Three Mile Lane Regenerative Design



University of Oregon
School of Planning, Public Policy and Management
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Acknowledgments

Researchers

Jake Boone Sasha Burrows **Colton Clark** Savannah Edson Naomi Greenwald **Hunter Hollander** Robert Holloway **Lindsay Jacobson Grace Miller Emily Nguyen** Kyra Ortiz Mons Roll Nikki Samson Tuason **Mindy Schlitt** Will Talbot Michael Walker Qi Wang Xiaoyu Wang Nathan Watkins-Hoagland Haoyi Yuan Shifan Zhao

Advisors

Mike Bisset, Community Development Director, City of McMinnville

Angela Carnahan, Willamette Valley Regional Rep., Oregon Dept. of Land Conservation and Dev.

Steve Down, Founder, The Falls Event Center / Evergreen Aviation and Space Museum

Scott Hill, Mayor, City of McMinnville

Heather Richards, Planning Director, City of McMinnville

Ric Stephens, Instructor, Planning, Public Policy and Management, University of Oregon

Jeff Towery, City Manager, City of McMinnville

Acknowledgments

Design Charrette Participants

Erica Anderson William Anderson Jeb Bludin Jake Boone Sasha Burrows Jody Christensen Colton Clark **Steve Down** Richard Dredge Savannah Edson Shahab Emrani Keith Ettestad Willene Ettestad Gioia Goodrum Naomi Greenwald **Cindy Heubig Scott Heubig Scott Heubig Hunter Hollander Robert Holloway Lindsay Jacobson Caralee Johnston** Kit Johnston Susan Knight Roger Lizut **Barbara Mann Kelly McDonald** Kathleen McKinney

Taylor McLean Kellie Menke **Emily Nauyen** John Ogleblyn **Sharon Ogleblyn Bryan Oller Phyllis Oller** Kyra Ortiz Paul Peterson Roger Ray **Heather Richards** Mons Roll **Donna Roodhouse** Lori Schanche Mindy Schlitt Pat Smith Rich Stafford **June Stephens** Ric Stephens Michael Strahs Will Talbot Michael Walker Qi Wang Xiaoyu Wang Nathan Watkins-Hogland **Kurt Wiley** Haoyi Yuan Shifan Zhao



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Introduction



The *Three Mile Lane Regenerative Design* report is a collaboration between public officials, residents, and researchers from the University of Oregon.

The project was initiated by McMinnville Planning Director **Heather Richards**, Department of Land Conservation and Development (DLCD) Regional Representative **Angela Lazarean**, and University of Oregon, School of Planning, Public Policy and Management Instructor **Ric Stephens**. The goals and objectives were to identify key City issues; engage with McMinnville citizens; research specific topics in sustainability, urban resiliency and regeneration; and prepare findings and recommendations in a synthesized

report. The study area is the City of McMinnville Three Mile Lane corridor. [See Study Area Map]

McMinnville Community Development Director **Mike Bisset** and City Planning Director **Heather Richards** met
with the research team and provided an overview of the
City and current development.

The research team conducted a Design Charrette to identify significant planning and design opportunities and constraints. The event was hosted by the Evergreen Aviation and Space Museum and attended by more than 60 city officials, residents and charrette organizers. Charrette participants identified specific city improvement

Introduction



suggestions. [See Community Priorities] Design charrette organizers also produced an example of collaborative public art: a "Mannekin Challenge" video. [see Design Charrette] Students also conducted a series of unmanned aircraft systems flights to photograph the Museum and other facilities.

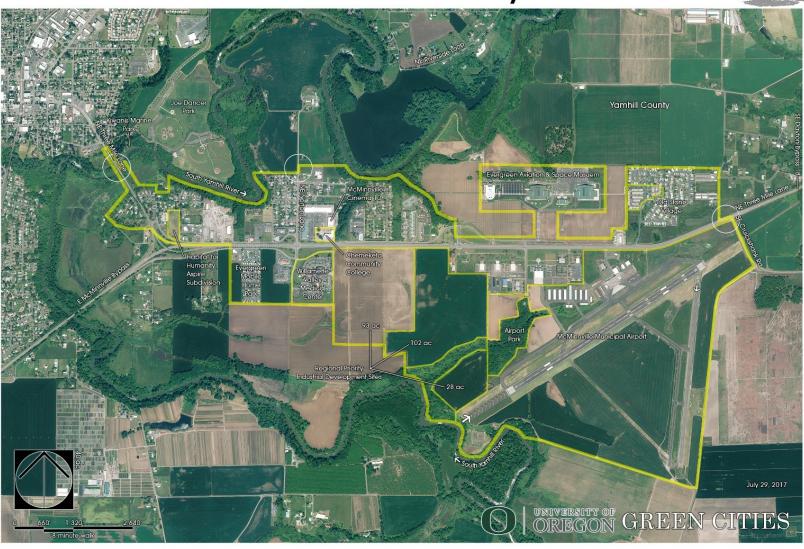
Project scope, participants, schedules and resources were documented on a project website hosted by the University of Oregon. The research team prepared individual informational videos to illustrate specific planning and design concepts. [see Videos]

It is the sincere hope of the research team that these recommendations will be helpful in shaping a regenerative future for the citizens of Three Mile Lane and McMinnville.



Three Mile Lane Study Area







Community Priorities

The University of Oregon "Green Cities" research team conducted a design charrette to better understand the opportunities and constraints associated with the McMinnville Three Mile Lane corridor study area. The participants (listed in Acknowledgments) identified and ranked the issues of highest value, and these scores are shown below. The overall highest scoring topics focus on employment land use flexibility and diversity; multi-modal mobility and connectivity; and Three Mile Lane sense of place. These focus topics form the foundation for this report.

Land Use Flexibility and Diversity

- Develop new **commercial** spaces along Three Mile Lane (i.e. gas station, grocery / retail)
- services / amenities on east side of bridge. Create office space to bring in higher wage jobs. Create traded sector jobs. Focus future and initial development of Three Mile Lane around the Evergreen Aviation and Space Museum complex, the airport and the hospital
- (10) Allow industrial / commercial flex space (i.e. wine, small manufacturing, avionics, corporate headquarters)
- (9) Provide a mix of best fit shopping and access to **amenities** on Three Mile Lane
- (6) Plan for land use that offers many uses [mixed use development]
- (5) Construct new **McMinnville Airport** terminal building

- (5) Amplify the **McMinnville Airport** as an asset for tourism and commerce
- (4) Expand wine industry near McMinnville Airport. Play up all local economics—not just wine! Blueberries, hazelnuts...
- (3) Address the unmet needs for more **retail and restaurant services**
- (2) Create **urban renewal** / **enterprise zone**

Mobility, Connectivity, Energy

- pedestrian trail into downtown
- Dancer Park
- (11) Improve accessibility and increase emphasis to **natural areas**
- (10) Construct new three Mile Lane multi-modal bridge to downtown
- (7) Add/expand **sidewalks and setbacks**. Finish Cumulus sidewalk.
- ••••• (6) Build **bike/ped bridge** access from Joe Dancer Park and path under bridge to separate pedestrians to cars
- **6)** Plan long-range **bike path** network
- (5) Develop **pedestrian** / **bike access** to downtown
- (4) Connect **frontage road** to more areas; currently dead end and needs easier access without circling back to Three Mile Lane. Complete access road.
- (4) Develop **bike path** north of NE Norton Lane

Community Priorities

- (3) Construct **second bridge** to north Norton Lane. Keep new bridge more rural. The existing bridge should remain the main entry point to town.
- (4) Improve vehicular, bike and pedestrian connectivity. Create attractive, multi-modal arterial roadways. Add pedestrian overpasses/ways to connect the whole area (north/south). Develop eastbound access from Highway 18 to downtown. Install traffic light and turn lane at west end of Cumulus. Build bypass roads for trucks and locals to reduce traffic on 3rd Street through City Center.
- (2) Add more bike lanes that are easily accessible, safe routes – residential. Construct bike lanes on Cumulus
- (2) Provide access to river

Sense of Place and Public Space

- Park **amphitheater**. Create **amphitheater** for 1000+ people
- to McMinnville. Create gateways to McMinnville.
- preserve history and culture of McMinnville. Keep the rural qualities of McMinnville. Design new commercial development to feel intimate. Develop denser commercial land. Construct noise barrier to prevent noise pollution
- (4) Create **bike**, **walking**, **greenway** that connects Three Mile Lane to downtown
- (3) Create **green space** parallel to main road

- (3) Update streetscapes (trees, lights, theme signs) with safety in mind
- (2) Enhance **natural amenities**. Maintain and update **Airport Park** that provides family friendly use. Update Airport Park
- (2) Move and create better fairgrounds with multi-use amphitheater
- (2) Build more **affordable housing.** Readdress parking/safety plans for Habitat for Humanity site
- (2) Create **setbacks** between road and new commercial / industrial development
- (2) Maintain architectural themes in new development
- (2) Add **park** at west end of study area







here is a paradigm shift occurring in the theory and practice of sustainable development.

Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

It is exactly 30 years since the Brundtland Commission defined the traditional definition of sustainable development above. (World Commission on Environment and Development, 1987). In the intervening decades sustainable development has become the foundation for contemporary planning practice. Parallel to this global movement for intergenerational equity, there has been a growing effort to redefine sustainability to address changing perceptions on values, the primacy of place, and systems thinking.

There are many critiques of the Brundtland definition: 1) It is anthropocentric (human-centered). Developed societies are now defining sustainability as either biocentric (all living things) or a more expanded ecocentric view (all living systems). 2) The needs of future generations cannot be known, so it is difficult (impossible?) to determine if

they will be compromised or not. 3) Standards set to prevent future impacts are arbitrary and typically based on existing (not ideal) conditions. 4) This last critique results in the definition lacking aspiration to achieve higher standards based on optimum natural systems. 5) There are no identified values attached to sense of place and culture which are vital to give meaning to sustainable development.

Regenerative Design

Regenerative design enhances sustainable development by addressing these concerns and structuring them into a new approach to guide contemporary urbanization:

"Regenerative Design, which is still creating itself, introduces into Ecological Design at least two additional streams—the Science or Art of Place, and the science of living systems. Regeneration is far more than simple renewal or restoration. Definitions of the word "regenerate" include three key ideas: a radical change for the better; creation of a new spirit; returning energy to the source. It calls for the integration of aspects of ourselves as designers and as human beings—those of spirit and meaning—that in this era are too often left outside the studio door. It demands that we reunite the art and science of design because we cannot succeed at sustainability if we fail to acknowledge human aspiration and will as the ultimate sustaining source of our activities." (Pamela Mang, 2001)

The traditional view of sustainable development was focused on balancing the three spheres of environment, economy and society. An expanded version of this equilibrium encompasses systems thinking, sense of place and an encompassing sphere of culture guided by human aspiration.

