

AGENDA

UGB Remand Task Force (RTF)

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Monday, May 19, 2014
3:00 p.m.

Brooks Room
Deschutes County Library: Bend Branch
601 NW Wall Street, Bend, OR 97701

JIM CLINTON
Mayor

JODIE BARRAM
Mayor Pro Tem

VICTOR CHUDOWSKY
City Councilor

DOUG KNIGHT
City Councilor

SALLY RUSSELL
City Councilor

MARK CAPELL
City Councilor

SCOTT RAMSAY
City Councilor

ERIC KING
City Manager

1. Call to Order
2. Approval of Minutes – March 17, 2014
3. Technical Advisory Committees and Stakeholder Interviews
 - a. Discussion by Brian Rankin – TACs/stakeholder interviews
 - b. Discussion by legal counsel– conflicts of interest
 - c. Discussion on above topics – RTF, public, staff
 - d. Testimony – Public
 - e. Deliberation and decisions - RTF
 - a. Decide on changes to Interested Parties list.
 - b. Decide on how to select TAC members – council interviews or staff recommendations (note: selection does not take place at this RTF meeting, but will take place at a later date).
 - c. RTF members each present and discuss their three suggested people to include in stakeholder interviews. Refine list of potential stakeholders as necessary.
 - d. Decide if staff or the RTF should recommend the final 18 stakeholders to City Council.
4. July 16th Steering Committee meeting – next steps
5. Adjourn

Remand Task Force Meeting
Monday, March 17, 2014
Minutes

1. Call to Order

Chair Chudowsky called the meeting to order at 3:06 PM. Present were the RTF members, Bill Wagner, Doug Knight, Sally Russell, Jodie Barram, Victor Chudowsky, Rex Wolf, Scott Ramsay and Mark Capell.

2. Approval of Minutes

Minutes from the January 24, 2014 and February 10, 2014 meetings were approved.

3. Update on the RFP proposal/Infill lands and CCRs. We will be meeting with staff shortly, scoring the proposals and then we'll be bringing a contract to Council on the 16th. We have two very good, qualified teams. The interviews will be on March 31st.

We also have a quick update on the BLI. We have a volunteer on board that is interested in helping us with reviewing a database with the different subdivisions and where there are restrictions. We'll keep you posted.

4. Presentation and Discussion - UGB Remand Task 2.3 - Housing Needs Analysis.

Mr. Rankin introduced the presentation and spoke about the "big picture." He discussed OSU briefly and the long-term plan for housing and the different approaches. A question was asked about the need for more housing for OSU and what is the simplest way to say that we're planning for OSU. Mr. Rankin replied that the UGB originally planned for a university. We were told we had to look for land for a university inside of the UGB before bringing land in the UGB and this is inside of the UGB.

The purpose of this meeting is to discuss steps 4-6 of the HNA. It's the meat of the residential land discussion. The steps include: determine the types of housing that are likely to be affordable, estimate the number of additional needed and determine the needed density.

The first part of step 4 is to identify the types of housing. This includes single family detached, single family attached and multiple family attached. Then we organize on household income by range categories and identify structure types financially attainable by each income. Then we estimate units by type.

The trends in key variables were discussed such as household income, age of household head, household types, household size and tenure. Mr. Syrnyk discussed

where we were in 2008. Some data from the Central Oregon Regional Housing Authority workforce housing needs analysis showed that many of the workforce in Bend lived outside of the City due to the increasing lack of housing affordable to low and moderate income households thus resulting in many area workers purchasing homes outside of Bend.

Mr. Syrnyk then discussed the direction we've received from the remand order. We were asked to express our housing needs mix using at least 3 types. We should also explain our policy choices. He also explained that we now know where our transit corridors are which makes a big difference in planning for multi-family housing along these corridors.

Step 5 involves estimating the number of additional types needed for new households. We have the housing mix at 65% single-family detached, 2% single-family attached and 33% multi-family attached. By using this mix, we estimated needed acres of land by plan designation and housing type. Ms. Russell asked if we knew that more people were commuting, how did we attach accurate demographic income to which Mr. Rankin mentions that the mix tries to take this in to consideration.

Mr. Wagner mentions that land cost considers supply and demand and is that a factor that we can argue? Mr. Rankin mentions that they tried this before by adding a surplus. We wanted a wide variety of choices but that it didn't work.

Step 6 was then reviewed. We are focusing on changes in density for lot size and living space. We are trying to capture key trends such as household characteristics. Mr. Syrnyk pointed out the "observed" housing units as opposed to the "proposed" units based on trends from the last slide.

Referring to our general plan, which is guiding our development code, you can add additional zones if needed.

Ms. Winters mentioned that we were required to mention how many large, vacant lots we have left. They told us to look hard at those for the housing needs. We have to connect them up with our findings -- what our numbers show with how we zone it. We have to look at what we have compared with what we need.

Mr. Syrnyk wrapped up by showing the 2008 proposal vs. the 2014 proposal.

Public Comment

Mr. Wolf mentions that it's an admirable and vigorous approach. The real challenge is the last part. Also, what does this mean to developers?

Mr. Knight asks for clarification of “tenure.” Mr. Syrnyk explained that tenure needs to be part of your analysis. It’s to help inform your analysis to see what type of housing people are buying or renting. He also questioned the net density to which Mr. Rankin mentioned that we could take a tour, or get photographs and examples. Mr. Capell believes it would be easier to have a list. He also questioned whether the 5.4 or the 4.4 is more representative of where we want to live.

Mr. Chudowsky tends to see a lot more attached homes and is that something we can play with relative to multi-family attached? How much of this proportion is directly related to income? What’s our leeway in terms of being able to adjust that? How would we back it up?

Steve Hultberg mentions he’s having trouble connecting the dots getting to the 65%. The trends are in the 73% range. What are the trends that we’re pointing to? What was the vacancy rate during the past 10 years? We need to take a hard look at that.

Mr. Rankin mentions that during 2007, the predominant type that was built was single family. Also, the market took a dive. He also mentions that we should look at multiple trends and then piece it together in our future housing mix. There isn’t a perfect set of data out there.

Mr. Wagner asks Mr. Hultberg about vacancy rates. It looks like there’s demand there. Mr. Hultberg agrees that the vacancy rate is low but is that demand for an apartment or single family home?

Bruce White mentions that likely the majority of second homes would be single-family residences. Mr. Rankin mentions that those 500 acres to account for second homes would not be included in the mix.

Mr. Ramsay mentions that the trends are dangerous. It’s based on economics. Sometimes people didn’t choose to live in an apartment but it was based on economics. People move to Bend to live in single homes and have space, not live in apartments.

Kirk Schuler asked about the RM zone and it states in the spreadsheet that it’s assumed to be built to 5.6 units. We need to correct the minimum density.

Mary Winters mentions that it was already stated in the record that Bend isn’t enamored to attached dwellings. The DLCD didn’t like that, we had to go back and explain it better. We have to explain how we’re going to meet our income levels, how will we ensure that it happens. We have to connect the dots. We have to connect it with affordability.

Mr. Ramsay asks if we could create new zones, to which Ms. Winters said it was in council’s discretion.

Ms. Russell talks about the average net density.

Ms. Barram explained how the data came about -- that it's outlined in the HNA.

Mr. Chudowsky mentions that we should let this sit and not direct staff to do anything. Let's have another meeting and come back to it. Those that have issues about it, please write it up so we can review it.

5. Adjourned at 4:57 PM.

DRAFT

MEMORANDUM

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To: **UGB RTF**
FROM: **BRIAN RANKIN**
SUBJECT: **TECHNICAL ADVISORY COMMITTEES AND
STAKEHOLDER INTERVIEWS**
DATE: **5/15/14**



The UGB remand project is entering a new phase starting in July, when the Angelo Planning Group (APG) team will be assisting the city with completing the UGB remand work. The approved Scope of Work (Scope) with APG outlines the work the city will undertake over the next two years. This Remand Task Force (RTF) meeting is therefore focused on preparing for the first steps of the process outlined in the Scope. During the meeting the RTF will discuss the composition of the three Technical Advisory Committees (TACs), and people to participate in stakeholder interviews. Attached to this memo is the approved Scope and interested parties list, both of which will be helpful to review prior to the meeting.

Homework and desired outcomes of RTF Meeting

- 1) Please review and suggest any changes to the attached list of interested parties the RTF believes should be contacted directly by the city to ask for their involvement in one of the three TACs. This list will then be used by city staff to contact these groups directly and request their participation. In addition, the city will publicize and promote the opportunity to participate in the TACs. Applications for TAC members will be reviewed and approved per the city's guidelines.
- 2) Per the city's guidelines, the RTF should decide if the City Council wants to directly interview TAC members, or allow city staff to make a recommendation to the City Council regarding the make-up of the TACs.
- 3) During the RTF meeting, each RTF member should be prepared to identify three interest groups, and specific people representing these groups, to participate in stakeholder interviews. This list of names will then be used by staff to recommend up to 18 stakeholders that will be approved by the City Council and contacted by the project consultant team for an assessment interview and discussion. Alternatively, the RTF could identify the 18 individuals at the 5/19/14 RTF meeting.
- 4) The decisions made at this RTF meeting will then be the basis for further refinement once the consulting team is brought on board and fully engaged in the project.

Background

The council-approved Scope describes work tasks that will take place in the project. Internally, the first activities taking place involve project chartering (e.g. agreeing upon team member roles, expectations, project risks, timelines, methodological issues, etc.), creating more detailed schedules, data and information exchange, and a Project Management Plan tying these elements together. Externally, some of the first work items include conducting stakeholder interviews, forming TACs, creating a Public Involvement Plan, and meeting with the Steering Committee to discuss their decision making model and guidelines, and identify core values which will inform subsequent work. Separate City Council actions that will be taken in the next month include approving a resolution to form the TACs and Steering Committee.

Pertinent excerpts from the Scope are presented below to explain the elements and relationships between the TACs, stakeholder interviews, and Public Involvement Plan (PIP).

Task 1.1 Stakeholder Interviews and Assessment Report

- a. Stakeholder interviews. APG and Mary Orton will conduct up to 20 interviews with approximately 25 stakeholders to assess priority viewpoints and issues to address during the remand process; review ideas in the preliminary draft PIP and discuss potential refinements to it; and, determine effective methods for involving these stakeholders throughout the planning process. The City will identify 18-20 interviewees, and interviewers will ask interviewees who else should be interviewed. Additional interviewees will be chosen by APG and Mary Orton from among those who are recommended by the original interviewees. City will provide input into whether and how many additional interviews can be conducted so the project stays on schedule. If additional interviews are needed of the number of interviewees increases, contingency funds will be used to cover additional costs.
- b. Assessment report. A kick-off meeting will be held with the City to explore the project approach to collaboration and the interview process. Consultant will prepare an interview questionnaire or topic guide for City review, schedule the interviews, conduct the interviews, and prepare an Assessment Report for review by interviewees and city staff. Before being finalized, the Report will be sent in draft form to interviewees to ensure their points of view are adequately represented. All interviews will be non-attributed; the summary will report themes and not ascribe comments to individuals. Some interviews will be small groups where it is appropriate to group common interests.

Task 1.2 Public Involvement Plan

APG and Mary Orton will prepare a Public Involvement Plan (PIP) that identifies specific public goals and principles, outreach and involvement tools, interests and viewpoints that need to be represented, and activities to be undertaken throughout the process. The PIP will describe key messages, stakeholder groups and participants, and the role of consultants, city staff and volunteers. The PIP will be detailed for Phase 1 and at a high level for Phases 2 and 3...

Task 1.5 - Technical Advisory Committee Meetings

Based on feedback from stakeholder interviews and PIP (Public Involvement Plan), three Technical Advisory Committees will be formed by the city under the guidance of Mary Orton and the APG team. The APG team will facilitate and support topic specific Technical Advisory Committees (TACs) to review and provide guidance on technical issues, methodologies, and recommendations. In order to promote collaboration, the TAC membership reflects technical expertise and broad community and stakeholder representation. The TAC meetings will be open to attendance by non-committee members...

There will be three TACs (Residential, Employment, Boundary and Growth Scenarios), each meeting four times plus two joint Steering committee TAC meetings in Phase 1.

Discussion on TACs and Stakeholder Interviewees

How will the TACs be used in the planning process?

The TACs are one element of public involvement, and a way for the Steering Committee (formerly the RTF) to receive recommendations on technical and policy matters in the Remand Order from a diverse group of citizens. TACs will be working with consultants and staff to review technical documents and provide direction on matters relating to the remand order, much the way that the RTF has been operating over the last year. Each of the three TACs will have a list of topics that they will address related to Remand Order tasks and issues. The Residential TAC will generally focus on residential land need, the Housing Needs, residential efficiency measures, the Buildable Lands Inventory, and related topics. The Economic TAC will focus on employment land need, the Employment Opportunities Analysis, and related items. The Boundary TAC will address the Goal 14 boundary expansion methodology, and how the Envision Tomorrow scenario planning tool will be used. TACs will make recommendations to the Steering Committee, which can direct additional work by TACs, accept their recommendations, or make modifications to the TACs recommendations. TACs are in an advisory role, not in a direct decision making role, which is the responsibility of the Steering Committee.

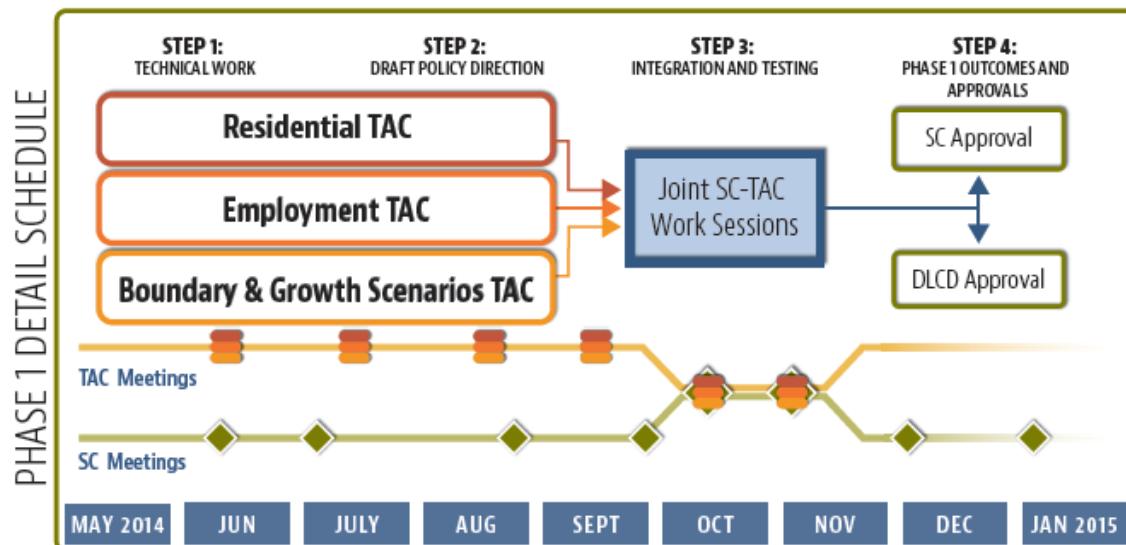
How are TACs formed?

Chapter 1.2 of the Bend Code, Advisory boards, Committees and Commissions, guides the creation and operation of the TACs. The TAC is considered a Temporary Committee, and must be established by resolution, which outlines their authority and responsibilities. The city will advertise in local papers, prepare a press release, and also contact specific groups identified by the RTF. Persons who are interested must submit an application. Staff or the council may interview and select applicants, but applicants will be appointed formally through the resolution approved by the City Council. TACs will have a Chair and Vice-Chair elected by the committee, will be supported by staff and the consultant, and are subject to the requirements of Oregon Public Meeting law. TACs should have approximately 15 members each.

With the RTF's guidance on the interested parties, interested parties and organizations will be able to identify the person they trust to represent their values to participate in the TACs. Ideal TAC members will have credibility and trust with members of their interest group. The role of TAC members is to participate with their viewpoints, but also share information about the UGB process to their peers, members, or larger group they represent. It is sometimes helpful if TAC members are active in multiple organizations and have ties throughout the community.

What is the time commitment and time frame for the TACs?

The diagram below illustrates time frames and the approximate TAC meeting schedule. TACs are budgeted to meet four times plus two times with the Steering Committee. The diagram below pertains to Phase 1 work, which is expected to last until Fall of 2014. The Scope assumes some form of TAC will continue in Phases 2 and 3 between Winter of 2014 and Spring of 2016, but the exact form and composition has not been detailed at this time. One possibility is that the three TACs be condensed into a single larger TAC in Phases 2 and 3. The details about the role and composition of the TAC will be informed by stakeholder interviews and reflected in the Public Involvement Plan for Phase 1.



Stakeholder Interviews

What is the value and purpose of the stakeholder interviews?

Stakeholder interviews will involve Mary Orton and APG having private and confidential discussions with 20-25 stakeholders about their perspectives on the UGB project, and how to move forward in a constructive manner. In a potentially contentious process, these interviews provide a mediator, such as Mary Orton, with as much information about nature of conflict and where people are coming from in advance potential conflicts. This process allows a neutral third party to ask stakeholders, "What do you think and how do we move forward?" This gives stakeholders the opportunity to identify how they want design and participate in a process, and it creates a sense of ownership and readiness to participate. Practically, this allows the consulting team to tailor the process, and get valuable input. In a process that has been lengthy, such as the UGB expansion project, people may have been misunderstood or not listened to in the past, increasing chance for conflict going forward. Stakeholders are encouraged to fully express themselves in an anonymous process. In the process of listening, the mediator establishes and builds a trusting relationship to advance the project while respecting a variety of viewpoints. The relationship between stakeholders and the mediator, not the city, may reestablish trust that has been broken. The results of the stakeholder interviews are then documented, and used to inform the details of the Public Involvement Plan.

What are some ideal characteristics of people to be interviewed?

Ideally, stakeholders have an interest or involvement in the project, or are impacted by the project through their role and activities in the community. They would be seen as influential people and leaders in their respective interest groups or organizations, are people that will influence and inform others, active in their community, and serve as opinion leaders. Stakeholders are often seen as speaking for a larger group and are able to reach out to a larger audience of people. Ideally, if stakeholders are comfortable with a process, then others will be comfortable with the process. Interviews with stakeholders could involve small groups of people with very similar views.

Conclusion

This is an exciting time for this important project. The intensity of scale of the project will take on a new dimension with the leadership and assistance of the AGP team. The newly approved Scope will require all of us to focus and work hard to stay on schedule. With this in mind, the RTF will be moving the project forward by working as a group to identify the interest groups to participate in the TACs, and individuals to participate in stakeholder interviews.

Exhibit A

Urban Growth Boundary Remand Project

Scope of Work for Angelo Planning Group Team

April 25, 2014

Introduction

This scope of work is for the City of Bend Urban Growth Boundary (UGB) Remand project. It directs the work of the Angelo Planning Group team, working in partnership with the City of Bend. The scope follows a three-phase approach to the project, as initially defined in the City's *Request for Proposal*:

- Phase 1: Project Foundation, Methodology and Policy
- Phase 2: Growth Scenarios and Proposed UGB
- Phase 3: Adoption and Implementation

The scope is more detailed for Phase 1 than for Phases 2 and 3. The Phase 1 scope provides a comprehensive description of the tasks and deliverables for the first year of work. Following Phase 1, detailed and collaborative scoping will be conducted for Phases 2 and 3. This is intended to ensure that the tasks, deliverables and processes for Phases 2 and 3 fully reflect the outcomes of Phase 1 and the priorities of the City at that time. In addition, this scope anticipates the need for further definition of the detailed methodologies within Phase 1. To that end, the Project Management task includes a Work Plan Refinement subtask that will be completed as one of the initial team efforts.

The scope of work is intended to implement a planning project resulting in the City of Bend UGB expansion meeting the requirements of the November 2010, Land Conservation and Development Commission Remand Order, representing the values of the community, and implementing policy direction from the Bend City Council. An Index of Remand requirements, prepared by the City, is attached to this scope of work as Attachment A as a reference guide to Remand requirements.

Definitions and Abbreviations

The Remand refers to the November 10, 2014 Land Conservation and Development Commission (LCDC) Remand Order.

The City – refers to both the City of Bend as whole and City of Bend staff

The APG Team – The Angelo Planning Group Team. The APG team includes Angelo Planning Group (APG), DKS Associates (DKS), ECONorthwest (ECO), Fregonese Associates (Fregonese), Leland Consulting Group (LCG), Mary Orton, MetroQuest, and MIG.

Scope of Work: Bend UGB Remand Project

Steering Committee (SC) – The Steering Committee for the project as designated by the City.

Technical Advisory Committees (TACs) – Technical Advisory Committees as designated by the City. There may be multiple TACs appointed.

Assumptions

Assumptions that apply generally are listed below. Additional task-specific assumptions are listed within the scope.

1. Deliverable work products will be provided in draft and final form, in electronic formats specified in the Project Management Plan.
2. Meetings specified as occurring in Bend have been budgeted accordingly. Other meetings generally referenced will occur via conference call, video call, or in person as part of trip to Bend. The scope is intended to be flexible so that meetings can occur as needed and in the most efficient and appropriate format. All SC, TAC and public meetings are assumed to take place in Bend.
3. City of Bend staff roles and responsibilities include:
 - Manage and maintain the public and legal record for the project.
 - Provide on-going interdepartmental staff expertise and involvement in the project, including legal counsel.
 - Review and comment on all draft work products, providing consolidated and reconciled edits and comments.
 - Finalize and distribute meeting summaries and minutes prepared in draft form by Consultant.
 - Appoint SC and TAC members, with input from APG team as needed. The City will serve as key contact for committee members. TAC memberships will be finalized after stakeholder interview and the Public Involvement Plan are completed. The City will take the lead in advertising and soliciting involvement in the TACs with guidance from APG and Mary Orton.
 - Make logistical arrangements for SC, TAC and public meetings, including reserving venues, providing refreshments as needed, distributing meeting materials to participants and posting announcements and meeting materials on the Project Webpage.
 - Facilitate on-going involvement from, and information to, a broad array of City staff from many departments. Continuity of the same key staff throughout the project will be facilitated to extent possible.
 - In coordination with community volunteers, make speakers bureau presentations and summarize results; participate in speakers bureau training or orientation sessions led by the Consultant.
 - Host and update project web page.

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- Serve as regular contact for communication with local media representatives.
- Manage comments and questions from citizens and stakeholders, serving as the lead point of contact for the public.

Phase 1: Project Foundation, Methodology and Policy Direction

Task PM: Project Management for Phase 1

The APG team will work collaboratively with the City to manage the project. The overall approach is to: create clearly defined roles and responsibilities; communicate early and often; manage the scope-schedule-budget in short intervals of time (weekly and monthly); be flexible and nimble so the project can adjust to and manage change; streamline communications through the use of clear protocols, templates, and on-line platforms; and, ensure there are clear checkpoints for the core management team to assess the project holistically.

Description of Sub-Tasks

PM.1 Chartering and Project Kick-off

The City will host a project chartering and kick-off meeting for the team. This will be a day-long session in Bend. The goal of the meeting is to introduce city and consulting team members, come to a common understanding about team member roles, expectations, project risks, and timelines. The meeting will include high level discussion of methodological issues to be worked out in Task PM.8, scope refinement. The City will arrange and guide a van tour of the study area. The City will be in the lead for drafting a project charter approved by key city staff, the venue, meeting goals, initial agenda, people to invite and involve, and logistics. APG will support the City in reviewing and finalizing the agenda and background materials including the scope, schedule, and related descriptive documents. APG will prepare presentation materials for the parts of the agenda that APG will lead. The City will write a Charter Agreement, reflecting outcomes of the kick-off meeting. Following the meeting (or at the end of the session, depending on readiness), the City will prepare the Project Charter for signature by the team members. See also Task PM.4 below – a draft Project Management Plan will be prepared prior to the chartering session, and finalized after the session.

Deliverables:

PM.1a Chartering and kick-off meeting in Bend.

PM 1.b Project Charter (by City of Bend)

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PM.2 Phase 1 Schedule

APG will prepare a Phase 1 schedule in two forms: (1) a simple graphic milestone-oriented schedule; and (2) detailed schedule in MS Project showing work times, review deadline, events, critical paths, and similar details. APG will coordinate the schedule with the consultant team. One meeting will occur to review the schedule and make refinements as needed. A preliminary draft of the project schedule will be prepared prior to the chartering session.

Deliverables:

PM.2.a Draft and final graphic milestone schedule

PM.2b Detailed MS Project schedule

PM.3 Establish and maintain a web-based project management platform, and initial base of background files

APG will establish and maintain a Basecamp site for project communications, file sharing, the official project calendar, and similar on-going activities. An additional file sharing web site may also be used to supplement file sharing resources. APG will draft protocols for use of the sites. The City to populate a background materials folder on the file sharing site so that team members have electronic access to a common set of base files. This subtask is for the initial cataloging and organization of electronic files – the review of project materials is part of other tasks. GIS file transfer and checking is part of Task 6. The legal record for the project may reside in Basecamp and the city's external project website. APG and the City assume Basecamp is not part of the legal record and may be part of the public record..

Deliverables:

PM.3a Establish and maintain Basecamp site

PM.3b Obtain background data and documents for the project.

PM.4 Project Management Plan

Following the completion of the project charter, APG will prepare a project management plan (PMP). Anticipated elements include: scope, schedule, responsibility matrix for deliverables, budget, team communication protocols, protocols for communication with the public and media, e-file protocols, quality assurance and quality control requirements, and similar topics. A draft of the PMP will be prepared prior to the Task PM.1 chartering session to inform that

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session. The PMP will be finalized after the chartering session so it is fully coordinated and complements the charter.

Deliverables:

PM.4a Outline, draft and final project management plan.

PM.5 Weekly Project Management Team Meetings and Mid-Point Project Management Assessment

APG will participate and co-lead (with the City) a weekly project management team meeting or conference call. For the purposes this task, the project management team includes Brian Rankin, Nick Arnis, Damian Syrnyk, Joe Dills, Mary Dorman, and Becky Hewitt. Other key staff will join the management team meetings as needed. These meetings are intended to be efficient weekly monitoring tasks and will support advancement of the scope and schedule; they will generally focus on near term project activities. Meetings will be scheduled in advance and have a standing agenda and call-in protocol. Both APG and the City will have computer/internet resources available to facilitate use of project resources during the meetings, and online communication platforms (e.g. GoToMeeting, Skype). For scoping, Phase 1 is assumed to be 9 months and have 3 management team meetings per month averaged over this time. APG and the City will hold a mid-point project assessment meeting to review: project milestones, effectiveness of project management activities to date; and whether any charter or PMP changes or refinements are needed. The meeting will be held in the period of months 4-5 of Phase 1. The meeting will be via conference call, or included during a trip when team members are in Bend for other meetings. APG will prepare and send meeting notes detailing decisions, deliverables, due dates, and pertinent information to project team members in a timely manner. The meeting notes will be use a tracking list or other concise format.

Deliverables:

PM.5a Weekly management team meetings (27 meetings/conferences calls)

PM.5b Mid-point project management assessment meeting (month 4 or 5)

PM.5c Quarterly progress reports or status updates, project budgets, pictures for use in public outreach and presentations to decision makers

Assumptions:

Additional phone conversations between project and city team members will be provided as needed.

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PM.6 General Plan Template

APG will prepare a template to be used for updates to General Plan text, policies and graphics during the project. There are two goals for this sub-task: (1) create a template so project deliverables have a consistent format; and, (2) update the General Plan to be more graphically appealing and user friendly. The template produced in this task will be used by the team for the specific updates referenced in this scope. Updates to other sections of the General Plan will be led by, and at the discretion of, the City. APG will review the current plan and provide examples from other cities for the City to review. We will prepare up to three mock-ups of a new template. After selection of the final format, we will prepare the General Plan template to be used for the project.

Deliverables:

PM.6a Research of comparable plan documents, and preparation of up to 3 mock-up options, meeting with city project team, refinements based on comments

PM.6b Prepare final template in a format consistent with City's document / software requirements

PM.7 Project Administration

This subtask covers time for APG to prepare monthly invoices, monthly progress reports, budget management and contract administration. Progress reports will be in a format that clearly and easily describes and compares the status of billing and progress on key deliverables for decision makers, staff, and the public.

Deliverables:

PM.7a Draft and final invoice monthly progress report format

PM.7b Monthly invoices, progress reports, project management coordination with Bend Project Manager and Finance Department

PM.7c Weekly task updates, punch list, project detail assignments

PM.8 Phase 1 Scope Refinement – Detailed Methodologies and Remand Integration

The purpose of this task is to prepare detailed and integrated methodologies for Tasks 5, 6, 7, and 9 (and other tasks as needed) so they are coordinated and implement specific elements of the Remand. Key members of the City team will meet, in Portland, for two days of work sessions to discuss and determine detailed methodologies the following task issues and others

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to be identified: (a) use of 2008 data sets for the Buildable Lands Inventory (BLI) in coordination with other data sets for the evaluation of Efficiency Measures; (b) what specific data sets will be required for individual tasks, and whether those data sets fully exist or need to be created/supplements; (c) which types of Efficiency Measures are best evaluated by the Envision Tomorrow model and which types of Efficiency Measures are best evaluated by other tools (and what those tools are); (d) how the Envision Model will be used for the capacity analysis of the current UGB in Task 6. For all of these methodologies, the starting point will be to identify, with specificity, the Remand requirements being addressed. Exhibit A is an initial reference guide to applicable Remand requirements. APG will prepare a meeting plan and facilitate team discussions. A memorandum summarizing the methodologies and citing Remand requirements will be prepared to document the outcomes and serve as a refined scope of work for specific task elements.

Deliverables:

PM.8a Agenda and meeting plan for work sessions.

PM.8b Work sessions in Portland (two-day format).

PM8.c Summary memorandum and updates to the scope and schedule, as needed.

Task 1: Public Involvement

Engaging the community in this project is essential for its success. The consultant will work collaboratively with city staff, volunteers, community groups and stakeholders to inform the public about this project and solicit their ideas and opinions about key project issues and deliverables. The team will use a variety of tools and resources as described in the following sub-tasks and deliverables.

Description of Sub-Tasks

1.1 Stakeholder Interviews and Assessment Report

- a. **Stakeholder interviews.** APG and Mary Orton will conduct up to 20 interviews with approximately 25 key stakeholders to: assess priority viewpoints and issues to address during the remand process; review ideas in the preliminary draft PIP and discuss potential refinements to it; and, determine effective methods for involving these stakeholders throughout the planning process. The City will identify 18-20 interviewees, and interviewers will ask interviewees who else should be interviewed. Additional interviewees will be chosen by APG and Mary Orton from among those who are recommended by the original interviewees. City will provide input into whether and how many additional interviews can be conducted so project stays on schedule. If additional interviews are needed or the number of interviewees increases, contingency funds will be used to cover additional costs.

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b. **Assessment report.** A kick-off meeting will be held with the City to explore the project approach to collaboration and the interview process. Consultant will prepare an interview questionnaire or topic guide for City review, schedule the interviews, conduct the interviews, and prepare an Assessment Report for review by interviewees and city staff. Before being finalized, the Report will be sent in draft form to interviewees to ensure their points of view are adequately represented. All interviews will be non-attributed; the summary will report themes and not ascribe comments to individuals. Some interviews will be small groups where it is appropriate to group common interests.

Deliverables:

- 1.1.a *Stakeholder interviews – set-up and hold meetings*
- 1.1.b *Stakeholder interviews – Assessment Report and debrief with City*

1.2 Public Involvement Plan

APG and Mary Orton will prepare a Public Involvement Plan (PIP) that identifies specific public goals and principles, outreach and involvement tools, interests and viewpoints that need to be represented, and activities to be undertaken throughout the process. The PIP will describe key messages, stakeholder groups and participants, and the role of consultants, city staff and volunteers. The PIP will be detailed for Phase 1 and at a high level for Phases 2 and 3. It will be updated prior to the start of Phase 2 to account for lessons learned in Phase 1 and at other points during the process, if needed. Consultant will prepare three drafts of the PIP: draft 1 - for use in the stakeholder interview process; draft 2 – reflecting stakeholder input for Steering Committee (SC) review; and, draft 3 – final.

Deliverables:

- 1.2.a *PIP draft 1 - for use in the stakeholder interview process*
- 1.2.b *PIP drafts 2 and 3 – reflecting stakeholder input for Steering Committee review, and final (draft 3)*

1.3 Core Values

APG and Mary Orton will lead a collaborative City process to identify core values for the project. The core values will serve as a guide for the UGB process as it unfolds. The process will begin with a facilitated discussion with the Steering Committee - resulting in initial core value ideas. Then, a web-based outreach (using the MetroQuest tool) will occur to solicit broad community input into the core values. The results of the web outreach will be shared at a community open house, which will also serve as an introductory meeting about the project. Results of stakeholder interviews also will inform the process. Based on these steps, Consultant will draft a set of core values for approval by the Steering Committee. Core values will serve as a basis

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for General Plan policies in appropriate chapters. Core values will be revisited periodically through the project and refined to some degree, if necessary.

Deliverables:

- 1.3.a *Memo to SC and SC meeting describing the purpose and process for core values, and core values initial ideas as articulated by the Steering Committee. Online core values review process using MetroQuest tool. (Note: Costs for this deliverable included under deliverable 2.8b)*
 - *Outreach materials for city staff to use during city led outreach events*
 - *Community open house 1: project kick-off and draft core values. (Note: Costs for this deliverable included under deliverable 2.6a)*
- 1.3.b *Draft 2 draft core values incorporating online and open house feedback, and Draft 3 final core values as approved by SC.*

1.4 Steering Committee Meetings

APG and Mary Orton will facilitate the work of the project Steering Committee to craft, review and approve project recommendations. Mary Orton will serve as Steering Committee facilitator, maintaining a role as a neutral party in the UGB process. Consultant will work with the SC at the outset of the process to prepare: (1) their decision making model and guidelines; and, (2) the approximate schedule and list of agenda topics for SC meetings. Consultant will prepare meeting agendas, materials, and draft meeting minutes. The APG team will conduct up to seven (7) SC meetings in Phase 1, including two joint SC/TAC meetings. The city legal department will provide APG with the required content of meeting minutes, which typically include SC members present, agenda topics, and votes or decisions made. They will not necessarily attribute specific comments to individual committee members but may attribute public comments or testimony offered to specific people.

Deliverables:

- 1.4.a *Up to seven (7) SC meetings in Phase 1, including two joint SC/TAC meetings.*

Optional Deliverables:

Additional SC meetings

1.5 Technical Advisory Committee Meetings

Based on feedback from stakeholder interviews and PIP, three Technical Advisory Committees will be formed by the city under the guidance of Mary Orton and the APG team. The APG team will facilitate and support topic specific Technical Advisory Committees (TACs) to review and provide guidance on technical issues, methodologies and recommendations. In order to promote collaboration, the TAC membership reflects technical expertise and broad community

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and stakeholder representation. The TAC meetings will be open to attendance by non-committee members. Consultant will work with the City and TACs at the outset of the process to prepare: (1) their process for making decisions or recommendations and other meeting guidelines; and, (2) the approximate schedule and list of agenda topics for SC meetings. Consultant will prepare meeting agendas, materials, and draft meeting minutes.

The APG team will conduct the TAC meetings listed below for Phase 1. At the end of Phase 1, the TAC process will be assessed and designed for Phase 2. City staff will notify SC, TAC, stakeholders, and interested citizens on time, date, and location of TAC meetings. City staff will be responsible for uploading meeting agendas and materials to project website in advance of meetings. Meeting agendas, materials, and decision points shall be reviewed by the city project team in advance of the TAC meetings. APG and the city staff will provide draft agendas and meeting materials for the city's internal review prior to Tuesday afternoon preceding TAC meetings. APG and project team members may attend City internal review meetings in person or via conference call to participate in the discussion as needed. APG and city staff will strive to have meeting materials available to the public at least five (5) business days prior to the TAC meetings.

APG will prepare preliminary draft meeting minutes. City staff will review the minutes, revise them if needed and post the drafts to the project Website for review by TAC members and the public. City staff will make any needed further revisions based on TAC comments. Meeting minutes will not necessarily attribute specific comments to individual committee members but may attribute public comments or testimony offered to specific people. The services for each TAC are listed below.

- a. Residential TAC: Four (4) meetings, plus two joint SC/TAC meetings in Phase 1. Services include:
 - TAC meeting agendas and preparation.
 - TAC facilitation and participation by consultant team members
 - Draft TAC meeting minutes.
- b. Employment TAC: Four (4) meetings, plus two joint SC/TAC meetings in Phase 1. Services include:
 - TAC meeting agendas and preparation.
 - TAC facilitation and participation by consultant team members
 - Draft TAC meeting minutes.
- c. Boundary & Growth Scenarios TAC: Four (4) meetings, plus two joint SC/TAC meetings in Phase 1. Services include:
 - TAC meeting agendas and preparation.
 - TAC facilitation and participation by consultant team members

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- Draft TAC meeting minutes.

Deliverables:

- 1.5.a TAC Trip 1 (3 TAC meetings in two days)
- 1.5.b TAC Trip 2 (3 TAC meetings in two days)
- 1.5.c TAC Trip 3 (3 TAC meetings in two days)
- 1.5.d TAC Trip 4 (3 TAC meetings in two days)

Note: The consultant cost estimate groups meetings into blocks or groups of meetings, with multiple TAC and/or taking place during a concentrated period of time and with hours and costs covering meeting preparation, facilitation, summary and travel time for each group of meetings. Consultant expects each trip to last 2 ½ days, including two days of committee meetings and a follow-up meeting with staff on the third day, resulting in two nights lodging per trip.

1.6 Community Open Houses and Workshops

As defined in the PIP, community open houses, workshops and other meetings will be conducted during the course of the project to inform the community and solicit feedback on key project elements. The APG team will work with City staff to determine the most appropriate format and approach for each meeting, identify needed meeting materials and staffing assumptions, and agree on notification/publicity efforts, consistent with the PIP. City staff will make logistical arrangements, implement the notification plan and assist in staffing meetings, as needed. For each community meeting, consultant deliverables include meeting plans, agendas, presentation or other materials, content for notification materials such as Website announcements or media releases, and meeting summaries.

Deliverables:

- 1.6.a Community open house 1: project kick-off and draft core values (Phase 1)
- 1.6.b Community open house 2: Phase 1 results and recommendations (Phase 1)

1.7 Speakers Bureau Materials and Training for Community Outreach Activities.

The APG team will work with City staff and community volunteers to prepare for and summarize presentations to community groups and people attending community events. Consultant will prepare “speakers bureau kits” for use by City staff and volunteers. Kits will include a combination of talking points, presentation materials, additional informational materials, comment forms and/or speaker summary forms that provide flexibility to conduct presentations, provide information and/or solicit feedback in a variety of settings. For each of three outreach points during the process, the APG team will: provide a plan for the outreach; provide kits; and, conduct training sessions for speakers bureau participants. City staff and

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volunteers will conduct and summarize results of speakers bureau presentations and other outreach activities, and provide summaries to APG of what was done. The APG team will prepare a combined summary of activities.

Deliverables:

- 1.7.a *Speakers bureau materials, training, and summary – round 1*
- 1.7.b *Speakers bureau materials, training, and summary – round 2*
- 1.7.c *Speakers bureau materials, training, and summary – round 3*

1.8 Online/Web-based Outreach.

APG, MetroQuest and Fregonese Associates will work with City staff to implement a multi-faceted Web-based outreach program with three primary components:

- **City of Bend Webpage.** The City's Web page will provide basic information about the project, including a project description, calendar of events and access to project-related materials. Consultant will work with City staff to develop the components of the Webpage for the project and provide project content, including links to the MetroQuest and MindMixer tools described below. The City will host the page and update it regularly.
- **MetroQuest tool.** Web-based participation will be provided using MetroQuest's customized web sites. There are two periods in Phase 1 where the tool will be used to engage the public in feedback on working ideas and recommendations: Phase 1 core values; and, draft Phase 1 recommendations. At each period of web-outreach, the MetroQuest services include: (1) Creation of specifications (a 2 page document with screen shots and samples); and, (2) Configuration and launch – initial content from team, draft web site by MetroQuest, tests and revisions, site launch, and maintenance. These steps are linear, meaning a given step cannot start until the previous step is complete. The MetroQuest tool is used for a limited duration (typically four weeks) during each application. Summary reports will be prepared.
- **MindMixer tool.** APG will use the MindMixer tool throughout the project to solicit feedback on a variety of discussion topics related to the project. Consultant will work with City staff to identify appropriate discussion topics, wording of questions and supporting materials. The APG team will establish MindMixer page, upload content and provide summary of MindMixer results. City staff will monitor the MindMixer discussions and respond to comments from participants, as needed, consistent with protocols established in the PIP. Further discussions with the city team during project chartering will determine if BendVoice is a suitable substitute for MindMixer.

Deliverables:

- 1.8.a *Initial content for project webpage, with advice on the format and structure of page. Approximately monthly updates of the webpage content will be needed; updated will be more frequent when needed to stay timely for public review of materials.*

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- 1.8.b *MetroQuest round 1 – core values outreach*
- 1.8.c *MetroQuest round 2 – Phase 1 results and recommendations*
- 1.8.d *MindMixer Phase 1 site setup, materials and monitoring, including:*
 - Site setup and associated materials*
 - Approximately monthly content updates, including new discussion topics and associated materials*
 - Approximately monthly reports on MindMixer results (links to reports generated by the MindMixer site or its reporting tool)*

1.9 Ongoing Public Monitoring, Strategy and Information

The APG team, including Mary Orton will provide regular assistance and oversight for public outreach activities, including:

- Preparing informational materials that briefly describe project issues or products and are intended for wide public distribution.
- Reviewing public and stakeholder comments and questions and working with City staff to prepare responses, when needed.
- Information and materials to support City communication with local news media.
- Strategies about how best to engage specific community groups or constituents, particularly disadvantaged populations or people who typically do not engage in planning processes in Bend.
- Monitoring and summarizing overall status of public engagement activities, including quarterly summaries of public involvement activities and reports.

Deliverables:

- 1.9.a *Up to 12 project fact sheets or other public informational materials.*
- 1.9.b *Strategy meetings or conference calls with City staff approximately twice per month to identify strategies or responses to public comments and feedback.*
- 1.9.c *Quarterly summaries of public involvement activities and results.*

1.10 Project Logo and Branding

APG and graphic artists from Fregonese Associates will work with the City to create a project logo, “tagline” and template for project materials. Consultant will provide up to three graphic logo options and up to three accompanying taglines – phrases that embody the goal or nature of the project. The APG team will incorporate the approved logo and tagline into one or more document templates that will be used for all materials that are widely distributed to the public (e.g., fact sheets, project updates, PowerPoint presentations, Website materials, map legends, etc.). Document templates will incorporate a standard set of fonts, colors, heading styles and layouts approved by the City. Templates are not anticipated to be used for technical reports

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that may vary in format, depending on their source. Consultant will provide digital images in native and JPG format for use by the City.

Deliverables:

- 1.10.a Up to three (3) alternative project logos and taglines.*
- 1.10.b Final project logo and tagline.*
- 1.10.c Up to five (5) document templates for use in preparing project-related materials.*

Additional Sub-Tasks (only if authorized by city project manager)

1.11 Additional Community Meetings or Open Houses

If needed and authorized by City staff, consultant will prepare for, conduct and summarize one or more community meetings or open houses for Phase 1.

1.12 Additional TAC and SC Meetings

If needed and authorized by City staff, consultant will prepare for, conduct and summarize two additional rounds of TAC meetings (six meetings, grouped into two two-day rounds). If needed and authorized by City staff, consultant will prepare for, conduct and summarize two additional SC meetings. Taken together, these tasks provide resources for up to eight meetings.

1.13 Additional Speakers Bureau Materials and Training

If needed and authorized by City staff, consultant will prepare materials for and conduct training sessions associated with one or more additional rounds of speakers bureau activities.

1.14 Additional Stakeholder Interviews

If needed and authorized by City staff, consultant will conduct interviews with up to 15 additional stakeholders, either by adding individuals to the interviews already assumed in Task 1.1, by increasing the number of interviews (beyond 20) or a combination of both.

City of Bend Staff Roles and Responsibilities – *Working Draft*:

- Review and comment on all draft work products.
- Finalize and distribute meeting minutes prepared in draft form by Consultant within approximately five days after each meeting.
- Appoint SC and TAC members, with input from APG team, including sub-consultants, and serve as key contact for committee members.
- Make logistical arrangements for SC, TAC and Public Meetings, including reserving venues, providing refreshments as needed, distributing meeting materials to participants and posting announcements and meeting materials on the Project Webpage.
- Maintain notification lists for TACs, and interested persons.

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- Providing public notice of SC and TAC meetings to the media and persons who have requested notice.
- Identify and notify the first round of stakeholder interview participants of interviews; arrange for venue and help identify dates.
- In coordination with community volunteers, make speakers bureau presentations and summarize results; participate in speakers bureau training or orientation sessions led by the Consultant.
- Update City of Bend Webpage to create a page for the Remand project and regularly update the page with materials and links to other online sites provided by the Consultant.
- Monitor MindMixer site and respond to comments, as needed.
- Participate in strategy meetings or conference calls with Consultant approximately twice per month.
- Serve as regular contact for communication with local media representatives.

Task 2: Water Public Facilities Plan

The Water Public Facilities Plan for the existing UGB has been completed and acknowledged. Public facility planning is integrally tied with UGB planning. Task 2 is primarily a review and coordination task for the APG team in Phase 1. Once scenarios are developed in Phase 2, the City will manage a separate consultant contract for water optimization and analysis of infill and UGB expansion areas that will be coordinated with the work of our team.

Associated Remand Issues

Issue 7.1	Timing of PFP Acknowledgement for Existing UGB
Issue 7.2	PFP Services and Capacity to Serve Lands Outside UGB
Issue 7.4	PFP Consistency with Proposed Land Uses
Issue 7.5	Coordination with Private Water System Providers

Description of Sub-Tasks

2.1 Review and Coordination

- a. **Review Water Public Facilities Plan (PFP).** Consultant reviews Water PFP. Meeting with staff to 1) assure consistent and coordinated data and assumptions regarding development capacity within 2008 UGB, and 2) begin to discuss evaluation criteria for water facilities that should be considered as part of Phase 2 analysis of scenarios. APG prepares meeting notes.

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b. **Review General Plan Text and Policies for Water Facilities (Chapter 8).** Consultant reviews Chapter 8 text and policies in context of Water PFP. Meeting with staff to 1) highlight text and policies that may need to be revised, 2) discuss schedule for updates and linkage with Phase 2 work. APG prepares meeting notes.

Deliverables:

2.1.a *Review Water PFP; meeting with staff; meeting notes.*

2.1.b *Review Chapter 8 of General Plan; highlight areas for text and policy revisions; meeting notes. Tasks 2.1.a and 2.1.b will be completed in one meeting/trip.*

Assumptions:

- *The City will coordinate with MSA to have them participate in the meeting for sub-tasks 2.1.a and 2.1.b above.*
- *MSA will be available for limited conference call coordination with APG as needed relative to the Water PFP.*

Task 3: Sewer Public Facilities Plan

Work on the Sewer Master Plan/Public Facilities Plan is underway as a separate consultant contract. Public facility planning is integrally tied with UGB planning. Task 3 is primarily a review and coordination task for the APG team in Phase 1. Once scenarios are developed in Phase 2, the City will manage a separate consultant contract for sewer optimization and analysis of infill and UGB expansion areas that will be coordinated with the work of our team.

Associated Remand Issues

Issue 7.1	Timing of PFP Acknowledgement for Existing UGB
Issue 7.2	PFP Services and Capacity to Serve Lands Outside UGB
Issue 7.4	PFP Consistency with Proposed Land Uses
Issue 7.5	Coordination with Private Water System Providers

Description of Sub-Tasks

3.1 Review and Coordination

a. **Coordination meeting.** Prior to completion of Sewer PFP, meet with staff to 1) assure consistent and coordinated data and assumptions regarding development capacity within 2008 UGB, 2) understand the schedule for expected completion of the Sewer PFP

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and linkages with the UGB project, and 3) begin to discuss evaluation criteria for sewer facilities that should be considered as part of Phase 2 analysis of scenarios. APG prepares meeting notes.

b. **Review Sewer PFP and General Plan Text and Policies for Sewer Facilities (Chapter 8).** Consultant reviews Sewer PFP and Chapter 8 text and policies in context of Sewer PFP. Meeting with staff to 1) highlight text and policies that may need to be revised, 2) discuss schedule for updates and linkage with Phase 2 work. APG prepares meeting notes.

Deliverables:

3.1.a *Meeting with staff to assure coordination of Sewer PFP and UGB Remand data, assumptions and schedule; meeting notes.*

3.1.b *Review Sewer PFP and Chapter 8 of General Plan; highlight areas for text and policy revisions; meeting notes. Tasks 3.1.a and 3.1.b will be completed in one meeting/trip.*

Assumptions:

- *The City will coordinate with MSA to have them participate in the meeting for sub-tasks 3.1.a and 3.1.b above.*
- *MSA will be available for on-going conference call coordination with APG as needed relative to the Sewer PFP.*

Task 4: MPO Model Coordination

The UGB Remand project will be closely coordinated with the current effort to update the MPO Metropolitan Transportation Plan (MTP), including the development of a 2028 land use scenario and corresponding update to the MPO regional travel demand model. This coordination will be facilitated with the key role of DKS on both the MPO and UGB Remand teams. The MPO has already developed a 2028 land use and transportation scenario that will be tested for VMT through the contract for that work. We assume that the UGB Remand project will be able to use the MPO 2028 scenario as one option upon which to build future scenarios with efficiency measures. The methods and tools developed for the regional travel demand model will be directly applicable to informing the development of scenarios for the UGB remand process. Task 4 is primarily a review and coordination task for the APG team in Phase 1. Once scenarios are developed in Phase 2, our team will use the updated regional travel demand model to test scenarios and the extent to which they show a reduction of VMT consistent with the requirements of the Transportation Planning Rule.

Description of Sub-Tasks

4.1 Review and Coordination

- a. **Coordination meetings.** Up to four meetings with City-MPO staff to review and discuss coordination of schedule and deliverables of MPO model, RTP Update and UGB remand process. DKS facilitates meetings and APG prepares meeting notes.
- b. **Review Updated Metropolitan Transportation Plan and General Plan Text and Policies for Transportation Facilities (Chapter 7).** Consultant reviews 2007 MTP, available updates from the 2014 MTP Update, and Chapter 7 General Plan text and policies in context of MTP. Meeting with staff to 1) highlight General Plan text and policies that may need to be revised, 2) discuss schedule for updates and linkage with Phase 2 work. APG facilitates meeting and prepares meeting notes.

Deliverables:

- 4.1.a *Up to four meetings with staff to assure coordination of Regional Travel Demand Model, Metropolitan Transportation Plan Update and UGB Remand data, assumptions and schedule; meeting notes.*
- 4.1.b *Review 2007 Metropolitan Transportation Plan, available updates from the 2014 Metropolitan Transportation Plan Update, and Chapter 7 of General Plan; highlight areas for text and policy revisions; one meeting with staff to discuss potential General plan revisions and schedule; meeting notes.*

Task 5: Residential Land Need

The purpose of Task 5 is to determine the city's 20-year (2008-2028) housing need and associated residential land need. Consultant work on Task 5 will build on work products such as the Buildable Lands Inventory (BLI) and Housing Needs Analysis (HNA) that have been completed by staff in draft form. The Draft BLI and HNA, supplemented with draft efficiency measures, will be considered the foundation for the preliminary capacity within the existing UGB. The preliminary capacity will be refined as part of the evaluation of efficiency measures (Task 6) and the BLI and HNA will be finalized at the conclusion of Phase 1.

Associated Remand Issues

Issue 2.2 Buildable Lands Inventory

Issue 2.3/2.4 Housing Needs Analysis (for consistency with state law and remand order)

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Issue 2.5	Second Homes
Issue 2.8	Compliance with Housing Policies of Bend General Plan
Issue 4.1	“Other Lands”
Issue 4.2	Park and School Land Need
Issue 5.8	Residential Land for Employment Uses (see also Task 7)

Description of Sub-Tasks

5.1. Review of Existing Materials Relating to Task 5

- a. **Acquire and review background materials.** City staff to provide APG team with electronic versions of materials relevant to Task 5 (including, but not limited to, relevant documents from remand record, Draft BLI, Draft HNA, Draft memos on Second Homes, Park and School Land Needs, etc.). City staff provides index that lists all Director’s Report and Remand Order directives relative to Task 5. This index serves as the foundation for all subsequent deliverables for Task 5.
- b. **Identify key issues and gaps.** Following review of background materials and specific direction from the Directors Report and Remand Order, APG and ECO will prepare a summary of key issues, questions, and potential information gaps or areas of vulnerability in draft products completed by City to address the remand issues (see above). City staff will provide a summary of issues raised at prior RTF meetings pertaining to these products to direct further refinements.
- c. **Meeting in Bend.** APG and ECO will participate in meeting with planning and legal staff to: 1) review draft products completed by City and target areas for additional consultant analysis and refinements; and 2) discuss approach to integrated deliverables for Tasks 5 and 6. Meeting notes will be prepared by APG.

Deliverables:

- 5.1.a *No deliverable. Budgeted time is for review and coordination.*
- 5.1.b *Consultant memo summarizing key issues, gaps, vulnerabilities in Draft BLI, HNA and other staff products relative to the requirements of the Director’s Report and Remand Order.*
- 5.1.c *Meeting in Bend. Target areas for consultant work on Draft BLI and HNA and brainstorm residential efficiency measures. Meeting notes prepared by APG.*

5.2 Refinements to Buildable Lands Inventory (BLI)

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- a. This scope assumes the BLI is preliminarily complete. Refinements to the BLI include adding the results of the CC&R research, new maps, etc. The BLI is used to determine capacity under existing zoning and potential changes to capacity based on efficiency measures. The BLI is a key foundation for much of the analysis required for compliance with Goals 9, 10 and 14. APG and ECO will co-lead any refinements to the BLI and associated findings.
- b. APG will support and review revisions to BLI completed by City. These revisions will include work in progress to identify those lots that met the definition of "Developed with Infill Potential" that may need to be re-classified as "Developed" because of covenants, conditions, and restrictions (CCRs) that would prohibit further development beyond that allowed by City Zoning.

Deliverables:

- 5.2.a *APG and ECO will co-lead updates and refinements to the BLI*
- 5.2.b *APG and ECO will support and review revisions already completed by City.*

5.3 Housing Needs Analysis (HNA)

- a. **Research, market analysis and developer interviews.** Based on review of completed documents and requirements of the Director's Report and Remand Order, and discussions in Task 5.1, ECO will focus on areas of the HNA where additional analysis may be appropriate or required. Specific attention will be devoted to addressing the specific guidance in the Director's Report and Remand Order, projected demographic and housing trends and related housing mix, density, and redevelopment/infill assumptions in the HNA and whether the City has identified needs for specific types of housing. City has identified additional studies on demographic and economic trends that will affect both the demand for and the supply of housing and will forward this research on to the consultant team. The consulting team will also bring additional research and techniques as needed.

LCG will support ECO's analysis with targeted market research and interviews with local housing experts (10) to obtain input on housing mix and density assumptions in the Draft HNA and an initial list of potential efficiency measures appropriate for the Bend market, and implementing the requirements of the Remand Order and Director's Decision (such as increased densities in specific centers or transit corridors, increased minimum densities, etc.). Remand Order and Director's Report requirements will serve as a basis for discussions with local experts, but input and suggestions from local experts may go above and beyond the basic requirements of the Remand Order and Director's Report. LCG will prepare a memo that summarizes: 1) Remand Order and Director's Report requirements, 2) targeted market research incorporating best practices and

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meeting legal requirements, 2) highlights from developer interviews, 3) findings on market feasibility for different housing products, and 4) feedback on most promising efficiency measures consistent with the Remand Order.

- b. **Draft 1 HNA, policies and findings.** ECO will prepare a staff review draft to include refinements and revisions of the base HNA, comments on issues, and initial policies and findings. While the policies and findings may be separate products from the HNA, we have assumed the products will be consolidated for the review by staff, the TAC and the Steering Committee. The current HNA has much of the research and raw data, but it may need to be repackaged and reformatted with additional graphics and more explicit conclusions that flow from the data.
- c. **Draft 2 HNA, policies, findings and preliminary Code.** Draft 2 incorporates staff input and is used for TAC Meeting 1. Consultants will prepare an executive summary to serve as a cover memo and explanation of key issues and Remand compliance. Draft 2 will include HNA text, policies, findings, and preliminary Code recommendations (50% level, not codified).
- d. **Draft 3 HNA, policies, findings and preliminary Code.** Draft 3 incorporates input from TAC Meetings 1-4, and is used for public and DLCD input.
- e. **Draft 4 HNA, policies, findings and preliminary Code.** Draft 4 reflects public and DLCD input. Draft 4 is used for Joint SC/TAC Work Sessions.
- f. **Draft 5 HNA (Final Draft).** Draft 5 represents the final HNA, General Plan policies, findings, Development Code recommendations revised based on the Joint SC/TAC Work Sessions and presented for SC and DLCD approval at the close of Phase 1. High-level plan policies will be included in Draft 5, along with the recommended Development Code concepts to implement the policies. Adoption ready Development Code amendments will be refined prior to the start of Phase 3.

Deliverables:

- 5.3.a *Market research, interviews with housing experts and memo addressing the specific guidance in the Director's Report and Remand Order.*
- 5.3.b *Draft 1 HNA, policies and findings.*
- 5.3.c *Draft 2 HNA, policies, findings and preliminary code recommendations. Cover memo/executive summary.*
- 5.3.d *Draft 3 HNA – reflects TAC meetings 1-4*
- 5.3.e *Draft 4 HNA - reflects public and DLCD input*

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5.3.f *Draft 4 HNA - final draft of policies, findings and code recommendations*

5.4 “Other Lands”, Park and School Land Needs

- a. The analysis and findings for “other lands” and park and school land needs are done, and DLCD has agreed to the outcomes. So far, land needs are addressed as a gross need for acres with the assumption that acreages may need to change slightly once different boundary scenarios are developed. Since the need for parks and schools is a function of the location of expansion and infill, there could be minor changes depending on the location of the boundary. Consultant reviews analysis and findings for other lands and park and school land needs to gain an understanding of basic assumptions and methodologies approved by DLCD.
- b. If minor changes to assumed land needs for schools and parks are warranted to reflect the location of expansion and infill, APG will update findings based on the methodologies that have been approved in the Director’s Report and Remand Order.

Deliverables:

5.4.a *Consultant reviews analysis and findings prepared by City and approved by DLCD. 5.4.b APG, ECO and MIG provide input on whether minor changes to assumed land needs for schools and parks are warranted to reflect the location of expansion and infill. If required, APG updates findings based on approved methodologies.*

Additional Sub-Tasks (only if authorized by City project manager)

5.5 Additional Drafts of HNA

- 5.5.a Additional revisions and versions of HNA beyond Drafts 1-5 assumed in subtask 5.3 above.
- 5.5.b Additional meetings of Residential TAC and/or SC to review/discuss Task 5 deliverables beyond number of meetings shown in the general schedule.

Deliverables:

5.5.a *Additional revisions of Draft HNA beyond Drafts 1-5 (final).*

5.5.b *Additional analysis to support Task 5 deliverables, policies and findings.*

Task 6: Efficiency Measures, Integrated Land Use and Transportation Plan

The purpose of Task 6 is to, for the current UGB: identify potential efficiency measures; test them for performance and appropriateness in Bend; evaluate the capacity of the current UGB with efficiency measures applied, and evaluate Remand compliance regarding per capita VMT reduction, Integrated Land Use and Transportation Plans, and related requirements. Task 6 work will be integrated with Task 5 (particularly the BLI and HNA) and Task 7 (particularly the EOA). Fregonese will calibrate and begin to use the Envision Tomorrow model in Task 6 to help the TACs and SC learn the potential benefits and trade-offs associated with different measures. The requirements for an Integrated Land Use and Transportation Plan will be addressed concurrent with the discussion of efficiency measures and analysis of per capita VMT reduction.

Associated Remand Issues

- Issue 3.1 Capacity of Current UGB and Efficiency Measures
- Issue 3.2 New Efficiency Measures
- Issue 7.4 PFP's Considering Efficiency Measures
- Issue 8.6 TPR Requirements (Begin Integrated Land Use and Transportation Plan)

Description of Sub-Tasks

6.0 Envision Model Set up, Calibration, and Base Case

- a. **Obtain GIS data.** Obtain GIS data sets needed for the project. It is assumed most data sets are available from the City. Existing land use, land and improvement value, zoning / comprehensive plan designations, and other relevant subjects will be extracted from the existing data sets, the BLI and/or assessors data. Additional layers such as roads, transit routes, transit stops, and existing infrastructure will be obtained from the city as available. Data will be checked so that the City and APG team are confident the consultants have accurate data that is consistent with previous data sets, and, can be supplemented during the project to create data sets for future use by the City.
- b. **Create Development Types / Building Blocks for Envision model.** Work with city staff to establish a set of building types that exist in Bend today and those that may be viable and desirable in the future, and use these to create a series of Building Prototypes that will comprise Development Types that reflect the city's existing neighborhoods and potential future variations. The HNA and EOA will inform the creation of Development Types. Working from the building types and development types, we will create Neighborhood Types as an additional tool for evaluation in the model. The Development Types and Neighborhood Types will be summarized in an illustrative document that is understandable to the public. The team will coordinate the details of

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the Development Types and Neighborhood Types with Remand requirements, including elements of Integrated Land Use and Transportation Plans.

- c. **Calibrate model for Fiscal Impact Analysis.** ECO will customize the Envision Fiscal Impact Tool to calibrate it to Bend and to evaluate fiscal impacts of growth scenarios on the City of Bend. Working with the City team and Finance Director, we will integrate information from Bend's utility rates, property assessment, tax revenues, and short and long term financial plans. Federal data sources on fiscal impact metrics will be reviewed as needed. The customized tool will produce a ratio of total revenues and total costs for scenarios being evaluated, to help identify which scenarios are most cost effective to accommodate growth. Infrastructure costs will be provided by the City, consistent with Public Facility Plans – this task will ensure the FIT calibration is coordinated with the PFPs. The FIT model is expected to be used primarily in Phase 2 – this subtask will accomplish the up-front calibration so the tool is tested and ready. Information from the HNA, EOA, and/or input from local developers in Task 5, will be used adjust the cost and rent/sales information within the Envision Model to match local conditions.
- d. **Calibrate Envision VMT calculator.** Envision Tomorrow's daily VMT calculator will be calibrated so it can be used, in Phase 1, as a Task 6 analysis tool. Calibration steps will include comparisons to the Bend MPO regional travel demand model 2010 scenario for total daily VMT, mode split, and VMT per trip (or per capita) by zone. The calibration will support "sensitivity tests" to evaluate which efficiency measures could be most effective in reducing daily per capita VMT and increasing use of walking, biking and transit. The formal VMT modeling for the project will be conducted as part of Phase 2 and will use the Bend MPO regional travel demand model. This sub-task will enable pre-Phase 2 VMT analyses to be conducted during the evaluation of efficiency measures and capacity analysis of the current UGB. This task will be coordinated with input from DLCD and ODOT. As part of the calibration, the team will evaluate how potential new transportation system improvements (e.g. enhanced transit, new street connections) will be addressed.
- e. **Identify Relevant Indicators.** Select from among the potential outputs of the Envision Model those that are most useful as evaluation criteria. Criteria will be selected or developed to allow for objective performance measures within the framework of Bend's community values and requirements of the planning process. This task will be integrated with the development and refinement of the Boundary Analysis methodology in Task 9.1. The indicators will be reviewed by the Boundary Methodology TAC and the Steering Committee.
- f. **Create a Base Year 2008 Conditions Scenario and a future Reference Case based on Current Trends.** The Base Year Conditions will reflect existing conditions and will help to calibrate the model as well as providing a reference point for public information. The

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Reference Case will provide a baseline for current UGB capacity and VMT against which to compare the effects of the efficiency measures. The Reference Case will reflect the build out of the current UGB, and will be consistent with the Goal 9 and 10 work. Each of these model runs will be checked against previous work by the City to ensure consistency. Prior to starting this task, the team will determine the methodology for coordinating data sets from different years. The base year for the BLI and other Remand related requirements is 2008. Evaluation of Efficiency Measures may require new information but will be analyzed using the 2008 data set. The methodology will be coordinated with the Task 9.1 Boundary Analysis methodology, DLCD and ODOT.

- g. **Prepare an outline for the Integrated Land Use and Transportation Plan (ILUTP) framework.** APG will prepare draft and final outline for ILUTP framework including consideration of Remand Order requirements pertaining to related tasks like efficiency measures, TPR compliance, infill/refill analysis in the EOA, etc. The purpose of the outline is to inform Task 6.1 and ready the team for potential preparation of an ILUTP. The outline will be coordinated with DLCD and ODOT.

Deliverables:

- 6.0.a *Budgeted time is to obtain GIS data and extract needed information for use in the model. Fregonese Associates will prepare a memorandum documenting sources of data, data sets used for specific purposes (e.g. BLI layers), and related steps of the GIS acquisition subtask.*
- 6.0.b *Calibration, description, and illustration of Development Types / Building Blocks / Neighborhood Typology.*
- 6.0.c *Calibration of the Fiscal Impact Tool, and technical memorandum documenting assumptions.*
- 6.0.d *Calibration of the VMT calculator, and technical memorandum documenting assumptions.*
- 6.0.e *Memorandum summarizing the selected indicators / evaluation criteria, with technical appendices documenting assumptions built into the model as needed. The Boundary Methodology and evaluation criteria are developed in Task 9.1.*
- 6.0.f *Summary memo of selected indicators for the Current Conditions Base Case and Current Trends Future Case scenarios.*
- 6.0.g *Draft and final outline for ILUTP framework including consideration of Remand Order requirements pertaining to related tasks like efficiency measures, TPR compliance, infill/refill analysis in the EOA*

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6.1 Efficiency Measures

- a. **Review and research efficiency measures.** Efficiency measures included in the existing Code to facilitate more efficient use of residential and employment lands will be catalogued by City staff, with commentary on how they have been used and actual efficiencies observed between 1998 and 2008. APG and ECO, supported by MIG, FA and LCG, will research and compile efficiency measure examples (including illustrations) and lessons learned from other communities. A team meeting will be held in Bend to review research results, brainstorm measures appropriate to Bend, and discuss efficiencies for special areas directed by the Directors Report (e.g., 3rd Street). The consultant team will document the range of potential efficiencies identified in this task. Documentation will include illustrative examples, as available, for use in TAC presentations and sharing with the public.
- b. **Draft 1 of Efficiency Measures.** APG to prepare a staff review draft to summarize existing efficiency measures (including plan and code amendments adopted since 2008) and a matrix of potential new measures for consideration (starting with a broader list of approximately 20 measures and including all measures the City was directed to consider in the Director's Report and/or Remand Order). Draft 1 will include a preliminary evaluation of the efficiency measures to estimate the potential magnitude or affect on land need and housing affordability, as well as determining which measures could be evaluated using Envision Tomorrow, and which measure are best evaluated with other tools (such as GIS). Evaluations will focus primarily on Remand requirements (e.g. VMT reduction).
- c. **Draft 2 of Efficiency Measures.** Draft 2 incorporates staff input and is used for TAC meetings 1 and 2. A memo summarizes what potential efficiency measures are being evaluated and why (e.g., what the Remand Order or statutes require and how the measures will be evaluated). The initial list of measures will be refined at TAC meetings 1 and 2 to those that are both likely to make a difference and expected to be more acceptable to the community. Appropriate and suitable measures will be tested using the Envision model. To complement the use of Envision, LCG will test whether the market will support potential efficiency measures through market research and developer interviews as described in Task 5.3.
- d. **Draft 3 of Efficiency Measures.** Draft 3 will incorporate TAC input and more detailed analysis of the anticipated impact of discrete measures using Envision. Specifically, Draft 3 will summarize the impact of each efficiency measure in terms of needed dwelling units accommodated (by type), gross acres saved and will also test and visualize efficiency measures using core values from earlier tasks. Draft 3 will determine the most effective and feasible efficiency measures to carry forward for public input and Joint

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SC/TAC meetings. Fregonese has the lead role in the spatial arrangement of the efficiency measures using the Envision tool.

- e. **Draft 4 of Efficiency Measures, Run Envision Model and Prepare Preliminary ILUTP.** Prepare alternative “packages” of efficiency measures (up to four), review them with the TACs, and calibrate the Envision model. We will evaluate the capacity of the current UGB using these packages and running the Envision model. As determined in Task PM8, Detailed Methodologies, several tools may be used to evaluate capacity, measure VMT, and perform analysis needed to address Remand issues. The evaluations will cover both land use and transportation measures (e.g. enhanced transit, new bridges or pedestrian crossings, expanded grid system). Initial model outputs will be shared with City staff and finalized for presentation at a Joint SC/TAC work session. The work session may include dynamic and real-time use of the model in the meeting – this will be determined as part of the meeting plan for the work session. Following the work session, Draft 4 of the Efficiency Measures, and as needed a draft preliminary ILUTP, will be prepared for review at a second Joint SC/TAC work session. Draft 4 will document conclusions about the performance of efficiency measures, including VMT reduction performance, and compliance with VMT reduction requirements of the Remand. Draft 4 will also identify the package of efficiency measures that will be used in Phase 2 as the basis for compliance with the Remand Order, as well as determining the adopted capacity estimate and growth strategy for the current UGB. As determined in Task PM8, Detailed Methodologies, several tools
- f. **Draft 5 (Final) Efficiency Measures and Preliminary ILUPT.** Final efficiency measures and the draft ILUPT will be refined and finalized after the two Joint SC/TAC work sessions and presented to the SC and DLCD for approval at the conclusion of Phase 1. APG will prepare Task 6 conclusions report that summarizes the process to identify, evaluate and implement new efficiency measures. The report will also address Remand Order requirements and be used as the basis for General Plan policy development, and findings. The preliminary BLI from Task 5 will be revised to reflect the capacity within the existing UGB (including the efficiency measures) and set the framework for the Phase 2 scenarios.

Deliverables:

- 6.1.a *Memo summarizing Remand Order requirements and research on potential efficiency measures, based on research. The memo will be updated and supplemented with the outcomes of the Task 6.1a collaboration with the City.*
- 6.1.b *Draft 1 Efficiency Measures, for staff review. Up to 20 efficiency measures in Draft 1.*
- 6.1.c *Draft 2 Efficiency Measures – reflects staff input. Basis for TAC meetings.*

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- 6.1.d *Draft 3 Efficiency Measures – shortened list of measures tested using Envision model; developer interviews (conducted as described in Task 5.3). Most effective and feasible measures to carry forward for public input and Joint SC/TAC work sessions. Cover memo/executive summary for public.*
- 6.1.e *Draft 4 Efficiency Measures and draft Preliminary ILUPT – reflects TAC input, developer input, and public input. Analysis of alternative “packages” of measures using Envision.*
- 6.1.f *Draft 5 (Final) efficiency measures and Preliminary ILUPT. Update BLI and capacity of existing UGB based on final strategies and SC/TAC work sessions. Cover memo/executive summary for public.*

6.2 Write Findings, Implementing Plan Text, Policies and Code

- a. APG will write findings to document how the City has complied with the Remand Order relating to efficiency measures and VMT reduction. The findings will include a robust discussion of measures that have already been implemented, along with the new measures that were considered and evaluated. The findings will include details on new measures that will be implemented and discuss how they will affect land need. ECO will review the draft findings for compliance with requirements of the Remand Order and Goals 9, 10 and 14. Findings will be drafted, revised and supplemented concurrent with the schedule for review of Efficiency Measures in Task 6.1 above.
- b. APG will draft implementing plan text, policies and code associated with efficiency measures as part of Draft 3, as the initial list of potential efficiency measures is refined to the most effective and feasible measures. Amendments to General Plan Chapters 1, 5, and 6 are anticipated to reflect new efficiency measures. Amendments may be needed for base zone standards or other sections of the Development Code.
- c. Findings, implementing plan text, policies and code will be refined, supplemented and reviewed by the TAC and SC concurrent with Drafts 4 and 5 (Final) above.

Deliverables:

- 6.2.a *Findings to summarize measures that have been adopted/implemented since the last periodic review (1998 or 2008 baseline year for the BLI).*
- 6.2.b *Outline plan text, policies and code (50% level) that would be associated with most effective and feasible measures – tied with Draft 3.*
- 6.2.c *Revise, supplement and refine findings, plan text, policies and code (50% level) concurrent with Drafts 4 and 5 (Final) above.*

Additional Sub-Tasks (only if authorized by city project manager)

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6.3 Additional Cycles of Review

- a. Additional revisions of Efficiency Measures beyond Drafts 1-5 assumed in subtask 6.1.
- b. Additional meetings of Residential TAC and/or SC to review/discuss Task 6 deliverables beyond number of meetings shown in the general schedule.
- c. Additional Envision tests (two) of efficiency measures beyond four packages assumed in subtask 6.1.e.

Deliverables: TBD

6.4 Additional Analysis of Efficiency Measures

If needed and authorized by City staff, consultant will conduct additional quantitative analysis of the feasibility of selected efficiency measures using residual land value analysis or other methodology approved by the City. The purpose is to test the market's likelihood to respond to certain measures, the relative degree to which each measure offers quantifiable financial benefits to land developers, builders, or homeowners, and the impact of different market assumptions on the effectiveness of each measure. This type of analysis would be useful for deliverable 6.1c or d. This contingent task may also support other analysis of efficiency measures, and/or creation of new data sets, that the City project manager considers necessary to support Task 6.

Deliverables: TBD

Task 7: Employment Lands

The purpose of Task 7 is to determine the city's 20-year (2008-2028) need for jobs and associated lands for employment. Consultant work on Task 7 will build on work products such as the Buildable Lands Inventory (BLI) and Economic Opportunities Analysis (EOA) that have been completed by staff in draft form. Consultant work on Task 7 will track prior to the discussion of efficiency measures. The BLI for employment lands is not in play. The only issue in play is what is likely to be redeveloped. The BLI and EOA, supplemented with draft efficiency measures, will be considered the foundation for the preliminary employment capacity within the existing UGB. The preliminary capacity will be refined as part of the evaluation of efficiency measures (Task 6) and the BLI and EOA will be finalized at the conclusion of Phase 1.

