City of McMinnville
Planning Department
231 NE Fifth Street
McMinnville, OR 97128
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MEMORANDUM

DATE: **February 15, 2022**
TO: **Planning Commission Members**
FROM: **Heather Richards, Planning Director**
SUBJECT: **New Public Record for G 7-21, Three Mile Lane Area Plan**

Staff has been fielding many different information requests relative to the Three Mile Lane Area Plan since the last planning commission public hearing on January 20, 2022.

Most are related to information that is already in the record. However, some of the email exchanges provide new information for the record or clarify other information for the record.

For those items that ask questions or there is additional content that is not part of the public hearing public record, we have included them in this packet with their attachments.

The attachments will be individually identified as part of the record as well.

From: Heather Richards
To: Mark Davis
Subject: FW: 3MLAP Adoption - Help Needed with some ?s
Date: Thursday, January 20, 2022 10:38:00 PM
Attachments: image001.png
image003.png

Hi Mark,

I thought I had forwarded this to you today and realized that I had not when you brought it up in your oral testimony. Below is the answer from ODOT on some of your questions. The remaining three we would need to contract with our David Evans and Associates to run the modeling and provide the answers. My budget is tight this year due to the HB 2001 and HB 2003 work we are doing. I will look and see if we have the resources and ask the Planning Commission if that information would be helpful to them in their decision-making.

Have a great day!

Heather

City of McMinnville
PLANNING

Heather Richards, PCED
Planning Director
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From: DUNCAN Michael W <Michael.W.DUNCAN@odot.oregon.gov>
Sent: Thursday, January 20, 2022 1:24 PM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Subject: RE: 3MLAP Adoption - Help Needed with some ?s

Heather,

Thanks for reaching out.

Regarding the grant award, the TGM program's intent is that the grant funds are used for the development and completion of an adoption ready plan. The 3MLAP project has met that intent, as developing the plan and leading it up to (and through, hopefully) adoption has been done in good faith.

Regarding the additional questions posed, I can provide a response to the first two bullets (see below). The remaining questions require a more technical answer. Is it possible to have DEA respond to the analysis related questions if they are under contract with the city?

-michael

Michael W. Duncan | Senior Region Planner, TGM Grant Manager
Transportation and Growth Management Program
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350 W. Marine Drive | Astoria, OR 97103
C: 503.710.1781
michael.w.duncan@odot.oregon.gov | http://www.oregon.gov/lcd/tgm

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From: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Sent: Wednesday, January 19, 2022 5:51 PM
To: DUNCAN Michael W <Michael.W.DUNCAN@odot.oregon.gov>
Subject: 3MLAP Adoption - Help Needed with some ?s
Importance: High

Hi Michael,

Our first evidentiary hearing for adopting the Three Mile Lane Area Plan is tomorrow night. Mark Davis had some questions that I wanted to pose to you..

Prior to that though I wanted to understand what happens if we cannot get the Area Plan adopted. I know that it was part of the grant contract and I want to make sure that I understand the consequences.

MD's Questions Below:

- When did the City and/or ODOT decide Highway 18 should no longer function as a limited-access expressway?
  The plan will not change the classification of Highway 18.
- What is the speed limit going to be along Highway 18 if the TMLAP is approved?
  The plan will not change the posted speed.
- How long will it take to travel from Cruikshank Road to the overpass from McMinnville?
- What level of usage does the TMLAP project for the pedestrian crossings at the two traffic lights?
- What is the difference in accident rates in this corridor between an expressway with only overpass access and the proposal to keep two traffic lights and add a roundabout?

Have a great day!

Heather

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From:	Heather Richards
To:	Mark Davis
Cc:	Amanda Guile-Hinman
Bcc:	pcschanche; pcwinfield; pcrankin; pcrandall; pclangenwalter; pctucholsky; pcbanagay; pcdeppe; pcmcclellan
Subject:	FW: 3MLAP - Information Request
Date:	Thursday, January 20, 2022 3:25:00 PM
Attachments:	We sent you safe versions of your files.msg Appendix B_2041 Intersection LOS_Comp Plan.pdf Appendix B_2041 Intersection LOS_Pref Alt.pdf image002.png

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Mark,

Please find attached the information that you requested (Appendix B to Tech Memo 8C). You will note from the consultant email below that Andrew Mortensen is willing to meet with you to discuss the data sheets if staff is present.

We will amend our public record to include these.

Have a great day!

Heather

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From: Andrew Mortensen <Ajmo@deainc.com>
Sent: Thursday, January 20, 2022 3:16 PM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Cc: Andrew Parish <aparish@angeloplanning.com>; Darci Rudzinski (drudzinski@angeloplanning.com) <drudzinski@angeloplanning.com>
Subject: RE: 3MLAP - Information Request

Hello Heather

Here are the two PDF files that constitute Appendix B to our 8C Memo. My recollection is that we sent these only to the TAC as they are really technical traffic engineering material - Synchro output files for intersection levels of service for the two future scenarios: Comprehensive Plan and Preferred 3MLAP. Each file is a combination of three individual files prepared back in March 2021 that we have packaged today for easier distribution.

Let me know if you have any questions. These reports require some interpretation for public dialogue. I'd gladly talk this through with Mark Davis, but with City Staff on the line.

Andy

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Mark Davis
652 SE Washington Street
McMinnville, OR 97128

February 15, 2022

McMinnville Planning Commission
231 NE Fifth Street
McMinnville, OR 97128

Dear Chair Winfield and Members of the Commission:

At your last meeting the Planning Director spent more than an hour explaining all the features of the Three Mile Lane Area Plan (TMLAP) covering 1340 acres. We heard about many desirable uses:

- 320 apartment units approved by the Planning Commission in Planned Development Amendments (PDAs) in 2019 and 2020
- 140-160 acre corporate campus site designated for an innovation center
- 40-60 acres of walkable large format retail currently subject to rezoning proposals
- Mixed Use areas proposed between the hospital and the large format retail including another 360 housing units
- Evergreen Museum plans for a "new hotel, retail and event space"
- Chemeketa Community College expansion of its programs (assuming the frontage road extension does not remove one of their buildings)
- Conversion of the current sand and gravel site into a Mixed Use development
- An extensive trail system with safe crossings of the highway for bicycles and pedestrians.

What we didn't hear was a clear explanation of how all the uses would interact with the real elephant in the room—Highway 18 that is already serving more than 20,000 vehicles on an average day. Instead, we were told that the traffic experts had run the numbers and the Levels of Service (LOS) at the two traffic lights were acceptable through 2041. What we were not told is which of the land uses listed above were being modeled in the intersection analysis study.

LOS Discussion: Today I had an opportunity to discuss my concerns about the LOS calculations with Andrew Mortensen, the traffic engineer with David Evans and Associates who wrote memorandum #8c in Appendix D of the TMLAP. I am attaching the Synchro reports that calculated those LOS numbers that are referenced in Appendix B to memorandum #8c.

Mr. Mortensen explained that the underlying assumptions driving the LOS calculations are not the specific land uses like those I have listed above, but rather general land use categories incorporated into a model that ODOT has created for these sorts of projects. I believe both Mr. Mortensen and a representative of ODOT will be present at the hearing on Thursday to explain this to you in greater detail.

As I told him, I still worry that there can be significant traffic differences between the theoretical output of the model and the real-life projects that will actually get built. He told me that when actual development plans move forward that both ODOT and the City will be reviewing their impact to make certain there is no adverse impact on the LOS calculations at the lights, and if so, to propose solutions to keep the Highway functioning under Expressway standards.

I pointed out that the Synchro reports did not include the impact of pedestrians and cyclists using the "Walk" signal at Norton Lane, something I reported in last month's testimony added 45 seconds to the time it takes the light to cycle there. Mr. Mortensen admitted that was an issue and asked his staff to run a report to try and model the impact. He said that even with large numbers of pedestrians the LOS still increased by only .02 or .03, leaving it just below the .80 standard.

Based on this conversation I don't think there is evidence that Highway 18 will fail to perform as projected in the TMLAP. Given how close the Norton Lane traffic signal is to failing to meet Expressway standards, it is critical that going forward that all parties with legal jurisdiction over access to the highway—ODOT, planning staff and you members on the Planning Commission—need to pay close attention to all land use proposals that impact the highway. Because the solutions are both expensive and take a long time to implement, waiting until after the problem is obvious to everyone should not be acceptable.

Everyone should understand that does not mean that if the TMLAP is adopted in its current form that traffic will flow like it does today over the next 20 years. The increasing LOS ratios mean there will be more congestion and more time spent waiting at the traffic lights or going through the proposed roundabout. We also need to acknowledge that the LOS calculations are based on typical workday traffic patterns, not Friday afternoons in the summer with everyone headed to the coast. There are going to be times like that when Highway 18 does not meet LOS standards.

Non-Traffic Concerns: Just because the TMLAP can potentially meet LOS standards for the next 20 years, doesn't mean that its adoption is an excellent idea. The concerns that various community members have raised about the impact on existing local businesses deserve your careful consideration.

The TMLAP sets a framework for development in the area that is going to be cited repeatedly by applicants for zone changes. It was already being cited last year as justification in a rezoning application before the TMLAP had even had its first public hearing.

Given the general nature of the suggestions for development included in the plan, we don't really know what we are signing on for. As the Planning Director pointed out to me in a recent email:

> "With all that said, we have no idea what will be built on the commercial land. It could be big box retailers and fast-food drive-ups as depicted in the Friends of Yamhill County alert to their membership and most recently in the letters to the paper, but the reality is that it could be bought by Bill Stoller tomorrow and become an extension of the museum campus. The vision as depicted in the Three Mile Lane Area Plan calls for a mixed-use commercial center (office and retail) and we are recommending the comprehensive plan map amendment to create a path for that vision to occur. But we cannot plan for growth beyond what the comprehensive plan map designation acknowledged growth pattern is until such time that a development project materializes. At that time the developer will need to do a traffic impact analysis based on the development planned to identify if it meets the criteria of the transportation facilities that it impacts."

Conclusion: As I have said to you previously, I support the TMLAP's recommendations for the land north of Highway 18. Completing the Cumulus Avenue frontage road (hopefully without damaging Chemeketa's future plans) will allow multi-modal transportation on that side of the highway to go back and forth into town without accessing Highway 18.

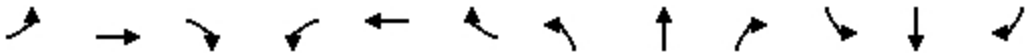
I oppose further development south of Highway 18 until there is a way to incorporate overpasses to allow the safe movement across the highway by pedestrians, cyclists and vehicles. As long as the only access is through traffic lights, essentially the only access will be from motor vehicles. We cannot create a truly walkable shopping environment if the only way to get there is in a car.

Thank you for your consideration of my opinions in this matter.

Sincerely,

//S//

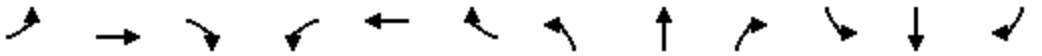
Mark Davis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1025	120	120	1130	120	405	45	200	135	10	85
Future Volume (vph)	60	1025	120	120	1130	120	405	45	200	135	10	85
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88		1.00	0.87	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1599	3228	1385	1614	3228	1403	3193	1459		1630	1463	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1599	3228	1385	1614	3228	1403	3193	1459		1630	1463	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	62	1068	125	125	1177	125	422	47	208	141	10	89
RTOR Reduction (vph)	0	0	64	0	0	66	0	131	0	0	81	0
Lane Group Flow (vph)	63	1068	61	125	1177	59	422	124	0	141	18	0
Confl. Peds. (#/hr)			2						1			2
Heavy Vehicles (%)	4%	3%	5%	3%	3%	6%	1%	5%	4%	2%	0%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	7.8	43.0	43.0	12.1	47.3	47.3	18.9	13.4		13.8	8.3	
Effective Green, g (s)	9.3	45.0	45.0	13.6	49.3	49.3	20.4	14.9		15.3	9.8	
Actuated g/C Ratio	0.09	0.43	0.43	0.13	0.47	0.47	0.19	0.14		0.15	0.09	
Clearance Time (s)	5.5	6.0	6.0	5.5	6.0	6.0	5.5	5.5		5.5	5.5	
Vehicle Extension (s)	2.5	5.2	5.2	2.5	5.2	5.2	2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	141	1386	594	209	1518	659	621	207		237	136	
v/s Ratio Prot	0.04	0.33		c0.08	c0.36		c0.13	0.08		c0.09	0.01	
v/s Ratio Perm			0.04			0.04						
v/c Ratio	0.45	0.77	0.10	0.60	0.78	0.09	0.68	0.60		0.59	0.13	
Uniform Delay, d1	45.3	25.5	17.8	43.0	23.1	15.3	39.2	42.1		41.9	43.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	3.2	0.2	3.8	3.0	0.1	2.7	3.8		3.3	0.3	
Delay (s)	46.9	28.7	18.0	46.8	26.2	15.5	41.9	46.0		45.2	43.9	
Level of Service	D	C	B	D	C	B	D	D		D	D	
Approach Delay (s)		28.6			27.0			43.4			44.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	104.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1253	2	2	1211	40	2	2	3	95	1	150
Future Volume (vph)	120	1253	2	2	1211	40	2	2	3	95	1	150
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	1568	3228		1662	3228	1488		1626		1614	1750	1430
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95		0.75	1.00	1.00
Satd. Flow (perm)	1568	3228		1662	3228	1488		1558		1280	1750	1430
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	125	1305	2	2	1261	42	2	2	3	99	1	156
RTOR Reduction (vph)	0	0	0	0	0	17	0	3	0	0	0	135
Lane Group Flow (vph)	125	1307	0	2	1261	25	0	4	0	99	1	21
Heavy Vehicles (%)	6%	3%	0%	0%	3%	0%	0%	0%	0%	3%	0%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		4
Actuated Green, G (s)	11.6	60.7		0.9	50.0	50.0		10.5		10.5	10.5	10.5
Effective Green, g (s)	13.1	62.7		2.4	52.0	52.0		12.0		12.0	12.0	12.0
Actuated g/C Ratio	0.15	0.70		0.03	0.58	0.58		0.13		0.13	0.13	0.13
Clearance Time (s)	5.5	6.0		5.5	6.0	6.0		5.5		5.5	5.5	5.5
Vehicle Extension (s)	2.5	5.2		2.5	5.2	5.2		2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	230	2271		44	1883	868		209		172	235	192
v/s Ratio Prot	c0.08	0.40		0.00	c0.39						0.00	
v/s Ratio Perm						0.02		0.00		c0.08		0.01
v/c Ratio	0.54	0.58		0.05	0.67	0.03		0.02		0.58	0.00	0.11
Uniform Delay, d1	35.2	6.6		42.2	12.7	7.9		33.5		36.2	33.4	33.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.1	0.6		0.3	1.3	0.0		0.0		3.8	0.0	0.2
Delay (s)	37.3	7.2		42.5	13.9	7.9		33.5		39.9	33.4	34.0
Level of Service	D	A		D	B	A		C		D	C	C
Approach Delay (s)		9.8			13.8			33.5			36.3	
Approach LOS		A			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	89.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	55

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	5	1	320	1	1	2	350	760	5	5	875	5
Future Vol, veh/h	5	1	320	1	1	2	350	760	5	5	875	5
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	0	2	3	0	25	3	0
Mvmt Flow	5	1	344	1	1	2	376	817	5	5	941	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2531	2539	944	2709	2539	835	946	0	0	833	0	0
Stage 1	954	954	-	1583	1583	-	-	-	-	-	-	-
Stage 2	1577	1585	-	1126	956	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.1	6.5	6.2	4.12	-	-	4.35	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.5	4	3.3	2.218	-	-	2.425	-	-
Pot Cap-1 Maneuver	19	28	~ 319	14	28	371	725	-	-	709	-	-
Stage 1	313	340	-	138	170	-	-	-	-	-	-	-
Stage 2	139	170	-	251	339	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	10	13	~ 319	-	13	366	725	-	-	702	-	-
Mov Cap-2 Maneuver	10	13	-	-	13	-	-	-	-	-	-	-
Stage 1	151	338	-	66	81	-	-	-	-	-	-	-
Stage 2	65	81	-	-	337	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 376.1		4.8	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	725	-	-	206	-	702	-	-
HCM Lane V/C Ratio	0.519	-	-	1.702	-	0.008	-	-
HCM Control Delay (s)	15.2	-	-	$ 376.1	-	10.2	-	-
HCM Lane LOS	C	-	-	F	-	B	-	-
HCM 95th %tile Q(veh)	3	-	-	23.6	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	32.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	5	1	5	5	200	5	914	5	100	1091	5
Future Vol, veh/h	1	5	1	5	5	200	5	914	5	100	1091	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	5	1	5	5	217	5	993	5	109	1186	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2524	2415	1189	2416	2415	996	1191	0	0	998	0	0
Stage 1	1407	1407	-	1006	1006	-	-	-	-	-	-	-
Stage 2	1117	1008	-	1410	1409	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	19	33	229	22	33	297	586	-	-	693	-	-
Stage 1	172	205	-	291	319	-	-	-	-	-	-	-
Stage 2	252	318	-	172	205	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	2	17	229	11	17	297	586	-	-	693	-	-
Mov Cap-2 Maneuver	2	17	-	11	17	-	-	-	-	-	-	-
Stage 1	169	109	-	285	313	-	-	-	-	-	-	-
Stage 2	65	312	-	87	109	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 761.9	$ 329.6	0.1	0.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	586	-	-	9	148	693	-	-
HCM Lane V/C Ratio	0.009	-	-	0.845	1.542	0.157	-	-
HCM Control Delay (s)	11.2	0	-	$ 761.9	$ 329.6	11.2	0	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	15.5	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1345	5	5	1245	10	15
Future Vol, veh/h	1345	5	5	1245	10	15
Conflicting Peds, #/hr	0	5	5	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	0	3	0	0
Mvmt Flow	1401	5	5	1297	10	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1411	0	2068	708
Stage 1	-	-	-	-	1409	-
Stage 2	-	-	-	-	659	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	490	-	48	382
Stage 1	-	-	-	-	195	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	488	-	47	380
Mov Cap-2 Maneuver	-	-	-	-	47	-
Stage 1	-	-	-	-	194	-
Stage 2	-	-	-	-	477	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	53.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	99	-	-	488	-
HCM Lane V/C Ratio	0.263	-	-	0.011	-
HCM Control Delay (s)	53.9	-	-	12.5	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1340	20	5	1225	25	30
Future Vol, veh/h	1340	20	5	1225	25	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	0	0	3	0	0
Mvmt Flow	1396	21	5	1276	26	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1417	0	2055	709
Stage 1	-	-	-	-	1407	-
Stage 2	-	-	-	-	648	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	487	-	49	381
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	487	-	49	381
Mov Cap-2 Maneuver	-	-	-	-	49	-
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	483	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	73.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	49	381	-	-	487	-
HCM Lane V/C Ratio	0.531	0.082	-	-	0.011	-
HCM Control Delay (s)	142.4	15.3	-	-	12.5	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th %tile Q(veh)	2	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	27.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	110	1265	1080	55	45	145
Future Vol, veh/h	110	1265	1080	55	45	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	4	3	3	0	9	0
Mvmt Flow	115	1318	1125	57	47	151

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1182	0	-	0	2043	591
Stage 1	-	-	-	-	1154	-
Stage 2	-	-	-	-	889	-
Critical Hdwy	4.18	-	-	-	6.98	6.9
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.24	-	-	-	3.59	3.3
Pot Cap-1 Maneuver	575	-	-	-	~ 45	455
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	345	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	575	-	-	-	~ 36	455
Mov Cap-2 Maneuver	-	-	-	-	~ 36	-
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	345	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	$ 383.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	575	-	-	-	121
HCM Lane V/C Ratio	0.199	-	-	-	1.636
HCM Control Delay (s)	12.8	-	-	-	$ 383.6
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.7	-	-	-	14.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1305	1115	3	15	20
Future Vol, veh/h	5	1305	1115	3	15	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	75	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	14	2	3	0	27	11
Mvmt Flow	5	1374	1174	3	16	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1177	0	-	0	1871	587
Stage 1	-	-	-	-	1174	-
Stage 2	-	-	-	-	697	-
Critical Hdwy	4.38	-	-	-	7.34	7.12
Critical Hdwy Stg 1	-	-	-	-	6.34	-
Critical Hdwy Stg 2	-	-	-	-	6.34	-
Follow-up Hdwy	2.34	-	-	-	3.77	3.41
Pot Cap-1 Maneuver	526	-	-	-	48	431
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	394	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	526	-	-	-	48	431
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	394	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	62.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	526	-	-	-	98
HCM Lane V/C Ratio	0.01	-	-	-	0.376
HCM Control Delay (s)	11.9	-	-	-	62.4
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	1.5

Intersection	
Int Delay, s/veh	232.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	865	455	30	780	335	10
Future Vol, veh/h	865	455	30	780	335	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	4	0	3	3	10
Mvmt Flow	920	484	32	830	356	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1404	0	1814	920
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.1	-	6.43	6.3
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.2	-	3.527	3.39
Pot Cap-1 Maneuver	-	-	493	-	~ 86	317
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	493	-	~ 80	317
Mov Cap-2 Maneuver	-	-	-	-	~ 80	-
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	372	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	$ 1667.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	82	-	-	493	-
HCM Lane V/C Ratio	4.476	-	-	0.065	-
HCM Control Delay (s)	$ 1667.7	-	-	12.8	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	39.1	-	-	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	46.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	140	60	170	250	0	85	0	145	0	0	0
Future Vol, veh/h	0	140	60	170	250	0	85	0	145	0	0	0
Conflicting Peds, #/hr	0	0	1	0	0	0	4	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	2	1	0	6	0	3	0	0	0
Mvmt Flow	0	165	71	200	294	0	100	0	171	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	438	376	6	406	291	86	5	0	0	171	0	0
Stage 1	5	5	-	286	286	-	-	-	-	-	-	-
Stage 2	433	371	-	120	5	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.51	6.2	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.009	3.3	2.254	-	-	2.2	-	-
Pot Cap-1 Maneuver	532	558	1083	555	621	978	1590	-	-	1418	-	-
Stage 1	1022	896	-	721	677	-	-	-	-	-	-	-
Stage 2	605	623	-	884	894	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	301	516	1078	370	574	978	1584	-	-	1418	-	-
Mov Cap-2 Maneuver	301	516	-	370	574	-	-	-	-	-	-	-
Stage 1	945	892	-	670	629	-	-	-	-	-	-	-
Stage 2	299	579	-	673	890	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	86.2	2.7	0
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1584	-	-	612	469	1418	-	-
HCM Lane V/C Ratio	0.063	-	-	0.384	1.054	-	-	-
HCM Control Delay (s)	7.4	0	-	14.5	86.2	0	-	-
HCM Lane LOS	A	A	-	B	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.8	15.3	0	-	-

Intersection	
Int Delay, s/veh	23.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	85	15	5	5	2	340	1	230	5	100	70	80
Future Vol, veh/h	85	15	5	5	2	340	1	230	5	100	70	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	1	0	2	0	0	8	2
Mvmt Flow	94	17	6	6	2	378	1	256	6	111	78	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	380	0	0	23	0	0	495	600	21	543	414	191
Stage 1	-	-	-	-	-	-	208	208	-	203	203	-
Stage 2	-	-	-	-	-	-	287	392	-	340	211	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.58	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.58	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.072	3.318
Pot Cap-1 Maneuver	1168	-	-	1605	-	-	488	415	1062	454	520	851
Stage 1	-	-	-	-	-	-	799	730	-	804	722	-
Stage 2	-	-	-	-	-	-	725	606	-	679	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1168	-	-	1605	-	-	358	379	1061	194	475	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	379	-	194	475	-
Stage 1	-	-	-	-	-	-	733	670	-	738	718	-
Stage 2	-	-	-	-	-	-	576	603	-	383	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.8	0.1	32.3	53.8
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	384	1168	-	-	1605	-	-	330
HCM Lane V/C Ratio	0.683	0.081	-	-	0.003	-	-	0.842
HCM Control Delay (s)	32.3	8.4	0	-	7.3	0	-	53.8
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	4.9	0.3	-	-	0	-	-	7.5