When designers and planners respond to all ecological influences on a project site, and approach public space design holistically using systems thinking, a regenerative solution can be achieved. (Jacobson, 2017)

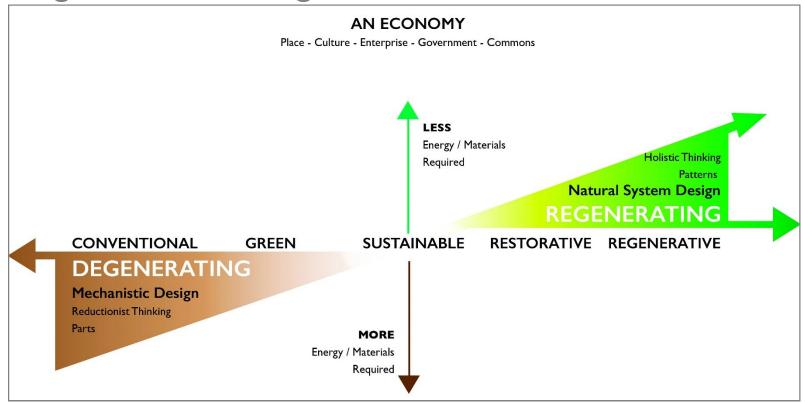
The Three Mile Lane corridor should become an economic driver for the City of McMinnville, and a regenerative economic model will also assist in this goal. Eight principles have been identified for a regenerative economy:

In Right Relationship

Humanity is an integral part of an interconnected web of life in which there is no real separation between 'us' and 'it.' The scale of the human economy matters in relation to the biosphere in which it is embedded. We are all connected; damage to any part of that web ripples back to harm every other part as well. There is much work to do here in disconnected, atomized finance in which speculation dominated capital markets and extreme complexity in mortgage lending have severed the critical relationship between owner and enterprise, lender and borrower. But the principle also applies at the macro scale, the imperative that the aggregate material throughput of the economy be in right relationship with the scale of the biosphere within which it is embedded.

Views Wealth Holistically

True wealth is not merely money in the bank. It must be defined and managed in terms of the wellbeing of the whole, achieved through the harmonization of multiple kinds of wealth or capital, including social, cultural, living, and experiential. It must also be defined by a broadly shared prosperity across all of these varied forms of capital. The whole is only as strong as the weakest link. Again, finance is ground zero.\



Innovative, Adaptive, Responsive

In a world in which change is both ever-present and accelerating, the qualities of innovation and adaptability are critical to health. It is this idea that Charles Darwin intended to convey in this often misconstrued statement attributed to him: "In the struggle for survival, the fittest win out at the expense of their rivals." What Darwin actually meant is that the most 'fit' is the one that fits best (i.e., the one that is most adaptable to a changing environment). Of all the principles, this one is best understood and accepted in our contemporary paradigm. One out of eight ain't so bad!

Empowered Participation

In an interdependent system, fitness comes from contributing in some way to the health of the whole. The quality of empowered participation means that all parts must be 'in relationship' with the larger whole in ways that not only empower them to negotiate for their own needs, but also enable them to add their unique contribution towards the health and wellbeing of the larger wholes in which they are embedded. In other words, beyond whatever moral belief one has, there is a scientifically grounded systemic requirement to address inequality, for the health of the whole.

Honors Community and Place

Each human community consists of a mosaic of peoples, traditions, beliefs, and institutions uniquely shaped by long-term pressures of geography, human history, culture, local environment, and changing human needs. Honoring this fact, a Regenerative Economy nurtures healthy and resilient communities and regions, each one uniquely informed by the essence of its individual history and place. This principle poses a profound challenge to the modern global corporation, but forward-thinking leaders are already moving toward a more distributed management structure connected to place.

Edge Effect Abundance

Creativity and abundance flourish synergistically at the 'edges' of systems, where the bonds holding the dominant pattern in place are weakest. For example, there is an abundance of interdependent life in salt marshes where a river meets the ocean. Edges are also where risk lies. At those edges the opportunities for innovation and crossfertilization are the greatest. Working collaboratively across edges—with ongoing learning and development sourced from the diversity that exists there— is transformative for both the communities where the exchanges are happening and for the individuals involved. Business leaders understand that the boundary of the firm is no longer the relevant 'whole' under management. If only Wall Street analysts understood too.

Robust Circulatory Flow

Just as human health depends on the robust circulation of oxygen and nutrients, so too does economic health depend on robust circulatory flows of money, information, resources (circular economy), and goods and services to support exchange, flush toxins, and nourish every cell at every level of our human networks. The circulation of money and information and the efficient use and reuse of

materials are particularly critical to individuals, businesses, and economies reaching their regenerative potential. This principle holds the promise of a whole new set of metrics to monitor (alternatives to GDP), and with them, supportive public policy options.

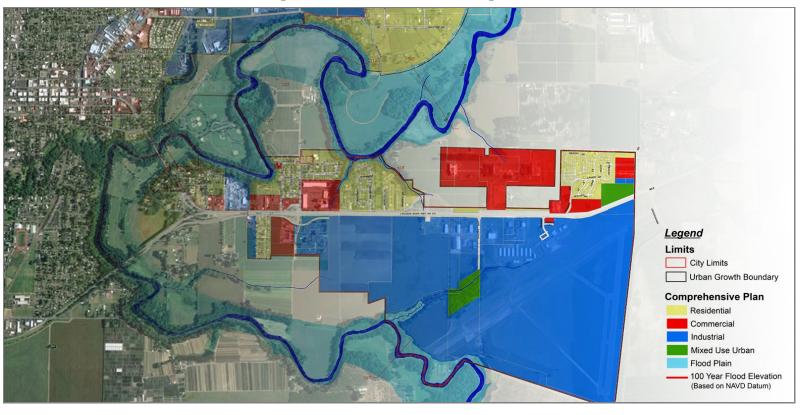
Seeks Balance

Being in balance is essential to systemic health. Like a unicycle rider, regenerative systems are always engaged in this delicate dance in search of balance. Achieving it requires that they harmonize multiple variables instead of optimizing single ones. A Regenerative Economy seeks to balance efficiency and resilience; collaboration and competition; diversity and coherence; and small, medium, and large organizations and needs. It runs directly against the (short-term) 'optimize' ideology that is at the root of modern financial logic. (Fullerton, 2015)

Three Mile Lane has the potential to be an exemplary model for regenerative design, and this report provides an outline of development strategies and implementation actions to help realize this vision.







- hree Mile Lane has extraordinary development potential due to several unique factors:
- Developable Land—The study area has over 200 acres of vacant land within the Urban Growth
 Boundary and largely served by existing infrastructure.
 The area also has several large parcels that are ideal for innovative development models.
- 2. Connectivity—Three Mile Lane is situated along Highway 18, an east-west corridor connecting metropolitan Portland with the coast, and Highway 99W, a north-south corridor parallel to Freeway 5. In addition, the McMinnville Airport provides a singular opportunity for air transportation.

3. Amenities and Features —The study area encompasses exceptional amenities and attractors including the McMinnville Airport, Evergreen Space and Aviation Museum, the Yamhill River; and aviation, commercial, industrial, institutional, medical, residential, and tourism development potential.

Planning and Design

Development projects of this scale benefit from a hierarchy of planning and design starting with a vision or concept, then a theme or style, and finally design guidelines including architecture, landscape and urban design. This is much like theatre with the *story*, *stage* and *set pieces*.





Eco-Industrial Park Photosimulation

Three Mile Lane could adopt any number of visions or hybridize elements from various concepts to create a project unlike any other. The following development models are ideal candidates for Three Mile Lane.

Aerotropolis

An approach focusing on the airport is Aerotropolis, a new urban form placing airports in the center with cities growing around them, connecting workers, suppliers, executives, and goods to the global marketplace. This recognizes new potential for aviation related to autonomous aircraft, personal aircraft and high-tech transportation.

Eco-efficient Employment

Three Mile Lane must design employment areas that respond to climate change and promote job opportunities for the 21st century. Strategies fall into three categories:

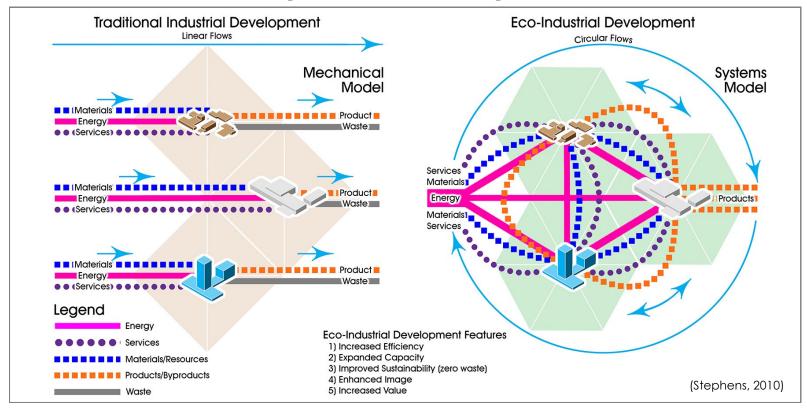
 High-performance infrastructure—Model approaches for building more environmentally and economically sustainable infrastructure systems that reduce resource waste and the demand on our current systems.

- 21st century design—Code changes and planning tools for designing vibrant employment areas that facilitate community, attract industry and reduce the impacts of climate change.
- Revitalizing employment areas—Strategies for redeveloping and reusing underutilized employment and industrial land for future economic growth. (Metro, n.d.)

Eco-Industrial Park

This concept is applicable to the industrial lands near McMinnville Airport, but eco-industrial networking can be expanded to nearby development such as the Evergreen Space and Aviation Museum, Chemetka Community College and other institutions that can collaborate with industrial businesses.

"An eco-industrial park (EIP) is an industrial park in which businesses cooperate with each other and with the local community in an attempt to reduce waste and pollution, efficiently share resources (such as information, materials, water, energy, infrastructure, and natural resources), and help achieve sustainable development, with the intention



of increasing economic gains and improving environmental quality. An EIP may also be planned, designed, and built in such a way that it makes it easier for businesses to co-operate, and that results in a more financially sound, environmentally friendly project for the developer." (Hein, 2015)

EcoDistrict

A Three Mile Lane EcoDistrict development would focus on sustainable development from building design to areawide practices through highly-integrated infrastructure and services. "An EcoDistrict is a neighborhood or district, which is committed to the implementation and growth of

sustainability. It is a cutting edge green city initiative that focuses on resource flows on a regional and neighborhood scale, in addition to just the building scale. The difference is the importance of the ideals and goals applied at all scales of the urban fabric. The goals are to lower emissions and increase prosperity." (Portland Sustainability Institute, n.d.)

