



Eugene City Council

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EUGENE CITY COUNCIL AGENDA

September 10, 2018

5:30 p.m. CITY COUNCIL WORK SESSION
Harris Hall, 125 East 8th Avenue
Eugene, Oregon 97401

Meeting of September 10, 2018;
Her Honor Mayor Lucy Vinis Presiding

Councilors

Mike Clark, President
Greg Evans
Emily Semple
Jennifer Yeh

Betty Taylor, Vice President
Chris Pryor
Claire Syrett
Alan Zelenka

5:30 p.m. CITY COUNCIL WORK SESSION
Harris Hall, 125 East 8th Avenue

- 1. Committee Reports and Items of Interest**
- 2. WORK SESSION: Transportation System Plan Update**
- 3. WORK SESSION: Improvement of Unimproved Roads**

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El consejo de la Ciudad de Eugene agradece su interés en estos asuntos de la agenda. El lugar de la reunión tiene acceso para sillas de ruedas. Se puede proveer a un intérprete para las personas con discapacidad auditiva si avisa con 48 horas de anticipación. También se puede proveer interpretación para español si avisa con 48 horas de anticipación. Para reservar estos servicios llame al 541-682-5010. Las reuniones del consejo de la ciudad se transmiten en vivo por Metro Television, Canal 21 de Comcast y son retransmitidas durante la semana.

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EUGENE CITY COUNCIL AGENDA ITEM SUMMARY



Work Session: Transportation System Plan Update

Meeting Date: September 10, 2018
Department: Public Works
www.eugene-or.gov

Agenda Item Number: 2
Staff Contact: Rob Inerfeld
Contact Telephone Number: 541-682-5343

ISSUE STATEMENT

On June 26, 2017, the Eugene City Council adopted the *Eugene 2035 Transportation System Plan*. The *Eugene 2035* TSP is a long range plan that establishes a city-specific system of transportation facilities and services that will serve the needs of Eugene residents, businesses and visitors over the next 17 years. The TSP adoption ordinance includes a section directing the City Manager to create a TSP implementation plan that will achieve the Climate Recovery Ordinance (as it relates to transportation) and Vision Zero goals. Immediately after adopting the TSP, council passed a motion directing the City Manager to also create a strategy for incorporating new and emerging transportation technologies into the TSP. This agenda item will provide an update on progress made to address these council directives.

BACKGROUND

At the June 26, 2017, City Council Meeting, the City Council made two specific directives for TSP implementation. The full text of these is provided as Attachment A. Generally, the first requires development of a TSP Implementation Plan that will achieve the Climate Recovery Ordinance as it relates to the transportation sector and also implements Vision Zero. The other requires development of a strategy to incorporate new and emerging transportation technologies, including autonomous and electric vehicles, into the TSP.

Provided as Attachment B to this AIS is a draft TSP Implementation Strategy that includes the following elements:

- high priority action items to implement the policies in the TSP;
- capital projects; and
- performance measures.

To determine whether the fully implemented TSP would achieve the goals of the Climate Recovery Ordinance, city staff worked with staff from the Central Lane Metropolitan Planning Organization and the Oregon Department of Transportation to utilize the Regional Strategic Planning Model. The RSPM model run found that the fully implemented TSP would result in a 40% reduction in fossil fuel consumption for transportation in Eugene by 2035. The CRO goal is a 50% reduction in fuel use by 2030. A memo summarizing this work was previously provided to the City Council and is provided as Attachment C.

Next steps for implementing the Eugene 2035 TSP include the following:

- finalize the TSP Implementation Strategy and bring it back to the City Council for approval;
- develop new performance measures to match the TPR requirements; and
- amend the TSP to
 - o incorporate the performance measures,
 - o better integrate Vision Zero,
 - o add key projects that have emerged from public input since TSP adoption, and
 - o integrate recommendations from the work with the University of Oregon and Lane Council of Governments on autonomous and electric vehicles and other new technologies.

RELATED CITY POLICIES

Eugene 2035 Transportation System Plan

Ordinance No. 20567: Climate Recovery

Resolution No. 5143: Vision Zero

COUNCIL OPTIONS

N/A

CITY MANAGER'S RECOMMENDATION

N/A

SUGGESTED MOTION

None.

ATTACHMENTS

- A. City Council direction for implementation of Eugene 2035 TSP
- B. Draft TSP Implementation Strategy
- C. TSP Capital Project Status
- D. Modeling of Eugene 2035 TSP as it relates to the CRO
- E. Inputs for Modeling of TSP

FOR MORE INFORMATION

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City Council direction for Implementation of *Eugene 2035 TSP*

The first motion amended the ordinance adopting the *Eugene 2035 TSP*. The second motion was approved after the City Council passed that TSP ordinance.

1. **Section 17 of Ordinance No. 20582 (adopting the *Eugene 2035 TSP*) Implementation Plans.** By June 30, 2018, the City Manager shall bring to the City Council for a vote, an amendment to the *2035 TSP* that creates a TSP Implementation Plan that will achieve the Climate Recovery Ordinance as it relates to the transportation sector and a Vision Zero adopted goals. The TSP Implementation Plan shall include: 1) the 2035 TSP-related specific prioritized actions, programs, projects, and performance measure benchmarks needed to achieve the Council's adopted climate recovery and Vision Zero goals; 2) specify their costs, benefits and co-benefits, and funding sources; and 3) the schedule for their implementation. The City Manager shall update the City Council quarterly on the progress made toward creating the TSP Implementation Plan.
2. **Motion passed June 26, 2017.** Before January 31 of 2018, the manager will create a strategy to incorporate new and emerging transportation technologies into the TSP and will present a timeline for the initiation of an amendment to the TSP. The strategy will at least include and describe: a) 50% electric vehicles by 2030 and 90% EVs by 2050, and b) autonomous vehicles. Note: Autonomous vehicle section to include: 1) an analysis and summary of city policies that apply to autonomous vehicles, 2) staff-recommended policy changes or new policies to support autonomous vehicle implementation that meets city goals of safety, compact growth, and low-carbon transportation, and 3) evaluation of anticipated impacts of autonomous vehicles on transportation infrastructure including signals, roads, and parking capacity. The Technology strategy should identify any other potentially transformative technologies expected within the next 10 years. For any technologies determined unsuitable for Eugene, provide an explanation why.

Eugene 2035 Transportation System Plan Implementation Strategy

Overview of TSP

The *Eugene 2035 TSP* includes 5 goals, 49 policies and 105 actions. This Implementation Strategy focuses on the highest priority actions to implement the policies in the *Eugene 2035 TSP*. Actions were selected based on their ability to achieve the goals of the TSP with an emphasis on reducing greenhouse gas emissions from transportation and implementing the Vision Zero Action Plan.

This Implementation Strategy is divided into three sections: Programs/Actions, Capital Infrastructure Projects and Performance Measures. This Eugene 2035 Implementation Strategy will complete the first action listed in the TSP, which is to create a transportation work plan that prioritizes implementation and funding for transportation projects and programs within the 2035 TSP 20-year planning period.

Programs and Actions

High priority TSP Actions were grouped into program areas. These program areas are responsible for implementing TSP actions in order to achieve longer-term TSP goals.

Program Area: Transportation Options

Transportation Demand Management Regulatory Structure and Program Development

- Require all employers of a certain size and type to prepare, implement and monitor Transportation Demand Management (TDM) Plans.
- Create and regularly use a robust, systemic method for measuring trips made by walking, biking and driving.

The City has received a grant from ODOT to develop the regulatory structure for requiring developers and employers to integrate TDM into their operations. The project will also determine the necessary staffing and monitoring programs needed. A revision of the City's Traffic Impact Analysis programs may also be incorporated into this process.

Cost:	\$200,000
Funding Status:	Yes, funding for planning process secured. Implementation not funded.
Funding Source(s):	Oregon Department of Transportation, Transportation Growth Management Grant Program
Project schedule:	2019

Individualized Marketing Campaigns, "SmartTrips"

- Provide education and awareness programs, such as SmartTrips and school-based transportation options (like Safe Routes to School), to improve safety for all travelers and encourage use of active transportation.
- Promote transportation demand management programs in downtown to coordinate the needs and travel options of multiple businesses and residences for purpose of reducing parking demand during the work week.

Over the past 8 years, the City has successfully delivered individualized marketing campaigns, termed *SmartTrips*. These have mostly been funded through federal grants. In 2019 and 2020, SmartTrips will focus on downtown Eugene.

Cost:	Approximately \$115,000 annually
Funding Status:	Funded through 2020
Funding Source(s):	Central Lane Metropolitan Planning Organization Discretionary Grant Program
Project schedule:	Annually

Program Area: Transportation Safety

Vision Zero Action Plan

- Adopt and implement a Vision Zero Action Plan to achieve the goal of zero transportation-related fatalities and life-changing injuries by 2035.

The Vision Zero Action Plan will be adopted through an administrative order signed by the City Manager, adoption process is anticipated to be complete in October 2018. After the Vision Zero Action Plan is adopted, staff will prepare a TSP amendment to better align the transportation safety actions in the TSP with the actions in the Vision Zero Action Plan.