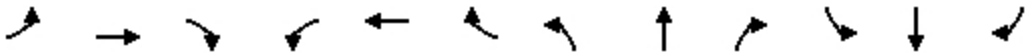
Intersection	
Int Delay, s/veh	13.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	85	15	5	5	2	340	1	230	5	100	70	80
Future Vol, veh/h	85	15	5	5	2	340	1	230	5	100	70	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	1	0	2	0	0	8	2
Mvmt Flow	94	17	6	6	2	378	1	256	6	111	78	89

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	796	610	123	618	651	260	167	0	0	263	0	0
Stage 1	345	345	-	262	262	-	-	-	-	-	-	-
Stage 2	451	265	-	356	389	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	303	412	933	404	390	781	1423	-	-	1313	-	-
Stage 1	666	640	-	747	695	-	-	-	-	-	-	-
Stage 2	584	693	-	666	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	372	933	360	353	780	1423	-	-	1312	-	-
Mov Cap-2 Maneuver	144	372	-	360	353	-	-	-	-	-	-	-
Stage 1	665	580	-	746	694	-	-	-	-	-	-	-
Stage 2	300	692	-	583	554	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	67.1	14.5	0	3.2
HCM LOS	F	B		

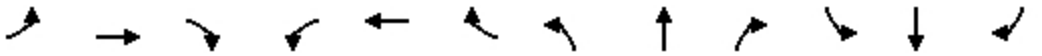
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	165	762	1312	-	-
HCM Lane V/C Ratio	0.001	-	-	0.707	0.506	0.085	-	-
HCM Control Delay (s)	7.5	0	-	67.1	14.5	8	0	-
HCM Lane LOS	A	A	-	F	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	4.3	2.9	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1069	75	52	1237	171	300	45	107	154	15	140
Future Volume (vph)	105	1069	75	52	1237	171	300	45	107	154	15	140
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	0.86	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1599	3228	1385	1614	3228	1403	3193	1488		1630	1463	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1599	3228	1385	1614	3228	1403	3193	1488		1630	1463	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	109	1114	78	54	1289	178	312	47	111	160	16	146
RTOR Reduction (vph)	0	0	38	0	0	93	0	73	0	0	132	0
Lane Group Flow (vph)	109	1114	40	54	1289	85	313	85	0	160	30	0
Confl. Peds. (#/hr)			2						1			2
Heavy Vehicles (%)	4%	3%	5%	3%	3%	6%	1%	5%	4%	2%	0%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	11.7	54.8	54.8	7.3	50.4	50.4	15.9	11.1		14.2	9.4	
Effective Green, g (s)	13.2	56.8	56.8	8.8	52.4	52.4	17.4	12.6		15.7	10.9	
Actuated g/C Ratio	0.12	0.52	0.52	0.08	0.48	0.48	0.16	0.11		0.14	0.10	
Clearance Time (s)	5.5	6.0	6.0	5.5	6.0	6.0	5.5	5.5		5.5	5.5	
Vehicle Extension (s)	2.5	5.2	5.2	2.5	5.2	5.2	2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	192	1668	715	129	1539	668	505	170		232	145	
v/s Ratio Prot	c0.07	0.35		0.03	c0.40		c0.10	0.06		c0.10	0.02	
v/s Ratio Perm			0.03			0.06						
v/c Ratio	0.57	0.67	0.06	0.42	0.84	0.13	0.62	0.50		0.69	0.21	
Uniform Delay, d1	45.7	19.6	13.2	48.1	25.0	16.0	43.2	45.7		44.8	45.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.1	1.4	0.1	1.6	4.7	0.2	1.9	1.7		7.6	0.5	
Delay (s)	48.8	21.0	13.3	49.7	29.7	16.2	45.1	47.4		52.4	46.1	
Level of Service	D	C	B	D	C	B	D	D		D	D	
Approach Delay (s)		22.9			28.8			45.9			49.2	
Approach LOS		C			C			D			D	

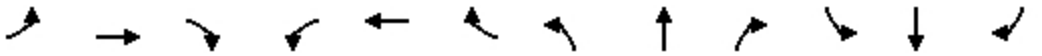
Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	109.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1140	85	55	1170	40	155	35	110	80	29	135
Future Volume (vph)	105	1140	85	55	1170	40	155	35	110	80	29	135
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	5.5	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.89		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1568	3201		1662	3228	1488	3225	1550		1614	1750	1430
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.74	1.00		0.53	1.00	1.00
Satd. Flow (perm)	1568	3201		1662	3228	1488	2504	1550		905	1750	1430
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	109	1188	89	57	1219	42	161	36	115	83	30	141
RTOR Reduction (vph)	0	3	0	0	0	19	0	97	0	0	0	119
Lane Group Flow (vph)	109	1274	0	57	1219	23	161	54	0	83	30	22
Heavy Vehicles (%)	6%	3%	0%	0%	3%	0%	0%	0%	0%	3%	0%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8			4		4
Actuated Green, G (s)	10.8	49.2		6.7	45.1	45.1	11.6	11.6		11.6	11.6	11.6
Effective Green, g (s)	12.3	51.2		8.2	47.1	47.1	11.6	13.1		13.1	13.1	13.1
Actuated g/C Ratio	0.15	0.61		0.10	0.56	0.56	0.14	0.16		0.16	0.16	0.16
Clearance Time (s)	5.5	6.0		5.5	6.0	6.0	5.5	5.5		5.5	5.5	5.5
Vehicle Extension (s)	2.5	5.2		2.5	5.2	5.2	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	228	1939		161	1799	829	343	240		140	271	221
v/s Ratio Prot	c0.07	c0.40		0.03	0.38			0.03			0.02	
v/s Ratio Perm						0.02	0.06			c0.09		0.02
v/c Ratio	0.48	0.66		0.35	0.68	0.03	0.47	0.22		0.59	0.11	0.10
Uniform Delay, d1	33.2	10.9		35.7	13.3	8.4	33.6	31.3		33.2	30.7	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	1.1		1.0	1.4	0.0	0.7	0.3		5.5	0.1	0.1
Delay (s)	34.3	12.0		36.7	14.7	8.4	34.4	31.6		38.7	30.8	30.8
Level of Service	C	B		D	B	A	C	C		D	C	C
Approach Delay (s)		13.8			15.4			33.0			33.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	84.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1070	9	9	1048	18	53	7	22	15	10	164
Future Volume (vph)	241	1070	9	9	1048	18	53	7	22	15	10	164
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	1.00
Satd. Flow (prot)	1630	3225		1662	3220			1673	1488		1666	1458
Flt Permitted	0.95	1.00		0.95	1.00			0.73	1.00		0.78	1.00
Satd. Flow (perm)	1630	3225		1662	3220			1281	1488		1341	1458
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96	0.92	0.92	0.92
Adj. Flow (vph)	262	1115	9	9	1092	20	55	8	23	16	11	178
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	21	0	0	161
Lane Group Flow (vph)	262	1124	0	9	1110	0	0	63	2	0	27	17
Heavy Vehicles (%)	2%	3%	0%	0%	3%	2%	0%	2%	0%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	12.4	37.6		1.1	26.3			5.4	5.4		5.4	5.4
Effective Green, g (s)	12.4	37.6		1.1	26.3			5.4	5.4		5.4	5.4
Actuated g/C Ratio	0.22	0.67		0.02	0.47			0.10	0.10		0.10	0.10
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Vehicle Extension (s)	2.5	2.5		2.5	2.5			2.5	2.5		2.5	2.5
Lane Grp Cap (vph)	360	2161		32	1509			123	143		129	140
v/s Ratio Prot	c0.16	0.35		0.01	c0.34							
v/s Ratio Perm								c0.05	0.00		0.02	0.01
v/c Ratio	0.73	0.52		0.28	0.74			0.51	0.02		0.21	0.12
Uniform Delay, d1	20.3	4.7		27.1	12.1			24.1	22.9		23.4	23.2
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	6.7	0.2		3.5	1.8			2.7	0.0		0.6	0.3
Delay (s)	27.0	4.8		30.6	13.9			26.8	23.0		24.0	23.5
Level of Service	C	A		C	B			C	C		C	C
Approach Delay (s)		9.0			14.0			25.8			23.5	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	56.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Future Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	1	0	2	0	0	8	2
Mvmt Flow	90	6	17	6	1	120	1	292	1	23	84	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	510	451	109	463	476	294	134	0	0	294	0	0
Stage 1	155	155	-	296	296	-	-	-	-	-	-	-
Stage 2	355	296	-	167	180	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	471	507	950	513	491	748	1463	-	-	1279	-	-
Stage 1	843	773	-	717	672	-	-	-	-	-	-	-
Stage 2	658	672	-	840	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	496	950	491	480	747	1463	-	-	1278	-	-
Mov Cap-2 Maneuver	388	496	-	491	480	-	-	-	-	-	-	-
Stage 1	842	758	-	716	671	-	-	-	-	-	-	-
Stage 2	551	671	-	803	739	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.3	11	0	1.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	430	727	1278	-	-
HCM Lane V/C Ratio	0.001	-	-	0.261	0.174	0.018	-	-
HCM Control Delay (s)	7.5	0	-	16.3	11	7.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	60.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	5	1	335	1	1	2	350	780	5	5	880	5
Future Vol, veh/h	5	1	335	1	1	2	350	780	5	5	880	5
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	11	11	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	0	2	3	0	25	3	0
Mvmt Flow	5	1	360	1	1	2	376	839	5	5	946	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2558	2566	949	2744	2566	857	951	0	0	855	0	0
Stage 1	959	959	-	1605	1605	-	-	-	-	-	-	-
Stage 2	1599	1607	-	1139	961	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.1	6.5	6.2	4.12	-	-	4.35	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.5	4	3.3	2.218	-	-	2.425	-	-
Pot Cap-1 Maneuver	18	26	~ 317	13	26	360	722	-	-	695	-	-
Stage 1	311	338	-	134	166	-	-	-	-	-	-	-
Stage 2	135	166	-	247	337	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	10	12	~ 317	-	12	355	722	-	-	688	-	-
Mov Cap-2 Maneuver	10	12	-	-	12	-	-	-	-	-	-	-
Stage 1	149	336	-	64	79	-	-	-	-	-	-	-
Stage 2	63	79	-	-	335	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 401.8		4.7	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	722	-	-	208	-	688	-	-
HCM Lane V/C Ratio	0.521	-	-	1.763	-	0.008	-	-
HCM Control Delay (s)	15.3	-	-	-$ 401.8	-	10.3	-	-
HCM Lane LOS	C	-	-	F	-	B	-	-
HCM 95th %tile Q(veh)	3.1	-	-	25.3	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	50

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	1	1	9	2	254	8	866	16	108	1080	11
Future Vol, veh/h	2	1	1	9	2	254	8	866	16	108	1080	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1	1	10	2	276	9	941	17	117	1174	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2521	2390	1180	2383	2388	950	1186	0	0	958	0	0
Stage 1	1414	1414	-	968	968	-	-	-	-	-	-	-
Stage 2	1107	976	-	1415	1420	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	19	34	232	24	34	315	589	-	-	718	-	-
Stage 1	171	204	-	305	332	-	-	-	-	-	-	-
Stage 2	255	329	-	170	202	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	17	232	14	17	315	589	-	-	718	-	-
Mov Cap-2 Maneuver	~ 1	17	-	14	17	-	-	-	-	-	-	-
Stage 1	165	106	-	295	321	-	-	-	-	-	-	-
Stage 2	30	318	-	87	105	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	3422.1	$ 388.4	0.1	1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	589	-	-	2	169	718	-	-
HCM Lane V/C Ratio	0.015	-	-	2.174	1.704	0.163	-	-
HCM Control Delay (s)	11.2	0	-	$ 3422.1	$ 388.4	11	0	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.4	20.2	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	243	13	0	0	3	56	1	1	0	32	1	136
Future Vol, veh/h	243	13	0	0	3	56	1	1	0	32	1	136
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	264	14	0	0	3	61	1	1	0	35	1	148

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	64	0	0	14	0	0	650	606	14	577	576	34
Stage 1	-	-	-	-	-	-	542	542	-	34	34	-
Stage 2	-	-	-	-	-	-	108	64	-	543	542	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1538	-	-	1604	-	-	382	411	1066	428	428	1039
Stage 1	-	-	-	-	-	-	525	520	-	982	867	-
Stage 2	-	-	-	-	-	-	897	842	-	524	520	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1604	-	-	283	340	1066	370	354	1039
Mov Cap-2 Maneuver	-	-	-	-	-	-	283	340	-	370	354	-
Stage 1	-	-	-	-	-	-	434	430	-	812	867	-
Stage 2	-	-	-	-	-	-	768	842	-	432	430	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.4	0	16.7	11.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	309	1538	-	-	1604	-	-	767
HCM Lane V/C Ratio	0.007	0.172	-	-	-	-	-	0.239
HCM Control Delay (s)	16.7	7.8	0	-	0	-	-	11.2
HCM Lane LOS	C	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0.6	-	-	0	-	-	0.9

Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	5	114	10	56	5	162	152	7	35	185	155
Future Vol, veh/h	95	5	114	10	56	5	162	152	7	35	185	155
Conflicting Peds, #/hr	6	0	1	0	0	0	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	92	85	92	92	92	85	85	92	92	85	85
Heavy Vehicles, %	0	2	0	2	2	2	6	3	2	2	1	2
Mvmt Flow	112	5	134	11	61	5	191	179	8	38	218	182

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	993	958	205	754	1045	189	404	0	0	187	0	0
Stage 1	389	389	-	565	565	-	-	-	-	-	-	-
Stage 2	604	569	-	189	480	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.53	6.9	7.33	6.53	6.23	4.19	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.019	3.3	3.519	4.019	3.319	2.257	-	-	2.219	-	-
Pot Cap-1 Maneuver	214	257	808	311	228	852	1128	-	-	1386	-	-
Stage 1	612	608	-	509	507	-	-	-	-	-	-	-
Stage 2	489	505	-	795	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	130	200	804	211	177	847	1124	-	-	1386	-	-
Mov Cap-2 Maneuver	130	200	-	211	177	-	-	-	-	-	-	-
Stage 1	494	584	-	412	411	-	-	-	-	-	-	-
Stage 2	333	409	-	632	532	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	58.9	35.8	4.5	0.7
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1124	-	-	132	804	192	1386	-	-
HCM Lane V/C Ratio	0.17	-	-	0.888	0.167	0.402	0.027	-	-
HCM Control Delay (s)	8.9	0	-	114.4	10.4	35.8	7.7	0.1	-
HCM Lane LOS	A	A	-	F	B	E	A	A	-
HCM 95th %tile Q(veh)	0.6	-	-	5.8	0.6	1.8	0.1	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Future Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	1	0	2	0	0	8	2
Mvmt Flow	90	6	17	6	1	120	1	292	1	23	84	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	121	0	0	23	0	0	335	328	16	415	276	61
Stage 1	-	-	-	-	-	-	195	195	-	73	73	-
Stage 2	-	-	-	-	-	-	140	133	-	342	203	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.52	6.2	7.1	6.58	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.58	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4.018	3.3	3.5	4.072	3.318
Pot Cap-1 Maneuver	1454	-	-	1605	-	-	622	591	1069	551	621	1004
Stage 1	-	-	-	-	-	-	811	739	-	942	823	-
Stage 2	-	-	-	-	-	-	868	786	-	677	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1454	-	-	1605	-	-	499	551	1068	305	579	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	499	551	-	305	579	-
Stage 1	-	-	-	-	-	-	760	692	-	883	820	-
Stage 2	-	-	-	-	-	-	737	783	-	366	677	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.1	0.3	18.7	13.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	552	1454	-	-	1605	-	-	580
HCM Lane V/C Ratio	0.533	0.062	-	-	0.003	-	-	0.272
HCM Control Delay (s)	18.7	7.6	0	-	7.3	0	-	13.5
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	3.1	0.2	-	-	0	-	-	1.1

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Future Vol, veh/h	81	5	15	5	1	108	1	263	1	21	76	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	1	0	2	0	0	8	2
Mvmt Flow	90	6	17	6	1	120	1	292	1	23	84	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	510	451	109	463	476	294	134	0	0	294	0	0
Stage 1	155	155	-	296	296	-	-	-	-	-	-	-
Stage 2	355	296	-	167	180	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	471	507	950	513	491	748	1463	-	-	1279	-	-
Stage 1	843	773	-	717	672	-	-	-	-	-	-	-
Stage 2	658	672	-	840	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	496	950	491	480	747	1463	-	-	1278	-	-
Mov Cap-2 Maneuver	388	496	-	491	480	-	-	-	-	-	-	-
Stage 1	842	758	-	716	671	-	-	-	-	-	-	-
Stage 2	551	671	-	803	739	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.3	11	0	1.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	430	727	1278	-	-
HCM Lane V/C Ratio	0.001	-	-	0.261	0.174	0.018	-	-
HCM Control Delay (s)	7.5	0	-	16.3	11	7.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.6	0.1	-	-

From: Heather Richards
To: Ilsa Perse
Subject: RE: Your presentation at Planning Commission
Date: Monday, February 7, 2022 8:56:00 PM
Attachments: 3MLAP Area Plan Document - FINAL DRAFT 1.20.22.pdf
3MLAP Appendix E - Final.pdf
Large Format Commercial Design Standards.pdf
210530_3ML_Final Design Booklet.pdf

Hi Ilsa,

Sorry for my delayed response. I am trying to keep up on my emails, but not doing a great job right now as we are working with reduced staffing.

The Three Mile Lane Area Plan Project Advisory Committee looked at several different developments as inspiration for the recommended mixed-use commercial development on the south side of Highway 18. They were looking for areas that incorporated office space, retail and entrepreneurial industrial development with distinctive local design standards. Those developments are discussed on pages 26, 27, and 28 of the Area Plan (attached). They consisted of the Old Mill District in Bend, Oregon, Northwest Crossing in Bend, Oregon, and Orenco Station in Hillsboro, Oregon. All are highly regarded mixed-use commercial developments.

Those areas informed the recommended commercial design standards found in Appendix E of the Area Plan that will guide the development of the mixed-use commercial development. I have attached Appendix E for your review. The design and development standards in Appendix E would be in addition to the City's adopted large format commercial design standards that are currently in the code (Section 17.56, adopted in 2008 - attached as well).

Early on in the process, the Project Advisory Committee also developed a design booklet of guiding principles to help guide their discussions and work (attached).

If you have further questions please feel free to email or call me.

Have a great day!

Heather

Heather Richards, PCED
Planning Director
City of McMinnville
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McMinnville, OR 97128

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www.mcminnvilleoregon.gov

-----Original Message-----
From: Ilsa Perse <ilsaperse4@gmail.com>
Sent: Friday, February 4, 2022 1:45 PM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Subject: Your presentation at Planning Commission

Hello Heather,

I am wondering if you can send me a list of the locations of the different attractive shopping centers that you showed in your presentation a couple of weeks ago. I don't remember your saying where they are, and I'm curious about what communities they are located in.

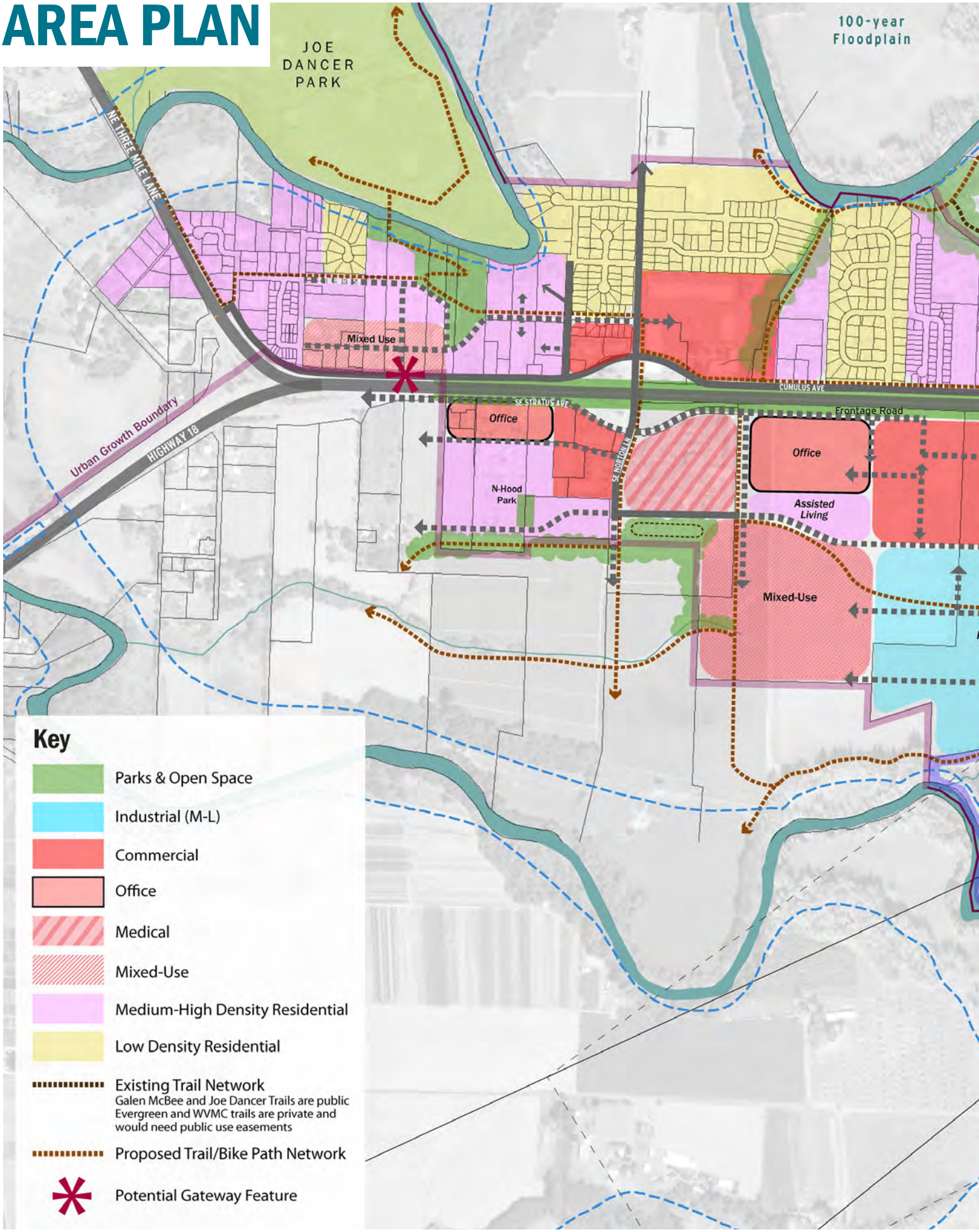
Many thanks,

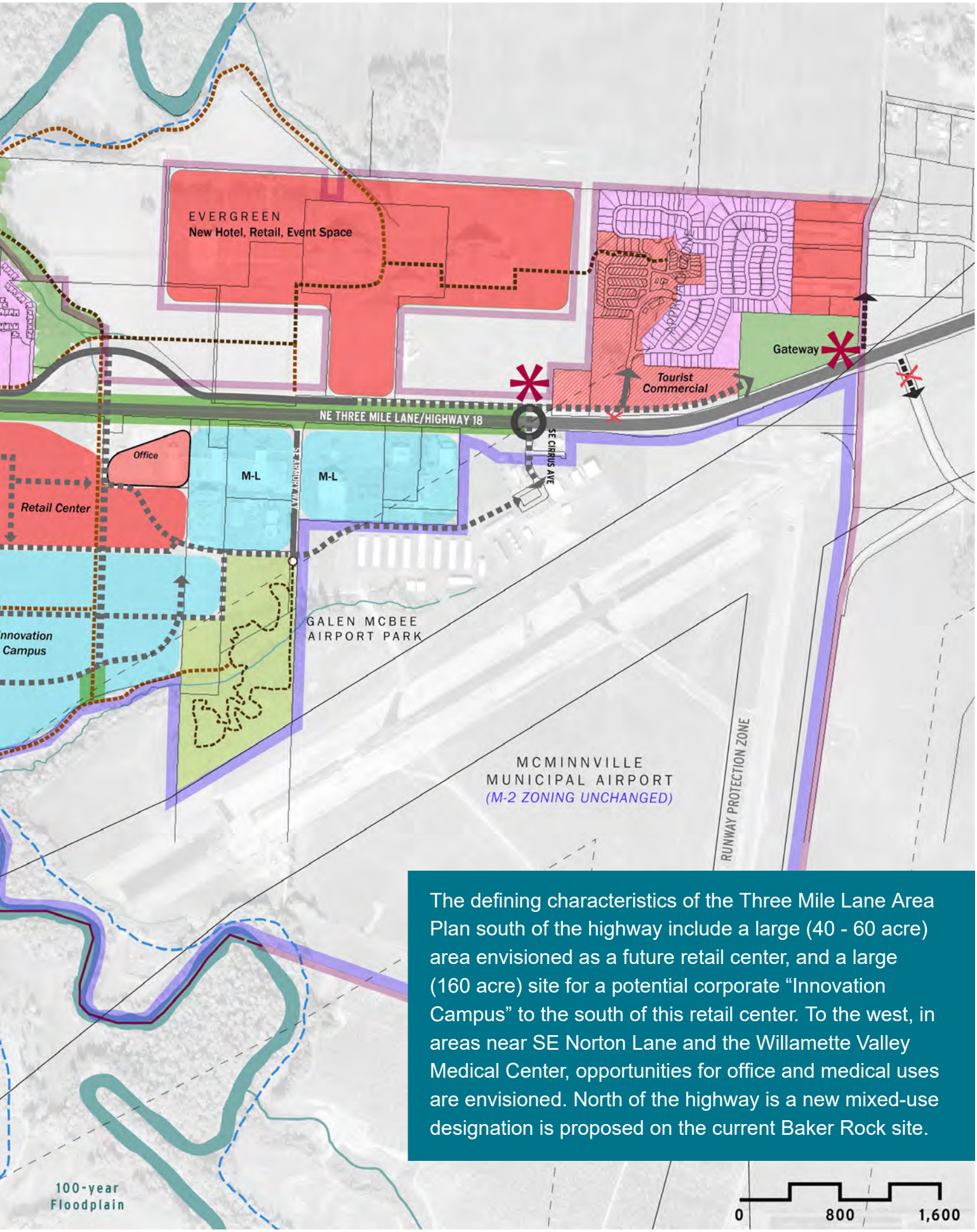
Ilsa Perse

THREE MILE LANE AREA PLAN
RECOMMENDED DESIGN

May 2021

AREA PLAN


JOE
DANCER
PARK
100-year
Floodplain
NE THREE MILE LANE
Mixed Use
CUMULUS AVE
SE STRATUS AVE
Office
Frontage Road
Urban Growth Boundary
HIGHWAY 18
SE NORDIC LN
N-Hood
Park
Office
Assisted
Living
Mixed-Use
Key
Parks & Open Space
Industrial (M-L)
Commercial
Office
Medical
Mixed-Use
Medium-High Density Residential
Low Density Residential
Existing Trail Network
Galen McBee and Joe Dancer Trails are public
Evergreen and WVMC trails are private and
would need public use easements
Proposed Trail/Bike Path Network
Potential Gateway Feature