Associated Remand Issues

Issue 5.1 20-year Land Need Consistent with Goal 9 (including infill/refill issue)

Issue 5.4 Market Choice Factor

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Issue 5.5	Policies to Manage Short-Term Supply
Issue 5.6	Vacancy Rate
Issue 5.8	Inclusion of Residential Land for Employment Uses (see also Task 5)

Description of Sub-Tasks

7.1. Review of Existing Materials Relating to Task 7

- a. **Acquire and review background materials.** City staff to provide APG team with electronic versions of materials relevant to Task 7 (including, but not limited to, relevant documents from remand record, BLI for employment lands, Draft EOA, etc.). City staff provides index that lists all Director's Report and Remand Order directives relative to Task 7. This index serves as the foundation for all subsequent deliverables for Task 7.
- b. **Identify key issues and gaps.** Following review of background materials and specific direction from the Director's Report and Remand Order, APG and ECO will prepare a summary of key issues, questions, and potential information gaps or areas of vulnerability in draft EOA to address the remand issues (see above). City staff will provide a summary of issues raised at prior RTF meetings pertaining to these products to direct further refinements.
- c. **Meeting in Bend.** APG and ECO will participate in meeting with planning and legal staff to: 1) review draft EOA in the record and target areas for additional consultant analysis and refinements; and 2) discuss approach to integrated deliverables for Tasks 6 and 7. Meeting notes will be prepared by APG.

Deliverables:

- 7.1.a *No deliverable. Budgeted time is for review of existing materials and coordination.*
- 7.1.b *Consultant memo summarizing key issues, gaps, vulnerabilities in BLI, EOA and other staff products relative to the requirements of the Director's Report and Remand Order.*
- 7.1.c *Meeting in Bend. Target areas for consultant work on BLI and EOA and brainstorm employment efficiency measures. Meeting notes prepared by APG.*

7.2 Refinements to Buildable Lands Inventory for Employment Lands

- a. The BLI for employment lands is complete and met Goal 9. The only refinements that will be needed are related to infill and refill/redevelopment. ECO will take the lead on the assumptions and analysis of infill and refill/redevelopment for the BLI. It is anticipated that the City may use a factor, or consider specific sites likely to re-develop. APG will take the lead on revising findings supporting the Goal 9 BLI, as needed.

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Deliverables:

7.2.a *ECO refinements to BLI for employment lands to address infill and refill/redevelopment. APG lead on revising findings supporting the Goal 9 BLI.*

7.3 Economic Opportunities Analysis (EOA)

a. **Research, market analysis and developer interviews.** Based on review and discussions in Task 7.1, ECO will take the lead on areas of the EOA where additional analysis may be appropriate or required by the Goal 9 rule. Specific attention will be devoted to Remand Issues, including but not limited to: 1) market choice (this will need a strong legal/technical approach), 2) infill/refill (with combination of historical analysis and market research supported by interviews), 3) strategies for short-term supply monitoring, 4) evaluation of whether special land needs approved by LCDC (university, hospital site and two large lot industrial sites) can be accommodated within the 2008 UGB, and 5) Policy and code tools to protect special sites (hospital site and large-lot industrial) for identified need.

LCG will support ECO's analysis of past trends with targeted market research and interviews with local developers (10) to obtain input on employment mix and specific land requirements in the Draft EOA and an initial list of potential efficiency measures (such as higher floor area ratios for certain employment categories, etc.) LCG will prepare a memo that summarizes: 1) targeted market research, 2) highlights from developer interviews, 3) findings on market feasibility for efficiency measures for employment lands, and 4) feedback on most promising efficiency measures.

b. **Draft 1 EOA, policies and findings.** ECO will prepare a staff review draft to include refinements of the base EOA, comments on issues, and initial policies and findings (prepared by APG). While the policies and findings may be separate products from the EOA, we have assumed the products will be consolidated for the review by staff, the Employment TAC and the Steering Committee.

c. **Draft 2 EOA, policies, findings and preliminary Code.** Draft 2 incorporates staff input and is used for TAC Meeting 1. Consultants will prepare a summary to serve as a cover memo and explanation of key issues and Remand compliance. Draft 2 will include EOA text, policies, findings, and preliminary Code recommendations (50% level, not codified). APG is lead for policies, findings and preliminary code. ECO will be in a review role on policies, findings and preliminary code for Goal 9 compliance.

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- d. **Draft 3 EOA, policies, findings and preliminary Code.** Draft 3 incorporates input from TAC Meetings 1-4, and is used for public and DLCD input.
- e. **Draft 4 EOA, policies, findings and preliminary Code.** Draft 4 reflects public and DLCD input. Draft 4 is used for Joint SC/TAC Work Sessions.
- f. **Draft 5 EOA (Final Draft).** Draft 5 represents the final EOA, Chapter 6 General Plan policies, findings, and Code recommendations revised based on the Joint SC/TAC Work Sessions and presented for SC and DLCD approval at the close of Phase 1.

Deliverables:

- 7.3.a *Market research, developer interviews and analysis and findings, with particular emphasis on Remand Issues relating to market choice and infill/refill.*
- 7.3.b *Draft 1 EOA, policies and findings.*
- 7.3.c *Draft 2 EOA, policies, findings and preliminary Code recommendations. Cover memo/executive summary.*
- 7.3.d *Draft 3 EOA – reflects input from Employment TAC meetings 1-4.*
- 7.3.e *Draft 4 EOA – reflects public and DLCD input. Used for Joint SC/TAC Work Sessions.*
- 7.3.f *Draft 5 EOA (Final Draft) – reflects final Phase 1 EOA, policies, findings and code recommendations based on Joint SC/TAC Work Sessions. Presented for SC and DLCD approval at closure of Phase 1.*

Additional Sub-Tasks (only if authorized by city project manager)

7.4 Additional Drafts of EOA

- a. Additional revisions and versions of EOA beyond Drafts 1-5 assumed in subtask 7.3 above.
- b. Additional meetings of Employment TAC and/or SC to review/discuss Task 7 deliverables beyond number of meetings shown in the general schedule.

Deliverables:

- 7.4.a *Additional revisions of EOA beyond Drafts 1-5 assumed in subtask 7.3 above.*
- 7.4.b *Additional meetings of Employment TAC and/or Steering Committee to review/discuss Task 7 deliverables.*

Task 8: Natural Resources and Hazards (Goals 5 and 7)

The purpose of Task 8 is to address specific Remand Issues relating to Goal 5 (Natural Resources) and Goal 7 (Natural Hazards). The Remand Order includes a negotiated approach to comply with Goal 5 requirements as part of the Phase 2 Goal 14 boundary analysis. The negotiated approach focuses specifically on the Deschutes River and Tumalo Creek and the following Goal 5 resources: Oregon scenic waterway, riparian areas and wildlife habitat. The Remand Order also addresses the plan designation for a specific aggregate site and consideration of wildfire risk. Consultant work on Task 8 will be consistent with the approach and direction provided in the Remand Order to comply with Goals 5 and 7.

Task 8 work may need to precede or track with the boundary TAC so the results of Task 8 inform the discussion on boundary methodology. If the direction is to keep the Goal 5 work simple and new inventories aren't needed, then timing will likely not be an issue. If new inventories are needed, these should ideally take place before we start developing scenarios for expansion due to likely reductions of capacity due to a protection program.

Associated Remand Issues

- Issue 6.1 Goal 5 Approach to Boundary, Protection Program
- Issue 6.2 Approach to Wildfire Risk
- Issue 6.3 Surface Mining Plan Map Designation for Shevlin Sand & Gravel Property

Description of Sub-Tasks

8.1 Review of Existing Materials Relating to Task 8

- a. **Acquire and review background materials.** City staff will provide APG team with electronic versions of materials relevant to Task 8 (including, but not limited to, correspondence with DLCD regarding negotiated approach to address Goal 5 resources, relevant documents from remand record relating to city and county Goal 5 inventories and programs, information in record on Shevlin Sand & Gravel site, relevant plans and maps for wildlife hazard areas, etc.).
- b. **Identify key issues, questions and gaps.** Following review of background materials, APG will prepare a summary of key issues, questions, and potential information gaps to address remand issues prior to meeting in Bend.
- c. **Meeting in Bend.** APG will participate in meeting with appropriate planning and legal staff to: 1) discuss the negotiated agreement to comply with Goal 5 requirements as part of the Goal 14 boundary analysis, 2) explore options for mapping the location of the

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Deschutes River and Tumalo Creek resources within potential UGB study areas, 3) discuss whether City should proceed with inventory of other potential Goal 5 resources within potential UGB study areas (outside of Deschutes River and Tumalo Creek), 4) discuss approach to Remand Issues 6.2 (wildlife risk) and 6.3 (aggregate site), and 5) obtain a better understanding of the City's approach to Areas of Special Interest (ASI) in the context of Goal 5 and Buildable Lands Inventory. Meeting notes will be prepared by APG.

Deliverables:

- 8.1.a *No deliverable. Budgeted time is for review of background materials.*
- 8.1.b *Consultant memo summarizing key issues, questions and gaps.*
- 8.1.c *Meeting in Bend. Explore options for mapping general boundaries for Goal 5 resources subject to negotiated agreement. Discuss if additional inventory work may be required for UGB study area. Meeting notes will be prepared by APG.*

8.2 Coordination with Agencies and Stakeholders

- a. **Scoping meeting to confirm approach to Goals 5.** APG will coordinate with staff to schedule and facilitate a scoping meeting with agencies and stakeholders with a specific interest in Remand Issues relating to Goals 5. At a minimum, we assume this scoping meeting will include representatives of DLCD, ODFW, Deschutes County, Bend Metro Park and Recreation District, Central Oregon Land Watch, Department of State Lands and other parties who submitted objections under Goal 5. APG will prepare the agenda and a packet for the scoping meeting. The objectives of the meeting will include: 1) confirming the approach to Goal 5 for the UGB analysis that will take place in Phase 2 of the project based on the Remand Order and the negotiated agreement with LDCC, 2) providing input to and coordinating with the development of UGB evaluation criteria for Goal 5 in Task 9.1, and 3) discussing whether additional Goal 5 inventory work will be required for UGB study areas; if yes, explore the appropriate timing and geographic focus for the additional work. Meeting notes for the scoping meeting will be prepared by APG.
- b. **Scoping meeting to confirm approach to Goal 7.** APG will coordinate with staff to schedule and facilitate a scoping meeting with agencies and stakeholders with a specific interest in Remand Issue 6.2 (Wildfire Risk). At a minimum, we assume this scoping meeting will include representatives of Deschutes County, Department of Forestry, emergency management representatives and interests identified through stakeholder interviews. APG will prepare the agenda and packet for the scoping meeting. The objectives of the meeting will include: 1) confirming the options to address Goal 7 (wildlife risk) in Phase 2 of the project, and 2) providing input to and coordinating with

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the development of UGB evaluation criteria for wildfire risk in Task 9.1 for consideration by the Boundary Methodology TAC and the Steering Committee, if appropriate. Meeting notes will be prepared by APG. The scoping meetings for Goals 5 and 7 may be consolidated if appropriate.

- c. **Research and coordination regarding Issue 6.3.** APG will coordinate with Deschutes County, DOGAMI and representatives of Shevlin Sand & Gravel as needed to obtain supporting information to confirm the extent of the significant and protected aggregate resource area and the approved mining area under DOGAMI permit 09-0018. As directed in the Remand, if the aggregate site is included in a revised UGB, the Surface Mining plan designation will be revised for consistency with the approved mining area under the DOGAMI permit. APG will prepare an updated GIS map based on the research and coordination.

Deliverables:

- 8.2.a *Scoping meeting with agencies and stakeholders for Goal 5; Consultant to prepare agenda, meeting packet and meeting notes.*
- 8.2.b *Scoping meeting with agencies and stakeholders for Goal 7; Consultant to prepare agenda, meeting packet and meeting notes.*
- 8.2.c *Consultant to prepare revised map of potential Surface Mining plan designation for Shevlin Sand & Gravel site based on DOGAMI permit.*

8.3 Scoping Report with Plan and Code Concepts to Address Task 8

- a. **Draft 1 Scoping Report.** In Phase 1, APG will prepare a scoping report with plan and code concepts that address the Remand Issues for Goals 5 and 7. The Scoping Report will summarize what we heard at the scoping meetings and will outline plan and code concepts (including maps) that are relevant to potential UGB expansion areas. For example, the Scoping Report will identify plan and code concepts for the Deschutes River and Tumalo Creek and the specific aggregate site that will be implemented only if those resources are included in candidate UGB expansion areas. Additionally, policy and code concepts could be considered for wildfire risk if identified high hazard areas are included in candidate UGB expansion areas. Plan concepts could include amendments to Chapters 2 (Natural Features and Open Space) and 10 (Natural Forces) of the General Plan; Appendix D (Goal 5 Inventory) of the General Plan; and Article V (Waterway Overlay Zone) of the Development Code.
- b. **Draft 2 Scoping Report.** Draft 2 will incorporate staff input and will be provided for review by agencies and stakeholders who participated in Task 8.2 scoping meetings.

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APG will prepare a summary to serve as a cover memo and explanation of key issues, plan and code concepts and Remand compliance.

- c. **Draft 3 Scoping Report.** Draft 3 will incorporate input from agencies and stakeholders and will be scheduled for review by the Steering Committee at the close of Phase 1.

Deliverables:

- 8.3.a *Draft 1 Scoping Report for Goals 5 & 7 for staff review.*
- 8.3.b *Draft 2 Scoping Report for agency/stakeholder review. 2-4 page Executive Summary.*
- 8.3.c *Draft 3 Scoping Report for Steering Committee Review at the close of Phase 1.*

Additional Sub-Tasks (only if authorized by city project manager)

8.4 Targeted Goal 5 inventory work in UGB study area boundary

Based on outcome of scoping meetings in Task 8.2, it may be necessary to supplement existing Goal 5 inventory information for the UGB study area. Additional expertise may also be needed to delineate more specific boundaries (such as top of bank) for the Deschutes River and Tumalo Creek resource areas included in the negotiated agreement with LCDC. Ecologists with DEA are available as a resource to the APG team to do this work. If authorized by the city, a specific scope, schedule and fee will be prepared for DEA.

Deliverables:

- 8.4 *Targeted Goal 5 inventory work for UGB study area (or specific sub-areas) completed by DEA.*

Task 9.1: Goal 14 Boundary Analysis Methodology

The purpose of this task is to develop the approach and methodology for the UGB analysis work to meet the requirements of the Director's Report, the Remand Order, ORS 197.298, Goal 14 and OAR 660, Division 24. The approach and methodology will be central to the success of the overall project. The approach and methodology will be thoroughly discussed and refined in Phase 1 before it is used to evaluate UGB scenarios in Phase 2. The methodology will need to be transparent and understood and supported by the public, decision makers, and DLCD.

Associated Remand Issues

Issues 2.6, 2.7	Unsuitable Lands and Surplus
Issue 4.3	Accommodating Park and School Land Need
Issue 4.9	Employment Land Consistent with Bend General Plan Policies

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Issue 6.1	Goal 5 Approach to Boundary
Issue 6.3	Surface Mining Designation of Shevlin Sand and Gravel Site
Issue 7.3	PFP's Determining Location of UGB
Issue 7.4	Boundary Analysis: Considering Impacts of Efficiency Measures
Issues 7.7, 7.9	Boundary Analysis: Impacts on Public Facilities in Expansion Area
Issues 8.1- 8.5	Boundary Analysis: Considering Transportation Costs
Issue 8.6	TPR Requirements for MPO Areas with UGB Amendments
Issue 8.7	Relying on Partially Acknowledged TSP for UGB Amendment
Issue 9	Boundary Analysis: Goal 14 Boundary Analysis Requirements
Issue 9.2	Exceptions for "Specific Types of Land Need"
Issue 9.3	ORS 197.298(3)c Efficiency Approach
Issue 9.4	UAR Lands are Exception Lands
Issue 9.5	Excluding Lands on Basis of Cost to Serve
Issues 9.6, 9.7	"Unsuitable" Lands Criteria, and Threshold Suitability Criteria
Issues 9.8, 9.9, 9.10	Direction of Goal 14 UGB Boundary Approach

Description of Sub-Tasks

9.1. Goal 14 Boundary Analysis Methodology

- a. **Acquire and review background materials.** City staff will provide APG team with electronic versions of materials relevant to Task 9.1 (including, but not limited to, relevant documents from remand record, evaluation criteria used for 2008 UGB decision, GIS data, etc.) City staff provides index that lists all Director's Report and Remand Order directives relative to Task 9.1. This index serves as the foundation for all subsequent deliverables for Task 9.1. Confirm legal strategy and approach to using new (2014/2015) GIS parcel data for the boundary analysis and evaluation of efficiency measures, with the 2008 BLI assumed to be the base to determine need per the remand.
- b. **Framework outline for Boundary Analysis Methodology.** ECO and APG will prepare a framework outline (matrix format) for the boundary analysis methodology based on the Director's Report and Remand Order (with a focus on Issues 9 – 9.10), the requirements

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of ORS 197.298, Goal 14 and OAR 660, division 24, and applicable case law. The City will be the lead in identifying applicable cases for the team.

- c. **Meeting in Bend.** APG, ECO and FA will participate in meeting with planning and legal staff to: 1) confirm the legal strategy and approach to using different years for GIS parcel data per 9.1.a above, 2) review the framework outline; 3) discuss the schedule and possible agendas for the UGB TAC meetings; and 4) brainstorm evaluation criteria and methodology to begin to flesh out the framework outline. The timing for Task 8 (and potential additional Goal 5 inventory work) will need to be discussed at this meeting because it has implications for the project schedule. Meeting notes will be prepared by APG.
- d. **Draft 1 of Goal 14 Boundary Analysis Methodology.** ECO, FA and APG will refine and supplement the framework outline reviewed with staff and prepare Draft 1 of the approach and methodology. Evaluation criteria are well suited to presentation in a matrix and we assume that format will be used for all drafts. The matrix will include, but not be limited to the following: 1) approach and methodology to determine a study area around the existing UGB based on statutory priorities, 2) definitions in Goals 9 & 10 for determining whether lands are “buildable” or “suitable” for general housing and employment uses, 3) consideration of specific land needs that are justified in the HNA and EOA, 4) assumptions and methodology for evaluating the infill and redevelopment capacity within exception areas, and 5) general criteria and methodology to address the Goal 14 factors with respect to efficient accommodation of identified land need, orderly and economic provision of public facilities and services, comparative environmental, energy, economic, and social consequences, and compatibility of proposed urban uses with nearby agricultural and forestry uses occurring on farm and forest lands outside the UGB, and 6) how to address exceptions to the priority statutes. The process for defining and selecting evaluation criteria will be based on 1) specific direction and requirements in the Director’s Report and Remand Order, 2) input and professional expertise from the full APG team, and 3) discussion and feedback from the Boundary TAC, the Steering Committee and the public.
- e. **Draft 2 of Goal 14 Boundary Analysis Methodology.** Draft 2 will incorporate staff input and will be used for TAC Meetings 1-4. Consultants will prepare an executive summary to serve as a cover memo and explanation of key issues and Remand compliance. TAC Meeting 1 will focus on an overview of the matrix and key requirements of the Remand Order, statutes, goals and rules that relate to the boundary evaluation process. The consultant team will coordinate with staff to structure agendas for TAC Meetings 2-4. It may make sense to organize the agendas to focus on logical groupings of criteria and linked with Envision indicators, such as: 1) criteria for evaluation of public facilities (e.g. sewer, water, storm water and transportation); 2) criteria for evaluating environmental, energy, economic and social consequences (e.g. distance to existing or planned schools,

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parks, trails; distance to existing or planned employment; proximity to Goal 5 resources; proximity to existing or planned transit services, etc.); and 3) criteria for evaluating efficient accommodation of identified land need and compatibility of proposed urban uses (e.g. capacity and suitability of analysis areas, urban form, fit with development patterns and land uses inside and outside the UGB). Envision includes indicators such as greenhouse gas, per capita energy use, water use, health indicators, etc. that can be will be pulled into and integrated with the boundary methodology.

- f. **Draft 3 of Goal 14 Boundary Analysis Methodology.** Draft 3 will incorporate input from TAC Meetings 1-4, and will be used for public and DLCD input. This draft may include weighting factors for specific criteria. Additionally, Draft 3 will describe how the Envision Tomorrow model will be used for the boundary analysis and what criteria can be measured vs. those that will include a more qualitative evaluation. DKS will provide the criteria and methodology for the transportation evaluation, and describe how the evaluation of per capita VMT will address State protocols and coordinate with the MPO and requirements for an Integrated Land Use and Transportation Plan. The city's water and sewer consultants will provide input on the criteria and methodology for the public facilities evaluation. Optimization for public facilities (conducted in Phase 2) will require actual boundaries or service areas and assumptions about uses and densities (dwelling units and commercial/industrial). The optimization process will allow Bend to compare and contrast the differences between initial capital costs and lifecycle costs associated with different UGB expansion/infill scenarios. ECO will detail the criteria and methodology for the fiscal impact evaluation.
- g. **Draft 4 of Goal 14 Boundary Analysis Methodology.** Draft 4 will reflect public and DLCD input. Draft 4 will be used for the Joint SC/TAC Work Sessions.
- h. **Draft 5 (Final) Goal 14 Boundary Analysis Methodology.** Draft 5 represents the final approach and methodology for the Goal 14 boundary analysis based on the Joint SC/TAC Work Sessions. Draft 5 will be presented for SC and DLCD approval at the close of Phase 1 and it will set the framework for the evaluation of UGB scenarios in Phase 2.

Deliverables:

- 9.1.a *No deliverable. Budgeted time is for review and coordination and initial meeting/discussion regarding legal approach and strategy for using 2008 GIS data sets inside the UGB and 2014/2015 GIS data sets for analysis outside the UGB.*
- 9.1.b *Framework outline (matrix) for boundary analysis methodology.*
- 9.1.c *Meeting in Bend (APG, ECO and FA) to review framework outline and discuss link with Goal 5 work. APG will prepare meeting notes.*

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- 9.1.d *Draft 1 of Boundary Analysis Methodology for staff review.*
- 9.1.e *Draft 2 of Boundary Analysis Methodology incorporating staff input. Cover memo/executive summary. Draft 2 will be used for UGB TAC Meetings 1-4.*
- 9.1.f *Draft 3 of Boundary Analysis Methodology – incorporates input from TAC Meetings 1-4.*
- 9.1.g *Draft 4 of Boundary Analysis Methodology – incorporates input from public and DLCD. Draft 4 will be used for Joint SC/TAC work sessions.*
- 9.1.h *Draft 5 (Final) Boundary Analysis Methodology – incorporates input from Joint SC/TAC work sessions and will be presented to DLCD and Steering Committee for approval at close of Phase 1.*

Additional Sub-Tasks (only if authorized by city project manager)

- i. Additional revisions of Goal 14 Boundary Analysis Methodology beyond Drafts 1-5 assumed above.
- j. Sketch planning exercise for 2-3 exception areas to refine assumptions regarding infill and redevelopment, estimated development capacity, and high-level infrastructure costs.

Deliverables

- 9.1.i *Additional revisions of Boundary Analysis Methodology beyond Drafts 1-5.*
- 9.1.j *Sketch planning exercise for 2-3 exception areas. This exercise could provide a stronger factual base to evaluate the relative costs and challenges of infill within established rural residential areas. The sketch plans could include potential lot layouts, street extensions and options for sewer and water extensions in addition to GIS analysis based on lot sizes, land values and improvement values.*

Phase 2: Growth Scenarios and Proposed UGB

The purpose of Phase 2 is to apply Phase 1's technical outcomes, policy framework, and Goal 14 boundary analysis methodology to different UGB expansion and infill scenarios. Use of the Envision Tomorrow tool will allow our analysis to build scenarios quickly, test them against each other to gauge performance per the Goal 14 criteria and Bend's core values, and, conduct real-time evaluation of each scenario's impact on land use, housing, sustainability, transportation (including VMT), economic conditions and other factors. The consultant team will carefully follow the steps and requirements outlined in the Remand Order, in close coordination with the City. Phase 2 will also create data sets, maps and modeling methods that are useful for future planning after the conclusion of the UGB Remand project.

Phase 2 Project Management

Phase 2 will continue the coordinated management approach between the City and the APG team that was started in Phase 1. Phase 2 will begin with a Phase 1 debrief and project charter check-in that will guide preparation of a detailed scope, schedule and budget for the Phase 2 work order. On-going project management and coordination will occur throughout Phase 2.

Deliverables:

PM2.1 Phase 1 debrief and charter check-in meeting.

PM2.2 Phase 2 scope of work and budget

PM2.3 Phase 2 schedule (summary graphic and detailed MS Project schedule)

PM2.4 Weekly project management team meetings

PM2.5 Project administration

Phase 2 Public Involvement

Phase 2 will continue project's commitment to public involvement and collaborative planning, tailoring the engagement methods and communications to Phase 2's focus on scenario planning and creation a proposed UGB. The Public Involvement Plan will be updated for Phase 2, based on the debrief discussions in PM2.1. Selected stakeholder interviews to obtain additional perspective on Phase 1 and tailor engagement to Phase 2. The role, composition and level of participation of the TAC's will be reviewed as a part of the PIP. A determination will be made whether to continue the TAC's in their Phase 1 composition / role or to reform the TAC's to best serve the technical needs of Phase 2.

The PIP will also define how input from the TAC's, SC and public is obtained to rate levels of preference of the various scenarios and, ultimately, the preferred scenario. The Phase 2 involvement methods will include determining the TAC preferences, public preference and identifying similarities and differences between the two before presenting to the SC for selection of the preferred alternative.

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Deliverables:

- PI2.1 *Phase 1 debrief and 5-10 stakeholder interviews*
- PI2.2 *Public Involvement Plan for Phase 2*
- PI2.3 *Steering Committee meetings*
- PI2.4 *TAC meetings*
- PI2.5 *Community open houses and workshops*
- PI2.6 *Speakers bureau materials and training (if included in PIP)*
- PI2.7 *On-line/web-based outreach.*
- PI2.8 *On-going public involvement monitoring, strategy and information*

Tasks 9.2 – 9.11: Growth Scenarios and Proposed UGB

Associated Remand Issues

Issues 2.6, 2.7	Unsuitable Lands and Surplus
Issue 4.3	Accommodating Park and School Land Need
Issue 4.9	Employment Land Consistent with Bend General Plan Policies
Issue 6.1	Goal 5 Approach to Boundary
Issue 6.3	Surface Mining Designation of Shevlin Sand and Gravel Site
Issue 7.3	PFP's Determining Location of UGB
Issue 7.4	Boundary Analysis: Considering Impacts of Efficiency Measures
Issues 7.7, 7.9	Boundary Analysis: Impacts on Public Facilities in Expansion Area
Issues 8.1- 8.5	Boundary Analysis: Considering Transportation Costs
Issue 8.6	TPR Requirements for MPO Areas with UGB Amendments
Issue 8.7	Relying on Partially Acknowledged TSP for UGB Amendment
Issue 9	Boundary Analysis: Goal 14 Boundary Analysis Requirements
Issue 9.2	Exceptions for “Specific Types of Land Need”

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Issue 9.3	ORS 197.298(3)c Efficiency Approach
Issue 9.4	UAR Lands are Exception Lands
Issue 9.5	Excluding Lands on Basis of Cost to Serve
Issues 9.6, 9.7	“Unsuitable” Lands Criteria, and Threshold Suitability Criteria
Issues 9.8- 9.10	Direction of Goal 14 UGB Boundary Approach

9.2 **Envision Model Set Up and Calibration.** Fregonese and the APG will: verify (and as needed obtain) all data sets needed for expansion area analysis. Data sets will include buildable lands; developed areas; existing zoning; parcel sizes; constrained lands (including new Goals 5 & 7 inventories from Task 8); existing and planned park, school, and transportation facilities (in TSP); existing and planned sewer and water facilities (in PFPs); and others required by the evaluation criteria. Fregonese will calibrate the model to apply the evaluation criteria established in Phase 1, including refinement of Building-Development-Neighborhood Types and other building blocks needed for Phase 2. APG will lead the coordination to identify model outputs required by team members (e.g. transportation team, PFP teams) and the set-up of Envision occurs to generate those outputs. Finally, sample map and analysis outputs will be created to test and coordinate visually compelling results that are understandable by project participants. The team will also craft the tools and outputs so they communicate in terms of what will ultimately be adopted: i.e. an Urban Growth Boundary, General Plan designations and Zoning Map designations.

The Envision model will be used at the front end to evaluate and refine a larger number of scenarios prior to narrowing the scenarios to four sketch level scenarios and applying the Optimization and VMT models.

As part of the model set-up and calibration, a draft of the ILUTP will be prepared and reviewed. This draft will build on the Preliminary ILUTP from Phase 1. It is intended to inform the setup of the Envision Model and all of the work of Task 9 (e.g. sketch level scenarios, the process of evaluating and considering alternatives) and ensure there are Remand-compliant links between land use, transportation performance, and per capita VMT analysis in Task 9.

Deliverables:

9.2a *Envision Model Set Up and Calibration*

9.2b *Prepare Draft 1 ILUPT (intended to guide scenario evaluations)*

9.3 **Define Sketch Level Scenarios.** Define initial sketch level scenarios (up to four) based on Phase 1 outcomes. The scenarios will be generalized and preliminary, intended as a starting point for community input and ideas.

Deliverables:

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9.3 Sketch Level Scenarios

9.4 **Community Workshop 1.** Obtain community input on sketch level scenarios in a workshop setting. Consider conducting “live” workshops to rank and test ideas in real time. The MetroQuest web-outreach tool will be integrated with this step.

Deliverables:

9.4 *Community Workshop 1*

9.5 **Prepare and Evaluate Scenarios.** Begin with discussion and recommendation of the outcomes of T 9.3 and 9.4. The SC will then select the four alts to be examined in 9.5. Following public outreach, we will prepare up to four UGB expansion scenarios that will be the focus of detailed evaluation using the boundary methodology factors approved in Task 9.1. The scenarios will be evaluated per the adopted evaluation criteria and using project’s modeling tools: Envision Tomorrow; the MPO Regional Travel Demand Model; and sewer and water optimization models (by City). APG will coordinate the model inputs (# households, #jobs, household size, densities, etc.) so they are consistent and coordinated for the Goal 14, public facilities and transportation analyses. To the extent feasible, we will use objective and measurable evaluation criteria. Other evaluation criteria, such as urban form, will include qualitative considerations. We will prepare a concise evaluation summary for the initial four scenarios based on the Task 9.1 methodology and review with the TAC and Steering Committee to determine initial preferences of the committee members prior to the Community Workshop. Input from the TAC and Steering Committee will be used to inform the materials presented at the Community Workshop. An initial, high level set of draft findings on Goal 14 will be developed to assess the four scenarios before selecting a preferred alternative.

Deliverables:

9.5 *Prepare and Evaluate Scenarios*

9.6 **Community Workshop 2.** A second community workshop will be held to obtain community input on the scenario evaluation in Task 9.5. The MetroQuest web-outreach tool will be integrated with this task.

- **MetroQuest tool.** Web-based participation will be provided using MetroQuest’s customized web sites. This tool will be used in Phase 2 as a platform for providing information about and collecting input for the public on the scenario evaluation. As in discussed in Phase 1, the tool will be developed and applied to engage the public in feedback on working ideas and recommendations.

Deliverables:

9.6 *Community Workshop 2*

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9.7 Prepare Preferred Scenario. The results of the 9.5 analysis and outcomes from Community Workshop 2 will provide the factual basis for the consultant team to prepare a draft preferred alternative for review by the TAC and SC. If the preferred alternative reflects a “hybrid” of the initial four scenarios, we will re-run the Envision Tomorrow, MPO Regional Travel Demand Model, and sewer and water (City) optimization models, as necessary, prior to selecting the Preferred Scenario. Ultimately, the Phase 2 analysis will provide the factual base to address the Goal 14 factors relating to need, orderly and economic provision of public facilities and services, comparative environmental, energy, economic and social consequences, and compatibility of the proposed urban uses with nearby farm and forest activities. An updated draft of the ILUTP (Draft 2) will be prepared for the TAC and SC. Their input and refinement of the Preferred Scenario will be incorporated into the final ILUTP (Draft 3), which will be approved by the SC.

Deliverables:

9.7a *Prepare Preferred Scenario*

9.7b *Prepare Draft 2 ILUTP*

9.7c *Prepare Draft 3 ILUTP*

9.8 Prepare draft amendments and findings - City. Phase 2 will conclude with the preparation of draft amendments and findings applicable to the City, including: draft General Plan amendments (text and policies); findings of compliance with the Remand Order and related City-County-State requirements needed to justify the proposed UGB; implementing Code amendments (50% level). General Plan map and Zoning Map designations will be prepared. Findings will be prepared so it is clear what criteria and findings address City, County and State requirements. This scope assumed the majority findings will be common text that will be jointly adopted by the City and County.

Deliverables:

9.8 *Draft Amendments and Findings – City*

9.9 Prepare draft amendments and findings – County. The same package of amendments and findings described above in Task 9.8 will be prepared for applicable sections of the Deschutes County Comprehensive Plan and Code.

Deliverables:

9.9 *Draft Amendments and Findings - County*

9.10 Phase 2 Meetings / Review. This task will include the following reviews and meetings:

- DLCD review and approval of Phase 2 outcomes

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- Task 9 Steering Committee meetings. Assume 8 meetings
- Task 9 TAC or similar expert meetings. Assume 6 meetings.
- Task 9 Public information and general outreach. Assume 2 Community Workshops (one to obtain input of sketch level scenarios and the second to obtain input on the scenario evaluation.

Deliverables:

9.10 Phase 2 Meetings / Review

Additional Phase 2 Tasks (only if authorized by city project manager)

- 9.11 Additional scenarios and evaluation beyond the four scenarios assumed above.
- 9.12 Additional meetings of TAC and/or SC to review/discuss the development and evaluation of the scenarios beyond the number of meetings shown in the general schedule.
- 9.13 Additional modeling of transportation required for a hybrid Preferred Scenario.

Phase 3: Adoption and Implementation

Phase 3 tasks are focused on final implementation and adoption, working from a strong foundation developed in Phases 1 and 2. The overall approach is to advance the plan amendments, findings, and code amendments as much as is reasonable and practical during the preparation of the deliverables in Phases 1 and 2. The Phase 3 scope of work and budget for the project assumes that plan amendment text and maps, with findings, will be at least 50% complete at the end of Phase 2, depending on the topic. Code amendments will be developed to 50% completeness at the end of Phase 2, meaning the substance of a given amendment is clear, but codification and some details are yet to be finalized. Final versions of city and county plan and code amendments, and final findings, will be developed during the Phase 3 Adoption and Implementation Phase.

Phase 3 Project Management

Phase 3 will continue the coordinated management approach between the City and the APG team. Phase 3 will begin with a Phase 2 debrief and project charter check-in that will guide preparation of a detailed scope, schedule and budget for the Phase 3 work order. On-going project management and coordination will occur throughout Phase 3.

Deliverables:

PM3.1 Phase 2 debrief and charter check-in meeting

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PM3.2 Phase 3 scope of work and budget

PM3.3 Phase 3 schedule (summary graphic and detailed MS Project schedule)

PM3.4 Weekly to bi-weekly project management team meetings

PM3.5 Project administration

Phase 3 Public Involvement

Phase 3 will continue project's commitment to public involvement and collaborative planning, tailoring the engagement methods and communications to Phase 3's focus on the adoption and implementation steps. The Public Involvement Plan will be updated for Phase 3.

Deliverables:

PI3.1 Phase 2 debrief

PI3.2 Public Involvement Plan for Phase 3

PI3.3 Community open house/workshop

PI3.4 Speakers bureau materials and training (if included in PIP)

PI3.5 On-line/web-based public information.

PI3.6 On-going public involvement monitoring, strategy and information

Tasks 10 – 11: City and County Plan and Code Amendments

Associated Remand Issues

Issue 10.2 Zoning and Planning Designation for UGB Expansion Areas

10.0 **Prepare City of Bend Plan and Code Amendments.** Task 10 will include the final versions of proposed changes to the city's General Plan and Development Code to integrate the results from Phases 1 and 2. This project will touch on multiple chapters of the existing General Plan. APG will integrate proposed plan revisions, tables, and figures into the template of the plan and assure internal consistency between chapters. DKS will provide figures and updated project lists to support revisions to the TSP.

Targeted amendments to the Development Code will also be prepared. This could include changes to implement new efficiency measures, changes to the Urban Reserve or other zones to address master planning requirements, etc. The final version of proposed plan and code amendments will also use underline/strikeout formatting and include commentary boxes to provide context for the changes.

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Findings to support City adoption of the UGB and related plan and code amendments will be finalized in Task 10. Progress drafts of findings will be prepared and reviewed in earlier phases of work. APG will establish the overall template for the findings and cross references to supporting evidence in coordination with staff and the city attorney early in Phase 1.

Deliverables:

- 10.a *City of Bend Plan and Code Amendments*
- 10.b *Finalize General Plan Text & Map Amendments (text, policies, maps, and technical appendices such as the HNA, EOA, and Goal 5 inventories)*
- 10.c *Finalize TSP Text & Map Amendments (road, bike, pedestrian network maps)*
- 10.d *Finalize Integrated Land Use and Transportation Plan (if needed)*
- 10.e *Finalize Development Code Amendments (if needed)*

11.0 **Prepare Deschutes County Plan and Code Amendments.** Task 11 will include final versions of proposed changes to the Deschutes County Comprehensive Plan and Development Code to integrate and implement the work products from Phases 1 and 2. This could include amendments to Urbanization Policies (Section 4.2) and may also involve changes to Urban Reserve zones for unincorporated lands included in the UGB. We will integrate proposed plan and code revisions into the template of the existing documents and assure internal consistency between chapters. The final version of proposed plan and code amendments will include new/revised text in underline/strikeout formatting and will include commentary boxes to provide context for the changes. DKS will provide figures and updated project lists to support revisions to the TSP, as needed.

Findings to support the county adoption of the UGB and related plan and code amendments will be finalized in Task 11. The majority of the findings will be the same for city and county adoption. However, findings to address the specific plan policies and plan and code amendment criteria will be tailored for each jurisdiction. As with Task 10, progress drafts of findings will be prepared and reviewed in earlier phases of work. We will coordinate with county staff and legal counsel early in Phase 1 to understand any unique county requirements

Deliverables:

- 11.a *Comp Plan Map, Text, Policy Amendments*
- 11.b *Zoning Map and Text Amendment*
- 11.c *County TSP Text and Map Amendment*

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11.d *Joint Management Agreement (if necessary, by City Staff)*

Additional Phase 3 Tasks (only if authorized by city project manager)

12.0 **Public Hearing Process.** The APG team will be available to support the public hearing and adoption process with the Bend City Council and Deschutes County Board of Commissioners as a contingency task. Public hearing support could include, but is not limited to, preparation and/or presentation of public hearing materials, written or oral response to public testimony, support with staff reports, refinement of final adoption findings, etc.

Deliverables:

12.a *Hearing Materials*

12.b *Meeting Attendance*

13.0 **DLCD Submittal for Acknowledgement.** Similar to Task 12, the APG team will coordinate closely with DLCD staff and provide draft deliverables for review and feedback through the duration of the 2-year project. This hands-on involvement by DLCD staff, combined with the guidance provided in the UGB Remand, should facilitate Department and LCDC review and acknowledgement of the local adoption package. The APG team will be available to support the DLCD submittal and acknowledgement process as a contingency task. Support could include, but is not limited to, preparation and/or presentation of materials for the LCDC hearing, written or oral response to public testimony, coordination meetings with DLCD staff, etc.

Deliverables:

13.a *Meeting Materials*

13.b *Meeting Attendance*

14.0 **Additional meetings beyond those assumed above.**

List of Interested Parties in UGB Remand and Focus of Communications and Outreach Efforts

Interested Parties	Focus of Involvement
Boards: Bend City Council Bend Planning Commission Bend Metro Parks and Recreation Board Bend-La Pine School Board Metropolitan Planning Organization Board Deschutes County Board of Commissioners Deschutes County Planning Commission	Regular updates Receive feedback
Advisory Committees: Infrastructure Advisory Committee Sewer Infrastructure Advisory Group Bend Economic Development Advisory Board	Provide updates Integrate Remand with their projects
State Agencies: Department of Land Conservation and Development Department of Transportation	Peer review of work products Provide updates
Local Government/Public/Interest Groups: General Public Chamber of Commerce Central Oregon Environmental Center Civic Groups Central Oregon Builders Association Building a Better Bend Bend 2030 Irrigation Districts City Club Rotary Clubs Neighborhood Associations Central Oregon Association of Realtors Central Oregon Landwatch	Inform Involve as the group desires
Press: Bend Bulletin Editorial Board The Source Editorial Board TV/Cable/Radio	Inform about meetings and milestones
Projects: Collection Systems Master Plan Central Area Plan Mixed Use Multi-modal Area Plan MPO Travel Demand Model Update OSU Campus Planning	Integrate into Remand as needed



Meeting Agenda

Bend Urban Growth Boundary Remand Project

Steering Committee Meeting No. 1

Thursday, June 19, 2014, 3-5 PM

Community Room of the Bend Parks and Recreation District
799 SW Columbia Street, Bend

<p>1. Call to Order and Welcome</p> <p>a. Welcome by Chair Victor Chudowsky b. Introduction of project team (Brian Rankin)</p>	<p>3:00 PM</p>
<p><i>Note: agenda items below will be facilitated by Mary Orton, The Mary Orton Company, Steering Committee Facilitator</i></p>	
<p>2. Committee Roles and Collaborative Decision Making</p> <p>a. Overview of Committee roles (Brian Rankin) b. Discussion:<ul style="list-style-type: none">- Collaborative decision making as a project goal: perspectives from the Steering Committee- The April, 2016 completion date for local adoption: a process for managing the project schedule- Other discussion on the Committee roles<p>c. Requested Action: Approval of Committee roles</p></p>	<p>3:10 PM</p>
<p>3. Meeting and Decision Making Protocols</p> <p>a. Overview of draft protocols (Mary Orton) b. Discussion c. Requested Action: Approval of protocols and determine standing meeting times and locations</p>	<p>3:45 PM</p>
<p>4. Core Values</p> <p>a. Overview of core values purpose and process (Joe Dills) b. Core values exercise/input from Steering Committee – a first conversation c. Next steps</p>	<p>4:00 PM</p>
<p>5. Public Comment</p>	<p>4:50 PM</p>
<p>6. Adjourn</p>	<p>5:00 PM</p>



Bend Urban Growth Boundary Remand Project

June 12, 2014 *Steering Committee and Technical Advisory Committee Roles*

STEERING COMMITTEE ROLE

The Bend Urban Growth Boundary Steering Committee (USC - formerly the Remand Task Force) will make timely decisions on policy direction and technical issues related to the Bend Urban Growth Boundary Remand Order. The USC's work will result in a proposed Urban Growth Boundary, General Plan, and supporting documents for Bend. The committee will forward its decisions to the City Council and Board of County Commissioners for adoption at the end of the process.

The USC consists of all seven Bend City Councilors, two Bend Planning Commission members, and one member of the Deschutes County Board of County Commissioners. Please see below for current membership and note regarding changes in membership.

The process will move quickly, so it will be essential to make decisions as efficiently as possible to stay on schedule. The USC members commit to review materials prior to meetings and actively participate in the discussion and decision-making process at each meeting.

Specifically, the USC will act on input and recommendations from the Technical Advisory Committees (TACs) and project team, and provide direction. The USC can direct additional work by the TACs, accept their recommendations, or make modifications to their recommendations.

The USC will use the approved scope and schedule, but may make changes to direct the process and the project schedule as needed. It will determine if additional work needs to be done or if additional meetings will be needed to resolve difficult issues. It will direct staff and the consultant team if additional work or schedule adjustments are necessary. The USC Chair may work with the project team in between USC meetings to provide direction regarding the schedule and work products as necessary. The USC Chair will consult with the Vice Chair as needed.

In this manner, the USC has decision-making responsibility for the planning process (analysis, public involvement, etc.) that will be unfolding. USC members will likely need to consult with their constituents and peers between meetings to make sure various interests are included in a process that reflects the values of the community.

TECHNICAL ADVISORY COMMITTEES ROLE

There will be three topic-specific Technical Advisory Committees (TACs) (Residential, Employment, Boundary and Growth Scenarios), each meeting approximately four times, plus two joint USC/TAC meetings in Phase 1. Staff and the APG team will facilitate and support the Technical Advisory Committees (TACs) to review and provide guidance on technical issues, methodologies, and recommendations.

TAC membership will reflect a degree of technical expertise or background in related subjects, and can also include highly involved and interested persons or even affected parties who may not be technical experts. The TACs will reflect the diverse views in the community on the subject. Ideal TAC members will have credibility and trust with members of their respective interest groups. It is sometimes helpful if TAC members are active in multiple organizations and have ties throughout the community.

TACs are in an advisory role and will make recommendations to the USC. The TACs will attempt to reach consensus on their recommendations to the USC. The role of TAC members is to participate with their viewpoints, attempt to reach recommendations that are acceptable to all TAC members, and share information about the UGB process with their peers, members, or larger group they represent. Decisions will generally be by consensus, but if that is not possible, then voting will be used to forward recommendations to the USC per the adopted meeting and decision making protocols.

The TACs are one element of public involvement, and a way for the USC to receive consensus (if possible) recommendations on technical and policy matters in the Remand Order from a diverse group of citizens. TACs will work with consultants and staff to review technical documents and provide direction on matters relating to the remand order.

Each of the three TACs will have a charge from the USC that consists of a list of topics that they will address related to Remand Order tasks and issues. The Residential TAC will generally focus on residential land need, the Housing Needs Analysis, residential efficiency measures, the Buildable Lands Inventory, and related topics. The Economic TAC will focus on employment land need, the Employment Opportunities Analysis, and related items. The Boundary TAC will address the Goal 14 boundary expansion methodology, and how the Envision Tomorrow scenario planning tool will be used. Transportation, per capita vehicle miles traveled and related topics will be addressed by the Boundary and Residential TACs.

MEMBERSHIP OF THE UGB STEERING COMMITTEE

- Bill Wagner, Bend Planning Commissioner, Steering Committee Vice-Chair
- Rex Wolf, Bend Planning Commissioner
- Tammy Baney, Deschutes County Commissioner
- Jim Clinton, Mayor
- Jodie Barram, Mayor Pro Tem
- Mark Capell, Bend City Councilor
- Victor Chudowsky, Bend City Councilor, Steering Committee Chair
- Doug Knight, Bend City Councilor
- Scott Ramsay, Bend City Councilor
- Sally Russell, Bend City Councilor

Note: If the City Council membership changes during the life of the project, new council members will sit on the USC. Per the City's policies governing committees, any USC vacancies resulting from changes to the Bend Planning Commission and Deschutes County Board of Commissioners will be filled by appointment by the Mayor with confirmation by the Council by approval by a motion.

RESOLUTION

A resolution will be brought to the Bend City Council for their approval to formally implement these roles and responsibilities, as well as the appointment of the members of the TACs.



Memorandum

June 12, 2014

To: Bend UGB Remand Steering Committee
Cc: Project Team
From: Brian Rankin, Project Manager, and Joe Dills, Angelo Planning Group
Re: Draft Project Schedule

OVERVIEW

Attached is a draft schedule for the Bend Urban Growth Boundary (UGB) Remand project. A milestone graphic version is provided, along with the roll-up version of our detailed project schedule. The following are a few high level observations:

- This schedule implements the project goal to “Complete local adoption by April 2016”.
- The schedule has been prepared at a detailed level for Phase 1 – now through February, 2015. It has been prepared a more generalized level for Phases 2 and 3.
- The schedule is very much a work in progress.
 1. As the team completes initial research and prepares detailed methodologies, we will discover needed refinements to the work plan and schedule; and
 2. We will all have a better understanding of the needs of the committee process after the first few meetings this summer.
- This is very ambitious schedule. Staff’s original schedule for completion by April, 2016 assumed starting the project in March, 2014. The time period to complete the work is effectively 3 months shorter than initially planned. This schedule addresses that shortfall by compressing Phase 1 by a month or two and getting started on some of the Phase 2 internal team work as Phase 1 is wrapping up in order to meet the target deadline.

MILESTONES IN PHASE 1

August, 2014 - Approval of core values at the UGB Steering Committee’s (USC) second meeting.

August through November – The Technical Advisory Committees (TACs) complete estimates of land needs, initial testing of efficiency measures, and methodologies for UGB expansion evaluation.

December through January, 2015 – Joint USC-TAC work sessions will include: review of technical analyses on how various efficiency measures perform; discussion of options for land

use and transportation integration, including analysis of per capita vehicle miles traveled for the options; estimates of current UGB capacity when various efficiency measures are assumed; and, other topics related to Remand requirements for the current UGB.

February, 2015 – USC approval of Phase 1 recommendations.

Public involvement activities, public information, and feedback loops are woven throughout the above-listed milestones and activities. The two primary outreach efforts are during the core values process and during the evaluation of the current UGB.

A SUGGESTED PROCESS FOR SCHEDULE MANAGEMENT

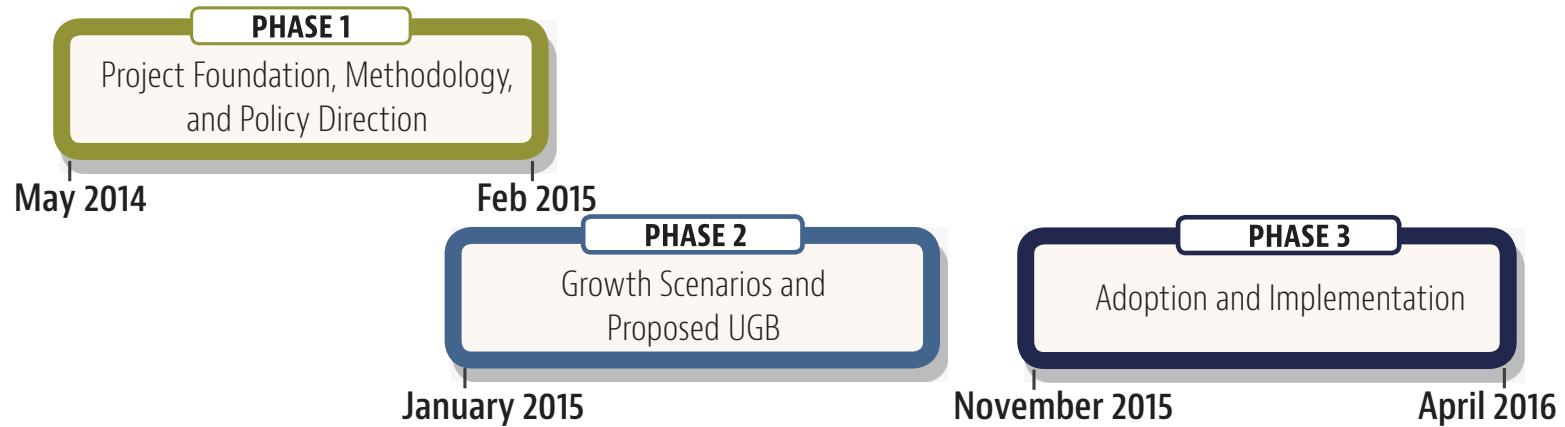
An ambitious schedule of course introduces a creative tension. On the one hand the process will naturally want to, and may occasionally need to, take more time than is scheduled for some tasks. On the other hand, the USC has set an important goal and it is in everyone's interest to ensure that there is not an incremental and cumulative prolonging of the schedule. To address this dilemma, we recommend the following process solutions:

1. The USC will have lead responsibility for considering and deciding if the schedule needs to be changed.
2. To provide a real-time method for schedule discussions, the USC Chair will work with the City Project Management Team and consultant project manager to discuss schedule issues and provide direction in-between USC meetings.
3. As needed, the USC Chair will work with the TAC Chairs to address schedule needs that are coming from the work of the TACs.

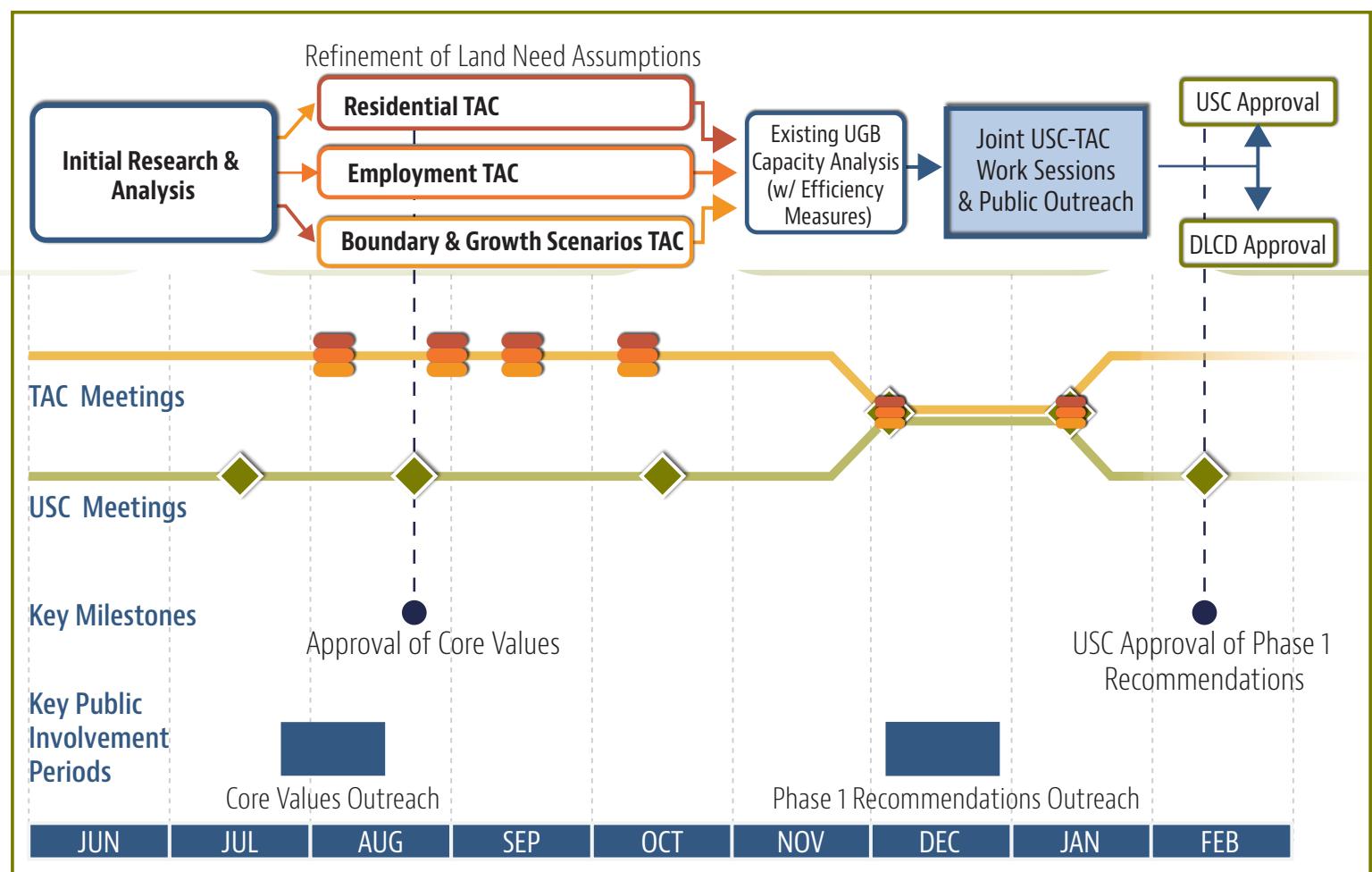
Project Schedule

The schedules shown below are preliminary and subject to change.

The schedule below is a high-level schedule for the three phases of the project.

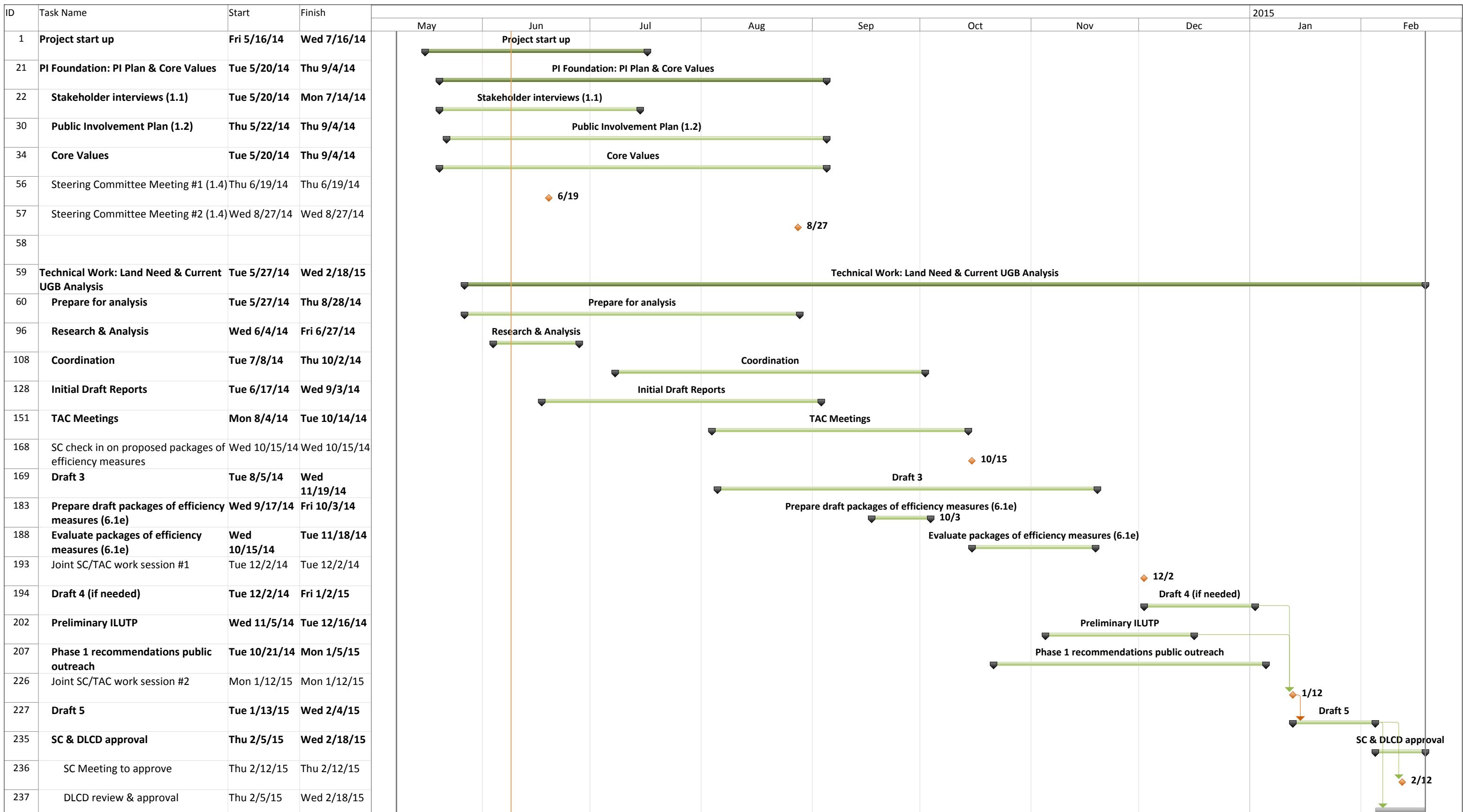


The schedule below is an estimate of the work to occur, by month, in Phase I.



TAC = Technical Advisory Committee

USC = UGB Steering Committee





UGB Steering Committee

Meeting and Decision Making Protocols

Draft – June 12, 2014

GENERAL GUIDELINES

- a. The agenda and Urban Growth Boundary Steering Committee (USC) discussions will be managed by the Chair, or someone designated by the Chair. As used below, the term Chair means the Chair or his designee, including the Facilitator.
- b. The Steering Committee Facilitator is a neutral party. In that role, she will not provide advice on substantive matters, and may provide advice on process matters. Project consultants and staff will provide input to the USC on substantive matters.
- c. Meetings will begin and end on time. If agenda items cannot be completed on time, the group will decide if the meeting should be extended or if an additional meeting should be scheduled. Additional meetings will likely require adjustments to the project schedule.
- d. At the meetings, USC members will:
 - Provide direct input as required to help reach group consensus
 - Share the available speaking time so that all USC members can be heard
 - Be respectful of a range of opinions
 - Focus on successfully completing the agreed upon agenda
 - Avoid side discussions when others are speaking
 - Voice concerns regarding agenda items as needed at the meeting, rather than voice concerns to consultants and staff after the meeting
 - Strive for consensus and acknowledging points of mutual agreement
- e. The Chair will gather comments and perspectives from other USC members before a member speaks multiple times on an issue.
- f. The Chair will provide opportunities for brief public comment or announcements at the beginning or end of each meeting. Public comment will not exceed 20 minutes of allotted meeting time with a maximum of 2 minutes per individual, unless consent of the USC allows otherwise. Time permitting, the Chair may provide opportunities for public comment at other times of the meeting with the consent of the committee, such as immediately before the USC makes a decision. The agenda may indicate specific items where public comment is invited.

- g. When USC members identify issues that are outside the scope of the committee's purpose, the ideas will be documented in an "idea bin" for future use by others, and the group will continue with the agenda.
- h. USC members are encouraged to share the committee's progress with their respective constituencies at meetings, by e-mail or through newsletters.

DECISION MAKING

1. The USC will make decisions regarding the direction of the project, project recommendations, and related matters. The USC will make every effort to make decisions by consensus. Consensus is reached when committee members all either support or can live with the proposal, even if it is not each committee member's personal favorite.
2. Each member will have three cards - a red, a yellow, and a green card. The Chair will test consensus by asking the members to show their cards. Showing a green card means, "I support the proposal"; a yellow card means, "I can live with the proposal"; and, a red card means "I cannot live with the proposal". Consensus is not reached if one or more red cards are shown.
3. If consensus cannot be reached, a vote will be taken. At least 2/3 of USC members present, and a minimum of 5 members, must agree for a group decision to be made. Absent that, the opinions of the members, and vote tally, will be recorded and be represented as not reaching consensus.
4. A quorum is required to record a consensus or voted position of the USC. A quorum of the USC shall be at least 6 of 10 members.
5. Prior decisions made by the USC by consensus or vote can be reconsidered when there is consensus or a majority vote approving a reconsideration. In this case, there will likely be impacts to the budget and schedule due to the need revisit substantive issues.



Memorandum

June 12, 2014

To: Bend UGB Steering Committee
Cc: Project Team
From: Joe Dills, Angelo Planning Group
Re: Core Values – Purpose and Process

OVERVIEW

The process of determining land needs, evaluating efficiency measures, preparing scenarios and ultimately approving a new Urban Growth Boundary (UGB) for Bend will navigate a complex web of rules and legal requirements. At the end of the day, the UGB must comply with the Remand and be legally defensible. But it must also reflect Bend's values and aspirations for the future. The legal side and values-based side of Bend's growth management are not mutually exclusive – they are, and should continue to be, complementary and balanced. To achieve this balance, the project work plan includes the preparation of core values.

For the purposes of the Bend UGB Remand project the core values are defined as: "the fundamental beliefs and priorities that should guide the growth and livability of Bend". They are initially intended to inform the direction of work related to the Bend UGB Remand project. The working assumption is that these values will also be implemented in the General Plan as value statements and through policies.

AN EXAMPLE OF CORE VALUES

There are many examples of core values, mission statements, and guiding principles – mostly from the world of strategic planning for businesses and institutions. A recent example of core values developed for a planning process can be found in the Willamette Falls Legacy Project (WFLP) in Oregon City.¹ This project is focused on master planning the former Blue Heron Mill Property. The site is next to Willamette Falls (the second largest waterfall by volume in North America) and is extremely important from a cultural, historic, and economic viewpoint.

The physical attributes of the Willamette Falls site, and the project's goals, are of course different from Bend's UGB. But what makes Willamette Falls an interesting example is how the project partners used their core values. They developed the core values to capture the priorities

¹ Check out the Willamette Falls Legacy Project at <http://www.rediscoverthefalls.com>

and fundamental goals for the project, and, to help a newly formed intergovernmental partnership come together. Then, the core values were used to shape a complex community conversation and help navigate many competing points of view. The short form of the WFLP core values are:

Public Access: ensuring access to the Falls and places for people to gather.

Economic Redevelopment: providing jobs and prosperity.

Healthy Habitat: maintaining, restoring and protecting the unique ecosystem of fish, wildlife and plants along the river.

Historic and Cultural Interpretation: providing opportunities to connect to heritage and history as well as current cultural practices related to the Falls.

The longer form, and further defined version, of the WFLP's core values are attached. Please note this is just one example, albeit a good one. There is no strict model that Bend needs to follow. The recommended parameters for the UGB Remand project's core values are: (1) They should reflect the deeply held values of the Steering Committee and community; (2) They should be as clear as possible, specific to Bend, and include some defining language; (3) They should be a small number of priority values (five or less); (4) They should be within the wheelhouse of what the City can implement. There are options for the actual phrasing, style, and organizational framework – this can be determined later once the content is in hand.

A SUGGESTED PROCESS FOR BEND'S CORE VALUES

We recommend a four-step process:

1. A first conversation about core values by the Steering Committee on June 19th (see discussion questions, below).
2. Outreach to the Bend community to identify their own core values. Outreach will include:
 - A question on core values in the stakeholder interviews
 - Web-based outreach using the MetroQuest tool
 - Opportunity to comment at community events
 - Comment forms and other “low tech” methods
3. Compilation of the feedback and identification of areas of common values.
4. Discussion of draft core values for review and approval by the Steering Committee in August.

DISCUSSION QUESTIONS FOR THE STEERING COMMITTEE

Please consider the following questions and come prepared to discuss them at the meeting on June 19th:

1. What is great about Bend – what defines its livability, prosperity, and vitality today?
2. Imagine you are in Bend in 2028. You look around you, and everything in Bend is just as you always hoped it would be. What do you see? What has changed? What has remained the same?

The Core Values Adopted for the Willamette Falls Legacy Project in Oregon City, Oregon.

Core Value: Public Access

Ensuring access to the Falls and places for people to gather

Cut off from public use for more than 150 years, the Falls site is the most dynamic place along the Willamette River. The Falls provide an important opportunity for Oregonians to connect with the river, which is isolated from many of the communities along its route. Visitors will get a front-row seat to experience Willamette Falls.

Core Value: Historic and Cultural Interpretation

Providing opportunities to connect to heritage and history as well as current cultural practices related to the Falls

Future visitors will learn about the rich history of the Oregon City riverfront. Much like Celilo Falls in the Columbia River George, Willamette Falls served as an important cultural site for native tribes. The Falls also tell the story of the area's industrial and community development: John McLoughlin built the Pacific Northwest's first lumber mill here, and in 1844, Oregon City became the first incorporated city west of the Rocky Mountains. As the birthplace of Oregon, it served as a launching point for thousands of new Oregonians.

Core Value: Economic Redevelopment

Providing jobs and prosperity

The Willamette Falls property will carry on a tradition of economic development along the riverfront. By returning part of the site to private developers, partners will ensure the transformation supports Oregon City's vision for the future and

reinvigorates the downtown as a hub of employment, shopping, business and tourism.

Core Value: Healthy Habitat

Maintaining, restoring and protecting the unique ecosystem of fish, wildlife and plants along the river

Historically, the Falls were surrounded by unique plants that depend on the microclimates associated with the waterfall mist. Protecting the site provides an opportunity to reestablish native plant communities, enhancing this ecologically diverse stretch of the Willamette River. Many rare plants thrive on river islands, in the Willamette Narrows and along Canemah Bluff. This land is also important for water quality and species that depend on clean, healthy water including salmon and lamprey that travel through the Falls and up the Willamette River.

UGB Remand Summary



MAKING BEND BETTER

The City of Bend has entered the next phase of its Urban Growth Boundary (UGB) expansion to chart a path for Bend's future growth. The UGB is a line drawn on the City's General Plan map that identifies Bend's urban land. This land represents an estimated 20-year supply of land for employment, housing, and other urban uses. As the city continues to grow, we have an opportunity to develop a plan for future growth that reflects the community's values and meets state planning requirements.

The City is working with a team of planning experts and advisors to address requirements of a "Remand" of the City's previously proposed UGB expansion. This two-year process – scheduled to end April 2016 – will address a variety of specific technical issues and planning requirements established by the Oregon Land Conservation and Development Commission (LCDC) in the Remand. It is essential that the analysis and findings are ultimately consistent with the Remand's requirements. At the same time, the Remand project is an opportunity for us to establish a new long-term vision for how Bend should grow in the future. One of the City's key objectives is to use land, public infrastructure, and resources more efficiently, thereby encouraging development that saves residents and businesses a significant amount of money over the long term. Ultimately, this project should make Bend a better place to live, work, and play in the years to come!

CHARTING OUR FUTURE

The process will address the following questions:

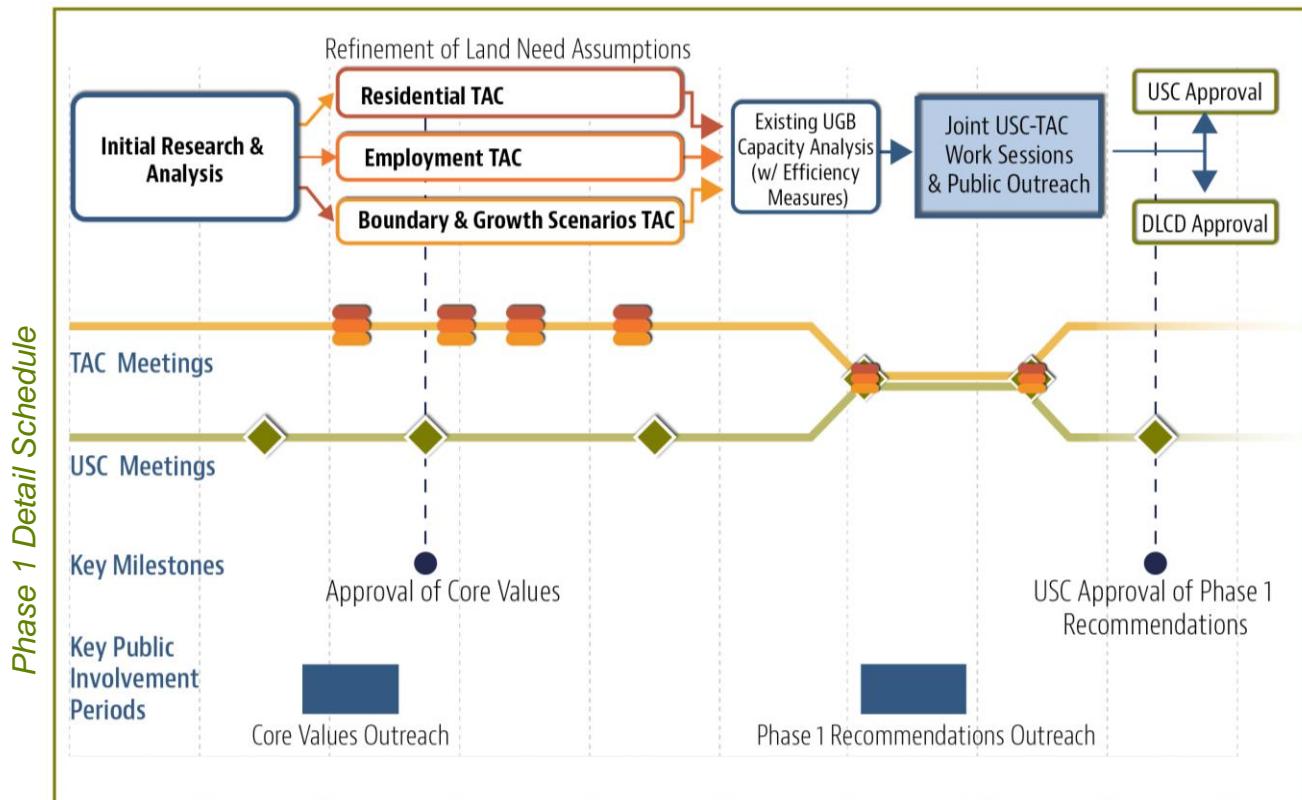
- What are the core values that should guide planning for the UGB?
- How much land is needed for jobs, homes, schools, and other land uses through the year 2028?
- What are the choices for efficient use of land and infrastructure within the current UGB?
- For new areas that might be added to the UGB, what are the costs, benefits, and choices for those options?
- What is the best long term growth scenario for the City that meets community goals and legal requirements?

GETTING INVOLVED

It is a high priority for the City to use a collaborative decision-making process that engages as many people as possible, including residents, business owners, local experts, and other interested parties. The project will provide many different opportunities for you to understand what is going on, weigh in with your priorities for Bend's future, and offer your opinions about the decisions the City will be making:

- Meetings of Technical Advisory Committees and a UGB Steering Committee open to the public.
- Online surveys, questionnaires, and comment forms.
- Regular updates in the City newsletter, Website, and BendVoice.
- Information and opportunities to comment at local festivals and community group meetings.
- Community workshops and open houses.
- Ability to comment via phone, e-mail, or in writing focused on the UGB.

For more information about the project, to provide comments, or to be added to a project contact list, please visit the City Website (www.bendoregon.gov/bendugb) or contact Brian Rankin at (541) 388-5584.



TAC = Technical Advisory Committee

USC = UGB Steering Committee

This is a preliminary schedule; please see www.bendoregon.gov/bendugb for updated meeting dates and times.

WHAT'S NEXT

The project is just getting underway and the City and project team are working on a number of start-up activities.