Cost:	\$150,000/year for staffing to coordinate overall Vision Zero implementation and implement education and marketing. Full Vision Zero implementation will also require additional resources within EPD and Fire & EMS.
Funding Status:	Program coordination, education and outreach is unfunded. The FY19 budget includes \$120,000 for Vision Zero staffing support on the Traffic Operations Team within Public Works Maintenance.
Potential Funding Source(s):	HB2017, Marijuana Tax Revenue
Program schedule:	Ongoing

Traffic Calming

- Strengthen the City's traffic calming program by increasing the annual funding amount.

This was accomplished starting with the FY2019 budget. Previously the program received \$30,000 per year.

Cost:	\$100,000/year
Funding Status:	Funded
Funding Source(s):	Additional state gas tax revenue provided by HB2017 (\$70,000) and general fund (\$30,000)
Program schedule:	Ongoing

Program Area: New and Emerging Transportation Technologies

Autonomous and Electric Vehicles

- Create a strategy to incorporate new and emerging transportation technologies into the TSP.

The City will be working with the Urbanism Next, a program of the Sustainable Cities Initiative of the University of Oregon to develop a strategy to incorporate autonomous vehicles into the TSP. The project will include 1) an analysis and summary of City policies that apply to autonomous vehicles, 2) staff-recommended policy changes or new policies to support autonomous vehicle implementation that meet City goals of safety, compact growth, and low-carbon transportation, and 3) evaluation of anticipated impacts of autonomous vehicles on transportation infrastructure including signals, roads, and parking capacity.

Cost:	\$65,000
Funding Status:	Yes, funding for strategy development secured.
Funding Source(s):	FY2018 Supplemental Budget
Project schedule:	Completion by September 2019

The City has contracted with the Lane Council of Governments to incorporate an electric vehicles strategy into the TSP. The project will examine the role of the City in encouraging more use of electric vehicles in Eugene through provision of charging infrastructure, building codes, incentives and other means. The strategy will include and describe what it would take to have a community fleet of 50% electric vehicles by 2030 and 90% EVs by 2050.

Cost:	\$6,000
Funding Status:	Yes, funding for strategy development secured.
Funding Source(s):	FY2018 Supplemental Budget
Project schedule:	Completion by December 2018

Program Area: Planning for Development

- Amend the City's adopted Traffic Impact Analysis Code and administrative rule provisions to expand the measurement of a proposed development's traffic impacts beyond the level of service measurement and, correspondingly, expand potential mitigation measures beyond measures that address vehicular delay.
- Amend the Traffic Impact Analysis provisions to require a review of safety at intersections through a comparison of the actual crash rate experienced during the past 3-5 years versus the expected crash rate for similar facilities to determine whether improvements may be needed.

Depending on available funding, both of these actions may be addressed through the ODOT Transportation and Growth Management grant to develop a TDM program. Combining these efforts will enable the City to more holistically look at how development impacts the transportation system and how vehicle trips can be mitigated.

Program Area: Arterial Corridor Planning for Capital Investments

MovingAhead

The MovingAhead planning study, a partnership with LTD, will achieve several actions in the 2035 TSP. MovingAhead is developing design alternatives for enhancing transit, walking and biking on five of the city's major corridors: Highway 99, River Road, Coburg Road, Martin Luther King Jr. Blvd. and Oak/Pearl/Amazon Parkway/30th to LCC. The City Council and LTD Board will cooperatively select the preferred alternative for each corridor and prioritize corridors for implementation.

Cost:	\$3,250,000
Funding Status:	Yes, funding for planning process secured. Construction not funded.
Funding Source(s):	STP-U, STIP-Enhance
Project schedule:	Select Preferred Alternatives for each corridor and prioritize corridors for implementation by mid-2019.

Beltline

By adopting the *Eugene 2035 TSP*, the City Council adopted the Beltline Facility Plan which calls for a new multimodal local arterial bridge over the Willamette River north of Beltline, auxiliary lanes along Beltline and design changes at the interchanges. ODOT is moving forward with construction at the Delta Highway/Beltline interchange and with a NEPA study of the longer term elements of the facility study.

Cost:	\$19 million for Delta/Beltline interchange construction; approximately \$5 million for NEPA study.
Funding Status:	Interchange construction and NEPA study are funded.
Funding Source(s):	ODOT funds
Project schedule:	Complete construction and NEPA study by 2021

Franklin Boulevard

The TSP calls for redesigning Franklin Boulevard in order to implement the Walnut Station Specific Area Plan. The City will be initiating a planning process to redesign Franklin from I-5 to Alder Street in fall 2018. Key goals of the project are to have one EmX lane in each direction (instead of one shared bi-directional lane), to make the street safer and more comfortable for walking and biking, and for Franklin to be more supportive of the mixed use development envisioned in the Walnut Station Plan.

Cost:	\$750,000
Funding Status:	Yes, funding for planning process secured. Construction not funded.
Funding Source(s):	Central Lane Metropolitan Planning Organization Discretionary Grant Program
Project schedule:	September 2018 - 2020

Program Area: Long Range Transportation Planning

- Amend TSP to:
 - o Update transportation safety language to better align with the Vision Zero Action Plan
 - o Incorporate new and emerging technology strategy
 - o Update project list to include Vision Zero projects and other key infrastructure projects

- Include performance measures that meet State requirements and performance measure benchmarks needed to achieve the Council’s adopted climate recovery and Vision Zero goals
- Update Eugene City Code to bring it into alignment with TSP policies

Capital Infrastructure Projects

- Adopt new Transportation SDC Methodology including project list
- Adopt new Multimodal Design Standards
- Develop sidewalk infill program and strategy for upgrading unimproved streets

There are a few priority actions in the TSP that inform the design or funding of capital projects. Adoption of the new Transportation SDC methodology and project list will provide funding necessary to implement infrastructure projects that are needed to achieve the Eugene’s Vision Zero and greenhouse gas emission reduction goals. The almost completed Multimodal Design Standards will inform the design of future City of Eugene capital projects on streets and shared use paths.

The projects shown in the attached TSP Capital Project Status list represent the City’s current priorities for construction of capital projects for the next 6 years. The majority of projects listed are already funded or awaiting grant award announcements. However, there is one multi-million dollar project that has not secured funding, the Franklin Boulevard project. The project status list includes funding sources. Below is the list of funding sources for transportation capital infrastructure projects.

Transportation Infrastructure Project Funding Sources

Abbreviation	Funding Program
4J Bond	2013 Eugene 4J School Improvement Bond
ARTS	Oregon Department of Transportation, All Roads Transportation Safety grant program
CLMPO	Central Lane Metropolitan Planning Organization federal discretionary grant program
CMAQ	Federal Congestion Mitigation and Air Quality program (programmed through Central Lane MPO)
ConnectOregon	Oregon lottery funds
FTA	Federal Transit Administration
HB2017	Keep Oregon Moving, State revenue collected through vehicle related taxes and fees
JTA	Oregon Jobs and Transportation Act (2009)
PBM	Pedestrian and bicycle component of Eugene Pavement Bond Measure
SDCs	System Development Charges
STBG	Federal Surface Transportation Block Grant (programmed through MPO, formerly known as STP-U)
STP-U	Federal Surface Transportation Program - Urban
SWIP	Oregon Department of Transportation, Sidewalk Improvement Program
STIP Enhance	Oregon Department of Transportation funding program that funded multimodal transportation projects
TAP	Transportation Alternatives Program (programmed through MPO)

Performance Measures

The adopted Eugene 2035 TSP contains performance measures that match that of TransPlan (the Eugene-Springfield metropolitan area's "Regional Transportation System Plan or "RTSP"). When the City adopted the 2035 TSP, it needed performance measures in the TSP to closely match those in the RTSP. However, the State is expected to soon eliminate the requirement that cities in metropolitan areas have RTSPs. It is likely the State will require that cities adopt new performance measures by June 30, 2020, designed to decrease greenhouse gas emissions from transportation. The anticipated change in State regulations are in line with the City of Eugene's goals and policies.

Once the State rules are adopted, the City of Eugene will develop performance measures to meet new State Transportation Planning Rule requirements while better aligning performance measure benchmarks with the Council's adopted climate recovery and Vision Zero goals. The State will provide three options for cities to demonstrate how they have planned for reducing greenhouse gas emissions by increasing transportation choices and reducing reliance on the automobile.

In addition to meeting State requirements, the City will also monitor advancement toward achieving the goals of the *Eugene 2035 TSP* and make progress reports available to the public.