Innovation District

A Three Mile Lane Innovation District would combine entrepreneurial business with technology and transportation options.

"For the past 50 years, the landscape of innovation has been dominated by places like Silicon Valley—suburban corridors of spatially isolated corporate campuses, accessible only by car, with little emphasis on the quality of life or on integrating work, housing and recreation. A new complementary urban model is now emerging, giving rise to what we and others are calling 'innovation districts.' These districts, by our definition, are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators. They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail." (Brookings Institution, n.d.)

There are three general innovation district models: anchor plus, re-imagined urban areas, and the urbanized science park. The urbanized science park model is most applicable to Three Mile Lane. The urbanized science park district is a model that "involves the reversing of an old trend where corporations moved out to the suburbs, isolated from other firms as well as retail shops and restaurants...the urbanized science park is seeing formerly sprawling areas become increasingly dense with businesses, housing, and restaurants." The key characteristics of this model are: location in a suburban area, and increasing urbanization. (Montini, n.d.) To facilitate this planning process, stakeholders must implement the following place making principles: identity, diversity, continuity, sociability proximity, mobility, and unity. (Place Making Principles, 2016) It is critical for cities to transition their economies to fit these emerging economic models and trends to ensure that they develop a first-mover advantage to make their city competitive for the globalized 21st century. (Walker, 2017)

Leadership in Energy and Environmental Design, Neighborhood Development

Is your local grocery store within walking distance...and is there a sidewalk for you to trek there safely? Does your neighborhood boast high-performing green buildings, parks and green space? Do bikes, pedestrians and vehicles play nicely together on the road? LEED for Neighborhood Development (LEED ND) was engineered to inspire and help create better, more sustainable, well-connected neighborhoods. It looks beyond the scale of buildings to consider entire communities. Why? Because sprawl is a scary thing. Here's the antidote. (U.S. Green Building Council, n.d.) Leadership in Energy and Environmental Design, Neighborhood Development is a United Statesbased rating system that integrates the principles of smart growth, urbanism and green building into a national system for neighborhood design.

Mixed-Use Development and Flex Space

Mixed-use development is a type of urban development that blends residential, commercial, cultural, institutional, or entertainment uses, where those functions are physically and functionally integrated, and that provides pedestrian connections. As the origins of zoning were rooted in separation, exclusivity, and automobile usage, mixed-use development counteracted these effects and sought to create connected communities that are accessible, walkable or transit-oriented, and inclusive. (Samson Tuason, 2017)

LEED FOR NEIGHBORHOOD DEVELOPMENT

110 TOTAL POINTS POSSIBLE



27 POSSIBLE POINTS	LOCATION & LINKAGE	SMART
REQ	Smart Location	PREREQ 1
ties REQ	Imperiled Species and Ecological Communitie	PREREQ 2
REQ	Wetland and Water Body Conservation	PREREQ 3
REQ	Agricultural Land Conservation	PREREQ 4
REQ	Floodplain Avoidance	PREREQ 5
••••••	Preferred Locations	CREDIT 1
• •	Brownfield Redevelopment	CREDIT 2
nce	Locations w/ Reduced Automobile Dependenc	CREDIT 3
•	Bicycle Network and Storage	CREDIT 4
•••	Housing and Jobs Proximity	CREDIT 5
•	Steep Slope Protection	CREDIT 6
ody Conservation	Site Design for Habitat/Wetland & Water Bod	CREDIT 7
Bodies	Restoration of Habitat/Wetlands and Water Bo	CREDIT 8
nds & Water Bodies	Long-Term Cnsrvtn. Mgmt. of Habitat/Wetland	CREDIT 9

*

NEIGHBO	RHOOD PATTERN & DESIGN	44 POSSIBLE POINTS
PREREQ 1	Walkable Streets	REQ
PREREQ 2	Compact Development	REQ
PREREQ 3	Connected and Open Community	REQ
CREDIT 1	Walkable Streets	
CREDIT 2	Compact Development	00000
CREDIT 3	Mixed-Use Neighborhood Centers	0000
CREDIT 4	Mixed-Income Diverse Communities	000000
CREDIT 5	Reduced Parking Footprint	•
CREDIT 6	Street Network	• •
CREDIT 7	Transit Facilities	•
CREDIT 8	Transportation Demand Management	• •
CREDIT 9	Access to Civic and Public Spaces	•
CREDIT 10	Access to Recreation Facilities	•
CREDIT 11	Visitability and Universal Design	•
CREDIT 12	Community Outreach and Involvement	• •
CREDIT 13	Local Food Production	•
CREDIT 14	Tree-Lined and Shaded Streets	• •
CREDIT 15	Neighborhood Schools	•



IN INFRASTRUCTURE & BUIL	DINGS 29 PUSSIBLE PUINTS
1 Certified Green Building	REQ
2 Minimum Building Energy Efficien	cy REQ
3 Minimum Building Water Efficienc	ry REQ
4 Construction Activity Pollution Pre	evention REQ
1 Certified Green Buildings	••••
2 Building Energy Efficiency	••
3 Building Water Efficiency	•
4 Water-Efficient Landscaping	•
5 Existing Building Use	•
6 Historic Resource Preservation ar	nd Adaptive Reuse
CREDIT 7 Minimized Site Disturbance in Design and Construction	
8 Stormwater Management	••••
9 Heat Island Reduction	•
10 Solar Orientation	•
11 On-Site Renewable Energy Source	es ••
12 District Heating and Cooling	••
13 Infrastructure Energy Efficiency	•
14 Wastewater Management	••
15 Recycled Content in Infrastructure	•
16 Solid Waste Management Infrastru	ucture
17 Light Pollution Reduction	•
1 1 1 1 1 1 1 1 1 1 1	Minimum Building Energy Efficient Minimum Building Water Efficient Construction Activity Pollution Proceedings Building Energy Efficiency Building Energy Efficiency Water-Efficient Landscaping Existing Building Use Historic Resource Preservation at Minimized Site Disturbance in De Stormwater Management Heat Island Reduction On-Site Renewable Energy Source District Heating and Cooling Infrastructure Energy Efficiency Wastewater Management Recycled Content in Infrastructure Solid Waste Management Infrastructure

GREEN INFRASTRUCTURE & RIIII DINGS 29 POSSIBLE POINTS



INNOVA	TION & DESIGN PROCESS	6 POSSIBLE POINTS
CREDIT 1	Innovation and Exemplary Performance	••••
CREDIT 2	LEED Accredited Professional	•



	REGIONAL PRIORITY CREDIT		4 POSSIBLE POINTS
(CREDIT 1	Regional Priority	••••

40-49 POINTS: CERTIFIED 50-59 POINTS: SILVER 60-79 POINTS: GOLD 80+ POINTS: PLATINUM FOR MORE INFORMATION SEE THE LEED REFERENCE GUIDE FOR GREEN NEIGHBORHOOD DEVELOPMENT

Planning for a fire station and elementary school should consider not only land use compatibility but potential symbiotic relationships with adjacent or nearby development.

Flex space is a term used for lightly zoned buildings. It is mainly used when referring to industrial or office space.

Regardless of development typology, mixed-use development and flex space should be the dominant forms of land use regulation to allow for flexibility and diversity necessary to respond to shifting socio-economics, demographics and technological innovation.

Each of these concept-driven planning approaches will help increase property values. Each approach also has competitive advantages and disadvantages. McMinnville may select one of these or adopt the most relevant aspects of each for a composite development. Whichever approach is taken, it will be essential that land use flexibility and diversity be comprehensively planned to implement the vision.

Science Park

A similar approach to integrating industrial development and educational institutions would be to develop a Three Mile Lane Science Park.

"A science park (also called a 'university research park', or a 'science and technology park') is a strategically planned, purpose built work environment. It is designed to locate in close physical proximity university, government and private research bodies involved in a particular field of endeavor. This is so that knowledge can be shared, innovation promoted and research outcomes progressed to viable commercial products." (Association of University Research Parks, n.d.)

The International Association of Science Parks (IASP) explains that the purpose of these parks is to "promote the economic development and competitiveness of cities and regions by creating new business, adding value to companies, and creating new knowledge-based jobs."

Smart Sustainable Community

A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects. (International Telecommunication Union, n.d.) Smart urbanism merges information and communications technologies; energy, resource and infrastructure technologies into networks that create sustainable, resilient, regenerative, urban-rural ecosystems with vibrant communities, thriving economies and biodiverse environments. (Stephens, 2017) Communities also need to start becoming 'smart,' using information and communications technology to become high-powered and efficient places to live. (Talbot, 2017) [See also Information and Communications Technology

Urban Enterprise Zone

A Three Mile Lane Enterprise Zone could stimulate economic development through a variety of incentives often combined in an urban enterprise zone.

"An urban enterprise zone is an area in which policies to encourage economic growth and development are



implemented. Urban enterprise zone policies generally offer tax concession, infrastructure incentives, and reduced regulations to attract investments and private companies into the zones. They are a type of special economic zone where companies can locate free of certain local, state, and federal taxes and restrictions." (World Bank, 2008)

The best way for a city to increase its tax revenue, is to increase property value within the city. The city does not necessarily have to grow outwards, but can look at existing property to see how the value can be increased. McMinnville has a great opportunity with its Three Mile Lane corridor to help increase property value and simultaneously increase general funding. The current

assets property value of McMinnville is \$2,298,038,501, and the maximum amount they could charge in property taxes would be 1% of that. [\$23M] (Roll, 2017)

Adequate / Workforce Housing

In addition to affordability, adequate housing must consider the comprehensive spectrum of human rights:

- Legal security of tenure
- Affordability
- Habitability
- Availability of services, materials, facilities and infrastructure
- Accessibility

- Location
- Cultural adequacy

In addition to adequate housing, Three Mile Lane must include workforce housing. Both of these ensure a better jobs/housing balance for the area that will reduce transportation demand and costs.

Smart Development

Whichever development model or combination is chosen, Three Mile Lane should adopt the Principles of Smart Development:

- O Efficient Use of Land Resources
- Full Use of Urban Services
- Mixed Use
- Transportation Options
- O Detailed, Human-Scale Design
- Implementation (American Planning Association, 1997)







obility, connectivity and energy planning and design for Three Mile Lane can transform this area into a renewable energy-based "smart district" with intelligent transportation systems.

Mobility

Mobility is the ability and level of ease of moving goods and services. Some examples of mobility include: Interstate highways providing designated truck lanes to increase the overall amount of goods transported; Bus Rapid Transit (BRT) systems with bus only lanes that increases the efficiency of moving people while removing automobiles from the roads. Congestion Management Systems are the

trend in mobility due to the lack of funds and the land constraints to keep expanding the transit system infinitely. These systems manage travel demand through innovative ideas to increase volume and capacity.

