

DATE: August 24, 2022

TO: Matt Hastie | APG|MIG

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SUBJECT: East Albany Plan – Development Alternatives (Transportation Evaluation) Summary DRAFT Project #21181-000

This memorandum summarizes the transportation evaluation that was conducted for three development scenarios in East Albany.

SCENARIOS OVERVIEW

Three development scenarios were prepared that included a mix of development types and locations across the approximately 2,800 acres of East Albany. Scenario maps are included as attachments.

TRANSPORTATION NETWORK

Each transportation scenario was assumed to include the following common major transportation elements to support access, connectivity, and mobility of travel modes. These elements are generally depicted on the scenario maps.

- Additional connections to neighborhoods north of Knox Butte and closure of Century Drive
- New north-south street east of Goldfish Farm connecting Knox Butte to US 20
- Two new east-west streets connecting Goldfish Farm to Scrael Hill Road
- Timber Street extension south of US 20 to connect to Three Lakes Road and provide access to areas south of US 20

SCENARIO EVALUATION PROCESS

The following section summarizes the evaluation process that was conducted for each scenario.

Land use quantities for each scenario were estimated based on the land use designations. The total estimated household and employment capacity for each scenario is listed in Table 1.

TABLE 1. DEVELOPMENT SCENARIO LAND USE CAPACITY SUMMARY

SCENARIO	HOUSEHOLDS	EMPLOYEES
BASE	4,705	3,074
SCENARIO 1	9,136	7,442
SCENARIO 2	8,753	8,934
SCENARIO 3	8,159	8,432

As listed in Table 1, each of the three development scenarios have the potential to add additional housing and employment capacity to East Albany. Scenario 1 has the highest overall housing capacity, while Scenario 2 has the highest overall employment capacity.

20 YEAR PLANNING HORIZON EVALUATION

Regional transportation planning in Albany uses the regional travel demand model to forecast future traffic volumes. The regional Corvallis Albany Lebanon Model (CALM) has a long-range planning horizon of 2043. The future land use assumptions for Albany that are included in the regional travel model are consistent with the statewide coordinated population projections¹. The travel model indicates that approximately one third of the overall city-wide household growth (approximately 2,400 units) are assumed to occur in East Albany over the next 21 years.

Since full buildout of the three land use scenarios would exceed the 21-year forecast, an incremental growth scenario was evaluated for each land use scenario. Each of these scenarios were capped to include a portion of household and employment growth that was consistent with the regional travel model assumptions and statewide population forecasts. Each scenario included a portion of housing and employment growth consistent with the land use designations. For the incremental 2,400 household unit growth, approximately 1,000 households have been recently approved and were accounted for in each scenario.

The three planning horizon scenarios were evaluated using the CALM travel demand model. Due to the incremental growth (limited to a 21-year forecast), relatively similar overall land use

¹ <https://www.pdx.edu/population-research/population-forecasts>

assumptions, and spread to an overall large size of the East Albany area, the model runs did not indicate significant differences in traffic impacts among the three scenarios. Rather, the following general transportation findings are similar among the scenarios:

- The identified additional transportation system will provide relief to existing streets
- A mix of housing and employment uses in close proximity allows opportunities for shorter, multimodal trips
- Higher intensity uses should be located along existing transit routes
- Larger employment areas that may require regional travel are best suited near east-west roads that provide access to I-5 (e.g., US 20)

BUILDOUT SENSITIVITY TESTS

Due to the limitations of the planning horizon evaluation, additional sensitivity tests were conducted for each scenario that estimated the relative differences of full buildout for the land use designation. Based on statewide population projections, full buildout of the scenarios would not be anticipated to occur within the next 20 years.

The travel model was used to conduct a preliminary sensitivity comparison between the three scenarios to determine potential differences of full buildout. This simplified sensitivity analysis scaled model trips within the East Albany area and did not control to growth in other areas of the City beyond the 20 year planning horizon or at regional gateways (including I-5) traveling into and out of the region. The analysis indicated that there would not be significant difference between the three scenarios (generally within ten percent) but that each of the scenarios at full buildout have the potential to add significant traffic growth beyond the 20-year horizon.