TSP Capital Project Status

TSP Project No.	Project Name	Project Cost	Build Year	Status	Primary Funding Source	Fiscal Agency Lead
2017						
PB-245	Commerce Street Pedestrian & Bicycle Bridge	\$1,500,000	2017	Completed	ConnectOregon, SDCs	City
MM-9, PB-216, PB-559, PB-306 to PB-309, PB-327	West Eugene EmX (including ped/bike bridges and sidewalk infill)	\$100,000,000	2017	Completed	FTA, ConnectOregon	LTD
2018						
PB-223	Jessen Shared Use Path: Ohio Street to Beltline	\$2,095,000	2018	Under Construction	STIP Enhance, SDCs	City
PB-46, PB-459, PB-249, PB-612, PB-613	Amazon Active Transportation Corridor	\$2,400,000	2018/19	Construction in 2018/2019	STIP Enhance, SDCs	City
MM-4, PB-462, PB-464, PB-465	I-5/Beltline Interchange Project Unit 4 (including shared use path)	\$34,000,000	2018	Completed	JTA	ODOT
2019						
PB-XXX (several project numbers)	Northeast Livable Streets	\$880,000	2019	Funded	STIP Enhance, SDCs	City
PB-541	N Garden Way	\$95,000	2019	Funded	CLMPO	City
PB-610	Roosevelt Boulevard Path	\$805,000	2019	Funded	STIP Enhance, SDCs	City
PB-31	S. Willamette Street Bike Lanes and Sidewalk Reconstruction	\$2,000,000	2019	Funded	STP-U, PBM	City
PB-556	13th Ave Protected Bikeway	\$3,280,000	2019	Funded	ARTS, STP-U, SDCs	City
MM-3	Delta Highway/Beltline Interchange Project	\$20,000,000	2019	Funded	ODOT funds	City
None-VZ	Hwy 99 Sidewalk Infill (Barger to Prairie)	\$1,132,000	2019	Funded	ODOT funds	City
PB-351, PB-437, PB-440	Enhanced Walking Network	\$1,260,000	2019	Funded	CMAQ, PBM	City
2020						
PB-18	High Street Protected Bikeway	\$1,679,000	2020	Funded	CMAQ, SDCs	City
PB-158	N Park Ave Bike Lane and Sidewalks	\$625,000	2020	Funded	CLMPO	Lane County
MM-2	Santa Clara Community Transit Center	\$10,300,000	2020	Funded	ConnectOregon	LTD
None-VZ	Highway 99 Crossing: St. Vincent de Paul Service Station	\$501,396	2020	Funded	SWIP	City
MM-22, PB-583	8th Avenue Two-Way Conversion and Protected Bikeway	\$2,025,000	2020	Funded	STBG, CMAQ, SDCs	City
PB-59, PB-275, PB-277	Prairie and Maxwell Sidewalk Infill and Bike Lane	\$725,000	2020	Funded	STBG, TAP, SDCs	City
2021						
MM-24, MM-25	Railroad Quiet Zone and 8th/Hilyard Intersection and Rail Crossing	\$7,700,000	2021	Funded	HB2017, Riverfront Urban Renewal	City
2022-2024						
Cost Estimate						
MM-27	Gilham Rd Upgrades: Ayres Rd to Ashbury Dr	\$740,000	2022	Funded	CMAQ	Lane County
PB-59, PB-275, PB-277	Maxwell and Prairie Road Bike/Ped	\$650,000	202X	Funded	CLMPO	City
PB-447	Highway 99 Bike Lane	\$44,000	202X	Funded	CLMPO	City
PB-571	Lincoln Street Protected Bikeway: 5th-13th	\$400,680	202X	Grant submitted	ARTS	City
None-VZ	River Road Median: Irvington Dr to NW Expressway	\$2,435,475	202X	Grant submitted	ARTS	City
None-VZ	River Road: River Loop/Ferndale Dr to NW Expressway Bike/Ped	\$1,285,480	202X	Grant submitted	ARTS	City
None-VZ	MLK Vision Zero Retrofit	\$556,920	202X	Grant submitted	ARTS	City
MM-19	Franklin Boulevard Transformation	\$27,000,000	202X	Unfunded	Federal	City
MM-26	Neighborhood Traffic Calming	\$100,000	annual	Funded	HB2017	City
Eight Year Total		\$226,214,951				

MEMORANDUM

To: Rob Inerfeld, City of Eugene

From: Kelly Clarke, Lane Council of Governments

DATE: 2/6/2018

RE: Eugene Transportation System Plan as it Relates to Climate Recovery Ordinance Goals

The Eugene 2035 Transportation System Plan (ETSP) was adopted by the City Council June, 2017. In addition to adopting the ETSP, Council adopted resolutions that require more detailed planning to integrate climate recovery ordinance (CRO) goals, Vision Zero and electric and autonomous vehicles into the ETSP within one year of adoption.

City, ODOT and LCOG staff have utilized the Regional Strategic Scenario Planning Model (RSPM), a scenario planning tool, to evaluate whether the adopted TSP will reach the CRO goals when fully implemented. RSPM worked for this purpose by modeling a wide range of adopted goals, policies, programs and projects relating to active transportation, fleet and fuels, transit, pricing, parking management, education and marketing, and the roadway system and evaluating their impact on fuel consumption and Greenhouse Gas (GHG) emissions. Inputs are included in the attached table. It should be noted that while the CRO fossil fuel goal is a reduction of fossil fuel use by 50% by 2030, the TSP forecast year is 2035 and, therefore, RSMP results are to a 2035 forecast year.

Climate Recovery Ordinance Goals:

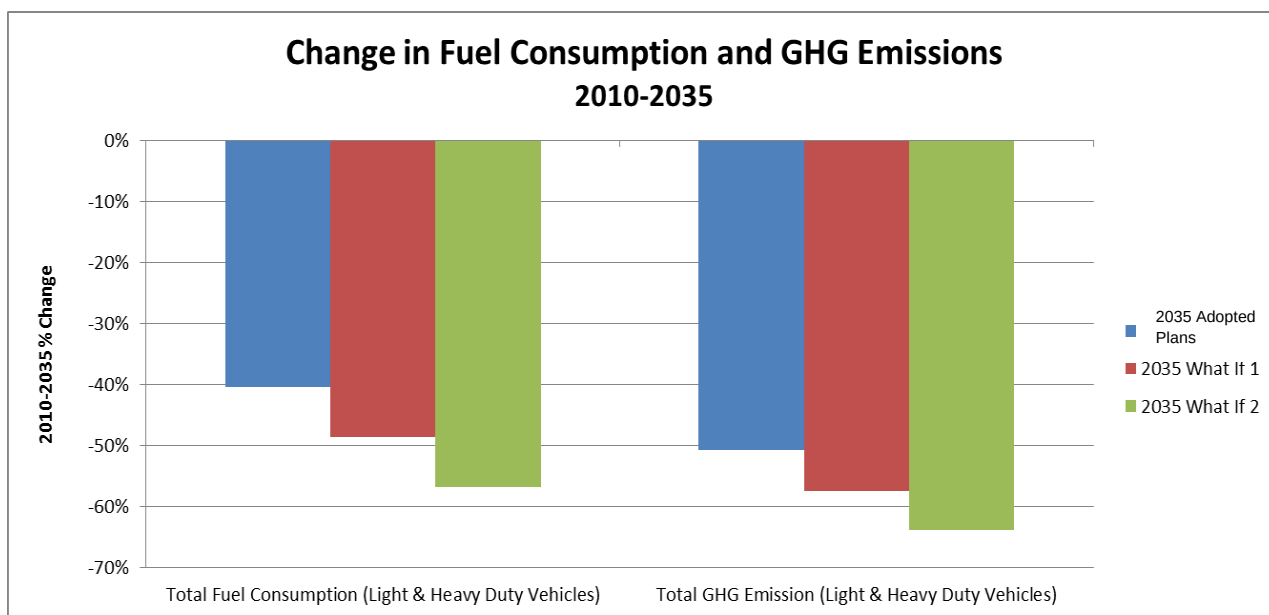
- Reduce fossil fuel use by 50% by 2030
- By the year 2100, total community greenhouse gas emissions shall be average share of a global atmospheric greenhouse gas level of 350 ppm, which is estimated in 2016 to require an annual average emission reduction level of 7.6%.

Three scenarios were tested:

Scenario	Description	Examples of Inputs
2035 Adopted Plans	Models the adopted ETSP, regional and state* goals, policies, programs and projects.	<ul style="list-style-type: none"> • Bike trips: 24% (models the ETSP goal of tripling bike trips) • Workplace TDM: 6% (proportion of working age persons anticipated to work for employers with strong commute options) • Light trucks: 48% (percentage of light trucks as share of household vehicles)
2035 What If #1	Tests a moderately aggressive increase to the adopted goals, policies, programs and projects.	<ul style="list-style-type: none"> • Bike trips: 24% (maintains an already aggressive percentage) • Workplace TDM: 10% • Light trucks: 39%
2035 What If #2	Tests an aggressive increase to the adopted goals, policies, programs and projects.	<ul style="list-style-type: none"> • Bike trips: 24% (maintains an already aggressive percentage) • Workplace TDM: 25% • Light trucks: 30%

Results of the three scenarios as specific to the CRO goals are shown in Chart 1 below. In summary, if fully implemented, the adopted ETSP, regional and state plans will result in a 40% reduction in fuel consumption. The City's CRO goal is to reduce fossil fuel use by 50% by 2030. The "What If Scenario 1" comes closer to the fossil fuel goal with a 49% reduction in fuel consumption. The "What If Scenario 2" exceeds the fossil fuel goal with a 57% reduction.

The CRO goal related to GHG emission is: "By the year 2100, total community greenhouse gas emissions shall be average share of a global atmospheric greenhouse gas level of 350 ppm, which is estimated in 2016 to require an annual average emission reduction level of 7.6%." RSPM measures percent change in GHG emissions and estimates the adopted ETSP, regional and state plans will result in a 51% reduction in GHG emissions by 2035. The "What If Scenario 1" results in a 57% reduction in GHG emissions. The "What If Scenario 2" results in a 64% reduction. City staff will translate results to the CRO goal quantities.



The "Adopted Plans" scenario and both "What If" scenarios all indicate that a reduction in fuel consumption and GHG emissions could result from implementation of the ETSP, regional and state goals, policies, programs and projects; particularly investments in increasing walking and bicycling, encouraging Transportation Options programs and increasing parking costs. The "What If Scenario 2" represents the largest reduction in fuel consumption and GHG emissions reduction resulting from goals, policies, programs and projects that are more aggressive than those adopted in the ETSP, regional and state plans, including; parking management policies to increase coverage and costs, increased Transportation Options programs, local fuel tax increases, increase in transit service miles, as well as policies to increase walking and bicycling.

