



We are Yakima comprehensive plan 2040

DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

March 2017



DEPARTMENT OF COMMUNITY DEVELOPMENT

Planning Division

Joan Davenport, AICP, Director

129 North Second Street, 2nd Floor, Yakima, WA 98901

ask.planning@yakimawa.gov • www.yakimawa.gov/services/planning

March 17, 2017

Subject: City of Yakima Comprehensive Plan 2040 update and Draft Supplemental Environmental Impact Statement (SEIS) comment period.



We are Yakima
comprehensive plan 2040

Request for Written Comment: The City of Yakima invites agencies, tribes, and the public to comment on the *Comprehensive Plan 2040 Update Draft Supplemental Environmental Impact Statement (SEIS)*. The Draft SEIS includes an update to the Comprehensive Plan, Transportation Plan, and Development Regulations. The EIS being supplemented is the *City of Yakima's Urban Area Comprehensive Plan Final Environmental Impact Statement (EIS)* issued in 2006. **All documents listed above can be found in draft format at:** <https://www.yakimawa.gov/services/planning/comprehensive-plan-update/>

Within the range of prior alternatives evaluated in 1997 and 2006, this Draft Supplemental Environmental Impact Statement (Draft SEIS) tests two alternatives, further described below:

- **Alternative 1 No Action – Current Comprehensive Plan:** This alternative is required by the State Environmental Policy Act. It assumes the 2006 Comprehensive Plan (as amended through 2016) remains in place including its policies, land use plan, and codes. Growth would occur based on current plans and zoning at a level above growth targets.
- **Action Alternative 2 – Plan Update – Infill, Mixed Use, and Higher Growth:** This alternative updates the Comprehensive Plan to promote a vision of equity in plans and strategies, growth in already developed areas where there is infrastructure, and a well-designed compatible land use pattern. This alternative implements the recommended actions by the Planning Commission that promote infill and greater land use compatibility. Growth would occur based on a revised land use plan and zoning at a level higher than growth targets.

Environmental issues evaluated in this Draft SEIS include natural environment, air quality, land use, population, housing, employment, plans and policies, cultural resource, transportation, parks and recreation, police and fire services, schools, sewer, water, and utilities.

Comment Due Date: Comments are due no later than May 16, 2017, and should be addressed to: Joseph Calhoun, Senior Planner; City of Yakima; 129 North 2nd Street; Yakima, WA 98901; joseph.calhoun@yakimawa.gov

Additional opportunities to provide comment include:

April 11, 2017 – Joint City Council/Planning Commission Study Session (10:00 am City Council Chambers, 129 N 2nd St.)

April 11, 2017 – Public Open House (4:00-8:00 pm, YV Tech Facility, 1120 S. 18th St)

May 10, 2017 – Yakima Planning Commission Open Public Hearing (3:00 pm City Council Chambers, 129 N. 2nd St.)

June 6, 2017 – Yakima City Council Public Hearing (6:00 pm, City Council Chambers, 129 N. 2nd St.)

Your interest in the City of Yakima is greatly appreciated. If you would like more information about this proposal, please contact Joseph Calhoun at 509-575-6042, or joseph.calhoun@yakimawa.gov.

Sincerely,

Joan Davenport, AICP, Community Development Director

Actualización del Plan Integral de la Ciudad de Yakima

17 de marzo 2017



Asunto: Actualización del Plan Integral 2040 de la Ciudad de Yakima y periodo de comentarios sobre la declaración suplementaria de impacto ambiental (SEIS)

Solicitud de Comentarios Escritos: La ciudad de Yakima invita a agencias, tribus y el público a comentar sobre la *Declaración Suplementario de Impacto Ambiental (SEIS) de la Actualización del Plan Integral 2040*. El Proyecto SEIS incluye una actualización al Plan Integral, Plan de Transporte, y Reglamentos de Desarrollo. La Declaración de Impacto Ambiental (EIS) que está supliendo es la que fue emitida en 2006. Los documentos mencionados se pueden encontrar en:

<https://www.yakimawa.gov/services/planning/comprehensive-plan-update/>

Dentro de la gama de alternativas anteriormente evaluadas en 1997 y 2006, esta declaración de impacto ambiental suplementario (Draft SEIS) pone a prueba dos alternativas, explicadas a continuación:

- **Alternativa 1 No Acción – Actual Plan Integral:** Esta alternativa es requerida por la Ley Estatal de Política Ambiental. Se supone que el Plan Integral 2006 (enmendada hasta el 2016) se mantiene en pie incluyendo sus políticas, plan de ordenamiento territorial y los códigos. El crecimiento ocurrirá según los planes actuales y zonificación a un nivel superior al objetivo de crecimiento.
- **Acción Alternativa 2 – Actualización del Plan – Relleno, Uso Mezclado, y Un Mayor Crecimiento:** Esta alternativa actualiza el Plan Integral para promover una visión de equidad en los planes y estrategias, crecimiento en las áreas ya desarrolladas donde hay infraestructura, y una tabla del uso terrenal bien diseñada y compatible. Esta alternativa implementa las acciones recomendadas por la Comisión de Planificación que promueven el relleno y una mayor compatibilidad del uso terrenal. El crecimiento ocurrirá según un plan de ordenamiento territorial y zonificación a un nivel superior al objetivo de crecimiento.

Cuestiones ambientales evaluadas en este proyecto SEIS incluyen el ambiente natural, calidad del aire, uso terrenal, población, vivienda, empleo, planes y políticas, recursos culturales, transporte, parques y recreación, servicios de policía y bomberos, escuelas, alcantarillado, agua, y utilidades.

Fecha de Vencimiento para Comentarios: Comentarios deben ser entregados a no más tardar el **16 de mayo 2017** y deben ser enviados a: **Joseph Calhoun, Senior Planner; City of Yakima; 129 North 2nd Street; Yakima, WA 98901;** joseph.calhoun@yakimawa.gov

Oportunidades adicionales para proporcionar comentarios:

11 de abril 2017 – Sesión Conjunta del Consejo Municipal y Comisión de Planificación
(10:00 am, City Council Chambers, 129 N. 2nd St.)

11 de abril, 2017 – Casa Abierta Publica (4:00-8:00 pm, YV Tech Facility, 1120 S. 18th St)

10 de mayo, 2017 – Audiencia Pública de la Comisión de Planificación
(3:00 pm, City Council Chambers, 129 N. 2nd St.)

6 de junio, 2017 – Audiencia Pública del Consejo Municipal (6:00 pm, City Council Chambers, 129 N. 2nd St.)

Su interés en la Ciudad de Yakima es muy apreciada. Si desea más información sobre esta propuesta, por favor de contactar a Joseph Calhoun at 509-575-6042, o joseph.calhoun@yakimawa.gov. En español, llame a la Oficina de Planificación al (509) 575-6183.

Atentamente,

Joan Davenport, AICP, Directora de Desarrollo Comunitario

FACT SHEET

Project Title

City of Yakima's Comprehensive Plan 2040 Update

Proposed Action and Alternatives

The proposed action is the adoption of the City of Yakima Comprehensive Plan 2040 and updated Development Regulations and Critical Areas Ordinance will provide an updated land use plan and policies to address growth through 2040. The Plan updates all sections of the 2006 plan and introduces new elements for Historic Preservation and Energy.

Within the range of prior alternatives evaluated in 1997 and 2006, this Draft Supplemental Environmental Impact Statement (Draft SEIS) tests two alternatives, further described in this section:

- **Alternative 1 No Action – Current Comprehensive Plan:** This alternative is required by the State Environmental Policy Act. It assumes the 2006 Comprehensive Plan (as amended through 2016) remains in place including its policies, land use plan, and codes. Growth would occur based on current plans and zoning at a level above growth targets.
- **Action Alternative 2 – Plan Update – Infill, Mixed Use, and Higher Growth:** This alternative updates the Comprehensive Plan including the vision statement, all elements, the future land use map, transportation plan, capital facilities plan, and selected implementing zoning and critical areas regulations in a manner that promotes a vision of equity in plans and strategies, and growth in already developed areas where there is infrastructure and a well-designed and compatible land use pattern. This alternative would also implement the individual parcel rezone/ Future Land Use amendments recommended for evaluation by the Planning Commission that promote infill and greater land use compatibility. Growth would occur based on a revised land use plan and zoning at a level higher than growth targets. A greater emphasis on infill development and mixed uses would allow an improved jobs-housing balance.

Proponent and Lead Agency

City of Yakima; 129 N 2nd St; Yakima, WA; 98901

Tentative Date of Implementation

June 30, 2017

Responsible SEPA Official

Joan Davenport, AICP; Community Development Director
City of Yakima
129 North Second Street
Yakima, WA 98901

Contact Person

Joseph Calhoun, Senior Planner
City of Yakima Planning Division

129 North Second Street
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509-575-6042
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Required Approvals

Recommendation by the Planning Commission and City Council Adoption. State agency review will also occur in accordance with the Growth Management Act as coordinated by the State of Washington Department of Commerce.

Principal SEIS Authors and Principal Contributors

This document was prepared under the direction of the City of Yakima Planning Division.

Principal Authors

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(Comprehensive Plan Update Consultant Lead; Existing Conditions Report; Land Capacity Analysis; Plan Foundation and Vision; Housing Element; Utilities Element; Capital Facilities Plan and Element; SEPA strategies and evaluation of: Natural Environment, Population/Housing/Employment, Plans and Policies, Cultural Resources, Schools, Infrastructure)

City of Yakima Planning Division
129 North Second Street
Yakima, WA 98901

(Comprehensive Plan Update Management; GIS and Mapping; SEPA evaluation of Air Quality, Land Use Patterns, Parks, Police, Fire, Power and Telecommunications, and Citizen Amendment Requests)

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Date of Draft SEIS Issuance

March 17, 2017

Comment Due Date

May 16, 2017

Written comments will be accepted by the Responsible Official through **5 p.m. May 16, 2017**. Please send comments to:

Joseph Calhoun, Senior Planner
City of Yakima Planning Division
129 North Second Street
Yakima, WA 98901
509-575-6042
joseph.calhoun@yakimawa.gov

To learn more about the proposal, agencies, affected tribes, and members of the public may consult the project website for meetings and hearings regarding the Comprehensive Plan Update:

<https://www.yakimawa.gov/services/planning/comprehensive-plan-update/>

Date and Location of Public Meeting

April 11, 2017: Joint City Council and Planning Commission Study Session. Location: City Hall Council Chambers, 129 N 2nd St., Yakima, WA, 98901.

April 11, 2017: Public Open House, Yakima Valley Technical Skills Center

Date of Final Action

June 30, 2017 projected completion.

Prior Environmental Review / EIS Supplemented

This SEIS supplements the Final Environmental Impact Statement prepared for the Yakima Urban Area Comprehensive Plan, Appendix A, November 2006.

Subsequent Environmental Review

The City is using phased review in its environmental review of the City Comprehensive Plan update with a programmatic review of the proposal and alternatives. Examples of proposals that may require more area-

specific or site-specific SEPA review when more details are known include, but are not limited to, capital improvement projects and private development.

Location of Background Data

See Contact Person above.

Draft SEIS Availability

The document is posted at the City's website at:

<https://www.yakimawa.gov/services/planning/comprehensive-plan-update/>

Compact disks are available at no charge at Yakima City Hall, Planning Division. Copies of the document may be purchased at Yakima City Hall Planning Division. A reference copy is available for review at City Hall Planning Division as well. The address for City Hall, Planning Division is: 129 North Second Street, Yakima, WA 98901

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1.0 ENVIRONMENTAL SUMMARY

1.1 Purpose of Proposed Action

What is the Proposal? Why is the City updating its Comprehensive Plan?

The City of Yakima is updating its Comprehensive Plan by June 2017 in accordance with Growth Management Act (GMA). An updated Comprehensive Plan will mean more housing choices, new opportunities for commercial and industrial growth, better connected roads and parks, new recreation opportunities, and improved public services. Elements of the plan to be updated or added include: Vision Statement, Land Use, Economic Development, Housing, Transportation, Capital Facilities, Utilities, Parks and Recreation, Natural Environment, Energy (new), and Historic Preservation (new).

Based on 20-year growth targets, the City is anticipated to add more residents and jobs between now and 2040. To achieve an updated vision and accommodate growth, it is anticipated that the land use (and later the zoning) map will be amended to reflect alternative land use patterns.

Transportation and Capital Facilities Plans will be amended and support the land use plan. Additionally, the City is evaluating its land use and critical areas regulations for proposed amendments that are consistent with the goals and policies of the 2040 Comprehensive Plan.

1.2 State Environmental Policy Act Process

What is a Programmatic SEIS?

This SEIS provides a qualitative and quantitative analysis of environmental impacts appropriate to the general nature of a comprehensive plan update. The adoption of comprehensive plans or other long-range planning activities is classified by SEPA as a nonproject (i.e., programmatic) action. A nonproject action is defined as an action that is broader than a single site-specific project and involves decisions on policies, plans, and programs. An EIS for a nonproject proposal does not require site-specific analyses; instead, the EIS discusses impacts and alternatives appropriate to the scope of the nonproject proposal and to the level of planning for the proposal (Washington Administrative Code [WAC] 197-11-442).

What is an Integrated EIS Document?

The City has elected to integrate SEPA and the Washington State GMA in both the process and the document (see WAC 197-11-235). Integration of the environmental analysis with the planning process informs the preparation of GMA comprehensive plan amendments and facilitates coordination of public involvement activities. The information contained in this SEIS will assist the City in refining a preferred alternative, related comprehensive plan amendments, and implementing regulations. This SEIS will supplement the 2006 EIS, prepared for the current City Comprehensive Plan, and will support the City Comprehensive Plan as it may be amended through this update process.

What is the Public Comment Process?

A 60-day comment period is proposed with this integrated Draft SEIS. Comments may be provided to the City orally during open public meetings and workshops or in writing based on the opportunities and instructions in the Fact Sheet.

The Final SEIS will provide responses to comments on the Draft SEIS.

1.3 Public Involvement

Scoping

A Scoping Notice was posted online and sent to SEPA agencies on October 17, 2016. The comment period ended on November 4, 2016. Four comments were received and are contained in Appendix A.

1.4 Summary of Proposed Alternatives

Objectives

Proposed Alternatives

- **Alternative 1 No Action – Current Comprehensive Plan:** This alternative is required by the State Environmental Policy Act. It assumes the 2006 Comprehensive Plan (as amended through 2016) remains in place including its policies, land use plan, and regulations. Growth would occur based on current plans and zoning at a level above growth targets.
- **Action Alternative 2 – Plan Update – Infill, Mixed Use, and Higher Growth:** This alternative updates the Comprehensive Plan, including the vision statement, all elements, the future land use map, transportation plan, capital facilities plan, and selected implementing zoning and critical areas regulations. The Plan promotes a vision of equity in plans and strategies, and encourage growth in already developed areas where there is infrastructure and a well-designed and compatible land use pattern.

This alternative would also implement the individual citizen amendment requests for the Future Land Use Map that were recommended for inclusion in the 2040 plan by the Planning Commission. Recommended citizen requests promote infill and greater land use compatibility. Growth would occur, based on revised land use policies and zoning, at a level higher than growth targets. A greater emphasis on infill development and mixed uses would allow for an improved balance between jobs and housing.

1.5 Summary of Impacts of the Proposal and Mitigation Measures

This section provides a summary of impacts and mitigation measures more fully described in Chapter 3 of this SEIS.

Natural Environment

How did we analyze the Natural Environment?

Natural environmental features were evaluated based on inventories of critical areas by federal, state, county and city agencies, regional air quality monitoring results, and City stormwater management programs.

What impacts were identified?

All alternatives would result in increased urbanization in the City, with a corresponding increase in impervious surfaces, reduction in vegetative cover, and changes in hydrology. Some potential effects on critical areas could include:

- Urban development could create greater impervious area resulting in more rapid runoff and degradation of water quality, reduce vegetation that can filter runoff or recharge, and reduce critical aquifer recharge.
- Development within floodplains could expose persons or employees to flood hazards.
- Development of vacant or underdeveloped properties could lead to wetland or habitat loss, habitat fragmentation, and loss of habitat connectivity.
- New development could occur in areas of geologic hazards and subject persons or employees to such risks.

What does it mean? What is different between the alternatives?

Alternative 1 would have less housing, population, and employment growth than Alternative 2, as described in Chapter 2 Alternatives. However, about 60% of growth in Alternative 1 is anticipated to occur on vacant and agricultural land in the western city limits (west of 40th Avenue) where there are smaller tributary streams and other habitat. Forty percent of development would occur in more developed areas of eastern Yakima where natural systems are more altered, except along the rivers.

There would be less efficient development patterns under Alternative 1 with more single-purpose commercial areas, less mixed uses, and less multifamily housing; thus, while there may be less nominal growth, the less focused and less dense pattern could disturb more wetlands and fish and wildlife habitat than Alternative 2.

Under Alternative 2, impacts to the natural environment would be similar to Alternative 1, but potentially reduced in intensity if infill policies are more successful in adding more housing, population, and jobs in eastern Yakima in already developed areas such as downtown. About 51% of growth would occur in western Yakima and 49% in eastern Yakima, which demonstrates a greater infill focus.

In already developed areas, implementation of newer stormwater regulations through the City's NPDES program and recent stormwater management regulations could improve water quality. Under both alternatives, such regulations would be protective, but Alternative 2 promotes a greater infill policy and could result in more areas redeveloping with improved water quality results over existing water quality.

Critical area regulations would be amended under Alternative 2 based on recent advances in best available science as well as to improve consistency with the SMP (YMC Title 17).

What are some solutions or mitigation for the impacts?

Mitigation measures include the new Natural Environment Element Policies and Critical Area Ordinance amendments based on a best available science gap analysis.

Additionally, the City would continue to apply its Shoreline Master Program (SMP) adopted in 2015, recent Stormwater Management Program, and the Washington Department of Ecology's *Stormwater Management Manual for Eastern Washington*.

The City implements the International Building Code in YMC Chapter 11.04. This code ensures buildings are developed in accordance with sound building requirements to prevent or minimize damage in seismic events and allows the building official to require geotechnical analysis.

With mitigation, what is the anticipated outcome?

Water Quality: Direct impacts to water quality such as increased impervious area and increased runoff would be reduced through the implementation of federal, state, and City regulations, including critical area and stormwater regulations.

Flood Hazards: Implementation of the City's flood hazard regulations, SMP, and habitat enhancement and flood hazard mitigation projects would reduce impacts.

Fish and Wildlife Habitats and Wetlands: Future development would likely have some impact, direct or indirect, to local plants, animals, and habitats, including wetlands. Alternative 1 No Action is anticipated to have a greater impact than Alternative 2 by allowing a lower density dispersed growth pattern in relatively less altered areas in western Yakima, and generally by continuing critical area regulations that do not incorporate more recent scientific information.

Geologically Hazardous Areas: Development within geologically hazardous areas poses an increased risk to structures and the people living or working in them. Implementing building codes and critical areas regulations will reduce potential risks or allow for notification of potential hazard areas under either alternative.

Critical Aquifer Recharge Areas: Critical aquifer recharge areas would be susceptible to groundwater contamination under either alternative. While both alternatives would apply aquifer protection regulations, Alternative 2 would be more protective by filling identified gaps in regulations.

Air Quality

How did we analyze Air Quality?

Regional air quality reports were reviewed (YRCAA, and YVCOG). Common development patterns and their use of wood heating fuel or their association with different travel modes were considered.

What impacts were identified?

Under both alternatives, current regulations and strategies would be implemented to maintain attainment status for Carbon Monoxide and PM₁₀ and taking necessary steps to stay in attainment status for PM_{2.5}.

What does it mean? What is different between the alternatives?

Alternative 1 promotes significant growth in western Yakima at current development rates. This means more single family homes and increases the use of single-occupancy vehicles due to a development pattern that is not pedestrian oriented and is less supportive of bicycle and transit options.

Alternative 2 promotes more infill and incentivizes higher density residential development. Developing an efficient transportation network, increasing transit use, and the conversion/redevelopment of older buildings commercial and industrial to more efficient heating/cooling systems will help maintain air quality standards. Infill and higher density residential development that locates residents closer to jobs also supports more pedestrian and bicycle travel, which has a positive impact on air quality.

What are some solutions or mitigation for the impacts?

Updated land use plan designations as well as air quality policies promote development types that reduce air emissions. National Ambient Air Quality Standards, Environmental Protection Agency Standards,

Washington State Department of Ecology Standards, and Yakima Regional Clean Air Agency laws and regulations will apply to both alternatives. Certain new development projects are required to undergo further review and permitting with the Yakima Regional Clean Air Agency.

With mitigation, what is the anticipated outcome?

New development through 2040 can potentially impact air quality due to new industries, increased traffic congestion, and/or increased population density. Mitigation will be required at the project level, when appropriate.

Land Use Patterns

How did we analyze Land Use Patterns?

The Land Use Patterns analysis considers:

- Current land use based on local field review, as well as County Assessor records and aerial maps;
- Growth targets developed with Yakima County;
- A city land capacity analysis for each alternative; and
- Distribution of future land use by transportation analysis zone (TAZ) for each alternative.

What impacts were identified?

- Both alternatives have sufficient capacity to meet 2040 targets of 17,167 more people and 8,556 more jobs. Alternative 2 has greater capacity than Alternative 1.
- As development occurs, undeveloped land and existing land uses may convert to uses consistent with the Comprehensive Plan Future Land Use (FLU) Map.
- A greater emphasis on infill development may create rapid growth in certain areas of central and eastern Yakima that increases the demand for expanded public services.
- Depending on the scale and design of future projects, there could be compatibility concerns between new development on undeveloped land and surrounding land uses. Similar compatibility issues may occur between more intensive infill development and existing lower density development.

What does it mean? What is different between the alternatives?

Alternative 1 retains the current FLU designations and provides sufficient capacity for growth targets, but less overall capacity for future growth than Alternative 2 given no changes in current residential densities or infill strategies.

Under Action Alternative 2, the City would promote more infill, mixed use, and higher growth numbers in key areas of the city in a manner that promotes a vision of equity in plans and strategies, and growth in already developed areas where there is infrastructure and a well-designed and compatible land use pattern. This alternative implements and streamlines FLU designations and the implementing zoning regulations. Growth would occur based on this revised land use plan and zoning at a level higher than growth targets. A greater emphasis on infill development and mixed uses would create an improved balance between jobs and housing within the City.

What are some solutions or mitigation for the impacts?

The Land Use Element Update contains revised goals and policies that promote orderly and compatible growth throughout the City of Yakima. Projects which exceed established environmental thresholds will undergo a project-specific environmental review.

With mitigation, what is the anticipated outcome?

As development occurs over time, existing land uses will convert to land uses consistent with the Comprehensive Plan and will meet growth targets. Implementation of the Alternatives could irreversibly commit vacant, agricultural, partially developed, and redeveloped properties to residential, employment, and institutional uses.

Some land use(s) may result in a potential for compatibility impacts due to type, scale, or activity levels. Updated goals and policies would promote compatible design, and require implementation of future design and development standards consistent with policies to improve land use compatibility.

Population, Housing, and Employment

How did we analyze Population, Housing, and Employment?

As with the land use analysis, population, housing, and employment was analyzed based on:

- Growth targets developed with Yakima County;
- A city land capacity analysis for each alternative; and
- Distribution of future land use by transportation analysis zone (TAZ) for each alternative.

What impacts were identified?

- Additional population, housing, and employment growth will occur, with differing distribution patterns depending on the Alternative.
- Yakima's residential west will experience additional housing growth in a low density, single-family pattern under both alternatives (with a greater share of population concentrated here under Alternative 1 than Alternative 2).
- Job growth will mainly focus Downtown, with some jobs along corridors outside of Downtown. Additional jobs will concentrate on the currently vacant Mill Site, which will have impacts on infrastructure needs.
- Housing affordability, age of housing stock, and quality of housing stock are all concerns for each alternative.
- Growth will put pressure on the City's infrastructure and service departments as more residents and employees require services provided by the City.
- Both alternatives can meet growth targets for the 2017-2037 period.

What does it mean? What is different between the alternatives?

Alternative 1 retains the existing intent for future land use and zoning in the city and would result in lower density residential development in the west and less downtown infill and redevelopment in the east. Jobs

would be located Downtown and along corridors outside of Downtown, with substantial new employment development on the Mill Site.

Alternative 2 would result in a future land use pattern that reinforces downtown infill and redevelopment with a focus on mixed use and multifamily housing in and around Downtown. More of the population would live within and close to the Downtown area and other mixed use centers along arterials and cross-roads. There would be more flexible attached housing opportunities with a combined Mixed Residential designation allowing both R-2 and R-3 densities. Much of the employment growth would also be concentrated Downtown and on the Mill Site.

What are some solutions or mitigation for the impacts?

The City's regulations on location, density, design, bulk, and other will help mitigate against the impacts of added development and growth in the city. In addition, as more residents and employees come to Yakima, there will be more demands on the services that the City and special districts supply. Level of service standards and capital planning will help guide the City in providing these services to a growing population base (which will also result in a growing tax base).

With mitigation, what is the anticipated outcome?

Growth will occur under either alternative. Under both alternatives, there will be an increased need for infrastructure investment in roads, transit, utilities, parks, and other public facilities to maintain existing levels of service for both residents and employers. These impacts are present for both alternatives being pursued.

Yakima will face added affordability challenges due to increasing demands on the housing stock and an economy that has not supported new residential or employment development in recent years.

With mitigation, the City can anticipate the location and development pattern of structures accommodating the new housing and employment, as well as infrastructure and capital facilities that will keep pace with the growth.

Plans and Policies

How did we analyze Plans and Policies?

Growth Management Act (GMA) goals, Countywide Planning Policies (CWPPs), and City Vision Statements were evaluated in relation to the studied alternatives.

What impacts were identified?

- Both alternatives meet the Growth Management Act goals, Countywide Planning Policies, and the vision statement in varying ways.

What does it mean? What is different between the alternatives?

Generally, both alternatives meet GMA goals, with Alternative 2 having greater consistency with GMA goals regarding:

- Sprawl reduction and housing affordability and variety due to the promotion of infill and mixed use designation changes;
- Transportation with a transportation plan update and emphasis on multi-modal improvements;

- Public facilities and services with a capital facility plan update aligning levels of service and revenues and projects; and
- Open space and recreation goals with the proposed Critical Area Ordinance amendments and parks plan update.

Generally, both alternatives are consistent with CWPPs. Both alternatives promote development within the existing UGA, accommodate growth targets, address essential public facilities, and promote housing and economic development. Alternative 2 would further promote CWPPs by:

- Updating housing inventories and strategies to increase housing affordability and variety, such as by the promotion of infill and mixed use designation changes;
- Update economic development strategies based on newer trends and outreach to stakeholders;
- Updating transportation policies and strategies based on a transportation plan update and emphasis on multi-modal improvements; and
- Aligning public facilities levels of service and revenues and projects in a capital facility plan update.

Under Alternative 2, given a desire for common and consistent development standards, the County's land use plan, zoning, and existing City-County interlocal agreements may need to be updated as described above to reflect the City's desired consolidation of land use categories and policies (and future code amendments) addressing implementing zoning and design standards.

Both alternatives address a community vision that guides the preparation of the land use plan and individual element policies. Alternative 1 No Action has a vision, goals, and policies that represents more dated trends. Alternative 2 Action updates and elaborates upon the community vision reflecting the changing community needs for housing, employment, and services in a manner promoting infill development and reflecting the community's diversity and neighborhood character.

What are some solutions or mitigation for the impacts?

While still consistent in overall pattern and boundaries, the County's land use plan and existing City-County interlocal agreements may need to be updated as described above to reflect the City's desired consolidation of land use categories and policies. Likewise, there would need to be an alignment between the County's and City's implementing zoning and design standards.

With mitigation, what is the anticipated outcome?

There is consistency with GMA goals, Countywide Planning Policies (CWPPs) and the City's vision statement. Both City and County land use plans are consistent in pattern and location, but there will need to be amendments of interlocal agreements and potentially plans and regulations under Alternative 2 to remain consistent with CWPPs that call for joint planning and common standards.

Cultural Resources

How did we analyze Cultural Resources?

The Historic Preservation Plan developed in 2016 (Artifacts Inc. 2016) and information from the Washington Department of Archaeology and Historic Preservation (DAHP) were reviewed and summarized in the SEIS.

What impacts were identified?

Under both alternatives, potentially eligible properties for historic register listing identified in Exhibit 3-10 could be altered or redeveloped and no longer be eligible.

Archaeological resources may be disturbed due to development activities, particularly in areas of high and very high risk identified in Exhibit 3-8. This risk is reduced with City regulations regarding identification, avoidance, and mitigation (YMC 17.05.010).

What does it mean? What is different between the alternatives?

Under Alternative 1, current historic preservation policies and ordinances would be retained to reduce potential impacts to historic sites (Chapter 11.62 YMC) and archaeological resources (YMC 17.05.010).

Alternative 2 promotes additional infill development and there could be more pressure for redevelopment in areas of historic character, such as Downtown. However, Alternative 2 also proposes the City's first Historic Preservation Element and Plan with additional policies and strategies to promote the protection of historic and cultural resources.

What are some solutions or mitigation for the impacts?

Federal, state, and city regulations protect historic resources and archaeological resources. In addition, under SEPA, non-exempt development is subject to review and evaluation regarding cultural resources, and mitigation measures may be imposed.

With mitigation, what is the anticipated outcome?

If cultural resources are found in the future impacts to historic and cultural preservation can be adequately mitigated by complying with federal, state, and local laws and mitigation measures.

Transportation

How did we analyze Transportation?

Transportation impacts were based on volume forecasts from a transportation demand model to get an estimate of future traffic conditions under each of the alternatives. Estimated traffic conditions were reviewed in relation to the Transportation Element of the Comprehensive Plan, as well as city and county criteria for safety, access, and circulation for vehicles, bicycles, and pedestrians.

What impacts were identified?

The anticipated vehicle traffic growth over the next 20 years would likely cause transportation impacts. Under all alternatives several intersections would operate below adopted level of service (LOS) standards. There may also be additional demands for transit facilities.

What does it mean? What is different between the alternatives?

Under Alternative 1 (No Action) 17 intersections would operate below the adopted LOS standard because of growth within the City. Delays at these intersections would result in congestion on major corridors throughout the City with the exception of the downtown area which experiences a lesser amount of intersection delay. Under Alternative 2 (Action), 16 intersections would operate below the adopted LOS standard due to shifts in travel patterns resulting from changes in land use allocations.

What are some solutions or mitigation for the impacts?

Temporary construction impacts can be managed to reduce impacts on local traffic flow. LOS improvements can be achieved for traffic operations through intersection improvements that increase capacity or flow of traffic, as well as through level of service policy revisions. See Section 3.7 for more information.

With mitigation, what is the anticipated outcome?

The anticipated vehicle traffic growth over the next 20 years would cause unavoidable increases in traffic and congestion that are characteristic of an urban area. Although there would be an increase in congestion associated with urban levels of growth, there are no significant unavoidable adverse impacts identified if the identified mitigation measures are implemented.

Parks and Recreation

How did we analyze Parks and Recreation?

Parks and Recreation facilities were examined in-depth in the Parks and Recreation Comprehensive Plan 2018-2023 and the City of Yakima Existing Conditions Analysis completed in 2016.

What impacts were identified?

- With a 2016 population of 93,410, Yakima is currently deficient in available park land and will continue to be at a deficit unless new investments are made. Additional park land is needed in areas throughout the City to appropriately distribute parks amenities across the seven City Districts.
- Many parks have aging infrastructure and will continue to need investments to maintain, update, and expand facilities
- Under current parks capital planning, there will be an increase in access to existing trail systems.

What does it mean? What is different between the alternatives?

Parks distribution in the No Action Alternative will likely mean more parks in west Yakima as the current population trend grows that way. The Action Alternative promotes greater infill in east and central Yakima which will create a necessity for expanded or new parks in established areas of the city, as well as updates to the existing facilities.

What are some solutions or mitigation for the impacts?

- Implement the Plan's goals and policies to increase the available park land in Yakima as the population grows to comply with level of service standards.
- Require large projects to provide open space as part of the development plan.
- Ensuring more access to existing trail systems through extending the network and creating multi-modal connections.
- Identifying and acquiring vacant land that may be suitable for future park development.
- Pursuing local, state, and federal grants and other funding sources to replace aging park infrastructure.

With mitigation, what is the anticipated outcome?

With mitigation, Yakima will build upon and enhance its City-wide park system to meet the recreation needs of current and future residents and which complies with level of service standards identified in the Parks and Recreation Comprehensive Plan.

Police and Fire Services

How did we analyze Police and Fire Services?

Police and Fire services were analyzed in the Capital Facilities Element, with a focus on the two departments' ability to provide an acceptable level of service (LOS) now and in the future. The identified LOS for Police is 1.8 Officers per 1,000 population. The Fire Department has several standards for Fire Suppression, EMS, Special Operations, Aircraft Rescue and Firefighting, and Wildland, with service measured based on turnout times.

What impacts were identified?

- There will be pressure on these department's ability to maintain or increase levels of service as population increases.
- Development patterns will have an impact on the ability of Fire and Police Departments to serve the City efficiently.
- Additional traffic congestion on City streets will impact the ability of Fire and Police Departments to serve the City efficiently. Station location and accessibility will be important for maintaining and improving the amount of time it takes for police and emergency services to reach the scene of response.

What does it mean? What is different between the alternatives?

The alternatives differ in the amount of growth, as well as the location and intensity of growth across the City. The distribution of population increases changes in the alternatives which may require modification to service areas depending on where higher densities are located. In particular, Alternative 2 would see areas of greater density and infill while Alternative 1 would expect a greater amount of the population to locate within low-density developments, predominantly in west Yakima.

What are some solutions or mitigation for the impacts?

- Involving police and fire early in the development process.
- Ensuring that police and fire are aware of future planning processes and anticipated land use distributions.
- Maintaining rigorous capital plans that plan for needed facility investments.
- Maintain LOS goals and prioritize improvements in service provision when needed.

With mitigation, what is the anticipated outcome?

With mitigation measures in place, Yakima can expect safe and consistent fire and police services throughout the City's seven Council Districts.

Schools

How did we analyze Schools?

Schools are analyzed based on population growth and expected student generation by 2040.

What impacts were identified?

- Population growth in the City will result in an increased student population.
- There will be a need for expanded school facilities and new staffing to continue providing the current level of service. Depending on the alternative and the location of residential growth, Yakima School District and West Valley School District may have different impacts.

What does it mean? What is different between the alternatives?

Impacts on schools will differ for each alternative due to the distribution of new residential growth. The No Action Alternative continues the predominant westward growth which will increase students in the West Valley School District similar to current rates. The Action Alternative promotes greater infill development which is anticipated to increase enrollment in the Yakima School District, perhaps greater than current rates. Under each alternative, additional facility space and staffing will be needed.

What are some solutions or mitigation for the impacts?

By setting level of service standard policies and participating in intentional capital planning, the school districts can ensure that the impacts of student growth on the quality of their education is mitigated.

With mitigation, what is the anticipated outcome?

With mitigation, it is anticipated that student education quality and experience will not change because of maintained service standards.

Sewer

How did we analyze Sewer?

Sewer is analyzed based on system capacity for treating wastewater.

What impacts were identified?

- Additional wastewater loads would need to be treated as the population of customers in the district increases and puts pressure on the system's capacity.
- System expansion and maintenance will require new system investments and capital planning.
- Wastewater line extension for new development, particularly in West Yakima, will need to be sized appropriately to accommodate future growth patterns.

What does it mean? What is different between the alternatives?

The Yakima Regional Wastewater Treatment Plant has existing capacity to accommodate projected population growth through 2040 under both alternatives, with some surplus capacity. Although there will be capital needs for wastewater treatment, these capital investments will be related to upgrades, system expansion, and system efficiency.

What are some solutions or mitigation for the impacts?

Level of service standards and capital planning will allow the Wastewater Division to maintain acceptable service as additional population is served by the system. This applies for both alternatives.

With mitigation, what is the anticipated outcome?

With planned upgrades and maintenance, the system will continue to serve the population at acceptable levels and wastewater will be treated by the existing Yakima Regional Wastewater Treatment Plant.

Water

How did we analyze Water?

Water was analyzed based on system capacity for serving customers with potable water.

What impacts were identified?

- New water customers will join the system as population grows.
- Capital investments will be required to expand and maintain the system.

What does it mean? What is different between the alternatives?

For both alternatives, the water system has the capacity to serve the City's new demands for potable water.

What are some solutions or mitigation for the impacts?

Level of service standards and capital planning will allow the Water and Irrigation Division to maintain acceptable water service as additional population is served by the system. This applies for both alternatives.