The Three Mile Lane corridor is an ideal setting for developing mobility through intelligent transportation system.

Intelligent transportation system (ITS) is the application of sensing, analysis, control and communications technologies to ground transportation in order to improve safety, mobility and efficiency. ITS includes a wide range of applications that process and share information to ease





Multi-modal Transportation Photosimulation

congestion, improve traffic management, minimize environmental impact and increase the benefits of transportation to commercial users and the public in general. (TechTarget, n.d.)

The Three Mile Lane study area is ideally suited to develop ITS for the following:

- Autonomous vehicles (driverless cars)
- Bikesharing
- Bus and shuttle services
- Carsharing
- Electric vehicles (EV) and charging stations
- Mobile Apps
- Ridesourcing (i.e. *Uber*, *Lyft...*)
- Street and sidewalk lighting
- Telematics for business applications
- Traffic monitoring
- Traffic signal coordination
- O Vehicle to vehicle (V2V) and vehicle to infrastructure (V2I) technology
- Unmanned aircraft systems (in conjunction with the McMinnville Airport and Evergreen Space and Aviation Museum

Multi-Modal and Inter-Modal Transportation
Multimodal transportation is the combining of modes of
movement—driving, public transit, biking and
walking—to provide more freedom in how people get
around. (Nguyen, 2017) Inter-modal transportation is the
ability to easily change modes.

Driving

As noted above, the Three Mile Lane corridor offers a unique opportunity for driverless vehicle integration into an ITS. Carsharing and ridesourcing are easily accommodated in this ITS model. Telematics and the Internet of (Moving) Things such as V₂V and V₂I will require more investment and deeper public-private partnerships that may be possible through the establishment of an Innovation District, Enterprise Zone or other program.

Public Transit

There is currently bus service in the Three Mile Lane corridor, but this could be significantly expanded and



supplemented by high-tech bus shelters, online real-time transit information and other features.

Biking

Biking provides great health benefits, increase in overall safety, and a greater connectedness to the surrounding community. (Clark, 2017) The ITS for Three Mile Lane should include a network of bike paths, lanes, routes, and cycle tracks. The bicycle transportation system should also include conveniently located bike racks, bike stations, wayfinding and signage.

Walking

The study area is relatively auto-dependent, and it will take significant infrastructure improvements and urban design to increase walkability. In addition to sidewalks and multi-purpose paths, landscaping (rainwater gardens), information kiosks, wayfinding signage, and public art will transform the Three Mile Lane corridor from an auto-dependent to a multi-modal intelligent transportation system.

Accessibility is the quality of travel and takes place at the community and individual level through Access
Management techniques to provide access to various land uses. It focuses on travel time, travel cost, travel options,





Solar Panels, Solar Lighting, Roof-mounted Wind Turbines and Green Walls Photosimulation

comfort, and risk while addressing the needs of all within the community. Mobility and accessibility are considered the "yin and yang" of transportation. The goal is to increase the overall capability of the transit system while not compromising efficiency and ease of access.

Connectivity

Connectivity is the relative location of an object to the destination centers [locational efficiency]. There are many different levels of hierarchy to connectivity. For example, subdivisions with many dead-end cul-de-sacs may have poor connectivity with surrounding land uses. It may take a long time for a family living at the end of a cul-de-sac to get out of the neighborhood and to the main road right behind their house. The destination might not be that far away by distance, but by travel time it is. Traditional downtowns on the other hand usually have higher connectivity with surrounding neighborhoods. Residential areas designed with streets in a grid format adjacent to the downtown are often well connected with the business district and decrease the travel time and congestion.

Walk Score

The Walk Score algorithm awards points based on the distance to the closest amenity in several categories. If the closest amenity in a category is within .25 miles (or .4 km), the maximum number of points is assigned. From the center of the Three Mile Lane corridor (Chemeketa College), the Walk Score is 23, "car-dependent" and the Transit Score is 16, "minimal transit." It is a 41-minute walk or 13-minute bike ride to downtown McMinnville. Expanded bus service and improved bicycle routes, lanes and paths are needed to elevate this score and improve connectivity. Strong connectivity ensures both sense of community and economic vitality. (WalkScore, n.d.)

Information and Communications Technology

For this report, connectivity is expanded to include information and communications technology (ICT). Three Mile Lane should become a "smart community" through development of broadband, a high-capacity transmission technique using a wide range of frequencies, which enables a large number of messages to be communicated simultaneously. The City should evaluate the potential benefits of creating a "10-gig" community as part of the

creation of an eco-industrial park or other high-tech approach to development.

Energy

As an area with multiple greenfields and undeveloped airport land, Three Mile Lane has a unique opportunity to supplement its energy demand with solar, wind and even hydroelectric power. Some facilities such as the McMinnville Airport could even become energy-independent. Renewable energy programs can be small-scale applications such as solar-powered street lights to more ambitious projects such as solar farms. Three Mile Lane can implement renewable energy programs through adoption of electric vehicles (EV) for municipal and institutional facilities; EV charging stations at convenient locations; and bio-solar roofs and wind turbines.

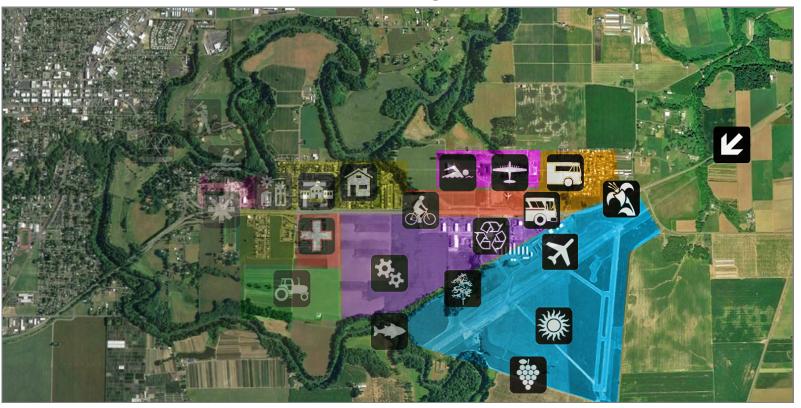
Near McMinville's airport, there are approximately 4,244,288 square feet of undeveloped land. According to the United States government, this region receives approximately 380 watt hours/feet²/day. 100,000 square feet of solar energy in that region has the capacity to power about 930 houses (Solar Energy Potential). Surprisingly enough, this is about the average for solar power per square feet in state. If the 4,244,288 square feet were to be converted into a solar farm facing south, the solar farm could power about 39,472 houses during the daytime. (Hollander, 2017)

For a long-term, sustainable vision, McMinnville should consider building its own solar farm, wind farm and/or other renewable facilities to increase urban resilience during regional energy incidents, as well as more economic and political independence. (Yuan, 2017)

Three Mile Lane should be a model for smart mobility, enhanced connectivity, and renewable energy development.







hree Mile Lane will benefit from a hierarchy of planning and design starting with a vision or concept, then a supporting theme or style, and finally, complementary design guidelines including architecture, landscaping, urban design, signage, and public art. This is much like theatre with the *story*, *stage* and *set pieces* corresponding to vision, theme and design details.

All the world's a stage, And all the men and women merely players; They have their exits and their entrances. (Shakespeare)

The Experience Economy

In the evolution of socio-economics, there are four distinct eras starting with *agrarian*, followed by *industrial*, then *service-oriented*, and now *information* or *knowledge-based*. Commensurate with the knowledge-based economy in this progression of economic value, there is increase in value association with experience.

"Economists have typically lumped experiences in with services, but experiences are a distinct economic offering, as different from services as services are from goods. Today we can identify and describe this fourth economic offering because consumers unquestionably desire experiences, and



more and more businesses are responding by explicitly designing and promoting them. As services, like goods before them, increasingly become commoditized—think of long-distance telephone services sold solely on price—experiences have emerged as the next step in what we call the *progression of economic value*." (Pine II, 1998)

With this understanding, it is critical for businesses to "set the stage" for experiences that blends esthetics, entertainment, escapism and education. As Pine II and Gilmore say:

"Work is theatre and every business a stage."

This approach to experiential design is essential for Three Mile Lane corridor to capture its optimum value and development potential.

Imageability, Identity and Branding

Currently the Three Mile Lane corridor is physically separated from downtown McMinnville by the Yamhill River, and this is accentuated by the single bridge crossing at the end of the corridor area. This segregation between an historic downtown and an emerging district is recognized by residents and visitors. Rather than attempt to merge the identities of the two areas into a single identity, the consensus of the design charrette and research team is to create a separate, but compatible identity for Three Mile Lane. The section on Land Use Flexibility and Diversity identifies several potential visions for the area, and the City may select a specific development program or create some hybrid from the most appropriate elements. The ultimate vision (or story), should be relatively simple to share; the theme (or stage) should be consistent throughout the area; and the design elements (or set pieces) should be derived from the theme and illuminate the vision. The design elements of Three Mile Lane—architecture, landscaping, urban design, signage, and public art—collectively create the imagery of the area.

Design guidelines tend to be easier to modify than development codes, allowing them to respond and adapt more quickly to the market and advances in technology. (Metro, n.d.)



If done well, these creates an sense of place that can serve as a brand for Three Mile Lane that is invaluable for sense of place and community.

Great places have great stories.

Eco-Identity

Eco-identity is "a phenomenon that connects individuals to their own community through different forms of stewardship activities and community service projects." (Kelly, 1970) Eco-identity can be used as a step in understanding a communities needs by focusing on 5 core areas;

- Being able to make positive contributions to the community
- 2) Understanding the unique needs that communities often face
- 3) Experiencing an emotional closeness or "community connectedness" during the process of the community development project
- 4) Considering the likelihood of continued community involvement
- 5) Viewing community service work as an important activity (Schlitt, 2017)

This concept applies to community gardens, farmers' markets, and community service activities of all kinds.





Street Tree and Bioswale Photosimulation

Eco-identity has similarities to social practice, an art medium that focuses on engagement through human interaction and social discourse.

Public Space

Three Mile Lane has a wide range of public space opportunities from Airport Park to the Yamhill River corridor. There is also a need to create new public spaces appropriate to the community vision.

Streetscapes

Final development of Three Mile Lane may result in 20% or more surface area having impervious pavement. The environmental impacts include increased flood hazard, decreased water quality, heat island effect, safety impacts, and others. These impacts may be significantly reduce and public space increased through a variety of approaches.

Shared Spaces

A shared space street is "a public space where movement is subject to social protocol and informal regulation, not traffic rules." (Monderman, 2014) Shared space streets are

less dangerous, more accessible as public space, and more socially interactive.