The preliminary analysis indicates that these future traffic growth estimates (relative to year 2043) could include:

- Knox Butte east of I-5 - Approximately double traffic and require a five-lane section along with strategies to maintain mobility.
- US 20 east of I-5 – Approximately double traffic, strategies to maintain mobility, and capacity upgrades at major intersections.
- Timber south of US 20 – Approximately double traffic. Would likely operate as a three lane facility but would require additional turn lanes near US 20.
- Goldfish Farm north of US 20 – Significant increase in traffic would require widening at US 20 and improved connectivity to reduce reliance on the corridor and provide alternative connections to US 2

FINDINGS

The transportation evaluation of the three scenarios provided the following findings:

- Each scenario has the potential to provide significant additional capacity for housing and employment uses
- Growth within the long-range planning horizon (2043) would not reach full buildout based on statewide coordinated population projections. Due to this constraint, significant differences do not exist among the three scenarios over this period.
- The following strategies should be considered for developing the preferred alternative:
 - The identified additional transportation system will provide relief to existing streets
 - A mix of housing and employment uses in close proximity allows opportunities for shorter, multimodal trips
 - Higher intensity uses should be located along existing transit routes
 - Larger employment areas that may require regional travel are best suited near east-west roads that provide access to I-5 (e.g., US 20)
- The ultimate buildout for the three scenarios have the potential to significantly increase trips and traffic in the East Albany area. While this buildout would likely occur beyond 2043, the preliminary sensitivity tests indicate that traffic could further double on some key roadway segments within East Albany if the full buildout potential is realized.

ATTACHMENTS

The following items are included as attachments:

