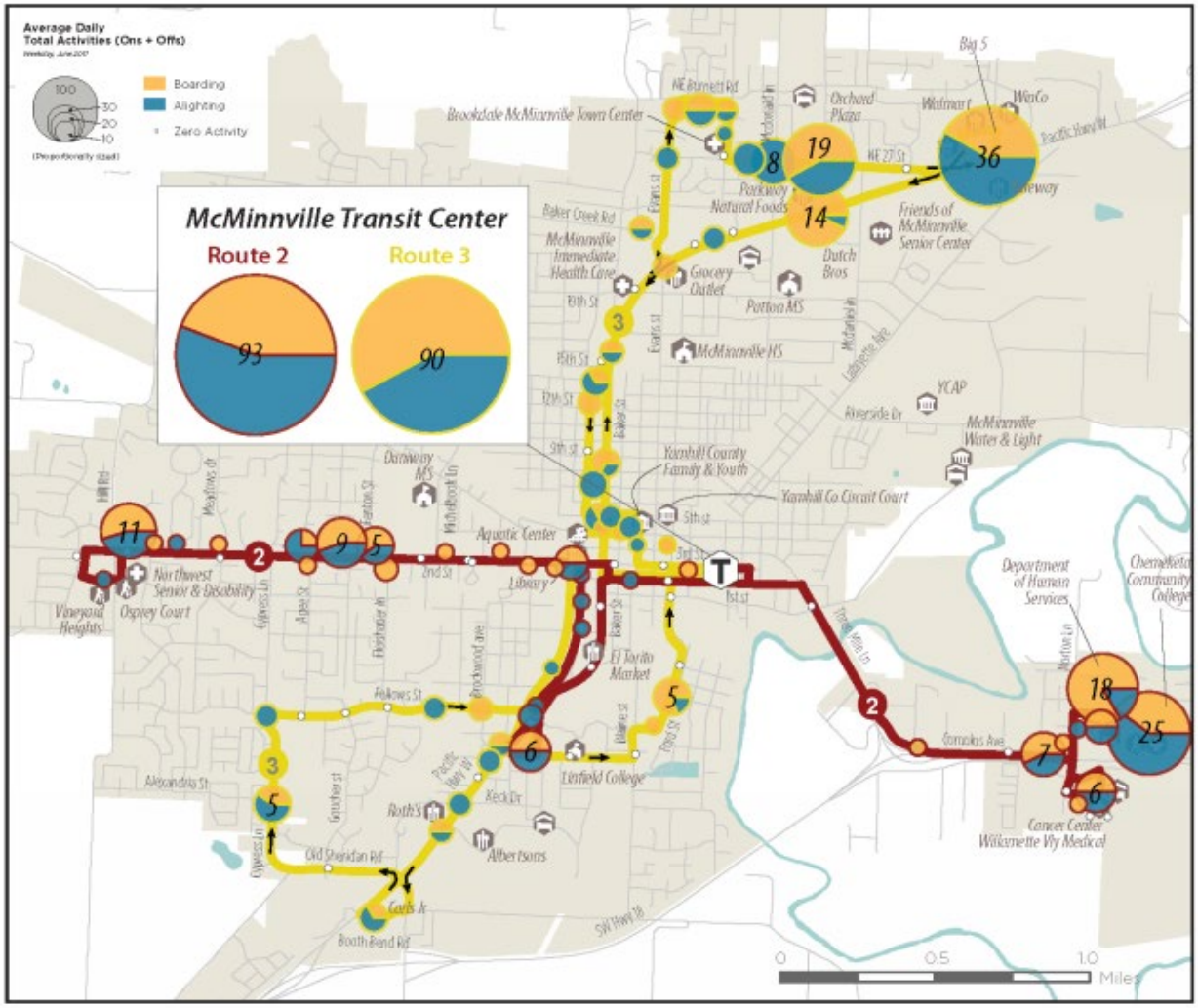
- Education
- Schools (Middle/High)
- Senior Centers
- Senior Housing
- Casino
- Grocery Store
- Health Care
- Public Services
- Mobile Home Parks
- Transit Center
- Bus Stop
- Closed Bus Stop

Figure 11 maps the 2017 daily ridership for local bus routes in McMinnville. Within the study area, boarding volumes are highest at Chemeketa Community College, Oregon Department of Human Services, Physician's Medical Center, and the Willamette Valley Medical Center.

In 2018, YCTA adopted the Transit Development Plan (TDP). The TDP calls for the following future improvements to Route #2, serving the 3MLAP study area:

Short-term	• Expand service hours from 8 a.m. – 6 p.m. to 8 a.m.-7 p.m. • Extend Route #2 to serve Virginia Garcia Medical Center • Transition from flag stops to signed stops
Mid-Term	• Introduce Saturday service
Long-Term	• Expand service hours from 8 a.m.-7 p.m. to 7 a.m.-7 p.m.
Long-Term Vision	• Expand service hours from 8 a.m. -7 p.m. to 6 a.m.-9 p.m. • Expand route frequency from 60 minutes to 30 minutes

Figure 11. YCTA Daily Ridership (2017)



Source: YCTA Transit Development Plan (2018)

3.3.1 Transit System Performance

ODOT's APM also describes the Transit Multimodal Assessment Method used to assess transit service within the study area.

Methodology

The following factors are considered in the Transit Level of Service (LOS) for on-street and highway segments:

- Transit Schedule Speed
- Transit Frequency
- Passenger Load Factor
- Threshold for late bus arrival times

Transit MMLOS Scores

The Transit Multimodal LOS scores are also based on user perceptions (traveler satisfaction), and are graded like a report card from best (LOS A) to worst (LOS F). More frequent and on-time bus service will rate better than infrequent, often late arrival bus service.

The current, hourly transit service on Route #2 in the 3MLAP area is the primary factor considered in transit scoring, resulting in LOS E on Cumulus Avenue and Norton Lane.

Transit Level of Service					
A	B	C	D	E	F
McMinnville Route #2 Service				**X**	

Other factors being equal, and if and when YCTA service increases to a 30 minute frequency, the future transit operations will improve to LOS C on the study area street system.

3.3.2 Transit Safety Evaluation

There were no reported transit bus crashes in the McMinnville urban area for the five-year period between 2012-2016.

3.4 VEHICLE SYSTEM

The adopted city and state traffic mobility targets and standards, study area intersections, and existing peak hour traffic operations and vehicle crash history are summarized in this section. **Figure 12** summarizes the ten study area intersections.

3.4.1 Mobility Targets

The 3MLAP update compares the study area intersections to mobility targets and standards, to indicate whether traffic operations maintain minimum levels of efficiency for motor vehicle travel. As identified in the Methodology Memorandum, both the city and ODOT use volume-to-capacity (v/c) ratios for their established mobility standards.

The volume-to-capacity ratio is the decimal representation (between 0.00 and 1.00) of the proportion of occupied capacity. Capacity is defined as the maximum motor vehicle throughput in one hour at an intersection turn movement or approach leg. Intersection v/c is the peak hour traffic divided by the hourly capacity of the intersection or movement. A ratio closer to 0 generally indicates smooth traffic operations and minimal delays. Ratios closer to 1.00 indicate increased congested and reduced intersection performance. A ratio exceeding 1.00 indicates that an individual turn movement, leg or total intersection is oversaturated, which typically results in excessive vehicle queues and long delays.

3.4.2 Intersection Traffic Operations

Intersection mobility targets vary by jurisdiction within the 3MLAP study area:

- For local city streets and intersections, McMinnville's 2010 Transportation System Plan (TSP) states a mobility standard v/c of 0.90 shall be used.
- All intersections under state jurisdiction in the study area must comply with the v/c mobility targets as defined in the Oregon Highway Plan (OHP), as outlined in **Appendix A**. The ODOT v/c targets are based on the state's classification of highways and posted speed limits.

Two of the ten study intersections were identified as intersections that do not meet performance targets during the peak hour in 2018. At these two intersections, motorists experience delays in excess of the mobility targets established by ODOT and McMinnville, for state and city streets, respectively. These two intersections, are located immediately outside of the study area, and include:

- Three Mile Lane @ First Street, and
- OR 18 @ Cruickshank Road

Existing (2018) Design Hour Traffic Volumes

Existing peak hour traffic volumes were developed as design hour volumes (DHM) to reflect the 30th highest hour of traffic in 2018. The procedure for determining 30th highest hour traffic volumes is specified in ODOT's APM[3].

The 30th highest hour of traffic for the 3MLAP study area intersections typically occurs on weekdays from 4:15 p.m. to 5:15 p.m., during the peak season month of July. The 30th highest hour volumes for 2018 are summarized in **Appendix B**.

Intersection Operations

A complete list of existing study area traffic operations is given in **Appendix B. Figure 12** maps the summary v/c mobility scores indicating which study intersections are either under capacity, approaching capacity, or meeting or exceeding capacity. Further details regarding the traffic analysis methodology are included in **Appendix A**.

Signalized Intersections

Among the ten study intersections, two are signalized: OR 18 and Norton Lane, and OR 18 and Cumulus Avenue. These intersections have been found to operate at volume-to-capacity ratios well below ODOT's established standards (see **Table 3**).

[3] Analysis Procedures Manual, Oregon Department of Transportation, Transportation Development Division Planning Section, Transportation Planning and Analysis Unit, Salem, Oregon, April, 2006, Section 4.3.

Table 3. Signalized Intersection Operations

Signalized Intersections				
ID	**Name**	**v/c**	**LOS**	**Mobility Target**
2	OR 18 & Norton Lane	0.62	C	0.80
3	OR 18 & Cumulus Avenue	0.56	B	0.80

Shaded *cells indicate the movement fails to meet applicable mobility target*

Notes:

1. *At signalized intersections, the results are reported for the overall intersection performance.*
2. *The v/c ratios and LOS are based on the results of the macrosimulation analysis using Synchro, which cannot account for the influence of adjacent intersection operations.*

Source: David Evans and Associates, Inc.

Unsignalized Intersections

Critical movements at unsignalized intersections are typically the minor street approach left-turn or through movements. These movements require yielding to all other movements at the intersection, and are subject to longer delays. Left-turn movements from the major street are also subject to delays for those motorists yielding to oncoming traffic. **Table 4** summarizes existing peak hour traffic operations during the study of unsignalized intersections.

Two of the study area unsignalized intersections fail to meet established mobility targets:

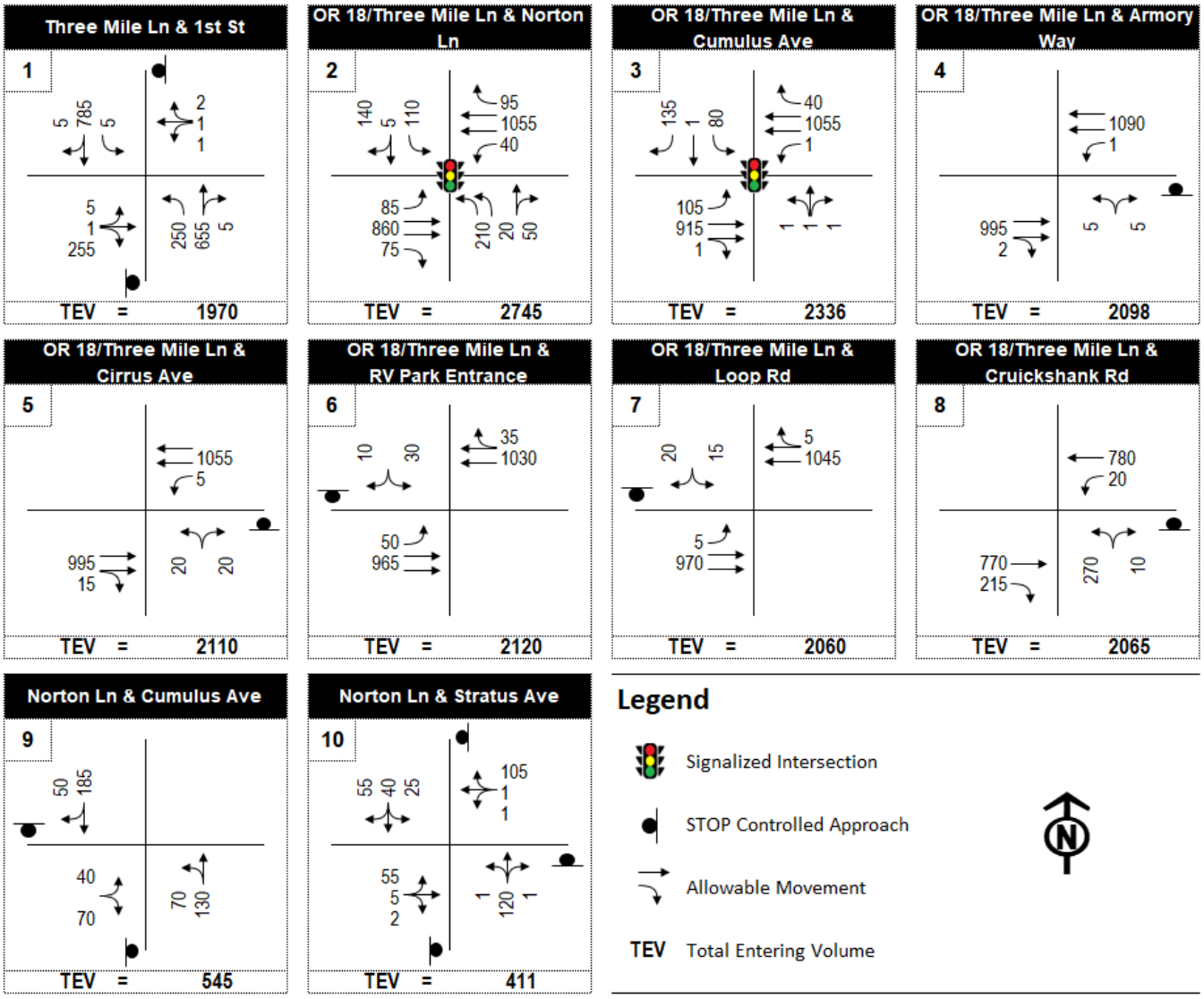
- **Three Mile Lane & First Street** – Three Mile Lane is classified under the OHP as an urban principal arterial and in the McMinnville Transportation System Plan, as a Major Arterial. Three Mile Lane is the most direct connection between the 3MLAP study area and McMinnville's downtown. Consequently, Three Mile Lane experiences high traffic volumes throughout the day, especially during the PM peak hour. There are limited gaps in the Three Mile Lane traffic flow for motorists turning from First Street.

Intersection Configuration: OR 18 & Cruickshank Road

- **OR 18 & Cruickshank Road** – Located just outside of McMinnville's UGB and the 3MLAP study area, Cruickshank Road serves as a primary route to locations that are south of McMinnville via OR 233 and OR 154. OR 18 has a posted speed of 55 mph.

  Cruickshank Road is posted with a stop sign. The northbound left-turn from Cruickshank Road is channelized and becomes the second westbound travel lane on OR 18.

Figure 12. Existing Traffic Operations:
Lane Configuration, Traffic Control, Peak Hour Volume, and Performance



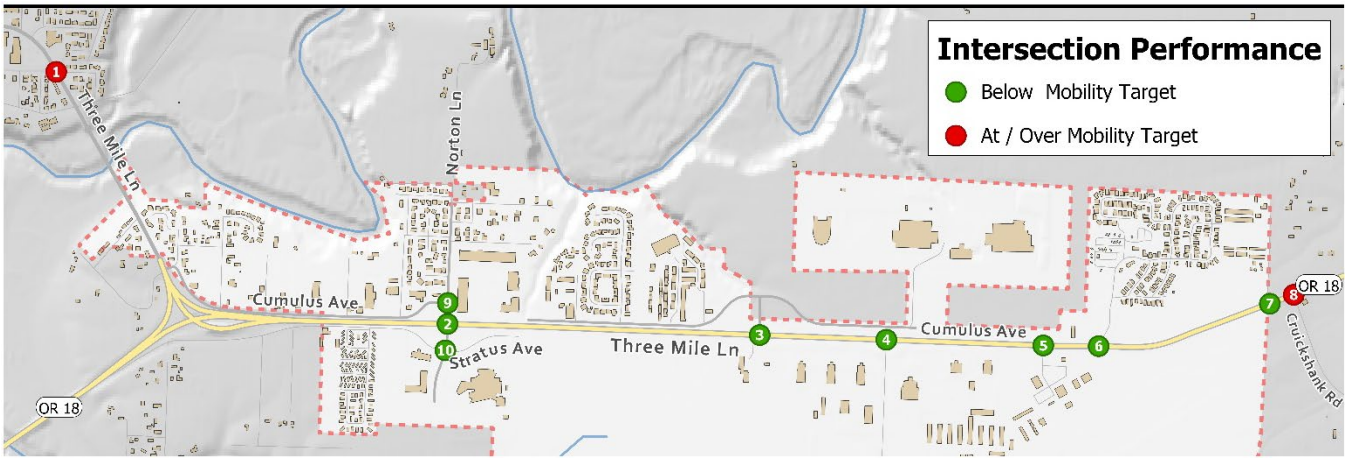


Table 4. Unsignalized Intersection Operations

Unsignalized Intersections		Northbound/Southbound				Eastbound/Westbound			
ID	Name	Critical Movement	v/c	LOS	Mobility Target	Critical Movement	v/c	LOS	Mobility Target
1	OR 18 & First St	NBL	0.34	B	0.90	**EBLTR**	0.99	F	0.90
4	OR 18 & Armory Way	NBLR	0.07	D	0.95	WBL	0.01	B	0.80
5	OR 18 & Cumulus Avenue	NBL	0.22	F	0.95	WBL	0.01	B	0.80
6	OR 18 & RV Park Entrance	SBLR	0.21	D	0.95	EBL	0.09	B	0.80
7	OR 18 & Loop Rd	SBLR	0.27	E	0.95	EBL	0.01	B	0.80
8	OR 18 & Cruickshank Rd	**NBLR**	0.94	F	0.75	WBL	0.03	B	0.70
9	Norton Lane & Cumulus Avenue	SBTR	0.51	C	0.90	EBLR	0.16	B	0.90
10	Norton Lane & Stratus Ave	NBLTR	0.22	B	0.90	WBLTR	0.13	A	0.90

Acronyms: EB = eastbound; WB = westbound; NB = northbound; and SB = southbound. L = left; T = through; and R = right.

Example: EBTR = eastbound through-right

***Shaded** cells indicate the movement fails to meet applicable mobility target*

Notes:

1. *At unsignalized intersections, the results are reported for the worst operating movements on major and minor approaches that must stop or yield the right of travel to other traffic flows.*
2. *The v/c ratios and LOS ratings are based on the results of the macrosimulation analysis using Synchro, which cannot account for the influence of adjacent intersection operations.*
3. *Mobility target is reported for the critical movement, as defined in Note 1.*

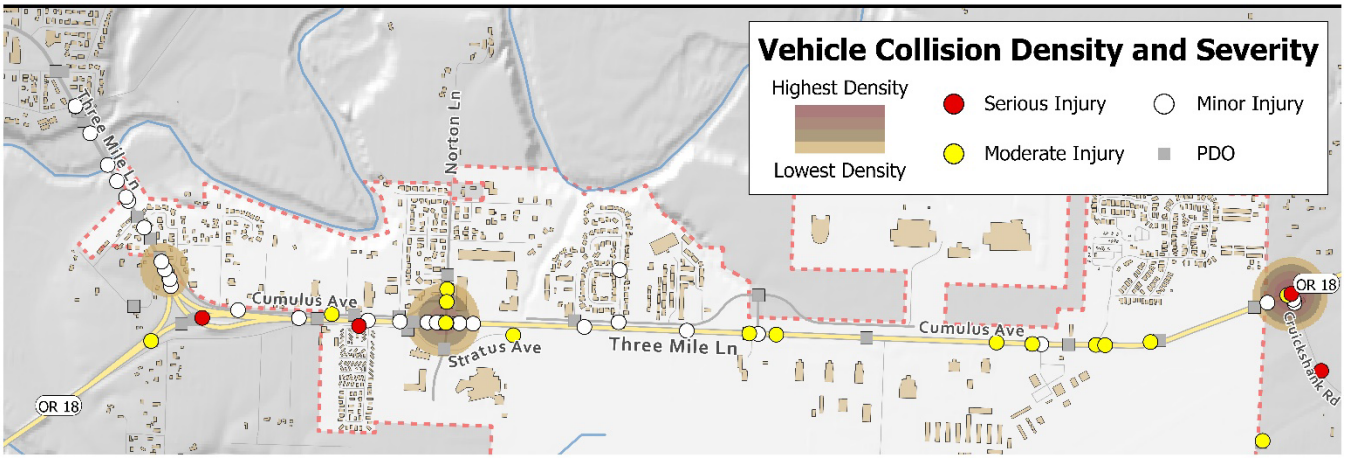
Source: David Evans and Associates, Inc.

3.4.3 Vehicle Safety Evaluation

Figure 13 maps the location of recent vehicle crashes within, and just outside of the 3MLAP study area.

A total of 173 crashes have been recorded for the study area (and immediate vicinity) for the five-year period of 2012-2016. The highest density of crashes are observed along OR 18, and particularly at its intersections with Cruickshank Road and Norton Lane.

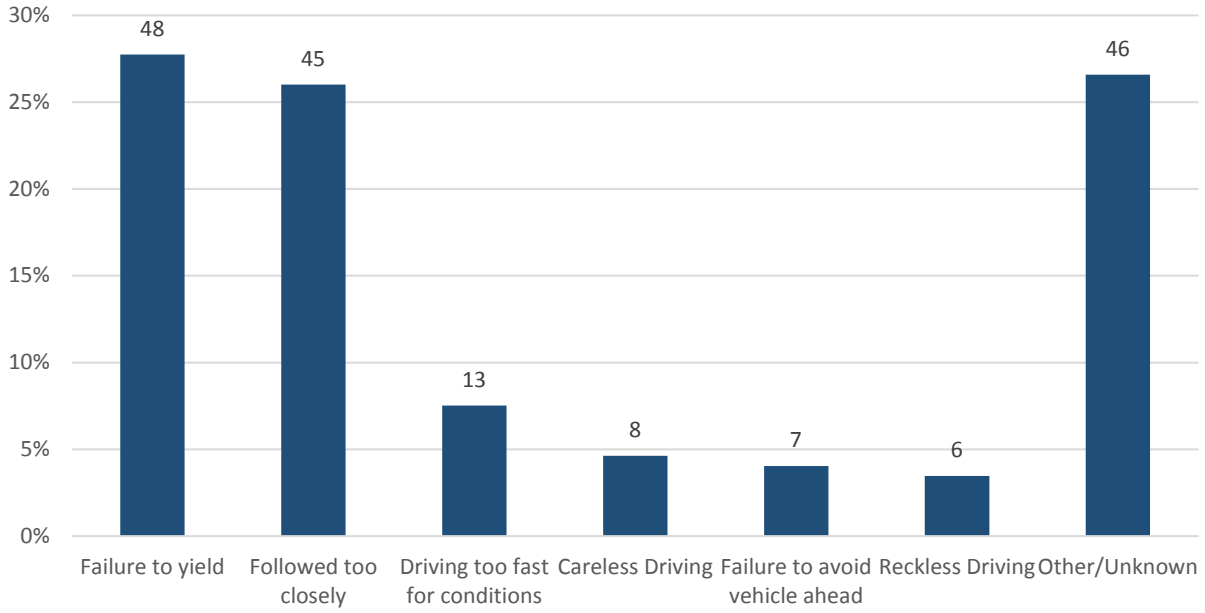
Figure 13. Vehicle Crashes: 2012-2016



Of the 173 crashes, the most commonly observed crash types were rear-end (40%) and turning movement (34%).

Figure 14 charts the general causes of vehicle crashes in the 3MLAP study area and vicinity.

Figure 14. Vehicle Crash Causes: 2012-2016



Data Source: ODOT Crash Data, 2012-2016

A more detailed safety analysis was conducted to determine whether any significant, documented safety issues exist within the study area, and whether findings can be used to inform future measures or general strategies to improve overall safety. This analysis includes a review of intersection crash history, intersection crash rates, and ODOT Safety Priority Index System (SPIS) data.

Serious Injury Vehicle Crashes

Over the five-year period of 2012-2016, there were no traffic fatalities recorded within or near the study area. During that period, six crashes within the study area and vicinity resulted in serious injuries. One of these crashes involved a pedestrian on Cirrus Avenue and is documented in **Table 1** above. **Table 5** summarizes the other five serious injury crashes. Three of the five serious injury crashes were observed at the intersection of OR 18 and Cruickshank Road, and all three crashes were the result of a driver failing to yield to vehicle traffic on OR 18, which is posted at 55 mph.

Table 5. Serious Injury Vehicle Crashes: 2012-2016

Location	Crash Type	Light Condition	Posted Speed (mph)	Drugs/ Alcohol?	Driver Action
OR 18 (just west of Three Mile Lane off-ramp toward downtown)	Collision with a fixed object	Day	45	No	Driver drowsy/fatigued
Cruickshank Rd (south of intersection with OR 18)	Collision with another vehicle (head-on)	Dawn	35	No	Driving too fast for conditions; Drove left of center
OR 18 & Cruickshank Rd	Collision with another vehicle (turning movement)	Day	55	No	Driver failed to yield
OR 18 & Cruickshank Rd	Collision with another vehicle (turning movement)	Dark (with street light)	55	No	Driver failed to yield
OR 18 & Cruickshank Rd	Collision with another vehicle (turning movement)	Day	55	No	Driver failed to yield

Intersection Crash Rates

Crash rates for the 3MLAP study intersections are evaluated based on three methods, as defined in the Oregon Highway Safety Manual:

- **Critical Crash Rate -** compares individual intersection crash rates to similar intersections[4] within the 3MLAP study area;
- **Statewide 90th Percentile -** compares study area intersection crash rates to similar intersections across Oregon; and,
- **Excess Proportion of Specific Crash Types -** identifies the type of crashes that are over-represented at an intersection when compared to similar intersections within the study area.

In support of the study, ODOT performed counts of ten study area intersections: two 4-legged signalized intersections (4SG), two 4-legged stop-controlled intersections (4ST), and six 3-legged stop-controlled intersections (3ST). Because of the limited number study intersections types, calculations for Critical Crash Rate and Excess Proportion of Specific Crash Types are not statistically valid for the 4SG and 4ST intersections. Only results for 3ST intersections in the study area are reported.

Critical Crash Rate and Statewide 90th Percentile

The intersection of OR 18 and Cruickshank Road is the only three-legged, stop-controlled intersection in the study area that has a Critical Crash Rate that exceeds either the crash rate for similar intersections in the study area, or the Statewide 90th Percentile rate (see **Table 6**). The most commonly observed crash type at the intersection was turning-related, which accounted for 33, or 79%, of the 42 crashes at this intersection over the five-year period. The most commonly cited cause of crashes was drivers failing to yield the right-of way.

[4] Similar intersections are grouped into "Reference Populations" which define major characteristics common to these groups. Four Reference Populations are used: 3-legged signalized intersections (3SG), 3-legged stop-controlled intersections (3ST), 4-legged signalized intersections (4SG), and 4-legged stop-controlled intersections (4ST)

Table 6. Crash Rates for 3ST Study Intersections

ID	Intersection	Intersection Type	Total Crashes	Critical Crash Rate (per MEV**)	Statewide 90th Percentile Crash Rate	Observed Crash Rate (per MEV)
4	OR 18 & Armory Way	Urban 3ST	0	0.38	0.29	0.00
5	OR 18 & Cirrus Ave	Urban 3ST	2	0.38	0.29	0.05
6	OR 18 & RV Park Entrance	Urban 3ST	0	0.38	0.29	0.00
7	OR 18 & Loop Rd	Urban 3ST	1	0.38	0.29	0.03
8	OR 18 & Cruickshank	Urban 3ST	42	0.38	0.29	**1.13**
9	Norton Lane & Cumulus Avenue	Urban 3ST	3	0.38	0.29	0.28

Notes:

*** Per MEV = Crashes per million entering vehicles; Critical crash rate (per Million Entering Vehicles) calculated based on 95% confidence level*

***Bolded and Shaded** indicates a high crash rate compared to other similar intersections in the study area.*

Source: ODOT crash data from January 1, 2012 to December 31, 2016

OR 18 and Cruickshank Road is located immediately east of the McMinnville urban area and has an operational crash rate of 1.13. For comparison purposes, the Statewide 90th Percentile crash rate for Rural 3ST intersections is 0.48. *[Note: ODOT has included in the 2021-2024 STIP, funding to install a buffered eastbound right-turn lane on OR 18 at Cruickshank road. This improvement will likely help reduce the crash rate.]*

Excess Proportion of Specific Crash Types

The Excess Proportion of Specific Crash Types method quantifies the extent to which a specific crash type (the target crash type) is overrepresented at an analysis site, compared to the average representation among similar intersections in the same study population.[5] Analysis of excess proportion of specific crash types does not consider the overall frequency or rate of crashes; instead it considers only the types of observed crashes.

A greater than expected proportion of rear-end collisions is observed at the intersection of Norton Lane and Cumulus Avenue, see **Table 7**.

Although only two rear-end crashes occurred in the five-year period, the excess proportion value is an indicator of potential benefit from any intersection countermeasure: the greater the excess proportion value, the greater likelihood that the intersection will benefit from a countermeasure targeting rear-end collision types.[6]

[5] ODOT Analysis Procedure Manual Version 2, Section 4.3.5, p. 4-76, 2016.
[6] Highway Safety Manual 4-58

Table 7. Crash Rates for 3ST Study Intersections

REAR-END CRASHES				
ID	**Intersection**	**Intersection Type**	**Probability**	**Excess Proportion**
9	Norton Lane & Cumulus Avenue	3ST	1.00	0.54

Notes:
A Limiting Probability of 0.90 was used
Reference Populations: 3ST (6 study intersections)

Source: ODOT crash data from January 1, 2012 to December 31, 2016

Safety Priority Index System (SPIS)

SPIS is a method used in Oregon to identify safety problems along state highways. Highways are evaluated in approximately one-tenth mile increments (often grouped into larger segments). Each year these segments are ranked by assigning a SPIS score based on the frequency and severity of observed crashes, and prevailing traffic volume. ODOT conducts more detailed crash analyses, and corrective actions are considered for highway segments ranked in the top 10%. **Table 8** summarizes the only segment of OR 18 within the study area, and vicinity that is listed in the top 10% of the most recent SPIS rankings.

Table 8. Top 10% ODOT SPIS Site Summary

Route	BMP	EMP	ADT	Crashes	Fatalities	Serious Injuries	Connection	Percent	SPIS Score
OR 18	48.50	48.68	19,500	28	0	2	Loop Road	95	78.19

Source: ODOT SPIS Report 2016 (2013-2015 Data)

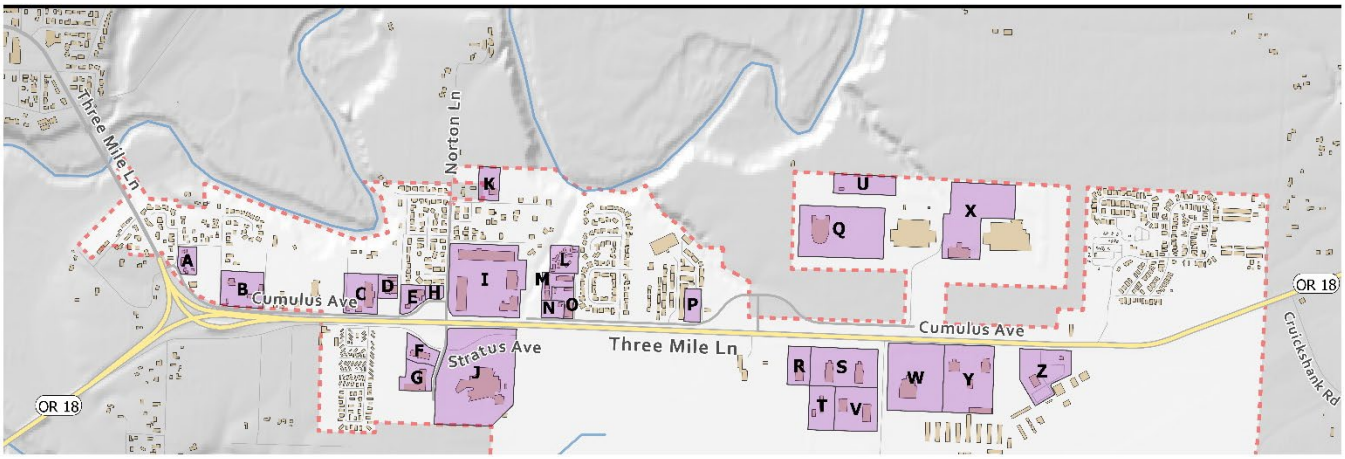
The SPIS site documented in the above table is located just outside the eastern extent of the study area on OR 18 in the vicinity of Loop Road and Cruickshank Road. Possible factors that contribute to the high SPIS score for this segment include high vehicle speeds on OR 18, the high volume of vehicles that turn left from Cruickshank Road onto OR 18 westbound (quickly needing to attain the posted 55 mph speed on OR 18), and the close proximity of Loop Road and Cruickshank Road.

