



Comprehensive Plan
Citizen Advisory Committee
AGENDA
Thursday, March 17, 2016

HILLSBORO PUBLIC LIBRARY, SHUTE PARK BRANCH
 775 SE 10th Avenue

4:00-6:00 PM
 Meeting Room

Time	Topic	Lead	Action
4:00	A. Introductions/Welcome	All	I
4:05	B. Minutes Review – February 18 meeting	Nick	I, D
4:10	C. Energy & Climate Change a. Background Report b. Draft Goals and Policies	Dan	I, D, R
4:50	D. Police & Fire Services a. Background Report b. Draft Goals and Policies	Aaron	I, D, R
5:30	E. Updates from Prior Topics a. Design & Development b. Natural Hazards	Laura	I, D
5:45	F. Staff Updates and Upcoming Meeting Schedules/Topics	Aaron	I
5:50	G. Public Comment	-	I
6:00	H. Adjourn	-	

I=Information, D=Discussion, R=Recommendation

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Next Regular Meeting:

Thursday, March 28, 2016
 4:00-6:00pm
Hillsboro Civic Center
Conference Room 113B/C
150 E. Main Street, Hillsboro

For further information on agenda items, contact Laura Weigel, Long Range Planning Manager, at (503) 681-6156 or email at laura.weigel@hillsboro-oregon.gov.



Meeting Summary

Citizen Advisory Committee – Comprehensive Plan Update

February 18, 2016 - 4:00 p.m. – 6:00 p.m.

Hillsboro Main Library – Community Room

2850 Brookwood Pkwy

Hillsboro, OR 97124

Members Present

Mica Annis, Steve Callaway, Marc Cardinaux, Aron Carleson, Katie Eyre, John Godsey, Bonnie Kookan, Glenn Miller, Tricia Mortell, Daniel Nguyen, Ahne Oosterhof, Ken Phelan, Bryan Welsh.

Members Excused

Wil Fuentes, Gwynne Pitts

Staff Present

Colin Cooper, Rob Dixon, Roger Gonzalez, Aaron Ray, Emily Tritsch, Laura Weigel

Welcome and Introductions

The meeting opened with introductions of the committee members and staff.

Minutes – February 18, 2016

No changes were made to the previous CAC meeting minutes.

Natural Hazards - Background Report and Draft Goals & Policies

Emily Tritsch reviewed the contents of the Natural Hazards Background Report. The key findings of the report included:

- Hillsboro is vulnerable to several hazards to varying degrees.
- Many public and private structures were built prior to adoption of current earthquake standards.
- Policy, planning, and outreach can reduce the effect of hazards.
- Other public agencies and private companies have their own hazard plans.

Emily then discussed updates to the Background Report following its review by the Technical Advisory Committee, including:

- Corrections to earthquake risk probability
- Move Liquefaction to the Earthquake Hazards section
- Providing additional detail on specific hazards
- Including discussion of other critical infrastructure, like electricity, gas, and telecommunications
- Updated Goal 7 language discussing National Flood Insurance Program
- Removing discussion of House Bill 2633, as it did not make it out of committee at the Legislature.

Questions from the committee included:

- How would we handle tornadoes, as they are not listed as a natural hazard by the state? Staff responded that tornadoes can be added to the list of hazards to the City.
- How are safety/hazard mitigation outreach and education protocols carried out in schools? Staff responded that they will share this question with the City's Emergency Manager, who does outreach to schools.
- How do these goals and policies compare to other cities' goals and policies? Staff responded that rather than comparing to nearby cities, they have been focused on maintaining consistency with Hillsboro's Natural Hazard Mitigation Plan and Washington County's emergency planning documents. Hillsboro's emergency plan incorporates many of the action items found in these areas, but is somewhat more detailed.
- Should air contamination be included in Natural Hazards? Staff responded that air contamination is not included in Statewide Goal 7, which is likely due to the fact that it is not a natural hazard, but instead generally human caused. A lengthy discussion over how to address air contamination from both human and natural causes took place. Staff explained that air contamination can be a cascading hazard, which is when a natural hazard triggers a human-made hazard, like when an earthquake causes an industrial hazard. However, this is outside the scope of this section. It was concluded that more issues related to air quality will be addressed in other sections of the Comprehensive Plan.

Additional comments from the committee included:

- It is important to harmonize language and methods between departments so that protocol can be followed in times of emergencies.
- The City should consider investing in upgrades to school gymnasiums to better withstand earthquakes and other hazards. Staff responded that this is something being considered, especially as public and quasi-public facilities, like school gymnasiums, could be used as temporary shelters.

Staff then reviewed the proposed goals and policies:

- Goal 1 – Minimize impacts of natural hazards on people and property
 - General Discussion and Questions
 - The Committee and staff discussed how the goals seem to focus more on preventative measures, and not so much on how to manage a hazard after the fact. Staff responded that there are policies that speak to how to handle a hazard after the fact, and reiterated that the scope of the Comprehensive Plan limits the extent to which it can play a role in planning emergency management, which is covered by the City’s emergency plans. Staff then clarified that policies related to this are located under Goal 2 as well. The Committee suggested developing a goal that speaks generally to hazard recovery.
 - The Committee then asked about language addressing the specifics of temporary shelters, such as how long they can remain open. Staff responded that this is an implementation measure, and specific policies related to temporary shelters will be addressed when developing necessary amendments to Community Development Code following adoption of the Comprehensive Plan.
 - The Committee asked about human-made hazards, such as an industrial incident. Staff responded that human-made hazards aren’t in the scope of this section, because it is aligned with the Statewide Goals related to natural hazard mitigation, although human-made hazards could be part of a chain of cascading hazards.
 - Policy 1.2: The committee asked to clarify the purpose of the inclusion of “low-density use”. Staff responded that it seeks to protect people and property, and to address ways to mitigate hazards through zone changes. The committee suggested removing “low-density use”, which was met with some pushback by other committee members, due to the potential to complicate the City’s ability to mitigate hazards. Staff clarified further that it is sometimes impossible, or very difficult, to outright prohibit certain land uses, even within natural hazard area.
 - Policy 1.5: Committee members stated that they didn’t understand the intent of the language “where the risk to public safety cannot be mitigated”. Staff explained that it allows for locating essential facilities in natural hazard areas in order to provide services that could not be provided if located outside that area.
 - Policy 1.7: The committee suggested removing “consideration” from language and adding “mitigate”. Committee then asked for clarification on “strong and supportive trees”. Staff responded that it addresses tree root structures, which are critical to the stability of trees. Staff agreed to clarify the policy.
 - Policy 1.8: Committee members suggested strengthening the language of this policy. Staff responded that the policy is sufficiently strong to enforce, especially once the CDC is updated to reflect new Goals and Policies. The Committee then asked if economic

resources should be included. Staff responded that protecting economic resources will be discussed elsewhere.

- **Goal 2:** Provide information and service to support the preparation and recovery of people of all ages, abilities, cultures, and incomes
 - **General Discussion:** The committee suggested changing “recovery of” to “recovery for” and to add “languages”. Staff agreed with these suggestions. The committee then asked if “languages” was added, if it would require providing information in ALL languages. Staff said they would think over the goal language.
 - **Policy 2.2:** Committee members asked what “channels” means in the policy language. Staff responded that is intended to describe sources of communication during hazard events and agreed to clarify the language.
- **Goal 3:** Improve coordination with public and private partners
 - **Policy 3.2:** The committee asked about the intent of “optimize funding”. Staff replied that they are currently working to get grant funding for natural hazard mitigation and would review the language to determine whether a different verb should be used.
 - **Policy 3.4:** Committee members suggested incorporating language to address “disaster sanitation”.
 - **Policy 3.5:** The committee asked how realistic it is to expect people to seek permits to store debris after an earthquake. Staff responded that it gives the City flexibility to work quickly to allow waste management companies and haulers to remove and store large amounts of debris following a natural hazard event.
- **Goal 4:** Build capacity for greater urban resilience
 - **Policy 4.2:** The committee stated concern about “capital investment”, because budgets are too limited to invest significantly in such areas. Staff stated that it gives the City flexibility to find funding to improve public structures. Committee suggested looking at including “optimize funding” in policy language. Staff responded that they will review the language.
- **Goal 5:** Manage and maintain spatial, demographic, and economic data to support hazard mitigation planning
 - **General Discussion** – Committee members noted that communications aren’t mentioned in any of these policies. Staff responded that “critical infrastructure” refers in part to communication infrastructure/technology, and that it is mentioned in policy 4.3.
 - **Policy 5.3:** The committee suggested developing a list or database of emergency shelters/locations. Staff stated that this may be included in implementation measures.

Design and Development - Background Report and Draft Goals & Policies

Laura Weigel introduced and reviewed the contents of the Design and Development Background Report, accompanied by a map of proposed design types across the City. Design types include Regional Centers, Employment Districts, Transit Station Communities, Town Centers, Village Centers, Neighborhood Centers, Corridors, Plan Areas, and Historic Neighborhoods. These design types allow for different types of development depending on the area, and are consistent with Metro’s 2040 Growth Concept, yet tailored to local needs. The key findings of the report included:

- There is no state requirement to cover this topic in the Comprehensive Plan, but there is clear direction from the Hillsboro 2035 Community Plan to develop comprehensive urban design standards.
- Urban design in a comprehensive topic and impacts many other areas.
- There are critical relationships between urban design standards and transportation networks.

Comments from the committee included:

- It seems that this background report is focused on high-density growth, without much consideration for detached single-family development. Staff responded the proposed hierarchy attempts to maintain the single-family neighborhoods that exist, while attempting to allow densification in areas that are suited to additional development. Technical Advisory Committee (TAC) feedback included a suggestion that additional policies be developed to clarify the role of existing single-family neighborhoods outside of the design types shown on the map. Staff will add this language to the goals and policies.

Staff then introduced the goals and policies, relaying a suggestion from TAC Goal 1 and 2 be switched (although for the purposes of this review, they remain in their original order) [Staff note: the policies have been reordered in the updated version included in the March packet]:

- Goal 1: Develop an urban design framework that reflects the unique character of each Hillsboro design type designation while ensuring urban design coherence city wide.
 - General Discussion: The committee suggested that “unique character” is too limiting and should be revised. Staff agreed to look at the language.
- Goal 2: Build compact, walkable places with distinct identities and design characteristics.
 - Policy 2.4: The committee again stated that language needs to be clarified to say that it isn’t intended to increase density in low-density neighborhoods. Staff will examine language.
 - Policy 2.5: Committee members stated that this should be clarified to state that high-density development will be focused in areas with existing or planned transit connectivity.
 - Policy 2.6: The committee wanted to clarify the use of the term “flexibility” in policy language, and question the extent to which it could allow a developer to not deliver on obligations included in an approved design. Staff explained that it instead allows the City to demand higher standards from developers if need be, and that these higher standards are mandated as conditions of approval. That process would not change. The committee then asked if flexible uses of properties should be allowed, specifically for ground floor spaces to allow residential, retail, or office space, which allows for flexibility in times of economic stress. Staff explained that policies for flexibility currently exist in the Community Development Code.
 - Policy 2.7: Committee members suggested that this policy might be better located under Goal 1. Staff agreed.
 - Policy 2.8: Committee members asked what a superblock is. Staff responded that it refers to large blocks of land with large distances between intersecting streets. Some examples can be found along TV Highway.
 - Policy 2.9: The committee suggested that this policy might also be better located under Goal 1. Staff agreed to examine moving it.

- Goal 3: Pursue employment areas with innovative site design elements that contribute to the public realm.
 - The committee did not have input on this goal.
- Goal 4: Plan, develop, and maintain an active public realm that enriches the lives and health of the community.
 - General Discussion: The committee asked if there should be any language in the goals and policies related to safety through design, like lighting standards. Staff responded that there are related policies being developed in Police & Fire and Transportation Goals and Policies, but that staff would re-examine where additional policies would be.
 - Policy 4.1: Committee members asked about the specific meaning of the term “innovative”. Staff responded that it refers more to emphasizing smart design and development—not necessarily groundbreaking or bold design.
 - Policy 4.3: The committee asked if Hillsboro has a program for protecting trees. Staff responded that the City emphasizes preserving existing trees in new developments, but that there aren’t strong regulations mandating tree preservation. Staff also mentioned that the Comprehensive Plan will examine Urban Forestry in its own section.
- Goal 5: Contribute to the sustainability of the urban environment
 - The committee did not have input on this goal.

Updates from Prior Topics – Urbanization, Noise Management, and Access to Healthy Food

Aaron Ray discussed minor updates to the goals and policies for Urbanization and Noise Management based on feedback from CAC and TAC. These updated sections are included in the meeting packet, and staff is asking for additional input from CAC members offline.

Aaron then discussed a rewritten set of goals and policies for Access to Healthy Food based on prior input from CAC and TAC. The new goals and policies are written around six topics:

- Residential gardening
- Farmers markets
- Community gardens
- Itinerant or periodic uses to support Community-Supported Agriculture and farmers markets
- Partnerships with schools and organizations
- Development of a Food System plan

Questions and comments from the committee included:

- Is it out of scope to include a reference to the need of developing a food systems plan? Staff replied that although the food system plan itself is outside the scope of the Comprehensive Plan, directing the creation of a plan is not.
- In Policy 1.1, the term “sales” is a little unclear in terms of intent. Staff responded that adding “limited” before “sales” might clarify the policy.
- In Policy 1.4, it wasn’t clear what is intended by “itinerant or periodic uses”. Staff explained that it is intended to allow for Community-Supported Agriculture programs, or similar programs, to distribute food at certain locations at certain times. Such language allows the City to approve of such short-term uses that might not otherwise be permitted under current policies.