Green Streets

Green streets include a bioswales or rainwater gardens parallel to the roadway as opposed to traditional street gutters. Bioswales are an effective design mechanism that maximizes the use of precipitation as irrigation and works to add nature and ecosystems back into a streetscape. (Greenwald, 2017)

Festival Streets

One or two streets within the Three Mile Lane corridor should be identified as "festival streets." These are designed to be easily transformed into public spaces for seasonal events such as farmers' markets, festivals, holidays, parades and others.

Parklets

In commercial and mixed-use development areas, temporary conversion of parking spaces to public use is ideal for special events or activities. Other efforts to



'reclaim' public space include "pavement to parks" and "streets as places."

Greenspaces

Community Gardens

A community garden is any piece of land gardened by a group of people, utilizing either individual or shared plots on private or public land. The land may produce fruit, vegetables, and/or ornamentals. Community gardens will provide green space, give people a sense of place and purpose, provide recreation, and make the community more environmentally friendly. (Burrows, 2017)

Parks

Airport Park is Three Mile Lane's preeminent park and could be enhanced to become an extraordinary amenity for the area. A variety of improvements are needed to make this park a more vibrant, multifunctional greenspace. The park should also convey the "aviation" theme with play structures and public art based on aircraft. Many residents would also like to see a new park on the western end of the corridor which could also serve as part of a gateway or entry statement for Three Mile Lane.

Three Mile Lane Greenway

Three Mile Lane should be designed as a green street with a parkway that includes a Class I multi-use path. The green





Solar Art, Kiosk and Habitat-friendly / Edible Landscaping Photosimulation

corridor should use native, drought-tolerant species designed for seasonal color and scent. Edible landscaping should be considered (with the exception of invasive species such as Himalayan blackberry).

Yamhill River Greenway

"Greenways are a fantastic way to use floodplains; they act as long, skinny parks, enhance bicycle and pedestrian transportation networks, help maintain floodplain ecological health, and reduce the economic costs of flooding by displacing other, more costly development (Greenways, Inc., 2011). Greenways are also drivers of health for residents, as they encourage more and longer walks and bicycle rides than would otherwise be the case." (Boone, 2017)

One of the development goals for Three Mile Lane should be to integrate all the public and green spaces into a multipurpose network. The culmination of these efforts should result in an urban ecology or green infrastructure that considers bike/ped connectivity, biodiversity, recreation, rainwater harvesting, stormwater management, water quality, wildlife habitat and many others.

Public Art

Three Mile Lane should develop a public art program administered by a Public Art Commission appointed by the City Council. The Public Art Commission would guide both public art installations and activities. Funding to support these projects would be through grants, donations and program fees. The scope of this Commission could span the full range of public art from statues to public performances. Examples of public art for Three Mile Lane include murals, intersection murals, painted utility boxes, public bookcases, land art energy generators, statue installment series (e.g. Cow Parade), art racks (public art bike racks), street banners and town flags. Public art projects are an excellent tool to achieve these effects; they help build community ties, improve public health, and form unique place identity. (Edson, 2017)

Solar art is a clever way of bridging the gap between aesthetics and energy needs; to create a sense of place. (Watkins-Hoagland, 2017) This could take the form of "power flowers" or other sculptures that incorporate solar panels. Wind art is a similar approach to making



decorative wind turbines and/or incorporating them public art installations.

Public art, when done well, can define the personality of a city and create a meaningful sense of place. (Miller, 2017)

Cultural Events

At present, McMinnville has several festivals that continue to preserve its culture. The popular UFO Festival carries on after 17 years, and the Turkey Rama Festival continues its tradition after 57 years to celebrate the once thriving turkey farm industry. (Ortiz, 2017)

Three Mile Lane should organize cultural events and community activities that enhance its sense of place and community. They should be oriented to aviation, wine industry, industrial technology, and others related to Three Mile Lane's vision, theme and design. In addition, cultural events should include the Latino community, and the City may wish to incorporate such iconic holidays as Dia de los Muertos and Carnival.





Recommendations



Unmanned Aircraft System Panorama

Land Use Flexibility and Diversity

- Adequate Housing Build more adequate / affordable / workforce housing.
- 2. **Aerotropolis** Plan for a multi-modal aviation-oriented development.
- 3. Amenities Address the unmet needs for more retail and restaurant services. Provide a mix of best fit shopping and access to amenities on Three Mile Lane. Build a *Walmart*, *Target*, *Costco* or *Winco* in the Three Mile Lane corridor. Reach out to breweries and dispensaries that would be interested in setting up shop in Three Mile Lane (Example: De Garde Brewing located near Tillamook's air museum)
- 4. Chemeketa College Campus Restaurants Create more restaurants and food options within the Chemeketa Community College compound.
- 5. **Commercial Development** Develop new **commercial** spaces along Three Mile Lane (i.e. gas station, grocery / retail). The area between the hospital

- and airport park should be re zoned to a commercial use because it has the potential of being a tax revenue generator.
- Commercial District Create a commercial district to network and organize collaborative programs and events.
- 7. **Community Plan** Consider requiring a "Community Plan" for large sites. The Community Plan would include design guidelines, implementation actions and other elements not in traditional zoning.
- 8. **Eco-efficient Employment** Adopt eco-efficient employment strategies: high-performance infrastructure, 21st century design, and revitalizing employment areas.
- 9. **Eco-Industrial Network** Create an eco-industrial network through online and other media.
- 10. **Eco-Industrial Park** Plan and design new industrial development to support eco-industrial development.

Recommendations

- 11. **EcoDistrict** Create an EcoDistrict encompassing either the airport/industrial development area or the entire corridor.
- 12. **Elementary School** With the influx of people that could be moving into the area, there will most likely need to be looking at services that the city needs to provide for people who live the evergreen side of the bridge. That being said, there will be a need for an elementary school.
- 13. **Employment Land** Create more office, industrial, and commercial space to increase jobs in the McMinnville area
- 14. Flex Space Allow industrial / commercial flex space (i.e. wine, small manufacturing, avionics, corporate headquarters)
- 15. **Fire Station** Identify a site for a fire station and target future development funding to complement emergency services for both sides of the Yamhill River.
- 16. **Form-based Code** Evaluate the benefits of developing a form-based code for the entire corridor or specific to the airport/industrial area.
- 17. **Flex Space** Plan flex space zoning for industrial development.
- 18. **Grocery Store** Build a grocery in three mile lane that accepts WIC and SNAP
- 19. Innovation District Affordable Housing Create affordable housing to provide social mobility and general accessibility to the Three Mile Lane innovation district

- 20. **Innovation District Asset Analysis** Determine Three Mile Lane's dependent assets and how they could be best utilized to create a competitive innovation district
- 21. **Innovation District Economic Sectors** Evaluate economic sectors that could be established or built upon in Three Mile Lane, determine their competitive advantages and leverage them accordingly
- **22. Innovation District Planning** Plan for land use that favors proximity and density
- 23. **Innovation District Research Network** Build a collaborative research network made up of area stakeholders to jump start the planning process for an innovation district
- 24. **Innovation District Sense of Place** Implement the place making principles of: identity, diversity, continuity, sociability proximity, mobility, and unity while designing the innovation district
- 25. **Innovation District Workforce** Create local incentives to attract an educated and skilled workforce
- 26. **LEED ND** Adopt the Leadership in Energy and Environmental Design, Neighborhood Development program and/or criteria.
- 27. McMinnville Airport Tourism Development
 Amplify the McMinnville Airport as an asset for
 tourism and commerce. Create a "destination" at
 McMinnville Airport by constructing a new terminal
 building, and amenities (shops, restaurants, art,
 landmarks) nearby that are accessible to the general
 public, including a shaded or covered outdoor event
 space.

Recommendations

- **28. McMinnville Airport Buffer Zone** Expand the buffer zone for the airport allowing for more commercial use
- 29. McMinnville Airport Commercial, Office and Industry Create businesses centered around air travel and time-sensitive manufacturing which can utilize the McMinnville Municipal Airport
- 30. McMinnville Airport Terminal Building Construct new McMinnville Airport terminal building
- 31. **McMinnville Airport Tourism Development** Amplify the McMinnville airport as an asset for tourism.
- 32. **McMinnville Multi-Modal Hub** Build a Multi-Modal, sustainable hub terminal next to the airport to transport travelers into the wonderful downtown of McMinnville.
- 33. **Mixed Use Development** Plan for land use that offers many uses [**mixed use development**].
- 34. **Mixed Use Residential** Build apartments above the existing various medical facilities located within the Chemeketa Community College compound
- 35. **Multiple and Flex Use** Plan for land use that offers multiple uses
- 36. **Neighborhood Commercial Development** To Build upon the proposed hospital/airport park commercial area, it should be subdivided to allow access for multiple companies to come in. It introduces the possibility for a strip mall or other small outlet stores that will allow the resident that live across the street to just cross the street instead of having to go into town.

- 37. **Performance Zoning** Do a major reshaping and rezoning of Three Mile Lane to make it more flexible and more usable for future development to expand and bring up the quality of the town.
- 38. **Retirement Community Expansion** The residential area around the retirement community should also be expanded because the commercial area appears to not get many visitors and could use more people.
- 39. **Science Park** Establish an urbanized science park development model in the Three Mile Lane corridor
- 40. **Services and Amenities** Provide **services** / **amenities** on east side of bridge. Create office space to bring in higher wage jobs. Create traded sector jobs. Focus future and initial development of Three Mile Lane around the Evergreen Aviation and Space Museum complex, the airport and the hospital
- 41. **Small-Scale Commercial Development** Develop commercial space to provide amenities to residents Many voice concerns over big box stores, maybe create buildings with an architectural style of a more small time feel and have smaller businesses.
- **42. Smart Development Principles** Adopt the Principles of Smart Development.
- 43. **Smart Sustainable Community** Develop the Three Mile Corridor for smart sustainable city technology and practices.
- 44. **Student Housing** Behind the current commercial area, there should be room to add more residential housing just south. This could be a combination of housing and apartments. The apartments could target the students that currently attend Linfield. The

students could also have quick access to amenities do to the new commercial area.