With mitigation, what is the anticipated outcome?

With planned upgrades and maintenance, the system will continue to serve the population at acceptable levels and potable water will be provided to all customers in the water district.

Utilities

How did we analyze Utilities?

Service providers for electricity, natural gas, and telecommunications are described in the Utilities Element of the Comprehensive Plan.

What impacts were identified?

- New development will require upgrades and expansions to the utilities networks to provide added capacity.

What does it mean? What is different between the alternatives?

Alternative 1 will continue the trend of new development occurring mostly in west Yakima. Alternative 2 promotes greater infill densities in east and central Yakima. These different development patterns may require differences in the location and timing of utilities expansion, but the added capacity needed will

not differ greatly. Utilities servers will meet the new demand, according to their business plan and the Washington Utilities and Transportation Commission requirements.

What are some solutions or mitigation for the impacts?

- Encourage providers to develop new utilities capacity as growth occurs.
- For the Action Alternative, greater infill densities may mean the need to upgrade existing utility infrastructure to accommodate new demands on the system.

With mitigation, what is the anticipated outcome?

With mitigation, all utilities will be provided at an acceptable level of service to accommodate future demands.

1.6 Citizen Amendment Requests

What are Citizen Amendment Requests?

The City of Yakima allows citizen amendments to the Comprehensive Plan on an annual basis. However, during the update process the normal amendment process was not available for 2016 or 2017. As a compromise so that citizens didn't have to wait until 2018 to submit a request, a modified process was put in place where citizens could submit requests during the update process that would be reviewed by staff and the Planning Commission as part of the overall update. In total, 16 requests were submitted. After review by staff and the Planning Commission, the following requests in Exhibit 1.6-1 were recommended to move forward in the process.

Exhibit 1-1. Summary of Citizen Amendment Requests

	Name	Description	Location
1	Datal Properties, LLC	Low Density Residential to Commercial Mixed Use	113 & 115 N 56 th Ave
2	Landon Glenn	Industrial to Commercial Mixed Use	203 & 207 Oak St
3	Jeff Baker	Regional Development to Commercial Mixed Use	Vic. Of E Nob Hill Blvd & S 18 th St
4	Jay Sentz	Low Density Residential to Community Mixed Use	4201 Summitview Ave
5	TM Rentals	Low Density Residential to Mixed Residential	Vic. Of S 38 th Ave and W Logan Ave
6	Gail Buchanan	Low Density Residential to Mixed Residential	408, 410, & 412 S 88 th Ave
7	Supercold Storage	Large Convenience Center to Industrial	1415 River Rd
8	Jerry Hand	Medium Density Residential to Commercial Mixed Use	1406 S Fair Ave & 909 LaFollette
9	William and Linda Beerman	Low Density Residential to Community Mixed Use	419 & 421 S 16 th Ave, 1513 Tieton Dr
10	SOZO Sports of Central WA	Industrial and Low Density Residential to Commercial Mixed Use	Vic. Of S 36 th Ave and Sorenson Rd
11	Gary Delaney	Medium Density Residential to Community Mixed Use	1414 S 2 nd Ave
12	Mark Hoffmann	Industrial to Low Density Residential	3109 W Washington Ave

How do these requests relate to the Comprehensive Plan?

These requests modify the Future Land Use designations of several parcels throughout the City. In most cases these areas will see either an increase in residential density, an increase in commercial density, or the change brings the Future Land Use into conformance with existing property use and zoning. These changes are cumulatively addressed in Alternative 2 in terms of overall land use patterns, housing and employment growth, and utility and transportation needs. At a cumulative level, the requests would be subject to development and design policies and regulations, and can be accommodated by infrastructure system plans and public services, provided the mitigation measures in Chapter 3.0 are implemented. The requests are individually analyzed at a programmatic level in Section 4.0

1.7 Major Conclusions, Areas of Controversy or Uncertainty, and Issues to be Resolved

Key environmental issues and options facing decision makers include:

- Alternative land use patterns in relation to 20-year growth estimates and community vision;

- Relationship of land use patterns to environmentally sensitive areas and land use compatibility; and
- Effect of growth on demand for public services, utilities, and parks and transportation capital improvements.

All Alternatives would allow for expected population, housing and employment growth and increased urbanization.

Prior to preparation of the Final SEIS, the following issues are anticipated to be resolved:

- Selection and refinement of future land use based on the studied alternatives;
- Refinement of goals, objectives, and policies; and
- Deliberations on updated Capital Facility Plan and Transportation Plan; and
- Refinements of proposed code changes, including the critical areas ordinance amendments and potential zoning changes.

2.0 ALTERNATIVES

2.1 Introduction and Purpose

The City of Yakima is updating its Comprehensive Plan by June 2017 in accordance with Growth Management Act (GMA). An updated Comprehensive Plan will mean more housing choices, new places to work, better connected roads and parks, new recreation opportunities, and improved public services. Elements of the plan to be updated or added include: Vision Statement, Land Use, Economic Development, Housing, Transportation, Capital Facilities, Utilities, Parks and Recreation, Natural Environment, Energy (new), and Historic Preservation (new).

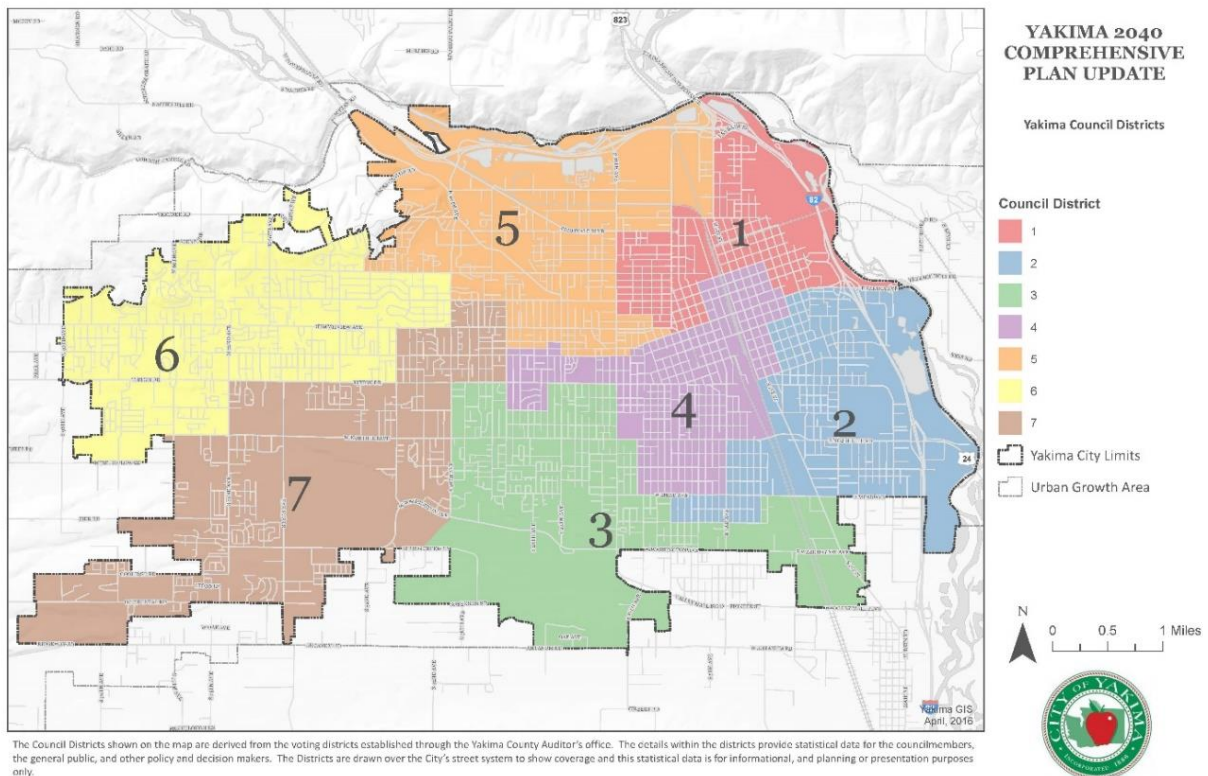
Based on 20-year growth targets, the City is anticipated to add more residents and jobs between now and 2040. To achieve an updated vision and accommodate growth, it is anticipated that the land use and zoning map will be amended to reflect alternative land use patterns.

Transportation and Capital Facilities Plans will be amended and support the land use plan. Additionally, the City is evaluating its land use and critical areas regulations for proposed amendments.

2.2 Description of Planning Area

The Yakima Comprehensive Plan Update applies to the current city limits encompassing 27.16 square miles or about 17,385 acres. (Washington State Office of Financial Management, 2016) See Exhibit 2-1.

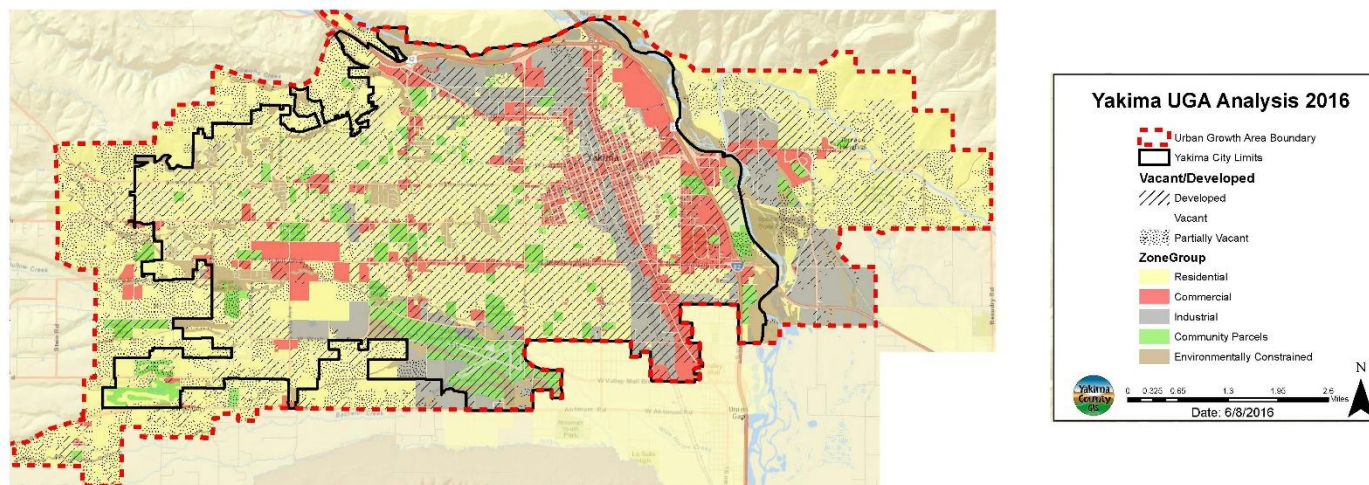
Exhibit 2-1. Yakima Council Districts



Source: City of Yakima GIS 2016

The City of Yakima has been assigned an Urban Growth Area (UGA) by Yakima County consisting of unincorporated land suited for urban development due to present urban patterns or ability to serve urban development in the future. Willing residents, landowners, and residents may annex to the city if they are part of the UGA. Total acres within the unincorporated UGA equal about 9,660 acres. (Yakima County, Public Services Department, Planning Division, 2016, July 13)

Exhibit 2-2. Yakima UGA and City Limits Map



Source: (Yakima County, Public Services Department, Planning Division, 2016, July 13)

The focus of the Comprehensive Plan and development regulations is the Yakima incorporated city limits. Yakima County is planning for the Yakima UGA in consultation with the City of Yakima. However, the SEIS addresses cumulative growth patterns and demands for services, such as transportation, fire, and water, within the city limits and UGA for a comprehensive evaluation.

2.3 State and Regional Planning Requirements

Growth Management Act (GMA)

The City of Yakima is required to update its Comprehensive Plan and development regulations in compliance with the Growth Management Act (GMA) every eight years, with the current deadline of June 30, 2017. The plan must have a 20-year planning horizon and must plan to accommodate future growth in coordination with Yakima County and neighboring cities.

By GMA requirements, the City must include the following comprehensive plan elements: land use, housing, capital facilities, utilities, transportation, economic development, and parks and recreation. The City has chosen to include the following optional elements: historic preservation and energy. The City must also ensure its development regulations are consistent with the Comprehensive Plan, including critical areas regulations and zoning.

Regional Plans

All cities' and the County's Comprehensive Plans are to be consistent with the Yakima County Countywide Planning Policies, which addresses the following topics:

- The designation of urban growth areas;
- Promotion of contiguous and orderly development and provision of urban services to such development;
- The siting of public capital facilities of a countywide or statewide nature;
- Countywide transportation facilities and strategies;
- The need for affordable housing for all segments of the population;
- Joint city and county planning within urban growth areas;
- County-wide economic development and employment; and
- Analysis of fiscal impact.

The Countywide Planning Policies also define roles for the County as a regional service provider and primary planner of unincorporated areas, with responsibilities to enter into urban growth management agreements to address joint issues. Cities are primary providers of urban governmental services, and primary planners of incorporated areas, and joint planners with the County on unincorporated areas through interlocal agreements. The Yakima Valley Conference of Governments serves as the Regional Transportation Planning Organization (RTPO) and performs responsibilities as identified in the most recent GMA regional strategy.

2.4 SEPA Process

SEPA Scoping Process

The City voluntarily issued a scoping notice, optional for a SEIS (WAC 197-11-620(1)). See Appendix A for the scoping notice and comments. Scoping allows early comment on the scope of the SEIS including topics and alternatives. The scoping period extended from October 13 to November 4, 2016. Comments were received from the following agencies:

- Ahtanum Irrigation District: Concerns about traffic congestion on Ahtanum Road, and identification of traffic improvements.
- Washington State Department of Ecology: Suggestions provided on wetlands mapping, goals of no net loss of wetland function, avoidance of wetland impacts, and reference to recent wetlands documents.
- Washington State Department of Fish and Wildlife: Recommendations on management of vegetation on river levees, protecting habitat in parks, open space, and riparian areas, and recommendations on improving maps in the current Comprehensive Plan.
- Yakama Nation: Requests addressing cultural resources in the EIS and Comprehensive Plan policies and development regulations that protect cultural resources.

This SEIS addresses the evaluation of the alternatives in the Transportation Plan including traffic levels of service. The SEIS also addresses natural resources and proposed updates to policies and critical area regulations. Cultural resources are added as an SEIS topic in response to the scoping comment and because the City is proposing a Historic Preservation Element.

Programmatic and Integrated Analysis

This SEIS provides a qualitative and quantitative analysis of environmental impacts appropriate to the general nature of a comprehensive plan update. The adoption of comprehensive plans or other long-range planning activities is classified by SEPA as a nonproject (i.e., programmatic) action. A nonproject action is defined as an action that is broader than a single site-specific project and involves decisions on policies, plans, and programs. An EIS for a nonproject proposal does not require site-specific analyses; instead, the EIS discusses impacts and alternatives appropriate to the scope of the nonproject proposal and to the level of planning for the proposal (Washington Administrative Code [WAC] 197-11-442).

The City has elected to integrate SEPA and the Washington State GMA in both the process and the document (see WAC 197-11-235). Integration of the environmental analysis with the planning process informs the preparation of GMA comprehensive plan amendments and facilitates coordination of public involvement activities. The information contained in this SEIS will assist the City in refining a preferred alternative, related comprehensive plan amendments, and implementing regulations. This SEIS will supplement the 2006 EIS, prepared for the current City Comprehensive Plan, and will support the City Comprehensive Plan as it may be amended through this update process.

The integrated Draft Comprehensive Plan/Draft SEIS document is structured as shown in Exhibit 2-3.

Exhibit 2-3. Yakima Integrated SEPA/GMA Plan and EIS

Document Section	Contents
Volume I. Yakima Comprehensive Plan—A Policy Document	Contains all policies and plans.
Volume II. Technical Appendices	
Part A. Capital Facility Plan	Contains required capital inventories, level of service analysis, and revenue analysis needed to support planned growth as well as the current community.
Part B. Supplemental Environmental Impact Statement	- Analyzes the proposal and alternatives. - Summarizes the comprehensive plan policies and regulations that serve as mitigation measures.
Other Supporting Material:	The following documents are part of the record of the Plan Update process, and summarized in the Plan and EIS. As informational documents, they may be updated overtime by the City without formal amendment. - Existing Conditions Report: An informational document that contains all inventories required by GMA and SEPA in the “Affected Environment” discussions. This analysis is incorporated by reference in this SEIS. - Land Capacity Analysis: Provides a method and results of a land capacity analysis for the alternatives. This analysis is summarized in the Plan Elements and this SEIS.

Source: BERK Consulting, 2017

Phased Review

SEPA encourages the use of phased environmental review to focus on issues that are ready for decision and to exclude from consideration issues that are 1) already decided or 2) not yet ready for decision making (WAC 197-11-060(5)). Phased review is appropriate where the sequence of a proposal is from a

programmatic document, such as an EIS addressing a comprehensive plan, to documents that are narrower in scope, such as those prepared for site-specific, project-level analysis. The City is using phased review in its environmental review of the City Comprehensive Plan update with a programmatic review of the proposal and alternatives. Examples of proposals that may require more area-specific or site-specific SEPA review when more details are known include, but are not limited to, capital improvement projects and private development.

Supplemental EIS

This SEIS supplements the Final Environmental Impact Statement prepared for the Yakima Urban Area Comprehensive Plan, Appendix A, November 2006.

The 2006 EIS reviewed the 2006 Comprehensive Plan to the 1997 Comprehensive Plan and some of the alternatives developed in 1997 including a Citizen Focus alternative based on comments for less intensive uses and a Vision Focus alternative with connected transportation, and retail and housing nodes.

2.5 Objectives and Alternatives

Within the range of prior alternatives evaluated in 1997 and 2006, this SEIS tests two alternatives, further described in this section:

- **Alternative 1 No Action – Current Comprehensive Plan:** This alternative is required by the State Environmental Policy Act. It assumes the 2006 Comprehensive Plan (as amended through 2016) remains in place including its policies, land use plan, and codes. Growth would occur based on current plans and zoning at a level above growth targets.
- **Action Alternative 2 – Plan Update – Infill, Mixed Use, and Higher Growth:** Updates the Comprehensive Plan including the vision statement, all elements, the future land use map, transportation plan, capital facilities plan, and selected implementing zoning and critical areas codes in a manner that promotes a vision of equity in plans and strategies, and growth in already developed areas where there is infrastructure and a well-designed and compatible land use pattern. This alternative would also implement the individual parcel rezone/Future Land Use amendments recommended for evaluation by the Planning Commission that promote infill and greater land use compatibility. Growth would occur based on a revised land use plan and zoning at a level higher than growth targets. A greater emphasis on infill development and mixed uses would allow an improved jobs-housing balance.

Comprehensive Plan Update Objectives

As part of describing proposed actions and alternatives, SEPA requires the description of proposal objectives and features. Agencies are encouraged to describe a proposal in terms of objectives, particularly for agency actions to allow for consideration of a wider range of alternatives and measurement of the alternatives alongside the objectives. The City's proposed Vision Statement is the primary objective for the Comprehensive Plan Update:

A Vision for Yakima's Future

The City of Yakima is the "Heart of Central Washington," bounded by the Yakima River and the railroad, serving as a center of the Yakima Valley's agricultural prosperity for over 125 years, and growing into a dynamic cultural, recreational, and economic hub of the region.

We celebrate our community of diverse cultures and offer opportunities for our public to participate in community life. We have created an inclusive city where all feel welcomed and safe. We work, live, and play side by side. Yakima has created a flourishing and diverse economy attracting and retaining businesses with living wage jobs for all our people. We preserve the character of our historic Downtown, residential neighborhoods, and commercial centers. We encourage well-designed infill and new development, quality public services, and infrastructure investments. Our residents have access to a high-quality education, affordable housing, and healthy living. We enhance our natural and recreation spaces. We connect our people and neighborhoods offering safe and reliable mobility options including walking, biking, transit, and cars.

The degree to which each alternative accomplishes the objective is addressed in this Draft SEIS, particularly in Section 3.6, “Plans and Policies.”

Comprehensive Plan Elements

Both the No Action and Action Alternatives have Comprehensive Plan chapters including goals and policies. The Action Alternative would update each chapter to address the revised vision statement, refresh and amend policies to be consistent with GMA provisions that have changed since the City’s last periodic update in 2006, and to be more streamlined and reader-friendly. Two new elements would be added: historic preservation and energy. See Exhibit 2-4.

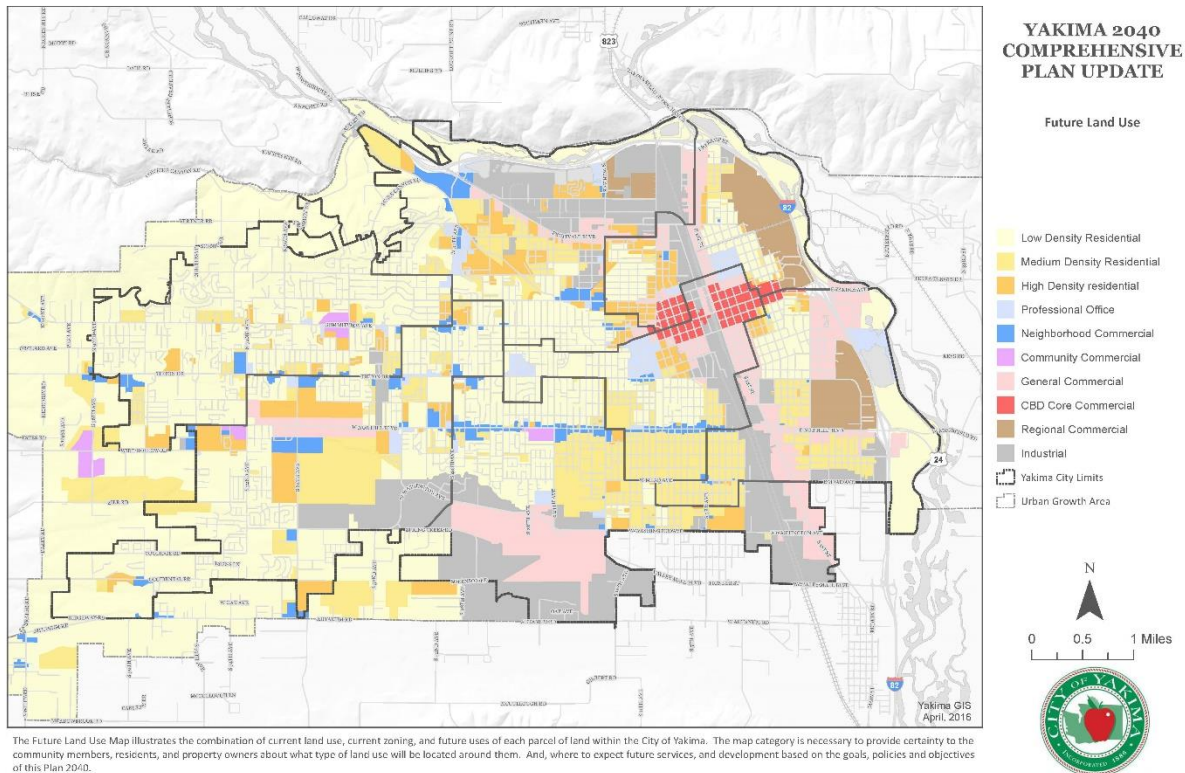
Exhibit 2-4. No Action and Action Alternative Comprehensive Plan Elements

No Action: Current Comprehensive Plan	Action: Proposed Comprehensive Plan
Land Use	Land Use
Economic Development	Historic Preservation
Housing	Economic Development
Transportation	Housing
Capital Facilities	Transportation
Utilities	Capital Facilities
Parks and Recreation	Utilities
Natural Environment	Parks and Recreation
	Natural Environment
	Energy

Comprehensive Plan Future Land Use Map

The No Action Alternative retains the currently adopted Future Land Use Map and associated implementing zoning as illustrated on Exhibit 2-5 below.

Exhibit 2-5. Future Land Use Map: Current 2016



Source: City of Yakima 2016

The Action Alternative would amend the Future Land Use Map to:

1. Combine and rename some designations to streamline the map and provide a clearer land use pattern.
2. Create a more compatible land use pattern, and recognize updated conditions and trends.
3. Respond to public redesignation requests evaluated by the Planning Commission.

The combined and renamed categories are illustrated on the table below, but generally result in fewer land use map categories, and more mixed use residential-commercial districts. See Exhibit 2-6.

Exhibit 2-6. Future Land Use and Implementing Zoning by Alternative

No Action Alternative		Action Alternative	
Future Land Use	Implementing Zones	Future Land Use	Implementing Zones
Low Density Residential	SR, R-1, R-2	Low Density Residential	SR, R-1
Medium Density Residential	R-1, R-2, R-3	Mixed Residential	R-2, R-3
High Density Residential	R-2, R-3, B-1, CBD		
Neighborhood Commercial	B-1, B-2, HB, R-3	Community Mixed Use	B-1, B-2, SCC, HB, R-3
Professional Office	B-1, B-2, R-3, GC		
Community Commercial	B-1, B-2, SCC	Commercial Mixed Use	LCC, GC, AS
General Commercial	B-1, B-2, SCC, LCC, GC, M-1		
CBD Core Commercial	CBD	CBD Commercial Core	CBD
Regional Commercial	LCC, CBD	Regional Commercial	RD
Industrial	M-1, M-2	Industrial	M-1, M-2, AS

Source: City of Yakima, 2016

Proposed land use designation area changes include several areawide or large property adjustments to correct mismatches between uses and zoning or to address changing conditions and trends in neighborhoods. See Exhibit 2-7.

Exhibit 2-7. Action Alternative: Proposed Land Use Designation Area Changes

Location	Action Alternative: Proposed Designation Change
North of Fairgrounds Area	Change from GC to Neighborhood Mixed Use and Mixed-Residential.
Washington Fruit and Produce Packing Plant	Change from Regional Commercial to Industrial to match current use.
Old Fruitvale Drive-In Site/Area	Change from Industrial to Community Mixed Use
Congdon Area	FLU doesn't match the established zoning; align the current zoning with FLU.

Source: City of Yakima, 2016

The last category of changes addressed public requests for consideration of Future Land Use changes. Sites or areas carried forward for study include those on Exhibit 2-8.

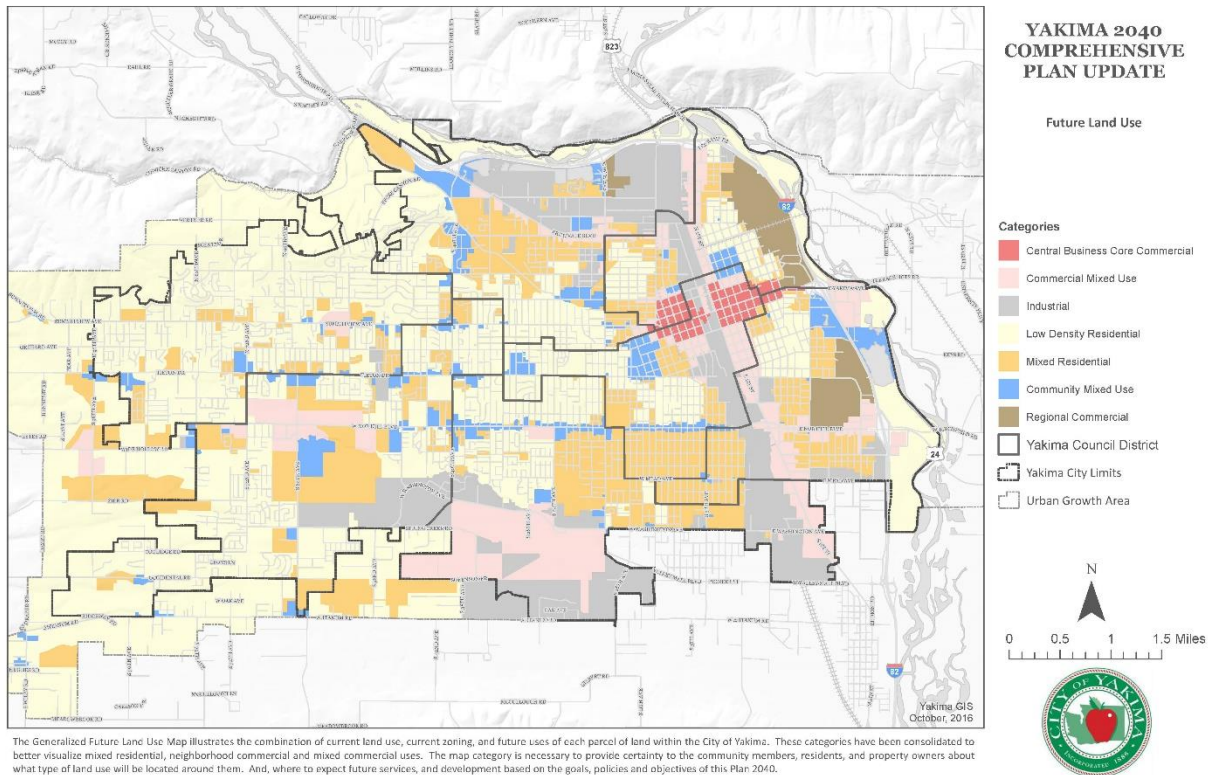
Exhibit 2-8. Summary of Citizen Amendment Requests

	Name	Description	Location
1	Datal Properties, LLC	Low Density Residential to Commercial Mixed Use	113 & 115 N 56 th Ave
2	Landon Glenn	Industrial to Commercial Mixed Use	203 & 207 Oak St
3	Jeff Baker	Regional Development to Commercial Mixed Use	Vic. Of E Nob Hill Blvd & S 18 th St
4	Jay Sentz	Low Density Residential to Community Mixed Use	4201 Summitview Ave
5	TM Rentals	Low Density Residential to Mixed Residential	Vic. Of S 38 th Ave and W Logan Ave
6	Gail Buchanan	Low Density Residential to Mixed Residential	408, 410, & 412 S 88 th Ave
7	Supercold Storage	Large Convenience Center to Industrial	1415 River Rd
8	Jerry Hand	Medium Density Residential to Commercial Mixed Use	1406 S Fair Ave & 909 LaFollette
9	William and Linda Beerman	Low Density Residential to Community Mixed Use	419 & 421 S 16 th Ave, 1513 Tieton Dr
10	SOZO Sports of Central WA	Industrial and Low Density Residential to Commercial Mixed Use	Vic. Of S 36 th Ave and Sorenson Rd
11	Gary Delaney	Medium Density Residential to Community Mixed Use	1414 S 2 nd Ave
12	Mark Hoffmann	Industrial to Low Density Residential	3109 W Washington Ave

Source: City of Yakima, 2016

With the full list of map designation consolidations, areawide and local changes based on conditions and trends, and public requests carried forward by the Planning Commission, the proposed land use map would change as shown in Exhibit 2-9.

Exhibit 2-9. Action Alternative Future Land Use Map



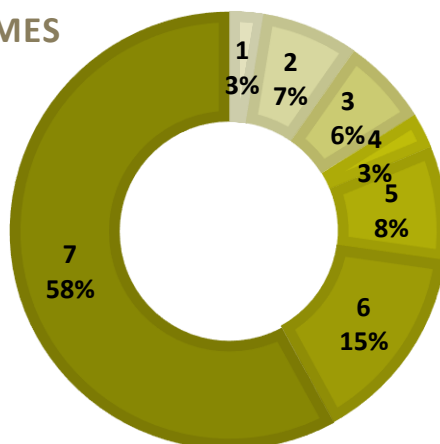
Source: City of Yakima, 2016 Growth Assumptions

The Comprehensive Plan addresses a 20-year planning period and must demonstrate an ability to accommodate future growth targets adopted in the Countywide Planning Policies. Based on collaborative planning with the County, the City of Yakima is due to take 25% of the future growth. The City growth targets would mean 17,167 new persons and 8,556 jobs between now and 2040. Land capacity analysis of each alternative illustrates more than adequate citywide capacity for additional population and jobs under each land use plan (current or proposed). The Action Alternative has a greater capacity for housing growth and job growth given the land use map changes and greater emphasis on infill development.

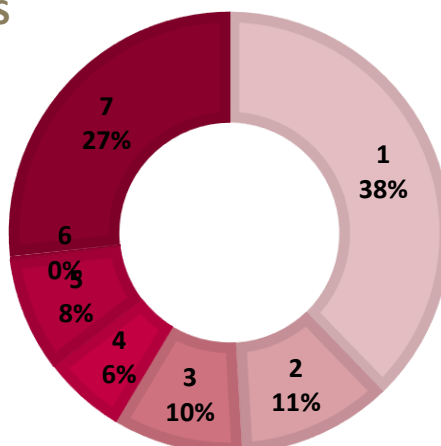
Exhibit 2-10. No Action Alternative Land Capacity Citywide and by Council District

District	Capacity: Vacant / Agriculture / Infill		
	New Homes	New Jobs	New People
1	401	9,384	1,096
2	1,102	2,808	3,009
3	1,004	2,360	2,740
4	407	1,499	1,110
5	1,312	2,087	3,582
6	2,297	75	6,270
7	8,995	6,624	24,556
Citywide	15,518	24,837	42,364

NEW HOMES



NEW JOBS

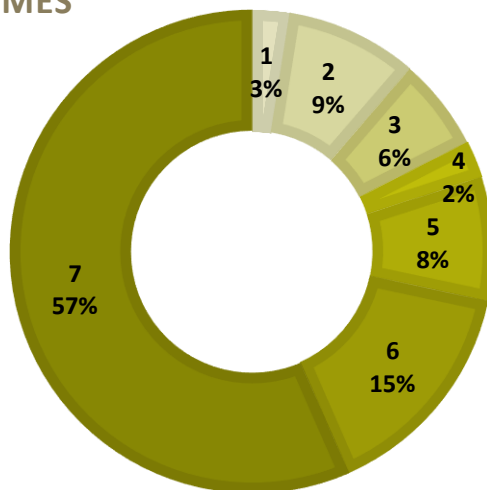


Source: City of Yakima, BERK Consulting 2016

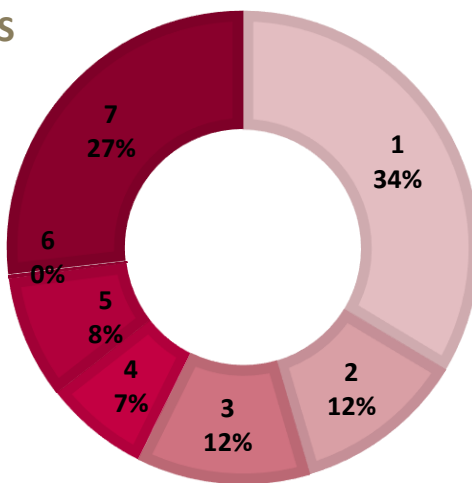
Exhibit 2-11. Action Alternative Land Capacity Citywide and by Council District

District	Capacity: Vacant / Agriculture / Underutilized		
	New Homes	New Jobs	New People
1	410	9,578	1,119
2	1,450	3,368	3,957
3	1,016	3,384	2,775
4	410	2,039	1,118
5	1,360	2,406	3,713
6	2,485	72	6,785
7	9,282	7,634	25,339
Citywide	16,413	28,481	44,806

NEW HOMES



NEW JOBS



Source: City of Yakima, BERK Consulting 2016

These targets represent a 20-year growth allocation, while land capacity considers a future buildout condition. The City must at least plan for its targets but may consider a higher potential growth, such as based on master plans and permit trends or other bases. For the purposes of this SEIS and transportation and capital facility planning, each alternative is studied at a level greater than targets but less than capacity. Assumptions are compared in Exhibit 2-10.