* Goals, policies, programs and projects from state and regional plans are considered in the analysis due to the regional geography of RSPM and to the broader impacts of state and regional strategies.

Inputs for Regional Strategic Planning Model (RSPM)	2010 Adopted Plans	2035 Adopted Plans	"What If" Scenario 1	"What If" Scenario 2	What is the source of this input?	What does this input influence? Referenced from the Oregon Strategic Assissment - RSPM User's Guide
Active transportation						
Population in Mixed Use areas	<u>16%*</u>	<u>16%</u>	16%	16%	US Census and City Zoning	This classification represents several land use characteristics that collectively create a successful compact multi-modal mixed-use areas, which have been shown to reduce vehicular travel. More specifically, pedestrian travel is sensitive to land use types. RSPM captures pedestrian travel as a characteristic of mixed-use areas.
Bike Diversion	<u>8%</u>	<u>24%</u>	24%	24%	ETSP Goal 5 -By the year 2035 triple the percentage of trips made on foot, by bicycle, and by transit from 2014 levels.	Percentage of trips in the region that are diverted from auto to bike.
Fleet and fuels						
Average MPG	24	52	54	56	Influenced by population, pricing and the State Target Rule OAR 660-044	Higher MPG has lower fossil fuel consumption.
Percent Light Truck (e.g. SUV, pickup truck, van) Share of Household Vehicles	<u>48%</u>	<u>48%</u>	39%	30%	City of Eugene DMV data and the state target rule OAR 660-044	Fewer SUVs, pick up trucks, vans and other light trucks per households indicates higher fuel efficient vehicles.
Percentage ICE	99%	35%	35%	35%	Influenced by population, pricing and the State Target Rule OAR 660-044	As fewer vehicles with ICE are on the road, fossile fuel consumption will go down.
Percentage HEV	1%	61%	61%	61%	Influenced by population, pricing and the State Target Rule OAR 660-044	HEV's have lower fossil fuel consumption needs.
Percentage PHEV/EV	0%	4%	4%	4%	Influenced by population, pricing and the State Target Rule OAR 660-044	PHEV/EV's have lower fossil fuel consumption needs.
Average Vehicle Age	10	8	8	8	Influenced by population, pricing and the State Target Rule OAR 660-044	Newer cars have more modern fuel efficiencies. This input indicates fleet turn over and overall higher efficiencies.
Transit						
Transit Service (Svc/capita)	<u>12</u>	<u>19</u>	19	19	Lane Transit District	Transit revenue miles are the number of miles travelled by a transit vehicle in the revenue service. This input is a significant predictor of household vehicle ownership and travel.
Pricing (MPO)						
Gas Taxes (\$/gallon)	<u>\$0.46</u>	<u>\$0.62</u>	\$0.80	\$1.00	This input includes federal, state and local gas taxes	Gas prices impact peoples decisions on how to travel. Lower gas prices result in higher VMT.
Pay As You Drive (PAYD) Insurance	0%	0%	10%	20%	ETSP	PAYD can incintivize motorists not to drive by reducing travel to save money.
Parking management						
Coverage - Workers	<u>8%</u>	<u>7%</u>	10%	12%	ETSP/Envision Eugene	Overall travel costs (including parking) impact a household's VMT. Higher parking costs result in lower VMT.
Coverage - NonWorkers	<u>5%</u>	<u>4%</u>	8%	10%	ETSP/Envision Eugene	Overall travel costs (including parking) impact a household's VMT. Higher parking costs result in lower VMT.
Parking Cost (ave \$/day)*	<u>\$3.19</u>	<u>\$2.82</u>	\$4.00	\$4.00	ETSP	Overall travel costs impact a household's VMT. Higher costs result in lower VMT.
Work Parking Buyout	0%	0%	3%	5%	ETSP	Incintivizes employees not to drive to work because there is not available parking.
Education and marketing						
Workplace TDM	<u>3%</u>	<u>6%</u>	10%	25%	ETSP Goals and Policies	TDM programs result in a reduction of VMT by diverting trips to other modes.
Household Marketing	<u>0.8%</u>	<u>4%</u>	8%	10%	ETSP Goals and Policies	TDM programs result in a reduction of VMT by diverting trips to other modes.
Eco-Driving/fuel-efficiency education programs	<u>2.5%</u>	<u>3%</u>	8%	10%	ETSP Goals and Policies	Eco-Driving/fuel-efficiency education programs reduce emissions per VMT.
Carshare Vehicles Available	3	<u>75</u>	130	130	ETSP Goals and Policies	Car sharing reduces VMT through changes in auto ownership and per mile costs.
Roads (MPO)						
ITS/Operational Program (% of ideal coverage for city size)						ITS programs determine the area roadway speeds which influence fuel efficiency.
Ramps	0%	50%	60%	70%	Best practice and supported through ETSP policies	Ramp signalization reduces highway congestion
Incidents	30%	50%	60%	70%	Best practice and supported through ETSP policies	Incident management systems help address non-recurring congestion caused by traffic incidents (collisions, breakdowns, etc)
Signal	57%	80%	85%	90%	Best practice and supported through ETSP policies	Traffic signal optimication decreases congestion and reduces idling
Access	40%	50%	60%	70%	Best practice and supported through ETSP policies	Access management decreases congestion by limiting the number of accesses (e.g. driveways, intersecting roads) and reducing conflict points (e.g. through addition of median barriers)
Road Capacity (Lane-miles in MPO)						
Freeway	<u>120</u>	<u>126</u>	<u>126</u>	<u>126</u>	ETSP and Regional Transportation Plan	Freeway supply is a significant predictor of household vehicle ownership and travel.
Arterial	<u>303</u>	<u>307</u>	<u>307</u>	<u>307</u>	ETSP and Regional Transportation Plan	Arterial supply is an indicator for estimating traffic congestion levels. Traffic congestion affects average trip speeds, vehicle fuel economy and emissions.
BACKGROUND INPUTS						
Average Household Income						
	\$ 48,744	\$ 58,134	\$ 58,134	\$ 58,134		
Market Price of Fuel (excluding tax)						
	\$2.43	\$5.58	\$5.58	\$5.58		

* Underlined inputs reflect Eugene specifically

Abbreviations

- ICE Internal combustion engines
- HEV Hybrid electric vehicle
- PHEV/EV Plug-in hybred electric vehicle /electric vehicle
- PAYD Pay as you drive
- VMT Vehicle Miles Traveled
- DVMT Daily Vehicles Miles Traveled

EUGENE CITY COUNCIL AGENDA ITEM SUMMARY



Work Session: Improvement of Unimproved Roads

Meeting Date: September 10, 2018
Department: Public Works Engineering
www.eugene-or.gov

Agenda Item Number: 3
Staff Contact: Mark Schoening
Contact Telephone Number: 541-682-5243

ISSUE STATEMENT

This work session is to review the elements to consider and the practical application for an ordinance to be drafted in response to the following council motion passed at the council work session on June 21, 2017:

In furtherance of the City Council's policy choices regarding densification, Vision Zero and complete streets, any new housing development of (x) number of units or greater that is predominantly served by sub-standard road(s) triggers road improvements that will be completed with (x) years of the development's approval, paid for by the developer and/or the City, but at no cost to the neighboring property owners, that bring the road up to a condition consistent with the Council's Vision Zero Policy.

BACKGROUND

The City Council held a work session on June 21, 2017, on New Housing Development on Unimproved Roads to discuss the following issues raised in the poll for the work session:

- Potential policy changes that consider developer, resident and City responsibility for bringing unimproved roads to City standards
- Implications of outward growth decisions as they affect unimproved roads.
- Development of a comprehensive plan for unimproved streets (including County roads as they are brought into the city through annexation)
- The idea of policy changes toward County road annexations without a plan for their improvement to City standards

There are 490 miles of improved roads and 52 miles of unimproved roads within the City of Eugene. The estimated cost to improve the unimproved roads to meet urban street design standards is approximately \$60 million. There are approximately an additional 68 miles of improved roads and 47 miles of unimproved roads within the City's urban growth boundary, but currently outside the city limits. The eight maps in Attachment A show the residential land supply developed as part of the buildable lands inventory and the unimproved and partially improved roads within the City's Urban Growth Boundary.

Improved roads are those roads which have been fully designed for structural adequacy, have storm drainage facilities provided which include curbs and gutters, and have either an asphalt concrete or a Portland cement concrete surface. Typically, these roads were either fully improved when the area was developed and paid for by the developer, or were improved through a local improvement district and paid for, in part, by the benefitting property owners. In some cases, a road may have been fully improved while under state or county jurisdiction and then surrendered to the City.

Unimproved roads are those roads with soil, gravel or asphalt mat surfaces that have typically evolved to their existing state, have not been structurally designed, and have few—if any—drainage facilities and no curbs or gutters.

New development subject to a land use decision is required to construct all streets within and adjacent to the development site. Chapter 9 – Land Use of the Eugene Code requires the following:

The developer shall grade and pave all streets and alleys in the development site. All paving shall be to the width specified in EC 9.6870 Street Width and provide for drainage of all such streets and alleys, and construct curbs and gutters, sidewalks, street trees and street lights within the development site according to the Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways and standards and specifications adopted pursuant to Chapter 7 of this code and other adopted plans and policies.