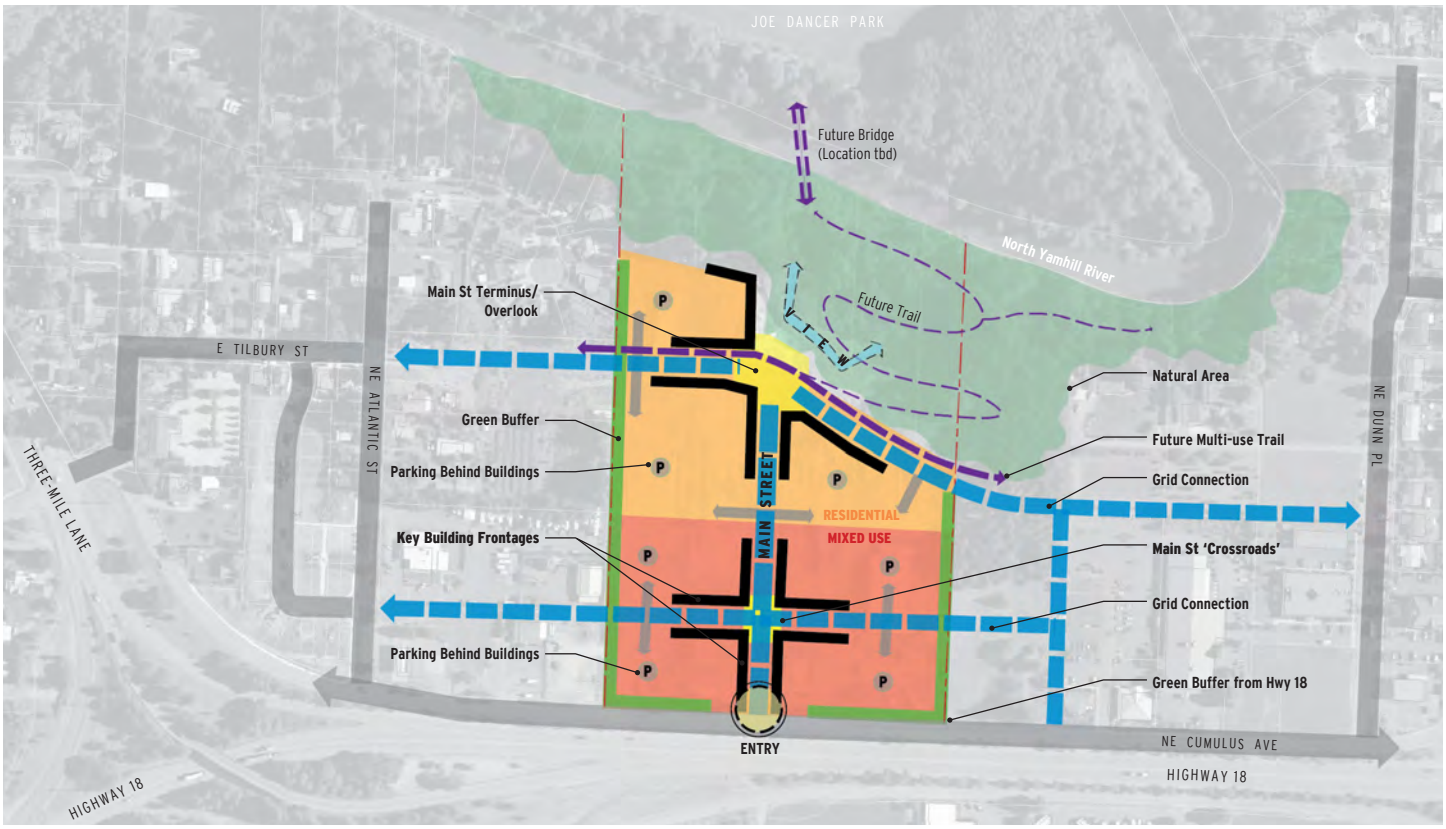
The defining characteristics of the Three Mile Lane Area Plan south of the highway include a large (40 - 60 acre) area envisioned as a future retail center, and a large (160 acre) site for a potential corporate “Innovation Campus” to the south of this retail center. To the west, in areas near SE Norton Lane and the Willamette Valley Medical Center, opportunities for office and medical uses are envisioned. North of the highway is a new mixed-use designation is proposed on the current Baker Rock site.

DESIGN FEATURES FOR NEW DEVELOPMENT

The overall goal for new developments in the Three Mile Lane Area is that they echo the features of traditional, older retail districts like downtown McMinnville, with similar common features that include:

- Walkable, narrow main streets connecting through the center, with parallel or angled on-street parking in front of retail storefronts.
- Public gathering spaces, bordered by dining and entertainment attractions, featuring play areas and flexible space for programmed public events.
- Parking lots, generally located behind buildings, featuring wide pedestrian walkways, integrated stormwater treatment and ample landscaping including shade trees.
- High-quality architecture, sometimes themed in a regionally appropriate way, with buildings placed in prominent locations that contribute to the quality of the pedestrian experience, versus behind large surface parking lots.
- Building edges that create 'frontage' on walkable streets or pedestrian walks, with higher-quality materials, generous windows and pedestrian-scale signage in the first 20-30' of elevation.
- Proximity and connection to a mix of other uses, to encourage walking from residential or office areas to the retail center.
- Generous landscape buffers between the retail center and roadways or parking lots while maintaining maximum visibility for retailers.
- A prominent entry to the site, with signage or a gateway feature.

MIXED USE AREA CONCEPTUAL DESIGN



KEY URBAN DESIGN ELEMENTS

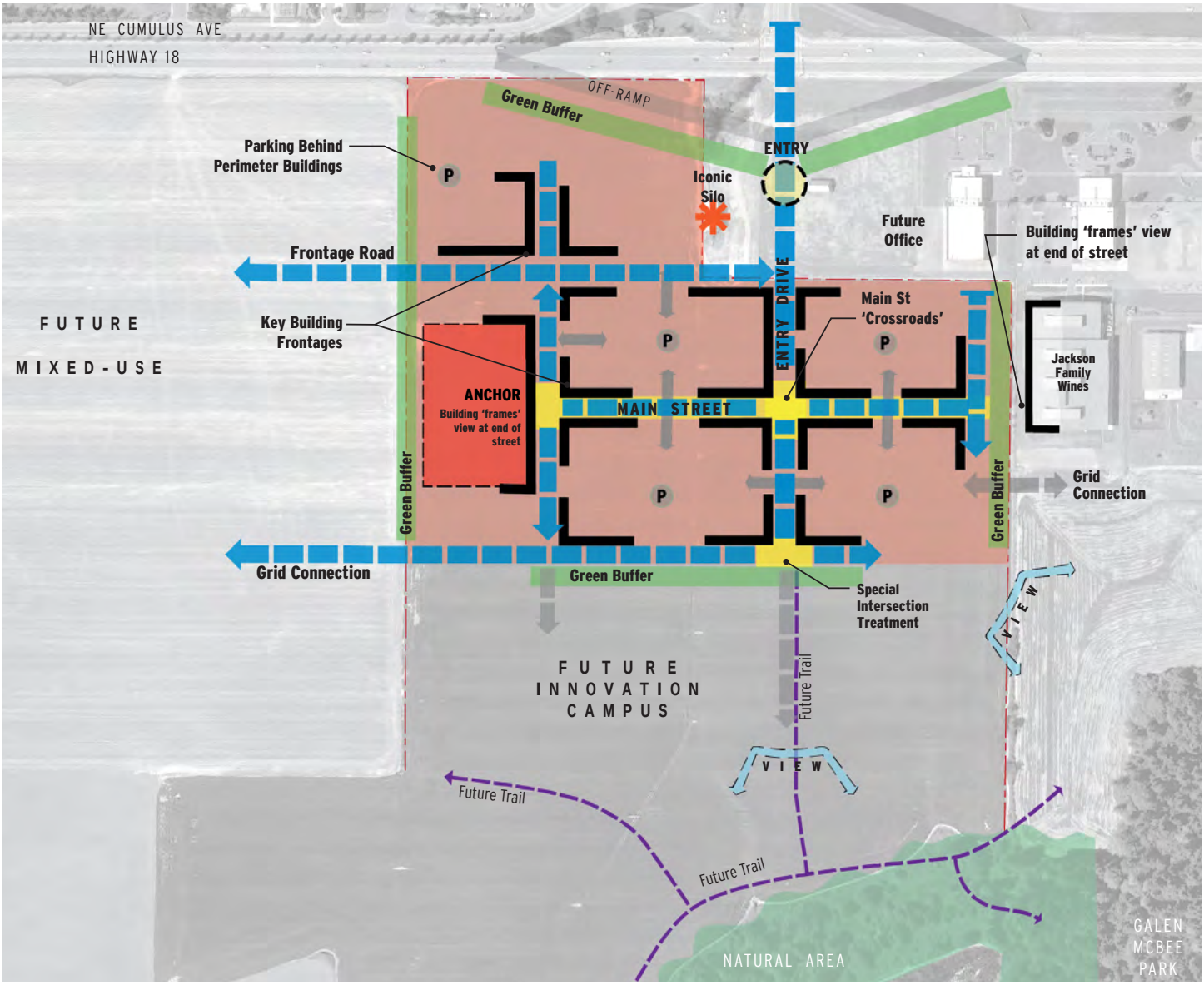
- Local streets can be logically extended through the site from the west (NE Atlantic) and the east (NE Dunn Place), creating access to the commercial and residential halves of the site, while a new central 'Main Street' can be extended north from NE Cumulus Avenue, bisecting the site and creating two crossroads intersections.

- Where the Main Street meets the bluff-top street, a public overlook can provide views to Joe Dancer Park and perhaps even a trailhead for a nature trail switch-backing down the bluff to a riverside trail system and a potential footbridge over the river connecting to the park and beyond to downtown.

- The proposed street extending east-west across the northern half of the site follows the top of the bluff and should be designed as a well-landscaped parkway, with an adjacent multi-use trail which will eventually extend throughout the Three Mile Lane study area as a safe parallel route to Hwy 18.

- New buildings should be located to form an urban frontage, with no setbacks, at the intersections of local streets. They should feature pedestrian-scaled ground floors, prominent entries, and canopies over sidewalks with street trees, on-street parking, and safe crossings. Surface parking will be located behind these frontages, separated from adjacent uses by well-landscaped green buffers.

RETAIL CENTER/INNOVATION CAMPUS CONCEPTUAL DESIGN



The retail market continues to evolve rapidly in response to the challenges of competing with online retail and market consolidation. One tactic that the retail industry has successfully used to attract and retain shoppers is the creation of mixed-use "town centers" that offer gathering spaces, walkable streets and more dining options than typical strip suburban developments or enclosed shopping centers. Mixed-use town centers offer a greater diversity of uses that typical retail developments, particularly as it pertains to entertainment and some office uses, with the latter providing critical daytime population for retailers.

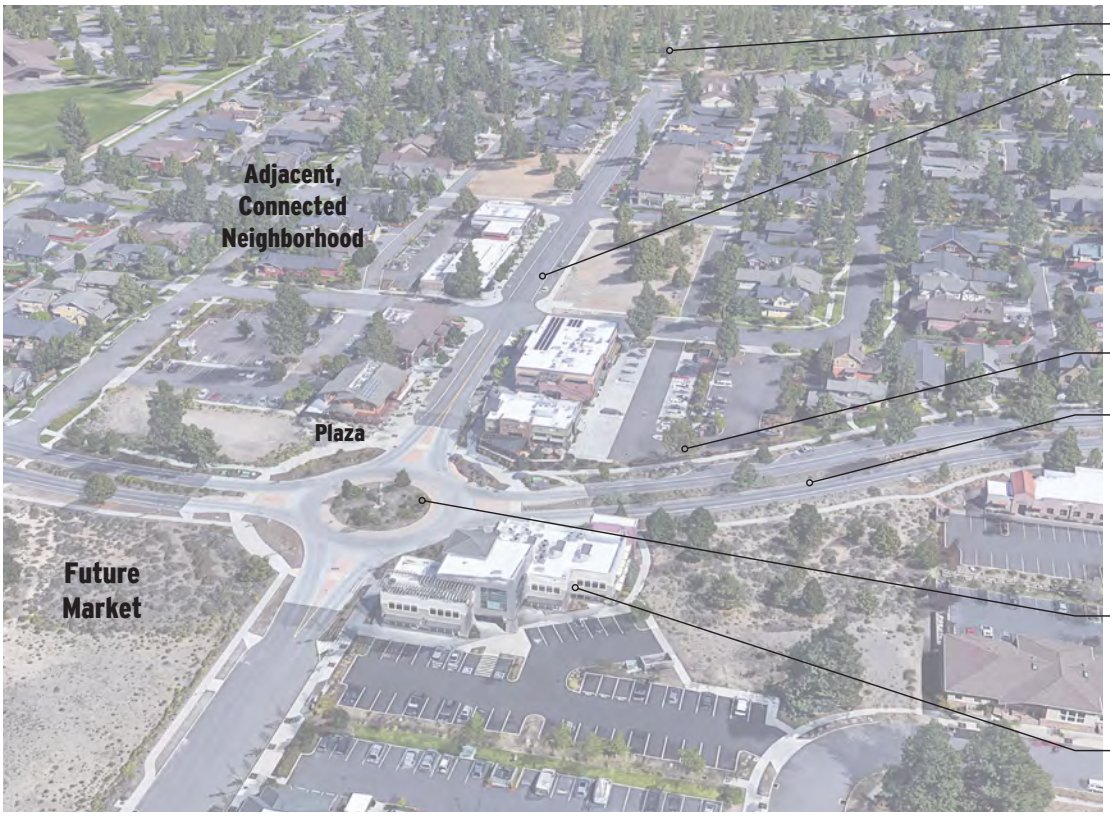
A retail center at Cumulus Avenue is a central feature of the Area Plan. The design of this development, the connectivity it provides to the street system south of Highway 18, and how well it contributes to McMinnville's Great Neighborhood Principles will be key in the success of this plan. This 60 acre parcel is one of the largest regional sites with easy highway access. The site is flat and developable—a unique characteristic for a site of this size, and has a locational advantage being both near to the highway and the McMinnville Municipal Airport. The diagram on this page provides an example of how this site could develop, implementing design features desired in the Three Mile Lane Area.

Flexibility is key to attracting a corporate Innovation Campus. The City and/or developer would have to be opportunistic and actively market the property and McMinnville as a corporate destination. Early infrastructure investments and construction of housing and commercial amenities within walking distance of the property would help attract a corporate user, as would a clear but flexible vision and development plan for the property.

KEY URBAN DESIGN ELEMENTS: PRECEDENTS

- Landscape Buffer
- Parking behind buildings
- Central 'Main Street':
  - Wide sidewalks
  - Street Trees
  - On-street parking
  - Active ground floors
- Public gateway plaza
- Gathering and event space
- Access and orientation to natural features

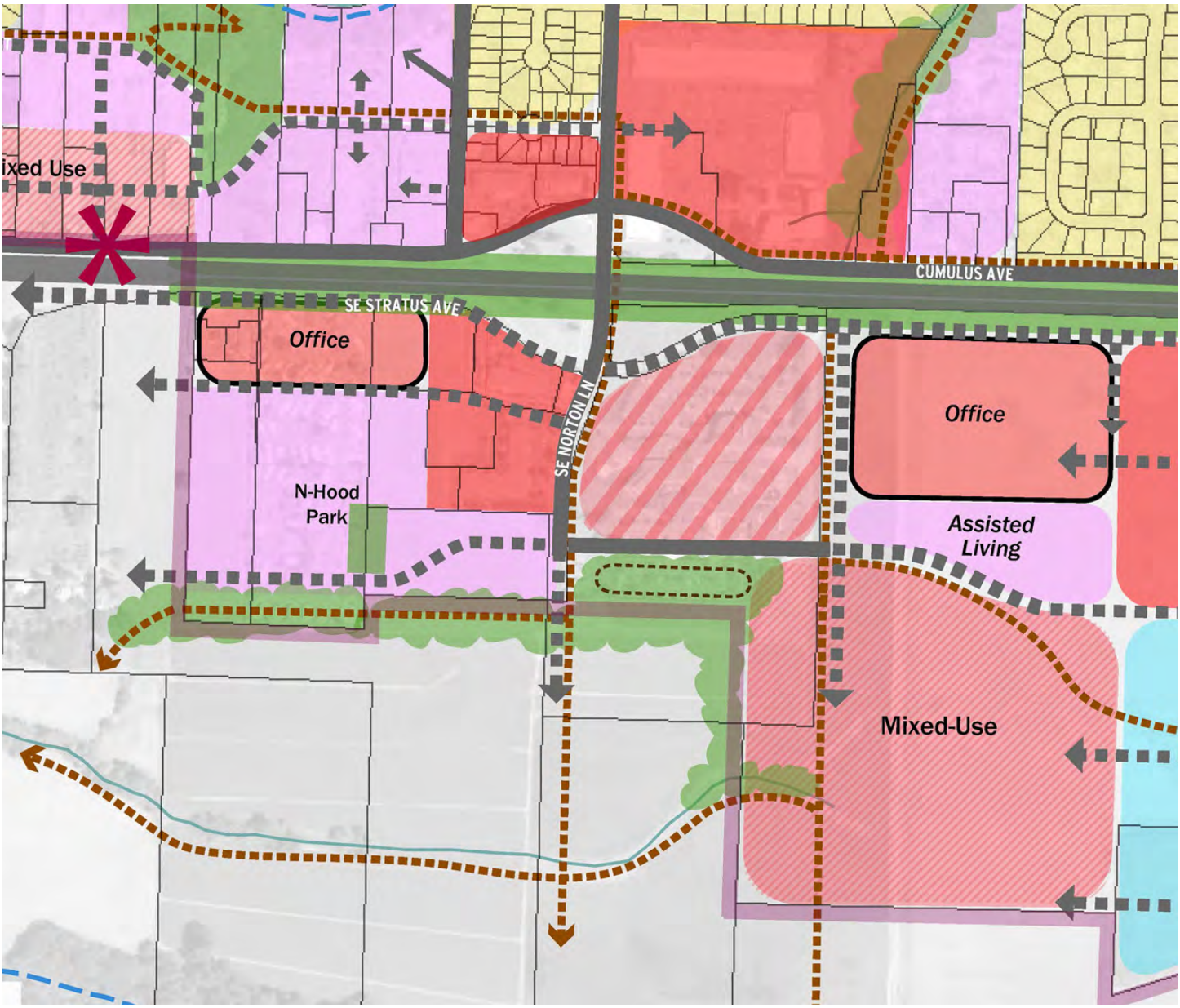
Old Mill District, Bend



- Integrated park space
- Central 'Main Street':
  - Wide sidewalks
  - Street Trees
  - On-street parking
  - Active ground floors
  - Mixed-use
  - Two blocks closed for Farmer's Market weekly
- Parking behind buildings
- Neighborhood Collector
- Gateway 'marker'
- Adjacent to 'clean' light industrial/office uses

NorthWest Crossing, Bend

HEALTH CARE AREA



Vacant parcels surrounding the Willamette Valley Medical Center are a significant opportunity for medical offices, housing for people reliant on medical services, and other uses that benefit from a health care cluster. As envisioned in the Area Plan existing industrial and high-density residential land and uses fronting the highway and in close proximity to the Medical Center could, over time, develop with housing – including assisted living and long-term care facilities - office uses, and services related to the hospital.

KEY URBAN DESIGN ELEMENTS

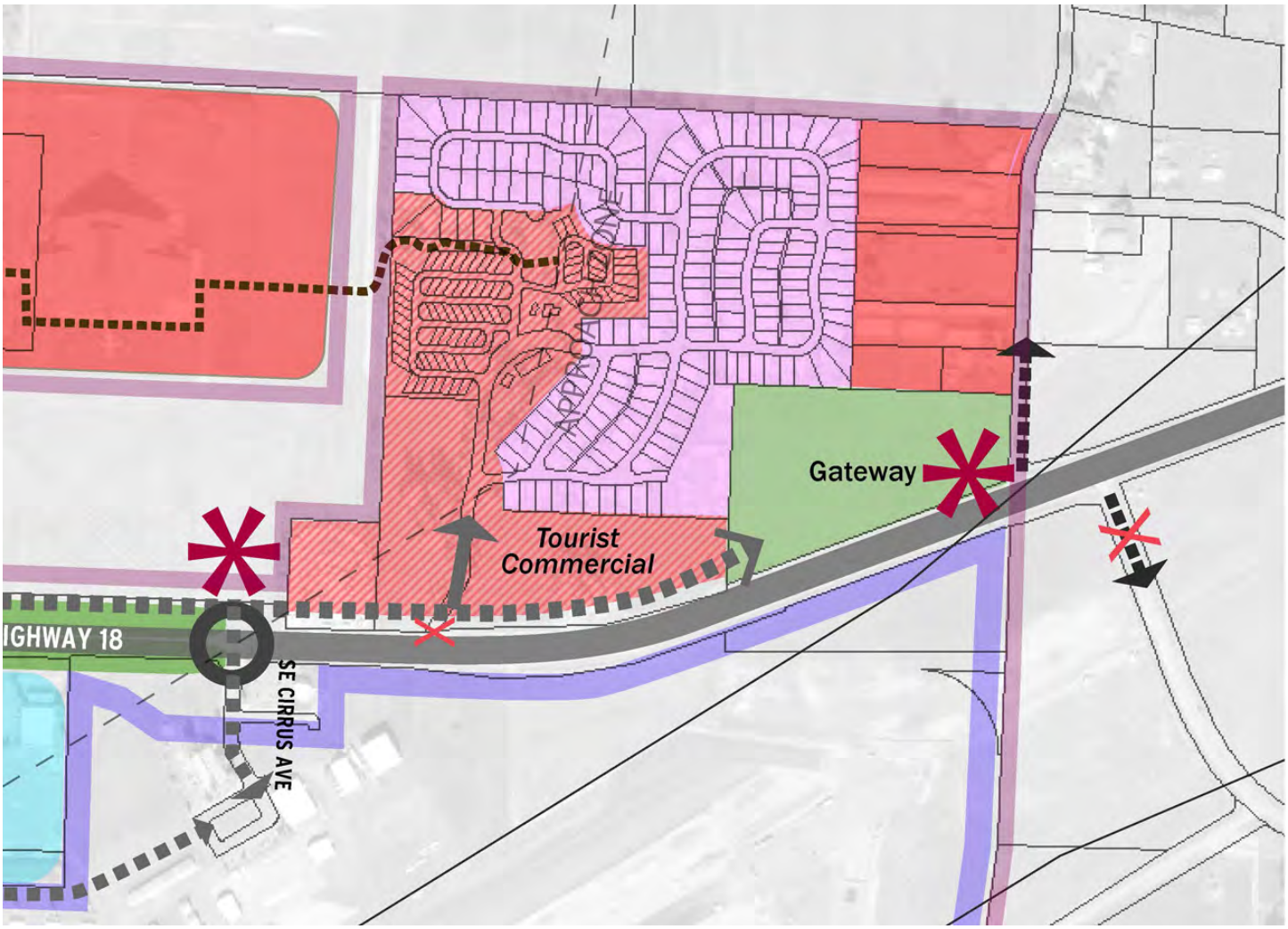
- **Transitions between uses: Health care facilities and surrounding residential areas.** Health care facilities are often active around the clock with bright lighting and they generate significant vehicle traffic. They also require a lot of delivery traffic and, in the case of a major medical center, helicopter use. Buffering between uses should be considered, particularly senior housing or market-rate apartments. Assisted living or nursing care facilities, however, would benefit from close proximity to the hospital.