Upcoming Meeting Schedules and Topics

- The next meeting will take place on Thursday, March 17 from 4:00-6:00 pm in the meeting room at Shute Park Library to discuss Energy and Climate Change, and Urbanization.
- The first Community Summit is scheduled for April 2 and April 7 in the Community Room at the Main Library. Topics include Bolstering Community Involvement and Enhancing Livability and Recreation core areas. CAC members are encouraged to attend.

Public Comment

No members of the public offered comment at the meeting.

Adjournment

With no additional business to consider, the CAC meeting was adjourned.

MEMORANDUM

To: Comprehensive Plan Update Citizen Advisory Committee (CAC)

From: Long Range Planning Staff

Date: March 11, 2016

Subject: Energy & Climate Change and Police & Fire Background Reports and Draft Goals and Policies Review

Requested Citizen Advisory Committee Action:

Review and provide feedback on the background reports and draft Comprehensive Plan goals and policies concerning Energy and Climate Change, and Police and Fire Services, as well as any additional feedback pertaining to Design and Development and Natural Hazards draft goals and policies revised following the February meeting.

Background:

This month, the committee will examine goals and policies from two new topics:

Core Area	Topic
Advancing Environmental Sustainability	• Energy & Climate Change
Promoting Health, Wellness, and Safety	• Police & Fire Services

For each, staff is requesting that CAC members read the materials prior to the meeting. It is, of course, preferable that you read the background reports in their entirety; however, if you do not, please do read Sections 7 and 8 of all of the background reports to be discussed. The CAC meeting will include, if needed, discussion of suggested revisions to the background reports, although the meetings will focus primarily on draft goals and policies.

Energy and Climate Change

Statewide Planning Goal 13 requires municipalities to adopt Comprehensive Plan policies to maximize the conservation of all forms of energy, based on sound economic principles. The City’s existing Comprehensive Plan goals and policies related to Energy date to 1980 and have not been updated to reflect the physical, political, and technological changes that have occurred since that time. The City’s efforts around environmental sustainability include a recognition of the need to move towards a cleaner energy system – i.e., one that relies less upon non-renewable fossil fuel resources and their associated greenhouse gas (GHG) emissions that contribute to climate change. In addition to the City making mitigation of climate change a priority, there is greater recognition that our City and community should place more focus on the ability to adapt to the

effects of climate change. This revised Comprehensive Plan section focuses on land use and transportation policies as they relate to Energy and Climate Change.

The attached Background Report and draft goals and policies were reviewed by an internal working group consisting of representatives from the Development Services, Long Range, and Transportation divisions within the Planning Department and with Peter Brandom from the City Manager's Office. The Hillsboro Sustainability Task Force reviewed the Background Report and draft goals and policies at its March 1st meeting. The Technical Advisory Committee reviewed the Background Report and draft goals and policies at its March 10th meeting. Hillsboro Sustainability Task Force and TAC members contributed minor edits to the Background Report and suggested refinements to the draft policies. Following CAC review, the draft Goals and Policies will be reviewed by the Planning Commission at their May 11, 2016, meeting.

Police & Fire Services

Cities are required to address police and fire protection in their Comprehensive Plan as a part of satisfying Statewide Planning Goal 11, which covers Public Facilities and Services. The City's existing Comprehensive Plan covers police and fire services alongside many other public facilities and services. Most of the current Comprehensive Plan Police and Fire Services policies date back to 1977. As with other public facilities and services-related sections, staff is recommending that Police and Fire Services be covered in a distinct section of the Comprehensive Plan to allow a more complete set of goals and policies to be developed.

The Background Report and draft goals and policies were reviewed by an internal working group consisting of representatives from the Development Services division, as well as TAC participants representing the Police and Fire Departments. The TAC reviewed the Background Report and draft goals and policies at their March 10, 2016, meeting; feedback resulted in some revisions to the Background Report, as well as some modifications to goals and policies to incorporate additional feedback from the Development Services division. Draft goals and policies will be presented to the Planning Commission at their May 11, 2016, meeting.

Design and Development and Natural Hazards

Revised draft goals and policies for Design and Development and Natural Hazards reflecting input from the February 2016 CAC meeting are included in this month's packet. These revisions will be discussed briefly at the end of this month's meeting, although any additional input from CAC members can be submitted to staff offline. Design and Development will be reviewed as part of a special Planning Commission work session scheduled for March 29, 2016. Natural Hazards goals and policies will be reviewed by the Planning Commission on April 13, 2016.

Cost:

Costs for preparation of these documents include staff time only.

Attachments:

1. Energy & Climate Change Background Report, draft goals and policies, and existing Comp Plan section

2. Police & Fire Services Background Report, draft Goals and Policies, and existing Comp Plan section
3. Design & Development draft Goals and Policies (updated March 10, 2016)
4. Noise Management draft Goals and Policies (updated March 11, 2016)

Energy and Climate Change

Background Report DRAFT – March 10, 2015

Review History

Date	Reviewed By
2.10.16 - 2.19.16	Internal Committee Meetings – <i>Comments Incorporated</i>
3.1.16	Hillsboro Sustainability Task Force Meeting – <i>No Comments submitted</i>
3.10.16	Technical Advisory Committee – <i>Comments included as tracked changes</i>

1. Introduction

Hillsboro is a community in transition. The City has experienced rapid growth and diversification in its population and economic base over the past 20 years. This growth has created new economic opportunities as well as pressures on economic, social, environmental, and energy resources. There is an increasing awareness among citizens and business owners of the need to be more resource efficient in the way we live and work. The City’s adopted definition of environmental sustainability is, “a sustainable future, in which the City responsibly satisfies the needs of its citizens, provides a healthy and satisfying work environment for its employees and minimizes its impact on the physical environment of the community.” Environmental sustainability is a significant part of the City’s efforts to thoroughly plan for a healthy, livable community where all residents, visitors, and employees have access to everyday needs, area attractions, and employers. Energy production and use, and its contribution to climate change, are key elements of our sustainable future.

The City’s efforts around environmental sustainability include a recognition of the need to move towards a cleaner energy system – i.e., one that relies less and less upon non-renewable fossil fuel resources and their associated greenhouse gas (GHG) emissions that contribute to climate change. Data suggests that climate change may result in higher temperatures, more wet weather conditions, and water resource shortages in our area, and impact other areas of the world more dramatically. The City has made the *mitigation* of climate change a priority. This includes a focus on building energy efficiency, renewable energy, material resource efficiency, water efficiency, and the reduction in use of non-renewable fossil fuels from transportation. Other tools, such as district-wide energy systems, may become more viable as well.

There is also a greater recognition that our City and community should place more focus on the ability to adapt to the effects of climate change. Climate change *adaptation* (or resilience) to changes in our climate may also be needed to ensure the long term viability of our community. Adaptation includes preparation, planning and budgeting for the inevitable yet unpredictable changes in our climate, which may involve an increase in violent storm frequency and intensity, warmer temperatures, increasing wet weather conditions and increases on demands for water and other resources.

This background report is one of a series of papers identifying recommended policy questions and updates to the Hillsboro Comprehensive Plan. The intent of this report is to examine the City’s land use and transportation policies as they relate to energy and climate change, ultimately identifying recommended policy revisions based on statutory requirements, established best practices, and emerging issues and trends to address climate change mitigation and adaptation. The outcome of this report is a series of policy questions and recommendations to inform the update of the Advancing

Environmental Sustainability section of the City's new Comprehensive Plan. This background report was prepared by City of Hillsboro Planning staff, and will be refined and reviewed through a process including the City's Sustainability Task Force, the project's Technical Advisory Committee, Citizen Advisory Committee, Planning Commission, and City Council.

2. Background

A Climate Action Plan Opportunities Framework, prepared for the City as the result of the 2012 Hillsboro New Energy Cities workshop, speaks to a cleaner energy future. The Framework states that:

The world stands on the cusp of a profound transition in how we produce, distribute, and utilize energy from an inefficient system dominated by a few centralized and polluting technologies to a much cleaner, smarter, diversified, and efficient system.

The drivers are many: volatile costs for traditional fuels, instability in the oil-producing nations of the Middle East, and serious health and environmental threats are pushing us to address our dependence upon fossil fuel. At the same time, capital flows into new energy companies combined with skilled clean energy entrepreneurs, engineers, and business strategists are pulling the clean energy economy forward.

While fortunes will be made and lost in the global race to commercialize new energy technologies, communities have much to gain by taking charge of their energy future and driving sustained financial and community investment into the local built environment and energy infrastructure. At a time when resources are becoming scarce, the communities that embrace the new energy systems broadly will have a competitive advantage over those that continue to assume an infinite and cheap supply of energy and natural and financial resources.

In communities across America, local residents, businesses, and public agencies spend millions of dollars each year to buy energy—often dirty and inefficient—from outside their borders. By using energy more efficiently and producing more energy locally, communities can reduce their outflow of energy dollars, keeping more dollars circulating among local businesses closer to home. In addition, when communities harness millions of dollars for energy efficiency retrofits and new energy infrastructure projects, they create good, family-wage local jobs in the trades.

Some American communities have begun to pioneer a new path for energy use and generation to improve their economic, social and energy resiliency. A cleaner energy future involves improving energy efficiency in new development, redevelopment, public facilities, utilities, and operations, as well as retrofitting existing development. The City took the lead in energy efficiency with the construction of the Hillsboro Civic Center in 2005. The Hillsboro Civic Center was designed to use 40% less energy than an equivalent building. This energy efficiency has been achieved through such measures as daylighting, energy-efficient lighting, heating and cooling systems. Greater energy efficiency can also be achieved through other actions such as passive building construction methods and technologies, water efficiency, and the reduction of urban heat-island impacts.

The City is has partnered with the Hillsboro Chamber, Portland General Electric, Intel, SolarWorld, Epson Portland, Enhabit, the Oregon Department of Energy, Earth Advantage, Oregon Energy Trust, Columbia-Willamette Clean Cities (the U.S. Department of Energy), and other key entities that have demonstrated expertise in cleaner energy systems and programs. Companies such as Intel have helped Hillsboro

achieve a top-two ranking in voluntary renewable energy purchasing (renewable energy credits) nationwide. SolarWorld, the largest manufacturer of photovoltaic solar panels in the U.S. for more than 35 years, provides Hillsboro with a distinct advantage for the expansion of use of solar energy. The City has partnered with SolarWorld to create the Hillsboro Solar Advantage program, which has supported increased residential and commercial solar developments that create local manufacturing and trades jobs.

The City has also developed a coordinated, efficient permitting system, including a building permit fee waiver to support the expansion of renewable energy systems, and information for constituents interested in renewable energy, including solar. Since 2012, the City has offered online permitting and deployed a comprehensive permit process enterprise platform. The City's system, combined with the building permit fee waiver for renewable energy systems and participation in the Rooftop Solar Challenge through Northwest Solar Communities, helps ensure a more timely and cost effective permitting process for solar energy development.

The City is actively engaged in reducing the use of non-renewable fossil fuels from transportation. The City has aggressively pursued installation of electric vehicle (EV) charging stations throughout the City, incorporated alternate fuel vehicles in its fleet mix, and installed traffic signal coordination/arterial system management systems. The City has also worked to reduce non-renewable energy use by vehicles with higher-density, pedestrian-oriented, and transit-supportive mixed-use development within such centers as downtown Hillsboro, Orenco Station, and the Tanasbourne and AmberGlen areas.

Distributed system involve shared resource generation, distribution, and management using decentralized sources. The City has explored the opportunity to create a distributed energy system pilot project but implementation has been slow due to a lack of funding and public support. The City has also looked into furthering water efficiency in some public facility projects which presents an opportunity to reduce energy use associated with the treatment and distribution of municipal water. By expanding community gardens and supporting local farmers markets, the City has also helped promote the use of locally-produced goods. The City has done a great deal to promote collaborative and innovative approaches to address energy and climate change challenges and there are significant further opportunities.

The City's cleaner energy future focus is reinforced in the multiple local policy and guiding documents including the Hillsboro 2020 Vision and Action Plan, City Sustainability Plan, and the recently completed Hillsboro 2035 Community Plan and associated Hillsboro Environmental Sustainability Plan. The Hillsboro Sustainability Task Force, made up of stakeholders representing various community interests including local schools and government, business and industry of various sizes, citizens, and potentially-affected service providers, helped developed the Hillsboro Environmental Sustainability Plan. This Task Force also works on structuring and implementing community priorities related to energy, resource conservation, materials management, and environmental education.

3. Hillsboro 2020 and Hillsboro 2035

3.1. Hillsboro 2020 Vision and Action Plan

Since 2000, the Hillsboro 2020 Vision and Action Plan has engaged the broader community in developing and implementing projects that strengthen the community, create economic opportunity

and protect the environment. Environmental sustainability formally emerged as a community priority during the ten-year update of Hillsboro 2020. Through that outreach process, the public expressed strong support for expanding sustainability efforts beyond City Hall and into the broader community. The Hillsboro 2020 Vision and Action Plan’s *Preserving the Environment* section includes seven strategies and associated actions directly or indirectly related to a cleaner energy system. Highlighted in the table below are details of the specific actions identified.