- **First Steering Committee meeting.** This group – made up of all 7 City Councilors, 2 Planning Commissioners, and a County Commissioner – will meet on June 19, 3:00p.m. in the Community Room of the Bend Parks and Recreation District (799 SW Columbia Street) to get an overview of the schedule and process to be undertaken and talk about their core values for the community and the project. *You are welcome to attend.*
- **Formation of Technical Advisory Committees.** During June and early July, the City will recruit people to serve on the advisory groups. For more information or to apply, please visit the City's Website at <http://www.bendoregon.gov/index.aspx?page=59>.
- **Detailed work plan.** The City and team are working together to establish a detailed schedule and approach to the Remand analysis. Check the Remand Webpage (www.bendoregon.gov/bendugb) during the next several weeks for more information.



Bend Urban Growth Boundary Remand Project

June 18, 2014

Core Values Questions

1. What is great about Bend – what defines its livability, prosperity, and vitality today?

A protected river - scenic and available for public use
and river banks
Paths and trails, and sidewalks. Walkability.
Affordable housing
Some Nice architecture, - historic preservation
Public transit
Vibrant community gathering areas
Minimal traffic congestion (less than today)
Clean water and air
Cultural activities

2. Imagine you are in Bend 2028. You look around you, and everything in Bend is just as you always hoped it would be.

What do you see?

Above

What has changed? Reduced wildfire threat through UGB design
and improved
and increased wildlife habitat
Completed river trail and park system
More people walking, biking, soccer than driving.
Less congestion
More affordable housing. More public transit
More diverse job opportunities
Vital neighborhoods

What has remained the same?

Clean water and air

See Bend 2030

For additional information, visit the project website at <http://bend.or.us>
or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584

Community input is welcome regarding the Core Values. Please check the web site for ways to participate. Written input may be submitted to Brian Rankin at the contacts listed above.



Bend Urban Growth Boundary Remand Project

June 18, 2014

Core Values Questions

1. What is great about Bend – what defines its livability, prosperity, and vitality today?

*Choices
diversity of offerings - activities, culture, even retail
community feel*

2. Imagine you are in Bend 2028. You look around you, and everything in Bend is just as you always hoped it would be.

What do you see?

*clear skies better
increased engagement/diversity*

What has changed?

*better connectivity
more affordable housing*

What has remained the same?

community feel

For additional information, visit the project website at <http://bend.or.us>
or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584

Community input is welcome regarding the Core Values. Please check the web site for ways to participate. Written input may be submitted to Brian Rankin at the contacts listed above.



Bend Urban Growth Boundary Remand Project

June 18, 2014

Core Values Questions

1. What is great about Bend – what defines its livability, prosperity, and vitality today?

Great outdoors beauty, recreation options
protected wildlife habitat
low traffic, no sprawl

2. Imagine you are in Bend 2028. You look around you, and everything in Bend is just as you always hoped it would be.

- thriving music + art community
- local food production
- solar energy used by city govt + agencies
- vibrant city
- wildlife habitat protected + in fact
- thriving + sustainable community
- No more destination resorts

What has changed?

- No development in fire-prone forests

4-year university Good public transportation, bike paths
high density, mixed residential Greater diversity

What has remained the same?

City is contained

Farmland, forests are still farm + forest

Rivers still have water in them

For additional information, visit the project website at <http://bend.or.us> or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584.

Community input is welcome regarding the Core Values. Please check the web site for ways to participate. Written input may be submitted to Brian Rankin at the contacts listed above.

How will existing surveys be incorporated?

e.g., Blvd 20/30 ; Greenprint



Bend Urban Growth Boundary Remand Project

June 18, 2014

Core Values Questions

1. What is great about Bend – what defines its livability, prosperity, and vitality today?

Great = confluence of environmental variety (forests, streams, recreation, etc) and stable vitality. (2) It has a wide in balance w/ population.

Quality planning

2. Imagine you are in Bend 2028. You look around you, and everything in Bend is just as you always hoped it would be.

What do you see?

Modest, controlled growth, with emphasis on MSW 2030?

What has changed?

Core Values
Consensus

What are
Competing
interests?

What has remained the same?

Great natural resources

For additional information, visit the project website at <http://bend.or.us>
or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584

Community input is welcome regarding the Core Values. Please check the web site for ways to participate. Written input may be submitted to Brian Rankin at the contacts listed above.

UEB STEERING COMMITTEE
JUNE 19, 2014 - SIGN-IN

①

NAME	EMAIL ADDRESS
John Russell	john.russell@state.or.us
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Robin Vora	robinvora1@gmail.com
Gwen Wysling	gwen@bethlehemmn.org



Meeting Agenda

Technical Advisory Committees Orientation

Tuesday, July 29, 2014 3-5 PM

Community Room - Bend Park and Recreation District
799 SW Columbia Street, Bend

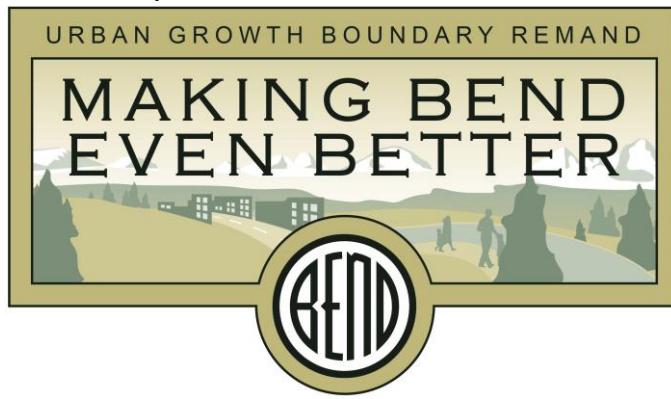
1. Welcome	3 PM
a. Welcome by Victor Chudowsky, UGB Steering Committee Chair	
b. Introduction of project team (Brian Rankin)	
2. Project Overview and TAC Role	3:10 PM
a. Project overview	
- Council goals (Victor, Brian)	
- TAC role (Brian)	
- Remand basics (Brian, Gary Firestone)	
- Project and TAC work plan (Brian and Joe Dills, Angelo Planning Group)	
3. A Few Process Issues	4:10 PM
a. Meeting protocols	
b. Heads up – election of TAC chair and vice chair and first meeting	
4. FAQs and Discussion	4:20 PM
a. Highlights of the FAQs (Brian, Joe)	
b. Additional TAC questions and discussion	
5. Adjourn	5:00 PM

For additional project information, visit the project website at <http://bend.or.us> or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584



Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact the City Recorder no later than 24 hours in advance of the meeting at rchristie@ci.bend.or.us, or fax 385-6676. Providing at least 2 days notice prior to the event will help ensure availability.



Technical Advisory Committees

Roster
July 24, 2014

Residential Lands Technical Advisory Committee

Kristina Barragan	Alzheimer's Association
David Ford	Brooks Resources, COCC
Stuart Hicks	Author and consultant
Andy High	COBA, AHAC
Allen Johnson	LCDC/DLCD work groups
Thomas Kemper	Housing Works
Katrina Langenderfer	Harper Houf Peterson Righellis, Central Oregon Food Policy Council
Lynne McConnell	NeighborImpact
Michael O'Neil	Rotary Club of Bend, COBA, Bend Fire/Safety Budget Committee
Kurt Petrich	Bendfilm, Central Oregon Locavore
Bill Robie	COAR, AHAC
Don Senecal	Past Bend Planning Commissioner
Sidney Snyder	OSU CEAC
Kirk Schueler	Budget Committee, EDCO, BBB
Stacey Stemach	Galveston Avenue Task Force, OSU CEAC, SIAG, BBB Chair

Residential Lands Technical Advisory Committee

Mike Tiller	Bend-La Pine Schools
Commissions	
Laura Fritz	Planning Commission
Ex Officio	
Steve Jorgensen	BMPRD
Gordon Howard	DLCD

Employment Lands Technical Advisory Committee

Ken Brinich	St. Francis School
Peter Christoff	Bend Chamber, Shepherd's House
Ann Marie Colucci	Real estate broker
Todd Dunkelberg	Deschutes Public Library, United Way
Brian Fratzke	COAR, Bend Chamber
David Garcia	Construction/development consulting
Christopher Heaps	Central Oregon Locavore, Defenders of Veterans Central Oregon
Patrick Kesgard	BEDAB
William Kuhn	BEDAB, Bend Habitat for Humanity
Robert Lebre	City Budget Committee
Dustin Locke	Architect
Wesley Price	SIAG, BEDAB, EDCO
Damon Runberg	Regional economist
Cindy Tisher	Bend Water Treatment Committee, Growing Tree Board
Jennifer Von Rohr	Bend 2030
Ron White	St. Charles committee, Red Cross
Commissions	

Employment Lands Technical Advisory Committee

Joan Vinci	Planning Commission
Wallace Corwin	BEDAB
Jade Mayer	Budget Committee
Ex Officio	
Tom Hogue	DLCD

Boundary and Growth Scenarios Technical Advisory Committee

Toby Bayard	Central Oregon Land Watch, Tumalo Langlauf Club, US 97 Corridor CAC
Susan Brody	Oregon Transportation Commission, Oregon Environmental Council
Peter Carlson	Bend Chamber
Paul Dewey	Central Oregon Land Watch, Governors Eastside Forest Advisory Council
John Dotson	Past Bend Planning Commissioner
Ellen Grover	Deschutes River Conservancy Secretary, The Environmental Center – Energy Challenge
Steve Hultberg	SIAG, Deschutes County Road Infrastructure Committee, Deschutes County Systems Development Charge Committee
Brian Meece	UGB TAC (initial proposal), COAR
Charlie Miller	COCC, Bend Chamber
Mike Riley	SIAG, Bend 2030
John Russell	Department of State Lands Asset Planner, Former Bend Economic Development Director
Ron Ross	Oregon Chapter Commercial Real Estate President, COAR, past Bend Chamber, past EDCO
Sharon Smith	SIAG, NeighborImpact
Gary Timm	Former California Coastal Commissioner
Rod Tomcho	Tenant Developments, US Bancorp Vice President

Boundary and Growth Scenarios Technical Advisory Committee	
Robin Vora	Orchard NA, MPO TAC, BMPRD NA Advisory Committee
Dale Van Valkenburg	Brooks Resources, BEDAB, SIAG, BBB
Bruce White	BEDAB
Ruth Williamson	Bend 2030 Chair, Deschutes County Collaborative Forest Project
Commissions	
Rockland Dunn	Planning Commission
Peter Werner	Budget Committee
Ex Officio	
Scott Edelman	DLCD
Jim Bryant	ODOT
Nick Lelack	Deschutes County

Affiliation acronyms:

AHAC – Affordable Housing Advisory Committee

BBB – Building a Better Bend

BEDAB – Bend Economic Development Advisory Board

BMPRD – Bend Metro Park and Recreation District

COAR – Central Oregon Association of Realtors

COBA – Central Oregon Builders Association

COCC – Central Oregon Community College

DLCD – Department of Land Conservation and Development

EDCO – Economic Development for Central Oregon

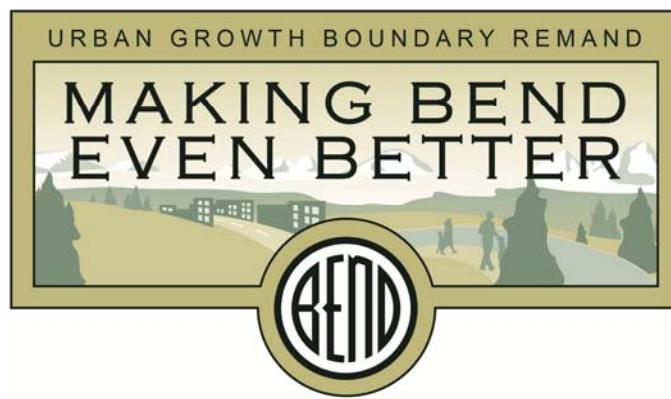
LCDC – Land Conservation and Development Commission

MPO – Metropolitan Planning Organization

NA – Neighborhood Association

OSU CEAC – Oregon State University Campus Expansion Advisory Committee

SIAG – Sewer Infrastructure Advisory Group



Project Goals And Work Plan Summary

July 24, 2014

OVERALL GOALS

The Bend City Council has agreed to the following goals for this project:

- Complete local adoption by April 2016
- Use a collaborative decision making process involving local experts and interested parties in a facilitated and expertly assisted process as described
- Apply best planning and engineering practices involving scenario development and analysis
- Engage, inform, and receive input from the public with techniques best suited for the project

The Urban Growth Boundary (UGB) expansion remand is one of the most important planning projects facing the citizens and leaders of Bend. The project will result in an updated General Plan, Transportation Systems Plan, UGB expansion, and new land use designations inside and outside the current UGB. This project will determine:

- The location, intensity, and type of future growth in Bend
- The pattern of development for existing and new residential areas, commercial and mixed use areas, industrial lands, and lands for public services like parks, schools, universities, and other public services
- The types, location, and costs of public infrastructure to serve future land uses
- The impacts on natural systems and resources such as rivers, riparian habitat, and farm and forest lands
- The future development of public parks and schools that are developed by separate agencies

WORK PLAN SUMMARY AND SCHEDULE

A Three Phase Work Plan

The project work plan has been organized into three phases as shown on the attached Project Schedule graphic.

Phase 1

Phase 1's key outcomes include the project goals, land need determinations, capacity analysis for the current UGB, and methodology for UGB expansion that will be applied in Phase 2. The goals will be established by the UGB Steering Committee (USC), with web-based and other community input in August. The other outcomes comprise much of the work that will be prepared by the Technical Advisory Committees (TACs). Phase 1 will produce updates to the City's Housing Needs Analysis, Economic Opportunities Analysis, and Buildable Lands Inventory. These products, and TAC review, may continue into Phase 2 as determined through subsequent scope development and the progress achieved in Phase 1. UGB analysis conclusions will be captured in an Urban Growth Report.

Phase 1 has a detailed scope of work and schedule. The sequence of work includes:

June through September, 2014 – Kick-off meeting by USC, appointment of TACs, preparation of and community outreach for project goals.

August through October, 2014 – The TACs complete estimates of land needs, initial testing of efficiency measures, and methodologies for UGB expansion evaluation.

December through January, 2015 – Joint USC-TAC work sessions will include: review of technical analyses on how various efficiency measures perform; analysis of compliance with the Transportation Planning Rule (including per capita vehicle miles traveled or VMT reduction and integrated land use and transportation plan provisions); estimates of current UGB capacity when various efficiency measures are assumed; and other topics related to Remand requirements for the current UGB.

February, 2015 – USC approval of Phase 1 recommendations (updated Housing Needs Analysis, Economic Opportunities Analysis, Phase 2 Boundary Methodology, Urbanization Report sections related to growth inside the current UGB).

Phase 2

Phase 2 will apply the UGB methodology developed in Phase 1. Phase 2's key outcomes include the preparation of alternative growth scenarios (with redevelopment, infill and UGB expansion considered), evaluation of those scenarios and application of Goal 14 criteria, narrowing of alternatives and selection of the preferred alternative, and preparation of the proposed UGB map, policies, findings and regulations. Phase 2 has been scoped at a general level – a detailed scope and schedule will be prepared at the conclusion of Phase 1.

Phase 3

Phase 3's outcomes include the final documents and supporting findings; and the work sessions, hearings and adoption proceedings required for local adoption of the amendments to the General Plan and implementing regulations. Following adoption, the UGB package will be submitted to the Department of Land Conservation and Development for acknowledgement.

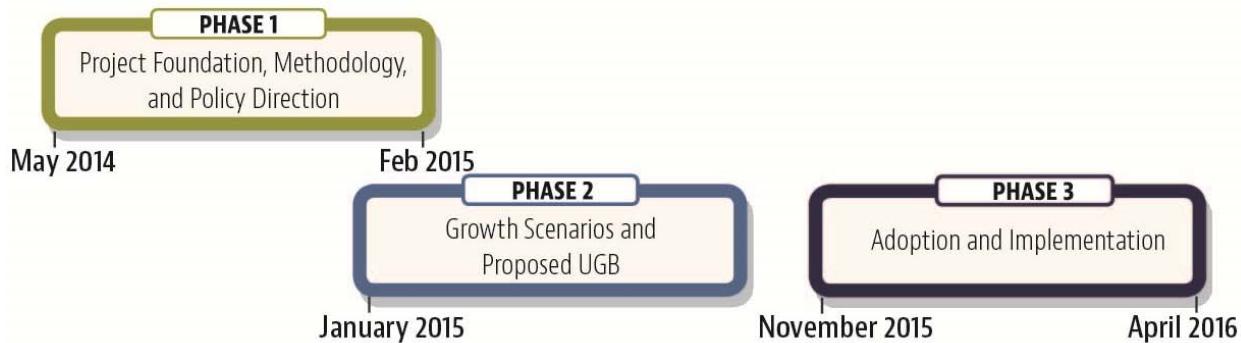
Public Involvement

Public involvement activities, public information, and feedback loops are woven throughout the above-listed milestones and activities. For more information, please see the Public Involvement Plan Summary.

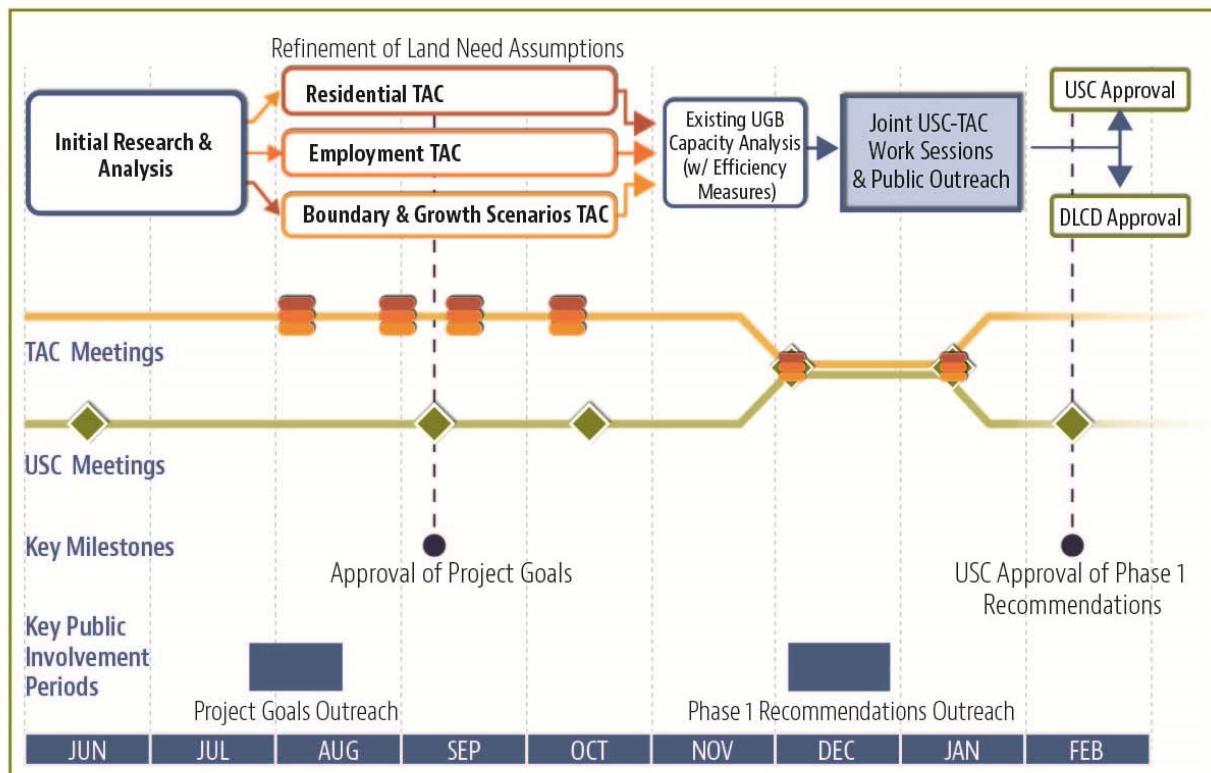
Project Schedule

The schedules shown below are preliminary and subject to change.

The schedule below is a high-level schedule for the three phases of the project.



The schedule below is an estimate of the work to occur, by month, in Phase I.



TAC = Technical Advisory Committee

USC = UGB Steering Committee

PHASE 1 TAC WORK PLAN SUMMARY AND SCHEDULE

Four sets of meetings to address key questions

The Phase 1 work plan shown on the preceding page includes the TACs meeting four times each in the August through October timeframe. During this period, the TACs are addressing the following questions:

Residential TAC

- How much land is needed for housing and related uses to the year 2028?
- What “residential efficiency measures” are best for Bend?

Employment TAC

- How much land is needed for employment to the year 2028?
- How and where will we invest public dollars to make land ready for the market?
- What are the best locations for needed employment lands?

UGB Scenarios and Boundary TAC

- Consistent with the requirements of the Remand, how do we frame the study area(s) for the analysis and packaging of UGB alternatives?
- How do we measure, evaluate and balance the location factors of Goal 14?
- Should some factors be weighted more heavily than others?

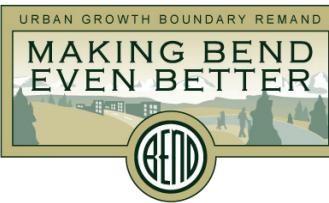
Joint work sessions and finalizing recommendations

The work plan also shows two joint work sessions between completion of the TAC meetings in October and the UGB Steering Committee meeting in the December-January time frame. The agenda, approach and number of actual participants for these work sessions is yet to be determined. Also, TAC involvement in reviewing updated Housing Needs Analysis (HNA), Economic Opportunity Analysis (EOA) and final Boundary Methodology documents will be identified in the coming months.

Topics for the four TAC meetings

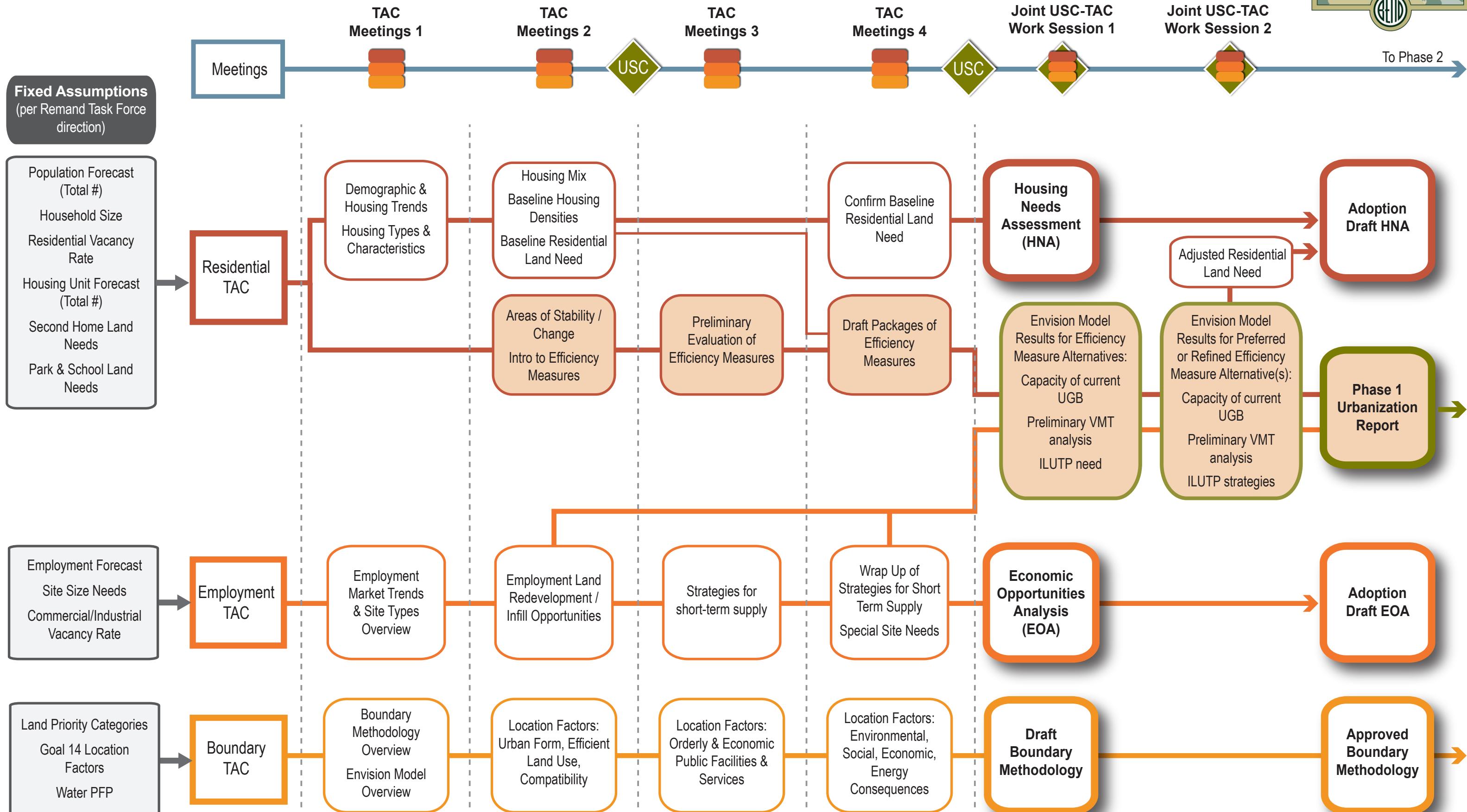
The attached graphic is a summary of the topics to be addressed at each of four TAC meetings in the August through October timeframe. The graphic also lists some the key assumptions that were “fixed” as part of the Remand Task Force’s review of Remand issues. Finally the graphic shows how the recommendations from the TACs will be used in the joint work sessions and the key documents that will result from Phase 1: updated HNA, updated EOA, Urbanization Report sections related to growth inside the current UGB, and Boundary Methodology.

The approach to the TACs meetings is to focus on key Remand questions. This is intended to make the best use of TAC member’s valuable time, focus the meetings, and reduce the volume of material that needs to be reviewed in each meeting (which is potentially very high!). The team is working on the specific questions that will be posed for each meeting of the TACs.



Phase 1 Work Plan - Committee Meeting Outcomes

Draft: July 21, 2014 (preliminary and subject to change)



Key: TAC = Technical Advisory Committee; USC = Urban Growth Boundary Steering Committee; UGB = Urban Growth Boundary; PFP = Public Facilities Plan; VMT = Vehicle Miles Traveled; ILUTP = Integrated Land Use and Transportation Plan; HNA = Housing Needs Assessment; EOA = Economic Opportunities Analysis



Technical Advisory Committee

Meeting and Decision Making Protocols

July 24, 2014

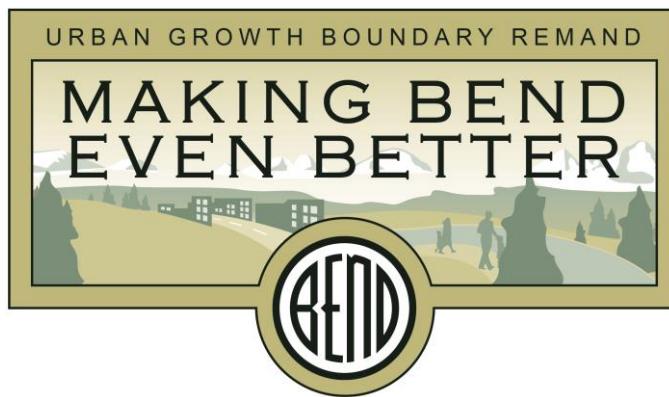
GENERAL GUIDELINES

- a. The agenda and Technical Advisory Committee (TAC) discussions will be managed by the Chair, or someone designated by the Chair. As used below, the term Chair means the Chair or his designee, including the Facilitator.
- b. Meetings will begin and end on time. If agenda items cannot be completed on time, the group will decide if the meeting should be extended or if an additional meeting should be scheduled. Additional meetings will likely require adjustments to the project schedule.
- c. At the meetings, members will:
 - Provide direct input as required to help reach group consensus
 - Share the available speaking time so that all members can be heard
 - Be respectful of a range of opinions
 - Focus on successfully completing the agreed upon agenda
 - Avoid side discussions when others are speaking
 - Voice concerns regarding agenda items as needed at the meeting, rather than voice concerns to consultants and staff after the meeting
 - Strive for consensus and acknowledging points of mutual agreement
- d. The Chair will gather comments and perspectives from other members before a member speaks multiple times on an issue.
- e. The Chair will provide opportunities for brief public comment or announcements at the beginning or end of each meeting. Public comment will not exceed 20 minutes of allotted meeting time with a maximum of 2 minutes per individual, at the discretion of the Chair – the public is encouraged to provide written comments, and summarize them briefly in the public comment period. Time permitting, the Chair may provide opportunities for public comment at other times of the meeting with the consent of the committee, such as immediately before the group makes a decision. The agenda may indicate specific items where public comment is invited.
- f. When members identify issues that are outside the scope of the committee's purpose, the ideas will be documented in an "idea bin" for future use by others, and the group will continue with the agenda.

- g. Members are encouraged to share the committee's progress with their respective constituencies at meetings, by e-mail or through newsletters.

DECISION MAKING

1. The TAC is an advisory group. It will forward advice in the form of recommendations to the USC.
2. Consistent with city policies for advisory committees, decisions will be made with a majority vote of a quorum of the TAC members. A minority opinion report on contentious issues may be forwarded to the USC when advised by the TAC. The Chair or Facilitator may check-in with the group regarding "do we have consensus on this recommendation" then ask for vote to document the consensus. Consensus is reached when all of the members present either support or can live with the proposal.
3. A quorum is a majority of the voting members of the TAC. The concurrence of a majority of those members present and voting shall be required to decide any matter.
4. As a general protocol, the TAC will try not to revisit its recommendations. However, prior decisions can be reconsidered when there is consensus or a majority vote approving a reconsideration. In this case, the project team will advise on budget and schedule implications. As needed, the USC may direct the TAC to reconsider issues as directed.



Project History And Back-Casting Narrative

July 24, 2014

A SUMMARY OF UGB EXPANSION HISTORY

The City of Bend has been working on the UGB expansion since 2004. The project has weathered changes in policy direction from different city councils, numerous project managers and staff teams, and external conditions in the local economy and community. The following explains some of the history of the UGB expansion project.

- The process for demonstrating a need for the UGB expansion began in 2004, and included the development and adoption of a coordinated population forecast with Deschutes County, followed by three years of technical work on buildable lands inventories, housing needs analysis, economic opportunities analysis, forecasting additional residential and employment lands, and public facilities (water, sewer, transportation) planning. Local real estate markets were experiencing rapid price increases and shortages of buildable land, making the UGB expansion a contentious project.
- Between April 2007 and November 2008, the city and county (either jointly or separately) conducted 66 public meetings on the UGB expansion. These meetings included public hearings, workshops, planning commission and council work sessions, and meetings of the technical advisory committee. This process relied very heavily on staff to do the technical work as well as run advisory committee meetings.
- From September 2007 through October 2008, the Bend Planning Commission, along with liaisons from the County Planning Commission,

conducted weekly or bi-weekly work sessions that were open to the public and included time for public comments on the UGB expansion.

- In January 2009, the Bend City Council approved the UGB expansion proposal. A summary of the original proposal and small map showing the proposed boundary and land uses are provided in Exhibit D. This was followed by the Deschutes County Board of County Commissioners' approval of the same proposal on February 11, 2009. These local adoptions were followed by a number of appeals to the Land Use Board of Appeals and Land Conservation and Development Commission.
- On January 8, 2010, the Oregon Department of Land Conservation Development (DLCD) issued a Director's Report on the Bend UGB expansion proposal. This report remanded the proposal back to the City for further work. Please visit DLCD's web site pertaining to the City of Bend UGB expansion for DLCD's letters, reports, decisions, and other materials related to the Bend UGB. See the Oregon Department of Land Conservation and Development: http://www.oregon.gov/LCD/pages/report_on_bend_and_deschutes_ugb_amendment.aspx#director_s_response_to_the_appeals
- On January 29, 2010, the City of Bend submitted an Appeal of the Director's Report to the LCDC. Eleven other parties also filed appeals.
- On March 18 and 19, April 23, and May 12, 2010, LCDC held a public hearing on these twelve appeals of the Director's Decision on the UGB expansion. DLCD prepared a summary of the Commission's tentative decisions that can be downloaded from their website.
- The City wrote an October 6, 2009 letter requesting DLCD acknowledge the Public Facility Plans which were elements of the UGB expansion proposal. You may view DLDC's October 21, 2009 letter responding to the City's request.
- On Nov. 3, 2010 LCDC issued an order that partially acknowledges and partially remands Bend's proposed UGB expansion. Certain elements of the City's proposal have been approved (Acknowledged); the remaining elements require additional explanation and/or work (remand). The Commission's final order became final on Jan. 3, 2011.
- On January 19, 2011, the Bend City Council approved a motion to form a special task force comprised of three City Councilors and two Bend Planning Commissioners - referred to as the Remand Task Force (RTF) to act as official review body to assist staff in addressing issues raised in the LCDC Remand Order, and to help form a recommendation to the full City Council. The approach was designed to be a technical exercise led by the RTF and planning staff to meet the requirements of the LCDC Remand Order. See the

City of Bend website with RTF meeting materials:

<http://bendoregon.gov/index.aspx?page=52&parent=5432>

- Between March, 2011 and April 2013, the RTF approved work related to a number of tasks including the residential Buildable Lands Inventory, elements of the Housing Needs Analysis, park, school, and other land need, and other remand tasks. Some of this work included findings, other work included analysis that will be the basis for findings. This work was informally reviewed and approved by DLCD field and Salem staff. Since then, this work has been reaffirmed by the current City Council with the understanding that findings will need to be written on the Housing Needs Analysis. The City expects most, if not all, of this work to be used by the selected consulting team.
- In July of 2012, the city began a multi-year sewer collection system master planning process for the current and Acknowledged UGB (not any proposed UGB expansion). This project includes multiple consultants and public involvement and outreach strategy. This plan must be completed, and a Sewer Public Facility Plan Acknowledged, before the city can use it as a basis for analyzing different infill and UGB expansion scenarios as part of the Goal 14 boundary analysis directed by the LCDC Remand Order. This planning process is currently underway and expected to end in November of 2014. After this, the Sewer PFP will need to be adopted by the City Council and Acknowledged by DLCD.
- A Water System Master Plan for the current and Acknowledged UGB was completed in February, 2012. A Water System Public Facility Plan and corresponding amendments to the Bend Area General Plan were adopted, appealed, and after two appeals to and one remand from the Land Use Board of Appeals, has been Acknowledged. Like the Sewer PFP, this plan and the corresponding water model for the current UGB, will be used as the basis for evaluating different infill and UGB expansion scenarios as part of the Goal 14 boundary analysis directed by the LCDC Remand Order.
- Between 2009 and 2013, long-range planning staff working on the UGB decreased from six employees to two employees. This was the result of layoffs that occurred after the downturn in the economy, lower building and planning permit fees coming into the city, and retirements. During 2011 and 2012, the UGB project was not moving forward due to having fewer staff resources, staff working on the underlying PFP adoption and legal challenges, and a general lack of urgency due in part to the economic downturn.
- In early 2013, the city appointed a new project manager to the UGB remand. This resulted in outreach and presentations with the community and RTF,

developing a new approach to the UGB remand, and new timelines reflecting the PFP timelines and new project approach.

- On April 1, 2013, LCDC granted the City of Bend an extension to complete the LCDC Remand Order. The current deadline to submit an adopted submittal consistent with the LCDC Remand Order is June 30, 2017.
- In September 2013, the Bend City Council approved new project goals, a project approach and milestones, and date to complete the Bend UGB remand work. The direction set by the City Council is included in this RFP (per the project goal discussed earlier)
- In October 2013, the City Council decided that all seven councilors would serve on the RTF with two Planning Commissioners and one Deschutes County Commissioners. Meetings with the RTF have focused on deciding how to frame the project, when to accept new information versus using current information in the record, reviewing past work, and discussing the detailed requirements of the LCDC Remand Order. This work is being done to bring new members of the RTF up to speed and to reach agreement on the project approach in advance of selecting a consultant to perform the work.

BACK-CASTING NARRATIVE

The following narrative is from the perspective of an observer in the future looking back in time and describing how the UGB expansion project was successfully completed. This is presented to provide some perspective and be an example of how a successful project could be described.

In the Winter of 2014, a multi-disciplinary team was hired by the City of Bend to create a 20-year plan for Bend's future that met the requirements established by the Land Conservation and Development Commission (LCDC) Remand Order, and set the course for Bend to become one of the most unique and visionary communities in the West.

In 2014, Bend was in the process of recovering from a collapse of the housing market and resulting increase in the unemployment rate. Bend had boomed and busted, but was on the rebound. Residential and economic land supplies were again being reduced due to a faster than expected recovery of the housing market. Continued enrollment growth was pressuring the development of new schools at the urban fringe due to land shortages. Voters had decided to support continued investments in Bend's outstanding parks, recreation, and trail system. Oregon State University Cascades Campus was in the process of planning and building Bend's first stand-alone four-year college campus on Bend's west side. The city was in the process of completing entirely new plans for its water and sewer systems for the existing UGB, and making difficult decisions about

tradeoffs about natural resources, water and sewer rates, and the citizenry's ability to pay for public services to remedy deficiencies and serve anticipated growth. In addition, the City was investing over \$100 million in transportation projects through a General Obligation Bond and the Murphy Road Overcrossing Project, over \$30 million dollar enhancement to the City's sewer treatment plant, and over \$40 million dollar improvements to the City's water source, transmission, and treatment systems. It was clearly a time when the city as a whole needed a new plan to direct the growth that was being experienced, the enthusiasm for Bend's continued success, and residential and employment growth that was forecasted.

The UGB project and plan brought the community together in workshops, advisory committees, public events, and through new approaches to citizen involvement to help make decisions on technical and policy related questions posed by the LCDC remand. While the LCDC remand was legal and technical in nature, and the products developed met these legal and technical requirements, the City of Bend did not forget that this project had to result in a cohesive and concrete plan for Bend's future. This plan considered Bend's unique housing and employment markets and established a 20 year plan for redevelopment and future expansion. This plan developed and analyzed different ways for Bend to grow, presented likely impacts of different growth patterns, and allowed the public and decision makers to make informed decisions to guide future growth. Public infrastructure such as water, wastewater, and multi-modal transportation services were public services provided by the City of Bend, and the implications of growth on these systems was understood and quantified to inform decisions about future growth and capital improvements.

For a plan to succeed, it must be implemented. Since implementation of the plan required combinations of public financing, private financing, Capital Improvement Programs (CIP), System Development Charges (SDC), and public private partnerships, among other mechanisms, the vision for Bend's future considered how the plan would be paid for by current and future generations. The connection between land use patterns and transportation systems was a key element of the plan. The plan successfully integrated land use patterns with multi-modal transportation improvements and programs. The project resulted in a plan that reduced the reliance on the automobile, enhanced the bicycle and pedestrian systems, and also identified the role of transit in meeting land use development goals.

The LCDC remand required the city to closely examine opportunities for redevelopment and infill. The project team led an analysis and community discussion of likely types, scales, and locations for future redevelopment in the City. Infill and redevelopment are often controversial subjects at the neighborhood level, so the city and project team sought to get high level buy-in of opportunities for redevelopment that could be supported by the community.

The process of expanding a UGB is always controversial, and the project team and city developed agreement on how the boundary decision would be made consistent with the direction from the LCDC remand prior to undertaking the actual analysis involving redevelopment and expansion. The boundary analysis considered the legal requirements specified in the LCDC remand, but where appropriate, also applied community and policy maker values to inform the analysis.

Through a process of scenario planning informed by direction from the LCDC Remand Order and the community, the public and decision makers were informed about the implications of different land use and infrastructure plans. Tradeoffs, benefits, costs, advantages, and disadvantages of different types of development patterns were explicitly discussed. The resulting conversation with decision makers and the community was well informed, unbiased, and transparent. The final decision on the mix of infill, redevelopment, and UGB expansion was the result of decision makers having the best available information from a process that involved Bend's well informed, civic minded citizens.

The end products of the project included major updates to the Bend General Plan text and policies. These updates included changes to the City's Transportation Systems Plan (TSP), and added new technical appendices regarding housing and employment land. The analysis of the boundary referenced technical studies of water and sewer systems that were later used as a basis for new Public Facilities Plans. For the first time since 1998, the City of Bend had an updated General Plan. The analysis and input was then combined to inform the creation of findings that illustrated how the proposal met the requirements of the LCDC remand and the administrative rules and laws of the State of Oregon.

Throughout the project, the city and consultant partnered to provide accurate and high quality analysis. This information was then used to further the conversation with the public and decision makers. The pros, cons, and tradeoffs of different growth policies were explained and discussed throughout the project. This approach allowed the public to be involved, for decisions to be based on facts as well as values, and to be transparent. In a growing community like Bend, decisions about growth can be controversial, but controversy in this project was minimized through a transparent analysis and discussion of the issues. Where there was controversy, decisions were based on a clear connection between facts, inferences, and meeting the legal and procedural requirements of the LCDC remand.

The aggressive timeline established by the City Council was achieved through a project design which reduced the risk of drawn out delays and another significant remand of the final product. Finishing the project by early 2016 was critical to the overall success of the city during a period of economic recovery and growth in the housing sector. The successful completion of the plan created a plan to direct growth and redevelopment,

created a degree of certainty about the near future, but also built new relationships between community partners and previously opposing interest groups. Finishing the project created certainty about Bend's future, and the community's energies focused on implementation and moving Bend forward.



Public Involvement Approach and Strategies

June 10, 2014

Draft

OVERALL GOALS

- Inform people about the planning process and how they can participate in a clear and effective manner.
- Use a variety of tools and strategies to engage key stakeholders and other community members in the process and incorporate the results in planning efforts and analyses.
- Coordinate planning and public involvement efforts among this and other related planning processes, as well as broader city communication strategies and efforts.

COMMUNITY ENGAGEMENT TOOLS AT A GLANCE

Tool	Audiences	Related Communication Materials and Strategies
Stakeholder Interviews	Key community stakeholders, interest groups	<ul style="list-style-type: none"> • Key issues, themes, core values • Public involvement strategy
Online tools - City Web site, MetroQuest, BendVoice	All community members/ general public	<ul style="list-style-type: none"> • Schedule • Project news and updates • Meeting materials • Fact sheet(s), FAQs • Questionnaires • Maps and reports • Contact Information • Links to other planning efforts • Key communication themes
Social media	All community members/tech savvy/younger residents	<ul style="list-style-type: none"> • Facebook • Twitter
Printed materials	All community members/ general public	<ul style="list-style-type: none"> • FAQs • Summary memos, reports, findings, maps, etc.
Media notices, op-ed articles, briefings	Media organizations, general public	<ul style="list-style-type: none"> • In coordination with City staff and broad city communication strategy

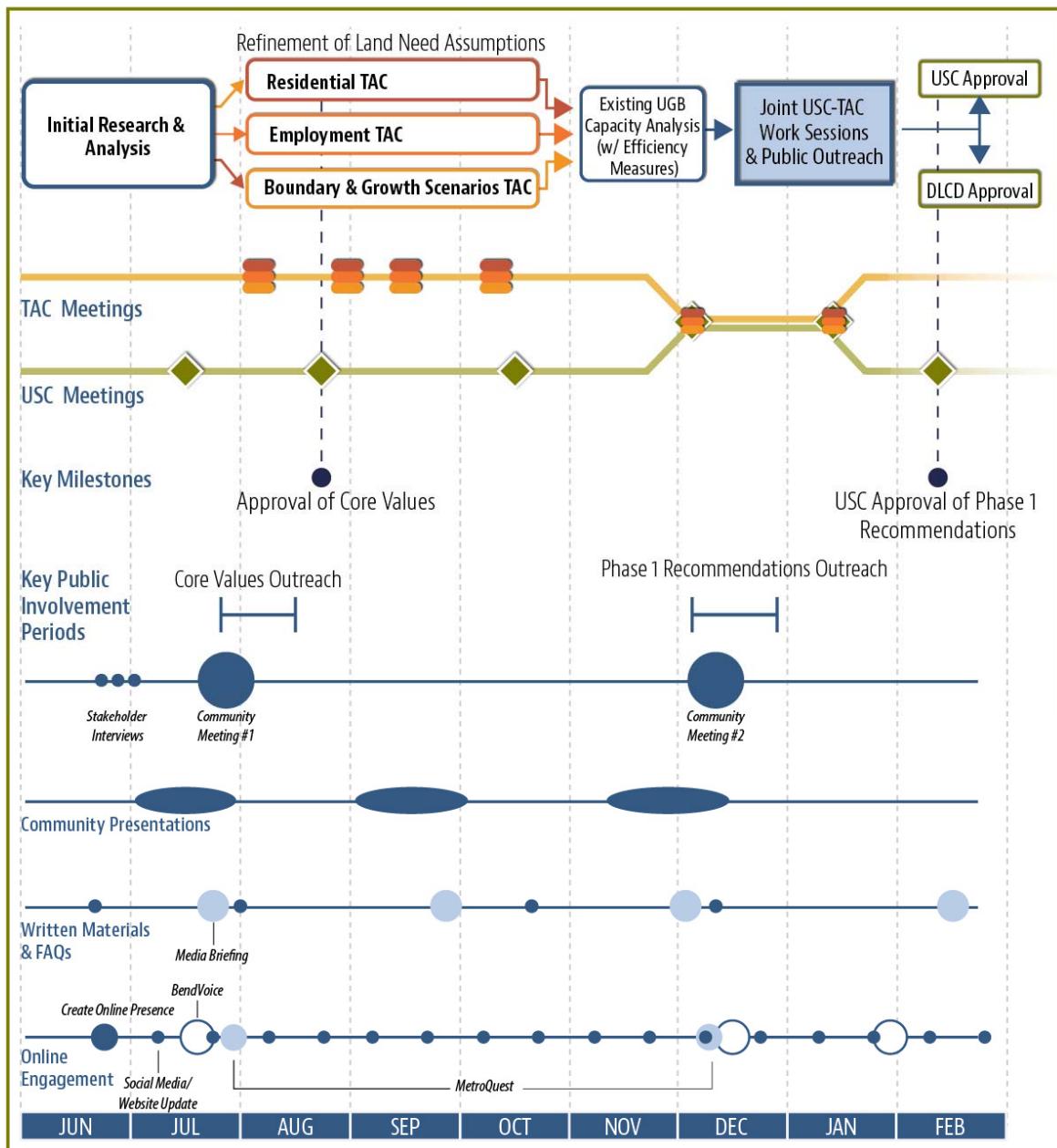
Tool	Audiences	Related Communication Materials and Strategies
Technical Advisory Committees (TAC)	Technical experts, key stakeholders, interest groups; general public can attend	<ul style="list-style-type: none"> • Agendas • Maps and summary memos or reports via Web site • Opportunities for public participation, comment
Steering Committee (SC)	City and county decision-makers	<ul style="list-style-type: none"> • Agendas • Maps and summary memos or reports via Web site • Opportunities for public participation, comment
Planning Commission Briefings	Planning Commission, general public	<ul style="list-style-type: none"> • Agendas • Maps and summary memos or reports via Web site • Updates via staff reports • PowerPoint • Summary notes
Community Meetings	All community members/ general public	<ul style="list-style-type: none"> • Flyers • FAQs/Handouts • Questionnaires • Maps and summary memos or reports via Web site • PowerPoint • Summary notes
Community Group Meetings & Events/ Speakers Bureau	Local community groups, general public	<ul style="list-style-type: none"> • FAQs/Handouts • Questionnaires • Maps and summary memos or reports via Web site • Summary notes
Direct Citizen Communications	All community members/ general public	<ul style="list-style-type: none"> • Contact list • Call-in number • City staff contact • Web site

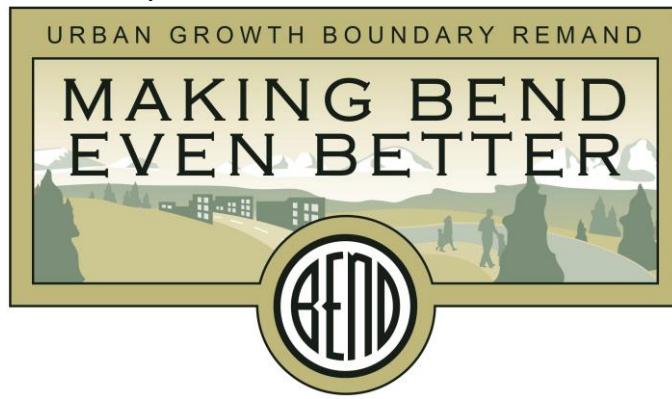
Project Schedule: *Public Involvement*

The schedules shown below are preliminary and subject to change.

TAC = Technical Advisory Committee

USC = UGB Steering Committee





Project Team

Roster
July 24, 2014

City of Bend	
Eric King	City Manager
Jon Skidmore	Assistant City Manager
	Principal Planner, City Project Manager brankin@bendoregon.gov
Brian Rankin	541-388-5584
	Senior Planner dsyrnyk@bendoregon.gov
Damian Syrnyk	541-312-4919
Nick Arnis	Department Head, Growth Management Department
	Department Head, Engineering, Infrastructure, and Planning Department (EIPD)
Tom Hickmann	
Mary Winters	City Legal Counsel
Gary Firestone	City Assistant Legal Counsel
Justin Finestone	Department Head, Communications Department
	Community Relations Manager, Communications Department
Anne Aurand	
Other city staff as needed	

Angelo Planning Group Team	
Angelo Planning Group	
Joe Dills	Consultant team project manager
Mary Dorman	Goals 14, 5, & 7 task lead
Frank Angelo	Principal-in-charge
Becky Hewitt	Assistant project manager, planning, GIS/scenarios
Matt Hastie	Public involvement task lead
DKS Associates	
Chris Maciejewski	Transportation analysis lead
ECONorthwest	
Bob Parker	Goal 9 & 10 task lead; Goal 14 advisor
Beth Goodman	Goal 9 & 10 compliance
Lorelei Juntunen	Fiscal impact task lead
Fregonese Associates	
John Fregonese	Scenario advisor
Glen Bolen	Scenarios / Envision model
Alex Joyce	Scenarios / Envision model
Leland Consulting Group	
Chris Zahas	Market analysis
MetroQuest	
Mike Walsh	MetroQuest on-line tool
Norma Hogan	MetroQuest on-line tool
MIG	
Jay Renkens	Urban design
The Mary Orton Company	
Mary Orton	Steering Committee facilitator, public involvement advisor
Anne George	Public involvement support
Joy Cooper	Public involvement support



Meeting Agenda

Residential Technical Advisory Committee

Monday, August 4, 2014 10 AM – 12:30 PM

City Council Chambers, Bend City Hall

Meeting Purpose and What is Needed from the TAC

The two central questions for the Residential TAC to address are:

- How much land is needed for housing and related uses to the year 2028?
- What “residential efficiency measures” are best for Bend?

This first meeting will set the foundation for answering the land needs question.

Specifically, we will recap the important Remand issues, learn about and discuss demographic/ housing trends, and then review an initial “library” of housing types to be used in preparing growth scenarios. Following the meeting, the team will use the feedback to prepare recommendations for housing mix and density to be discussed in Meeting 2 on August 25th.

The specific discussion questions, i.e. the feedback we would like from the TAC, are listed as the bulleted discussion questions under each agenda item. They are a starting point for the agenda.

1.	Welcome and Introductions	10:00 AM
	<ul style="list-style-type: none"> a. Welcome b. Self-introductions 	Brian Rankin All
2.	Election of Chair and Vice Chair	10:10 AM
	<ul style="list-style-type: none"> a. Nominations b. Vote and confirmation 	Facilitator
3.	Demographic and Housing Trends	10:20 AM
	<ul style="list-style-type: none"> a. Building on past work b. Context – How demographic/housing trends and housing types and characteristics relate to Goal 10 – Housing, the 	Brian Rankin Bob Parker, ECONorthwest

For additional project information, visit the project website at <http://bend.or.us> or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584



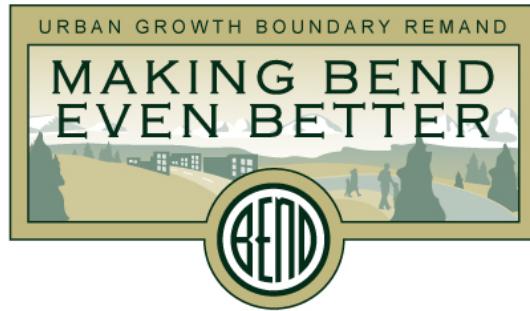
Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact the City Recorder no later than 24 hours in advance of the meeting at rchristie@ci.bend.or.us, or fax 385-6676. Providing at least 2 days notice prior to the event will help ensure availability.

	Remand, Bend's Housing Needs Analysis and the draft project goals.	
	<ul style="list-style-type: none">• What questions/comments does the TAC have on the context and how this information will be used?	
c.	Demographic and housing trends and implications for Bend's future housing mix	Chris Zahas, Leland Consulting Group
	<ul style="list-style-type: none">• How does the TAC see these trends playing out in Bend?• What other trend insights/data do you have on the subject?	
4.	Housing Types	11:30 AM
a.	Presentation of an initial "residential building library" for Bend – examples of housing types to be included in the Envision Model	Fregonese Associates
	<ul style="list-style-type: none">• Which of presented housing types are good fits for Bend, given the demographic trends we discussed?• What housing products are missing that make sense in Bend and should be added to the library?• Are there specific site suitability/location criteria for certain housing types?	
5.	Adjourn	12:30 PM

Memorandum

July 28, 2014



To: Residential Lands Technical Advisory Committee
Cc: Bend Staff
From: APG Consulting Team
Re: SUMMARY OF KEY REMAND ISSUES RELATED TO RESIDENTIAL LANDS

INTRODUCTION

This memorandum provides background information for the first meeting of the Residential Lands Technical Advisory Committee (TAC), specifically, a brief summary of Remand issues related to housing mix and density. As a general approach, issues brought to the TAC for discussion will be major issues where options exist that can be informed by local input. Many of the Residential Lands Remand issues are narrow and technical/legal in nature and are relatively straightforward to address. A list of Remand issues for residential lands is presented in Appendix A.

The charge of the residential lands TAC is:

- Confirm residential land need for 2008-2028 planning period that will feed into the Phase 1 capacity analysis of the existing UGB and Phase 2 analysis of UGB expansion alternatives
- Provide feedback/direction on most promising efficiency measures for residential lands

In short, the Residential Lands TAC will address the following:

- How much land is needed for housing and related uses to 2028?
- What residential efficiency measures are best for Bend?

Building on Past Work

The Remand Order specifies work that has been approved by LCDC and work that was not approved. Since the Remand Order, various task forces and the City Council have approved some of the Remand Order issues that required reworking. The direction from the City Council and UGB Steering Committee is to complete the work as soon as possible, with community input, and assistance from a consulting team. In addition, they have stated that work previously approved by post-remand committees (RTF and USC) NOT be reconsidered at this time. This work was also reviewed by DLCD staff, who approved the approach and findings to these few remand items. This not only saves time, it saves money by not having to reconsider these issues anew. It is fair to say that few issues have been approved prior to this new approach to

the project, and that the major remand issues are still unresolved and require guidance from all the TACs.

Planning Horizons and the Remand

An important consideration is that this a Remand and partial acknowledgement of a decision made in December 2008. Thus, the TAC's work will focus on issues that need resolution from the Remand. Following is guidance from the Bend City Attorney on the issue of planning horizons and new information:

The Commission's [i.e. LCDC's] role is not to substitute itself for the city, or make a new decision today, starting from scratch, just as the RTF's [Remand Task Force] and City Council's roles are to carry out the Remand requirements spelled out by the Commission. Rather, LCDC, the RTF, and City Council will review the City's UGB expansion as if it were 2008. This makes sense given that a UGB expansion is based on the amount of land that the city needs for future residential and employment uses, over the 20-year planning period. Seeing the Remand through the lens of 2008 also keeps the data, timeframe, and analysis internally consistent. Here, the planning period is 2008 to 2028, and is based on the coordinated population forecast upheld on appeal to LUBA.

In summary, the planning horizon is 2008-2028 and the City can choose to reanalyze data already in the record, or add data that could have been available through 2008, to comply with the Remand requirements on residential land needs. The exception to this general rule is when new information must be reconsidered in order to meet the requirements of the Remand Order. For sake of the Residential TAC, new information can and should be considered around infill and redevelopment and efficiency measures.

The City's Obligation under Goal 10

The language of Goal 10 and ORS 197.296 refers to housing *need*: it requires communities to provide needed housing types for households at all income levels. Goal 10's broad definition of need covers all households—from those with no home to those with second homes.

State policy does not make a clear distinction between need and demand. Following is a definition used by ECONorthwest in Goal 10 compliance work for multiple Oregon cities, which we believe to be consistent with definitions in state policy:

- *Housing need* can be defined broadly or narrowly. The broad definition is based on the mandate of Goal 10 that requires communities to plan for housing that meets the needs of households at all income levels. Goal 10, though it addresses housing, emphasizes the impacts on the households that need that housing. Since everyone needs shelter, Goal 10 requires that a jurisdiction address, at some level, how every household will be affected by the housing market over a 20-year period. Public agencies that provide housing assistance (primarily the Department of Housing and Urban Development – HUD, and the Oregon Housing and Community Services Department - HCS) define housing need more narrowly. For them, households in need do not include most of the

households that can purchase or rent housing at an “affordable” price, consistent with the requirements of their household characteristics. Households that cannot find and afford such housing have need: they are either unhoused, in housing of substandard condition, overcrowded, or paying more than their income and federal standards say they can afford.

- *Housing market demand* is what households demonstrate they are willing to purchase in the market place. Growth in population means growth in the number of households and implies an increase in demand for housing units. That demand is met, to the extent it is, primarily by the construction of new housing units by the private sector based on its judgments about the types of housing that will be absorbed by the market. ORS 197.296 includes a market demand component: buildable land needs analyses must consider the density and mix of housing developed over the previous five years or since their most recent periodic review, whichever is greater. In concept, what got built in that five-year period was the *effective demand for new housing*: it is the local equilibrium of demand factors, supply factors, and price.

In short, a housing needs analysis should make a distinction between housing that people might need (a normative, social judgment) and what the market will produce (an observable outcome). Goal 10 states this requirement as follows:

“Buildable lands for residential use shall be inventoried and plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.”

The City’s obligation under Goal 10 is to plan for housing need. In practical terms that means the city needs to determine (1) how many new housing units are needed, and (2) the mix and density of new housing. Note that the private sector builds housing in response to demand; what the market builds and what the community needs may not be the same. **The City’s obligation is to designate enough land in appropriate plan designations (e.g., single-family, multifamily, etc.) to accommodate the identified need.**

HOUSING MIX AND THE REMAND

This section describes Remand issues that are related to housing mix and density. In this first meeting, the Residential TAC will focus on an overview of broad demographic trends (based on data that was available in 2008) that will influence the need for housing and housing product types to 2028.

Population Assumptions and Bend’s Housing Unit Forecast

Some of the basic assumptions for Bend’s housing unit need for the 2008-2028 planning period have already been acknowledged by LCDC and will not be reopened through this process. Key assumptions are reflected in Table 1.

Table 1: Housing Unit Forecast: 2008 to 2028

Population forecast for 2028	115,063
(-) Less Population on 7/1/08	76,551
(=) New population 2008 to 2028	38,512
(-) Less population in group quarters (2.3%)	886
(=) New population in households	37,626
(/) Divided by household size (2.4)	
(=) Equals new occupied housing units	15,678
(+) Plus vacancy factor (6.4%)	1,003
= New housing units 2008 to 2028	16,681

Source: Table 1-1 from the Draft 2014 Bend Housing Needs Analysis

The City used “safe harbors” supported by Census data for the assumptions relating to population in group quarters, household size and vacancy factor.

Housing Trends and Densities Documented by the City

Additionally, the City has documented the types of housing units permitted in Bend since the last periodic review as required by statute and Goal 10. Table 2 displays the changes in the mix of housing in Bend between 1998 and 2008. It includes the mix of housing as of 1998, after the adoption of the current General Plan, between 1998 and 2008, and in 2008. The presentation of housing mix describes three types of housing, consistent with the Commission’s Order and OAR 660-008-005¹.

Table 2: Presentation of Housing Mix

Type of Housing	Pre-1998		1998-2008		2008	
	Number	Distribution	Number	Distribution	Number	Distribution
SFD	13,439	70%	11,528	73%	24,967	71%
SFA	48	0%	610	4%	658	2%
MFA	5,708	30%	3,596	23%	9,304	27%
Total	19,195	100%	15,734	100%	34,929	100%

Notes:

SFD – Single family detached: includes detached single family dwellings and manufactured homes on individual lots

SFA – Single family attached: includes attached single family housing such as row houses

MFA – Multi-family attached: includes Condominiums, multi-family housing, duplexes, and manufactured homes in parks

Source: City of Bend building and land use permit records; Table 4-2 of Draft 2014 Bend Housing Needs Analysis

Statewide planning rules require that the City analyze the historic density and mix of housing by plan designation (Table 3). The historic densities shown in Table 3 are an indicator of “housing

¹ See OAR 660-008-005, Definitions, online at http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_008.html.

“demand” as described above. The City will need to make an additional determination related to “needed density and mix” based on expected demographic and economic characteristics of Bend households.

Table 3. Allowed and Actual Built Residential Densities by Zone as of 2008²

	Plan Designation			
	RL	RS	RM	RH
Allowable Density By Zone (Units/Gross Acre)	1.1 - 2.2	2.0 - 7.3	7.3 - 21.7	21.7 - 43.0
Allowable Density By Zone (Units/Net Acre)	1.4 - 2.8	2.5 - 9.1	9.1 - 27.1	23.9 – 47.3
Average Built Density 2008 (Units/Net Acre)	2.1	3.9	9.9	15.5

Source: Table 6-5 from Draft 2014 Bend Housing Needs Analysis

Remand Requirements

The two key factors for estimating residential land need from 2008-2028 relate to the assumed mix of housing types (single family detached, single family attached and multifamily) and the assumed density (units per acre) for each housing type. This is called the “housing needs determination” in the context of the statewide planning system.

The Remand Issues that focus specifically on housing mix and density are highlighted below.

Remand Issues:

- *Goal 10, the Goal 10 implementing rule, and the needed housing statutes require that the City analyze needed housing types at particular price ranges and rent levels commensurate with the financial capabilities of present and future residents of area residents.*
- *...under Goals 10 and 14 the City must consider the future housing needs of area residents during the (twenty-year) planning period. The purpose of the analysis of both past trends and future needs is that -- if there is a difference -- the local government must show how it is planning to alter those past trends in order to meet the future needs.*
- *If the future needs require a different density or mix of housing types than has occurred in the past, then ORS 197.296(7) requires the local government to show how new measures demonstrably increase the likelihood that the needed density and/or mix will be achieved.*

² The conversion from gross to net density is achieved for the RL, RS, and RM zones by multiplying the gross density ranges by 1.25 to account for 25% of gross site area typically dedicated for streets and utilities. For the RH zone, a 10% dedication factor is used, acknowledging that a typical multi-family housing site in that zone may already have existing street frontage, thus the additional amount needed for dedication is less.

Conclusion

To meet the requirements of the Remand, the housing needs analysis must make stronger linkages between forecast growth, the demographic characteristics of current and new residents, the capacity of those residents/households to pay for housing at specific price and rent levels, and housing types that will meet that need.

The specific steps in the process of relating demographic characteristics to housing need are described in handbook "Planning for Residential Growth," (DLCD 1997) which outlines six steps necessary to complete a housing needs analysis that satisfies state law:

- Step 1 – Project the number of new housing units needed in the next 20 years.
- Step 2 – Identify relevant national, state, and local demographic and economic trends and factors that may affect the 20-year project of structure type mix.
- Step 3 – Describe the demographic characteristics of the population, and, if possible, household trends that relate to demand for different types of housing.
- Step 4 – Determine the types of housing that are likely to be affordable to the projected households based on household income.
- Step 5 – Estimate the number of additional needed units by structure type.
- Step 6 – Determine the needed density ranges for each plan designation and the average needed net density for all structure types.

To summarize, the City is required to consider its needs for future housing based on type and density over a 20-year planning period. This analysis of housing must examine current and future demographic and economic trends that will influence the types of housing produced and purchased or rented. In addition, this analysis must consider the types of housing needed at various price ranges and rent levels. One of the final steps in this process is an estimate of the number of additional units that will be needed by structure type. Once the City has done this, the City must show that adequate land has been or will be planned and zoned within the existing UGB, and if necessary, any area added through an expansion, to demonstrate that the General Plan satisfies Goal 10.

The additional analysis primarily relates to Steps 2-4, which will be discussed in detail by the Residential Lands TAC.

The draft HNA includes analysis of all of these steps. Much of the analysis in the draft HNA was not a part of the Remand and will not need to be revisited. Additional analysis will be necessary to justify the City's determination of housing need in support of a revised UGB proposal.

APPENDIX A: LIST OF REMAND ISSUES

Appendix A provides a list of all Remand issues related to housing needs and residential land efficiency measures. The numbering of directives in the second column starts with number 15 because this list is an excerpt of the larger Index of all directives to the City on Remand.

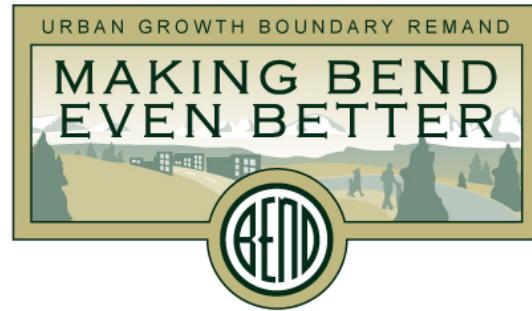
Remand Subissue	Directives to City on Remand
Housing Needs Analysis – Goal 10	
2.3 (Analysis) Pages 31-32	<p>15. While the City is free to <i>separate</i> the three basic housing types required to be analyzed by statute into subcategories, it may not <i>combine</i> categories as this effectively makes it impossible to do the analysis required by statute</p> <p>16. Goal 10, the Goal 10 implementing rule, and the needed housing statutes also require that the City analyze needed housing types at particular price ranges and rent levels commensurate with the financial capabilities of present and future residents of area residents.</p> <p>17. ...under Goals 10 and 14 the City also must consider the <i>future</i> housing needs of area residents during the (twenty-year) planning period. The purpose of the analysis of both past trends and future needs is that -- if there is a difference -- the local government must show how it is planning to alter those past trends in order to meet the future needs.</p> <p>18. if the <i>future</i> needs require a different density or mix of housing types than has occurred in the past, then ORS 197.296(7) requires the local government to show how new measures demonstrably increase the likelihood that the needed density and/or mix will be achieved.</p>
2.3 (Conclusion) Pages 32-33	<p>19. remands the city's decision for it to revise its findings and chapter 5 of its comprehensive plan consistent with the preceding analysis</p>
2.3 (Director's Report) Pages 45-46	<p>20. Revise the Housing Needs Analysis to comply with ORS 197.296, OAR 660-008-0020, and ORS 197.303. The Housing Needs Analysis must include an evaluation of the need for at least three housing types at particular price ranges (owner occupancy) and rent levels (renter occupancy), and commensurate with the financial capabilities of current and future residents. Those housing types include: (a) attached single family housing (common-wall dwellings or rowhouses where each dwelling unit occupies a separate lot pursuant to OAR 660-008-0005(1)); (b) detached single family housing (a housing unit that is free standing and separate from other housing units pursuant to OAR 660-008-0005(3); and (c) multiple family housing (attached housing where each dwelling unit is not located on a separate lot pursuant to OAR 660-008-0005(5));</p> <p>21. Adopt the revised Housing Needs Analysis as an element of the comprehensive plan, along with findings that demonstrate how the revised Housing Needs Analysis complies with the applicable statutory, goal and rule requirements described above;</p> <p>22. Analyze what the mix of plan designations should be in the UGB expansion area in direct relation to the city's projected housing needs, and consider the</p>

Remand Subissue	Directives to City on Remand
	adoption of new residential plan districts that encourage more multi-family, higher density single family housing, and other needed housing types for a greater proportion of the expansion area, in order to meet the city's and the region's demonstrated housing needs;
2.4 (Analysis) Page 35-	<p>23. The City must (under Goal 10 and the needed housing statutes) plan for an adequate supply of buildable land for affordable housing, including workforce housing (whether that land is inside the prior UGB, on lands in a UGB expansion area, or both).</p> <p>24. On remand, the City also must explain why it believes particular areas planned to meet the future housing needs of residents are appropriate for the expected housing types.</p>
2.4 (Conclusions) Page 35	<p>25. The City must plan lands within its existing UGB and any expansion area so that there are sufficient buildable lands in each plan district to meet the city's anticipated needs for particular needed housing types.</p> <p>26. To the extent that the City continues to determine that there is a current and projected future shortage of land for affordable housing that translates into a need for more multi-family housing, the City must show how it's planning for lands within the exiting UGB and lands in any expansion area will provide sufficient buildable lands in plan districts that are designed to meet that need.</p> <p>27. If the City continues to project a future housing mix of 65% single-family and 35% multi-family, it must explain why that housing mix will provide sufficient buildable lands to meet its projected future housing needs over the planning period, and that projection and explanation must be supported by an adequate factual base.</p>
2.8 (Analysis) Page 47	28. The City agreed to adopt findings clarifying why its decision is consistent, and the Commission concurs that this issue can be resolved by the adoption of findings explaining why the city's decision is consistent with its plan policies.
2.8 (Conclusion) Page 47	29. The Commission denies the city's appeal for the reasons stated above, but also clarifies that its remand is solely for the lack of adequate findings by the City.
HNA and Efficiency Measures	
3.1 (Analysis) Pages 50-53	<p>30. LCDC concluded that the City's densities for housing were, in their view, low</p> <p>31. Need to determine if raising the minimum densities of the residential zones is necessary to encourage the development of needed housing</p> <p>32. On remand, the City must address both prior trends (as required by ORS 197.296(5)) and recent existing steps it already has taken to increase density and meet its housing needs. The requirement of Goal 14 to reasonably accommodate future land needs within its UGB does not allow the city to use an unreasonably conservative projection of future development capacity</p> <p>33. Nevertheless, given the apparent market demand for increasing density</p>

Remand Subissue	Directives to City on Remand
	<p>relative to existing planning and zoning designations, the City must explain why increasing the density allowed, particularly for large blocks of vacant land outside of existing established neighborhoods, is not reasonable during the 20-year planning period.</p> <p>34. The Director's Decision identifies a number of other efficiency measures that the City should consider (drawn from the city's own Residential Lands Study), but that list is not intended to be exclusive or directive; it is up to the City to determine in the first instance what is reasonable to accommodate its future housing needs within its UGB (<u>See Director's Decision 45-46</u>)</p>
3.1 (Conclusion) Pages 53-54	<p>35. the City must reconsider the projected capacity of lands within its prior UGB for residential development during the planning period in light of its revised BLI, recent development trends, and existing and potential new measures to increase that capacity.</p> <p>36. The measures the City considers must include, but are not limited to, evaluating the infill capacity (including plan and zone changes) of residential lands with more than five acres that are vacant or partially vacant.</p> <p>37. The City also should consider the measures as listed in the Director's Decision, at 45-46, that are related to efficiency measures.</p>
3.1 (Director's Report)	<p>38. Consider measures to encourage needed housing types within additional areas of the city, including rezoning of areas along transit corridors and in neighborhood centers;</p> <p>39. Consider splitting the existing RS zone, which covers most of the residential areas of the city, into two or more zones in order to encourage redevelopment in some areas while protecting development patterns in well-established neighborhoods;</p> <p>40. In areas where the city is planning significant public investments, consider upzoning as a means to help spread the costs of such investments;</p> <p>41. Consider strengthening the minimum density provisions in the existing UAR and SR 2½ zones by eliminating PUDs and other clustering tools; and</p> <p>42. Consider strengthening the minimum density provisions in the existing RS and RM zones to encourage development of needed housing types, rather than relying on low density residential development.</p>
3.2 (Analysis) Pages 55-56	<p>43. Under Goal 10 and ORS 197.296 the City must adopt definitive measures and find, based on an adequate factual base, that those measures demonstrably increase the likelihood that residential development will occur at the housing types and density and at the mix of housing types required to meet housing needs over the next 20 years.</p> <p>44. The City agreed, on remand, to include provisions in the General Plan requiring adoption and implementation of the Central Area Plan and rezoning of lands along transit corridor as described in its findings.</p>

Remand Subissue	Directives to City on Remand
3.2 (Conclusion) Page 56	<p>45. ...directs the City on remand to address the requirements of ORS 197.296(7) and (9) with respect to any new efficiency measures that it relies on.</p> <p>46. The City may do this by adopting specific timelines for initiation and completion of efficiency measures, including detail about the outcomes that will be achieved as part of the Housing Element of its comprehensive plan.</p> <p>47. The City also must adopt findings that show why those outcomes are more likely to occur as a result of the measure(s), and how they relate to needed housing types and locations.</p> <p>48. In addition, in coordination with its Work Plan for Outstanding Metropolitan Transportation Planning Work (issue area 8), if the City continues to rely on these two particular measures, it must:</p> <p>49. Within two years following acknowledgement, complete and adopt the Central Area Plan. The Plan must include provisions that plan for at least 500 additional medium-density and high-density housing units over the planning period.</p> <p>50. Within two years following acknowledgement, complete and adopt provisions of its comprehensive plan that authorize at least 600 additional medium-density and high-density housing units on lands abutting or within ¼ mile of existing or planned transit routes.</p>

Memorandum



July 29, 2014

To: Residential Lands Technical Advisory Committee
Cc: Bend Staff
From: APG Consulting Team
Re: Demographic Characteristics and Trends that will Affect Housing Demand in Bend for the 2008-2028 period

This memorandum provides a summary of demographic characteristics and changes in Bend's population that will affect Bend's housing market over the 2008 to 2028 period. The questions addressed in this memorandum are:

- What are the key demographic changes and trends that may affect Bend's housing market over the 2008-2028 planning period?
- What are the implications of these demographic trends for Bend's housing market, including demand for types of housing, housing tenure, and location of housing in Bend?

The purpose of this analysis is to address issues in the remand related to Bend's proposed mix and density of new housing. These questions will be discussed at the first Residential Lands Technical Advisory Committee (TAC) meeting.