3.5 OFF-STREET PARKING

For reference, **Figure 15** maps the off-street parking lot inventory in the study area, by specific land use. **Figure 16** charts the parking space inventory and utilization of the key land uses in the study area. The inventory and utilization analysis is predicated on a Google Earth review and enumeration of occupied and vacant spaces, based on the Google aerial photograph dated July 16 (Monday), 2018 (estimated time of day – mid-morning).

During the typical weekday mid-morning, the area parking utilization is quite high. Parking utilization picks up later in the afternoon, due to increased visitors at the Evergreen Air and Space Museum and Waterpark facilities. The hospital parking lots are also relatively full, with a utilization rate of about 70%.

Figure 15. Study Area Off-Street Parking Inventory

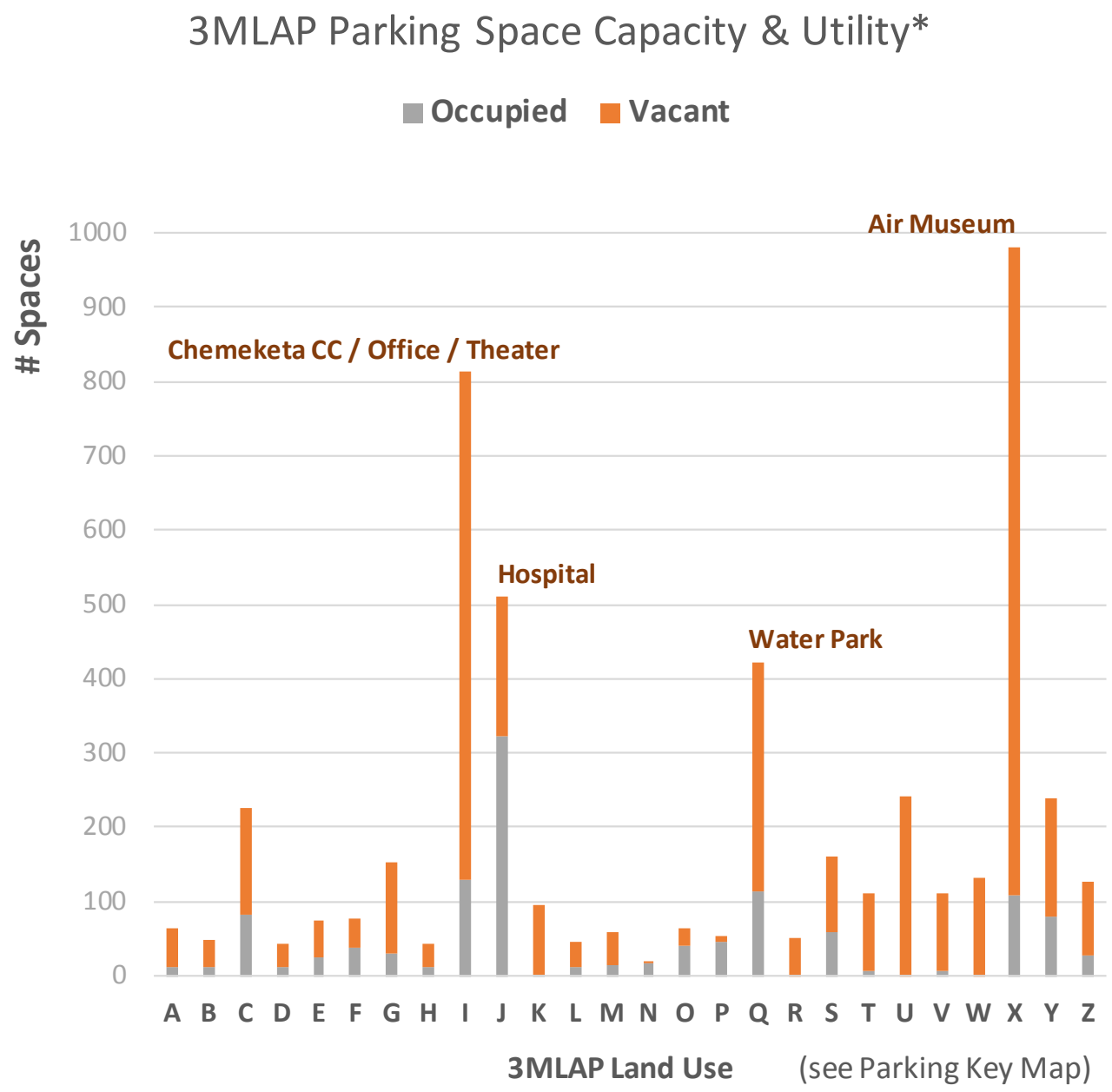


Map Key

A	Jehovah's Witness[4]	N	Assisted Living[5]
B	American Legion[3]	O	Virginia Garcia Health Center[1]
C	Physician's Medical Center[1]	P	Fircrest Assisted Living[5]
D	Yamhill County Housing Authority[2]	Q	Evergreen Water Park[3]
E	Red Lion Inns[3]	R	Evergreen Intl' Aviation[5]
F	Comfort Inn, Restaurant[3]	S	Evergreen Intl' Aviation[5]
G	Medical Offices[1]	T	Jackson Family Wines[3]
H	McDonalds[3]	U	Evergreen Intl' Aviation[5]
I	Chemeketa CC, Offices, Theater[2]	V	US Army National Guard[2]
J	Willamette Valley Medical Center[1]	W	Evergreen Intl' Aviation[5]
K	New Horizons Church[4]	X	Evergreen Aviation Air & Space Museum[3]
L	Apartments[7]	Y	Evergreen Intl' Aviation[5]
M	Apartments[7]	Z	McMinnville Airport & State Police[2]

[1] Medical
[2] Institutional
[3] Commercial/Lodging
[4] Religious
[5] Business
[6] Senior Housing / Assisted Care
[7] Residential

Figure 16. Study Area Parking Capacity and Utilization



Source: Google Maps * July 16 (Monday), 2018 (mid-morning)

4 KEY FINDINGS

This section summarizes the existing, multimodal conditions within the 3MLAP study area:

- Auto (vehicle) operation deficiencies are noted at the two intersections at the ends of the study area: Three Mile Lane and First Street, and OR 18 at Cruickshank Road. The two major signalized intersections on OR 18 at Norton Lane and Cumulus currently operate well within the mobility targets outlined in the Oregon Highway Plan.
- There is a notable crash history at the intersection of OR 18 and Cruickshank Road. Three of the five serious injury crashes within the study area between 2012-2016 occurred at the intersection and all three were the result of a driver failing to yield to vehicle traffic on OR 18, which is posted at 55 mph.
- Within the study, the OR 18/Cruickshank Road intersection is a logical location to consider including potential gateway streetscape improvements. Any gateway and traffic operation improvement options must consider limitations of vertical lighting and traffic control within the McMinnville Airport Vertical Clearance Zone.
- There is an abundance of parking capacity serving several major land uses: Valley Medical Center, Evergreen Aviation/Air Museum/Water Park, and the original factory outlet center.

- The 3MLAP study area has very limited bicycle facilities, and frequently the only option available to cyclists is to ride in general purpose travel lanes. While the major streets in the area are generally flat with good pavement conditions, vehicular traffic volume is relatively high and travel at higher speeds (35 mph and higher).The lack of separate bike lanes, buffered bike lanes, or separated facilities contribute to a poor overall environment for cyclists seeking to travel within the study area network.
- OR 18 has high travel speeds, long crossing distances and represents a major barrier for crossing cyclists.
- With two exceptions, study area streets and highway routes lack bike lanes, and have posted speed limits of 35 mph or greater, producing high levels of traffic stress (BLTS 4).
    - Cumulus Avenue, east of Chemeketa Community College, has on-street bike lanes and a posted speed limit of 35 mph, resulting in moderate levels of traffic streets (BLTS 3).
    - With a posted speed limit of 25 mph, Norton Lane scores a BLTS 3 immediately north and south of OR 18, and BLTS 2 elsewhere, even in the absence of bike lanes due to its lower posted speed limit of 25 mph.
- Creating attractive, low-stress bicycle facilities on key routes within the study area will require examining traffic calming design adaptations and lower speed limits, and implementing buffered bike lanes or separated pathways.

	• Higher posted and operational speed limits along Cumulus and Cirrus Avenues (35 mph) are not conducive to an inviting, healthy, and comfortable pedestrian experience. • Many of the key existing streets and intersections in the 3MLAP study area contain essential but limited pedestrian features. Some of the sidewalks are older, but are functional; and the system provides a baseline, if minimal, connected network within the study area. Linkage to the McMinnville city center is limited to the Yamhill River Bridge. • Older pedestrian design features are considered to be minimal under current guidelines. The existing pedestrian realm lacks important features that would otherwise contribute to more safe and inviting walking environments on Norton Lane, Cumulus Avenue, and Stratus Avenue. • The original factory outlet mall development introduces a barrier to more direct pedestrian and bicycle travel along Cumulus Avenue and the crossing of Norton Lane, making it more difficult for residents east of Norton Lane to walk and cycle to McMinnville's central city. The landscaping perimeter provides only an informal and substandard pedestrian link to Norton Lane, and the absence of a designated crosswalk at the Norton Lane and Cumulus Avenue intersection makes walking more difficult within the corridor.

	• YCTA provides limited (hourly) service in the study area on Route 2, with direct links to downtown McMinnville and the city Transit Center. This limited service is the primary factor that contributes to the poor system performance rating. Other factors being equal, and if and when YCTA service increases to a 30 minute frequency, the future transit operations will improve to LOS C on the study area street system.

The findings from this Memorandum will be used to help identify improvement projects in later phases of the 3MLAP development.

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5 APPENDIX A METHODOLOGY MEMORANDUM

6 APPENDIX B EXISTING PEAK HOUR (30TH HIGHEST DESIGN VOLUME) INTERSECTION TRAFFIC OPERATIONS ANALYSIS

HCM Reports

Attached are HCM 2000 reports for the two signalized study intersections and HCM 6th Edition reports for the eight unsignalized study intersections. The following should be noted when reviewing these reports:

Study Intersection 8 (OR 18/Three Mile Lane & Cruickshank Rd) – Due to this intersection's non-traditional lane configuration characteristics, westbound through volumes were set to zero in order to model the northbound left turn to best simulate the intersection's seagull configuration.

Study Intersection 9 (Norton Lane & Cumulus Avenue) – Due to this intersection's non-traditional traffic control characteristics (stop-controlled for the EB and SB approaches and free for the NB), this intersection was remodeled as a conventional four-legged, two-way stop controlled intersection with entering volume of zero on the leg opposite the free NB approach. Volumes for the southbound, Norton Lane stop-controlled approach were moved to a remodeled westbound approach. This approach may slightly overestimate the v/c for some of the movements. Results indicate low v/c ratios for all movements at this intersection despite the possibility of an overestimation. Therefore, it is conservatively estimated that Intersection 9 performs at a v/c well below established mobility standards during the PM peak hour.

Study Intersection 10 (Norton Lane & Stratus Ave) - Due to this intersection's non-traditional traffic control characteristics (stop-controlled for the EB, WB, and NB approaches and free for the SB), this intersection was modeled twice: first, with the EB and WB approaches stopped, and the NB and SB approaches free; and second, with the NB and SB approaches stopped, and the EB and WB approaches free. Using this methodology, the NB approach was found to have the maximum v/c ratio for any approach yielded by both Intersection 10 models. It should be noted, however, that this approach overestimates the v/c for this approach. With a v/c of 0.22, even with this overestimation, it is conservatively estimated that Intersection 10 performs at a v/c well below established mobility standards during the system PM peak hour.

7

McMinnville Three Mile Lane Area Plan: Market Analysis

Date April 16, 2019 | FINAL DRAFT

To McMinnville Three Mile Lane Area Plan Project Management Team

From Chris Zahas and Sam Brookham, Leland Consulting Group

Executive Summary

This executive summary provides an overview of the McMinnville Three Mile Lane Market Analysis, which assesses conditions for residential, commercial, office, and industrial development, as well as public recreational facilities. The executive summary includes a description of residential, commercial, office, and industrial forecasts and demand.

Population and Employment Forecasts

The Population Research Center at Portland State University (PSU) produces the annual Population Estimates for Oregon and its counties and cities, as well as the estimates by age and sex for the state and its counties. The population is projected to grow faster from 2020 onwards within the McMinnville UGB than in Yamhill County.

Table ES- 1. Population Forecasts, 2017-2040

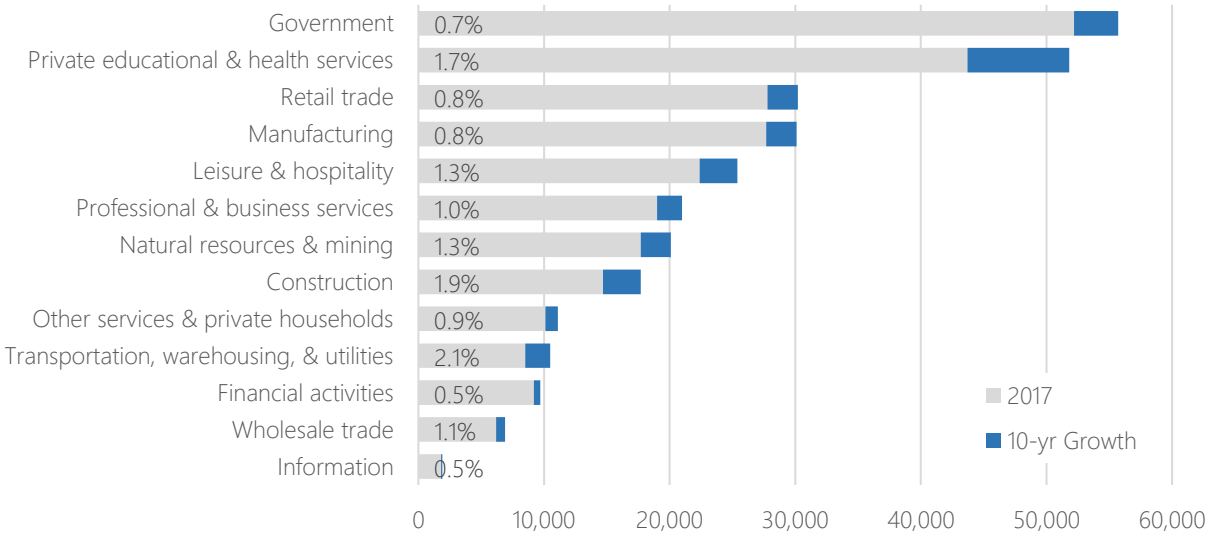
Area / Year	2017	2020	2025	2030	2035	2040
Yamhill County	106,555	111,101	119,339	127,404	135,096	142,311
Annual Growth Rate	N/A	1.40%	1.44%	1.32%	1.18%	1.05%
McMinnville UGB	34,293	35,709	38,437	41,255	44,122	46,956
Annual Growth Rate	N/A	1.36%	1.48%	1.43%	1.35%	1.25%

Source: Portland State University

The study area has a diversified employment base, reflecting the broad range of commercial and industrial businesses in the area. Key takeaways relating to regional employment forecasts include:

- More than one-quarter of all projected employment growth is expected to be in the educational and health services industries, with most in the health care field specifically.
- Industries that typically drive the majority of new office demand—namely Professional and Business Services, Financial Activities, and Information—are among the industries projected to see the slowest employment growth among all industries, and collectively account for eight percent of total projected employment growth.
- Manufacturing employment—the primary driver of industrial development—is projected to be responsible for eight percent of total employment growth.

Figure ES- 2. Projected New Employment Growth, Mid-Valley Region, 2017-2027



Source: Oregon Employment Department (QualityInfo.org).

Real Estate Market

Key takeaways relating to market conditions and real estate trends within the region, City, and Three Mile Lane study area specifically, are as follow.

- **Residential prospects** are strong regionally and nationally, but market conditions are weaker in McMinnville. Significant growth in the Mid-Valley region has driven demand for household growth—for both multifamily and single-family. Growth projections for the region suggest demand will remain strong market-wide, although new development in McMinnville has clustered around the western and northern edges of the city. However, existing rents in the region are relatively low and may struggle to attract prominent multifamily developers in the region due to the continuously rising nature of construction costs. The single-family market is very tight, with strong absorption but very little inventory currently listed for sale—particularly in the sub-$400,000 categories. Single-family homes, multiplexes, townhomes, cottage clusters, and low-rise "garden" apartments are all residential development types that would likely be feasible in the study area in the near-term. Higher-density developments may require additional incentives or other interventions.
- **Retail prospects** are relatively strong for certain retail sectors, despite relatively weak market conditions (including rent, vacancy, absorption, etc.). The Three Mile Lane study area likely checks off many site selection criteria and market characteristics typically desired by prospective retailers. While there are few retailers currently in the area, desired physical characteristics, such as visibility, vacant developable land, and ease of access are all present. Further, McMinnville's central location between the Oregon Coast, the Portland Metro, and Salem provides access to a wide variety of markets. Significant household growth and the burgeoning tourism industry will continue to improve retail prospects.
- **Industrial users** are likely to find the Three Mile Lane area an attractive location given its separation from incompatible land users (like residential), ease of access, highway location, level terrain, and

proximity to the airport. While industrial development prospects at the national level are strong, especially warehouse and distribution—largely because of the rise of e-commerce—the Three Mile Lane corridor is not centrally located to large population centers and is therefore unlikely to capture much of this growing market. Instead, industrial growth is likely to be down to the growing agriculture and food and beverage production industry (including the wine industry). These latter users would be consistent with the existing industrial zoning while creating interesting places and improving walkable access to amenities.

- **Office prospects** are potentially strong but limited. Employment data shows few jobs and low historical growth for industry sectors that typically drive demand for new office space. Regionally, however, projections show significant employment growth in education, healthcare, and professional and business services—all of which drive the most demand for new office construction. If McMinnville is able to reposition its office market to capture a greater share of this regional growth, office prospects may expand. Indeed, two businesses recently relocated to the Three Mile Lane Area because of the lack of available office space downtown—reflecting the very low vacancy rate—but wished to remain in McMinnville because of the high quality of life. McMinnville's quality of life not only has a positive impact on business retention, but there has also recently seen a significant uptick in small high-tech relocations from Silicon Valley that are struggling to find office space. Build-to-suit office opportunities may also arise and help build momentum in the local office market, especially with regard to healthcare and education where there are some existing major tenants and institutions.
- **Lodging** is likely to be a significant development type over the long-term, but the area may struggle to attract hotel developers due to its existing industrial character, lack of walkable amenities, and isolation from downtown. An assessment of the opportunities to capture demand associated with the burgeoning $7 billion wine industry in the Willamette Valley and related tourism development requires further, more nuanced analysis.
- **Tourism** is a booming industry, particularly with regard to the wine industry, increasing market pressure for the new construction of compatible uses, such as experiential retail and restaurants, lodging, and craft industrial, as well as recreational amenities, such as trails and parks, that combined help to create an authentic, vibrant place.

Three Mile Lane in its entirety is located within an Opportunity Zone, a new tax program created by the 2017 Tax Cuts and Jobs Act designed to spur investment in distressed communities. Investors may defer tax on capital gains up to December 31, 2026, by making an appropriate investment through a qualified opportunity fund (QOF) in accordance with certain requirements. This will increase returns and should make investing in opportunity zones more appealing.

Demand and Forecasted Absorption

The following table provides a summary of market area demand for all applicable land uses. The table also includes an estimated development program for the Three Mile Lane study area, which is LCG's projected "capture" of regional growth—based on historical trends, land supply, and anecdotal evidence based on the

two focus group discussion conducted to date.[1] The justification for both these numbers is included in the "Notes" column.

It is important to note that these numbers are not specific recommendations; rather, they simply provide an indication of the potential program mix based on market strength. Changes to the mix and specific numbers are anticipated with changes to the zoning, land supply, and public interventions, among other market disrupters.

Table ES- 3. Summary of Market Area Demand and Three Mile Lane Capture

Land Use	Market Area Demand	3ML Est. Program	Notes
Ownership Residential	2,555 units	NA	The market is strong for single-family, with high home values, household incomes, sales volumes, absorption, and construction activity. The quantity depends largely on the City's vision for the area, applicable zoning, and buildable land.
Rental Residential	1,224 units	240 units	Despite solid national development prospects and strong market area demand due to high growth, low-rise rental apartments and multiplexes are likely the primary building types feasible in the study area because of relatively weak market characteristics.
Retail	539,200 sf	150,000 sf	The study area is well-positioned for new retail development, particularly large-format retail. Neighborhood-serving retail may be a mid- to long-term aspiration when additional residential construction occurs.
Office	144,500 sf	30,000 sf	The office market is relatively weak, and the absorption of significant speculative new development should not be expected. However, opportunities may arise because of McMinnville's high quality of life, and the Three Mile Lane corridor's proximity to the airport and institutional users, such as healthcare and education.
Industrial	793,000 sf	80,000 sf	The industrial market remains strong due to the growth of agriculture, food and beverage production, and manufacturing. Continued growth may generate demand in the study area, but development may negatively impact prospects for other land uses, such as lodging and multifamily.
Lodging	NA	NA	Lodging is a specialized development type, which may be feasible given McMinnville's strong tourism industry. However, a weak office market may limit feasibility in the short-term.

Source: Leland Consulting Group

[1] Where applicable, LCG increased the projected growth rate to reflect higher spending due to tourism from the burgeoning wine industry. Spending generated from tourism would not otherwise get captured within LCG's demand models as the majority of demand is typically generated by those that live and work within the primary market area.

Introduction

The Three Mile Lane Area Plan (3MLAP) project will develop an area plan for the Three Mile Lane corridor in McMinnville, updating the 1981 Three Mile Lane Overlay District (amended in 1994) and the 1996 Highway 18 Corridor Refinement Plan. The 3MLAP will integrate a wide range of land uses and a multi-modal transportation system that serves both local and state transportation needs and provides active connectivity within the plan area as well as to the City's downtown core. The project will consider how to maximize the opportunities for job creation, housing, and resiliency planning in the corridor by leveraging the land assets to their highest and best use for affordable housing, industrial development, tourism development, hospital expansion, airport expansion, and gateway improvements.

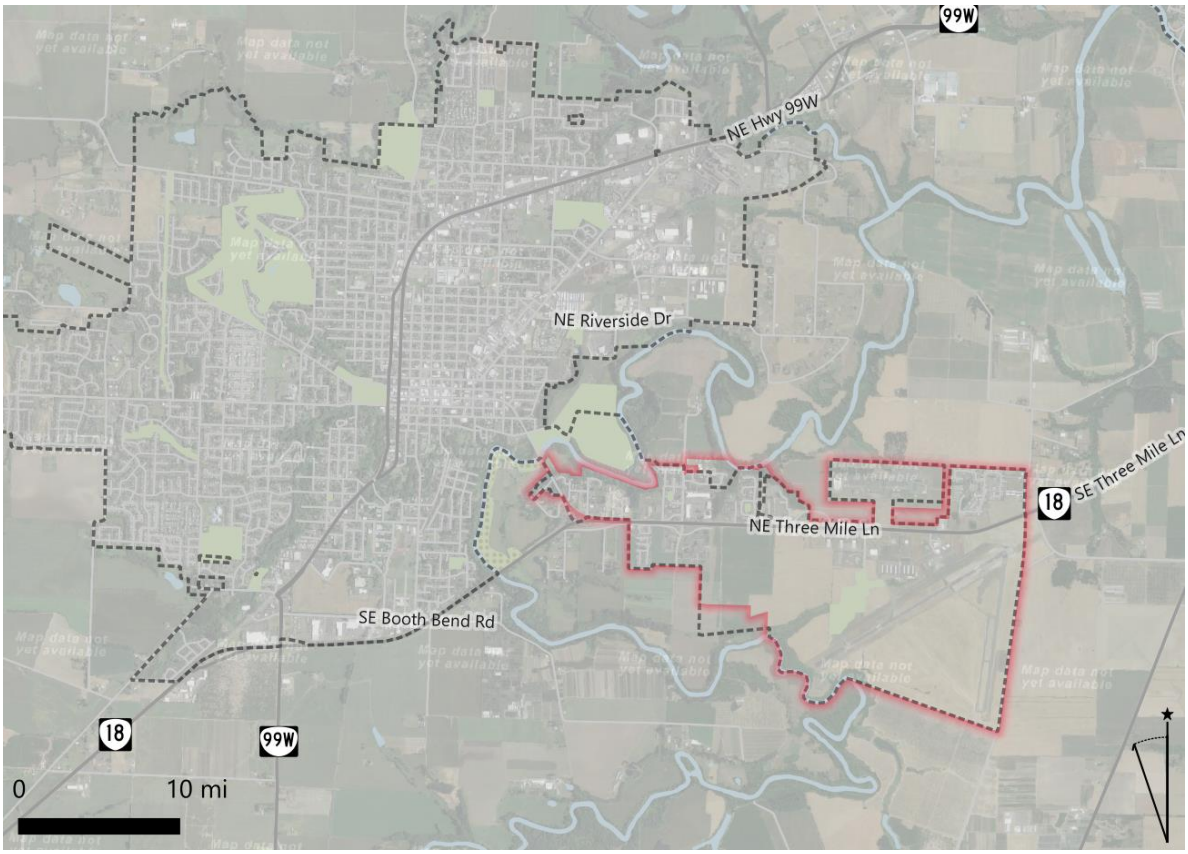
Task Overview

This Market Analysis includes existing and future market conditions for development in the Project Study Area based on current forecasts for population and employment growth; published forecasts for expected growth and development trends; contact with industry professionals; and information provided by participants project meetings and other public input.

Project Study Area

The project study area is located in the southeast arm of McMinnville, centered around State Highway 18/Three Mile Lane, as indicated below in Figure 1.

Figure 1. Three Mile Lane Study Area



Source: Google, TIGER, Leland Consulting Group

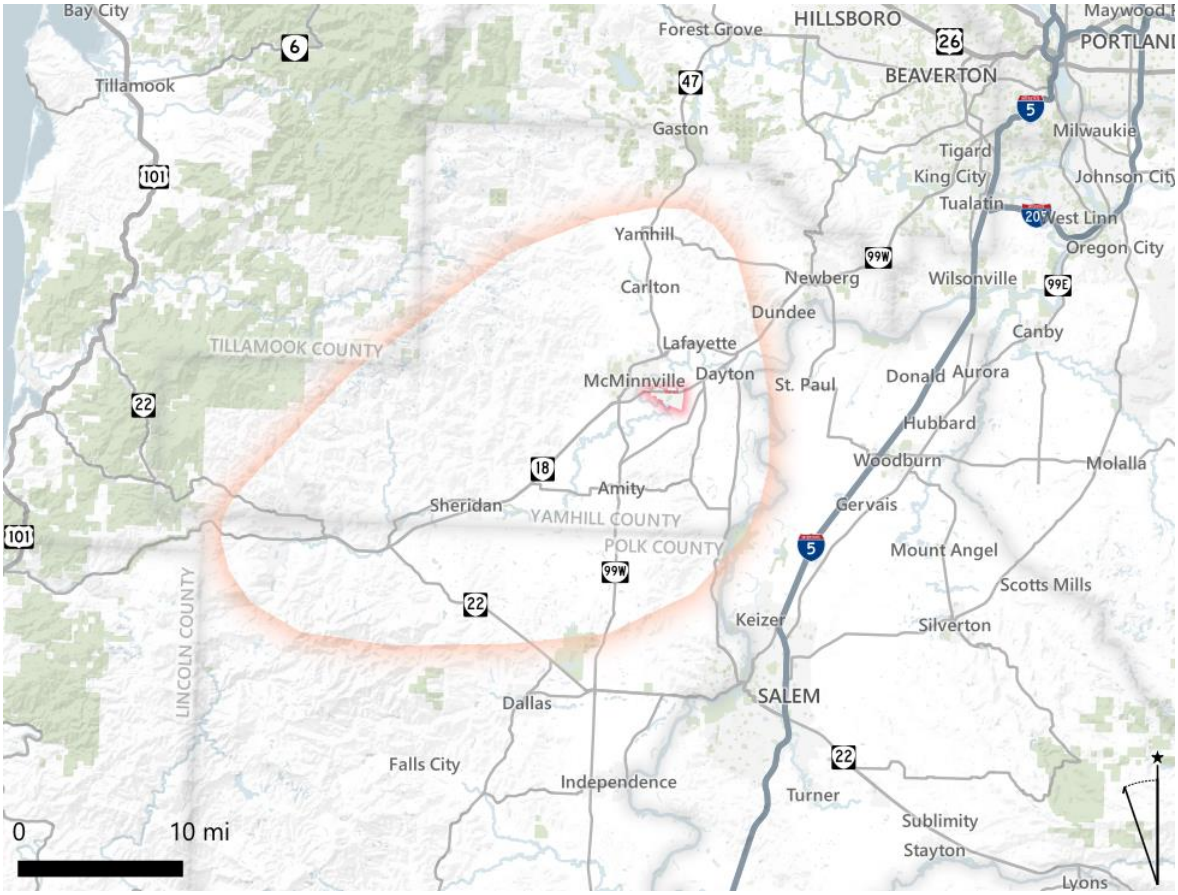
The Market Area

The market area, as defined in Figure 2. represents the area from which the most demand for residential, commercial, and industrial uses will originate, and where most of the competitive development is located. Residents and businesses located in this area are the primary groups to support retail on site, lease/utilize office space, and live in the study area. The market area is roughly bounded by the Willamette River to the east, Tillamook State Forest to the west, and Polk County to the south—although the market does extend into Polk County, there are few residents or jobs located in this area—and the City of Yamhill to the north.

The market area is defined based on several variables, including drive time, destinations, and commute patterns and other relationships to the City of McMinnville. As the most southwestern city of significance on the way to the coast, the market area extends further southwest than it does to the north and south, where McMinnville is unlikely to out-compete with Oregon's major metropolitan regions—namely Portland and Salem. The pass-through traffic on Highway 18 from Portland to the coast is another market of importance to retailers and tourism-related developers, but not necessarily captured within this report. The retail leakage analysis, discussed in depth later in this report, would capture some of the retail spending, but impacts to hotels, wineries, and other important tourism-related organizations and development would not be cataloged.

McMinnville and other cities located on the western periphery are likely to capture the majority of demand in the Western Willamette Valley, while Newberg is closer to the Portland Metropolitan Area and more likely to capture demand for residents and businesses whose lives and livelihoods are oriented towards Portland.

Figure 2. Regional Overview and Market Area



Source: TIGER, Leland Consulting Group

National and Regional Context

Development Context and Market Trends

Development and Land Use Types

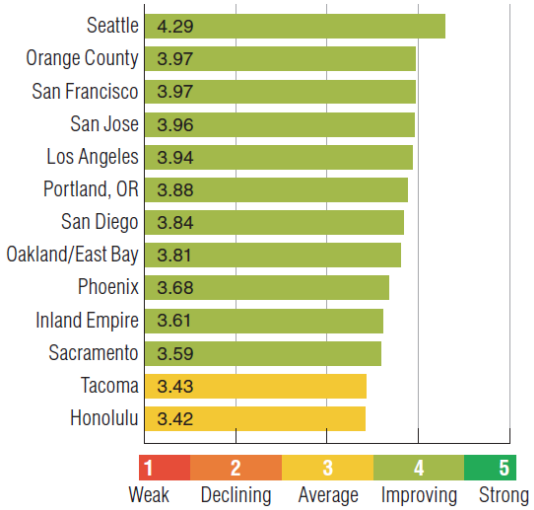
This section includes excerpts from the Urban Land Institute's (ULI) Emerging Trends in Real Estate report for 2019, an annual publication that assesses the state of real estate markets both nationally and locally based on interviews and surveys with experts in development and finance. Both national and regional trends have an impact on future land uses in the study area: they set the stage for the types of investments that are desirable for real estate developers and investors.

Emerging Trends[2] suggests that access to talent (i.e., well-educated workers) is what drives the economies of many of the Pacific Northwest markets.

The Portland metropolitan region[3] is described by ULI as a "solid 18-hour city" whose strengths include strong economic growth due to increased wealth in the market, a high quality of life and attractive outdoor activities, and a diverse workforce that helps to supply trained labor to industries.

While the regional economy is not considered as strong as other Pacific Coast major metropolitan regions, it has experienced the benefit of being able to offer a more competitive cost structure to its more expensive neighbors along with a high quality of life for residents. This is a prime example of how quality of life can drive an economy and one that McMinnville can continue to leverage, especially given the affordability challenges facing the Portland metro.

Figure 3. Local Outlook: Pacific Northwest



Source: ULI

Indeed, the main challenges in the Portland metropolitan area are housing affordability and critical infrastructure enhancements, where the median home value is $338,000 and the median household income is $68,100. McMinnville's relationship to the Portland metropolitan region may be nuanced, but affordability appears to be a factor. According to 2015-2016 migration data from the IRS (which is based on the address on annual tax returns), Yamhill County attracted approximately 230 households from Multnomah County, with only 173 households migrating *from* Yamhill to Multnomah during this same period. In general, Yamhill's migratory relationship with other Oregon counties is more prevalent than Multnomah: approximately 65 percent of incoming households to Yamhill County in 2015 to 2016 were from Oregon, compared to only 37 percent for Multnomah. Further, 69 percent of households *leaving* Yamhill migrated to other Oregon counties, compared to only 51 percent of Multnomah households.

[2] URL

[3] Since McMinnville is on the periphery of the Portland metropolitan area, Portland directly impacts McMinnville's economy.