- 1) Scenario 1 Map
- 2) Scenario 2 Map
- 3) Scenario 3 Map

FIGURE 1. SCENARIO 1 LAND USE AND TRANSPORTATION SYSTEM

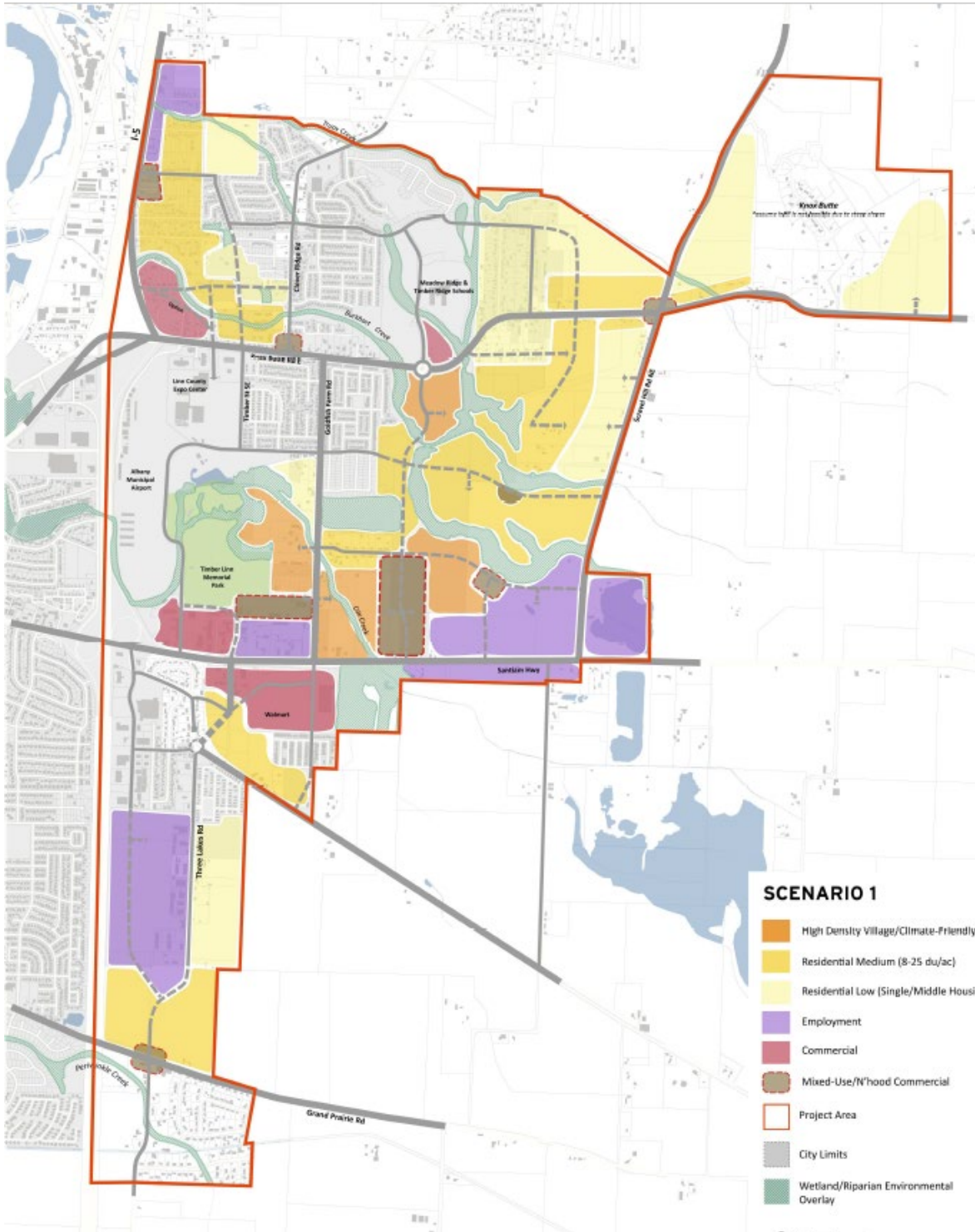


FIGURE 2. SCENARIO 2 LAND USE AND TRANSPORTATION SYSTEM

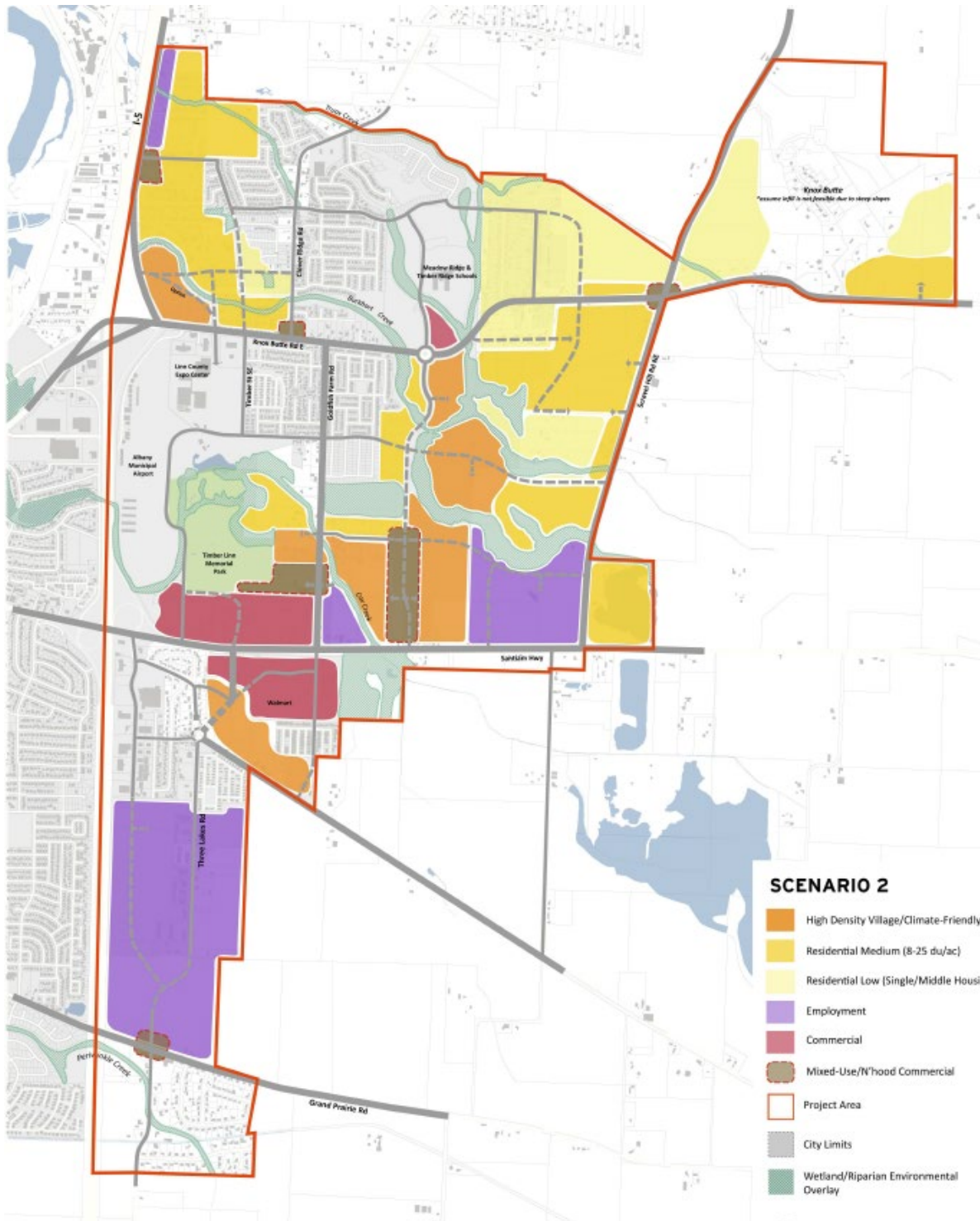


FIGURE 3. SCENARIO 3 LAND USE AND TRANSPORTATION SYSTEM