In the 2005 housing needs analysis, Bend proposed that 65% of new housing would be single-family detached housing types and 35% would be multifamily housing types. The remand required Bend to make stronger linkages between forecast growth, the demographic characteristics of current and new residents, the capacity of those residents/households to pay for housing at specific price and rent levels, and housing types that will meet that need.

This memorandum presents information about demographic and other trends to describe the linkages between forecast growth, the demographic and socioeconomic characteristics of Bend's households (current and future), and housing need. The memorandum is organized into the following sections:

- **Demographic and socioeconomic factors affecting housing choice** describes the broad, often national, trends that affect housing choice, presents information about these trends in Bend, and discusses the implications of these trends for housing demand and need in Bend. The information summarized in this section is presented in greater depth in the full Housing Needs Analysis report, which will be available later in the project. The

citations for the analysis in this section are presented as endnotes, at the very end of the memorandum.

- **Appendix A. Research about demographic changes and implication for future housing mix** presents information from the academic literature about demographic and socioeconomic trends that affect housing demand and need and the implications of these trends on future housing demand. Appendix A presents key findings from the literature, organized by key demographic trend, as well as links to key articles or reports available for optional additional reading.

DEMOGRAPHIC AND SOCIOECONOMIC FACTORS AFFECTING HOUSING CHOICE

In the context of housing markets, past and current housing conditions demonstrate *the intersection of the forces of housing supply and demand at a price of housing*. Housing demand is derived from the characteristics of households that create or are correlated with *preferences* for different types of housing, and *the ability to pay* (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

One way to forecast housing demand is with detailed analysis of demographic and socioeconomic variables. If one could measure housing demand for each household, one might find that every household has a unique set of preferences for housing. But no city-wide housing analysis can expect to build from the preferences of individual households. Most housing market analyses that get to this level of detail describe *categories* of households on the assumption that households in each category will share characteristics that will make their preferences similar.

The main demographic and socioeconomic variables that may affect housing choice include: age of householder, household composition (e.g., married couple with children or single-person household), size of household, ethnicity, race, household income, or accumulated wealth (e.g., real estate or stocks).

The research in this memorandum is based on numerous articles and sources of information about housing. Appendix A presents an analysis of our research of the academic literature about the relationship between demographics and housing demand. The literature about housing markets identify the following household characteristics as those most strongly correlated with housing choice: age of the householder, size of the household, and income:

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. For example, a person may choose to live in an apartment when they are just out of high school or college but if they have children, they may choose to live in a single-family detached house.
- **Size of household** is the number of people living in the household. Household size is related to household composition, which describes the age and relationships of people living within the household. Younger and older people are more likely to live in single-person households and people in their middle years are more likely to live in multiple person households (often with children).
- **Income** is the income from all people in the household who have income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own). A review of census data that analyzes housing types by income in most cities will show that as income increases, households are more likely to choose single-family detached housing types. Consistent with the relationship between income and housing type, higher income households are also more likely to own than rent.

Trends affecting housing choice in Bend

The national demographic trends that will affect housing demand across the U.S., as well as Oregon and Bend are:

- **Aging of the baby boomers.** By 2030, the youngest baby boomers will be over 65 years old. By 2030, people 65 years and older are projected to account for about 20% of the U.S. population, up from about 12% of the population in 2000.¹
- **Growth in Echo Boomers.** Echo Boomers are a large group of people (Generation Y) born from the late-1970's to early 2000's, with the largest concentration born between 1982 and 1995. By 2030, Echo Boomers will all be older than 35 years old, with the oldest Echo Boomers over 50 years old. The Echo Boomers will form households and enter their prime earnings years during the 20-year planning period.²
- **Growth of Hispanic and Latino population.** One of the fastest growing groups in the U.S. will be the Hispanic and Latino population. By 2030, Hispanic and Latino population is projected to account for about 20% of the U.S. population, an increase from about 13% of the U.S. population in 2000. Growth in the Hispanic population will be the result of natural increase (more births than deaths) and immigration from other countries.³

Tables 1 through 3 describe the changes in these demographic and socioeconomic trends and their potential effect on housing choice in Bend over the 2008-2028 planning period. These tables discuss the characteristics of the householder, which is the person identified (by the household) as the head of household in the Census. Data in these tables is from the U.S. Census' 2007 American Community Survey, except where noted.

Table 1. Baby boomers (Age in 2008: 42 to 61 years old; Age in 2028: 62 to 81 years old)⁴

Demographic trends	<p>Baby boomers are the fastest growing segment of Deschutes County's population.</p> <ul style="list-style-type: none"> • People over 65 years are forecast to grow from 13% of Deschutes County's population in 2000 to 24% in 2030.⁵ • Growth in people over 65 years old in Deschutes County will result in growth of nearly 40,000 people in this age group in Deschutes County or 35% of population growth over the 2000 to 2030 period.⁶
Effect of trends on household choice	<p>Age of household head</p> <p>Bend's older householders are more likely to own their home.</p> <ul style="list-style-type: none"> • Homeownership peaks for householders 35 to 64. More than 50% of householders 35 to 64 in Bend are homeowners. • Homeownership begins to decrease for households over 65 years old. Twenty percent of householders over 75 in Bend are homeowners. <p>National studies about the housing preferences of older residents show that the majority express an interest in remaining in their home or in their community as long as possible, a trend that increases with age.⁷</p> <ul style="list-style-type: none"> • Between about 65% and 80% of people over 65 would like to stay in their homes as long as possible.⁸ • The Baby Boomers who want to move generally want to live in a typical community setting, with a mixture of people of different ages, and in a setting where recreational amenities are available.⁹ • Of people over 65 who expect to move in the next five years, a smaller proportion of these households expect to live in a single-family home and to be homeowners, compared with households of all ages who expect to move in the next 5 years.¹⁰ • Seniors who moved recently were much more likely to have moved into a smaller home, compared to households of all ages who moved recently.¹¹
	<p>Household size and composition</p> <p>Household size decreases with age after age 65 in Bend.</p> <ul style="list-style-type: none"> • More than 6% of households 65 years and older were single-person households in Bend. • Growth in households 65 years and older will result in growth in single-person households.
	<p>Household income</p> <p>Bend's household income peaks around age 45.</p> <ul style="list-style-type: none"> • Household income decreases after age 65. About 50% of Bend's households over 65 had income of less than \$50,000, compared with 36% of households 45 to 64. • Households with householders over 65 years have a lower than average household income, at about 95% of Bend's median household income, compared with ages 45 to 64 years with 117% of Bend's median household income. • Lower income does not necessarily result in greater problems with housing affordability or lower homeownership rates for people over 65 years because: <ul style="list-style-type: none"> • Some householders over 65 have paid off their mortgage. For households who have paid off their mortgage, lower income does not necessarily result in lower disposable income or affect their ability to continue to own their home. • Older households may have more accumulated wealth, which could include assets like the value of their house or investments.
	<p>Potential effect on housing demand</p> <p>The major impact of the aging of the baby boomers on demand for new housing will be through demand for housing types specific to seniors, such as assisted living facilities. Baby boomers will make a range of housing choices in Bend:</p> <ul style="list-style-type: none"> • Many will choose to remain in their houses as long as they are able. • Those that do move are more likely to move into smaller homes, attached homes, or apartments and are more likely to rent than other households headed by other generations. • Some may downsize to smaller single-family homes (detached and attached) or multifamily units. These will be a mixture of owner and renter units. Nationally, of the 20% Baby Boomers that expect to move, 11% plan to move to an apartment, 16% to attached housing, 65% to single family housing, and 6% to a mobile home.¹² • As their health fails, some will choose to move to group housing, such as assisted living facilities or nursing homes.

Table 2. Echo Boomers (Age in 2008: 11 to 24 years old; Age in 2030: 31 to 44 years old)¹³

Demographic trends		<p>Echo Boomers are one of the fastest growing segments of Deschutes County's population</p> <ul style="list-style-type: none"> • By 2030, the State projects that there will be nearly 70,000 people 25 to 49 years in Deschutes County, up from nearly 43,000 people in 2000.¹⁴ • There will be an increase of about 27,000 people between the ages of 25 to 49 years. This group will account for 24% of total population growth over the 2000 to 2030 period.¹⁵
Effect of trends on household choice	Age of household head	<p>Housing preferences shift for householders as they get older.</p> <ul style="list-style-type: none"> • Under 25 years old: 94% were renters in Bend • 25 to 34 years old: 63% were renters in Bend • 35 to 44 years old: 43% were renters in Bend • 82% of single-family housing detached housing in Deschutes County was owner-occupied and 95% of multifamily dwellings were renter-occupied
	Household size and composition	<p>Household size increases until age 44 in Bend.</p> <ul style="list-style-type: none"> • Eighty-five percent of households in Bend between ages 15-34 years have two or more persons. • About 15% of Bend's households between 15 to 34 years are single-person households, compared with 26% of households 35 to 64 years. • Seventy-three percent of households with two or more persons younger than age 34 are renters in Bend.
	Household income	<p>Younger households have lower income and homeownership rates on average.</p> <ul style="list-style-type: none"> • About 40% of households under 25 years had an income of less than \$25,000 in Bend. About 40% of households between 25 and 44 had income of less than \$50,000. • Younger households generally had less accumulated wealth, such as housing equity. • Households between 25 and 44 years had higher than average income, at about 112% of Bend's median household income. • Higher incomes generally correlate with homeownership. The median income for homeowners in Bend was \$72,800 (in 2007), compared with \$43,200 for renters.
	Potential effect on housing demand	<p>Growth in Echo Boomers will result in increased demand for all housing types in Bend. Recent research hypothesizes that Echo Boomers may make different housing choices than their parents as a result of the on-going recession and housing crisis. They suggest that Echo Boomers will prefer to rent and will prefer to live in multifamily housing, especially in large cities. Other studies suggest that the majority of Echo Boomers' housing preference is to own a single-family home. Our conclusion based on review of recent research is that it seems unlikely that the majority of Echo Boomers will make fundamentally different housing choices than previous generations as they age and have families, but their housing choices may be constrained by what they can afford due to student loan debt, and prolonged entry into higher paying positions due to the Baby Boomers putting off retirement.</p> <ul style="list-style-type: none"> • Echo Boomers are more interested in living within a city (including in a downtown area) or a suburb closer to a city than prior generations.¹⁶ • Echo Boomers are more willing than other age groups to choose to live in a community with a wider range of housing and denser housing, where it is easier to talk to work or nearby urban amenities, and where transportation by automobile is less common.¹⁷ • Echo Boomers are likely to choose to rent and are more likely to rent a multifamily unit than older households. This choice may be made from preference but is likely to be necessitated by lower income. • Echo Boomers who prefer single-family units may prefer, or only be able to afford, smaller single-family units.¹⁸ • As they establish their careers, their incomes increase, and they form families, it seems likely that a large share of Echo Boomers in Bend will choose to live in an owner-occupied single family house. Some Echo Boomers may prefer to rent or own a multifamily unit in or near Bend's downtown. • Bend is a suburban market, with urban amenities that may appeal to Echo Boomers who prefer to live in a smaller city but in an area with a wide range of access to outdoor recreational activities. Bend itself does not have distant suburbs but nearby smaller cities have filled the role of distant suburbs for Bend. Echo Boomers may choose to live in Bend's suburban neighborhoods, rather than in nearby smaller cities, if housing in Bend is affordable.

Table 3. Growth of Latino and Hispanic Population¹⁹

Demographic trends	<p>Bend is becoming more ethnically diverse, with growth in the Hispanic and Latino population (both from immigration and from current residents in Bend).</p> <ul style="list-style-type: none"> Bend became more ethnically diverse, with Hispanic and Latino population growing by more than 100% between 2000 and 2007, an addition of 2,459 Hispanic or Latino residents. Nationally, growth in Hispanics is driving population growth, both from immigration and from natural increase of Hispanics living in the U.S.²⁰
Age of household head	<p>The Hispanic population in Bend has a different age structure than Bend's overall population.</p> <ul style="list-style-type: none"> In 2007, median age for Hispanics (29 years) was lower with the median age for the total population (35 years) in Bend. <p>Nationally, growth in Hispanic population between 2005 and 2015 will help off-set decreases in white householders between the ages of 30 and 49.²¹</p>
Household size and composition	<p>Nationally, Hispanics households with children grew at a faster rate than other minority populations between 1995 and 2005, resulting in increased demand for housing to accommodate families.²²</p> <ul style="list-style-type: none"> In 1999, 51% of Hispanic households had children, compared with 33% of all households.²³ <p>Hispanic households in Bend are more likely to be larger and less likely to be homeowners.</p> <ul style="list-style-type: none"> In 2000, the average size of Hispanic households in Bend was 3.4 persons per household, compared with an average of 2.4 persons per household for all households in Bend.²⁴ Hispanic households in Bend live in single-family houses (detached and attached) less often than non-Hispanic households. About one-third of Hispanic households live in single-family dwellings, as compared to about 75% of non-Hispanic households. About one-third of Hispanic households are homeowners, compared with an ownership rate of a little almost 60% for all households in Bend. <p>In 2007, Oregon's Hispanic households were more likely to be younger homeowners. Seventy-two percent of Hispanic homeowners in Oregon were younger than 45 years old, compared with 38% of non-Hispanic householders²⁵.</p>
Effect of trends on household choice	<p>Hispanic households in Bend have lower than average income.</p> <ul style="list-style-type: none"> Hispanic households in Bend have lower than average income, with household income at 96% of Bend's median (\$56,053) and family income at 79% of Bend's median (\$66,740). <p>Immigrants generally have lower income than U.S.-born workers but income increases for immigrants the longer they have been in the U.S. and through successive generations.</p> <ul style="list-style-type: none"> First generation immigrants may take several decades to earn sufficient incomes to become homeowners²⁶ and to have income comparable to a person born in the U.S., of a similar age and education. This is true of Hispanic immigrants.²⁷ Income generally increases for second-generation immigrants, who have higher educational attainment.²⁸ This is true of recent Hispanic immigrants.²⁹ In 2012, the national median household income for first generation Hispanic households was \$34,600, compared to \$48,400 for second-generation Hispanic households, compared with the U.S. average of \$58,200.³⁰ <p>Hispanic households suffered steeper drops in household wealth than non-Hispanic white households during the recession, which may affect their ability to own homes, although the desire for homeownership remains strong.³¹</p>
Potential effect on housing demand	<p>Growth in Hispanic and Latino households may result in increased demand for multifamily and single-family housing in Bend.</p> <ul style="list-style-type: none"> Affordability is likely to be a more common problem for Hispanic and Latino households, especially recent immigrants, because they have lower income on average. Homeownership increases the longer immigrants stay in the U.S. Longer-term first generation immigrants and second-generation immigrants may become home owners, depending on their ability to afford owning a home.³² Hispanic population with lower income is more likely to choose lower-cost housing, such as multifamily housing because that is what they can afford. Hispanics are more likely to rent but when they are homeowners, they are more likely to live in a more urban area, compared with white households.³³ Growth in Hispanics will increase demand for smaller "starter homes" and entry-level apartments.³⁴

Conclusions about how demographic trends may affect housing choice

Identifying future housing need based on expected demographic changes requires making qualitative assessments of the future housing market. Demographic changes are likely to affect housing in Bend's housing market in the following ways over the next 20 years. The future housing mix will probably look different than the recent past. Based on the future demographic trends, the most pressing need is to increase the range (both in size and in pricing) of housing products in walkable neighborhoods.

- **Recession may have delayed some effects of demographic shifts.** The impacts of major demographics shifts are being delayed due to the financial effects of the recession, however, substantial housing demand shifts are underway that will change land use patterns. Baby Boomers are working longer and may not be moving because of a loss of home equity. Echo Boomers have taken on college debt, are having a hard time getting a foothold in the workforce, and are therefore delaying household formation. The extended effects of the recession will mean that more households are renting for an extended period of time before being able to make a home purchase, or will only be financially capable of purchasing a smaller less-expensive home. In summary, this delay means more near-term demand for rental housing or smaller less-expensive ownership housing.
- **Slower demand for large-lot single-family housing.** Gen X (the generation born after the Baby Boomers and before the Echo Boomers), is currently in its prime family raising years, and the demographic group most likely to need larger single-family homes. Gen X is much smaller than either the Baby Boomer or Echo Boomer generations. As the Baby Boomers move out of their existing single-family homes, there will be fewer households to take them over. In recent years, Bend has been attracting retirees who are purchasing (and, in some cases, renting) available single-family dwellings.

In the future, growth of Echo Boomers and shrinking of the Baby Boomer generation, may slow demand for new large-lot single-family housing. The Echo Boomer's preferences are generally for more walkable communities and they are willing to accept smaller homes in closer proximity to amenities. In addition, Echo Boomer's have lower income and higher debt.

However, much of Bend's growth results from in-migration of people from outside of Central Oregon, many of whom are attracted to Bend's access to outdoor amenities, open space, and rural quality of life that Bend offers. Interviews with Bend's development community noted that demand for single-family housing that offers ample parking and storage for outdoor equipment is strong. They also noted that incoming retirees are pricing out the second-home move-up market for existing families.

All of these factors contribute to continued demand for large-lot single-family detached housing but suggest that demand for this type of housing is likely to slow between the 2008 to 2028 period.

- **Demand will increase for a wider range of housing types.** Most of the evidence suggests that the bulk of the change will be in the direction of smaller average house and lot sizes for single-family housing. An aging population, increasing housing costs, and other variables are factors that support the conclusion that the future housing supply will include smaller and less expensive units and a broader array of housing choices. A substantial portion of Bend's residents will live in attached housing, such as townhouses, cottage housing, duplexes, garden apartments, or urban apartments. While most households may prefer to own their home, a growing share of households will be renters, either from choice (e.g., Baby Boomers who prefer to rent smaller units) or by economic necessity. Demand for these uses will be particularly high in close-in areas near Bend's commercial and recreational amenities.
 - **Demand for a wider range of housing types by retirees.** Older households tend to move less frequently than younger households, and a large majority would like to age in place—a desire that grows stronger with age. Being near family, friends, and social organizations in walkable neighborhoods also becomes increasingly important with age. Of those that have moved recently, a third of Baby Boomers and half of the generation older than Baby Boomers have moved to smaller housing units. Those Baby Boomers who do move may be more likely to choose homes in locations with more amenities located near friends and family. Interviews with members of Bend's development community indicated that small lot, cluster, or cottage housing might be appropriate housing types to meet this need.
 - **Housing for families will be in demand.** The two largest growing parts of Bend's population are Echo Boomers and Hispanic households. Echo Boomers will be entering the phase of life when they form families and have children. In addition, Hispanic households have larger than average household size because they live in multi-generational households and have a larger number of children on average. Growth in households with families will drive need for housing with sufficient space for a family.
 - **Housing affordability will continue to be an issue.** More than one-third of Bend's households were cost burdened in 2007. A household is considered "cost-burdened" if they pay 30% or more of their gross household income on housing costs. Bend's rate of cost burden shows that a substantial proportion of Bend's households cannot afford housing in Bend. Interviews with members of Bend's development community suggest a shortage of homes priced for first-time homebuyers, many workers in Bend live in nearby communities because affordable housing is in short supply in Bend, and that the demand for small-lot housing with nearby amenities is increasing. The interviewees also indicate that, while there is demand for urban housing products (particularly rental apartments), the wages in Bend's service and tourism economy may not allow workers to afford rents sufficient to pay for development of these types of housing. For two of the fastest growing demographics in Bend, the Echo Boomers and Hispanic and Latino population, affordability is more likely to be a barrier to homeownership or higher-cost rental housing.

- **Location of housing will be increasingly important.** The location of housing is becoming increasingly important, with increased demand for housing in walkable neighborhoods near retail and other amenities. Where they can afford it, the Echo Boomers generally prefer housing in walkable areas with retail and other amenities nearby, rather than housing in more suburban areas or in outlying cities. Some Baby Boomers who are downsizing are also choosing to live in similar walkable areas.
- **Design of housing and neighborhoods is important.** Well-designed multifamily and compact single-family located in a desirable neighborhood can provide opportunities for a wider range of housing options. Consumers are more likely to make the tradeoff of a smaller lot and home size when neighborhood parks, schools, and retail amenities are within walking distance. Therefore, there will be steady demand for multifamily housing in close-in locations proximate to Bend's downtown amenities and jobs.

APPENDIX A: RESEARCH ABOUT DEMOGRAPHIC CHANGES AND IMPLICATIONS FOR FUTURE HOUSING MIX

This section provides greater detail on the research conducted on the demographic trends that are summarized in the tables above. For further reading on a given topic, see the relevant report listed in the “Materials for Further Reading” section below.

Key Findings by Topic

Aging Boomers

Question: Are aging Baby Boomers downsizing or staying put?

- **Some are downsizing.** “Thirty-two percent of Americans have moved in the past five years. More than half of the gen Yers report moving, and 31 percent of gen Xers have moved. Baby boomers and the oldest Americans are the least likely to have moved...Baby boomers and war babies/members of the silent generation are the most likely to have downsized in their most recent move. In fact, 50 percent of the oldest Americans report that their new home is smaller than their old one. One-third of baby boomers report moving into a smaller home, and 44 percent say they have moved into a larger home.”¹

Table 1. Recent Movers Change in Home Size

	Recently moved?		Recent Change in Home Size			Expected Homeownership Status	
	Yes	No	Larger	Smaller	Same	Own	Rent
All Adults	32%	67%	48%	27%	25%	73%	25%
Gen Y	53%	47%	48%	25%	27%	69%	31%
Gen X	31%	69%	59%	20%	20%	81%	16%
Baby Boomers	20%	80%	44%	33%	22%	79%	20%
War babies/silent generation	19%	80%	24%	50%	25%	55%	36%

Source: ULI America in 2013, Leland Consulting Group

- **Preference for staying put increases with age.** The AARP conducted a housing preference survey of people age 45 or older and found that 73 percent of them strongly agreed with the statement, “*what I'd really like to do is stay in my current residence for as long as possible*”. This preference increases with age. Seventy-eight percent of the respondents over 65 strongly agreed with the statement, whereas only 72 percent of those 50-64 and 60 percent of those age 45-49 strongly agreed with the statement.²

¹ American in 2013 Focus on Housing and Community, Urban Land Institute

² “Home and Community Preferences of the 45+ Population” November 2010, AARP, Keenan Teresa A.

"The aging of the population poses a different policy challenge. Most seniors prefer to age in place. While many of these households are currently well housed, their needs will change over time. Meeting those needs will require modifications to existing homes, the expansion of transportation networks and supportive services, and additions to the housing stock aimed specifically at the senior population. Many older Americans are also heading into their retirement years with little financial cushion and may find it difficult to find suitable housing that fits within their budgets. Expanding the range of housing options available to the country's growing senior population will require concerted efforts from both the public and private sectors."³

"Despite their shrinking households and declining labor force participation, Boomers do not appear to be altering their housing consumption by abandoning their detached single-family homes...In fact, contrary to the downsizing perception, the percent of Baby Boomers residing in single-family detached homes was at least as high in 2012 as at any time since the onset of the housing crisis. Even the oldest members of the Boomer generation, who have largely exited the childrearing stage and begun to retire in large numbers, show no major shift away from single-family residency....One likely mobility constraint is the substantial decline in Boomers' home values during the housing bust. Between 2006 and 2012, the average value of an owner-occupied single-family detached home with a Boomer householder declined by 13 percent."⁴

- **Being near friends, family, and social organizations grows increasingly important with age.** An AARP Housing Preference survey of householders 45 years and older, found that "Roughly two-thirds of respondents agreed that they want to stay in their home because *I like what my community has to offer me.*" In contrast, roughly one-quarter agreed with the statement that they want to stay in their home because "*I cannot afford to move.*"...When asked about seven different community aspects and the level of importance they have for them, two-thirds of respondents said that being near friends/and or family and being near where one wants to go (ie., grocery stores, doctor's offices, the library) is *extremely* or *very important* to them. Roughly half noted that being near church or social organizations or being somewhere where it's easy to walk are *extremely* or *very important* to them, while somewhat fewer said the same thing about being near good schools or being near work. Only about one-fifth of respondents report that being near transit (bus or rail) was *extremely* or *very important* to them."⁵

³ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2013

⁴ "Are Aging Baby Boomers Abandoning the Single-Family Nest?" June 12, 2014. *Fannie Mae Housing Insights*, Volume 4, Issue 3.

⁵ "Home and Community Preferences of the 45+ Population," Keenan Teresa A. November 2010, AARP

Table 2. Importance of Community Aspects for Staying in One's Community

Extremely or Very Important	Age		
	45-49	50-64	65+
Being near friends and/or family	60%	64%	71%
Being near where you want to go	68%	62%	70%
Being near church or social organizations	42%	43%	57%
It's easy to walk	46%	43%	51%
Being near good schools	64%	38%	31%
Being near work	43%	36%	21%
Being near transit	16%	22%	21%

Source: AARP

- **Retiring later.** “To put these trends in perspective, incomes among households under age 35 are back to 1990s levels. The recession had an even bigger impact on households between the ages of 35 and 54, whose incomes are now lower than those of similarly aged households in 1971. Now in what are typically the peak earning years, 45–54 year-olds have instead seen their real median incomes fall 6.0 percent from what they made ten years earlier (when they were aged 35–44). Over the next ten years, these households will be approaching typical retirement age, but the loss of income at such a critical point in their careers will make it difficult for many to save enough to stop working.”⁶
- **Affordability for seniors.** “Affordability is a serious problem for seniors, especially for renters. According to a U.S. Department of Housing and Urban Development (HUD) report to Congress earlier this year, 1.33 million elderly renters (where the householder or spouse is age 62 or over, with no children under 18 present) had “worst case” housing needs in 2009. This meant that they earned less than half their metropolitan area’s median income, received no government housing assistance and either paid more than half their income for rent, lived in severely inadequate housing, or both. Compared to 2007, the number of older renters in this category had increased by 120,000 (10 percent) – a change that the HUD report attributes to fallout from the foreclosure crisis and recession, as shrinking incomes drove increased competition for already scarce affordable housing. Seventy percent of senior renters spend at least 30 percent of their income on housing costs. Senior homeowners are not immune from affordability problems either: about three in 10 senior homeowners spend at least 30 percent of their income on housing and 17 percent pay at least half their income. Even seniors who own their houses free and clear face rising energy costs and, in some locations, rising property taxes.”⁷

⁶ Joint Center for Housing Studies of Harvard University, *The State of the Nation’s Housing*, 2013

⁷ Demographic Challenges and Opportunities for U.S. Housing Markets, March 2012, Bipartisan Policy Center

- **Housing released by seniors.** “Some seniors occupy newly constructed housing (so the total release of housing exceeds the net release). In 2009, for example, housing built since 2000 accounted for about seven percent of owner-occupied dwellings occupied by seniors and 10 percent of rentals. Seniors’ consumption of new housing may rise in the next two decades as Baby Boomers – whose wealth and income are higher than that of today’s retirees and who are entering retirement in vastly larger numbers – seek new options to downsize, accommodate disabilities or live in different types of neighborhoods. Just as demand created by Baby Boomers spurred new apartment construction in the 1970s, the sheer size of the Baby Boom generation could cause a dramatic increase in the construction of senior-accessible housing over the coming decades. Baby Boomers’ ability to move into new housing, however, will depend on where, when and for how much they will seek to sell their current residences.....Despite potential increases in new construction, most of the houses that seniors will release in coming years were built when energy was inexpensive, nuclear families were the rule, incomes were increasing for most Americans, and mortgages were generally predictable and easy to obtain. Most observers expect the next 20 to 30 years to depart from this historic picture, with more expensive energy, growing diversity in race, ethnicity and in household structure, and more intense international economic competition. All of these factors will likely reduce demand for large single-family homes on large lots far away from established centers of employment and entertainment.”⁸
- **Fewer elderly living alone in multifamily buildings.** The percent of people 70 years or older that head households in multifamily buildings has been in decline since 1979.⁹

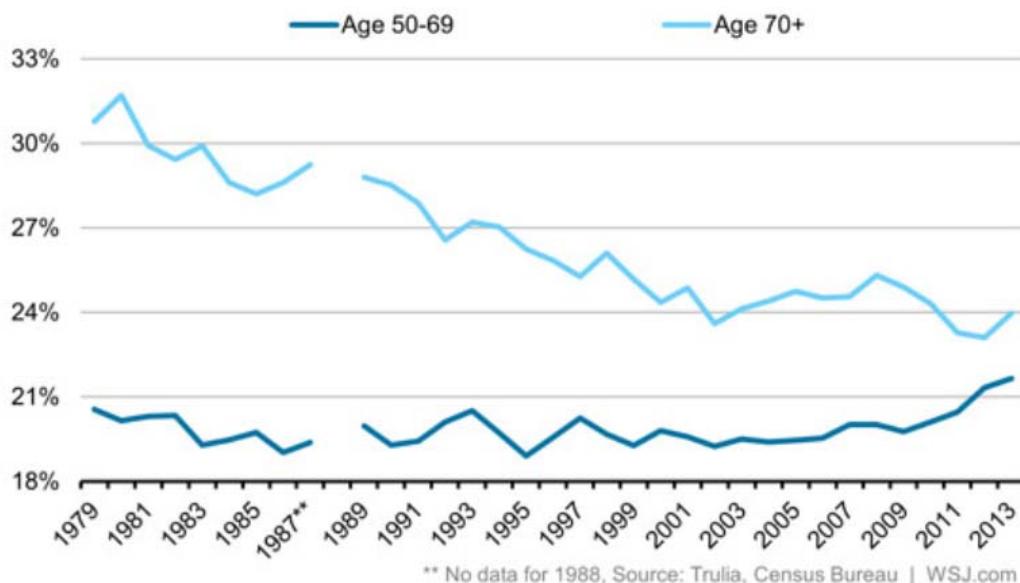
⁸ *Demographic Challenges and Opportunities for U.S. Housing Markets, March 2012, Bipartisan Policy Center*

⁹ “*Baby Boomers Aren’t (Yet) Downsizing in Dromes*”, Nick Timiraos, June 27, 2014, *The Wall Street Journal*

Table 3. Aging Alone

Aging Alone

Share of households living in multi-unit buildings, by age of head of household



Source: *The Wall Street Journal, Trulia, Census Bureau*

Delayed Millennial Household Formation

Are Millennials putting off housing formation as a short-term response to the recession or are there other underlying factors that will impact their housing decisions much farther into the future?

- **Student debt.** “For today’s younger households, student loan debt may make the transition to homeownership more difficult. According to the Federal Reserve Bank of New York, the number of young adults under age 30 with student loan debt outstanding increased by 39 percent between the start of 2005 and the end of 2012, with the average amount rising from \$13,300 to \$21,400. However, concerns over rising student loan debt often overlook the fact that the trend also affects older households. The increase was even larger among adults in their 30s, with the number of borrowers up 76 percent and average debt climbing from \$20,000 to \$29,400. Moreover, of the \$600 billion increase in student loans outstanding in 2005–12, fully 38 percent was among households over age 40. Since many of these older households already own homes, the sharp rise in student loan debt could affect their ability to meet their mortgage obligations.”¹⁰
- **Diversity and household formation.** “To estimate the magnitude of the demand that Echo Boomers may (or may not) bring to housing markets in the next 20 years, we developed three scenarios. We began with the 1990, 2000 and 2010 Census results and the Census Bureau’s national population projections assuming a constant net rate of immigration at 975,000 people per year. Using the observed and projected population series, we

¹⁰ Joint Center for Housing Studies of Harvard University, *The State of the Nation’s Housing, 2013*

computed national rates of household formation and homeownership for people grouped by age cohort (10-year groups starting at age 15) and by race/ethnicity (white non-Hispanic, black non-Hispanic, other non-Hispanic and Hispanic)...The range of estimates in these scenarios can be attributed to different rates of household formation for Echo Boomers. Under the low scenario, people between 15 and 34 years old in 2010 (a span that includes Echo Boomers plus five years of the Baby Bust generation) would form 15.6 million new households between 2010 and 2020. Other cohorts would account for the formation of an additional 5.4 million households over the same time period. The medium scenario would result in 17.1 million new Echo Boomer households and 6.1 million other households. The high scenario, finally, yields 18.8 million new Echo Boomer households and 6.7 million new households from other generations. Because changes in the number of older households are less sensitive to differences in economic assumptions, the decline in older households is more consistent across the three scenarios, ranging from 10.6 million fewer old households in the high scenario to 11.6 million fewer old households in the low scenario.”¹¹

- **Education.** “Compared to previous generations at the same age, Echo Boomers are more likely to have completed high school, and more than half (54 percent) have at least some college education, compared to 49 percent of people in the Baby Bust generation and 36 percent of Baby Boomers when they were 18 to 28 years old. In terms of educational achievement, women of the Echo Boom generation have vaulted far above women of previous generations; in fact, among Echo Boomers, more women than men and more women than in any previous generation have attained a college education...The growth in female educational attainment may also portend higher levels of household formation if it results in greater gender equity and gives women more financial independence. Other factors, however, could inhibit household formation and homeownership. Young adults carry high levels of credit card and student loan debt; even young people who already had formed households had higher debt loads in 2009 than people of the same age 10 years earlier.³¹ Rates of marriage declined in the 2000s from 8.2 per thousand to 6.8 per thousand.³² Finally, while all households lost wealth during the recession, average household wealth fell well below \$10,000 for Hispanic and black households. Considering the diversity of the young population, this reduction in wealth among older adults will reduce the purchasing power of a significant fraction of young people who can no longer count on their parents’ housing wealth.”¹²
- **Household formation.** “At a basic level, changes in the number of adults and the rates at which adults head independent households determine household growth. On the plus side, the number of adults aged 18 and older rose by 18.1 million from 2005 to 2012 and fully 2.4 million in the past year alone. The echo-boom generation (born after 1985) fueled much of this growth, helping to boost the number of adults in their mid-20s—the group most likely to form new households. But while the young adult population has been growing, the rate at which members of this age group head their own households has declined. As a result, household growth has not kept pace with population growth. Going forward, though, even if today’s low household formation rates persist, the aging of the large echo-boom cohort into

¹¹ Demographic Challenges and Opportunities for U.S. Housing Markets, March 2012, Bipartisan Policy Center

¹² Demographic Challenges and Opportunities for U.S. Housing Markets, March 2012, Bipartisan Policy Center

their 30s will raise household headship rates because of lifecycle effects. Indeed, one out of every two 30–34 year-olds heads an independent household, compared with just one in four 20–24 year-olds. Since household headship rates continue to rise (albeit more slowly) through older adulthood, the rates for the echo boomers will likely increase for years to come.”¹³

- **Mobility and homeownership.** “While mobility rates have fallen for nearly all household types, the decline was particularly steep for homeowners that have mortgages. Mobility rates for this group fell from 7.1 percent in 2007 to only 4.9 percent in 2011. The reasons for this short-term drop are numerous and include the lock-in effect of home price declines, falling incomes, fewer new employment opportunities, and tightened credit standards making it more difficult to qualify for a new mortgage. Mobility rates are highest among renters and young adults. In 2011, fully 28.8 percent of renter households changed residences, compared with just 4.4 percent of homeowners. Young householders are also more mobile, with rates at 52.7 percent for those under age 25—significantly higher than the 19.7 percent for household heads in the next older age group... The oldest echo boomers are just beginning to swell the ranks of young adult movers. Having more young adults in the population may thus change the composition of housing demand in the coming years, given that younger households are more likely than older households to move into rentals (82 percent vs. 67 percent) and less likely to move into single-family homes (42 percent vs. 50 percent).”¹⁴
- **Gen Y has more urban community characteristic preferences.** “Gen Y expresses preferences that differ from those of the other generations in interesting ways. Gen Y is the least likely to value neighborhood safety or space between neighbors, but the most likely to want high-quality public schools, a short distance to work or school, walkability, and proximity to amenities like shopping and transit... Among gen Yers, 54 percent—representing nearly 39 million people—would trade a larger home for a shorter commute. Among all generations, gen Y is the most attracted to living in a neighborhood close to a mix of shops, restaurants, and offices. Sixty-two percent of gen Yers (representing more than 44 million people) prefer this type of mixed-use community over one where shops, restaurants, and offices are farther away. Gen Y is also the only age cohort that shows a preference for living in a neighborhood where there is a mix of housing types. Fifty-nine percent of gen Yers—representing more than 42 million people—would like to live in a community where there is a range of housing. Similarly, 52 percent of gen Yers (representing more than 37 million people) would like to live in a community where there is a range of incomes.”¹⁵

¹³ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2013

¹⁴ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2013

¹⁵ American in 2013 Focus on Housing and Community, Urban Land Institute

Table 4. Community Characteristics

Importance of Community Characteristics Percentage ranking each characteristic 6 or higher in importance on a scale of 1 to 10	Homeownership status		By Generation					
	Owners	Renters	All Adults	Gen Y	Gen X	Baby boomers	War babies/silent generation	
Neighborhood safety	94%	88%	92%	88%	97%	92%	92%	
Quality of local public schools	77%	83%	79%	87%	82%	74%	68%	
Space between neighborhs	75%	68%	72%	69%	79%	70%	70%	
Short distance to work or school	66%	76%	71%	82%	71%	67%	57%	
Distance to medical care	68%	65%	71%	73%	63%	72%	78%	
Walkability	75%	79%	70%	76%	67%	67%	69%	
Distance to shopping/entertainment	63%	71%	66%	71%	58%	67%	69%	
Distance to family/friends	59%	70%	63%	69%	57%	60%	66%	
Distance to parks/recreational areas	63%	64%	64%	68%	62%	63%	60%	
Convenience of public transportation	44%	67%	52%	57%	45%	50%	56%	

Source: Urban Land Institute

Housing choices of Hispanic and Latino households

Does the growing Hispanic population have different housing needs/preferences than the average household and how will this impact Bend's housing supply in the future?

- **Growth in home ownership.** “U.S. Census data over the past 12 years shows that despite suffering significant losses during the recent foreclosure crisis, Hispanics have achieved homeownership gains in all but two of those years. During the same 12-year period, the number of Hispanic homeowners grew from 4.24 million in 2000 to 6.69 million in 2012, a remarkable increase of 58 percent at a time when the rest of the U.S. population saw a net increase of only 5 percent. In 2012, home prices increased significantly in most markets across the country for the first time in half a decade. Hispanic household growth and home purchases were arguably the most important drivers of the housing recover.”¹⁶
- **Recession and home value drop.** “Between 1995 and 2004, rates of homeownership among blacks rose by seven percentage points; among Hispanics, homeownership grew even more quickly – from about 40 percent in 1993 to 50 percent in 2005–2006. Between 2004–2006 and 2010, however, homeownership rates dropped sharply, and more so for Hispanic and black households than for white non-Hispanics. The overall homeownership rate of 65.1 percent in April 2010 was 1.1 percentage points lower than 10 years earlier. While the housing crisis has hurt people of all races and ethnicities, it has been devastating for many Hispanic and black families, reducing their median wealth by one half to two-thirds and significantly increasing the number of households with negative net worth.”¹⁷

“The recession-induced drop in home values has been especially damaging to minority and low-income households. On average, real home values for Hispanic owners plummeted nearly \$100,000 (35 percent) between 2007 and 2010, while the decline for black owners was nearly \$69,000 (31 percent). By comparison, average values for white homeowners fell just 15 percent over this period...Moreover, white homeowners still had \$166,800 in home equity on average in 2010—about twice the amount that blacks and Hispanics held...Over the next decade, minorities will make up an increasing share of young households and represent an important source of demand for both rental housing and starter homes. While their housing aspirations are similar to those of whites, minorities face greater constraints in pursuing those goals because of their lower incomes and wealth.”¹⁸

- **Hispanic population is younger.** “Hispanics are also a much younger demographic averaging a full 10 years younger than the overall population...Every month 50,000 young Hispanics reach the age of 18...With a median age of 27, the Hispanic population is 10 years younger than the total U.S. median age of 37 years. In particular, Hispanics are heavily represented in the 26 to 46 age range involved in most home sales.”¹⁹

¹⁷ Demographic Challenges and Opportunities for U.S. Housing Markets, March 2012, Bipartisan Policy Center

¹⁸ Joint Center for Housing Studies of Harvard University, The State of the Nation's Housing, 2013

¹⁹ State of Hispanic Homeownership Report, National Association of Hispanic Real Estate Professionals (NAHREP), 2012

- **Hispanic households are larger.** Hispanic households are typically larger than the households of non-Hispanic Whites....Sixty-one percent of all Hispanic households consist of a married couple with children younger than 18.”²⁰
- **Hispanics believe that home ownership is a good investment.** “Despite being hit hard by the housing market downturn, three-in-four (75%) Latinos agree that buying a home is the best long-term investment a person can make in the U.S. This compares with 81% of the general population who say the same....Fully 83% of Latino homeowners say owing a home is the best long-term investment, while 70% of renters say the same. All of these demographic and cultural characteristics make Hispanics ideal homebuyers in the housing market. In fact, Hispanics are expected to comprise half of all new homebuyers by 2020”²¹
- **First-time homebuyers.** “Forward thinking companies are already changing their strategy to reflect this shift. Case in point: D.R. Horton, the nation’s largest residential homebuilder, achieved huge profits in 2012 by constructing low-priced homes. Rather than focus on the move-up market, Horton cornered the entry-level market—the market most heavily represented by minority Hispanic and Asian first-time homebuyers...By virtue of their population growth, rate of household formation and purchasing power, Hispanics are expected to drive demand for small starter homes in vibrant, high-density communities.”²²
- **Multigenerational.** “Indeed, as the Hispanic share of the U.S. population continues to grow, a substantial increase in demand is being created for building new homes that meet the structural housing needs of large and multi-generational Hispanic families...Some builders are already creating products that meet the shifting demand and needs of these consumer segments who want home with enough space to accommodate parents, adult children or tenants. These new floor plans feature a second, self-contained unit with its own entrance, bathroom and kitchenette—a development that meets both the short- and long-term needs of many Hispanic households.”²³
- **Demand for smaller units.** “Hispanics, in particular, will stimulate demand for condominiums, smaller starter homes, first trade-up homes and the estimated 11 million housing units that will become available between 2010 and 2020 as baby boomers retire.”²⁴
- **Preference for walkable neighborhoods.** According to the Pew Research Center, Hispanics prefer to live in neighborhoods where houses are smaller and closer together, but

²⁰ *State of Hispanic Homeownership Report, National Association of Hispanic Real Estate Professionals (NAHREP), 2012*

²¹ *Pew Research Hispanic Trends Project, “III. Latinos and Homeownership”, January 26, 2012.*

²² *State of Hispanic Homeownership Report, National Association of Hispanic Real Estate Professionals (NAHREP), 2012*

²³ *State of Hispanic Homeownership Report, National Association of Hispanic Real Estate Professionals (NAHREP), 2012*

²⁴ *State of Hispanic Homeownership Report, National Association of Hispanic Real Estate Professionals (NAHREP), 2012*

schools/stores are within walking distance by 60 percent compared to 44 percent of non-Hispanic Whites.²⁵

Opportunities to provide housing development through infill and redevelopment

Are Bend residents really willing to trade single-family homes on larger lots for urban walkable neighborhoods?

- **Shorter commute for a smaller home.** According to the ULI, “among older Americans, many of whom have spent substantial time in the workforce and may continue working beyond the traditional retirement age, the preference for a shorter commute is very strong, even if it means living in a smaller home. Seventy-two percent of baby boomers, or nearly 53 million people, would make that tradeoff. Similarly, 65 percent of war babies and members of the silent generation—nearly 23 million people—would trade a larger home for a shorter commute. Almost 51 percent of these older Americans (representing 18 million people) also show a slight preference for living in areas close to a mix of shops, restaurants, and offices, reinforcing their preference, particularly as they age, for walkable communities near amenities.”²⁶

Table 5. Community Attribute Preferences

Community Attribute Preferences	Homeownership status		By Generation					
	Owners	Renters	All Adults	Gen Y	Gen X	Baby boomers	War babies/ silent generation	
Shorter commute/smaller home	63%	56%	61%	54%	54%	72%	65%	
Close to mix of shops, restaurants, and offices	49%	60%	53%	62%	50%	49%	51%	
Mix of incomes	50%	53%	52%	52%	53%	53%	47%	
Public transportation options	44%	62%	51%	55%	45%	52%	48%	
Mix of homes	43%	57%	48%	59%	47%	42%	44%	
<i>Percentage choosing three or more of these compact development attributes</i>	-	-	54%	59%	49%	57%	51%	

Source: *Urban Land Institute*

- **Likelihood of moving and anticipated new housing.** “Many Americans report that they are likely to change homes during the next five years. “*America in 2013*” found that 42 percent of Americans—representing 98 million people—are likely movers. Making up that

²⁵ 2014 Political Polarization Survey, Table 3.1 Preferred Community, Pew Research Center for the People and the Press, June 12, 2014

²⁶ *American in 2013 Focus on Housing and Community*, Urban Land Institute

42 percent are 25 percent who are very likely to move and 17 percent who are somewhat likely. Gen Yers are the most likely to move: 63 percent say they expect to move during the next five years. America's oldest generations are the least likely to move. Lower-income people are more likely to move than those with higher incomes. Fifty-one percent of the people making less than \$25,000 report that they are likely to move in the next five years, compared with 43 percent of those making more than \$75,000. Most movers—73 percent—believe they will own the primary residence they move into; one-quarter expect to rent. Gen Yers and the oldest Americans are the most likely to expect to rent their new home, and gen Xers are the least likely to expect to rent. Just 20 percent of the baby boomers expect to rent...Most movers in Generation X—87 percent—expect to live in a single-family home. For the oldest generations, 30 percent of movers expect to move to apartments or compact homes like townhouses or rowhouses.”²⁷

Table 6. Recently Moved and Change in Home Size

	Recently moved?		Recent Change in Home Size		
	Yes	No	Larger	Smaller	Same
All Adults	32%	67%	48%	27%	25%
Gen Y	53%	47%	48%	25%	27%
Gen X	31%	69%	59%	20%	20%
Baby Boomers	20%	80%	44%	33%	22%
War babies/silent generation	19%	80%	24%	50%	25%

Source: *Urban Land Institute*

²⁷ *American in 2013 Focus on Housing and Community*, *Urban Land Institute*

Table 7. Likelihood of Moving and Expected Type of New Home

	Likely to Move		Expected Homeownership Status		Movers' Expected Type of Home			
	Likely to move	Not likely to move	Expect to own	Expect to rent	Single-family	Apartment	Duplex, townhouse, rowhouse	Manufactured/mobile home
All Adults	42%	57%	73%	25%	65%	15%	14%	2%
Gen Y	63%	36%	69%	31%	60%	21%	17%	1%
Gen X	41%	59%	81%	16%	87%	6%	4%	1%
Baby Boomers	31%	68%	79%	20%	65%	11%	16%	6%
War babies/silent generation	22%	76%	55%	36%	58%	17%	13%	0%

Source: *Urban Land Institute*

- **Community preference.** “Americans prefer walkable communities, but only to a point. In most comparisons tested, a majority prefers the community where it is easier to walk or the commute is shorter. But when comparing a detached single-family house to an apartment or townhouse, the detached home wins out—even with a longer commute and more driving.
 - A majority prefers houses with small yards and easy walks to schools, stores and restaurants over houses with large yards but where you have to drive to get to schools, stores and restaurants (55 percent to 40 percent).
 - An even larger majority prefers houses with smaller yards but a shorter commute to work over houses with larger yards but a longer commute to work (57 percent to 36 percent).
 - A neighborhood with a mix of houses, stores and businesses that are easy to walk to is preferred over a neighborhood with houses only that requires driving to stores and businesses (60 percent to 35 percent).
 - Nevertheless, when given a choice between a detached, single family house that requires driving to shops and a longer commute to work and an apartment or condominium with an easy walk to shops and a shorter commute to work, a strong majority prefers the single family home –even with the longer commute (57 percent to 39 percent).²⁸

Table 8. Current Community Versus Preferred Community

	Where You Live Now	Where you Prefer to Live
City -Near mix of offices, apartments, and shops	16%	15%
City - Mostly residential neighborhood	19%	13%
Suburban neighborhood with a mix of houses, shops, and businesses	27%	30%
Suburban neighborhood with houses only	15%	11%
Small Town	11%	14%
Rural Area	11%	16%

Source: National Association of Realtors, 2013 Survey

²⁸ National Association of Realtors, National Community Preference Survey, 2013

- **Housing demand will shift.** According to the Director of the Metropolitan Research Center at the University of Utah, Arthur Nelson, housing demand is shifting from large lot homes to small lot, townhomes and attached housing and the current supply of housing will not meet future needs.²⁹

Table 9. US Housing Demand Shift 2010-2030

House Type	2010 Supply 2030 Demand	2030 Demand	Difference
Attached/Other	26%	34%	8%
Townhome	6%	18%	12%
Small Lot	11%	50%	39%
Large Lot	69%	34%	-35%

Source: Arthur C. Nelson, Presidential Professor & Director, Metropolitan Research Center, University of Utah

- **Political influence on housing preference.** “Given the choice, three-quarters (75%) of consistent conservatives say they would opt to live in a community where “the houses are larger and farther apart, but schools, stores and restaurants are several miles away,” and just 22% say they’d choose to live where “the houses are smaller and closer to each other, but schools, stores and restaurants are within walking distance.” The preferences of consistent liberals are almost the exact inverse, with 77% preferring the smaller house closer to amenities, and just 21% opting for more square footage farther away.”³⁰
- **Fewer households with children.** “Currently, only one third of U.S. households have children, and over the next two decades only 12% of new households being formed will have children. Childfree households are prime candidates for locating in denser areas of cities, within walking range of commercial services and entertainment. Households with two working parents are also increasingly seeking to live in urban areas to simplify their lives, taking advantage of child-care services and after-school educational opportunities available in urban areas.”³¹
- **Recent movers prefer walkable communities.** “There is a wider divide among those who have moved in the last three years or are planning to move in the next three years. Recent movers prefer the walkable community by 20 points (58 to 38 percent), almost identical to the walkable community preference expressed by those who plan to move in the next three years (+18 points, 57 to 39 percent).”³²

²⁹ “Reshaping America’s Built Environment”, Arthur C. Nelson

³⁰ Pew Research, Center for the People and the Press, *Political Polarization in the American Public, Section 3: Political Polarization and Personal Life*. June 12, 2014

³¹ *Business Performance in Walkable Shopping Areas, November 2013*, Robert Wood Johnson Foundation.

³² National Association of Realtors, *National Community Preference Survey, 2013*

Materials for further reading

The following list provides examples of key articles used in the research for this memorandum, with web links where available, for further reading.

Joint Center for Housing Studies of Harvard University

State of the Nation's Housing

http://www.jchs.harvard.edu/research/state_nations_housing

<http://www.jchs.harvard.edu/research/publications/state-nations-housing-2007>

American Association of Retired Persons (AARP)

Home and Community Preferences of the 45+ Population

<http://www.aarp.org/home-garden/livable-communities/info-11-2010/home-community-services-10.html>

Approaching 65: A Survey of Baby Boomers Turning 65 Years Old

assets.aarp.org/rgcenter/general/approaching-65.pdf

Fixing to Stay: A National Survey of Housing and Home Modification Issues

<http://www.aarp.org/home-garden/housing/info-2000/aresearch-import-783.html>

Beyond 50: A Report to the Nation on Livable Communities: Creating Environments for Successful Aging

http://www.aarp.org/home-garden/livable-communities/info-2005/beyond_50_05_a_report_to_the_nation_on_livable_communities__creating_environments_for_successful_aging.html

Pew Research Center

Second-Generation Americans: A Portrait of the Adult Children of Immigrants

<http://www.pewsocialtrends.org/2013/02/07/second-generation-americans/>

Latinos and Homeownership

<http://www.pewhispanic.org/2012/01/26/iii-latinos-and-homeownership/>

The Brookings Institute

Who Lives Downtown

<http://www.brookings.edu/research/reports/2005/11/downtownredevelopment-birch>

The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities

<http://www.brookings.edu/research/reports/2001/03/demographics-riche>

Urban Land Institute (ULI)

America in 2013 Focus on Housing and Community

http://uli.org/wp-content/uploads/ULI-Documents/America-in-2013-Compendium_web.pdf

Research by Other Organizations

Demographic Challenges and Opportunities for U.S. Housing Markets

<http://www.urban.org/UploadedPDF/412520-Demographic-Challenges-and-Opportunities-for-US-Housing-Markets.pdf>

State of Hispanic Homeownership Report

<http://nahrep.org/downloads/state-of-homeownership.pdf>

National Community Preference Survey

<http://www.realtor.org/reports/nar-2013-community-preference-survey>

Are Aging Baby Boomers Abandoning the Single-Family Nest?

<http://www.fanniemae.com/resources/file/research/datanotes/pdf/housing-insights-061214.pdf>

2004 National Community Preference Survey

<http://www.smartgrowthamerica.org/2004/10/20/survey-finds-lengthening-commutes-are-driving-the-growing-demand-for-walkable-neighborhoods-near-cities/>

Endnotes

¹ U.S. Census Bureau, *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*, Table 2a. Projected Population of the United States, by Age and Sex: 2000 to 2050. (2004).

² U.S. Census Bureau, *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*, Table 2a. Projected Population of the United States, by Age and Sex: 2000 to 2050. (2004); available from <http://www.census.gov/population/projections/data/national/usinterimproj.html>.

³ U.S. Census Bureau, *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*, Table 2a. Projected Population of the United States, by Age and Sex: 2000 to 2050. (2004).

⁴ Data in Table 1 is from the U.S. Census, 2007 American Community Survey, except where otherwise noted.

⁵ Oregon Office of Economic Analysis, *Forecasts of Oregon's County Populations and Components of Change, 2000 – 2040*, [Excel Workbook] (April 2004); available from http://www.oregon.gov/DAS/oea/Pages/demographic.aspx#Long_Term_County_Forecast.

⁶ Oregon Office of Economic Analysis, *Forecasts of Oregon's County Populations and Components of Change, 2000 – 2040*, [Excel Workbook] (April 2004).

⁷ Ada-Helen Bayer, Ph.D. and Leon Harper, *Fixing to Stay: A National Survey of Housing and Home Modification Issues* (Washington, D.C.: AARP, 2000).

William H. Frey, *Mapping the Growth of Older America: Seniors and Boomers in the Early 21st Century*, (Conducted for the Metropolitan Policy Program at the Brookings Institution, May 2007).

Teresa A. Keenan, *Home and Community Preferences of the 45+ Population*, (Conducted for AARP, November 2010).

⁸ Ada-Helen Bayer, Ph.D. and Leon Harper, *Fixing to Stay: A National Survey of Housing and Home Modification Issues* (Washington, D.C.: AARP, 2000).

Andrew Kochera, Audrey Straight, and Thomas Guterbock, *Beyond 50: A Report to the Nation on Livable Communities: Creating Environments for Successful Aging*, (Washington, D.C.: AARP, 2005).

Stephen Engblom, Greg Ault, and Lisa Fisher, *Boomer Residential Preferences*, (Conducted for the Urban Land Institution, Multifamily Trends, May/June 2007).

Teresa A. Keenan, *Home and Community Preferences of the 45+ Population*, (Conducted for AARP, November 2010).

⁹ Stephen Engblom, Greg Ault, and Lisa Fisher, *Boomer Residential Preferences*, (Conducted for the Urban Land Institution, Multifamily Trends, May/June 2007).

¹⁰ Teresa A. Keenan, *Home and Community Preferences of the 45+ Population*, (Conducted for AARP, November 2010).

¹¹ Teresa A. Keenan, *Home and Community Preferences of the 45+ Population*, (Conducted for AARP, November 2010).

¹² Teresa A. Keenan, *Home and Community Preferences of the 45+ Population*, (Conducted for AARP, November 2010).

¹³ Data in Table 2 is from the U.S. Census, 2007 American Community Survey, except where otherwise noted.

¹⁴ Oregon Office of Economic Analysis, *Forecasts of Oregon's County Populations and Components of Change, 2000 – 2040*, [Excel Workbook] (April 2004).

¹⁵ Oregon Office of Economic Analysis, *Forecasts of Oregon's County Populations and Components of Change, 2000 – 2040*, [Excel Workbook] (April 2004).

¹⁶ *American in 2013 Focus on Housing and Community*, Urban Land Institute

Belden Russonello & Stewart Research and Communications, *2004 National Community Preference Survey*, (Conducted for Smart Growth America and National Association of Realtors, 2004).

Eugenia L. Birch, *Who Lives Downtown*, Living Cities Census Series (Washington, D.C.: The Brookings Institute, November 2005).

¹⁷ *American in 2013 Focus on Housing and Community*, Urban Land Institute

Belden Russonello & Stewart Research and Communications, *2004 National Community Preference Survey*, (Conducted for Smart Growth America and National Association of Realtors, 2004).

¹⁸ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2013

¹⁹ Data in Table 3 is from the U.S. Census, 2007 American Community Survey, except where otherwise noted.

²⁰ Joint Center For Housing Studies of Harvard University, *State of the Nation's Housing*, (Cambridge, MA: President and Fellows of Harvard College, 2007).

²¹ Joint Center For Housing Studies of Harvard University, *State of the Nation's Housing*, (Cambridge, MA: President and Fellows of Harvard College, 2007).

²² Joint Center For Housing Studies of Harvard University, *State of the Nation's Housing*, (Cambridge, MA: President and Fellows of Harvard College, 2007).

²³ Martha F. Riche, *The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities*, (Washington, D.C.: The Brookings Institution Center on Urban and Metropolitan Policy, March 2001).

²⁴ U.S. Census, 2000 Decennial Census.

²⁵ U.S. Census, 2007 American Community Survey

²⁶ James P. Allen, *How Successful Are Recent Immigrants to the United States and Their Children? Presidential Address delivered to the Association of Pacific Coast Geographers, 68th annual meeting, Phoenix, Arizona, October 22, 2005* (Los Angeles: The Association of Pacific Coast Geographers, 2006)

²⁷ Pew Research Center report *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, 2013.

²⁸ Allen, James P. "How Successful Are Recent Immigrants to the United States and Their Children?" Presidential Address delivered to the Association of Pacific Coast Geographers, 68th annual meeting, Phoenix, Arizona, October 22, 2005.

²⁹ Pew Research Center report *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, 2013.

³⁰ Pew Research Center report *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, 2013.

³¹ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2013.

³² Gregory Rodriguez, *Immigrants Today: Where they Come From, Where They Live in the US*, Emergences, Volume 9, Number 2 (Washington, D.C.: Taylor & Francis Ltd 1999).

³³ Martha F. Riche, *The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities*, (Washington, D.C.: The Brookings Institution Center on Urban and Metropolitan Policy, March 2001).

³⁴ Joint Center For Housing Studies of Harvard University, *State of the Nation's Housing*, (Cambridge, MA: President and Fellows of Harvard College, 2007).





ENVISION TOMORROW OVERVIEW

Envision Tomorrow, an innovative, open source, set of urban and regional planning tools developed by Fregonese Associates, is an integral piece of our scenario planning process. It can be used to model development feasibility on a site-by-site basis as well as create and evaluate multiple land use scenarios, test and refine transportation plans, produce small-area concept plans, and model complex regional issues. The software also provides a real-time evaluation of relevant indicators such as land use, energy consumption, and financial impacts that measure a scenario's performance. It can also provide baseline carbon emissions analysis of different land use patterns, enabling planners to model the relationship between greenhouse gas emissions and land use and transportation decisions.

Envision Tomorrow consists of two primary tools: the **Prototype Builder**, an ROI model spreadsheet tool, and the **Scenario Builder**, an ArcGIS add-on.

WHAT IS ENVISION TOMORROW?

The **Prototype Builder**, a return on investment (ROI) spreadsheet tool, can be used to model buildings and test the physical and financial feasibility of development. The tool allows the user to examine land use regulations in relation to the current development market and consider the impact of parking, height requirements, construction costs, rents and subsidies. Use this tool to see what is market feasible. Use it to see how preferred forms of development, such as mixed-use retail with housing above, might become more financially feasible within your existing code.

The **Scenario Builder** adds scenario-building functionality to ArcGIS. First, design a library of buildings in the Prototype Builder. Next, use the Scenario Builder to create development types and “paint the landscape” by allocating different development types across the study area to create unique land use scenarios. The tool then allows real-time evaluation of each scenario through a set of user-defined benchmarks or indicators. The indicators measure such things as the scenario’s impact on land use, housing, sustainability, transportation, and economic conditions. It also allows communities and regions to monitor progress over the short-and long-terms.

WHAT MAKES ENVISION TOMORROW UNIQUE?

Transparent and Versatile

Envision Tomorrow is a versatile and expandable tool that can easily be adapted to accommodate various uses. Unlike most planning software, Envision Tomorrow allows the user to easily and transparently change the assumptions of the prototype buildings, development types, and scenario inputs. By making the tool transparent, you can quickly and easily adjust the assumptions to more accurately reflect the dynamics of your particular neighborhood, city, or region. This transparency allows planners to adjust assumptions in the scenario process if necessary.

Building Level Data

Since the Envision Tomorrow analysis process begins at the building level, anything we know about a building, we can test in a scenario. These are examples of common indicators used for evaluation:

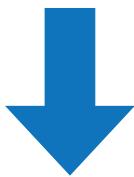
- **Housing and jobs**
(mix and density)
- **Jobs-housing balance**
- **Land consumption**
(vacant, agricultural, infill)
- **Impervious surface**
- **Open space**
- **Housing affordability**
- **Resource usage**
(energy and water)
- **Waste production**
(water, solid, carbon)
- **Transportation** (travel mode choice, vehicle miles traveled)
- **Fiscal impact** (local revenue and infrastructure costs)
- **Balanced housing index**
(how a scenario’s housing mix matches the expected future demographic profile)

ENVISION TOMORROW PROCESS

1

Develop Building Prototypes

Create prototype buildings using the return on investment (ROI) model.



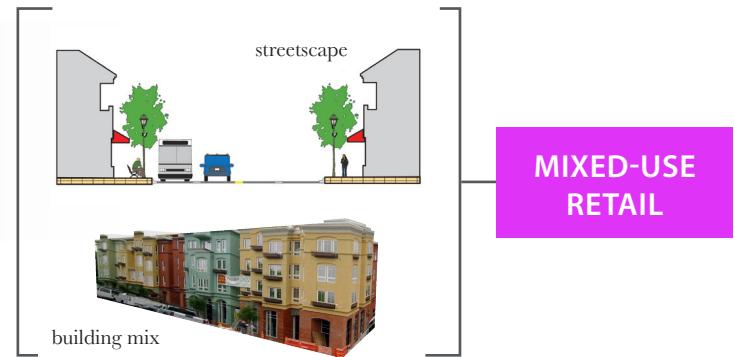
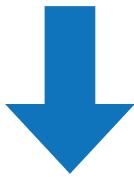
Prototype Name	Corridor Mixed Use
Project City/State	(enter name of building)
Site area	Long Beach
Site gross-to-net ratio	43,560 square feet
Landscaping or open space	1.00 acres
Building height (stories)	100% (enter percentage)
Under-build	5% (enter percentage)
	4 stories
	70% (enter percentage)



2

Create Scenario Development Types

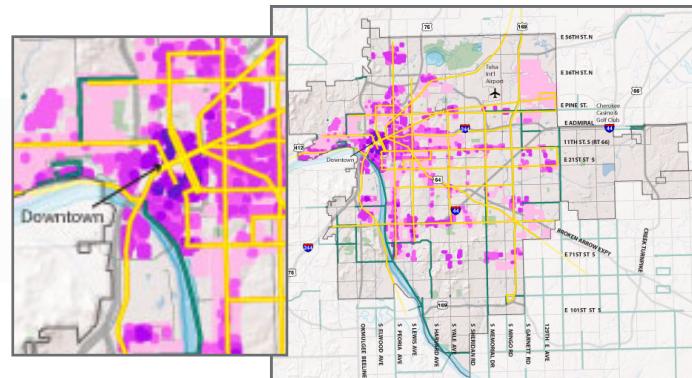
Development types include all of the elements in a city: a mix of buildings, streets, civic uses and open spaces.



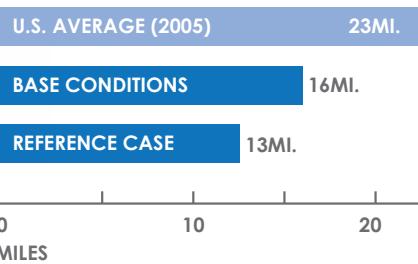
3

Build Scenarios

Create scenarios by applying the development types to the landscape using the scenario builder.



VEHICLE MILES TRAVELED Per Person Per Day



4

Evaluate Scenario Performance

Using the ROI model, examine a whole host of benchmarks based on the built scenario.

WHAT IS ENVISION TOMORROW?

Relevant and Cutting-Edge Research

Fregonese Associates has partnered with a number of institutions, organizations and government entities around the country to further the capabilities of Envision Tomorrow. These partnerships provide access to leading thinkers and the latest research and data about urban form and development which are then incorporated into Envision Tomorrow. Most recently, through collaboration with the University of Utah, 18 expanded indicators were developed that allow Envision Tomorrow users the ability to measure, for example, employment growth and resilience, public health, transportation safety, workforce housing and air quality impacts.

HOW IS IT USED AND WHO USES IT?

Municipalities, regional governments, and private organizations around the nation use Envision Tomorrow. The Chicago, Illinois region uses the tool to conduct housing studies; Baton Rouge, Louisiana is analyzing future growth scenarios, while the Southern California Association of Governments in California is examining the potential for greenhouse emissions reduction through different land use policies. In Portland, Oregon, the regional government, Metro, is refining their ability to test land use and transportation policies through scenario planning. Smaller cities like Waco, Texas and Mountlake Terrace, Washington, have found Envision Tomorrow to be a valuable addition to their planning toolbox. Below is a brief list of Envision Tomorrow users:

- Sonoran Institute/Lincoln Land Institute joint venture
- Southern California Association of Governments
- Envision Utah
- Chicago Metropolitan Agency for Planning
- City of Portland
- Portland Metro
- City of Tulsa
- Montana State University
- City of Long Beach

FAQ

What software do you need to run Envision Tomorrow?

Envision Tomorrow requires Windows XP or Vista, Microsoft Office 2000 Professional or greater, and ESRI's ArcGIS desktop software 9.3 or greater. The tool supports all ArcGIS license types (ArcView, ArcEditor, ArcInfo).

What types of indicators can Envision Tomorrow report?

Land Use: density and mix of uses

Transportation: mode choice, VMT—requires local calibration including travel survey results, land use and demographic inputs

Housing: mix and affordability

Fiscal Impact: local revenue and infrastructure—requires local calibration of revenue, rates and costs inputs

Environment: open space and agriculture conversion

Sustainability: energy use, carbon footprint, water usage and wastewater—requires local calibration based on local climate and typical resource use

Visit the Envision Tomorrow wiki page for more information on indicators: www.frego.com/etwiki

How long does it take to get up and running?

Start-up time depends on the indicators you use to evaluate the scenarios. Basic land use indicators can be inputted into the tool and calibrated within a few days. More complex transportation and sustainability indicators, including carbon footprint, could take several weeks to collect the input data. To reduce local calibration time, you can use national averages.

Can Envision Tomorrow be used to analyze different levels of geography?

Yes, Envision Tomorrow is designed to model land use decisions at a range of scales starting at the parcel level. By first designing Prototype Buildings that are financially feasible at the local level, the user then combines these prototypes into a series of Development Types, such as Main Street, mixed-use neighborhood, strip commercial, etc. The Development Types are used to create a series of land use scenarios at the district, city, county, and regional scale. The Scenario Builder tool allows the creation and comparison of up to five land use scenarios concurrently. The user can edit, switch between, and compare all five scenarios. A scenario spreadsheet in Excel format is dynamically linked to the tool and maintains the scenario outputs, such as housing mix, in a series of tabs for quick comparison. As you make changes to a scenario, the results automatically report in the spreadsheet for instant monitoring. Users can focus in small areas for detailed design control as well as zoom to a larger scenario with small area changes intact. Detailed scenario results are easily exportable and reportable at any geography.

FAQ

How does Envision Tomorrow evaluate different land uses and policy alternatives?

The tool evaluates scenario differences based on a variety of indicators. Most indicators derive from what particular mix of buildings the user chooses to place on the landscape and where they place them. For example, if the user paints an area with a main street development type as opposed to a strip commercial development type, the underlying buildings that compose those places are different, and that difference will be reflected in the indicators. Main Street development might include some multifamily housing and mixed-use, whereas the strip commercial might include low intensity retail. The choice to put in main street development could result in a lower housing density, but achieve a reduction in per capita water and energy usage and the number of vehicle miles traveled. The implications of different land uses are reflected instantly as the user makes alternative decisions.

Does Envision Tomorrow model carbon footprint?

Envision Tomorrow uses a predictive algorithm combined with local travel and demographic data to estimate the impact of land use changes on key transportation indicators, such as travel mode split, vehicle miles traveled, and greenhouse gas emissions. By using a predictive algorithm approach, the tool does not require a direct link to a transportation model to evaluate the impact of land use changes on travel behavior and carbon emissions.

Can you modify underlying assumptions to align with local conditions?

Yes, all assumptions to the prototype buildings, development types, and scenario inputs are transparent and editable in Excel. From our experience, it is important that planners see all of the assumptions in the scenario process and be able to adjust the assumptions, if necessary. Because the tool is dynamically linked in Excel, changing an assumption results in instant updates to the scenario outputs.

Can the tool display impacts graphically and visually?

Yes, Envision Tomorrow provides visual results in multiple formats, including maps, charts, and graphics. Scenario results can be used to create 2D and 3D visualizations.

How much does Envision Tomorrow cost?

The software license for Envision Tomorrow is free-of-charge. The only fees associated compensate our time to train users in using the tool. Contracts are driven by the client's needs; we typically create a contract for data gathering, training and customization.

URBAN GROWTH BOUNDARY REMAND

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Residential TAC Meeting 1

August 4, 2014

Bend UGB Remand Project

Key questions



- TAC charge:
 - Confirm residential land need for 2008-2028 planning period
 - Provide feedback/direction on most promising efficiency measures for residential lands
- Key questions:
 - How much land is needed for housing and related uses to 2028?
 - What residential efficiency measures are best for Bend?

Goal 10: Housing



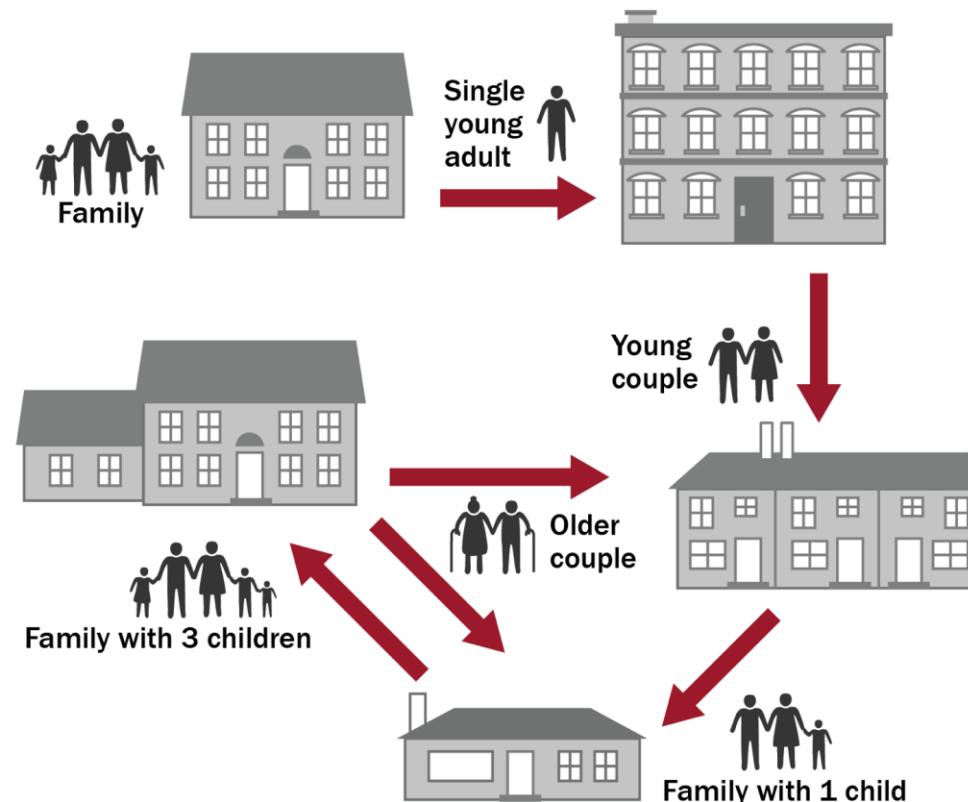
Buildable lands for residential use shall be inventoried and plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.