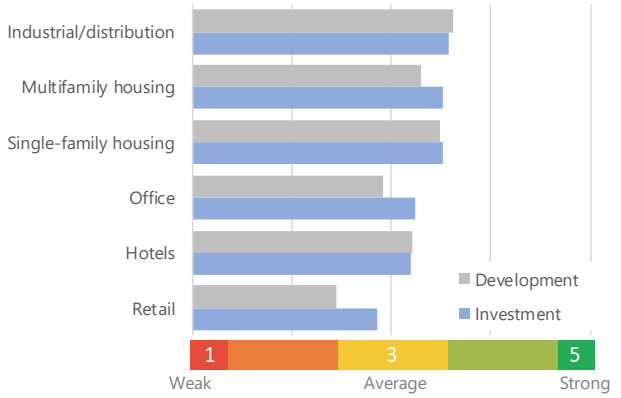
National Real Estate Development Prospects

Emerging Trends also provides guidance about the types of development that are likely to be most desirable in the coming years from a developer and investor perspective. While this is a national outlook, the guidance is relevant for most local markets, including McMinnville.

The following figure shows ULI's high-level summary of national investment and development prospects for 2019. Several notable features are described below.

Industrial and distribution are favored development types, largely because of the acceleration of online retailing, and the need for distribution points for these goods. However, developers will seek to locate online distribution centers near the center of metropolitan areas where the density of residents and businesses is greatest, therefore the impact of this trend in McMinnville is likely to be modest. Single-family housing has picked back up significantly; for many years following the great recession the development of single-family housing was much slower. Multifamily housing is also seen as having fair to good development prospects. Hotel development is judged to be just above fair.

Figure 4. National Development Prospects, 2019



Source: ULI

LCG's experience is that hotel development is a specialized form of development, which will continue to work in specific locations, often with an established base of major employers or a major tourism draw, as McMinnville has. Office development is less desirable,[4] in part because the new generation of white-collar employees requires less space: many hard-wall offices have been eliminated in favor of open floor plans, more employees are working remotely, and paper filing and other "analog" space requirements have become digitized. A majority of new office development has also taken place in close proximity to central business subareas (e.g., downtown Portland), where many young professionals locate and where job growth has been fastest.

New retail development is seen by investors as the riskiest and least desirable type of development, primarily due to the rapid expansion of online retailers who are capturing market share from mall anchors and commodity retailers. Sears, Macy's, Toys R Us, Sam's Club, J.C. Penny, and Payless Shoes are among the chains that have completed major store closures. The retrenchment of these traditional retailers and years of high vacancies have made retail developers cautious. Nevertheless, there may be opportunities for retail growth in under-served markets or areas with significant population growth.

The Impact of Tourism on Development

There are several emerging trends in traveler behavior and consumer preferences that have a significant impact on tourism, and therefore should be considered in terms of potential investment decisions. While investments

[4] However, two office-related businesses have recently moved to Three Mile Lane because they outgrew downtown locations. Office market characteristics provided later in this report shows a low vacancy rate in the office market of 1.4 percent, suggesting a significant lack of available office space.

are typically related to commercial estate, tourism can often also result in residential demand as visitors are drawn to a particular quality of life (for example, young, emerging professional looking to relocate or retirees looking for a place to retire). Some of these trends are described below.

- **Authenticity** – Travelers are increasingly seeking authenticity in the places they visit, where they can experience deeper and more personal connections. According to a travel trend poll of travel agents by American Express in 2014, more than one-third (34 percent) of respondents said customers are seeking to immerse themselves in unique and authentic aspects of their travel destinations.
- **Interactive/Experiential Tourism** – It is more likely that a visitor will be motivated to travel to a destination, extend their stay or return for a future visit if the attractions and assets allow for direct interaction. This has significant implications for the art/culture, entertainment/festival, culinary and other sectors of the McMinnville visitor offering.
- **Culinary/Food Tourism** – Authentic food experiences have become a popular motivator for travel, according to research conducted by TrekkSoft, an international tour operator software company. In a worldwide survey of nearly 150 tour operators, respondents described food markets, tasting sessions, cooking lessons and vineyard/farm visits as growing in popularity.
- **Health and Wellness** – Health-conscious consumers are now seeking to enhance their well-being through travel experiences. In 2017, Booking.com found that 40 percent of travelers are interested in a health and well-being travel experience, such as locally sourced menus, improved access to recreational activities such as yoga, and wellness- or fitness-oriented events.
- **Leveraging Waterfronts** – Both large- and mid-sized communities throughout the country have invested in their scenic waterfronts by planning and supporting the development of shopping districts, outdoor restaurants and river walks. Cities such as Grand Rapids (MI), Bend (OR), Pueblo (CO), Reno (NV) and many others have developed extensive plans and zoning adjustments to add riverside cafes, unique retail, gondolas, craft breweries and other assets that build on these invaluable natural assets.

The Impact of Airports on Development

The 650-acre McMinnville Municipal Airport is located within the Three Mile Lane Study Area on the south side of Highway 18. The facility can accommodate private jet aircraft, but there is no commercial airline that services McMinnville. Most of the aircraft housed at the airport are small planes owned by private individuals. There are also a few jets and a significant helicopter presence due to the helicopter flight school.

While there is not currently commercial air service operating out of the airport, it is important to acknowledge any impact it has on the area's prospects, including any related development opportunities. An assessment of national trends in general aviation and related development helps provide context for possible opportunities.

Nationally, many modern airports now generate most of their revenues from sources other than aviation. Airport authorities are no longer stale bureaucracies. They have quietly been morphing into what can best be called entrepreneurial landlords.

Depending on local circumstances, airports have seen the following types of development (in addition to the usual airport facilities like parking, etc.), either on their lands or directly adjacent to their lands (many of these are in high demand and, therefore, currently at a premium):

- Hotel developments
- Conference/convention centers
- High-end outlet malls
- Destination shopping centers
- Corporate head offices
- Mixed-use developments (shop, work, play, stay)
- Office buildings
- Post-secondary education facilities, specifically aerospace-related
- High-tech business parks
- Industrial developments (manufacturing, warehousing)
- Cargo facilities
- Casinos
- Entertainment destinations
- Recreational facilities
- Botanical gardens
- Butterfly gardens
- Residential developments
- Libraries
- International sports facilities
- Local amenities

Demographics

This section provides an overview of past, existing, and projected demographic conditions.

Household and Population Characteristics

In 2018, the project study area was home to just over 2,000 residents—approximately six percent of McMinnville's total population and three percent of the market area. The market area—which is mostly located in Yamhill County—contains about three-quarters of the County's population.

The study area's population has grown at the fastest rate versus the city, county, and state, although total numerical growth has been relatively little. McMinnville, in general, has generally experienced significant population growth—particularly from 2000 to 2010.

Table 1. Population Counts

	Study Area	McMinnville	Market Area	Yamhill Co.	Oregon
2000 Total Population	1,536	27,198	59,834	84,992	3,421,399
2010 Total Population	1,856	32,187	69,597	99,193	3,831,074
2018 Total Population	2,086	34,366	75,125	104,675	4,185,014
00-10 Annual Growth Rate	1.9%	1.7%	1.5%	1.6%	1.14%
10-18 Annual Growth Rate	1.5%	0.8%	1.0%	0.8%	1.11%
00-18 Annual Growth Rate	1.7%	1.3%	1.3%	1.2%	1.13%

Source: ESRI and Leland Consulting Group

Selected household characteristics are provided in the following table. Generally, existing households in the Three Mile Lane study area are slightly smaller, have higher incomes, and are significantly older, more diverse, and less educated than McMinnville and the wider region. Further, home values are higher than the City and market area average, yet lower than the county and state, likely because despite there being relatively few homes in the study area, most were built post-2000.

Table 2. Select Demographic and Housing Characteristics, 2018

	Study Area	McMinnville	Market Area	Yamhill Co.	Oregon
Avg. Household Size	2.58	2.65	2.74	2.73	2.50
Median Home Value*	$291,043	$277,574	$292,514	$307,273	$301,025
Median HH Income	$55,460	$53,456	$57,553	$61,863	$57,902
Per Capita Income	$27,729	$26,783	$27,420	$28,571	$31,775
Median Age	40.9	35.7	38.1	38.0	39.7
Non-white Pop	20.6%	17.8%	16.5%	14.6%	16.4%
Bachelor's +	19.0%	24.4%	22.2%	26.3%	33.4%

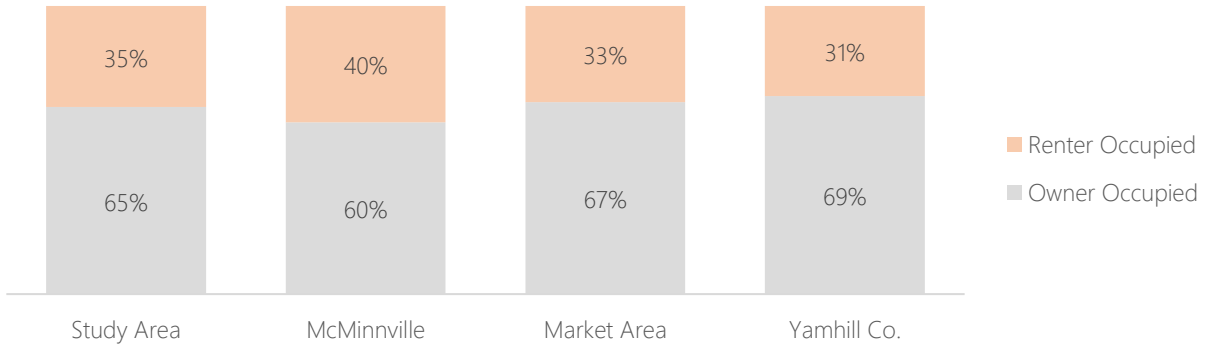
Source: ESRI and Leland Consulting Group
**Owner-occupied housing only*

As shown in Figure 5, the study area has a greater proportion of renters compared to market area and county (where owner-occupied households are the norm), but less than the City of McMinnville. This is likely reflective of the higher proportion of older and higher-income households in the study area versus McMinnville.

The Pew Research Center indicates that certain demographic groups—such as young adults, nonwhites, and those with less educational attainment—have historically been more likely to rent than other groups, and rental rates have increased among these groups over the past decade. However, rental rates have also increased among some groups that have traditionally been less likely to rent, including whites and middle-aged adults.[5]

In fact, although renting is most common among young adults, nearly everyone rents at some point in their lives—whether by choice or by necessity. However, rental housing is particularly important for low-income and minority households, about half of whom are renters. As a result, supplying affordable units in a variety of structure types and neighborhoods is a critical national housing policy priority.[6] [7]

Figure 5. Tenure, 2018



Source: ESRI and Leland Consulting Group

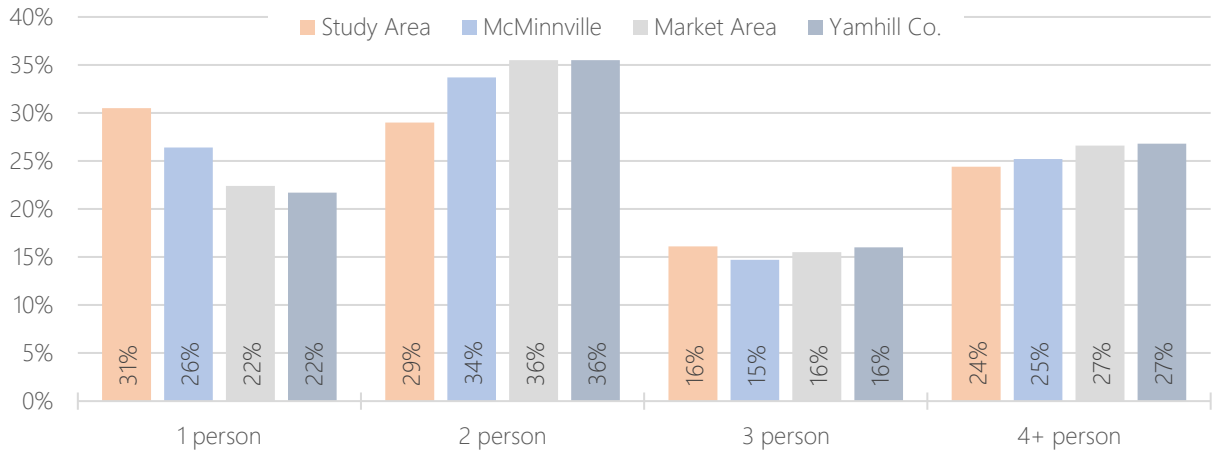
[5] Pew Research Center, "More U.S. households are renting than at any point in 50 years," 2018, URL

[6] From "Renter Demographics" by the Joint Center for Housing Studies of Harvard University, URL

[7] At the time of writing, McMinnville was undertaking a Housing Needs Analysis (HNA), the preliminary results of which show housing affordability as a growing challenge in McMinnville.

Figure 6 shows the proportion of households by size for each comparison area. The study area currently has the greatest proportion of one-person households but is consistent with al comparison areas for households with three or more people. Generally, one- and two-person households are the most common household size.

Figure 6. Households by Size, 2010



Source: ESRI and Leland Consulting Group

Residential Forecasts

Population growth is a key indicator and driver of demand for both residential and commercial development, and therefore, population forecasts are critical in estimating future demand. The projected growth—or lack thereof—of the population, households, and employment help to inform future growth rates which are used in the demand analyses presented in this report.

The Population Research Center at Portland State University (PSU) produces annual population estimates for Oregon and its counties and cities, as well as estimates by age and sex for the state and its counties.

The population is projected to grow faster within the limits of the McMinnville UGB than in Yamhill County as a whole. As such, an increasing share of the county's population is expected to reside in McMinnville over the next 40 years (32 percent in 2018 and 35 percent by 2067).

While McMinnville will have high actual population growth, other cities in Yamhill County have higher projected growth rates over the next two decades. These cities include Dundee (1.84 percent), Newberg (1.81 percent), Lafayette (1.7 percent), Carlton (1.6 percent), and Yamhill (1.2 percent).

Table 3. Population Forecasts, 2017-2040

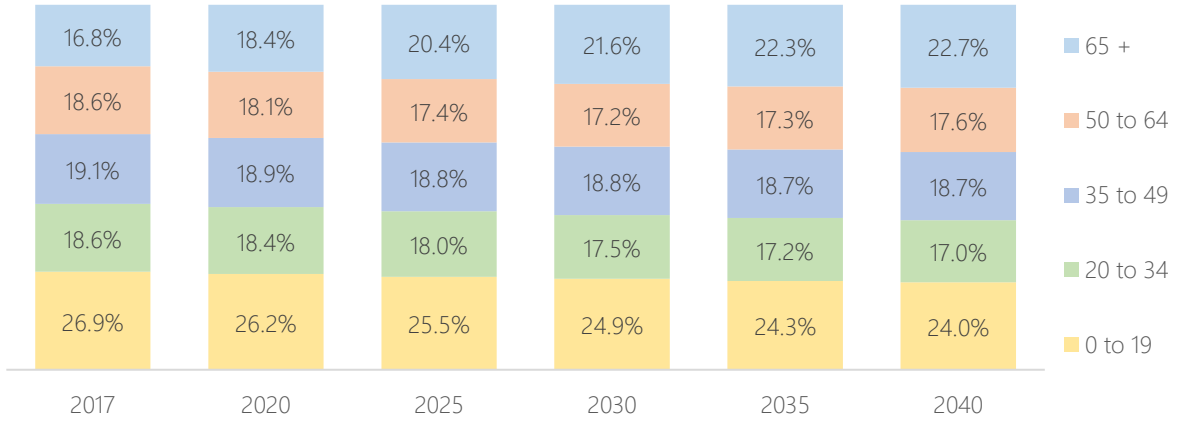
Area / Year	2017	2020	2025	2030	2035	2040
Yamhill County	106,555	111,101	119,339	127,404	135,096	142,311
Annual Growth Rate	N/A	1.40%	1.44%	1.32%	1.18%	1.05%
McMinnville UGB	34,293	35,709	38,437	41,255	44,122	46,956
Annual Growth Rate	N/A	1.36%	1.48%	1.43%	1.35%	1.25%

Source: Portland State University

The 65-and-over age group is projected to experience the most growth in the next two decades as the entire baby boomer generation enters retirement age. After 2030, the millennial presence is projected to significantly

increase the proportion of the population aged between 50 and 64. Access to essential services and a sufficient range of appropriate housing options will be critical in accommodating these aging demographics. These shifting demographics are likely to have a significant impact on residential development. For example, growth in the number of seniors will result in demand for senior housing (age-restricted apartments or assisted living facilities) and small and maintenance-free dwelling units. Growth in the Millennial generation will result in demand for affordable single-family, townhomes, and multifamily housing.

Figure 7. Population by Age, Yamhill County, 2018-2040



Source: Portland State University

Employment

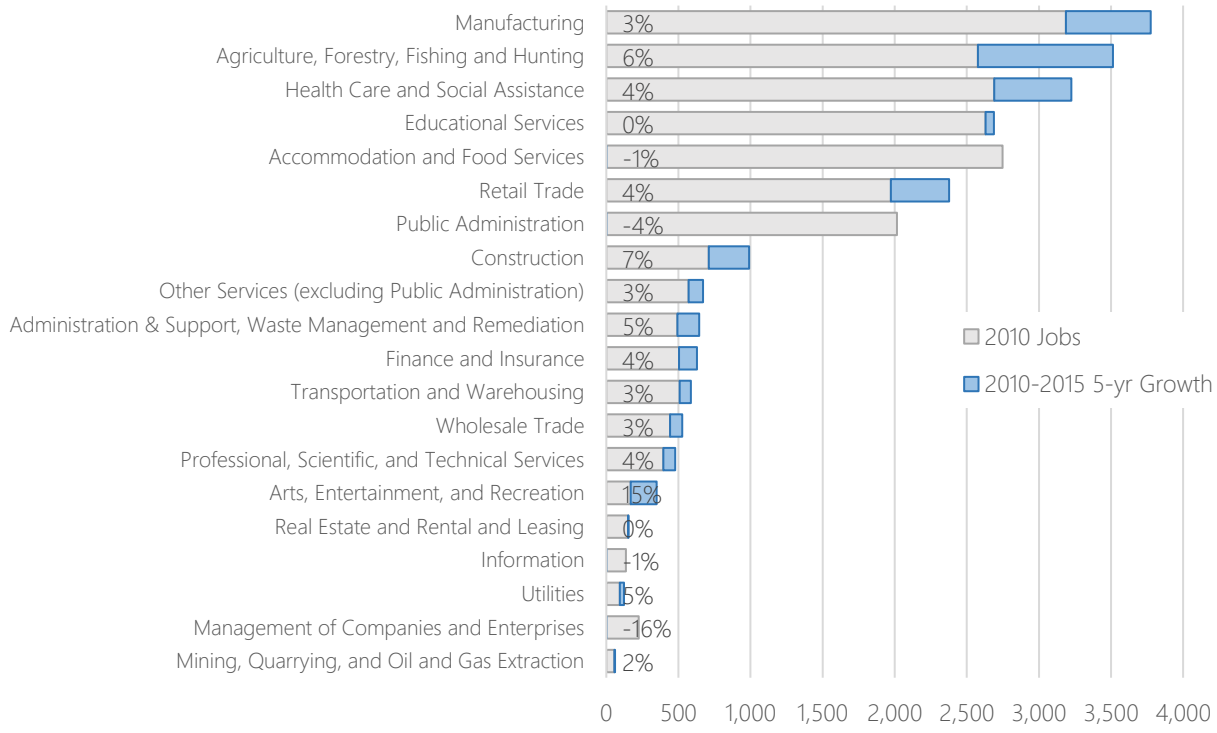
This section provides an overview of past, existing, and projected employment conditions.

Total job counts for 2010 and 2015 and annual employment growth are shown in Figure 8. Employment in the McMinnville market area predominantly consists of jobs in manufacturing, education, healthcare, accommodation and food services, and retail. These five industries were responsible for over 71 percent of all jobs in 2015. Approximately one-quarter of all jobs in 2015 were in the manufacturing industry. Of these top five industries, all but Educational Services experienced high annual growth of over two percent.

- The fastest growing industries between 2010 and 2015 were:
    - Arts and entertainment (15.5% annually). While this sector is relatively modest in size, its growth has been the highest among all other sectors, likely due to the increase in tourism in the area.
    - Construction (6.9% annually).
    - Agriculture, forestry, fishing, and hunting (6.4% annually). Not only in this the third-fastest growing sector in the market area, but it is also the second-largest in terms of total jobs. One of the inputs into this sector is the wine industry, in which McMinnville has continued to experience growth.
    - Administrative & support, waste management & remediation services (5.5% annually)
    - Utilities (5.4% annually)

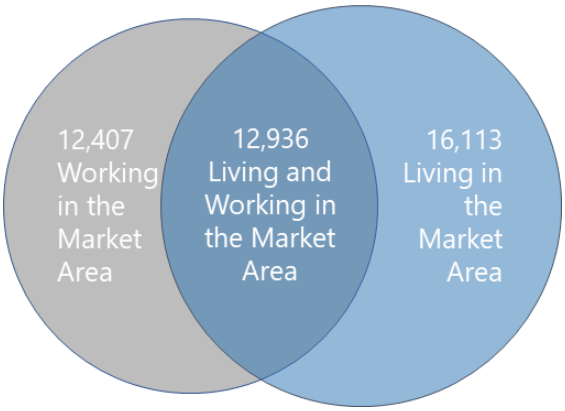
  - Finance and insurance (4.5% annually). The majority of speculative office demand is typically generated by this sector and the following sector. This growth improves development prospects for new office development, but in terms of total jobs, these sectors remain relatively minor in the region.
  - Professional, scientific and technical services (3.9% annually).
- The only industries to lose jobs in the five-year period between 2010 and 2015 were:
  - Management of companies and enterprises (-15.6% annually)
  - Public administration (-3.7% annually)
  - Information (-1.3% annually)
  - Accommodation and food services (-0.7% annually).

Figure 8. Employment Profile, McMinnville Market Area



Source: LEHD. Percentages shown above are compound annual growth rates for the past five years.

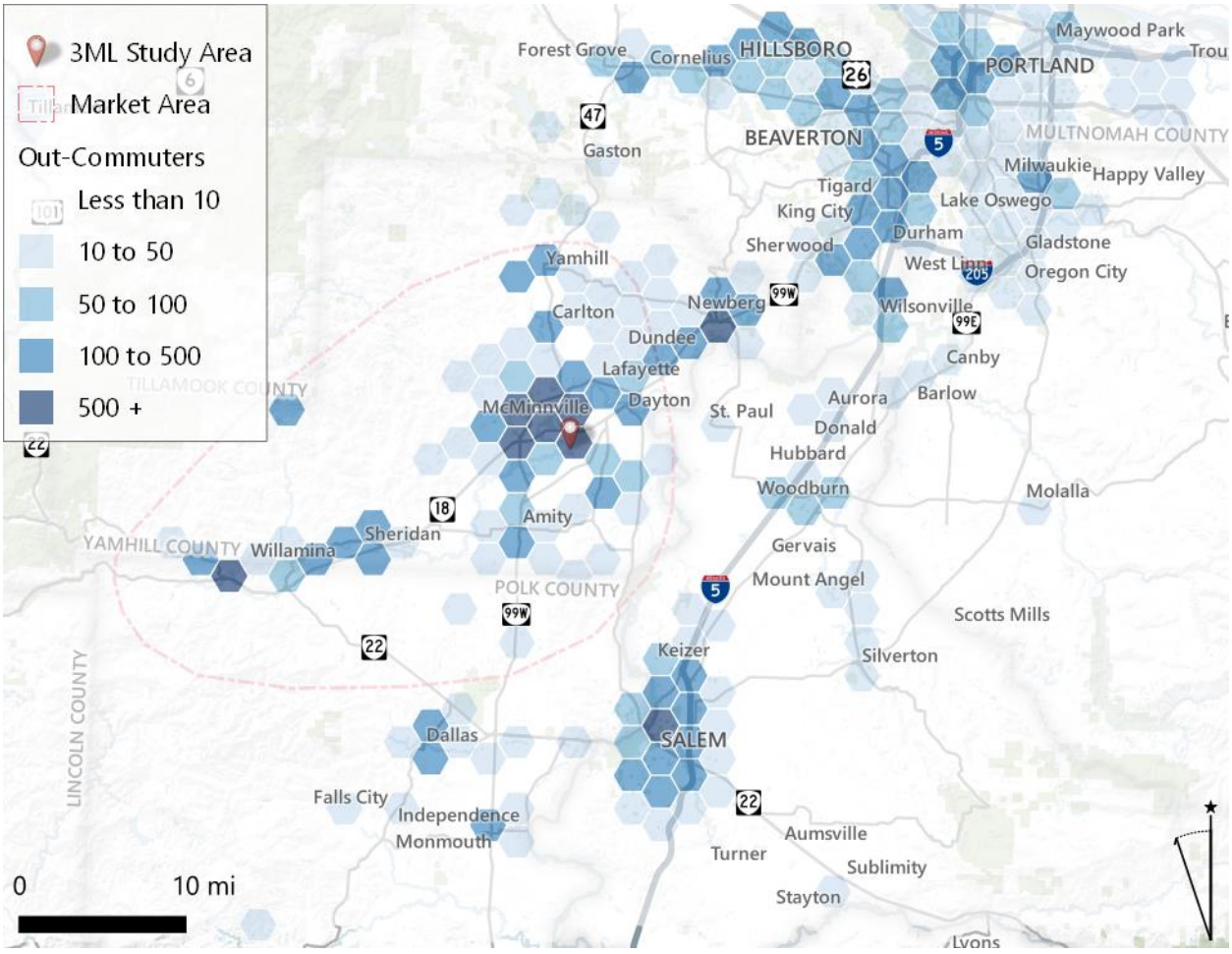
Figure 9. Commute Patterns, Inflow-Outflow, McMinnville Market Area, 2015



The number of people that both live and work in the McMinnville market area generally increased from 2005 to 2015, suggesting that McMinnville's employment market has strengthened over the past decade. Approximately half of the people working in the market area as of 2015 also live there, up from 41 percent in 2005.

Figure 10 below shows where residents of the market area commuted to work in 2015. The highest concentration of employees living in the market area is within McMinnville. However, a significant number of market area residents commute to Newberg and Salem, as well as further afield to various cities in the Portland metropolitan area. Few residents commute to the coast, although there are small concentrations of employment in cities and towns to the southwest of McMinnville—namely Sheridan and Grand Ronde.

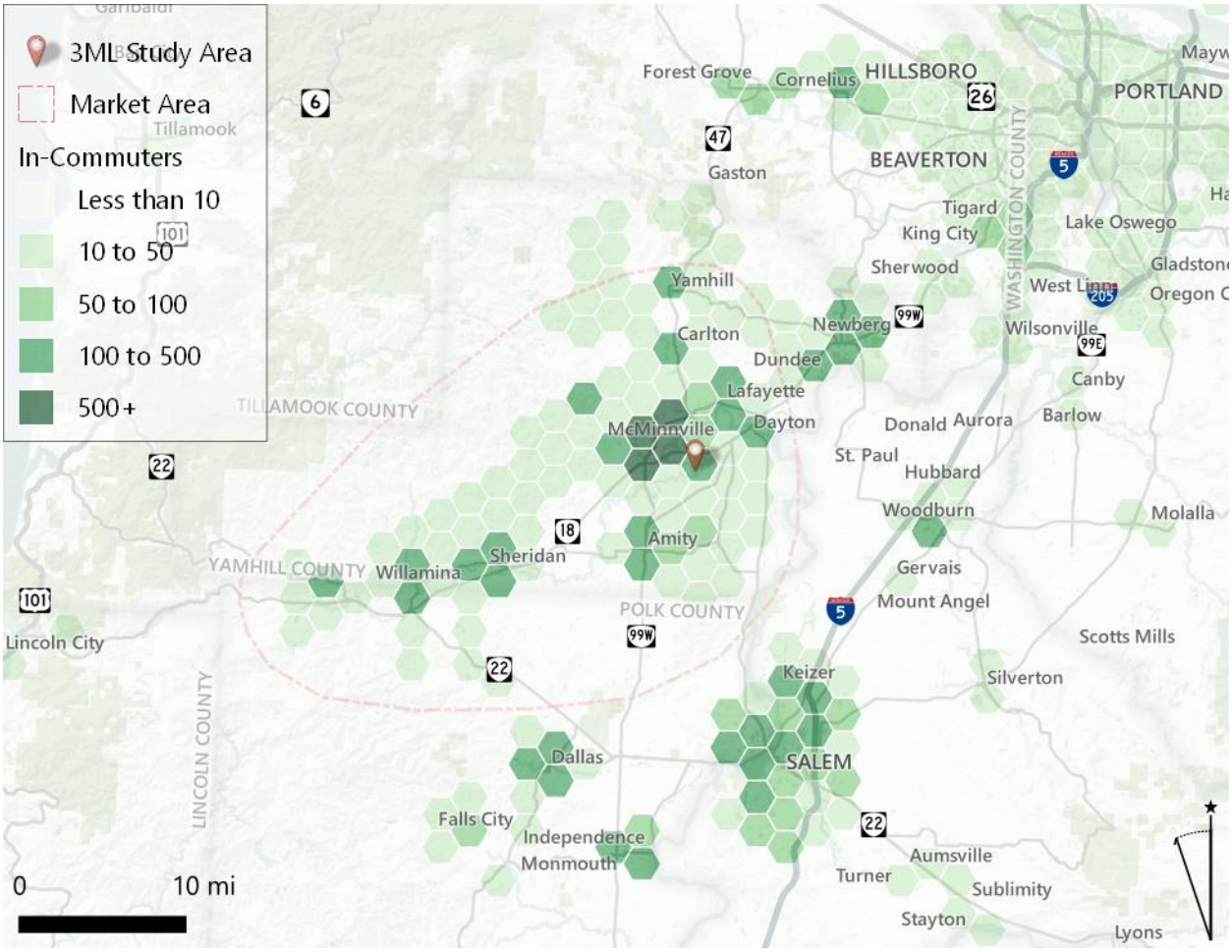
Figure 10. Where Market Area Residents Commute To, 2015



Source: LEHD OnTheMap and Leland Consulting

As the following map shows, there is a significantly greater concentration of employees that also live in the McMinnville area. Few employees working in McMinnville and the surrounding market area live in Salem and even fewer in areas of the Portland Metro.

Figure 11. Where Market Area Employees Commute From, 2015



Source: LEHD OnTheMap and Leland Consulting

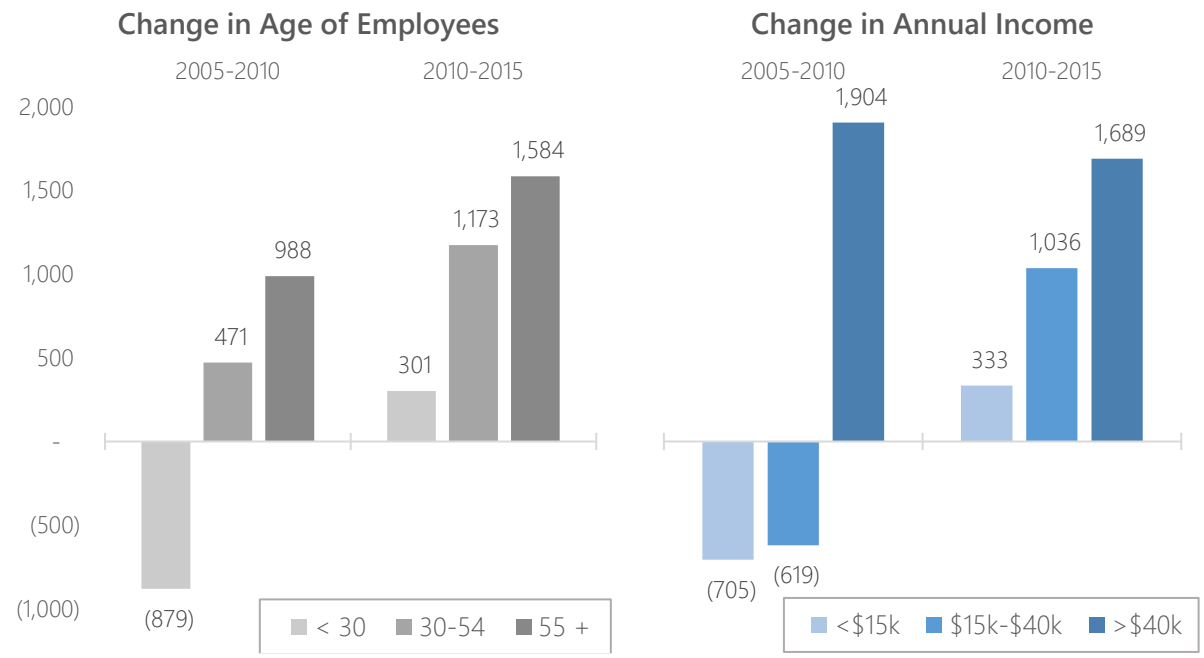
Figure 12 below shows the proportion of market area employees by both age and annual income in 2005, 2010, and 2015. Generally, employees in the market area were significantly older in 2015 than in 2005 but earned significantly more on an annual basis. In fact, employment grew by almost 2,600 jobs in the 55-and-over age category. During this same period, workers in the under-30 age category declined by almost 600.