The developer shall pave streets and alleys adjacent to the development site to the width specified in EC 9.6870 Street Width, unless such streets and alleys are already paved to that width, provided the City makes findings to demonstrate consistency with constitutional requirements. All paving shall provide for drainage of all such streets and alleys, and construct curbs and gutters, sidewalks, street trees and street lights adjacent to the development site according to the Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways and standards and specifications adopted pursuant to Chapter 7 of this code and other adopted plans and policies.*

*The United States and Oregon Constitutions limit the extent to which the City can require a developer to make off-site street improvements. Any time the City seeks to impose such a requirement, the City must first consider the particular impacts the development will have on the street and then limit the required street improvements to those that are “proportional” to the development’s impact on the street.

For streets adjacent to new development, it is not always practical to construct street improvements. In such cases, the City requires developers to pay an equivalent assessment for future street improvements for adjacent streets functionally classified as arterials or collectors. For all functional street classifications, developers are required to sign a petition for future street improvements (irrevocable petition) and for the assessment of the real property benefitted by the improvements.

Elements to consider in developing a draft ordinance as directed by the council motion include:

- The *Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways*, is consistent with the council's vision regarding Complete Streets and Vision Zero.
- New development is paying its full share for street improvements under the existing Land Use Code and consistent with the United States and Oregon Constitutions.
- Street improvements are programmed through the Six-Year Capital Improvement Plan as recommended by the City Manager and adopted by the City Council.
- Arterial and collector streets provide for through travel that connect major destinations such as employment centers, parks, schools, and commercial and industrial areas.
- Local streets primarily provide access to property.
- Arterial and collector street improvements may be funded by transportation system development charges and federal funds allocated by the Metropolitan Planning Organization.
- Jurisdictional transfer of County Roads from the County to the City should be contingent upon the roads being fully improved to urban standards and in good repair.
- A subdivision of 20 single-family residences and a 30 unit multi-family residential development will generate approximately the same number of new vehicular trips (approximately 190 average daily trips).

RELATED CITY POLICIES

Municipal Charter – Chapter IX – Public Improvements, Section 37. Procedure., Section 38. Assessments., Section 39. Amendments., and Section 40. Liens.

Eugene Code Chapter 7 – Public Improvements – Local Improvements 7.085 – 7.270

Eugene Code -Chapter 9 – Land Use – Public Improvement Standards 9.6500 – 9.6510 and Standards for Streets, Alleys, and Other Public Ways 9.6800 – 9.6875

Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways, November 1999.

COUNCIL OPTIONS

None. This is an information item.

CITY MANAGER'S RECOMMENDATION

None. This is an information item.

SUGGESTED MOTION

None. This is an information item.

ATTACHMENTS

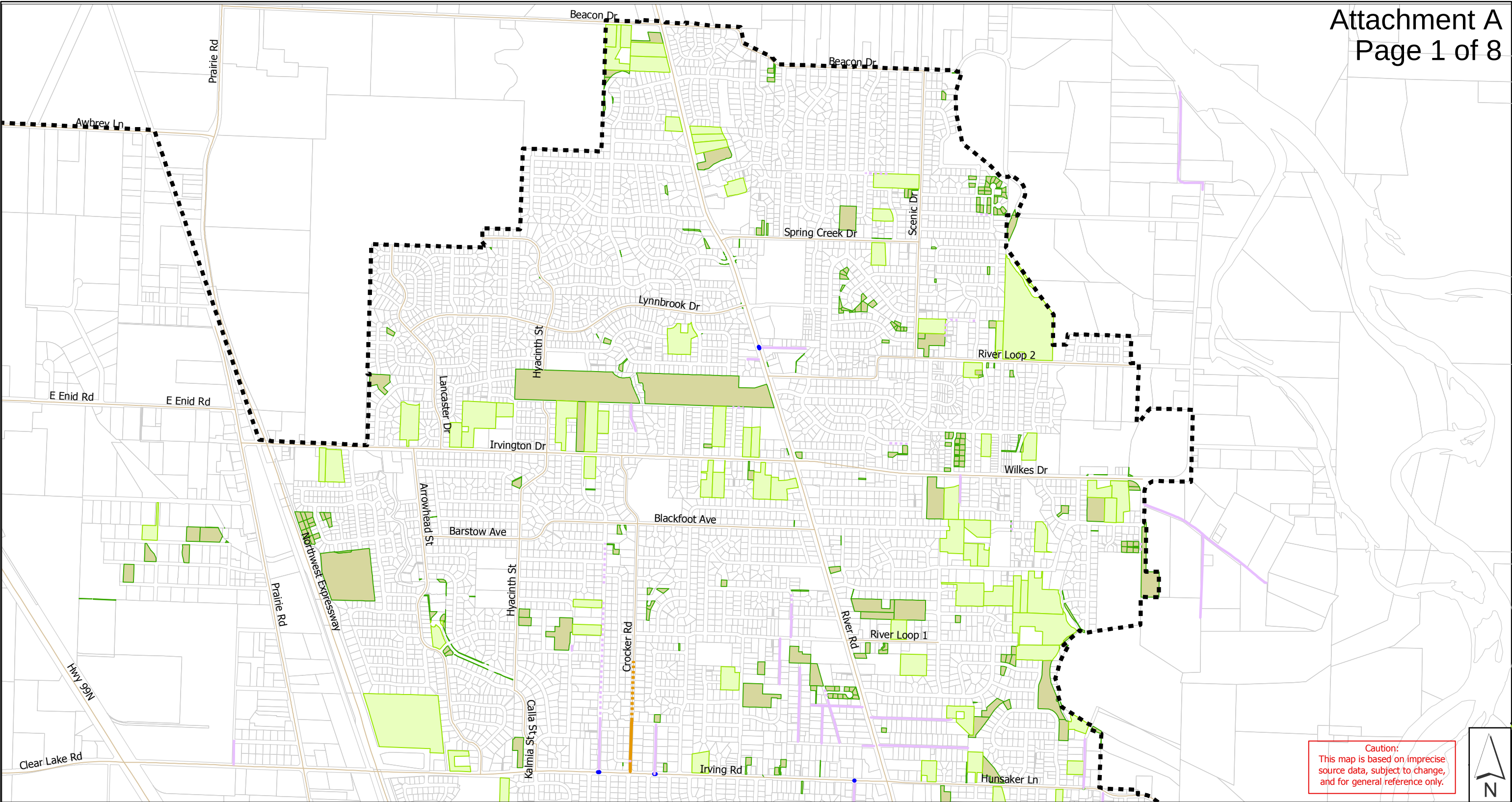
A. Residential Land Supply on Unimproved and Partially Improved Roads (eight maps)

FOR MORE INFORMATION

Staff Contact: Mark Schoening

Telephone: 541-682-5243

Staff E-Mail: mschoening@eugene-or.gov



Caution:
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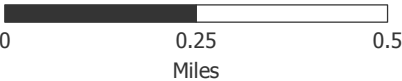
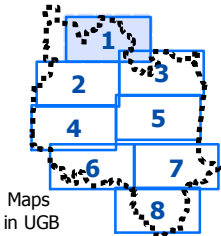


Legend

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|-------------------|---------------------------|-----------------------|
| Unimproved Street | Partially Improved Street | Vacant Residential |
| Major Arterial | Major Arterial | Total |
| Minor Arterial | Minor Arterial | Partial |
| Major Collector | Major Collector | UGB |
| Minor Collector | Minor Collector | Taxlot |
| Local | Local | Major Improved Street |

**Residential Land Supply on
Unimproved and Partially Improved Streets**

Residential land supply derived from PDD 2012 - 2032 Building Land Inventory program