Action	Summary
13.1	<i>Identify/Map Pathways:</i> Develop and regularly update an inventory of bicycle and pedestrian pathways, and make available in print or online.
13.2	<i>Bicycle and Pedestrian Advisory Committee:</i> Establish a Bicycle and Pedestrian Advisory Committee responsible for advising the City on active transportation investments and coordinating with regional jurisdictions on pathway and facilities connections.
13.3	<i>Fund Pathways:</i> Explore feasible funding options including state, regional or private, grants, public or special levies or other means to upgrade and complete the City's bike path/pedestrian system in accordance with current codes and ordinances.
13.4	<i>Sidewalk Completion and Repair:</i> Encourage adjacent property owners to complete and repair sidewalk systems and provide assistance where feasible.
13.5	<i>Bike Rack Policy:</i> Help develop a policy and strategy for expanding the number of secure bike racks available city-wide.
13.6	<i>Integrated Bike Network:</i> Coordinate with regional partners to create and promote a bicycle transportation network connecting population, transit and employment centers and other regional destinations.
13.7	<i>Safe Routes to School:</i> Establish and promote safe bicycle and pedestrian routes to schools from surrounding neighborhoods.
13.8	<i>Smart Crossings:</i> Install smart-crossings, including flashing beacons, at locations noted for heavy pedestrian use.
14.1	<i>Transit System Expansion and Promotion:</i> (A) Develop public/private partnerships to expand existing transit systems and promote increased ridership. (B) Promote and encourage use of mass transit and alternative modes of transportation. Explore and promote use through new incentive programs and by providing necessary infrastructure and transit service within Hillsboro.
14.2	<i>Transit Service Expansion:</i> Communicate to Tri-Met local need for additional transit routes and encourage ongoing operation of existing transit service.
14.3	<i>Local Transit System:</i> Study economic feasibility of operating a limited Hillsboro transit service that complements Tri-Met service.
14.4	<i>Transit “Free Fare” Zone:</i> Explore and if feasible implement a "free fare" transit zone in Hillsboro.
24.2	<i>New Tree Planting Program:</i> Establish a tree planting, maintenance and preservation organization and program.
26.1	<i>Waste Reduction Promotion:</i> Promote and encourage existing waste reduction programs (including hazardous wastes, plastics and other materials not currently recycled) by simplifying the sorting process and increasing incentives to recycle. Target under-served areas, such as businesses and construction sites.
26.2	<i>Solid Waste Reduction and Recycling Education for Youth:</i> Educate and assist K-12 students and school staff to reduce solid waste and expand recycling participation.

27.1	<i>Environmentally-Friendly Construction Education and Demonstration:</i> (A) Identify environmentally-friendly materials and techniques (such as energy-efficient building construction, rainwater recycling, native plant landscaping, "green" roofs and porous paving). (B) Educate development community and public about environmentally-friendly materials and techniques. (C) Demonstrate techniques in new construction of public buildings and facilities. (D) Enable broader application of environmentally-friendly materials and techniques.
27.2	<i>Environmentally-Friendly Construction Education and Demonstration:</i> Develop/establish incentives for use of environmentally-friendly construction and landscaping techniques.
28.1	<i>Hillsboro Public-Private Sustainability Task Force:</i> Establish a public-private Sustainability Task Force responsible for inventorying sustainability efforts, developing community goals and initiatives and tracking implementation.
28.2	<i>Local Goods and Services Procurement:</i> Facilitate links between producers and consumers to support the local economy and minimize the carbon footprint.
28.3	<i>Sustainability Outreach Program:</i> Create a public outreach program to raise sustainability awareness and promote environmentally-responsible processes, products and programs.
28.4	<i>Sustainable Schools:</i> Partner with Hillsboro schools to model sustainability through building design, conservation and curriculum.
28.5	<i>Ecological Business Program:</i> Use peer-based outreach to promote the use of sustainable products and processes in our business community.
28.6	<i>Sustainability Awards Program:</i> Create a Sustainability Awards Program to recognize organizations and individuals who help meet community sustainability goals.
29.1	<i>Resource Conservation Incentives:</i> Create incentives and educational programming to promote conservation of water, electricity, gas and other limited resources.
29.2	<i>Renewable Energy Pilot Projects:</i> Launch pilot projects to showcase solar and other renewable energy resource technology in homes and businesses.
29.3	<i>Renewable Energy Source Use Promotion:</i> Promote broader use of renewable energy by local residents and businesses by expanding options and reducing costs and other barriers to access.

3.2. Hillsboro 2035 Community Plan

In 2013, the City initiated research and outreach to gather community input for the Hillsboro 2035 Community Plan. The Hillsboro Sustainability Task Force worked with a variety of public and private sector partners to develop the Hillsboro Environmental Sustainability Plan. While the Hillsboro 2035 Community Plan sets a broad road map for building a more sustainable community (including social, economic and broader livability issues), the Hillsboro Environmental Sustainability Plan is specifically focused on stewardship of the environmental goals. In this sense, the Plan is essentially a fifth Hillsboro 2035 Community Plan focus area.

Much like the Hillsboro 2035 Community Plan, the Hillsboro Environmental Sustainability Plan is a broad-based, community-wide plan involving over a dozen community partners to implement actions within and beyond the City's purview. The Plan focuses on three general areas of environmental sustainability: energy, resource conservation, and resource recovery and renewal. Three primary goal areas and numerous specific actions – both existing and potential – have been identified to be carried out over the next five years. The Plan is designed to be flexible and easily updated as new opportunities arise, additional implementation partners step forward, and technological advances provide new approaches for achieving plan goals.

Within each of the Hillsboro Environmental Sustainability Plan goal areas, specific indicators and targets for tracking progress are identified, and a series of program, project and policy actions are outlined to move the plan forward. A variety of community organizations have volunteered to serve as implementation stewards. Each year, the Sustainability Task Force will collect empirical data and survey implementation stewards to develop an annual progress report as part of the overall Hillsboro 2035 reporting process.

Major Plan goal areas and objectives, with some examples of potential actions from over 60 that have been identified, include:

Energy Objectives:

- Reduce greenhouse gas emissions
- Reduce use of non-renewable energy resources
- Expand use of renewable energy resources to meet demand

Example Action Proposals:

- Home 'energy score' pilot project
- Energy related education and resources for residents and businesses
- Biogas to energy (renewable natural gas or RNG)
- Enhance employee commute options and incentives
- Enhancement of bicycle infrastructure

Resource Conservation Objectives:

- Enhance understanding of the importance of natural assets and ecosystem services
- Protect and enhance environmental assets (air, land, water and habitat)
- Foster healthy human and wildlife populations

Example Action Proposals:

- Tree planting campaign
- Promote EcoBiz and golf course eco-certification
- Monitor bird and amphibian diversity and health
- Promote sustainability awards program
- Curtail air pollution from wood and debris burning

Resource Recovery and Renewal Objectives:

- Reduce waste stream volumes
- Repurpose waste stream elements for beneficial use
- Pursue a "one-water" use and reuse strategy

Example Action Proposals:

- Encourage proper backyard composting
- Encourage use of durable commercial goods (e.g., food service ware)
- Enhance recycling opportunities at multi-family developments
- Explore options for food waste composting
- Incorporate sustainable development principles into City codes

4. Existing Comprehensive Plan

The City's first Comprehensive Plan adopted in 1972¹ makes no reference to energy. In 1977 the current Hillsboro Comprehensive Plan was adopted by the City Council². The [current](#) Comprehensive Plan Energy section [last amended in 1980](#) includes the following goals and policies.

4.1 Goals

The existing Comprehensive Plan goals are to conserve energy by using energy conservation as a determinant in:

- (A) The location of various land use activities (residential, commercial, industrial).
- (B) The design of developments.
- (C) The design and development of a transportation system.
- (D) The design and construction of housing and other structures.

4.2 Policies

The existing Comprehensive Plan's four Energy goals are accompanied by eight policies that have not been amended since 1980. These policies include the construction of energy-efficient structures, concentration of major commercial activities in areas receiving a high volume of traffic, dispersal of minor commercial compatible with residential uses, expansion of the transportation system to safely accommodate energy efficient transportation methods, refinement of land use design and development standards, and promotion of recycling techniques, programs and centers.

4.3 Implementation Measures

Three implementation measures for Energy were added to the existing Comprehensive Plan in 1980. The first implementation measure involves the City cooperating with the Metro regional government's efforts to encourage voluntary recycling and establish a recycling center in Hillsboro. The other two implementation measures involve amending the City's Transportation System Plan to address energy conservation. Specifically, developing bicycle, pedestrian, and transit system master plans, as well as encouraging the location of high-density residential, commercial, and industrial development to increase the use of public transportation.

5. Regulatory Context

5.1 Federal Regulations

At the federal level, energy and climate change is primarily addressed in four areas: research and development; standards, incentives and regulations; policy development and implementation; and national and international leadership. National energy and climate change policy does not set a regulatory requirement at the local government level. The City has worked closely with the Federal Department of Energy (DOE) on energy use reductions and grant programs for the past several years, which represents a new and much deeper engagement at the local level from the DOE

¹ Resolution No. 704-1-72

² Ordinance No. 2793-4-77

5.2 Statewide Regulations

5.2.1 Statewide Planning Goals

Oregon's Statewide Planning Goals provide the basis for all land use and transportation planning at the state and local levels. Oregon Statewide Planning Goal 13 directs planning efforts to maximize the conservation of all forms of energy, based upon sound economic principles. The goal also encourages that land conservation and development actions seek to utilize renewable energy sources whenever possible. There exists little enumeration on the implementation of Goal 13; however, it may provide the basis for state and local energy and climate change planning as these issues become more prominent. Goal 13 provides the following guidelines for energy conservation planning:

1. Priority consideration in land use planning should be given to methods of analysis and implementation measures that will assure achievement of maximum efficiency in energy utilization.
2. The allocation of land and uses permitted on the land should seek to minimize the depletion of non-renewable sources of energy.
3. Land use planning should, to the maximum extent possible, seek to recycle and re-use vacant land and those uses which are not energy efficient.
4. Land use planning should, to the maximum extent possible, combine increasing density gradients along high capacity transportation corridors to achieve greater energy efficiency.
5. Plans directed toward energy conservation within the planning area should consider as a major determinant the existing and potential capacity of the renewable energy sources to yield useful energy output. Renewable energy sources include sunshine, wind, geothermal heat and municipal, forest and farm waste. Whenever possible, land conservation and development actions provided for under such plans should utilize renewable energy sources.

5.2.2 Oregon Revised Statutes

Oregon Revised Statutes (ORS) include a chapter on Energy, Conservation Programs, and Energy Facilities.³ This chapter states that continued growth in demand for nonrenewable energy forms poses a serious and immediate, as well as future, problem. It is essential that future generations not be left a legacy of vanished or depleted resources, resulting in massive environmental, social and financial impact. It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources. The need exists for comprehensive state leadership in energy production, distribution and utilization. It is, therefore, the policy of Oregon:

- (a) That development and use of a diverse array of permanently sustainable energy resources be encouraged utilizing to the highest degree possible the private sector of our free enterprise system.
- (b) That through state government example and other effective communications, energy conservation and elimination of wasteful and uneconomical uses of energy and materials be

³ ORS Chapter 469.

promoted. This conservation must include, but not be limited to, resource recovery and materials recycling.

- (c) That the basic human needs of every citizen, present and future, shall be given priority in the allocation of energy resources, commensurate with perpetuation of a free and productive economy with special attention to the preservation and enhancement of environmental quality.
- (d) That state government assist every citizen and industry in adjusting to a diminished availability of energy.
- (e) That energy-efficient modes of transportation for people and goods shall be encouraged, while energy-inefficient modes of transportation shall be discouraged.
- (f) That cost-effectiveness be considered in state agency decision-making relating to energy sources, facilities or conservation, and that cost-effectiveness be considered in all agency decision-making relating to energy facilities.
- (g) That state government shall provide a source of impartial and objective information in order that this energy policy may be enhanced.

5.2.3 Other Statewide Acts/Rules

Oregon House Bill 3543 established statewide GHG emissions reduction targets of 75 percent below 1990 levels by 2050. The bill also amended ORS Chapter 468A to require state and local governments, businesses, nonprofit organizations, and individual residents to prepare for the effects of climate change in order to minimize its social, economic and environmental effect. .

In 2009, the Oregon Legislature through House Bill 2001 mandated the six metropolitan areas to develop a preferred land use and transportation scenario designed to reduce greenhouse gas emissions from light-duty vehicles (cars, small trucks, and SUVs). In 2010, Oregon Senate Bill 1059 provided further direction for scenario planning by creating a process for adoption and implementation of plans to reduce GHG emissions from light-duty vehicles. SB 1059 calls for transportation GHG emissions reductions of 75 percent below 1990 levels by 2050 as required by ORS 468A.205. The premise of this bill is that tackling GHG emissions, especially from the transportation sector, requires a regional approach. In the Portland metro region, Metro's "Climate Smart Strategy" was adopted in 2014.

Oregon House Bill 2620 enacted in 2007 requires installation of solar energy systems on new public buildings or major building remodels which have a building contract price over \$1 million. The other requirement was that funds spent on inclusion of solar technology into a building project be at least 1.5% of the total cost. Oregon Senate Bill 1533, passed in 2012, expanded the allowable renewable energy sources beyond solar to meet the 1.5% requirement.

In 2009, the Oregon Senate passed SB 79 which encourages the achievement of net-zero emissions in building operations by 2030. SB 79 also directed the creation of a task force to develop the Oregon Reach code, a set of optional statewide building standards and construction practices designed to increase the energy efficiency of buildings.

5.3 Metro Regulations

The Regional Urban Growth Management Functional Plan (UGMFP) does not directly address energy and climate change. It is the purpose of UGMFP Title 11 requirements to guide such long-range planning for urban reserve and areas added to the Urban Growth Boundary (UGB)⁴. The Regional Framework Plan does call for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit friendly communities which respond to an element of energy conservation.

6. Other Plans, Programs or Reports

6.1 City Sustainability Plan

In 2010, the City completed its first comprehensive greenhouse gas (GHG) inventory, which provides a critical baseline to measure how effective the city is in reducing GHG emissions over time. That same year a City Sustainability Plan for the organization was completed with a 20-year target for achievement. Working groups met to discuss issues around construction and maintenance practices, energy, policy, and vendor relations. This Plan identified what sustainability meant to the organization, the City's past and ongoing sustainability efforts, long-range sustainability goals and projects, and a process for capturing information to allow for performance measurement.