Some of the key takeaways about McMinnville's employment associated with both the aforementioned commute data and this trend data is summarized as follows.

- McMinnville as an aging community that is failing to attract or retain its younger workforce. Comparatively, the same data source shows a similar yet less significant trends for the City of Portland.
- People over the age of 55 are moving to McMinnville as they near retirement age, skewing the average employee age upwards. In contrast, almost half of all new employment growth in Portland between 2010 and 2015 was for employees aged between 30 and 54. Similarly, however, the metro

also showed a decline in workers younger than 30 between 2005 and 2010, and only modest growth between 2010 and 2015. Ultimately, this shows Oregon to be an attractive place for workers well into their career already rather than younger, entry-level workers.

Figure 12. Change in Number of Employees by Age and Annual Income, McMinnville, 2005-2015

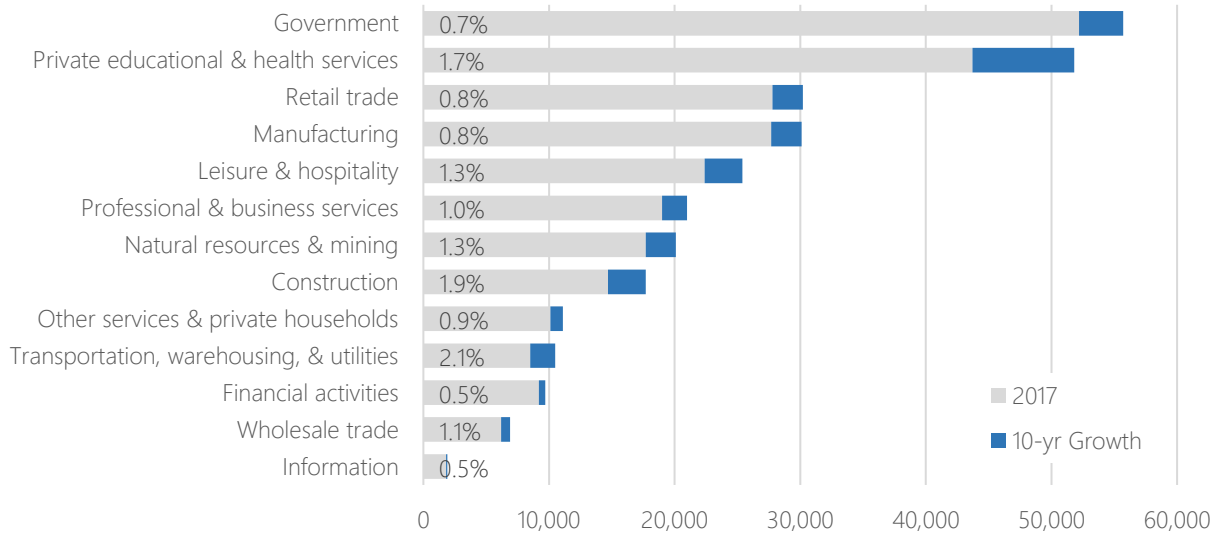


Source: LEHD

Employment Projections

For employment forecasts, we use the State Employment Department's 10-year projections for each industry. Over half of all projected employment growth is expected to occur in the industries of Educational and Health Services, Government, Construction, and Leisure and Hospitality. The fastest growing industry is Transportation, Warehousing, and Utilities. New, specialized office demand may arise from significant growth in education and healthcare, while employment growth in leisure and hospitality is indicative of the region's burgeoning tourism presence, particularly with regard to the wine industry.

Figure 13. Projected New Employment Growth, Mid-Valley Region*, 2017-2027



Source: Oregon Employment Department (QualityInfo.org)
**Includes the four-county region of Marion, Polk, Washington, and Yamhill*

However, caution is required with these projections. Not only do they apply to a larger geographic area than the residential projections (a four-county region versus the McMinnville UGB), but the employment projections are given by industry, likely resulting in a significant margin of error. As such, it is likely to be just as instructive to consider historical trends (e.g. from the last five to 10 years) in projecting future employment in the market area. The demand estimates for new office and industrial development that are presented later in this report are based on an average of historical and future growth rates.

Real Estate Market

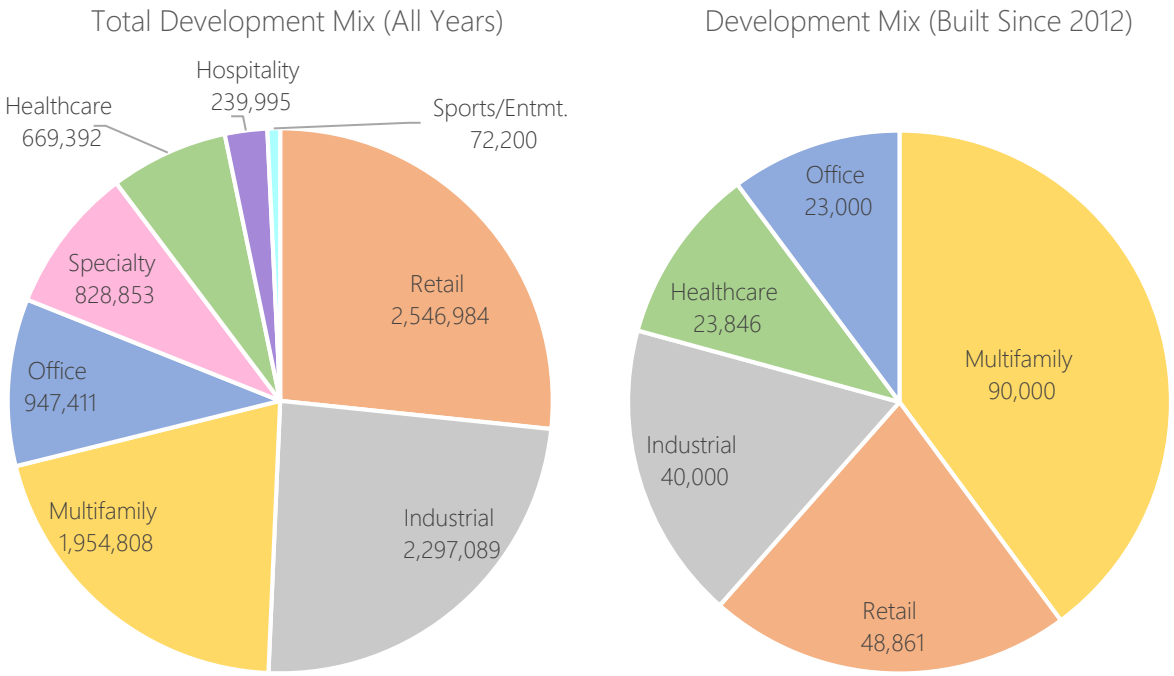
This section covers the residential market, which includes both single-family and multifamily housing; the retail market; and the market for "employment" space, which includes both industrial and office land uses. Market conditions—such as the development pipeline, building vacancies, rents, and other market trends—are critical to establishing the market's strength and subsequent level of financial feasibility for new development.

However, more recent development in McMinnville has been mostly multifamily residential (predominately apartments), which is consistent with national trends and consumer preferences, despite weaker market conditions. With the growing demand among younger and older generations for apartments, tighter mortgage lending requirements, and many years of limited apartment production, there remains pent-up demand for apartments in most markets. Coupled with a changing commercial market in which office space use is declining every year and retailers are closing at an unprecedented rate in face of e-commerce, multifamily has generally become the dominant type of new development. This trend appears to be applicable to the McMinnville market area as well. With that said, construction costs and increasing land prices continue to increase feasibility barriers. If rents are not high enough to justify new construction to mitigate these barriers, then additional funding will be necessary to bridge the feasibility gap.

Figure 14 shows commercial and multifamily real estate development (excluding institutional and single-family residential) by total square footage within the market area. The chart on the left shows all development built

across all years. The land use mix is relatively evenly spread across many development types, with retail and industrial comprising over half of all development.

Figure 14. McMinnville Market Area Land Use Mix, Commercial and Multifamily Development (Square Feet)

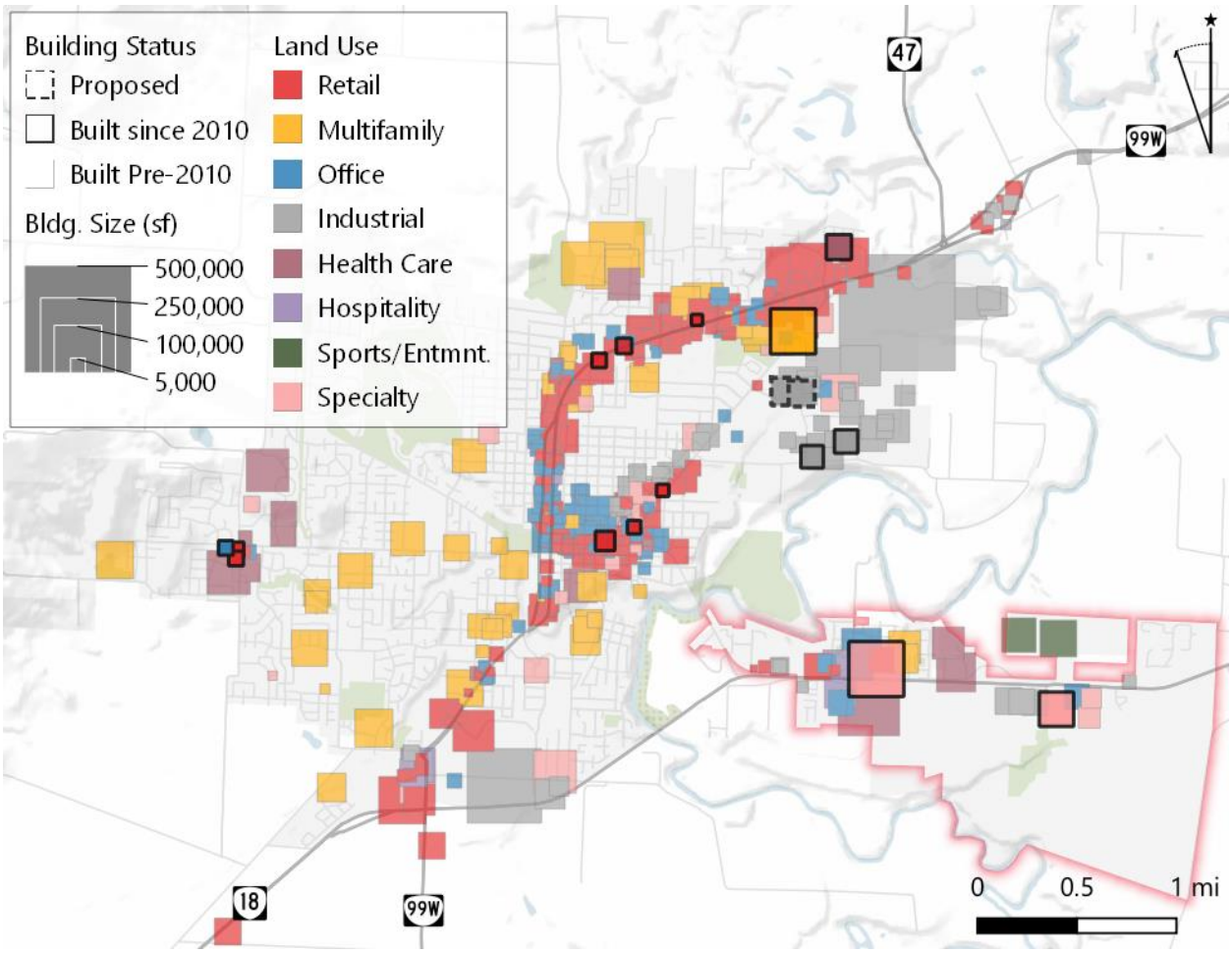


Source: Costar

Figure 15 shows the location and size (by total building square footage) for each land use. Squares with bold outlines indicate recent construction and buildings under construction, while squares with dashed or no outlines indicate proposed projects planned for 2019 or beyond. It is worth noting that some of these proposed projects have been in the pipeline for a long time, such as the proposed retail projects in the Three Mile Lane study area. This analysis—to a certain extent—will identify whether some of these projects are indeed feasible.

There has been relatively little new development in McMinnville, and most recent construction has occurred in the northern sections of the city, with some smaller retail projects along the Highway 99W corridor.

Figure 15. Development by Land Use* and Year Built, City of McMinnville



Source: Costar and Leland Consulting Group
**Excludes institutional and single-family residential land uses*

Residential Market

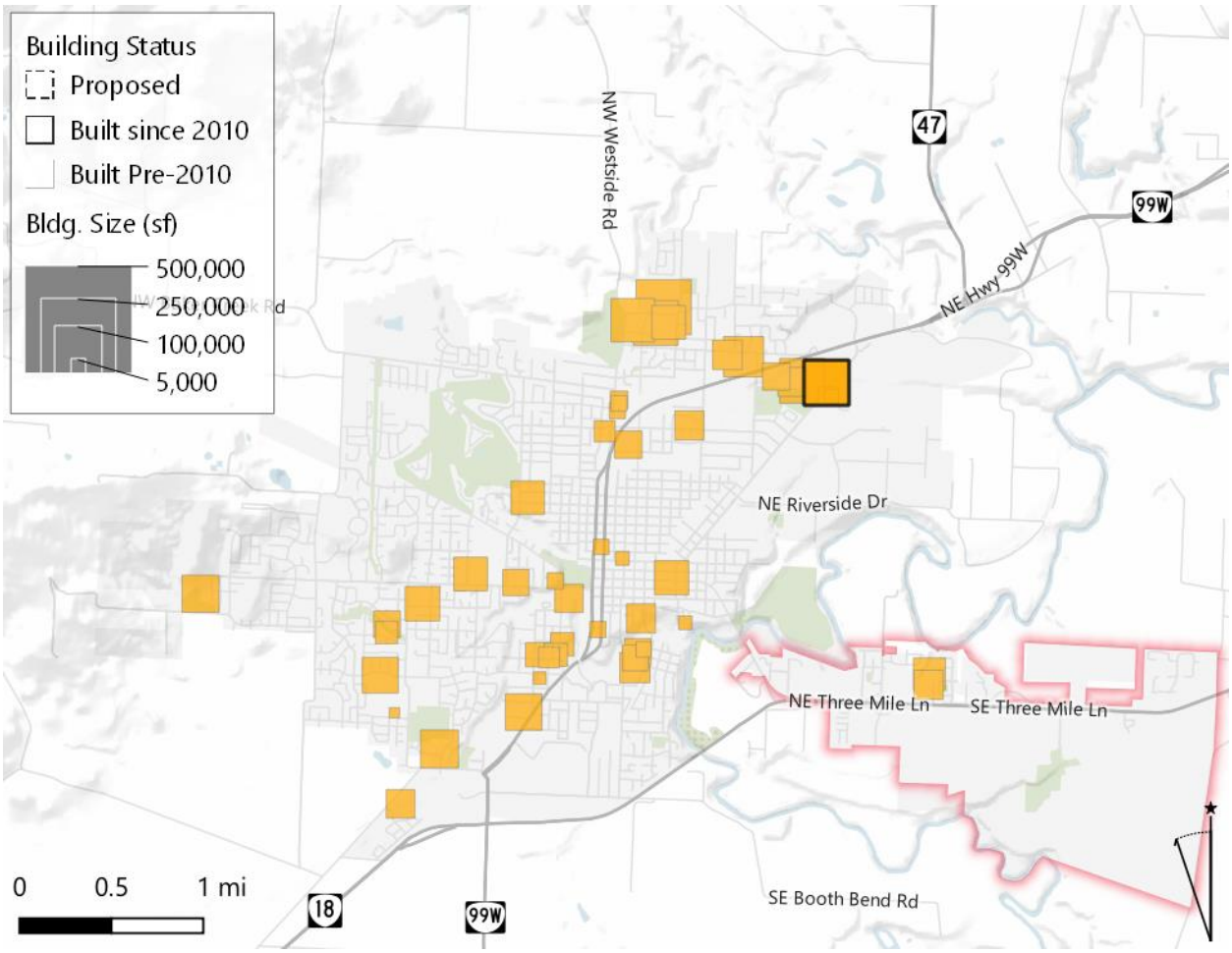
The residential market includes both single-family and multifamily development—both renter-occupied and owner-occupied.

Multifamily Rental Market Summary

Nationally, apartment demand and occupancy remain strong and demographics are favorable to the apartment sector. However, apartment growth tends to be most apparent closer to the center of large metropolitan areas.

The regional market is largely rural and features a sizable proportion of renters, underpinned by demand from students at several local colleges and universities. Deliveries have been limited in this cycle, though lease-up has been rapid in new projects. Generally, there have been tighter vacancies and higher rent growth than in the wider Portland metro region. The primary inventory is for "workforce housing," and there are no high-end communities (designated by CoStar as 4 or 5 stars) in the submarket. Investment in Yamhill County is limited, with fewer than 10 properties typically trading each year between primarily local firms and investors.

Figure 16. Multifamily Residential Development



Source: Costar, Leland Consulting Group

Within McMinnville, 13 of the 37 apartment buildings with 20 or more units are non-market-rate[8] (senior or affordable). Market-rate apartments rent—on average—from about $1.00 to $1.20 per square foot. The vacancy rate is very low, with the only vacancies near or above five percent in buildings older than 1980. Units in newer buildings typically achieve higher rents.

Only one apartment project has been completed within the market area since 2012—Lafayette Place Apartments. This project is pictured below along with a summary of its key attributes.

Lafayette Place Apartments. A 132-unit market-rate apartment project, completed in 2017, located in north McMinnville. The buildings are wood-frame, three-story "garden walk-ups". At $955 for a 1-bedroom apartment ($1.32 per square foot) and $1,196 for a 2-bedroom apartment ($1.26 per square foot), the Lafayette Place Apartments are the highest renting multifamily

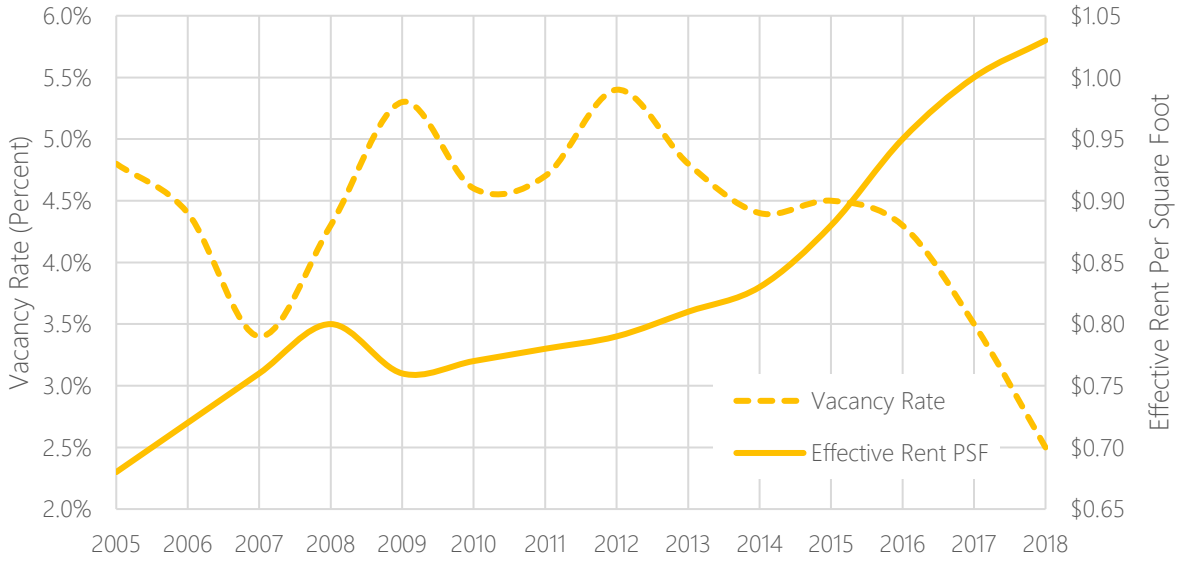
[8] Market rate housing is an apartment that has no rent restrictions

property in the market area. Parking is 100 percent onsite surface lots.

Figure 17 below confirms that the multifamily market in the McMinnville market area is tight. Average rents have been climbing over the last decade, while vacancies have been very low and have rapidly declined since 2012, indicating demand for new multifamily construction.

In fact, this market strength and potential demand is underlined by the fact that vacancy rates in McMinnville's multifamily housing market remained low and rent growth was largely positive during the recession—a period of time where most apartments in similar markets saw the exact opposite trends occurring.

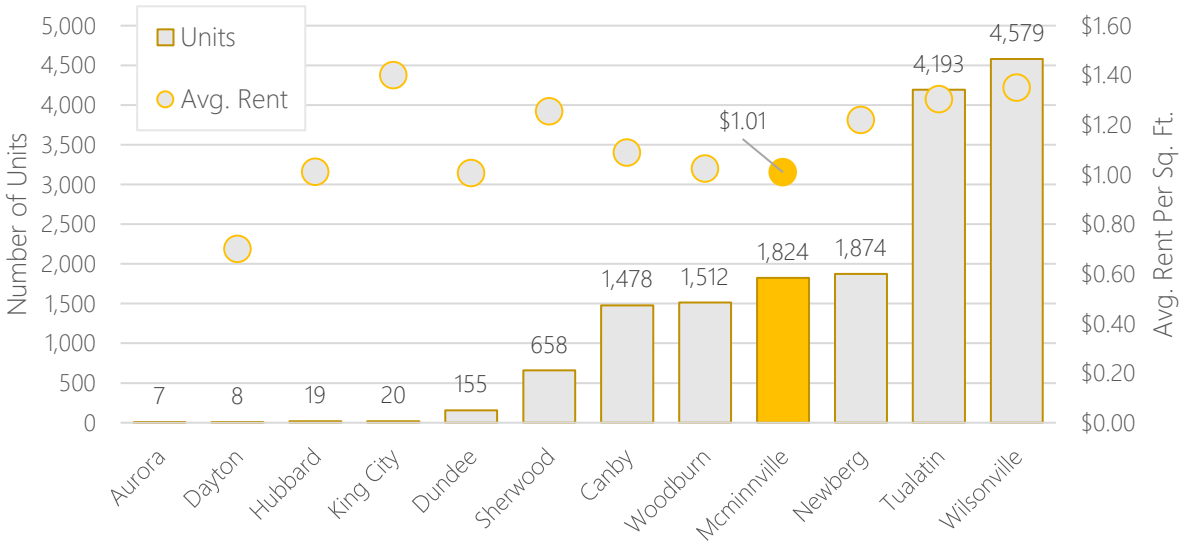
Figure 17. Market Area Multifamily Rent and Vacancy Trends, 2005-2018



Source: Costar, Leland Consulting Group

However, the average rent per square foot for multifamily apartments in McMinnville is lower than those in Newberg, Tualatin, and Wilsonville, which benefit from their proximity to the larger job centers in Portland and Washington County. Some of McMinnville's newer or higher quality multifamily properties, however, have seen rents higher than the historical average. For market-rate properties only, the average rent increases to about $1.11 per square foot.

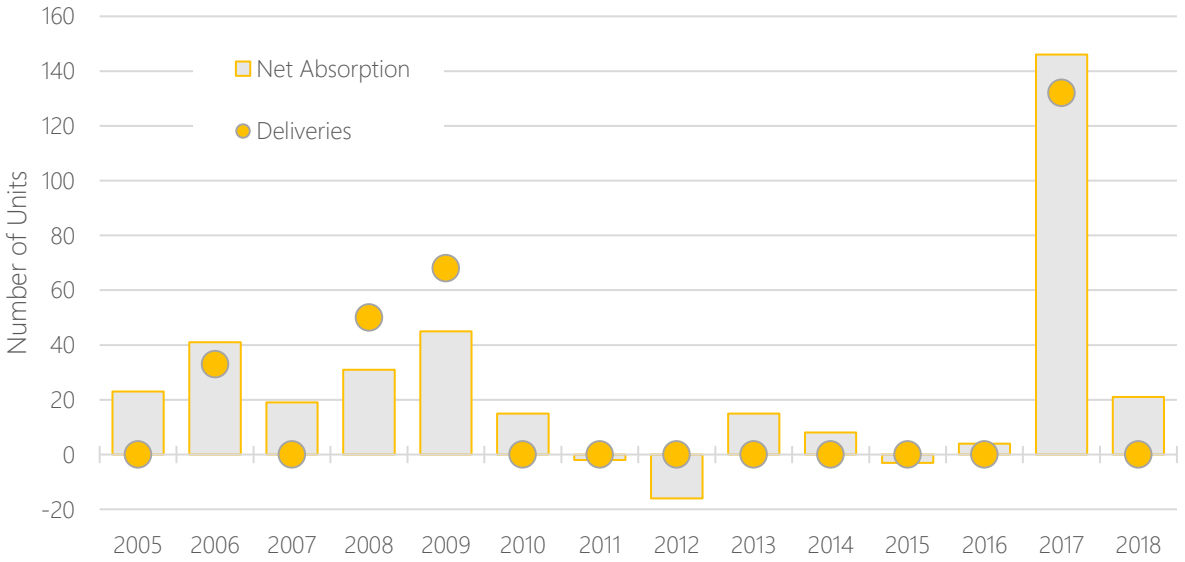
Figure 18. Regional Multifamily Residential Summary



Source: Costar, Leland Consulting Group

Vacancies decreased gradually and then significantly from 2012 through 2018, despite the completion of the 132-unit Lafayette Place Apartments in 2017, largely due to continued positive absorption. The instant absorption of the first new apartment project in a decade indicates strong demand for new rental housing.

Figure 19. Market Area Multifamily Net Absorption and Deliveries (units), 2005-2018

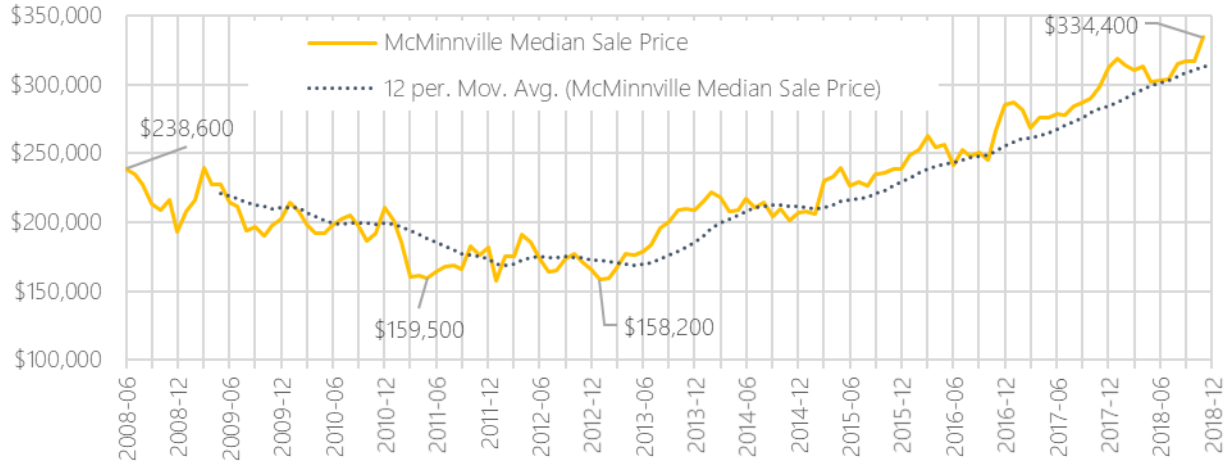


Source: Costar, Leland Consulting Group

Single Family Market Summary

Single-family home prices have been increasing rapidly since the 10-year low of $158,000 in 2013 Q2. The pre-recession median price of $239,000 was surpassed going into 2016. Per Figure 20, McMinnville's single-family market appears strong and hasn't experienced the same volatility in the market over the past 10 years as many other municipalities.

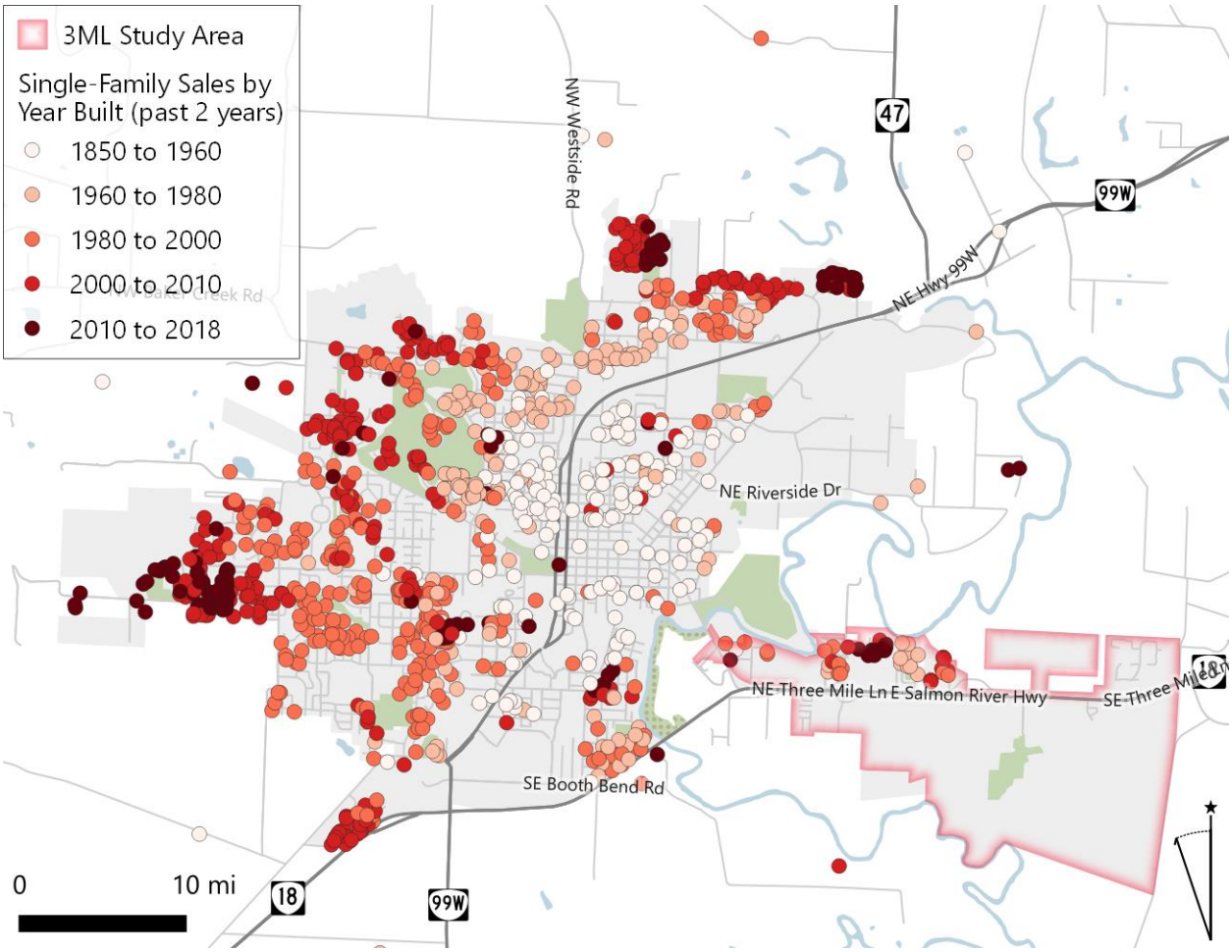
Figure 20. McMinnville Single-Family Median Home Sold Price (2008 to 2018)



Source: Zillow Real Estate Research

Figure 21 shows the location density of residential sales for the past two years. Sales have been driven by new single-family construction in subdivisions, mostly in the western and northern edges of the city. However, some new development has occurred in the Three Mile Lane project area.

Figure 21. Single-family Residential Sales, Past Two Years



Source: Redfin, Leland Consulting Group

Table 4 below shows data relating to single-family sales and absorption for the past 24 months, as well as current for-sale listings, and estimated months of inventory. Months of inventory are often referenced when determining whether it's a seller's market or a buyer's market: If there are zero to four months of inventory, meaning that all current listings can expect to be sold within 4 months, it is considered a seller's market because houses are selling very quickly.

Key findings and general takeaways include:

- Over the last 24 months, approximately 1,127 homes were sold (all new homes and resales), over 92 percent of which were single-family detached homes.
- There are no existing townhomes listed for sale.
- The single-family market is considered tight, with only three months of inventory currently listed for sale. The market for housing under $400,000 is particularly tight, with very little inventory listed for sale and the highest rate of absorption across all home types and price ranges.

Table 4. Owner-occupied Housing Market Summary, McMinnville, 2018

	Sales in Last Two Years	Percent of Total	Absorption (Units Sold per Month)	Listings	Months of Inventory
Single-Family Homes					
Under $200k	68	7%	3	0	0
$200k to $300k	373	36%	16	9	1
$300k to $400k	365	35%	15	31	2
$400k to $500k	141	14%	6	43	7
$500k to $600k	59	6%	2	12	5
$600k +	38	4%	2	23	15
Subtotal	1,044		44	118	3
Attached Homes*					
Under $200k	12	14%	1	0	0
$200k to $300k	58	70%	2	0	0
$300k to $400k	13	16%	1	0	0
$400k +	0	0%	0	0	0
Subtotal	83		3	0	0
All Housing					
Under $300,000	511	45%	21	9	0
Over $300,000	616	55%	26	109	4
Total	1,127		47	118	3

Source: Redfin and Leland Consulting Group
**Attached includes condominiums and townhomes*

The following table—which shows various data for sales over the past 24 months for all housing (all construction years) and new housing (built since 2010) by the number of bedrooms—provides further confirmation of the tight single-family market and relatively strong demand for middle-income, mid-sized, high-quality housing. Housing built since 2010 tends to cost about 22 percent more on average than the local single-family market. New housing—and homes with two and three bedrooms—spend the least time on the market (not including one-bedroom housing, which comprises only one percent of the market).