- 45. **Temporary and Transitional Land Uses** Allow a wide range of temporary and transitional land uses especially for vacant land prior to ultimate development.
- 46. **Tourism Development** Create "places to stop" along Three Mile Lane by increasing plantings, covered areas, public areas for pedestrians, and points of interest (art, history, parks, and culture)
- 47. Tourism Development Factors 1) Attractors—develop and expand tourism attractors: Evergreen Space and Aviation Museum, McMinnville Airport, Wine Industry... 2) Infrastructure—Develop hotels and restaurants (especially west of the Evergreen development) to serve tourism in the area. 3)

 Services—educate and train businesses to cater to tourism. 4) Information—provide information about area tourism such as location, hours of operation... 5)

 Promotion—promote tourism through digital media, publications, TV/radio...
- 48. **Tourism Technology** Invest in new upcoming infrastructure technology to be a technologically cutting edge tourist destination. Invest in Three Mile Lane to be the technological showcase for McMinnville. This will create an amazing dichotomic sense of place between the historic downtown and the high-tech Innovation District, Eco-Industrial Park...
- 49. **Urban Enterprise Zone** Plan an urban enterprise zone for development of the Three Mile Lane corridor.
- 50. **Wine Industry** Expand **wine industry** near McMinnville Airport. Create industrial area for wine

(or other commodities) on the south side of Three Mile Lane, export through nearby airport. Increase the presence of the wine industry. Using localized businesses and making them central to the town and its identity helps to further develop a sense of place. Especially for McMinnville, using the surrounding wine industries would be a big tourist attraction to promote development in the economy. The surrounding area is so plentiful with wineries that McMinnville could easily have its wineries become its main attraction. Play up all local economics—not just wine! Blueberries, hazelnuts...

Mobility, Connectivity, Energy

- 51. **10-Gig Community** Evaluate the benefits of becoming a "10-gig" community.
- 52. Accessibility Improve accessibility and increase emphasis to natural areas. Provide access to Joe Dancer Park. Provide access to river.
- 53. **Alternative Highway Routes** Build alternate routes from highway for local access and to decrease traffic on main roads
- 54. **Bike Friendly** (a.k.a. Class IV) A roadway not designated by directional and informational markers, striping, signing nor pavement markings for the preferential or exclusive use of bicyclists, but containing appropriate bicycle-friendly design standards such as wide-curb lanes and bicycle safe drain grates.
- 55. **Bike Lanes** (*a.k.a. Class II*) A portion of a roadway that is designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Most often these are done in couplets, each

one being one way and adjacent to the outside through travel lane. Also called Bicycle Lanes. Add more bike lanes that are easily accessible, safe routes – residential. Construct bike lanes on Cumulus. Implement green-painted bicycle lanes, with at least two feet of separation from automobile traffic, along both NE Cumulus Avenue and SE Stratus Avenue. Add bike lanes, more extensive but also along 3 mile lane.

- 56. **Bike Paths** *Separate Facility* (*a.k.a. Class I*) A non-motorized facility, paved or unpaved, physically separated from motorized vehicular traffic by an open space or barrier. Also called Bicycle Path, Bike Trail, Non-motorized Trail, Multi-purpose Trail or some combination thereof. A bike path sometimes encompasses *shared use paths*, and multi-use paths, and is a paved path that has been designated for use by cyclists outside of the right of way of a public road. Plan long-range bike path network. Develop bike paths north of NW Joe Dancer Park. Develop bike path north of NE Norton Lane .
- 57. **Bike Racks** Design art bike racks to be placed near the Evergreen Aviation & Space Museum. This idea would pair well with the city's interest in building an extended network of connected bike lanes, as it would transform the museum into a family biking destination.
- 58. Bike Routes (a.k.a. Class III) A segment of road designated by the jurisdiction having authority, with appropriate directional and informational markers, but without striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Also called Bicycle Route. There is nothing different about the roadway, only that it has signs posted identifying it as a bike route. Develop pedestrian / bike access to

- downtown. Create more bike and pedestrian friendly paths, lanes and routes connecting to the city
- 59. **Cycle Track** A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Consider construction of a cycle track adjacent Three Mile Lane.
- 6o. **Dutch Intersection Design** Retrofit intersections in Three Mile Lane to "Dutch intersections"
- 61. **Electric Vehicle Charging Stations** Build a new electric vehicle charging stations in Highway 18. (The trend for future transportation.) Install EV charging stations in downtown
- **62. Electric Vehicles and Hybrids** Phase out gas powered city vehicles
- 63. **Frontage Road** Connect **frontage road** to more areas; currently dead end and needs easier access without circling back to Three Mile Lane. Complete access road.
- 64. **Intelligent Transportation System** Design the Three Mile Lane corridor with ITS concepts and technologies.
- 65. **Inter-modal Transportation** Design ITS to be highly inter-modal especially between car, cyclist and public transit.
- 66. Multi-modal Bridge Construct new Three Mile Lane multi-modal bridge to downtown
- 67. **Multi-modal Streets** Improve vehicular, public transit, bike and pedestrian connectivity. Create

attractive, multi-modal arterial roadways. Add pedestrian overpasses/ways to connect the whole area (north/south). Develop eastbound access from Highway 18 to downtown. Install traffic light and turn lane at west end of Cumulus. Build bypass roads for trucks and locals to reduce traffic on 3rd Street through City Center.

- 68. Multi-purpose Trail Design bike and pedestrian trail into downtown
- 69. **NE Cumulus Avenue** Replace the chain-link fence blocking NE Cumulus Avenue near Chemeketa Community College with removable bollards or other traffic control devices, in order to allow bicycle access without needing to either jump the curb or ride on NE Three Mile Lane proper.
- 70. **NE Cumulus Avenue** Connect Cumulus frontage road so that it continues along the length of 3-Mile Lane without breaks.
- 71. **NE Cumulus Avenue Pedestrian and Bicycle Thoroughfare** Create a wide (8'-12') protected Bicycle and Pedestrian thoroughfare along the frontage road, Cumulus.
- 72. **NE Kingwood Street** Connect the NE Kingwood St. neighborhood to the NE Cole Avenue neighborhood via foot/bike paths through the wooded area.
- 73. **NE Kingwood Street Underpass** Plan for the future construction of another, similar underpass at NE Kingwood Street, to connect to the eventual extension of SE Stratus Avenue to the east.
- 74. **Pedestrian and Bike Path Networks** Create paths of connectivity for easy access and better flow -

- Multimodal transportation, longer bike/pedestrian path networks
- 75. **Pedestrian and Bike Paths** Connect 3-Mile Lane to Joe Dancer Park with new Bike and Pedestrian pathways.
- 76. **Pedestrian and Bike Trails** Develop bike and pedestrian trails into downtown areas
- 77. **Public Transit Bus Line** To help build transportation lines to encourage residential growth in the area, there should be an increase in public bus transportation to transport anyone who lives in the 3 mile lane area to the city center.
- 78. **Public Transit Expansion** Extend bus and transit routes to reach more areas of McMinnville and to connect neighborhoods and communities
- 79. **Public Transit for Intercity Commuting** Work with Salem and/or Portland to establish electric intercity trains
- 80. **Public Transit on Three Mile Lane** Implement electric transit along 3 mile lane, downtown to the airport
- 81. **Renewable Energy Amphitheatre** The World Class Joe Dancer Amphitheatre Build as a renewable LEED certified building. This will give McMinnville yet another attraction to bring tourism into the growing city. This construction will tie in perfectly with the idea of 3-mile lane being a technologically advanced destination.
- 82. **Renewable Energy Bike Path** Build Solar Bike Path. (Example: solar bike path in Netherlands)

- 83. **Renewable Energy City Facilities** Replace all infrastructures with solar or wind powered at Three Miles Lane. (traffic lights, road lights...)
- 84. **Renewable Energy Gateway** Integrate well-designed solar panels or wind turbines into city gateway design.
- 85. Renewable Energy Gateway Lighting Redesign Gateway signs upon entry to three mile lane to be digitized LED lights that are solar powered. This will continue with the trend of technological innovations while allowing multiple messages or images to be displayed. Depending on the day, imagine being able to advertise which festivals are occurring in downtown as soon as you hit 3-mile lane.
- 86. **Renewable Energy Hydroelectric Dam** Develop a community hydroelectric dam adjacent the Yamhill River
- 87. **Renewable Energy Independence** Make a goal to go completely off-grid in Three Miles Lane area, and to become a paradigm for sustainable city, even for the country!
- 88. Renewable Energy McMinnville Airport Build Solar Wind-Turbines in the unused "Empty" space at the airport. As the terminal expands it is important to construct renewable energy generation options on and around the structures.
- 89. **Renewable Energy Platforms** Build free solar charging platform in public space, park...
- 90. **Renewable Energy Public Art** Build Solar Art Sculptures in Joe Dancer Park.
- 91. **Renewable Energy Public Art** Combine wind turbines or solar panels with public arts to install at

- public space and public gardens. (Airport Park and Joe Dancer Park) Install solar art along Three Mile Lane as either a temporary or permanent exhibit. Examples include solar flowers, animated wind turbine sculptures, lighted artwork, and others.
- 92. **Renewable Energy Public Transit** Set up planning to use electrical vehicles for all public transportation.
- 93. **Renewable Energy Roofs** Set up energy programs to promote installation of "solar roof" in residential, museum, hospital, and college.
- 94. **Renewable Energy Solar Farm** Dedicate an area to development of a community solar farm
- 95. **Renewable Energy Solar Panels** Install solar panels on homes before tax credit expires
- 96. Renewable Energy System Development Pass city ordinance to require all new capital construction projects include renewable energy system (solar, wind or bio-wastes...). Potential targets: new projects (like the hotel) around Evergreen aviation and space museum; new commercial or industrial business at Three Miles Lane)
- 97. Renewable Energy System McMinnville Airport
 Plan projects to reform airport as completely
 renewable energy powered. (Install solar PV or wind
 turbines. Potential location: terminal roofs, spare
 airport area. This could be an attracting characteristic
 for potential commerce)
- 98. **Renewable Energy Systems Program** Develop a renewable energy program to include consideration for: solar, wind, hydro, and biomass (geothermal and bio-wastes).

- 99. **Renewable Energy Wind Farm** Develop large areas within the airport influence zone as a wind farm.
- 100. Renewable Energy Wind Turbines with Aircraft
 Theme Plant miniature wind turbines along the road leading to the Evergreen Aviation & Space Museum, but design them to look like something else (such as aircraft propellers.)
- 101. **Renewable Energy Yamhill Bridge** Integrate well-designed wind turbines into new bridge design to represent as the second gateway for the city of McMinnville.
- 102.**Road Striping** Avoid road striping in the residential areas, especially in conjunction with shared spaces.
- Norton Lane. Keep new bridge more rural. The existing bridge should remain the main entry point to town. Engineer and construct a second bridge to the north across the Yamhill River, connecting NE Norton Lane with NE Riverside Drive. Ensure this bridge has protected access for bicycle and pedestrian travelers. Reconstruct the McMinnville bridge. The bridge currently cannot withstand any seismic impact and needs to be renovated. Upon analyzing the bridge, it was apparent that the structure is outdated and appears unstable and unsafe. Furthermore, if this bridge ever does collapse, half of the community will be cut off from major government services on the other side of the river (Fire Department, Hospital).
- 104. Sidewalk Expansion Add/expand sidewalks and setbacks. Finish Cumulus sidewalk.