Goal 10: Housing



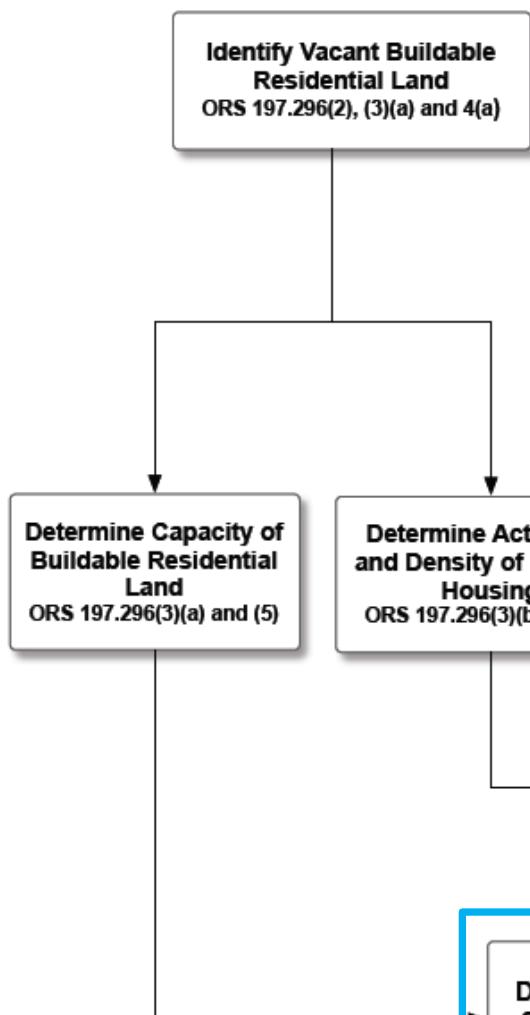
- ORS 197.303 defines needed housing types:
 - Single-family, multifamily, manufactured and government assisted
- Goal 10 and OAR 660-008 require:
 - Housing needs analysis
 - Analysis of national, state and local trends
 - Historical density and mix
 - Needed housing by price and type
 - 20-year supply of buildable land

Effect of demographic changes on housing need

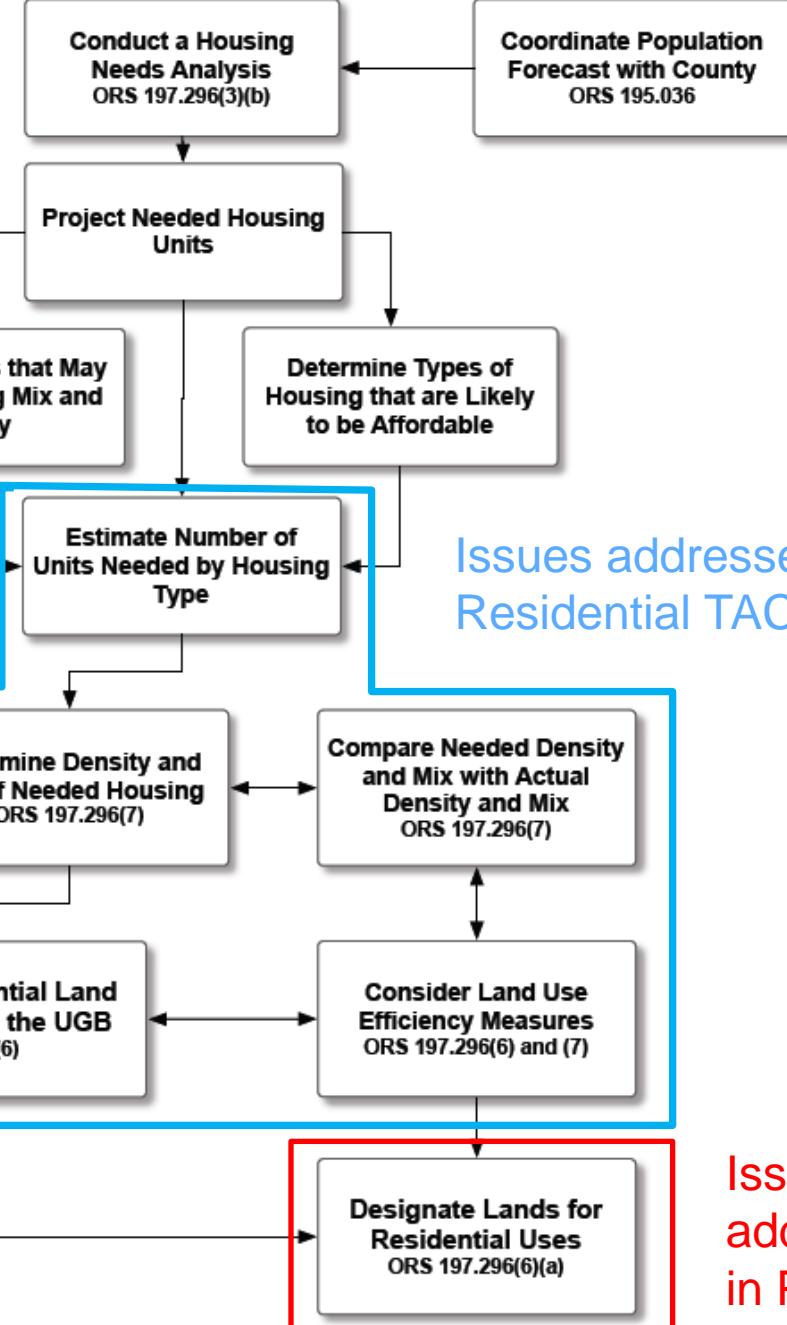


Source: ECONorthwest, adapted from Clark, William A.V. and Frans M. Dieleman. 1996. *Households and Housing*. New Brunswick, NJ: Center for Urban Policy Research.

Inventory of Residential Land



Need for Residential Land



Issues addressed by Residential TAC

Issues addressed in Phase II

Housing Needs Analysis in 6 Steps



1. Project the number of new housing units needed in the next 20 years.
2. Identify relevant national, state, and local demographic and economic trends and factors that may affect the 20-year project of structure type mix.
3. Describe the demographic characteristics of the population, and, if possible, household trends that relate to demand for different types of housing.
4. Determine the types of housing that are likely to be affordable to the projected households based on household income.
5. Estimate the number of additional needed units by structure type.
6. Determine the needed density ranges for each plan designation and the average needed net density for all structure types.

Key Remand issues



- “Housing need determination”
 - Housing mix and density related to demographic and socio-economic characteristics and trends
- Redevelopment
- Land use efficiency measures

URBAN GROWTH BOUNDARY REMAND

MAKING BEND EVEN BETTER



Demographic Trends and Implications for Housing

Bend UGB Remand Project

Residential TAC, 4 August 2014

Presentation Overview



- Demographic shifts underway
 - Baby Boomers
 - Gen Y / Echo Boomers
 - Growing Hispanic / Latino Population
- Impact on housing in Bend
- Developer interview summary

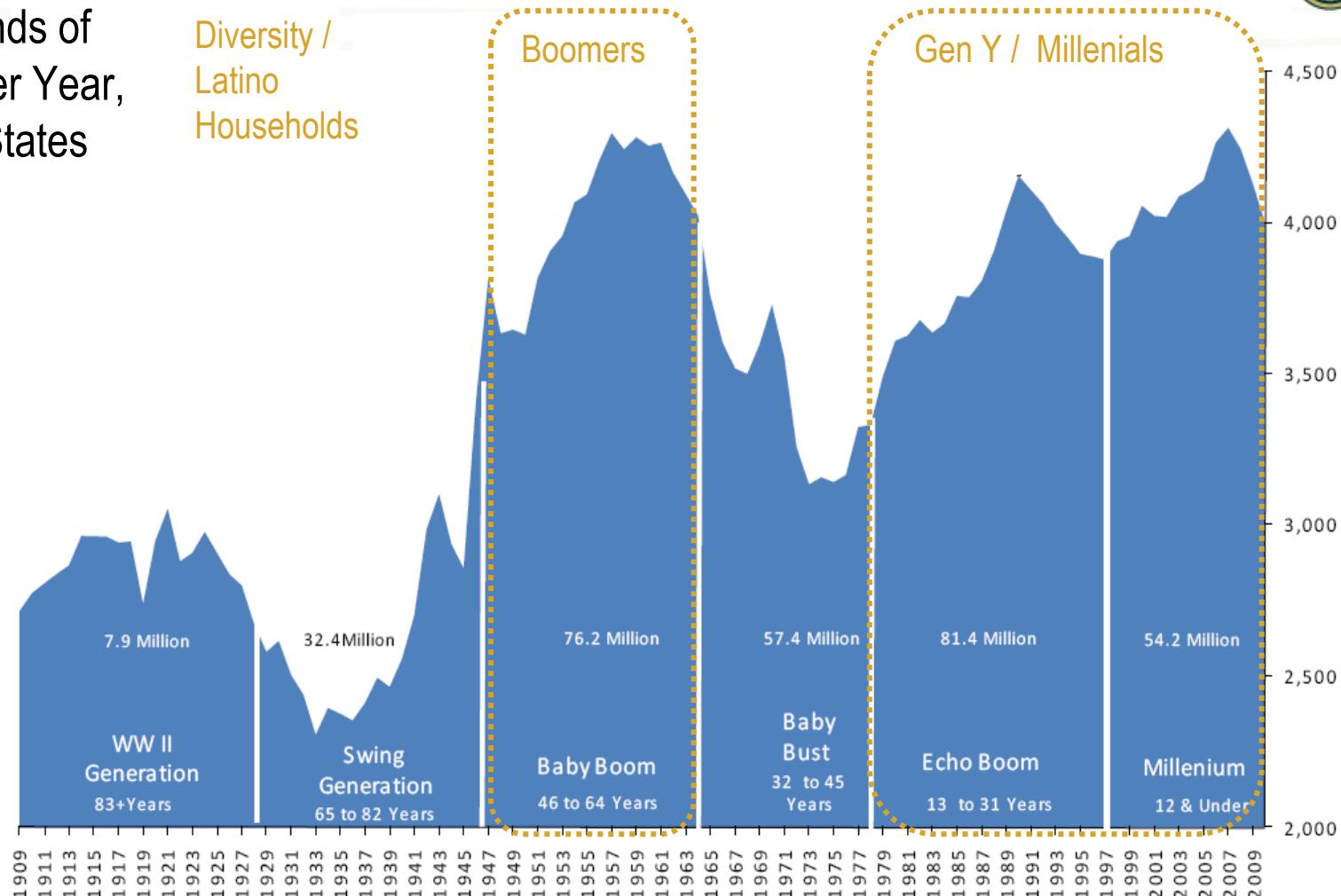


Big Demographic Shifts Over the Next Twenty Years



Thousands of Births per Year, United States

Diversity / Latino Households



Source: National Center for Health Statistics, US Census Bureau; Heitman Research

01428

A photograph of two women in winter clothing sitting on a sled in a snowy, mountainous area. The woman on the left is wearing a blue jacket and sunglasses, smiling. The woman on the right is wearing a red and black plaid jacket and sunglasses, also smiling. They are sitting on a sled, and the background shows snow-covered trees and a ski lift.

Baby Boomers

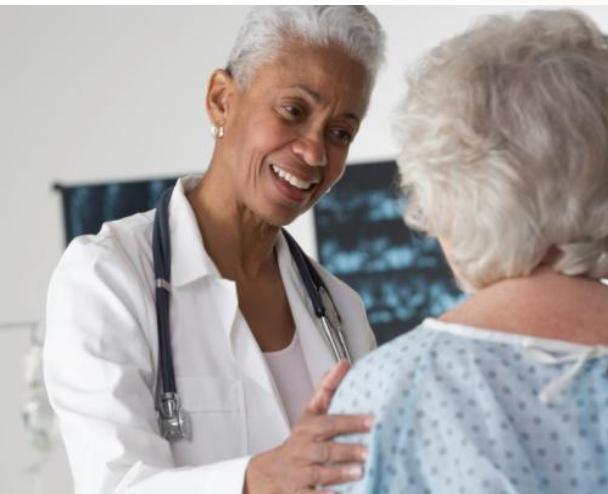
35%

(40,000 residents)



...of Bend's population growth is estimated to come from people 65 or older. By 2030, 24% of Bend's population will be 65 or older. Baby Boomers are the fastest growing segment of Deschutes County's population.

Baby Boomers and Housing



- More likely to own their home
- Most want to live in typical community setting; mix of ages
- Most want to “age in place”
- Some will choose to downsize; drawn by proximity to amenities
- Some will move to group housing or assisted living as health fails

What Does That Mean For Bend?



- Greater variety of housing products
- Opportunity for cottage housing, ADUs, townhomes
- Proximity to amenities is critical—parks, libraries, healthcare, restaurants, shopping, etc.



Generation Y/ Echo Boomers

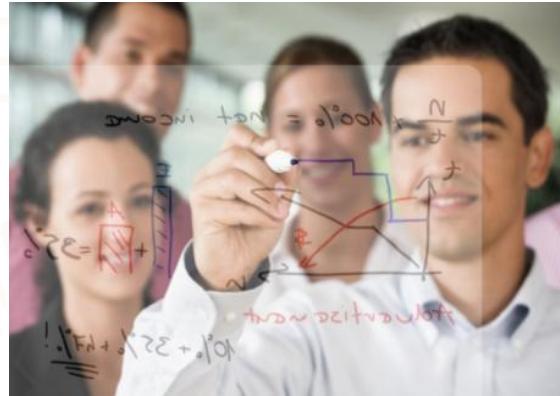
24%...

(27,000 residents)



...of Bend's population growth will come from people between the ages of 25 to 49 over the 2000 to 2030 period. Housing preferences shift and household size maximizes for this age range.

Generation Y and Housing



Gen Y works to live, does not live to work

- Age group most likely to live in social, urban environments
- High percentage of renters
- Shift to ownership with age
- Increased demand for variety of housing types
- Amenities are extremely important

What Does That Mean For Bend?



- More likely to live in denser neighborhoods
- Housing choices may be constrained by finances
- Opportunity for variety of housing types
 - Apartments
 - Mixed-use
 - Townhomes
 - Condos
 - Single family



Growing Hispanic/ Latino Population

3.4

persons per household



...was the average for Hispanic households in Bend, compared to 2.4 for all households. Nationally, Hispanics households with children grew at a faster rate than other minority populations between 1995 and 2005.

Latinos and Housing



- Larger family sizes, more children
- Larger share of renters
- Homeowners tend to be younger, often second generation
- More multigenerational households



What Does That Mean For Bend?



- Affordability may be an issue
- Single family homes
- Smaller “starter homes”
- Entry-level apartments

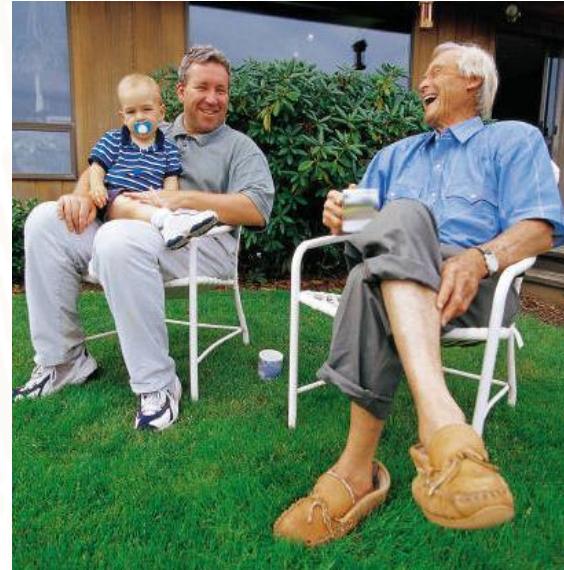


Impact on Housing in Bend

Slower Demand for *Large-lot* Single-family



The sum of active, distinct, and diverse neighborhoods creates a complete community.



Demand for Wider Range of Housing Types

Cottage Housing



Row Houses/ Townhomes



Mixed-Use Low-Rise



Accessory
Dwelling
Units



Wood Frame
Condos or
Apartments



Location is Increasingly Important



Design is Important



Well-designed multifamily and compact single-family located in a desirable neighborhood can provide opportunities for a wider range of housing options of housing options



Northwest Crossing

Source: centraloregonresortliving.com



Port Townsend WA



Developer Interview Summary

Developer Interview Summary



Single Family

- Currently lots of inquiry and demand for single family housing, but almost no buildable land is available.
- The “missing middle” is real, but limited.
- The demand for small lots is increasing, particularly if amenities are present/nearby.

Multifamily

- Third Street corridor is ripe for infill and redevelopment as denser housing

Developer Interview Summary



Barriers to Development

- Development process, fees
- Shortage of land, too expensive
- Lack of infrastructure
- Lack of appropriately-zoned property
- No planned unit development code

So, What Does this Mean for the TAC?



- Information being used to help determine:
 - Mix and density of housing
 - Location of different housing types (densities)
 - Amount of *infill* likely to occur
 - Amount of *redevelopment* likely to occur
- **NOT** being used to determine needed housing units for 2008-2028
 - Using the # new units approved in Remand

URBAN GROWTH BOUNDARY REMAND

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Envision Tomorrow Residential Buildings

Residential TAC Meeting #1

August 4th, 2014

Fregonese Associates Inc.

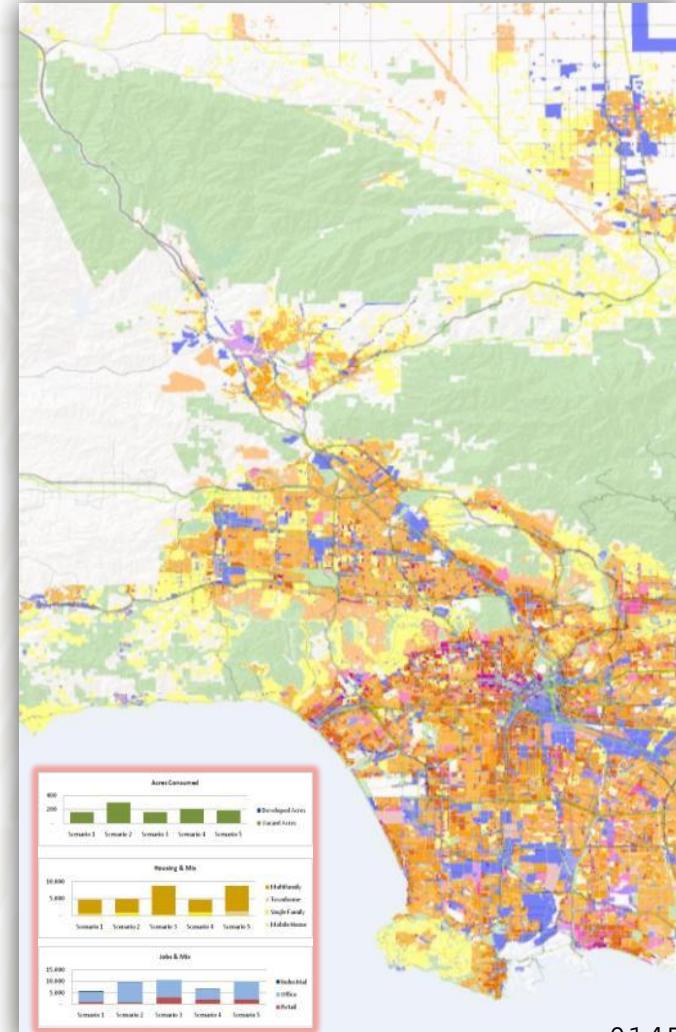
What is Envision Tomorrow?



- Suite of planning tools:
 - Analysis Tools
 - Prototype Builder
 - Return on Investment (ROI) model
 - Scenario Builder
 - Extension for ArcGIS

envision
tomorrow™

a suite of urban and regional planning tools



Building-Level Approach to Planning



Scenario Building Process

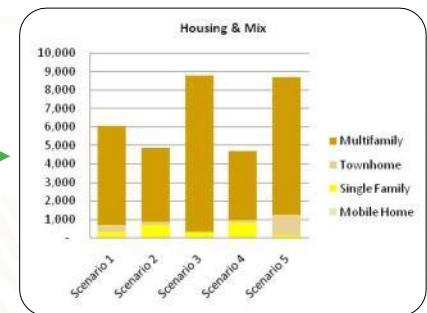


Building Types

Development Types

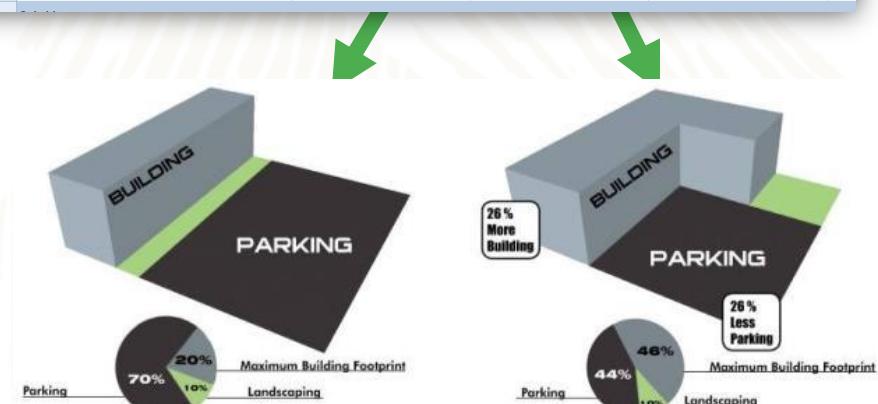
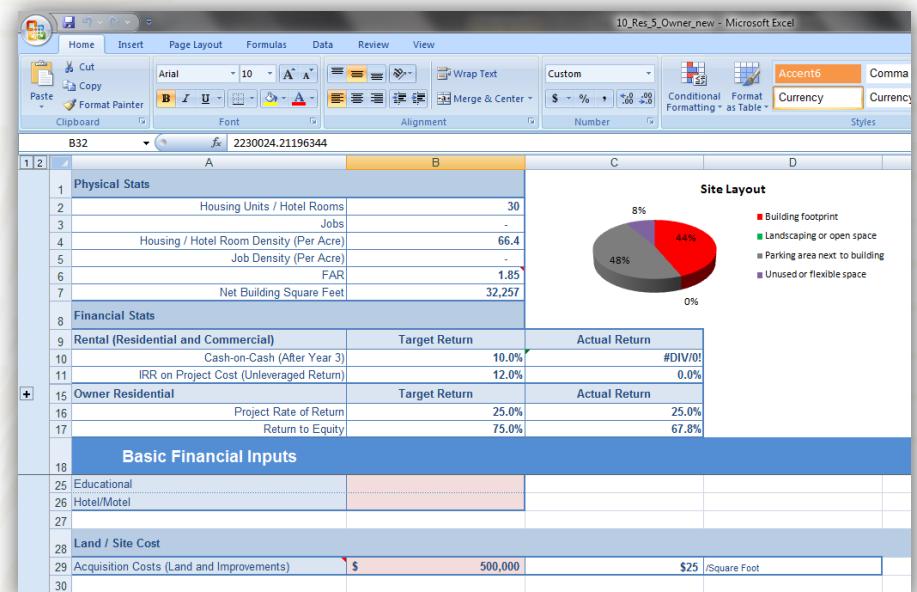
Scenario Development

Evaluation



Building-Level Financial Analysis

- Powerful as standalone tool or integrated with Scenario Builder
- Test existing regulations for financial feasibility
- Test impact of new development regulations
- Experiment with sensitivity of key variables



Test Financial Performance of Current Zoning and Alternatives



Current Zoning

4 story Mixed Use with existing parking



Tweaked Zoning

6 story Mixed Use with lower parking requirements



Baseline		Adjusted	Change
Height	4 Stories	6 Stories	+2
Parking Spaces	127	115	-10%
Land Used	43,000 Square Ft	43,000 Square Ft	0%
Density	31 DU / Acre	63 DU / Acre	+103%
Floor Area Ratio	1.1	2.0	+79%
Project Value	\$17.3 Million	\$23.5 Million	+35%
Unit Cost	\$519,272	\$369,590	-29%

Example: *Townhome Prototype Building*



- 6 units
- Lot size: $\frac{1}{2}$ acre
- Average unit size: 2,000 sf
- Parking: 2 spaces/unit

Building Context Influences Market



Urban



Inner
Neighborhood



Outer
Neighborhood

- Building context influences what is buildable
- Elements
 - Walkable streets
 - Walkable destinations and amenities
 - Land cost & rents
- Large variability within Bend

Amenities can Increase Desirability and Achievable Rents 10-20%



Parks and Open Space



Transit

Commercial Amenities



Traffic Calming



Walkability

Bicycle Connectivity



Context can Change Within the Planning Horizon

Development Feasibility Spectrum Changes with Increase in Desirability

What Can Be Built?



Today's Rents & Sales Prices



10% Increase in Average Rent

Amenity Level



20% Increase in Average Rent

New Construction vs. Adaptive Reuse



- New construction not financially viable in all areas
 - Adapting can cost less than new construction
 - May not trigger additional zoning or development regulation requirements
- Adaptive reuse great for emerging areas
 - i.e. Galveston and Newport



Single Family to Duplex



Warehouse to Lofts



New Construction Residential Buildings



Building Name	Height (Stories)	Urban	Inner	Outer
Rural Single Family	1			
Executive Estate Single Family	1			
Large Lot Single Family - 40,000 sq ft	1			
Large Lot Single Family - 20,000 sq ft	1			
Conventional Lot Single Family - 10,000 Sq Ft	1			
Conventional Lot Single Family - 8,000 Sq Ft	1			
Conventional Lot Single Family - 6,000 sq ft	1			
Small Lot Single Family - 4,000 sq ft	2			
"Skinny Lot" Single Family - 2,500 sq ft	2			
Accessory Dwelling Unit (ADU)				
Cottage Homes	2			
Outer Townhomes Medium	2			
Inner Townhomes Medium	2			
Inner Townhomes High	2			
Live-Work Townhome	2			
Suburban Apartment Complex	2			
Garden Apartment	2			
Apartment or Condo	3			
Apartment or Condo	5			
Mixed-Use Apartment or Condo	5			
Apartment or Condo	8			
Apartment or Condo	15			
Mixed-Use Apartment or Condo	15			

Rural Single Family Multiple Acres



Housing Units per Acre	Height
Acreage Lots	1-2 stories



Executive Estate Single Family

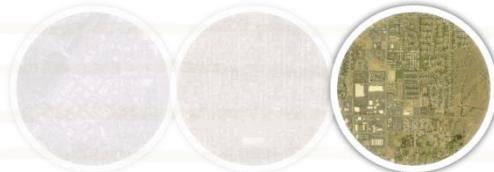


Housing Units per Acre	Height
0.5 - 1	1-2 stories



Large Lot Single Family

10,000 Sq Ft Lots +



Urban

Inner

Outer

Housing Units per Acre

<= 4

Height

1-2 stories



Conventional Single Family

5,000 – 8,000 Sq Ft Lots



Urban

Inner

Outer

Housing Units per Acre

5 - 9

Height

1-2 stories



Small Lot Single Family



Housing Units per Acre

9 - 12

Height

1-3 stories



“Skinny Lot” Single Family



Housing Units per Acre

14 - 18

Height

1-3 stories



Accessory Dwelling Unit (ADU)



Housing Units per Acre	Height
Doubles Density (7 -> 14)	1-3 stories



Cottage or Clustered Homes



Housing Units per Acre

8 - 12

Height

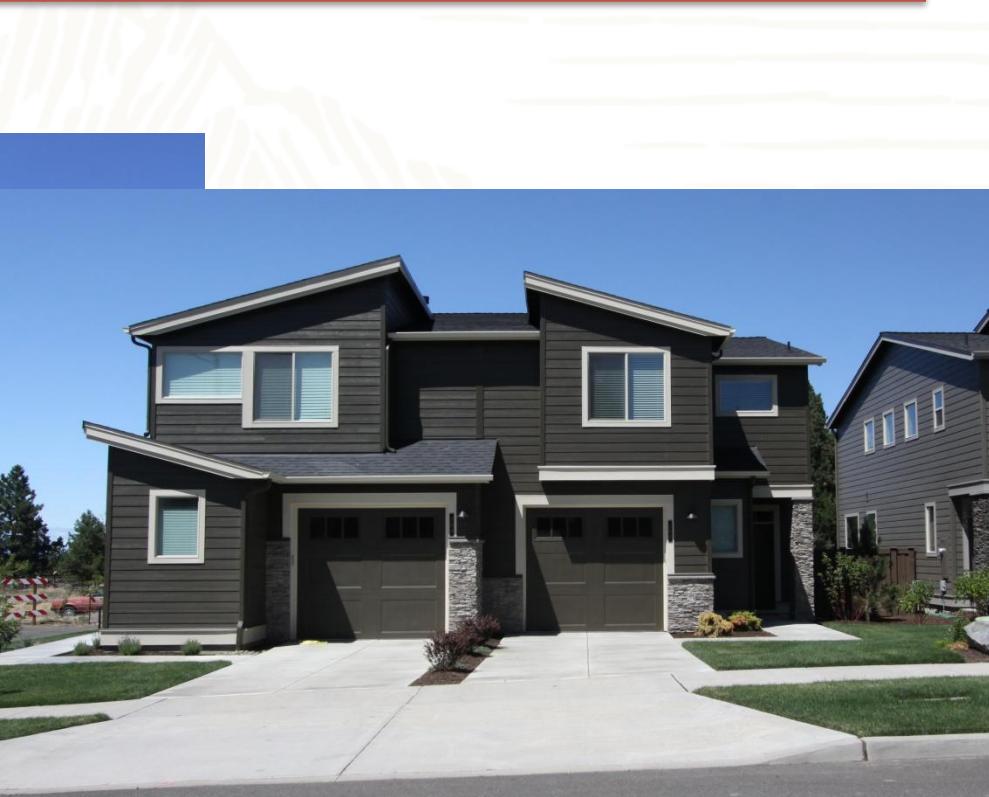
1-2 stories



Townhome Low Density



Housing Units per Acre	Height
9 - 18	1-3 stories



Townhome Medium Density



Housing Units per Acre

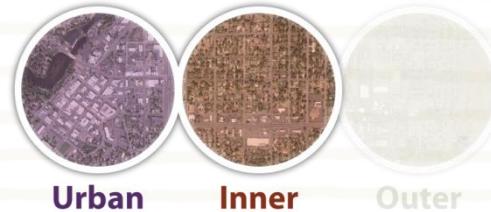
12 - 25

Height

2-3 stories



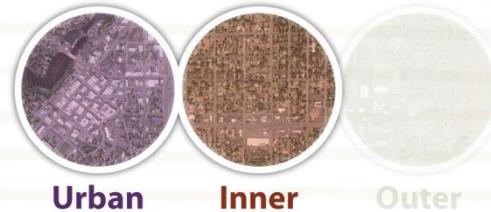
Inner Townhome High Density



Housing Units per Acre	Height
20 - 30	2-3 stories



Live-Work Townhomes



Housing Units per Acre

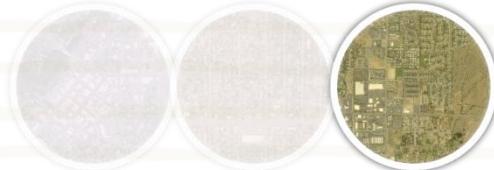
15 - 30

Height

2-3 stories



Suburban Apartment Complex



Urban

Inner

Outer

Housing Units per Acre	Height
15 - 25 units per acre	2 stories



Garden Apartment



Housing Units per Acre

20 - 40 units per acre

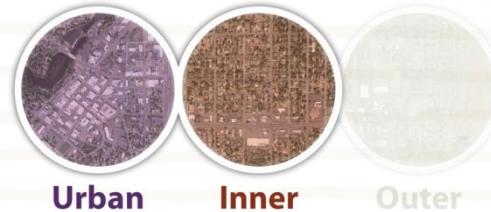
Height

1-3 stories



Urban Apartments

“Stick Built”

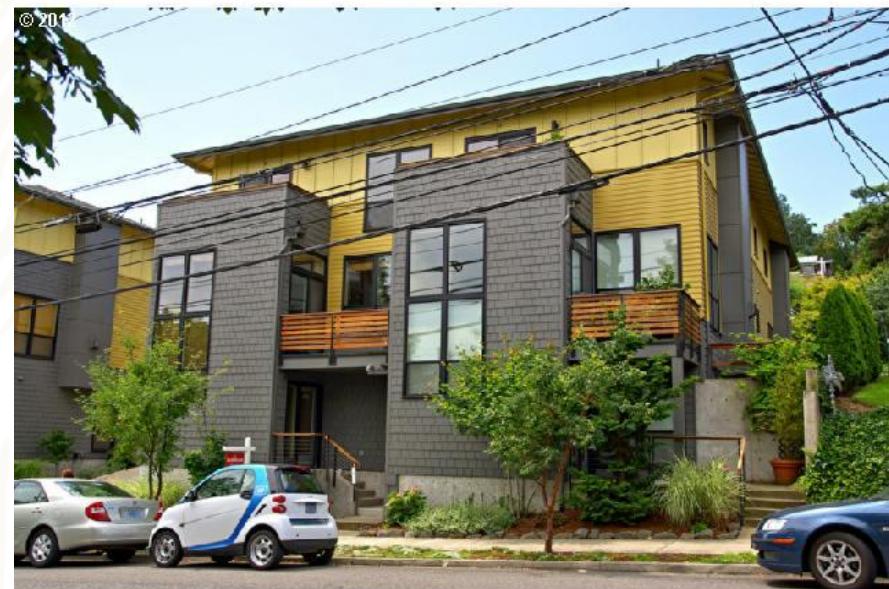


Housing Units per Acre

40 - 100+

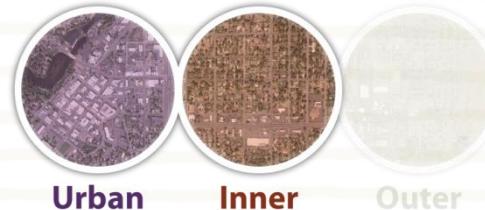
Height

2-4 stories



Urban Mixed-Use Residential

Medium Density: “Stick Built”



Housing Units per Acre	Height
40 - 100+	2-4 stories



Urban Mixed-Use Residential

High Density: Concrete + Steel or Wood



Urban



Inner



Outer

Housing Units per Acre	Height
50 - 200+	5+ stories



Relevance to Remand



- Housing Mix & Density:
 - All buildings fit broad housing types: Single Family Detached, Single Family Attached, Multifamily
 - More nuanced & realistic way to understand broad housing types and estimate densities
 - Match scenarios to housing need by type
- Efficiency Measures:
 - Analysis is grounded in market reality and calibrated with zoning
 - Financial elements allow sophisticated evaluation of impact of efficiency measures
 - Calculate UGB capacity with efficiency measures

City of Bend
Residential Lands Technical Advisory Committee
Meeting Notes
Date: August 4, 2014

The Residential Lands TAC held its regular meeting at 10:00 am on Monday, August 4, 2014 in the City Hall Council Chambers. The meeting was called to order at 10:05 am by Brian Rankin.

Roll Call

<input type="checkbox"/> Kristina Barragan	<input type="checkbox"/> Stacy Stemach	<input type="checkbox"/> Allen Johnson
<input type="checkbox"/> David Ford	<input type="checkbox"/> Gordon Howard	<input type="checkbox"/> Thomas Kemper
<input type="checkbox"/> Kurt Petrich	<input type="checkbox"/> Michael O'Neil	<input type="checkbox"/> Katrina Langenderfer
<input type="checkbox"/> Bill Robie	<input type="checkbox"/> Mike Tiller	<input type="checkbox"/> Lynne McConnell
<input type="checkbox"/> Don Senecal	<input type="checkbox"/> Laura Fritz	
<input type="checkbox"/> Sidney Snyder		
<input type="checkbox"/> Kirk Schueler		

Discussion

Matt Hastie will facilitate this group at future meetings

Joe Dills facilitated discussion of appointing chair and vice chair for the Residential TAC

Al Johnson volunteered to serve as Vice Chair

Brian pointed out that the TAC Chair and Vice Chair would have an additional meeting per month for prep work for next TAC meeting – about two additional hours

Tom Kemper volunteered to serve as Chair

Decision Item

By consensus, the Residential TAC appointed the leadership to this TAC: Tom Kemper, Chair, Al Johnson, Vice Chair, Stacy Stemach and Sid Snyder as remainder of TAC leadership

Action Items/Next Steps

Action	Assigned To
Provides slides to TAC Acronyms list	City of Bend
Vacation rentals National, regional trends data	City of Bend and APG
Trends, demographics, numbers (#'s) on housing mix projection	APG, Consultant team
Changes to housing library, potential code work changes	Fregonese and Associates and consultant team

Meeting adjourned at 12:35pm by Joe Dills.



Meeting Agenda

Employment Technical Advisory Committee

Monday, August 4, 2014 2:30 PM – 5:00 PM

City Council Chambers, Bend City Hall

Meeting Purpose and What is Needed from the TAC

The three central questions for the Employment TAC to address are:

- How much land is needed for employment to the year 2028?
- What are the short term and long term land needs by employment type?
- How and where will we invest public dollars to make land ready for the market?
- What are the best locations for needed employment lands?

This first meeting will set the foundation for answering the land needs question. Specifically, we will recap the important Remand issues, learn about and discuss employment trends, and then review an initial “library” of employment building types to be used in preparing growth scenarios. Additionally, the TAC will discuss a specific Remand issue that needs to be resolved: the use of a market factor for projecting needed employment land.

The specific discussion questions, i.e. the feedback we would like from the TAC, are listed as the bulleted discussion questions under each agenda item. They are a starting point for the agenda.

1.	Welcome and Introductions	2:30 PM
	a. Welcome	Brian Rankin
	b. Self-introductions	All
2.	Election of Chair and Vice Chair	2:40 PM
	a. Nominations	Facilitator
	b. Vote and confirmation	
3.	Employment and Market Trends	2:50 PM
	a. Building on past work	Brian Rankin

For additional project information, visit the project website at <http://bend.or.us> or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584



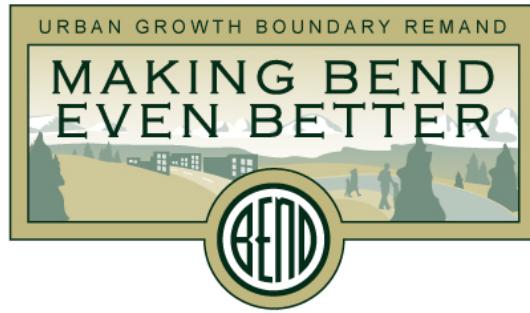
Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact the City Recorder no later than 24 hours in advance of the meeting at rchristie@ci.bend.or.us, or fax 385-6676. Providing at least 2 days notice prior to the event will help ensure availability.

b. Context – How employment and market trends and site types relate to Goal 9 – Economy, the Remand, Bend's Economic Opportunities Analysis (EOA) and the draft project goals.	Bob Parker, ECONorthwest
• What questions/comments does the TAC have on the context and how this information will be used?	
c. Employment and market trends and implications for Bend's future mix of employment lands	Chris Zahas, Leland Consulting Group
• Does the TAC agree with the description of employment and market trends?	
• How does the TAC see these trends playing out in Bend?	
• What other trend insights/data do you have on the subject?	
4. Employment Types	3:40 PM
a. Presentation of an initial “employment building library” for Bend – examples of employment types to be included in the Envision Model	Fregonese Associates
• What recent development products are good fits for Bend?	
• What commercial/industrial building types are missing that might make sense in Bend	
5. Market Factor	4:20 PM
a. Brief recap of the market factor issue and staff perspectives / recommendation	Bob Parker
• Does the TAC support using Scenario A as presented in the 2008 EOA to project employment land needs to 2028?	
6. Adjourn	5:00 PM

Memorandum

July 28, 2014



To: Employment Lands Technical Advisory Committee
Cc: Bend Staff
From: APG Consulting Team
Re: SUMMARY OF KEY REMAND ISSUES RELATED TO EMPLOYMENT LANDS

INTRODUCTION

This memorandum provides background information for the first meeting of the Employment Lands Technical Advisory Committee (TAC), specifically, a brief summary of Remand issues related to the land need scenario and use of a “market factor”. As a general principle, issues brought to the TAC for discussion will be major issues where options exist that can be informed by local input. Many of the Remand issues are specific and technical/legal in nature and are relatively simple to address. A list of the Remand issues related to employment lands is presented in Appendix A.

The charge of the employment lands TAC is:

- Confirm employment land need for 2008-2028 planning period that will feed into Phase 2 analysis of UGB alternatives
- Develop strategies to provide short-term supply of employment lands

In short, the Employment Lands TAC will address the following:

- How much land is needed for employment to 2028?
- How and where will we invest public dollars to make land ready for the market?
- What are the best locations for needed employment lands?

Building on Past Work

The Remand Order specifies work that has been approved by LCDC and work that was not approved. Since the Remand Order, various task forces and the City Council have approved some of the Remand Order issues that required reworking. The direction from the City Council and UGB Steering Committee is to complete the work as soon as possible, with community input, and assistance from a consulting team. In addition, they have stated that work previously approved by post-remand committees (RTF and USC) NOT be reconsidered at this time. This work was also reviewed by DLCD staff, who approved the approach and findings to these few remand items. This not only saves time, it saves money by not having to reconsider these issues anew. It is fair to say that few issues have been approved prior to this new approach to

the project, and that the major remand issues are still unresolved and require guidance from all the TACs.

Land entitlement is one of many factors influencing economic development, and the Employment TAC will focus on issues like site criteria, infrastructure, land readiness, and a framework to make sufficient, suitable, and buildable lands available to the market place over time. Together, this work is critical to propel and stabilize Bend's economy, and to become a stronger economic force for decades to come.

Planning Horizons and the Remand

An important consideration is that this a Remand and partial acknowledgement of a decision made in December 2008. Thus, the TAC's work will focus on issues that need resolution from the Remand. Following is guidance from the Bend City Attorney on the issue of planning horizons and new information:

The Commission's [i.e. LCDC's] role is not to substitute itself for the city, or make a new decision today, starting from scratch, just as the RTF's and City Council's roles are to carry out the Remand requirements spelled out by the Commission. Rather, LCDC, the RTF, and City Council will review the City's UGB expansion as if it were 2008. This makes sense given that a UGB expansion is based on the amount of land that the city needs for future residential and employment uses, over the 20-year planning period. Seeing the Remand through the lens of 2008 also keeps the data, timeframe, and analysis internally consistent. Here, the planning period is 2008 to 2028, and is based on the coordinated population forecast upheld on appeal to LUBA.

In summary, the planning horizon is 2008-2028 and the City can choose to reanalyze data already in the record, or add data that could have been available through 2008, to comply with the Remand requirements on employment land needs. In addition, the project will allow for some reconciliation and consideration of what has occurred on employment lands since 2008 in order to accurately account for actual development.

The City's Obligation under Goal 9

Planning for Economic Development must comply with Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). Specifically, Goal 9 requires cities to:

1. Include an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends;
2. Contain policies concerning the economic development opportunities in the community;
3. Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies;

4. Limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with proposed uses.

The key provision related to the Remand is requirement 3: “provide for at least an adequate supply of sites.” The UGB analysis must make connections between the City’s economic development vision (requirement 2), economic development potential (requirement 1), and land that is designated for employment uses. The City is allowed to a certain extent to be aspirational in its vision, but must link its aspirations to its vision, targeted industries, the site needs of those industries, and ultimately, the land designated for employment uses. In short, the city’s economic aspirations must be grounded in reality and a factual base—including a demonstration that lands designated for employment can be serviced.

EMPLOYMENT LAND NEED AND THE REMAND

In this first meeting, the Employment Lands TAC will focus on the economic vision (e.g., the types of businesses Bend is planning for), key trends that influence economic opportunities, and any types of employment or related development that might be missing in Bend.

Bend’s Employment Forecast

DLCD acknowledged Bend’s employment forecast. Thus, the 2008-2028 forecast will serve as the basis for determining employment land needs. Bend’s economic opportunities analysis shows that total employment in Bend will grow to 60,607 employees by 2028, an increase of 22,891 employees between 2008 and 2028.¹

Remand Requirements

Appendix A presents the list of Remand issues related to employment lands. At this first meeting, we will provide an overview of the issues related to land need scenarios and use of a “market factor”. Remand issues relating to redevelopment and infill opportunities for employment land, short-term supply strategies and special site needs will be addressed at subsequent meetings of the Employment Lands TAC.

Remand Issues related to Land Need Scenario and Market Factor

The 2008 EOA describes two scenarios as the basis for estimating employment land needs.

- **Scenario A** identified a minimum need for 1,380 net acres of employment land to meet anticipated employment by the year 2028, based on the employment forecast described in the prior section. Scenario A was the result of a relatively simple formula of dividing employment projections by employment density.

¹ The employment forecast is shown in Table 26 of Bend’s Economic Opportunities Analysis. Bend’s employment forecast does not include employees who are considered shift workers because land need estimates should be based on the day shift (typically the largest shift) instead of all employees working at a given business. Bend had approximately 8,000 shift workers in 2008.

- **Scenario B** provided additional employment lands for a variety of locations and sites above the minimum need. Scenario B identified a need for 2,090 gross acres to meet the anticipated needs, provide adequate selection of sites of different sizes, locations, and types, and meet its economic aspirations to attract specific uses.

Comments: The 2008 EOA includes a market choice factor for Scenario B. In order to justify an increase in the need for certain types of employment land within the UGB over what a trends-based analysis would conclude, there would need to be a factual basis in the EOA to satisfy OAR 660, division 9; and, to satisfy OAR 660, division 24, a finding that the job-growth estimate that supports the land need determination is reasonable and cannot be accommodated within the existing UGB.

Conclusion

With respect to land need, the Remand suggested that land need Scenario A meets legal standards. Including two different scenarios in the 2008 EOA caused some confusion with the DLCD and LCDC review of the prior UGB proposal. Additionally, Goal 9 does not specifically allow for the use of a market factor and no city has successfully justified a larger employment land need through use of a “market factor.” Based on a recent Court of Appeals decision relating to the City of Woodburn’s proposed UGB, the APG team and city planning and city staff believe that it would be very difficult to develop legally defensible findings for a UGB scenario that includes a “market factor” for employment lands.

We recommend that the Employment TAC proceed with Scenario A from the 2008 EOA, supplemented with special site needs supported in the Remand that cannot be accommodated within the existing UGB. Does the TAC support this approach?

APPENDIX A: LIST OF REMAND ISSUES

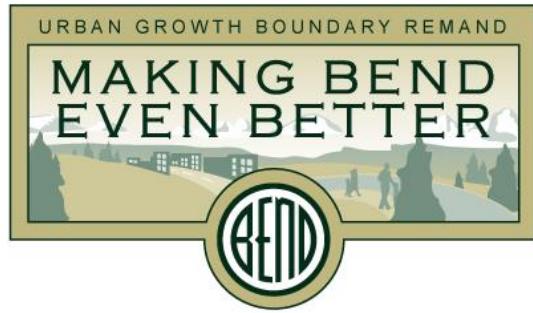
Appendix A presents the complete list of Remand issues related to employment lands. The numbering of directives in the second column starts with number 61 because this list is an excerpt of the larger Index of all directives to the City on Remand.

Remand Subissue	Directives to City on Remand
5.1 (Conclusion) Page 67	61. The submittal is remanded for the City to clarify in adequate findings that it is utilizing its 2008 EOA, scenario B, as the basis for estimating employment land needs
5.2 (Conclusion) Page 70	62. Commission remands the UGB decision to the City to provide an adequate factual base to support use of a 10 percent redevelopment factor, including an analysis of the amount of redevelopment that has occurred in the past and a reasoned extension of that analysis over the planning period 63. Alternatively, the City may satisfy Goal 9 and division 9 by other means, for example through a site-by-site redevelopment analysis. However, a site-by-site analysis is not required; the Commission determines that using a factor is acceptable where findings explain evidentiary basis and address the Goal 14 requirement to reasonably accommodate development within the existing UGB.
5.4 (Analysis) Page 76	64. As a result, in this case (<u>See</u> 1000 Friends of Oregon v. LCDC, __ Or App __, __P3d __ (A135375)) to the extent that the city continues to base some portion of its employment land need on market choice, it must explain how doing so in the factual context provided by the record for the Bend UGB expansion is consistent with the requirements of Goal 9, OAR 660-009-0025, and the "need" factors of Goal 14
5.4 (Conclusion) Pages 76-77	65. On remand, the City must make findings addressing applicable law, including addressing consistency with Goals 9 and 14 as required in <i>1000 Friends of Oregon v. LCDC</i> , __ Or App __, __P3d __ (A135375) (September 8, 2010)
5.5 (Analysis) Page 77	66. Under OAR 660-009-0015(3)(a)(C), the EOA Inventory of Industrial and Other Employment Lands for cities and counties within a Metropolitan Planning Organization, must include the approximate total acreage and percentage of sites within each plan or zoning district that comprise the short-term supply of land. 67. This short-term supply analysis required for jurisdictions within MPOs is in addition to the EOA inventory requirements applicable to all comprehensive plans for areas within urban growth boundaries. OAR 660-009-0015(3)(a) 68. Furthermore, division 9 requires that comprehensive plans for cities such as Bend "include detailed strategies for preparing the total land supply for

	development and for replacing the short-term supply of land as it is developed." OAR 660-009-0020(2).
5.5 (Conclusion) Page 78	69. The Commission concludes that the Goal 9 rule requires the City to include policies for maintaining a short-term supply. 70. The City must plan for required infrastructure and have identified the funding mechanisms.
5.6 (Analysis) Page 80	71. (t)he City must establish a basis in reason connecting the inference that the planning period will present higher vacancy rates for industrial and office than historic and current conditions to the trend data from which it is derived. 72. the City may pursue a mechanism to make industrial and commercial rents affordable under the competitive short-term supply, but not by inflating the long-term need beyond what may be supported by substantial evidence in trend data or reasoned inferences there from.
5.6 (Conclusion) Page 80	73. The Commission concluded that under division 9, the long-term vacancy factor should be based on past and projected future trends over the planning period.
5.8 (Analysis) Page 84	74. The City agreed that on remand it would move the analysis and calculation to the residential/other lands analysis and calculation.
5.8 (Conclusion) Page 84	75. The Commission remands the submittal to incorporate analysis of land needs for employment uses within residential zones in the City's housing needs analysis.
5.9 (Analysis) Page 85	76. The City designated a substantial amount of land as Commercial General along Highway 20 in the expansion area. The City concedes that it did not make findings related to the General Plan policies cited by appellant, but agrees to develop findings addressing the policies on remand.
5.9 (Conclusion) Page 85	77. The Commission remands the submittal to the City to allow it to address Commercial Development Policy 27 and 28 contained in Chapter 6 of the Bend Area Plan

Memorandum

July 28, 2014



To: Employment Lands Technical Advisory Committee
Cc: Bend Staff
From: APG Consulting Team
Re: Employment and Real Estate Trends that Will Affect Commercial Land Use in Bend

This memorandum presents information about location-specific employment trends that build upon trends addressed in the 2008 Employment Opportunities Analysis that will affect Bend's retail, commercial, and industrial market over the 2008 to 2028 period. Bend has experienced tremendous growth in the recent past and is expected to continue to grow over the next two decades. Bend will need to accommodate new employment as it grows, according to changing trends in employment. The questions addressed in this memorandum are:

- What are the key employment, retail, and commercial trends that may affect the location of Bend's employment land use mix over the 2008-2028 planning period to accommodate 20-year land need estimates, and influence redevelopment/infill strategies within the current UGB and arrangement of economic lands in expansion area?
- What are the implications of these employment trends for Bend's commercial and industrial market, including demand for types and location of businesses in Bend?

The purpose of this analysis is to address issues in the remand related to Bend's proposed allocation and location of employment land inside the current UGB and expansion area. This analysis does not apply to trends related to determining land need since these have mostly been approved by LCDC. These questions will be discussed at the first Commercial Lands Technical Advisory Committee (TAC) meeting.

COMMERCIAL, RETAIL, AND INDUSTRIAL TRENDS AFFECTING EMPLOYMENT LOCATION

Employment locations are largely determined by employee and employer needs and their ability to pay for locations that fit those needs. For many businesses, those needs have changed over time as many economies, including Bend's, have transitioned away from a natural resource-based economy to a knowledge-based economy. In the past, many businesses chose to locate near the source of raw materials. More recently, businesses' locational choices are influenced more by access to a skilled and educated workforce.

Workers are increasingly drawn to places with a high quality of life, drawing employers to them or creating their own businesses in order to live a certain lifestyle. Bend is attractive to businesses (who need workers) and residents in large part because of its high quality of life, which includes access to a variety of outdoor recreational opportunities, a moderate climate, and quality shopping and entertainment venues.

There are certain fundamentals of real estate that affect the viability of different business types and impact their location decisions. The main variables affecting business location include:

- **Transportation access.** Businesses will make locational decisions based on transportation access for their employees, clients, and their shipping or delivery needs.
- **Land price and availability.** Land prices, and thus rents, affect location decisions. Some business types are more sensitive to price than others. Industrial lands typically demand the least land value, whereas centrally located office locations can command the highest rents. Retailers' ability to pay depends on their clientele and turnover of product, so they are often willing to pay more to be in a prime location because they will easily make up the difference in higher sales.
- **Workforce, suppliers, and support services.** Many businesses need to be in proximity to other similar businesses, suppliers, and support services in order to be successful and therefore tend to cluster together. Other businesses need space and want less liability from having other users or the public nearby, or want assurance that they can expand in the future, and therefore tend to locate in more remote or fringe locations. All businesses need a reliable trained workforce and businesses in the same industry often cluster together in the same region in order to share those resources. In many professional and high tech business sectors, the presence and preferences of employees drive location decisions, as discussed below.

Trends affecting employment location in Bend

There are national and regional demographic and employment trends that will affect business location decisions across the U.S., as well as Oregon and Bend. This section provides a summary of trends that will be particularly important to Bend including¹:

- **Employee needs are changing.** Employees in many industry sectors, especially high tech and professional sectors, are becoming increasingly educated with valuable sought-after skills. They want more than "just a paycheck" from employers and are increasingly seeking opportunities to live in a place with a high quality of life first and then finding employment to fit their lifestyle. Many employees want to be in walkable locations with easy access to amenities such as parks, restaurants, services, with a range of housing options and shorter commutes. Employers, especially in industries with a need for highly

¹ The research in this memorandum is based on interviews with Bend's development community as well as numerous articles and sources of information about the changing nature of employment. Appendix A presents key citations and an analysis of our research of the academic literature about the evolving relationship between employees, employers, retail preferences and siting of different employment types.

educated workers, are moving to where the employees want to live in order to attract and retain a qualified workforce.²

- **Employer needs are changing.** There is a growing demand for flexible employment spaces that can change over time and respond to the needs of different users. Apart from heavy industrial users, most businesses can fit within mixed-use districts and near residential areas without disturbing residents, and they benefit from being near other businesses and amenities. As mentioned above, employees are driving the location decision for many employers, as they are increasingly choosing to locate in downtowns and near commercial centers over remote standalone locations, even if they have to pay higher rents to be there. There is also more overlap between retail, commercial, and industrial uses as consumer's habits and residential preferences shift over time³.

Different employment types have different requirements for success that will be expressed through the company's decision to locate in a specific place. Heavy industries need truck access. Retail and commercial businesses need visibility, easy access, and proximity to supporting households. Offices need to be in a location where employees can collaborate with other firms and access business services, while employees want to be near amenities such as restaurants and cafes. Heavy industrial users need to work without raising complaints about noise, odor, and particulate matter related to production, as well as needing access to regional transportation networks to ship and receive goods.

- **Evolving commercial and retail landscape.** New residential neighborhoods create demand for local and regional commercial centers. As new residential neighborhoods are built there will be demand for neighborhood serving commercial centers. Those needs are typically for services such as hair salons, dental and medical offices, and food related purchases such as grocery stores and restaurants.⁴ Other types of retail such as clothing and department stores, home and garden supplies, and boutique specialty shops will tend to locate in regional centers and corridors with good transportation access where they can draw from a larger market with a greater number of households. Consumers are increasingly interested in locally-produced goods which are driving a need for craft industrial spaces that can offer retail showrooms alongside manufacturing space. Breweries, craft foods, and metal or woodworking shops are good examples of this. Online shopping has changed retail in dramatic ways that are permeating through the built environment. Quality design and walkable locations are key factors to the success of future commercial centers by providing an ambience and experience that cannot be bought online and shipped direct to the consumer.

² Katz, Bruce, and Julie Wagner. "The Rise of Innovation Districts: A New Geography of Innovation in America." Metropolitan Policy Program: At Brookings: May 2014.

³ Supported by the current mix of uses in the EOA. City of Bend Economic Opportunities Analysis, April 2007.

⁴ 2013 Economic Impact of Shopping Centers, International Council of Shopping Centers (ICSC); Business Performance in Walkable Shopping Areas, November 2013, Robert Wood Johnson Foundation

Table 1 through Table 3 describe the changes in these trends and their potential affect on employment location choice in Bend over the 2008-2028 planning period. This information is intended to inform the redevelopment and infill discussion as required by the remand, it is not intended to inform the employment land need which has already been established.

Table 1. Employee needs are changing

Trends affecting infill/redevelopment	<ul style="list-style-type: none"> Quality of life drives location decisions. Bend's quality of life attracts employees with a variety of skill sets. It has become a magnet for experienced entrepreneurs to start new companies. It also attracts workers in the tourism and recreation industry serving visitors and residents.
Effect of trends on employment location	<ul style="list-style-type: none"> Bend is remote, yet accessible. The Redmond Airport makes travel accessible between Bend and Seattle and Silicon Valley for tech start-ups that need to collaborate with other companies. The lack of interstate highway access and the distance to other metropolitan areas makes it seem isolated. Accessibility. Employees and residents increasingly want to be in walkable locations with access to transportation options including cars, bikes, walking, and transit. Having a good trail system with connections to parks and other key locations is increasingly important.
	<ul style="list-style-type: none"> Employee's residential options are limited. Housing affordability is a challenge for many of Bend's employees, especially workers in the service sector making lower wages. Many employees live in other communities and commute to Bend due to a lack of housing options. Demand for commercial office and other employment uses is increasing in the downtown area due to the availability of amenities close-by for workers.
	<ul style="list-style-type: none"> Career growth is limited. Employees sometimes cite a lack of career opportunities because Bend has a limited range of employers. Start-ups and self-employment. Bend has a strong entrepreneurial spirit and has attracted many experienced residents that create their own opportunities for employment. Educational opportunities are limited. Bend does not yet have a four-year university, although planning for OSU Cascades is underway. However, it will take several years to get the college established. The lack of a four-year university constrains the supply of trained workers in several industries.
	<ul style="list-style-type: none"> A greater variety of housing options will support employees at varying income levels. Walkable and accessible business districts with a mix of office, shops, and restaurants are very attractive to technology and professional office workers. Many businesses will locate in such areas in order to attract and retain their workforce. Support for entrepreneurs, including the provision of flexible spaces in a range of sizes, will allow Bend to continue to attract entrepreneurs who see opportunities to start their own businesses.

Table 2. Employer needs are changing

Trends affecting infill/redevelopment	<ul style="list-style-type: none"> Flex space. Employment is increasingly able to fit into similar spaces. Office, light manufacturing, retail, and research and development can easily fit within the same building shell, although the tenant improvements may be very different. Office space per employee is decreasing. The typical space per employee has been in decline over the past decade, and is projected to stabilize around 200 to 150 square feet, or potentially less, per person, in the near future. Alternative workplace strategies, digital storage, and other technological advances have decreased the need for space in most office industries. Employees attract employers. Employers are increasingly moving to locations that are attractive for employees. Bend has many attractive qualities, fueling substantial growth.
Effect of trends on employment location	Transportation <ul style="list-style-type: none"> Bend is remote, yet accessible. The Redmond Airport makes travel accessible between Bend and Seattle and Silicon Valley for tech start-ups that need to collaborate with other companies. The lack of interstate highway access and the distance to other metropolitan areas makes it difficult to get goods to consumers.
	Land Price and availability <ul style="list-style-type: none"> Need for smaller parcels/buildings. Bend is not meeting the needs of many smaller manufacturers/businesses. Interviews revealed a lack of smaller parcels to meet the need of smaller start-up businesses. Lack of short-term supply. Juniper Ridge is planned for larger industrial users, but is largely not available for development due to lack of infrastructure. The market also does not perceive it as viable for smaller users. Industrial land is in short supply, as evidenced by a 4-5% vacancy rate (excluding large buildings over 15,000 square feet). Office locating in industrial space. Many office users are locating in flex spaces in industrial business parks which may be driving up the cost of industrial space for other users. Manufacturing locating elsewhere. Many manufacturing businesses are locating in Prineville, Redmond, or other locations to find available land at a price point they can afford. Need smaller flex buildings. There is a need for flex space between 1,500 and 3,500 square feet.
	Workforce, suppliers, and support services <ul style="list-style-type: none"> Educational opportunities are limited. Bend does not yet have a four-year university, although planning for OSU Cascades is underway, and will eventually help to provide an educated workforce. However, it will be several years before the first crop of graduates are ready for employment. Bend has not yet reached a critical mass. Employers in Bend sometimes have a hard time attracting highly educated workers who cite a lack of career opportunities, because there are not enough businesses in their industry to choose from should they need/want to change jobs in the future. Additionally, some employees cite a lack of employment opportunities for their spouses, who may be in other industries.
	Potential effect on infill/redevelopment <ul style="list-style-type: none"> Future employment growth will probably come from growth of existing companies and continued entrepreneurship. Having sites available of varying sizes will be important to meet the needs of new and growing companies. Bend will probably remain limited in its ability to attract large employers, but may be able to grow and attract medium sized business with continued support for start-ups and the completion of OSU Cascades to grow the local workforce. Policy may need to be put into place to protect industrial space from non-industrial users that raise land values and make it inaccessible to price-sensitive manufacturers. Office and other non-heavy industrial uses could be encouraged to locate in more mixed-use districts that provide more amenities for workers. Quality design matters. Employees and consumers increasingly want to be in walkable, amenity rich locations with something more to offer than just employment.

Table 3. Evolving commercial and retail landscape

Trends affecting infill/redevelopment	<ul style="list-style-type: none"> Residential growth will create commercial demand. Every new household in Bend will create demand for around 50 to 70 square feet of retail space, around 15 square feet of which can be located in small neighborhood centers, most of which will be convenience or food-related purchases and personal services. Neighborhood vs. regional centers. A critical mass of 2,000 to 3,000 households can support one block of "Main Street" or one neighborhood retail center ranging from 38,000 to 45,000 square feet on 3 to 5 acres of space. The remainder of the demand will locate in regional centers with a larger market area, where it can be supported by a greater number of households. Those centers will be larger, in the 6 to 10 acre range and will want to be near major roads and intersections. A large community center of 100,000 to 400,000 square feet supported by 20,000 or more households and anchored by one or more department stores would need 25 to 35 acres of land. Infill in malls and regional centers. Nationally there is a trend toward malls and larger regional retail centers offering more commercial services. People have less time to shop and want to overlap errands and shopping in a single trip. Medical and dental offices, libraries, and post offices have also begun to locate alongside retail and absorb vacant spaces. Some of the new demand for commercial spaces will be absorbed into existing commercial areas. Flex space. A new kind of "craft industrial" flex space is growing and evolving that incorporates light manufacturing with a retail or restaurant component. Bend's breweries offer a good example of this. Consumers want to purchase locally-produced goods and have an experience that comes with seeing them being produced. Other examples include specialty foods, and wood or metal working. Health care. In response to healthcare legislation and demographic trends, regional healthcare systems are expected to grow by adding smaller neighborhood clinics and offices. Most have sufficient space in hospitals and specialty care centers to meet demand. Medical offices are increasingly locating in retail centers to provide easy access to consumers. Demand will continue to grow with the aging of the Baby Boomers, as people over 65 visit the doctor three times as much as the younger population.
Effect of trends on employment location	Transportation <ul style="list-style-type: none"> Standards limit infill. Parking and vehicle access standards limit the development of smaller commercial parcels and inhibit the kind of walkable places that are increasingly attractive to residents and employees. Travel options. Consumers are attracted to high quality walkable and accessible destinations. Connections to regional trails and other commercial centers are important as people want more travel options than just cars.
	Land Price and availability <ul style="list-style-type: none"> Quality design matters. Retailers have to compete with cheaper online options, so they have to offer atmosphere, entertainment, and something more to attract customers. Walkability. Walkable places can command higher office and retail rents, in the range of \$6 to \$8 per square foot more than other locations, supported by retail sales that can be up to 80% higher in high quality walkable places.
	Workforce, suppliers, and support services <ul style="list-style-type: none"> The workforce may be limited by limited housing opportunities. Retail workers have lower earnings than employees in other sectors and much of the workforce may have to live in other communities and commute to Bend to find affordable housing.
	Potential effect on infill/redevelopment <ul style="list-style-type: none"> Bend will need a variety of commercial spaces to accommodate future growth. Some infill in existing commercial centers should be expected if not precluded by existing design standards. New neighborhoods on the fringe will need to reserve key locations for commercial centers to develop over time, as housing develops to support it. Commercial spaces need to be flexible in allowing uses to change over time. Many office, commercial, and light industrial uses can coexist in the same areas and benefit from being in proximity to each other.

Conclusions

Given the information presented above, Bend will need to plan for a variety of retail and commercial uses in multiple locations to meet future needs. Based on changing demographic trends and consumer preferences, retail and employment will likely become more mixed-use in nature, even in large shopping centers, if permitted to do so. The exception to this is heavy industrial which may need greater protection from non-industrial users. Flexibility for light industrial uses, "craft industrial," and research and development types of employment will allow those uses to expand in Bend.

Bend will need to plan for more employment in mixed-use walkable neighborhoods and a greater flexibility for non-industrial employment types to co-locate within the same areas. Industrial areas may need greater protection from encroaching non-industrial users that drive up rents and chase price-sensitive industrial users to other locations. The new OSU Cascades Campus will be important to employment in the future and current planning efforts may want to consider creating opportunities for co-location of incubator space or other partnerships to foster innovation and capture the creative synergies between education and business start-ups given the entrepreneurial nature of Bend's community and the need to provide a trained workforce.

- **Neighborhood retail per capita/household.** Every new household in Bend will create demand for around 50 to 70 square feet of retail space, depending on the size and purchasing power of the inhabitants. As new neighborhoods are created on the urban fringe, some neighborhood retail will be necessary to accommodate new residents, while the rest of the commercial/retail demand will likely locate in regional centers. It is likely that around 15 square feet of neighborhood, convenience-type retail could be supported per new resident located nearby in a fringe neighborhood shopping center. However, neighborhood retail would need a critical mass of housing units to be completed and inhabited before it becomes viable. Therefore, planning efforts should allow for or reserve land for some commercial and retail development to support new households, keeping in mind that actual development and occupancy will come after a critical mass of households has been established. It should be noted that this commercial/retail development will likely want to locate at key intersections with higher traffic counts and good visibility.
 - Approximately 2,500 to 3,000 households could support 38,000 to 45,000 square feet of retail, which is about the right size for a small convenience center, perhaps with a drug store, specialty food or small grocery store, and small café, fast food restaurant, or other small tenant. At an FAR of about .25 this is about four to five acres.
 - A larger core population of 6,000 to 8,000 households would be needed to support a full-size grocery store with a variety of in-line tenants in a new neighborhood center of 60,000 to 90,000 square feet, or approximately six to 10 acres.

- **Absorption of demand for new regional retail.** New residents will create additional demand for other types of retail that will likely be absorbed by existing commercial areas and will initially be expressed as higher sales per square foot in existing stores, followed by an increase in rents and higher quality tenants. As demand increases, existing regional centers could also start to fill in existing underutilized areas and parking lots. Commercial centers are becoming increasingly varied as people want to accomplish multiple goals in one trip, so retail centers may also add other non-retail uses such as healthcare facilities and libraries.
 - A larger community center of 100,000 to 400,000 square feet anchored by one or more department stores would need 25 to 35 acres of land and the support of 20,000 or more households.
- **Excess retail space.** Some trends point toward a reduction in retail space per capita in the future. As more consumers buy products online, and the sharing and renting economy grows, there may be a need for less retail space per person. Brick-and-mortar locations for some products and services will remain strong particularly those that offer an experience or have entertainment value that cannot be purchased online. Grocery stores and restaurants provide a sensory experience appealing to people across generations, particularly as a nearby neighborhood amenity. Other retailers may face challenges in the future, presenting a potential opportunity for adaptive reuse of empty commercial space or redevelopment of existing retail spaces. This may also present an opportunity for transitional uses such as community meeting spaces, neighborhood supportive services such as a pocket library, or other uses. The addition of housing near existing commercial centers will help strengthen the consumer base making them more viable over time.
- **Design matters.** As noted above, online shopping has created competition for many companies and products, but consumers still desire an experience and the entertainment value that comes from engaging places. Commercial centers are increasingly serving an additional role as a community gathering space or “living rooms” where families and friends meet and socialize. Interviews with Bend’s development community strongly reflected a view that quality design matters, serving as a real drawing card for people. In particular, developers noted the amenity value that neighborhood commercial areas provide for adjacent residential neighborhoods, especially when they are within walking distance. Implications for efficiency measures could include providing an opportunity through code provisions or incentives that would enable or facilitate this de facto mixed-use opportunity. Locational factors need to be considered for the success of commercial areas such as proximity to a range of transportation options, and accessibility to existing and developing neighborhoods.
- **Walkable communities and demand for mixed-use.** Shifting demographic and household dynamics are fueling demand for walkable neighborhoods and people are increasingly willing to occupy smaller homes in order to be closer to more amenities, which includes stores and restaurants. The top walking destinations for people living in

walkable neighborhoods are restaurants, grocery stores, and banks. If existing neighborhoods are allowed to infill with new residents, opportunities for mixed-use housing and commercial developments will increase. Interviews with Bend's development community noted that small community/commercial centers (and particularly a smaller grocery store) within walking distance or a very short drive are necessary components for a desirable neighborhood.

Employment has shifted away from natural resources to knowledge resources. Highly educated workers, especially in the high tech industry, are drawing employers to the places where they want to live or are creating their own jobs rather than moving to find employment. Walkable Urban Spaces and Innovation Districts attract an educated workforce, can command higher rents, and boost the overall economy. Therefore Bend needs to allow for and foster employment in mixed-use and commercial districts where amenities, such as restaurants and shops, are within a short distance of employment, and where other firms are nearby, providing for easy collaborative interaction. Interviews with Bend's development community noted that parking and access requirements made commercial and employment development on small lots infeasible, precluding some of the walkable neighborhoods that employees desire.

- **Allow for flexibility.** Employment is becoming increasingly diverse, with the lines between industrial, office space, retail, and other uses being blurred. Technological advances are accelerating the obsolescence of spaces built around very specific equipment and highly customized spaces. Space per employee continues to shrink and as firms work toward reducing their overall footprint, they implement innovative strategies throughout the workplace to find a balance between personal space and common amenities. Healthcare and medical offices are growing in non-traditional places and are frequently locating in retail centers in order to provide convenient access to clients. "Craft industrial" uses, like breweries, value-added food producers, and bike manufacturers, are creating demand for a blend of retail and manufacturing space that allows customers not only to purchase locally made goods, but to also experience their creation. They are usually less capital-intensive than heavy industry, and more consumer oriented than business oriented. This retail and industrial overlap can be a good neighbor for housing—or can serve as a buffer use between housing and more intense types of employment, and offers an opportunity for infill and redevelopment for certain types of light industrial and craft uses, maybe even live-work or home occupations.

"Nuisance zoning" is increasingly unnecessary for many types of employment, as fewer employers are producing noxious fumes and odors that are incompatible with other uses. Therefore, zoning that allows for a range of uses in most employment areas will allow Bend to better accommodate future employment growth. The exception to this trend relates to price-sensitive heavy-industrial users that need to be protected and have land set aside that is affordable and meets their needs.

- **OSU Cascades and innovative employment clusters.** Across the US, tech startups play an especially important role in smaller local economies. Because of Bend's location, entrepreneurial characters, quality of life, and relative proximity to Silicon Valley and Seattle, many successful business, tech, and professional transplants have moved into the area, bringing companies with them or starting new businesses upon their arrival. The development of OSU Cascades campus will give employers in Bend greater access to qualified employees. Given the trend toward co-location of start-ups and educational institutions, a growing employee desire to be near amenities and a diverse range of employment, and the regional economic benefits associated with Innovation Districts, there may be an opportunity to plan for employment or incubator spaces (as well as housing) in proximity to the OSU campus. As Bend becomes a regional technology hub and gains a four-year university, it may wish to foster coordination of future office, flex-space, and industrial land uses within a high-density hub to serve employees with a desirable live-work node.
- **Lack of affordable housing creates a burden on service workers.** Central Oregon has the largest concentration of destination resorts in the Pacific Northwest including Sunriver Resort, Black Butte Ranch, Eagle Crest, and others. According to the Oregon Employment Department the average annual wage for workers in Oregon's destination resorts is approximately \$26,500 - working an average of 32 hours per week during peak season, with an average pay rate of \$12 per hour. Destination resorts pay slightly more than other industries within leisure and hospitality, and more than the accommodation and food services industry which pays an average of approximately \$16,800 in Central Oregon. Interviews revealed that workers in the service industry within Bend's economy can't afford to live in Bend, which creates longer commutes and puts a greater burden on these workers. Bend needs to look for ways to reduce housing and transportation costs for this segment of the workforce. Mixed-use districts will be an important way to keep overall living costs lower for these employees. Transportation options, including bike networks and trails will also help support lower-wage workers by reducing transportation costs.⁵
- **Short-term supply.** Juniper Ridge was planned for industrial users requiring large parcels, but it does not yet have the infrastructure in place, and is therefore unavailable in the short-term. Additionally, it is perceived as being "off the map" for most industrial users and isn't competitive/available for smaller-lot industrial users due to large-lot requirements and cost.

⁵ Oregon Employment Department.

APPENDIX A: FURTHER READING AND CITATIONS

This section provides greater detail on the research conducted on the employment trends that are summarized in the tables above, and is organized around broader themes framed by probing questions guiding the research. For further reading on a given topic, see the relevant report listed in the Sources section below.

Changing nature of Employment

Employee Needs

Question: How are employee needs changing?

- **Workers want more than just a paycheck.** The Nineteenth and Twentieth Century economies were resource based, and workers congregated to businesses. During the 20th century economy, Industrial Districts—areas with high concentrations of manufacturing enterprises were commonly engaged in similar or complimentary work—where the nature of work was manufacturing activity. Now, businesses go to where the workers want to be, and workers are there for the lifestyle.⁶ (p.5) “Around the world, employees’ psychological needs are changing with regard to work. Increasingly, they want more from their job than a paycheck; they desire more interaction, more mobility, and more options—in short, they want a work life that’s a better match with their values and social life, in a work environment that’s more natural, both literally and figuratively.”⁷
- **Industrial/manufacturing employment.** According to the BLS, manufacturing employment is expected to decrease an annual rate of decline of 0.1 percent. Real output in the manufacturing sector is expected to grow from around \$4.4 trillion in 2010 to \$5.7 trillion in 2020. Although manufacturing output is growing, its percentage of total output continues to fall, from 19.2 percent in 2010 to 17.6 percent in 2020.⁸
- **Business formation and growth.** New and young businesses—as opposed to small businesses generally—play an outsized role in net job creation in the United States. But not all new businesses are the same—the substantial majority of nascent entrepreneurs do not intend to grow their businesses significantly or innovate, and many more never do. Differentiating growth-oriented “startups” from the rest of young businesses is an important distinction that has been underrepresented in research on business dynamics and in small business policy. Kauffman research contrasted business and job creation dynamics in the United States private sector with the innovative high-tech sector—defined here as the group of industries with very high shares of employees in the Science, Technology, Engineering, and Mathematics (STEM) fields. Findings showed that high-tech sector and the information and communications technology are important

⁶ Katz, Bruce, and Julie Wagner. "The Rise of Innovation Districts: A New Geography of Innovation in America." Metropolitan Policy Program: At Brookings: May 2014.