Table 5. Single-Family Sales Within the Last Two Years by Number of Bedrooms

Number of Bedrooms	Percent of Sales	Avg. Price	Avg. Price per Sq. Ft.	Avg. Size (sq. ft.)	Avg. DOM	Avg. Year Built
All Construction	**100%**	**$333,904**	**$185**	**1,865**	**370**	**1985**
1	1%	$263,451	$255	1061	188	1971
2	9%	$254,814	$205	1,276	374	1962
3	62%	$315,474	$188	1,710	368	1985
4	23%	$393,456	$173	2,303	375	1992
5	5%	$424,828	$156	2,772	382	1997
6	1%	$498,520	$151	3,344	351	1984
Built Since 2010	**14%**	**$408,298**	**$203**	**2,029**	**313**	**2016**
1	1%	$275,000	$393	700	133	2017
2	2%	$328,000	$201	1,648	288	2012
3	33%	$379,286	$199	1,902	283	2015
4	49%	$408,915	$186	2,202	375	2016
5	16%	$442,392	$171	2,590	366	2016

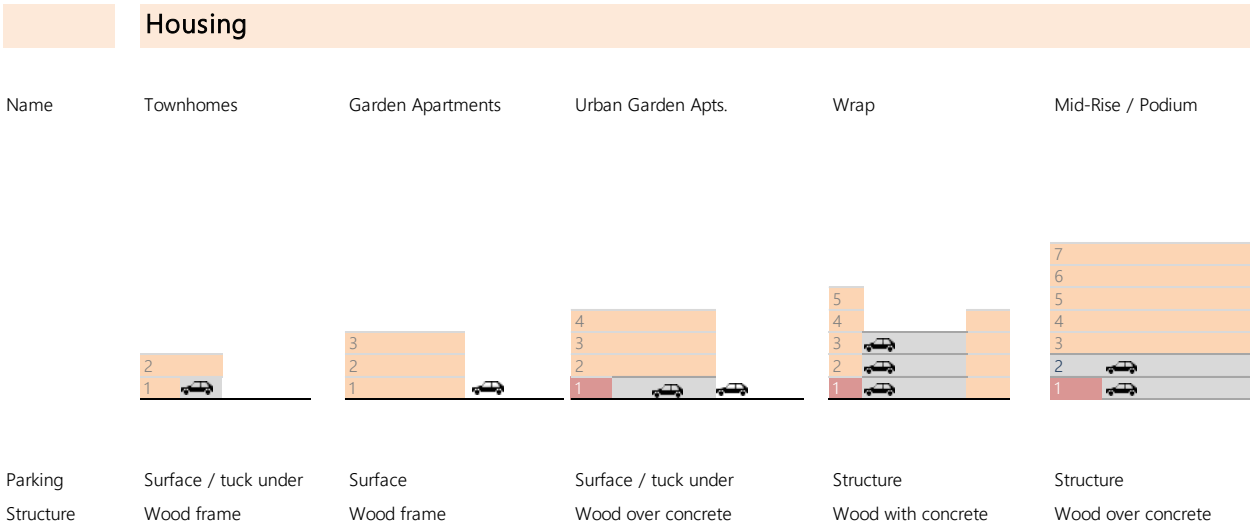
Source: Redfin, as of July 2018

Housing Development Prototypes

Most housing can be categorized within a set of "prototypes," which are shown below (single-family residential is not included). The prototypes increase in scale and density moving from left to right. Parking is a key factor that affects housing density and financial feasibility. Typical types of parking are surface, tuck under, structured, and below-grade structured. Surface parking is the least expensive and below-grade structured parking is the most expensive. Structured parking can add tens of thousands of dollars of construction cost per housing unit, which often means that only hot housing markets with high rents can accommodate higher-density housing types with structured parking. Construction materials also change as housing density increases. Townhomes, low-rise (garden) apartments, and low-rise apartments with tuck-under parking (urban garden apartments) are typically entirely wood-frame buildings; while wrap and mid-rise/podium structures require concrete construction for parking areas; in addition, steel is sometimes used instead of wood for the apartment areas. The construction complexity and specialization required for these building types also increases costs.

Single-family, townhomes and low-rise apartments appear to be the most financially feasible housing development types in the near- and mid-term. Single-family homes will also be feasible. Urban garden apartments (which include tuck-under parking and sometimes ground-floor retail) may be feasible in the mid- and long-terms. Wrap and mid-rise projects are only likely to be feasible after significant "place-making" improvements have been made, and/or if the market changes. Affordable and/or mixed-income projects can sometimes achieve higher densities than market-rate projects since they have access to additional public funding sources. While the vacancy rate across multifamily apartments is practically zero and net absorption continues to increase, rents remain too low for market-driven high-density developments. However, the tight market may generate significant rent growth, subsequently improving the feasibility of higher density developments.

Figure 22. Housing Development Prototypes



Market Trends

The recession had a profound and lasting effect on the housing market, and while the recovery is now almost over, more people are renting than ever before. For many people, financial barriers such as rising student debts, access to credit, and large down payments have forced them to rent. For many others, the choice to rent is simply a choice. Indeed, it is well established that the two most populous generations—the Baby Boomers (ages 54 to 72) and the Millennials (ages 22 to 37)—are currently the primary drivers of demand for residential units in walkable, urban locations that offer flexibility and a range of amenities.

As Baby Boomers reach retirement age and see the last of their children leave home, they are increasingly attracted to smaller move-down or "lock-and-leave" housing which requires less maintenance and affords more flexibility. As such, age-restricted and senior multifamily housing has risen near the top of the list for best investment choices (per ULI's "Emerging Trends in Real Estate 2018").

For Millennials, the situation is more nuanced and difficult to forecast. The common rhetoric for many years was that Millennials desire urban living and will continue to reside in urban cities because of financial conditions and choice. However, while demand for urban rental apartments has remained high among Millennials, they are increasingly forming households and having children, looking at select suburbs and secondary markets because of the quality of life, lower cost, and space and yard availability. Indeed, 70 percent of Millennials expect to be homeowners by 2020, even though only 26 percent own today (per ULI's "Gen Y and Housing"). With that said, generational trends associated with the next emerging generation—Gen Z (ages 21 and below)—are relatively unknown.

Other reports have recently documented important trends in housing. Findings include:

- Cost of housing, neighborhood safety; proximity to work; K-12 school quality; and community character, ambiance, and visual appeal were the top five critical community features for survey respondents.[9]

[9] Urban Land Institute (ULI), Gen Y and Housing: What They Want and Where They Want it, 2015

- Urban setting; proximity to shopping, dining, and entertainment; walkability; and availability of mass transit are all also important—but not critical—features in a community. [10]
- The more walkable the community, the more satisfied residents are with their quality of life.[11]
- Access to public transportation is much more important to those earning under $50,000 per year, while walkability is also more important to those with lower incomes. [12]
- Sixty percent of residents would spend at least a little more for a house in a walkable community. [13]
- Four-in-ten people prefer a walkable community and a short commute. Millennials, in particular, are swayed by a shorter commute. [14]

Talk of generational shifts, however, sometimes misses the point. Ultimately, people are waiting longer to make significant life choices, such as buying a home or having children, and quality of place has emerged as a primary desire for almost all prospective residents across all demographic groups. Quality of place is simply the components that make any given place enjoyable to live, such as availability of and access to good schools, parks, quality healthcare, transit, shops, entertainment, and cultural amenities.

Residential Demand

As noted earlier, projected growth rates tend to vary significantly depending on the source and the geography in question. Therefore, it is important to carefully consider the "middle-of-the-road" option and note that actual demand is likely to change. With that said, PSU's projections for the McMinnville Urban Growth Boundary align with projections for Yamhill County as well as the "baseline" growth rate, which applies the historical household growth rate from 2010 to 2018 in the market area to current households.

For the residential and retail demand forecasts, we assume that actual household growth will be approximately 1.3 percent. Based on this household growth rate, we project market area demand for an additional 3,800 units over the next 10 years within the market area, or about 380 units per year. We anticipate that the most demand for new *rental* units will be from households with incomes less than $75,000, and the most demand for new owner-occupied housing to be from households earning between $50,000 and $150,000. We expect about 32 percent of future housing demand to be for renter-occupied units, resulting in about 1,200 rental units and 2,500 owned units.

[10] Ibid.

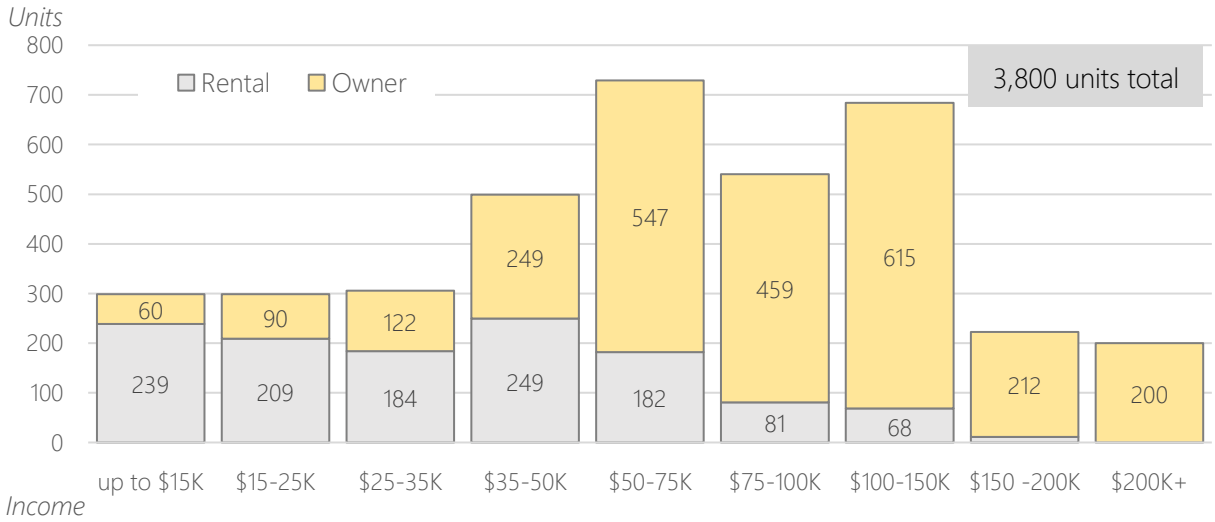
[11] National Association of Realtors (NAR), National Community and Transportation Preference Survey, 2018

[12] Ibid.

[13] Ibid.

[14] Ibid.

Figure 23. 10-year Market Area Unit Demand



Source: Leland Consulting Group

Table 6. Annual Income Range and Attainable/Affordable Monthly Rent and Housing Price

HH Income	$15k	$25k	$35k	$50k	$75k	$100k	$150k	$200k	$200k+
Attainable Monthly Rent	$375	$625	$875	$1,250	$1,875	$2,500	$2,500+	$2,500+	$2,500+
Attainable Home Price	$45k	$75k	$105k	$150k	$225k	$300k	$450k	$600k	$600k+

Source: ESRI, Leland Consulting

While projected residential growth suggests demand for a total of 1,200 multifamily rental apartments, the past five years has only delivered a total of 132 multifamily apartment units, significantly lower than the necessary rate of development required to get to 1,200 within the next decade. Of course, townhomes and—to a lesser extent—single-family homes may also be renter-occupied, but multifamily apartments will be responsible for the majority of new renter-occupied units. With the trajectory of the past five years, the multifamily market will continue to be constrained, potentially increasing rents and attracting developers to the region. However, the City should explore ways in which to incentivize new housing development and bridge any potential feasibility gaps preventing new construction.

Table 7. Historical and Forecasted Multifamily Residential Trends, Market Area

	Past 5 Yrs.	Next 10 Years
Net MFR Absorption	175 units	275 units
MFR Deliveries	132 units	350 units

Source: Costar and Leland Consulting Group

Three Mile Lane Study Area Absorption

With such a tight single-family and multifamily market, as well as few major tracts of vacant tracts for greenfield development inside urban areas, we expect the project study area to capture a significant amount of new residential demand over the next 10 years.

While the vacancy rate is currently almost zero, development activity should theoretically increase, and we anticipate the multifamily market to subsequently stabilize near five percent vacancy (typically considered the point of market equilibrium for multifamily). For this reason, we anticipate deliveries to be higher in the Three Mile Lane project area than net absorption. This assumes that land supply and zoning is able to accommodate new multifamily development.

For single-family, we anticipate single-family development to build out to the extent allowed. Given the existing industrial zoning, there are few places which could accommodate such residential development. Much fewer single-family units could be accommodated simply due to the density of single-family development and land required relative to multifamily residential.

Retail Market

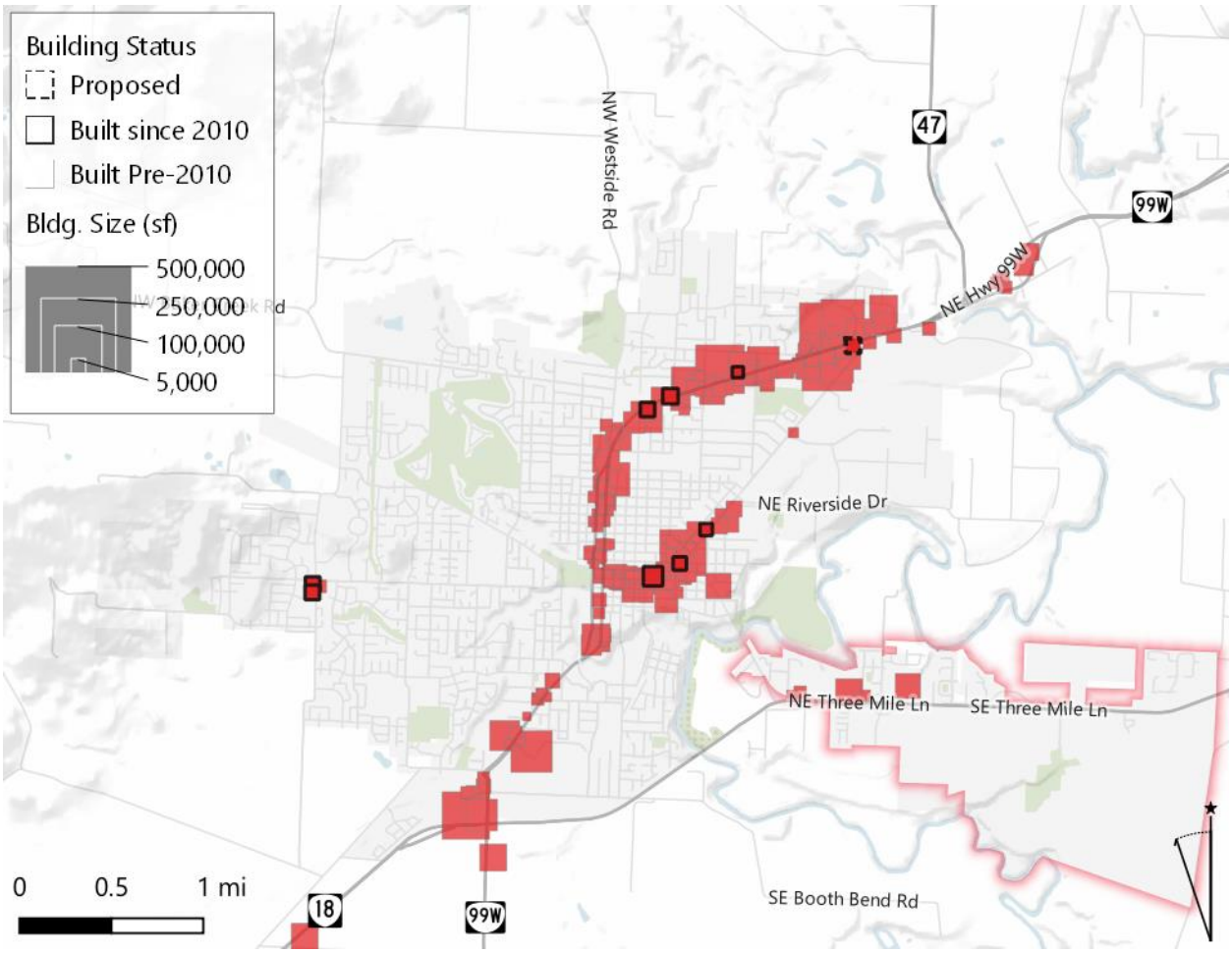
Market Summary

For retail, the analytic goal of defining a "market area" is generally to encompass likely customers whose spending power will fuel a significant majority of sales in future shops and eateries in the study area. Competitive supply (both existing and potential) will also, logically, tend to fall within that same market area. Neighborhood stores such as supermarkets tend to have much smaller market areas than big box stores, which in turn have smaller catchment areas than regional malls or other larger-scale projects.

CoStar reports that the McMinnville market area has 268 buildings totaling 2.5 million square feet of retail space. The market has a low vacancy rate of 1.4 percent. Rents vary widely by retail property type, condition, and configuration. Generally, asking rents for quality retail space range from around $14 to $18 per square foot, but a few quality, well-positioned retail spaces are achieving upwards of $24 to $30 per square foot triple-net, such as some pad sites along Highway 99W. No comps currently exist for brand new, first-generation retail space.

Figure 24 illustrates the relative size of retail development by total square footage. Retail development is largely concentrated along State Highway 99W. Generally, retail is small-scale—especially along Baker Street and near downtown—while larger neighborhood-serving retail—such as McMinnville Town Center, Lowe's, Wal-Mart, WinCo Foods, and Bi-mart—is located in the northern and southern areas of the city.

Figure 24. Regional Retail Development



Source: Costar, Leland Consulting Group

Understanding the pattern of retail spending within a community is critical. By looking at estimated demand from existing households and current estimated sales, we can identify the relative strength or weakness of each retail category. Retail sectors in which household spending is not fully captured are called "leakage" categories, while retail categories in which sales are higher than estimated household demand generated by existing residents are called "surplus" categories.

A retail sales surplus indicates that a community pulls consumers and retail dollars in from outside the trade area, thereby serving as a regional market. Conversely, when local demand for a specific product is not being met within a trade area, consumers are going elsewhere to shop, creating retail leakage.

Table 8 shows the current annual retail leakage for various retail categories. Most retail categories show a sales leakage occurring, with Food and Beverage (grocery), Building Materials and Garden Equipment, Health and Personal Care, and Miscellaneous Retailers showing a surplus. This indicates that the McMinnville area is a weak retail market with a lot of spending potential leaving the area. General Merchandise shows the highest leakage, but these retailers—such as Walmart and Target—have large catchment areas and it's very possible that McMinnville residents travel to larger metros, such as Salem and Portland to shop at these stores.

While leakage usually presents an immediate opportunity to increase new retail development activity and capture some of the demand leaving the area, this may be unlikely for many of the retail categories in the table and following chart below given McMinnville's proximity to several regionally-significant retail centers. For example, both Bridgeport Village and the Woodburn Outlets—which provide an extensive range of low-cost, high-quality products—are about a 45-minute drive of McMinnville.

Table 8. Retail Leakage Analysis, McMinnville Market Area

	Est. HH Demand	Current Est. Sales	Current Leakage ($)
Furniture and Home Furnishings	$25,459,215	$9,815,869	15,643,346
Electronics and Appliance	$25,779,334	$10,205,468	15,573,866
Building Material, Garden Equip	$56,286,379	$89,349,237	-33,062,858
Food and Beverage (grocery)	$132,402,012	$244,668,336	-112,266,324
Health and Personal Care	$49,511,435	$59,825,939	-10,314,504
Clothing and Accessories	$39,384,538	$5,785,467	33,599,071
Sporting Gds, Hobby, Book, Music	$27,981,058	$12,792,050	15,189,008
General Merchandise	$138,540,476	$41,383,114	97,157,362
Misc. Store Retailers	$38,326,257	$81,493,693	-43,167,436
Foodservice and Drinking Places	$83,233,240	$53,518,658	29,714,582
Other (including cinema, prof./med. office, consumer banks, etc.)	$92,535,592	$91,325,675	1,209,917

Source: ESRI

Figure 25. Market Area Retail Demand: Surplus/Leakage

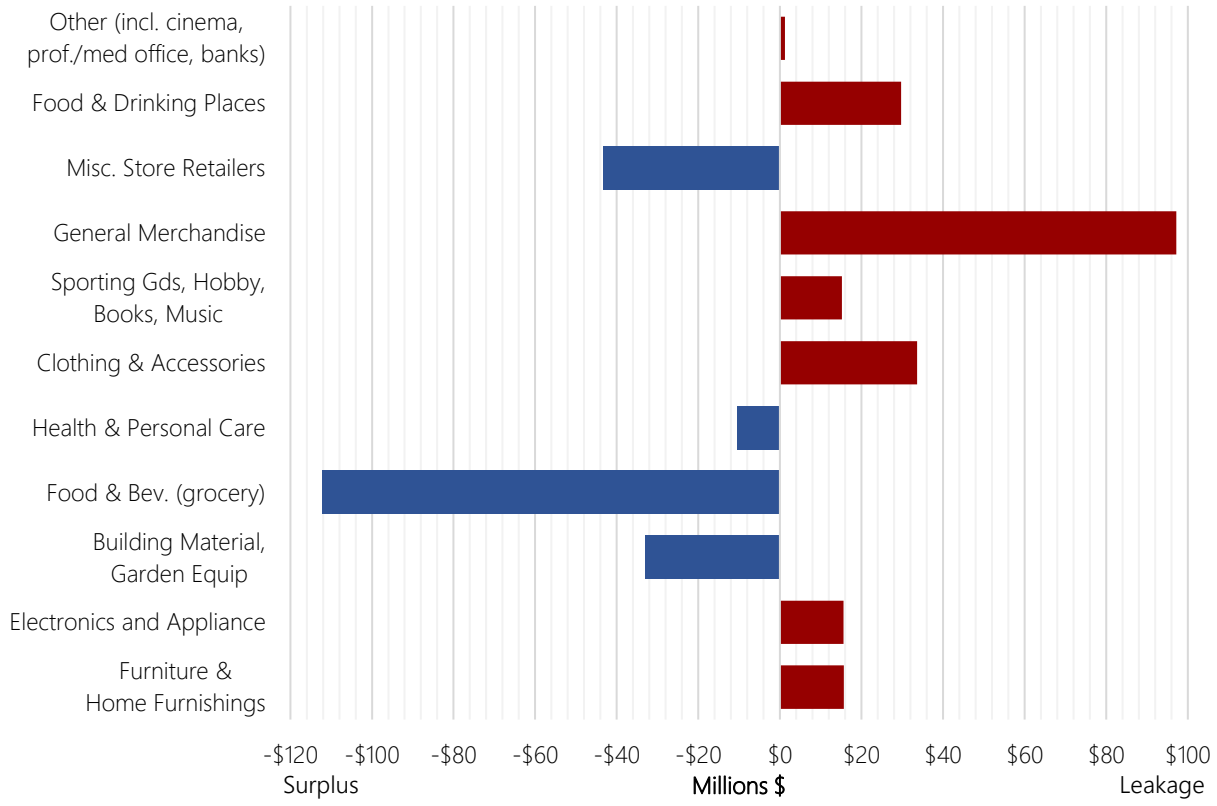
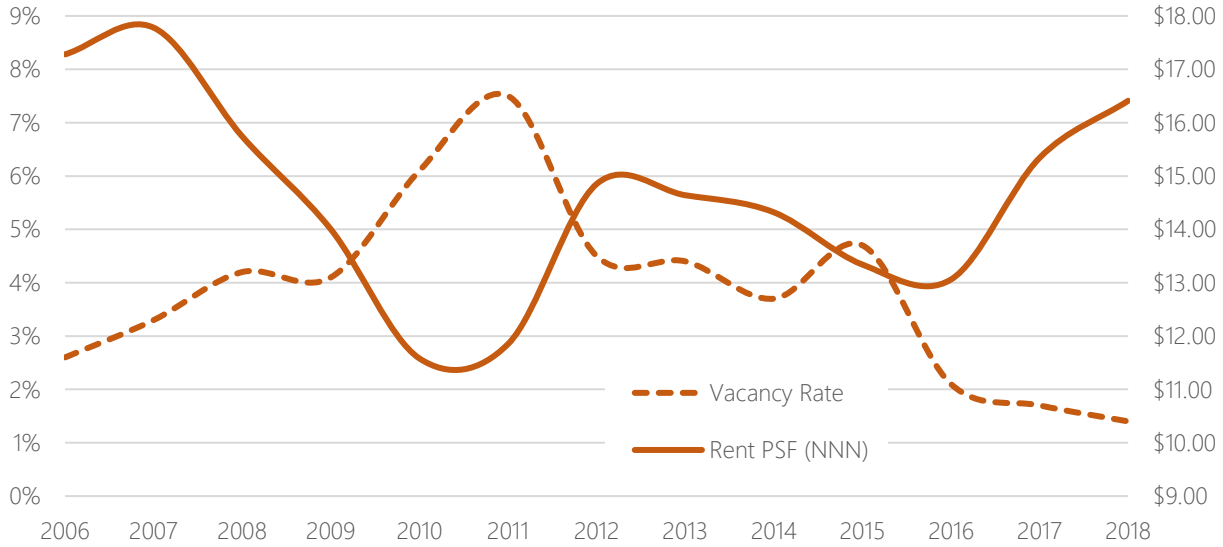


Figure 26 provides rent and vacancy trends for retail development in the McMinnville market area. Rents and vacancies tend to have an inverse relationship, and this has been the case with local retail. Rents were at their lowest rates and vacancy at its highest during the recession, and rents have yet to recover to the 12-year high of almost $18 per square foot triple-net (NNN) in 2007, despite Costar data showing the vacancy rate at record lows.

While such low vacancies typically suggest demand for new retail development, this may be small-scale. The changing face of the retail sector is resulting in record closures of national retailers, and other large regional retail centers—such as the Woodburn outlet mall and Bridgeport Village—are far more competitive and already established.

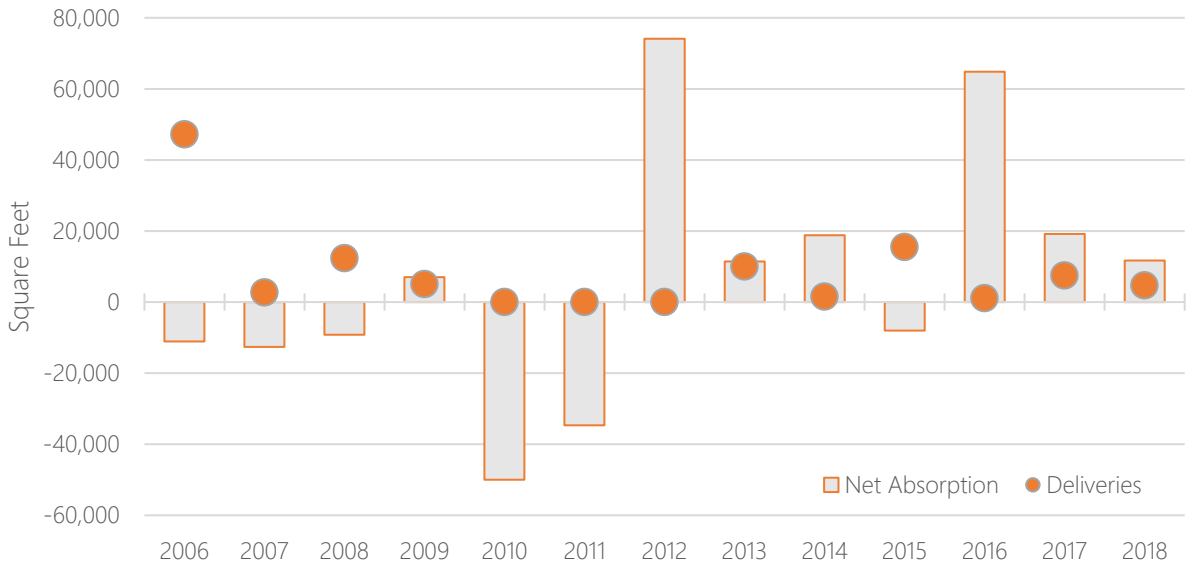
Figure 26. Market Area Retail Rent and Vacancy Trends, 2006-2018



Source: Costar

Figure 27, which shows the net absorption and total retail deliveries by year for the past 12 years, demonstrates why the spike in the vacancy rate occurred in 2010 and 2011. Clearly, some major retail space was vacated during and immediately following the recession, but the market appeared to have bounced back in 2012 with a relatively strong year of positive absorption. In terms of deliveries, there have been few significant developments over the past decade.

Figure 27. Market Area Retail Net Absorption and Deliveries (sq. ft.), 2006-2018



Source: CoStar

Market Trends

The goods-based consumer retail industry is undergoing a seismic shift and transformation. Big name retailers are declaring bankruptcy and closing hundreds of stores as online purchases grow and American buying habits change. Last year saw a record number of store closings. This is having a trickle-down effect on communities, as some see their brick-and-mortar retail bases slowly eroding, with impacts felt in shopping centers and along traditional Main Streets.

Planners in some cities and counties are taking proactive approaches to the shifting retail landscape. They're commissioning studies of the marketplace and developing new strategies to maintain and foster better retail environments. Also, many retail-only zoning classifications are being modified to allow a variety of new uses in ground-floor, street-fronting spaces. The idea is to liven up the street with pedestrian activity without relying on retail, with new uses ranging from offices to fitness facilities.[15]

Table 9 summarizes the anticipated growth and decline of primary retail types. This information is based on research conducted by commercial real estate company Cushman & Wakefield and reflects changing preferences. Online shopping is having a significant impact on "commodity retail." Retailers selling products that can easily be ordered and shipped from Amazon or others face a challenging environment and must have a competitive advantage against online competition—whether that is the convenience, experience, customer service, or something else. Commodity retailer categories include electronics, office supplies, and video stores.

By contrast, experiential consumerism is an emerging trend in which retailers offering a special experience, or offering services that cannot be procured online, have the potential to thrive. A prime example is dining—as one retail guru has said, "you can't eat the internet;" and you certainly cannot dine with family and friends on the internet. Therefore, food and beverage establishments have become a larger and larger part of the retail

[15] URL

experience, on both main streets and larger shopping centers. Another growing "retail" sector is healthcare. Small, neighborhood-scale providers are moving into both main street and retail center locations.

Table 9. Retail Trends: Growing and Declining Retail

Growing	Declining
	
• Retail that offers a special experience • Food! • "Fast Casual," i.e. Little Big Burger • Food Halls, artisanal markets • Trucks to Bricks • Grocery: Ranging from discount, to organic, to small format, and ethnic • Medical users, incl. ZoomCare • Apparel: Fast fashion, off-price, active sportswear • Sporting clubs • Fitness/Health Clubs • Marijuana dispensaries • Auto repair • Convenience stores • Car dealerships • Home improvement and home furnishings	• Commodity retail • Food: Casual dining, weaker fast food chains • Mid-priced apparel and shoes; children's • Dollar Stores • Pet supplies • Electronics • Office Supplies • Bookstores • Toy Stores • Video stores • Bank Branches

Source: Cushman & Wakefield, Leland Consulting Group.

The Rise of E-commerce

Between 2001 and 2015, total online retail sales grew at a 21.8 percent annual growth rate and accounted for 22 percent of total retail sales growth. During the same period, brick-and-mortar stores grew at a rate of only 3.7 percent annually, decreasing their share of the total retail market from 98 percent to 89 percent. While still only

a small total market share, estimates indicate that up to 20 percent of total US sales will be attributed to e-commerce by 2019.

The rise of online retail has also had a major impact on the way retailers are doing business. As more people turn to the internet to do their shopping, traditional brick-and-mortar stores are altering their store formats and incorporating an online platform into their business concepts. Omnichannel retail strategies, where a retailer operates through both physical locations and online sales, have proven to be a necessity in today's market.

The list of top online retailers reinforces this point, as many also have a significant brick-and-mortar presence. Of the top 25 companies with the highest online retail sales in 2016, 18 were more traditional brick-and-mortar retailers. These include companies such as Walmart, Best Buy, Macy's Inc., Nordstrom Inc., Target Corp., Gap Inc., and Neiman Marcus.[16] That said, Amazon remains king among online retailers, with almost six times the sales volume of the second-ranked retailer, Walmart.

Employment Market

The McMinnville market area has 97 office buildings with a total of 785,000 square feet of rentable space, comprising entirely of Class B and C buildings. Most are wood-framed buildings built between 1970 and 2000. Office vacancy stands at 3.2 percent according to CoStar; this is down from a 10-year high of 10.5 percent in 2011, indicating demand for new space.[17] Gross office rents currently average around $18.20 per square foot per year.

There are 85 industrial buildings with a total of 2.4 million square feet of rentable space, although almost one-quarter of this total is from the steel mill in the north of the city. Industrial vacancy stands at 0.4 percent according to Costar, down from a 10-year high of 15.8 percent in 2014. Industrial rents average around $8.40 per square foot.