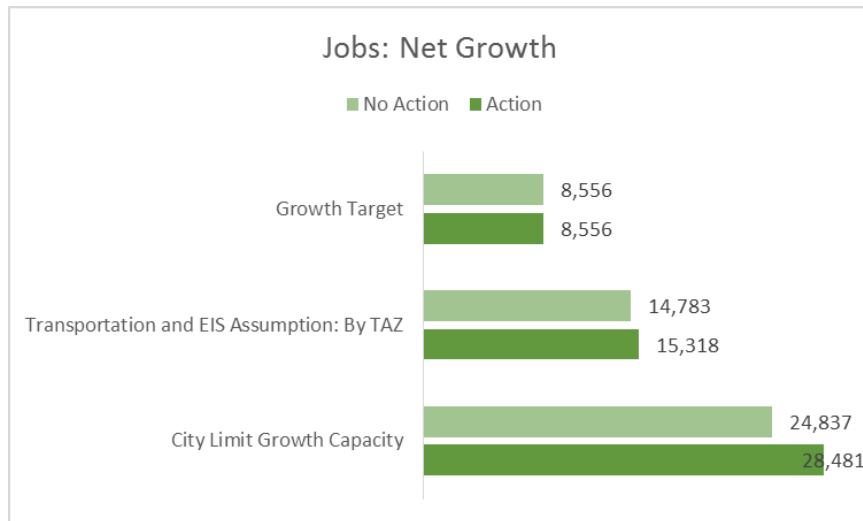
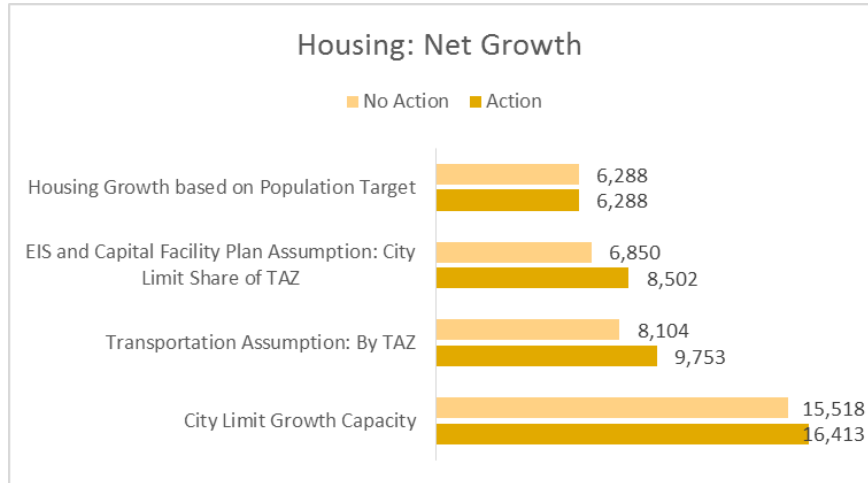
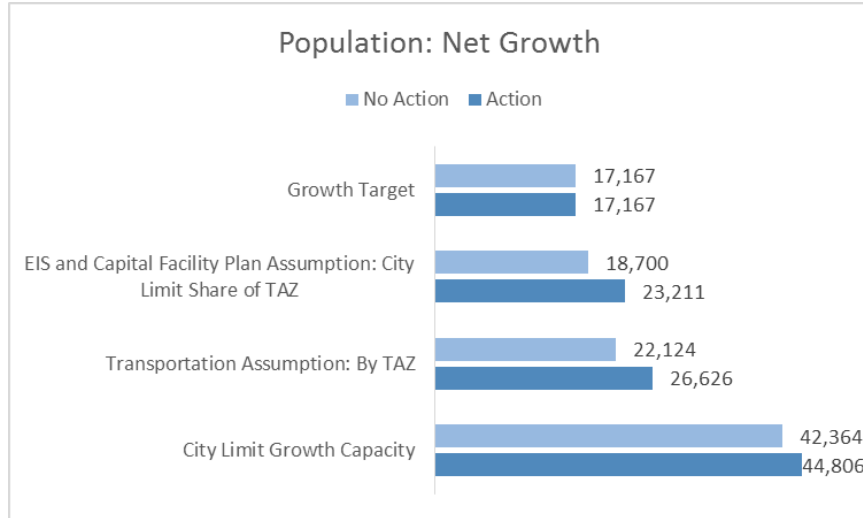
Generally, the alternatives would study population and housing at about 44-52% of the growth capacity, and jobs at about 54-60% of capacity. The Action Alternative studies slightly higher growth than the No Action based on the greater emphasis on infill development and changes to land use categories described above.

Considering land use plans, growth capacity, permit activity, and other assumptions, the City has prepared estimates of growth by Transportation Analysis Zone (TAZ). The TAZ level land use estimates are block-oriented and do not conform to city limits; this allows the transportation model to analyze growth within land areas having common road access points regardless of political boundary.

Most services are driven by population growth, and more tailored estimates are prepared for population and housing. The SEIS and Capital Facility Plan assumptions are based on the TAZ level growth estimates, but adjust TAZ estimates based on geographic share of the city limit within the TAZ. For example, if 50% of a TAZ contains land within the city limits then 50% of the growth in the TAZ is considered within the city limits. This is a simple but more tailored estimate of growth planned in the city limits, and is used to identify impacts or service demands in the SEIS and Capital Facility Plan.

Most employment in the Yakima area is concentrated in the city limits, and TAZs closely resembling city limits are used for both the Transportation and SEIS assumptions.

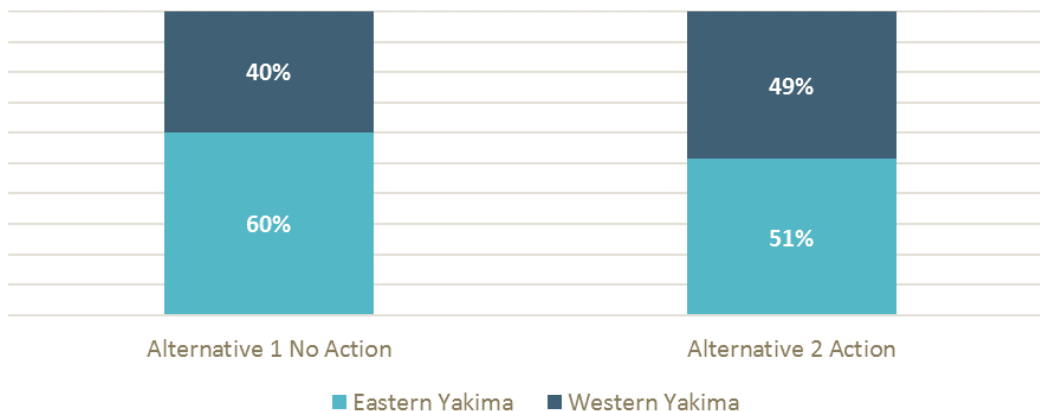
Exhibit 2-12. Alternative Growth Comparison



Source: City of Yakima, BERK Consulting 2016

The share of growth in western Yakima in relation to eastern Yakima differs among the alternatives. Using school district boundaries as a reference to compare growth shares, Alternative 1 No Action directs about 40% of planned growth to eastern Yakima and 60% in western Yakima. Alternative 2 Action assumes a nearly equal distribution of 50/50, which means the share of growth is more directed to eastern Yakima based on a focus of infill development in areas with infrastructure and services.

Exhibit 2-13. Share of Growth in Eastern and Western Yakima



Source: City of Yakima, 2016; BERK, 2017

Transportation and Capital Facilities Plans

The No Action Alternative would retain current transportation and capital facilities plans, whereas the Action Alternative would amend the plans to address the new land use plan and associated policies, including those promoting greater infill in downtown and elsewhere in the established areas of the city to take advantage of existing infrastructure and adaptively reuse sites to increase investment in housing and jobs.

Land Use Regulations

The No Action Alternative would retain the current Future Land Use Map and zoning regulations. The relationship between Future Land Use and implementing zoning would remain as a nearly 1:1 ratio. The No Action Alternative will retain the historic growth patterns in Yakima, predominantly in districts 6 and 7. The Action Alternative would reduce the Future Land Use designations from ten to seven and revise implementing zoning districts to be in-line with the most compatible designation. This new FLU/Zoning relationship is intended to promote increased infill development in all districts that is complimentary to the expected western growth in Districts 6 and 7.

Critical Areas Regulations

The No Action Alternative would retain current critical areas regulations. The Action Alternative would amend critical areas regulations based on a gap analysis identifying revisions to comply with the State's more recently revised critical area classification guidelines and newer scientific and professional studies such as those published by the Washington Department of Ecology in 2014. See also Appendix B for the gap analysis and proposed code revisions for consideration.

2.6 Summary of Alternatives

Exhibit 2-14 summarizes the key elements of the alternatives and how they vary by alternative. Generally, the No Action Alternative retains current plans and regulations, and has a little less growth planned, whereas the Action Alternative updates plans and regulations to meet the new Vision and GMA requirements, and focuses on more infill growth and a slightly higher citywide growth assumption.

Exhibit 2-14. Summary of Alternatives

Feature	No Action Alternative	Action Alternative
Comprehensive Plan Elements	Current Plan 2006 as annually amended	Update existing elements and add two optional elements
Comprehensive Plan Future Land Use Map	Current Plan 2006 as annually amended	Amend map for streamlining, conditions and trends, and public request purposes
Growth Assumptions SEIS	Population: 18,700 Housing: 6,850 Jobs: 14,783	Population: 23,211 Housing: 8,502 Jobs: 15,318
Transportation and Capital Investments	Current Capital Facility Plan including Budget and Transportation Improvement Program (TIP)	Update Capital Facility Plan to address new growth patterns and proposed policies promoting multi-modal transportation, which would be implemented by subsequent budgets and TIPs
Land Use Regulations	Maintain Current Regulations in Municipal Code	Amend regulations to address gap analysis
Critical Areas Regulations	Maintain Current Regulations in Municipal Code	Amend regulations to address gap analysis

2.7 Future Alternatives

The alternatives present a range of policy and growth options. Future alternatives that are consistent with the range of alternatives studied in this Draft SEIS and that are consistent with the plan objectives may be identified by decision-makers and would be considered in the Final SEIS.

2.8 Benefits and Disadvantages of Delaying Implementation of the Proposal

SEPA requires a discussion of the benefits and disadvantages of reserving, for some future time, the implementation of a proposal compared to possible approval at this time. In other words, the City must consider the possibility of foreclosing future options by implementing the proposal.

Adopting a Comprehensive Plan that includes new household and employment forecasts and updated goals and policies has several benefits:

- Provides for a diversified employment base and a greater range of housing choices.
- Prepares the City for the state-mandated 8-year Comprehensive Plan periodic review with household and employment forecasts for the planning period.

- Guides development and City resource allocations to meet forecast trends along with the community vision.
- Allows for growth to be directed in proximity to public services and utilities.

Delaying implementation of the proposal could delay natural environment impacts on vacant and underdeveloped lands. This potential growth may instead occur elsewhere in Yakima County, with unknown potential for related impacts at those other locations. Delaying implementation of the proposal would allow for growth to occur based on the current City Comprehensive Plan and zoning regulations, but would not prepare the City for new growth allocations, local needs such as more attached housing, and a new horizon year.

3.0 CONCISE ANALYSIS OF ALTERNATIVES

3.1 Natural Environment

Affected Environment

Water Quality

In the City of Yakima, impervious surfaces and commercial, residential, and agricultural uses can generate or convey a variety of pollutants, such as animal wastes, oils, fertilizers and herbicides, and metals, to Yakima's streams and lakes. These substances can damage groundwater, lakes, rivers, and streams; disrupt human use of these waters; or interfere with the behavior and reduce the survival of aquatic life. The loss of riparian vegetation and the associated shade that it provides has also had an impact on water temperatures. Six waterbodies in the City have been documented as exceeding standards for one or more water quality parameters. The City has a *Stormwater Management Program for City of Yakima*. The City also regulates construction and post-construction stormwater management under Chapters 7.82 and 7.83 of the Yakima Municipal Code. These chapters require use of the latest edition of Washington Department of Ecology's *Stormwater Management Manual for Eastern Washington*.

Frequently Flooded Areas

The Federal Emergency Management Agency (FEMA) has mapped the floodplains for the Yakima and Naches Rivers, as well as Wide Hollow, Bachelor, Spring, and Shaw Creeks (see Existing Conditions Report and Natural Environment Element for maps). As currently mapped, eight percent of the City is in a designated floodplain, mostly associated with the Yakima and Naches Rivers on the east and north sides of the City, which are bounded by a levee system. The City regulates development in or near these areas to ensure compatibility with surrounding properties, and to prevent an increase in risk to upstream or downstream neighbors or the natural functions of floodplains.

Fish and Wildlife Habitat Conservation Areas

Although largely urbanized, the City of Yakima still has habitat for fish and wildlife distributed in parks and other preserved open spaces, on agricultural lands, in underdeveloped or vacant spaces, and in and along 51.4 miles of stream corridors and several lakes (see Existing Conditions Report and Natural Environment Element for maps). Some of the habitats such as shrub-steppe, wetlands and riparian areas associated with rivers and streams are considered priority habitats defined by WDFW.

Several fish species are protected under the Endangered Species Act, and additional species are also state priority species. In addition to fish, other priority species in the city include a number of birds, such as bald eagle, wood duck, common loon, and great blue heron, many of which breed along the Yakima or Naches Rivers; sharp-tailed snake and ring-necked snake; and Townsend's ground squirrel.

Wetlands

The U.S. Fish and Wildlife Service has mapped and classified wetlands in the City as part of its National Wetland Inventory (see Existing Conditions Report and Natural Environment Element for maps); mapping may underrepresent the area of wetlands due to the date of inventories and the nature of the data that is not comprehensively collected by federal, state, or local agencies. Most of these wetlands are large complexes associated with the Yakima and Naches Rivers, although smaller wetlands are scattered throughout the City along the smaller streams and in other localized depressions.

Geologically Hazardous Areas

Geologically hazardous areas include areas of erosion hazard, landslide hazard, seismic hazard, and other hazard, including volcanic. In the City, three types of landslide hazards have been mapped: intermediate risk oversteepened slopes, high risk oversteepened slopes, and channel migration zones that are associated with shoreline waterbodies (see Existing Conditions Report and Natural Environment Element for maps). In Yakima, the high risk steep slopes are mainly isolated in the City's north and northwestern boundaries along West Powerhouse Road, Prospect Way, and Canyon Creek Road. Moderate risk steep slopes are found nearby near Scenic Drive and Englewood Crest Drive.

Critical Aquifer Recharge Areas

Critical aquifer recharge areas are lands where surface waters or pollutants can infiltrate into groundwater that is utilized for drinking water. The City's drinking water comes from the Naches River water treatment facility, but the backup supply comes from four municipal groundwater wells. To date, the City has identified five discrete areas that have high vulnerability to contamination (see Existing Conditions Report and Natural Environment Element for maps) that cover about 8 percent of the city limits. The Washington Department of Health maintains updated maps of wellhead protection zones around drinking water sources on its website.

Impacts

Impacts Common to All Alternatives

All alternatives would result in an increase in population and employment density in the city limits, with a corresponding increase in residential and commercial development. All alternatives would result in increased urbanization in the City, with a corresponding increase in impervious surfaces, reduction in vegetative cover, and changes in hydrology.

Earth and Water Quality: New development could occur in seismic and volcanic hazard areas, or within or abutting landslide or erosion hazard areas, and potentially be vulnerable to a greater risk of damage. Urban development on vacant or agricultural sites can lead to vegetation removal and increased impervious surfaces, and accordingly increase erosion and landslide hazards in susceptible areas.

Urban development in the form of buildings and paved parking and roads prevents rain from infiltrating into the soil, generating more rapid runoff from the land into nearby lakes and streams. However, in an urban environment, the effects of redevelopment can result in an improvement of water quality and increased infiltration as areas come into compliance with applicable stormwater quality standards.

Floodplains, Wetlands, and Fish and Wildlife Habitat: Increased development in floodplains could expose larger populations to flood hazards. New development within the floodplain could increase current flood elevations through the placement of fill and resulting reduction of flood storage. This could increase the area affected by floods, the height of the flood, and/or the time it takes for flood waters to recede. New development can result in increased impervious areas and worsen runoff, affecting water quality. Development of vacant or underdeveloped properties could lead to wetland or habitat loss, habitat fragmentation, and loss of habitat connectivity.

Critical Aquifer Recharge Areas: Increased development and impervious surfaces often result in less vegetation coverage that can naturally filter runoff. Critical aquifer recharge areas would be susceptible to groundwater contamination. Potential sources of contamination that can impact groundwater sources are leaks or releases of petroleum products, pesticides, fertilizers, herbicides, and septic systems.

Alternative 1: No Action

Geologic hazards are generally found in northern Yakima, where planned single-family development could disturb slopes and erosive soils. Critical area regulations would continue as adopted in 2016, and would help avoid development on unstable slopes.

Alternative 1 would have lesser housing, population, and employment growth than Alternative 2 as described in Chapter 2 Alternatives. However, about 60% of growth is anticipated on vacant and agricultural land in the western city limits (west of 40th Avenue) where there are smaller tributary streams and other habitat, and 40% in more developed areas of eastern Yakima where natural systems are more altered except along the rivers.

There would be less efficient development patterns under Alternative 1 with more single-purpose commercial areas, less mixed uses, and less multifamily housing; thus, while there may be less nominal growth, the less focused and less dense pattern could disturb more wetlands and fish and wildlife habitat than Alternative 2.

Growth could also occur in eastern Yakima along the Yakima and Naches Rivers where there are mapped floodplains and habitats that could be further disturbed. However, the Shoreline Master Program (SMP) would apply and would promote no-net-loss of shoreline ecological function; SMP shoreline designations allow less alteration in areas of high ecological function or areas that present health and safety impacts such as channel migration zones.

There would be no change in fish and wildlife or wetland regulations compared to Alternative 2, and while most impacts could be avoided or mitigated, the results could be less protective as regulations would not reflect the most recent guidance under best available science.

Growth could occur in high vulnerability aquifer areas or within wellhead protection areas. Development could increase impervious areas and reduce groundwater recharge. Critical area regulations would limit the types of uses that have a potential to result in groundwater contamination. No updates to the critical aquifer recharge area regulations would be made under Alternative 1, and results would be less consistent with best available science.

Alternative 2: Action

Impacts to the natural environment would be similar to Alternative 1, but potentially reduced in intensity if infill policies are more successful in adding more housing, population, and jobs in eastern Yakima in already developed areas such as downtown. About 51% of growth would occur in western Yakima and 49% in eastern Yakima, which demonstrates a greater infill focus.

Critical area regulations would be amended under Alternative 2 based on recent advances in best available science as well as to improve consistency with the SMP. Key changes include:

- In the Fish and Wildlife Habitat Conservation Areas (FWHCA) section, broaden the application to more than “hydrologically related critical areas” and update the stream typing and buffer system.
- In the Wetlands section, implement updates for consistency with the recently modified wetlands regulations in the SMP and recently issued science-based wetland guidance.
- In the Critical Aquifer Recharge Areas (CARA) section, extensively revise to fill the risk gap left by deferring regulation of this resource primarily to state and federal law.

Mitigation Measures

Incorporated Plan Features

- With Alternative 1, the current Natural Environment goals and policies would apply.
- Proposed Natural Environment goals and policies under Alternative 2 refine the City's approach to protection of the City's water resources and critical areas. Some highlighted goals include:
 - 9.1 Enhance and protect surface, storm, and groundwater quality and quantity.
 - 9.3 Manage floodplains to protect public health and safety, and to support ecological function.
 - 9.4 Preserve and enhance terrestrial and aquatic habitats to maintain viable populations of plants and animals.
 - 9.5 Manage use and development in geologically hazardous areas to protect public health and safety.

Applicable Regulations

- The City regulates frequently flooded areas, FWHCAs, wetlands, geologically hazardous areas, and CARAs under Chapter 15.27 of the Yakima Municipal Code, which was last updated in 2008.
- Yakima updated its SMP in 2015, which has been adopted as Title 17 of the Yakima Municipal Code. In the City of Yakima, the waterbodies subject to the SMP are the Yakima River, Naches River, Cowiche Creek, Willow Lake, Lake Aspen, and Rotary Lake.
- In 2015, the City continued to meet its obligations under the federal Clean Water Act by developing the *Stormwater Management Program for City of Yakima*. This local program will ensure that the City is compliant with its National Pollutant Discharge Elimination System (NPDES) Eastern Washington Phase II Municipal Stormwater Permit, and plans and implements performance measures that reduce pollutants in stormwater to the "maximum extent practicable."
- The City also regulates construction and post-construction stormwater management under Chapters 7.82 and 7.83 of the Yakima Municipal Code. These chapters require use of the latest edition of Washington Department of Ecology's *Stormwater Management Manual for Eastern Washington*.
- The City implements the International Building Code in Chapter 11.04. This code ensures buildings are developed in accordance with sound building requirements to prevent or minimize damage in seismic events. The code also allows the building official to require geotechnical analysis.

Other Potential Mitigation Measures

- Consistent with Alternative 2, the City could update its Critical Area Regulations, similar to the gap analysis requirements included in Appendix B. The changes would include more recent critical area classifications and protective standards particularly in the areas of fish and wildlife, wetlands, and aquifers.

Significant Unavoidable Adverse Impacts

All alternatives would result in increased urbanization in the City, with a corresponding increase in impervious surfaces, reduction in vegetative cover, and changes in hydrology.

Water Quality: Direct impacts to water quality such as increased impervious area and increased runoff would be reduced through the implementation of federal, state, and City regulations, including critical area and stormwater regulations. In already developed areas, implementation of newer stormwater regulations through the City's NPDES program and recent stormwater management regulations could improve water quality. Under both alternatives, such regulations would be protective, but Alternative 2 promotes a greater infill policy and could result in more areas redeveloping with improved water quality results over existing water quality.

Flood Hazard Areas: Under both alternatives there could be more development in western Yakima compared to already developed areas and potentially more alteration of floodplains westward, though more pronounced under Alternative 1 No Action. Implementation of the City's flood hazard regulations, SMP, and habitat enhancement and flood hazard mitigation projects would reduce impacts.

Wetlands and Plants and Animals: Future development would likely have some impact, direct or indirect, to local plants, animals, and habitats, including wetlands. However, most development is likely to occur within areas that have been previously disturbed by prior development or agricultural activity. Critical area and SMP regulations can help protect the functions and value of wetlands and other habitats. Alternative 1 No Action is anticipated to have a greater impact than Alternative 2 by allowing a lower density dispersed growth pattern in relatively less altered areas in western Yakima, and generally by continuing critical area regulations that do not incorporate more recent scientific information.

Earth: Development within geologically hazardous areas poses an increased risk to structures and the people living or working in them. Implementing building codes and critical areas regulations will reduce potential risks or allow for notification of potential hazard areas under either alternative.

Critical Aquifer Recharge Areas: Critical aquifer recharge areas would be susceptible to groundwater contamination under either alternative. While both alternatives would apply aquifer protection regulations, Alternative 2 would be more protective by filling identified gaps in regulations.

3.2 Air Quality

Affected Environment

The airshed for the City of Yakima, as defined by the Environmental Protection Agency (EPA), is the Yakima Basin. According to the Yakima Regional Clean Air Agency, "the air quality in Yakima County is fresh, clean and healthy most of the year, yet at certain times it faces challenges..." Although air quality currently meets federal and state air quality standards, that has not always been the case. After years of planning and analysis, coordination between Yakima County and incorporated cities, and implementation of targeted projects, the urban areas of Yakima County were removed from non-attainment status for carbon monoxide and particulate matter less than 10 microns in diameter (PM₁₀).

Impacts

Impacts Common to All Alternatives

Under both alternatives, current regulations and strategies would be implemented to maintain attainment status for Carbon Monoxide and PM₁₀ and taking necessary steps to stay in attainment status for PM_{2.5}.

Alternative 1: No Action

Alternative 1 promotes significant growth in western Yakima at current development rates. This means more single family homes and increases the potential for use of single-occupancy vehicles.

Alternative 2: Action

Alternative 2 promotes more infill and incentivizes higher density residential development. Developing an efficient transportation network, increasing transit use, and the conversion/redevelopment of older buildings commercial and industrial to more efficient heating/cooling systems will help maintain air quality standards. The development pattern in Alternative 2 would be more supportive of pedestrian and bicycle transit, which would have a positive impact on air quality.

Mitigation Measures

Incorporated Plan Features

Alternative 1 would continue current air quality goals and policies, while Alternative 2 would streamline and update them as follows:

GOAL 9.2. PROTECT AND ENHANCE AIR QUALITY.

Policies

- 9.2.1. Cooperate with local, State and federal air pollution control agencies and comply with applicable regulations that govern air pollutants during land development, construction and operation. (Update and expansion of Policy 10.3.1)
- 9.2.2 Develop a land use pattern and associated infrastructure that encourages trip reduction, minimizes vehicular emissions, and facilitates use of alternate modes of transportation. (Update of Policy 10.3.3)

Alternative 2 would promote an updated Land Use Plan that further promotes development patterns that reduce emissions as identified in policy 9.2.2.

See also discussion of Transportation Element policies and other mitigation to promote use of multi-modal travel.

Applicable Regulations

National Ambient Air Quality Standards, Environmental Protection Agency Standards, Washington State Department of Ecology Standards, and Yakima Regional Clean Air Agency laws and regulations will apply to both alternatives. Certain new development projects are required to undergo further review and permitting with the Yakima Regional Clean Air Agency.

Other Potential Mitigation Measures

No other measures proposed.

Significant Unavoidable Adverse Impacts

New development through 2040 can potentially impact air quality due to new industries, increased traffic congestion, and/or increased population density. Mitigation will be required at the project level, when appropriate.

3.3 Land Use Patterns

Affected Environment

Yakima's current land use pattern is dominated by single family uses, both in the number of properties (21,836) and the number of acres (5,274). Vacant/underdeveloped/open space is the second most prominent land use category, followed by agriculture and resource lands. Exhibit 3-1 describes the land use existing conditions with the number of properties and acres for each category of land use.

Exhibit 3-1. Land Use Categories, Properties and Acres

Land Use Grouping	Number of Properties	Acres
Agriculture and Resource	108	1,617
Government / Education	154	522
Industrial	49	187
Manufacturing	207	544
Multi-Family Residential	2,485	977
Parks, Recreation and Cultural	139	790
Professional Offices and Services	1,199	1,028
Retail Commercial	801	765
Single Family Residential	21,836	5,274
Transportation	675	801
Vacant/Underdeveloped/Open Space	1,639	1,857
TOTAL	29,292	14,363

Source: City of Yakima, 2016; Yakima County Assessor's Office, 2016

Similarly, the City's future land use is predominantly Low Density Residential, followed by Industrial and Medium Density Residential (see Impacts Analysis below). Overall, future land use includes 65% residential uses and 20% commercial and professional offices.

A Buildable Lands Analysis, completed in 2017, indicated that the City has sufficient capacity to accommodate future population (17,167 persons) and employment growth (8,556). (See Exhibit 2-12. Alternative Growth Comparison.) The City of Yakima has a total of 3,577 developable acres. This accounts for a total of 1,639 acres of land identified as vacant land, agricultural land, potential infill, and underutilized land. The analysis accounts for Critical Areas and the restrictions they impose on development.

Impacts

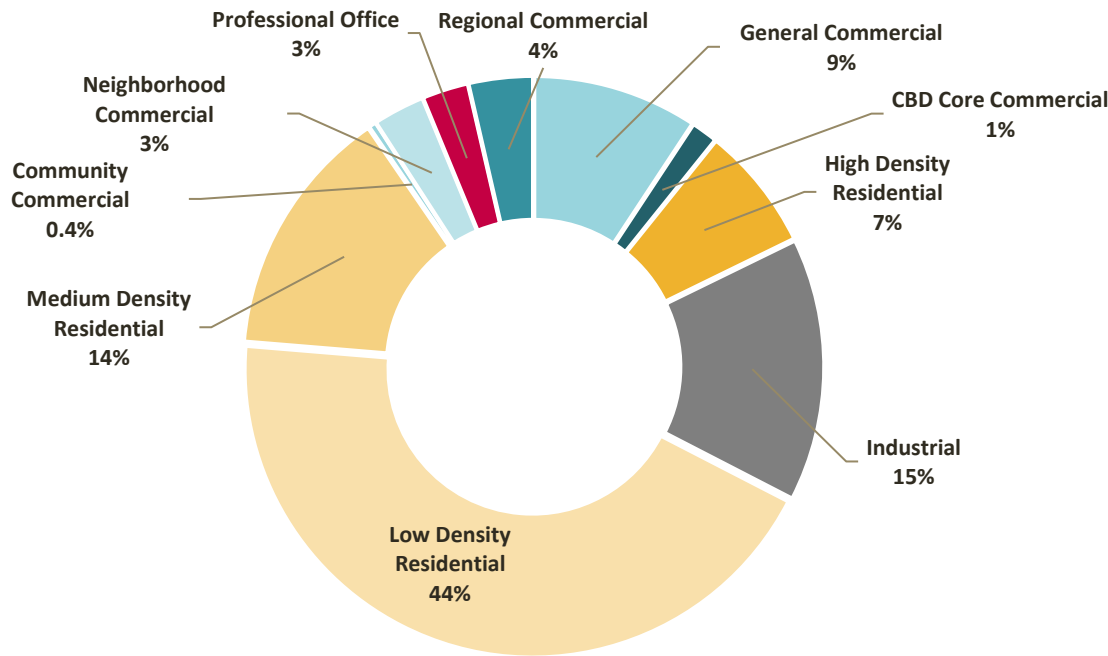
Impacts Common to All Alternatives

Both alternatives have capacity to accommodate the assigned 2040 population target of 17,167 persons and jobs target of 8,556. Both alternatives will increase in residential, commercial, and industrial development.

Alternative 1: No Action

Under Alternative 1 No Action, the focus of land use will continue to be single-purpose zones such as Low Density Residential.

Exhibit 3-2. Alternative 1 No Action Future Land Use Share



Source: City of Yakima, 2016; Yakima County Assessor’s Office, 2016; BERK, 2016

Alternative 1 continues past trends with the majority of new development occurring in western Yakima and along Major Arterials, with minimal infill development. Alternative 1 would result in a pattern of typical neighborhood design consistent with past trends, greater investment in infrastructure in greenfield areas compared with investments in developed areas of eastern Yakima; and less revitalization and investment in older neighborhoods where retention and improvement of affordable housing stock is supportive of housing goals

Alternative 2: Action

Alternative 2 Action combines several future land use designations to provide a streamlined rezoning process to help spur infill development.

Exhibit 3-3. Alternative 2 Action Future Land Use Share

Designation	Approximate Acreage	Percent of Total Acres
Low Density Residential	7,726	44%

Designation	Approximate Acreage	Percent of Total Acres
Mixed Residential	3,709	21%
Community Mixed Use	1,082	6%
Commercial Mixed Use	1,902	11%
Regional Commercial	562	3%
Central Business Core Commercial	266	1%
Industrial	2,509	14%
Total Gross Acres	17,756	100%

Alternative 2 has a larger focus on infill development on vacant and/or underutilized sites in the city limits. The potential for greater infill growth will require expanded or upgraded public services in already developed areas. This update will provide consistent goals and policies for consistent and compatible development throughout the City of Yakima.

Mitigation Measures

Incorporated Plan Features

See Land Use Element Chapter 1.4 for Goals and Policies that provide for a broad distribution of land use types with an emphasis on protection of neighborhoods and residential uses, and the promotion of design and land use controls to minimize incompatibilities between uses.

Applicable Regulations

The following regulations guide land use in Yakima:

- Title 14 – Subdivision Ordinance
- Title 15 – Yakima Urban Area Zoning Ordinance.
- Title 16 – Administration of Development Permit Regulations
- Chapter 6.88 – Environmental Policy

In addition, project-specific environmental review and processing will occur when future projects are submitted.

Other Potential Mitigation Measures

The City could adopt design and development standards consistent with updated Land Use Element policies.

Significant Unavoidable Adverse Impacts

As development occurs over time, existing land uses will convert to land uses consistent with the Comprehensive Plan and will meet growth targets. The implementation of the Alternatives could irreversibly commit vacant, agricultural, partially developed, and redeveloped properties to residential,

employment, and institutional uses. Alternative 2 Action would focus more growth in already developed areas and create a more efficient pattern in vacant and agricultural areas.

Some land use(s) may result in a potential for compatibility impacts due to type, scale, or activity levels. Such impacts can be mitigated by individual project review and appropriate SEPA mitigation measures and land use permit conditions; zoning standards addressing height and setbacks, and landscaping standards. Impacts could be reduced with Alternative 2 Action compared to Alternative 1 due to updated goals and policies that promote compatible design, and creation of future design and development standards consistent with policies.

3.4 Population, Housing, and Employment

Affected Environment

This section considers the current and forecasted population, housing, and employment under the City's current plan and zoning (No Action Alternative) and the alternative capacity for growth (Action Alternative). The City had 93,220 residents in the base year (2015), with 37,411 housing units and 47,578 jobs. Additional information about demographics, the housing supply, and employment sectors can be found in the City of Yakima Existing Conditions Report (BERK Consulting, 2017).

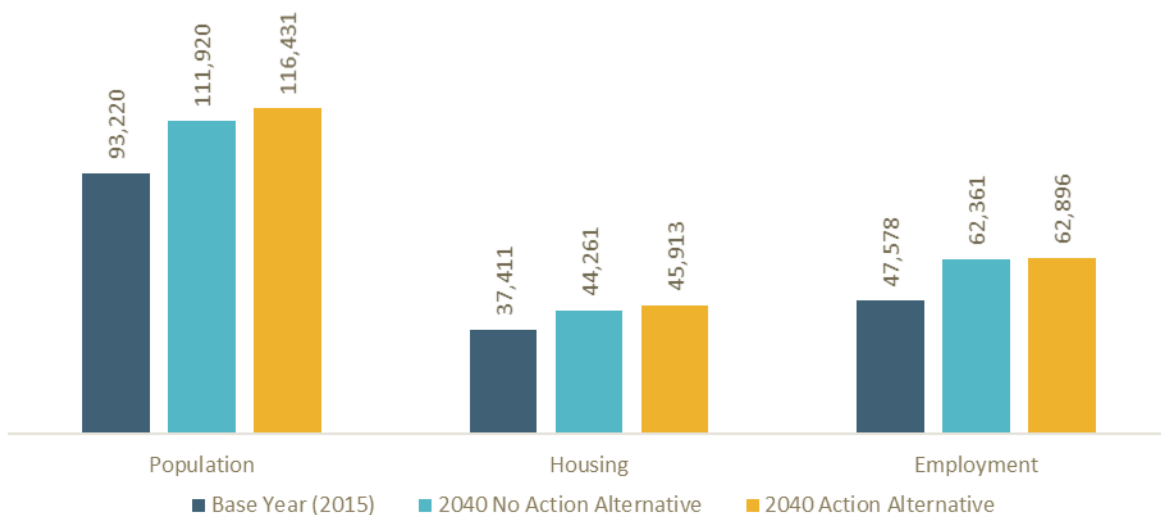
Impacts

Impacts Common to All Alternatives

Under both alternatives, new development would occur in the City, with different areas of focus for development depending on the Alternative. New development in Yakima's western residential areas would occur in both alternatives. Both alternatives also anticipate job growth in the Downtown area, as well as development on the Mill Site that would increase the employment activity in that area of the City. Neither Alternative would exceed the City's current land capacity, although the Action Alternative would anticipate zoning changes that would redirect some of the residential and jobs development towards mixed use and multifamily centers in and around Downtown and away from low density single-family development.

Exhibit 3-4 shows the population, housing, and employment in Yakima during the 2015 base year, in addition to the 2040 growth projections for both the No Action and Action Alternatives. Under both alternatives, capacity for growth is not exceeded. The No Action Alternative would expect about 20% growth in the population by 2040, while the Action Alternative would expect about 25% growth in the population by 2040. Housing and employment growth would vary less between the two alternatives, with 18-23% housing growth expected and 31-32% employment growth projected.

Exhibit 3-4. Population, Housing, and Employment Affected Environment (2015 and 2040)



	Base Year (2015)	No Action Alternative		Action Alternative	
		2040	Capacity	2040	Capacity
Population	93,220	111,920	135,584	116,431	138,026
Housing	37,411	44,261	51,157	45,913	52,052
Employment	47,578	67,721	66,056	62,896	71,365

Source: City of Yakima, 2016; OFM, 2015; U.S. Census Bureau, ACS Five-Year Estimates, 2010 – 2014; BERK Consulting, 2017

Alternative 1: No Action

Alternative 1, the No Action Alternative, anticipates population, housing, and employment growth in Yakima city limits. Population and housing growth would be focused on the undeveloped areas on the west side of the City. The No Action Alternative would introduce around 18,700 new residents, 6,850 new dwelling units, and 14,783 new employees in Yakima by 2040 (see Exhibit 3-4).

Alternative 2: Action

Alternative 2, the Action Alternative, anticipates infill development of population, housing, and employment in the Downtown area and areas surrounding Downtown. Employment growth would include new development on the Mill Site as the underutilized land adjacent to Downtown develops for employment use. Development on the west side of the city would occur but would in balance with the development on the east side. Compared to the No Action Alternative, Alternative 2 would implement zoning that would encourage more infill development downtown through the use of mixed use and Mixed Residential multifamily development types along arterials and at crossroads.

The Action Alternative would introduce around 23,211 new residents, 8,502 new dwelling units, and 15,318 new employees in Yakima by 2040 (see Exhibit 3-4).