- 105. **Smart City Street and Traffic Lights** Implement smart city technology that optimizes energy use one street lamps.
- 106.Solar Parking Lots Construct solar canopies to provide shade and store solar energy in large parking lots.
- 107.**Solar Roadways** Construct demonstration solar roadways in the industrial development areas as part of eco-efficiency.
- 108.**Street and Park Furniture** Install more benches along Three Mile Lane, public spaces, and parks
- 109.**Sustainable Development Curriculum** Teach kids in elementary school the importance of the environment, ecology and sustainability
- 110. **Three Mile Lane Pedestrian and Bike Path** There should also be looking to add a bike path to the center of town because it would reduce congestion across the bridge, as well to create a safer way to commute for the residents. Would increase interest to live on the 3 mile lane area of the bridge.
- 111. **Three Mile Lane Smart Street** Turn Three Mile Lane into a smart street by adding islands along the outer shoulders with trees planted along them to separate the car lanes from the bike lanes and implement various traffic ordinances to slow down traffic.
- 112. **Three Mile Lane Speed Limit** Lower the speed limit to 45 mph and create bike lanes on Three Mile Lane
- 113. **Three Mile Lane Street Trees** Plant new trees and native wetland species in plantings along 3-Mile Lane frontage road to create visual interest and edge out existing invasive grass coverage.

- 114. **Three Mile Lane Underpasses** Create 1-3 underpasses connecting the north side of 3-Mile Lane to the south, in proximity to the airport, and the hospital.
- 115. **Traffic Calming** We can also be looking at adding more lights on Highway 18 so that traffic could slow down, which would further the interest for residential development.
- no. Underpass for Pedestrians and Cyclists Build bike/ped bridge access from Joe Dancer Park and path under bridge to separate pedestrians to cars. Construct a bicycle and pedestrian underpass below NE Three Mile Lane, connecting NE Dunn Place with SE Stratus Avenue, providing protected access from the residential areas to the north with the medical center to the south.
- 117. **Walk Score** Measure mobility, access and connectivity development progress by *Walk Score*.
- 118. Yamhill River Bridge for Autos, Pedestrians and Cyclists Work with ODOT to ensure protected access for bicycle and pedestrian travelers across the Yamhill river when the current bridge is replaced or rebuilt.
- 119. Yamhill River Bridge for Pedestrians and Cyclists
 Connect the NE Dunn Place neighborhood with Joe
 Dancer Park via the construction of a pedestrian and
 bicycle bridge across the Yamhill river, and associated
 paved pathways allowing protected travel from NE
 Dunn Place to SE Brooks Street.
- 120. Yamhill River Bridge Multi-Modal Redesign a multi -modal bridge to the downtown area or add a second bridge connecting to more of the city

- 121. Yamhill River Bridge Pedestrian and Bike Lanes
 Add bike and pedestrian lanes to bridge. This second
 improvement will create a multi-modal bridge. This is
 perfect timing for upgrades with its pending
 reconstruction. Not only will it reduce carbon
 emissions, but hopefully it would increase people's
 decision to commute by foot or bike instead of by car,
 and will help with traffic flow and public health.
- 122. Yamhill River Bridge Public Art Using a Systems thinking approach rebuild the bridge as a multi-modal and multi-functional piece. Incorporating artistic design to use the bridge as the gateway to downtown's sense of place. While building in solar power collectors along the sides and top which are angled to collect rainwater runoff to be reclaimed for use in Joe Dancer park. On the underside of this bridge will be multi-modal construction to allow bikers, and pedestrians to safely cross.
- 123. **Yamhill River Bridge Seismic Upgrade** Repair primary bridge to be seismically resilient, and include protected bicycle and pedestrian access.
- 124. **Yamhill River Bridges** Reconstruct current bridge to be more structurally sound, add a second bridge to ease traffic or build a separate pedestrian and bicycle only bridge
- 125. **Yamhill River Secondary Bridge** Construct a secondary bridge with protected pedestrian and bicycle access connecting downtown to 3-Mile Lane to ensure safe and consistent connectivity during primary bridge's upcoming repair.

Sense of Place and Public Space

- 126.**Air Shows** Bring in air show attractions to compliment the air museum
- 127. **Airport Park Aviation Theme** Develop an aviation theme for signage, public art, urban design elements, etc. Construct airplane-themed play structures. Add airplane-themed public artwork.
- 128. Airport Park Family Design Update Airport Park to be more kid friendly
- park. McMinnville has a large demographic of families, and redesigning the Airport Park could be a nice treasure hidden within the city. It already has mushroom structures big enough for kids to play inside, but if it was maintained correctly, it could appear to be an enchanted forest in McMinnville.
- 130. Amphitheater Construct Joe Dancer Park amphitheater. Create amphitheater for 1000+ people. Move and create better fairgrounds with multi-use amphitheater. Create an amphitheater for festivals, live performances, public events, etc. One of the more simple things that can easily tie a community together is music. An amphitheater or central gathering location is a great way for any town to get to know one another and build unity.
- 131. Architectural Themes Maintain architectural themes in new development

- 132. **Bio-Solar Roofs** Incentivize development of bio-solar roofs that combine green roof vegetation with solar panels
- 133. **Branding and Aviation** Play up the flight theme; create bars, restaurants, and souvenir shops around three mile lane that are related to flight.
- 134. **Branding and Wayfinding** Update signage letting people know when they get to McMinnville gateway signage (on three mile lane and then again for the historic downtown area, also advertise parks and bike trails more)
- 135. **Branding Logo** Consider a logo that represents the Three Mile Lane. The logo should be put on signage along or at the beginning of the Three Mile Lane to show where the lane begins and ends. The logo will add uniqueness to the lane and give it character and identity. Design a Three Mile Lane logo. A simple but necessary factor in constructing a sense of place is the sign itself. Since the wine industry could play a big future role in tourism as well as building a sense of community, a design with grapes could be part of the imagery.
- 136. Carnaval Organize a regional Latino Carnaval festival. This could include a parade, outdoor events and activities. [February 8—13, 2018]
- 137. **City Comforts** Provide "city comforts" throughout the corridor. These include bus shelters, drinking fountains, kiosks, outdoor dining, pedestrian signage, and so on.
- 138. **Community Artwork** Create more community artwork. The uniqueness of place comes from the structures and art produced by the

- community. Looking at art makes the place resonate with the subject and is memorable.
- 139. Community Chicken Coop Create a community chicken coop at or near the community gardens. This will expand assess to cheap, healthy food and foster a sense of community in this area. It can also help teach children how to care for animals.
- 140. Community Festivals and Events Organize more community festivals and events. Opportunities for the community to congregate would benefit any city and improve the sense of place as well as a sense of belonging, resulting in increased care and concern for the well-being of the city.
- 141. **Community Garden Committee** Form a planning committee of people who would be devoted to the garden. Form multiple committees that handle different aspects of the garden (ex: funding, construction, communication, youth activities, and partnerships).
- 142. **Community Garden Experts** Identify the skills and resources that are already present that could aid in building a community garden. Contact planners, horticulture societies, and landscapers for assistance.
- 143. **Community Garden for Children** Plan for children. The idea of a specially designed garden for children should be considered. A separate garden for children will allow them to learn and experiment at their own speed.
- 144. **Community Garden in Aspire Park** Implement a community garden in one sunny corner of Aspire Park. See steps above for implementing guidelines.

- interaction. Great communication makes a successful community garden. Create a phone list, email list, bulletins, and celebratory gatherings.
- 146.**Community Garden Public Meeting** Organize a meeting of community members interested in creating a community garden. Determine whether a garden is needed or wanted and who will be involved.
- 147. **Community Garden Regulations** Determine rules for the garden and put them in writing. Create a code of conduct that everyone will agree with. These rules should be created by the community members and should be a collaborative effort.
- 148. Community Garden Sites Choose a site. The best spots for a community garden on the Three Mile Lane will be on a vacant plot in a residential area, adjacent to the hospital, and adjacent to or inside Airport Park. Find out who owns the land and if you can get a lease agreement. Decide if public liability insurance is necessary.
- 149.**Community Garden Sponsors** Find a sponsor. For example private businesses, schools, churches, or parks and recreation departments are always possible sponsors.
- 150. Community Gardens and Farmers' Markets
 Reserve space for community gardens and farmers
 markets. If an area is set aside for festivals and other
 community gatherings, the city could also advance
 their means of cultivating local vegetation. It is
 important for any community to be self-sustaining,
 and located in farm country, McMinnville could easily
 hold more farmers markets or even set aside land for a
 community garden.

- 151. **Community Work Day** Implement a community work day in which students, or any citizens, get sponsors for a days work cleaning up parks and public spaces like joe dancer and airport park. The Money is donated to public school local non-profit like habitat for humanity or McMinnville parks and recreation.
- 152. **Competitions** Organize competitions for public art, landscape and urban design.
- 153. **Cultural Events** Program continuous community activities, events, celebrations, festivals... Citizens committees can organize, fund-raise and conduct small -scale and city-wide events with guidance from City officials.
- 154. **Dia de los Muertos Holiday** Organize a regional Latino "day of the dead" festival. This could include a parade, outdoor events and activities. [October 31-November 2, 2018]
- 155. Easter Eggs Provide "Easter eggs" throughout the corridor. These are hidden or unexpected features in the community that are often discovered accidentally. They include small public art, humorous signage, creative design details, and more. These are especially important for children to enhance their urban experience which is largely designed for adults.
- 156. Eco-Identity Develop programs for community activities and projects that create and support eco-identity.
- 157. **Edible Garden** Plant an edible forest garden in Joe Dancer Park.
- 158.**Edible Landscape** Plant fruit trees in the city via community service initiative .