- **Transitions between uses: Health care facilities and other commercial uses.** The scale and orientation of existing uses, as related to future uses should be considered. For example, while Senior Housing might benefit from a location within walking distance of a retail center, there should be careful site planning to ensure the housing isn't directly adjacent to loading or parking facilities. It may be most feasible to place health-care related housing with an orientation south towards views and the river.

- **Walkability between uses.** Convenient, safe connections between a variety of uses in this area will be important to current and future users.

- **Visual quality of buildings facing Highway 18.** New development should avoid placing loading docks or creating blank walls visible from passing vehicles.

TOURIST COMMERCIAL



The Evergreen complex continues to draw visitors to McMinnville who support other local businesses in the Three Mile Lane area and beyond. The Area Plan foresees the continuation and intensification of tourism-related uses as allowed by existing zoning designations. East of Evergreen, land is currently zoned for commercial uses along the highway and has the possibility of hosting more tourism- and travel-related commercial uses in the vicinity of the Aviation & Space Museum and waterpark. The Area Plan envisions activities and uses related to visitors and the traveling public that could boost tourism and be mutually beneficial to existing attractions. A cluster of these uses in the northeast part of the study area could have a synergistic effect, strengthening McMinnville's and the region's reputation as a destination.

KEY URBAN DESIGN ELEMENTS

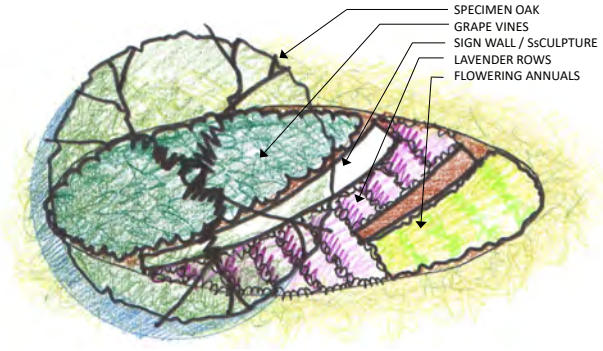
- Connectivity to the Evergreen complex. An important design element of this visitor-oriented area is connectivity to existing Evergreen tourist uses. Providing a safe walking and biking connection parallel to Highway 18 will help integrate future development with the Evergreen attractions, which will continue to attract significant amounts of visitors.

- "Gateway" location. In addition, with a prominent location on the east entrance to McMinnville, this development opportunity area should be required to meet the City's Great Neighborhood Principles with high-quality design.

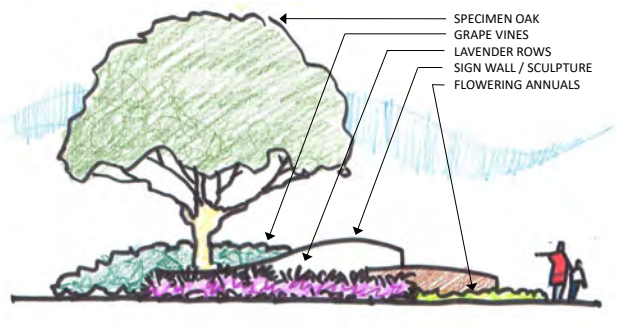
Visitor-oriented facilities with distinctive design elements

GATEWAYS

Three Mile Lane will serve as a figurative gateway to McMinnville, and future design of Highway 18 improvements should consider opportunities for corridor design that respects the area's agricultural heritage and landscape character (see below). There will also be opportunities for specific gateway features that physically mark this entrance to McMinnville. These images present some design considerations for these features.



PLAN VIEW



ELEVATION VIEW

Conceptual Gateway Feature Sketch

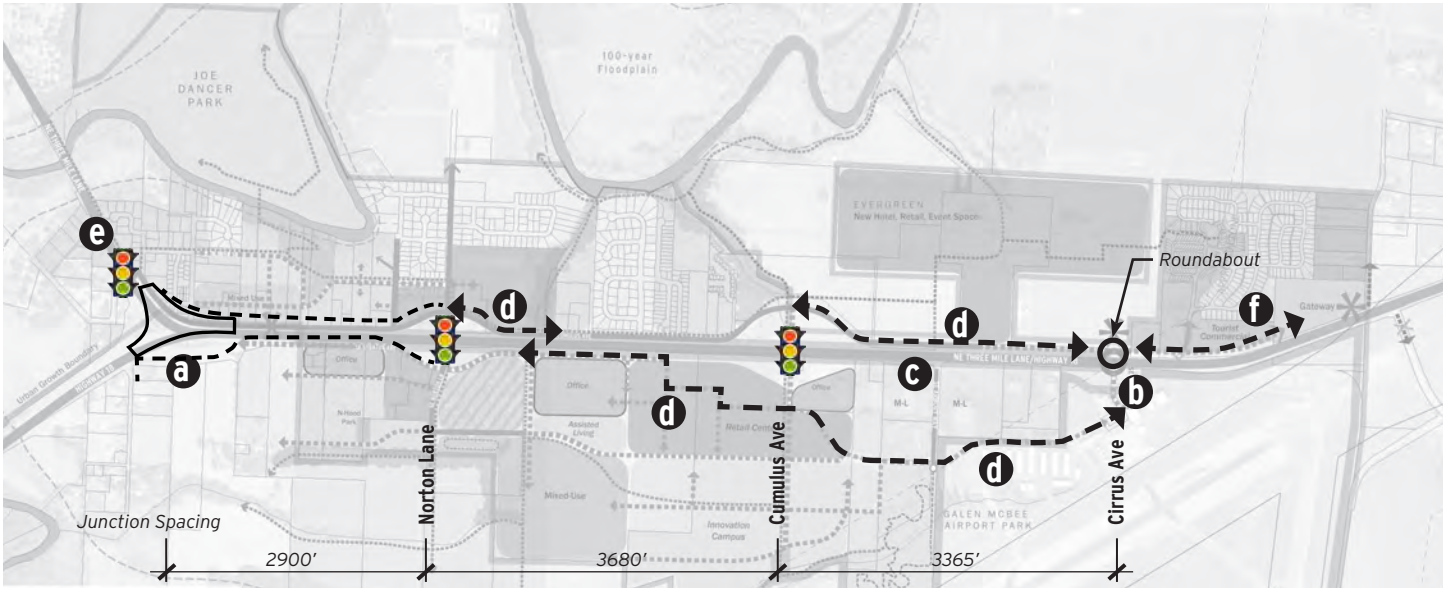
Large landscape design gestures, visible from fast-moving vehicles (and the air)

A large-scale public art piece, perhaps dramatically lit at night

TRANSPORTATION

Transportation analysis confirmed that both signalized intersections in the area – Oregon Highway 18 and Norton Lane and Oregon Highway 18 and Cumulus Avenue – will operate at volume-to-capacity ratios below ODOT's established standards under year 2041 Preferred Alternative traffic conditions. However, two of the study area unsignalized intersections fail to meet established mobility targets, as described at right:

- **Three Mile Lane & First Street:** Three Mile Lane experiences high traffic volumes throughout the day, especially during the PM peak hour. There are limited gaps in the traffic flow for motorists turning from First Street. The intersection also doesn't meet mobility targets based on 2018 traffic conditions.
- **Three Mile Lane & Cumulus Avenue:** The westbound and eastbound approaches are controlled with stop signs. There is no separate left-turn lane on the north leg of Three Mile Lane. Future traffic on Three Mile Lane and Cumulus Avenue is sufficiently high that eastbound and westbound motorists will find insufficient gaps to turn and travel north or south through the intersection.



Preferred Facility Design Concept

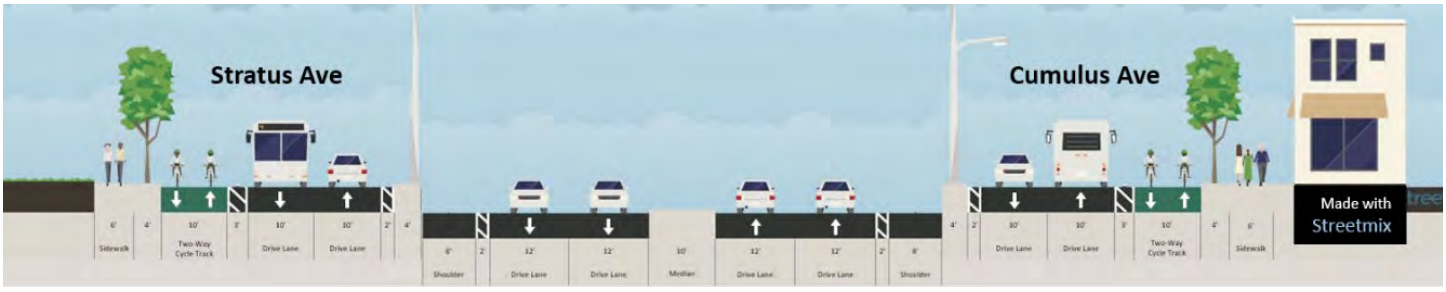
Design Concept Notes:

a. Three Mile Lane interchange: reconstructed for full directional access and crossing, with new connector to Stratus Avenue - see facing page).
b. Cirrus Avenue: new roundabout on OR 18, with McMinnville gateway features.
c. Removal of at-grade street and driveway accesses to OR 18 in the section between Cumulus Avenue and the eastern edge of the study area, including Loop Road and Cruickshank Road.
d. New east-west frontage streets north and south of OR 18, linking Cirrus Avenue, Cumulus Avenue and Norton Lane.
e. New traffic signal (or roundabout) at Three-Mile Lane and Cumulus Avenue.
f. Loop Road: disconnect from OR 18 and realign to new Cirrus Avenue connector and roundabout.

Oregon Highway 18 / Three Mile Lane Interchange Preferred Facility Design

The diagram above illustrates the reconstructed interchange of Oregon Highway 18 at Three Mile Lane. The interchange modifications allow full vehicular movement to and from the highway in all directions, and a bi-directional connection between the southern half of the Study Area and McMinnville's city center via Stratus Avenue. These new connections will likely carry significant local traffic demand that would otherwise travel on Oregon Highway 18 between the study area and McMinnville's city center.

The Stratus Avenue connection also provides direct connectivity for pedestrian and cyclists traveling between the southern half of the Study Area and McMinnville's city center. Separated, two-way cycle tracks on both Cumulus Avenue and Stratus Avenue will improve rider comfort and significantly reduce level of traffic stress on these routes (see below).



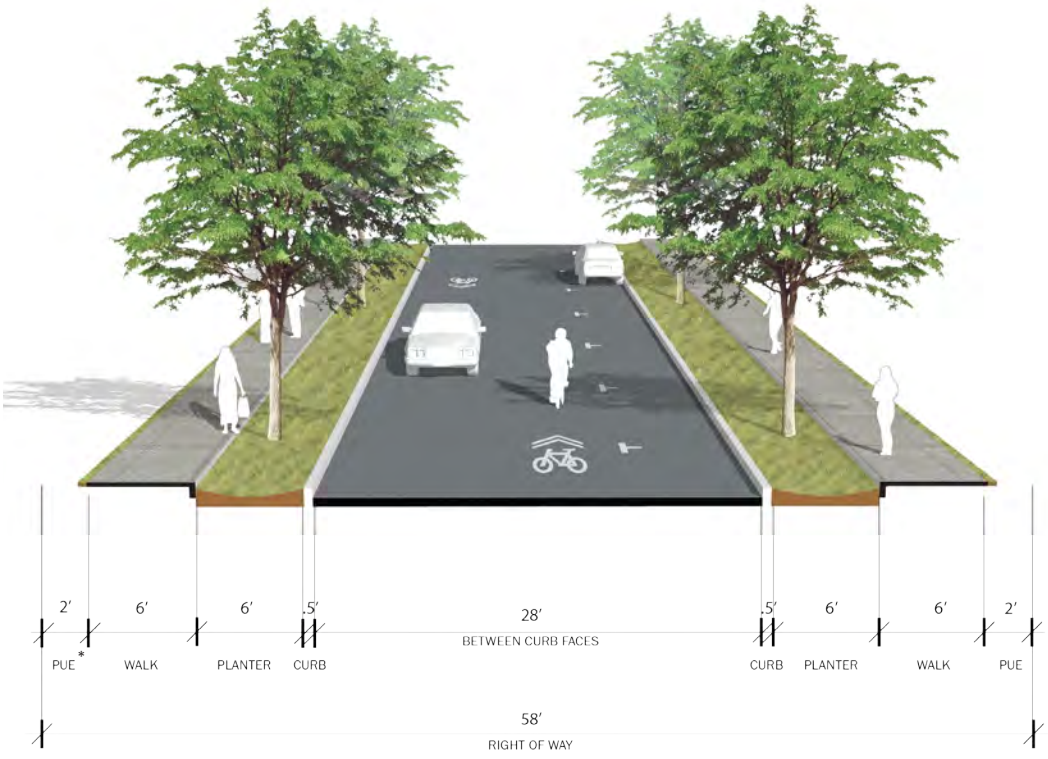
Proposed Oregon Highway 18 Cross Section

COMPLETE STREETS DESIGN

The Three Mile Lane Area Plan includes special complete street standards to encourage biking and walking, requiring stormwater treatment and extensive street tree plantings on all study area streets. These standards are compared to exiting standards applicable elsewhere in the City in the table blow; complete street cross-sections for Major Collector and Local Residential streets are shown on the facing page.

	Major Collector Existing Standards	Notes	Local Residential Existing Standards	Notes
Right-of-Way	74′	Increase to 80′	50′	Increase to 58′
Speed	25–30 mph		15–25 mph	
Maximum Average Daily Traffic (ADT)	16,000		1,200	
Adjacent Land Use Intensity	Medium		Low	
Sidewalks	5′ residential 10–12′ commercial	6′	5′	Increase to 6′
Planter Strips	6′ residential N/A commercial	8′	5′	Increase to 6′
Curb-to-Curb Street Width	44′	Suggest 50′	28′	
On-Street Parking Two Sides	N/A		yes	Switch to one side parking if travelway too narrow.
Bike Facility	2 lanes (5′)	Change to 8′ buffered bike lanes (or cycle tracks)	Shared Lane	OK, with sharrow markings
Median / Center Turn Lane	12′		None	
Travel Lane Width	2 lanes (11′)		See street width	

PROPOSED 3ML MAJOR COLLECTOR STREET CROSS-SECTION



PROPOSED 3ML LOCAL RESIDENTIAL STREET CROSS-SECTION

BICYCLE FACILITIES

The Preferred Alternative includes recommended bicycle system improvements on existing streets and new connectors to help form a more complete bicycle network within the 3MLAP study area. Bicycle facilities provide improved mobility for users riding to the city center and seeking active transportation options that support a healthy lifestyle. Bicycle facilities considered in the study include bike lanes, buffered bike lanes, bike boulevards (shared lane), cycle tracks and shared-use paths as shown on this page.

The combination of bicycle facility improvements along existing and planned collector streets, and planned pathway improvements in the study area will significantly improve bicycle access, mobility and comfort for users of all ages and confidence levels.

Buffered Bike Lane

Cycle Track

Two-Way Cycle Track

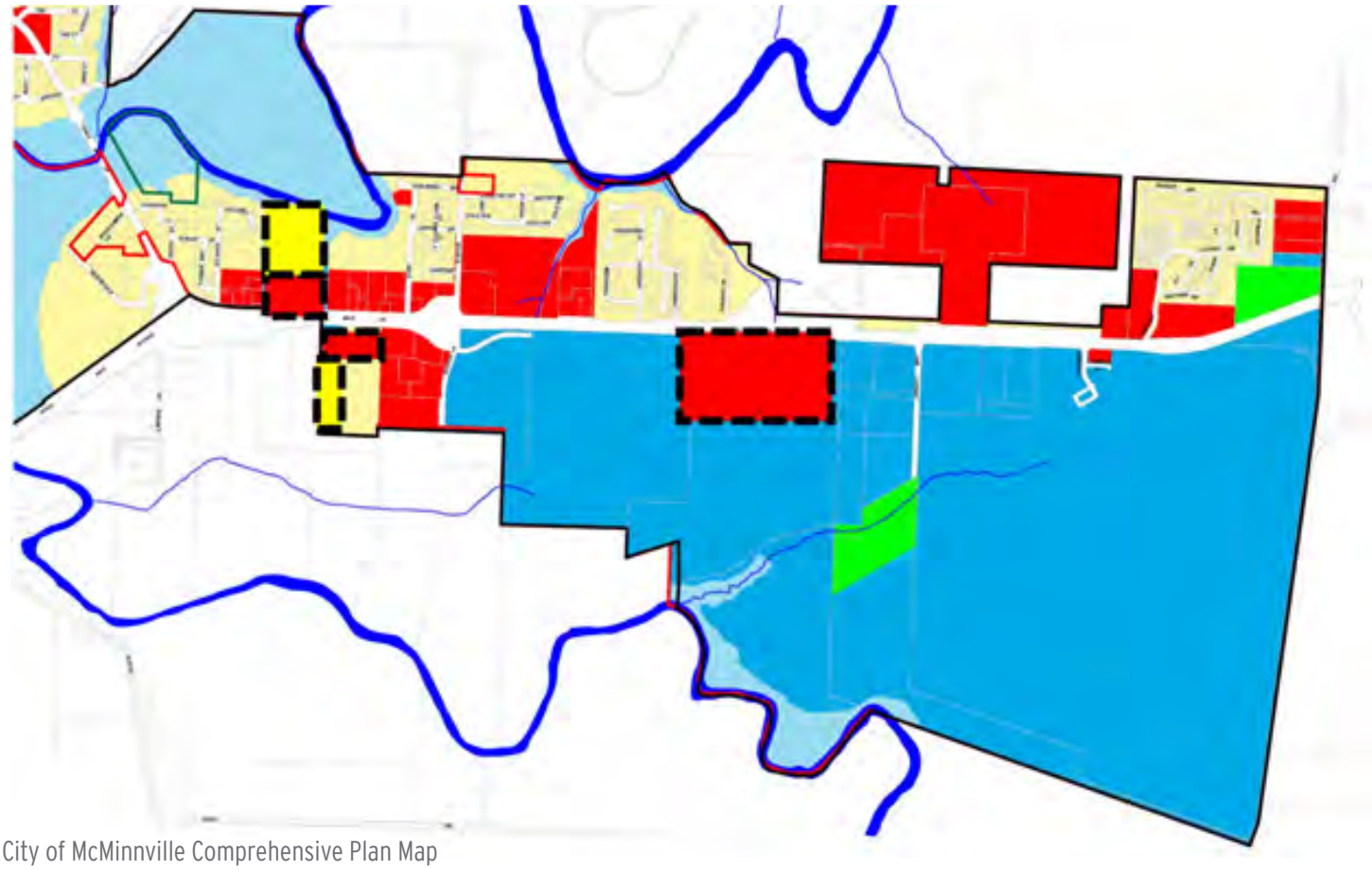
Shared Lane (sharrows)

POLICIES

The following policies are intended to guide development and future planning decisions in the Three Mile Lane area. These policies implement the Three Mile Lane Area Plan goals and describe how Great Neighborhood Principles are expected to be expressed in the future growth and development of the Three Mile Lane Area.

1. Require future development to be consistent with the design elements of the Three Mile Lane Area Plan.
2. Public improvements and private development shall strive to protect tree groves and mature individual trees.
3. Riparian corridors and adjacent native landscape shall be protected.
4. The built environment will be designed to provide and protect views to rolling hills and volcanoes and to enhance visual and physical access to the North Yamhill River. New streets and open spaces will be oriented to capture views.
5. Enhancing connections to existing trails and open space, such as connections into Joe Dancer Park and Galen McBee Airport Park, and creating a public greenway along South Yamhill River with trails and connections to the Three Mile Lane Area is a priority.
6. New gathering spaces will be designed to incorporate natural areas and views.
7. Require native landscape plantings with seasonal variation and tree plantings that include shade streets with mature tree canopy.
8. A network of sidewalks and trails will connect people to key locations within the Three Mile Lane Area.
9. The Three Mile Lane Area will have safe bicycle routes for residents and touring cyclists.
10. Proposed new streets will connect to the existing local street grid, consistent with the conceptual designs in the Three Mile Lane Area Plan and in compliance with Transportation System Plan standards.
11. New commercial developments should be designed to be at a walkable, human scale and for ease of use by all ages and abilities.
12. New commercial, office, mixed-use, and multi-family developments should be designed to reflect the micro-climate and enhance outdoor life through the incorporation of features such as porches, balconies, courtyards, plazas, etc.
13. New commercial, office, mixed-use, and industrial campus developments should promote inclusion and interaction within the right-of-way.
14. Encourage mixed-use development where feasible.
15. Proposed site landscape for new development should strive to reflect patterns of wine industry—eg, rows of vines, southern orientation, shelter belts of trees – and consider functional site planning of vineyard and farm complexes as conceptual models.
16. New development should consider adjacency to agricultural fields and respect this heritage through careful transitions.
17. Architectural building design that includes simple roof forms (industrial and agricultural) is encouraged in the Three Mile Lane Area.
18. Encourage a diversity of future housing forms, types, and design that respect the current character of the area .
19. Ensure that new commercial and industrial campus development creates a welcoming and visible interface with Three Mile Lane.
20. Encourage site design and architecture that visibly convey the historic or current industry on the site (e.g., aviation, wine-making).
21. New commercial, mixed-use, office, and industrial campus development should consider using local materials for cladding and building structure (timber, corrugated steel cladding, red brick), and incorporating vibrant color.

COMPREHENSIVE PLAN AMENDMENTS



City of McMinnville Comprehensive Plan Map

In addition to the Three Mile Lane Area Plan being adopted as an element of the Comprehensive Plan, a map amendment will be a necessary implementation action. The Area Plan envisions land uses that are different than what is currently planned for on the City's Comprehensive Plan map. To allow for the area to develop consistent with the vision for the Three Mile Lane Area, the City will need to change the Comprehensive Plan Land Use Map in the areas indicated by the dashed black line above. The predominant change is from an Industrial designation to a Commercial designation for 40 acres south of Highway 18. The other change south of the highway, west of Norton Lane, is from Industrial to Commercial and Residential. The needed amendment north of the highway and west of Norton Lane changes Industrial designated land to Commercial and Residential designations to enable the subject properties to develop as a mixed-use area.