6.2 New Energy Cities Climate Action Plan Opportunities Framework

In 2012, the City hosted a New Energy Cities Community Partners workshop with Climate Solutions to map the flow of energy and emissions in the community and to identify goals and priorities to reduce fuel consumption and greenhouse gas emissions. The outcome included a community energy flow map and Climate Action Plan Opportunities Framework to guide the collaborative work of Hillsboro's public, private, nonprofit, and civic leaders in creating a model for new energy leadership. These tools have been used in conjunction with an energy sector analysis to identify opportunities for implementation.

6.3 State of Oregon 10-year Energy Action Plan

In 2012, the state of Oregon also completed a 10-year Energy Action Plan designed to protect Oregon consumers and ensure energy investments made today strengthen the economy. According to the U.S. Energy Information Administration, Oregonians spend approximately \$14 billion on energy each year, and most of that money leaves the state. The Plan outlines strategies to meet energy efficiency, renewable energy, GHG reduction, and transportation objectives, with strategies that help to create investment opportunities to keep more capital circulating in Oregon. The Plan includes specific initiatives that affect incremental change in the short term and could be expanded over the long term. The Plan is also an economic action plan that emphasizes priorities supporting energy-related jobs and projects in urban and rural communities across Oregon. More than 1,500 people submitted written comments or participated in a series of public meetings about the plan.

The plan presents three core strategies where the state can play a lead role in innovation, policy development and market transformation:

⁴ Ordinance No. 99-818A, Sec. 3. Amended by Ordinance No. 02-969B, Sec. II; and Ordinance No. 10-1238A, Sec. 5; and Ordinance No. 11-1252A, Sec. 1).

- Meeting 100% of new electric load growth through energy efficiency and conservation.
- Enhancing clean energy infrastructure development by removing finance and regulatory barriers to attract new investment and pursue promising new technologies.
- Accelerating the market transition to a more efficient, lower cost and cleaner transportation system, including strategies for fleet vehicle conversion and access to cleaner-burning and more efficient vehicles.

6.4 Metro Climate Smart Strategy

In 2014, the Portland metropolitan regional government adopted a “Climate Smart Strategy”. This was the result of a four year process of research, analysis, community engagement, and discussion. This strategy and accompanying actions rely on adopted local and regional land use and transportation plans as well as expected advancements in cleaner, low carbon fuels, and more fuel-efficient vehicles.

Major components of the Climate Smart Strategy include key policy recommendations, several immediate actions, a toolbox of possible near-term actions, and performance monitoring targets. The nine key policy recommendations established are:

- Implement the 2040 Growth Concept and local adopted land use and transportation plans
- Make transit convenient, frequent, accessible, and affordable
- Make biking and walking safe and convenient
- Make streets and highways safe, reliable, and connected
- Use technology to actively manage the transportation system
- Provide information and incentives to expand the use of travel options
- Make efficient use of vehicle parking and land dedicated to parking
- Support Oregon’s transition to cleaner, low carbon fuels, more fuel efficient vehicles, and pay-as-you-drive private vehicle insurance
- Secure adequate funding for transportation investments

Three immediate support actions for 2015 and 2016 were identified to demonstrate the region’s commitment to work together to begin implementing the strategy. The actions include:

- Advocating for increased transportation funding for all modes
- Advocating for federal and state actions that lead to cleaner, low carbon fuels, and more fuel-efficient vehicles in Oregon
- Seeking resources and technical assistance to advance community and regional demonstration projects that combine the most effective GHG reduction strategies.

A menu of possible near-term actions was developed that state, regional and local governments, and special districts could take between 2015 and 2020 to begin implementing the Climate Smart Strategy. The toolbox will be subject to further review and refinement as part of scheduled updates to the Regional Transportation Plan (RTP) to reflect new information and approaches to reducing greenhouse gas emissions.

The last component of the Climate Smart Strategy is a set of performance measures and performance monitoring targets for tracking progress. The purpose of performance measures and targets is to

monitor and assess whether key elements or actions that make up the strategy are being implemented, and whether the strategy is achieving expected outcomes.

7. Emerging Issues, Challenges, and Trends

The City faces multiple issues and challenges to support moving towards a cleaner energy future. This section examines these issues and challenges, and also explores some emerging trends and opportunities that the City could chart towards pursuing climate change mitigation and adaptation.

7.1 Issues & Challenges

Funding

- Limited federal and state funding impacts local governments' ability to move towards a cleaner energy future and to pursue climate change mitigation and adaptation.

Resource Inefficiency

- Buildings today are rarely designed and constructed to integrate both the needs of society and to improve the natural environment, such as creating more energy than is used.
- Buildings are often designed and constructed for uses and conditions of the moment, requiring significant remodeling or replacement when needs or circumstances change, a costly approach from financial, energy, and materials perspectives.
- There has been little market for most recycling materials over the past couple of years, with no end in sight—what was once a revenue is now a cost.
- Limited incentives or requirements for the reuse or recycling of construction debris and other materials in our community results in increased need for virgin materials and the associated fossil fuel energy and emissions impacts.
- Limited development of district-wide energy systems, harvesting of rainwater, and repurposing of grey water and wastewater to reduce fossil fuel energy use and related emissions.

Transportation

- ~~Land use patterns that maintain dependency on the automobile and limit the spread of a cleaner energy system continue to be developed. Land use patterns that deter high levels of transit service, maintain dependency on the automobile, and limit the spread of a cleaner energy system continue to be developed.~~
- Walking, and biking, ~~and transit~~ are constrained by factors such as safety concerns, families with children, gaps in walking and biking facilities, and non-secure bike parking, ~~long transit times, and night and weekend employment shifts not served by transit.~~

Existing Development Code and Standards

- The City's current development code and standards have limited language to support a move towards a cleaner energy future and to pursue climate change mitigation and adaptation.

7.2 Emerging Trends & Opportunities

Resource Efficiency

- There is greater understanding that a significant amount of energy goes to light, heat, and cool buildings that are not energy-efficient.
- Today there is a greater focus on the reduction and reuse of construction debris and other materials in order to reduce overall energy use by reducing demand on raw materials and production of new products.
- According to the One-Water approach, “water is a single resource that supports everything from public health to our local economy. From the rain, to the river, to the faucet at home, it moves in one big cycle. Demand for clean water is increasing rapidly, and with it there is a greater emphasis on the need for planning, management, allocation, and use of water to broadly consider all of the increasing demands locally, regionally and globally.” The harvesting and repurposing of water presents an opportunity to mitigate demand on fresh water and to reduce energy use associated with the treatment and distribution of municipal water.
- Work is being done to create development that adapts to changing needs and conditions, including environmental conditions such as climate change, to increase resiliency. Adaptive design makes renovation or repurposing of space easier, less expensive, and less burdensome on the environment.

Renewable Energy

- Some American communities have begun to pioneer a new path for energy use and generation to improve their social and economic resiliency.
- There is greater awareness of the benefit of transitioning from a relatively inefficient energy system (e.g., how it is produced, distributed, and utilized by a few centralized and polluting technologies) to a much cleaner, smarter, diversified and efficient system.
- There is greater understanding that working towards a cleaner energy system and pursuing climate change mitigation and adaptation have multiple other co-benefits such as improving air and water quality and potentially benefitting the local economy.
- The cost of renewable energy production from renewable resources has trended downward in recent years.
- Local governments can advance the widespread installation of renewable energy through such measures as supporting the division of land, siting of buildings, and use of construction methods and technologies.

Transportation

- A mix of land use and emphasis on urban form encourages more people to access ~~the majority of their daily needs~~ their daily activities nearby, preferably on foot by foot, bicycle, and/or transit.

- New technologies are emerging that reduce vehicle fossil fuel consumption from transportation such as alternate fuel vehicles, more efficient and diverse transportation options, and technology to actively manage the transportation system.
- There is opportunity for the expansion of alternative fuel vehicle infrastructure in existing development and alternative fuel vehicle-ready construction in new development and re-development.
- There is increased interest in access to locally-produced goods and facilitating other links between local producers and consumers to support the local economy and reduce carbon emissions from the transportation sector.

Innovative Approaches

- More distributed systems are being developed to increase net-positive energy efficiency and resiliency.
- Ideas for designing development to regenerate its own sources of energy and materials, and to restore the surrounding ecosystem hold great potential. Regenerative design considers raw materials, cyclical operations, health and building inhabitant energy usage. Examples of regenerative design include sequestering more carbon than is emitted by the production, transportation, and installation of building materials; generating more energy than is taken from the grid; harvesting and purifying all water needed for potable use and treating/recycling all liquid waste; operating carbon-free; and designing interiors that improve human health, deliver ample day-lighting and natural ventilation, and that provide flexibility of use and adaptation for future goals.

8. Goal/Policy Questions to Consider

The Energy and Climate Change proposed draft policies are a significant departure from the current Comprehensive Plan's Energy policies last amended in 1980. The proposed draft policies will be largely implemented through a variety of incentives. The development community will have the opportunity to pursue such voluntary policies if market conditions exist and/or there is interest in pursuing a variety of economic, social, and environmental benefits. One question that needs to be considered to inform the Energy and Climate Change draft goals and policies is listed below.

- Which elements of draft Energy and Climate Change goals and policies should be incorporated into other Comprehensive Plan Update topic areas?

9. Recommended Comprehensive Plan Updates

Based on the issues outlined in this report, see the draft Energy and Climate Change goals and policies to move towards a cleaner energy future and to pursue climate change mitigation and adaptation.

Energy and Climate Change

Goals and Policies DRAFT – March 10, 2016

Review History

Date	Reviewed By
2.10.16 - 2.19.16	Internal Committee Meetings – <i>Comments Incorporated</i>
3.1.16	Hillsboro Sustainability Task Force Meeting – <i>Comments Incorporated</i>
3.10.16	Technical Advisory Committee – <i>Comments included as tracked changes</i>

GOAL 1 Advance resource efficiency* in the built environment.

- POLICY 1.1 **Resource-efficient development.** Facilitate resource-efficient development through innovative construction methods and technologies, such as a net-positive* approach to resources.
- POLICY 1.2 **Passive solar.** Pursue passive solar* in new site design and development to advance energy efficiency.
- POLICY 1.3 **Distributed systems.** Support development and maintenance of small-scale, district-wide, and/or other distributed systems* [where appropriate](#).
- POLICY 1.4 **Material resource efficiency.** Promote material resource efficiency* through such measures as construction waste recycling, sourcing of raw materials, and reusable building elements.
- POLICY 1.5 **Water efficiency.** Promote water efficiency*, which also saves energy.
- POLICY 1.6 **Urban heat island effect.** Reduce urban heat island effect* through such measures as increasing tree canopy and installing green roofs*.

GOAL 2 Increase the production and use of renewable energy*.

- POLICY 2.1 **Use of renewable energy.** Promote the use of renewable energy.
- POLICY 2.2 **Renewable energy production and storage.** Promote the ~~integration~~ [production](#) of renewable energy ~~production~~ and [energy](#) storage.
- POLICY 2.3 **Design for renewable energy production.** Pursue opportunities to integrate renewable energy production in new development and redevelopment through design, such as ensuring solar access* in the division of land and siting of buildings.
- POLICY 2.4 **Renewable energy-ready construction.** Pursue construction methods and technologies in new development and redevelopment, such as solar-ready construction*, to expand opportunities for the production of renewable energy.

GOAL 3 Reduce carbon emissions from the transportation sector.

- POLICY 3.1 **Compact walkable places.** Pursue compact mixed-use areas, and innovative architectural and site designs, so daily activities can be accessed nearby, preferably ~~on~~ by foot, bicycle, and/or transit.
- POLICY 3.2 **Active transportation and transit.** Expand and promote active transportation* infrastructure and transit that is safe, well connected, and efficient.
- POLICY 3.3 **Alternative-fuel vehicle infrastructure.** Promote the expansion of alternative-fuel vehicle infrastructure* in existing development, new development, and redevelopment.

GOAL 4 Promote collaborative and innovative approaches to address energy and climate change challenges and opportunities.

- POLICY 4.1 **Responsive development code and standards.** Maintain development codes and standards that respond to changing conditions and emerging trends in climate change mitigation* and adaptation*.
- POLICY 4.2 **Partnerships around climate change.** Create partnerships within the City and with other public agencies, the private sector, non-profit organizations, property owners, and residents on climate change mitigation and adaptation strategies and implementation measures.
- POLICY 4.3 **Community member education.** Facilitate education focused on energy and climate change for community members of all ages, abilities, cultures, and incomes using tools such as on-site signage, innovative technologies, demonstrations, and tours.
- POLICY 4.4 **Public-private partnerships for regenerative design.** Partner with stakeholders such as other public agencies, the private sector, and non-profit organizations to encourage regenerative design*.
- POLICY 4.5 **Quantify energy use, resource impacts, and carbon emissions.** Promote development that quantifies energy use, resource impacts, and carbon emissions associated with all phases of a proposed ~~project's life cycle~~ project from raw material extraction to final use and disposal.
- POLICY 4.6 **Volatile organic compounds.** Strive to eliminate the use of ~~construction materials with~~ volatile organic compounds* that evaporate easily into the surrounding air and contribute to climate change.
- POLICY 4.7 **Adaptable building and site design.** Advance building and site designs that are adaptable to changing economic, environmental, and energy needs and conditions.
- POLICY 4.8 **Locally-produced goods.** Promote the use of locally-produced goods, which saves energy.

DEFINITIONS:

Active Transportation – Any form of human-powered transportation—walking, bicycling, the use of strollers, wheelchairs/mobility devices, in-line skating and skateboarding.

Alternative Fuel Vehicle Infrastructure – Systems and equipment that support the use of motor vehicles that utilize energy sources other than petroleum-based fuels, such as electricity, natural gas, propane, biodiesel. Infrastructure components may include items such as charging stations, fueling and distribution systems, and storage systems.

Climate Change Adaptation – Actions that aim to manage risks from climate change impacts, protect communities, and strengthen the community’s ability to adapt to changing conditions.