⁷ Plantronics. "Smart Working—the New Competitive Advantage" (White Paper). Plantronics, Inc. March 2012.

⁸ Henderson, Richard. "Employment Outlook: 2010-2020, Industry Employment and Output Projections to 2020." Bureau of Labor Statistics Monthly Review, Jan. 2012.

contributors to entrepreneurship in the U.S. economy. Of new and young firms, high-tech companies play an outsized role in job creation. High-tech businesses start lean but grow rapidly in the early years, and their job creation is so robust that it offsets job losses from early-stage business failures. This is a key distinction from young firms across the entire private sector, where net job losses resulting from the high rate of early-stage failures are substantial.⁹

Flex Space

Question: Is there an increasing demand for flexible employment spaces?

- **Office space per employee is shrinking.** Firms are responding to recessionary pressures, and in an effort to reduce overhead costs, many are reducing their real estate for greater cost savings, both in terms of surplus properties and individual space. According to the CoreNet Global Corporate Real Estate 2020 survey of 500 corporate real estate executives, the average space per employee has changed from 225 square feet in 2010 to 176 square feet in 2012, and is projected to decline to 151 square feet in 2017, with 40 percent of survey respondents indicating they would use less than 100 square feet per employee. The speed of technology, entrance of younger generations into the work force, the need to cut costs and shrink portfolios, and the continued push toward globalization has created a, “perfect storm” converging on the workplace and CRE’s position in provisioning and managing it.¹⁰ Workspaces around the world are undergoing major redesign and reconfiguration, many of these changes include more open space, communal areas, and remote workers—and less individual office and cubicle space, where collaboration and creativity often get stifled. Flexibility and variety in floor plans are replacing conventional layouts; employees now have other options besides conference rooms for holding one-on-one meetings and mentoring sessions.¹¹

Over the past decade the US General Services Administration (GSA) has moved away from assigning office space based on hierarchical space use standards and “now follows the Code of Federal Regulation’s (CFR) recommendations for space planning based on organizational needs”. The Federal benchmark is set at 218 rentable square feet per person; however the new GSA Headquarter office in Washington DC will average 92 rentable square feet per person of workspace, because of the introduction of shared work spaces and telecommuting. The GSA’s research into the subject produced the following findings, “[n]o significant differences between government and private workspace use trends were found. Private sector survey respondents reported an average space per person of 200 USF (230 RSF)¹², with a median of 193 USF (222 RSF) as compared to the Federal benchmark of 190 USF (218 RSF). The greater space per person average in the private sector was due to the nature of work performed by

⁹ Hathaway, Ian. “Tech Starts: High Technology Business Formation and Job Creation in the United States.” Ewing Marion Kauffman Foundation: August 2013.

¹⁰ Todd, Sarah, “Corporate Real Estate 2020: Workplace Final Report.” CoreNet Global Inc., May 2012.

¹¹ Plantronics. “Smart Working—the New Competitive Advantage” (White Paper). Plantronics, Inc. March 2012.

¹² USF means Usable Square Feet or the space within an individual tenant’s space without including common areas like lobbies and staircases, while RSF stands for Rentable Square Feet and includes common areas.

participating private sector organizations. In cases where a private sector organization used less space than a Federal organization, telework and other flexible work arrangements were responsible for reducing the organization's overall workspace needs.¹³

- **Industrial buildings offer lower prices and more flexibility.** Industrial buildings offering flex space provide adaptability that businesses may need for nonindustrial uses. Mark Emerick, senior vice president at real estate firm CBRE Group Inc. said flex space occurs where commercial use meets industrial use. Besides flexibility, Emerick notes that many businesses choose industrial space because rents can be almost half the cost of leasing Class A office space. This is usually because a company will have to pay for elevators, stairs, lobbies and restrooms—known as the core or load factor—in office buildings. “You have to pay for all that, whereas in creative flex office spaces [it's] your own space.”
- **Portfolio repurposing and designing for adaptability.** Instead of allowing outdated or surplus properties to remain vacant, firms are looking for innovative ways to repurpose them and improve utilization and efficiency. CoreNet Global estimates that the total volume of vacant commercial space in the urban environment including corporate facilities is close to 30 percent.¹⁴ The Industrial Asset Management Council and the Society of Industrial and Office Realtors commissioned a survey of more than 60 corporate users of industrial space to gain more insight about flexibility and adaptive re-use of industrial buildings. The survey explored strategies to boost the adaptability potential of their facilities and barriers to re-use. The top three industrial property types which lend themselves to new uses, and found to have the greatest successes for adaptability and re-use include—warehouse/distribution centers, light manufacturing plants, and research facilities.
- **Building to meet current needs might reduce future flexibility.** Product life cycles are shorter, near-constant technology innovations keep disrupting the status quo, and business strategies continue to change. While one company may require a certain size facility now, going forward it may not need as much space. Or, it may need more space but lack the acreage to expand. Specialty requirements and infrastructure also make it more difficult to repurpose the facility in the future. One executive said, “Try to resist the pressure from your user groups to build in a high level of customization, because it's the permanence of specialized uses that can reduce the adaptive potential of the facility.” He adds that customization can come with the equipment that gets installed. “Specialty uses can be added in or changed out with relative ease as needs change. The manufacturing lines themselves can be changed out as your product lines change...Among the most effective ways to retain flexibility, keep the building itself constant and look for ways to minimize permanent specialty use requirements by shifting the specialty requirements to replaceable equipment...Today, when we build a new building, we go into it assuming

¹³ US General Services Administration, *Workspace Utilization and Allocation Benchmark*, July 2011

¹⁴ Mattson-Teig, Beth. “Adaptive Re-Use of Corporate Real Estate,” *Area Development Online*, 2012.

that something will change...So, if you take the position going in that the uses in all likelihood will change over time, then your design and construction approach is going to be different from the old way, when the assumption was that nothing was going to change.”¹⁵

Locational Needs

Question: What are the locational needs of different employment types?

- **Highly amenitized areas can become a powerful driver of the economy.** Walkable Urban Places, or ‘WalkUPs’ focus on regional area developments characterized by high density, diverse real estate mix types connected to surrounding areas accessible by multiple transportation modes including bus, rail, bike, and motor vehicles. In a study identifying the country’s top 30 metropolitan WalkUPs, Leinberger and Lynch predicted that a wealth-creating development in many metropolitan areas has initiated a permanent shift away from drivable suburban to walkable urban areas. “Walkable urban office space in the 30 largest metros commands a 74 percent rent-per-square-foot premium over rents in drivable suburban areas. And, these price premiums continue to grow.”¹⁶
- **Innovation districts.** Innovation Districts grow out of a powerful set of economic, cultural, and demographic forces that are reshaping both how and where people live and work. Innovation Districts are geographical 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, technically-wired and offer mixed-use housing, office, and retail. Entrepreneurs are starting their companies in collaborative spaces, rather than independently. This collaboration allows them to mingle with other entrepreneurs and improve access to everything from legal advice to equipment. A growing share of workers are choosing to work and live in places that are walkable, bikeable, and connected to transit and technology. Innovation Districts are emerging in dozens of cities and metropolitan areas across the United States. Many are taking shape where underutilized areas (particularly older industrial areas) are being re-imagined and remade, while others are developing in traditional exurban areas—which are scrambling to meet demand for more urbanized, vibrant work and living environments. Unlike traditional customary urban revitalization efforts emphasizing the commercial aspects of development, innovation districts help aid cities and metropolis move up the value chain of global competitiveness by growing the firms, networks and traded sectors that drive broad-based prosperity.¹⁷
- **Quality of life, education, and entrepreneurship.** Bend is the 16th largest metro area in the country for high-tech startup density. A study by Kauffman provided a number of

¹⁵ Moline, Ann. "Designing Flexibility into the Industrial Workplace." BOMA International (2013).

¹⁶ Leinberger, Christopher; Lynch, Patrick. "Foot Traffic Ahead: Ranking Walkable Urbanism in America's Largest Metro's." The George Washington University School of Business. 2014.

¹⁷ Katz, Bruce, and Julie Wagner. "The Rise of Innovation Districts: A New Geography of Innovation in America." Metropolitan Policy Program: At Brookings: May 2014.

insights on 384 metropolitan areas. Each of the high-density metros had one of three characteristics, and some had a combination: they are well-known tech hubs or regions with highly skilled workforces; they have a strong defense or aerospace presence; they are smaller university cities. High-tech startups were especially prominent in the local economies of Boulder, Fort Collins-Loveland, Colorado Springs, and Grand Junction in Colorado; Corvallis and Bend in Oregon; Cheyenne, Wyoming; Huntsville, Alabama; Missoula, Montana; Sioux Falls, South Dakota; and Ames, Iowa. Many of these areas offer more than just a job, but a lifestyle with recreational opportunities, and greater small town amenities that many find desirable. Because of their small size, these regions represented just 2 percent of high-tech startups nationally, but their high densities compared to other employment, illustrate the relative importance of high-tech startups to the local economies. The research showed that startups are being founded throughout the US, and forming 'tech hubs' in communities tied to technology-focused industries in large and small cities.¹⁸

- **Industrial and retail overlap.** Industrial space is being designed and located where it can meet the needs of online retailers with ever faster delivery times.¹⁹ Retailers are looking for urban formats that will be able to serve city dwellers more efficiently. "Our approach to our industrial real estate is different today, because overall business assumptions are fundamentally different than they were 20 years ago."²⁰ Online shopping and changes in retail have implications for industrial space. Big box retailers are starting to function like mini-distribution centers as retailers figure out how to respond to expectations for on-demand delivery as consumers become increasing sophisticated about merging online and in-store shopping. "The concurrent optimization of multiple channels will require a flexible network of smaller urban locations that fill parcel orders delivered direct to customer homes within a day and large distribution centers that replenish both stores and in-market distribution centers. Multiple in-market distribution centers will be smaller and run fleets of trucks into neighborhoods, perhaps twice a day, for same-day and next-day delivery to households."²¹
- **Heavy industry.** Over the past century, the shift in industrial land use and its effect on urban form has resulted in several studies across the country recognizing the vital interaction between industrial and other uses in a healthy urban economy. The studies found that many industrial land uses provide critical support services for both commercial and residential uses, and that close proximity was critical to timely and cost effective delivery of those services. Many of the studies recommend the creation of buffer zones between industrial uses and residential or mixed uses, and emphasized the

¹⁸ Hathaway, Ian. "Tech Starts: High Technology Business Formation and Job Creation in the United States." Ewing Marion Kauffman Foundation: August 2013.

¹⁹ Blank, Stephen; Kramer, Anita; Warren, Andrew. "Emerging Trends in Real Estate 2014." Urban Land Institute & PWC (2014).

²⁰ Moline, Ann. "Designing Flexibility into the Industrial Workplace." BOMA International (2013).

²¹ The Changing World of Trade, Cushman and Wakefield, 2013

preservation and protection of prime industrial land from residential and mixed-use development, presenting several common requirements for industrial users:

- Industrial uses are highly sensitive to rent levels, and therefore vulnerable to displacement if not protected.
- Close proximity to customers, suppliers, workers and road networks are primary concerns. Access to ports, rail, and transit were secondary and highly dependent on location and industry.
- Clustering of similar industries and their supplier networks is a common occurrence in industrial districts. Industrial users generally preferred exclusive industrial districts—as opposed to integrated uses.²²
- **Co-location and integration of uses.** “The factors affecting the demand for industrial land are largely related to industrial restructuring. This restructuring encompasses changes in the structure, function and location of Production, Distribution and Repair (PDR) industries, as well as the growth of office-based service industries and various types of Research and Development industries. Production-based industrial restructuring dates back to the 1950's and included waves of industrial suburbanization, intra-national regional shifts, and globalization. Accompanying these geographic shifts have been dramatic changes in firm structure such that the various functions that were once co-located in a single facility are now dispersed globally based primarily on workforce and market considerations. Management, administration, and support services associated with many production firms now tend to cluster in central cities along with office-based service firms.”²³

Neighborhood and Regional Retail Locations

Question: Particularly for new neighborhoods on the fringe, how much of the demand from new households will locate in the nearby neighborhood as opposed to established regional retail and commercial areas?

- **Retail per capita.** The ICSC estimates that 44 percent or 24 of the total 54 square feet of estimated shopping space per resident is located in a shopping center including: power centers, theme/festival centers, outlet centers, neighborhood centers, community centers, community centers, lifestyle centers, strip retail centers, regional malls, and airport shopping centers combined. The remaining 30 square feet is located outside of shopping centers in other types of commercial buildings such as stand-alone stores and “Main Street” mixed-use areas.²⁴
- **Average retail square footage per household.** “By one estimate, an average household can support 72 sq ft of retail development. Of this, approximately 40 sq ft are

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²³ Lester, William T.; Kaza, Nikhil; Kirk, Sarah. “Making Room for Manufacturing: Understanding Threats to Industrial Land Conversion in Cities.” University of North Carolina, Chapel Hill, Dept. of City and Regional Planning. January 30, 2014.

²⁴ 2013 Economic Impact of Shopping Centers, International Council of Shopping Centers (ICSC)

in categories typically present in neighborhood retail areas, such as grocers, drug stores, cleaners, florists, video/entertainment, and eating/drinking establishments. Of course, not all of a household's purchases in these categories will be made in the nearest neighborhood retail area, and an estimate of 15 to 20 sq ft per household is probably a safe estimate of what can be supported locally. Thus, if a neighborhood shopping area has 50,000 sq ft (of which 30,000 is a supermarket), it will require approximately 2,500 to 3,300 households or a population of 5,000 to 6,500 to support such a center.²⁵

Table 4. Supportable Retail Space per Household

Store Type	Supportable Sq. Ft. Per Household	% Neighborhood	Neighborhood Sq. Ft. Per Household
Food/Grocery	11.6	45.0%	5.2
Eating Places	12.4	45.0%	5.6
Drinking Places	1.5	45.0%	0.7
Drug	3.1	45.0%	1.4
Apparel	4.5	17.5%	0.8
Shoe	1.3	17.5%	0.2
Book	1	17.5%	0.2
Hobby/Toy	1	17.5%	0.2
Gift	1	17.5%	0.2
Flower	0.5	17.5%	0.1
Hardware	0.5	5.0%	0
Auto supply	2.6	5.0%	0.1
Furniture	3.5	5.0%	0.2
Home furnishings	1.6	5.0%	0.1
Appliance	0.5	5.0%	0
Radio/TV/Computer/Music	2.3	5.0%	0.1
Sporting Goods	1.4	5.0%	0.1
Building Material	2.6	0.0%	---
Department/Variety	13.4	0.0%	---
Gas Stations	5.5	0.0%	---
Total	71.8		15.1

Source: *Business Performance in Walkable Shopping Areas*, November 2013, Robert Wood Johnson Foundation; Center for Economic Development, University of Wisconsin Extension

Table 5. Local Retail Center Type

Retail Center Type	Gross Retail Area	Dwellings Necessary To Support	Average Trade Area	Anchor Tenants
Corner Store	1,500 - 3,000	1,000	Neighborhood	Corner store
Convenience Center	10,000 - 30,000	2,000	1 mile radius	Specialty food or pharmacy
Neighborhood Center	60,000 - 90,000	6 - 8,000	2 mile radius	Supermarket and pharmacy
Community Center	100,000 - 400,000	20,000+	5 mile radius	Junior department store

Source: *Shopping Center Development Handbook*, ULI

²⁵ *Business Performance in Walkable Shopping Areas*, November 2013, Robert Wood Johnson Foundation

- **Density, diversity and design.** “Density has been shown as explaining much of the variation in performance of retail areas, although other factors also make a difference. A study of transportation choices found that “three D’s” – density, diversity and design – generally result in fewer driving trips and encourage non-auto travel. A survey of walking behavior, conducted among a sample of residents in six US cities, found that residential densities and the presence of significant retail opportunities were positively correlated with the probability of residents walking. We know from neighborhood studies that residents of areas with net densities of 21.7 units per acre or more are more likely to walk to destinations in their neighborhood. This correlates with residential areas that have a mix of apartments, townhouses and small-lot single family houses.”²⁶
- **Retail destinations that people walk to.** “For home-based trips, nearby grocery stores, eating places (not fast food), retail stores and banks are strongly correlated with pedestrian activity. This means having such opportunities within one-third of a mile of residential units, or having effective transit links that support home to shop travel in 20 minutes or less.”²⁷

Accommodating Demand from Infill and Redevelopment

Question: As infill and redevelopment occurs, how will additional retail demand be accommodated?

- **Changing retail format.** “Businesses are realizing the potential of locating in dense urban areas and are changing their formats to fit urban sites. Led by Whole Foods, supermarkets were among the first to adapt to the increased preferences for urban living, creating smaller stores, offering fresh produce and more prepared foods, reducing the parking they expect, and in some cases occupying multiple levels and offering home delivery service. The success of urban pioneers has spawned a host of new entrants into the urban grocery field, and forced longstanding chains to adapt their retailing approach. Other businesses are also discovering the potential for sales in walkable locations. Formerly big-box retailers including Target and Staples have created scaled-down and multi-story stores in community retail locations, and chains such as Tesco and Safeway have been experimenting with urban prototypes.”²⁸
- **Very big or very small retail formats.** “Nielsen is seeing similar trends in store-level footprints—they’re either going very big or very small. Take Wal-Mart’s approach to supersize its already large store footprints in some areas, creating one-stop, one basket shopping destinations. Alternatively, smaller stores like convenience stores have grown as a destination for quick trips. Convenience stores tend to locate in smaller shopping centers, potentially drawing consumers away from larger shopping centers. This trend, to super-size, is observed at the shopping center-level as well. Power centers, which include big box retailers as anchors and few smaller tenants, have experienced growth in both size and number in the past five years...Bigger isn’t always better. Since the start

²⁶ Business Performance in Walkable Shopping Areas, November 2013, Robert Wood Johnson Foundation.

²⁷ Business Performance in Walkable Shopping Areas, November 2013, Robert Wood Johnson Foundation

²⁸ Business Performance in Walkable Shopping Areas, November 2013, Robert Wood Johnson Foundation

of the Great Recession at the end of 2007, small formats like dollar stores, convenience stores and drug stores have driven retail chain expansion. Of the nearly 17,000 new stores that opened between 2007 and 2013, 36 percent were dollar stores, 32 percent were convenience stores and 21 percent were drug stores. Larger retailers like Wal-Mart and Target are thinking small as well. Wal-Mart is betting on its smaller Neighborhood Markets and Wal-Mart Express concepts for future growth, putting them in a position to blend in with their host communities and help them compete more directly with the smaller store concepts. Target launched its smaller, urban City Target concept in 2012 and has since opened eight locations in major metros across the country. ²⁹

- **Moving toward mixed-use projects.** “Many of the new walkable urban shopping areas are being built as mixed-use projects with housing or offices above ground-floor retail outlets. In the past it was difficult to finance mixed-use projects because of lender restrictions such as the Federal National Mortgage Association’s (Fannie Mae) limit of no more than 5% retail space in residential projects it financed. However, today there is a growing receptivity in the investment community to support such projects. Lenders believe that these projects generally cost about 10% more to develop, but this is not a deterrent to attracting financing. Developers see mixed-use projects as providing marketing advantages and diversification of the products they are offering.”³⁰
- **Remaking malls.** “In response to competitive as well as community changes, the action in the shopping center world has shifted from the construction of new malls to the rehabilitation, repositioning, and intensification of uses at existing mall sites around the country. Exciting and innovative new shopping environments are being created from the bones of older malls, and the emerging phoenix bears little resemblance to what preceded. The old rules of mall development are breaking down rapidly as developers rethink what the mall could be. Their emphatic conclusion is that the age of the cookie-cutter mall is over: developers are remaking malls as quickly as they need to in order to remain competitive. New design concepts, retail formats, public environments, amenities, tenant mixes, use mixes, anchors, parking configurations, neighborhood links, price points, and customer experiences are being tailored to fit the needs of the community and the mall site, as well as the competitive demands of the market.”³¹
- **Excessive amount of retail.** “America’s chronically excessive inventory of retail space is worsening. Smaller formats are more suitable for time-conscious shoppers, many of whom may just be “showrooming”—looking at goods they will ultimately buy online. Also, the...regional malls in a market are unlikely to be able to offer the “excitement factor” that Gen Y demands. It is time for redevelopment, possibly with multiple, denser uses.”³²

²⁹ *The State of the Shopping Center, 2014, Nielsen*

³⁰ *Business Performance in Walkable Shopping Areas, November 2013, Robert Wood Johnson Foundation*

³¹ *Ten Principles for Rethinking the Mall, Urban Land Institute*

³² *Generation Y: Shopping and Entertainment in the Digital Age, M. Leanne Lachman and Deborah L. Brett, Urban Land Institute*

Changing Retail Trends

Question: How are changing trends in retail likely to change commercial land use needs for Bend?

- **Malls are adding service-oriented tenants.** “Signs of improvement have been surfacing and a new era of the shopping center industry is starting to occur. Instead of building new centers, owners are redeveloping the centers they already have, making them more appealing and driving consumers back into malls... Many shopping centers are also focused on added service-oriented tenants, which offer today’s busy consumer an opportunity to complete weekly errands or to engage in a variety of other activities. Among the many services found in today’s malls are churches, schools, postal branches, municipal offices, libraries, and museums.”³³
- **Integration of online and brick-and-mortar stores.** “Retail today is undergoing seismic change, as it becomes more global, urban and specialized due to the rapid rise of online shopping, mobile technology and changes in consumer spending patterns...As more consumers shop through multiple channels, retailers are taking action in greater numbers to integrate their online and physical store presence. Consumers are comparing products and prices online at home or price shopping and comparing variants in a physical store. While in the store, they’re using their mobile phone or tablets to compare selected goods with other store availabilities...In some retail sectors, experts believe that up to three-quarters of all transactions will be completed via multiple channels before the end of the decade...The concurrent optimization of multiple channels will require a flexible network of smaller urban locations that fill parcel orders delivered direct to customer homes within a day and large distribution centers that replenish both stores and in-market distribution centers. Multiple in-market distribution centers will be smaller and run fleets of trucks into neighborhoods, perhaps twice a day, for same-day and next-day delivery to households.”³⁴ “The growth in e-commerce compared to brick-and-mortar retailers cannot be ignored in the retail space. E-commerce and brick-and-mortar are truly “frenemies”—there is certainly rivalry, however, a friendship needs to be established to be successful in the retail space of the future.”³⁵
- **Walkable locations perform better economically.** “A place with good walkability, on average, commands \$8.88/sq. ft. per year more in office rents and \$6.92/sq. ft. per year higher retail rents, and generates 80 percent more in retail sales as compared to the place with fair walkability, holding household income levels constant.”³⁶
- **Shoppers want entertainment and an experience.** “The composition of the large shopping center landscape has also remained relatively stable over the past year.

³³ 2013 Economic Impact of Shopping Centers, International Council of Shopping Centers (ICSC)

³⁴ The Changing World of Trade, Cushman and Wakefield, 2013

³⁵ The State of the Shopping Center, 2014, Nielsen

³⁶ “Walk This Way, The Economic Promise of Walkable, Places in Metropolitan Washington, D.C., ,Christopher B. Leinberger and Mariela Alfonzo, Brookings, May 2012

Community centers, which feature neighborhood-serving amenities like grocery stores and dry cleaners, are still the most common type of shopping center in 2014, comprising 46 percent of centers. In 2013, Nielsen reported the rise of lifestyle centers and the decline of traditional malls like regional and super-regional centers. This trend is holding true in 2014 as consumers continue to be drawn to the shopping experience offered by lifestyle centers with their mix of retail, restaurants and entertainment options...No matter what the concept, consumers want a one-stop shop for retail and entertainment they can't get through online shopping—from specialty cafes and wine bars, to concerts and yoga classes.”³⁷

- **Healthcare is undergoing major changes.** During the recession many regional healthcare systems invested in vacant big box and other non-traditional locations to meet the growing need for convenient access to medical services. Over the short-term, medical office and healthcare facilities are undergoing major changes as they respond to mandates in the Affordable Care Act, which has brought 32 million previously uninsured into the healthcare system, and requires providers to put extensive electronic records systems in place. Healthcare providers are consolidating in order to streamline costs, as fewer sole practitioners can afford to stand on their own. Demographic trends, primarily the aging of the Baby Boomers will continue to drive healthcare demand in the long-term. “The annual number of physician office visits per 100 people in the 65–74 year-old cohort is nearly 70% higher than in the 45–64 year-old cohort.”³⁸
- **Hispanic shopping preference.** “In order to capture Hispanic shoppers, developers and retailers must appeal to their distinct shopping needs and preferences. Hispanic families shop as a unit with Grandma, Mom, Dad and the kids all along for the ride. Because of this, Hispanic consumers are looking for one stop that has something for everyone from grocery and medical services to clothes, entertainment and banking. It’s not just the tenant mix that’s important in making a shopping center appealing to Hispanic consumers—these consumers want a place to sit down and relax, a place for kids to play and a place to attend cultural events. The Legaspi Company, named one of Fast Company’s most innovative companies of 2014, has built a reputation by doing just that. It has successfully revitalized 10 failing shopping centers across the country by turning them into Hispanic cultural centers, which subsequently increased foot traffic and income by 30 percent. One such shopping center is Plaza Fiesta located in Atlanta. The Legaspi Company filled nearly 240,000 square feet of empty retail space in the center by addressing the distinct needs of Hispanic consumers. Boots, quinceañera shops and country-western retailers are popular tenants in the center. And given the strong religious ties of the Hispanic community, Easter, Christmas and the Day of the Virgin of Guadalupe celebrations are held for the community and Sunday sales events don’t start until 3 pm to avoid conflicting with Mass. Paying attention to these cultural cues makes

³⁷ *The State of the Shopping Center, 2014, Nielsen*

³⁸ Colliers International, Medical Office Trends and 2014 Outlook

Hispanic consumers feel a connection to the shopping center as an important place within their community, like the town plazas in their ancestral communities.”³⁹

- **Renting and sharing economy.** “[T]echnology has reduced transaction costs, making sharing assets cheaper and easier than ever—and therefore possible on a much larger scale. The big change is the availability of more data about people and things, which allows physical assets to be disaggregated and consumed as services. Before the internet, renting a surfboard, a power tool or a parking space from someone else was feasible, but was usually more trouble than it was worth. Now websites such as Airbnb, RelayRides and SnapGoods match up owners and renters; smartphones with GPS let people see where the nearest rentable car is parked; social networks provide a way to check up on people and build trust; and online payment systems handle the billing.”⁴⁰
- **Retail will become leaner.** “Because of increased levels of e-commerce, retail is expected to become leaner in the future.” Technology is enabling merchants to get by with much less inventory, [which] means they need less space,” a real estate service provider points out. “At the other end of the supply chain, the buyer’s journey [has] changed a lot.” As a result, “Retailers continue to rethink size requirements,” says the CEO of an investment firm. Less square footage per site and the gradual decline of big-box stores is where many interviewees predict retail is headed in the near future. One investor believes, “The need for big department stores is declining, and the end of their world may occur in five years.” On the other hand, a shopping center developer notes that while “retailers are running out of opportunities in suburbs, urban environments [retail alone or with residential on top] will continue to be attractive.” Multiple firms are “seeing [the] millennial generation focusing on urbanism, plus a combination of private developers and government programs [is] pursuing the redevelopment of infill locations,” according to the president of a retail REIT. Prospects for mixed-use urban developments are high, tied as they are to these changing demographics. One shopping center owner further observes, “The path of growth for retail is no longer out toward the suburbs. Everyone is looking to move back into the city and to find an adaptable business model that can tap this underserved segment.” In fact, urban mixed-use properties were a clear favorite among survey respondents, who rated this sector the highest of all sectors for expected development prospects in 2014. Prospects for investment in urban mixed-use properties were expected to be almost as strong.”⁴¹ (p.58)

Sources

The following list provides examples of key articles used in the research for this memorandum, with web links where available, for further reading.

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University of Maryland, School of Architecture, Planning and Preservation: College Park, *An Evaluation of Recent Industrial Land Use Studies: Do Theory and History Matter In Practice?* 2010.

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University of North Carolina, Chapel Hill Dept. of City and Regional Planning, *Making Room for Manufacturing: Understanding Threats to Industrial Land Conversion in Cities*, 2014

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ENVISION TOMORROW OVERVIEW

Envision Tomorrow, an innovative, open source, set of urban and regional planning tools developed by Fregonese Associates, is an integral piece of our scenario planning process. It can be used to model development feasibility on a site-by-site basis as well as create and evaluate multiple land use scenarios, test and refine transportation plans, produce small-area concept plans, and model complex regional issues. The software also provides a real-time evaluation of relevant indicators such as land use, energy consumption, and financial impacts that measure a scenario's performance. It can also provide baseline carbon emissions analysis of different land use patterns, enabling planners to model the relationship between greenhouse gas emissions and land use and transportation decisions.

Envision Tomorrow consists of two primary tools: the **Prototype Builder**, an ROI model spreadsheet tool, and the **Scenario Builder**, an ArcGIS add-on.

WHAT IS ENVISION TOMORROW?

The **Prototype Builder**, a return on investment (ROI) spreadsheet tool, can be used to model buildings and test the physical and financial feasibility of development. The tool allows the user to examine land use regulations in relation to the current development market and consider the impact of parking, height requirements, construction costs, rents and subsidies. Use this tool to see what is market feasible. Use it to see how preferred forms of development, such as mixed-use retail with housing above, might become more financially feasible within your existing code.

The **Scenario Builder** adds scenario-building functionality to ArcGIS. First, design a library of buildings in the Prototype Builder. Next, use the Scenario Builder to create development types and “paint the landscape” by allocating different development types across the study area to create unique land use scenarios. The tool then allows real-time evaluation of each scenario through a set of user-defined benchmarks or indicators. The indicators measure such things as the scenario’s impact on land use, housing, sustainability, transportation, and economic conditions. It also allows communities and regions to monitor progress over the short-and long-terms.

WHAT MAKES ENVISION TOMORROW UNIQUE?

Transparent and Versatile

Envision Tomorrow is a versatile and expandable tool that can easily be adapted to accommodate various uses. Unlike most planning software, Envision Tomorrow allows the user to easily and transparently change the assumptions of the prototype buildings, development types, and scenario inputs. By making the tool transparent, you can quickly and easily adjust the assumptions to more accurately reflect the dynamics of your particular neighborhood, city, or region. This transparency allows planners to adjust assumptions in the scenario process if necessary.

Building Level Data

Since the Envision Tomorrow analysis process begins at the building level, anything we know about a building, we can test in a scenario. These are examples of common indicators used for evaluation:

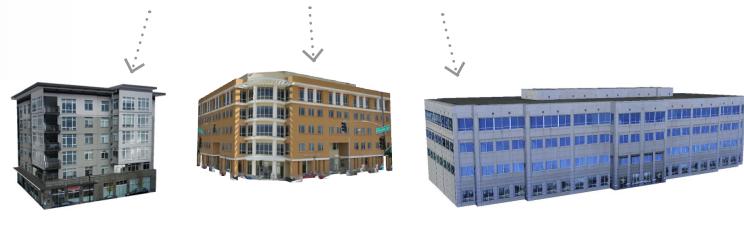
- **Housing and jobs**
(mix and density)
- **Jobs-housing balance**
- **Land consumption**
(vacant, agricultural, infill)
- **Impervious surface**
- **Open space**
- **Housing affordability**
- **Resource usage**
(energy and water)
- **Waste production**
(water, solid, carbon)
- **Transportation** (travel mode choice, vehicle miles traveled)
- **Fiscal impact** (local revenue and infrastructure costs)
- **Balanced housing index**
(how a scenario’s housing mix matches the expected future demographic profile)

ENVISION TOMORROW PROCESS

1 Develop Building Prototypes

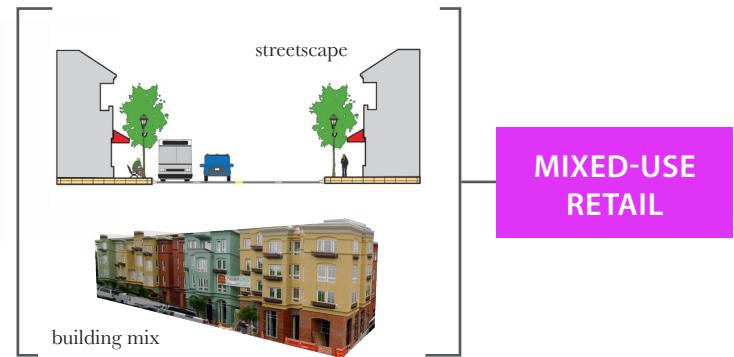
Create prototype buildings using the return on investment (ROI) model.

Prototype Name	Corridor Mixed Use
Project City/State	(enter name of building)
Site area	Long Beach (enter name of city/state or project)
Site gross-to-net ratio	43,560 square feet
Landscaping or open space	1.00 acres
Building height (stories)	100% (enter percentage)
Under-build	5% (enter percentage)
	4 stories
	70% (enter percentage)



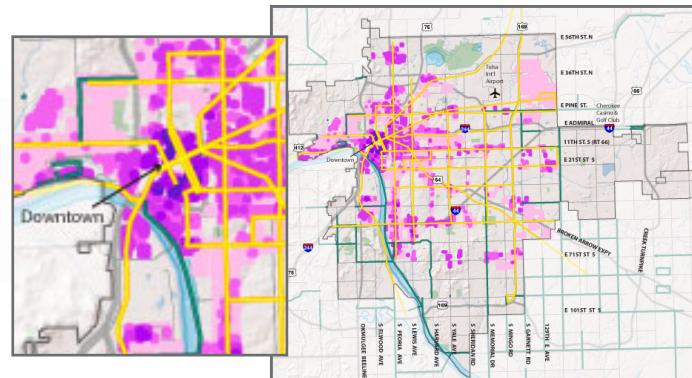
2 Create Scenario Development Types

Development types include all of the elements in a city: a mix of buildings, streets, civic uses and open spaces.



3 Build Scenarios

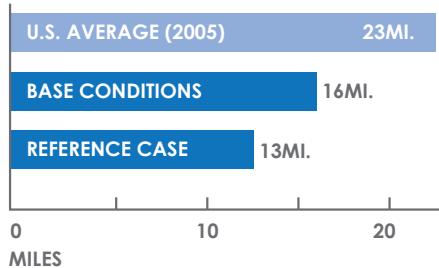
Create scenarios by applying the development types to the landscape using the scenario builder.



4 Evaluate Scenario Performance

Using the ROI model, examine a whole host of benchmarks based on the built scenario.

VEHICLE MILES TRAVELED Per Person Per Day



WHAT IS ENVISION TOMORROW?

Relevant and Cutting-Edge Research

Fregonese Associates has partnered with a number of institutions, organizations and government entities around the country to further the capabilities of Envision Tomorrow. These partnerships provide access to leading thinkers and the latest research and data about urban form and development which are then incorporated into Envision Tomorrow. Most recently, through collaboration with the University of Utah, 18 expanded indicators were developed that allow Envision Tomorrow users the ability to measure, for example, employment growth and resilience, public health, transportation safety, workforce housing and air quality impacts.

HOW IS IT USED AND WHO USES IT?

Municipalities, regional governments, and private organizations around the nation use Envision Tomorrow. The Chicago, Illinois region uses the tool to conduct housing studies; Baton Rouge, Louisiana is analyzing future growth scenarios, while the Southern California Association of Governments in California is examining the potential for greenhouse emissions reduction through different land use policies. In Portland, Oregon, the regional government, Metro, is refining their ability to test land use and transportation policies through scenario planning. Smaller cities like Waco, Texas and Mountlake Terrace, Washington, have found Envision Tomorrow to be a valuable addition to their planning toolbox. Below is a brief list of Envision Tomorrow users:

- Sonoran Institute/Lincoln Land Institute joint venture
- Southern California Association of Governments
- Envision Utah
- Chicago Metropolitan Agency for Planning
- City of Portland
- Portland Metro
- City of Tulsa
- Montana State University
- City of Long Beach

FAQ

What software do you need to run Envision Tomorrow?

Envision Tomorrow requires Windows XP or Vista, Microsoft Office 2000 Professional or greater, and ESRI's ArcGIS desktop software 9.3 or greater. The tool supports all ArcGIS license types (ArcView, ArcEditor, ArcInfo).

What types of indicators can Envision Tomorrow report?

Land Use: density and mix of uses

Transportation: mode choice, VMT—requires local calibration including travel survey results, land use and demographic inputs

Housing: mix and affordability

Fiscal Impact: local revenue and infrastructure—requires local calibration of revenue, rates and costs inputs

Environment: open space and agriculture conversion

Sustainability: energy use, carbon footprint, water usage and wastewater—requires local calibration based on local climate and typical resource use

Visit the Envision Tomorrow wiki page for more information on indicators: www.frego.com/etwiki

How long does it take to get up and running?

Start-up time depends on the indicators you use to evaluate the scenarios. Basic land use indicators can be inputted into the tool and calibrated within a few days. More complex transportation and sustainability indicators, including carbon footprint, could take several weeks to collect the input data. To reduce local calibration time, you can use national averages.

Can Envision Tomorrow be used to analyze different levels of geography?

Yes, Envision Tomorrow is designed to model land use decisions at a range of scales starting at the parcel level. By first designing Prototype Buildings that are financially feasible at the local level, the user then combines these prototypes into a series of Development Types, such as Main Street, mixed-use neighborhood, strip commercial, etc. The Development Types are used to create a series of land use scenarios at the district, city, county, and regional scale. The Scenario Builder tool allows the creation and comparison of up to five land use scenarios concurrently. The user can edit, switch between, and compare all five scenarios. A scenario spreadsheet in Excel format is dynamically linked to the tool and maintains the scenario outputs, such as housing mix, in a series of tabs for quick comparison. As you make changes to a scenario, the results automatically report in the spreadsheet for instant monitoring. Users can focus in small areas for detailed design control as well as zoom to a larger scenario with small area changes intact. Detailed scenario results are easily exportable and reportable at any geography.

FAQ

How does Envision Tomorrow evaluate different land uses and policy alternatives?

The tool evaluates scenario differences based on a variety of indicators. Most indicators derive from what particular mix of buildings the user chooses to place on the landscape and where they place them. For example, if the user paints an area with a main street development type as opposed to a strip commercial development type, the underlying buildings that compose those places are different, and that difference will be reflected in the indicators. Main Street development might include some multifamily housing and mixed-use, whereas the strip commercial might include low intensity retail. The choice to put in main street development could result in a lower housing density, but achieve a reduction in per capita water and energy usage and the number of vehicle miles traveled. The implications of different land uses are reflected instantly as the user makes alternative decisions.

Does Envision Tomorrow model carbon footprint?

Envision Tomorrow uses a predictive algorithm combined with local travel and demographic data to estimate the impact of land use changes on key transportation indicators, such as travel mode split, vehicle miles traveled, and greenhouse gas emissions. By using a predictive algorithm approach, the tool does not require a direct link to a transportation model to evaluate the impact of land use changes on travel behavior and carbon emissions.

Can you modify underlying assumptions to align with local conditions?

Yes, all assumptions to the prototype buildings, development types, and scenario inputs are transparent and editable in Excel. From our experience, it is important that planners see all of the assumptions in the scenario process and be able to adjust the assumptions, if necessary. Because the tool is dynamically linked in Excel, changing an assumption results in instant updates to the scenario outputs.

Can the tool display impacts graphically and visually?

Yes, Envision Tomorrow provides visual results in multiple formats, including maps, charts, and graphics. Scenario results can be used to create 2D and 3D visualizations.

How much does Envision Tomorrow cost?

The software license for Envision Tomorrow is free-of-charge. The only fees associated compensate our time to train users in using the tool. Contracts are driven by the client's needs; we typically create a contract for data gathering, training and customization.

URBAN GROWTH BOUNDARY REMAND

**MAKING BEND
EVEN BETTER**



Employment and Retail Trends and Implications for Employment Land

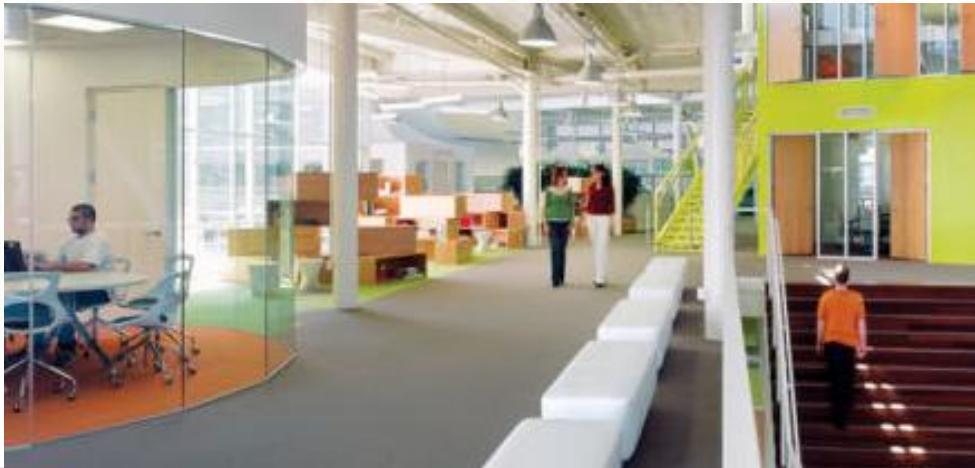
Bend UGB Remand Project

Employment TAC, 4 August 2014

Presentation Overview



- Employee needs are changing
- Employer needs are changing
- Changing employment and retail trends
- Impact on infill/redevelopment
- Developer interview summary





Changing Employee Needs

Employees Attract Employers



20th Century



People and businesses relocate to access natural resources.

21st Century



People and businesses relocate to access other smart people, businesses, and quality of life.

Walkable Communities & Mixed-use



Retail main streets



Attractive facades



Historic authenticity



Sense of place



Pedestrian scale



Compact form



Open space



Amenities: Water, public art, parks

What it Means for Bend



- People drawn to Bend for quality of life
- Entrepreneurs create their own jobs
- Walkable and accessible business districts
- Need affordable housing options

Changing Employer Needs



The Changing Workplace

Intel, Hillsboro, Oregon



Past

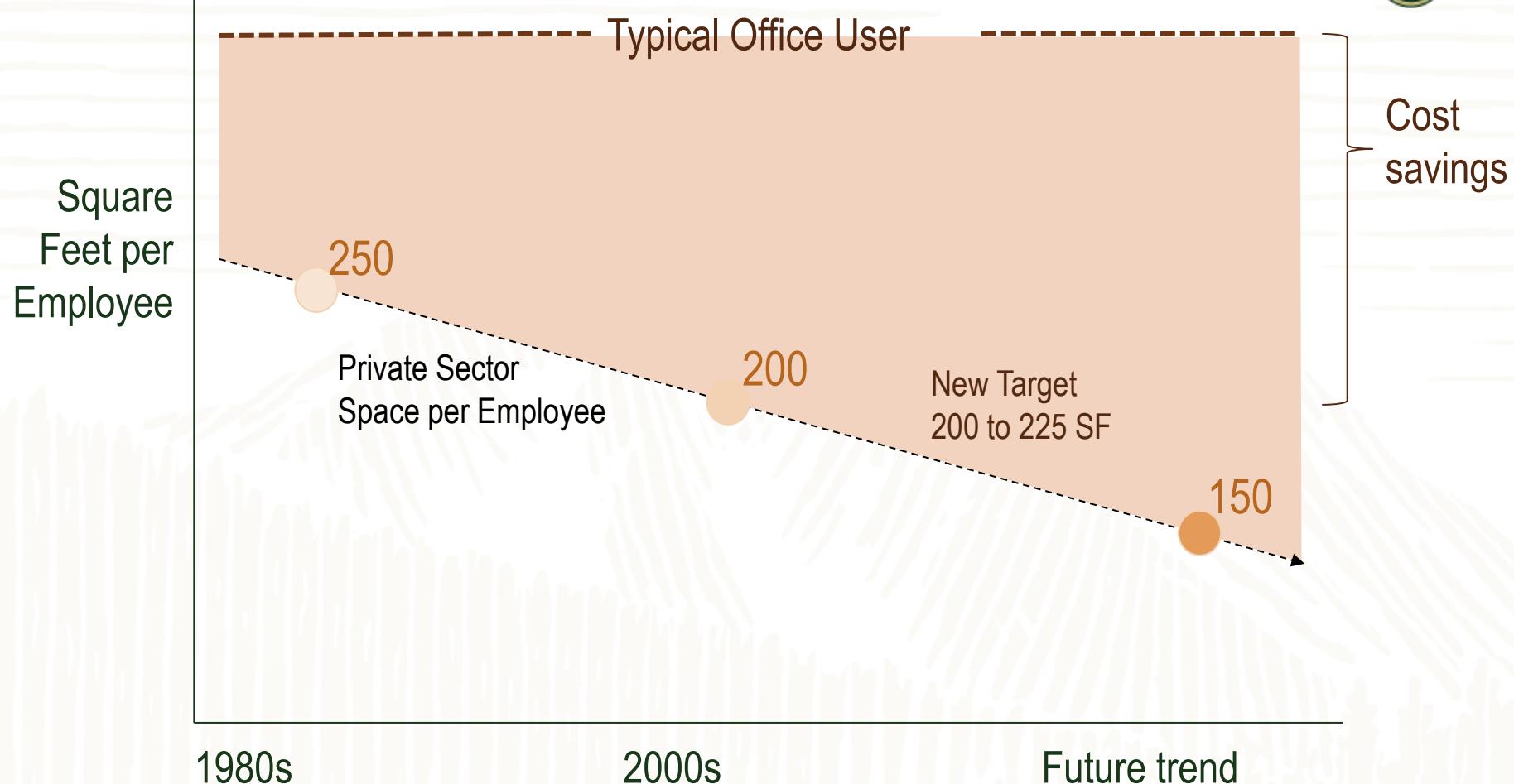


Current



Source: Intel: "Office Work Space Is Shrinking, but That's Not All Bad,"
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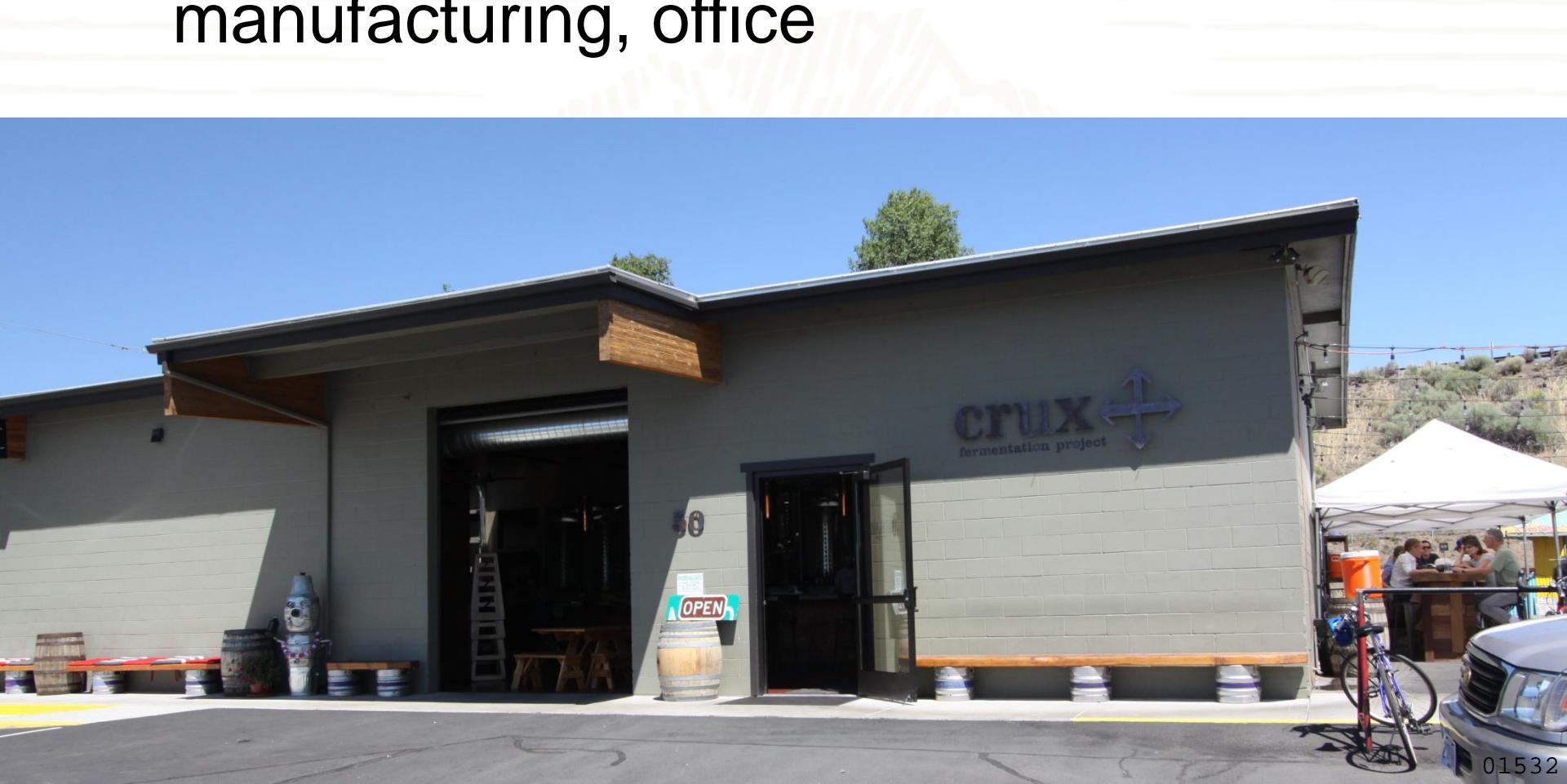
Shrinking Office Space



Flexible Building Types



- Blurring of the lines between retail, manufacturing, office



OSU Cascades



- Better educated employees
- Opportunity for innovation
- Will need more rental housing



What it Means for Bend



- Slow demand for more office
- Need for smaller parcels/buildings
- Need small flexible spaces: 1,500-3,000 sf
- Flexibility in definitions
- Education to grow workforce

Evolving Commercial/ Retail Landscape



Evolving Retail Landscape



Walmart



Target



Best Buy



Grocery

Walmart :Marketside
~20,000 sq. ft.

Safeway: The Market
~15,000 sq. ft.

Evolving Retail Space



Online sales continue to grow



Mobile retail is a growing concept



Pop-up shops test new concepts



Showroom stores drive shoppers online



Neighborhood Retail



Regional Retail

Is the new living room.



Station Park,
Farmington, Utah

Allow for Flexibility

Craft Industrial—retail showrooms connect consumers to the manufacturing process.



What it Means for Bend



- Residential growth adds to commercial demand
- Neighborhood vs. regional retail
- Experiential retail
- Health care infill
- Flex space & mixed uses



Developer Interview Summary

Developer Interview Summary



Workforce

- People coming to Bend for “lifestyle”
- Affordable housing is a concern

Barriers to Development

- Parking regulations need work
- Entitlement process more expensive than elsewhere

Developer Interview Summary



Industrial

- Short supply, low vacancy rate
- Juniper Ridge not served, not viable for smaller industrial users
- Flexibility of industrial buildings is key to accommodate future users/ variety of users

So, What Does this Mean for the TAC?



- Information being used to help determine:
 - Location of employment land
 - Amount of *infill* likely to occur
 - Amount of *redevelopment* likely to occur
- ***NOT*** being used to determine estimated employment for 2008-2028
 - Using the # new employees (22,891) determined in 2008 EOA for 2008 - 2028

URBAN GROWTH BOUNDARY REMAND

MAKING BEND EVEN BETTER



Envision Tomorrow Employment Buildings

Employment TAC Meeting #1

August 4th, 2014

Fregonese Associates Inc.

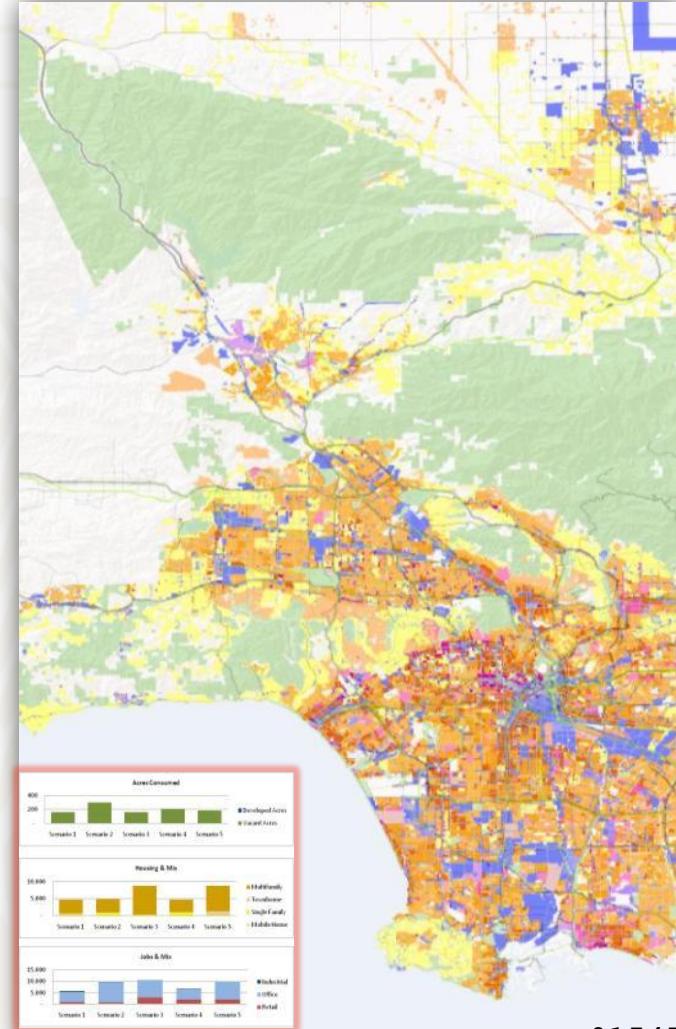
What is Envision Tomorrow?



- Suite of planning tools:
 - Analysis Tools
 - Prototype Builder
 - Return on Investment (ROI) model
 - Scenario Builder
 - Extension for ArcGIS

envision
tomorrow™

a suite of urban and regional planning tools



Building-Level Approach to Planning



Scenario Building Process

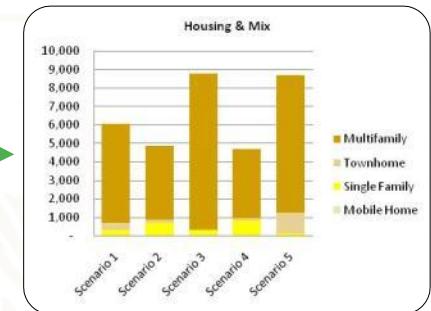


Building Types

Development Types

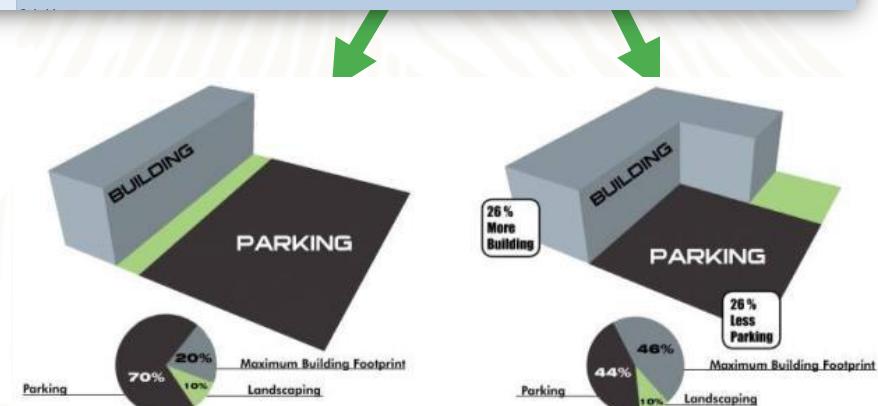
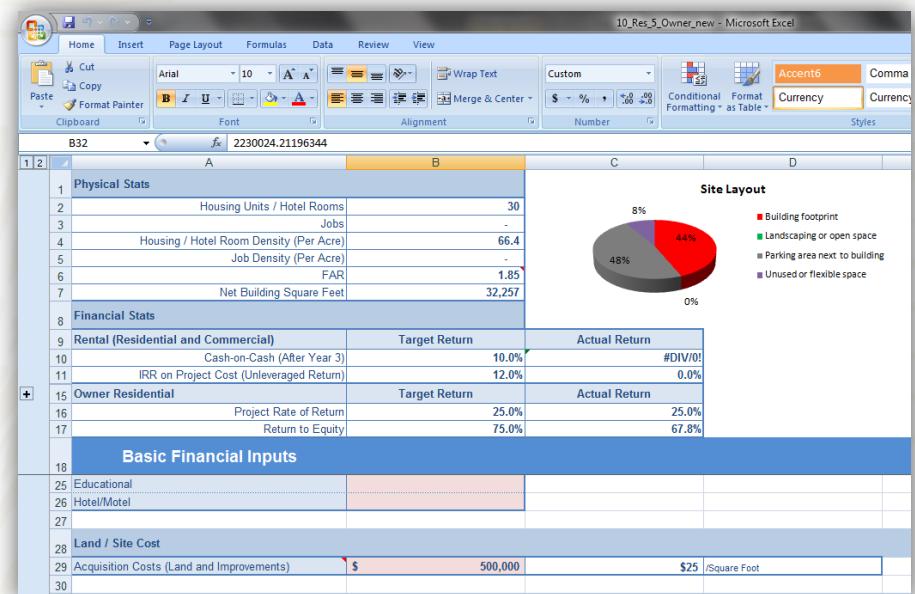
Scenario Development

Evaluation



Building-Level Financial Analysis

- Powerful as standalone tool or integrated with Scenario Builder
- Test existing regulations for financial feasibility
- Test impact of new development regulations
- Experiment with sensitivity of key variables



Test Financial Performance of Current Zoning and Alternatives



Current Zoning

4 story Mixed Use with existing parking



Tweaked Zoning

6 story Mixed Use with lower parking requirements



Baseline		Adjusted	Change
Height	4 Stories	6 Stories	+2
Parking Spaces	127	115	-10%
Land Used	43,000 Square Ft	43,000 Square Ft	0%
Density	31 DU / Acre	63 DU / Acre	+103%
Floor Area Ratio	1.1	2.0	+79%
Project Value	\$17.3 Million	\$23.5 Million	+35%
Unit Cost	\$519,272	\$369,590	-29%

Building Context Influences Market



Urban



Inner
Neighborhood



Outer
Neighborhood

- Building context influences what is buildable
- Elements
 - Walkable streets
 - Walkable destinations and amenities
 - Land cost & rents
- Large variability within Bend

Amenities can Increase Desirability and Achievable Rents 10-20%



Parks and Open Space

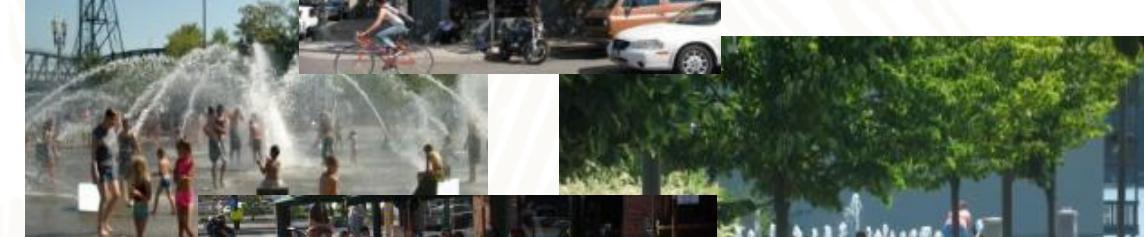


Transit

Commercial Amenities



Traffic Calming



Walkability

Bicycle Connectivity



Context can Change Within the Planning Horizon

Development Feasibility Spectrum Changes with Increase in Desirability

***What Can Be
Built?***



**Today's Rents
& Sales Prices**



**10% Increase in
Average Rent**



Amenity Level



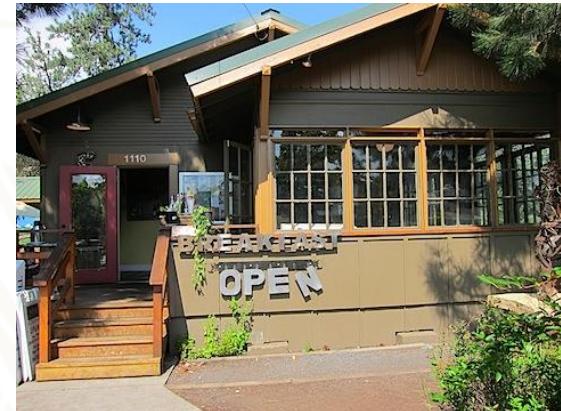
**20% Increase in
Average Rent**



New Construction vs. Adaptive Reuse



- New construction not financially viable in all areas
 - Adapting can cost a fraction of the cost of new construction
 - May not trigger additional zoning or development regulation requirements
- Adaptive reuse great for emerging areas
 - i.e. Galveston and Newport



Single Family to Commercial



Garage / Warehouse to Commercial



Warehouse to Office



New Construction Commercial Buildings



Building Name	Height (Stories)	Urban	Inner	Outer
Regional Retail / Mall	1			
Arterial Commercial	1			
Lifestyle Retail / Suburban Main Street Retail	1			
Traditional Main Street Retail	1			
Heavy Industrial	1			
Light Industrial / Warehousing	1			
Outer Flex/Tech Office	1			
Flex/Tech Office	2			
Suburban Office	1			
Outer Office	1			
Outer Office	3			
Office	1			
Office	3			
Office	5			
Hotel	1			
Hotel	3			
Hotel	5			
Hotel	15			
Mixed-Use Office	5			
Mixed-Use Office	15			

Regional Retail / Mall



FAR

0.2

Height

1-2 stories



Arterial Commercial “Strip Commercial”



FAR	Height
0.23	1 stories



Suburban Main Street

“Lifestyle Retail”



FAR

0.35

Height

1-2 stories



Traditional Main Street

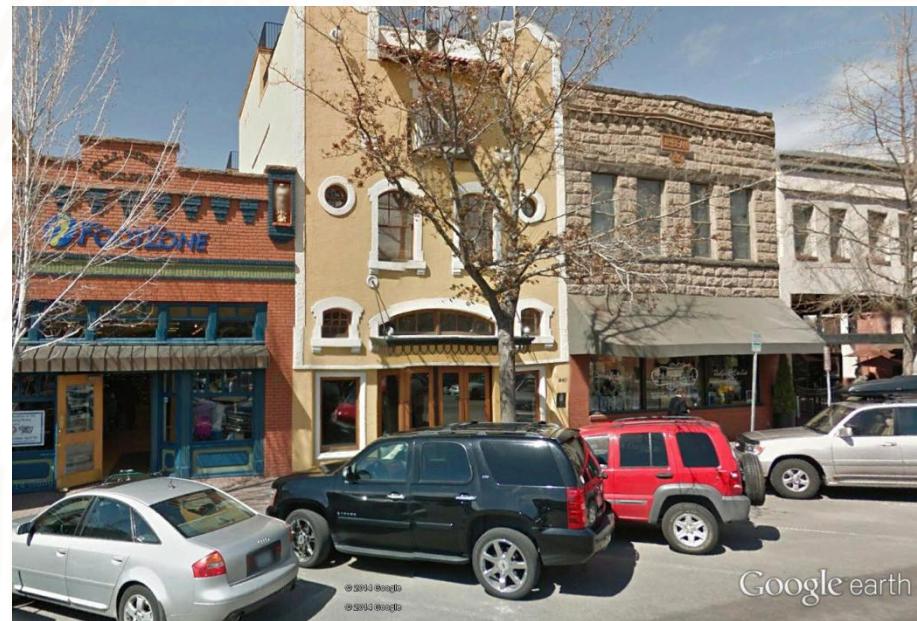


FAR

0.5 - 1

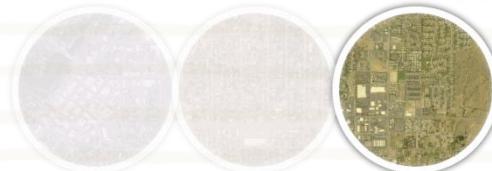
Height

1-2 stories



Google earth

Outer Office



FAR

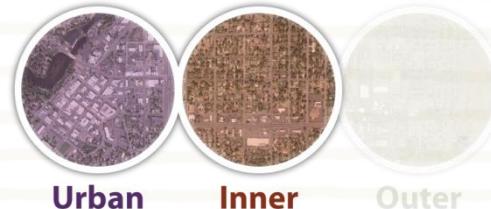
0.4 – 0.6

Height

1-3 stories



Inner Office

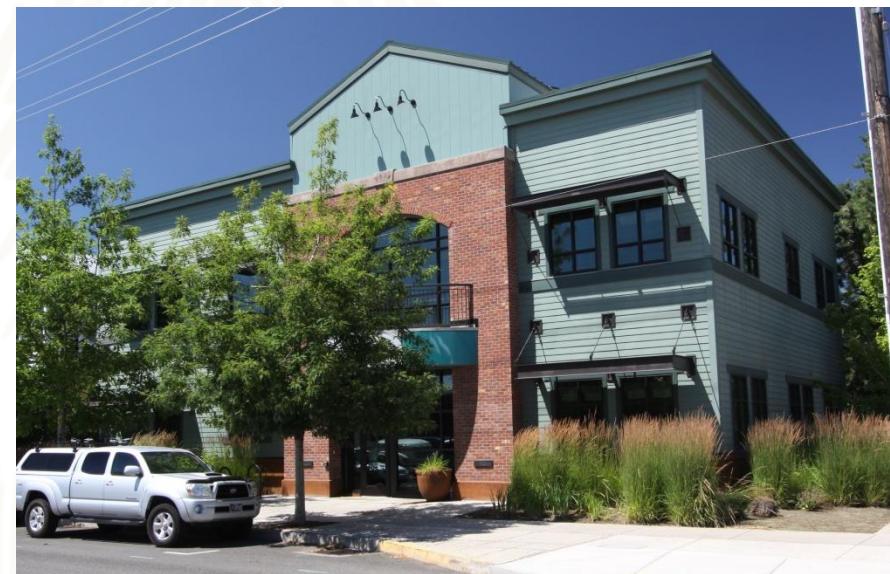


FAR

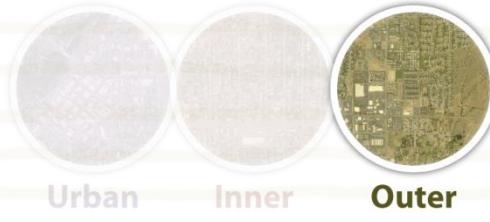
0.5 – 1.5

Height

1-3 stories



Outer Office/Flex Space



FAR

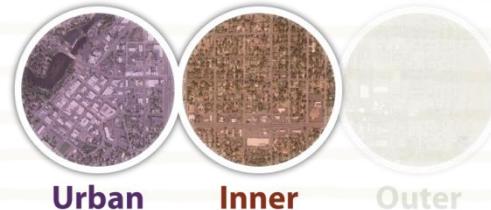
0.25 – 0.5

Height

1-2 stories



Urban Office/Flex Space



FAR

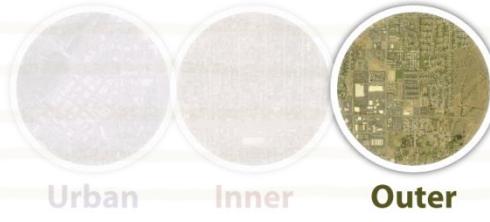
0.5 – 1.0

Height

1-3 stories



Light Industrial / Warehousing



FAR

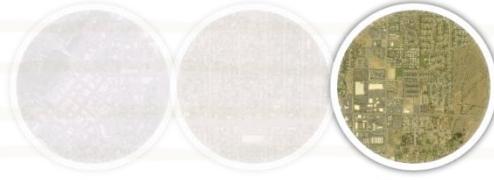
0.25 – 0.4

Height

1-2 stories



Heavy Industrial



FAR

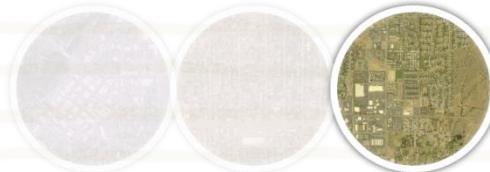
0.15 – 0.3

Height

1-2 stories



Outer Hotel



Urban

Inner

Outer

FAR

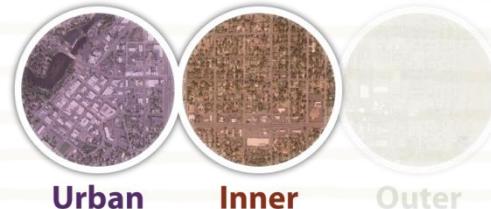
0.35

Height

1-3 stories



Inner Hotel



FAR

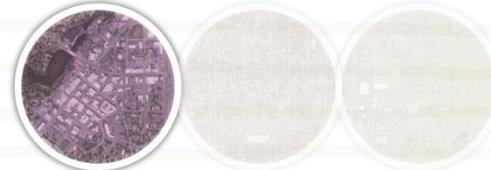
0.5 – 1.0

Height

2-4 stories



Urban Hotel



Urban

Inner

Outer

FAR

2.0 +

Height

5+ stories



Mixed-Use Office

Medium Density: “Stick Built”



FAR

1.5 - 3.0

Height

2-4 stories



Mixed-Use Office

Concrete + Steel or Wood



Urban

Inner

Outer

FAR

3.0 +

Height

5+ stories



Relevance to Remand



- Redevelopment potential:
 - Building financials can help test (re)development feasibility
 - Analysis is grounded in market reality and calibrated with zoning
- Match scenarios to employment space need by type
- Urban form – evaluate where to meet employment land needs

URBAN GROWTH BOUNDARY REMAND

**MAKING BEND
EVEN BETTER**



Employment TAC Meeting 1

August 4, 2014

Bend UGB Remand Project

Key questions



- TAC Charge
 - Confirm employment land need for 2008-2028 planning period
 - Develop strategies to provide short-term supply of employment lands
- Key Questions
 - How much land is needed for employment to 2028?
 - How and where will we invest public dollars to make land ready for the market?
 - What are the best locations for needed employment lands?

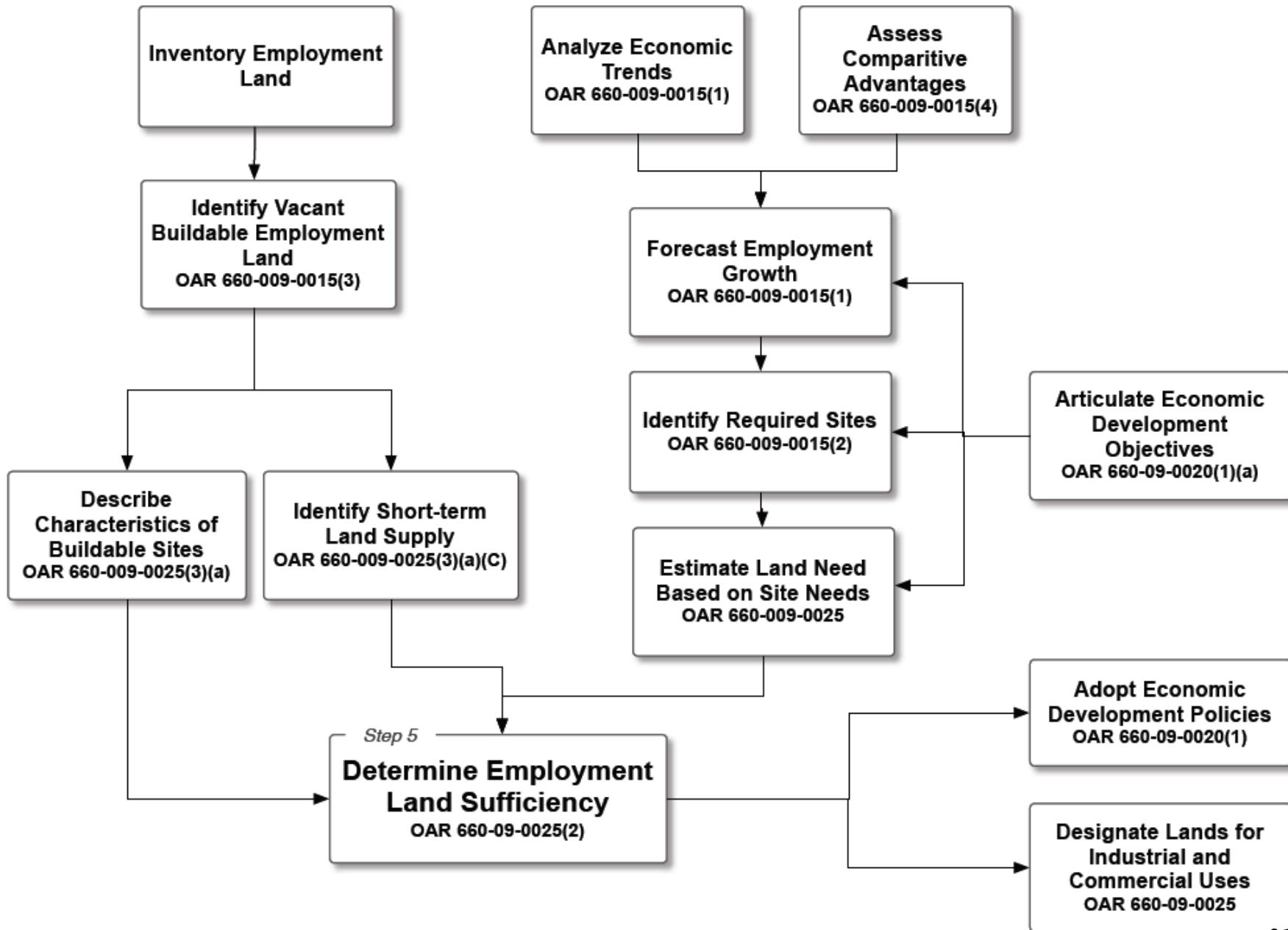
Goal 9 requirements



- Comprehensive Plans must:
 - Include an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends;
 - Contain policies concerning the economic development opportunities in the community;
 - Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies;
 - Limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with proposed uses.