REGULATORY FRAMEWORK

The Three Mile Lane Planned Development Overlay covers the entirety of the Three Mile Lane Area. Adopted in 1981, the overlay was established to ensure high quality design, compatibility of living and working environments, provision of open spaces and parks, and buffering of residential uses from the highway. Amendments in 1994 replaced outdated policies and added regulations for commercial signage along the Three Mile Lane corridor. The Three Mile Lane Area Plan recommends another update to address development requirements. Future development in this area will continue to be regulated by the underlying base zones, with additional or modified standards applied as applicable, based on the updated Three Mile Lane Planned Development Overlay.

Policy	Overlay Amendment	Recommended Future Action
1. Require future development to be consistent with the design elements of the Three Mile Lane Area Plan.	Include specific development standards (see amendments in this table) in the Three Mile Lane Planned Development Overlay to implement the Three Mile Lane Area Plan. Note that the review and approval process for land use applications is through Three Mile Lane Design Review, Director's Review with Notification. Require Mixed–use, Commercial, or Industrial development proposals over [10] acres to be subject to Planned Development Overlay (Chapter 17.51) and Planning Commission approval. In the Innovation Campus allow office uses that support products and services that are manufactured or developed on site or that serve as corporate offices for products that are manufactured elsewhere.	
2. Public improvements and private development shall strive to protect tree groves and mature individual trees.		Identify tree groves and tree types to be protected and designate as significant or historic trees.
3. Riparian corridors and adjacent native landscapes shall be protected.	Require mapping and protection of stream corridors and re–vegetation with native plantings.	
4. The built environment will be designed to provide and protect views to rolling hills and volcanoes and to enhance visual and physical access to the North Yamhill River. New streets and open spaces will be oriented to capture views.	Require viewshed analysis as part of Design Review.	
5. Enhancing connections to existing trails and open space, such as connections into Joe Dancer Park and McBee Park, and creating a public greenway along South Yamhill River with trails and connections to the Three Mile Lane Area is a priority.	Require connection to proposed trail, trail right–of–way dedication, and trail construction as part of Design Review/development approval.	
6. New gathering spaces will be designed to incorporate natural areas and views.	When proposed as part of a Planned Development master plan, require gathering spaces be designed to incorporate natural areas and views as a condition of approval.	

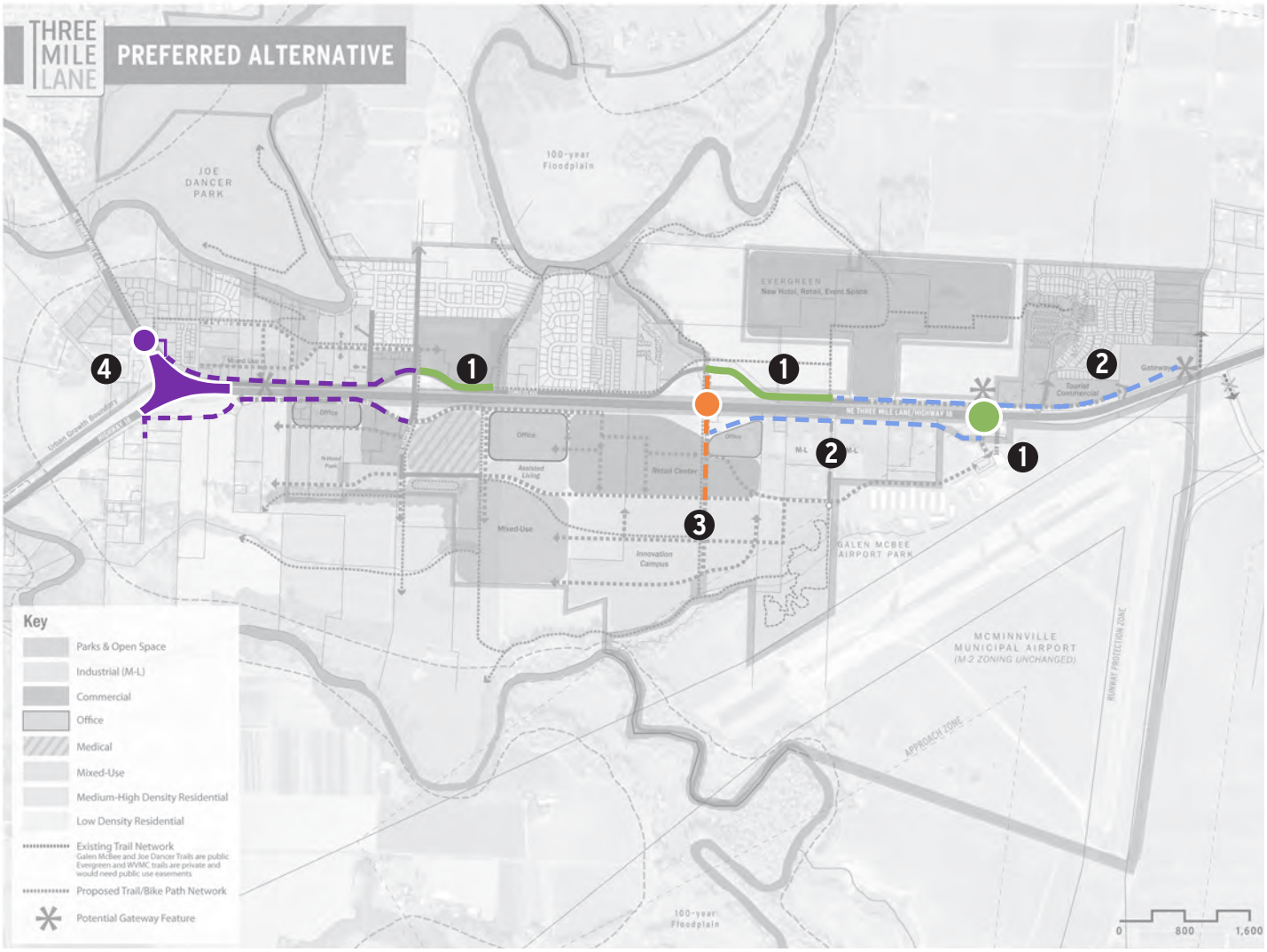
REGULATORY FRAMEWORK

Policy	Overlay Amendment	Recommended Future Action
7. Require native landscape plantings with seasonal variation and tree plantings that include shade streets with mature tree canopy.	Require native landscaping and plantings of all development through Design Review.	Develop and define approved planting list and approved tree list.
8. A network of sidewalks and trails will connect people to key locations within the Three Mile Lane Area.	Apply pedestrian walkway and connectivity standards to all non-residential development. Note: Pedestrian walkway standards, currently are applied to Large Format Retail; site design requires connections between buildings and from building entrances to streets (§17.56.050.C.2).	
9. The Three Mile Lane Area will have safe bicycle routes for residents and touring cyclists.	Require transportation improvements consistent with the Area Plan through Design Review.	
10. Proposed new streets will connect to the existing local street grid, consistent with the conceptual designs in the Three Mile Lane Area Plan and in compliance with Transportation System Plan standards.	Require transportation improvements consistent with the Area Plan through Design Review.	
11. New commercial developments should be designed to be at a walkable, human scale and for ease of use by all ages and abilities.	Requirements for commercial building size and massing. Standards for parking maximums for all uses. Parking lot location requirements for commercial uses.	Additional guidelines or standards related to façade treatments. 17.56.050 Development Standards
12. New commercial, office, mixed-use, and multi-family developments should be designed to reflect the micro-climate and enhance outdoor life through the incorporation of features such as porches, balconies, courtyards, plazas, etc.	Require as part of Design Review: • Standards for non-residential buildings to include minimum pedestrian shelter coverages along ground floor elevations/street frontages and main entrances. • Residential design features to include clear and objective building design standards/architectural elements.	Additional guidelines or standards related to façade treatments.
13. New commercial, office, mixed-use, and industrial campus developments should promote inclusion and interaction within the right-of-way.	Require as part of Design Review: • New requirements for building orientation (set-to, building orientation); • Additional guidelines or standards related to façade treatments, including transparency. • Provision of on-street parking for ground-floor commercial uses (new requirements allowing on-street spaces to be counted toward parking minimums, new cross-section standards for streets with ground-floor retail).	
14. Encourage mixed-use development where feasible.		Consider additional guidelines or requirements for the Mixed Use area.

Policy	Overlay Amendment	Recommended Future Action
15. Proposed site landscaping for new development should strive to reflect patterns of wine industry—eg, rows of vines, southern orientation, shelter belts of trees – and consider functional site planning of vineyard and farm complexes as conceptual models.	Require landscaping proposed as part of a Planned Development master plan to demonstrate how it reflects existing patterns.	
16. New development should consider adjacency to agricultural fields and respect this heritage through careful transitions.	Buffer/perimeter requirements for new non-residential development adjacent to a dissimilar use.	Determine if specific buffering requirements are needed for proposed development abutting land zoned exclusive farm use.
17. Architectural building design that includes simple roof forms (industrial and agricultural) is encouraged in the Three Mile Lane Area.		Develop design guidelines or architectural standards.
18. Encourage a diversity of future housing forms, types, and design that respect the current character of the area.	Buffer/perimeter requirements for new non-residential development adjacent to a dissimilar use.	Evaluate Zoning Ordinance to ensure there are clear and objective design standards for new residential development.
19. Ensure that new commercial and industrial campus development creates a welcoming and visible interface with Three Mile Lane.	Requirements for landscape buffering fronting Three Mile Lane. Requirements for non-residential development related to building facades, including addressing blank walls and requiring articulation and materials or color variation.	Develop design guidelines to encourage a more cohesive visual character along the corridor.
20. Encourage site design and architecture that visibly convey the historic or current industry on the site (e.g., aviation, wine-making).		Develop design guidelines or architectural standards.
21. New commercial, mixed-use, office, and industrial campus development should consider using local materials for cladding and building structure (timber, corrugated steel cladding, red brick), and incorporating vibrant color.	Requirements for non-residential development related to building facades, including addressing blank walls and requiring articulation and materials or color variation.	Develop additional design guidelines or standards related to façade treatments; define acceptable color palate.

CONCEPT PHASING & COSTS

Phase	Description	Notes	Cost in 2021 (millions of $) Low	High
1	**Independent State and/or City Projects**			
	New multi-lane roundabout at OR 18 and Cirrus Avenue		$8.0	$10.0
	Construct bicycle lanes and sidewalks on NE Cumulus Avenue from Cumulus to Evergreen Air and Space Museum Entrance		$0.4	$0.6
	Extend Cumulus Avenue east from Norton Lane and modify intersection traffic control at existing Norton Lane/Cumulus Ave intersection	(1)	tbd	tbd
2	**City/State Projects Reliant on Completion of New OR 18/Cirrus Roundabout**			
	Disconnect loop road from OR 18 and realign to Cirrus Avenue		$2.5	$3.0
	New OR 18 frontage roads between Cumulus Avenue and Cirrus Avenue (both north and south of OR 18)	(2)	tbd	tbd
3	**City/State Projects Commensurate With/Reliant on New Extension of Cumulus Avenue South of OR 18**			
	Construct Cumulus Avenue south of OR 18	(2)	tbd	tbd
	Revise Traffic Signal at OR 18/Cumulus Avenue intersection		$1.1	$1.2
	Construct bicycle lanes and sidewalks on Cumulus Avenue from OR 18 to NE Cumulus Avenue.		$0.5	$0.7
4	**City/State Projects Commensurate With/Reliant on New OR 18/Three Mile Lane Interchange**			
	Reconstruct OR 18/Three Mile Lane Interchange	(3)	$60.0	$90.0
	Re-Fit Cumulus Avenue (north side) with 2-Way cycle track, buffer strip and wider sidewalk: Three Mile Lane to Norton Lane		$3.1	$3.4
	Re-Fit Stratus Avenue (south side) with 2-Way cycle track, buffer strip and wider sidewalk: Martin Lane to Norton Lane		$1.6	$1.8
	Re-align Cumulus Avenue and Nehemiah Lane at Three Mile Lane		$2.4	$2.6
	New Traffic Signal on Three Mile Lane at Cumulus Avenue		$0.5	$0.6
	Re-align Lawson Lane		$1.5	$1.7
			$81.6	**$115.6**



*** Colors on map above correspond to Phases in table on facing page**

City of McMinnville

THREE MILE LANE

May 2021

CITY OF MCMINNVILLE ZONING ORDINANCE

Chapter 17.56

LARGE FORMAT COMMERCIAL DEVELOPMENT
(as adopted by Ord. 4891, April 22, 2008)

Sections:

17.56.010 Purpose. While McMinnville recognizes the inevitable commercial growth taking place within the City and the ensuing change to the cityscape, it is committed to preserving the character and values of the City, thus continuing to make McMinnville an inviting place to live and work. This ordinance aims to diminish the negative aesthetic impacts of large-scale commercial development on the City.

Large commercial establishments typically locate at highly visible locations on major public streets. As a result of this, their design and layout determines much of the character and attractiveness of major streetscapes in the City. This ordinance is a response to concerns about the impact of large-format commercial establishments on McMinnville's landscape. To date, much of the built commercial environment in McMinnville is largely defined by typical small-town characteristics: architectural variety, pedestrian scale and accessibility, substantial façade articulation, extensive glazing, and landscaping. The goals and standards of this chapter are intended to encourage large-scale commercial development that reflects McMinnville's traditional design elements.

Specifically, the goals of this ordinance are to:

A. Establish standards which will ensure that large-scale commercial development in McMinnville is compatible with surrounding commercial and residential development.
B. Permit commercial development which is visually appealing with regard to site and building design.
C. Encourage large-scale commercial development to use energy-efficient building and layout designs.

D. Create a pedestrian-friendly environment within large-scale commercial developments.
E. Achieve reasonably sized parking areas enhanced with substantial landscaping and parking lot trees.

17.56.020 Definitions. For the purposes of this section, refer to Section 17.06.015 for Large Format Commercial Development related definitions. (Ord. 4952 §1, 2012).

17.56.030 Applicability.

A. The requirements of this Chapter shall apply to:
    1. New commercial structures, the footprint of which exceeds 25,000 square feet of gross floor area;
    2. Additions to commercial structures that result in a combined total footprint exceeding 25,000 square feet of gross floor area, and that represent more than a 20 percent increase in building gross floor area. In those cases, the building's entire façade shall be brought into compliance with the standards of this chapter to the extent practicable.
    3. Buildings less than 25,000 square feet in size that share appurtenant facilities, such as driveways, parking and pedestrian walkways, with developments otherwise subject to the requirements of this chapter. Examples include restaurants, banks, gas stations and convenience stores constructed on building pads or separate lots located within a larger development site that is otherwise subject to the requirements of this chapter.
B. Where existing planned development provisions differ from the standards of this Chapter, the standards of this Chapter shall take precedence.

17.56.040 Review Process.

A. An application for design review of commercial development subject to the provisions of this ordinance shall be submitted to the Planning Department and shall be subject to the procedures listed in (B) through (D) below.
B. Applications shall be submitted to the Planning Department for initial review for completeness as stated in Section 17.72.040. The application shall include:
    1. Two (2) copies of the following information:
        a. Detailed plans for the proposed commercial development showing topography, site layout, massing (i.e., isometric), parking, and site circulation.
        b. Building elevations that include building colors and materials (texture and relief), building height, vertical and horizontal articulation, voids to solids (window to wall) relationships, window treatment, and other elements as appropriate.
        c. General landscape plan indicating the percentage of site landscaping, and the number, species, and placement of all proposed plant material; a complete landscaping and irrigation plan is required prior to or at the time of building permit submittal.
    2. A narrative describing how the proposal meets or exceeds the guidelines and standards of this chapter.
    3. Other information deemed necessary by the Planning Director to allow review of the applicant's proposal. The Director may also waive the submittal of

certain information based upon the character and complexity (or simplicity) of the proposal.

C. An application for design review shall be reviewed by the Planning Director as set forth in Section 17.72.100.

D. A guideline or standard contained in this ordinance may be waived as a part of the design review process. If a waiver is requested, the applicant must explain in their application how the proposed design meets or exceeds the guidelines and standards of this chapter. A request for a waiver shall be reviewed by the Planning Director and notification shall be provided as set forth in Section 17.72.110. The Director shall base a decision to approve, approve with conditions, or deny a waiver request based on the following criteria:

1. There is a demonstrable difficulty in meeting the specific requirement(s) of this chapter due to a unique or unusual aspect of the site, an existing structure, or the proposed use(s) of the site;
2. There is demonstrable evidence that the alternative design shall accomplish the purpose of this chapter in a manner that is equal to or superior to a project designed consistent with the guidelines standards contained herein; and,
3. The waiver requested is the minimum necessary to alleviate the difficulty of meeting the requirements of this chapter.
4. Notification of the Director's decision shall be provided as set forth in Section 17.72.150. A copy of the Director's letter shall be provided to the Building Official.
5. An appeal of a decision by the Planning Director may be made subject to the provisions of Section 17.72.170. (Ord. 4920, §4, 2010)

17.56.050 Development Standards. Large-dimensioned, plain, building facades are typically perceived as architecturally monotonous and do not reflect the existing or desired character of the McMinnville community. Toward reducing the visual scale of such buildings, McMinnville supports architectural designs that relate to both the pedestrian as well as to those traveling within adjacent rights-of-way.

To implement that vision, McMinnville requires that large commercial structures, as defined in this chapter, provide architectural features that "break up" or articulate the building's horizontal plane, and that provide visual interest. Examples of elements supportive to this design include, but are not limited to, the use of vertical columns, gables, a variety of compatible and complementary building materials, the provision of openings in the building façade, and landscaping, both around the perimeter and throughout the site.

This vision for development is addressed through the following four sections of this chapter identified as: Building facades; roof features; site design; and, energy efficiency.

A. Building Facades. Buildings shall have architectural features and patterns that provide visual interest relating to both the pedestrian as well as to those traveling within adjacent rights-of-way. The following elements shall be integral parts of the building fabric, and not superficially applied trim, graphics, or paint.

1. Architectural Projections or Recesses.
Features such as projections and recesses can create an interplay of sun and shadow along the façade and provide the building a sense of depth and substance. Additionally, projections and recesses can also provide strong visual focal points and are often used to emphasize specific aspects of the design such as an entry or adjacent plaza.

Standard: Building facades shall include architectural projections and/or recesses incorporated into each exterior wall design. The proposed design shall be of such dimension to relate significantly to both the pedestrian as well as to those traveling within adjacent rights-of-way.

2. Design Features.

Large structures that provide a combination of design features add visual interest to the building, and help it relate the pedestrian scale. Further, the provision of customer amenities such as covered walkways also help to create a more inviting atmosphere for the community at-large. In an effort to avoid the construction of large, architecturally plain commercial facilities, McMinnville encourages architectural variety and character in its building design and the provision of pedestrian amenities to create a more livable and enjoyable outdoor environment for the community.

Standard: Buildings shall include at least two design features along the majority of the main façade such as canopies, awnings, porticos, covered walkways, or transparent display windows.

3. Loading Facilities.

To aid in mitigating negative visual impacts commonly associated with off-street loading facilities, such facilities shall be visually screened by either a wall designed to architecturally complement the building exterior, an evergreen vegetative screen, or a combination of these two options. Solid waste and recycling enclosures shall be designed as required by Chapter 17.61(Solid Waste and Recycling Enclosure Plan) of the McMinnville Zoning Ordinance.

4. Entrances.

To provide architectural interest to the building and to provide meaningful focal point(s), the customer entrance(s) of each large commercial structure shall be clearly visible and architecturally prominent.

5. Repeating Elements.

All building facades shall include a repeating pattern that includes at least three of the following four elements, one of which shall repeat horizontally:

a. Color change

b. Texture change

c. Material change

d. Architectural or structural bays provided through a change in plane of at least 12 inches in width, such as a reveal, projecting rib, or offset.

6. Exterior Building Materials.

a. At least 75% of exterior building materials shall include:
    i. Brick
    ii. Rock
    iii. Stone,
    iv. Tile, and/or
    v. Tinted and textured concrete masonry units
    vi. Other materials as approved by the Planning Director

b. Exterior building materials may include the following architectural and design elements as approved by the Planning Director; the applicant shall demonstrate compliance of the design guideline goals and standards of this chapter:
   i. Smooth-faced concrete masonry units
   ii. Metal siding
   iii. Smooth-faced tilt-up concrete panels
c. Exterior building materials shall not include:
   i. T-111 siding
   ii. Plain plywood, and
   iii. Sheet Pressboard

7. Multiple-Tenant Buildings.
When large commercial structures contain multiple tenants, each business that occupies less than 15,000 square feet of gross ground-floor area, and with separate exterior entrance(s), shall have transparent windows along at least 50 percent of the horizontal length of its storefront. The bottom of the ground floor windows shall be no more than three (3) feet above the adjacent exterior grade. These requirements are in addition to all other requirements of this Chapter.

B. Roof Features. Rooftops and rooflines have the ability to define the skyline and become symbols of the building. Architectural variability in the roof design can enhance the character of the development and can add to its positive relationship to the neighborhood around it. McMinnville encourages roof designs that provide architectural variation and visual interest to complement the community at-large. Toward this end, roof features shall incorporate no less than two of the following features:

1. Parapets with cornices;

2. Overhanging eaves or cornices;

3. Prominent portions of the roof design exhibiting slopes with a plane of between 4/12 (33 degrees) and 6/12 (45 degrees).

C. Site Design.

1. Buffering.
Where a property containing a large commercial structure(s) abuts land zoned for residential use, and no public street separates the residential-zoned land from the commercially zoned property, the proposed use shall provide screening in the form of sight-obscuring, evergreen plantings, shade trees, fences, walls, or combinations of plantings and screens. Where plant material is used, emphasis shall be placed on achieving an effective year-round vegetative screen as approved by the Landscape Review Committee. Chain-link fencing shall not be permitted.

2. Pedestrian Walkways.
   a. Continuous 10-foot-wide pedestrian walkways shall be provided along the full length of any building facade featuring a customer entrance, and along any other building facade abutting customer parking areas for the distance that the parking lot abuts the building.

b. Continuous 10-foot-wide pedestrian walkways may be allowed to be separated from the building façade with planting beds for foundation landscaping except where features such as covered entrances, awnings or canopies are part of the building façade, wherein the walkway must abut the building façade. Such walkways shall include weather-protection features, such as awnings, within 30 feet of all customer entrances and connecting to the entrance(s).
c. Continuous six-foot-wide pedestrian walkways shall be provided from the sidewalk along the adjacent public or private street(s) to the principal customer entrance(s) of all large commercial structures. These pedestrian walkways shall feature abutting landscaped areas of no less than five-feet in width for no less than 50 percent of the length from the building to the adjacent street.
d. Pedestrian walkways shall be distinguished from driving surfaces through use of durable, low maintenance surface materials such as pavers, bricks, or scored or dyed concrete.
e. Walkways within a site with multiple structures shall be located and aligned to directly and continuously connect all commercial buildings, and shall not be located and aligned solely based on the outline of a parking lot configuration. Walkways within parking lots shall be raised or enhanced with a paved surface not less than six (6) feet in width. Drive aisles leading to main entrances shall have walkways on each side of the drive aisle.
f. Where it is necessary for the primary pedestrian access to cross drive aisles or other internal roadways, the pedestrian crossing shall emphasize and place priority on pedestrian access and safety. The material and layout of the pedestrian access shall be continuous as it crosses the driveway, with a break in continuity of the driveway paving and not in the pedestrian access way. The pedestrian crossings must be well-marked using pavement treatments, signs, striping, signals, lighting, traffic calming techniques, median refuge areas, or other design elements as may be approved.

3. Parking.

Parking spaces shall be provided at no more than 120 percent of the minimum required by Chapter 17.60 (Off-Street Parking and Loading). Additionally, all parking areas shall be designed in a manner that is attractive, easy to maintain, and minimizes the visual impact of off-street parking. Bicycle parking accommodations shall be provided as required by Chapter 17.60.140 (Off-Street Parking and Loading) of the McMinnville Zoning Ordinance.

4. Parking Lot Landscaping.

a. All parking facilities shall include landscaping to equal not less than ten percent (10%) of the gross site area supporting the proposed commercial development; exclusive of building footprint(s).
b. Landscaped peninsulas and islands shall be evenly distributed throughout all parking areas, and separated by no more than 60 feet, one from another. Such landscaped areas shall be provided with raised curbs, be a minimum of five feet in width, and shall each contain at least one deciduous tree. To achieve the maximum canopy coverage, all trees shall be non columnar in form or as may be approved by the Landscape Review Committee.