Market Summary

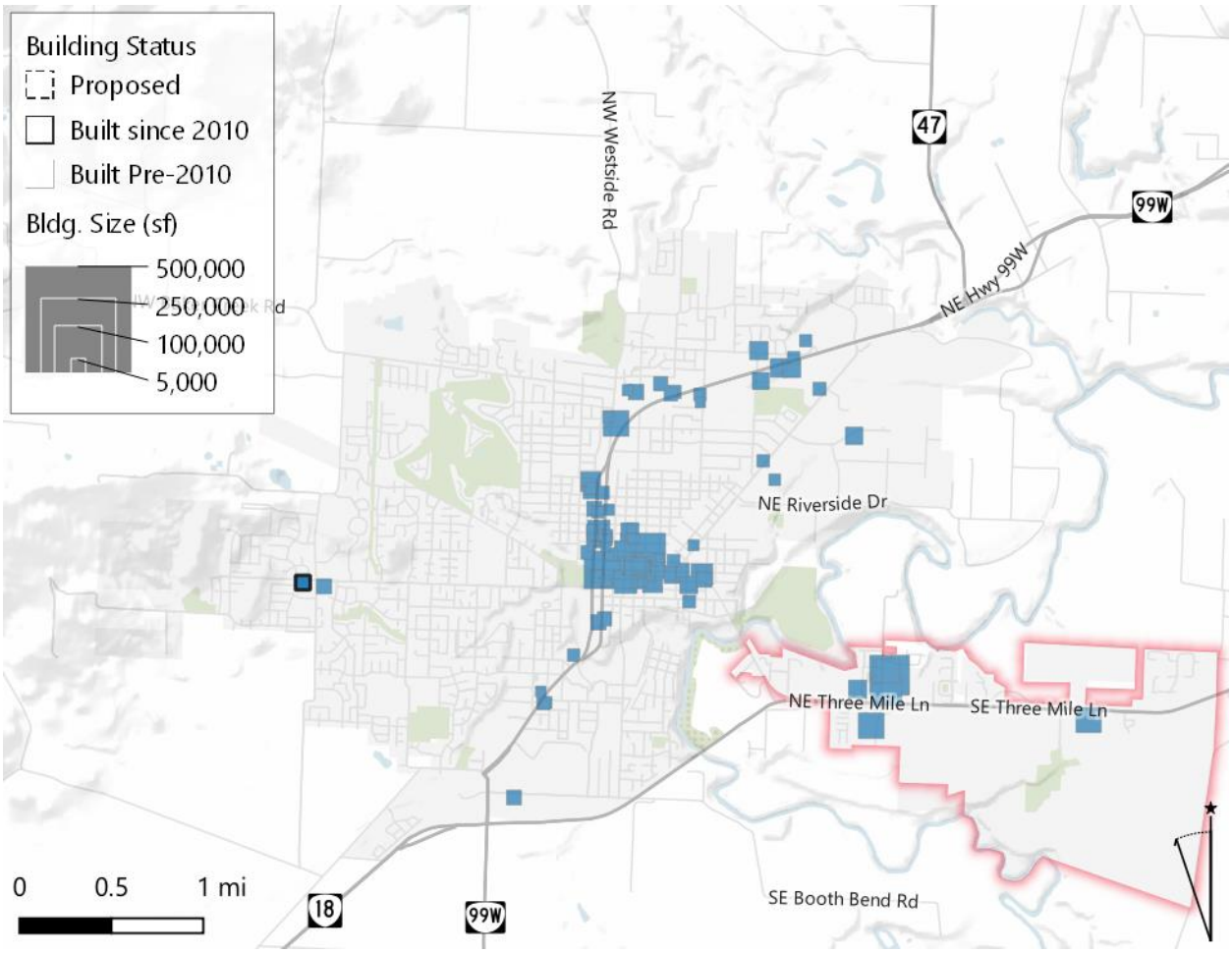
With an economy centered on agriculture, the Yamhill County office market is relatively quiet, and its tenants and investors are predominantly local. The vacancy rate is tight, due in part to moderate absorption but largely because of limited inventory and the lack of new construction. Rents experienced back-to-back years of growth in 2015 and 2016 but contracted in the past year. Over the cycle, the submarket has consistently posted minimal investment activity and nearly no new supply.

As shown in Figure 28, new office construction in the region has been limited to the Portland Metropolitan Area and other close-in cities.

[16] wwd.com/business-news/financial/amazon-walmart-top-ecommerce-retailers-10383750/

[17] Anecdotal evidence suggests an immediate need/demand for mid- and large-scale Class A office space, although the extent of which is likely limited, based on projected regional employment growth rates.

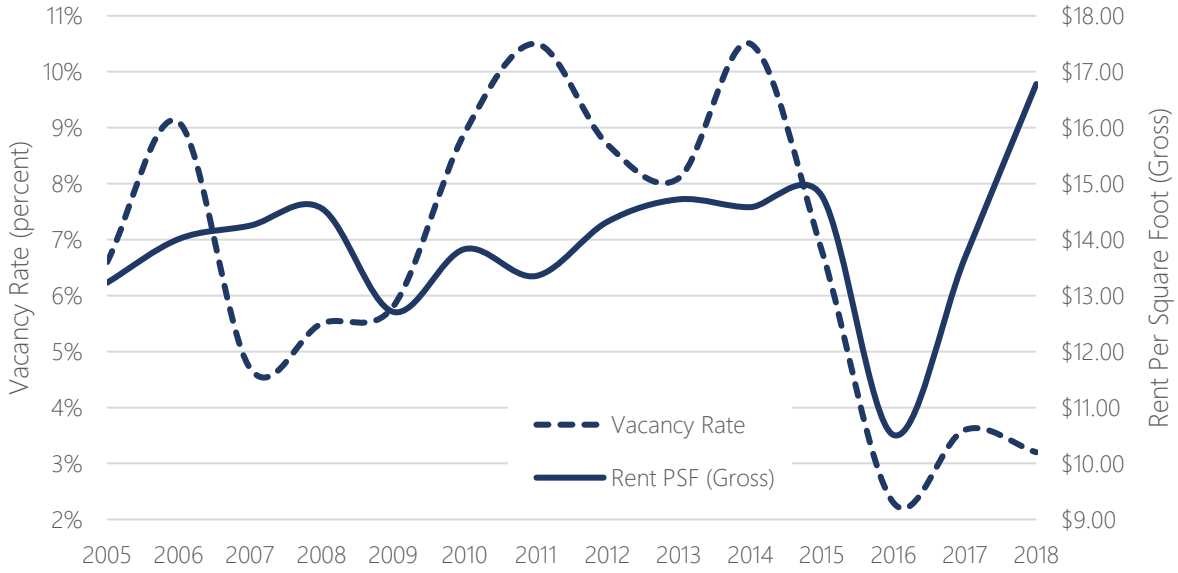
Figure 28. Regional Office Development



Source: Costar, Leland Consulting Group.

There has been little to no rent growth in the market area over the past decade, and vacancy rates have been erratic, declining significantly from 2014 and settling near three percent in 2018. However, the following chart shows the volatility of the office market.

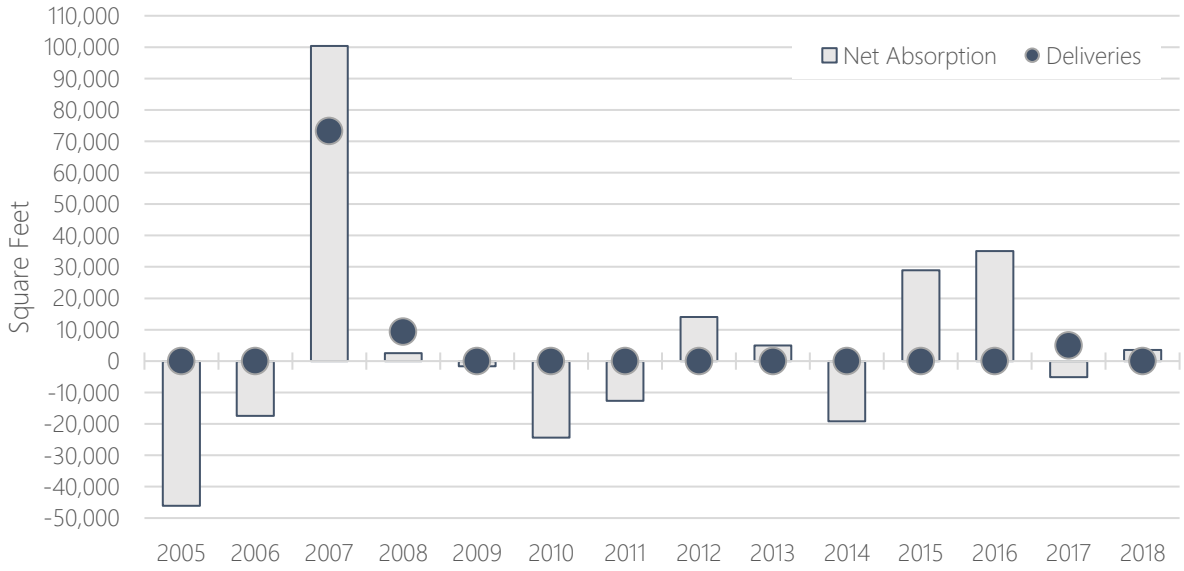
Figure 29. Market Area Office Rent and Vacancy Trends, 2005-2018



Source: Costar

Net absorption of office space has been largely positive, albeit minimal, and essentially no new office space has been constructed in the past decade. This is reflective of the fact that more competitive and significant employment clusters are located elsewhere in the region, largely throughout the Portland Metropolitan Area, such as Wilsonville. However, this may also partially due to the lack of appropriately zoned land for office.

Figure 30. Market Area Office Net Absorption and Deliveries (sq. ft.), 2005-2018



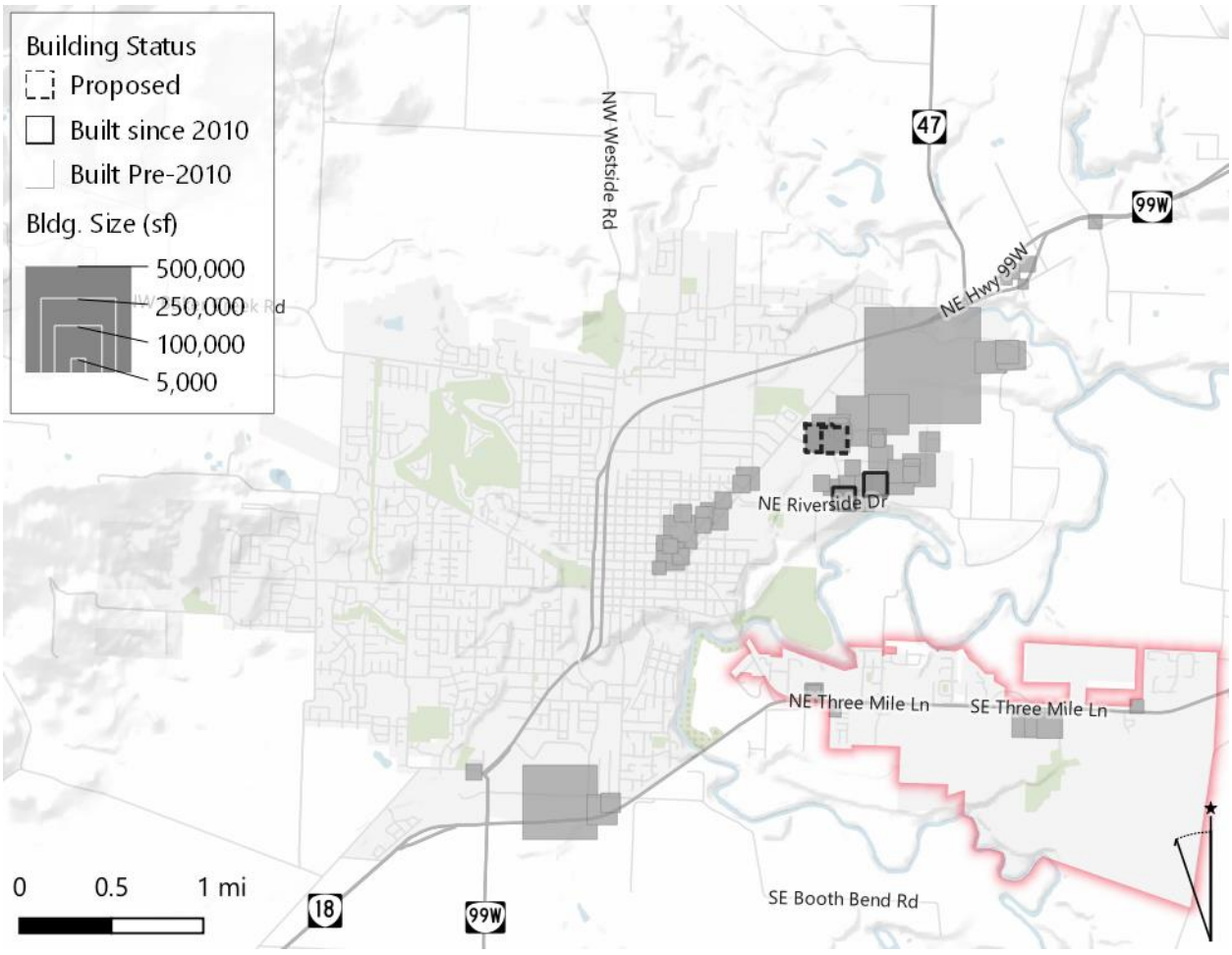
Source: Costar

For industrial, the market is marginally stronger than for office. However, like office, industrial development has also clustered elsewhere in the region in locations that are arguably better suited for continued expansion.[18] Locations such as the Tualatin, Tigard, and Wilsonville benefit from close proximity to Interstate-5 and access to talent in Portland. These locations have rapidly built up their manufacturing industries, among others. While McMinnville has seen recent development, it is unlikely to compete with these other centers.

With that said, Three Mile Lane may have a locational advantage for industrial development due to its proximity and access to the airport. Nationally, many modern airports now generate most of their revenues from sources other than aviation. While small and lacking commercial service, the McMinnville airport may have positive impacts for a hotel (including conference spaces), office space, business parks, industrial development (particularly manufacturing and warehousing), cargo facilities, sports facilities, among others.

Extending the airport runway to accommodate larger aircraft may further improve development prospects and accelerate the rate of development. However, doing so is understood to be challenging as the only place to extend is to the northeast, which would require moving Highway 18.

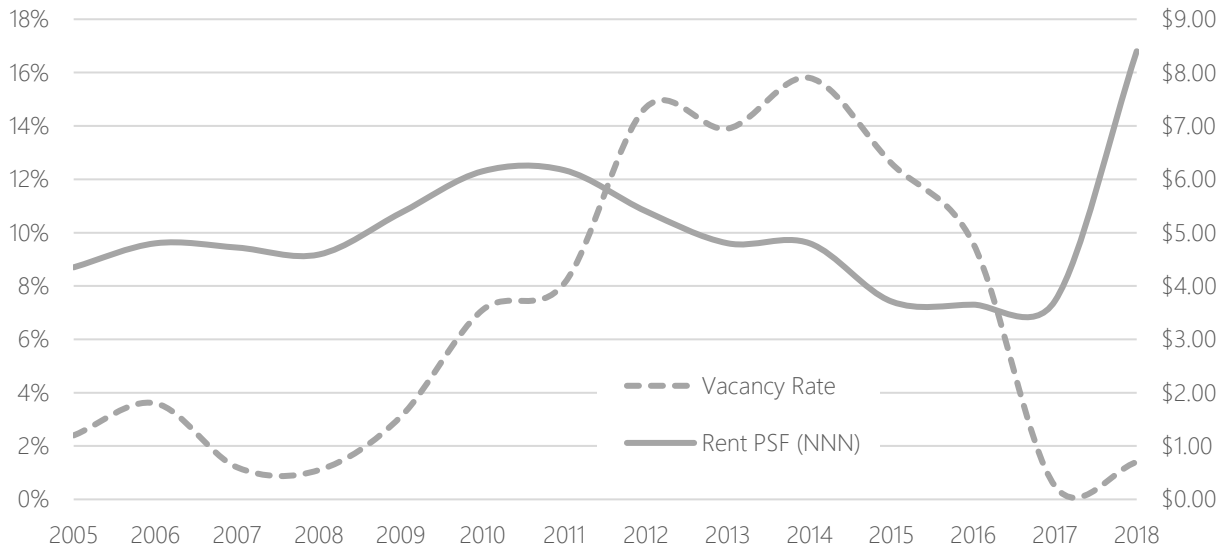
Figure 31. Regional Industrial/Flex Development



[18] The data that populates the corresponding map often neglects to show owner-occupied buildings, such as the Jackson Family Wines building, built in 2017 in the Three Mile Lane corridor.

While the industrial vacancy rate is virtually zero, rents have only just climbed to pre-recession levels. A hike in vacancy rates between 2009 and 2014 resulted in negative rent growth. However, with the wine industry such a significant component of the Mid-Valley industrial market, there is a reason to believe that typical rent and vacancy characteristics may not truly represent the McMinnville market area's industrial market.

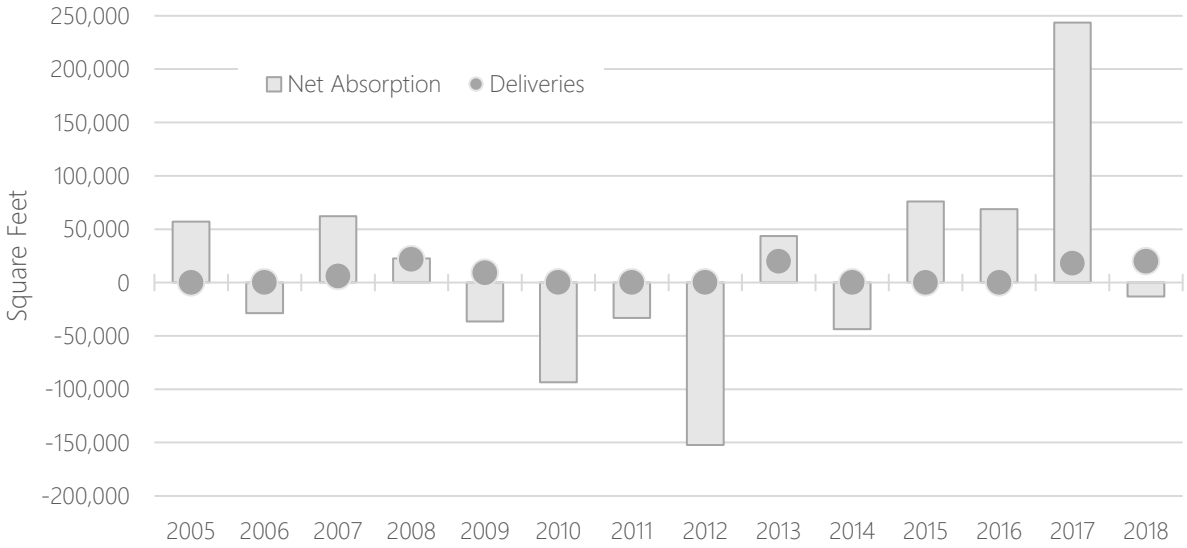
Figure 32. Market Area Industrial Rent and Vacancy Trends, 2009-2018



Source: Costar, Leland Consulting Group

Net absorption has been largely positive since several years of negative absorption between 2009 and 2012—likely as a result of the recession, with a huge surge in absorption in 2017 which has resulted in almost zero vacancies in the market area. There have been few industrial deliveries over the past decade.

Figure 33. Market Area Industrial Net Absorption and Deliveries (sq. ft.), 2005-2018



Source: Costar, Leland Consulting Group

Planned and Proposed Projects

Per Costar, there are only two proposed industrial buildings in the McMinnville area, both of which are planned for either office or industrial. Both buildings are located in McMinnville's industrial district (zoned General Industrial M-2) along a Portland Western Railroad rail spur.

Figure 34. Proposed Industrial Development, McMinnville

Source: Kidder Matthews

Market Trends

While people once followed the jobs, corporations and professional firms are now following people back to the city. These companies have increasingly seen prospective employees choosing to live, work, and play in more interesting—often urban—locations, and now they have realized that attracting these employees requires them to be in these places too. As such, the authenticity of a place has become a sought-after commodity. This is likely one of McMinnville's strongest assets. Companies and workers now look for the genuine, the idiosyncratic, the unique and, most importantly, the personality of a place that matches their own. In fact, a recent Newmark study identified a significant rent premium for office properties with transit access, dining operations, and open floor plans of around 50 percent higher than those with obsolescent characteristics.

For cities, this means that opportunity lies in attracting more investment and focusing on placemaking to make themselves the place where the best and brightest live, work, and shop. This might require updating office and industrial areas to reflect the way we now do business and work day-to-day. And, as the finance, utility, and even government sectors continue to consolidate, cities will need to backfill their buildings with new tenants to keep downtown an interesting and lively place.

Location Preferences

Across the United States, traditional office development is increasingly considered obsolete in today's shifting market. Since the Great Recession tenant preferences have shifted to central, walkable, amenity-rich locations as companies find it tougher to recruit the Millennial and emerging Gen Z workforce to sterile, single-use buildings and in auto-dependent neighborhoods. These locations have typically been in inner-city areas, but more recently office investors have been refocusing their attention to suburban communities that increasingly offer a better value for investors than urban products, mainly in areas where developers are creating live-work-play environments. The migration of millennials to the suburbs should ease investor concerns about demand for suburban office space.

Workplace Trends

General trends impacting the office workspace include a steady decline in the number of square feet per employee, the increase in standardized workspaces and non-dedicated (shared) office space with more

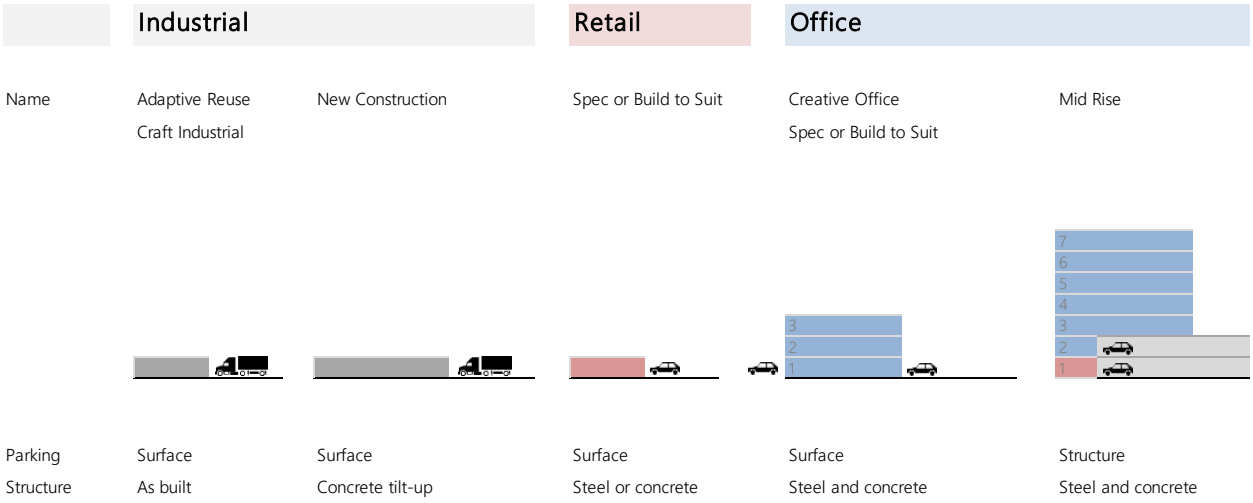
amenities, more tolerance for telecommuting and collaborative workspaces, and a greater emphasis on higher space utilization, innovation, and productivity. Within the private sector, Class A office space continues to be the primary driver of new office demand, yet "creative" office environments—the repositioning of established office space (typically Class B) to open, modern workspaces—are becoming ever more popular. Real estate investors are wondering whether the office sector is next in line for a painful shakeup, as tenants continue to use office space more efficiently.

The impact of tenants' push for greater space efficiency has created winners and losers within the office market. Fitting more employees into less space has enabled office tenants to sign smaller leases or afford higher-end space. This is a particularly compelling tradeoff in the current market, as tenants are increasingly relying on amenity-rich office environments to help recruit the highly skilled workers who are now in short supply.

Commercial Development Prototypes

Commercial development prototypes are shown below. Once again, parking is a major driver of building form. Only one commercial development prototype—mid-rise office—includes structured parking; this building type is unlikely to be feasible due to the high cost of structured parking.

Figure 35. Commercial Development Prototypes

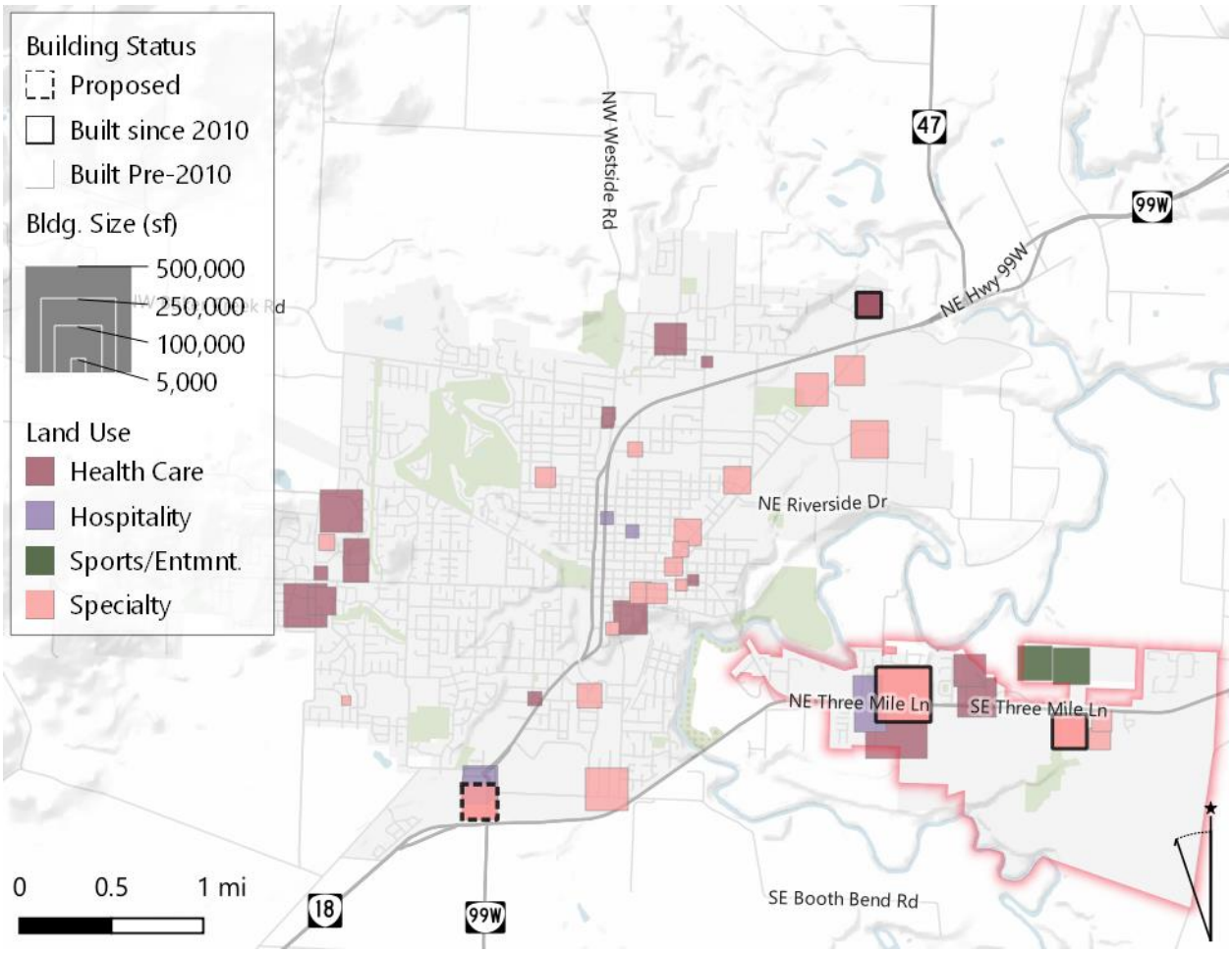


Lodging, Hospitality, Specialty, and Recreation

Development Summary

Since 2010, there have been only a handful of new properties built in these categories, including one health care facility (skilled nursing facility/assisted living), and two specialty properties (Chemeketa Community College and an airplane hangar).

Figure 36. Regional "Other" Development



Source: Costar, Leland Consulting Group

Tourism

The tourism region of the Willamette Valley includes Benton, Linn, Marion, Polk, Yamhill and portions of Clackamas and Lane counties. The region stretches from the crest of the coast range to the crest of the Cascade Range. The Willamette Valley offers more than 500 wineries in 150 miles, historic towns and cities, craft breweries, farm stands, and hiking, paddling, and cycling.

The region continues to be a big draw for locals and tourists alike, with tourism rates in Oregon rising 54 percent in the last three years[19] (as of December 2018). In 2018, the Willamette Valley was the second-most visited destination in Oregon for overnight tourists, attracting almost 20 million visitors (Portland was first with 26.4 million, and the Oregon Coast was third with 18 million)[20]. New wine country restaurants and boutiques have made the area even more appealing.

[19] http://www.wweek.com/culture/2018/10/09/two-oregon-natives-are-opening-a-bougie-new-hotel-in-downtown-mcminnville/

[20] http://industry.traveloregon.com/content/uploads/2018/05/Dean-Runyan-FINAL-2018.pdf

The wine industry has brought new economic activity and tourism, and industry growth, bringing more jobs, increased tourism, and international recognition, and growing support of arts and culture opportunities.

The arts and culture environment in Yamhill County is a growing field of increasing vitality. Artist studios and monthly wine walks increasingly attract visitors from outside the region. Events such as the two annual international wine conferences at Linfield College and monthly art and wine walks provide critical exposure both for area artists and for local vineyards. Key institutions – such as Chehalem Cultural Center, George Fox University and Linfield College – play significant roles in providing robust art and cultural offerings to their communities. The vibrancy of the environment varies across the county, and the accessibility of arts and cultural opportunities may not be equitable across different populations.

High quality of life and robust arts and culture offerings are often considered the most attractive aspects of Yamhill County for residents or businesses considering the location. They are also tourism draws. Other attractors include the region's natural beauty, small-town feel, good schools, and quality higher education institutions. The area's proximity to Portland while remaining rural and independent is also a positive attribute.

The following table provides high-level tourism data for the Willamette Valley.

Table 10. Willamette Valley, Direct Travel Impacts, 2012-2018

	2012	2018	Change
Direct Employment	18,830	21,890	16%
Employee Earnings ($M)	$385	$522	36%
Visitor Spending ($M)	$1,423	$1,629	14%
Taxes (State/Local) ($M)	$59	$79	34%

Source: Dean Runyan, Oregon Travel Impacts, May 2018

Per the Oregon 2015 Regional Visitor Report for the Willamette Valley Region,[21] approximately seven percent of all overnight trips in 2015 were for business, 53 percent were to visit friends or relatives, and 40 percent were considered "marketable" (i.e. leisure). Of these marketable trips, most people were visiting for the outdoors, a special event, or touring—and mostly during the spring and summer months. In terms of spending, 30 percent of the $706 million spent in the region was on lodging, and 27% was on restaurant food and beverage.

The Willamette Valley attracts visitors that are typically older, higher-income, and often childless or retired individuals and couples. The average age of overnight visitors to the Willamette Valley was 49 in 2015, older than the state average of 46. A significantly greater proportion of visitors aged 45 and over visit the Willamette Valley (61 percent of all visitors versus 49 percent).

Lodging & Hospitality

Near Term Hotel Development Prospects.

The primary demand driver for hotel development include:

- Tourism and tourist destinations,

[21] http://industry.traveloregon.com/content/uploads/2016/11/Oregon-Willamette-Valley-Region-2015-Visitor-Final-Report.pdf

- Entertainment activities,
- Business activity (number of jobs and businesses),
- Business conferences and conventions, and
- Travel patterns (visibility).

McMinnville's Three Mile Lane arguably possesses three of the five drivers listed above, which is a positive sign for future lodging and hospitality development. Despite this, in the near term (zero to five years), hotel development in Three Mile Lane will be difficult for the following reasons:

- **Distance from downtown amenities.** Visitors to the hotel would probably drive, not walk, to the restaurants, wine-tasting, boutiques, retail, and other amenities in downtown. There are no commercial amenities at the Three Mile Lane today and therefore a hotel at the Three Mile Lane would need to create its own sense of place and stand on its own. This would require a significantly higher level of investment, potentially in place making amenities, restaurants, meeting facilities, etc.
- **The current setting is somewhat industrial**. This is not a highly desirable hotel setting. Uncertainty about what will happen to the Evergreen properties and the surrounding area will also make hotel developers more reluctant to invest.
- **Land constraints** impact the ability of the market to support the development of moderate-cost hotels, which are needed to support the burgeoning tourism industry.

Long Term Hotel Development Prospects.

In the long term, this could be an excellent site for a hotel. Numerous amenities would improve prospects for hotel development, including:

- Additional parks, open spaces, and festival venues.
- Restaurants and retail.
- Wine tasking and wine-related uses.
- Other residential and commercial development.