Inventory of Employment Land

Need for Employment Land



City of Bend
Employment Lands Technical Advisory Committee
Meeting Notes
Date: August 4, 2014

The Employment Lands TAC held its regular meeting at 2:30 pm on Monday, August 4, 2014 in the City Hall Council Chambers. The meeting was called to order at 2:30 pm by Brian Rankin.

Roll Call

<input type="checkbox"/> Ken Brinich	<input type="checkbox"/> Patrick Keskard	<input type="checkbox"/> Ron White
<input type="checkbox"/> Peter Christoff	<input type="checkbox"/> William Kuhn	<input type="checkbox"/> Joan Vinci
<input type="checkbox"/> Ann Marie Collucci	<input type="checkbox"/> Robert Lebre	<input type="checkbox"/> Wallace Corwin
<input type="checkbox"/> Todd Dunkelberg	<input type="checkbox"/> Dustin Locke	<input type="checkbox"/> Jade Meyer
<input type="checkbox"/> Brian Fratzke	<input type="checkbox"/> Wesley Price	<input type="checkbox"/> Tom Hogue
<input type="checkbox"/> David Garcia	<input type="checkbox"/> Damon Runberg	<input type="checkbox"/> Jennifer Von Rohr
<input type="checkbox"/> Christopher Heaps	<input type="checkbox"/> Cindy Tisher	

Discussion

Frank Angelo facilitated the discussion of appointing the chair and vice chair for the Employment TAC. Brian Rankin pointed out that the TAC Chair and Vice Chair would spend about 2 additional hours per month for prep work associated with the next 3 TAC meetings.

By consensus, the Employment TAC appointed the following leadership to this TAC: Jade Mayer, Chair, Wes Price, Vice Chair, with Patrick Keskard and Joan Vinci agreeing to provide back up support as needed.

Brian Rankin provided a brief overview of past UGB work.

Bob Parker with ECONorthwest presented an overview of Remand requirements relating to employment lands.

Chris Zahas with Leland Consulting Group presented information on emerging national and local trends that are relevant to the work of the Employment TAC.

Alex Joyce with Fregonese Associates provided an overview of the Envision Tomorrow model and introduced an initial “employment building library” for Bend.

Decision Item

By unanimous vote, the TAC recommended proceeding with Scenario A from the 2008 Employment Opportunities Analysis (EOA) and dropping the “market factor.” This decision was supported by the July 28, 2014 memo summarizing Remand Issues Relating to Employment Lands and a recommendation from city staff and the consultant team.

Action Items/Next Steps

Action	Assigned To
Supplement “building type library” to address medical space, specialty manufacturing and recreational/specialty buildings (such as climbing gyms, etc.)	APG team (Fregonese Associates)
Provide opportunity for follow-up meeting for TAC members interested in digging into Envision Tomorrow model assumptions and spreadsheets	City of Bend and APG team (Fregonese Associates)

Meeting adjourned at 5:00 by Frank Angelo.



Meeting Agenda

UGB Boundary and Growth Scenarios Technical Advisory Committee

Tuesday, August 5, 2014 10:00 AM – 12:30 PM

City Council Chambers, Bend City Hall

Meeting Purpose and What is Needed from the TAC

The UGB Boundary TAC will prepare a methodology to evaluate UGB alternatives in Phase 2 of the project. In Phase 1, the central questions are:

- Consistent with the requirements of the Remand, how do we frame the study area(s) for the analysis and packaging of UGB alternatives?
- How do we measure, evaluate and balance the location factors of Goal 14?
- Should some factors be weighted more heavily than others?

This first meeting will address several issues related to the first question above regarding framing of study areas and alternatives. Specifically, we will recap the important Remand issues and UGB analysis steps, review an approach to “suitability criteria and screening”, and discuss a “tiered approach” to the analysis of expansion areas and packaging of UGB Scenarios. Lastly, we’ll introduce the Envision Tomorrow scenario modeling tool.

The specific discussion questions, i.e. the feedback we would like from the TAC, are listed as the bulleted discussion questions under each agenda item. They are a starting point for the agenda.

1.	Welcome and Introductions	10:00 AM
	a. Welcome	Brian Rankin
	b. Self-introductions	All
2.	Election of Chair and Vice Chair	10:10 AM
	a. Nominations	Facilitator
	b. Vote and confirmation	

For additional project information, visit the project website at <http://bend.or.us> or contact Brian Rankin, City of Bend, at brankin@bendoregon.gov or 541-388-5584



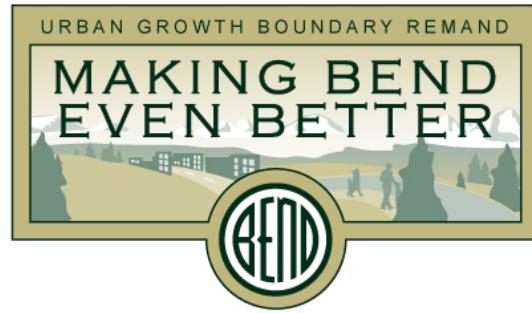
Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact the City Recorder no later than 24 hours in advance of the meeting at rchristie@ci.bend.or.us, or fax 385-6676. Providing at least 2 days notice prior to the event will help ensure availability.

3. Legal and Planning Context	10:20 AM
a. Building on past work	Brian Rankin
b. Context – Overview of Goal 14, ORS 197.298, Remand requirements, and typical steps in a UGB expansion analysis.	Bob Parker, ECONorthwest
<ul style="list-style-type: none">• What questions/comments does the TAC have on the context and how this information will be used?• Does the TAC support the general approach regarding suitability criteria and screening?• Does the TAC support the tiered approach to analysis of expansion areas?• What initial input does the TAC have on local issues that are important to include in the consideration of the Goal 14 factors?	Mary Dorman, Angelo Planning Group
4. Envision Tomorrow Scenario Tool	11:40 AM
a. Overview of the Envision Tomorrow scenario modelling tool and how it will be applied in Bend.	Fregonese Associates
<ul style="list-style-type: none">• Questions and discussion about Envision	
5. Adjourn	12:30 PM

Memorandum

July 28, 2014



To: Boundary and Growth Scenarios Technical Advisory Committee
Cc: Bend Staff
From: APG Consulting Team
Re: SUMMARY OF KEY REMAND ISSUES RELATED TO BOUNDARY AND GROWTH SCENARIOS

INTRODUCTION

This memorandum provides background information for the first meeting of the Boundary and Growth Scenarios Technical Advisory Committee (Boundary TAC). The work of Bend's three Technical Advisory Committees (TACs) will run in parallel in Phase 1 and be integrated in two joint TAC/Steering Committee work sessions at the end of Phase 1. The key questions to be addressed by each TAC in Phase 1 are listed below.

Residential Lands TAC (Land Needs)

- How much land is needed for housing and related uses through 2028?
- What residential "efficiency measures" to accommodate more residential growth within the existing UGB are best for Bend?

Employment Lands TAC (Land Needs)

- How much land is needed for employment and special site needs through 2028?
- How and where will we invest public dollars to make land ready for the market?

Boundary TAC (UGB Alternatives Analysis – Location)

- Consistent with the requirements of the Remand, how do we frame the study area(s) for the analysis and packaging of the boundary and growth scenarios?
- How do we measure, evaluate and balance the location factors of Goal 14?
- Should some factors be weighted more heavily than others?

The Boundary Methodology developed in Phase 1 will be used to evaluate boundary and growth scenarios in Phase 2 with Envision scenario tools. Fregonese Associates will present an overview of Envision at the first meeting of the Boundary TAC.

Building on Past Work

The prior UGB expansion proposal's approach resulted in the Remand Order requirements specified in the Appendix A attached to this memorandum. The requirements are lengthy and specific, so a non-technical and high-level description of the evaluation process provided here will provide some context for the more detailed discussion.

The approach the City took in the original proposal will be dramatically improved by virtue of the guidance provided in the Remand Order, the use of a TAC to specifically address the boundary methodology, using the Envision Tomorrow scenario planning model, and use of more detailed models (optimization for water and sewer systems, and use of the MPO Travel Demand Model) to be employed in Phase 2 of the project. In addition, this process will be assisted by highly experienced and knowledgeable consultants who have performed this work in Oregon, and other large cities in the U.S.

First, a diverse group of community members will focus exclusively on boundary methodology prior to forming boundaries. Ideally, this will establish more credibility for the process and embed local values to the extent they are allowed by law and the Remand Order. A critical element for the success of this project is balancing work that is legally defensible and reflects the values of the community. The Envision Tomorrow tool will allow the community and decision makers to run preliminary alternative boundary and infill scenarios faster and with estimates of impacts prior to using more detailed, time consuming, and expensive models later in Phase 2. Consider the Envision Tomorrow as an iterative tool to allow testing of ideas, concepts, and land use scenarios to narrow down the universe of boundary and infill scenarios into four competing infill and expansion scenarios that are all legal and meet the requirements of the Remand Order, yet have different impacts, advantages, disadvantages, costs, and benefits.

These four scenarios will then receive an additional level of analysis through modeling with the city's recently completed optimization models for water and sewer. While not considered originally in the scope of work, the stormwater system will also likely need to be considered as well. Impacts on the transportation network will then be analyzed with the MPO Travel Demand Model which is currently being developed and finalized. Together, these models will enable the community and decision makers to explore the more detailed public-facility related implications of the four boundary scenarios. This will then allow for a comparison and eventual selection of a preferred alternative. Along the way, input from the USC and public will help guide and refine this process.

This illustrates the importance of the work of the Boundary TAC; it will be deciding what factors are important to the community, apply these factors to meet the requirements of state law and the Remand Order, and apply these considerations to the rigorous analysis in Phase 2.

Planning Horizons and the Remand

An important consideration is that this a Remand and partial acknowledgement of a decision made in December 2008. Thus, the TAC's work will focus on issues that need resolution from

the Remand. Following is guidance from the Bend City Attorney on the issue of planning horizons and new information:

The Commission's [i.e. LCDC's] role is not to substitute itself for the city, or make a new decision today, starting from scratch, just as the RTF's [Remand Task Force] and City Council's roles are to carry out the Remand requirements spelled out by the Commission. Rather, LCDC, the RTF, and City Council will review the City's UGB expansion as if it were 2008. This makes sense given that a UGB expansion is based on the amount of land that the city needs for future residential and employment uses, over the 20-year planning period. Seeing the Remand through the lens of 2008 also keeps the data, timeframe, and analysis internally consistent. Here, the planning period is 2008 to 2028, and is based on the coordinated population forecast upheld on appeal to LUBA.

In summary, the planning horizon is 2008-2028 and the City can choose to reanalyze data already in the record, or add data that could have been available through 2008, to comply with the Remand requirements on residential and employment land needs. The exception to this general rule is when new information must be reconsidered in order to meet the requirements of the Remand Order. For the Residential and Employment TACs, new information can and should be considered around infill and redevelopment and efficiency measures. The work of the Boundary TAC will be based on updated 2014 GIS data and other new information.

OVERVIEW OF GOAL 14 & ORS 197.298

The UGB is a key component of Oregon's land use planning program. Guidance and rules related to management of a UGB are provided in Statewide Planning Goal 14 and in Oregon Revised Statutes (ORS) 197.298. The relevant guidance from each is summarized below. A diagram of the major steps in the process to establish or amend a UGB is shown on the following page.

Goal 14: Urbanization

To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

Land Need (see UGB diagram – blue boxes)

Establishment and change of urban growth boundaries shall be based on the following:

- (1) Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and
- (2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2).

In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need.

Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.

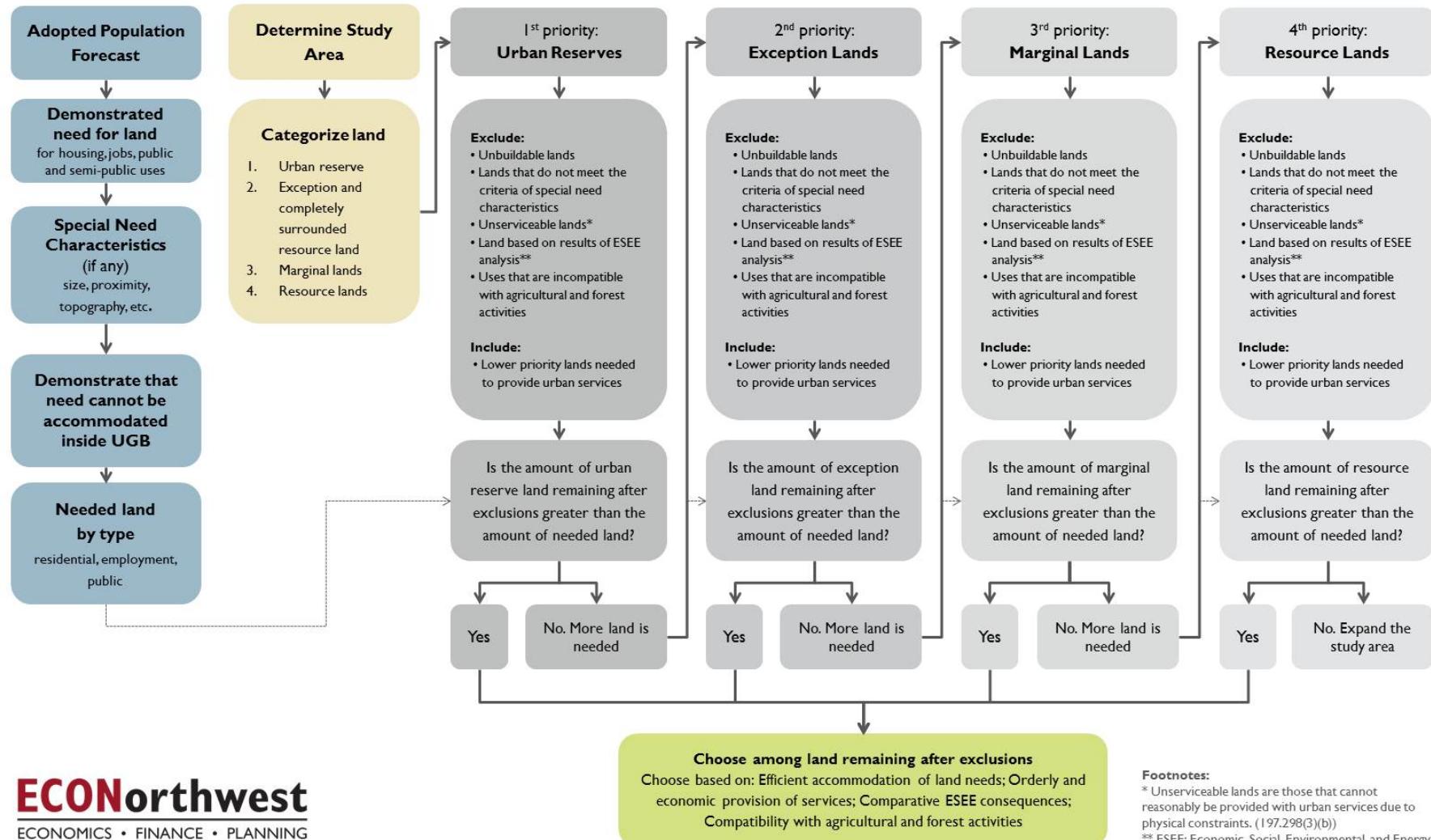
Boundary Location (see UGB diagram – tan, grey and green boxes)

The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

- (1) Efficient accommodation of identified land needs;
- (2) Orderly and economic provision of public facilities and services;
- (3) Comparative environmental, energy, economic and social consequences; and
- (4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Land Needs

UGB Alternatives Analysis - Location



Land Priority Provisions

State law (ORS 197.298) establishes that land may not be included within an urban growth boundary except under the following categories:

- (1) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.

Comments: Bend does not have designated urban reserve land so this priority category is not applicable.

- (2) Second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or non-resource land. Second priority may include resource land that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.

Comments: OAR 660-024-0060 clarifies that “land adjacent to the UGB” is not limited to lots or parcels that abut the UGB, but also includes land in the vicinity of the UGB that has a reasonable potential to satisfy the identified need deficiency. If the amount of suitable land in this category exceeds the amount needed, the City then uses the Goal 14 location factors to identify which priority lands to include in its UGB. For general housing needs, land is considered suitable unless it: is severely constrained by natural hazards (Goal 7), is protected by Goal 5, has slopes over 25 percent, is within the 100-year floodplain or can’t be provided with public facilities.¹ Lands for general employment needs are not “suitable” unless they are “serviceable” and are either “vacant” (a lot greater than ½ acre not containing permanent improvements or greater than 5 acres where less than ½ acre is occupied by improvements), or developed but likely to be redeveloped during the planning period.² The Goal 14 factors are not criteria; they are considerations that are applied to each alternative parcel or group of parcels. The parcel or parcels that, on balance, best satisfy the factors are selected. In other words, no single one of the four location factors may be the sole basis for selecting a particular parcel(s) to add to the UGB.

The Envision Tomorrow model results, GIS analysis, and optimization/TDM results will create a common set of evaluation criteria for the Goal 14 location factors, thus representing the balancing.

- (3) If land in the second priority category is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247.

Comments: Marginal lands have not been designated so this priority category is not applicable.

¹ OAR 660-024-0060(1)(e) and OAR 660-024-0010(1)

² OAR 660-009-0005(1), (9) and (14)

(4) If higher priority land is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.

ORS 197.298(3) provides that land of lower priority may be included in a UGB if land of higher priority is found to be inadequate to accommodate the amount of land estimated for one or more of the following reasons:

(a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;

Comments: The City has documented specific needs for a University (225 acres at Juniper Ridge), a new Hospital site (112 acres south of Bend) and two large industrial sites (total of 112 acres). However, the City will need to provide findings documenting that the specific needs cannot be accommodated within the existing UGB.

The OSU-Cascade development within the City removes the need for a University site at Juniper Ridge. However, it will displace land within the UGB that was assumed to be available for general employment uses from 2008-2028.

(b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or

(c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands.

Comments: There is a high threshold to exclude higher priority land, such as exception land, and instead add lower priority lands, such as farmlands. For example, the Director's Report stated the fact that it may cost more to provide public services to one area than others does not satisfy ORS 197.298(3). Likewise, the fact that one parcel will yield fewer new homes or less development than others does not allow a local government to exclude that land from a UGB expansion area in favor of other, lower priority lands. LUBA and the courts have construed the ORS 197.298(3) exceptions narrowly to allow inclusion of lower priority lands at the exclusion of higher priority lands only in cases with compelling facts.

The Director's Report and the LCDC Remand noted that the City may be able to include specific lower priority resource lands in order to provide services to higher priority exception lands if supported by an adequate factual base.

REMAND REQUIREMENTS

Key Remand Issues that relate specifically to the Goal 14 methodology (Boundary Location) are summarized below from the list of Remand Issues presented in Appendix A. Selected Remand

Issues relating to Goal 5 (Natural Resources), Goal 7 (Natural Hazards), Goal 11 (Public Facilities and Services) and Goal 12 (Transportation) are also highlighted because of their linkage to the Goal 14 location factors.

The Remand includes numerous issues and directives relating to land needs and land efficiency measures. As described at the beginning of this memo, the Residential and Employment TACs will have the lead role in providing the inputs on land needs and specific characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. The UGB TAC will focus on the methodology that will be used to evaluate alternative UGB scenarios, based on guidance from the Remand, state law and relevant case law.

Issues related to Suitability Criteria and “Screening”

See Appendix A List of Remand Issues – Sub Issue 9.1, 9.2 and 9.3

- Directives 105-107 highlight the role and importance of establishing suitability criteria for general housing, employment, and related land needs.
- Directive 108 outlines the steps for applying the suitability criteria to exception lands within the study area and notes that lands that do not meet the suitability criteria appropriate lands may be “screened out” from further analysis.

Comments: The Director’s Report stated that the methodology and approach used in 2008 improperly excluded a substantial amount of land planned and zoned as exception lands from consideration for inclusion in the UGB. This resulted from the city’s use of suitability criteria, some of which did not correspond to future housing and employment needs identified by the city, and some of which did not comply with state law. The Director’s Report concluded that the analysis created an artificial shortage of first priority exception lands, and then used that shortage to justify including lower priority resource land, effectively undermining the statutory priorities in ORS 197.298.

Issues related to Aggregation of Lands for Alternatives Analysis

See Appendix A List of Remand Issues – Sub Issue 9.1, 9.2 and 9.3

- Directives 109-114 outline the steps the city must follow to comply with the land priority provisions in ORS 197.298.

Comments: A general problem with the locational analysis is that large areas grouped for evaluation do not have similar circumstances as required by OAR 660-024-0060(6).

- Directives 22-24 relating to Goal 12 (Transportation) also emphasized that the City is required to compare lands in the same priority classes.

Comments: The City may aggregate its underlying data, by TAZs and priority category, and address the results in revised findings. On remand, the city must analyze the

relative costs of lands in the same priority category, rather than aggregating its analysis into subareas without regard to the priorities under ORS 197.298.

We are considering use of a grid system to remedy the issue of different parcel sizes and different analysis boundaries (TAZ, sewer basins, water pressure zones, etc.).

Issues related to Goal 14 Location Factors

The Goal 14 administrative rule provides some guidance for “considerations” that must be addressed in the Goal 14 Location Factors for the UGB. The most specific guidance is provided for Factor 2 – orderly and economic provision of public facilities and services. In general, the city has a great deal of flexibility in deciding how to measure and balance the location factors of Goal 14 in the evaluation of UGB alternatives within a given priority category. In other words, state law and the rules do not prescribe how and whether to weight specific factors (such as orderly and economic provision of public facilities and services); or what should be included in the consideration of comparative environmental, energy, economic and social consequences. The city has an opportunity to balance and consider the factors based on community goals and priorities. The Envision Tomorrow scenario planning model will provide a helpful and engaging tool to quickly evaluate alternative UGB scenarios based on UGB location factors that are important to the community.

- Goal 5 (Natural Resources) – Directives 80-84 reflect an approach to comply with Goal 5 issues. This approach can be referenced and implemented in the consideration of Goal 14 Factor 3 (comparative environmental, energy, economic and social consequences) should a revised UGB expansion area include any areas along the Deschutes River, Tumalo Creek or both.
- Goal 7 (Natural Hazards) – Directive 86 acknowledges that the City is not required to consider relative risk of wildfire in alternative UGB expansion candidate areas under Goal 7 (Natural Hazards) or Goal 2 (Land Use Planning/Coordination). However, it is entirely appropriate and permissible for the City to consider relative risk of wildfire in considering the environmental consequences of the alternatives under Location factor 3 of Goal 14.
- Goal 11 (Public Facilities & Services) – Directives 87-90 outline the steps the City must address in revised facility plans under Goal 11 and location factor 2 of Goal 14. To the extent the city is relying on the relative costs of public facilities and services to justify inclusion of particular lands within the UGB expansion area, it must include the comparative analysis required by OAR 660-024-0060(8).
- Goal 12 (Transportation) – Directives 91-101 provide specific guidance regarding the considerations that should be included in the analysis and balancing of transportation in the evaluation of alternative UGB expansion areas. The Remand states that “no specific method or outcome is required.”

- Goal 12 – Directives 102-104 confirm that the City is required to comply with OAR 660-012-0035 before it may complete its UGB expansion. OAR 660-012-0035 includes requirements regarding planning for transportation choices and reduced reliance on the auto. The rule includes a specific target for reduction in vehicles miles traveled (VMT) and provides timeframes for completion and review procedures. Using Envision Tomorrow and other transportation models, the city will calculate and prepare analyses of its baseline VMT per capita in 2003, along with projected VMT per capita over the planning period with proposed “packages” of land use and transportation measures to reduce VMT per capita. This task, and an Integrated Land Use and Transportation Plan, will be one of the major topics of the Joint TAC/Steering Committee work sessions at the end of Phase 1.

Conclusion and Recommendations

Suitability Criteria & Screening

Table 3 of the Director’s Report (page 118-122) provides very specific guidance regarding UGB Location Threshold Suitability Criteria that are permissible screens for both general land need and specific identified land needs. The APG Team proposes that we follow the guidance in Table 3 (included in Appendix B). Does the TAC support this approach?

Tiered Approach to Analysis of Expansion Areas and Packaging of UGB Scenarios
ORS 197.298 and the Remand are very clear regarding the steps that must be followed relative to priority categories, i.e. to look at exception lands before resource lands. Therefore, we suggest that Bend’s approach be to categorize and analyze land within the study area based on the priority categories and follow a tiered method where higher priority lands are evaluated first for each identified land need rather than aggregating exception and resource lands for analysis. At this point, we are not making assumptions about whether certain lands (e.g., exception and resource land) can ultimately be justified for inclusion in a revised UGB proposal. Rather, we are suggesting the sequence of analysis. What comments does the TAC have on this? Does the TAC support this approach?

We propose to address ORS 197.283(3) exceptions for resource lands as part of the packaging of UGB scenarios. All scenarios will follow the tiered analysis approach and all will have scored relatively high on Goal 14 factors. The scenarios will reflect different choices in balancing the Goal 14 factors in different ways and the inclusion of resource lands may be justified under certain scenarios (e.g., to provide future urban services to higher priority lands). Does the TAC generally support this approach?

Goal 14 Location Factors

Meetings 2-4 of the UGB Methodology TAC will be focused on how we measure, evaluate and balance the location factors of Goal 14. Does the TAC have any initial input to the APG team on local issues that are important to include in the consideration of the Goal 14 factors?

Factor 1 – Efficient accommodation of identified land needs;

Factor 2 – Orderly and economic provision of public facilities and services;

Factor 3 – Comparative environmental, energy, economic and social consequences; and

Factor 4 – Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside of the UGB.

APPENDIX A: LIST OF REMAND ISSUES

This Appendix provides a list of Remand issues related to UGB methodology and Boundary Location. The numbering of directives in the second column starts with number 105 because this list is an excerpt of the larger Index of all directives to the City on Remand.

Subissue	Directives to City on Remand
UGB Methodology & Boundary Analysis (Goal 14)	
9.1 (Conclusion) Pages 129- 130	<p>In evaluating which lands to include within its UGB expansion on remand, the City must follow the following steps:</p> <ul style="list-style-type: none"> 105. Establish suitability criteria for general housing, employment, and related land needs. These criteria must be consistent with (in the sense of implementing, or being in harmony with) the definitions in OAR 660-008-0005(2) (for lands planned for future general residential uses), and 660-009-0005(9) and (12) and 660-009-0025(1) and (2) (for lands planned for future general employment uses) as well as other provisions of law applicable in determining whether the land will meet the city's general land needs. 106. Document the criteria used to locate lands required to meet any "specific identified needs" as allowed by ORS 197.298(3)(a). The identified land needs include a future university site, a medical center, and two large-lot industrial uses. 107. Document (through existing or supplemental findings) that the sites identified by the City for a university, a medical center, and two large-lot industrial uses. The Commission agrees with the City that these identified future uses are justified under 197.298(3)(a). The City must demonstrate, however, through additional findings, that these future uses cannot reasonably be accommodated within the prior UGB. 108. Apply the suitability criteria (from step 1, above) for general housing, employment and related land needs to exception lands within the expansion study area. In this step, the City must identify exception lands (including lands designated by the City as urban area reserve) that will not accommodate any of its general land needs during the planning period. These lands may be "screened out" from further analysis. 109. For its remaining (general) future land needs over the planning period, the City must compare the remaining (after the screening described above for suitability) exception lands using the Goal 14 locational factors to determine which of those lands are best to include in its UGB expansion area. In this step, the City may rely on ORS 197.298(3)(c) (maximum efficiency of land uses *** requires inclusion of [resource lands] *** to include or to provide services to [the exception lands]) to include resource lands, particularly resource lands interspersed with exception lands, within its UGB expansion area. Resource lands included under ORS 197.298(3)(c) need not be evaluated for soil capability, as called for under ORS 197.298(2). 110. If the City is unable to accommodate its need for additional lands during the planning period after undertaking the preceding steps, it may then evaluate lands in the next priority category under ORS 197.298(1) (e.g., resource lands) for its general land needs. If the City does so, it must consider resource lands with lower soil capability first, as specified in ORS 197.298(2). To the extent that resource lands are needed to meet remaining (general) future land needs over the planning period, the City must apply the general suitability

	criteria used in Step 1 (above) and then compare suitable resource lands using the Goal 14 location factors to determine which of those lands are the best to include in its UGB expansion area.
9.2 (Analysis) Page 131	111. The remaining work for the City on remand is simply to show, using those criteria, that the uses "cannot reasonably be accommodated" within the prior UGB.
9.2 (Conclusion) Pages 131-132	112. The City must, however, analyze whether these needs could reasonably be accommodated within the prior UGB using its site suitability criteria and buildable lands inventory, and adopt findings explaining its reasoning.
9.3 (Analysis) Page 132	113. The City will need to work through the particular application of ORS 197.298(3)(c) to the facts on remand, and that application may depend, in part, on what the City does with its public facilities plans.
9.3 (Conclusion) Page 133	114. ORS 197.298(3)(c) may be used, as described above under issue 9.1., where resource lands are interspersed with exception lands, and in order to urbanize (provide public services to) exception lands that couldn't otherwise be served.

Natural Resources – Goal 5

6.1 (Conclusion) Page 91	<p>80. State scenic waterway – Should a revised UGB expansion area include any areas within the Middle Deschutes River Scenic Waterway as described in OAR 736-040-0072, the city must adopt local requirements to implement the state plan for protecting the Middle Deschutes Scenic Waterway, including a setback from the canyon rim for structures.</p> <p>81. Riparian protection – Should a revised UGB expansion area include areas along the Deschutes River, Tumalo Creek, or both, the city must prepare and adopt an inventory of the significant riparian area that either: 1) finds that the topography along the river does not restrict the use of the safe harbor inventory under OAR 660-023-0090(5)(d) and apply the 75 feet upland from top of each bank safe harbor width provided in OAR 660-023-0090(5)(a); or 2) apply the standard inventory methodology, used within the current UGB, to the expansion area. In either case, the significant riparian area will fall within the canyon walls. For a protection program the city will adopt the county measures that serve to protect the scenic waterway and add restrictions for vegetation removal within the significant riparian area. The City must develop the protection program to meet the safe harbor protection measure standards.</p> <p>82. Wildlife habitat – Should a revised UGB expansion area include areas along the Deschutes River, Tumalo Creek, or both, the city must apply OAR 660-023-0110, the Goal 5 wildlife habitat rule, by conducting a safe harbor inventory under OAR 660-023-0110(4). The rule allows the city to limit consideration of significant habitat to the five habitat categories specified in subsections (a)-(e). The Commission understands that the City anticipates that ODFW will provide the City a letter stating that the agency does not have</p>
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	<p>information that any of the five habitat categories are documented, identified or mapped within the portion of the Deschutes River or Tumalo Creek corridors that pass through the expansion area.</p> <p>83. Tumalo Creek – Should a revised UGB expansion area include Tumalo Creek in the final expansion area, the city must apply the Goal 5 safe harbor inventory and protection measures for riparian areas along the creek.</p> <p>84. ..the Commission concludes that the City may not exclude identified ASIs from its BLI (if they are already inside the prior UGB), or excluded ASIs from inclusion in the expansion area.</p>
6.3 (Conclusion) Page 95	85. On remand, if the City includes the property in the revised UGB expansion area, the City should only plan for surface mining that portion of the property within the DOGAMI permit 09-0018 area, as the site is not on the county's acknowledged surface mining inventory.
Wildlife Risk – Goal 7	
6.2 (Conclusion) Page 93	86. It is entirely appropriate and permissible for the City to consider relative risk of wildfire in alternate UGB expansion candidate areas in considering the environmental, energy, economic and social consequences of the alternatives under locational factor 3 of Goal 14.
Public Facilities – Goal 11	
7.1 (Conclusion) Page 101	<p>87. The City may adopt public facilities plans as needed for acknowledged land uses within its prior, acknowledged UGB on remand.</p> <p>88. The city may then, subsequently, adopt revisions to its public facilities plans for any revised UGB expansion proposal and any other related amendments to its acknowledged comprehensive plan.</p>
7.7 (Conclusion) Page 110	<p>89. On remand, the City must address the entire expansion area under Goal 11 and Goal 14, locational factor 2. The City is not required to do so through amendments to its public facilities plan, although it may do so.</p> <p>90. If the City elects to carry out the analysis(es) of the feasibility of serving the expansion area independently of its public facilities plan, it should nevertheless formally adopt the analysis and incorporate it into the city's comprehensive plan (and the analysis must not conflict with existing provisions of the public facilities plan).</p>
Transportation – Goal 12	
8.1 (Analysis) Pages 114-115	<p>91. The city is required to compare lands in the same priority classes under ORS 197.298, Goal 14 and OAR 660-024-0060 (except when lower priority lands are included as necessary to serve higher priority lands under ORS 197.298(3)(b)).</p> <p>92. The city may aggregate its underlying data, by TAZs and priority category, and address the results in revised findings</p>
8.1 (Conclusion)	93. On remand, the city must analyze the relative costs of lands in the same priority category, rather than aggregating its analysis into subareas without regard to the priorities under ORS 197.298.

Page 115	
8.1 (Director's Report) Page 89	<p>94. Identify and assign costs of individual UGB expansion areas, rather than combinations of different areas;</p> <p>95. Provide additional information regarding the costs of providing transportation facilities to serve individual areas, including any extraordinary costs related to overcoming topographic barriers or rights of way;</p> <p>96. Provide more detailed analysis of the extent to which the costs of improvements for major roadway improvements in north area (including proposed improvements to Highways 20 and 97) are a result of and should be assigned to development in the north area rather than the city as a whole. (That is, the city's analysis and evaluation should assess whether the extent of improvements in north area might be avoided or reduced in scale or cost if the UGB was not expanded in this area, or if the extent of the UGB expansion was reduced.); and</p> <p>97. Provide comparable estimates for providing needed roadway capacity for areas that, because of topographic constraints, may need to be served by different types of road networks. For example, growth on the east side can apparently be served by a fairly complete grid of streets, while topographic barriers limit potential for a full street grid in this area.</p>
8.2 (Conclusion) Page 116	<p>98. On remand, the city must revise its findings to address this issue. If the city chooses to rely on existing analysis that there is no cost differential between alternate lands in the same priority category, that decision must be supported by substantial evidence in the record as a whole.</p> <p>99. While no specific method or outcome is required, the city must explain its basis(es) for assigning the costs of extraordinary improvements to expansion areas in the same priority category, and consider whether changes in the extent or location of the UGB expansion would reduce the need for major improvements in this area.</p>
8.3 (Conclusion) Pages 117-118	<p>100. On remand, the city must revise its findings to address this issue including not only the relative cost of required transportation improvements, but the relative advantages and disadvantages as well. OAR 660-024-0060(8) (which may include the relative amount of development capacity the city can support for a particular unit of cost).</p> <p>101. On appeal, at oral argument, the city agreed to strengthen its findings in this area to the extent that lands on the west of the city are included in the UGB expansion area on remand.</p>
8.6 (Conclusion) Pages 120-121	<p>102. The City is required to comply with OAR 660-012-0035 before it may complete its UGB expansion.</p> <p>103. The City has agreed to prepare analyses of its baseline VMT per capita in 2003 (with VMT as defined in OAR 660-012-0005), along with an analysis of projected VMT per capita over the planning period with proposed "packages" of land use and transportation measures to reduce VMT per capita.</p> <p>104. If the City demonstrates that its revised UGB expansion, along with proposed land use and transportation measures, results in an estimated change in VMT per capita:</p> <ul style="list-style-type: none"> a. of a decline of 5% or more per capita, then the City is in compliance with this aspect of the TPR under 0035(6); b. of a decline of between 0% and 4.99 percent per capita, then the City may proceed by preparing for DLCD/LCDC review and approval

	c. concurrently with the revised UGB, a work program/plan to achieve a reduction of 5% or more over the planning period; or of an increase in VMT per capita, then the city must prepare, submit and obtain DLCD/LCDC approval of an integrated land use and transportation plan as provided in OAR 660-012-0035(5) prior to approval of a revised UGB.
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APPENDIX B: TABLE 3 FROM DIRECTORS REPORT

Findings Regarding Boundary Location Threshold Suitability Criteria

Criterion	Analysis
Lot is not entirely within the 100-year floodplain.	This criterion is based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), ⁶⁵ and is a permissible screen for both general land need and specific identified land needs.
Lot is serviceable for city sanitary (does not include private or public systems other than the city).	This criterion is a permissible screen under OIAR 660-008-0005(2)(e) (cannot be provided with public facilities), except for the limitation to city facilities. So long as sanitary sewer is available or feasible during the planning period, the property cannot be excluded as unsuitable.
Lot is serviceable for city water.	This criterion is permissible, see analysis immediately above.
Lot is in regional stormwater plan service area.	This criterion is permissible, see analysis immediately above.
The lot scores medium or high for street connectivity.	This criterion is not a permissible suitability screen. As long as street access is feasible during the planning period, the property can be provided with public facilities. This criteria can, however, be used as a Goal 14 factor for determining what exception lands to include in the event there is an excess amount of such lands and the city and the county are deciding which exception lands to include.
The lot scores medium or high for street connectivity.	This criterion is not a permissible suitability screen. As long as street access is feasible during the planning period, the property can be provided with public facilities. This criteria can, however, be used as a Goal 14 factor for determining what exception lands to include in the event there is an excess amount of such lands and the city and the county are deciding which exception lands to include.
Lot is a public or private right-of-way for roads, sidewalks, and/or landscaping.	Publicly owned land generally is not considered buildable (Goal 10 – within the existing UGB) or suitable (OAR 660-024), and is an appropriate suitability screen. However, private right-of-way and open space land is “generally considered “suitable and available.”
Lot does not contain an active surface mine in the county’s Goal 5 inventory.	This criterion, which is based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), is a permissible suitability screen for general land need.

Criterion	Analysis
Lot is not designated by the county as a Goal 5 resource.	This criterion, which is based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), is a permissible suitability screen for general land need.
Lot is not a cemetery.	This criterion, which is based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), is a permissible suitability screen for general land need.
Lot is not owned by the federal government.	This criterion, which is based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), is a permissible suitability screen for general land need.
<ul style="list-style-type: none"> • Lot is not a state park; • Lot is not owned by the Bend Metro Park and Recreation District (listed twice). • Lot is not owned by Bend-La Pine School District 	These criteria, which are based on OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment), are permissible suitability screens for general land need.
Lot is not a public or private open space.	This criterion is a permissible suitability screen for publicly owned open space, but not for private open space. OAR 660-008-0005(2).
Lot is developed with a school or church and is larger than 5 acres.	(1) Some church and school land may be redeveloped. Such lands may be screened as "unsuitable" only based on findings and an adequate factual base that they are not likely to be redeveloped during the 20- year planning period Larger lots with substantial vacant land generally will be considered to be suitable (at least in part)..
Lot is not a landfill.	This criterion may be used only if based on findings and an adequate factual base that the lands are not likely to be redeveloped during the 20-year planning period. OAR 660-008-0005(2) (for housing) and OAR 660-009-0005(2) (for employment).
Lot is not a destination resort approved by the county.	This criterion may be used only if based on findings and an adequate factual base that the lands are not likely to be redeveloped during the 20-year planning period.

Criterion	Analysis
Lot has recorded CC&Rs prohibiting further division.	This criterion may be used only if based on findings and an adequate factual base that the lands are not likely to be redeveloped during the 20-year planning period. The director finds that the evidence cited in the city's findings, R. at 1171-1174, does not support the city's conclusion that the listed subdivisions cannot be redeveloped. The comments in Table V-6 [R. at 1173] show that additional residential development is not prohibited in almost all of the subdivisions listed. Even for those few subdivisions where additional land divisions are prohibited by CC&Rs, the findings do not address whether there are vacant lots, or whether additional housing not involving a land division, such as an "in-law" apartment or "granny flat" may be feasible.
Lot has improvements with a value of less than \$20,000.	This criterion may be used only if based on findings and an adequate factual base that the lands are not likely to be redeveloped during the 20-year planning period. The valuation threshold used by the city is very low in relation to the potential value of residential redevelopment, and would appear to effectively define lands that have minimal improvements as being developed rather than vacant.
Lot has 1 dwelling and is larger than three acres.	This criterion may be used only if based on findings and an adequate factual base that the lands are not likely to be redeveloped during the 20-year planning period. The acreage threshold used by the city is very high. A lot with an existing home and several acres of land normally could accommodate some additional residential development during a twenty- year planning period. As noted in the section of this report addressing housing need, the city has not analyzed the actual level of redevelopment that has occurred on such lands, making it impossible to reach definitive conclusions about the amount of redevelopment that is likely to occur, as those terms are used in OAR 660-008-0005(2) and 660-024-0010(1) and 0060(1)(e) and (5). The city appears to have excluded a substantial amount of exception lands based on this criterion.

Criterion	Analysis
Lot is zoned EFU-TRB with 23 acres of high value soils when irrigated OR zoned EFU-UAL with 36 acres of high value soils when irrigated.	The capability of soils on commercial farm parcels becomes relevant only if and when (a) all suitable exception parcels have been added, (b) some amount of 20- year land need remains, (c) the city goes to the next highest priority under ORS 197.298(1), which is agriculture or forest land, (d) lower capability agriculture or forest parcels have been given priority over higher capability resource parcels per ORS 197.298(2), (e) lower capability resource parcels are not suitable for the identified need, or there is not enough lower capability resource land to meet that remaining need, and (f) lowest priority high value resource land must be considered.

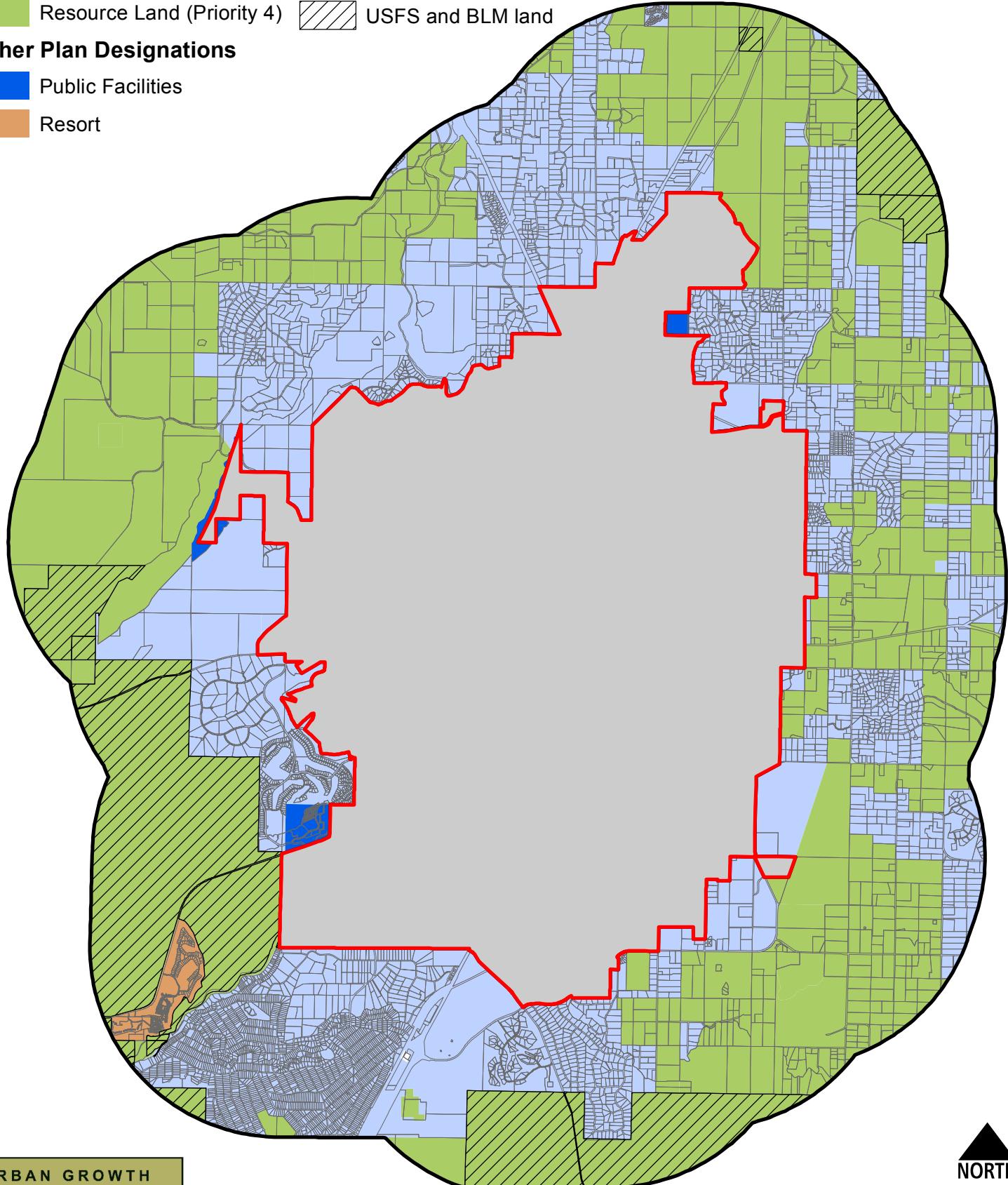
UGB Study Area by Priority Class

Priority Category

- Exception Land (Priority 2)
- Resource Land (Priority 4)

 Urban Growth Boundary Proposed 2 mile study area USFS and BLM land**Other Plan Designations**

- Public Facilities
- Resort



URBAN GROWTH
BOUNDARY REMAND

 NORTH

0 0.5 1 2 Miles





ENVISION TOMORROW OVERVIEW

Envision Tomorrow, an innovative, open source, set of urban and regional planning tools developed by Fregonese Associates, is an integral piece of our scenario planning process. It can be used to model development feasibility on a site-by-site basis as well as create and evaluate multiple land use scenarios, test and refine transportation plans, produce small-area concept plans, and model complex regional issues. The software also provides a real-time evaluation of relevant indicators such as land use, energy consumption, and financial impacts that measure a scenario's performance. It can also provide baseline carbon emissions analysis of different land use patterns, enabling planners to model the relationship between greenhouse gas emissions and land use and transportation decisions.

Envision Tomorrow consists of two primary tools: the **Prototype Builder**, an ROI model spreadsheet tool, and the **Scenario Builder**, an ArcGIS add-on.

WHAT IS ENVISION TOMORROW?

The **Prototype Builder**, a return on investment (ROI) spreadsheet tool, can be used to model buildings and test the physical and financial feasibility of development. The tool allows the user to examine land use regulations in relation to the current development market and consider the impact of parking, height requirements, construction costs, rents and subsidies. Use this tool to see what is market feasible. Use it to see how preferred forms of development, such as mixed-use retail with housing above, might become more financially feasible within your existing code.

The **Scenario Builder** adds scenario-building functionality to ArcGIS. First, design a library of buildings in the Prototype Builder. Next, use the Scenario Builder to create development types and “paint the landscape” by allocating different development types across the study area to create unique land use scenarios. The tool then allows real-time evaluation of each scenario through a set of user-defined benchmarks or indicators. The indicators measure such things as the scenario’s impact on land use, housing, sustainability, transportation, and economic conditions. It also allows communities and regions to monitor progress over the short-and long-terms.

WHAT MAKES ENVISION TOMORROW UNIQUE?

Transparent and Versatile

Envision Tomorrow is a versatile and expandable tool that can easily be adapted to accommodate various uses. Unlike most planning software, Envision Tomorrow allows the user to easily and transparently change the assumptions of the prototype buildings, development types, and scenario inputs. By making the tool transparent, you can quickly and easily adjust the assumptions to more accurately reflect the dynamics of your particular neighborhood, city, or region. This transparency allows planners to adjust assumptions in the scenario process if necessary.

Building Level Data

Since the Envision Tomorrow analysis process begins at the building level, anything we know about a building, we can test in a scenario. These are examples of common indicators used for evaluation:

- **Housing and jobs**
(mix and density)
- **Jobs-housing balance**
- **Land consumption**
(vacant, agricultural, infill)
- **Impervious surface**
- **Open space**
- **Housing affordability**
- **Resource usage**
(energy and water)
- **Waste production**
(water, solid, carbon)
- **Transportation** (travel mode choice, vehicle miles traveled)
- **Fiscal impact** (local revenue and infrastructure costs)
- **Balanced housing index**
(how a scenario’s housing mix matches the expected future demographic profile)

ENVISION TOMORROW PROCESS

1

Develop Building Prototypes

Create prototype buildings using the return on investment (ROI) model.



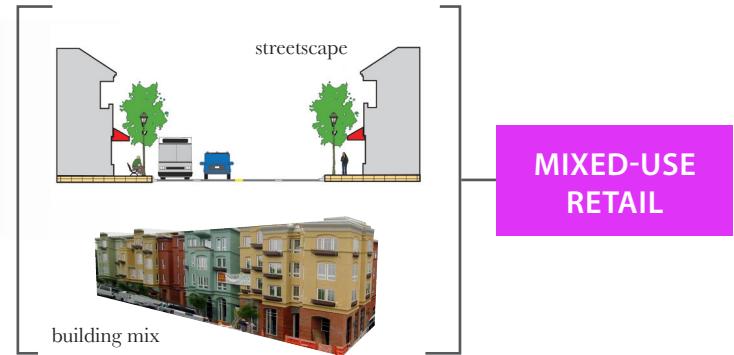
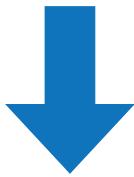
Prototype Name	Corridor Mixed Use
Project City/State	(enter name of building)
Site area	Long Beach (enter name of city/state or project)
Site gross-to-net ratio	43,560 square feet
Landscaping or open space	1.00 acres
Building height (stories)	100% (enter percentage)
Under-build	5% (enter percentage)
	4 stories
	70% (enter percentage)



2

Create Scenario Development Types

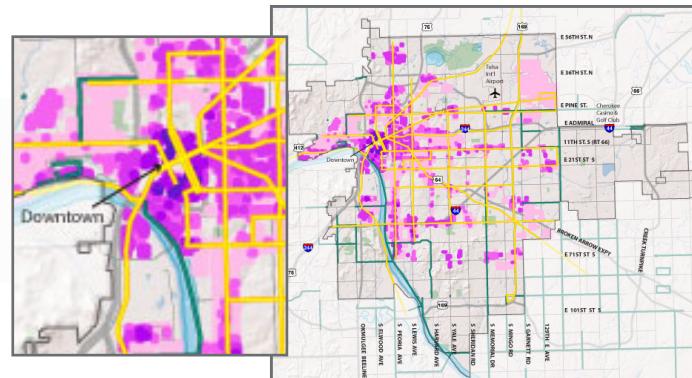
Development types include all of the elements in a city: a mix of buildings, streets, civic uses and open spaces.



3

Build Scenarios

Create scenarios by applying the development types to the landscape using the scenario builder.

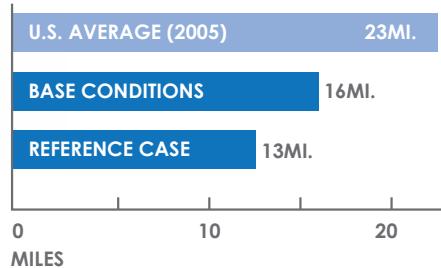


VEHICLE MILES TRAVELED Per Person Per Day

4

Evaluate Scenario Performance

Using the ROI model, examine a whole host of benchmarks based on the built scenario.



WHAT IS ENVISION TOMORROW?

Relevant and Cutting-Edge Research

Fregonese Associates has partnered with a number of institutions, organizations and government entities around the country to further the capabilities of Envision Tomorrow. These partnerships provide access to leading thinkers and the latest research and data about urban form and development which are then incorporated into Envision Tomorrow. Most recently, through collaboration with the University of Utah, 18 expanded indicators were developed that allow Envision Tomorrow users the ability to measure, for example, employment growth and resilience, public health, transportation safety, workforce housing and air quality impacts.

HOW IS IT USED AND WHO USES IT?

Municipalities, regional governments, and private organizations around the nation use Envision Tomorrow. The Chicago, Illinois region uses the tool to conduct housing studies; Baton Rouge, Louisiana is analyzing future growth scenarios, while the Southern California Association of Governments in California is examining the potential for greenhouse emissions reduction through different land use policies. In Portland, Oregon, the regional government, Metro, is refining their ability to test land use and transportation policies through scenario planning. Smaller cities like Waco, Texas and Mountlake Terrace, Washington, have found Envision Tomorrow to be a valuable addition to their planning toolbox. Below is a brief list of Envision Tomorrow users:

- Sonoran Institute/Lincoln Land Institute joint venture
- Southern California Association of Governments
- Envision Utah
- Chicago Metropolitan Agency for Planning
- City of Portland
- Portland Metro
- City of Tulsa
- Montana State University
- City of Long Beach

FAQ

What software do you need to run Envision Tomorrow?

Envision Tomorrow requires Windows XP or Vista, Microsoft Office 2000 Professional or greater, and ESRI's ArcGIS desktop software 9.3 or greater. The tool supports all ArcGIS license types (ArcView, ArcEditor, ArcInfo).

What types of indicators can Envision Tomorrow report?

Land Use: density and mix of uses

Transportation: mode choice, VMT—requires local calibration including travel survey results, land use and demographic inputs

Housing: mix and affordability

Fiscal Impact: local revenue and infrastructure—requires local calibration of revenue, rates and costs inputs

Environment: open space and agriculture conversion

Sustainability: energy use, carbon footprint, water usage and wastewater—requires local calibration based on local climate and typical resource use

Visit the Envision Tomorrow wiki page for more information on indicators: www.frego.com/etwiki

How long does it take to get up and running?

Start-up time depends on the indicators you use to evaluate the scenarios. Basic land use indicators can be inputted into the tool and calibrated within a few days. More complex transportation and sustainability indicators, including carbon footprint, could take several weeks to collect the input data. To reduce local calibration time, you can use national averages.

Can Envision Tomorrow be used to analyze different levels of geography?

Yes, Envision Tomorrow is designed to model land use decisions at a range of scales starting at the parcel level. By first designing Prototype Buildings that are financially feasible at the local level, the user then combines these prototypes into a series of Development Types, such as Main Street, mixed-use neighborhood, strip commercial, etc. The Development Types are used to create a series of land use scenarios at the district, city, county, and regional scale. The Scenario Builder tool allows the creation and comparison of up to five land use scenarios concurrently. The user can edit, switch between, and compare all five scenarios. A scenario spreadsheet in Excel format is dynamically linked to the tool and maintains the scenario outputs, such as housing mix, in a series of tabs for quick comparison. As you make changes to a scenario, the results automatically report in the spreadsheet for instant monitoring. Users can focus in small areas for detailed design control as well as zoom to a larger scenario with small area changes intact. Detailed scenario results are easily exportable and reportable at any geography.

FAQ

How does Envision Tomorrow evaluate different land uses and policy alternatives?

The tool evaluates scenario differences based on a variety of indicators. Most indicators derive from what particular mix of buildings the user chooses to place on the landscape and where they place them. For example, if the user paints an area with a main street development type as opposed to a strip commercial development type, the underlying buildings that compose those places are different, and that difference will be reflected in the indicators. Main Street development might include some multifamily housing and mixed-use, whereas the strip commercial might include low intensity retail. The choice to put in main street development could result in a lower housing density, but achieve a reduction in per capita water and energy usage and the number of vehicle miles traveled. The implications of different land uses are reflected instantly as the user makes alternative decisions.

Does Envision Tomorrow model carbon footprint?

Envision Tomorrow uses a predictive algorithm combined with local travel and demographic data to estimate the impact of land use changes on key transportation indicators, such as travel mode split, vehicle miles traveled, and greenhouse gas emissions. By using a predictive algorithm approach, the tool does not require a direct link to a transportation model to evaluate the impact of land use changes on travel behavior and carbon emissions.

Can you modify underlying assumptions to align with local conditions?

Yes, all assumptions to the prototype buildings, development types, and scenario inputs are transparent and editable in Excel. From our experience, it is important that planners see all of the assumptions in the scenario process and be able to adjust the assumptions, if necessary. Because the tool is dynamically linked in Excel, changing an assumption results in instant updates to the scenario outputs.

Can the tool display impacts graphically and visually?

Yes, Envision Tomorrow provides visual results in multiple formats, including maps, charts, and graphics. Scenario results can be used to create 2D and 3D visualizations.

How much does Envision Tomorrow cost?

The software license for Envision Tomorrow is free-of-charge. The only fees associated compensate our time to train users in using the tool. Contracts are driven by the client's needs; we typically create a contract for data gathering, training and customization.

URBAN GROWTH BOUNDARY REMAND

**MAKING BEND
EVEN BETTER**



Boundary TAC Meeting 1

August 5, 2014

Bend UGB Remand Project

Key Questions for Boundary TAC



- Consistent with the requirements of the Remand, how do we frame the study area(s) for the analysis and packaging of the boundary and growth scenarios?
- How do we measure, evaluate and balance the location factors of Goal 14?
- Should some factors be weighted more heavily than others?

Overview of Goal 14: Urbanization



“To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.”

Overview of Goal 14: Land Need



“Establishment and change of urban growth boundaries shall be based on the following:

1. Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast;

Overview of Goal 14: Land Need



“Establishment and change of urban growth boundaries shall be based on the following:

2. Demonstrated need for land suitable to accommodate housing, employment opportunities, livability, or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection.”

Overview of Goal 14: Land Needs



- In determining need, local government may specify characteristics, such as parcel size, topography or proximity necessary for land to be suitable for an identified need.
- Prior to expanding UGB, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the UGB.

Overview of Goal 14: Location Factors



1. Efficient accommodation of identified land needs;
2. Orderly and economic provision of public facilities and services;
3. Comparative environmental, energy, economic and social consequences; and
4. Compatibility of proposed urban uses with nearby agricultural and forest activities on farm and forest lands outside the UGB.

Priorities for including land in a UGB



ORS 197.298 Priorities*

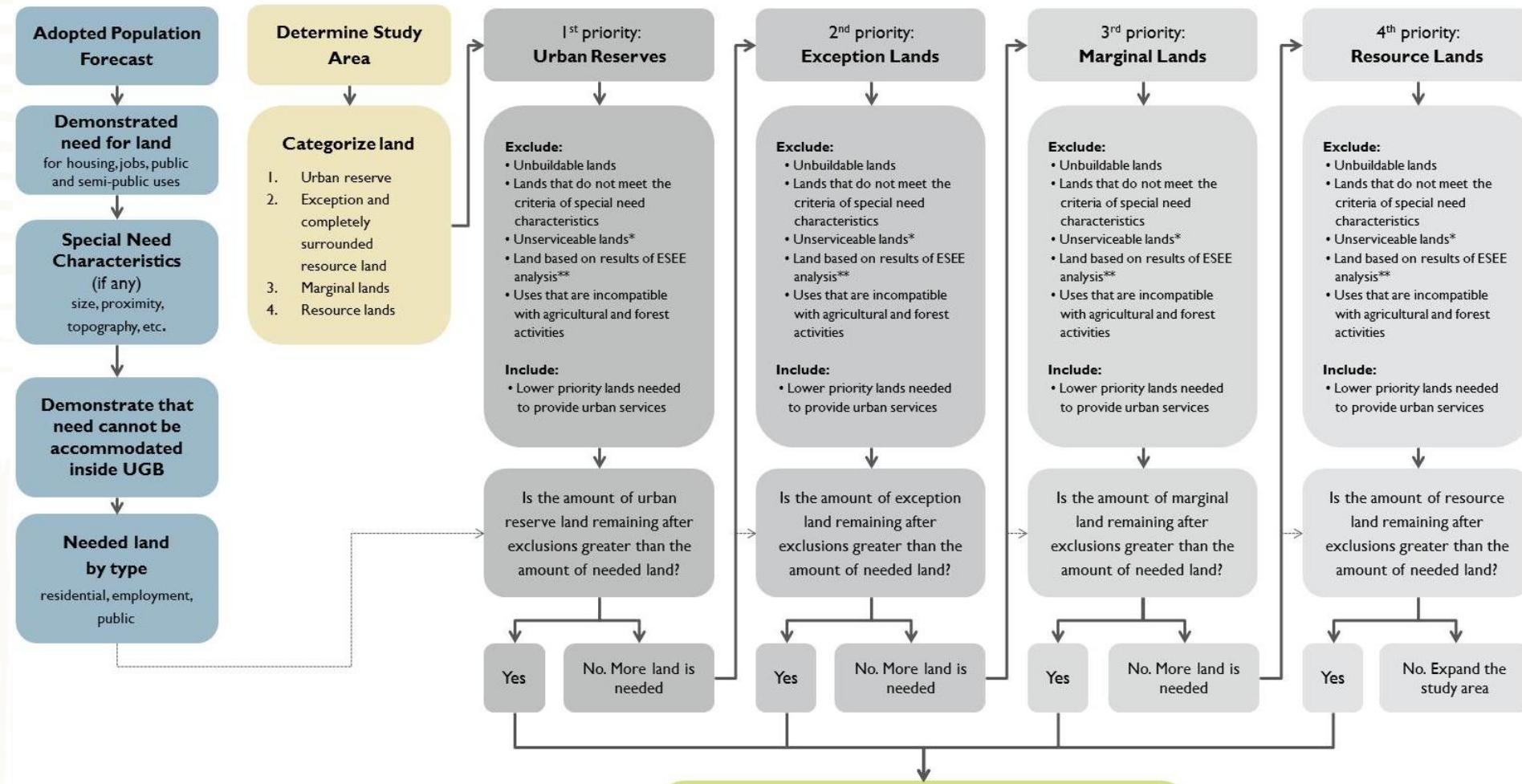
1. Urban Reserve Land
2. Exception Lands
3. Marginal Lands
4. Resource Lands (i.e. farm and forestry)

*Lower-priority lands may be included if needed to provide urban services to higher –priority lands.

UGB Analysis Flow Chart

Land Needs

UGB Alternatives Analysis - Location



Footnotes:

* Unserviceable lands are those that cannot reasonably be provided with urban services due to physical constraints. (197.298(3)(b))

** ESEE: Economic, Social, Environmental, and Energy

Remand Issues – Suitability Criteria and Screening



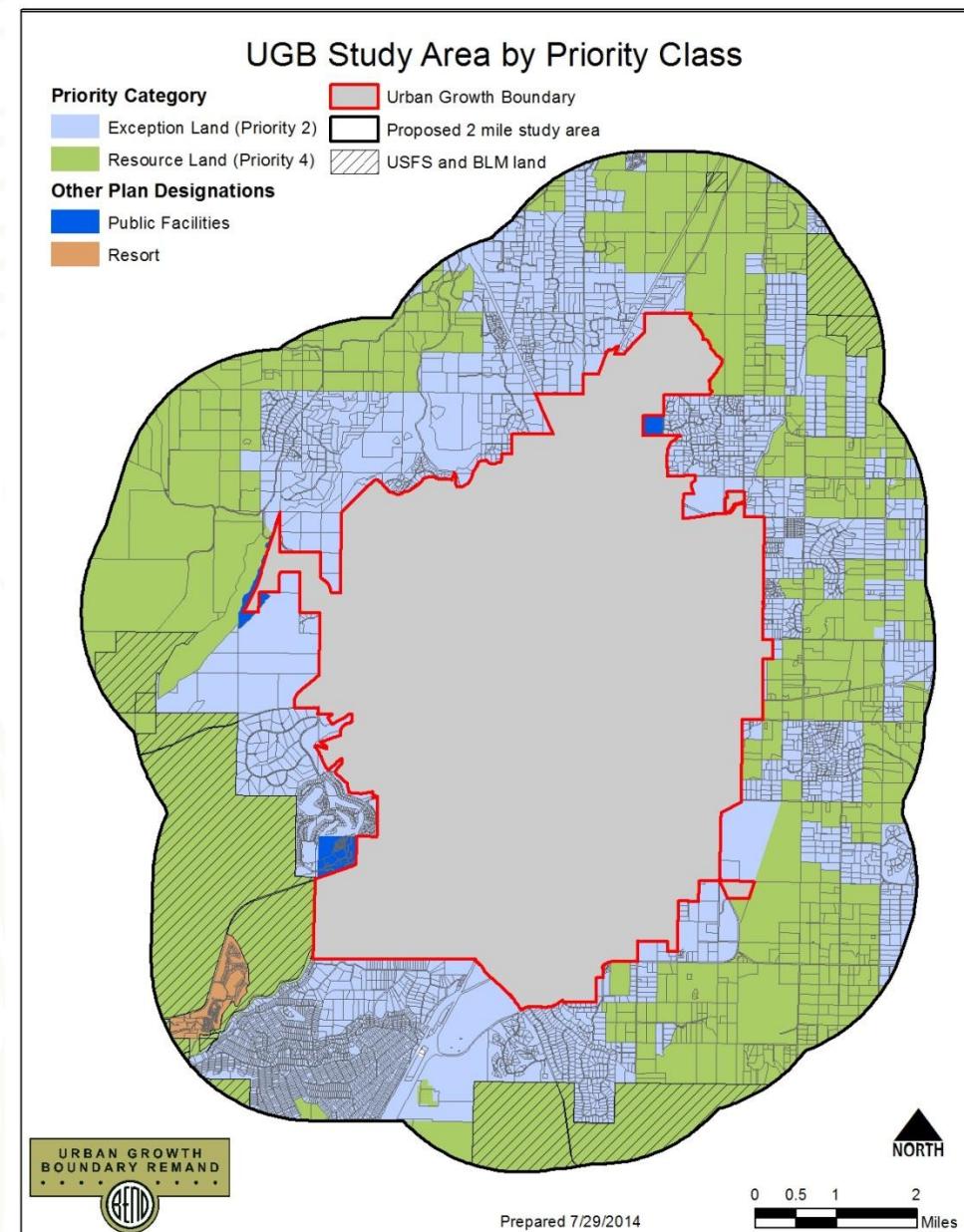
- Methodology used in 2008 excluded substantial amount of exception lands from consideration for inclusion in UGB.
- Assumed little to no development capacity for exception lands that were included (lot has 1 dwelling and is >3 acres)
- Propose to follow guidance from Director's Report for suitability criteria & screening

Remand Issues – Aggregation of Lands for Alternative Analysis



- ORS 197.298 and Remand are very clear regarding steps that must be followed.
- Propose a tiered approach where higher priority lands are evaluated first rather than aggregating exception and resource lands for analysis.
- Not making assumptions about whether certain lands can be justified – focusing on sequence of analysis.

Priority 2 & 4 Lands: Proposed UGB Study Area



Remand Issues – Goal 14 Location Factors



- The city has flexibility in deciding how to measure and balance the location factors of Goal 14 in the evaluation of UGB alternatives.
- Opportunity to balance and consider the factors based on community goals and priorities.

URBAN GROWTH BOUNDARY DEMAND

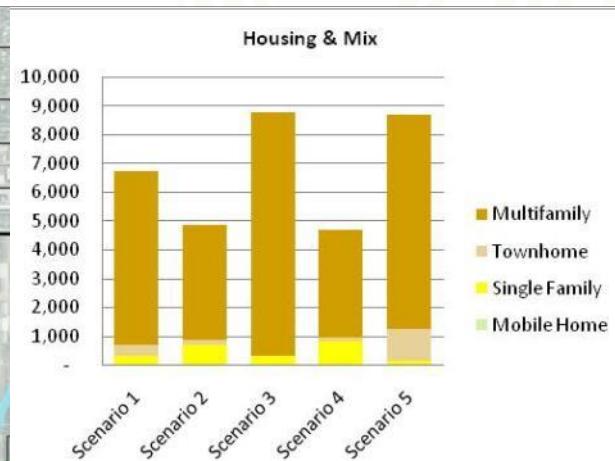
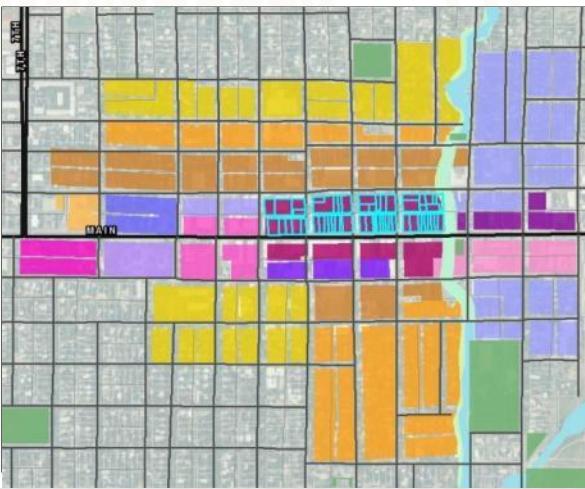
MAKING BEND EVEN BETTER



Scenario Planning with Envision Tomorrow

Boundary TAC Meeting #1

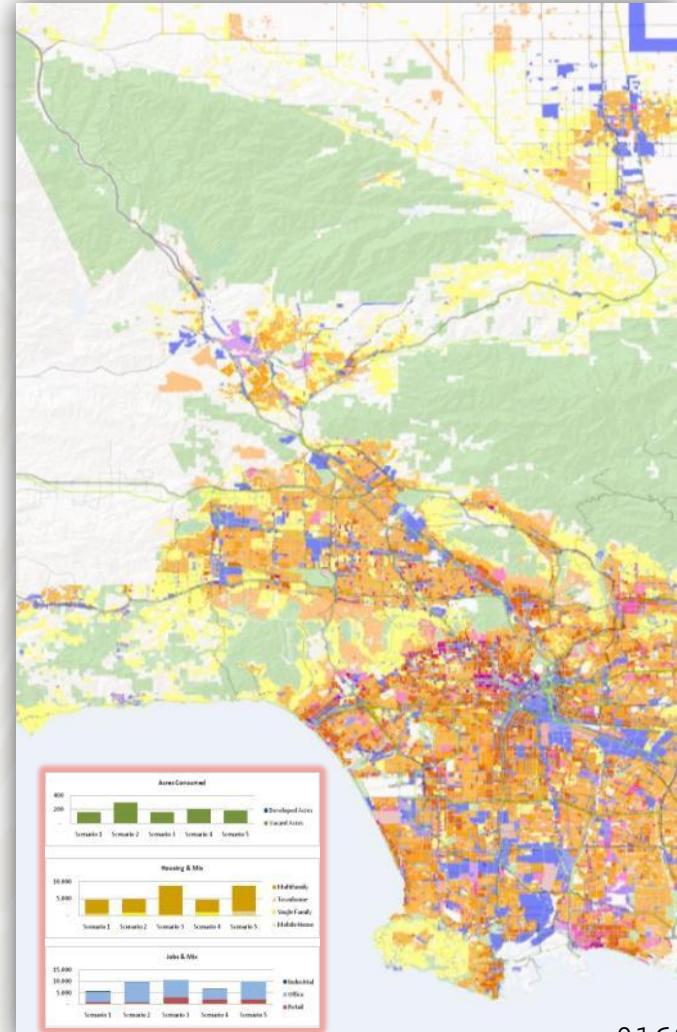
August 5, 2014



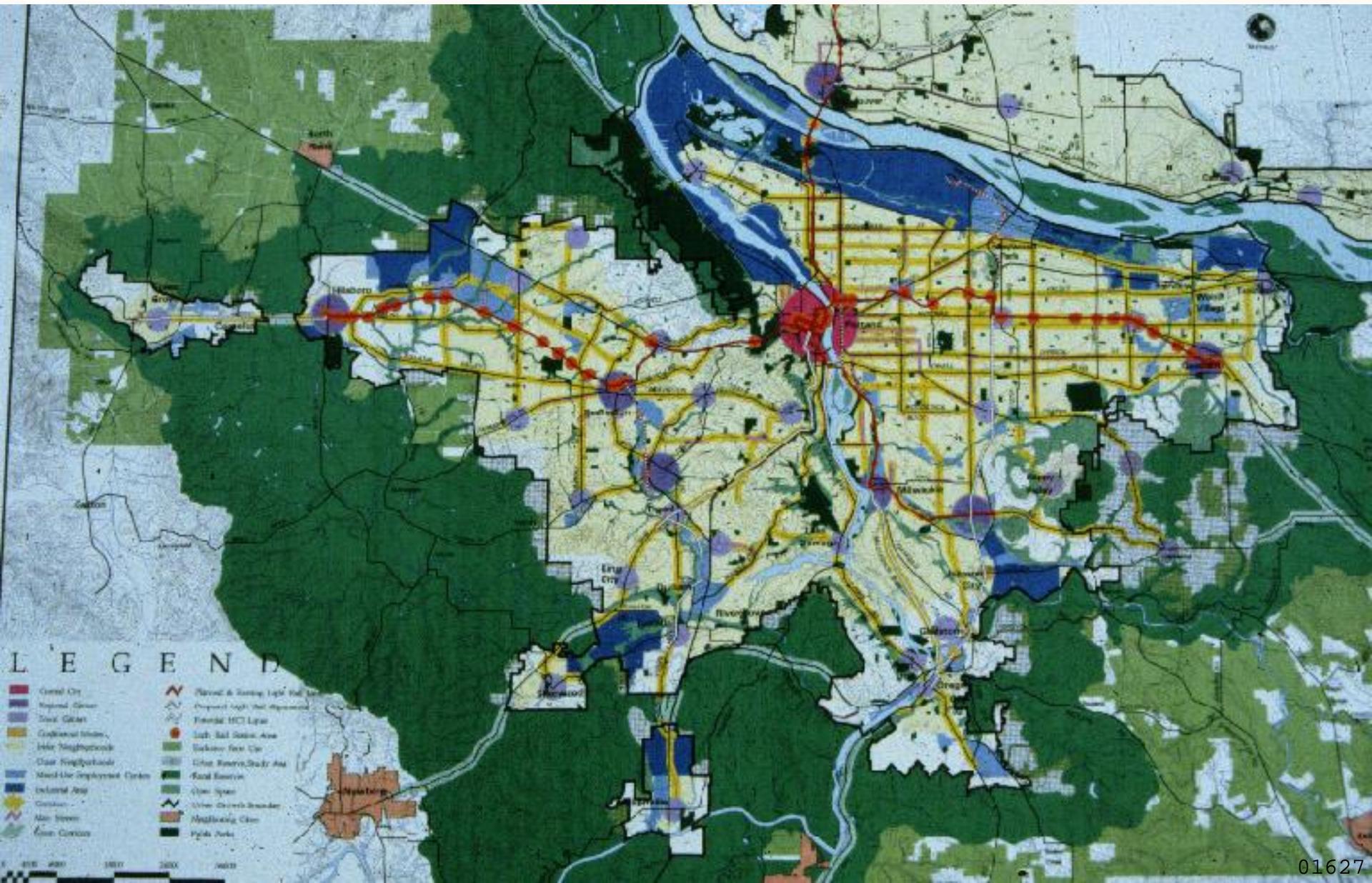
What is Envision Tomorrow?