5. Dark Skies Lighting.

Exterior lighting often creates a substantial amount of unintended sky-directed glare (sky glow). “Dark skies” lighting aims to protect the night sky from light pollution by use of partially and fully shielded lighting, and by more careful

selection of lighting options for the application. These efforts help to ensure that the majority of the light reaches its intended target and reduces both vertical and lateral glare. Additionally, as energy prices increase, the city encourages the use of more efficient lighting.

Standard: Lighting of parking and landscaped areas shall be directed either into or on the site and away from property lines. Building accent lighting shall be directed and/ or shielded to place light on the intended target, and not result in skyward glare.

17.56.060 Energy Efficiency. Locally and nationally, energy costs have continued to rise as has the desire to lessen the volume and severity of pollutants released into the environment. McMinnville supports the vision of local sustainability and endorses the utilization of proven and innovative energy efficient design and construction technologies to reduce building heat-gain, lower energy consumption and lessen pollutant output such as:

A. Energy-efficient windows
B. LEED level construction
C. White reflective cool-roof technology to reduce heat absorption
D. Use of other energy-efficient technologies as approved through the review process outlined in this chapter.

17.56.070 Maintenance of Vacant Buildings. In the event of the vacancy of a large commercial structure, the owner shall maintain the facilities and grounds, including the structure(s), landscaping, parking lots and storm water facilities, to ensure the development does not become a public nuisance.

From:	Heather Richards
To:	Margaret Cross
Subject:	RE: Request for information relating to 3MLAP
Date:	Sunday, February 13, 2022 10:24:00 PM
Attachments:	Green Cities - Three Mile Lane.pdf McMinnville 3MLAP Online Open House Combined Results.pdf image002.png

Hi Margaret, I tried to answer your questions in your email below by pointing you to where you can find the information. I am fielding many requests for information right now and per City policy I cannot spend more than 15 minutes on a request informally. If it takes me more than 15 minutes than we ask that it go through our official public records request process.

Have a great day!

Heather

City of McMinnville
PLANNING

Heather Richards, PCED
Planning Director
City of McMinnville
231 NE Fifth Street
McMinnville, OR 97128

503-474-5107 (phone)
541-604-4152 (cell)

Heather.Richards@mcminnvilleoregon.gov
www.mcminnvilleoregon.gov

From: Margaret Cross <maggie.45.cross@gmail.com>
Sent: Saturday, February 12, 2022 8:07 PM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>

Subject: Request for information relating to 3MLAP

Dear Heather,

I have three requests that I hope you can respond to:

First, I wonder if you could give me more information about the public meetings for the 3MLAP. I am having trouble filling in some blanks on my timeline and I want to be accurate.
I see there was a Focus Group meeting in December, 2018, and another on 1/22/2019; a third meeting is referenced but no date is given. Could you tell me when it occurred? Are there any minutes or summaries kept for these meetings and if so, are they available? Were there two charrettes or just the one on April 7, 2021? What were the dates for the property owner work sessions? Are there any minutes, attendance lists or summaries available for these sessions? I note a town hall on 7/11/2019, but when were the Open Houses?

City Response: Below is a table of the public meeting dates associated with this project. This should answer most of your questions. There were four design charrettes in total with this project: 1) General Public (July 29, 2017); 2) Property Owners (March 14, 2019); 3) Project Advisory Committee (April 8, 2019); and 4) General Public (July 11, 2019).

Appendix A of the Plan document has the summary information for most of the public meetings, and it can be found on the project website at: https://threemilelane.com/project-documents. You will also find agendas, presentations, and summaries for most of the meetings there as well, except I noticed that it did not have the survey information which I have attached to this email. The Green Cities information happened prior to the ODOT grant project. I have attached that for you as well. All of the planning commission and city council presentations should be available on the city website for those two different committees. Meetings | McMinnville Oregon.

Type of Meeting	Date	Notes

Design Charrette (Green Cities, U of O)	July 29, 2017	Mailing to all property owners in the area, social media notification, newspaper articles.
Mailing to all property owners in the area	December 9, 2018	Mailing introducing the project and the project website inviting people to participate and sign up a for an interested stakeholder email distribution group
Focus Groups	January 22, 2019	Invited stakeholders representing community leaders in affordable housing, economic development, tourism
Design Charrette	March 14, 2019	Property Owners
Project Advisory Committee Meetings	March 14, 2019	
Design Charrette	April 8, 2019	Project Advisory Committee
Project Advisory Committee Meetings	April 8, 2019	
Open House	April 10, 2019	Mailing to everyone in the area, social media notification, newspaper article
On-Line Public Survey	April 1 – April 24, 2019	Social media notification, newspaper article
Project Advisory Committee Meetings	June 12, 2019	
Design Charrette	July 11, 2019	Open to General Public – social

	(Part of Town Hall)	media notification, newspaper articles
Town Hall	July 11, 2019	Mailing to everyone in the area, social media notification, newspaper articles
City Council Presentation	August 13, 2019	At City Council meeting
Planning Commission Presentation	September 19, 2019	
Project Advisory Committee Meetings	April 7, 2021	
Virtual Public Open House	April 26 – May 17, 2021	Social media notification, newspaper articles
Joint City Council / Planning Commission Work Session	May, 11, 2021	
Planning Commission Work Session	November 17, 2021	
Planning Commission Public Hearing	January 20, 2022	
Planning Commission Public Hearing	February 17, 2022	

Second, can you tell me what it means when you refer to "re-aligning" a street like Nehemiah Lane. Practically, what does that look like? This is probably a commonly used term in road engineering,

but I'm clueless, I'm afraid.

City Response: "re-aligning" means redesigning the intersection of Nehemiah Lane so that it is safer both from a visibility and functionality perspective. That is all done when the need for an improvement at Nehemiah is identified and at that time it will be engineered. That was not part of this high level planning process, but merely pointed out as a future improvement that would need to occur.

Lastly, could you send me the links to read the applications for proposed re-zonings from M-1 to C-3 within the Three Mile Lane overlay? My eyes are getting pretty tired but I would like to read the actual applications as opposed to the legal notices.

City Response: You can find all current planning projects on our planning webpage. Links to the three comprehensive plan map amendments and zone changes are below:

Comprehensive Plan Map Amendment/Zone Change (CPA 2-20/ZC 3-20) | McMinnville Oregon

Comprehensive Plan Map Amendment/Zone Change (CPA 1-21/ZC 2-21) | McMinnville Oregon

Comprehensive Plan Map Amendment/Zone Change (CPA 2-21/ZC 3-21) | McMinnville Oregon

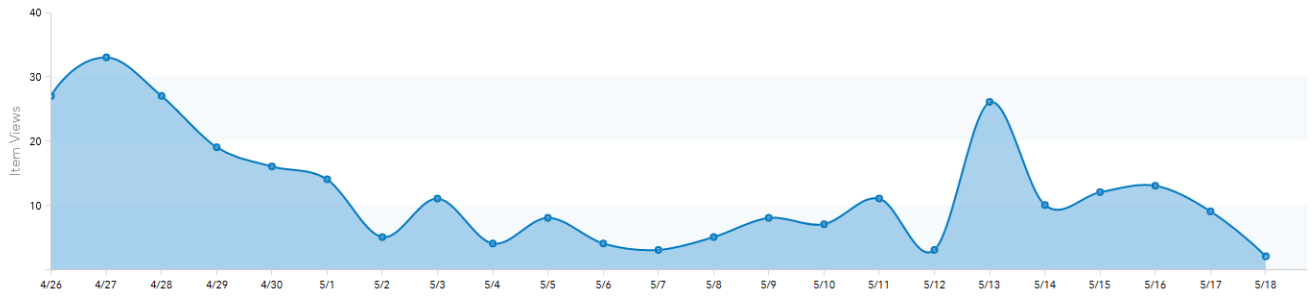
There sure is a lot of material to go through!

Regards,

Margaret Cross

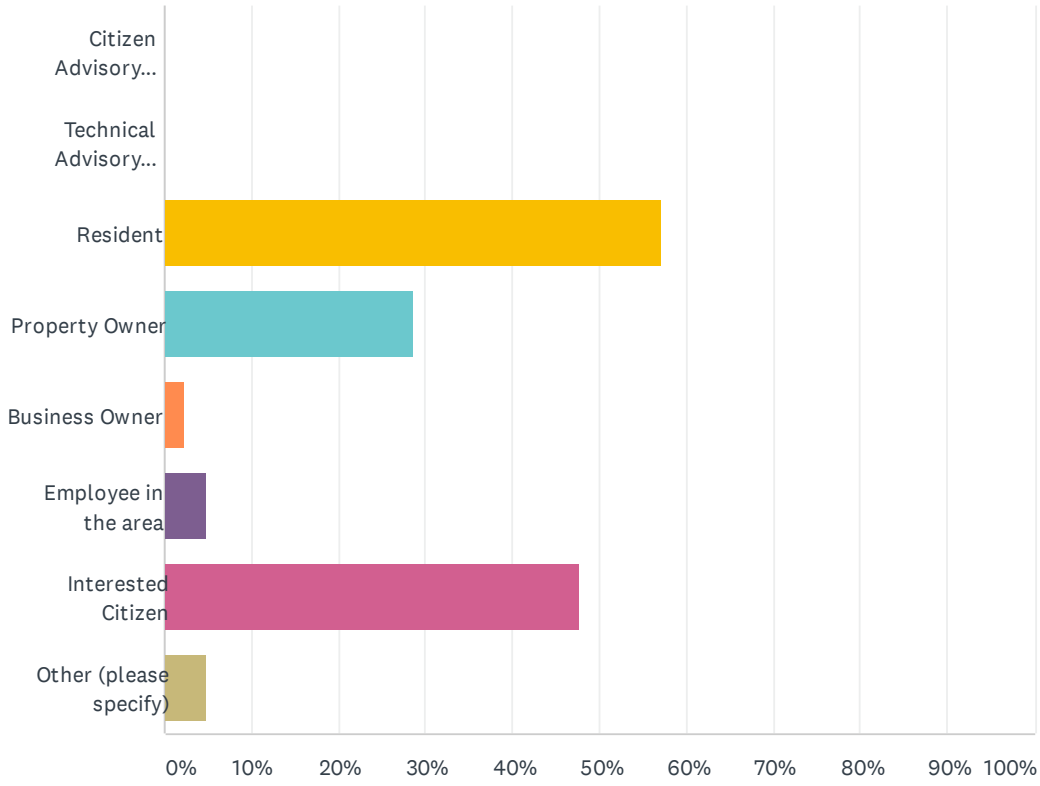
Item Views this Period	Avg Item Views Per Day
277	12.59

Usage Time Series



Q1 What is your interest in the Three Mile Lane Area Plan (choose all that apply)?I am a...

Answered: 42 Skipped: 0

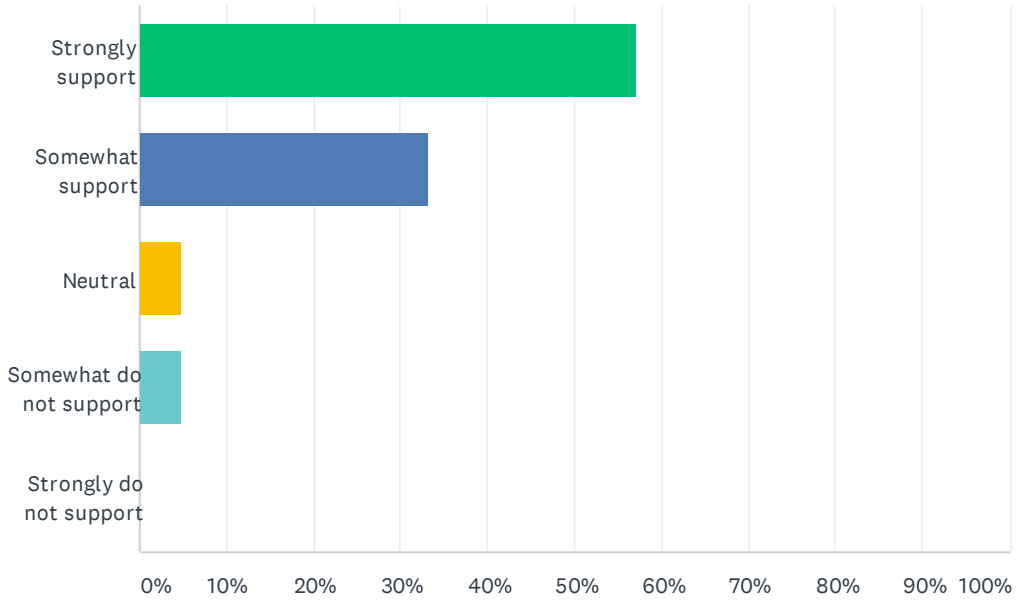


ANSWER CHOICES	RESPONSES	
Citizen Advisory Committee Member	0.00%	0
Technical Advisory Committee Member	0.00%	0
Resident	57.14%	24
Property Owner	28.57%	12
Business Owner	2.38%	1
Employee in the area	4.76%	2
Interested Citizen	47.62%	20
Other (please specify)	4.76%	2
Total Respondents: 42		

#	OTHER (PLEASE SPECIFY)	DATE
1	I am interested in Economic Development in the region	5/3/2021 4:49 PM
2	Test post.	4/26/2021 10:13 AM

Q1 What is your overall level of support for the Great Neighborhood Principles, as applied in the Three Mile Lane Area?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly support	57.14%	12
Somewhat support	33.33%	7
Neutral	4.76%	1
Somewhat do not support	4.76%	1
Strongly do not support	0.00%	0
TOTAL		21

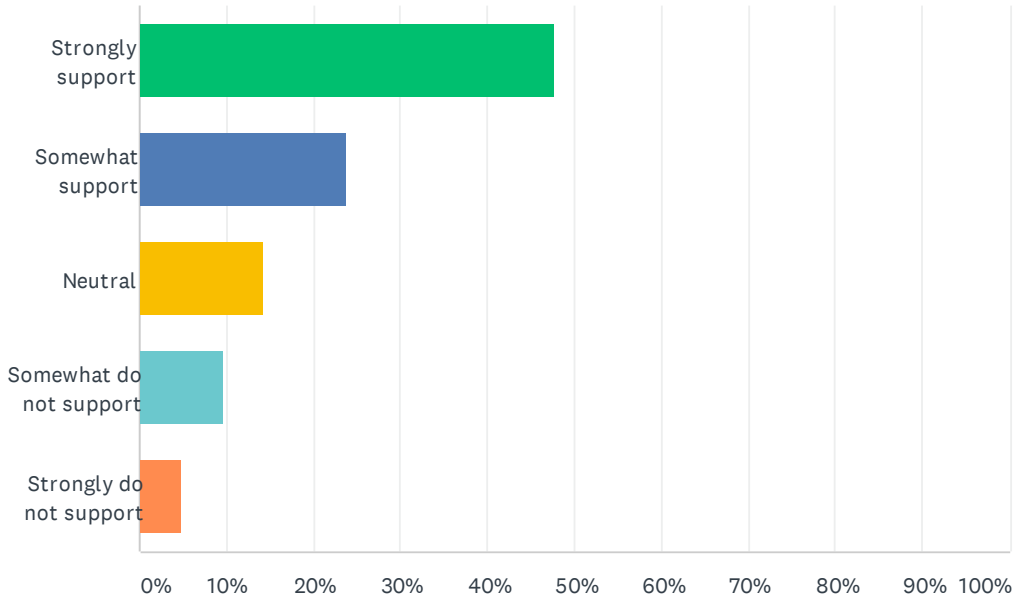
Q2 Is there anything else you would like to tell us about these principles?

Answered: 8 Skipped: 13

#	RESPONSES	DATE
1	This plan feels like an ode to wine, aviation and agriculture, which is fine. However, there is nothing in here that speaks to honoring or reflecting the ethnic diversity of this area, featuring indigenous artwork or using space or design to offer representation for other underrepresented ethnic minorities or marginalized groups. If that isn't written into the plan at this stage, I have zero confidence it'll be meaningfully addressed as you progress. How does this fit with McMinnville's DEI goals?	5/14/2021 7:14 AM
2	As a bicyclist, there should be bike lanes from the "Gateway" all the way into downtown 3rd street; As a person who likes to eat, we need a grocery store in this part of town. Market of Choice would fit the retail design well on Cumulus & Fircrest.	5/11/2021 4:40 PM
3	As a bicyclist, bike lanes are essential for commuting. Currently McMinnville is NOT a very bicycle friendly town. Also, as a resident near Fircrest & Cumulus, it would be wonderful to included a grocery store on this side of town, especially for those who can't commute far.	5/11/2021 4:22 PM
4	A great neighborhood cannot be created with a 4-lane highway running through the middle of it. They are great principles but in this area, at best, they are window dressing for an area of the city that is a sacrifice zone for the destructive impact of our auto-oriented society.	5/9/2021 4:37 PM
5	Keep a park like atmosphere in this area - not industrial or all housing,	5/4/2021 6:04 PM
6	I believe expansion of McMinnville Community airport is huge in the development of the Three Mile Lane project. Business patrons from nearby states would certainly appreciate the ease of flying into the city to appreciate all the amenities the city and surrounding areas have to offer.	5/3/2021 5:24 PM
7	To enhance the river area for local residents and bring in more, shopping, dining, etc. along with housing of various types would be a huge benefit to keep residents spending money in our own city and enhancing the area.	4/29/2021 6:56 AM
8	I most strongly agree with the principles that these spaces should be bike and ped friendly, connect with the urban core easily, and include a mix of residential, retail, and other uses. It is currently geared towards vehicles. Let's gear it towards humans.	4/27/2021 9:14 AM

Q1 What is your overall level of support for the key features of the land use plan?

Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly support	47.62%	10
Somewhat support	23.81%	5
Neutral	14.29%	3
Somewhat do not support	9.52%	2
Strongly do not support	4.76%	1
TOTAL		21

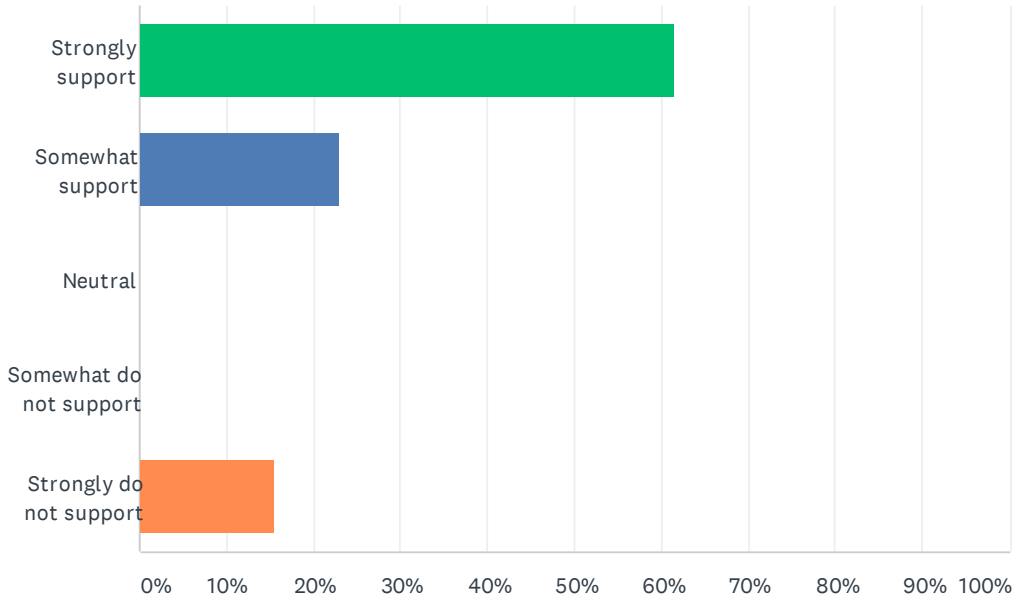
Q2 Is there anything else you would like to tell us about any of the key features or about the preferred alternative generally?

Answered: 10 Skipped: 11

#	RESPONSES	DATE
1	Somewhere you need to address the access to Joe Dancer Park from 3rd St/ 1st St. That is an incredibly unsafe crossing but it's the connection point between this Three Mile Lane section from the rest of McMinnville for pedestrians and recreational users.	5/14/2021 7:22 AM
2	Grocery Store - please include a grocery store at Cumulus & Fircrest; We really need one on this side of town. - a Market of Choice would be wonderful!! Also, the noise level on this side of town is already high (traffic, airport), so please take this into consideration when approving the industrial aspects of this plan.	5/11/2021 4:29 PM
3	Like putting lipstick on a pig.	5/9/2021 4:41 PM
4	keep airport park the way it is. Don't add traffic lights to rt 18	5/4/2021 6:07 PM
5	I like the whole idea.	5/3/2021 5:32 PM
6	no planned site for a Costco type store that serves our part of the county and saves gasoline usage to drive to these type stores ??? offers jobs and serves 4 adjacent towns within 5 miles	4/30/2021 2:57 PM
7	I think we need to balance small local business with retail establishments that provided convenience, quality with good prices. Would love to see a Market of Choice as McMinnville and the area lacks high end grocery options. Mid-level retail options would be great as well....think Target instead of Wal-Mart.	4/28/2021 4:25 PM
8	Make lots of bike/hike paths, also to connect Joe Dancer park. Try to plan for further bike path along Yamhill River - ideally going all the way to Lafayette locks. Promote siting of a kayaks/canoes rental shop. Have business development scouts try to recruit as many drone R&D & manufacturing companies from around the USA as possible, to locate at shown innovation center and close to the airport - that's a future growth industry. Tie this to new drone design/manufacturing classes at the new Chemeketa Community College building on 3 mile lane. Also recruit "tiny house" industry experts/manufacturers to locate in this area, to gain most "leading edge" tiny house design/manufacturing capabilities in the USA. Then host related trade show to draw like minded to this local area. To save on initial cost bike/hiking paths do not have to be paved, at first can be for mountain bikes. As more funding becomes available can pave later.	4/28/2021 8:32 AM
9	Connectedness by trails for bike/ped use is very important. the retail spaces are great, as it allows for grocery services for the residential. I'd like to see a mix of residential and retail as well (i.e., stores on the bottom floor and residential above). Accessibility for humans, not cars, should be the focus.	4/27/2021 9:17 AM
10	Curious whether the mixed use space currently incorporates opportunities for high quality, enriching childcare without prohibitive SDC charges that have not allowed childcare centers to develop due to cost. If we want families to call McMinnville home, as we continue to build homes, we need to find direction out of the childcare drought we have created. Please see Bend, OR as an example.	4/26/2021 11:29 AM

Q1 What is your overall level of support for the preferred Highway 18 improvements?

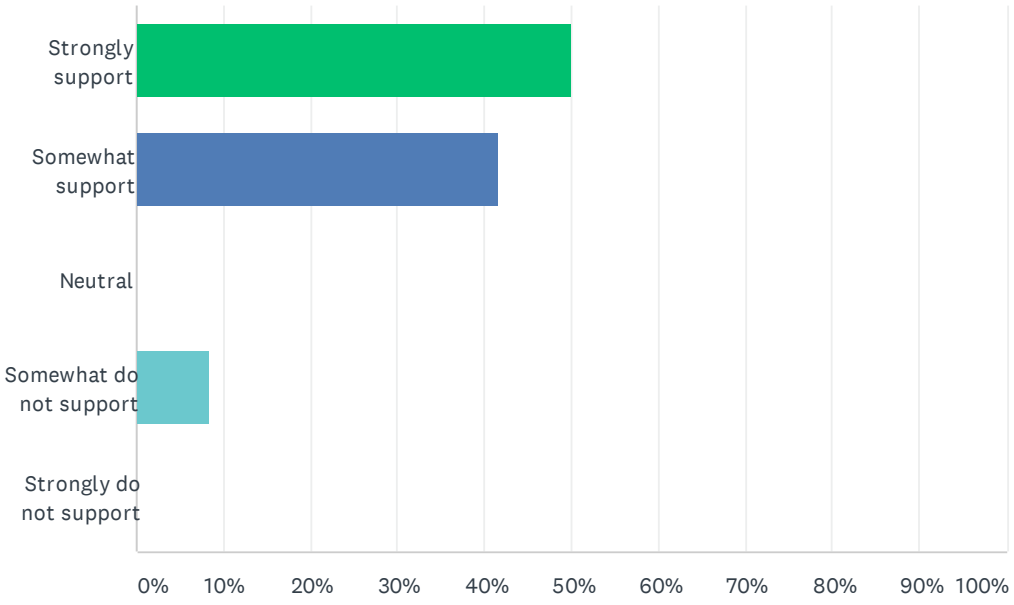
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly support	61.54%	8
Somewhat support	23.08%	3
Neutral	0.00%	0
Somewhat do not support	0.00%	0
Strongly do not support	15.38%	2
TOTAL		13

Q2 What is your overall level of support for the Complete Streets standards for the local roadway network?