Mitigation Measures

Incorporated Plan Features

- The City of Yakima currently has the available land capacity and regulations in place to absorb projected future growth for housing and employment for both the Action and No Action Alternatives. As new residents and jobs come to the City, it is expected that private development will respond to the demand for new housing, office space, and industrial space.
- In addition, infill development provides the opportunity, under both alternatives, for Downtown Yakima and the surrounding area to become more accessible and more affordable through mixed use and pedestrian-oriented development patterns. Alternative 2 further supports this opportunity with infill policies and a modified land use plan and economic development strategies. Assuming the market allows for redevelopment, Downtown's presence of vacant and older buildings creates conditions ripe for redevelopment.
- The Action Alternative would incorporate changes to land use and design regulations that would support the infill goals of the City. The City recognizes a need to focus on corridors and areas that may receive higher intensity development, specifically those outside of the denser Downtown area. City policies identified in the Plans and Policies section and the City's Future Land Use map (see Exhibit 2-9. Action Alternative Future Land Use Map) will help Yakima mitigate impacts of population, employment, and housing growth.

Applicable Regulations

- Zoning regulations help further the City's policies on location, pattern, and character of employment and residential growth. The City's zoning code implements the Comprehensive Plan policies for housing density, type, and design. These mechanisms would apply for both Alternative 1 and Alternative 2.

Other Potential Mitigation Measures

- Housing affordability, as well as the quality and age of the housing stock is a concern for both alternatives and the City should utilize public funds and regulatory tools to continue to address these impacts. The Districts with the most need should be prioritized for implementation of these tools to alleviate the impacts of growth. Federal, State, and local funding sources can be pursued to help target issues related to housing affordability, either through assistance or subsidies.
- Capital planning and level of service standards, incorporated into the Comprehensive Plan, help mitigate against the increased pressure that service departments and the City's transportation network will experience. Service standards will help guide the departments on increased service needs as the city grows, and capital planning will help ensure that the right projects are prioritized. In addition, a growing tax base will help facilitate this capital planning process.

Significant Unavoidable Adverse Impacts

Population and employment in Yakima would increase under both alternatives. Growth in residents and workers could result in secondary impacts on the natural and built environment, as well as significant impacts on the demand for public services. Population and the housing units would increase under both alternatives, with more impacts on services on the west side of the City anticipated under the No Action Alternative than the Action Alternative. However, more intense housing and employment growth in the

Downtown area, through infill, under the Action Alternative, would put pressure on service capacity in certain areas of the City.

Under both alternatives, there will be an increased need for infrastructure investment in roads, transit, utilities, parks, and other public facilities to maintain existing levels of service for both residents and employers. These impacts are present for both alternatives being pursued.

Yakima will face added affordability challenges due to increasing demands on the housing stock and an economy that has not supported new residential or employment development in recent years.

With mitigation, the City can anticipate the location and development pattern of structures accommodating the new housing and employment, as well as infrastructure and capital facilities that will keep pace with the growth.

3.5 Plans and Policies

Affected Environment

The Washington State Growth Management Act (GMA) contains 13 planning goals (RCW 36.70A.020) that guide local jurisdictions as they determine their vision for the future, develop plans, write or amend regulations, and implement programs and budgets that help realize the community's vision. The 13 goals are summarized below:

- Guide growth in urban areas
- Encourage an efficient multi-modal transportation system
- Promote economic development
- Ensure timely and fair permit procedures
- Retain and enhance open space, protect habitat, and develop parks and recreation facilities
- Ensure adequate public facilities and services
- Foster citizen participation
- Reduce sprawl
- Encourage a variety of housing types including affordable housing
- Recognize property rights
- Protect agricultural, forest and mineral lands
- Protect the environment
- Encourage historic preservation

A fourteenth goal of GMA consists of the goals and policies of the Shoreline Management Act (SMA) as set forth in RCW 90.58.020.

In addition to consistency with GMA goals, the City of Yakima's Comprehensive Plan, along with other jurisdictions' plans in the County are to be guided by the Yakima County-wide Planning Policy (CWPP) established in accordance with the GMA. The 2003 CWPPs create a framework that provides an overall direction for development of jurisdictional comprehensive plans. CWPP topics include:

- The designation of urban growth areas;
- Promotion of contiguous and orderly development and provision of urban services to such development;
- The siting of public capital facilities of a countywide or statewide nature;
- Countywide transportation facilities and strategies;

- The need for affordable housing for all segments of the population;
- Joint city and county planning within urban growth areas;
- County-wide economic development and employment;
- Analysis of fiscal impact; and
- Coordination with special purpose districts, adjacent counties and state, tribal and federal governments.

In addition to consistency with state and regional policies, the Comprehensive Plan should be consistent with the Vision Statement of the Comprehensive Plan as a measure of overall consistency with the land use plan and policies. The current Alternative 1 No Action vision statement reads in part: *The vision of Yakima as a vital, prosperous community with a healthy economy and quality of life for all citizens depends upon cooperation and common goals.*

The City's proposed Vision Statement associated with Alternative 2 Action is the primary objective for the Comprehensive Plan Update and describes a diverse and inclusive community, providing opportunities for affordable housing and family wage jobs, enhancement of the natural environment and recreation, and investing in neighborhoods, infrastructure, and transportation. The full statement is listed in is summarized in Section 2.5 of this SEIS.

Impacts

Impacts Common to All Alternatives

Growth Management Act

Each GMA goal is listed below together with a discussion of each alternative's consistency. Generally, both alternatives meet GMA goals, with Alternative 2 having greater consistency with GMA goals regarding:

- Sprawl reduction and housing affordability and variety due to the promotion of infill and mixed use designation changes;
- Transportation with a transportation plan update and emphasis on multi-modal improvements;
- Public facilities and services with a capital facility plan update aligning levels of service and revenues and projects; and
- Open space and recreation goals with the proposed critical area ordinance amendments and parks plan update.

Exhibit 3-5. Consistency with Growth Management Act Goals

GMA Goal	Discussion
(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.	Both alternatives focus growth in the city limit and provide for coordinated planning in the UGA. No change to UGA boundaries are proposed.
(2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.	Both alternatives provide for urban densities. However, Alternative 2 provides for a greater focus on infill development and more efficient land use patterns such as Mixed Residential and a variety of mixed commercial-residential areas.

GMA Goal	Discussion
(3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.	Alternative 1 would maintain the current Transportation Plan while Alternative 2 updates the plan and provides for greater multimodal capital proposals to promote pedestrian, bicycle, and transit modes of travel as well as address road congestion, airport needs, and freight routes, to align with YVCOG regional transportation planning. Both alternatives provide sufficient housing capacity to meet expected population growth. Alternative 2 provides for greater housing variety and opportunities for affordable renter and owner housing with the Mixed Residential and mixed use designations. Alternative 2 Housing Element updates policies and addresses recent housing trends including smaller household sizes, increases in retirement population, opportunities for affordable ownership housing (e.g. townhomes), and rental housing gaps. A greater focus on infill under Alternative 2 will allow for greater investment in existing neighborhoods and housing rehabilitation and retention.
(4) Housing. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.	
(5) Economic development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.	Both alternatives encourage economic development. Alternative 2 updates the Economic Development Element and is based on a new Economic Development strategy, and will help advance the vision for Downtown revitalization, a diverse employment base, and attracting and family-wage jobs.
(6) Property rights. Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.	Both alternatives provide for a reasonable use of private property. City regulations provide for development standards to promote fair and consistent regulation of property; avenues to request variances and to grandfather existing legal uses remain.
(7) Permits. Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.	Both alternatives would retain regulatory procedures that evaluate permits consistently with permit procedures and criteria. Alternative 2 includes policies to adjust land use designations to create a more predictable land use pattern.
(8) Natural resource industries. Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands and productive agricultural lands, and discourage incompatible uses.	Both alternatives would retain current UGA boundaries and would not alter designated resource lands of long-term commercial significance. While agricultural activities are present in UGA and city territory, they were not designated as lands of long-term commercial significance and are anticipated to convert to urban uses over the planning period 2017-2040.
(9) Open space and recreation. Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase	Both alternatives include parks plans. Alternative 2 updates the Parks and Recreation Element and associated functional plan to address more recent park needs and the City's equity analysis. Alternative 2 also provides for critical areas regulations updates

GMA Goal	Discussion
access to natural resource lands and water, and develop parks and recreation facilities.	that are more current with best available science to conserve habitat.
(10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.	Alternatives 1 and 2 allow development that would be subject to federal, state, and local air quality laws and rules as described in Section 3.2. Alternative 2 promotes a land use pattern focusing on infill, more efficient densities, and opportunities for multi-modal travel, which could further advance the protection of air quality. Under both alternatives, the City would implement stormwater regulations designed to protect water quality. Alternative 2 has a greater focus on infill and a greater potential to improve water quality with redevelopment as described in Section 3.1. The current plan was developed with public outreach in 2006 and 2012 with annual amendments also subject to public hearings and deliberation. Alternative 2 Action has been drafted with: ▪ A visioning workshop and survey; ▪ A public meeting to evaluate a draft vision and land use plan amendment concepts; ▪ Advertisement of opportunities to apply for citizen amendment requests regarding the land use plan, and Planning Commission evaluation of them; and ▪ A 21-day SEIS Scoping notice to submit comments on the alternatives and scope of the document. See the Plan Foundation and Vision chapter of the Comprehensive Plan and SEIS Section 2.4.
(11) Citizen participation and coordination. Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.	
(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.	Both alternatives address capital facilities. Alternative 2 provides a more comprehensive evaluation of public facilities and services aligning levels of service and revenues and projects through the capital facility plan update.
(13) Historic preservation. Identify and encourage the preservation of lands, sites, and structures, that have historical or archaeological significance.	Under Alternative 1 No Action, the City would continue a historic preservation commission and preservation ordinance per Chapter 11.62 "Historic Preservation Ordinance for Special Valuation." Alternative 2 Action would continue the commission and ordinance but establish a new Historic Preservation Element and Plan to further identify eligible properties and incentivize historic preservation.

Yakima County Countywide Planning Policies

Generally, both alternatives are consistent with CWPPs. Both alternatives promote development within the existing UGA, accommodate growth targets, address essential public facilities, and promote housing and economic development. Alternative 2 would further promote CWPPs by:

- Updating housing inventories and strategies to increase housing affordability and variety, such as by the promotion of infill and mixed use designation changes;
- Update economic development strategies based on newer trends and outreach to stakeholders;
- Updating transportation policies and strategies based on a transportation plan update and emphasis on multi-modal improvements;

- Aligning public facilities levels of service and revenues and projects in a capital facility plan update.

Updates to joint planning or interlocal agreements may be needed with the City and County Comprehensive Plan Updates.

A summary of CWPPs is presented below as stated in the 2003 document. A discussion of each alternative's consistency follows each CWPP summary.

Urban Growth Areas (UGAs): CWPPs regarding UGAs are concerned with “encouraging growth in UGAs and discouraging urban growth outside of these areas. Also, development within UGAs should occur in a logical fashion outward from the edge of developed land in conjunction with service and infrastructure provision.” The policies also indicate sufficient UGA territory should be included to accommodate a minimum 20-year population forecast. UGAs are also to contain greenbelts and open space. Infill development including higher density zoning and small lot sizes are to be encouraged.

Discussion: Both alternatives focus growth in the city limits and provide for coordinated planning in the UGA. No change to UGA boundaries are proposed. Both alternatives can accommodate allocated growth targets for population and jobs. Alternative 2 would provide for a more efficient land use pattern with Mixed Residential and a series of mixed use designations. Alternative also promotes infill development in already developed areas, more consistent with CWPPs that promote a logical progression of development from the edge of developed areas outward.

Contiguous and orderly development and the provision of services within UGAs: The intent of the CWPPs is to “minimize differences in urban development regulations and standards between the County and the cities and to facilitate the economical provision of urban services to development.”

Discussion: Both alternatives are designed to promote urban densities supported by infrastructure without changes to UGA boundaries. However, Alternative 2 provides for a greater focus on infill development and updates transportation and infrastructure plans. The City's focus in the plan update is the city limits while the County is planning for the UGA; both agencies are reviewing each other's' plans through regular communication and comment periods. Intergovernmental agreements may need update based on both jurisdictions' plan updates.

Siting public facilities of a county-wide or statewide nature: The CWPPs acknowledge that although essential public capital facilities such as airports, landfills, jails, and similar examples “are necessary for the common good, they are seldom welcome into a community or neighborhood. Recognizing that public facilities of a statewide or countywide nature are an essential part of our society, policies for their siting and construction are necessary to ensure a reasonable approval process. Each jurisdiction will utilize an appropriate public process for siting essential public facilities, as outlined in their respective comprehensive plans, policies or regulations.”

Discussion: Both Alternatives include policies addressing essential public facilities. A refreshment of these policies in the Draft Land Use Element under Alternative 2 Action.

Transportation Facilities and Strategies: The CWPPs promote “the development of an integrated multi-modal transportation system within Yakima County.” The CWPPs acknowledge that in developing transportation elements, specific linkages will be undertaken to integrate the local and regional plans such as the regional transportation plan developed by the Yakima Valley Conference of Governments.

Discussion: Alternative 1 would maintain the current Transportation Plan while Alternative 2 updates the plan and provides for greater multimodal capital proposals to promote pedestrian, bicycle, and

transit modes of travel as well as address road congestion, airport needs, and freight routes, to align with YVCOG regional transportation planning.

Affordable Housing: The CWPPs note that “the marketplace will guarantee adequate housing for those in the upper economic brackets, but that some combination of appropriately zoned land, regulatory incentives, financial subsidies, and innovative planning techniques will be necessary to make adequate provisions for the needs of middle and lower income persons.” The CWPPs for affordable housing are intended to “provide a common ground and some universally acceptable parameters to help guide decision-makers through the complex topic of affordable housing.” Policies guide the development of an inventory and analysis to meet 20-year growth forecasts, strategies to provide a mix of housing types and costs, preservation and rehabilitation of existing neighborhoods, compatible housing design, diverse housing types such as for special needs populations, promotion of first-time homebuyer housing, affordable housing incentives, and monitoring housing plans.

Discussion: Both alternatives provide sufficient housing capacity to meet expected population growth. Alternative 2 provides for greater housing variety and opportunities for affordable renter and owner housing with the Mixed Residential and mixed use designations. Alternative 2 Housing Element updates policies and addresses recent housing trends including smaller household sizes, increases in retirement population, opportunities for affordable ownership housing (e.g. townhomes), and providing more opportunities for rental housing to fill gaps between household incomes and available units. A greater focus on infill under Alternative 2 will allow for greater investment in existing neighborhoods and housing rehabilitation and retention.

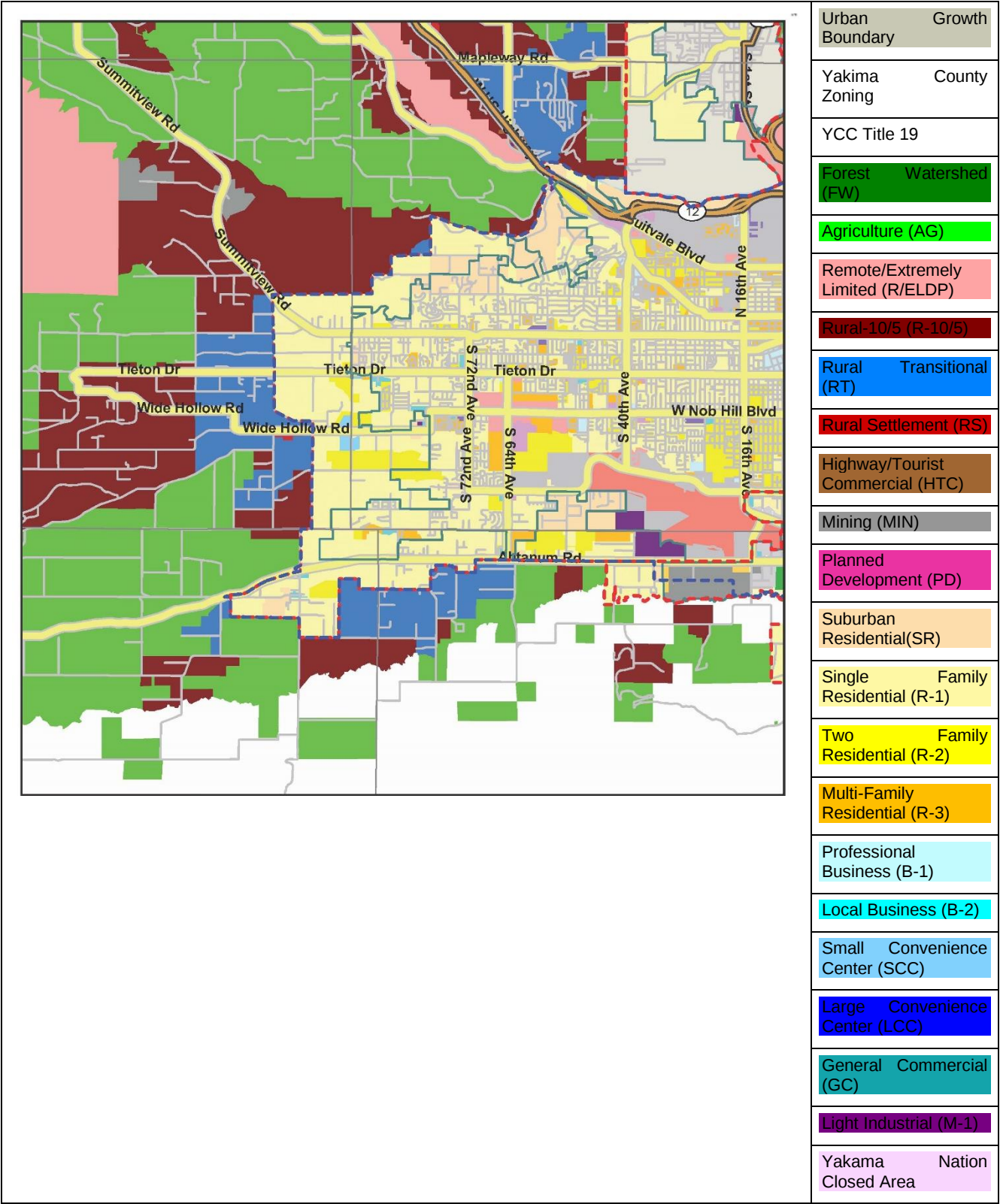
Joint Planning: The CWPPs describe that: “Because the UGA defines where the city is financially capable of providing urban services and may ultimately annex, land use decisions need to respect the desires of the community. Agreement on land use planning within the UGA is as important as designating the boundary itself.” The policies relate to:

- Coordinated planning for land use, capital facilities and infrastructure within urban growth areas;
- The process for comprehensive plan amendments, zone changes and development review and approval within UGAs; and
- The establishment of common and consistent development and construction standards.

Discussion: The City has provided for mutual consultation on proposed comprehensive land use plan policies for lands within urban growth areas with the County and special districts by inviting staff to early coordination meetings such as regarding capital facilities and providing notice of public meetings such as the visioning events and Planning Commission meetings.

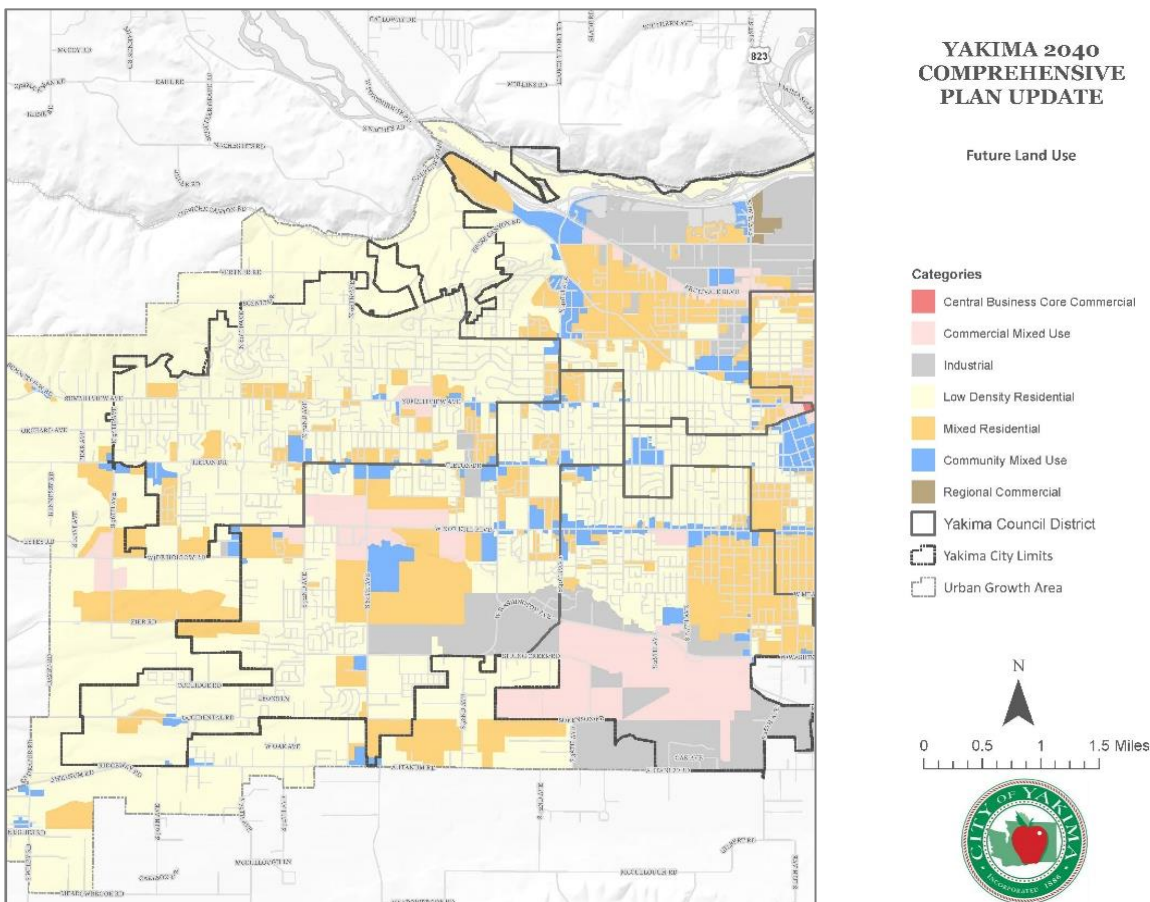
Alternative 1 No Action provides a 1:1 match in land use and zoning with the County’s plan and zoning within the unified Yakima Urban Area Plan. The City’s proposed land use plan under Alternative 2 includes a similar growth pattern of residential and commercial uses with similar boundaries as the County’s land use plan. However, it consolidates land use categories and would allow for more zones underneath the designations (see Exhibit 2-6). For example, Mixed Residential allows for both R-2 and R-3 zones with moderate and higher densities. Therefore, some rezones could occur from R-2 to R-3 or vice versa over time.

Exhibit 3-6. Western Yakima UGA Land Use Designations



Source: Yakima County GIS, 2017

Exhibit 3-7. City of Yakima Proposed Land Use Plan – Western Yakima UGA



Source: City of Yakima, 2016

Under Alternative 2, given a desire for common and consistent development standards, the County's land use plan, zoning, and existing City-County interlocal agreements may need update as described above to reflect the City's desired consolidation of land use categories and policies (and future code amendments) addressing implementing zoning and design standards.

Economic Development: The CWPPs describe that "Countywide economic development policies should promote a regional economic development program consistent with local community preferences. The rural and urban economies within the county are inextricably connected, and economic development opportunities should strengthen linkages between population centers and outlying areas." The CWPPs "policies relate to a general strategy to help ensure future economic vitality, broaden employment opportunities to meet the needs of projected future growth while maintaining a high-quality environment."

Discussion: Both alternatives encourage economic development. Alternative 2 updates the Economic Development Element and is based on a new Economic Development strategy, and will help advance the vision for Downtown revitalization, a diverse employment base, and attracting and family-wage jobs. As the center of an agricultural economy many jobs in the City's industrial and manufacturing areas will still be associated with agricultural processing and other activities.

Fiscal Impact: CWPPs promote the “provision of cost-effective urban infrastructure.” Policies address the preparation of a capital facilities plan, coordinating with capital facilities providers, consideration of impact fees, and annexation transition agreements from county to city.

Discussion: Both alternatives address capital facilities. Alternative 2 provides a more comprehensive evaluation of public facilities and services aligning levels of service and revenues and projects through the capital facility plan update.

Coordination with special purpose districts, adjacent counties and state, tribal and federal governments: CWPPs relate to coordination among jurisdictions including the county, cities, special purpose districts, adjacent counties, state agencies, Yakama Nation and the federal government.

Discussion: See discussion under Joint Planning.

Yakima Comprehensive Plan

Both alternatives address a community vision that guides the preparation of the land use plan and individual element policies.

The current Alternative 1 No Action vision statement reads:

The vision of Yakima as a vital, prosperous community with a healthy economy and quality of life for all citizens depends upon cooperation and common goals. This plan identifies the strategies and challenges to guide future development in the Yakima Urban Growth Area. This plan identifies current trends, choices and preferred alternatives to achieve our common vision. This vision will serve as a foundation for all subsequent planning efforts in the Yakima urban area.

Discussion: The current vision reflected public engagement and trends through 2006. Prosperity and quality of life are continuing goals for the community. However, the diversity of the community, and a more complete vision regarding housing, transportation, parks, and other topics are not as well represented as the proposed vision below. The Alternative 1 No Action elements and policies, while still relevant in many cases would not be updated to reflect more current trends and community needs.

The Proposed Vision associated with Alternative 2 Comprehensive Plan Update reads:

A Vision for Yakima’s Future

The City of Yakima is the “Heart of Central Washington,” bounded by the Yakima River and the railroad, serving as a center of the Yakima Valley’s agricultural prosperity for over 125 years, and growing into a dynamic cultural, recreational, and economic hub of the region.

We celebrate our community of diverse cultures and offer opportunities for our public to participate in community life. We have created an inclusive city where all feel welcomed and safe. We work, live, and play side by side. Yakima has created a flourishing and diverse economy attracting and retaining businesses with living wage jobs for all our people. We preserve the character of our historic Downtown, residential neighborhoods, and commercial centers. We encourage well-designed infill and new development, quality public services, and infrastructure investments. Our residents have access to a high-quality education, affordable housing, and healthy living. We enhance our natural and recreation

spaces. We connect our people and neighborhoods offering safe and reliable mobility options including walking, biking, transit, and cars.

Discussion: Alternative 2 Action updates and elaborates upon the community vision reflecting the changing community needs for housing, employment, and services in a manner promoting infill development and reflecting the community's diversity and neighborhood character.

Mitigation Measures

Incorporated Plan Features

- Both alternatives address GMA and CWPP goals. Alternative 2 updates the Comprehensive Plan for greater support of goals on efficient development patterns, and updated levels of service and transportation and capital plans.

Applicable Regulations and Commitments

- The Countywide Planning Policies, 2003, guide each jurisdiction's plans and ensure general consistency between City and County Plans.

Other Potential Mitigation Measures

- While still consistent in overall pattern and boundaries, the County's land use plan and existing City-County interlocal agreements may need update under Alternative 2 to reflect the City's desired consolidation of land use categories and policies. Likewise, there would need to be an alignment between the County's and City's implementing zoning and design standards.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts have been identified. There is consistency with GMA goals, Countywide Planning Policies (CWPPs) and the City's vision statement. Alternative 2 would further support these documents given a greater attention to efficient land use patterns and infill development as well as updated transportation and capital facility plans. Both City and County land use plans are consistent in pattern and location, but there will need to be amendments of interlocal agreements and potentially plans and regulations to remain consistent with CWPPs that call for joint planning and common standards.

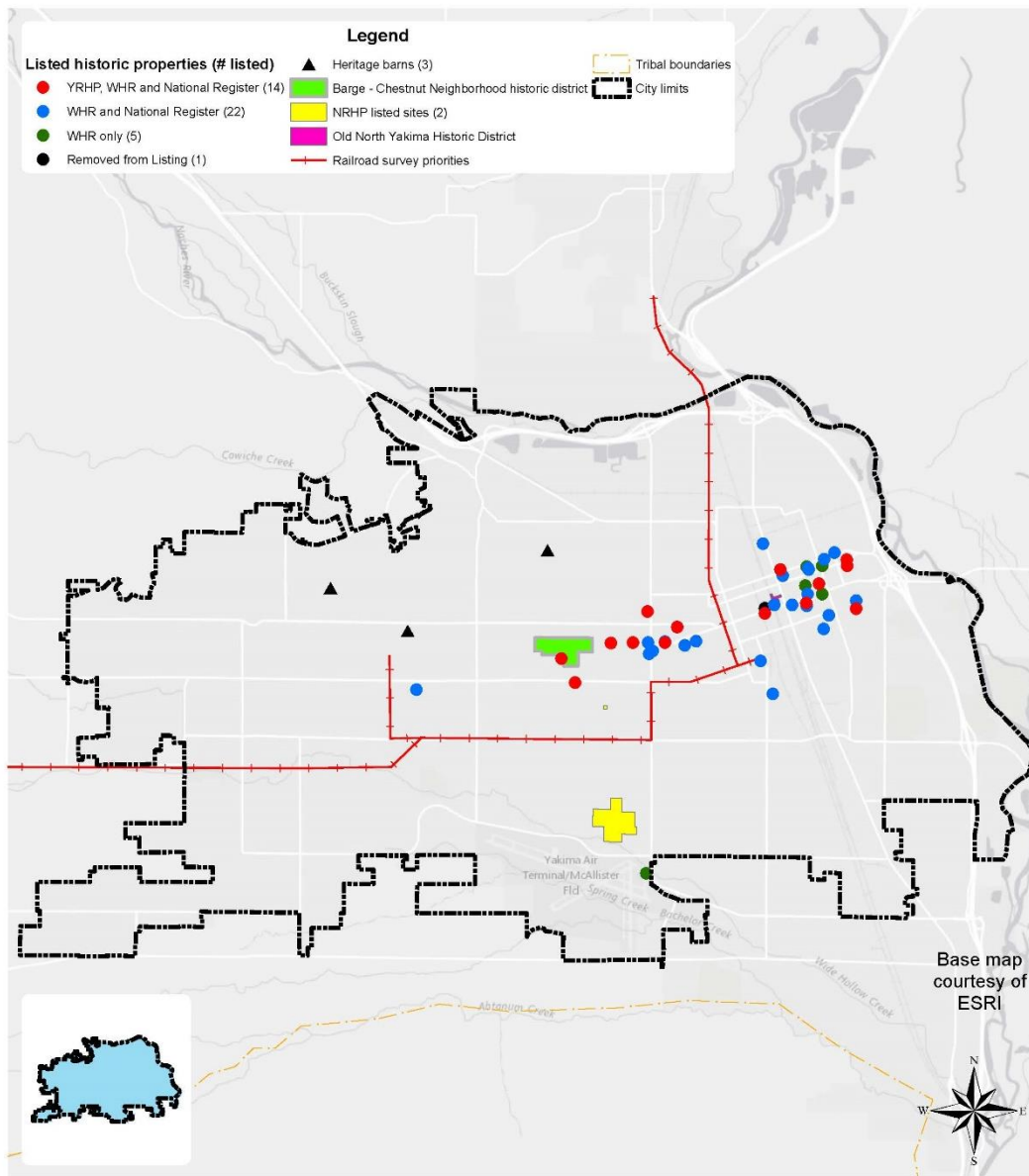
3.6 Cultural Resources

Affected Environment

Yakima began as a Euro-American agricultural community on lands historically used by Native Americans. The Yakama Nation is most closely associated with this city, both because of the shared name and the adjacent tribal reservation (created in 1855). The Yakamas and other regional tribes have a long history of making seasonal camps, fishing, gathering and hunting in the area. Evidence of Native American presence prior to Euro-American arrival is generally restricted to archaeological sites.

Exhibit presents the Washington Department of Archaeology and Historic Preservation (DAHP) predictive model regarding cultural resources. Areas along the Yakima and Naches rivers and other waterbodies are particular areas of sensitivity regarding the potential presence of archaeological resources.

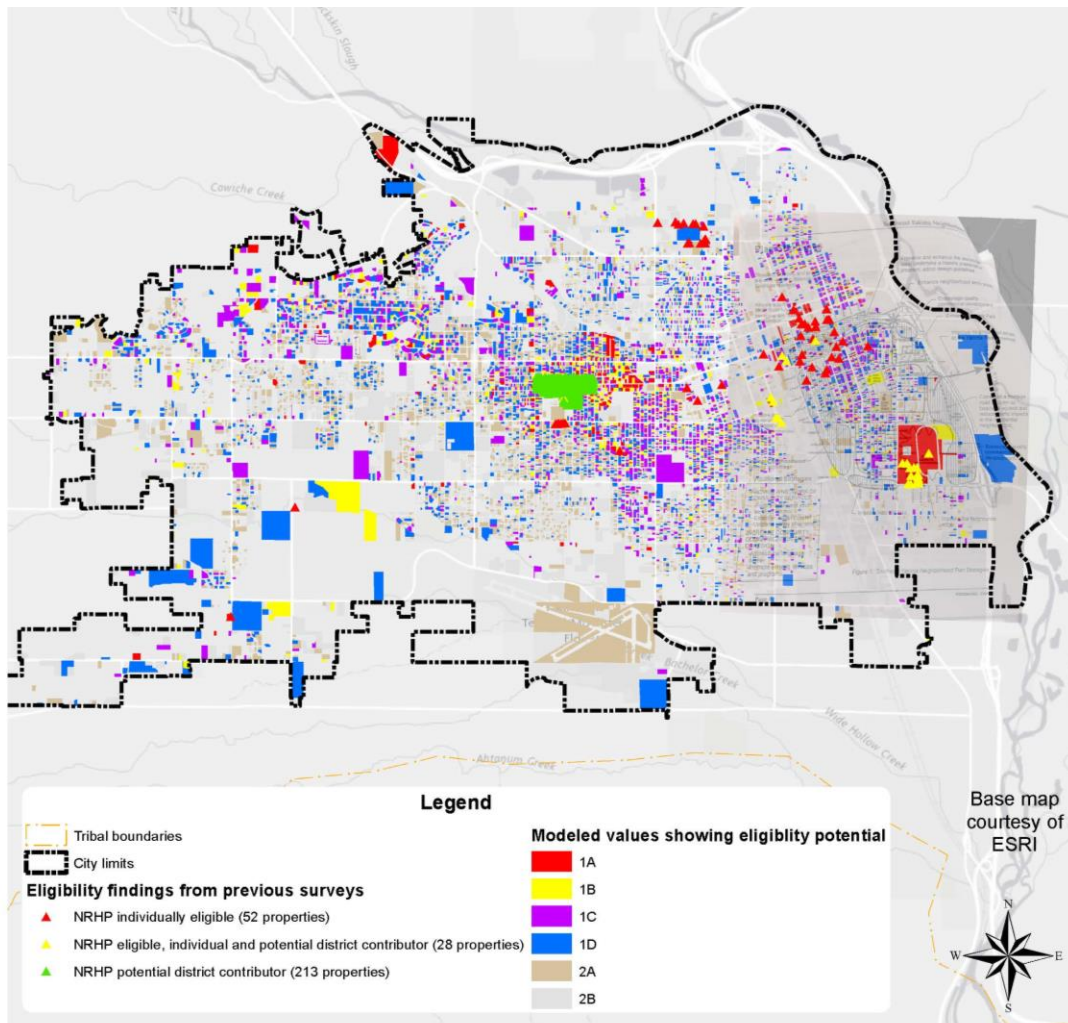
Exhibit 3-9. Properties Listed in Registers



Source: Artifacts Consulting Inc. 2016

One of the responsibilities for a certified local government is to survey historic properties within the community. Properties change over time, necessitating periodic updates to previously inventoried properties. Additionally, every year, more properties become 50 years old, the standard minimum age for properties to reach to be considered historic, as established by the National Park Service. Potentially eligible properties based on a predictive model are shown in Exhibit 3-10.

Exhibit 3-10. Potentially Eligible Properties



Legend

- 1A: potentially individually eligible to the National Register of Historic Places
- 1B: potentially contributing to a National Register of Historic Places eligible historic district
- 1C: potentially eligible for local designation, but not to the National Register
- 1D: potentially contributing to a local historic district
- 2A: not eligible, with conditions
- 2B: not eligible

Source: Artifacts Consulting Inc. 2016

As highlighted on the map, there are 11 properties determined eligible by the Department of Archaeology and Historic Preservation (DAHP) for listing to the NRHP, but are not currently listed in any historic register.