Climate Change Mitigation – Actions that aim to reduce greenhouse gas emissions in order to slow climate change.

Distributed Systems – Shared resource generation, distribution, and management using decentralized sources.

Green Roof – A roof of a building that is partially or completely covered with vegetation over a growing medium and waterproofing membrane with many benefits including saving energy and reducing urban heat island effect.

Material Resource Efficiency – The sourcing of construction materials, reduction of construction materials, and reuse of construction materials for beneficial use other than disposal.

Net Positive – Producing more resources than are consumed, such as a building sending excess energy back into the electricity grid.

Passive Solar – Site and development design to collect, store, and distribute solar energy in the form of building heat in the winter and to reject building solar heat in the summer.

Regenerative Design – Processes that restore, renew or revitalize their own sources of energy and materials, creating sustainable systems that mimic natural processes with little or no waste.

Renewable Energy – Energy from natural sources that are continually replenished such as sunlight, wind, rain, tides, waves, geothermal heat, and timber when harvested sustainably. Non-renewable energy is energy from a natural resource which is not reproduced, grown, generated, or used on a scale which can sustain the rate of its consumption such as coal, petroleum and natural gas.

Resource Efficiency – [Reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal.](#)

Solar Access – The ability of one property to continue to receive sunlight across property lines without obstruction, [such as](#) from another property.

Solar-Ready Construction – New development designed to accommodate the future installation of solar photovoltaic (PV) or solar hot water systems after construction is complete.

Urban-Heat Island Effect – Roads, buildings, industry and people causing urban air and surface temperatures that are higher relative to those in surrounding rural areas.

Volatile Organic Compounds – Chemicals that contain carbon and easily evaporate at room temperature. VOCs include a wide variety of individual chemicals that are produced both naturally and by humans. Certain VOCs released into the atmosphere, especially from the production and combustion of fossil fuels, influence climate change.

Water Efficiency – Strategies that reduce water use and increase water reuse. ~~waste, collect and store rainwater for reuse on-site, and repurpose grey water and wastewater for reuse on-site.~~

Section 11. Energy.

- (I) **Goal.** To conserve energy by using energy conservation as a determinant in:
 - (A) The location of various land use activities (residential, commercial, industrial).
 - (B) The design of developments.
 - (C) The design and development of a transportation system.
 - (D) The design and construction of housing and other structures.

- (II) **Policies.**
 - (A) The City shall promote and encourage the construction of energy-efficient residential, commercial and industrial structures.
 - (B) Major commercial activities shall be concentrated in areas receiving a high volume of traffic in order to minimize auto use and conserve energy resources. However, inefficient strip development patterns that increase congestion and therefore waste energy resources shall be avoided.
 - (C) Minor commercial activities which are compatible with residential uses shall be dispersed throughout the planning area to serve the public and conserve energy resources.
 - (D) Improvement and expansion of the transportation system will be designed to safely accommodate energy efficient transportation methods.
 - (E) The City may use the following or similar implementation methods to encourage achievement of this energy goal: Lot size, dimension and siting controls; building height, bulk and surface area; density of use, particularly housing density; availability of light, wind and air; compatibility with and conflict between competing land use activities; and systems and incentives for the collection, reuse and recycling of metallic and nonmetallic waste.
 - (F) Measures designed to conserve energy resources shall be consistent with the goals and policies of this Plan.
 - (G) Processing techniques designed to recycle sludge and other solid waste materials shall be encouraged and utilized where feasible to conserve energy resources.

- (H) The City shall promote and encourage service organizations and/or industry to establish recycling programs and centers for newspapers, magazines, glass, metal and other recyclable materials. (Amended by Ord. No. 3130/6-80.)

(III) Implementation Measures.

- (1) The City shall cooperate with efforts by the Metropolitan Service District (Metro) to encourage voluntary recycling in the planning area. The City shall also cooperate with Metro in the timely establishment of a recycling center in Hillsboro.
- (2) Energy conservation shall be addressed in the Transportation Plan. This should include development of bicycle/pedestrian paths, local mass transit, and light rail or express bus system master plans.
- (3) The Transportation Plan shall encourage commercial and industrial centers and high density residential development to locate so as to encourage use of public transportation.

(Section III. Added by Ord. No. 3130/6-80.)

Police and Fire Services

Background Report DRAFT – March 4, 2016

Review History

Date	Reviewed By
1.20.2016	Internal Committee – <i>Comments Incorporated</i>
3.11.2016	Technical Advisory Committee – <i>Comments shown as tracked changes</i>

1. Introduction

Public safety is paramount to the viability of any city. Simply put, cities cannot and will not attract residents, businesses, or visitors if fundamental safety is at all in question. Effective police and fire services play a critical role in sustaining Hillsboro’s future growth, livability, and prosperity. Providing these services requires consideration of public safety issues at all stages of the development process, from early visioning all the way through to construction and maintenance.

This background report is one of a series of papers identifying recommended policy questions and updates to the Hillsboro Comprehensive Plan. The intent of this report is to examine the City’s police and fire services as they relate to land use and transportation planning, and evaluate these efforts against relevant policies, goals, and regulations as well as emerging issues and trends. The outcome of this report is a series of policy questions and recommendations to inform the update of the Promoting Health, Wellness and Safety section of the City’s updated Comprehensive Plan. This background report was prepared by City of Hillsboro Planning staff in collaboration with staff from Hillsboro Fire Department and Hillsboro Police Department. It will be refined and reviewed through a process including a Technical Advisory Committee, Citizen Advisory Committee, the Planning Commission and City Council.

The current Comprehensive Plan considers police and fire services in the context of broader public facilities policies. As part of the plan update, police and fire services will be broken out into its own topic area, reinforcing the criticality of effective police and fire services in developing safe and livable communities, and reflecting significant public input that shows the importance of public safety in the community. Goals and policies set in this topic area are intended to address only the aspects of public safety as they relate to land use planning and development; goals and policies will not generally address departmental operations or programming.

2. Background

Hillsboro prides itself on being a full-service city, including providing comprehensive public safety services. Police and fire services play a major role in the City’s overall service portfolio: public safety expenditures account for approximately 10% of the City’s budget¹, nearly as much as it takes to operate the City’s water system.

¹ Fiscal Year 2015-16 Annual Budget

2.1. Hillsboro Police Department

The Hillsboro Police Department (HPD) provides police services throughout the entire City. The force includes 134 sworn officers and 49 support staff members. Police services include records, parking enforcement, code enforcement, community outreach, and administrative support. HPD collaborates with local and regional partners on initiatives focusing on gang enforcement, narcotics, forensics, fraud and identity theft, crimes against children, transit security, and others. The sworn police force is augmented by a cadet program and reserve officer volunteer program.

In the 2014-15 fiscal year, HPD officers opened over 17,000 cases and responded to over 80,000 community calls for service (or, put another way, one call every 6.5 minutes over the entire year). Overall calls for service have been trending downward over ~~the past five recent~~ years, as shown in Table 1 below. In 2012, HPD changed its methodology for tracking calls for service, making direct comparisons with prior data less significant. Therefore, only 2012 and more recent data is shown here. 2010 and 2011 data do indicate a similar downward trend in overall calls for service, however.

HPD tracks calls and response time in each of its five patrol districts (shown in Figure 1 on the next page), generally matching each quadrant of the city with an additional district focusing on the Downtown area. District 2, which covers the northeast area of the city (including Tanasbourne and AmberGlen) has the highest call rate. Rates for all districts are shown in Table 2.

Table 1. Total police calls for service

Calendar Year	Calls for Service
2010	93059
2011	91507
2012	82587
2013	81115
2014	80095

Table 2. Citizen-generated police calls by district.
Note that traffic calls are not included.

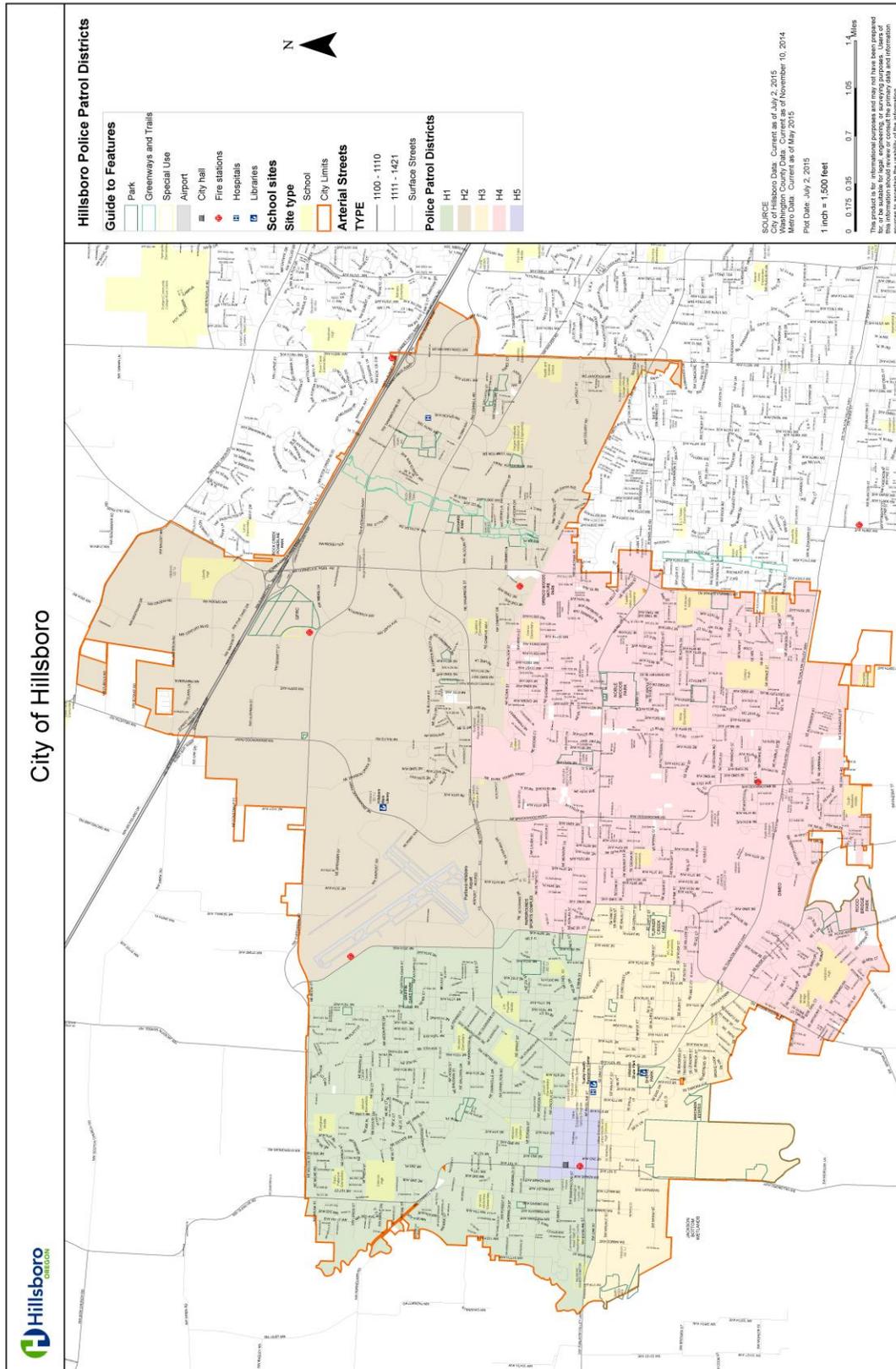
	2012	2013	2014
District 1	5751	5503	5281
District 2	7336	7370	7724
District 3	6006	6439	5961
District 4	6488	6944	7619
District 5	1756	1875	1748

Response times for citizen-generated complaints have historically been highest in district 4, covering the southeast area of the city generally south of the Fair Complex and Orenco, and east of 32nd Avenue south to the City limits. Average response times over the past five years have remained relatively steady, as shown in Table 3.

Table 3. Police response times by district (in minutes)

	2012	2013	2014
District 1	8.9	9.1	9.2
District 2	9.3	9.4	8.9
District 3	9.0	8.8	9.1
District 4	12.3	11.5	10.5
District 5	7.2	7.1	6.9
Average	9.4	9.2	8.9

Figure 1. Hillsboro Police Patrol Districts



2.2. Hillsboro Fire Department

The Hillsboro Fire Department (HFD) responds to fire, rescue, and hazard incidents throughout the City, including structural fires, medical calls, motor vehicle crashes, and technical rescue situations. The department also performs inspections and provides training and public education services. HFD personnel includes 84-90 firefighters and chief officers, and 21-18 training, logistics, education, prevention, emergency management, and support staff, operating out of five stations and one logistics facility across the City, as shown in Figure 3.

In the ~~2013-14~~2014-15 fiscal year, HFD responded to nearly 9,7009,800 emergencies of all types. The department also provided 1,5313,327 hours of service in fire prevention activities and 1,440995 hours in public education activities. Although the incidence of fire has generally declined in recent years due to prevention and outreach efforts, other types of calls for service have increased substantially: between the 2009-10 and ~~2013-14~~2014-15 fiscal years, total emergencies increased 29.531.7%, with calls related to motor vehicle crashes more than doublingincreasing over 250%, from 256 in the 2009-10 fiscal year to 629-645 in the ~~2013-14~~2014-15 fiscal year.

Table 4. Fire calls for service

	2009-10	2010-11	2011-12	2012-13	2013-14	<u>2014-15</u>
Emergencies of all types	7439	7735	6874	9219	9635	<u>9799</u>
Fire Calls	231	227	251	276	274	<u>404</u>
Medical Calls	4280	4579	4710	4597	5111	<u>6243</u>
Motor Vehicle Accident Calls	256	298	281	533	629	<u>645</u>

The department has been generally successful in responding to an increasing demand for services while lowering overall response times in recent years. This reflects additional facilities and capacities brought online to accommodate residential and employment growth across the City. HFD has targets of answering calls within 4 minutes on 75% of calls, and 5 minutes within 90% of calls. The department is trending toward meeting this target, as shown in Figure 2.