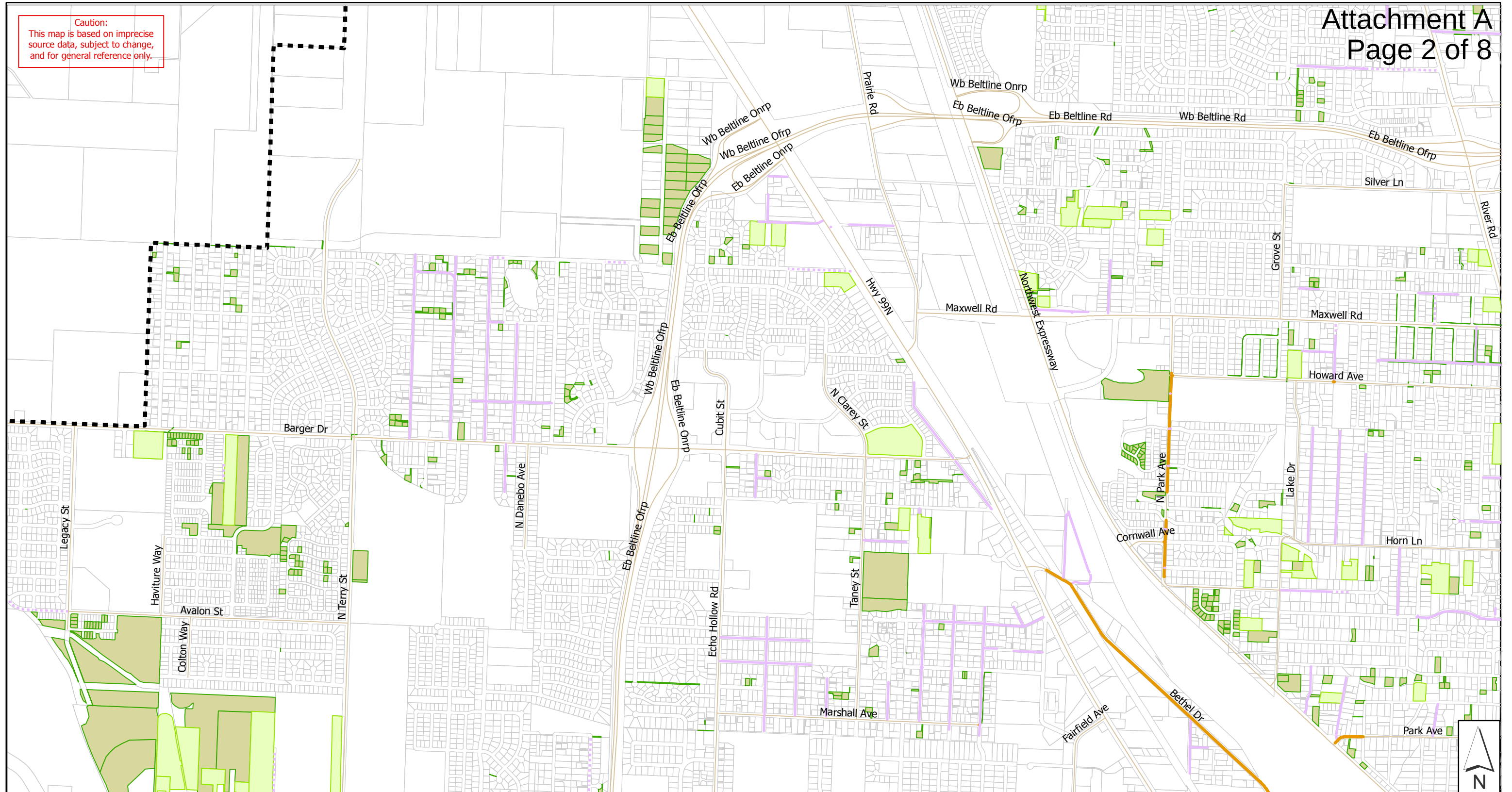


Maps
in UGB



July 13, 2018

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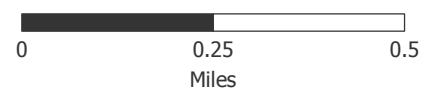
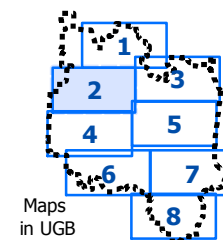


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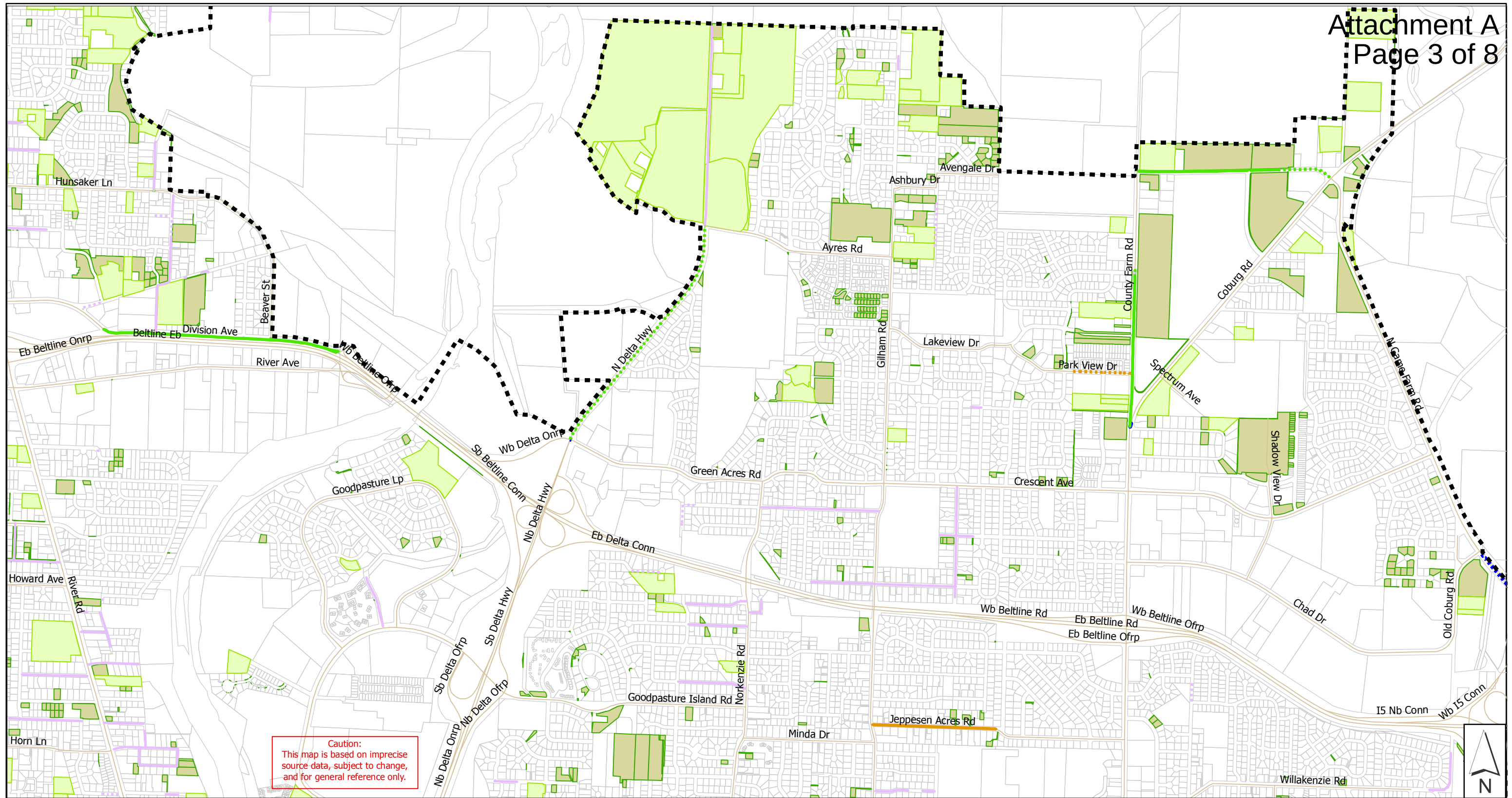
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July 13, 2018



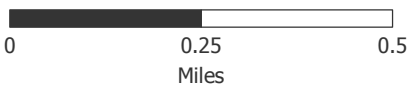
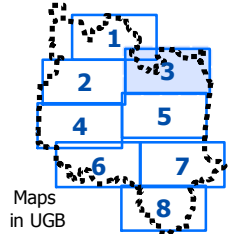
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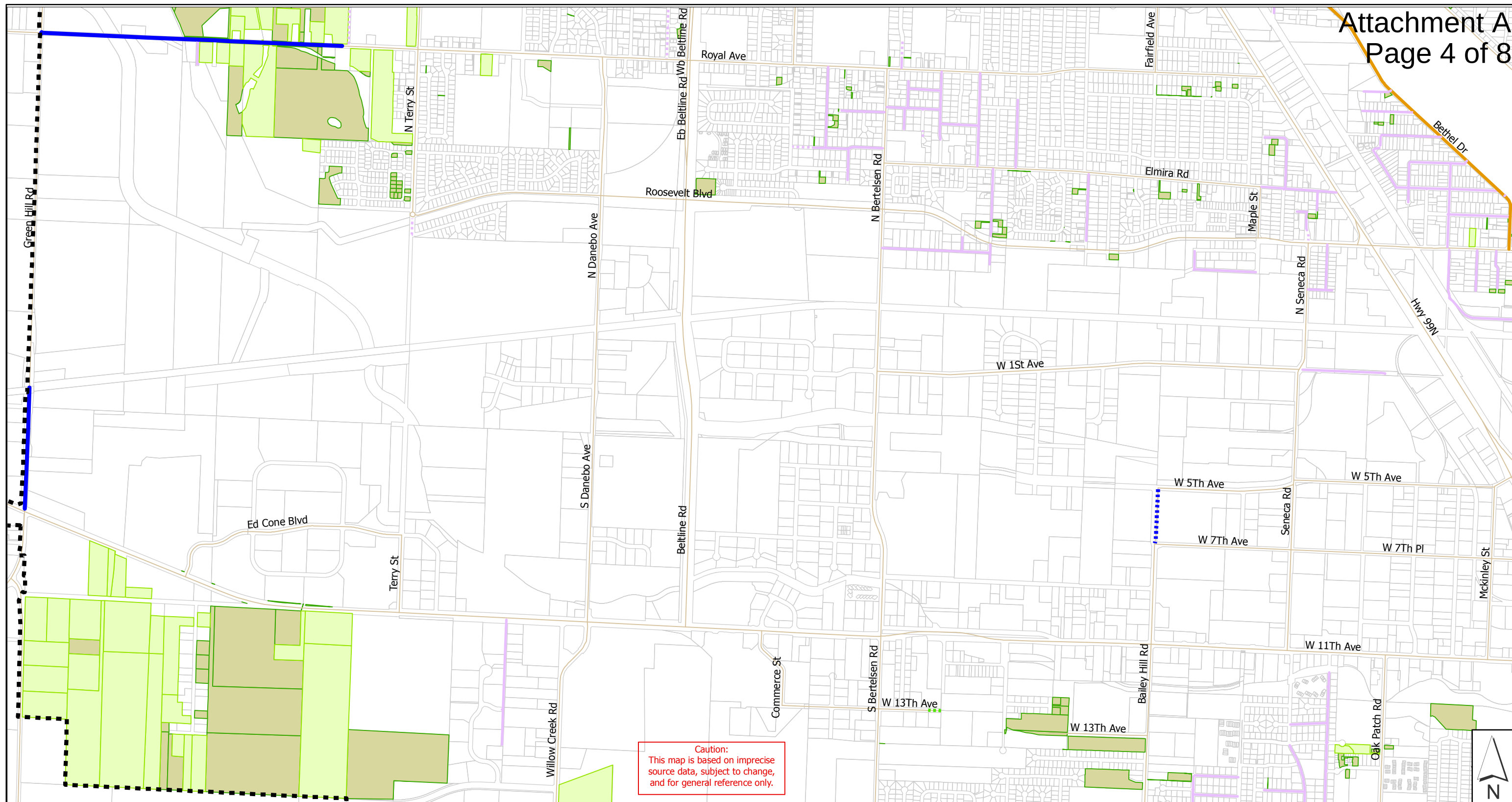
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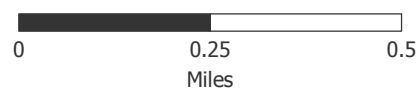
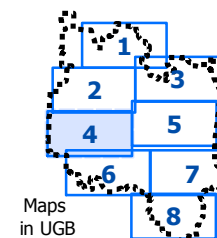