Impacts

Impacts Common to All Alternatives

Under both alternatives, potentially eligible properties for historic register listing identified in Exhibit 3-10 could be altered or redeveloped and no longer be eligible.

Archaeological resources may be disturbed due to development activities, particularly in areas of high and very high risk identified in Exhibit 3-8, though the risk reduced with City regulations regarding identification, avoidance, and mitigation (YMC 17.05.010).

Alternative 1: No Action

Impacts would be consistent with Impacts Common to All Alternatives. Under Alternative 1 No Action, current historic preservation policies and ordinances would be retained to reduce potential impacts to historic sites (Chapter 11.62 YMC) and archaeological resources (YMC 17.05.010). These include the local historic register and associated tax incentives as well as requirements for surveys in areas of high and very high risk of archaeological resources as noted on Exhibit 3-8. Stop work orders, evaluations, and mitigation are possible actions should potential archaeological resources be uncovered.

Alternative 2: Action

Impacts would be consistent with Impacts Common to All Alternatives and Alternative 1 No Action. Alternative 2 Action promotes additional infill development and there could be more pressure for redevelopment in areas of historic character. However, Alternative 2 Action also proposes the City's first Historic Preservation Element and Plan with additional policies and strategies to promote the protection of historic and cultural resources.

Mitigation Measures

Incorporated Plan Features

- Alternative 2 includes a Historic Preservation Element and Plan.

Applicable Regulations

The following City codes protect historic and archaeological resource:

- Chapter 11.62 YMC, Historic Preservation Ordinance for Special Valuation
- YMC 17.05.010 Archaeological and Historic Resources: Requires evaluation in high and very high risk areas for archaeological resource. Stop work is required if resources are found, followed by evaluation, consultation, and mitigation as appropriate.

In addition, under SEPA, non-exempt development is subject to review and evaluation regarding cultural resources, and mitigation measures may be imposed.

Future Projects will adhere to and comply with all State and federal laws including those summarized below.

- Washington State has a number of laws that oversee the protection and proper excavation of archaeological sites (RCW 27.53, WAC 25-48), human remains (RCW 27.44), and historic cemeteries or graves (RCW 68.60). Under RCW 27.53, DAHP regulates the treatment of archaeological sites on both public and private lands and has the authority to require specific treatment of archaeological

resources. All precontact resources or sites are protected, regardless of their significance or eligibility for local, state, or national registers. Historic archaeological resources or sites are protected unless DAHP has made a determination of “not-eligible” for listing on the WHR and the NRHP.

- The Governor’s Executive Order 05-05 requires state agencies to integrate DAHP, the Governor’s Office of Indian Affairs, and concerned tribes into their capital project planning process. This executive order affects any capital construction projects and any land acquisitions for purposes of capital construction not undergoing Section 106 review under the National Historic Preservation Act of 1966.

Other Potential Mitigation Measures

- No additional mitigation is proposed.

Significant Unavoidable Adverse Impacts

If cultural resources are found in the future impacts to historic and cultural preservation can be adequately mitigated by complying with federal, state, and local laws and mitigation measures.

3.7 Transportation

Affected Environment

This section describes the existing system and traffic conditions in the study area, including traffic volumes, intersection level of service, public transportation services, and non-motorized transportation facilities. A complete existing conditions analysis is found in Chapter 2 of the City of Yakima 2040 Transportation Plan.

Study Area Intersections

The study area intersections encompass locations on arterial roadways throughout the study area. The study area and study intersections of the transportation analysis were established based on input from city staff as well as review of travel patterns within the city. The study area intersections are found in Exhibit 3-12 in the following Traffic Operations section.

Roadway System

The study area is served by a network of roadways consisting of highways, principal arterial roadways, minor arterial roadways, collector streets, and local streets. Additional discussion on the roadway system serving the study area can be found in Chapter 2 of the City of Yakima 2040 Transportation Plan.

Traffic Volumes

Traffic counts were collected on City roadways in 2015 at mid-block locations to determine average daily traffic (ADT) volumes to represent existing traffic conditions. In addition to ADT volumes, PM peak hour turning movement volumes were also collected at study intersections for use in a level of service analysis. PM peak hour volumes typically represent the worst travel conditions experienced during the day. Chapter 2 of the 2040 Transportation Plan provides additional detail regarding traffic counts used in analysis.

Traffic Operations

Level of service (LOS) was used to rate traffic operations in the study area. LOS is measured on a scale ranging from A to F, in which A represents freely flowing traffic and F represents severe congestion. LOS ratings are based on the amount of delay a vehicle experiences at the intersection being studied. At signalized intersections, LOS is calculated based on the delay of all vehicles entering the intersection. At unsignalized intersections, the LOS is calculated based on the worst stop-controlled approach.

The City of Yakima has adopted LOS D as the standard for all city intersections within the city and UGA, and LOS D on WSDOT facilities. Exhibit 3-11 summarizes the intersection LOS delay thresholds for signalized and unsignalized intersections.

Exhibit 3-11. Level of Service Criteria

Level of Service	Control Delay (seconds/vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	0 - 10	0 - 10
B	>10 - 20	>10 - 15
C	>20 - 35	>15 - 25
D	>35 - 55	>25 - 35
E	>55 - 80	>35 - 50
F	>80	>50

Note: The LOS criteria is based on control delay, which includes initial deceleration delay, final deceleration delay, stopped delay, and queue move-up time.

Source: Transportation Research Board *Highway Capacity Manual* (2010)

As shown in Exhibit 3-12, three locations exceed the LOS D standard in existing conditions – S 64th Ave & Tieton Dr (LOS F), N 16th Ave & W Tieton Dr (LOS E), and S 18th St & E Nob Hill Blvd (LOS E). All of the intersections are signalized with the exception of S 64th Ave & Tieton Dr which is two-way stop controlled.

Exhibit 3-12. Existing PM Peak Hour Level of Service Summary

ID	Location	Traffic Control	2016 Existing Conditions PM Peak Hour	
			LOS	Delay (seconds)
1	N 72nd Ave & Summitview Ave	Signal	C	31
2	S 72nd Ave & Tieton Dr	Signal	C	27
3	S 72nd Ave & W Nob Hill Blvd	Signal	C	25
4	S 72nd Ave & W Washington Ave	TWSC	D	30
5	S 64th Ave & Tieton Dr	TWSC	F	58
6	W Washington Ave & S 64th Ave	Signal	B	17
7	N 40th Ave & Fruitvale Blvd	Signal	C	26
8	N 40th Ave & Englewood Ave	Signal	C	22
9	N 40th Ave & W Lincoln Ave	Signal	C	22
10	N 40th Ave & W Summitview Ave	Signal	D	37
11	S 40th Ave & W Tieton Dr	Signal	C	34

2016 Existing Conditions PM Peak Hour				
ID	Location	Traffic Control	LOS	Delay (seconds)
12	S 40th Ave & W Nob Hill Blvd	Signal	D	54
13	W Washington Ave & S 40th Ave	Signal	B	14
14	S 24th Ave & W Nob Hill Blvd	Signal	C	35
15	N 16th Ave & Fruitvale Blvd	Signal	C	26
16	N 16th Ave & W Lincoln Ave	Signal	D	39
17	N 16th Ave & Summitview Ave	Signal	C	26
18	N 16th Ave & W Yakima Ave	Signal	B	18
19	N 16th Ave & W Tieton Dr	Signal	E	63
20	N 16th Ave & W Nob Hill Blvd	Signal	D	39
21	N 16th Ave & W Washington Blvd	Signal	C	27
22	S 3rd Ave & W Yakima Ave	Signal	A	10
23	S 3rd Ave & W Nob Hill Blvd	Signal	C	34
24	N 1st St & W I St	Signal	B	18
25	N 1st St & W Yakima Ave	Signal	C	21
26	E Nob Hill Blvd & S 1st St	Signal	D	37
27	W Washington Ave & S 1st ST	Signal	C	26
28	N 3rd St & W Yakima Ave	Signal	A	9
29	S Fair Ave & E Nob Hill Blvd	Signal	D	39
30	S 18th St & E Nob Hill Blvd	Signal	E	58

Note: The average delay for all vehicles is reported for signalized intersections. The delay of the worst stop-controlled approach is reported for signalized intersections. Cells LOS and Delay in bold exceed the City's LOS D standard.

Source: Transpo Group, 2016

Transit

Yakima Transit serves the cities of Yakima and Selah with fixed route, paratransit, and vanpool services. In addition to these core services, Yakima Transit also provides the Yakima-Ellensburg Commuter service during morning and evening commute periods. Yakima Transit provides connections to rail, air, and other fixed-route services. Information in this section is coordinated and consistent with the Transit Development Plan (Yakima Transit, 2014).

Non-Motorized Facilities

The most complete system of sidewalks is located within the central business district and downtown area. Sidewalks are generally provided on both sides of the street in these areas, but may not have standard curb ramps or other ADA facilities. Many of the older residential neighborhoods east of 16th Avenue also have sidewalks, along with the east-west arterial and collector roadways extending to the western sections of the City.

Yakima has several important shared-use trails that provide critical connections and enhance pedestrian travel. These off-street facilities include pathways and unpaved trails that are used by all types of non-motorized users. The Powerhouse Canal Pathway, Yakima Greenway, and several unnamed neighborhood connector paths support pedestrian travel in Yakima.

Bicycling is an important and growing mode of travel for people in cities across the country. Existing bicycle facilities are found in the *Draft Bicycle Master Plan* (City of Yakima, 2015). The City of Yakima has three types of bicycle treatments: shared lanes, bicycle lanes, and shared-use trails.

- While not formal bicycle facilities, roadways with shared lane markings, or sharrows, are important components of the non-motorized network. Shared lane markings are an important tool that can assist bicyclists and motorists by indicating appropriate bicycle positioning on a roadway, increasing safety and visibility.
- Yakima has approximately 5 miles of bike lanes currently installed. Bicycle lanes are present in the central business district on W Lincoln Avenue, W MLK Jr. Boulevard, S 3rd Street, and S 6th Street. There are also a few segments of bike lanes on the east end of town on Tieton Drive, W Nob Hill Boulevard, and W Washington Avenue.
- The shared-use trails that are part of the pedestrian network are important for bicycle travel. Paved trails are preferred by many cyclists who also travel on streets, but finely crushed gravel surfaces may be suitable alternatives.

Impacts

This section describes the transportation systems and conditions that are expected to exist in the long term (2040) within the study area for the City of Yakima forecast land use Alternatives 1 and 2. The action Alternative 2, is compared to the No Action alternative (Alternative 1) to identify project and policy related impacts on transportation and potential mitigation measures.

Impacts Common to All Alternatives

Construction

Under all alternatives, construction for new development would result in temporary impacts on roadways. Construction activities could affect local vehicle access. These impacts would include increased congestion, traffic diversions caused by temporary road closures and detours, increased truck traffic associated with construction activity, and temporary changes in roadside characteristics that could affect safety. Impacts could also result from the intrusion of non-local traffic into residential areas because of temporary street closures and traffic detours, as well as disruptions to vehicular and pedestrian access.

As part of normal construction planning and permitting, project developers, the City of Yakima, WSDOT, Yakima County, and Yakima Transit would work to minimize the duration and impact of lane closures and reductions by (a) maintaining through traffic, where practical, except for short-duration closures that would generally occur on nights and weekends; (b) establishing detour routes on nearby arterials for short-duration closures; and (c) maintaining traffic management systems. A Traffic Control Plan that addresses all travel modes would be prepared at final design of new developments for approval and implementation during construction.

Operation

As a conservative assumption, analysts assumed the same roadway network in 2040 as existing conditions. However, analysts assumed that signal timing would be updated at signalized intersections to best serve future conditions. This process involved optimizing signal timing independently at signalized locations. Intersection traffic control is consistent with those found in existing conditions.

Alternative 1: No Action**Construction**

Construction activity impacts in Alternative 1 are consistent with the impacts common to all alternatives. Higher density development in the downtown core is not assumed in this scenario.

Operation*Roadway System*

The roadway configuration and intersection channelization in the study area for the No Action Alternative is unchanged.

Traffic Volumes and Operations

The project team obtained year 2040 vehicle volumes for the study intersections under Alternative 1 (No Action) conditions from the Yakima Valley Conference of Governments' Travel Demand Model. This model used 2040 household and employment estimates to generate vehicle trips and assigned those trips to roadways within the region and the City of Yakima and its UGA.

Traffic volumes for the study area intersections are generally expected to increase between 2016 and 2040 due to regional population and employment growth (see Exhibit 3-13). Seventeen intersections are expected to operate at and E or F level of service by 2040 under Alternative 1. All other intersections in the study area would operate at LOS D or better.

Exhibit 3-13. Alternative 1 Expected PM Peak Hour Level of Service Summary

ID	Location	Traffic Control	2016 Existing Conditions PM Peak Hour	
			LOS	Delay (seconds)
1	N 72nd Ave & Summitview Ave	Signal	D	50
2	S 72nd Ave & Tieton Dr	Signal	E	61
3	S 72nd Ave & W Nob Hill Blvd	Signal	D	52
4	S 72nd Ave & W Washington Ave	TWSC	F	130
5	S 64th Ave & Tieton Dr	TWSC	C	16
6	W Washington Ave & S 64th Ave	Signal	C	28
7	N 40th Ave & Fruitvale Blvd	Signal	E	59
8	N 40th Ave & Englewood Ave	Signal	E	56
9	N 40th Ave & W Lincoln Ave	Signal	D	44
10	N 40th Ave & W Summitview Ave	Signal	E	61
11	S 40th Ave & W Tieton Dr	Signal	E	65
12	S 40th Ave & W Nob Hill Blvd	Signal	F	94
13	W Washington Ave & S 40th Ave	Signal	E	61
14	S 24th Ave & W Nob Hill Blvd	Signal	D	44
15	N 16th Ave & Fruitvale Blvd	Signal	D	52
16	N 16th Ave & W Lincoln Ave	Signal	F	84
17	N 16th Ave & Summitview Ave	Signal	D	39
18	N 16th Ave & W Yakima Ave	Signal	C	23
19	N 16th Ave & W Tieton Dr	Signal	F	120
20	N 16th Ave & W Nob Hill Blvd	Signal	E	65

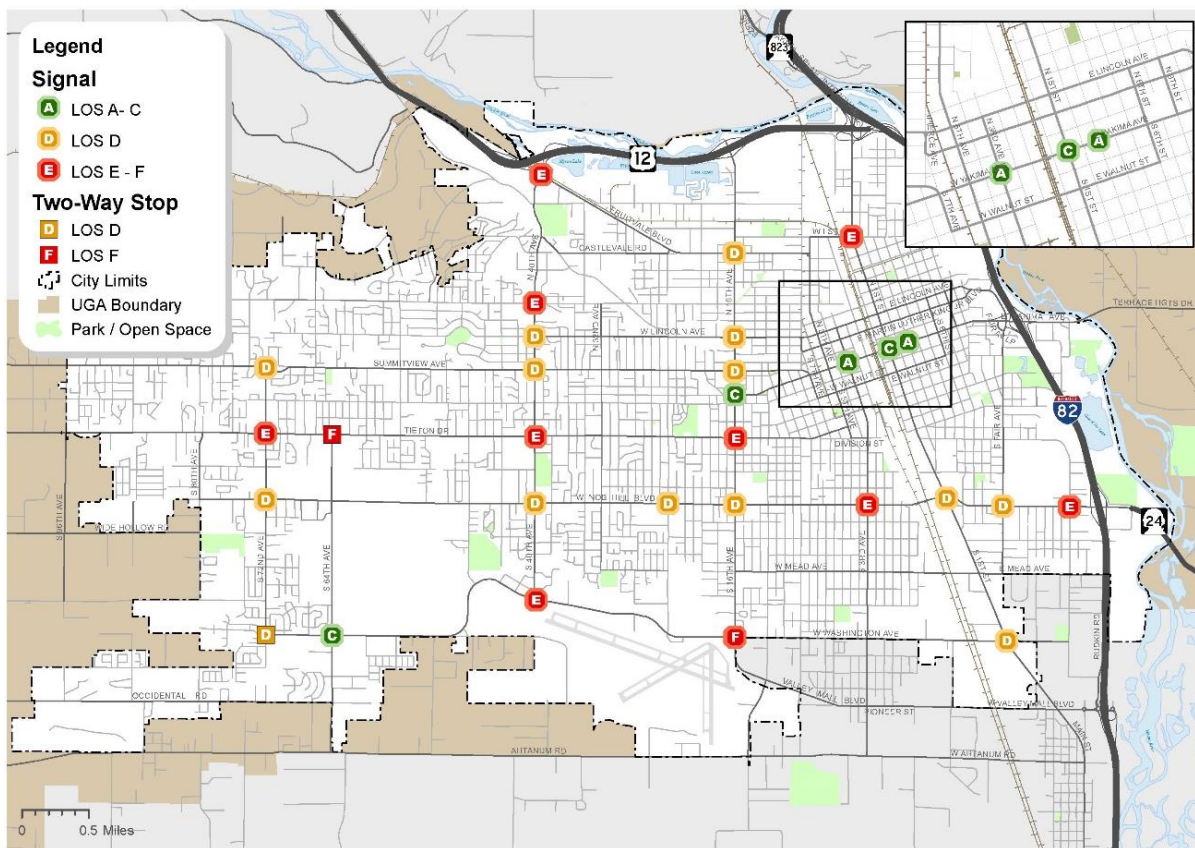
ID	Location	Traffic Control	2016 Existing Conditions PM Peak Hour	
			LOS	Delay (seconds)
21	N 16th Ave & W Washington Blvd	Signal	F	97
22	S 3rd Ave & W Yakima Ave	Signal	B	11
23	S 3rd Ave & W Nob Hill Blvd	Signal	E	65
24	N 1st St & W I St	Signal	E	59
25	N 1st St & W Yakima Ave	Signal	C	27
26	E Nob Hill Blvd & S 1st St	Signal	E	62
27	W Washington Ave & S 1st ST	Signal	D	46
28	N 3rd St & W Yakima Ave	Signal	B	13
29	S Fair Ave & E Nob Hill Blvd	Signal	F	86
30	S 18th St & E Nob Hill Blvd	Signal	E	65

Note: The average delay for all vehicles is reported for signalized intersections. The delay of the worst stop-controlled approach is reported for signalized intersections. Cells LOS and Delay in bold exceed the City's LOS D standard.

Source: Transpo Group, 2016

Exhibit 3-14 shows the LOS for intersections studied,

Exhibit 3-14. Alternative 1 (No Action) LOS Map



2040 No Action Level of Service

City of Yakima 2040 Transportation Plan

Q:\Projects\1515254-00 - Yakima Transportation Plan Update\GIS\Maps\WXD\Draft Figures\DraftFigX_Future NA LOS.mxd

DRAFT FIGURE

transpogroup 

Transit

Public transportation services under the No Action Alternative would be similar to the existing conditions. With increased population and employment growth, demand for public transit would likely increase, which could result in the need for service expansion in the study area. All of the study intersections are located on a corridor served by public transit.

Non-Motorized Facilities

Under Alternative 1 (No Action Alternative), non-motorized facilities would remain the same as under 2016 existing conditions. Other non-motorized facilities may be constructed between 2016 and 2040 as proposed in the City of Yakima's Transportation Master Plan.

Alternative 2: Action

Construction

Construction activity impacts in Alternative 2 are consistent with the impacts common to all alternatives. Construction impacts may be intensified or prolonged in the vicinity of the downtown core where concentrations of new development are planned. However, with implementation of measures described under Impacts Common to All Alternatives, there would be no significant construction impacts under Alternative 2.

Operation

Roadway System

The roadway configuration and the study are intersections for Alternative 2 would be consistent with the Alternative 1. The roadway system improvements assumed for 2040 were discussed in the previous section.

Traffic Volumes and Operations

To analyze conditions under Alternative 2, the population, households, and jobs assumed for Alternative 2 were used in the travel demand model to generate vehicle trips entering study locations. Traffic volumes at study intersections for Alternative 2 had generally minor differences compared to Alternative 1.

Traffic impacts were determined by using the same methodology used in Alternative 1 analysis. Signal timing and entering volumes were updated at study intersections to determine level of service. Analysis finds that 16 intersections fall below the City's LOS D standard (see Exhibit 3-15). Each of these locations are consistent with results found in Alternative 1, with the exception of the N 40th Ave & Englewood Ave changing from LOS E to LOS D in Alternative 2. The change in level of service can be attributed to a decrease in northbound and southbound vehicles entering the intersection, decreasing overall intersection delay. Other than the intersection at N 40th Ave & Englewood Ave, the map in Exhibit 3-14 also applies for Alternative 2.

Exhibit 3-15. Alternative 2 Expected PM Peak Hour Level of Service Summary

ID	Location	Traffic Control	2016 Existing Conditions PM Peak Hour	
			LOS	Delay (seconds)
1	N 72nd Ave & Summitview Ave	Signal	D	50
2	S 72nd Ave & Tieton Dr	Signal	E	61
3	S 72nd Ave & W Nob Hill Blvd	Signal	D	52
4	S 72nd Ave & W Washington Ave	TWSC	F	104
5	S 64th Ave & Tieton Dr	TWSC	C	16
6	W Washington Ave & S 64th Ave	Signal	C	28
7	N 40th Ave & Fruitvale Blvd	Signal	E	63
8	N 40th Ave & Englewood Ave	Signal	D	47
9	N 40th Ave & W Lincoln Ave	Signal	D	44
10	N 40th Ave & W Summitview Ave	Signal	E	65
11	S 40th Ave & W Tieton Dr	Signal	E	67
12	S 40th Ave & W Nob Hill Blvd	Signal	F	92
13	W Washington Ave & S 40th Ave	Signal	E	59
14	S 24th Ave & W Nob Hill Blvd	Signal	D	44
15	N 16th Ave & Fruitvale Blvd	Signal	D	54
16	N 16th Ave & W Lincoln Ave	Signal	F	84
17	N 16th Ave & Summitview Ave	Signal	D	41
18	N 16th Ave & W Yakima Ave	Signal	C	23
19	N 16th Ave & W Tieton Dr	Signal	F	123
20	N 16th Ave & W Nob Hill Blvd	Signal	E	63
21	N 16th Ave & W Washington Blvd	Signal	F	96

ID	Location	Traffic Control	2016 Existing Conditions PM Peak Hour	
			LOS	Delay (seconds)
22	S 3rd Ave & W Yakima Ave	Signal	B	11
23	S 3rd Ave & W Nob Hill Blvd	Signal	E	64
24	N 1st St & W I St	Signal	E	59
25	N 1st St & W Yakima Ave	Signal	C	28
26	E Nob Hill Blvd & S 1st St	Signal	E	62
27	W Washington Ave & S 1st ST	Signal	D	46
28	N 3rd St & W Yakima Ave	Signal	B	14
29	S Fair Ave & E Nob Hill Blvd	Signal	E	76
30	S 18th St & E Nob Hill Blvd	Signal	E	63

Note: The average delay for all vehicles is reported for signalized intersections. The delay of the worst stop-controlled approach is reported for signalized intersections. Cells LOS and Delay in bold exceed the City's LOS D standard.

Source: Transpo Group, 2016

Mitigation Measures

Incorporated Plan Features

- Alternative 2 will implement proposed policies in the Transportation Element in the City of Yakima Comprehensive Plan update. The Transportation Element sets forth policies that address circulation and design and support the reduction of vehicle trips through the creation of pedestrian-friendly environments and increasing opportunities for transit and ride sharing.
- Alternative 2 (Action) encourages a dense, mixed-use neighborhood core that encourages walking, biking, and transit.

Applicable Plans and Regulations

- Title 9 of the Yakima Municipal Code (YMC) addresses traffic control including adoption of the Washington State Model Traffic Ordinance and a street designation system.
- Title 8 of the YMC includes rules and regulations for street and sidewalk construction and right-of-way use.
- The Yakima City Council is currently discussing the potential adoption of a Transportation Benefit District.
- Plans for the Mill Site include potential improved access from I-82 to the Mill Site.

Other Potential Mitigation Measures

This section describes the potential traffic mitigation measures for transportation mobility impacts caused by the Yakima Comprehensive Plan Project action Alternatives 2. For assessing potential traffic mitigation measures, impacts were determined by comparing intersection LOS for the 2040 Alternative 1 (No Action) and Alternative 2 (Action) during the PM peak hour. The following criteria were used to identify traffic impacts caused by the implementation of the action alternatives:

- Increase in traffic demand that results in unacceptable intersection operations according to the City of Yakima (LOS E or F) at an intersection that operates acceptably (LOS D or better) under Alternative 1 (No Action) in 2040.
- Increase in traffic demand at an intersection that increases delay by more than 10 seconds at an intersection that operates unacceptably (LOS E or F) under Alternative 1 (No Action) in 2040.

With planned improvements in the Transportation Systems Plan Update all study intersections satisfy the criteria listed above to meet operations standards.

Significant Unavoidable Adverse Impacts

Vehicle traffic growth over 20 years will cause unavoidable increases in traffic and congestion, characteristic of an urban area. Under all of the alternatives adverse impacts can be mitigated to ensure that adopted City of Yakima LOS standards are met. Significant unavoidable adverse transportation and traffic impacts are not anticipated with Alternatives 1 or 2, if identified mitigation measures are implemented.

3.8 Public Services

Affected Environment

Parks and Recreation

Yakima has around 401.82 acres of parks and recreation facilities, in addition to some public buildings, such as the Harman Center and the Henry Beauchamp, Jr. Community Center. Also available to the public are the Yakima Greenway, with about 10 miles of trails, the Sportsman State Park, and the Yakima Area Arboretum. The City of Yakima Parks & Recreation Division also offers activities for adults, youth, and seniors through sports programs, the senior center, summer day camps and other special events.

Only the Neighborhood and Community Parks are assigned levels of service standards. Based on a 2-acre per 1,000 population standard for Neighborhood/Mini Parks, the City of Yakima has a current deficit of park lands of 127.4 acres. Based on a 5-acre per 1,000 population standard for Community Parks, the City has a current deficit of 217.8 acres.

Schools

The City of Yakima is primarily served by the Yakima School District and the West Valley School District. In May of 2015, Yakima School District had 15,768 students and 881 teachers. East Valley School District had 3,107 students and 179 teachers (OSPI, 2015).

The current student-teacher ratio is 18.3 in the Yakima School District, and serves as a level of service standard. The level of service for the West Valley School District is based on maintaining a similar facility ratio per student, presently 167 square feet per student served.

Police

The Yakima Police Department (YPD) has 185 employees, about 80% of which are commissioned officers and 20% of which are civilian personnel (YPD, 2016). The department has four divisions: Criminal Investigation, Uniformed, Special Ops, and Administrative Services. The City is divided into 9 patrol districts with each squad having an assigned officer to patrol the district.

The current LOS policy for YPD is 1.8 officers per 1,000 residents. Using the LOS of 1.8 officers per 1,000 residents, the department currently has a deficit of 20 officers.

Fire & Emergency Services

The Yakima Fire Department (YFD) had 104 full time equivalent (FTE) positions and about 115 personnel, including 1 Fire Chief, 2 Deputy Chiefs, 2 Admin Staff, 8 Day Positions, 90 firefighters, and 12 reserve positions (2016). In 2015, there were a total of 8,987 incidents, of which 66% were categorized Rescue and Emergency Medical Service. Only 5.03% of the calls (452 calls) were for responses to incidents categorized as Fires. YFD also contracts with Union Gap and Yakima County to provide fire service in the City of Union Gap and Fire Protection District 11. Normal staffing conditions call for 6 stations with 7 response units.

Fire facilities have capital needs based on facility location and staffing. These two factors feed into a unit's response time, which is how LOS is generally measured. The current adopted level of service for response time is 8 minutes. In 2016, the department was able to meet this level of service 69% of the time, with an average response time of just over 8 minutes. However, the 2016 Annual Report indicated that there has been an increase in number of calls and type of responses, which has changed the scope of service needed by YFD (YFD, 2016).

Impacts

General Impacts

Under both alternatives, growth will occur in the 20-year planning period, and increase the demand for public services including parks and recreation, schools, law enforcement, and fire and emergency services.

Parks & Recreation Impacts Common to All Alternatives

Future growth will put further demand onto the parks system, which currently does not meet the standard for most LOS metrics. Many established parks have aging infrastructure that are in need of repair or replacement.

Exhibit 3-16. Demand for Parks based on Growth 2015-2040

Parks	No Action	Action
Population Growth 2015-2040	18,700	23,211
Neighborhood/Mini Parks	37.40	46.42
Community Parks	93.50	116.05

Source: BERK, 2017

Alternative 1: No Action

Alternative 1 No Action would require an additional 37.4 acres of Neighborhood/Mini Parks and 93.5 acres of Community Parks, exacerbating the current deficit in both park types in 2016.

The No Action Alternative will continue the predominant westward trend of expansion. This means the majority of the new population will be in west Yakima. The need for new parks in the west will be in

greater conflict with the need to redevelop existing parks and/or create new parks in central and east Yakima.

Alternative 2: Action

Alternative 2 Action would have a greater demand for parks than Alternative 1 with an additional 46.42 Neighborhood Parks and 116.05 acres of Community Parks, and would increase the current deficit identified in 2016.

The Action Alternative promotes greater infill densities in central and east Yakima, while lessening somewhat the western expansion. More infill projects will further highlight the need to rehabilitate existing parks and explore opportunities for new park land in central and east Yakima. Westward expansion will require new parks as well, but greater infill densities will help promote park equity throughout the city.

Schools

Impacts Common to All Alternatives

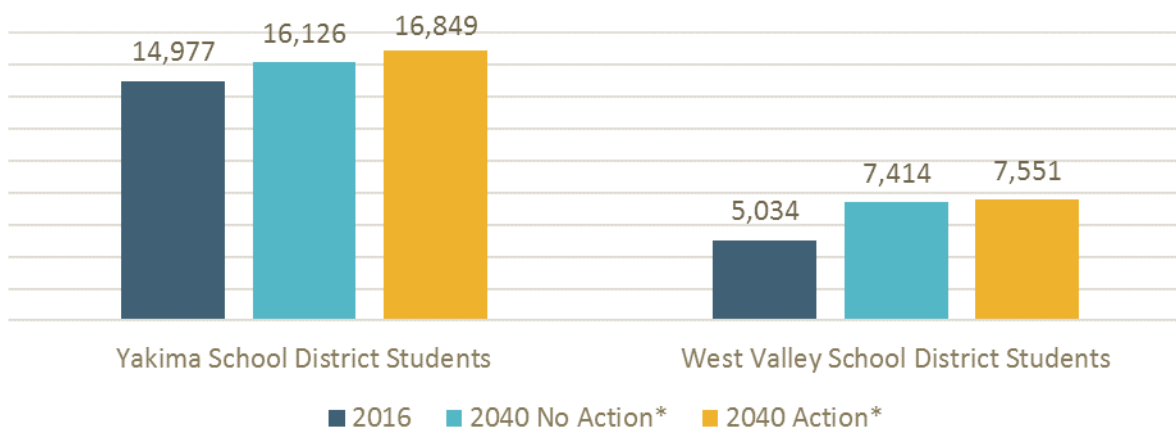
Future population growth will result in added student generation. The share of population projected is illustrated in the table below. Generally, the Action Alternative assumes higher population growth than No Action, but would distribute the population more equally between the two districts, whereas the proportion of students expected in West Valley is higher than the Yakima School District under the No Action Alternative. See Exhibit 3-17.

Exhibit 3-17. Net Population Growth Distribution by School District

School District Share	No Action	% Total Growth	Action	% Total Growth
Yakima School District	7,502	40%	11,378	49%
West Valley School District	11,376	60%	12,010	51%

Both the Yakima School District and the West Valley School District will have additional needs for facilities and staffing as the City's residential population grows under both alternatives and there are more students. Exhibit 3-18 shows the base year students, No Action 2040 students projected, and Action 2040 students for the Yakima School District and the West Valley School District. District population is greater in the Action Alternative than the No Action Alternative for both Districts.

Exhibit 3-18. School District Estimated Student Growth, 2015 – 2040



*School district student counts for 2040 are based on 2014 ACS household size estimates and 2016 student per household ratios, using OSPI student counts.

Source: City of Yakima, 2016; OSPI, 2016; BERK, 2017

Alternative 1: No Action

Under the No Action Alternative, Yakima School District could expect around 16,126 students to enroll, which is an increase of around 1,150 students from 2016 (see Exhibit 3-18). The West Valley School District could expect around 7,414 students, which is an increase of around 2,380 from 2016 (see Exhibit 3-18).

Alternative 2: Action

Under the Action Alternative, Yakima School District could expect around 16,849 students to enroll, which is an increase of around 1,870 students from 2016 (see Exhibit 3-18). The West Valley School District could expect around 7,551 students, which is an increase of over 2,500 from 2016 (see Exhibit 3-18).

Police

Impacts Common to All Alternatives

Future growth will in turn increase the need for an adequate police force to meet the public safety needs of Yakima's residents. The availability of adequate police resources in all zones will be a primary goal.

Exhibit 3-19. Demand for Officers based on growth, 2015 - 2040

	No Action	Action
Population Growth 2015 - 2040	18,700	23,211
Officers to meet LOS standard of 1.8 Officers per 1,000	201	210
Officers to meet existing LOS of 1.6 Officers per 1,000	179	186

Source: City of Yakima, 2016; BERK, 2017

Alternative 1: No Action

The No Action Alternative will likely see the most increase in new residents in western Yakima and would likely see little change to the current patrol districts. There would need to be at least 201 officers to meet LOS standards, or 179 officers to maintain existing levels of service (see Exhibit 3-19). Although Alternative 1 would require less officers than the Action Alternative, which anticipates higher growth, the lower density development pattern may put unique pressure on patrol service.

Alternative 2: Action

The Action Alternative will promote higher infill densities which could require redistribution of the current patrol districts to meet the needs of greater densities in central and eastern Yakima. There would need to be at least 210 officers to meet LOS standards, or 186 officers to maintain existing levels of service (see Exhibit 3-19).

Fire & Emergency Services

Impacts Common to All Alternatives

Future growth in population and development density will increase the need for adequate fire department personnel to meet the public safety needs of Yakima's residents. In addition, there may be added facility needs to ensure that fire personnel and apparatus are able to reach all areas of the city at an appropriate turnout time. Exhibit 3-20 shows the potential facility needs for fire service in 2040 for both alternatives. Around 3,000 more square feet of space would be needed for the Action Alternative, not taking into account locational needs because of population distribution differences. The current facility inventory includes over 67,000 square feet of space.

Exhibit 3-20. Demand for Fire Facilities, 2015 – 2040

Fire	No Action	Action
Population Growth 2015 - 2040	18,700	23,211
Facility Needs (SqFt)*	80,583	83,830

* Assumes 720 square feet per 1,000 served, based on the current facility level of service for fire,

Source: City of Yakima, 2016; Yakima Fire Department, 2016; BERK, 2017

Accessibility issues are important as population and employment growth impacts fire service as the current level of service policies are related to the ability to meet turnout time goals. Added traffic congestion on the road network would also put pressure on the Department's ability to achieve turnout time goals.

Alternative 1: No Action

The No Action Alternative will likely see the most increase in new residents in western Yakima and would likely see little change to the current distribution of fire resources. Fire service provision in the lower density west would be less efficient, and may require siting new facilities as more residents come move into the west.

Around 13,360 additional square feet of facility space would be needed under the No Action Alternative (see Exhibit 3-20). It is possible that additional facilities would need to be sited to meet turnout time goals

given the distribution of population, combined with added congestion on the road network (which would slow down travel time from the fire facility to the response site). See Section 3.7 (Transportation) for additional analysis on traffic impacts by alternative.

Alternative 2: Action

The Action Alternative will promote higher infill densities which could require redistribution of the current fire resources to meet the needs of greater densities in central and eastern Yakima. Furthermore, the potential for new development in areas of the downtown (taller buildings) could require additional aerial ladder trucks. Higher density development also allows for more efficiency in locating stations than in lower density areas, which could help increase levels of service for some areas of the City.

Around 16,600 additional square feet of facility space would be needed under the Action Alternative (see Exhibit 3-20). It is possible that additional facilities would need to be sited to meet turnout time goals given the distribution of population, combined with added congestion on the road network (which would slow down travel time from the fire facility to the response site).

See Section 3.7 (Transportation) for additional analysis on traffic impacts by alternative.

Mitigation Measures

Incorporated Plan Features

The Parks and Recreation Element and Capital Facilities Element and Plan discuss levels of service for Parks, Police, Fire and Schools. Short and long range project lists are also included, with probable funding sources and timelines.