Figure 2. Fire department average-75th percentile response times

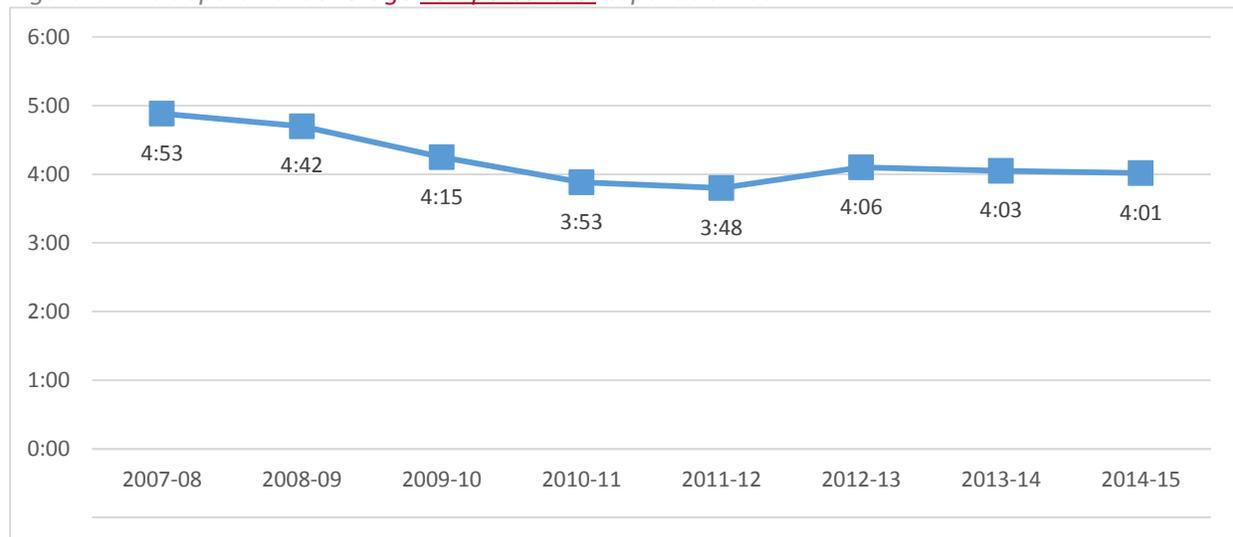
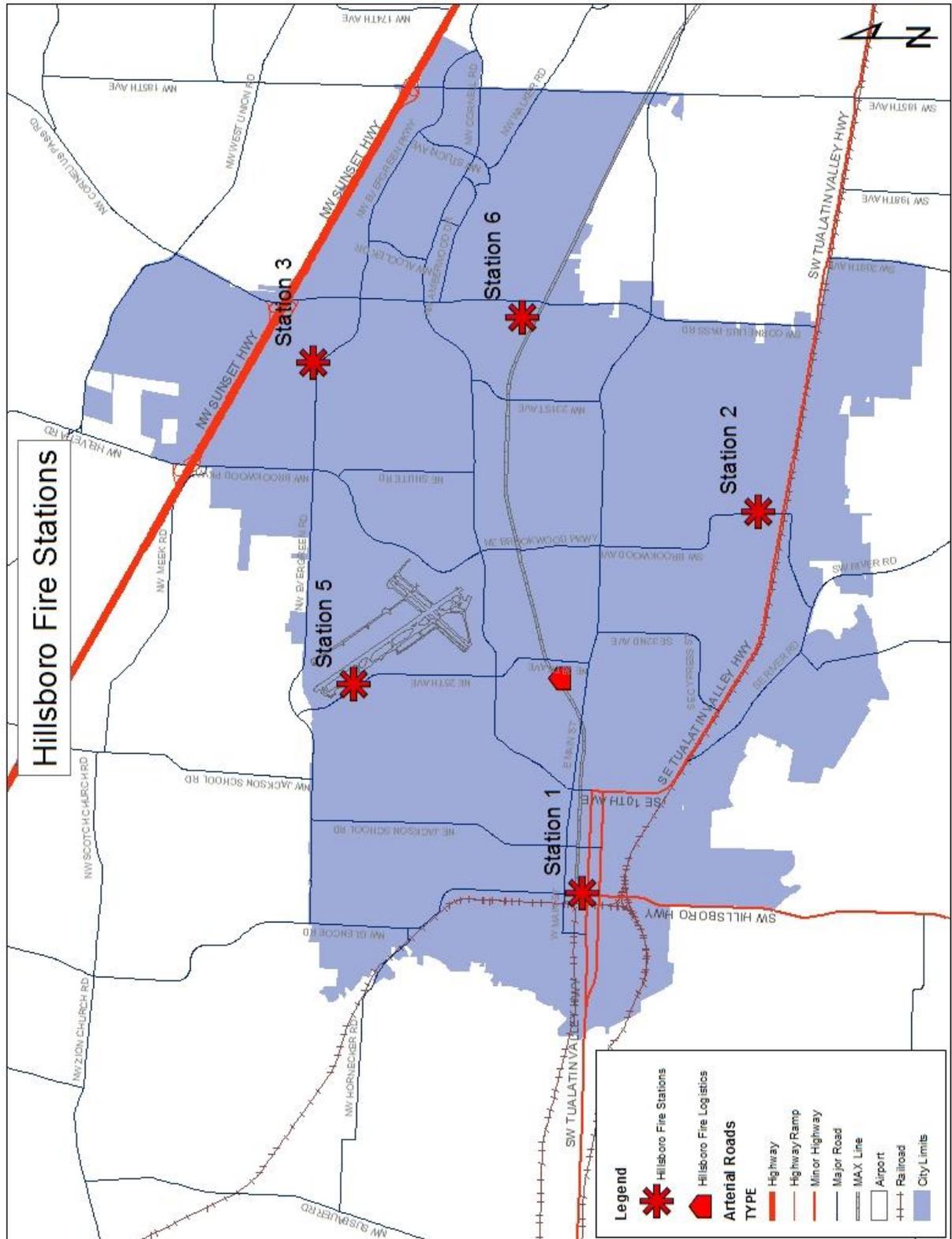


Figure 3. Hillsboro Fire Department Facility Locations



3. Hillsboro 2020 and Hillsboro 2035

The community has clearly identified public safety services as critical components of the City’s vision in each of Hillsboro’s recent visioning projects. In both Hillsboro 2020 and the Hillsboro 2035 Community Plan, a number of initiatives and actions related to police and fire services were developed. The breadth of these initiatives illustrates the importance of comprehensive police and fire services in building and sustaining a safe and secure community.

3.1. Vision 2020

The 2020 Vision and Action Plan² was organized into a series of focus areas, strategies, and actions, with one focus area devoted to Promoting Health and Safety. The actions most related to police and fire services are listed below. Most of these actions have been implemented – items not implemented are noted.

- Strategy 46.1: Conduct ongoing community outreach and communications to develop understanding and awareness of public safety programs.
- Strategy 46.2: Solicit community input in public safety planning.
- Strategy 47.1: Target for information and training, additional neighborhoods, elderly, rental and non-English speaking populations as well as Hillsboro businesses.
- Strategy 47.2: Develop dynamic outreach programs that provide information and education to a range of Hillsboro residents on high-priority community safety issues (e.g., bicycle and pedestrian safety, traffic safety, secure crime reporting, etc.)
- Strategy 47.3: Identify high-crime areas and develop location-appropriate strategies to enhance public safety. (Not yet implemented.)
- Strategy 48.1: Develop multi-lingual and multi-cultural capacity within public safety departments of the City. Recruit multi-lingual and multi-cultural staff. Provide ongoing language training for emergency service personnel; produce multi-lingual and multi-cultural training publications.
- Strategy 48.2: Identify and procure technology to assist expanding capacity of the multi-language network.
- Strategy 48.3: Extend the network including neighboring communities and other government agencies.
- Strategy 49.3: Sustain and expand outreach and education programs that bring awareness and solutions to the problem of juveniles setting fires.

3.2. Hillsboro 2035 Community Plan

The Hillsboro 2035 Community Plan builds on the strategies defined in the 2020 Vision and updated them to reflect emerging community needs. Public safety initiatives in the plan are generally found in the Initiative 5 of the Health, Wellness, and Safety focus area. The goal of this initiative is to “Keep Hillsboro safe through proactive community policing, fire prevention and emergency preparedness.” Actions in this initiative are all to be implemented by 2020, including:

- Action 5A. Continue to update public safety techniques and technology to serve our growing and evolving community.

² *Hillsboro 2020 Vision and Action Plan*, Revised August 2010
(http://www.hillsboro2020.org/FileLib/H2020ActionPlan2010_Web.pdf).

- Action 5B. Expand public safety education, communications and active participation opportunities for community members
- Action 5C. Increase police presence in parks, neighborhoods and schools
- Action 5D. Update and follow best-practices for use-of-force and mental health response incidents
- Action 5E. Increase public safety workforce diversity to reflect Hillsboro’s demographics
- Action 5F. Increase disaster preparedness through education, engagement and advanced warning systems

There are additional actions in other areas of the 2035 Community Plan that have a nexus to public safety indirectly, including:

- Action 2D: Adopt standards for urban design with emphasis on creating or preserving neighborhood character and “sense of place”
- Action 8D: Enhance appearance, quality and safety of bus shelters and MAX stations

4. Existing Comprehensive Plan

The existing Comprehensive Plan primarily addresses police and fire services in Section 12, Public Facilities and Services. Other sections of the plan have additional language that relates to public safety. The current definition of “public facilities, utilities, and services” includes those needed to provide police and fire protection, among many other functions. Rather than listing all current goals, policies, and implementation measures related to public facilities and services in general, those listed below are those most pertinent to public safety functions.

Section 12 Goals

- Provide public facilities and services in an orderly and efficient manner consistent with the expansion of urbanization into rural areas.
- Utilize the availability of public facilities and services as a tool for guiding urbanization with the Hillsboro Planning Area.
- Provide a safe and healthy living environment.
- Provide that existing land uses are and will continue to be supported by needed public facilities and services.
- Provide that future development is appropriately guided and supported by the provision of public facilities and services in a timely, orderly, and efficient manner.

Section 12 Policies

- Public facilities and services shall be provided at a level sufficient to create and maintain an adequate supply of housing and service an increasing level of commercial and industrial activity.
- The ability of residents to pay for public facilities and services at varying densities of development should be a prime consideration in determining appropriate densities and land uses in the planning area.
- Citizens’ should assist in the development of funding methods and programs for public facility and service projects.

M. The City shall promote coordination among the City and other governmental and interested parties including special districts to facilitate the most effective uses of public facilities serving the planning area.

Section 12 Implementation Measures

G1. The City shall maintain, within the funding available, the current level of police protection in relation to the crime rates and calls for service. The crime rates and calls for service shall be monitored annually, so that the funding level of police services can be evaluated in relation to the needs of the community.

G2. The City shall, within the funding available, continue its efforts to reduce the incidence of reported crime. These efforts include maintaining manpower commensurate with the population, an ongoing training program for police personnel, and pursuing a community-wide program of crime prevention.

H1. The City shall maintain, within the funding available, the current level of fire protection, emergency medical and fire related services.

H2. Prior to the first major revision, the City shall study future fire station locations and major equipment needs. The study shall establish station locations or locational criteria and identify the needs for major equipment acquisition.

H3. The City shall continue to coordinate fire protection efforts, including station locations, with Washington County RFPD #2, to assure maximum effectiveness and efficiency.

In addition to the policies listed above, there are a handful of additional policies in other sections of the existing Comprehensive Plan that relate to public safety, including:

- Urbanization, Section 2
 - Urban services necessary for development include adequate water, sewer, and fire protection. The documentation of the availability of these needed services must be current.
 - Other essential services, including school districts, Police or Sheriff's Department, water districts, and transit agency, must be shown to be available to a proposed development within five years of a development approval.
- Public Facilities and Services, Section 12
 - The water system shall be coordinated with the Land Use Map in the provision of public facilities, especially sanitary sewers and fire protection.
- Downtown Framework Plan, Section 26
 - Continue and enhance police presence and police/community partnerships to address vandalism, gangs, drug trafficking, and MAX line/MAX station safety.
- AmberGlen Community Plan, Section 28
 - Ensure that the Police Department and Fire Department have the equipment, staff and expertise required to provide a safe and healthy environment given the larger scale and density of planned development.
- South Hillsboro Community Plan, Section 31
 - Site design should support Crime Prevention through Environmental Design principles as outlined in the Hillsboro Community Development Code.

- Provide civic resources throughout South Hillsboro, including ... Police and fire substations or offices.
- Create neighborhoods with strong identities that encourage community-based policing and preventive programs for emergency services.
- Identify a preferred location for a fire station to serve the South Hillsboro community.

5. Regulatory Context

5.1. Federal Regulations

Although there are a number of federal regulations which involve the operation and programming of public safety services, there are few that directly address land use issues as they relate to police and fire services. Within the realm of land use planning, the most relevant federal regulations are Title VI of the Civil Rights Act of 1964 and the Omnibus Crime Control and Safe Streets Act of 1968, which forbid agencies receiving federal financial assistance from discriminating on the basis of race, color, sex, or national origin.