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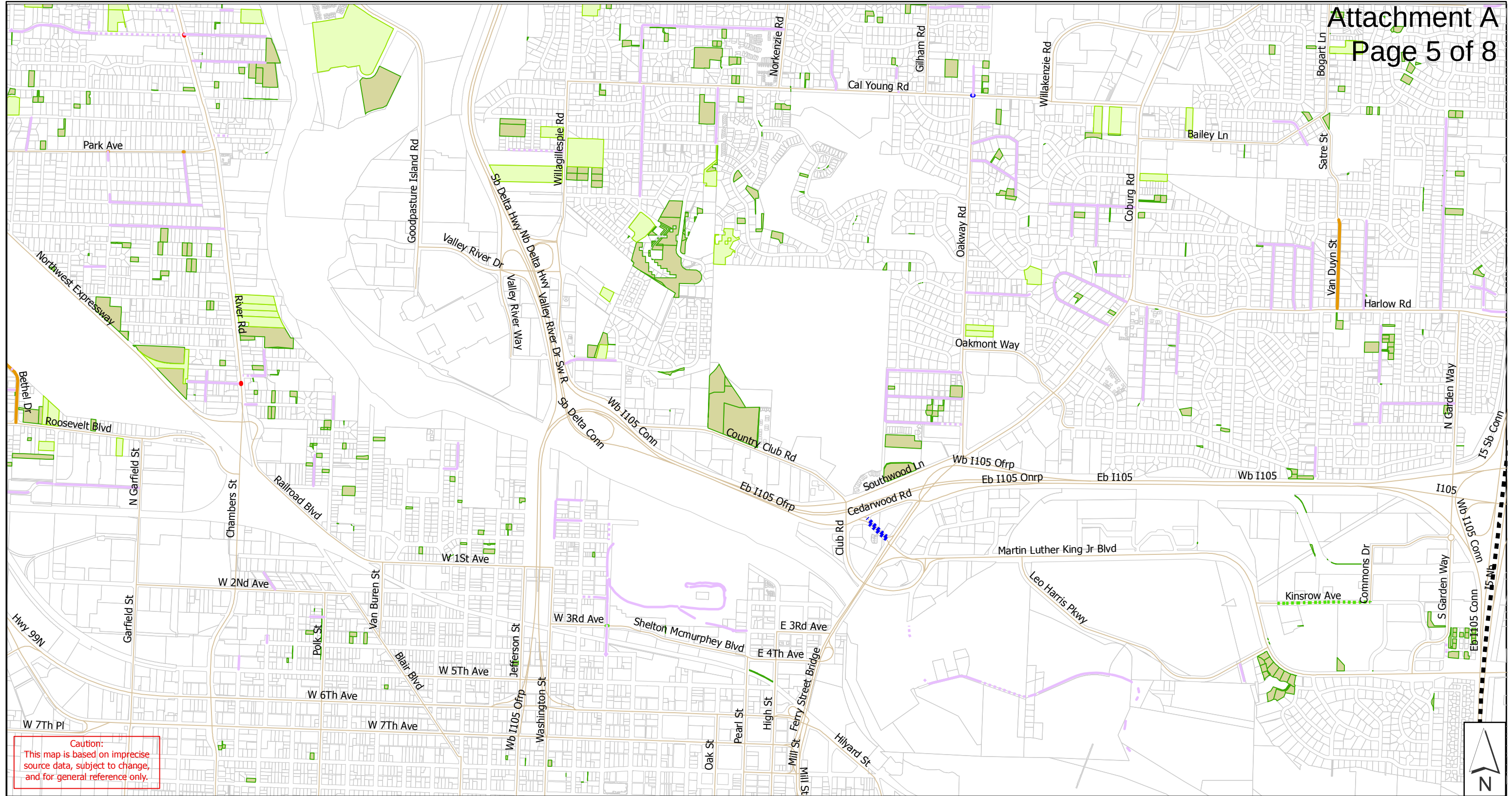
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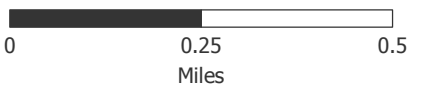
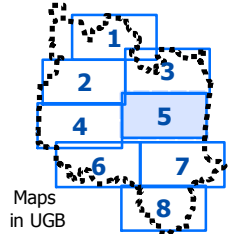


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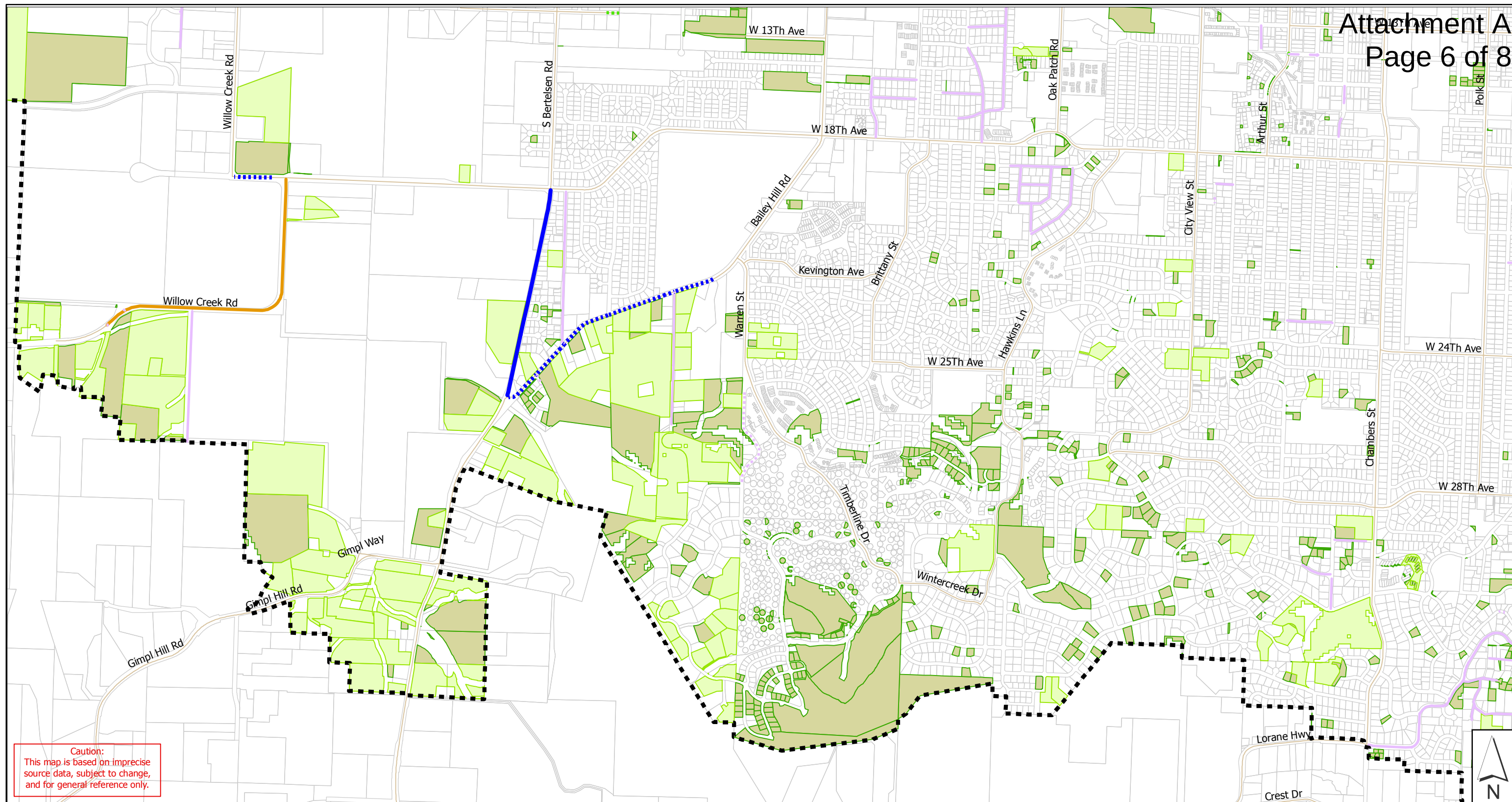
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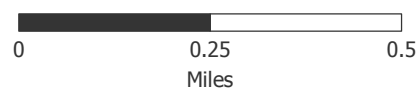
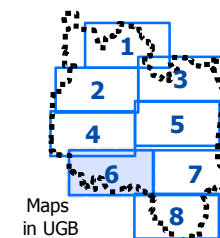