Applicable Regulations

- YMC Title 13 – Parks and Playgrounds
- YMC Title 10 – Fire
- YMC Title 6 – Public Safety and Morals

Other Potential Mitigation Measures

- Project specific environmental and land use review will be required based upon the scope of future redevelopment or new projects for parks, police, fire, and school facilities.
- Capital facility plans and functional plans such as for Parks and Recreation are generally updated every six years consistent with GMA.
- The City's budget and capital improvement program implement the Capital Facilities Plan as well as functional plans for Parks and Recreation.

Significant Unavoidable Adverse Impacts

Demand for services will increase under all studied alternatives. No significant unavoidable adverse public service impacts are anticipated with implementation of either alternative with regular capital facility planning and functional plan updates, generally every six years.

3.9 Infrastructure

Affected Environment

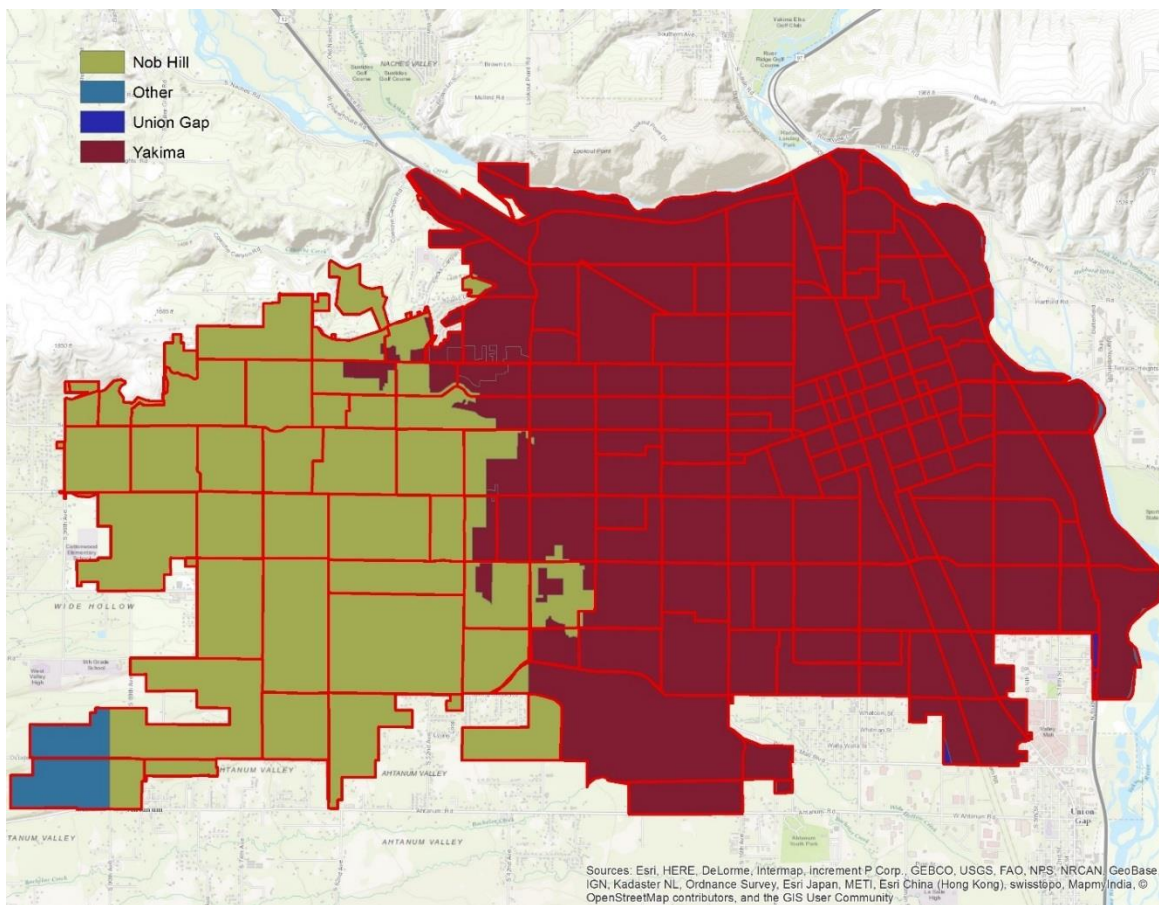
Water and Irrigation

Water

Water services in Yakima are principally provided by the Yakima Water Division in eastern Yakima, and the non-profit Nob Hill Water Association serving western Yakima (Nob Hill Water, 2016). Some areas are under served in both eastern and western Yakima; water service is extended on request and new development pays for the extension of infrastructure.

The service areas of each water provider are identified below overlaid on Transportation Analysis Zones within the city limits.

Exhibit 3-21. Water Service Area within the Yakima City Limits by Transportation Analysis Zones



Source: City of Yakima, BERK Consulting 2017

The City of Yakima Water Division is serving over 73,000 customers with 1,590,619 miles of water pipe.

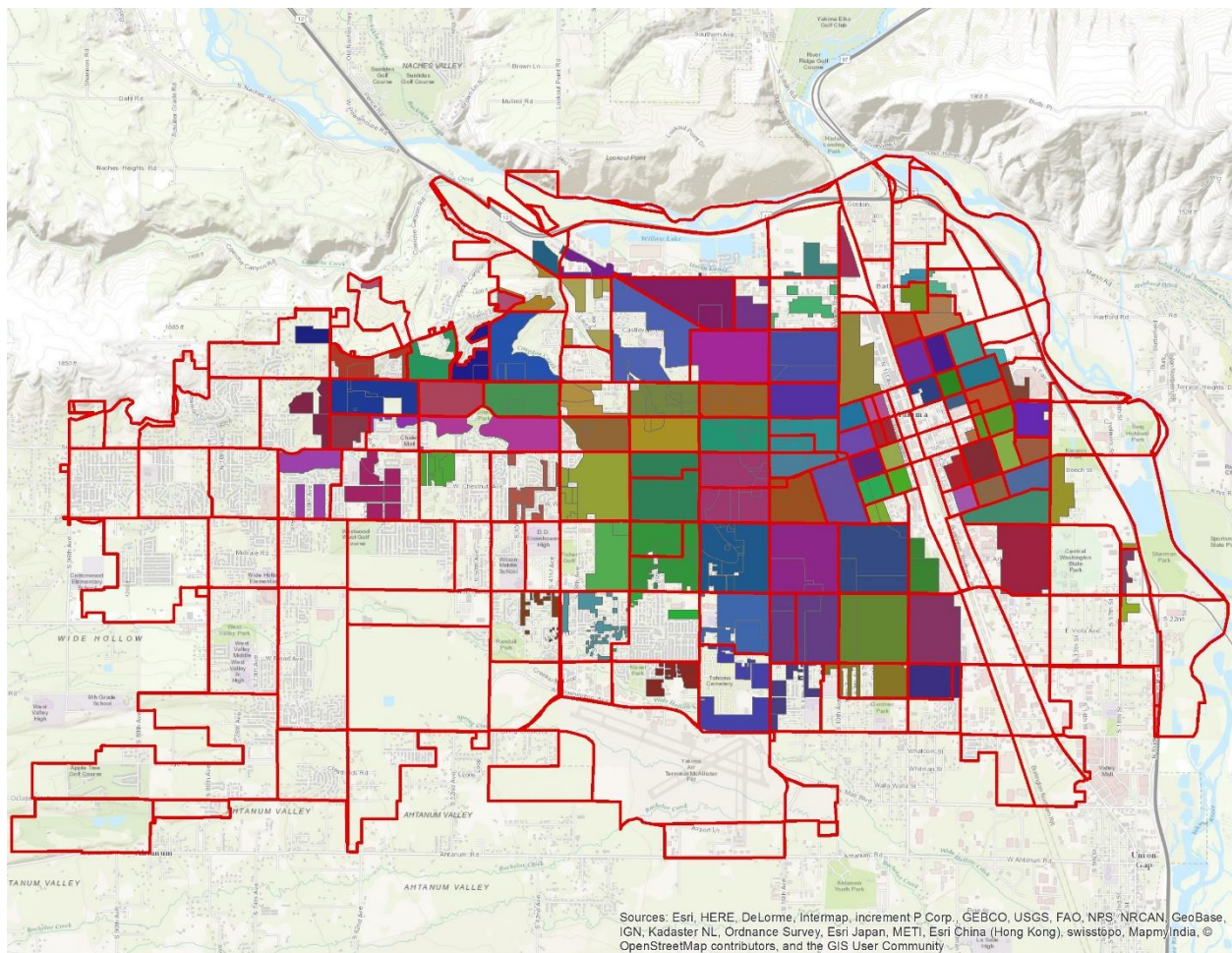
The Nob Hill Water Association served over 28,000 customers in 2016, with some of the customers located within the City of Yakima. The Association has over 870,000 feet of water main lines (Nob Hill Water Association, 2015).

Irrigation

The City of Yakima was originally developed on irrigated farmland, with irrigation provided by several private irrigation systems. Eventually, urban development replaced farmland. The irrigation systems were left and suitably modified to irrigate lawns, gardens and small farms. To date, the City of Yakima maintains two water delivery systems; one for potable water and one for irrigation water (City of Yakima, 2012).

The separate, non-potable irrigation system is composed of more than 60 systems and sub-systems, and serves approximately 2,100 acres of developed land and 11,000 customers. It serves almost 50% of the total potable water service area. A map showing irrigation-served areas appears below overlaid on transportation analysis zones within the city limits.

Irrigation-Served Areas in Yakima City Limits



Source: City of Yakima, BERK Consulting 2017

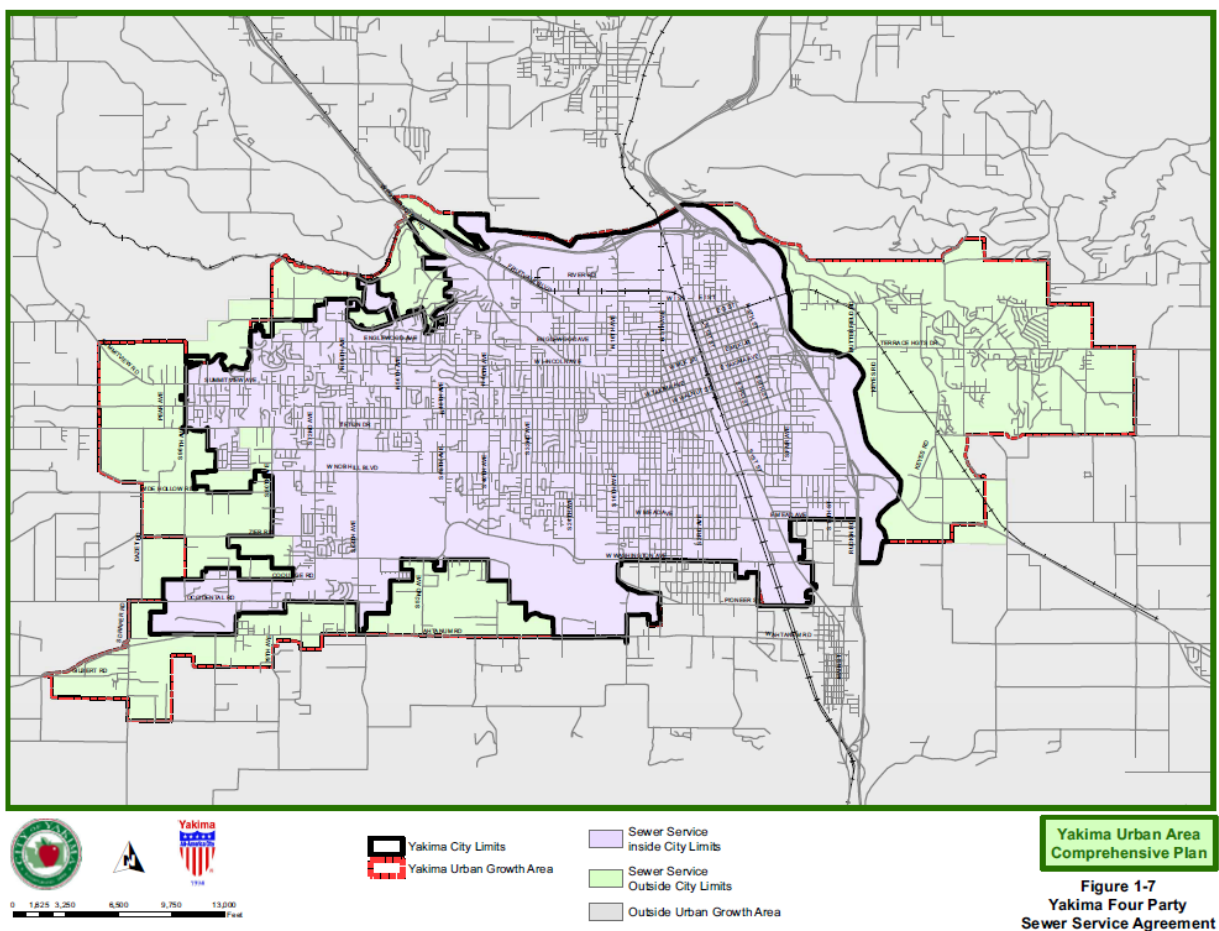
The City of Yakima currently serves the irrigation district with a total of 85 miles of pipe for over 50,000 customers. The City has invested over \$15 million in the irrigation system, which went toward refurbishing 32 miles of pipe line to bring the system up to an acceptable level of service. The level of service standard provides for minimum design pressure of 20 psi. Service is provided by a staff of seven and one-half (7.8) employees which amounts to 0.709 FTE per 1,000 accounts.

Wastewater

The Yakima Regional Wastewater Treatment Plant (WWTP) processes wastewater from homes and businesses in Yakima, as well as Union Gap, Terrace Heights, and Moxee. The plant currently receives a monthly flow of around 13 MGD on average, with peak flows during irrigation season when infiltration adds around 4 MGD to the warm weather flows. Current plant capacity is rated near 22 MGD. Future projects include an industrial waste bioreactor that treats food processing waste, the removal and use of phosphorous as fertilizer, recovery of methane biogas to operate WWTP systems, and conversion of biosolids into quality fertilizer (City of Yakima, 2016).

The City's sewer service area includes the Yakima Urban Area including both the city limits and UGA.

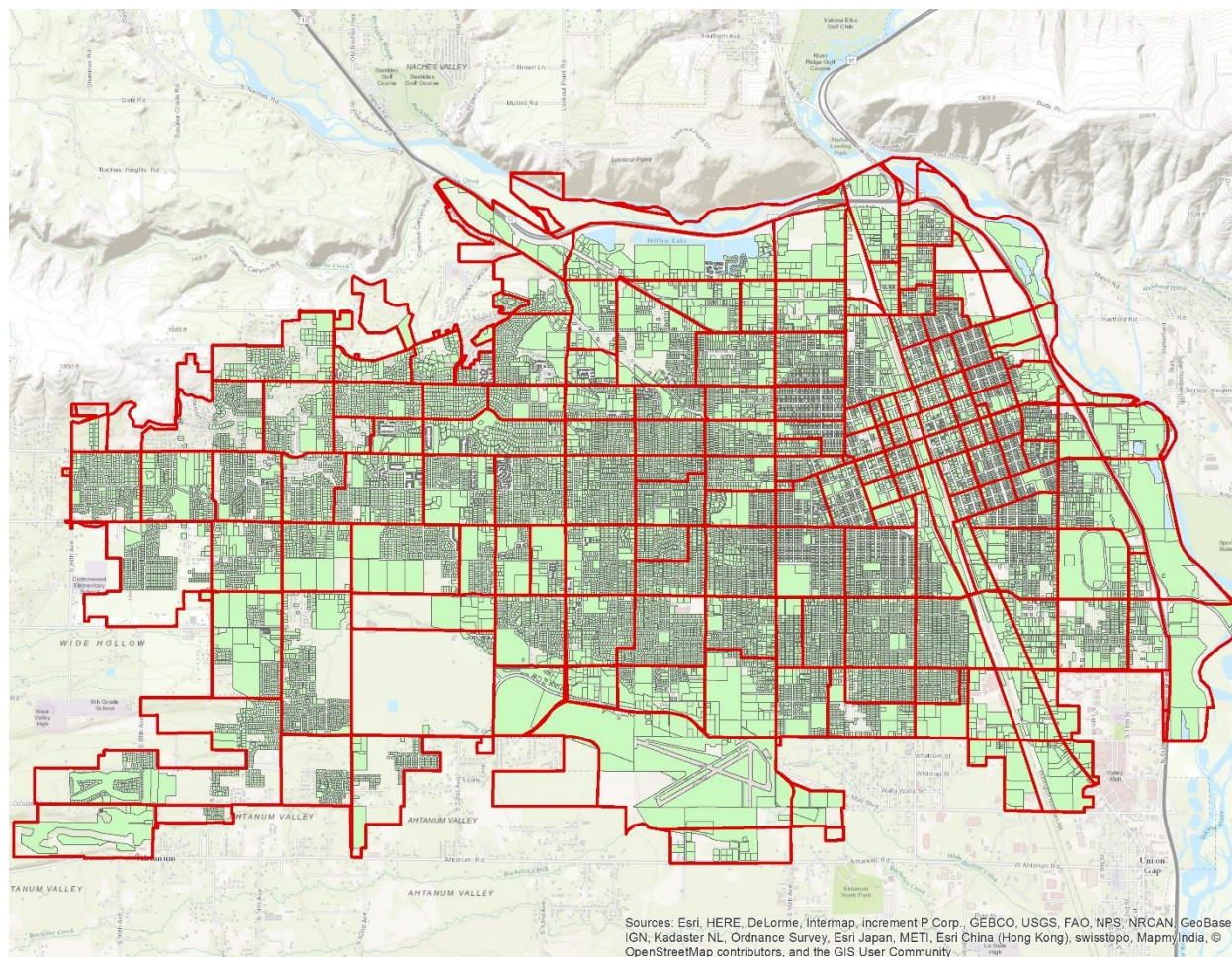
Exhibit 3-22. Yakima Sewer Service Area



Source: City of Yakima, Water System Plan, 2011

Parcels currently served by Yakima within the city limits are illustrated in the map below.

Exhibit 3-23. Sewer-Served Properties in Yakima City Limits



Source: City of Yakima, BERK Consulting 2017

There are pockets of land in the City that are not served by sewers due to the land being vacant, or challenging physical conditions, or past development allowed on septic systems. The City lacks a system-wide sewer plan to identify the specific locations of new trunk lines, the engineering, and cost of new lines.

The City conducted a sewer system plan update in 2016, which considers future land use and growth.

Stormwater

Yakima's stormwater collection area includes the City of Yakima, as well as some of the West Valley area outside of city limits. With hot, dry summer weather and cold, dry winters, the majority of the annual precipitation occurs between October and March. Runoff typically occurs during rapid warming events and is tied closely to the snowfall conditions in the Cascades. In accordance with the NPDES Western Washington Phase II Municipal Stormwater Permit the City requires development to provide on-site stormwater management to mitigate these impacts. Level of service standards require stormwater quantity and quality treatment to be consistent with the City stormwater manual.

Impacts

Water and Irrigation

Impacts Common to All Alternatives

Water

The Draft Water System Plan update assumes 0.33% growth rate similar to Alternative 1, but with a pattern of land use more consistent with Alternative 2.

Under both alternatives, the demand for water will increase as growth increases. Both alternatives will result in average day demands (ADD) and maximum day demands (MDD) that are well within the wastewater treatment plant capacity.

**Exhibit 3-24. Yakima Service Area Water Demand by Alternative
–Growth Rate Impact on ADD and MDD**

Scenario	2015	2020	2025	2030	2035	2040
ADD (0.33%)	10.5	10.7	10.9	11.0	11.2	11.3
ADD (0.51%)	10.5	10.8	11.0	11.3	11.6	11.8
Difference	0.0	0.1	0.1	0.2	0.4	0.5
MDD (0.33%)	18.4	18.8	19.1	19.4	19.6	19.9
MDD (0.51%)	18.4	18.9	19.3	19.8	20.3	20.8
Difference	0.0	0.1	0.3	0.4	0.6	0.9
Treatment Capacity	21.6 mgd					

Legend: Average Day Demand (ADD) and Maximum Day Demand (MDD)

Source: (Nob Hill Water Association, 2015)

The Nob Hill 2015 Water System Plans assumes a growth rate of over 2%. Based on the growth, the Nob Hill Water System Plan addresses an average day demand is expected to increase from 4,434,000 gallons per day in 2015 to 6,873,000 gallons per day in 2035. Its maximum day requirement is expected to increase from 6,160 gpm in 2015 to 9,550 gpm in 2035.

Both alternatives will see an increase in demand. As the Action Alternative has higher growth overall than the No Action Alternative, it has a higher growth rate. However, both alternatives are well under the growth rate assumed in the Nob Hill Water System Plan.

Exhibit 3-25. Nob Hill Water System Growth

Year	Nob Hill System Plan	No Action	Action
2015	31,000	28,151	28,151
2040	51,536	40,248	41,066
Difference	20,536	12,097	12,916
Growth Rate	2.06%	1.44%	1.52%

Source: (Gray & Osborne, Inc., May 2015) and BERK Consulting 2017

Irrigation

Both alternatives will increase the demand for irrigation services. The capital facilities improvements may include extension or improvement of existing pipes by 3.81 to 6.24 miles.

Exhibit 3-26. Irrigation Pipeline Improvement Demand

Time Period	Yakima Population	Feet of Pipe to Meet Target LOS Standard	Current Feet of Pipe Available	Net Reserve or Deficit
LOS Standard = 1.6 miles of pipe per 1,000 served				
2016	53,297	85.27	85.35	0.08
Alternative 1: 2014	55,727	89.16	85.35	(3.81)
Alternative 2: 2040	57,246	91.59	85.35	(6.24)

Source: City of Yakima, 2016; David Brown, City of Yakima Irrigation, 2016; BERK, 2017

Alternative 1: No ActionWater

Within the Yakima Water Service Area, generally in eastern Yakima, the Alternative 1 No Action population growth rate is 0.33% while the Action Alternative growth rate is 0.51%. By 2040 under Alternative 1, there will be a net reserve of 1.7 MGD at MDD scenario. This is a greater net reserve compared to Alternative 2.

Alternative 1 has a projected growth rate less than the Nob Hill Water System Plan, and the Plan improvements can accommodate the projected growth in western Yakima.

Irrigation

Alternative 1 focuses more growth in western Yakima proportionally to eastern Yakima. A greater need for irrigation services will occur requiring over 3.81 miles of irrigation pipeline within eastern Yakima.

Alternative 2: ActionWater

Within the City of Yakima water service area, Alternative 2 will increase the water demand to a level slightly higher than the Draft Water System assumptions. However, the difference in demand is less than 0.5 millions of gallons per day (MGD) at 2040 considering average day demand (ADD). The higher ADD is still within the lower maximum day demand (MDD) (i.e. captures the additional population average demand). Overall, the additional population does not drastically change demand (especially within the 10-year WSP planning period). In addition, the capacity of the City's Water Treatment Plant (WTP) is 21.6 MGD, and the increase in projected MDD still does not exceed the WTP capacity for the planning horizon. This leaves a net reserve of 0.9 MGD at 2040 under MDD conditions. (HDR, 2017)

Alternative 1 has a projected growth rate less than the Nob Hill Water System Plan, and the Plan improvements can accommodate the projected growth in western Yakima.

Irrigation

Alternative 2 focuses less growth in western Yakima proportionally to eastern Yakima. A greater need for irrigation services will occur beyond Alternative 1 requiring over 6.24 miles of irrigation pipeline extension or improvements within eastern Yakima.

Wastewater

Impacts Common to All Alternatives

The Yakima Regional Wastewater Treatment Plant (YRWWTP) has long-term capacity to serve at current levels. A 2014 evaluation of loading and capacity done by the Water and Irrigation Division indicated that there is capacity for hydraulic loading through 2074, organic loading through 2043, and solids loading through 2052. See the Draft Capital Facilities Plan (CFP) for a summary analysis.

Exhibit 3-27 provides the LOS analysis for wastewater treatment, identifying the conservative analysis of population in the 2015 Waste Load Assessment (growth rate of 1.24% over a 60-year period) greater than both Alternatives 1 and 2, and focusing on the capacity for treating pounds of organic materials.

Exhibit 3-27. Sewer LOS Analysis

Time Period	Service Area Population ¹	lbs of Organic Treatment Capacity Needed to Meet Target LOS Standard	Current lbs Organic Treatment Capacity Available	Net Reserve or Deficit (lbs)
L LOS Standard = 342.8 pounds of maximum monthly organic loading per 1,000 population				
2016	111,696	38,175	53,400	15,225
2040	147,379	50,371	53,400	3,029

*The Wastewater service area population includes the City of Yakima, Union Gap, and Terrace Heights

Source: Source: City of Yakima, 2016; Mike Price, Wastewater/Stormwater Manager, City of Yakima, 2016

The YRWWTP has capacity to treat up to 53,400 pounds of organic material. With current load levels of 342.8 pounds of maximum monthly organic loading per 1,000 population, the facility will have surplus treatment capacity of over 3,000 pounds in 2040.

Both alternatives have lower growth rates than that assumed in the Waste Load Assessment: 0.33% and 0.51% respectively for Alternatives 1 and 2, while 1.16% is the rate assumed in the Waste Load Assessment.

Alternative 1: No Action

Alternative 1 supports greater growth proportionally in western Yakima, which will require greater service extension to serve greenfield development.

Alternative 2: Action

Alternative 2 supports an infill policy with a more balanced level of growth between eastern and western Yakima. Improvements to existing infrastructure in already developed areas will be needed as well as extension in western Yakima. While in western Yakima, higher total growth is projected under Alternative 2 compared to Alternative 1, the density pattern is more efficient to serve.

Stormwater

Impacts Common to All Alternatives

Level of service is regulated by the city's code and design standards that comply with state regulation. All new development must meet water quality, runoff, and erosion control requirements of the local and state regulations. In 2005, Yakima County and the Cities of Yakima, Union Gap, and Sunnyside entered an Interlocal Governmental Agreement for compliance under the Eastern Washington Phase II Municipal Stormwater Permit. The Stormwater Management Manual for Eastern Washington provides the design and management practices for facilities in compliance with federal, state, and local jurisdictional requirements.

As the City grows, developments will be required to install new conveyance and stormwater management systems. Maintaining level of service through 2040 will require maintaining the existing system and ensuring new facilities are constructed in accordance with the Municipal Stormwater Permit.

Greater growth is anticipated under all studied alternatives, and such residential and employment development to accommodate growth will be subject to the stormwater management plans and regulations prepared by the City.

Exhibit 3-28. Stormwater Service Area – City Limits – Growth by Alternative

	No Action	Action
2015 Population: City Limits	93,220	93,220
Population Growth: City Limits 2017-2040	18,700	23,211
Western Yakima Proportion of Growth	40%	49%
Eastern Yakima Proportion of Growth	60%	51%
Total Population City Limits	111,920	116,431

Source: OFM 2015 and BERK Consulting, 2017

Alternative 1: No Action

Alternative 1 No Action has lower growth than Alternative 2 Action overall, but with a greater proportion of growth in a lower density pattern in western Yakima. Therefore, a greater level of growth will require implementation of new stormwater systems in areas of greenfield development on vacant and agricultural land.

Alternative 2: Action

Alternative 2 has a greater proportion of growth allocated to eastern Yakima with existing stormwater systems built prior to newer stormwater standards. There is an opportunity for redevelopment in eastern Yakima to improve systems and water quality as noted in Section 3.1.

Mitigation Measures

Incorporated Plan Features

- Alternative 1 is subject to current Comprehensive Plan capital facility policies, the existing Capital Facility Plan, and more recent functional plans prepared for water, irrigation, wastewater, and stormwater which have not yet been incorporated into the current Capital Facility Plan.
- Alternative 2 updates the Capital Facility Plan and integrates analysis of water, irrigation, wastewater, and stormwater from the City's functional plans. Information is presented by Council district. Refreshed policies address the City's equity principles and fiscal policies.

Applicable Regulations and Commitments

- Title 7 Public Services and Utilities regulates Irrigation System, Water System, Wastewater, and Stormwater system connections and rates.
- City of Yakima Water System Plans (2011; pending update in 2017), Wastewater Treatment Plan and System Plans (2013, 2015 and 2016), and Stormwater Management Programs and Plans (2015) guide long-range and strategic actions to ensure sufficient water supply, water treatment, wastewater collection and treatment, and stormwater quality.
- Special Districts including the Nob Hill Water Association provide water services in accordance with a Water System Plan (2015).

Other Potential Mitigation Measures

- None proposed.

Significant Unavoidable Adverse Impacts

Demand for water, irrigation, wastewater, and stormwater will increase under all studied alternatives. Current plans address projected growth under either alternative. No significant unavoidable adverse public service impacts are anticipated with implementation of either alternative with regular capital facility planning and functional plan updates, generally every six years.

3.10 Power and Telecommunications

Affected Environment

Electricity

The City of Yakima is served by Pacific Power and Light Company. Demand for electrical service is determined by the use. The broad distribution of land uses provided by the Future Land Use Map will help determine where upgraded facilities may be necessary.

Natural Gas

The City of Yakima is served Cascade Natural Gas Corporation. Not all residences and businesses are served, however. Future demand and growth patterns may require extended or upgraded facilities.

Telecommunications

Several telecommunications providers are within the City of Yakima. There are several options available for when new construction occurs. The extension and upgrade of telecommunication facilities will likely follow growth patterns.

Impacts

Electricity, Natural Gas, Telecommunications

Impacts Common to All Alternatives

Population growth is compared below by Alternative. The addition of people under either alternative will require a significant amount of new construction, and with new construction comes upgraded and new utility infrastructure.

Exhibit 3-29. Franchise Utilities Service Area – City Limits – Population Growth by Alternative

	No Action	Action
2015 Population: City Limits	93,220	93,220
Population Growth: City Limits 2017-2040	18,700	23,211
Western Yakima Proportion of Growth	40%	49%
Eastern Yakima Proportion of Growth	60%	51%
Total Population City Limits	111,920	116,431

Source: OFM 2015, City of Yakima and BERK Consulting, 2017

Employment growth is compared by alternative below. Likewise, to population, new infrastructure for power and telecommunications will be needed to meet employment demands.

Exhibit 3-30. Franchise Utilities Service Area – City Limits – Population Growth by Alternative

Scenario	No Action	Action
Employment 2015: By TAZ City Limit Approximation	47,578	47,578
Transportation and EIS Assumption: By TAZ	14,783	15,318
Total 2040	62,361	62,896

Source: City of Yakima and BERK Consulting, 2017

Alternative 1: No Action

The No Action Alternative will continue the past trends of the primary residential growth happening in west Yakima. Higher demand for commercial and industrial utilities will occur in similar patterns in those concentrated areas.

Alternative 2: Action

The Action Alternative promotes greater infill in east and central Yakima. The potential for redevelopment and mixed uses may require existing utility infrastructure to be upgraded to accommodate higher densities. Through a new Energy Element, this alternative also promotes and encourages the incorporation of non-traditional energy sources, such as solar, wind and geothermal, into new development and redevelopment.

Mitigation Measures

Incorporated Plan Features

- Under Alternative 1, the current Utility Element will continue to apply with policies addressing utility service provider coordination and conservation, and less emphasis on alternative energy sources.
- With Alternative 2, the Utilities Element and Energy Elements both contain goals and policies for the adequate distribution of utilities with new development and redevelopment projects. The Energy Element establishes additional conservation policies and encourages use of alternative energy sources.

Applicable Regulations

Adequate utility service is a condition of development under these codes and ordinances; the zoning code also addresses allowable utility facilities and permit requirements:

- Title 14 Subdivisions
- Title 15 Zoning
- Title 11 Buildings
- Title 12 Development Standards

Other Potential Mitigation Measures

- New and redeveloped projects will undergo land use and environmental review, as dictated by the scope of the project and applicable regulations.

Significant Unavoidable Adverse Impacts

Future population growth will increase the demand on utilities and will require extension and, in some cases, upgraded facilities. Coordination with service providers early in project review will help avoid significant adverse impacts.

4.0 CITIZEN AMENDMENT REQUESTS

4.1 Programmatic Analysis of Citizen Amendment Requests

Each citizen amendment request described in Chapter 2.0 has been evaluated in Chapter 3.0 cumulatively. In Exhibit 4-1, each request is evaluated individually at a programmatic level regarding potential effects on the natural environment, land use and growth, and public services and infrastructure. The properties contained in the requests below have been evaluated cumulatively for effects on public services and infrastructure in Sections 3.7 to 3.10. At the time of any future development, street frontage and system development changes would likely be required, consistent with the level of development.

Exhibit 4-1. Citizen Amendment Requests – Programmatic Environmental Review

Name, Description, Location	Natural Environment Effects	Land Use and Growth Effects	Public Service and Infrastructure Effects
1. Datal Properties, LLC Low Density Residential to Commercial Mixed Use 113 & 115 N 56th Ave	A commercial development may be more intensive in impervious area than residential uses. For example, lot coverage is 60% in low density zones (SR and R-1) but 80-85% under zones implementing Community Mixed Use (see Exhibit 2-6 for zones and YMC Table 5-1.). An increase in impervious area may increase stormwater flow and effect water quality of streams to which the site drains However, City stormwater regulations will apply and will regulate flows and water quality consistent with the State’s most recent manuals.	The proposal will increase the potential for mixed uses with higher densities and greater employment growth. The parcels are located at the cross-roads of two arterials. The location is appropriate for commercial use, but the size and grade difference will make development difficult. Based on size and configuration of parcels, the development potential of the lot for commercial use is problematic for parking and setbacks. If there is insufficient area for landscaping and setbacks, the compatibility with adjacent residential areas could be insufficient. New design guidelines that fulfil proposed land use policies could help mitigate the effect. Until such time as design guidelines are developed a higher permit review standard may be appropriate to ensure sufficient development conditions.	At higher densities and intensities, the future commercial and residential uses allowed by Commercial Mixed Use will mean greater demand on public services such as police, fire, schools, and parks compared with lower density residential uses. There will be a greater intensity of use, greater transportation trips, and likely a higher demand for water, wastewater, power, and telecommunication facilities with mixed use employment and residential uses at higher densities compared with lower density residential uses.
2. Landon Glenn Industrial to Commercial Mixed Use 203 & 207 Oak St	Minimal effect to the natural environment. The existing residential use at 203 Oak St is completely built out. Commercial development on the vacant 207 Oak Avenue Parcel would more consistent with the neighborhood.	The size of the vacant parcel at 207 Oak St is more amenable to commercial development and is consistent with the surrounding area. No changes are proposed to the existing use at 203 Oak Avenue.	Minimal effect. Potential new development on the vacant lot will utilize existing utilities in the right of way. Utility and transportation demand from a new commercial use would likely be lower than a new industrial use.
3. Jeff Baker Regional Development to Commercial Mixed Use	Changing from Regional Development (RD) to Commercial Mixed Use will have little impact on the Natural Environment. The RD is intended to allow projects at a much larger scale than most the smaller lots in this area can accommodate. The	Most the land use will remain the same. When this area was changed to RD several years ago there were many uses rendered to be legally nonconforming as a result. This change will bring long-term historic uses back into compliance.	Minimal effect as most of the area is already built out. New uses are limited due to necessary utility and roadway extensions that would be necessary if the area were to stay as RD.

Vic. Of E Nob Hill Blvd & S 18th St	Commercial Mixed Use designation is more appropriate to the character of the existing area.		
4. Jay Sentz Low Density Residential to Community Mixed Use 4201 Summitview Ave	Commercial development on this lot is proposed to be incorporated into the adjacent commercial node to the east. Lot coverage would increase from the R-1 standard of 60% to an SCC standard of 85%. All applicable development standards will apply to future development.	The proposal will increase the available uses at the adjacent commercial complex, along with allowing more space for site distance at the existing commercial exit. Site design standards will be in place to protect adjacent residential uses. The lot itself would be difficult to site any commercial use due to its size. However, incorporating the lot into the adjacent commercial complex will allow a site design that can be scaled to the area.	Greater demand on public services will be necessary to accommodate this higher intensity commercial use. The proposed site plan would remove the driveway on this lot to incorporate the parcel into the adjacent commercial development. If approved, sight distance and grade issues at the existing ingress/egress point into the development will be greatly improved.
5. TM Rentals Low Density Residential to Mixed Residential Vic. Of S 38th Ave and W Logan Ave	An increase from Low Density Residential to High Density Residential will increase the density of these sites. Adjacent to the south is Wide Hollow Creek which is classified as a Type II water. Applicable Critical Area development standards and buffers will be observed with future development. The applicant indicates that of the total 7.55 acres, approximately 4.11 acres is within the floodplain/critical area of Wide Hollow Creek; leaving 3.44 acres of developable land.	This change will increase the units per acre from 7 to 8-12 (R-2) or up to 13+ (R-3), depending on the desired zoning. The on-site critical area and floodplain further limit the available area for development on these parcels, making medium to high density residential a viable option, if designed appropriately.	Medium or High Density development will generate more traffic and require greater utility needs than Low Density development. The development review process will require frontage improvements and utility extension consistent with the proposed use.
6. Gail Buchanan Low Density Residential to Mixed Residential 408, 410, & 412 S 88th Ave	An increase from Low Density Residential to High Density Residential will increase the density of these sites. Lot coverage could increase from 60% to 80% and building height could increase from 35-ft to 50-ft if R-3 zoning is desired. If the zoning changes to R-2, lot coverage and building height remains unchanged.	This change will increase the units per acre from 7 to 8-12 (R-2) or up to 13+ (R-3), depending on the desired zoning. Increased densities will require additional site design standards to promote compatibility with adjacent single family homes.	Medium or High Density development will generate more traffic and require greater utility needs than Low Density development. The development review process will require frontage improvements and utility extension consistent with the proposed use.
7. Supercold Storage	None. This change simply brings the FLU designation into conformance with the existing land use.	None. This change simply brings the FLU designation into conformance with the existing land use.	None. This change simply brings the FLU designation into conformance with the existing land use.