5.2. Statewide Regulations

5.2.1. Statewide Planning Goals

Oregon Statewide Planning Goal 11 addresses Public Facilities and Services, including police and fire services.³ Municipalities are required to develop and maintain public facilities plans for key urban services including public safety. Specifically, as related to police and fire services, Goal 11 requires:

- Coordination: Plans to expand the City through annexation and/or urbanization must include coordination of expansion of public safety service coverage sufficient to accommodate planned uses and densities;
- Adequacy: Public safety services should be provided at levels necessary and suitable for urban uses;
- Capital Improvement Programming: Budgets and finance programs should be designed to achieve the desired types and levels of public services across the City;
- Expansion Capacity: Public services should be appropriate to support sufficient amounts of land to maintain an adequate housing market in areas undergoing development or redevelopment;
- Implementation: Plans should provide for a detailed management program to assign respective implementation roles and responsibilities to relevant governmental bodies.

5.2.2. Other State Statutes, Rules, and Policies

A number of additional state statutes, administrative rules, and other policies govern provision of police and fire services in the state, although most govern department operational or oversight activities and have little relationship to land use planning. These statutes and rules include:

- Police services
 - Oregon Revised Statutes Chapter 181
 - Oregon Administrative Rules Chapters 257 and 259
- Fire services

³ Oregon Administrative Rule 660-015-0000(11).

- Oregon Revised Statutes Chapter 476 (including the Conflagration Act, ORS 476.510)
- Oregon Administrative Rules Chapters 654 and 837

5.3. Metro Regulations

Police and fire services are not explicitly regulated by the Urban Growth Management Functional Plan or the Regional Framework Plan.

6. Emerging Issues, Challenges, and Trends

6.1. Issues & Challenges

6.1.1. Matching ongoing growth with service coverage

Rapid growth across the City has made it a challenge to maintain police and fire service levels consistently, and additional growth will place additional demand on public safety services. Planning for additional public safety facilities and services will be necessary both in cases of new development and redevelopment, as well as annexation of already urbanized areas (particularly those designated to be incorporated into Hillsboro under the terms of Senate Bill 122). In some cases, providing services to these areas could involve negotiation with surrounding jurisdictions that currently provide public safety services to those areas.

In addition to geographic coverage, changes in the types of development can also impact public safety services. For example, denser and more intense urban forms can present challenges for emergency egress and access. As another example, taller buildings can have a significant impact on response times, as personnel need to not only access the site, but then ascend to the problem location.

6.1.2. Demographic changes and aging populations

Shifts in demographics can also have an impact on public safety services. Currently, for example, some of the highest users of Fire Department services are care homes located throughout the City. This trend is expected to continue as aging populations expand. As our City diversifies, public safety organizations will need to be able to engage all of the City's diverse communities to understand and respond to evolving public safety needs, through efforts including community-based policing and preventive programs.

6.2. Emerging Trends & Opportunities

6.2.1. Designing and reviewing development with public safety in mind

Coordination between the Planning, Fire, Police, and other departments when reviewing development proposals is critical to ensuring that new development can be adequately protected. This coordination exists today in the permitting process and should be continued, and where necessary, refined.

In addition, there are a variety of measures that can be taken at the design and construction stages which can have a significant impact on public safety. Many of these measures are identified as the basis of our building codes, but additional measures can enhance the safety of a site. These measures, collectively referred to as "Crime Prevention Through Environmental Design" (CPTED) consider the overall design of a site, components such as lighting and landscaping, and

characteristics such as sight lines and visibilities to improve overall safety. Special attention can also be paid to high-traffic locations including transit facilities and gathering places.

6.2.2. Public-private partnerships and incentives to address service challenges

One option for extending public safety services in new development and redevelopment would be to explore options to collaborate with the private sector to build new public safety capacities into new development. For example, the City may wish to incentivize developers of tall or large buildings to include small public safety substations or on-site equipment storage facilities to aid in emergency response.

7. Recommended Plan Updates and Policy Questions to Consider

Key plan updates:

- Expanded policies to incorporate design efforts to improve public safety, including CPTED principles.
- New policies to ensure that sites for new facilities are identified with new development and redevelopment.
- More explicit policies to facilitate community policing, public engagement, and awareness.
- New policies to extend the City's ability to respond to emergencies.
- New policies to allow the City and developers to creatively respond to public safety challenges in new development and redevelopment.
- Stronger policies to address safety in the design of transit stations, parks, and other public gathering places.
- A new policy that discusses public safety funding sources and strategies.

Police and Fire Services

Goals and Policies DRAFT – March 11, 2016

Review History

Date	Reviewed By
1.20.2016	Internal Committee – <i>Changes incorporated</i>
3.10.2016	Technical Advisory Committee – <i>Comments shown as tracked changes</i>

GOAL 1 Provide comprehensive and effective public safety services.

POLICY 1.1 **Maintain level of service.** Provide police, fire, medical, and other necessary public safety services at levels of service commensurate with the City's population and commercial and industrial activity.

POLICY 1.2 **Evaluate additional demand.** ~~Ensure that~~ Evaluate additional demand on existing ~~public-police and fire~~ safety levels of service, budgets, or facilities resulting from new development*, redevelopment*, or infill development* ~~is~~ **sufficiently mitigated.**

POLICY 1.3 **Facility location.** Locate police, fire, and other public safety facilities as appropriate to ensure adequate and consistent service coverage and response times throughout the City.

POLICY 1.4 **Facility and service planning coordination.** Support coordination of facility and service planning between departments within the City, and with other local and regional mutual aid* partners, to improve efficiency and service delivery.

POLICY 1.5 **Analyze demand and capabilities.** Monitor ~~public-safety~~ **police and fire** service demand, reported incidents, and other appropriate data to ensure the adequacy of current service capacities, facilities, and budgets.

POLICY 1.6 **Coordination with system plans.** Coordinate ~~public-safety~~ **police and fire** service and facility planning with other public infrastructure plans, such as the Water Master Plan and Transportation System Plan.

POLICY 1.7 **Community awareness and engagement.** Facilitate community public safety awareness, education, volunteer, and training programs.

POLICY 1.8 **Funding sources and strategies.** Identify funding sources and strategies for new or additional ~~public-safety~~ **police and fire** services or facilities.

Commented [APR1]: This policy may be revised further based on input from Development Services staff.

GOAL 2 Support and extend the City's ability to respond to emergencies.

POLICY 2.1 **Continuity and security of services.** Support efforts to assure continuity and security of services following disasters, disruptions, and other events.

POLICY 2.2 **Emergency response infrastructure.** Facilitate the creation and maintenance of emergency response infrastructure including emergency communications, coordination, management, and facilities.

GOAL 3 Use development and redevelopment to improve public safety.

POLICY 3.1 **Address public safety through site and building design.** Allow for flexibility in site design, building placement, ~~and~~ infrastructure placement, and design standards to incorporate measures intended to improve public safety.

POLICY 3.2 **Planning for new facilities.** Identify and procure ~~sites-locations~~ for new public safety facilities, if necessary, at the time of concept planning, annexation, or significant redevelopment.

POLICY 3.3 **Crime Prevention Through Environmental Design.** Support efforts to implement Crime Prevention Through Environmental Design* principles in building and site designs.

POLICY 3.4 **Community-based policing and prevention.** Create neighborhoods, ~~and~~ developments, ~~facilities, and programs~~ with strong identities that encourage community-based policing and preventive programs ~~for emergency services to improve public safety.~~

POLICY 3.5 **Safety and security at gathering places.** Support measures to improve safety and security at public and quasi-public facilities, gathering places, transit facilities, and similar locations.

POLICY 3.6 **Access and safety in parks and public facilities.** Design parks, open spaces, and public facilities to incorporate public safety measures and ensure emergency access.

POLICY 3.7 **Development review coordination.** Ensure coordination between City departments and other applicable agencies to collaboratively identify and resolve public safety-related issues during development review and permitting processes.

DEFINITIONS:

Crime Prevention Through Environmental Design: A multi-disciplinary approach to deterring criminal behavior through thoughtful building and site design, including access control, landscaping, sight lines, visibility, lighting, entrance placement, and access and egress paths.

Development: Any man-made change to real property in the City, including but not limited to construction or installation of a building or other structure; major site alterations such as grading or paving; or improvements for use as parking. Vegetation removal outside the boundaries of a Significant Natural Resource Area is not development. (CDC 12.01.500)

Infill Development: Additional development on already developed lots, usually achieved through subdividing the lot or otherwise increasing its density.

Mutual Aid: Cooperative service agreements between emergency response agencies to lend assistance across jurisdictional boundaries to mitigate the potential of an emergency to overwhelm the resource capabilities of a single agency.

Redevelopment: Construction of new structures, expansion or change of existing structures or building footprints, reconfiguration of existing driveways or parking, and site grading related to such additions, changes, or reconfigurations. (CDC 12.01.500)

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- (6) All major land use actions shall provide for adequate storm drainage conveyance and treatment per adopted standards. (Amended by Ord. No. 5102/1-02 and 5728/3-07.)
- (7) Storm sewer improvements shall be coordinated with the implementation of the Transportation Plan where appropriate.

(F) GENERAL GOVERNMENT.

- (1) Prior to the first major Comprehensive Plan revision, the City shall study general government services and assess the adequacy of existing facilities and project future facility requirements. (Amended by Ord. No. 5102/1-02.)
- (2) Prior to the first major Comprehensive Plan revision, the City shall review the Community Development Code and determine if the existing zones adequately address the location of such public facilities as: churches, schools, utilities, and government agencies. (Amended by Ord. No. 5102/1-02 and Ord. No. 6096/9-14)
- (3) The City shall periodically convene a Technical Advisory Committee consisting of representatives from the Public Works, Water, Finance and Planning and the appropriate service provider districts to coordinate long term public facilities and to plan for public facilities. (Added by Ord. No. 5102/1-02.)

(G) POLICE SERVICES.

- (1) The City shall maintain, within the funding available, the current level of police protection in relation to the crime rates and calls for service. The crime rates and calls for service shall be monitored annually, so that the funding level of police services can be evaluated in relation to the needs of the community.
- (2) The City shall, within the funding available, continue its efforts to reduce the incidence of reported crime. These efforts include maintaining manpower commensurate with the population, an ongoing training program for police personnel, and pursuing a community-wide program of crime prevention.

(H) FIRE PROTECTION.

- (1) The City shall maintain, within the funding available, the current level of fire protection, emergency medical and fire related services.

- (2) Prior to the first major revision, the City shall study future fire station locations and major equipment needs. The study shall establish station locations or locational criteria and identify the needs for major equipment acquisition.
- (3) The City shall continue to coordinate fire protection efforts, including station locations, with Washington County RFPD #2, to assure maximum effectiveness and efficiency.
- (4) Fire flows should be analyzed to assist in determining the location of new lines to improve water pressures in areas that may be deficient. (Amended by Ord. No. 5102/1-02.)

(I) LIBRARY FACILITIES.

- (1) Library needs and activities shall be monitored in the future to determine the need and optimum time for physical improvements.

(Amended by Ord. No. 5102/1-02.)

(J) SCHOOLS.

- (1) Public Facilities planning and projections shall be maintained in five year increments and shall be coordinated with the joint City/County urbanization studies.
- (2) The City shall coordinate with the school districts located in the Urban Area to help assure an adequate level of educational services. Areas of coordination shall include:
 - (a) Location of school site;
 - (b) Reservation of potential school sites during the development approval process;
 - (c) Provision of adequate pedestrian, bicycle and bus access from residential districts to school sites;
 - (d) Consideration of school capacities, school population, and district assessed value during the development approval process; and
 - (e) Provision of population projections.

(Amended by Ord. No. 5102/1-02.)

Design and Development

Goals and Policies DRAFT – February 3, 2016

Review History

Date	Reviewed By
12.30.15 – 2.3.16	Internal Committee Meetings – <i>Comments Incorporated</i>
2.11.16	TAC Review – <i>Comments Incorporated</i>
2.18.16	CAC Review – <i>Comments shown as tracked changes</i>

GOAL 1 Build compact, walkable places with distinct identities and design characteristics.

POLICY 1.1 **Innovation to enrich.** Advance innovative architectural and site design to enrich the lives and health of the community.

POLICY 1.2 **Preserve Compatibility.** Pursue innovative architectural and site design in new development, infill and redevelopment that preserves compatibility within existing neighborhoods.

POLICY 1.3 **Multi-modal design.** Support multi-modal design patterns that allow people to easily meet the majority of their daily needs nearby.

POLICY 1.4 **Design type characteristics.** Focus higher density, pedestrian oriented, and transit supportive mixed-use development within Regional Centers, Transit Station Communities, Town Centers, Neighborhood Centers, and along select Corridors.

POLICY 1.5 **Employment areas with access.** Focus higher employment densities in areas with planned or existing enhanced transportation connectivity, access to transit, and utility infrastructure.

POLICY 1.6 **Flexibility as a reflection of innovation.** Facilitate development review flexibility when proposed development is designed to be innovative and have positive aesthetic, environmental, and social impacts; creates public benefits; and demonstrates exemplary levels of architectural detail, site design and/or urban design best practices.

~~POLICY 1.7 **Scaled transitions.** Develop effective transitions between higher and lower intensity development in areas of different scales and/or uses.~~

POLICY 1.8 **Reduce superblocks.** Avoid the proliferation of superblocks* by encouraging a more compact development pattern that is internally connected and publically accessible by multiple modes.

POLICY 1.9 **Context sensitive parking.** Integrate context-sensitive parking that enhances the quality of the built environment.

Commented [LW1]: The CAC mentioned moving this to goal 2 and at the time I agreed, but after mulling it over, I think it might be better suited here?

GOAL 2 Develop an urban design framework that reflects the unique character of each Hillsboro design type designation* while protecting existing single family neighborhoods while and ensuring urban design coherence city wide.

POLICY 2.1 **Context-sensitive design.** Ensure context-sensitive design and development that reinforce each area's identity, based on the fundamental characteristics of each Hillsboro design type designation, to reinforce each area's identity, as well areas that do not have a design type designation.

POLICY 2.2 **Incentives & Partnerships.** Pursue programs that create and support market incentives and partnerships to enhance urban design and architectural integrity, such as store front enhancement programs, green roofs, enhanced public spaces, and signage.