Answered: 12 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly support	50.00%	6
Somewhat support	41.67%	5
Neutral	0.00%	0
Somewhat do not support	8.33%	1
Strongly do not support	0.00%	0
TOTAL		12

Q3 Is there anything else you would like to tell us about the transportation concepts discussed in this section?

Answered: 6 Skipped: 7

#	RESPONSES	DATE
1	Instead of large round-a-bouts as a feature, what about a large pedestrian bridge to connect either side of HWY 18?	5/14/2021 7:29 AM
2	The traffic lights and "jug handles" are going to turn our bypass into a parking lot on weekends with the traffic heading to the coast. We need off-ramps and overpasses as called for the in the original plan for this area.	5/9/2021 4:45 PM
3	Would be a good idea to get a high speed exit built that would allow traffic to head onto 3rd street when traveling east on hwy 18.	4/29/2021 8:59 AM
4	create master plan for hike/bike paths through this new area. This plan should enable: 1. Connections to local small towns (Lafayette, Amity, Dayton) without having to hike/bike along busy Hwy 99 or 3 mile lane, rather through more quiet and scenic areas 2. Enable one to start their ride/hike from downtown 3rd street and get to new development area via more scenic/quiet pathway (less exposure to cars). 3. Find company willing to rent bikes - it is crazy that one cannot rent bikes in McMinnville.	4/28/2021 8:59 AM
5	I have some concern on HWY 18 changes and how that would impact (or be impacted by) heavy truck traffic transitioning to/from the coast.	4/27/2021 1:30 PM
6	I support the plans for the highway and major collectors. However, I strongly believe that there should be dedicated bike sections on residential streets. Bikes on roadways have proven to be deadly in McMinnville.	4/27/2021 9:19 AM

Three Mile Lane

Regenerative Design

University of Oregon
School of Planning, Public Policy and Management
Green Cities, Summer 2017

Acknowledgments

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

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Kit Johnston
Susan Knight
Roger Lizut
Barbara Mann
Kelly McDonald
Kathleen McKinney
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2017-12-16

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

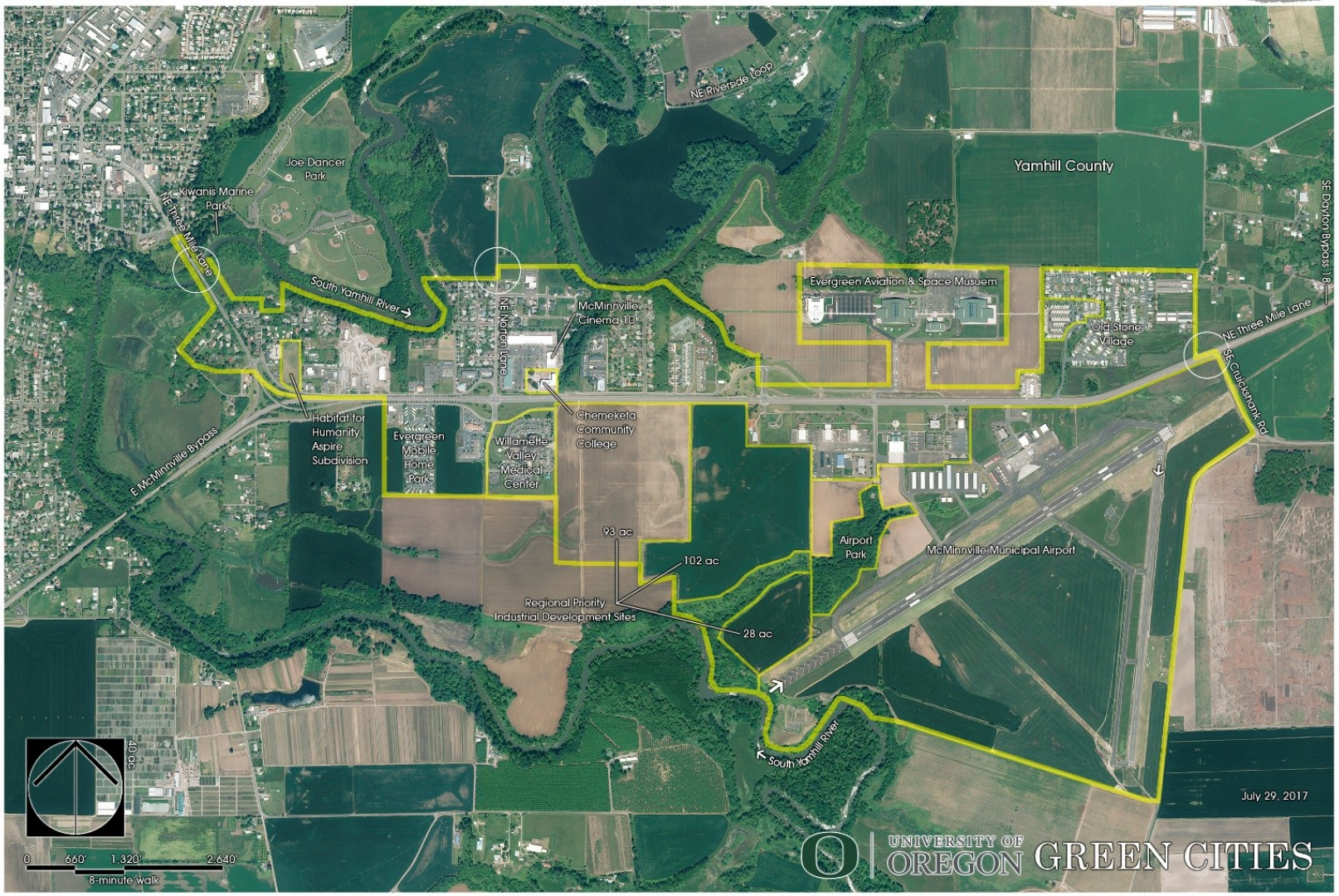
Introduction

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



https://blogs.uoregon.edu/threemilelane/files/2017/06/Three-Mile-Lane-Study-Area-u2rkhk.jpg

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

●●●●●●●●●●●●●●●●●●●● (20) Develop new **commercial** spaces along Three Mile Lane (i.e. gas station, grocery / retail)

●●●●●●●●●●●●●●●●● (17) 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

●●●●●●●●● (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

●●●●●●●●●●●●● (13) Design **bike and pedestrian trail** into downtown

●●●●●●●●●●● (11) Provide access to **Joe 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

●●●●●●●●●●●●● (14) Construct Joe Dancer Park **amphitheater**. Create **amphitheater** for 1000+ people

●●●●●●●●●●● (11) Improve **signage/gateway** to McMinnville. Create gateways to McMinnville.

●●●●●●●●● (9) 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

●●●● (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

Regenerative Design

There 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.

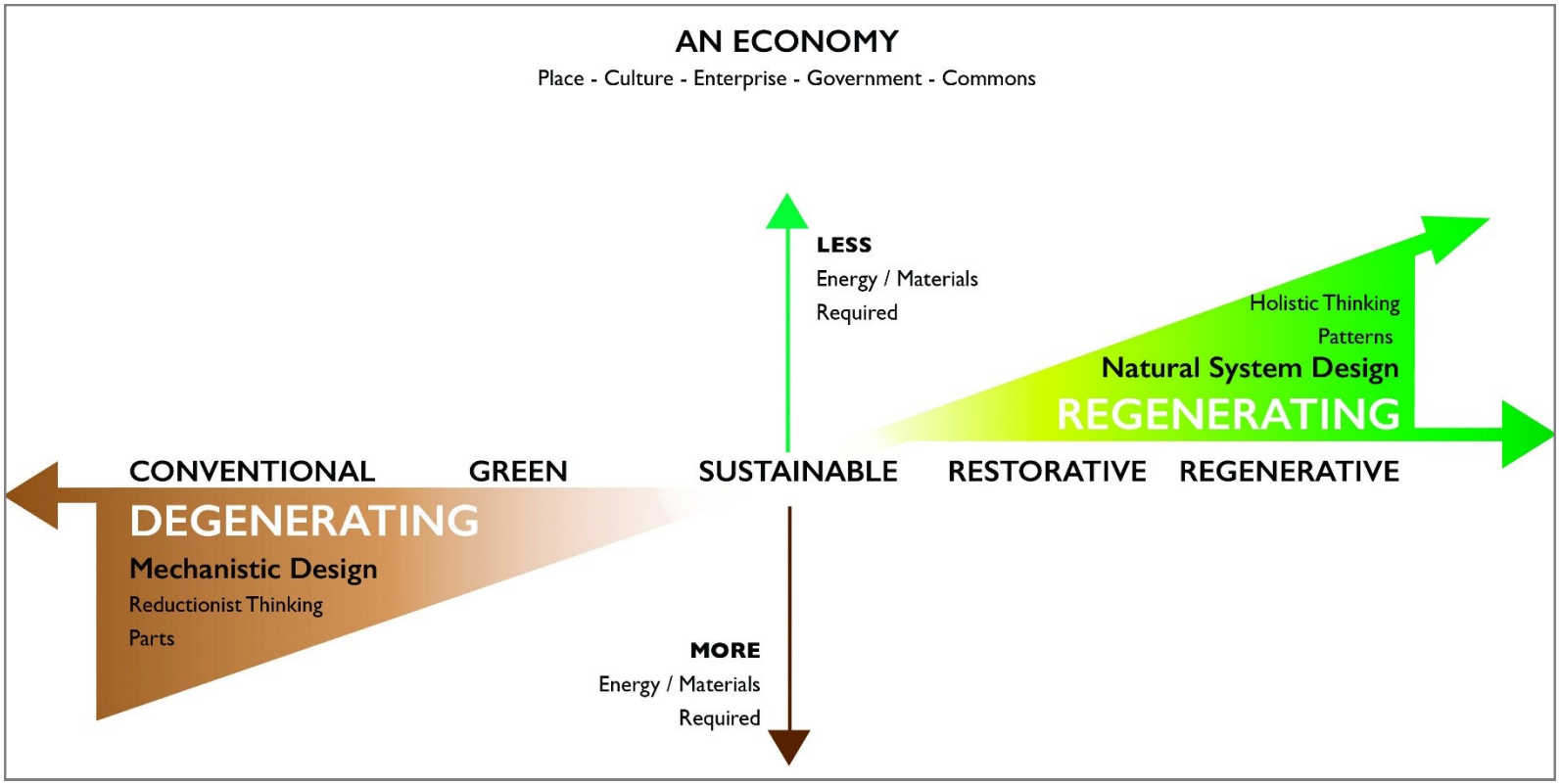
When designers and planners respond to all ecological influences on a project site, and approach public space design holistically using systems thinking, a regenerative solution can be achieved. (Jacobson, 2017)

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.\

Regenerative Design



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.

Regenerative Design

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.

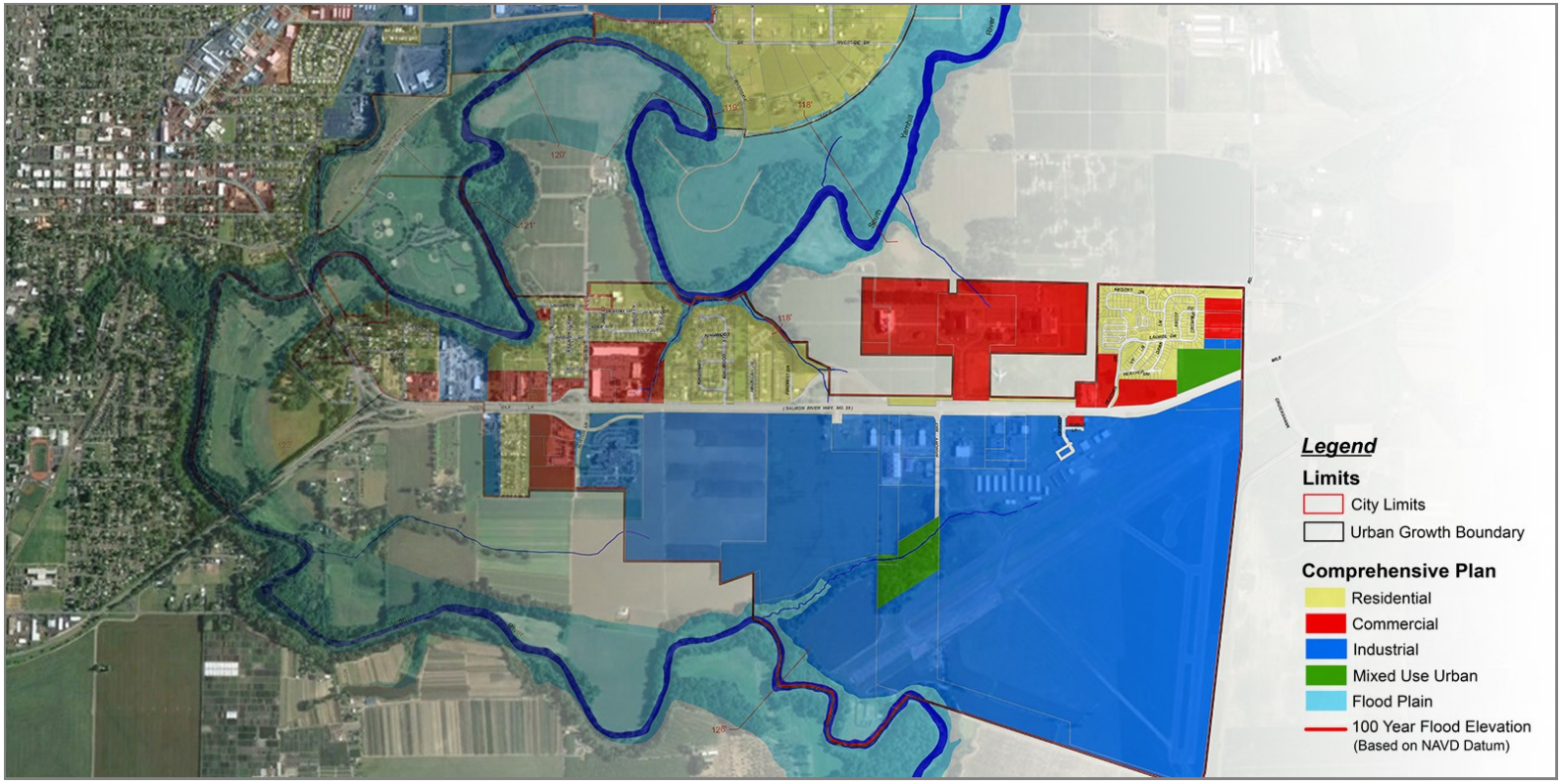
Edge Effect Abundance
Creativity and abundance flourish synergistically at the 'edges' of systems, where the bonds holding the dominant pattern in place are weakest. For example, there is an abundance of interdependent life in salt marshes where a river meets the ocean. Edges are also where risk lies. At those edges the opportunities for innovation and cross-fertilization 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.

Land Use Flexibility and Diversity



Three Mile Lane has extraordinary development potential due to several unique factors:

1. **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*.

Land Use Flexibility and Diversity

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:

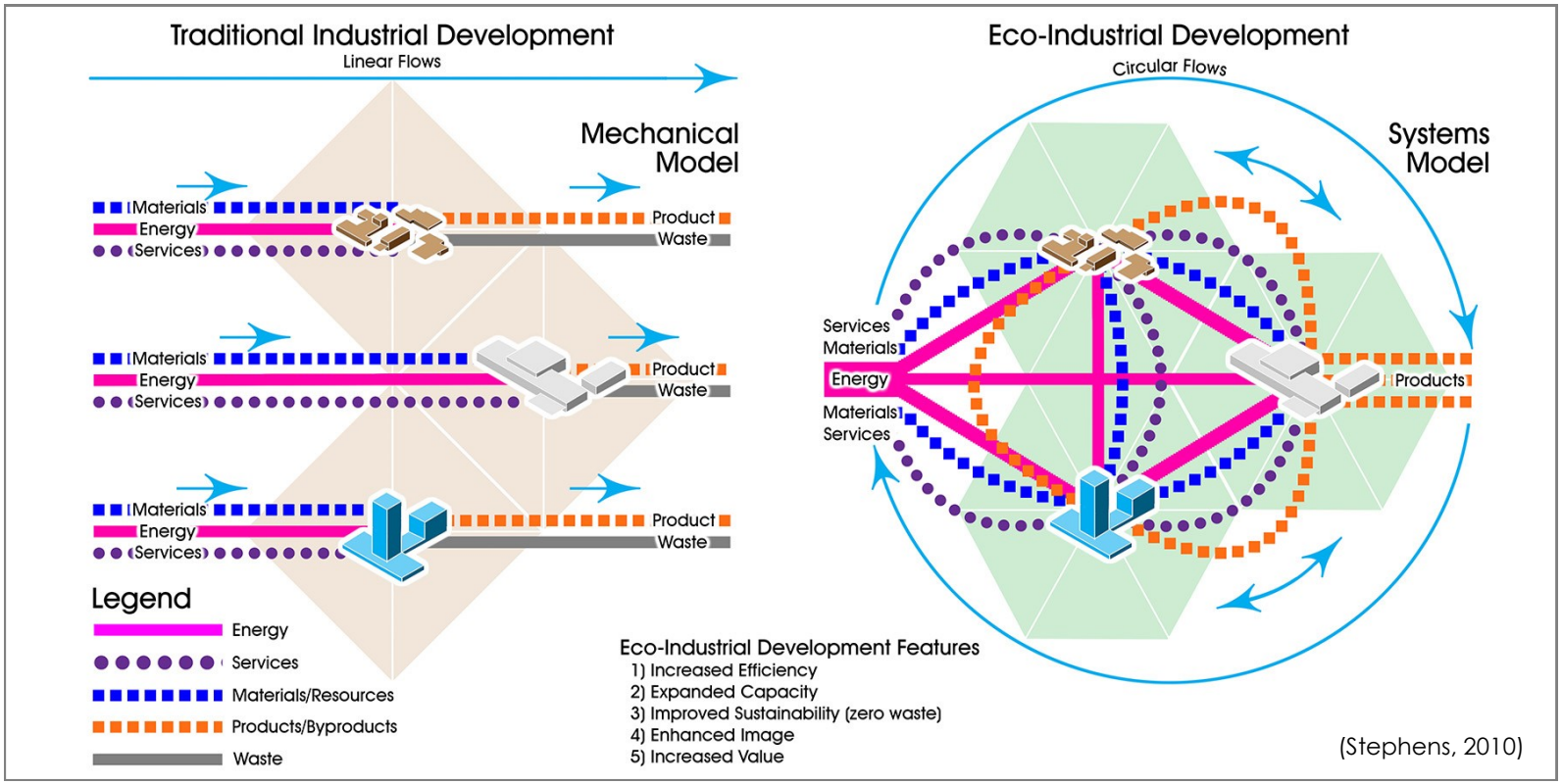
- High-performance infrastructure—Model approaches for building more environmentally and economically sustainable infrastructure systems that reduce resource waste and the demand on our current systems.
- 21st century design—Code changes and planning tools for designing vibrant employment areas that 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

Land Use Flexibility and Diversity



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 area-wide 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.

Land Use Flexibility and Diversity

"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 States-based 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)

Land Use Flexibility and Diversity

LEED® FOR NEIGHBORHOOD DEVELOPMENT

110 TOTAL POINTS POSSIBLE

SMART LOCATION & LINKAGE — 27 POSSIBLE POINTS

PREREQ 1	Smart Location	REQ
PREREQ 2	Imperiled Species and Ecological Communities	REQ
PREREQ 3	Wetland and Water Body Conservation	REQ
PREREQ 4	Agricultural Land Conservation	REQ
PREREQ 5	Floodplain Avoidance	REQ
CREDIT 1	Preferred Locations	●●●●●●●●●
CREDIT 2	Brownfield Redevelopment	●●
CREDIT 3	Locations w/ Reduced Automobile Dependence	●●●●●●●
CREDIT 4	Bicycle Network and Storage	●
CREDIT 5	Housing and Jobs Proximity	●●●
CREDIT 6	Steep Slope Protection	●
CREDIT 7	Site Design for Habitat / Wetland & Water Body Conservation	●
CREDIT 8	Restoration of Habitat/Wetlands and Water Bodies	●
CREDIT 9	Long-Term Cnsrvtn. Mgmt. of Habitat/Wetlands & Water Bodies	●

NEIGHBORHOOD 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	●●●●●●
CREDIT 3	Mixed-Use Neighborhood Centers	●●●●
CREDIT 4	Mixed-Income Diverse Communities	●●●●●●●
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	●

GREEN INFRASTRUCTURE & BUILDINGS — 29 POSSIBLE POINTS

PREREQ 1	Certified Green Building	REQ
PREREQ 2	Minimum Building Energy Efficiency	REQ
PREREQ 3	Minimum Building Water Efficiency	REQ
PREREQ 4	Construction Activity Pollution Prevention	REQ
CREDIT 1	Certified Green Buildings	●●●●●
CREDIT 2	Building Energy Efficiency	●●
CREDIT 3	Building Water Efficiency	●
CREDIT 4	Water-Efficient Landscaping	●
CREDIT 5	Existing Building Use	●
CREDIT 6	Historic Resource Preservation and Adaptive Reuse	●
CREDIT 7	Minimized Site Disturbance in Design and Construction	●
CREDIT 8	Stormwater Management	●●●●
CREDIT 9	Heat Island Reduction	●
CREDIT 10	Solar Orientation	●
CREDIT 11	On-Site Renewable Energy Sources	●●●
CREDIT 12	District Heating and Cooling	●●
CREDIT 13	Infrastructure Energy Efficiency	●
CREDIT 14	Wastewater Management	●●
CREDIT 15	Recycled Content in Infrastructure	●
CREDIT 16	Solid Waste Management Infrastructure	●
CREDIT 17	Light Pollution Reduction	●

INNOVATION & 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*

Land Use Flexibility and Diversity

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

Land Use Flexibility and Diversity

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

Land Use Flexibility and Diversity

- Location
- Cultural adequacy

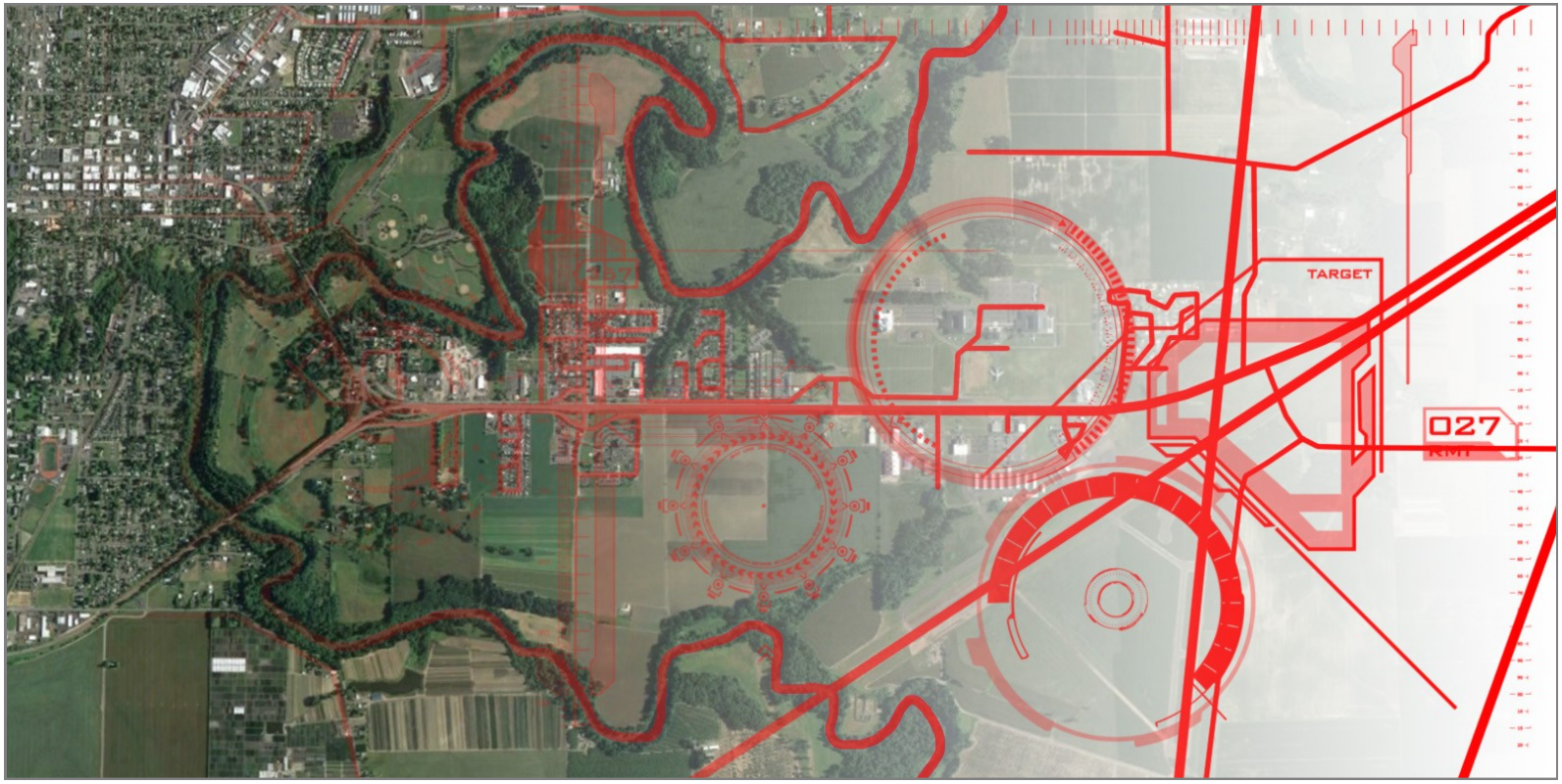
In addition to adequate housing, Three Mile Lane must include workforce housing. Both of these ensure a better jobs/housing balance for the area that will reduce transportation demand and costs.