Large Convenience Center to Industrial 1415 River Rd			
8. Jerry Hand Medium Density Residential to Commercial Mixed Use 1406 S Fair Ave & 909 LaFollette	A commercial development may be more intensive in impervious area than residential uses. For example, lot coverage is 60% in low density zones (SR and R-1) but 80-85% under zones implementing Commercial Mixed Use (see Exhibit 2-6 for zones and YMC Table 5-1.). An increase in impervious area may increase stormwater flow and affect water quality of streams to which the site drains However, City stormwater regulations will apply and will regulate flows and water quality consistent with the State's most recent manuals.	This neighborhood has a broad mixture of residential and commercial uses. Adjacent uses to these sites are commercial to the north and east, residential to the south and west. The total acreage of both parcels is only 0.33 acres, which will dramatically limit the intensity of any proposed future commercial development. With careful site design and consideration of setbacks and landscaping, the impacts on adjacent residential uses can be minimized.	Due to the limited area of the site, future development will not likely put a burden on the street or utility infrastructure. More intense development will likely require new water and sewer connections that can handle more capacity than the current residential uses.
9. William and Linda Beerman Low Density Residential to Community Mixed Use 419 & 421 S 16th Ave, 1513 Tieton Dr	421 S 16th and 1513 Tieton are an existing commercial business. 419 is a single family home. The proposal would remove the single family home to expand the parking are for the business. A commercial development may be more intensive in impervious area than residential uses. For example, lot coverage is 60% in low density zones (SR and R-1) but 80-85% under zones implementing Community Mixed Use (see Exhibit 2-6 for zones and YMC Table 5-1.). An increase in impervious area may increase stormwater flow and effect water quality of streams to which the site drains However, City stormwater regulations will apply and will regulate flows and water quality consistent with the State's most recent manuals.	The only land use change would be at 419 S 16th Avenue which would remove the single-family home and incorporate the property into the adjacent commercial development. Careful site design and appropriate site screening and setbacks will be necessary to promote compatibility with the neighborhood.	Depending on future site design, this change could minimize traffic conflicts by relocating the existing driveway along 16th which is less than 100-feet from the intersection. Stormwater management will be important if the parking lot is expanded.
10. SOZO Sports of Central WA	This area is currently being constructed as a soccer complex and public park (currently Low Density Residential).	The soccer complex and park area comprises the majority of this request, which was approved by the City of Yakima	The 6-year TIP includes a project to widen S 36th Avenue from Spring Creek Road to Sorenson Road, and classify 36th as a

**Industrial and Low
Density Residential to
Commercial Mixed Use**
**Vic. Of S 36th Ave and
Sorenson Rd**

Environmental considerations for the complex were reviewed in SEPA#035-15. Other parcels outside of the complex are changing from Industrial to Commercial Mixed Use. Future development will undergo environmental review as appropriate. Commercial uses will likely have less environmental impact than Industrial.

by CL2#014-15. Parcels outside of the complex that are changing from Industrial to Commercial will be able to provide support facilities to the park. Furthermore, these parcels are within the Airport Safety Overlay which dramatically limits the development potential. Small-scale commercial development is more viable than industrial.

Collector. Utility connections and other considerations will be required for future development.

11. Gary Delaney
**Medium Density
Residential to
Community Mixed Use**
1414 S 2nd Ave

None. This change simply brings the FLU designation into conformance with the existing land use.

None. This change simply brings the FLU designation into conformance with the existing land use.

None. This change simply brings the FLU designation into conformance with the existing land use.

12. Mark Hoffmann

**Industrial to Low
Density Residential**
**3109 W Washington
Ave**

None. This change simply brings the FLU designation into conformance with the existing land use.

None. This change simply brings the FLU designation into conformance with the existing land use.

None. This change simply brings the FLU designation into conformance with the existing land use.

5.0 ACRONYMS, ABBREVIATIONS, AND REFERENCES

5.1 Acronyms and Abbreviations

ADD – Average Day Demand

ADT – Average Daily Traffic

BAS – Best Available Science

BMPs – Best Management Practices

CARA – Critical Aquifer Recharge Area

CFP – Capital Facilities Plan

CPPs – Countywide Planning Policies

DAHP – Department of Archaeology and Historic Preservation

DEIS – Draft Environmental Impact Statement

EIS – Environmental Impact Statement

FEIS – Final Environmental Impact Statement

FEMA – Federal Emergency Management Agency

FLU – Future Land Use

FTE – Full Time Employees

FWHCA – Fish and Wildlife Habitat Conservation Areas

GMA – the Washington State Growth Management Act (RCW 36.70A)

GPM – Gallons per Minute

LOS – Level of Service

MDD – Maximum Day Demand

MGD – Million Gallons per Day

NPDES – National Pollution Discharge Elimination System

NRHP – National Register of Historic Places

OFM – Washington State Office of Financial Management

PHD – Peak Hour Demand

PHF – Peak Hour Flow

RCW – Revised Code of Washington

RTPO – Regional Transportation Planning Organization

SEPA – Washington State Environmental Policy Act (WAC 174-11)

TAZ – Transportation Analysis Zones

UGA – Urban Growth Area

WAC – Washington Administrative Code
WDFW – Washington Department of Fish and Wildlife
WSDOT – Washington State Department of Transportation
WSP – Washington State Patrol
WWTP – Wastewater Treatment Plant
YMC – Yakima Municipal Code
YRCAA – Yakima Regional Clean Air Agency
YRWWTP – Yakima Regional Wastewater Treatment Plant
YVCOG – Yakima Valley Council of Governments

5.2 References

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6.0 DISTRIBUTION LIST

The following agencies and interested parties have received a notice of availability of this Draft SEIS.

Tribes

Yakama Bureau of Indian Affairs, Yakama Nation Environmental Management Program, Yakama-Klickitat Fisheries

Federal Agencies

US Army Corps of Engineers, Natural Resource Conservation Service, NOAA Fisheries, US Environmental Protection Agency, US Fish and Wildlife Service, Federal Aviation Administration

State Agencies

Department of Commerce, Department of Ecology, Department of Fish and Wildlife, Department of Natural Resources, Department of Social and Health Services, Department of Archaeology and Historic Preservation, Energy Facility Site Evaluation Council, Office of Rural and Farmworker Housing, Department of Transportation

Regional Agencies

Yakima County Commissioners, Yakima County Planning, Yakima Regional Clean Air Agency, Yakima Valley Conference of Governments, Yakima Regional Clean Air Agency, Conservation District

Local Agencies

Ahtanum Irrigation District, Nob Hill Water, Greater Yakima Chamber of Commerce, Hispanic Chamber of Commerce of Yakima, Nob Hill Water, West Valley School District, Yakima School District, Yakima Valley Museum, Yakima Waste Systems, Yakima Library, City of Union Gap

Newspapers and Radio

Newspapers: Yakima Herald, El Sol de Yakima, Yakima Valley Business Times, Sunnyside Daily Sun News, El Mundo, La Voz, Associated Press

TV Stations: KIMA, KNDO, KAPP, KCJT, KNDU, KEPR, KVEW, YCTC, Y-PAC

Radio Stations: Radio Yakima (KXDD, KHHK, KARY, KRSE, KBBO, KTCR), Townsquare Media Yakima (KMGW, KIT, KUTI, KFFM, KDBL, KATS), Casa Media Group (KMNA, KLES), Bustos Media (KZTA, KDYK), La Marketa Radio, Northwest Public Radio, KDNA

Interested Parties Central WA Homebuilders Association, Barge-Chestnut Neighborhood Association, Yakima Association of Realtors, Associated General Contractors of WA, RCDR. Additionally, 213 individuals were notified via email who signed up for notification during our various outreach events.

All parcels with a future land use change, which may result in a future zoning change, have been notified that their future land use is changing. For additional information, please see the contact information provided on the fact sheet.

7.0 APPENDIX A: SCOPING NOTICE AND COMMENTS



CITY OF YAKIMA COMPREHENSIVE PLAN UPDATE

Determination of Significance & Scoping Notice

Proposal and Alternatives

The City of Yakima is updating its Comprehensive Plan by June 2017 in accordance with Growth Management Act (GMA). An updated Comprehensive Plan will mean more housing choices, new places to work, better connected roads and parks, new recreation opportunities, and improved public services. Elements of the plan to be updated or added include: Vision Statement, Land Use, Economic Development, Housing, Transportation, Capital Facilities, Utilities, Parks and Recreation, Natural Environment, Energy (new), and Historic Preservation (new).

Based on 20-year growth targets, the City is anticipated to add more than 17,000 people and 8,500 jobs between now and 2040. To achieve an updated vision and accommodate growth, it is anticipated that the land use and subsequent changes to the zoning map will be amended to reflect alternative land use patterns. Some of these changes may include:

- Consolidated plan designations with few categories and greater allowance to change underlying zoning designations if appropriate,
- New policies or map changes to ensure neighborhoods have appropriately defined mixed use commercial centers and a range of housing types, and
- Potentially some zoning changes to better match current land use patterns or alternatively advance the refreshed Comprehensive Plan vision.

Transportation and Capital Facilities Plans will be amended and support the land use plan. Additionally, the City is evaluating its critical areas policies and regulations for updated best available science and may propose amendments accordingly.

The City's integrated Comprehensive Plan and Supplemental Environmental Impact Statement (SEIS) will evaluate alternatives. The range of alternatives is likely to be similar to the following:

- **Alternative 1 No Action – Current Comprehensive Plan:** This alternative is required by the State Environmental Policy Act. It assumes current policies, land use plans, and codes remain in place. Growth would occur based on current plans and zoning at a level above growth targets.
- **Action Alternative 2 – Plan Update – Infill, Mixed Use, and Higher Growth:** Updates the Comprehensive Plan including the vision statement, all elements, the future land use map, transportation plan, capital facilities plan, and selected implementing zoning and critical areas codes in a manner that promotes a vision of equity in plans and strategies, and growth in already developed areas where there is infrastructure and a well-designed and compatible land use pattern. This alternative would also implement the individual parcel rezone/ Future Land Use amendments recommended for evaluation by the Planning Commission that promote infill and greater land use compatibility. Growth would occur based on a revised land use plan and zoning at a level higher than growth targets. A greater emphasis on infill development and mixed uses would allow an improved jobs-housing balance. The City may review a sub-alternative of growth closer to target levels.

Study Area

The study area for the Yakima Comprehensive Plan Update is the current city limits for the City of Yakima. Yakima County is planning for unincorporated Yakima Urban Growth Area lands.

Proponent and Lead Agency

The City of Yakima – Department of Community Development

EIS Required

The lead agency has determined this proposal is likely to have a significant adverse impact on the environment. A supplemental environmental impact statement (SEIS) is required under RCW 43.21C.030 (2)(c) and will be prepared.

The SEIS will supplement the Final Environmental Impact Statement prepared for the Yakima Urban Area Comprehensive Plan, Appendix A, November 2006. The SEIS will also consider other recent SEPA documents for Comprehensive Plan amendments over time.

An Integrated Plan/SEIS will be prepared for the Yakima Comprehensive Plan Update. Alternatives will be analyzed in the SEIS portion of the integrated Plan/SEIS along with analysis of impacts to the built and natural environment. An integrated Plan and SEIS is allowed by SEPA Rules (WAC 197-11-210 to 235).

The lead agency has identified the following areas for discussion in the SEIS: Natural environment (plants and animals, water resources, air quality), land use patterns, population/housing/employment, relationship to plans and policies, transportation, parks and recreation, police and fire services, schools, sewer, water, and utilities (electricity, natural gas, telecommunications). The analysis will be programmatic in nature and will rely on available studies and information where appropriate.

Scoping and Comment Deadline

Agencies, tribes, and the public are invited to comment on the scope of the SEIS, potential alternatives, potential significant adverse environmental impacts, mitigation measures, and potential approvals. The scoping comment period begins October 14, 2016 and ends 5:00 pm on November 4, 2016. The method and deadline for giving us your comments is:

Submit comments in writing to Joseph Calhoun, Senior Planner; 129 North 2nd Street; Yakima, WA 98901; or joseph.calhoun@yakimawa.gov by 5:00 pm on November 4, 2016.

Please visit <https://www.yakimawa.gov/services/planning/comprehensive-plan-update/> to review draft plan documents.

Following the scoping comment period, The City of Yakima will evaluate the comments and determine the scope of environmental review. At that time, the alternatives and the integrated Plan/SEIS will be developed.

Responsible Official

Joan Davenport, Director of Community Development
City of Yakima
129 North 2nd Street
Yakima, WA 98901

Date: 10-13-16

Signature: _____



Appeals

You may appeal this determination of significance in accordance with YMC 6.88.170 Appeals. You should be prepared to make specific factual objections. Contact the SEPA Responsible Official above to read or ask about the procedures for SEPA appeals.

Joseph Calhoun, Senior Planner
City of Yakima Planning
129 North 2nd Street
Yakima, WA 98901

Dear Mr. Calhoun:

I represent the Ahtanum Irrigation District and have been asked by the Board to respond to your request for comments about the proposed 2040 Comprehensive Plan.

Later we will have some comments about the water situation in the Ahtanum area but understand that now is the time to comment on other issues.

Traffic has become a major concern for the Ahtanum area. In the mid afternoon, eastbound traffic is problematic on Ahtanum Road from approximately South 80th to South 64th avenues. School buses and fruit trucks seem to congregate and back up traffic for considerable stretches, at times up to a mile or more. Westbound traffic from Union gap also tends to back up.

Several large City housing developments are currently underway in the vicinity of South 64th Avenue and Ahtanum Road (Ahtanum Crossings to the West and Anderson Estates to the East) and will undoubtedly further compound an already challenging traffic issue. Traffic lights and other improvements on Occidental Road and Ahtanum Road are essential to mitigate the problems caused by the increased traffic when these developments are completed.

We appreciate your attention to our concerns.

Very Truly Yours,



Jerry D. Talbott,
Attorney for Ahtanum Irrigation District.

RECEIVED

NOV 07 2016

**CITY OF YAKIMA
PLANNING DIV.**



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

November 1, 2016

Joseph Calhoun
City of Yakima
Dept. of Community Development
128 North 2nd Street
Yakima, WA 98901

Re: City of Yakima Comprehensive Plan 2040 Update

Dear Mr. Calhoun:

Thank you for the opportunity to comment on the scope of the Environmental Impact Statement for City of Yakima Comprehensive Plan 2040 Update. We have reviewed the documents and have the following comments.

SHORELANDS/ENVIRONMENTAL ASSISTANCE

Natural Environment/Wetlands/page 6: NWI maps are only one tool to use to identify wetlands within City boundaries. Because NWI mapped wetlands are generally only 60 percent accurate (due to the scale at which maps are drawn, age of maps, vegetation cover, and changes in hydrologic inputs over time, to name just a few reasons why maps might be inaccurate) the City may want to consider additional mapping at a more detailed scale during this update process.

The City Comprehensive Plan should include a goal of “no net loss” of wetland function (WAC-365-196-830). The plan should include infra-structure development which avoids wetland losses as much as possible. Wetlands should be protected in a variety of ways, including placement of wetlands within protected natural open space areas, inclusion of wetlands in parks or other recreational areas, and requiring adequate buffers from development that take the varying levels of impact from new development into account when determining appropriate buffer requirements. In addition, the City may want to consider seeking funding to set aside areas where City-wide wetland mitigation banks or advance mitigation areas for City projects could be built.

Ecology has updated some of its documents regarding wetland protection, and put some of that information into a power-point presentation that was given to the October 26, 2016 Eastern Washington Planners Forum in Moses Lake. That power-point presentation is available via the WA State Department of Commerce website. (Or you can contact Donna Bunten at Ecology,

Mr. Calhoun
November 1, 2016
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(360) 407-7172 or dbun461@ecy.wa.gov, if you cannot find the presentation at the Commerce site.)

Ecology would be happy to review updated draft CAO language regarding wetlands before it goes out to public review. We would also be happy to provide other wetland technical assistance, including wetland technical report review(s) or attend pre-application meetings with wetland issues as needed. Call Cathy Reed at (509) 575-2616 for wetland technical assistance.

If you have any questions or would like to respond to these Shorelands/Environmental Assistance comments, please contact **Catherine Reed** at (509) 575-2616 or email at catherine.reed@ecy.wa.gov.

Sincerely,



Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012
crosepacoordinator@ecy.wa.gov



State of Washington
Department of Fish and Wildlife
South Central Region 3 – 1701 S. 24th Ave., Yakima WA 98902-5720
Phone: (509) 575-2740, Fax (509) 575-2474

November 04, 2016

City of Yakima Planning Division
Joseph Calhoun, Senior Planner
129 N 2nd St
Yakima, WA 98901

Subject: **State Environmental Policy Act Document, Comments on
Determination of Significance and Notice of Scoping, Comprehensive
Plan 2040 Update, City of Yakima, Yakima County**

Dear Joseph:

The Washington Department of Fish and Wildlife (WDFW) has reviewed the above-referenced State Environmental Policy Act (SEPA) document for a Determination of Significance Notice on the Comprehensive Plan 2040 Update, received via the City website on October 28, 2016, and offers the following comments at this time. Other comments may be offered as the project progresses.

NATURAL ENVIRONMENT

Management and Removal of Vegetation on Yakima River Levees:

The City practices the removal of vegetation on the Federal flood-control levee system within city limits. Active management of levee vegetation is no longer required for U.S. Army Corps of Engineers - PL 84-99 levee certification. The near-stream and sometimes overhanging vegetation, which has been severely cropped for many years, can provide significant cover and shade for fish and a food source in the form of insects, which fall or land on the water from it. Active removal of levee vegetation impairs the recruitment to the river of woody debris organic detritus. Barren levees reduce channel roughness, which is a negative characteristic in terms of providing for levee stability and longevity. Thus, keeping vegetation on levees can have many positive benefits.

We recommend that the City immediately suspends its current management of vegetation on the levee system and adopt a policy under Goal 9.4 of sustaining that vegetation and approaching levees as fully part of the Riparian - Fish and Wildlife Habitat Conservation Area. Pierce County, Washington makes available their document related to maximizing habitat while minimizing negative effects of vegetation on levees. This document "Levee Vegetation Management Strategy" is available on the Internet at <https://www.co.pierce.wa.us/ArchiveCenter/ViewFile/Item/4622>.

In urban environments where wildlife presence is encouraged it is vital that small patches of habitat be preserved and enhanced. In this environment, wildlife habitat; particularly

for birds and small mammals, is limited in urban areas. When looking to develop parks and new development in general; habitat should be preserved. Attempts to make everything clean and "park-like" should be discouraged.

--Examples of how this can be done is to keep riparian vegetation intact and enhance it in areas, such as along the greenway and local lakes and ponds. Birds typically use these areas both for nesting and as important migration corridors.

--In our parks and open spaces, native vegetation should be planted as landscaping when possible. We should find opportunities to encourage brushy habitat areas in our parks, not just clean landscaping and lawns.

--Wetlands, and floodplain areas, even degraded ones, are often used by urban wildlife. Attempts to fill them in or further degrade them should be discouraged.

Thus, a new policy might be adopted, such as: "Conserve, protect and enhance native vegetation in open spaces, parks and riparian areas. Consider using native vegetation for planting in these areas and look for opportunities to enhance habitat for fish and wildlife".

Goal 9.3.5 does not convey a clear meaning and its intentions are not well understood. However, we do support certain land uses (parks, athletic venues) where important hydrological functions exist, provided those natural functions continue to be fully maintained following implementation.

Natural Environment Maps:

1. The wetlands/stream maps seem to be missing many/most of the smaller wetlands that National Wetlands Inventory (NWI) shows. Our recommendation is to use all the information displayed on the NWI layer.

2. Areas listed as "Urban Natural Environment Open Space" are mapped as Shrub-steppe (also listed as Urban Natural Environment Open Space" in the attributes). The term "Shrub-steppe" carries much more clarity and provides a contextual tie-in to both "Natural Environment" and "Open Space". Thus, "Shrub-steppe" is consistent across the landscape and our is preferred term.

Zoning Maps:

Some of the floodplain is designated as "Vacant/Under developed/Open Space". We also see that some of the Naches River floodplain is designated as "Agriculture and Resource". The background on these groupings is unknown, but some of this verbiage may be counterproductive in designating floodplain and riparian habitat.

Joseph Calhoun
Notice of Scoping, Comprehensive Plan 2040 Update
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Please feel free to contact me with any questions or clarifications you may require. My phone number is 457-9310.

Sincerely,

A handwritten signature in black ink, reading "Eric Bartrand". The signature is written in a cursive style with a large, stylized "E" and "B".

Eric Bartrand

Department of Fish and Wildlife
Area Habitat Biologist
1701 S 24th Avenue
Yakima, WA 98902

EB,SD:eb

Joseph Calhoun
Notice of Scoping, Comprehensive Plan 2040 Update
November 4, 2016
Page 4



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

November 4, 2016

Sent via Email

Joseph Calhoun, Senior Planner
City of Yakima
129 North 2nd Street
Yakima, WA 98901
Email: joseph.calhoun@yakimawa.gov

Re: COMMENTS ON SCOPE OF SEIS FOR YAKIMA CITY COMPREHENSIVE PLAN UPDATE

Dear Mr. Calhoun:

I write on behalf of the Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation") to provide comments on the proposed scope of the Supplemental Environmental Impact Statement ("SEIS") for the City's Comprehensive Plan Update (the "Update").

Specifically, the Yakama Nation requests that the SEIS review and address the Update's treatment of cultural, archaeological, and historic resources (collectively, "cultural resources"). As you know, the City of Yakima is within the Yakama Nation's ceded territory, and has been home to Yakama People since time immemorial. In preparing the SEIS, it is important that the City understands and assesses the cultural nature of the lands that the Update will apply to. To do this, the City should use and consider the best available information regarding cultural resources, including information obtained through consultation with the Yakama Nation and from the Washington State Department of Archaeological and Historic Preservation ("DAHP").

Ultimately, the City should adopt a Comprehensive Plan (and associated critical area ordinance) that includes specific goals, policies, and regulations to protect cultural resources. Having clear cultural resource goals, policies, and regulations will prevent damage and destruction of Yakama cultural resources, and will also protect development project proponents by promoting the early identification of cultural resources, and preventing costly mid-construction issues.

The Yakama Nation looks forward to the opportunity to work cooperatively with the City in its Comprehensive Plan Update process. Please contact Yakama Nation Archaeologist Jessica Lally at Jessica_Lally@yakama.com with questions.

Respectfully,



PHILIP RIGDON
DNR SUPERINTENDENT, YAKAMA NATION

Yakama Nation, Post Office Box 151, Toppenish, WA 98948 (509) 865-5121

8.0 APPENDIX B: CRITICAL AREAS ORDINANCE GAP ANALYSIS



CRITICAL AREAS REGULATIONS UPDATE BEST AVAILABLE SCIENCE RECOMMENDATIONS

INTRODUCTION

With passage of the Growth Management Act (GMA), local jurisdictions throughout Washington State (State), including the City of Yakima (City), were required to develop policies and regulations to designate and protect critical areas. The GMA directs jurisdictions to periodically conduct a thorough review and update their Comprehensive Plan and regulations (Revised Code of Washington [RCW] 36.70A.130). The City originally developed its first critical areas regulations in 1998 as Chapter 15.27 of its Yakima Municipal Code (YMC), and adopted revisions in 2008 and 2009 based on the then-current best available science (BAS).

The City is currently undergoing a comprehensive review and update of its Comprehensive Plan and development regulations. When updating critical areas policies and regulations, jurisdictions must revisit the standards to establish that they are based on the most recent BAS and “give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries” (RCW 36.70A.172).

Critical areas, as defined by the GMA (RCW 36.70A.030(5)), include:

- 1) Frequently flooded areas (Part Four of YMC 15.27),
- 2) Fish and wildlife habitat conservation areas (Part Five),
- 3) Wetlands (Part Six),
- 4) Geologically hazardous areas (Part Seven), and
- 5) Critical aquifer recharge areas (Part Eight).

The following table provides recommendations for revisions to the 2009 critical areas regulations based on recent advances in BAS, as well as improvements to support clarity, ease of use, and general consistency with the RCW and the Washington Administrative Code (WAC), and to eliminate redundancy and conflict with Title 17 (Shoreline Master Program [SMP] Regulations) YMC. Key areas of recommended change are as follows:

- 1) In the Fish and Wildlife Habitat Conservation Areas section, broaden the application to more than “hydrologically related critical areas” and update the stream typing and buffer system.
- 2) In the Wetlands section, implement updates for consistency with the recently modified wetlands regulations in the SMP and recently issued science-based wetland guidance.

- 3) In the Critical Aquifer Recharge Areas section, extensively revise to fill the risk gap left by deferring regulation of this resource primarily to state and federal law.

The scientific information reviewed during development of these recommendations is included in the last column of the table and listed in the References section at the end of this document.

ANALYSIS OF CRITICAL AREAS REGULATIONS (YMC 15.27)

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
Part One. General Provisions		
15.27.120 Purpose of chapter	Amend as follows: "The purpose of this chapter is to establish a single, uniform system of procedures and standards for development within designated critical areas <u>outside of shoreline jurisdiction</u> within the incorporated city of Yakima and its urban growth area. "	Clarifies that these regulations are not applicable in shoreline jurisdiction; shoreline critical areas regulations are separately addressed in Chapter 17.09 Yakima Municipal Code (YMC).
15.27.140.A Applicability	Amend as follows: "The provisions of this chapter shall apply to any new development, construction, or use within the incorporated portion of the city of Yakima and its urban growth area <u>outside of shoreline jurisdiction</u> designated as a critical area..."	Change to avoid confusion with shoreline regulations in Title 17.
15.27.140.B Applicability	Update as needed.	
Part Two. Definitions		
Fill	Amend as follows: "...The physical structure of a shore <u>bank</u> stabilization structure shall not be considered fill...."	Change to avoid confusion with shoreline regulations in Title 17.

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
Fish and wildlife habitat conservation	Add this definition: Fish and wildlife habitat conservation means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term. Counties and cities should engage in cooperative planning and coordination to help assure long term population viability.	Definition taken from Washington Administrative Code (WAC) 365-190-130(1).
Fish and wildlife habitat conservation areas	Add this definition: "Fish and wildlife habitat conservation areas" are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species. Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.	Definition taken from WAC 365-190-030(6)(a and c).
Habitats of local importance	Add this definition: "Habitats of local importance" are designated as fish and wildlife habitat conservation areas based on a finding by the city that they are locally important.	Definition adapted from WAC 365-190-030(6)(b).
Hydrologically related critical area (HRCA)	Delete this definition as it's no longer in use.	
Priority habitat and species	Add the following definitions: "Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: comparatively high fish or wildlife density, comparatively high fish or wildlife species diversity, fish spawning habitat, important wildlife habitat, important fish or wildlife seasonal range, important fish or wildlife movement corridor, rearing and foraging habitat, refuge, limited availability, high vulnerability to habitat alteration, unique or dependent species, or shellfish bed. A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife. A priority habitat may also be described by a successional stage. Alternatively, a priority habitat may consist of a specific habitat element	These definitions were taken from Washington Department of Fish and Wildlife's (WDFW's) <i>Priority Habitat and Species List</i> (2008). WDFW's system for

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
	(such as talus slopes, caves, or snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife. “Priority species” means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below: A. Washington State (State) Listed or State Proposed Species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by WDFW (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297. B. Vulnerable Aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. C. Species of Recreational, Commercial, and/or Tribal Importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation. D. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.	designating Priority Habitats and Species (PHS), and providing recommendations for management of those habitats and species, is an important element of best available science that guides protection of the full range of fish and wildlife habitat conservation areas. The current regulations thoroughly address aquatic species and habitats, but other habitats and species are not covered.
Restore and Restoration	Replace with the following (adapted from the definition used in YMC 17.01.090): “Restore,” “restoration” or “ecological restoration” means the reestablishment or upgrading of impaired functions, such as those listed in YMC 15.27.504, that have been lost or destroyed through natural events or human activity. This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive structures, and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the site to aboriginal or pre-European settlement conditions.	Consistency with definition in Title 17. This definition includes the appropriate acknowledgment that “restoration” is a continuum from any upgrade to full reestablishment.

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
Species of local importance	Add this definition: "Species of local importance" are those species that are of local concern due to their population status or their sensitivity to habitat alteration or that are game species.	Taken from WAC 365-190-030(19).
Waters of the state	Add this definition: "Waters of the state" are all lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.	Taken from Revised Code of Washington (RCW) 90.48.020.
Part Three. Application and Review Procedures		
15.27.305 Documented exemptions for hydrologically related critical areas and wetlands	Update section title to: Documented exemptions for <u>fish and wildlife habitat conservation</u> hydrologically related critical areas and wetlands .	Greater consistency with WAC classification of critical areas.
15.27.307.A Mitigation requirements	Modify as follows: If an alteration to a critical area is unavoidable, all adverse impacts to that critical area and its buffers shall be mitigated for in accordance with an approved mitigation plan and mitigation for wetland impacts shall be mitigated in accordance with the Washington State Department of Ecology Wetland Mitigation in Washington State, Parts 1 and 2 (March 2006 or as updated).	Critical area-specific mitigation guidance should be located within that critical area's regulations section for ease of staff and public use.
15.27.315 Supplemental report requirements for specific critical areas	Modify as follows: A. Fish and Wildlife Habitat Conservation Areas <u>Stream Corridors</u> . When a critical areas report is required for a <u>fish and wildlife habitat conservation area</u> stream corridor or hydrologically related critical area , it shall include the following: Add a new 3. <u>A discussion of any federal, state or local management recommendations which have been developed for the species or habitats in the area, and how they will be incorporated into the project.</u>	Greater consistency with RCW and WAC classification of critical areas.
Part Four. Flood Hazard Areas		
15.27.401 Principles	Modify as follows: Part Four recognizes the right and need of the river <u>and stream</u> channels to periodically carry more than the normal flow of water....	This sentence's reference to "the river" implies that

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		there is only one feature in the City of Yakima (City) that has designated flood hazard areas. Two rivers and a number of streams have mapped floodway and/or floodplain.
15.27.409- 15.27.412 Floodway fringe and floodway permitted and prohibited uses	• Consider curtailing certain permitted uses (particularly new development) in the floodway fringe and expanding the list of prohibited uses in the floodway fringe so that treatment is more similar to floodway regulations. • Consider prohibiting new dikes in the floodway.	RCW 36.70A.172 requires that the City “give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.” WDFW (Knight, 2009) and many other sources emphasize the importance of floodplains in providing physical habitat for salmonids, as well as supporting watershed-/basin-level processes that help form and maintain physical

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
		habitat. New uses in floodplains can degrade aquatic habitat and have an adverse effect on salmonids and other aquatic or terrestrial species if they increase stormwater runoff/reduce infiltration, reduce sources of large woody debris, alter the size and volume of sediment inputs, or interfere with channel migration, among others.
Part Five. Fish and Wildlife Habitat and the Stream Corridor System		
General	Replace use of “hydrologically related critical area” to the more encompassing “fish and wildlife habitat conservation area” in this section. Retitle this Part Five as “Fish and Wildlife Habitat Conservation Areas.”	See comment below.
15.27.500 Purpose and intent	Revise the Purpose and Intent section as shown below: “The stream corridor system includes hydrologically related critical areas, streams, lakes, ponds, and wetlands and is part of a fragile and highly complex relationship of geology, soils, water, vegetation, and wildlife. Policies and standards to help conserve and protect fish and wildlife habitat conservation areas are designed to accomplish the following: A. Meet the requirements of the Growth Management Act (RCW 36.70A.172) regarding best available science; B. Follow the requirements pursuant to flood-resistant construction in the adopted building code; C. Provide a zero net loss of natural wetland functions and values;	This Purpose and Intent section and the regulations that follow target only hydrologically related critical areas, which eliminates the potential to provide appropriate levels of protection of upland

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	BD. Provide possible Require consideration of alternatives for necessary development, construction, and uses within <u>fish and wildlife habitat conservation areas</u> a designated stream corridor and other hydrologically related critical areas; CE. Prevent decline in the quantity and quality of surface and subsurface waters; DE. Conserve, restore, and protect fish and wildlife habitats, vegetation, and ecological relationships; EG. Protect sensitive areas of the stream corridor <u>fish and wildlife habitat conservation areas</u> from the potential negative effects of development <u>through coordinated land use planning; and</u> FH. <u>Protect fish and wildlife habitat conservation areas</u> through voluntary agreements or government incentives, provide protection of natural wetland functions and values; and I. Recognize wildlife area conservation habitats within their natural geographic location through coordinated land use planning."	habitats and species that require those upland habitats to support some part of their life cycle. Accordingly, language is recommended to address the full range of potential fish and wildlife habitats in the City, outside of shoreline jurisdiction, and to be consistent with updated definitions of this critical area type that were promulgated by WDFW and included in the WAC.
15.27.501 Protection approach	Revise the Protection Approach section as shown below: "A.—To maintain fish and wildlife habitat, there must be adequate environmental conditions for reproduction, foraging, resting, cover, and dispersal of animals. Factors affecting both habitat and its quality include the presence of essential resources such as food, water, <u>and cover</u> nest building materials, and lack of <u>disturbance and diseases.</u> The city of Yakima protects fish and wildlife habitat through: 1. <u>Designation of fish and wildlife habitat conservation areas</u> Protection of habitat for aquatic species; and 2. <u>Application of development standards based on best available science to proposed activity and development in or near fish and wildlife habitat conservation areas.</u> Protection of habitat for species located near the water.	Modified A for technical accuracy and to provide greater clarity of protection mechanisms.