- Suite of open source planning tools:
 - Prototype Builder
 - Return on Investment (ROI) model
 - Scenario Builder
 - Extension for ArcGIS
 - Analysis Tools



Envision Techniques Developed During Portland 2040 Growth Concept Process



Why Use Scenario Planning?



- Weigh choices against consequences
- Test policy options quickly
- Prepare for uncertainty
- Develop strategies to optimize outcomes

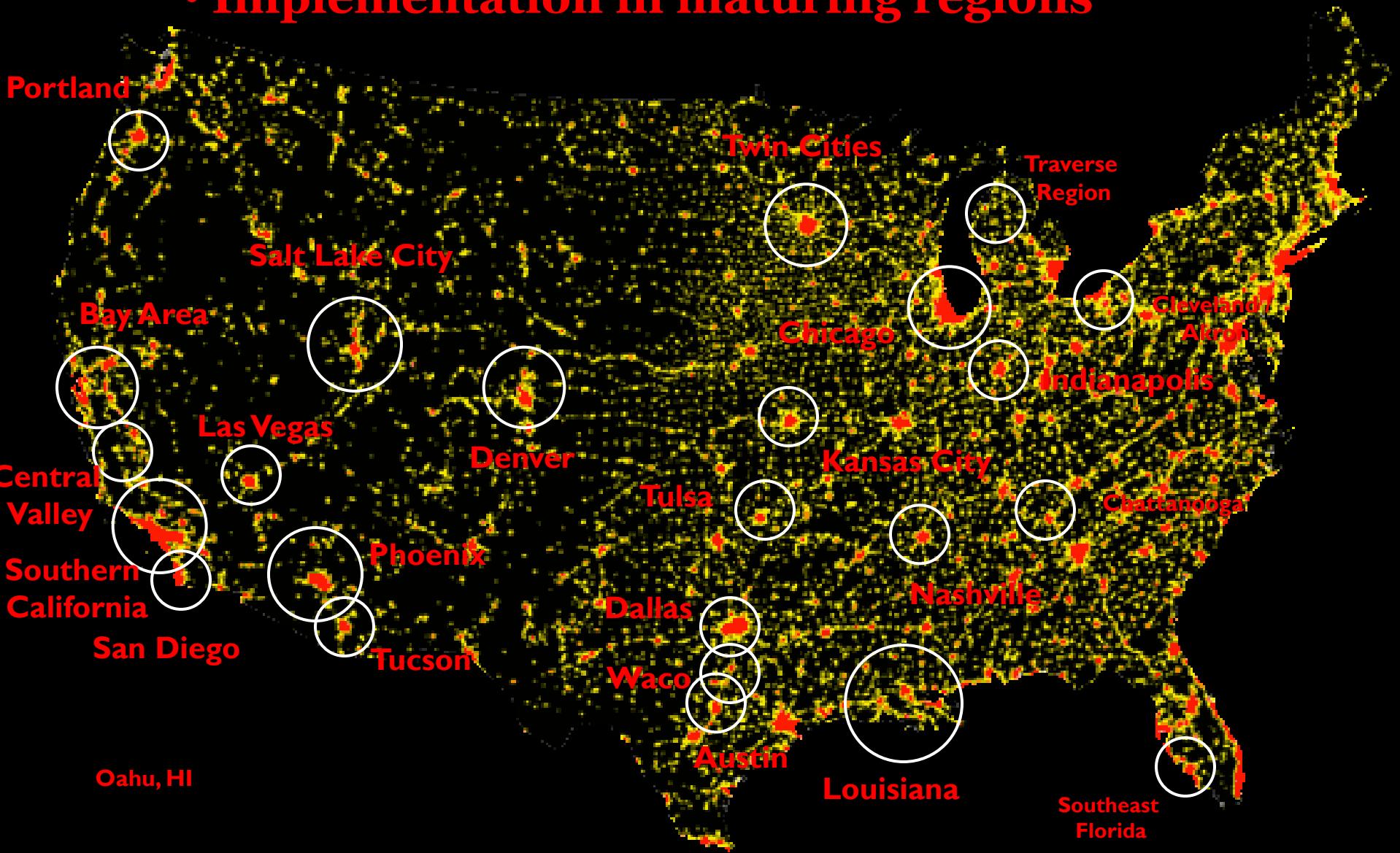


Early Scenario Plans Using Envision Process



And Since the 2000's...

- Broadening access in smaller communities
- Implementation in maturing regions



Linking Research to Practice



Dr. Reid
Ewing,
University of
Utah

Dr. Arthur
“Chris”
Nelson,
University of
Utah



Dr. Rob
Patterson,
University of
Texas, Austin

Public Domain and Open Source, it is a platform for putting latest expertise in the hands of planners across the United States

Scenario Building Process



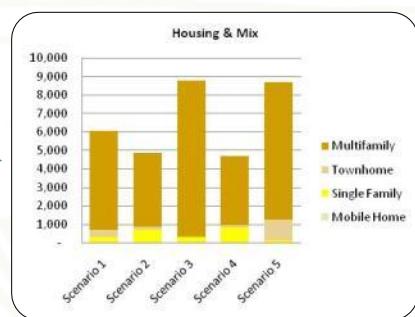
Data Gathering & Setup

Create Building & Development Types

Scenario Development

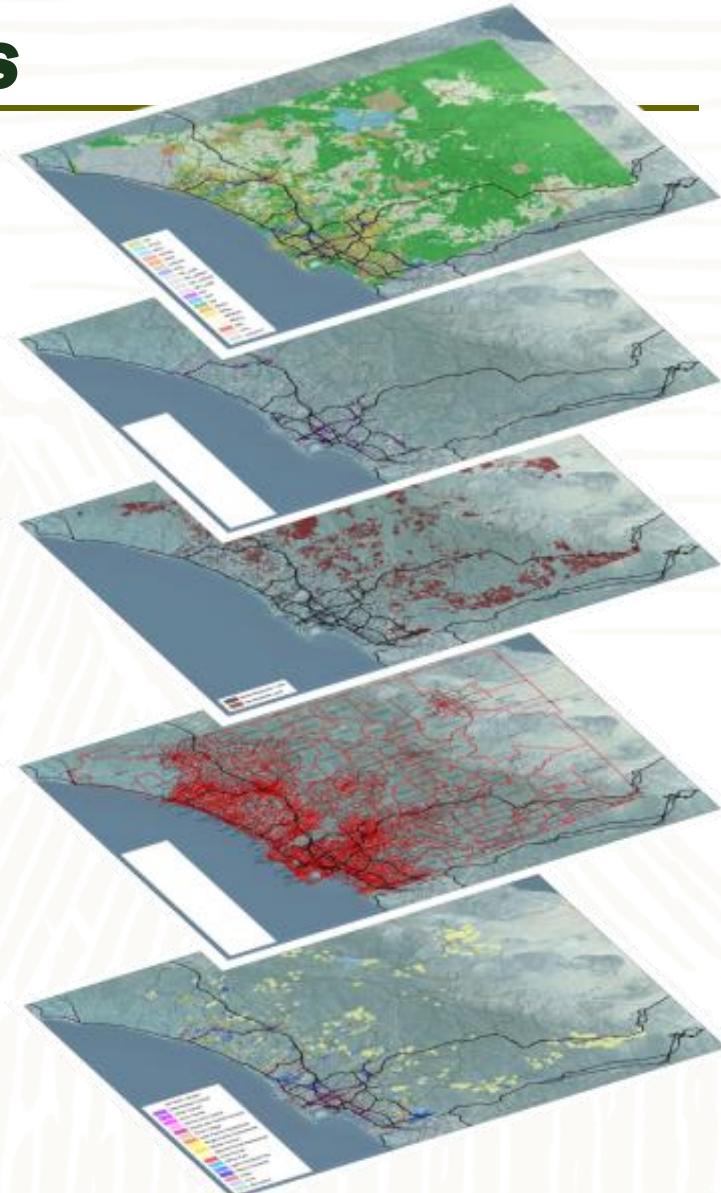
Evaluation

1



Setup and Data Collection: *Rooted in Oregon LU Process*

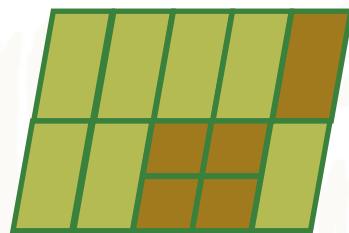
- Forecast and need
 - Housing units and jobs by type
- Buildable lands supply
 - Vacant & infill
- Existing & Planned Land Use
 - Current plan and zoning capacity
- Development constraints
 - “Suitability” & “Priority Lands”
- Infrastructure
 - Existing and planned roads, transit, power, water and sewer



Buildable Land



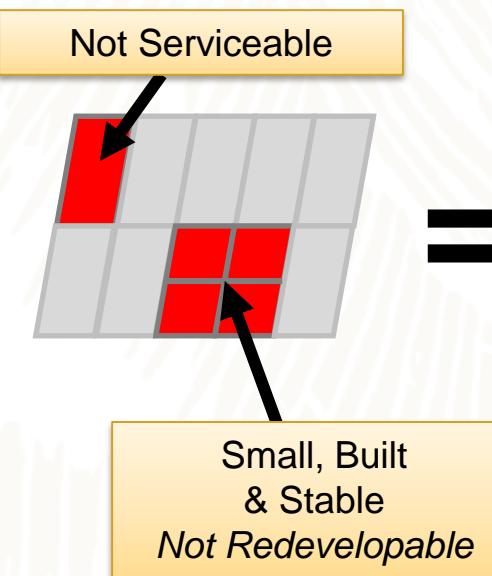
Land Supply
2014 Parcels



Constraints
Floodplains and Steep Slopes, etc.



Unsuitable Lands
Public Right of Way, Public Parks, etc.



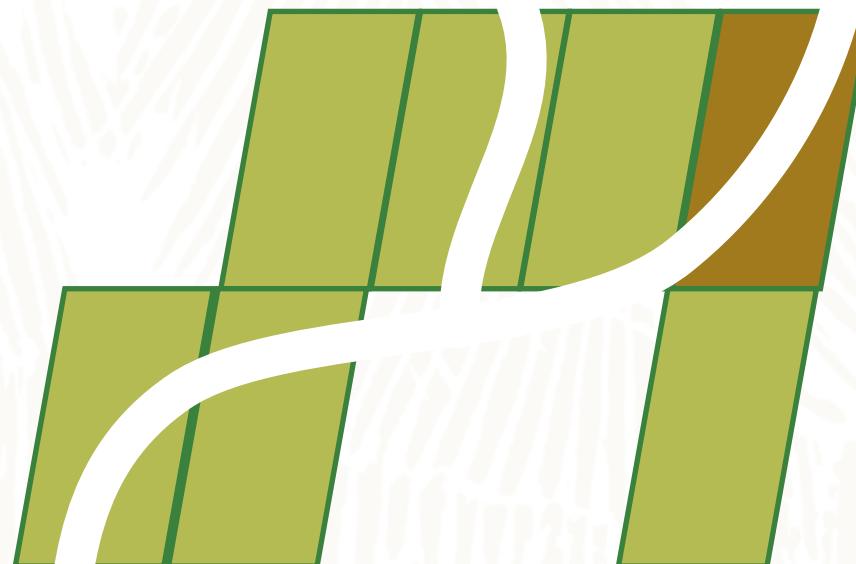
Buildable Land



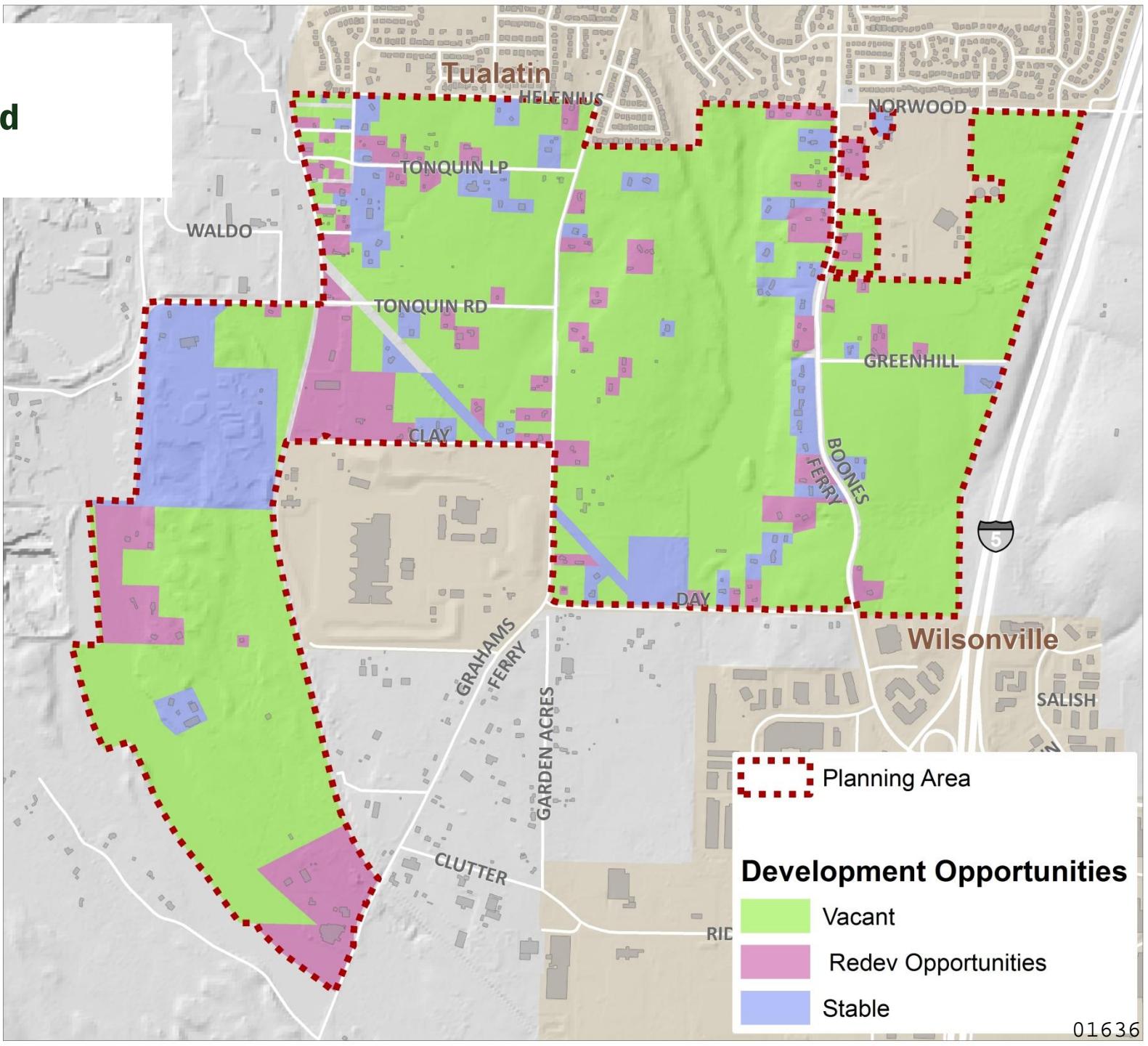
Each Parcel Assigned a Priority Level in GIS



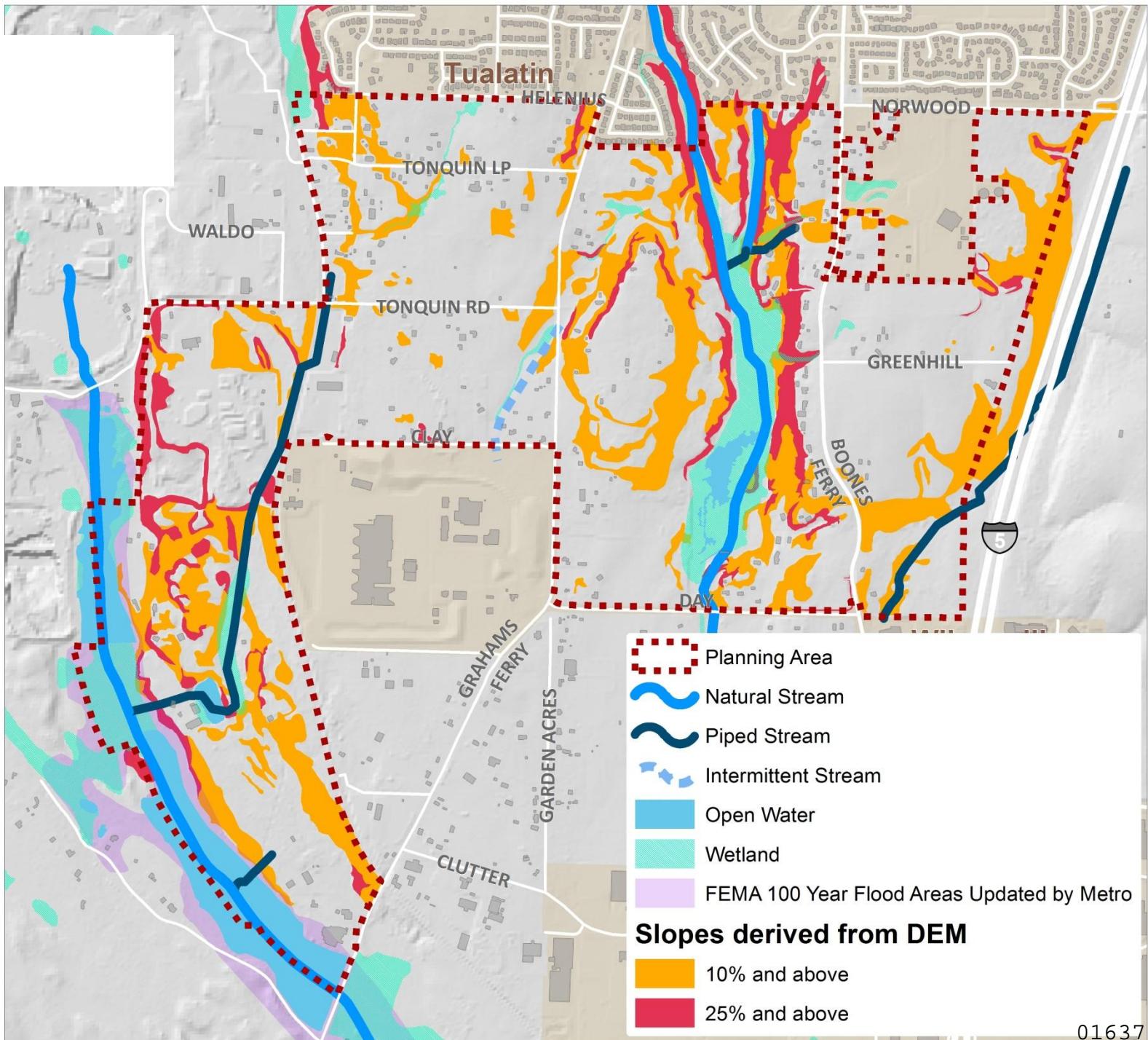
- Exception Lands
(Priority 2)
- Resource Lands
(Priority 4)



Example: Existing Land Supply



Example: Constraints

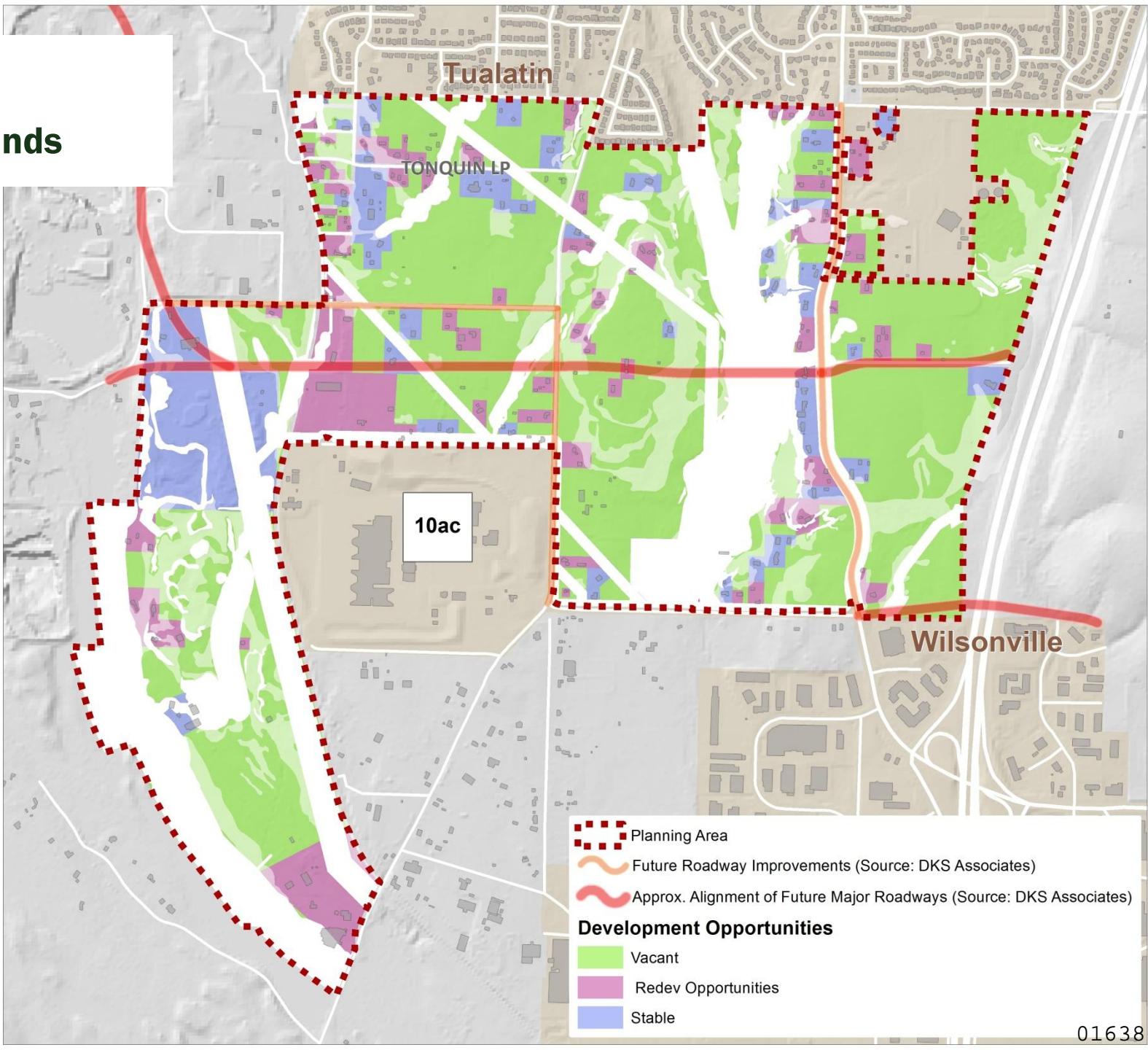


Slopes derived from DEM

10% and above

25% and above

Example: Buildable Lands



Scenario Building Process



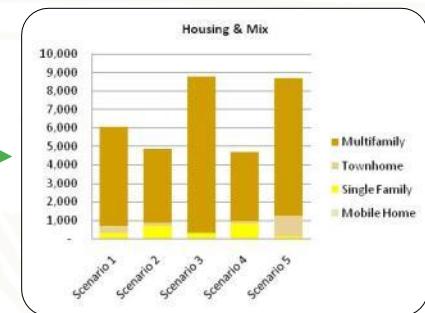
Baseline Analysis

Create Building & Development Types

Scenario Development

Evaluation

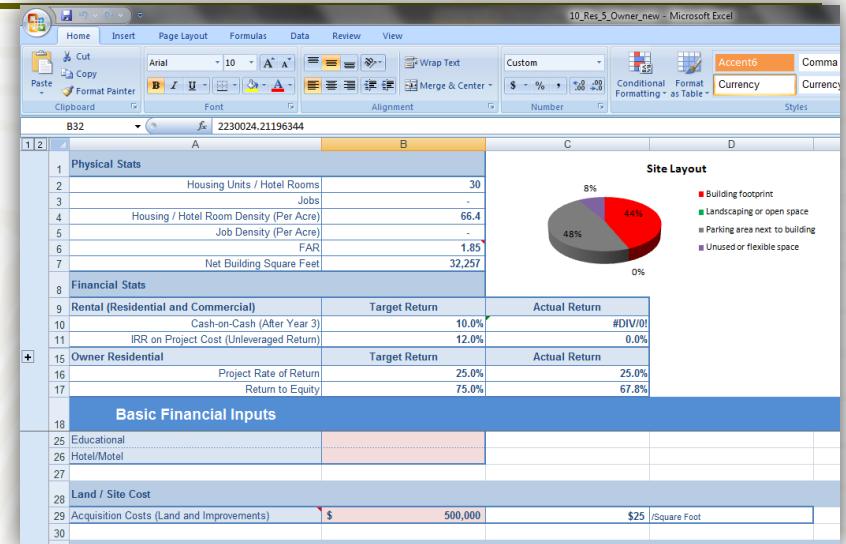
2



Create Prototype Buildings

Why start with buildings?

- Easily modeled & lots of existing data
 - Density and Design
 - Rents and Sales Prices
 - Costs and Affordability
 - Energy and Water Use
 - Fiscal Impacts
- Physical Form
 - Height
 - Unit sizes
 - Parking configurations
- Financial Reality
 - Rents / sales prices
 - Construction costs
 - Land costs



Feasible?

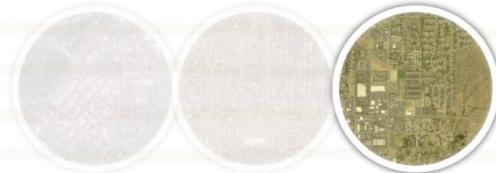


Calibrate Building Library to Bend Market



Large Lot Single Family

10,000 Sq Ft Lots +



Urban

Inner

Outer

Housing Units per Acre

≤ 4

Height

1-2 stories



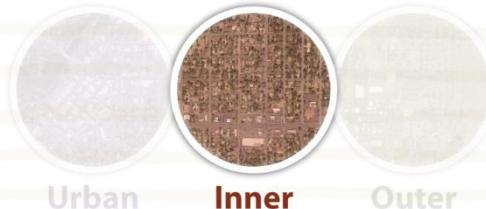
Small Lot Single Family



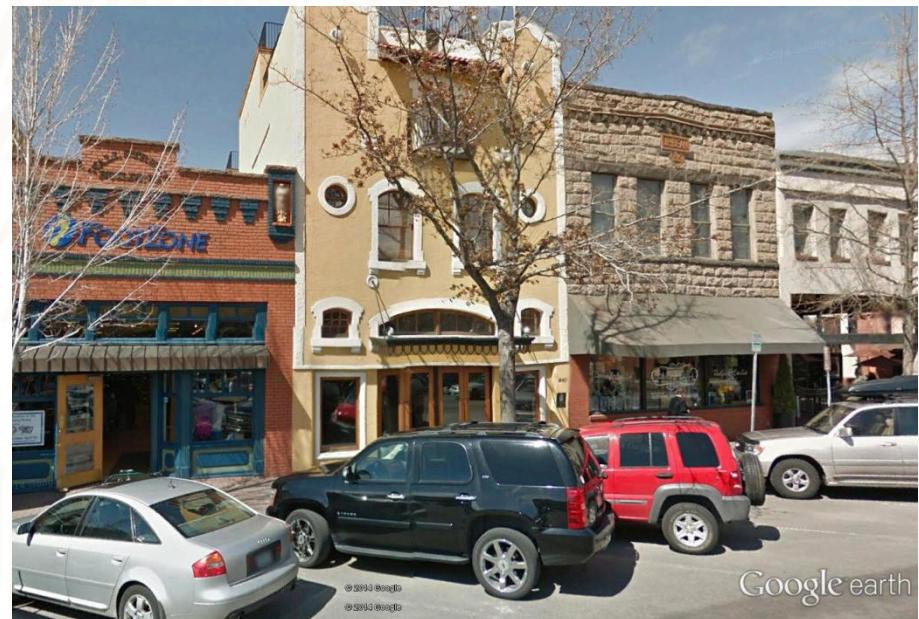
Housing Units per Acre	Jobs per Acre	Height
9 - 12	0	1-3 stories



Traditional Main Street



Housing Units per Acre	Jobs per Acre	Height
0	20 - 35	1-2 stories



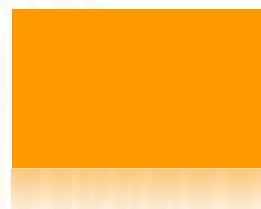
Google earth

Construct Plan & Zone Types with Bend-specific Buildings from Library

Building Library

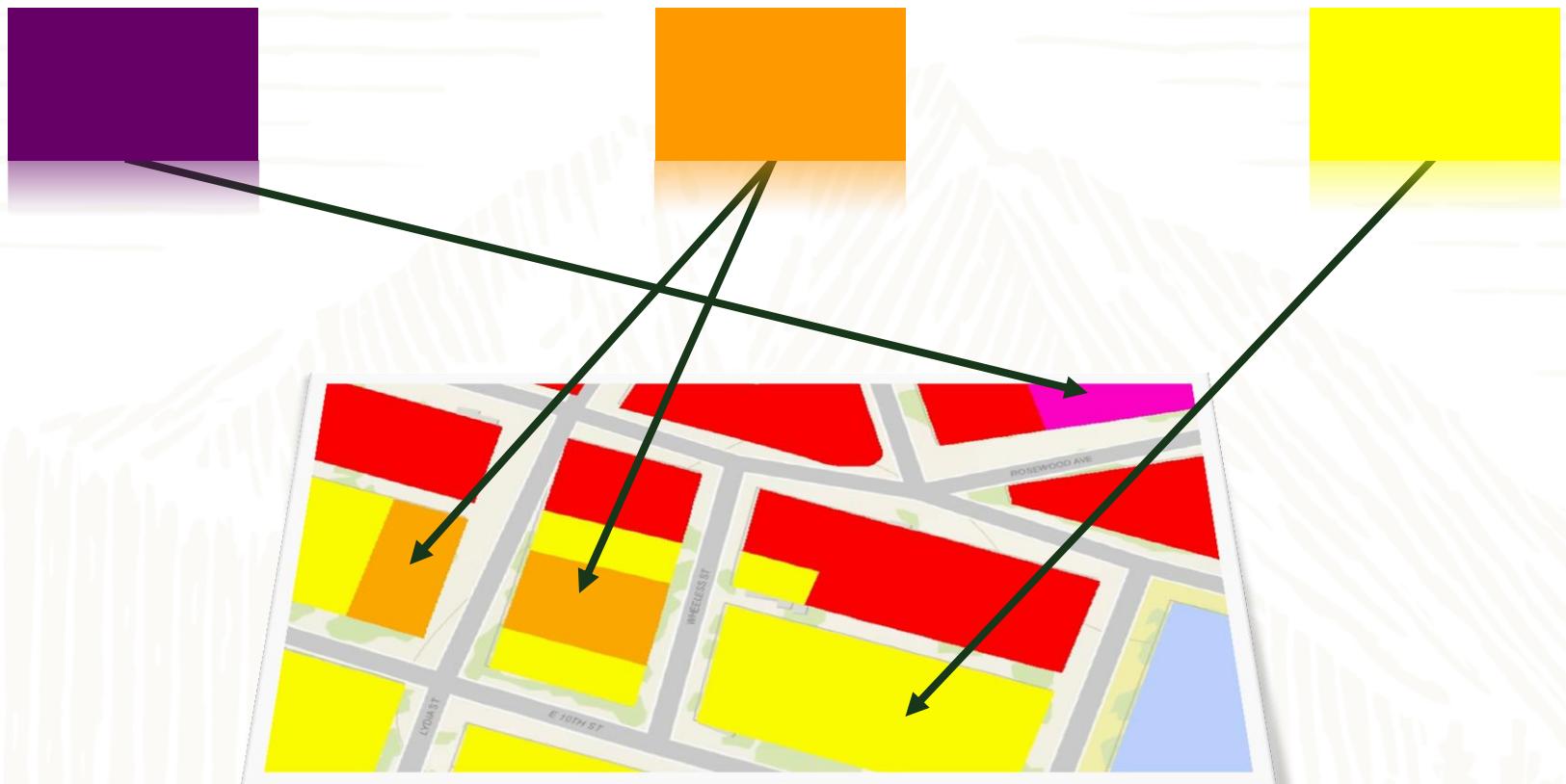


Mix locally calibrated Building Types into Place Types that represent the zoning categories.

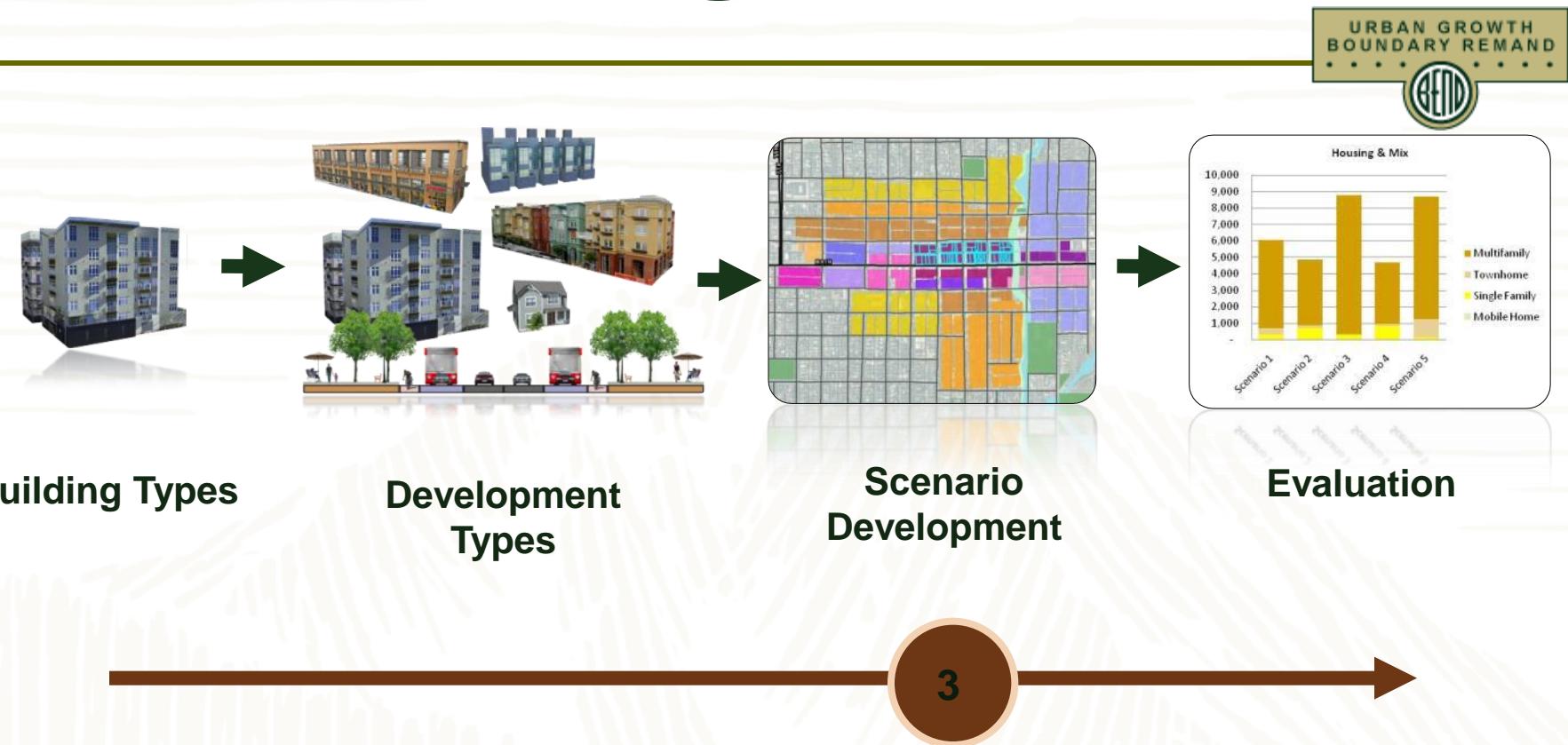


Place Types = Plan and Zoning Classes

Allows for Accurate Plan & Zoning Capacity Estimates



Scenario Building Process



Step 3: Paint future land use scenarios to test the implications of different decisions or policies.

Scenario Builder:

Scenario Painter for ArcGIS

- Quickly paint scenarios using financially feasible building blocks
- Compare and base case and multiple scenarios across variety of indicators
- Track progress in real-time

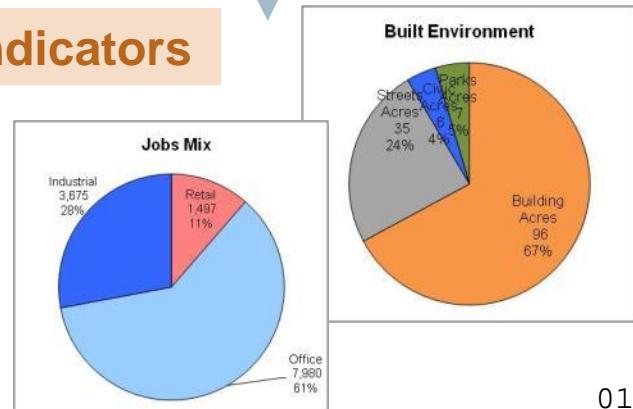
Buildings



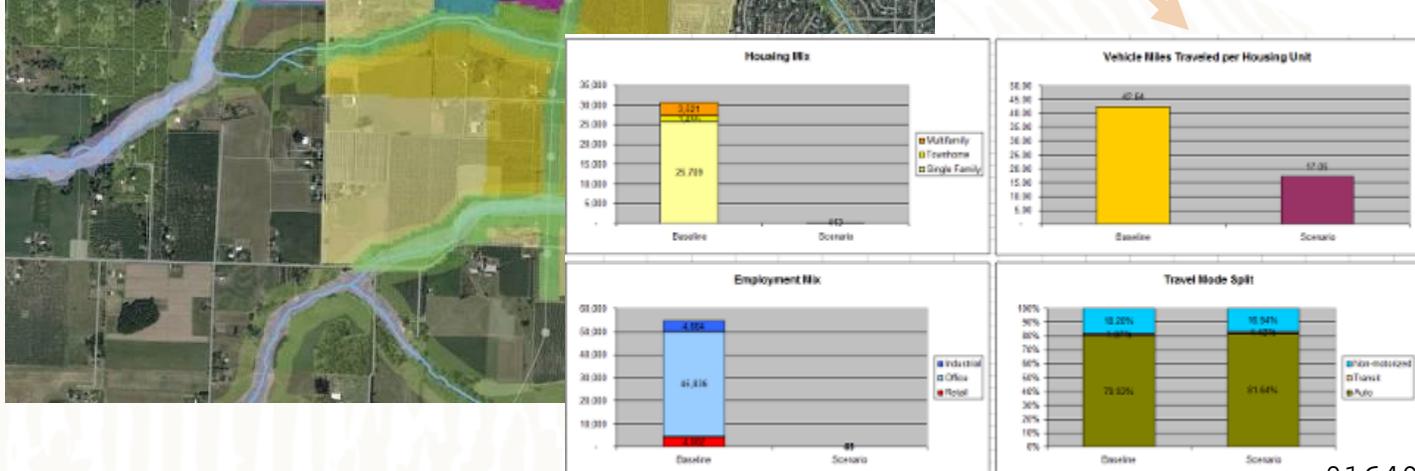
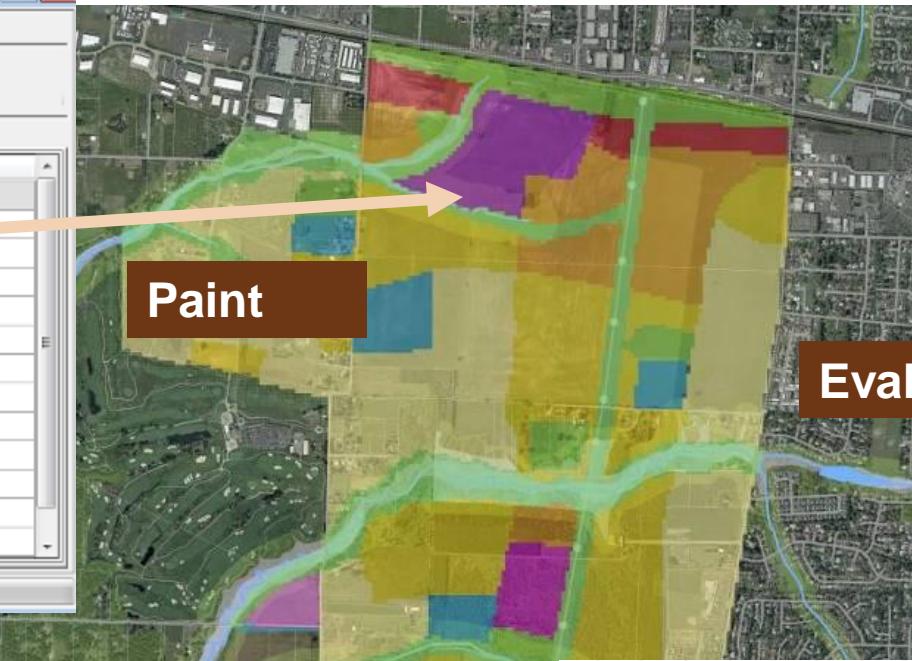
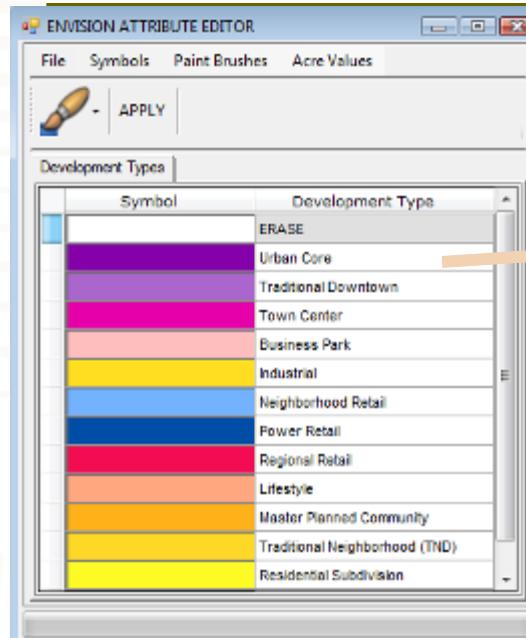
Scenarios



Indicators



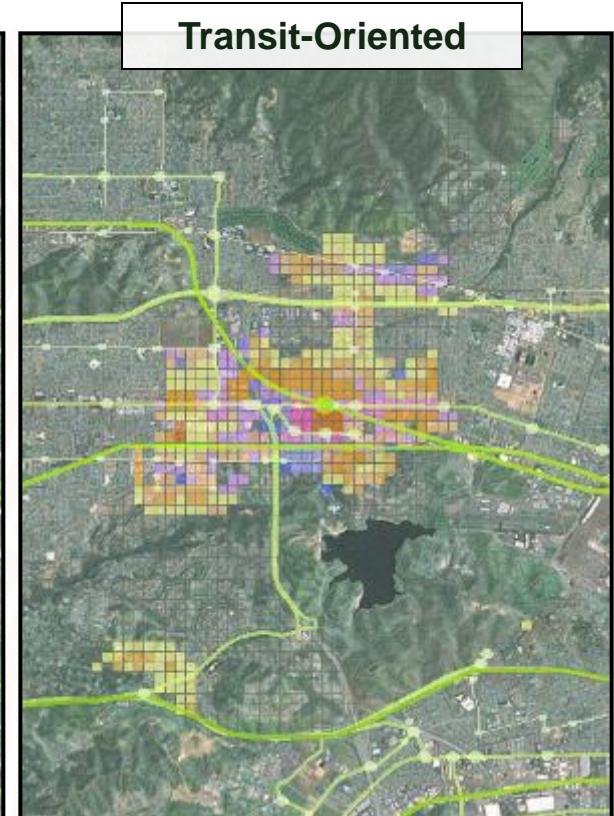
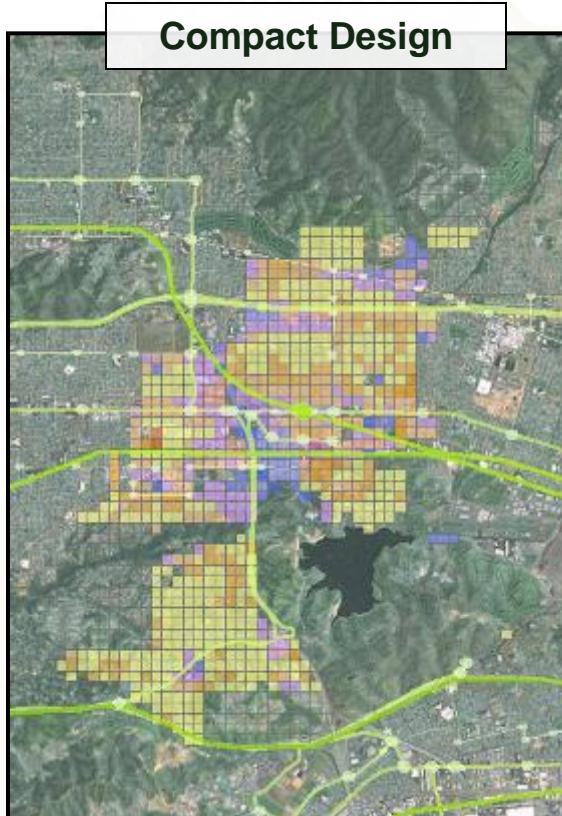
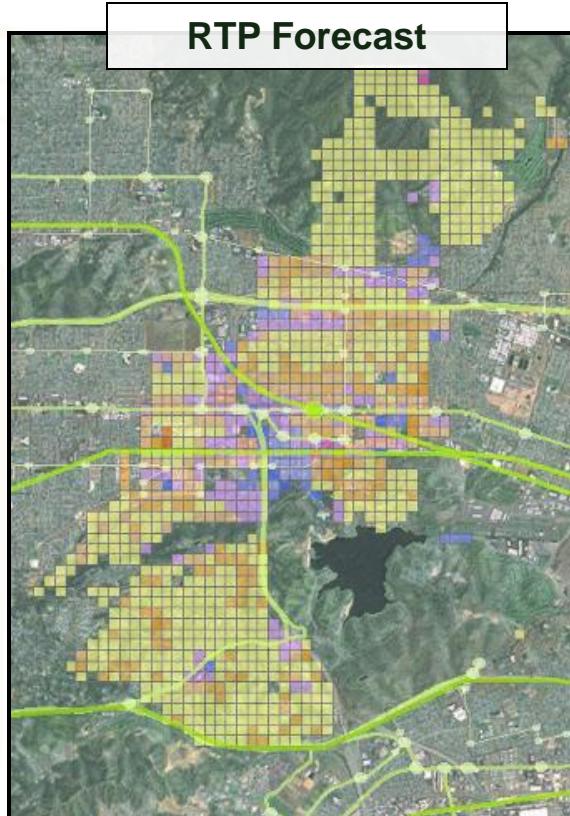
Detailed Land Use Scenarios



Design and Test Multiple Scenarios



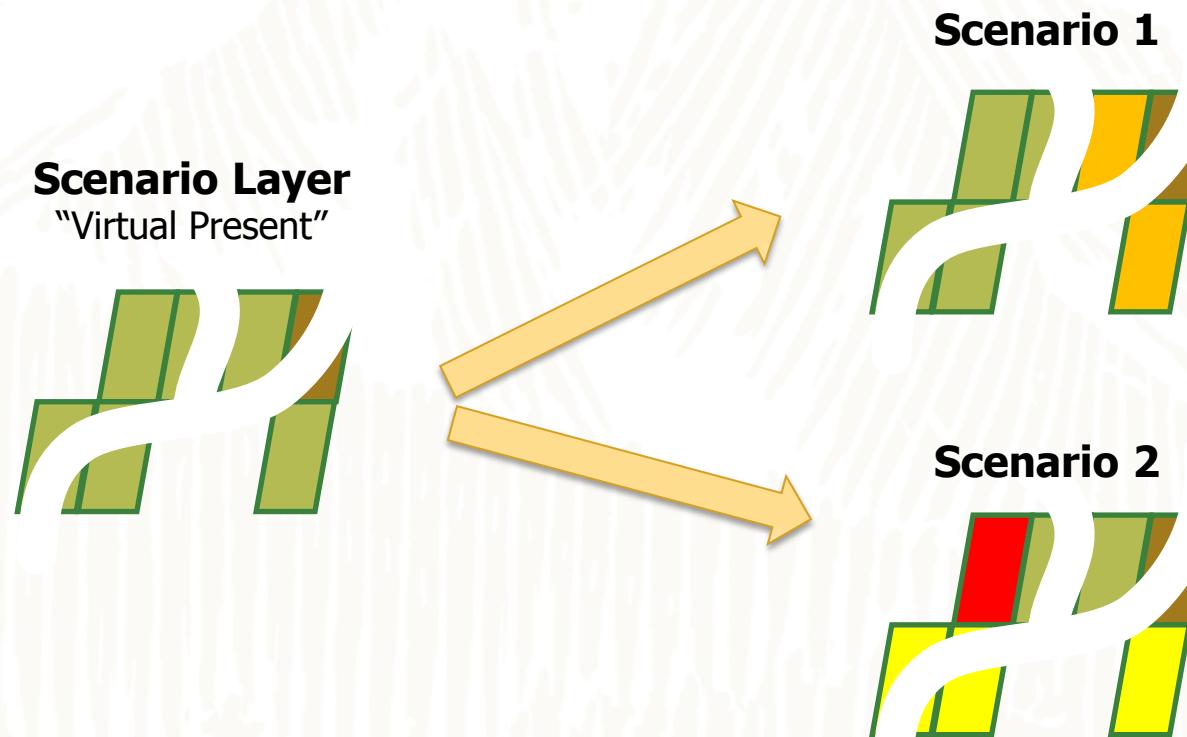
- Test land use policies
- Experiment with new development patterns



What's in a Scenario?



- Current “base year” housing and jobs by type are quantified within the scenario layer
- Scenarios represent existing development plus future development
- Building library reflects new construction and future development

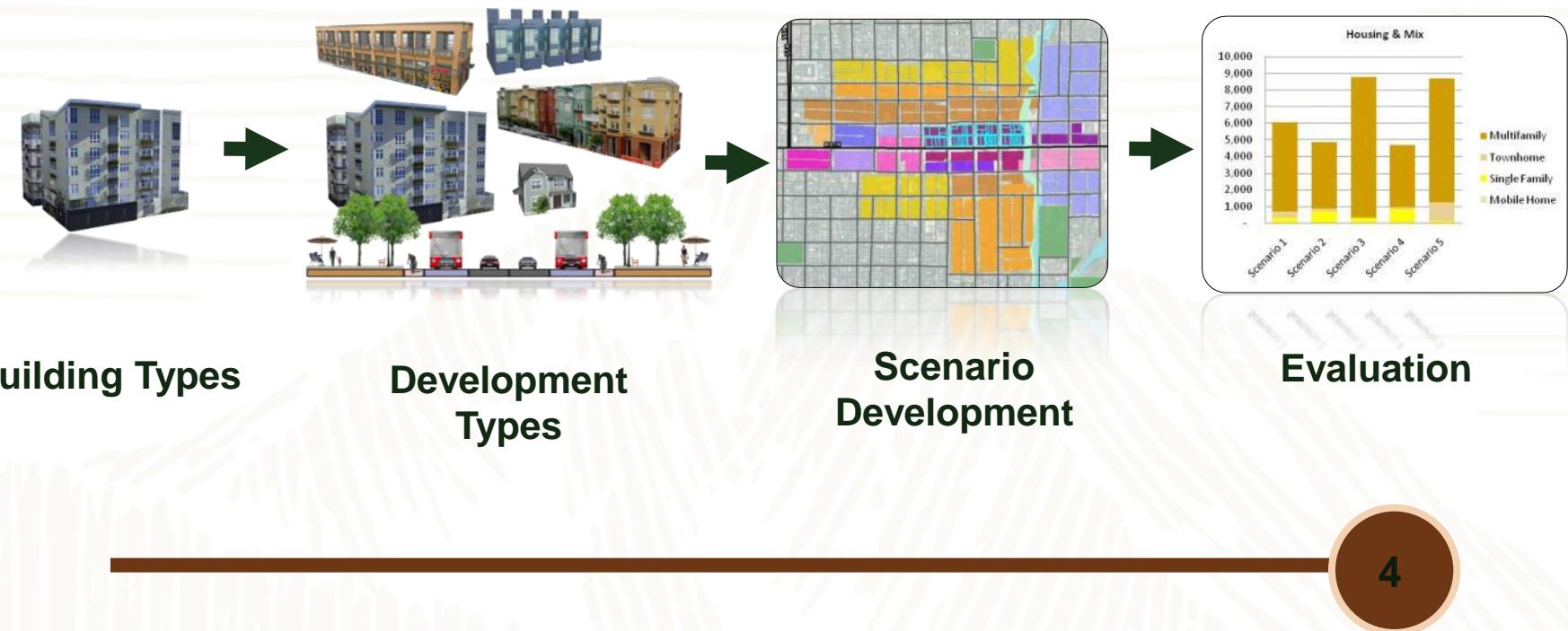


Detailed Scenarios Inside and Out



- Inside UGB
 - Capacity of current UGB
 - Impacts and benefits of efficiency measures
 - Which products, how much, and where?
- Outside UGB
 - Create “packages” or scenarios that meet all identified land needs, consistent with Goal 14
 - Compare impacts and benefits on relevant indicators

Scenario Building Process

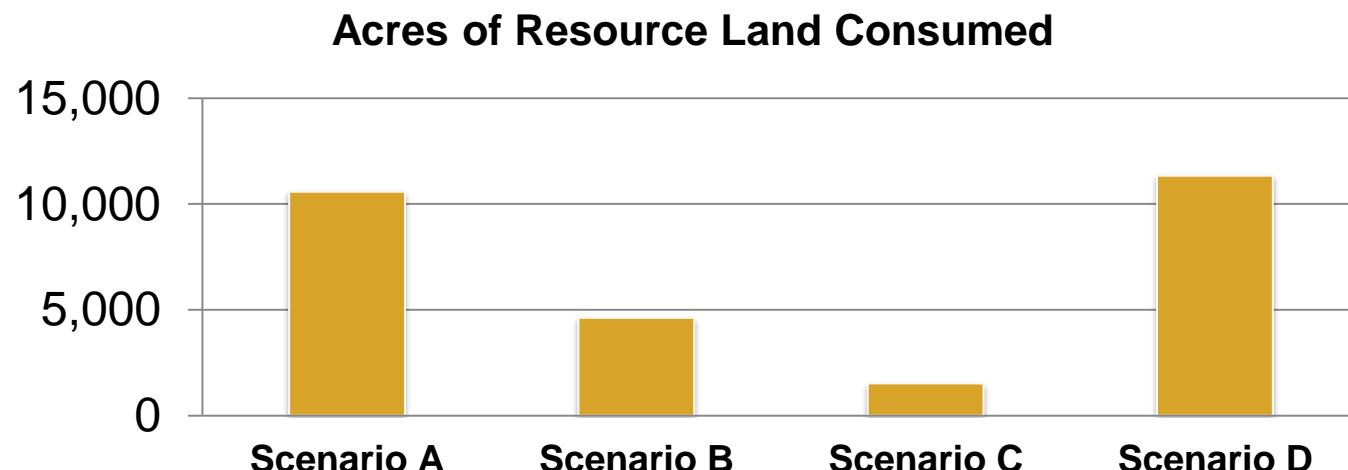
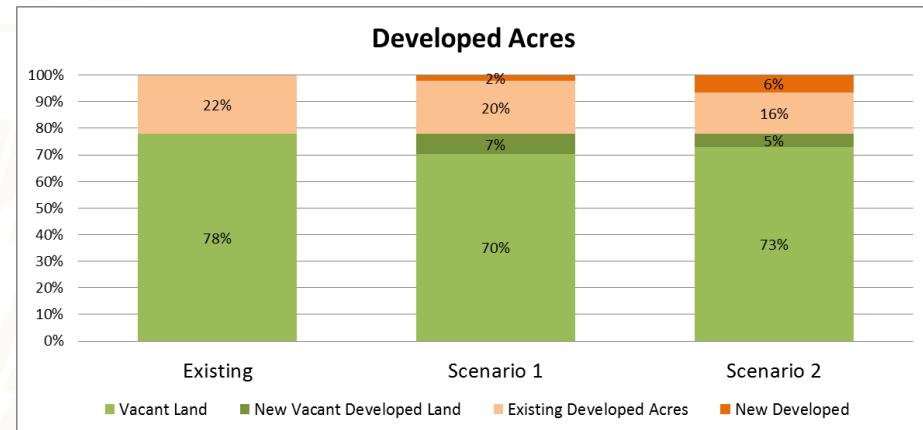


Step 4: Compare the scenarios and monitor the impact of land use decisions in real-time.

Envision Tomorrow Scenario Indicators



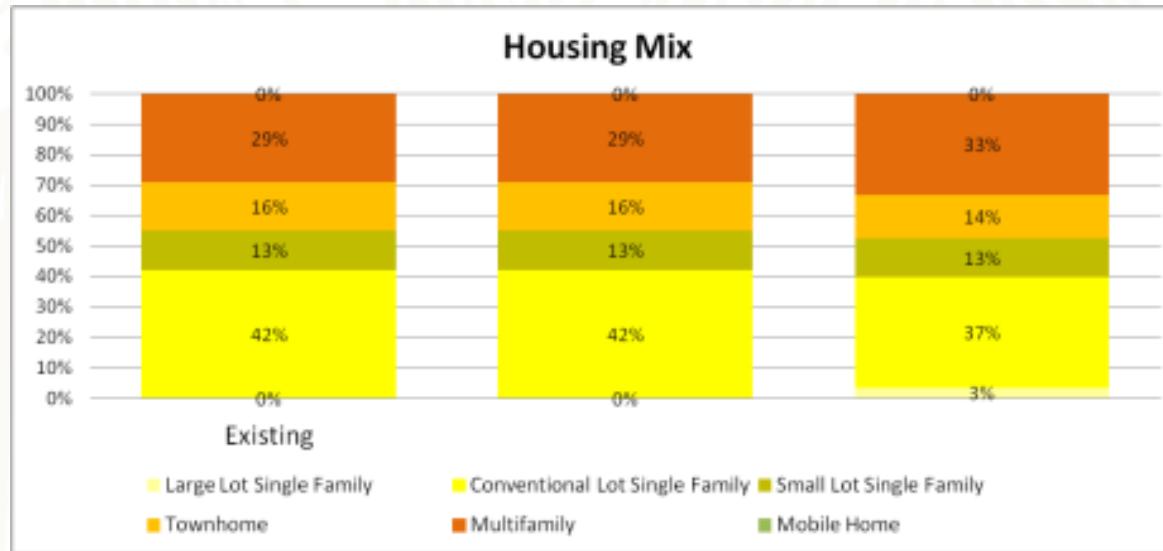
- **Land consumption & impact**
 - Vacant and redevelopment lands
 - Measure development impact to sensitive lands



Envision Tomorrow Scenario Indicators



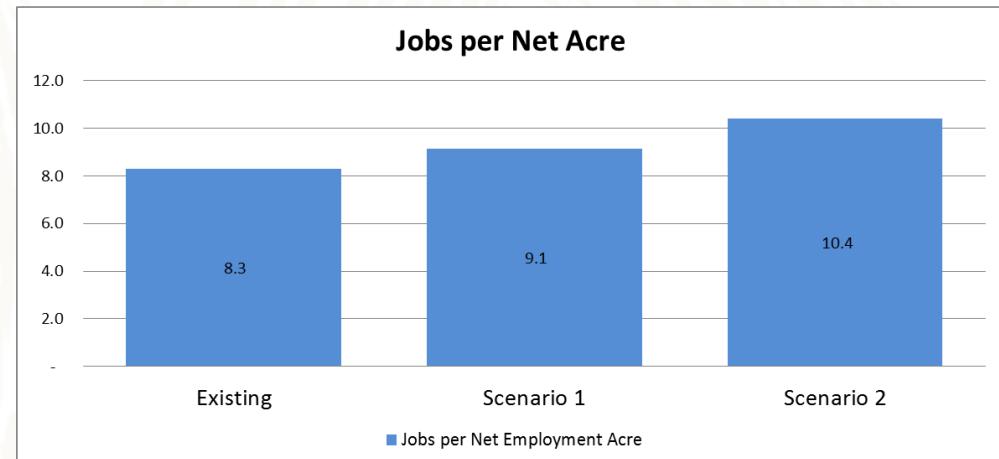
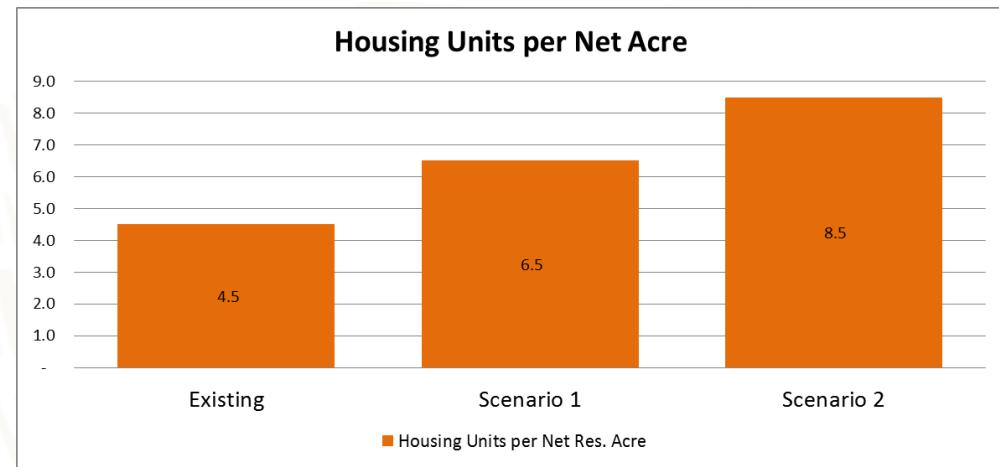
- **Housing**
 - Unit type mix (incl. SFD, SFA, MF), density, tenure
 - Cost and affordability (rents / sales prices)
 - Match to future housing need
- **Employment**
 - Industry mix, FAR and density
 - Match to future employment needs
- **Jobs-Housing Balance**



Envision Tomorrow Scenario Indicators



- **Housing and job density**
 - Gross
 - Net
 - Net by land use area

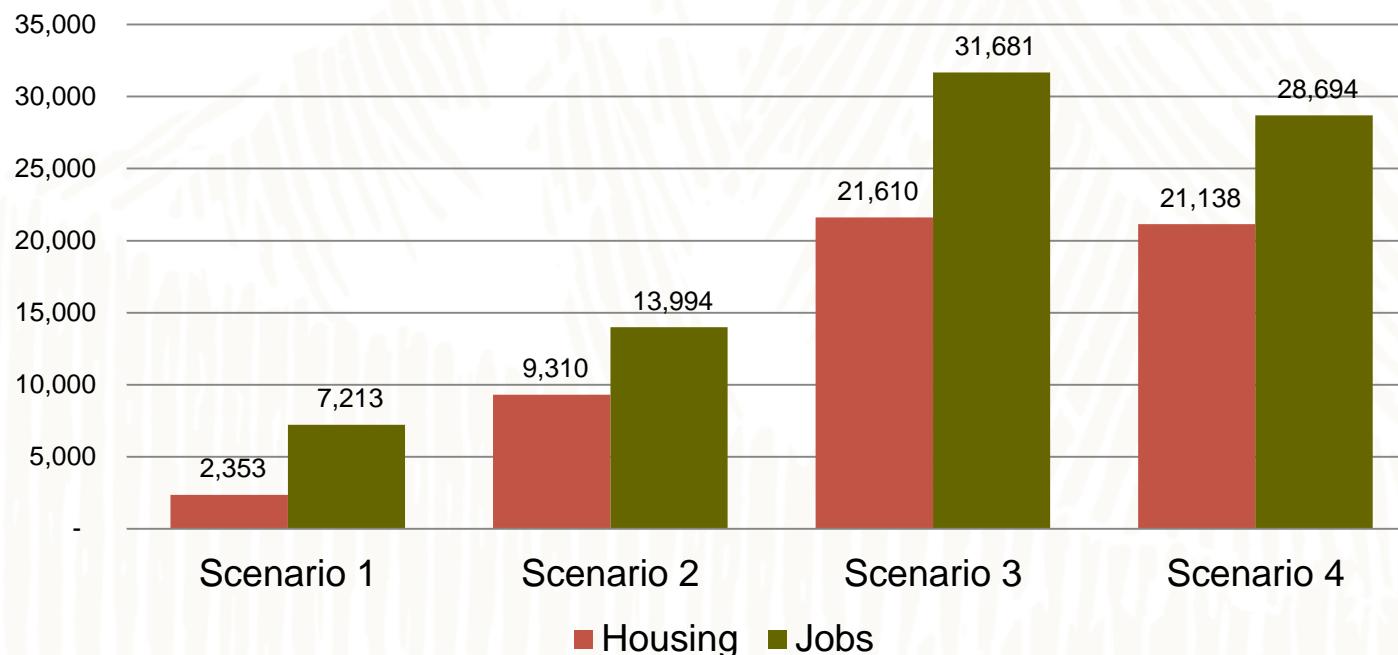


Envision Tomorrow Scenario Indicators



- **Infill and Redevelopment**
 - Percentage of growth on vacant lands or accommodated through infill

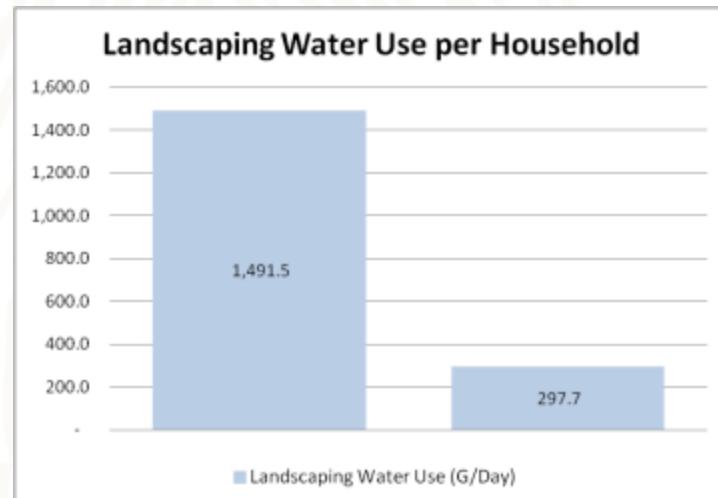
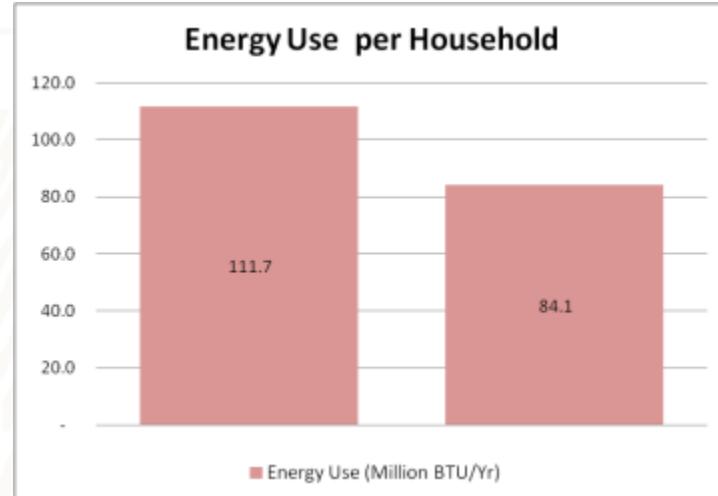
Housing and Jobs from Redevelopment



Building-Level Sustainability Indicators



- Building energy use
- Carbon emissions from energy use
- Landscaping water consumption
- Internal building water consumption
- Solid waste generated

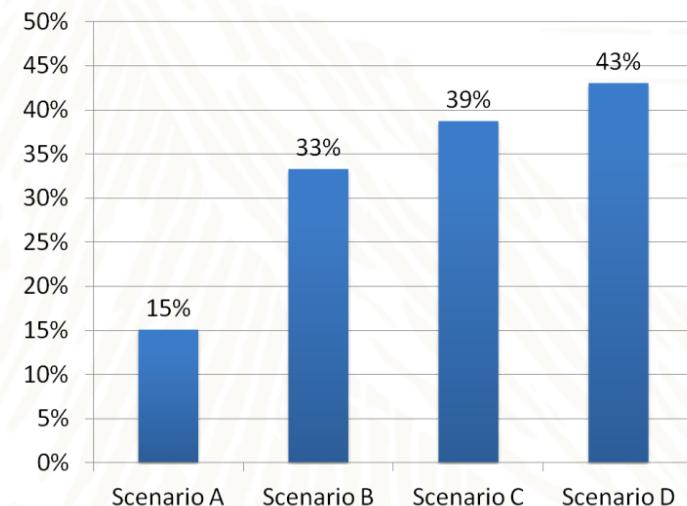


Proximity Measures (Walkable Access)



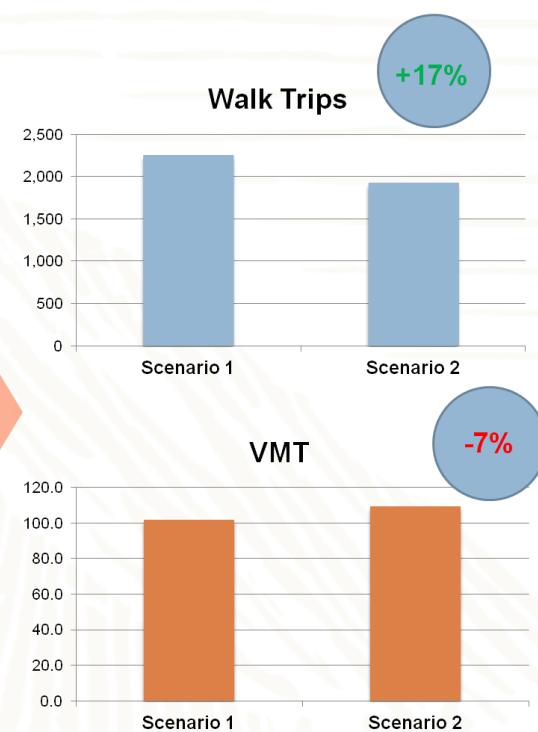
- Calculate the proportion of development in a scenario that is within walking distance to any amenity, such as a school or park
- Example:
 - 50% of residents are within a 10 minute walk to a park

Percent of Housing within Walking Distance to a Park



Transportation Indicators

- Household Vehicle Miles Traveled
- Trips by Mode
 - Auto
 - Transit
 - Walk
 - Bike
- Cost of Transportation (Auto and Transit)
- Health Benefits of Increased Walking
- Changes in Transportation Air Pollutants



Relevance to Remand



- Test efficiency measures & measure UGB capacity
- Compare options to meet remaining land needs outside UGB
- Evaluate choices using indicators that link to Goal 14 & project goals

City of Bend
Boundary & Growth Scenarios Technical Advisory Committee
Meeting Notes
Date: August 5, 2014

The Boundary & Growth Scenarios TAC held its regular meeting at 10:00 am on Tuesday, August 5, 2014 in the City Hall Council Chambers. The meeting was called to order at 10:05 am by Brian Rankin.

Roll Call

<input type="checkbox"/> Toby Bayard	<input type="checkbox"/> Ellen Grover	<input type="checkbox"/> John Russell
<input type="checkbox"/> Susan Brody	<input type="checkbox"/> Steve Hultberg	<input type="checkbox"/> Ron Ross
<input type="checkbox"/> Peter Carlson	<input type="checkbox"/> Brian Meece	<input type="checkbox"/> Sharon Smith
<input type="checkbox"/> Paul Dewey	<input type="checkbox"/> Charlie Miller	<input type="checkbox"/> Gary Timm
<input type="checkbox"/> Dale Van Valkenburg	<input type="checkbox"/> Mike Riley	<input type="checkbox"/> Rod Tomcho
<input type="checkbox"/> Bruce White	<input type="checkbox"/> Ruth Williamson	<input type="checkbox"/> Scott Edelman
	<input type="checkbox"/> Rockland Dunn	<input type="checkbox"/> Nick Lelack

Discussion

Brian opened the meeting by introducing himself and making some remarks.

Committee members introduced themselves.

Committee agreed by consensus to defer election of chair and vice chair to later in the meeting.
Brian provided introduction and background on past work.

Bob Parker gave a power point presentation on Goal 14 and its requirements for UGB expansion

Mary Dorman followed with a presentation on the remand issues related to boundary.

Alex Joyce followed with a presentation on the Envision Tomorrow scenario planning tool

Decision Item

At the end of the meeting, the TAC came to consensus on Mike Riley and Sharon Smith serving as co-chairs for the Boundary TAC with Dale Van Valkenburg serving as liaison to the Residential TAC and Brian Meece agreeing to serve as liaison to the Employment TAC.

Action Items/Next Steps

Action	Assigned To
Send out open house flyers	City of Bend
Mike Riley – context map	City of Bend, APG
Gary Timm –tour of UGB areas	City can provide map, possibly arrange tour later
Requests for McMinnville Court of Appeals decision on UGB, Staff interpretation of this decision	City of Bend (city will also post Court's opinion on website)

Meeting adjourned at 12:30 pm by Joe Dills, APG.