The more that a hotel developer needs to create these amenities "from scratch," the more difficult the economics will be.

Many of the new hotels recently built in the region are unique and interesting, with amenities oriented to local tourism draws—such as the wine industry. Some of these new hotels are profiled below.

The Allison, Newberg, Oregon. The Allison is an 85-room, 5-star resort hotel in Newberg, Oregon which opened in 2010. Room rates average between $435 and $475 per night.

Located in the Willamette Valley in 35 acres of grounds, this luxury spa resort is within 10 miles of dozens of wineries and 2 miles from Chehalem Glenn Golf Course. Amenities include an upscale restaurant and wine cellar, a spa offering wellness treatments, an indoor pool and hot tub, and yoga classes.

Atticus Hotel, McMinnville, Oregon. Atticus is a new 36-room luxury boutique hotel in downtown McMinnville, at the corner of N.E. 4th St. and N.E. Ford St. The property—which takes the place of a vacant parking lot—is a 22,640 square-foot, four-story building, and was developed by the Odd Fellows Building (OFB) LLC. It is leased in its entirety by Live McMinnville LLC., which will operate the Atticus Hotel.

Eighteen wineries and tasting rooms are located within walking distance along the town's quaint and historic downtown stretch. The Atticus offers a variety of studio and one-bedroom suites from $300 per night, as well as a 2-bedroom 2.5-bath penthouse. The hotel features amenities including a conference room, exercise facility, business center, private dining space, and a restaurant and bar. Guests can expect a full accouterment of services, including valet parking, in-room dining, 24-hour concierge, and group sales coordination.

The Hotel at Independence Landing, Independence, Oregon. A boutique hotel is expected to open in Independence, Oregon in May 2019. The developer, Tokola Properties, was selected by the City of Independence after they bought the waterfront property in 2015 and sent out a request for qualifications for developers to outline their vision for the site.

The Independence hotel, featuring "warm and contemporary" architecture that compliments the historic downtown area, will have 75 rooms.

Embarcadero Hospitality Group will manage the hotel. Seasonal rates for rooms will range from around $125 on winter weekdays up to $300 or more for certain suites during summer weekends, developers said.

Recreation & Open Space

Infrastructure—the physical facilities and systems that support economic activity—is a key driver of real estate investment and development. Historically, real estate was influenced by the quality and location of roads, bridges, and other forms of auto-oriented infrastructure. The Interstate Highway System, for example, was a critical factor in the growth of suburban America.

More recently, transit-oriented development has become a common term in the lexicon of real estate and transportation officials. Transit-oriented development is characterized by compact, mixed-use, residential, and commercial development that is clustered around a transit stop or a rail station. Today, bike trails, bike lanes, bike-share systems, and other forms of active transportation infrastructure are helping spur a new generation of "trail-oriented development." This trend reflects the desire of people around the world to live in places where driving an automobile is just one of a number of safe, convenient, and affordable transportation options. The Urban Land Institute's America in 2015 report found that, in the United States, over half of all people (52 percent) and 63 percent of millennials would like to live in a place where they do not need to use a car very often; half of U.S. residents believe their communities need more bike lanes.

Active transportation was, until recently, an overlooked mode of travel. However, in recent years, investments in infrastructure that accommodates those who walk and ride bicycles have begun to reshape communities.

Shared themes among active transportation projects include the following:

> Active transportation infrastructure can catalyze real estate development. Trails, bike lanes, and bicycle-sharing systems can improve pedestrian and bicyclist access to employment centers, recreational destinations, and public transit facilities, thereby enhancing the attractiveness of developments along active transportation corridors. In some cases, former industrial districts and towns outside urban cores have benefited from active transportation infrastructure due to improved walking and cycling connectivity.
>
> Investments in trails, bike lanes, and bicycle-sharing systems have high levels of return on investment. Regions and cities have found that relatively small investments in active transportation can have outsized economic returns due to improved health and environmental outcomes and reduced negative externalities, such as automobile traffic congestion and poor air quality.

Bike-friendly cities and towns are also finding that bicycle facilities boost the tourism economy and encourage extended stays and return visits. Tourism is one of the world's largest industries. The U.S. Travel Association explains that U.S. residents spend over $800 billion a year on travel and recreation away from home.

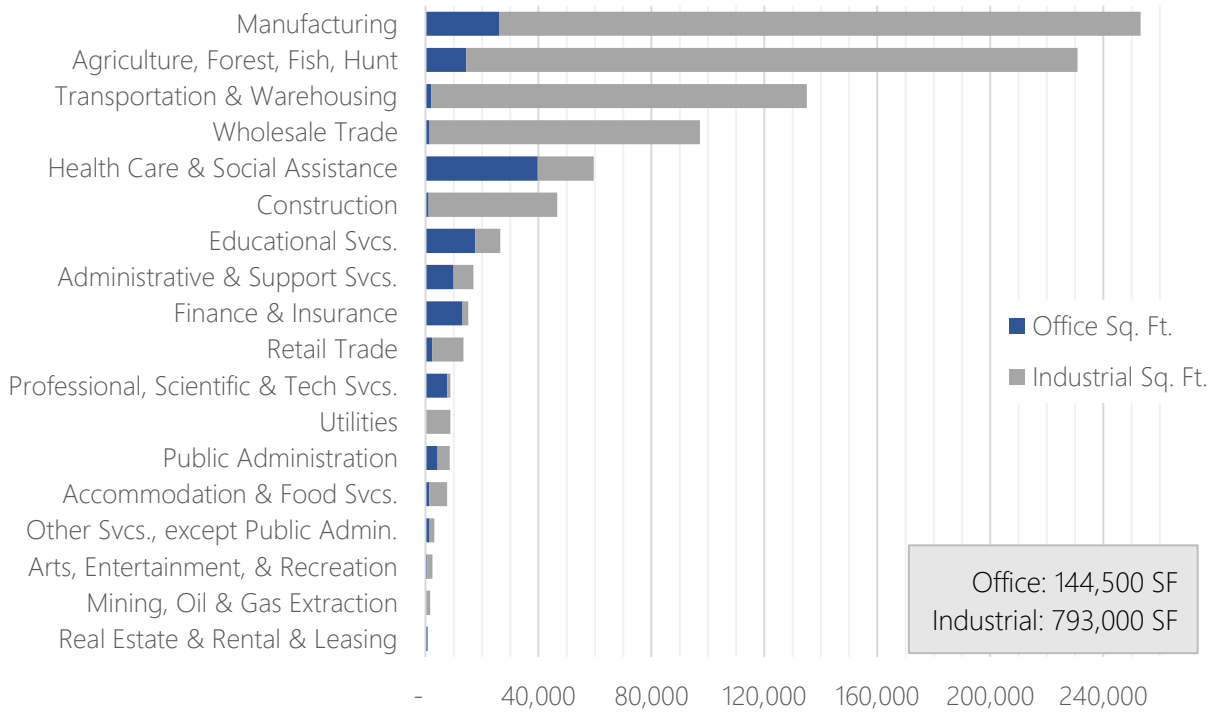
Demand for Commercial/Employment Development

This section provides an estimate of future 10-year market demand for residential development, office and industrial development, and retail development.

Office and Industrial Demand

Based on the respective strength of the office and industrial markets, most employment-based demand for new development is likely to be in the industrial sector, specifically manufacturing and agriculture (tied to the wine industry). With that said, this is largely dependent on McMinnville's ability to compete with other cities in the region where industrial development has been more prevalent. Figure 37 shows LCG's office and industrial development forecast for the market area, based on job growth forecasts made by the U.S. Census.

Figure 37. 10-Year Office and Industrial Demand



Source: Leland Consulting Group

For office, employment growth in the industries of healthcare and social assistance and educational services can be expected to drive most of the demand for new office development.

However, the Census' employment forecast likely overstates demand for industrial and office space. The following table shows historical employment growth rates along with historical office and industrial deliveries documented over the past decade. These historical trends are useful in suggesting office and industrial construction for the next decade in the market area.

Because little new office space has been built (despite the addition of several thousand new employees), it is possible that there will be little to no demand for office space in the next decade; however, the limited development may be due to a limited supply of appropriately zoned land. Likewise, the total demand for new industrial space may be lower than would be projected using employment forecasts.

Three Mile Lane may be a prime location for **light or craft industrial** which could align with the City's vision for the area and provide secondary tourism benefits if new development includes experiential or retail components. This is discussed further in the following "Retail Absorption" section. Larger or heavy industrial users are likely to be attracted to existing business and industrial parks, such as that in the north of the City.

Table 11. Historical and Forecasted Office and Industrial Trends, Market Area

	Past 5 Years	Next 10 Years
Net Office Absorption	48,102	70,000
Office Deliveries	5,000	75,000
Net Industrial Absorption	82,500	175,000
Industrial Deliveries	58,000	200,000

Source: Leland Consulting Group

Three Mile Lane Office Absorption

While employment is projected to continue to grow in the market area, the industries projected to experience the most growth and dominate future employment are not traditionally significant office users. This is also true of the past five years, during which time very little new office space was built, suggesting a limited office market outside of healthcare.

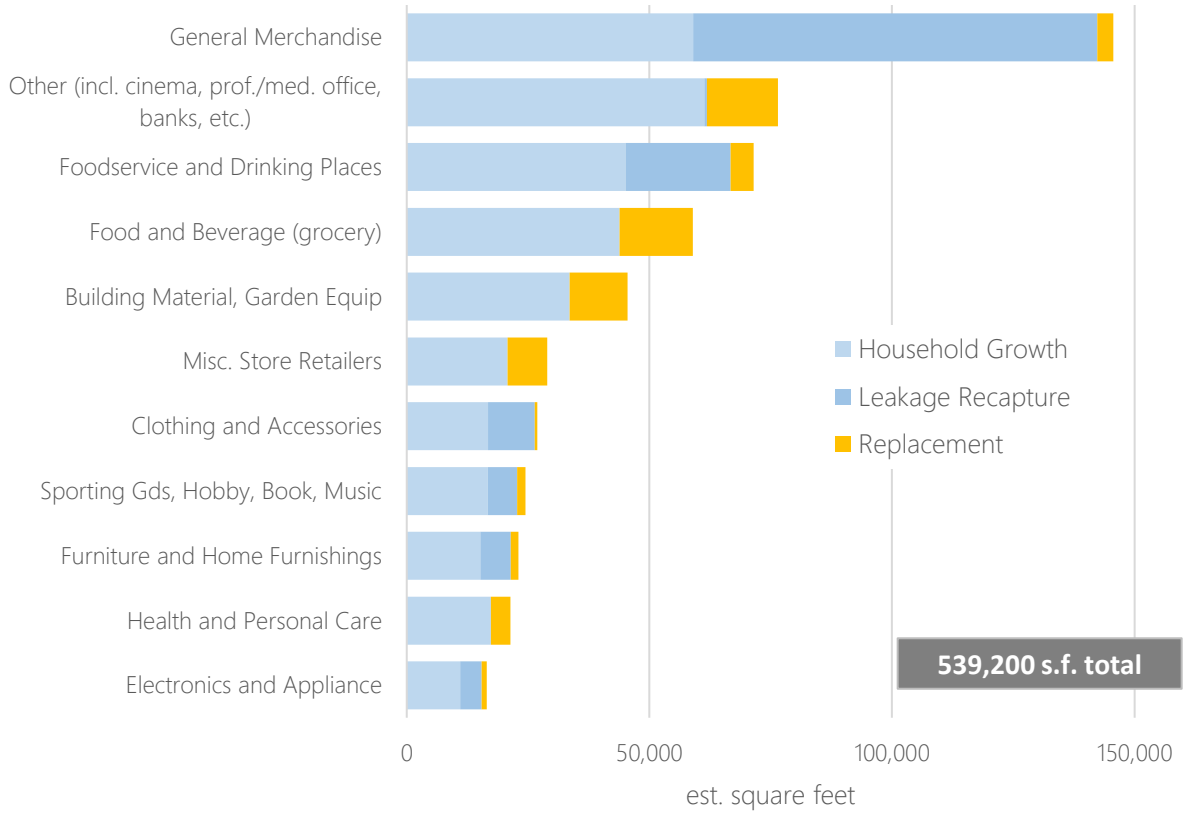
As office rents are too low to justify the high costs of new, high-quality speculative office development, new construction is only likely if large office users can be attracted to the area, or if one or more tenants are looking for a special site and campus environment, particularly near existing health care facilities. McMinnville's high quality of life, business incentives, and proximity to the Portland metro region may indeed be sufficient in attracting these larger companies, but this is almost impossible to forecast. Additionally, target users could include existing companies looking to expand.

Speculative office development is therefore likely to be minimal or nonexistent in the Three Mile Lane area in the near- and mid-term. On the other hand, recent trends for owner-occupied (often called build-to-suit) buildings in the Three Mile Lane corridor are positive indicators for both the office and industrial markets. The recent presence of two large companies—Jackson Family Wines (industrial/flex) and The Springs Living (office/flex)—in the corridor prove that a market exists for new space, reinforced by the very low vacancy rate in both markets. However, as build-to-suit opportunities are typically less driven by traditional market forces—because they are often to fill specific niches in the market and rent growth is less important—new build-to-suit opportunities are more challenging to forecast that speculative office.

Retail Demand

Using the household growth projections and leakage analysis described earlier, we forecast demand for approximately 529,000 square feet of additional retail development within the market area over the next decade. The general merchandise, "other" (cinema, medical and professional office, etc.), and foodservice and drinking places (restaurants and bars) retail categories are responsible for about half of total demand. Grocery demand would likely support one or two additional stores.

Figure 38. 10-year Market Area Retail Demand by Source



Source: Leland Consulting Group

The following table shows total retail absorption and development for the past five years, and forecasted development based on the same historical trends. Note that these forecasted numbers are significantly lower than those presented above. This is merely to highlight that there may be pent-up demand well into the future if the development trends of the past continue. Increasing the rate of development may, therefore, require significant public interventions.

Table 12. Historical and Forecasted Retail Trends, Market Area

	Past 5 Yrs.	Next 10 Years
Net Retail Absorption	117,900	200,000
Retail Deliveries	40,300	150,000

Source: Costar, Leland Consulting Group

Three Mile Lane Retail Absorption

The Three Mile Lane project area is relatively well-positioned for retail development due to high visibility, ease of access, high traffic counts along Highway 18, and there are few alternative urban areas between McMinnville and the coast, providing opportunities to capture spending from those visiting the Oregon coast.

Additionally, as one of the few locations in the market area with large, contiguous, vacant tracts of land within city limits, Three Mile Lane should be able to capture a significant portion of market area demand over the next 10 years.

However, significant challenges remain, including:

- Existing retail in the project area is virtually non-existent;
- Many retailers—particularly bars, restaurants, and other small-format stores—are likely to prefer a downtown location, where there is existing activity, authentic and interesting buildings, and less risk; and
- There are many other large, successful retail centers within a reasonable drive-time with which any major retail development would compete.

As such, retailers in Three Mile Lane are likely to be auto-oriented, with convenience and general merchandise retail potentially feasible in the short-term. Significant household growth in the area—as projected—is likely to generate demand for further dining and grocery options over the longer term, but not in the near-term as current retail spending data indicates a major surplus of grocery stores in the region.

The tourism and wine industry, especially, is burgeoning, increasing opportunities for development that would leverage the wave of visitors to the area during the warmer months. Specifically, this may take the form of experiential or "destination" retail and commercial uses. Commercial tenants in this category include restaurants, wine-tasting and wine sales, unique Willamette Valley food growers and vendors, other food and beverage vendors (coffee, ice cream, bakeries), and outdoor recreation suppliers. Secondary commercial tenants can fill space alongside these "anchor" tenants. Indeed, a larger building with production, warehousing or light manufacturing in the back and a front-facing retailer—such as a tasting room or craft store—would fit the existing industrial, auto-oriented character of the Three Mile Lane study area while increasing activity in the corridor.

Conclusion

This market analysis assessed the market conditions for residential, commercial, office, and industrial development, and subsequently identified opportunities for the Three Mile Lane corridor based on existing land assets.

Projected residential and employment growth over the next 20 years will drive demand for new residential, commercial, and industrial development. Potential development in the Three Mile Lane corridor is likely to be driven by these market forces, as well as more nuanced needs for housing and retail in particular. Existing market conditions indicate that development will likely remain low-density and surface parked, at least until rents increase and development feasibility of higher-density building types improves. For residential uses this may translate in the near-term to townhomes and apartments up to four stories, as well as single-family and multiplexes. Based on projected demand, retail development is likely to be surface parked, low-rise, and community-serving (potential grocery store, restaurants, etc.), and as part of mixed-use residential and/or office developments over a longer time period.

The growing tourism industry, airport activity, and existing needs for meeting space should drive demand for hotel. However, with speculative office demand relatively low in comparison to housing and retail, hotel prospects are reliant on existing employment and tourism.

With few large flat land tracts left in the area and moderate to high employment growth projected in the industries of manufacturing, agriculture, transportation and warehousing, and wholesale trade, there is strong industrial demand. However, a housing-focused vision for the area is likely to be incompatible with significant

industrial development. Less impactful industrial—light or "craft," particularly if retail or experiential components are included—would be compatible with adjacent land uses and help generate a live-work-play environment.

In short, opportunities for new development are prevalent given the prevalence of large, greenfield sites in the study area. As such, it is positioned to capture a significant share of regional demand for retail and commercial development, as well as housing, industrial, and other mixed uses.

METHODOLOGY MEMORANDUM

DATE: December 10, 2018

TO: **Michael Duncan,** Transportation Growth and Management
Kristie Gladhill, ODOT Transportation Planning and Analysis
Keith Blair, ODOT Region 2

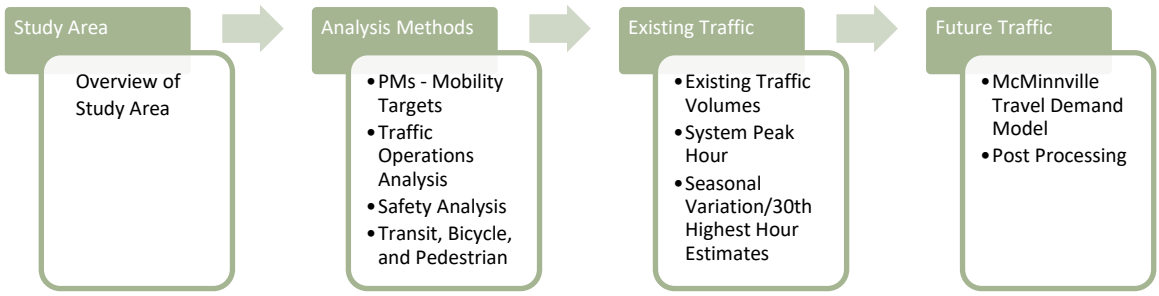
FROM: Andrew Mortensen, Associate, David Evans and Associates, Inc.
Cameron Grile, PE, PTOE, Associate, David Evans and Associates, Inc.
Matthew Hartnett, EIT, David Evans and Associates, Inc.

SUBJECT: **City of McMinnville Three Mile Lane Overlay/Area Plan Update**
Methodology Memorandum

Purpose of the Memorandum

The purpose of this memorandum is to summarize the proposed methods and assumptions that will inform an evaluation of traffic operations, safety, and the experience of transit users, bicyclists, and pedestrians for the Three Mile Lane Overlay/Area Plan Update (3MLAP). The ODOT Analysis Procedures Manual (APM)[1] will guide the methods and assumptions used for these analyses. This Methodology Memorandum summarizes the methods and assumptions used in developing existing and future traffic volumes for these analyses.

The memorandum includes four major sections:



Findings from Memorandum Used to Guide Plan Update

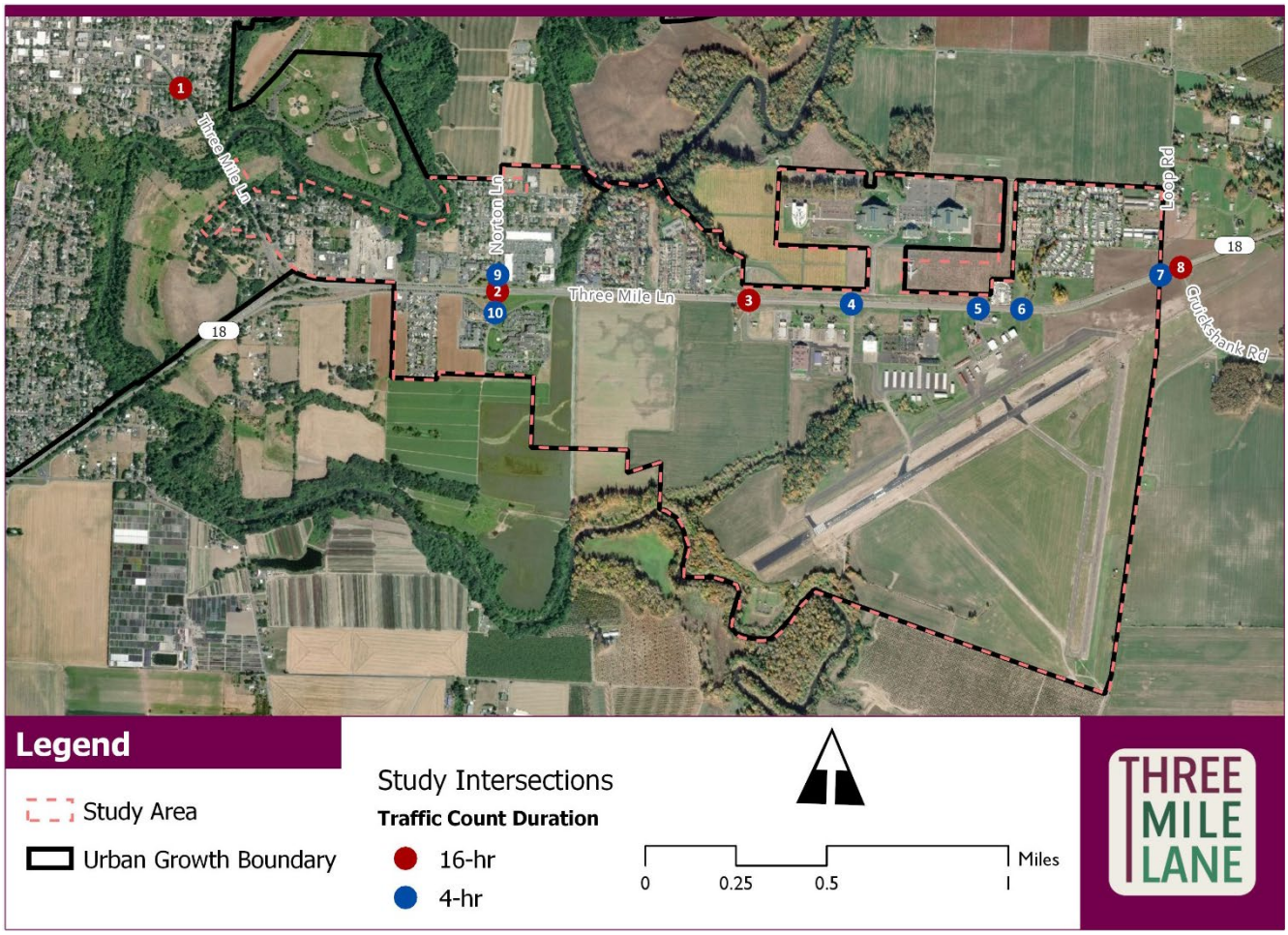
Findings from this memorandum will have important input to key tasks later in this project, including the identification of existing and forecasted future conditions and alternatives evaluation.

[1] Analysis Procedures Manual, Version 2.0, Oregon Department of Transportation, Transportation Planning & Analysis Unit (TPAU), 2018.

1. Study Area

The 3MLAP study area includes Three Mile Lane from city center to SE Loop Road and adjacent lands, totaling about 1,340 acres in southeastern McMinnville. The eastern portion of Three Mile Lane in the study area is also OR 18, and serves as a major connection between the Oregon Coast and the Portland metro area. Ten study intersections are identified for the study area, as summarized in Figure 1.

FIGURE 1: OVERVIEW OF STUDY AREA AND STUDY INTERSECTIONS



2. Performance Measures and Analysis Methods

Performance Measures - Mobility Standards

The 1999 Oregon Highway Plan (OHP) outlines specific performance measures to be maintained along ODOT facilities as part of the Highway Mobility Standards. As applied, these standards are intended to maintain mobility along important highway corridors and vary according to functional classification, location and designated role within the National Highway System (NHS). The OHP mobility targets assist in the planning phase and help determine future system deficiencies. The Highway Design Manual (HDM) standards are used

to develop a 20-year design life option that addresses said future deficiencies. Each roadway classification will be compared to its appropriate standard from the OHP and HDM.

For local City streets and intersections, McMinnville's 2010 Transportation System Plan (TSP) states a mobility standard of volume-to-capacity ratio (v/c) of 0.90 shall be used.

The mobility targets applicable for the 3MLAP are summarized in **Table 1**.

TABLE 1: APPLICABLE MOBILITY TARGETS

ID	Intersection	Volume-to-Capacity Ratio Main route/intersecting route			Geographic Context
		ODOT Facilities		City Facilities	
		OHP[1]	HDM[2]	TSP[3]	
1	Three Mile Lane/1st Street			0.90/0.90	Local Interest Road
2	OR 18/Norton Lane	0.80/0.95	0.65/0.75		Statewide Expressway (speed >= 45mph), inside UGB, Non-MPO
3	OR 18/Cumulus Lane	0.80/0.95	0.65/0.75		
4	OR 18/Armory Way	0.80/0.95	0.65/0.75		
5	OR 18/Cirrus Avenue	0.80/0.95	0.65/0.75		
6	OR 18/RV Park Entrance	0.80/0.95	0.65/0.75		
7	OR 18/Loop Road	0.80/0.95	0.65/0.75		
8	OR 18/Cruickshank Road	0.70/0.75	0.60/0.70		Statewide Expressway (speed >= 45mph), outside UGB, Rural
9	Norton Lane/Cumulus Avenue			0.90/0.90	Local Interest Road
10	Norton Lane/Stratus Avenue			0.90/0.90	Local Interest Road

[1] Oregon Highway Plan, OHP Policy 1F, revisions adopted through May 2015.

[2] Highway Design Manual, Table 10-2, 2012.

[3] City of McMinnville Transportation System Plan, May 2010.

Traffic Operations Analysis Procedures

ODOT Transportation Planning and Analysis (TPAU) and Region 2 Traffic staff will review the analysis assumptions. Evaluation of study area and study intersection traffic operations will follow procedures outlined in the APM and apply analytical methods recommended in the Highway Capacity Manual (HCM), including those related to use of modeling tools as follows:

Intersection Type	HCM Methods	Software
Unsignalized	*HCM 6th Edition*	*Synchro (v10)*
Signalized	*HCM 2000*	*Synchro (v10)*
Roundabouts (if any, in future improvement scenarios)	*HCM 6th Edition*	*Sidra*

Safety Analysis

The study will analyze the 3LMAP study area crash history, performing the following:

- Obtain five (5) years of complete and available crash data from ODOT's Crash Analysis and Reporting Unit.
- Identify crash patterns and trends for any location in the study area:
  - Where the intersection crash rate exceeds the critical crash rate or the published 90th percentile rates in Table 4-1 of the APM.
  - That is a top 10% Safety Priority Index System (SPIS) site or has an excess proportion of specific crash types.

Critical Crash Rate and Excess Proportions of Specific Crash Types will be calculated as outlined in the APM.

Transit, Bicycle, and Pedestrian Evaluation

The study will identify the comfort and desirability of the study area for the following users:

- Transit: Evaluation of transit service frequency, transit service span, transit routes, and simplified multimodal level of service (MMLOS).
- Bicyclists: Bicycle Level of Traffic Stress (BLTS) as outlined in the APM for Three Mile Lane, OR 18/Three Mile Lane, Cumulus Avenue, and Norton Lane in the study area.
- Pedestrians: Simplified MMLOS.
- Qualitative assessments of bikeability and walkability.

3. Existing Traffic Conditions

Traffic Counts and Data Assembly

In April 2018, ODOT performed counts of bicyclists, pedestrians, and vehicle classification for the ten identified study intersections. The counts include 4- and 16-hour vehicle classification counts with 15-minute intervals. ODOT also performed 2- and 5-day tube counts at four additional locations. These study intersection traffic counts are summarized in **Figure 1**.

System Peak Hour

A single system peak hour is selected for analysis purposes, based on the prevailing peak hour from the ten study area intersection counts. Traffic counts are summarized in 15-minute intervals to determine the true peak hour for the entire study area. **Table 2** summarizes the peak hour and peak hour volume for each intersection where traffic counts were collected on April 3, 2018.

There are instances of slight variation in the peak hour for the ten study intersections, but a prevailing peak hour of **4:15-5:15 PM** is determined based on the total entering traffic for all study intersections in the April 2018 counts.

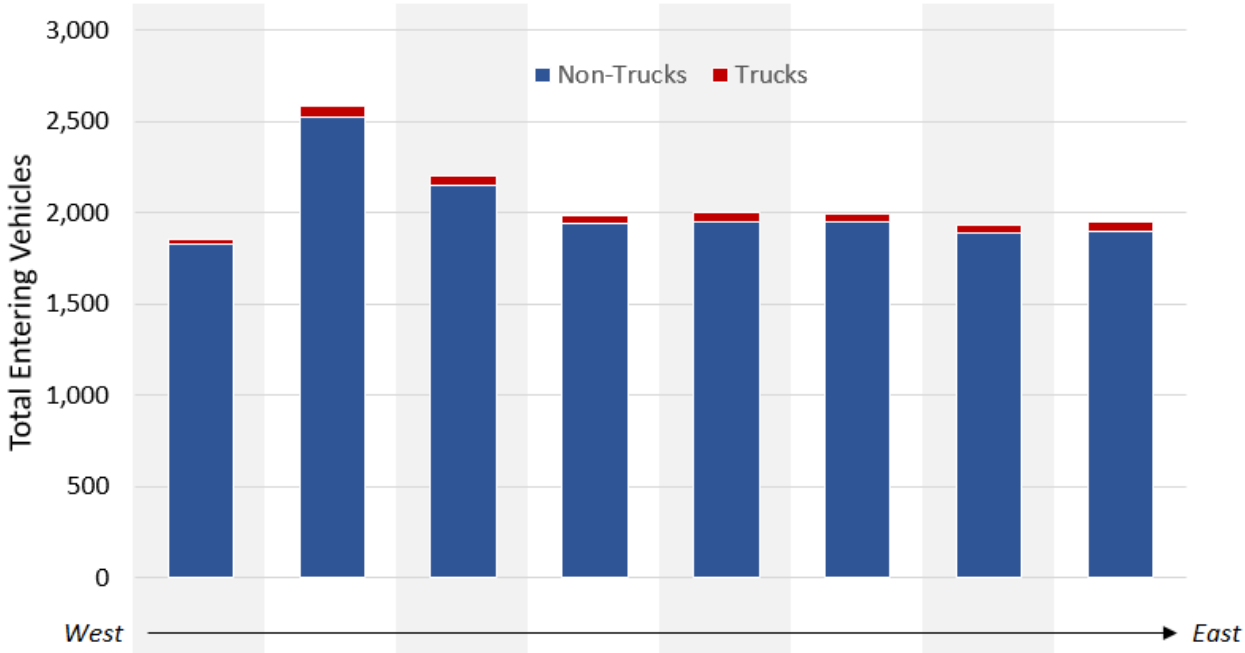
TABLE 2: PEAK HOUR AND PEAK HOUR VEHICLE VOLUME BY STUDY INTERSECTION

ID	Study Intersection	Peak Hour	Peak Hour Vehicle Volume	4:15-5:15 PM Vehicle Volume	Peak Hour vs. Prevailing Peak Hour Volume: % Difference
1	Three Mile Lane/1st Street	4:30-5:30 PM	1,891	1,854	2.0%
2	OR 18/Norton Lane	4:00-5:00 PM	2,596	2,579	0.7%
3	OR 18/Cumulus Avenue	**4:15-5:15 PM**	2,200	2,200	0.0%
4	OR 18/Armory Way	**4:15-5:15 PM**	1,980	1,980	0.0%
5	OR 18/Cirrus Way	**4:15-5:15 PM**	1,996	1,996	0.0%
6	OR 18/RV Park entrance	**4:15-5:15 PM**	1,991	1,991	0.0%
7	OR 18/Loop Road	**4:15-5:15 PM**	1,934	1,934	0.0%
8	OR 18/Cruickshank Road	**4:15-5:15 PM**	1,945	1,945	0.0%
9	Norton Lane/Cumulus Avenue	3:15-4:15 PM	541	513	5.2%
10	Norton Lane/Stratus Avenue	3:15-4:15 PM	438	378	13.7%

**Data Source: ODOT, 2018*

Figure 2 and Figure 3 summarize the total vehicle, truck, bicycle, and pedestrian volumes during the prevailing peak hour (4:15-5:15 PM) for the ten study intersections. **Figure 2** summarizes these volumes for the eight study intersections on Three Mile Lane, and **Figure 3** shows volumes by mode for the intersections of Norton Lane and Stratus Ave and of Norton Lane and Cumulus Ave.