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	B. The city of Yakima's approach to protecting threatened, endangered, and sensitive species habitat is by using the protection approach sections of this chapter."	
15.27.502 and 15.27.503 Hydrologically related critical area features and Habitat and habitats of local importance	Replace/modify existing language in .502 and .503 with the following, and retitle section as 15.27.502 Designation: A. Designation: Fish and wildlife habitat conservation areas are those habitat areas outside of shoreline jurisdiction that meet any of the criteria listed below. 1. Areas with which state and federal endangered, threatened, and sensitive species have a primary association; 2. Habitats and species of local importance; 3. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat; 4. Waters of the state, including any required buffers and associated Federal Emergency Management Agency-mapped floodplains and floodways; 5. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and 6. State natural area preserves, natural resource conservation areas, and state wildlife areas. B. Habitats and species of local importance. 1. All species and habitats identified by WDFW's <i>Priority Habitats and Species</i> program that may be found in the city of Yakima are designated as fish and wildlife habitat conservation areas and afforded protection under this chapter. 2. [Retain existing 15.27.503.B here] 3. [Modify existing 15.27.503.C as shown] "Development Standards. Projects located within habitats of local importance <u>or within 200 feet of species of local importance</u>, as designated in subsection A <u>B.1 and B.2</u> of this section, shall meet the standards below, rather than comply with the applicable development standards in YMC 15.27.508 through 15.27.521, unless review is also needed for a hydrologically related critical area. <u>In addition, P</u>projects shall be designated using management recommendations established for the species or habitat by federal and state agencies, or those adopted for species and habitats of local importance by the city of Yakima. The department shall consider the extent such recommendations are used in its decision on the proposal, and may consider recommendations and advice from agencies with expertise."	Derived from WAC 365-190-130(2). Recommend reorganization of these code sections to provide more consistency with the State's classification of critical areas, and better balance the emphasis on aquatic <i>and terrestrial</i> species. Although the City's code currently contains a process for designating species and habitats of local importance, this section of code has not been used. Instead, it is recommended, consistent with WDFW guidance, that habitats and species of local importance be specifically named to

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
		include PHS minimally, and then include the process for nominating additional species or habitats.
Streams, Lake and Ponds Typing System 15.27.505	The current water-typing system does not provide a clear, scientific basis to distinguish the different water types. The City should consider switching to either WAC 222-16-030 (Water typing system) or WAC 222-16-031 (Interim water typing system). Either of these systems would support application of the buffer scale in a way that more closely matches the actual functions and values of a given waterbody.	RCW 36.70A.172 requires that the City “give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.” Although the current typing system’s linkage to a suite of specific functions (in the case of Type 2) is science-based, the application of it is too subjective, and there could be situations where anadromous fish or other salmonids may be using a lower-functioning stream, and thus be assigned

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
		an inappropriately smaller buffer.
15.27.505.A Streams, lakes and ponds typing system	Amend as follows: Type 1 <u>waters streams</u> are those waters, within their ordinary high water mark (OHWM), meeting the criteria as “shorelines of the state” and “shorelines of statewide significance” under RCW Chapter 90.58. Other W <u>waters associated with Type 1 waters streams as defined in RCW Chapter 90.58 are not included</u> are not considered Type 1 waters. <u>Type 1 waters are regulated exclusively under Title 17 of the Yakima Municipal Code.</u>	If the City elects to switch to the system in WAC 222-16-030, Type 1 would be re-named Type S.
15.27.505.B Streams, lakes and ponds typing system	The delineation of perennial streams into Type 2 (listed in current Appendix B) and Type 3 waters as currently defined seems particularly vague and subjective. If the City does not wish to switch water typing systems altogether, then it is recommended that Type 2 be defined as perennial, salmonid-bearing and Type 3 be defined as perennial, non-salmonid-bearing. Type 4 should then be limited to non-fish-bearing. Appendix B could either be eliminated, or updated based on the best available information. In the latter case, Cowiche Creek (that portion which is not Type 1 or Type S) and Spring Creek, as well as any accessible tributaries, should at the very least be added to Appendix B as a Type 2 water. If Appendix B is retained, with further modifications to the list, amend as follows: “Type 2 streams are those surface water features <u>listed in Appendix B of this title</u> which require protection due to the nature of their contributions to the functional properties listed in YMC 15.27.504. and are considered “streams, lakes and/or ponds of local importance,” as listed in Appendix B of this title.” ”	WAC 222-16-030 or -031; WDFW, 2016
15.27.505.F.3 Streams, lakes and ponds typing system	Delete this provision.	Title 17 provides all of the necessary detail regarding which waters may or may not be considered a shoreline (Type 1).
15.27.506 Wetland rating system	Remove this section regarding the wetland rating system.	Recommendation for clarity. This important regulation should be in the wetlands regulations section.

Section of the Yakima Municipal Code Chapter 15.27	Recommendation		Comment / Science Reference				
15.27.507 Maps	Suggest relocating this section to a consolidated early section on critical areas maps in general, perhaps in Part One or Part Two, Article II. The text and list should be modified accordingly, considering the actual content of the updated map sets.						
15.27.510-.513 Use classifications etc.	Delete these provisions.		The concept of use classifications surrounding water orientation is only appropriate for shoreline (Type 1) waterbodies, which are solely regulated via Title 17. These provisions are not suitable or necessary for Types 2-5 waters.				
15.27.514 Vegetative buffers	Amend as follows:		These buffer recommendations are based on review of <i>Final Draft Semi-arid Riparian Functions and Associated Regulatory Protections to Support Shoreline Master Program Updates</i> (Anchor QEA, LLC, 2013) and aerial photographs. Note that as				
	The establishment of a vegetative buffer system is necessary to protect the functions and values of certain hydrologically related critical areas. Standard and minimum buffers for streams, lakes, and ponds, and wetlands are listed in (Tables 27.5-1 and 27.5-2). <u>Buffers associated with wetlands are listed in YMC 15.27.XXX.</u>						
	Table 27.5-1 <table><tr><th>Stream Water Type</th><th>Buffer Width—standard/(minimum adjustmentwidth)¹</th><th>Buffer Width (if City chooses to switch to one of the WAC rating systems)</th></tr><tr><td>Type 1 shoreline streams, lakes, and ponds</td><td>100'<u>See Table 09.030-1 in YMC 17.09.030.P.</u></td><td><u>Type 1 / Type S. See Table 09.030-1 in YMC 17.09.030.P.</u></td></tr></table>			Stream Water Type	Buffer Width—standard/(minimum adjustment width) ¹	Buffer Width (if City chooses to switch to one of the WAC rating systems)	Type 1 shoreline streams, lakes, and ponds
Stream Water Type	Buffer Width—standard/(minimum adjustment width) ¹	Buffer Width (if City chooses to switch to one of the WAC rating systems)					
Type 1 shoreline streams, lakes, and ponds	100' <u>See Table 09.030-1 in YMC 17.09.030.P.</u>	<u>Type 1 / Type S. See Table 09.030-1 in YMC 17.09.030.P.</u>					

¹ The buffer modifications suggested below are recommended if the City does not change its current rating system definitions.

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	Type 2 streams, lakes, and ponds	75'/(2556.25')	Type 2 or 3 / Type F = 75'	currently defined, the City's Type 4 stream could be fish- bearing. Removed wetland- specific language, and relocated to the appropriate wetlands section. Added detailed regulations for mechanisms to modify stream buffers, consistent with the updated wetland regulation buffer modification tools.
	Type 3 streams (perennial), lakes, and ponds	5065'/(2548.75')	Type 3 or 4 / Type Np = 50'	
	Type 4 streams (intermittent), lakes, and ponds	2550'/(1537.5')	Type 5 / Type Ns = 25'	
	Type 5 streams (ephemeral)	No buffer standards. Type 5 streams are not regulated as streams, but may be protected under geologically hazardous area, floodplain, stormwater, construction, grading or other development regulations.	Not Applicable	
	A. Vegetative buffers shall be measured from the ordinary high water mark for streams, lakes, and ponds, and from the edge of the wetlands. The width of the buffer shall be determined according to the stream or wetland water type. Buffer width may be reduced through an adjustment permit process (YMC 15.27.317). However, the administrative official may not approve reductions to the standard buffer widths for wetlands that score medium (twenty through twenty-eight points) or high (twenty-nine through thirty-six points) for wetland habitat function, except where it can be shown that a particular wildlife species' needs within the buffer can be met with a smaller buffer. B. Type 1 waters streams, lakes, and ponds are protected by the shoreline master program (Title 17) and are not part of this title. C. The minimum buffer widths listed in Tables 27.5-1 and 27.5-2 are the lowest possible buffer widths allowed by means of the adjustment process. Adjustments below the minimum buffer width must meet additional approval criteria as provided in YMC 15.27.317(C)(4). D. The adequacy of these standard buffer widths presumes the existence of a relatively intact native vegetative community within the buffer zone that is deemed adequate to protect the identified critical area. 1. If the vegetation is degraded, then revegetation may be considered with any adjustment to the buffer width.			

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
	2. Where the use is being intensified, a degraded buffer may be revegetated to maintain the standard width. E. <u>Where a legally established road or railway crosses a buffer, the administrative official may approve a modification of the minimum required buffer width to the waterward edge of the improved road or railway if a study submitted by the applicant and prepared by a qualified professional demonstrates that the part of the buffer on the upland side of the road or railway sought to be reduced:</u> <u>1. Does not provide additional protection of the waterbody; and</u> <u>2. Provides insignificant biological, geological or hydrological buffer functions relating to the waterward portion of the buffer adjacent to the waterbody.</u> <u>If the improved roadway corridor is wider than 20 feet, a study is not required.</u> F. <u>Buffer averaging to improve habitat protection may be permitted when all of the following conditions are met:</u> <u>1. The water or its riparian corridor has significant differences in characteristics that affect its habitat functions.</u> <u>2. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the habitat, and decreased adjacent to the lower-functioning or less sensitive portion as demonstrated by a critical areas report from a qualified professional.</u> <u>3. The total area of the buffer after averaging is equal to the area required without averaging.</u> <u>4. The buffer at its narrowest point is never less than three-quarters of the required width.</u> G. <u>Buffer averaging to allow reasonable use of a parcel may be permitted when all of the following conditions are met:</u> <u>1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging.</u> <u>2. The averaged buffer will not result in degradation of the waterbody or riparian corridor's functions and values as demonstrated by a critical areas report from a qualified professional.</u> <u>3. The total buffer area after averaging is equal to the area required without averaging.</u> <u>4. The buffer at its narrowest point is never less than three-quarters of the required width.</u> The administrative official may not approve reductions to the standard buffer widths for wetlands that score medium (twenty through twenty-eight points) or high (twenty-nine through thirty-six points) for wetland habitat function, except where it can be shown that a particular wildlife species' needs within the buffer can be met with a smaller buffer.	

Section of the Yakima Municipal Code Chapter 15.27	Recommendation				Comment / Science Reference								
	Table 27.5-2 <table><tr><th>Type 1 Wetlands (standard/minimum)</th><th>Type 2 Wetlands (standard/minimum)</th><th>Type 3 Wetlands (standard/minimum)</th><th>Type 4 Wetlands (standard/minimum)</th></tr><tr><td>200'/100'</td><td>150'/75'</td><td>100'/50'</td><td>50'/25'</td></tr></table>				Type 1 Wetlands (standard/minimum)	Type 2 Wetlands (standard/minimum)	Type 3 Wetlands (standard/minimum)	Type 4 Wetlands (standard/minimum)	200'/100'	150'/75'	100'/50'	50'/25'	
Type 1 Wetlands (standard/minimum)	Type 2 Wetlands (standard/minimum)	Type 3 Wetlands (standard/minimum)	Type 4 Wetlands (standard/minimum)										
200'/100'	150'/75'	100'/50'	50'/25'										
15.27.515 Roads, railroads, and parking AND 15.27.516 Utility transmission lines and facilities	Consider developing a Public Agency and Utility Exception (PAUE), regulations for which could be located within Article VI, Permit Review Criteria, and consolidating the applicable provisions from .515 and .516 into more general criteria that could apply to more critical area types. Alternatively, could consolidate these two sections into one section governing linear and/or public facilities, or even more generally be part of a regulations section describing modifications allowed in non-shoreline waters and/or their buffers.				Suggestions will support flexibility for modifications that often have minimal feasible or appropriate alternatives. Whitman County Code 9.05.110 provides a good example of PAUE language.								
15.27.517 Shore Bank stabilization AND 15.27.518 Dredging and excavation AND 15.27.519 Filling	Most of the activities in .517 - .519 are most likely to be proposed or undertaken in shoreline jurisdiction, and thus not subject to these regulations. Many of these provisions could be removed outright. As suggested immediately above, these sections could also fall underneath a more general set of regulations describing modifications allowed in non-shoreline waters and/or their buffers.				Change would eliminate redundancy and minimize unnecessary language.								
15.27.520 Commercial mining of gravel	This activity seems likely to be only pursued in shoreline jurisdiction. If that’s the case, this section could be deleted.				Change would eliminate redundancy and minimize unnecessary language.								

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
15.27.521 Reclamation	Retitle this section to “Restoration,” as Reclamation is a term more commonly associated with post-mining activities.	Consistency with current terminology.
Part Six. Wetlands Replace 15.27.601-.605 with 17.09.040.B-.G, with the following exceptions:		
General	1. Substitute appropriate cross-references in 15.27.XX for the equivalent references in Title 17 (e.g., in 17.09.040.B.2, substitute 17.25.200 for the reference to 17.01.090). 2. Replace “shoreline administrator” with “administrative official.” 3. Replace references to shoreline permits with the equivalent non-shoreline permit. 4. Replace “most current, accurate, and complete scientific and technical information available that is applicable to the issues of concern” with “best available science.”	As part of the recent SMP update, the wetland regulations section was incorporated into the SMP, but updated to reflect the most current scientific information. Much of the SMP version of these regulations can then be used wholesale, except where there were shoreline-specific modifications.
17.09.040.B.1	Revise 17.09.040.B.1 as follows: “ Consistent with WAC 173-22-035, w Wetlands in shoreline jurisdiction shall be delineated...”	Update to remove inapplicable shoreline reference.
17.09.040.D.2	Revise 17.09.040.D.2 as follows: “Washington State Wetland Rating System for Eastern Washington, revised October 2014 <u>March 2007</u> (Ecology Publication Number 14-06-03004-06-15 , or as revised)...”	Ecology’s most recent wetland rating system represents the best available science (Hruby, 2014).

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
17.09.040.D.2.a-d	Replace 17.09.040.D.2.a-d with the following: a. Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. Risk of any degradation to these wetlands must be avoided because their functions and values are too difficult to replace. Generally, these wetlands are not common and make up a small percentage of the wetlands in the region. b. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. c. Category III wetlands are wetlands with a moderate level of functions and can often be adequately replaced with a well-planned mitigation project. These wetlands generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. d. Category IV wetlands have the lowest level of functions and are often heavily disturbed. These are wetlands that should be able to be replaced and, in some cases, improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.	Descriptions of the different wetland categories are from <i>Washington State Wetland Rating System For Eastern Washington</i> (Hruby, 2014).
17.09.040.E Wetland Buffers	Replace Sub-section E with XX.050 from <i>Wetland Guidance for CAO Updates Eastern Washington Version</i> (Bunten and others, 2016).	<i>Wetland Guidance for CAO Updates Eastern Washington Version</i> (Bunten and others, 2016)
17.09.040.F and G	Replace Sub-sections F and G with Section XX.070 from <i>Wetland Guidance for CAO Updates Eastern Washington Version</i> (Bunten and others, 2016).	<i>Wetland Guidance for CAO Updates Eastern Washington Version</i> (Bunten and others, 2016). While lengthier than the current language, this more detailed section will provide

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
		better consistency with the U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency (EPA) <i>Compensatory Mitigation for Losses of Aquatic Resources; Final Rule</i> (Corps, 2008).
Part Seven. Geologically Hazardous Areas		
15.27.701 Mapping and designation	Modify A.2.d as shown: <u>Channel migration zones and stream undercutting.</u> Modify C as shown: The approximate location and extent of geologically hazardous areas are shown on the city's critical area map titled "Geologically Hazardous Areas of the City of Yakima." The following geologically hazardous areas have been mapped and classified using the criteria found in WAC 365-190- 120080(4)(b) through (h):	Updated WAC language and references.
15.27.702.A	Modify as shown: ...YMC Title 11 requirements can be met by the application of the Best Management Practices (BMPs) in the <u>Stormwater Management Manual for Eastern Washington</u> Stormwater Manual (WDOE Ecology publication number 04-10-076, <u>or most recent version</u>);...	Change clarifies manual title, and ensures that the most current and scientifically based version would continue to be used in the future.
15.27.702.D	Modify as shown: ...Protection measures for stream undercutting hazard areas will be accomplished by critical areas review for flood hazards, <u>and streams,</u> and shoreline jurisdiction.	Update to remove inapplicable shoreline reference.

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15.27.703.B.2	Modify as shown: ...The administrative official is authorized to waive further geologic hazard review for oversteepened slopes on the basis that the hazards identified by the geologic hazard report will be adequately mitigated through <u>conditions applied to</u> the issuance of a grading or construction permit.	Change for clarity (the issuance of a permit doesn't mitigate hazards, unless that permit contains appropriate conditions).
Part Eight. Critical Aquifer Recharge Areas (CARA)		
15.27.810 Mapping	The map referenced in this section does <i>not</i> clearly illustrate all of the features named in the regulations. The referenced critical aquifer recharge area guidance document has also been updated since 1997. The most recent version (Morgan, 2005) stresses the importance of mapping public water supply wells, private wells, aquifer boundaries, and areas that have been rated for susceptibility. In the absence of good maps, the 2005 guidance document emphasizes more strongly the important of performance standards. At this time, the section should be edited to reflect what is available, and require use of the latest guidance for future mapping efforts. Suggest renaming this section to “Maps and Reference Documents” or something similar. At a minimum, the following maps and reference documents could be listed: • U.S. Department of Agriculture Soil Survey http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx • Washington Department of Health Group A and B Maps https://fortress.wa.gov/doh/eh/maps/SWAP/index.html • Soil Survey of Yakima County Area, Washington (report only) http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/washington/yakimaWA1985/yakimaWA1985-I.pdf • City of Yakima Wellhead Protection Plan http://www.yakimacounty.us/669/City-of-Yakima-Wellhead-Protection-Plan • Hydrogeologic Framework of Sedimentary Deposits in Six Structural Basins, Yakima River Basin, Washington http://pubs.usgs.gov/sir/2006/5116/pdf/sir20065116.pdf and Yakima Basin plate http://pubs.usgs.gov/sir/2006/5116/pdf/sir20065116_plate4.pdf	<i>Critical Aquifer Recharge Areas Guidance Document</i> (Morgan, 2005)

Section of the Yakima Municipal Code Chapter 15.27	Recommendation	Comment / Science Reference
15.27.820 Protection Approach	Existing .820.B essentially relies on property owner/applicant compliance with a variety of existing local, state and federal laws. Given the lack of good maps at this time and the gaps in appropriate protection that can result from reliance on state and federal regulations (see Morgan, 2005), complete revision of the regulations is recommended as shown below. These regulations were adapted from the City of Redmond’s and City of Ellensburg’s regulations, both of which were last updated in 2013, customized to the City of Yakima. After reviewing a number of examples of CARA regulations from other cities and counties, Redmond/Ellensburg was chosen based on their content and level of detail, which were a good fit considering the City of Yakima’s available information. Ellensburg has a similar landscape position to Yakima. Where applicable, language from Yakima County’s code was also integrated. During review of other CARA regulation examples, it was noted that there seemed to be three primary approaches: 1) High level of detail and specificity based on more extensive groundwater/aquifer mapping and analysis (e.g., Cowlitz County). This specificity can significantly reduce the burden on staff and applicants. 2) Low level of detail and specificity, with the regulations deferring primarily to state and federal regulations. In several cases, additional reporting or other performance standards could be required by the Director when a development “has potential to impact an aquifer,” but the regulations do not identify reliable, science-based indicators to help a Director make that determination (e.g., Benton County). 3) Moderate level of detail, with tiered submittal requirements and more specific standards, but limited supporting map analysis. (e.g., Redmond and Ellensburg). The following set of recommended regulations takes the moderate approach. With a budget commitment by the City (e.g., either now or as part of a future work program by the City or a joint effort of the County-City if appropriate), maps could be generated and these regulations could be refined to further minimize staff and applicant reporting and analysis.	<i>Critical Aquifer Recharge Areas Guidance Document (Morgan, 2005)</i>

RECOMMENDED CARA REGULATIONS

15.27.820 Protection approach.

- A. Classification and Rating of Critical Aquifer Recharge Areas. To promote consistent application of the standards and requirements of this section, Critical Aquifer Recharge Areas within the City shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.
1. Critical Aquifer Recharge Areas Classification. Critical aquifer recharge areas are those areas with a critical recharging effect on aquifers used for potable water. Wellhead protection involves the management of activities that have a potential to degrade the quality of groundwater produced by a supply well. The City is classified into four wellhead protection zones that are based on proximity to and travel time of groundwater to Group A and Group B water source wells within the City limits, and are designated using guidance from the Washington Department of Health Wellhead Protection Program pursuant to Chapter 246-290 WAC.
 - a. Wellhead Protection Zone 1 represents the land area overlying the six-month time-of-travel zone of any Group A water source well and/or land area overlying any Group B wellhead protection area.
 - b. Wellhead Protection Zone 2 represents the land area that overlies the one-year time-of-travel zone of any Group A water source well, excluding the land area contained within Wellhead Protection Zone 1.
 - c. Wellhead Protection Zone 3 represents the land area that overlies the five-year and ten-year time-of-travel zones of any Group A water source well, excluding the land area contained within Wellhead Protection Zones 1 or 2.
 - d. Wellhead Protection Zone 4 represents all the remaining land area in the City not included in Wellhead Protection Zones 1, 2, or 3.
 2. Classification of wellhead protection zones shall be determined in accordance with the City's Wellhead Protection Plan and the Washington State Department of Health, Office of Drinking Water, Source Water Assessment Program (SWAP) Mapping Application, which designates time of travel and wellhead protection zones that correspond to Zones 1 through 4, noted in subsection 1 above.
- B. Prohibited Activities in Wellhead Protection Zones.
1. Land uses or activities for new development or redevelopment that pose a significant hazard to the City's groundwater resources, resulting from storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances, shall be prohibited in Wellhead Protection Zones 1 and 2. These land uses and activities include, but are not limited to:
 - a. Large on-site sewage systems, as defined in WAC Chapter 246-272A;
 - b. Hazardous liquid pipelines as defined in RCW Chapter 81.88;
 - c. Solid waste landfills or transfer stations, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste;

- d. Liquid petroleum refining, reprocessing, and storage;
 - e. Bulk storage facilities;
 - f. Hard rock and sand and gravel mining, unless located within the mineral resource designation;
 - g. The storage or distribution of gasoline treated with the additive methyl tertiary butyl ether;
 - h. Hazardous waste treatment, storage, and disposal facilities except those defined under permit by rule for industrial wastewater treatment processes per WAC 173-303-802(5)(a);
 - i. Chemical manufacturing, including but not limited to, organic and inorganic chemicals, plastics and resins, pharmaceuticals, cleaning compounds, paints and lacquers, and agricultural chemicals;
 - j. Dry cleaning establishments using the solvent perchloroethylene or similarly toxic compounds;
 - k. Primary and secondary metal industries that manufacture, produce, smelt, or refine ferrous and nonferrous metals from molten materials;
 - l. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
 - m. Mobile fleet fueling operations;
 - n. Class I, Class III, Class IV, and the following types of Class V wells: 5A7, 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 as regulated under RCW Chapter 90.48 and WAC Chapters 173-200 and 173-218, as amended;
 - o. Permanent dewatering of the aquifer for new projects and redevelopment;
 - p. Facilities that store, process, or dispose of radioactive substances; and
 - q. Irrigation with graywater or reclaimed water.
2. Other land uses and activities that the City determines would pose a significant groundwater hazard to Group A and Group B groundwater supplies within the City limits, or would significantly reduce the recharge to aquifers currently or potentially used as a potable water source.
- C. Wellhead Protection Zone Performance Standards.
1. Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.

2. Any uses or activities which involve storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances shall comply with the following standards that apply to the wellhead protection zone in which they are located. Residential uses of hazardous materials or deleterious substances are exempt from the following standards.
3. If a property is located in more than one wellhead protection zone, the Director of [XXX] shall determine which standards shall apply based on an assessment evaluation of the risk posed by the facility or activity. The assessment evaluation shall include, but not be limited to: (a) the location, type, and quantity of the hazardous materials or deleterious substances on the property; (b) the geographic and geologic characteristics of the site; and (c) the type and location of infiltration on the site.
4. Development within Wellhead Protection Zones 1 or 2, and any facility or activity existing as of [XXX], within which hazardous materials or other deleterious substances are present, shall implement the following relevant performance standards:
 - a. Secondary Containment.
 - i. The owner or operator of any facility or activity shall provide secondary containment for hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid or in quantities specified in the Yakima Fire Code, YMC Chapter 10.05, whichever is smaller.
 - ii. Hazardous materials stored in tanks that are subject to regulation by the Washington State Department of Ecology (Ecology) under WAC Chapter 173-360, Underground Storage Tank Regulations, are exempt from the secondary containment requirements of this section, provided that documentation is provided to demonstrate compliance with those regulations.
 - b. Vehicle Fueling, Maintenance, and Storage Areas. Fleet and automotive service station fueling, equipment maintenance, and vehicle washing areas shall have a containment system for collecting and treating all runoff from such areas and preventing release of fuels, oils, lubricants, and other automotive fluids into soil, surface water, or groundwater. Appropriate emergency response equipment and spill kits shall be kept on-site during transfer, handling, treatment, use, production, recycling, or disposal of hazardous materials or other deleterious substances.
 - c. Loading and Unloading Areas. Secondary containment or equivalent Best Management Practices (BMPs), as approved by the Director of Public Works, shall be required at loading and unloading areas that store, handle, treat, use, produce, recycle, or dispose of hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid.
 - d. Stormwater Infiltration Systems. Design and construction of new stormwater infiltration systems must address site-specific risks of releases posed by all hazardous materials on-site. These risks may be mitigated by physical design means or equivalent BMPs in accordance with an approved Hazardous Materials Management Plan. Design and construction of said stormwater infiltration systems shall also be in accordance with YMC Chapter 7.83 and the latest edition of the Stormwater Management Manual for Eastern Washington, approved local equivalent, or another technical stormwater manual approved by Ecology, and shall be certified for compliance with the requirements of this section by a professional engineer or engineering geologist registered in the State of Washington.

- e. The record and construction details of any well regulated under Chapter 173-160 WAC, Construction and Maintenance of Wells, and any well excluded per WAC 173-160-010(2) that is constructed or decommissioned in Zones 1 and 2, shall be provided to the Department of [XXX] within 60 days of well completion or decommissioning.
- f. Protection Standards During Construction. The following standards shall apply to construction activities occurring where construction vehicles will be refueled on-site and/or the quantity of hazardous materials that will be stored, dispensed, used, or handled on the construction site is in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid, exclusive of the quantity of hazardous materials contained in fuel or fluid reservoirs of construction vehicles. As part of the City's project permitting process, the City may require any or all of the following items:
 - i. A development agreement;
 - ii. Detailed monitoring and construction standards;
 - iii. Designation of a person on-site during operating hours who is responsible for supervising the use, storage, and handling of hazardous materials and who has appropriate knowledge and training to take mitigating actions necessary in the event of fire or spill;
 - iv. Hazardous material storage, dispensing, refueling areas, and use and handling areas shall be provided with secondary containment adequate to contain the maximum release from the largest volume container of hazardous substances stored at the construction site;
 - v. Practices and procedures to ensure that hazardous materials left on-site when the site is unsupervised are inaccessible to the public. Locked storage sheds, locked fencing, locked fuel tanks on construction vehicles, or other techniques may be used if they will preclude access;
 - vi. Practices and procedures to ensure that construction vehicles and stationary equipment that are found to be leaking fuel, hydraulic fluid, and/or other hazardous materials will be removed immediately or repaired on-site immediately. The vehicle or equipment may be repaired in place, provided the leakage is completely contained;
 - vii. Practices and procedures to ensure that storage and dispensing of flammable and combustible liquids from tanks, containers, and tank trucks into the fuel and fluid reservoirs of construction vehicles or stationary equipment on the construction site are in accordance with the Yakima Fire Code, YMC Chapter 10.05; and
 - viii. Practices and procedures, and/or on-site materials adequate to ensure the immediate containment and cleanup of any release of hazardous substances stored at the construction site. On-site cleanup materials may suffice for smaller spills whereas cleanup of larger spills may require a subcontract with a qualified cleanup contractor. Releases shall immediately be contained, cleaned up, and reported if required under state or federal law. Contaminated soil, water, and other materials shall be disposed of according to state and local requirements.
- g. Fill Materials. Fill material shall comply with the standards in YMC Chapter 7.82 and the following:

- i. Fill material shall not contain concentrations of contaminants that exceed cleanup standards for soil specified in WAC 173-340-740, Model Toxics Control Act, regardless of whether all or part of the contamination is due to natural background levels at the fill source site. Where the detection limit (lower limit at which a chemical can be detected by a specified laboratory procedure) for a particular soil contaminant exceeds the cleanup standard for soil specified in WAC 173-340-740, the detection limit shall be the standard for fill material quality.
- ii. Fill materials in quantities greater than 10 cubic yards placed directly on or in the ground in excess of six months shall meet the following requirements:
 - 1. A fill material source statement shall be provided to the Department of [XXX] and shall be reviewed and accepted by the Department prior to stockpiling or grading imported fill materials at the site. The source statement shall be issued by a professional engineer, geologist, engineering geologist or hydrogeologist licensed in the State of Washington demonstrating the source's compliance with standards of the Model Toxics Control Act. The source statement shall be required for each different source location from which fill will be obtained.
 - 2. Analytical results demonstrating that fill materials do not exceed cleanup standards specified in WAC 173-340-740 may be used in lieu of a fill material source statement, provided the regulated facility submits a sampling plan to, and which is approved by, the Director of [XXX]. The regulated facility must then adhere to the approved sampling plan, and maintain analytical data on-site and available for inspection for a minimum of five years from the date that the fill was accepted.
- iii. The Department of [XXX] may accept a fill material source statement that does not include results of sampling and analysis of imported fill if it determines that adequate information is provided indicating that the source location is free of contamination. Such information may include, but is not limited to:
 - 1. Results of field testing of earth materials to be imported to the site with instruments capable of detecting the presence of contaminants; or
 - 2. Results of previous sampling and analysis of earth materials to be imported to the site.
- iv. A fill material source statement is not required if documents confirm that imported fill will be obtained from a Washington State Department of Transportation approved source.
- v. The Director of [XXX] shall have the authority to require corrective measures regarding noncompliant fill materials, including independent sampling and analysis, if the property owner or operator fails to accomplish such measures in a timely manner. The property owner or operator shall be responsible for any costs incurred by the City in the conduct of such activities.
- h. Cathodic Protection Wells. Cathodic protection wells shall be constructed such that the following do not occur.
 - i. Vertical cross-connection of aquifers normally separated by confining units;

- ii. Migration of contaminated surface water along improperly sealed well borings or casings;
 - iii. Introduction of electrolytes or related solutions into the subsurface; and
 - iv. Any of the above conditions caused by improperly abandoned cathodic protection wells that are no longer in use.
- i. Underground Hydraulic Elevator Cylinders. All underground hydraulic elevator pressure cylinders shall be encased in an outer plastic casing constructed of Schedule 40 or thicker-wall polyethylene or polyvinyl chloride pipe, or equivalent. The plastic casing shall be capped at the bottom, and all joints shall be solvent- or heat-welded to ensure water tightness. The neck of the plastic casing shall provide a means of inspection to monitor the annulus between the pressurized hydraulic elevator cylinder and the protective plastic casing.
 - j. Best Management Practices (BMPs). All development or redevelopment shall implement BMPs for water quality and quantity, as approved by the Director of [XXX], such as biofiltration swales and use of oil-water separators, BMPs appropriate to the particular use proposed, clustered development, and limited impervious surfaces.
- 5. Development within Wellhead Protection Zone 3 shall implement appropriate BMPs and comply with the performance standards for vehicle fueling, maintenance, and storage areas; loading and unloading areas; well construction and operation; fill materials; cathodic protection wells; and underground hydraulic elevator cylinders in applicable subsections in C.4 of this section.
 - 6. Development within Wellhead Protection Zone 4 shall implement BMPs for water quality and quantity.
 - 7. An incremental environmental improvement to a system protective of groundwater shall not alter, expand, or intensify an existing legal nonconformance, but may proceed without having to meet the following City codes:
 - a. Restrictions associated with critical areas and critical area buffers, if the footprint of the original system protective of groundwater is located within the same critical area buffer, and it can be demonstrated through BAS that there will be no significant adverse impacts to the critical area and its buffer;
 - b. Any requirement to bring all or any portion of the facility or the development it serves up to current building, fire, or land use codes that is triggered by the value or design of the incremental environmental improvement to a system protective of groundwater; and
 - c. The incremental improvement shall not qualify as a redevelopment that would otherwise be prohibited by Title 15 YMC.

15.27.315 Supplemental report requirements for specific critical areas. (Addition)

- E. Critical Aquifer Recharge Areas. The approach of the City critical area regulations is to require a level of study and analysis commensurate with potential risks to wellhead protection zones associated with particular sites and particular proposals. At a minimum, all applicants shall review the history of the site and conduct a surface reconnaissance. The purpose of a critical aquifer recharge area report is to evaluate the actual geologic conditions and determine

the site's proximity to or location within a wellhead protection zone; evaluate the safety and appropriateness of proposed activities; and recommend appropriate construction practices, monitoring programs, and other mitigation measures required to ensure achievement of the purpose and intent of these regulations. The information required by this report should be coordinated with the study and reporting requirements for any other critical areas located on the site. A critical aquifer recharge area report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer who is licensed in the State of Washington and who has experience in preparing hydrogeologic assessments.

1. Level One Hydrological Assessment: At sites located within Wellhead Protection Zones 1 through 3, defined in Section 15.27.820.A.1, a critical aquifer recharge areas report shall contain a level one hydrological assessment which includes the following site- and proposal-related information at a minimum:
 - a. Information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas located on-site or immediately adjacent to the site, and permeability of the unsaturated zone based on existing data.
 - b. Groundwater depth, flow direction, and gradient based on available information.
 - c. Currently available data on wells and springs within 1,300 feet of the project area.
 - d. Location of other critical areas, including surface waters, within 1,300 feet of the project site.
 - e. Available historic water quality data for the area to be affected by the proposed activity.
 - f. BMPs proposed to be utilized.
2. Level Two Hydrogeologic Assessment.
 - a. A level two hydrogeologic assessment shall be required for any of the following proposed activities at sites located within Wellhead Protection Zones 1 through 3:
 - i. Activities that result in 5,000 square feet or more impervious site area.
 - ii. Activities that divert, alter, or reduce the flow of surface or groundwaters, including dewatering or otherwise reduce the recharging of the aquifer.
 - iii. The storage, handling, treatment, use, production, recycling, or disposal of deleterious substances or hazardous materials, other than household chemicals used according to the directions specified on the packaging for domestic applications.
 - iv. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre.

- v. Any other activity determined by the Director of [XXX] likely to have an adverse impact on groundwater quality or quantity, or on the recharge of the aquifer.
- b. A level two hydrogeologic assessment shall include the following site and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeological assessment:
 - i. Historic water quality and elevation data for the area to be affected by the proposed activity compiled for at least the previous five-year period.
 - ii. Groundwater monitoring plan provisions.
 - iii. Discussion of the effects of the proposed project on the groundwater quality and quantity, including:
 - 1. Predictive evaluation of groundwater withdrawal effects on nearby wells and surface water features.
 - 2. Predictive evaluation of contaminant transport based on potential releases to groundwater.
 - iv. Identification of the type and quantities of any deleterious substances or hazardous materials that will be stored, handled, treated, used, produced, recycled, or disposed of on the site, including but not limited to materials, such as elevator lift/hydraulic fluid, hazardous materials used during construction, materials used by the building occupants, proposed storage and manufacturing uses, etc.
 - v. Proposed methods of storing any of the above substances, including containment methods to be used during construction and/or use of the proposed facility.
 - vi. Proposed plan for implementing YMC 15.27.820.C.3.f, *Protection Standards During Construction*.
 - vii. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.
 - viii. A complete discussion of past environmental investigations, sampling, spills, or incidents that may have resulted in or contributed to contaminated soil or groundwater at the site. Attach copies of all historical and current reports, and sampling results.

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AUTHOR QUALIFICATIONS

Amy Summe is a Senior Biologist/Permit Specialist with Shannon & Wilson, Inc. She has Bachelor of Science degrees from Washington State University in Zoology and Environmental Science. She has more than 19 years of experience in environmental consulting, much of it spent developing and updating critical areas regulations under the Growth Management Act and the Shoreline Management Act. In addition to leading the update of the City's SMP, she also was the project manager for Benton County and Adams County's SMP update.

Chris Allen is a Senior Hydrogeologist for Shannon & Wilson, Inc. He is licensed in Washington State as a geologist and hydrogeologist and has a Bachelor of Science degree in Geology from Western Washington University. Over the last 18 years, he has focused on hydrogeologic and geotechnical projects. His experience includes drilling, design, construction, development, assessment and maintenance of wells, storm water infiltration studies, and critical aquifer recharge area (CARA) assessments, all of which require a knowledge of a variety of regulations from the city to the federal level. In the Yakima area, he's been involved in multiple projects requiring hydrogeologic assessments including for the City of Moxee and City of Selah, Costco Union Gap, and roadway/railway grade separation projects involving dewatering.

Katie Walter is the Natural Resources Group Leader at Shannon & Wilson, Inc. and has a Bachelor of Science degree from the University of Washington in Botany. She has 26 years of experience conducting wetland delineations, developing mitigation plans, conducting natural resource inventories, and permitting large complex multi-jurisdictional projects.

Jim Bailey is a Senior Hydrogeologist with Shannon & Wilson, Inc. He has a Bachelor of Science degree in Biology from the University of North Carolina, and a Master of Science in Hydrogeology from Washington State University. He is a licensed geologist and hydrogeologist with more than 26 years of experience. He specializes in water supply development and groundwater management experience, with a focus on municipal water supply including water rights, well design/construction, and evaluation of well performance issues.