Smart Development

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

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

Mobility, Connectivity, Energy



Mobility, 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

Mobility, Connectivity, Energy

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
- 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

Mobility, Connectivity, Energy

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,

Mobility, Connectivity, Energy

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

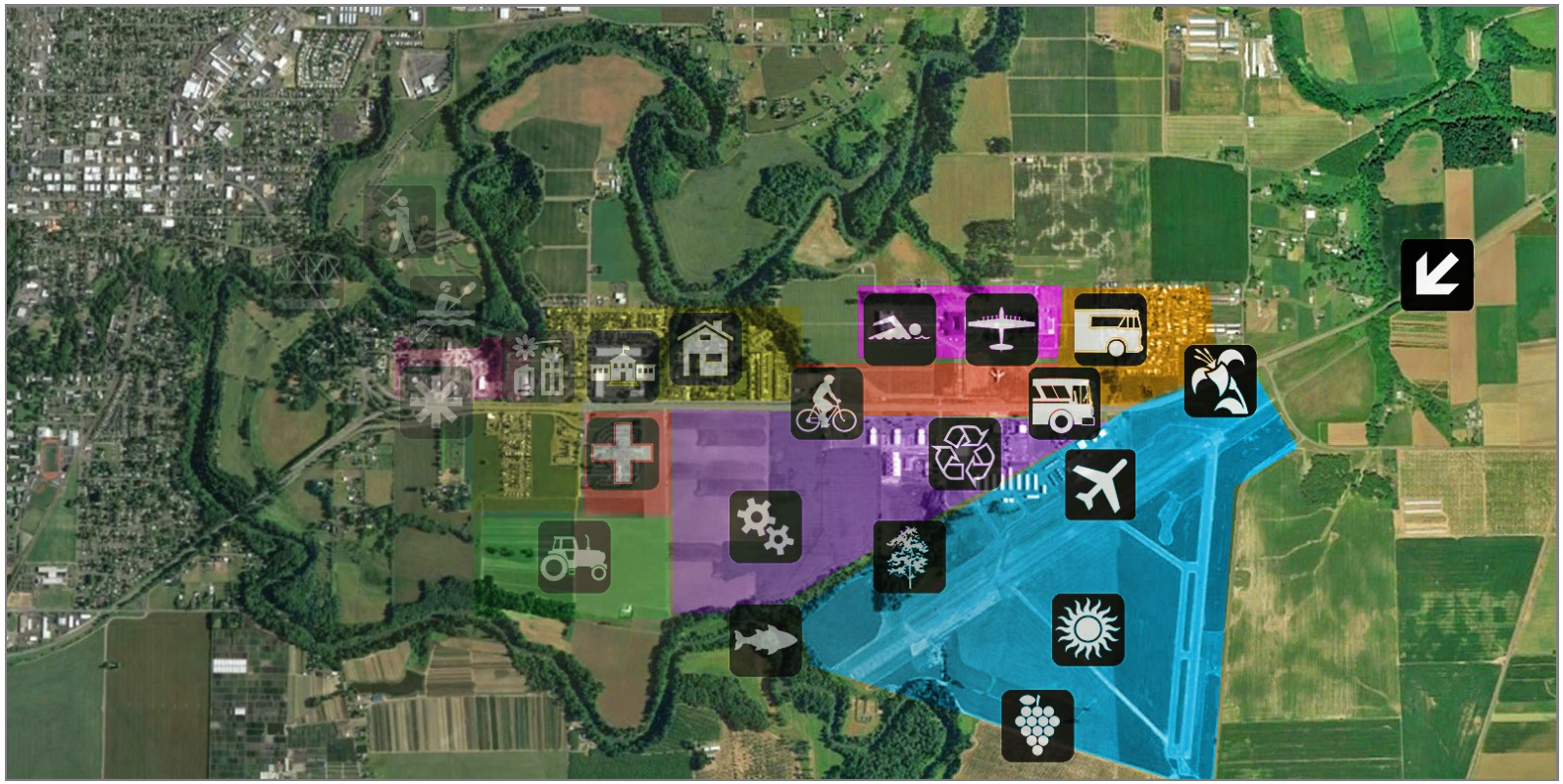
As an area with multiple greenfields and undeveloped airport land, Three Mile Lane has a unique opportunity to supplement its energy demand with solar, wind and even hydroelectric power. Some facilities such as the McMinnville Airport could even become energy-independent. Renewable energy programs can 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/feet^2/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.

Sense of Place and Public Space



Three 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.)

Sense of Place and Public Space

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;

1) 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.

Sense of Place and Public Space

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

Sense of Place and Public Space

'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

Sense of Place and Public Space

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 multi-purpose 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

Sense of Place and Public Space

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

1. **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.
6. **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.

60. **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)

Recommendations

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).

Recommendations

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.

103. **Second Bridge** Construct **second bridge** to north – 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.

Recommendations

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.

116. **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.

Recommendations

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

129. **Airport Park Redevelopment** Redevelop the airport 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.

145. **Community Garden Networking** Promote social 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.

Recommendations

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

Recommendations

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.

180. **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.

Recommendations

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.

Recommendations

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 way-finding 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
- **Hunter Hollander** – Zero Carbon Cities https://youtu.be/uJyVvKkRo-g
- **Robert Holloway** – Public Space – Sense of Place https://youtu.be/R4ZgCQ7Btbo
- **Lindsay Jacobson** – Regenerative Public Spaces https://youtu.be/A2HtvlcMSTQ
- **Grace Miller** – The Do's and Don'ts of Public Art https://youtu.be/l0J6qSm_gVk
- **Emily Nguyen** – Multimodal Transportation: Living and Traveling Together https://youtu.be/NUGbpRBtU1Y
- **Kyra Ortiz** – Urban Culture and Heritage https://youtu.be/bPcE0R6HG7A
- **Mons Roll** – Municipal Finance https://youtu.be/TcVlCR-dyNU
- **Nikki Samson Tuason** – Mixed-Use Development in McMinnville's Three Mile Lane https://youtu.be/BdBlKTv3ezg
- **Mindy Schlitt** – Genius Loci: The Spirit of a Place https://youtu.be/rP4QKLYMbZY
- **Will Talbot** – Sustainable Architecture at Three Mile Lane https://youtu.be/SYOYAGLxt4U
- **Michael Walker** – Innovation Districts https://youtu.be/gs8YXOFXUYA
- **Qi Wang** – Public Transportation https://youtu.be/I1fBc5uBlwE
- **Xiaoyu Wang** – Recommendations for the City of McMinnville Urban Design https://youtu.be/jGA82D0eakQ
- **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

https://blogs.uoregon.edu/threemilelane/

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Research Team Photo

Public Hearing Simulation, Harris Hall, Eugene

Index

From:	Heather Richards
To:	Mark Davis
Cc:	Amanda Guile-Hinman; Claudia Cisneros; Andrew Mortensen; DUNCAN Michael W
Subject:	TMLAP Information Request
Date:	Tuesday, February 15, 2022 12:19:00 PM
Attachments:	image001.png image002.png image003.png 20210305_01_2015_McMinnville_3MLAP_DEA_3-8-21.pdf App_for_Confidential_Information.pdf

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Hi Mark,

I forwarded your email below to the consultants and ODOT. From the emails that I have seen today, the housing and employment data are interwoven in the same spreadsheet and are TAZ specific (locational) which is the State of Oregon Employment Department's confidentiality problem. I know that David Evans and Associates and ODOT representatives are reviewing your request and will get back to you. Attached is the application form that David Evans and Associates signed to access the confidential data. This is the form that was provided to you in a previous email. If you fill it out and it is approved, they will be able to send you the spreadsheets.

On a more general note, I may be able to help with some of the confusion and frustration that I am sensing. This is an area planning process. It is a visioning exercise for future uses of a 1400-acre area. The vision is meant to help with the more refined analysis to come in public facility plan updates, master plans and development projects. The outcome of the visioning document was to identify the comprehensive plan map amendments that needed to occur to support the community's future vision for this area. It is very high-level. It is not development-specific. Your questions below are more focused on master planning and development review criteria rather than a visioning exercise and the comprehensive plan map amendments needed to support that exercise.

The Three Mile Lane Area Plan ended up with a small list of recommended comprehensive plan map amendments to help support the vision developed with and affirmed by the Citizen's Advisory Committee. Those comprehensive plan map amendments are not refined into proposed zones, master plans or development projects. Those processes are all to follow.

Since this was a comprehensive plan level process, per the direction of DLCD staff and state regulations we focused only on the comprehensive plan map designations when forecasting growth (residential, commercial and industrial), and the acknowledged level of growth that the city assigned to each of those designations to forecast public facility needs (residential = 5.7 units per acre, commercial = 26 jobs per acre and industrial = 11 jobs per acre). We do not have a mixed-use comprehensive plan designation (I wish that we did).

Note: I had Andy Mortensen from DEA and Michael Duncan from ODOT review my response to you and Michael

Duncan from ODOT added this note to the paragraph above, [Just to note, simplifying the process of a travel demand model can help, but I think that many (perhaps Mark, Sid, and others) are conflating how these type (TDM) of models work (using origin/destination data, employment and hh data as you've noted) with how a development proposal would use ITE trip rates based on a specific use. This begins to reach beyond my understanding of modeling, but I believe the difference is one being a probabilistic model, while the other is deterministic. If Mark or others really want to better understand the process it might be worth bringing Sam or someone from TPAU online. Just know that the discussion will become very technical, very quickly. I would also note that the model was developed as a Small Urban Model and that how the base year was built in collaboration with the city is consistent with FHWA process of developing models, and applied in accordance with the APM. In other words, how the model was developed and implemented is the standard of practice for a project of this scale/scope.]

FHWA (Federal Highway Administration – US DOT)
APM (Analysis Procedures Manual – ODOT technical traffic/transportation planning guidelines)

The baseline data for the new model took a snapshot of existing conditions (housing units and employees (based on state employment data)) and then assumed growth on top of that, one future scenario based on the current Comprehensive Plan and a second scenario based on the comprehensive plan map amendments identified as the Preferred Alternative (land use plan) reflecting the vision of the Three Mile Lane Area Plan. The baseline data is built upon a series of TAZs where housing and employment are assigned to understand traffic movements. That is all prepared by the ODOT transportation model staff and reviewed by the consultants. If the consultants felt that there was something amiss or needed to be looked at, they would ask staff to review it. I am hoping that Michael Duncan from ODOT and Andy Mortensen from David Evans and Associates will explain that in more detail at the public hearing.

In regards to your bullet list of questions, I have provided my thoughts below:

- 320 apartment units approved by the Planning Commission in Planned Development Amendments (PDAs) in 2019 and 2020

  Keep in mind that what was approved was an amendment to allow multifamily on these parcels as an outright permitted use. Those amendments were reviewed and approved by ODOT representatives. However, no development plans have been submitted to the City for either project. So right now it is still commercially zoned land. With that said, due to the timing of the land-use decision, the Housing Authority project probably was not included in the baseline data as the City was not aware of it at the time. However, the underlying zoning of the land should have provided the baseline data for assigned trips in that TAZ and the underlying zoning is C3, one of our highest zoning traffic generators for the analysis. The same is true for the other parcel of land. I suspect and hope that it will be multifamily on both parcels as we need it and if we are able to put together a comprehensive vision for the south side of Highway 18 it would turn out to be a nice development with safe bike/ped access to trails, Airport Park, employment, medical and commercial amenities- ie the purpose of the Area Plan. However, both parties could walk away from housing and sell the property as commercial land in the future. They were not thrilled to hear someone refer to their projects as "ghetto housing" in the public testimony opposed to the Three Mile Lane Area plan. But for right now, the underlying commercial comprehensive plan map designation of commercial supports the multifamily vision so it does not need to be amended.

- 140-160 acre corporate campus site designated for an innovation center

Again an industrial incubator innovative center on this site is part of the overall community vision, but for right now it is just a vision that is supported with the industrial comprehensive plan designation. It has not been master planned yet and there are no details beyond the vision. No one knows what the actual future for the 160 acres may be. Just this week an ammunition manufacturing plant was looking at it. A few months ago a regional asphalt batch plant was looking at it. However, the Innovation Center has been identified as a key component of the city's economic development strategy to nurture high-paying jobs in McMinnville. It is a City Council goal, and recently has received a lot of statewide attention. The next step is to do the master planning and public facility analysis specific to that master planning – that is what those ARPA dollars are for. I believe that the community would rather see a good high-density, high-paying jobs program there rather than an asphalt batch plant. If the master plan is approved by the city (land-use decision) then part of that approval includes a more in-depth traffic analysis for the impact of the master planned development. That analysis may change some of the transportation elements on Highway 18 or it may not. But we will not do that analysis until there is an actual master plan to analyze. More refined planning = more refined analysis. Right now it is just a vision that is pointing the way towards the next steps needed. Until the master plan is approved, it is 140 – 160 acres of industrial M2 land (no change from today).

- 40-60 acres of large format retail currently subject to rezoning proposals

The Area Plan recommends a comprehensive plan map amendment of 40 – 60 acres of industrial comprehensive plan map designation to commercial, which was actually modeled as 33 net acres to accommodate the needed land to set aside for a future interchange in the future. (We (ODOT or the City) cannot require that the land be set aside or dedicated as there is no legal indication that it is required per the state regulations but we are trying to work with the developer to do so. However, since everyone (ODOT, City staff, transportation experts) recognizes that in reality the interchange will not materialize for 30 – 40 years if ever, no one wants to own and maintain the land in the meantime.) With all that said, we have no idea what will be built on the commercial land. It could be big box retailers and fast-food drive-ups as depicted in the Friends of Yamhill County alert to their membership and most recently in the letters to the paper, but the reality is that it could be bought by Bill Stoller tomorrow and become an extension of the museum campus. The vision as depicted in the Three Mile Lane Area Plan calls for a mixed-use commercial center (office and retail) and we are recommending the comprehensive plan map amendment to create a path for that vision to occur. But we cannot plan for growth beyond what the comprehensive plan map designation acknowledged growth pattern is until such time that a development project materializes. At that time the developer will need to do a traffic impact analysis based on the development planned to identify if it meets the criteria of the transportation facilities that it impacts.

- Mixed Use areas proposed between the hospital and the large format retail including another 360 housing units

Some of this land is zoned ML and some is zoned M2. The ML zone allows for office, medical facilities and ancillary hospital uses. Ancillary hospital uses is not defined but many hospitals are moving to an outpatient model utilizing longer stay and assisted living housing facilities adjacent to the hospital. The Project Advisory Committee did not feel that the comprehensive plan designation needed to change to support the vision for that area. I may have muddied the waters with my slide identifying potential housing units in the area as I included the group quarters associated with assisted living facilities. And I will correct that at the public hearing on Thursday as Sid had the same question for ODOT. I was trying to illustrate what could happen on these properties and trying to explain that the Area Plan was merely a tool to set the table for the community's vision to occur.

- Evergreen Museum plans for "new hotel, retail and event space"

From what I understand, the hotel and event space are all part of their approved master plan for the site. I am not sure about the retail but the property owner provided that to us. Their site is zoned C3 and supports all of those uses so no comprehensive plan map amendments needed. If they do something other than what is part of the approved master plan they will need to go through a process which would require a traffic impact analysis just like every other project to truth-test the impact of their project to the facilities. That truth testing is not part of this visioning project.

- Chemeketa Community College expansion of its programs (assuming the frontage road extension does not remove one of their buildings)

  I do not recall that being part of this visioning exercise except for some adjacent higher density housing for those students who are not commuters. The Project Management Team met with CCC representatives to discuss their future needs and plans. Their property is currently zoned C3 and does not need a different comprehensive plan designation and potential rezone to support their vision.

- Conversion of the current sand and gravel site into a Mixed Use development.

  The mixed-use development on this site that is the Three Mile Lane Area Plan preferred land use alternative (vision) did require a comprehensive plan map amendment to support the vision. And as indicated earlier we do not have a true mixed-use comprehensive plan map designation so we chose commercial for where we thought the highest density of uses would be and then residential for the north part of the project which is identified to be mostly residential. That was part of the modeling for the preferred land-use alternative.

- And, while technically not proposed, the increased housing density now allowed under State law that affects all existing neighborhoods.

  By law, we can only assume a 3% increase from the HB 2001 work for growth planning unless we can demonstrate a local trend that determines it should be higher. That 3% would change our residential comprehensive plan factor to 5.9 units per acre. This bill had not passed when we were doing the transportation modeling work, so it was not included. I honestly do not think it would make much of a difference.

Have a great day!

Heather

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From: Mark Davis <mark@startlivingthetruth.com>
Sent: Saturday, February 12, 2022 11:39 AM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Cc: Amanda Guile-Hinman <Amanda.Guile@mcminnvilleoregon.gov>; Claudia Cisneros <Claudia.Cisneros@mcminnvilleoregon.gov>

Subject: Re: FW: TMLAP Information Request

Heather,
I have no interest in proprietary employment data. I want to know the assumptions that are driving the Synchro report to return a .76 V/C ratio at Norton and .64 V/C ratio at Cumulus in 2041. Those numbers are based on a critical movement analysis which can only be generated by assumptions about how much traffic is going through those two intersections. What are those assumptions about future traffic flow?

In my non-professional view that future increase in traffic flow will be driven by assumptions about two factors:

1. The general increase in traffic flow generated by an increase in population so that there are more vehicles going to the coast, going to work, going to school, etc.

2. The specific increase tied to all the development proposed in the TMLAP.

I would like to see those assumptions. The assumptions in #1 seem pretty straightforward to me. The assumptions for #2 obviously require a bit more work, but don't require showing me proprietary data about specific sites with identifiable uses. I am interested in the amount of traffic generated by various types of proposed uses like housing, retail, office, industrial, health care, education, etc.

I suspect what you really want to know is what I intend to do with the data when I get it, so I will tell you. I am skeptical that we can get the proposed uses functional without a much larger increase in the V/C ratio that will mean it no longer meets the ODOT standard for expressways.

While not an exhaustive listing of all the land uses proposed in the TMLAP, here are some of them:

- 320 apartment units approved by the Planning Commission in Planned Development Amendments (PDAs) in 2019 and 2020
- 140-160 acre corporate campus site designated for an innovation center
- 40-60 acres of large format retail currently subject to rezoning proposals
- Mixed Use areas proposed between the hospital and the large format retail including another 360 housing units
- Evergreen Museum plans for "new hotel, retail and event space"
- Chemeketa Community College expansion of its programs (assuming the frontage road extension does not remove one of their buildings)
- Conversion of the current sand and gravel site into a Mixed Use development
- And, while technically not proposed, the increased housing density now allowed under State law that affects all existing neighborhoods.

I intend to look at the assumptions and see if they match all of these proposed uses.

My general concern about the availability of these numbers was amplified when I studied slide 88 of your presentation at the last Planning Commission meeting. It includes two bar graphs with the words "Study Area Demographics" (presumably based on the information I am asking for) over them that shows the impact on the highway traffic of Housing and Employment. There are fewer than 100 units of housing shown on the graph including both "Future Base" and "Future Plan". If in fact the traffic projection for 2041 is based on a fraction of the housing units listed above, it is not reflective of the full impact of the TMLAP.

In summary, I am requesting the assumptions about what land uses drive what increases in traffic over the 20-year period. The record shows that that information was included in emails and spreadsheets cited in Appendix D, so I asked for that information. I have no interest in reading emails or seeing proprietary data. I just want to see enough information to confirm that all the elements of the TMLAP are included in traffic projection for 2041. I don't feel that this is an unreasonable request; in fact, I think it should have been included in the traffic projection so that it was clear to everyone.

Thank you.

Mark Davis

On Fri, Feb 11, 2022 at 1:04 PM Heather Richards <Heather.Richards@mcminnvilleoregon.gov> wrote:

> **Mark,**

Below is the response that I just received from ODOT regarding your request for information. Andrew Mortensen had forwarded it to Michael Duncan with ODOT when he received it from me, as he had signed a non-disclosure agreement with ODOT stating that he would not release the data without ODOT's permission. City staff signed a similar NDA.

It sounds like they are going to review the memorandum requested and the spreadsheet to redact any of the proprietary information before releasing it into the public record. I have not yet received a firm number on how long that will take or what the costs - if there are any - are.

If you fill out the attached form and ODOT releases the data to you, they wanted to make sure that it was clear that if the data is released to you it is for your purposes only and not to be shared with anyone else or put into the public record.

You are assuming that all of the data in the modeling is the normal public record for transportation analysis – it is not. The aggregate outputs are typically what is in the record as well as the methodology for the transportation scenarios used.

It is not clear to me what your specific concerns are with the transportation analysis and the data that was used. It might help if you provided those concerns as questions and then Michael Duncan and Andrew Mortensen can answer them without revealing any of the specific data.

Have a great day!

Heather

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From: DUNCAN Michael W <Michael.W.DUNCAN@odot.oregon.gov>
Sent: Friday, February 11, 2022 11:54 AM
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>; Andrew Mortensen <Ajmo@deainc.com>
Cc: AYASH Sam <Sam.H.AYASH@odot.oregon.gov>
Subject: TMLAP Information Request

All,
My understanding is that housing/pop data is public and can be shared freely. However, employment data is sensitive and confidential information. A request for access to that data would need to be done through State of Oregon Employment Department. I've attached the application.
Each person that is asking for access to this data would also need to sign a separate application, and they are then, in turn, limited in how they can share employment related data—at an aggregate level to protect confidentiality, for example. The form helps explain some of this nuance. It's important to note the above, though, should one individual be requesting the data with the expectation that they are sharing it with others either within a group or in a public setting.
-michael

1) **Housing and Employment Demographic Data**
Demographic data within the McMinnville UGB was prepared and summarized for year 2015, 2041 Base and 2041 Tier 2 land use plan, based housing and employment demographics (McMinnville UGB) for ODOT model inputs.
   - Year 2015 demographic data were prepared and agreed to by the City of McMinnville and ODOT.
   - Year 2041 Base demographic data was developed by David Evans and Associates, Inc. (Memorandum - McMinnville OSUM Input Demographic Data Refinement and Excel file dated January 15, 2021, reviewed and agreed to by the City of McMinnville, and submitted to ODOT).
   - Year 2041 Tier 2 Land Use Plan demographic data was developed by David Evans and Associates, Inc. (E-mail and Excel file reviewed and agreed to by the City of McMinnville, and submitted to ODOT, March 15, 2021).