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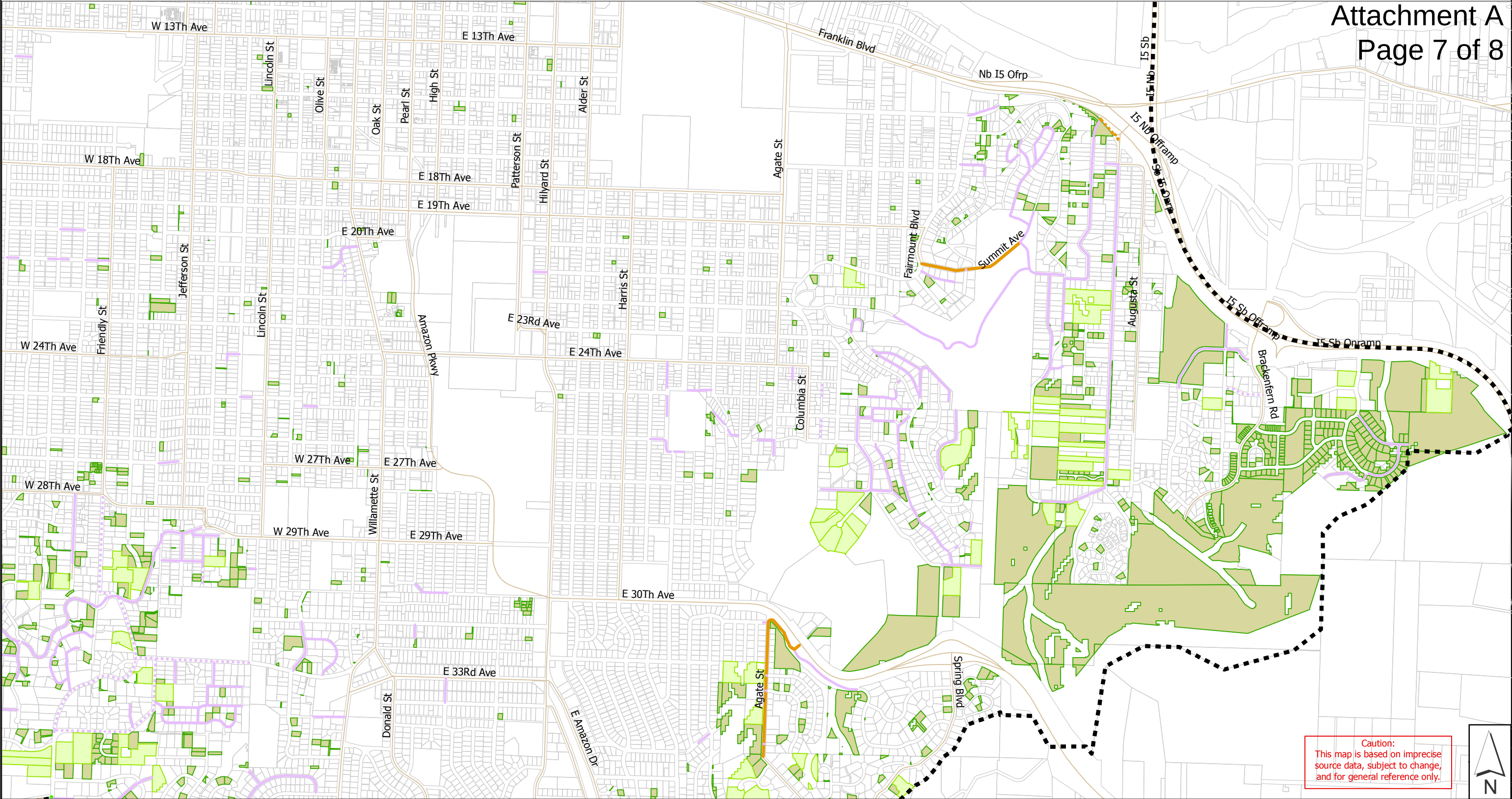
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July 13, 2018



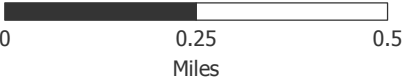
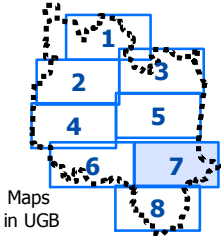
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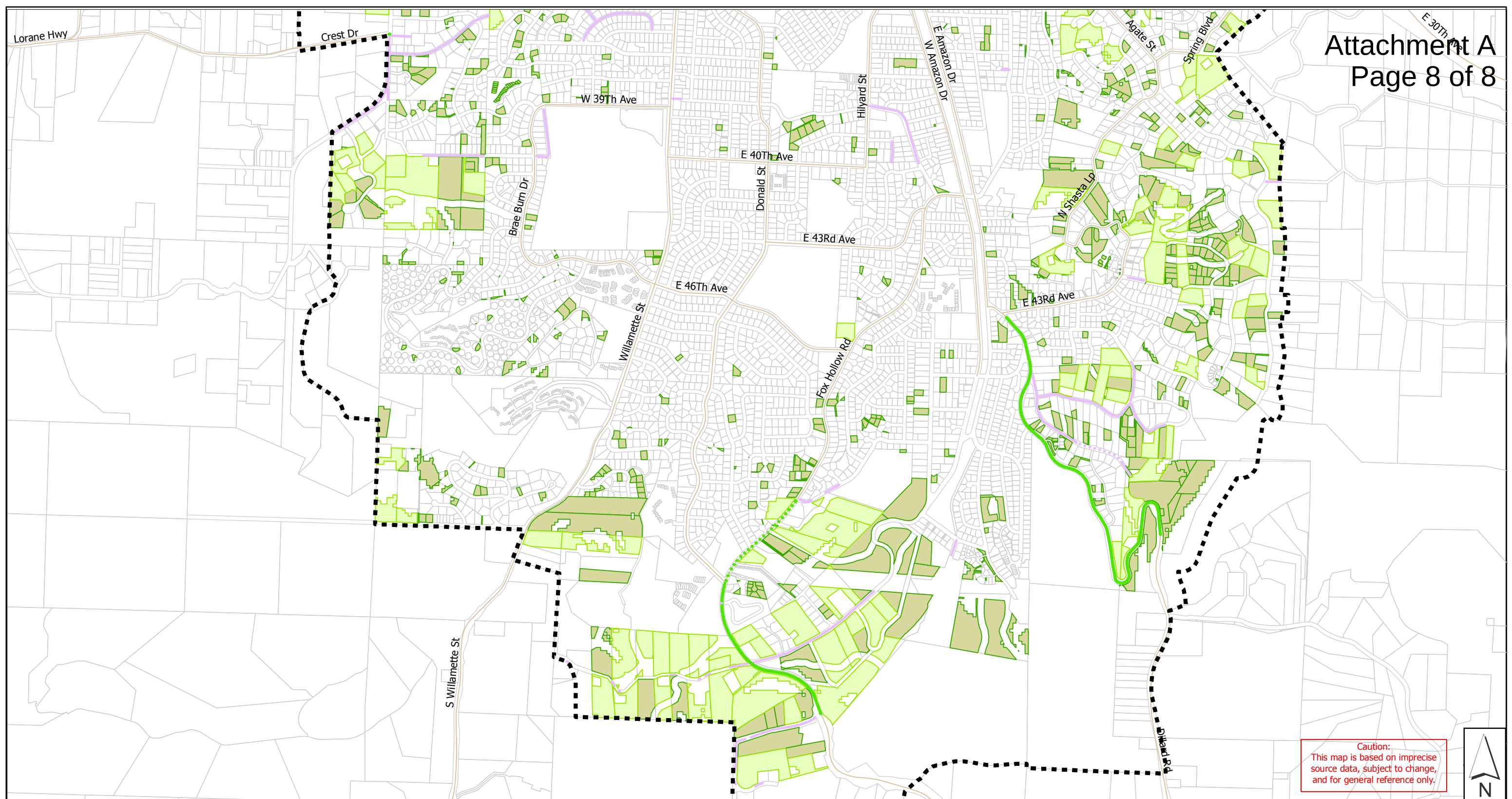
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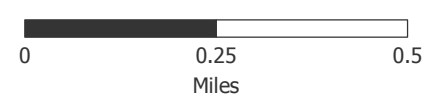
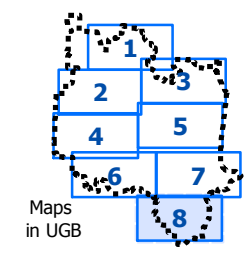


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