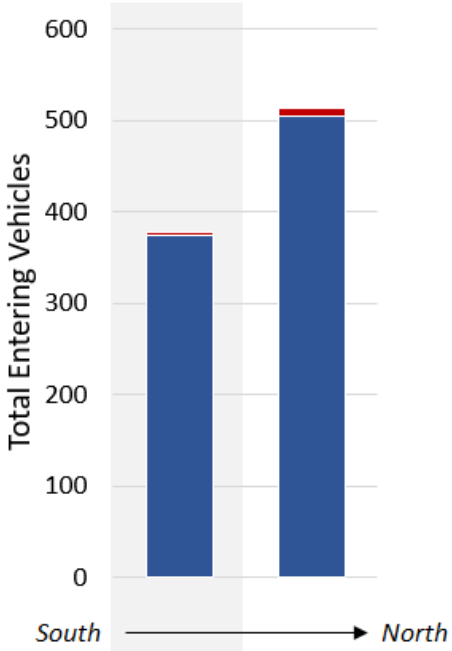
FIGURE 2: PM PEAK HOUR TOTAL VEHICLE, TRUCK, BIKE, AND PEDESTRIAN COUNTS, THREE MILE LANE INTERSECTIONS



Intersecting Street		1st St	Norton Ln	Cumulus Ave	Armory Way	Cirrus Ave	RV Park	Loop Rd	Cruick-shank Rd
	Count	1,823	2,520	2,150	1,935	1,949	1,944	1,886	1,895
	Percent	98.3%	97.7%	97.7%	97.7%	97.6%	97.6%	97.5%	97.4%
	Count	31	59	50	45	47	47	48	50
	Percent	1.7%	2.3%	2.3%	2.3%	2.4%	2.4%	2.5%	2.6%
	Count	3	0	0	0	0	0	0	0
	Count	15	5	0	5	0	0	0	0

**Counts shown in top row of table include all non-truck vehicular traffic; Trucks are defined as Single Unit Trucks, Single Trailer Trucks, and Multi Trailer Trucks; Data Source: ODOT, 2018*

FIGURE 3: PM PEAK HOUR TOTAL VEHICLE, TRUCK, BIKE, AND PEDESTRIAN COUNTS, NORTON LANE INTERSECTIONS



Intersecting Street		Stratus Ave	Cumulus Ave
	Count	374	505
	Percent	98.9%	98.4%
	Count	4	8
	Percent	1.1%	1.6%
	Count	0	1
	Count	1	11

**Data Source: ODOT, 2018*

Seasonal Variation and 30th Highest Hour Estimate

Spot traffic counts need to be converted to peak month equivalents using calculated seasonal adjustment factors. The APM outlines three optional methods for determining seasonal adjustment factors. Each are described below, including findings of the assessment and selection of the best method applied in the study.

Seasonal Adjustment Methods

- **On-Site ATR** - No ATRs are found within or immediately near the study area.
- **ATR Characteristics Methods** - no ATR or combination of ATRs are deemed appropriate and having similar travel characteristics of Highway 18 or other study area streets.
- **Seasonal Trend –** in consultation with ODOT Region 2 the seasonal Trend method is applied as the best option to determining seasonal adjustment factors for the 3MLAP study.

Interpolation of the 2018 Seasonal Trend Table as applied to the April 3, 2018 counts is summarized in **Table 3**.

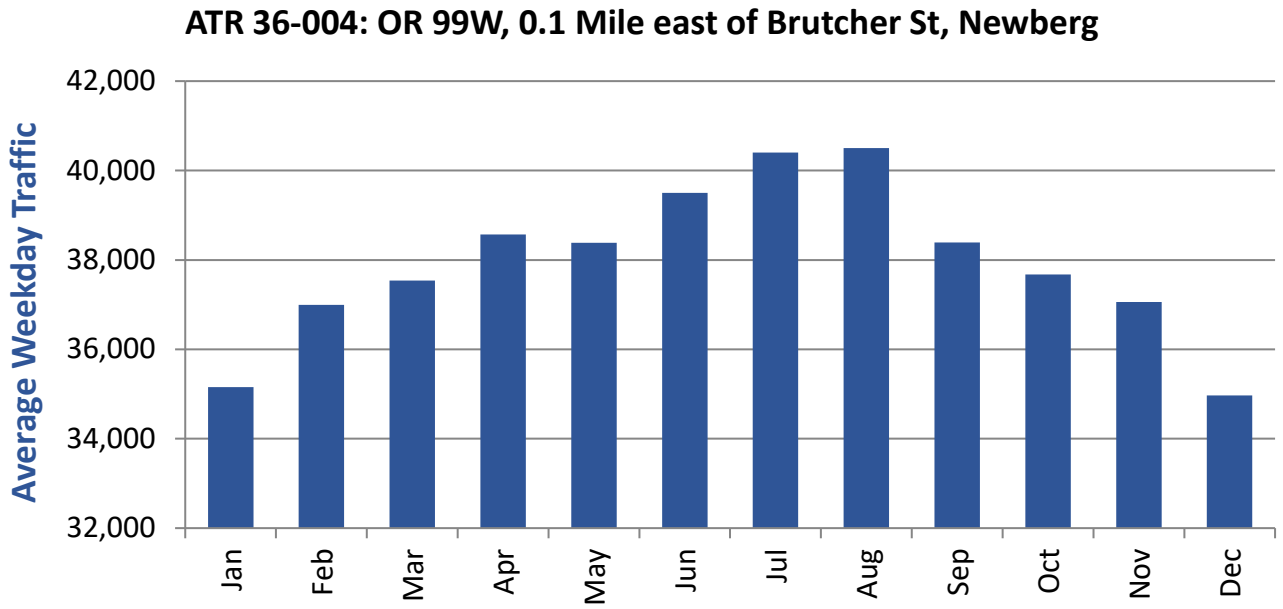
TABLE 3: INTERPOLATION OF ODOT SEASONAL TREND TABLE - COMMUTER

	AVERAGE		
		Interpolated	
	1-Apr	3-Apr	15-Apr
Commuter	0.9491	**0.9463**	0.9292
Adjustment Factor:		**1.06**	

A seasonal adjustment factor of **1.06** will be applied to the April 3, 2018 counts to obtain the 30th Highest Hour Volumes as outlined in the APM.

The nearest and relevant ATR site is located on OR 99W in Newberg (36-004), approximately 12 miles northeast of the study area, which has a peak month of **August** (and also yields a seasonal adjustment factor of 1.06 - matching the Seasonal Trend Method finding above). See **Figure 4**, which summarizes Average Weekday Traffic by month for 2016.

FIGURE 4: OR 99W, NEWBERG: AVERAGE WEEKDAY TRAFFIC BY MONTH, 2016



**Data Source: ODOT*

4. Future Traffic Conditions

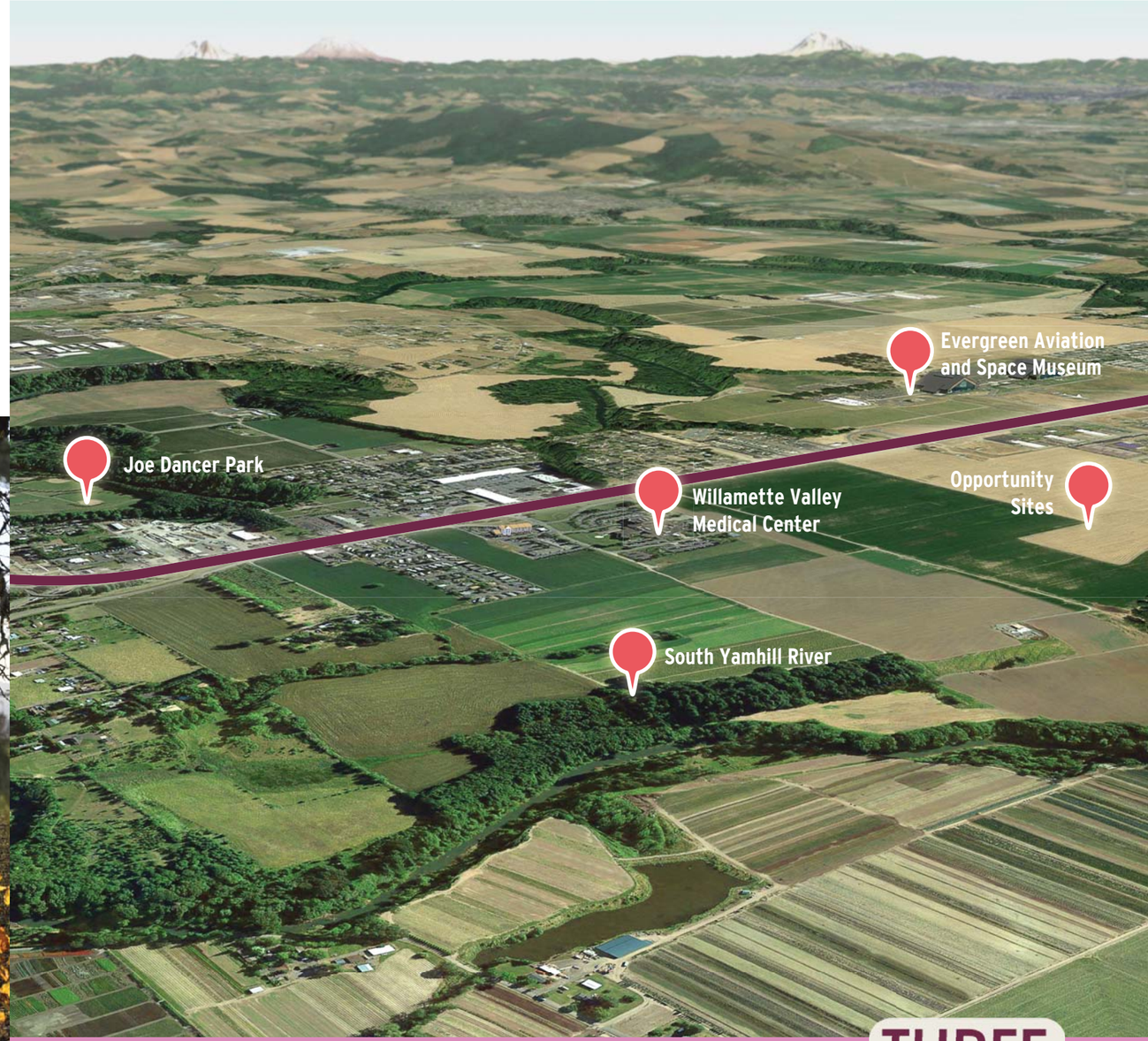
McMinnville OSUM (V3) Travel Demand Model

Base year (2018) and Future year (2040) model volumes from the McMinnville Oregon Small Urban Model (OSUM)[2] (V3) will be used as the primary tool to estimate future travel demand within the McMinnville Urban Growth Boundary (UGB).

Post-Processing

While the travel demand model is calibrated to local conditions and volumes, raw volumes from the travel demand model will not be used for capacity analysis. Rather, motor vehicle turn movement volume forecasts will be developed using post-processing methods consistent with the APM. This approach is derived from methodologies outlined in the National Cooperative Highway Research Program (NCHRP) Report 765, Highway Traffic Data for Urbanized Area Project Planning and Design.

[2] The Oregon Small Urban Model (OSUM) is managed by the Oregon Department of Transportation (ODOT) Transportation Planning and Analysis Unit (TPAU).



THREE MILE LANE AREA PLAN
EXISTING CONDITIONS

THREE MILE LANE

City of McMinnville

THREE MILE LANE

March 7, 2019

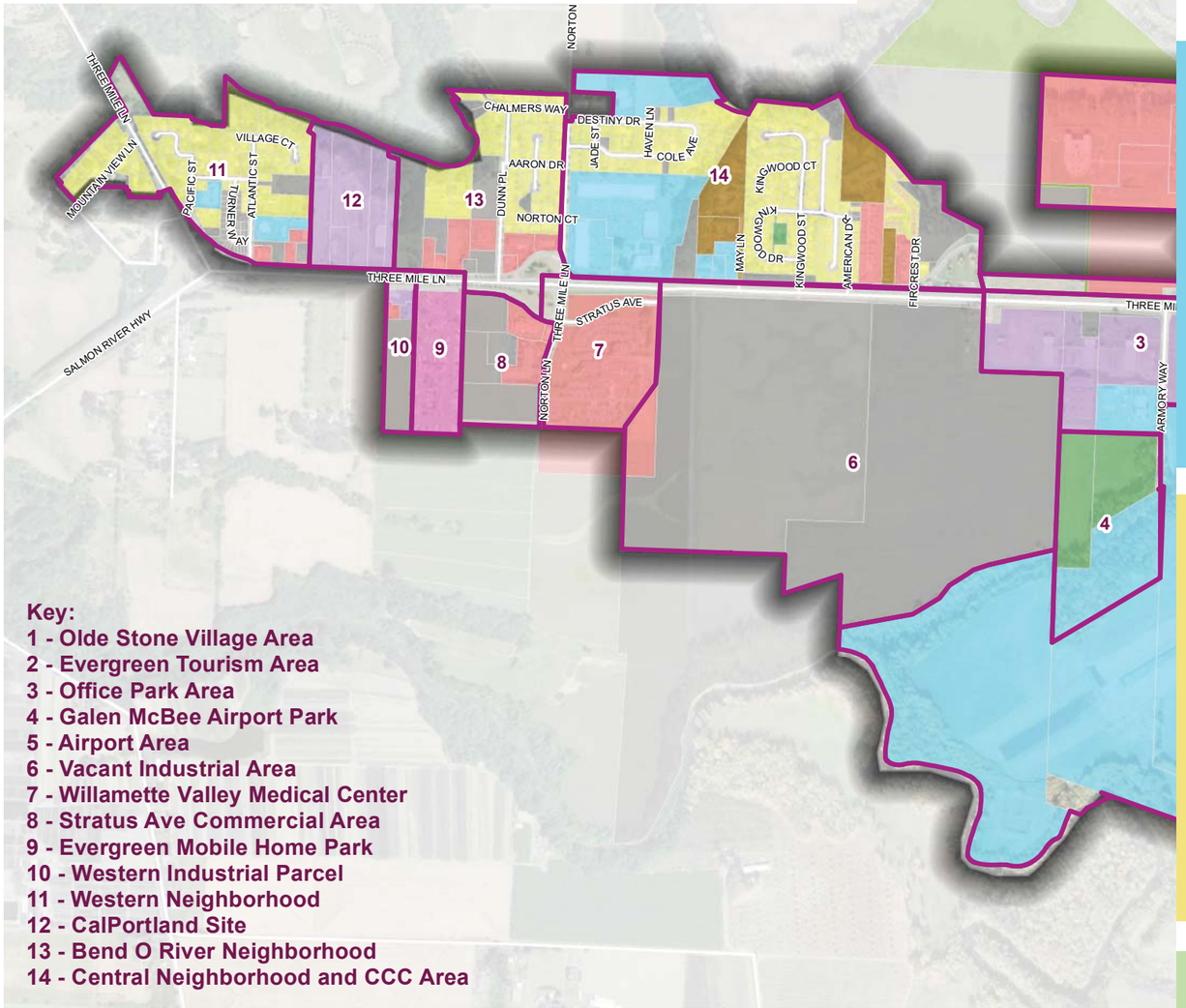
DRAFT

Task 2.4: Conditions Booklet

City of McMinnville

March 7, 2019

EXISTING LAND USES



- Residential Manufactured Homes
- Residential Single- & Two-Family
- Residential Condo
- Residential Multi-Family
- Open Space
- Commercial
- Industrial
- Public / Institutional
- Resource
- Vacant

NORTH

SOUTH

OPPORTUNITIES

Joe Dancer Park

Highway 18/Three Mile Lane is an important connection but is also a significant barrier, effectively separating residential and commercial uses north of the highway from the uses south of the highway.

There are significant opportunities to increase E-W connections for example, between Old Stone Village and the Evergreen Tourism Area or between the airport area and Willamette Valley Medical Center. A new bridge across the S Yamhill River to Joe Dancer Park would improve connections with downtown.

Improving non-motorized connections between areas that currently support pedestrians and cyclists and improving wayfinding would better connect people in Three Mile Lane area to the rest of the city. Similarly, the South Yamhill River and Airport Park could provide welcome connections to nature.

Chemeketa Community College

Larger buildings such as Chemeketa Community College are an appropriate scale for highway frontage. Many existing buildings in the study area lack sidewalk pedestrian access and are surrounded by large parking lots, which limits the area's pedestrian friendliness.

Three Mile Lane area as a whole may benefit from strategically locating denser, more walkable development near land uses that support it. Agricultural building forms could integrate well with the existing character of the site and inspire future development; a current example of this is the Jackson Family Winery building.

Future buildings can be oriented to the stunning visual character of the area, which includes beautiful oak and fir forests, large actively-farmed fields, views west to the Coast Range and east to Mt Hood and Mt Jefferson.

Vacant land, zoned industrial

Galen McBee Airport Park has the potential to be a great community asset. There are opportunities to add connections to this park and extend trail loops to access the South Yamhill River. Existing mature oak and fir stands also lend a distinct natural character throughout the area. Land for future nature trails and mature trees should be preserved if possible.

The area is characterized by large open fields, which reflects McMinnville's agricultural heritage and it's strategic position in the heart of the region's wine country. Future development should strive to maintain views of these spaces and even consider the potential for what the Urban Land Institute terms "Agrihoods", where active farming is incorporated into new mixed-use community design.

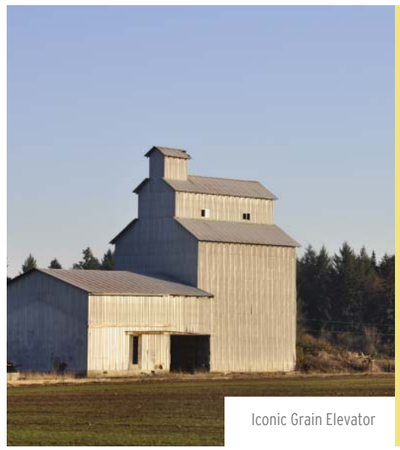
URBAN DESIGN: ISSUES +

CIRCULATION

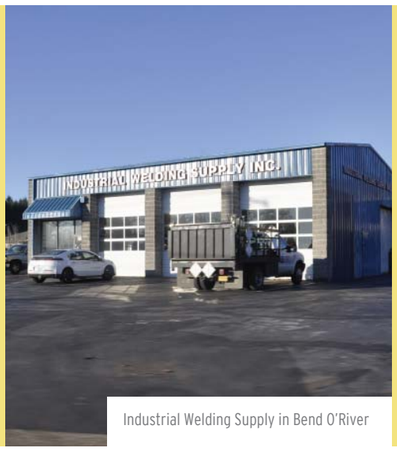
Hwy 18 Western Gateway

Hwy 18

BUILDING DESIGN



Iconic Grain Elevator



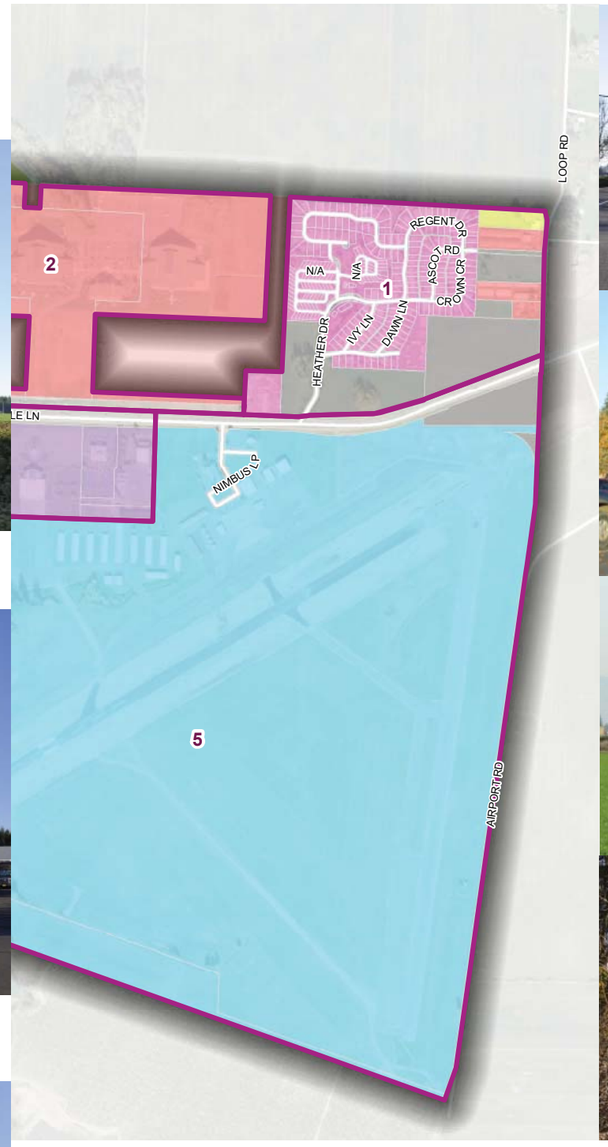
Industrial Welding Supply in Bend O'River

American Legion Post 21 in the Western Neighborhood

OPEN SPACE

Galen McBee Airport Park

Boy Scouts installation in a mature stand of trees



FirCrest Senior Living Community

McMinnville Cinema 10

Jackson Family Winery and Processing Center

Galen McBee Airport Park

North of Three Mile Lane, land uses are mixed, with fewer large parcels except for the Evergreen Aviation & Space Museum complex. The north side includes single-family and multi-family uses, mobile homes, and commercial, industrial, and vacant land.

South of Three Mile Lane, much of the land is utilized by the McMinnville Municipal Airport (identified as public/institutional use), industrial, and undeveloped land. Jackson Family Wines and several commercial and manufactured home uses are also located in this area.

LAND USE OPPORTUNITIES

LIGHT INDUSTRIAL

Light industry


Light industry

Agricultural building forms

The study area contains over 200 acres of vacant land largely served by existing infrastructure and zoned for industrial uses. Most of this vacant land is found in a few large parcels, which could be ideal for large-scale and cohesive development. There are many contemporary examples of light industrial development that integrate well with other land uses. Agricultural building forms could relate well with the existing character of the area. An old grain elevator building is a prominent feature at the west end of this area and inspired the design for the nearby Jackson Family Winery and processing center. Other development could follow suit with site-specific landscape and building forms.

AMENITIES AND TOURISM


Caption
Existing regional attraction


Industrial structure converted to community market

Gateway

The study area includes a number of amenities and attractions, including the airport; Evergreen Space & Aviation Museum, water park, and event center; the Yamhill River; and a number of large employers, including several medical centers and clinics, and industrial and office sites. These amenities and attractors have the opportunity to serve McMinnville residents as well as tourists from outside the city. For nearby residents safe and convenient connections to amenities will be key, as will new amenities that serve daily needs and local economic empowerment. There is a clear opportunity to provide a formal welcome to McMinnville as a marked destination with a distinct personality.

Auto operation deficiencies are noted at the two intersections at the ends of the study area: Three Mile Lane at First Street, and OR 18 at Cruickshank Road. The two major signalized intersections on OR 18 at Norton Lane and Cumulus currently operate well within the mobility targets outlined in the Oregon Highway Plan. There is a notable crash history at the intersection of OR 18 and Cruickshank Road. This intersection is a logical location to consider including potential gateway streetscape improvements.

YCTA provides limited (hourly) service in the study area on Route 2, with direct links to downtown McMinnville and the city Transit Center. If and when YCTA service increases to a 30 minute frequency, future transit access will improve within the Three Mile Lane area.

The study area has very limited bicycle facilities, and frequently the only option available to cyclists is to ride in general purpose travel lanes. While the major streets in the area are generally flat with good pavement conditions, vehicular traffic volume is relatively high and travel is at higher speeds (35 mph and higher).The lack of separate bike lanes, buffered bike lanes, or separated facilities contributes to a poor overall environment for cyclists seeking to travel within the study area network.

Creating attractive, low-stress bicycle facilities on key routes within the study area will require examining traffic calming design adaptations and lower speed limits, and implementing buffered bike lanes or separated pathways.

Many of the key existing streets and intersections in the study area contain essential but limited pedestrian features. Some of the sidewalks are older, but functional and the system provides a baseline, if minimal, connected network within the study area. Linkage to the McMinnville city center is limited to the Yamhill River Bridge.

The existing pedestrian realm lacks important features that would otherwise contribute to more safe and inviting walking environments on Norton Lane, Cumulus Avenue, and Stratus Avenue. The original factory outlet mall development introduces a barrier to more direct pedestrian and bicycle travel along Cumulus Avenue and the crossing of Norton Lane, making it more difficult for residents east of Norton Lane to walk and cycle to McMinnville's central city.

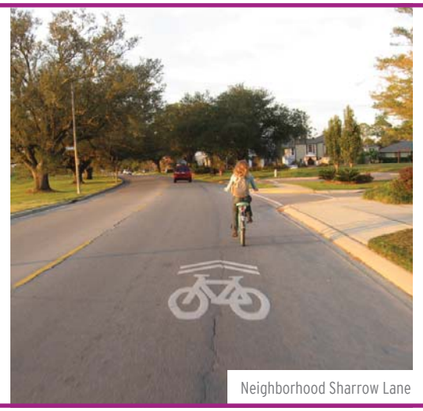
TRANSPORTATION

Intersection of OR 18 and Cruickshank Road

Example of a welcoming transit stop designed specifically for a district

Buffered bike lane

Nonvehicular multi-use path



Neighborhood Sharrow Lane

Closed street connection on NE Cumulus Ave

Goal: a connected network of comfortable pedestrian transportation for all ages and abilities

NEIGHBORHOODS

Diverse forms of housing development, e.g. cottages

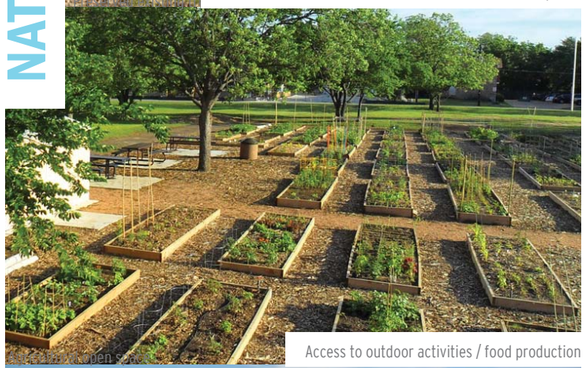
Recreation

Complete streets

Within the mixed residential and commercial areas on the north side of Three Mile Lane, as well as on the south side, there may be opportunities for new mixed-use development, creating varied, diverse, complete neighborhoods that provide different types of housing, access to green space, and connect to walkable services. A key element will be the integration of complete streets; those that prioritize safe walking and biking for people of different ages and allow travel between homes, jobs, services, and recreation.

NATURAL FEATURES

Mature stands of trees within the Three Mile Lane study area

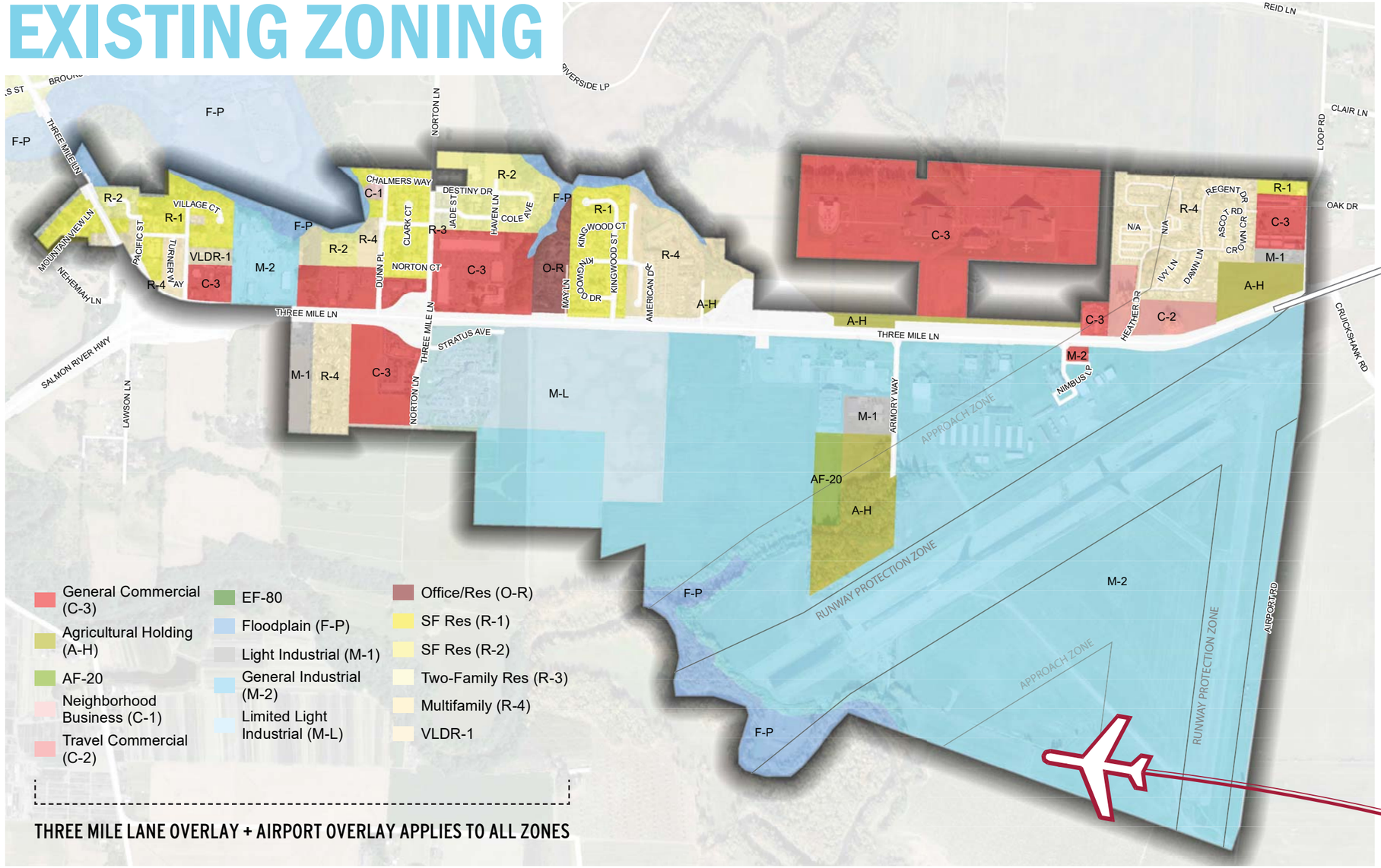


Access to outdoor activities / food production

Nature trails

The study area is bounded to both the north and south by the South Yamhill River and its associated natural areas. The study area also has several mature tree stands with defining character. Airport Park to the south includes two loop trails that cross a small tributary stream that flows into the South Yamhill River. This park is also defined by dramatic views to Mt Hood and Mt Jefferson on sunny days and features several pieces of quirky concrete artwork. People living and working in the Three Mile Lane area would benefit greatly from the preservation of and connection to these natural features.

EXISTING ZONING



- General Commercial (C-3)
- Agricultural Holding (A-H)
- AF-20
- Neighborhood Business (C-1)
- Travel Commercial (C-2)
- EF-80
- Floodplain (F-P)
- Light Industrial (M-1)
- General Industrial (M-2)
- Limited Light Industrial (M-L)
- Office/Res (O-R)
- SF Res (R-1)
- SF Res (R-2)
- Two-Family Res (R-3)
- Multifamily (R-4)
- VLDR-1

THREE MILE LANE OVERLAY + AIRPORT OVERLAY APPLIES TO ALL ZONES

The Existing Three Mile Lane Overlay Zone was Intended To:

- Encourage mixed-use and mixed housing types
- Ensure high quality and design
- Compatible living and working environments
- Provide open spaces and parks
- Buffer residences from the highway

120' Setback

from centerline of Three Mile Lane
- landscape and buffering may be required

ZONING THOUGHTS:

* Existing base zones likely do not meet the mixed-use intent of the study area. New base zones may be appropriate for larger parcels that are currently undeveloped.

* It's easier to change the language of the existing overlay than create a new zone or overlay

* A single zone is easier to understand, as overlay zones create complexity for property owners and developers, even though they already exist in this area

* The Three Mile Lane Overlay Zone could be modified to apply regulations to some subareas, but not the entire area, if desired.

RESIDENTAL ZONES

R-1 is low density, single family residential; R-2 single family with a slightly higher density; R-3 allows two-family dwellings throughout the zone; R-4 allows multi-family dwellings and condos.

COMMERCIAL ZONES

C-1 is smaller-scale neighborhood services; C-2 provides for travel-related uses like lodging and gas stations; C-3 accommodates a wide range of uses like big box stores and theaters.

AG HOLDING

49 acres held to provide for the continued practice of agriculture. Permitted uses are limited to farming, single-family dwellings, and sewage pump stations. Parks are allowed as conditional uses.

INDUSTRIAL ZONES

M-L provides for industries with limited external impact in an attractive setting; M-1 is for industrial uses that require buffering from other uses and environmentally sensitive areas, it includes a wide range of industrial uses; M-2 allows all uses in M-L and M-1, but also allows general manufacturing and airports as well as "leisure time activities" as conditional uses.

The Airport Overlay includes a Runway Protection Zone that prohibits development and an Approach Zone that limits structures to below 209,' prohibits places of public assembly, and limits residential density over 1 dwelling /20 acres.