POLICY 2.3 **Urban design coherence.** Ensure urban design coherence between Hillsboro design types by employing consistent citywide public realm elements including wayfinding, directional signage, gateway enhancements, public art, cohesive street naming, lighting, or other treatments.

~~POLICY 4-7.2.4~~ **Scaled transitions.** Develop effective transitions between higher and lower intensity development in areas of different scales and/or uses.

Policy 2.5 Street Grid. Implement and maintain a Citywide uniform street naming and addressing system.

Commented [LW2]: TAC mentioned adding open space and parks language, but it seems too specific here.

GOAL 3 Pursue employment areas with innovative site design elements that contribute to the public realm.

POLICY 3.1 **Innovative site design.** Advance innovative employment area site design, such as general orientation of development towards street frontages and appropriate setbacks and screening.

POLICY 3.2 **High-quality public realm.** Facilitate the creation of a high-quality public realm in employment areas, such as integrating street trees, vegetated stormwater management, and off-street pathways.

POLICY 3.3 **High-quality commercial nodes.** Pursue the design of high-quality commercial nodes* to serve the needs of businesses and employees in the surrounding uses.

POLICY 3.4 **Multi-modal commuting.** Design employment areas to support multi-modal commuting options.

GOAL 4 Plan, develop, and maintain an active public realm that enriches the lives and health of the community.

POLICY 4.1 **Innovative public facility design.** Advance innovative public facility design that promotes health and enhances livability.

POLICY 4.2 **Multi-modal streetscapes.** Design and retrofit major roadways to facilitate safe, multi-modal* streetscapes.

POLICY 4.3 **Green infrastructure.** Support the integration of natural and green infrastructure*, such as street trees, green spaces, eco-roofs, gardens, and vegetated stormwater management into the public realm.

POLICY 4.4 **Activate the public realm.** Support the interaction and activation between the public realm and adjacent development and uses.

POLICY 4.5 **Partnerships for the public realm.** Consider partnerships for development, redevelopment, and maintenance of streetscapes*, natural areas and third places.*

Policy 4.6 **Ground floor flexibility.** Provide flexibility for temporary ground floor uses to support existing development until the time that redevelopment becomes economically viable.

Commented [LW3]: Added based on CAC comments.

GOAL 5 Contribute to the sustainability of the urban environment.

POLICY 5.1 **Resilient and regenerative energy.** Support emerging trends and technology that integrate resilient and/or regenerative* energy and water infrastructure; and materials sourcing and reuse into the design and development of the built environment.

POLICY 5.2 **District wide resource efficiency.** Facilitate the creation of ecodistricts* and other collaborative arrangements where multiple partners work together to achieve sustainability and resource efficiency goals at a district scale.

DESIGN TYPE DESIGNATIONS (please see corresponding Comprehensive Design Types map)

Regional Centers are compact hubs of high density* housing, employment, and commercial uses supported by high quality transit, multi-modal* street networks, and supportive amenities and services.

Employment Areas serve as hubs for regional commerce. They include industrial land for high tech, business parks, manufacturing, and other business uses. These areas should include limited supporting commercial and retail uses to serve employees. These areas should contain multi-modal commuting options and good connectivity to regional transportation facilities for the movement of goods and cargo.

Transit Station Communities are nodes* of higher-density development centered around a light rail or high capacity transit station that feature a high-quality pedestrian environment and feature a variety of shops and services.

Town Centers are comprised of medium to high intensity* mixed use development containing housing, commercial, retail and civic* uses. These areas are well served by transit, have supportive amenities, and are accessible by the surrounding neighborhood by walking or biking.

Neighborhood Centers have a mix of retail and services to meet day-to-day living needs of the immediate neighborhood with less density and intensity than Regional or Town Centers. These areas have a high level of connectivity to the immediate neighborhood by walking or biking, with the potential for transit access nearby.

Corridors are major streets that may accommodate higher densities and intensities and feature a high-quality pedestrian environment and convenient access to transit. Corridors provide critical connections to centers, and serve as major multi-modal transportation routes for people and goods.

Historic Neighborhoods are intended to promote public awareness and appreciation of the City's history and advance civic pride and identity. Special protections apply to preserve the character of the area while ensuring integration with surrounding areas and uses.

Plan Areas are geographic areas for which special regulations have been created by the City through the adoption of a community or area plan.

DEFINITIONS:

Commercial Nodes

Civic Uses

Density

Design Type Designation

Ecodistricts

Green infrastructure

Intensity

Multi-modal

Nodes

Regenerative

Resilient

Streetscapes

Superblocks

Third places

Areas Subject to Natural Hazards

Goals and Policies DRAFT – April 13, 2016

Review History

Date	Reviewed By
01.07.2016	Internal Committee – <i>Comments Incorporated</i>
01.20.2016	Internal Committee – <i>Comments Incorporated</i>
02.11.2016	Technical Advisory Committee – <i>Comments Incorporated</i>
02.17.2016	DLCD Natural Hazards Planner – <i>No Changes</i>
02.18.2016	Citizen Advisory Committee – <i>Comments Tracked</i>

GOAL 1 Minimize impacts of natural hazards on people and property.

- POLICY 1.1 **Limit hazard impact:** Enhance ordinances and design standards that limit the impact of flooding and other natural hazards* on people and property.
- POLICY 1.2 **~~Convert-Transition~~ hazard areas to little or no development:** Facilitate the ~~transition-shifting of existing uses of developed land in~~ natural hazard areas* to open space, recreation, or other low-density uses over time.
- POLICY 1.3 **Create mitigation plan:** Develop and maintain a mitigation plan for natural hazards.
- POLICY 1.4 **Avoid development in unsafe areas:** Avoid development in natural hazard areas where the risk to people and property cannot be mitigated.
- POLICY 1.5 **Site essential facilities outside of hazard areas:** Prohibit the siting of essential facilities* in identified natural hazard areas where the risk to public safety cannot be mitigated, unless an essential facility is needed to provide essential emergency response services in a timely manner
- POLICY 1.6 **Site HazMat storage outside of hazard areas:** Prohibit the siting of hazardous materials storage facilities* and special occupancy structures* in identified natural hazard areas where the risk to public safety cannot be mitigated.
- POLICY 1.7 **Support natural resource preservation:** Support the preservation and maintenance of natural resources to mitigate the impact of natural hazards with consideration for natural hazard impacts; for example, maintaining, preserving, and installing trees as necessary to ensure strong and supported trees a safe depth and spread of tress’ root systems in order to minimize damage caused by trees during impacts resulting from wind storms.
- POLICY 1.8 **Protect cultural resources from hazards:** Support measures to protect historic and cultural resources from damage caused by natural hazards.
- POLICY 1.9 **Plan for rapid recovery:** Support programs, plans, and investments intended to expedite the restoration of critical services*; permitting alternative access

[routes to essential facilities or allowing temporary use of public rights-of-way for emergency supply or debris storage, and equipment staging.](#)

GOAL 2 Provide information and services to support ~~the~~ hazard preparation and recovery ~~of~~ for people of all ages, abilities, cultures, and incomes.

POLICY 2.1 **Educate the public on hazards:** Ensure availability of information to build awareness about natural hazards and mitigation measures to members of the public in a variety of formats, media, and languages, focusing especially on actionable items such as earthquake retrofitting and stocking emergency supplies.

POLICY 2.2 **Develop hazard warning and information system:** Promote multiple [channels sources](#) for outreach in a variety of formats, media, and languages for sharing of information, alerts, and instruction during a hazard event.

POLICY 2.3 **Support structural enhancements:** Promote development policies and practices that protect the safety of people in Hillsboro, including retrofitting structures and fortifying vital transportation and communication systems.

POLICY 2.4 **Allow for temporary sheltering in public facilities:** Enable the emergency and immediate use of appropriate public and quasi-public facilities* for temporary congregation and sheltering locations during and following a disaster event.

POLICY 2.5 **Allow construction of temporary housing:** Facilitate the expedient provision of temporary [or private](#) housing immediately following disaster event.

POLICY 2.6 [Maintain list of accessible facilities: Create and maintain a list of accessible facilities* for use by the public in the event of a natural hazard event.](#)

GOAL 3 Improve coordination with public and private partners.

POLICY 3.1 **Create hazard response strategy with public/private partners:** Build and maintain citywide hazard response strategy based on existing plans and close coordination with public and private sector partners.

POLICY 3.2 [Ensure clear communication between Departments: Coordinate language pertaining to hazard planning and response between Departments to support clear communication in documents, strategies, and methods.](#)

POLICY 3.23 **Pursue creative funding solutions for hazard mitigation:** Optimize funding for natural hazard mitigation, response, recovery, and outreach by pursuing creative and flexible funding strategies.

POLICY 3.43 **Identify opportunities to restore critical services:** Coordinate with private sector service providers and other jurisdictions to identify opportunities to [provide continuity expedite restoration](#) of critical services* [and expedite its restoration](#).

POLICY 3.54 **Plan for ~~debris management~~ disaster sanitation needs:** Coordinate with local and regional jurisdictions to develop solutions for debris management [and disaster sanitation needs](#) following natural hazard events.

POLICY 3.65 **Provide temporary use permits for debris storage:** Facilitate temporary use permits for short-term storage of debris during hazard clean up and recovery.

GOAL 4 Build capacity for greater urban resilience*.

POLICY 4.1 **Support building retrofits:** Promote replacement, retrofitting, and redesign of at-risk buildings*.

POLICY 4.2 **Invest in Support resilience of public structures:** Promote and support a sustained program of capital investment to improve resilience in public structures, especially essential facilities* and schools.

POLICY 4.3 **Provide infrastructure redundancies:** Provide redundancies to critical infrastructure* to reduce service down times and expedite recovery.

POLICY 4.4 **Fortify lifeline transportation routes:** Support actions and investments to ensure availability of lifeline transportation routes*, including aviation services, following a natural hazard.

POLICY 4.5 **Develop Resiliency Plan:** Develop and maintain a citywide Resilience Plan to support rapid recovery of the City and its services.

POLICY 4.6 **Address cascading hazards:** Expand the City's capacity to address cascading hazards*.

GOAL 5 Manage and maintain spatial, demographic, and economic data to support hazard mitigation planning.

POLICY 5.1 **Update data used for analysis:** Promote frequent updates to the spatial*, demographic, and economic data used by the City to support hazard planning and response.

POLICY 5.2 **Regularly update mapping:** Ensure continuous and timely revisions to natural hazard mapping on a community-wide basis in conjunction with federal, state, and local efforts.

POLICY 5.3 **Support use of best available technology:** Leverage existing technology and support investment for additional hardware and software in favor of comprehensive natural hazard planning and response.

DEFINITIONS:

List of Accessible Facilities – A list of shelters and other facilities, as well as other information for public consumption, should be accessible to the public both online and offline, in the event that internet service is unavailable during or immediately following a natural hazard. Information should be provided in English and Spanish, at minimum, with graphical content wherever possible; text should be printed in large format in order to be accessible to the greatest number of people.

At-Risk Buildings – Buildings with little or no structural integrity that are unlikely to withstand a natural hazard event, such as an earthquake. Often these include structure built prior to 1980 using construction techniques now known to be inadequate for protection in the event of an earthquake. Structural retrofits can remove a building from at-risk status

Cascading Hazards - Hazard events or conditions that occur as a result of a primary hazard in which effects may be transferred or multiplied in a new medium. For example, a seismic event could be a primary hazard and a flood, failed bridge, or hazardous material spill that occur as a result of that event would be the cascading hazards.

Critical Services – Utilities and infrastructure that provide vital life services, such as electricity and potable water

Critical Infrastructure – The means by which critical services are delivered or conveyed; for example, power lines, water systems, communication networks, and transportation routes.

Essential Facilities – Hospitals, fire and police stations, structures containing water or fire-suppression materials, emergency vehicle shelters and garages, standby power generating equipment for essential facilities, and government communication centers or other facilities required in emergency response (defined by the state building code [ORS 455.447(1)(a)]).

Hazardous Materials Storage Facilities – Per state building code (ORS 455.447(1)(b)): “Structures housing, supporting, or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.”

Lifeline Transportation Routes – Transportation routes (streets, highways, and bridges) that “support emergency response and recovery efforts by providing a backbone system...that connect service providers, incident areas and essential supply lines” (ODOT Lifeline Route Selection¹)

Natural Hazard Areas – Land prone to natural hazards, such as those whose geologic conditions predispose them to earthquake, landslide, or sinkhole impacts, or whose location, within a 100-year floodplain or adjacent to wildlands, increases the likelihood of flood or wildfire.

Natural Hazards – Severe or extreme weather, climate, geologic, or fire events that occur naturally or as a result of a natural event (such as lightning or high winds).

Quasi-Public Facilities – Facilities that provide public benefit but under private ownership or control

Resilience – The ability to adapt to changing conditions and recover quickly from disasters or hazard events

Spatial Data – Information with a geographic component that allows analysis, representation, and visualization of data for the purpose of decision-making. This reference to the City’s spatial data includes not just the data the City creates and maintains, but also the data acquired from other sources, such as the Oregon Department of Geology and Mineral Industries (DOGAMI), the US Geological Survey (USGS), and the Oregon Department of Land Conservation and Development.

Special Occupancy Structures – Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons; buildings with a capacity greater than 250 individuals used in association with public, private, parochial school through secondary level or child care centers; buildings for colleges or adult education with a capacity greater than 500 persons; medical facilities with 50 or

¹ <http://www.oregon.gov/ODOT/GOVREL/Pages/news/101112a.aspx> (Accessed: 29 December 2015).

more residents, incapacitated patients, or patients requiring daily care or assistance; jail and detention facilities; all structures and occupancies with a capacity greater than 5,000 persons (ORS 445.447 (1)(e)).

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