- 159. **Festival Street** Select a local commercial street to be redesigned as a "festival street" to accommodate seasonal and special community events.
- 160.**Frontage Road Expansion** Continue frontage road and connect it to more areas as it currently has dead ends, residents currently have to loop back onto Three Mile Lane to access other areas
- 161. Gateway Signage / Entry Statement Improve signage/gateway to McMinnville. Create gateways to McMinnville. Add signage at the far east end of the study area to signify the arrival into McMinnville, focus signage design on what makes east side McMinnville special. Aim to improve signage and enhance the gateway to McMinnville
- 162. **Gateway Design Competition** Organize a design competition for the Three Mile Lane gateway.
- 163. **Green Street Impervious Pavement Sidewalks**Impervious pavement: Create sidewalks running all the way through three mile lane and pave with impervious cement
- 164.**Green Street Median Bioswales** Frontage Roads: Connect frontage roads throughout the north side of three miles lane with center median bioswales which will add aesthetic value and slow traffic.
- 165. **Green Streets** Develop Three Mile Lane as a green street with bioswales. Where feasible develop new streets with rainwater gardens for stormwater management, water quality control, and landscape irrigation.
- 166. Greenspace Enhance natural amenities. Maintain and update Airport Park that provides family friendly use. Update Airport Park

- 167. Greenway Create bike, walking, greenway that connects Three Mile Lane to downtown. Create green space parallel to main road.
- 168. Habitat-Friendly Development Practices Create and incentivize habitat-friendly development practices especially adjacent the Yamhill River Greenway.
- 169. Historic Preservation Protect historic buildings to preserve history and culture of McMinnville. Keep the rural qualities of McMinnville. Design new commercial development to feel intimate. Develop denser commercial land. Construct noise barrier to prevent noise pollution. Protect historic buildings to preserve the history and culture of McMinnville. Build tourism around these buildings with tours/museums/visitor centers.
- 170. **Information Kiosk and Library Shelf** Build a small community library shelf and information kiosk, where residents can take or leave books and hang up flyers for local events.
- 171. **Information Kiosks** Create kiosk maps for Three Mile Lane with locations of stores, restaurants, parks, etc.
- 172. Landscape with Grapes Use grapes as a theme throughout your landscaping to reinforce McMinnville as a wine destination. If you plant vines a cotton candy grapes or juniper grapes they will grow quickly and easily, and are delicious. Tourists and community members will be able to snack on grapes as the wonder throughout McMinnville. This example of edible landscaping adds character and flavor into the city.

- 173. Landscape with Mulch Use mulch throughout Joe Dancer and Airport park to keep weeds and invasive species at bay.
- 174. Landscape with Native Ground Cover Replace your conventional lawn grass into ornamental grasses and native ground cover like wood sorrel to reduce maintenance and water usage.
- 175. Landscape with Native Plants Combat the invasive blackberry growth on Joe Dancer park by taking out the blackberries and planting native and sustainable plants like sword and broken ferns and Oregon grapes. These durable, shade tolerant plants will require little maintenance once established.
- 176.**Mushroom House Design Contest** Host a Mushroom House Design Contest
- 177. **Mushroom House Event** Involve local artists, schools, and businesses in the creation of the mushroom structures
- 178. Mushroom House Renovation or Removal
 Renovate or remove the mushroom house and other concrete sculptures.
- 179. **Parklets** Use on-street parking spaces as temporary public space for special events and activities.
- 18o. Pavement, Colored Use colored pavement to distinguish bike lanes. This can be accomplished by paving travel lanes with concrete and bike lanes with asphalt, or the reverse; slurry-sealing or chip-sealing the roadway and not the bike lanes, and incorporate dyes into concrete or asphalt.

- 181. **Pavement, Pervious** Wherever possible, substitute impervious with pervious surfaces such as grasscrete, pavers, etc.
- 182. Pavement, Textured For commercial and institutional sidewalk crossings, use textured and/or color pavement such as pavers or stamped concrete.
- 183. **Public Amenities** Install functioning water fountains and trash receptacles
- 184.**Public Art Bike Racks** Create public art in the form of bike racks in key locations
- 185. Public Art Design Competition Hold a design competition among local artists for the painting of electrical and utility boxes. Each winner would realize their vision on one box in the study area.
- 186.**Public Art Design Workshop** Facilitate public design workshops to determine what kind of art to place within the city. Public approval of new installations will be greater if citizens are involved in the selection process.
- 187. **Public Art Mural** Paint a mural on an intersection in the area near NE Norton. Involve the community in design and painting of the street. This could help develop a neighborhood identity in the area.
- 188. Public Art Murals for Cinema and College
 Commission a mural in collaboration with the cinema to create something on the west side of their building. A movie-themed design would brighten the strip mall, yet as the cinema falls between two Chemeketa
 Community College buildings, there is an opportunity to design something that blends well with the landscape and spirit of the region.

- 189. Public Art Presidential Statues Expand the collection of presidential statues in the city to areas around the Three Mile Lane. There is already a Ben Franklin downtown and an Abe Lincoln near the community center. Adding more would solidify their status as symbols of the city.
- 190. Public Art Sculpture Incorporate art sculptures or murals relevant to the history or future of McMinnville to give the area a sense of identity and place
- 191. **Public Art that is Interactive** Bring in more public art that is interactive throughout the city and the three mile lane area
- 192. Public Art incorporating Renewable Energy
 Develop a variety of public art installations that
 include wind or solar energy generation. These public
 art works may include animated elements or lighting
 powered by generated energy.
- 193. Public Space in Joe Dancer Park or Event Services
 Add a public gathering space such as terraced steps
 around a central area, either in Joe Dancer Park or as
 part of the expansion of event services north of the
 Three Mile Lane. The area should be accessible to all
 members of the community.
- 194. **Public Spaces** Identify areas of the heaviest activity and foot traffic, and construct public spaces there. (Playgrounds, fountains, places to sit, unobstructive plantings, and places for food trucks to park are a few examples of features that could be included in a public space.)
- 195.**Roundabouts** Use roundabouts to promote orderly traffic flow at moderate to high volumes and designate gateways.

- 196. Sense of Place, Imageabilty, Identity Plan and design for sense of place through architecture, landscaping, public art, urban design, wayfinding and signage that is consistent with the theme supporting the project vision.
- 197. Setbacks Create setbacks between road and new commercial / industrial development
- 198.**Shared Spaces** Redesign local streets to become "shared spaces."
- 199. **Street Art** Organize street art events for temporary and/or permanent pavement markings.
- 200. Streetscapes Update streetscapes (trees, lights, theme signs) with safety in mind
- 201. Three Mile Lane Media Dedicate specific media for Three Mile Lane i.e. newspaper section, website, social media...
- 202. Three Mile Lane Park Add park at west end of study area. Create a park at the end of the three mile lane area (leaving McMinnville) for further expansion
- 203. Three Mile Lane Seasonal Banners Line the Three Mile Lane with banners that can be changed out seasonally or for special occasions. For instance, special designs for the annual UFO festival could indicate to through traffic that an event is occurring in town.
- 204.**Three Mile Lane Signage** Redo the signage throughout Three Mile Lane to create a consistent sense of place.
- 205.**Traffic Calming** Utilize innovative traffic calming techniques such as curb extensions, chicanes, pavement treatments, etc.

- 206.**Visioning** Establish a long term vision for growth for Three Mile Lane
- 207. **Wayfinding and Signage** Implement creative wayfinding signs to promote travel via bicycle and walking. These should provide directions and distances to recreation, entertainment and commercial businesses.
- 208.Yamhill River Floodplain Greenbelt Consider the use of the Yamhill River floodplain as a greenbelt, with walkable and bikeable pathways along the river connecting Joe Dancer Park with Airport Park to the southeast, and with the future development south of NE Miller Street to the northeast. Design benches, lighting, and other furniture to withstand occasional flooding without suffering damage.
- 209. Yamhill River Greenway Improve the usability and accessibility to the Yamhill River on both the north and south sides of Three Mile Lane.
- 210. **Yamhill River Public Access** Create more public access points to the river



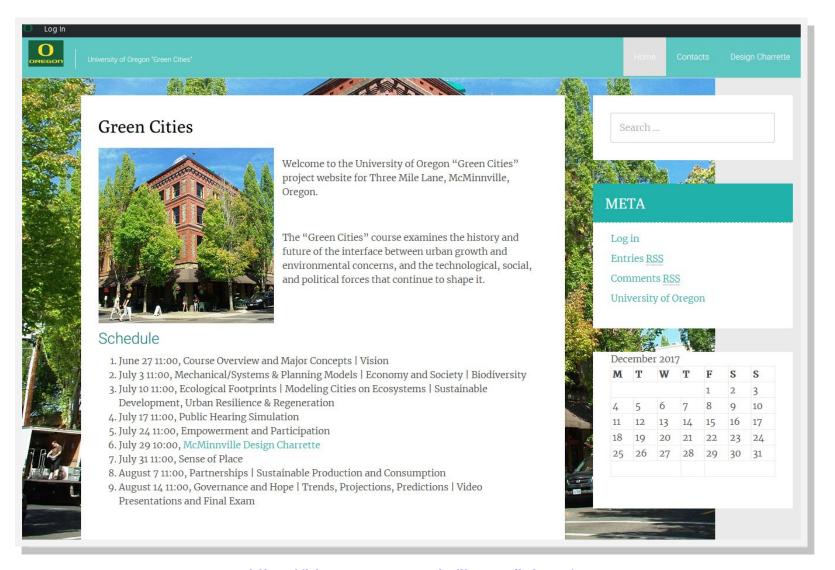


Videos

- Jake Boone Connectivity https://youtu.be/kN9966E3YaU
- Sasha Burrows Community Gardens https://youtu.be/h-7imfY_I4
- Colton Clark Integrating Bike Friendly City Design https://youtu.be/uKRHQ8DqVNA
- Savannah Edson Public Art: Building Community and Creating Sense of Place https://youtu.be/EdJCvvx-Ogs
- Naomi Greenwald Sustainable Landscaping https://youtu.be/bTwJpQVxSeg
- O Hunter Hollander Zero Carbon Cities https://youtu.be/uJyVvKkRo-g
- O Robert Holloway Public Space Sense of Place https://youtu.be/R4ZgCQ7Btbo
- Lindsay Jacobson Regenerative Public Spaces https://youtu.be/A2HtvlcMSTQ
- O Grace Miller The Do's and Don'ts of Public Art https://youtu.be/I0J6qSm_gVk
- Emily Nguyen Multimodal Transportation: Living and Traveling Together https://youtu.be/ NUGbpRBtU1Y
- Kyra Ortiz Urban Culture and Heritage https://youtu.be/bPcE0R6HG7A
- O Mons Roll Municipal Finance https://youtu.be/TcVICR-dyNU
- Nikki Samson Tuason Mixed-Use Development in McMinnville's Three Mile Lane https://youtu.be/BdBIKTv3ezg
- Mindy Schlitt Genius Loci: The Spirit of a Place https://youtu.be/rP4QKLYMbZY
- O Will Talbot Sustainable Architecture at Three Mile Lane https://youtu.be/SYOYAGLxt4U
- Michael Walker Innovation Districts https://youtu.be/gs8YXOFXUYA
- O Qi Wang Public Transportation https://youtu.be/I1fBc5uBlwE
- Xiaoyu Wang Recommendations for the City of McMinnville Urban Design https://youtu.be/ jGA82D0eakQ
- O Nathan Watkins-Hoagland Resilient Cities https://youtu.be/nORX8cgX55A
- Haoyi Yuan Renewable Energy and Sustainable City https://youtu.be/BfJu3BxSMIY
- Shifan Zhao Climate and Climate Change and Risk Management https://youtu.be/z-Z-1IfoEPc



Project Website



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Research Team Photo



Public Hearing Simulation, Harris Hall, Eugene



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