

Energy Committee Comment: Gateway Area Plan

(note: this template is a guide to assist in Committee review of relevant GAP policy. However, the full Plan and all draft policies continue to be available for committee discussion/recommendation to the Council).

City staff presented to the Energy Committee at the Committee's regularly scheduled March 21st meeting. Feedback provided to staff has been summarized below. Where relevant, committee comment has been noted next to existing policy, should the committee choose to craft additional language to recommend to the City Council.

General Comments

- Solar access concerns with new development-committee members inquired about solar shading study
- Concern that houses & small homes specifically will be shaded/solar potential will be lost, however, proposal that if the sunlight is hitting taller buildings rather than homes, that is not lost sunlight—can those buildings generate electricity for the neighborhood? Community solar, Eco-block concept
- Connect to all-electric as part of micro-grid- consider neighborhood-level micro-grids
- Rather than focusing on micro-grids (voiced that Humboldt Bay Generating Station and islanding capability decrease the need for smaller scale micro-grids locally), help Arcata go all-electric through block-by-block converting from natural gas; grants/long-term low-interest loans to help households/blocks/neighborhoods become more eco-friendly (eco-block). Committee members indicated interest in more information on eco-block concept and how it could relate to Gateway Plan
- Propose locations/plan for where electric vehicle charging stations will be located
- Plan for Class 4 rather than Class 2 bike lanes to provide more protection for cyclists amid new one-way streets—potential physical separation/barriers

Committee will provide recommendations at a later meeting when committee is more prepared to provide feedback (however, not holding on shading study to be done to provide those recommendations).

Policy Chapter 11: Infrastructure and Services	Comment - Committee	Submitted Comment	Vote: Recommended mods?
GA-11a. Plan Utility Infrastructure to Accommodate Envisioned Growth. In planning for improvements to the overall utility infrastructure, design the systems to accommodate the planned amount of growth outlined in other policies.		<p>W: There are two aspects of growth, increased land area being developed and more intensive utility use per square foot. Land area being developed is known with the unknown being date of development. For changes in intensity, we should assume that users will be all-electric. For potential increases in strength of sewer discharge the City should require onsite pre-treatment to reduce strength of discharge (see IPs for pre-treatment language)</p> <p>Z: Need to account for growth in elect. demand due to development, as well as to electrification of existing transportation and heating needs</p>	<p>In planning for improvements to the overall utility infrastructure system, <u>including wastewater and electrical demand</u>, design the systems to accommodate the planned amount of growth outlined in other policies. <u>Plan for future infrastructure needs due to conversion of uses, including needs for all electric, for example.</u></p> <p><u>Infrastructure will be developed over time as needed. The CIP will reflect near term infrastructure needs.</u></p>

GA-11c. Enhanced Infrastructure Finance District. Work with the County to explore the formation of an EIFD to fund infrastructure and housing projects within the Plan Area.		
GA-11d. University Contributions to Infrastructure Costs. Given that the City is planning for substantial residential growth in the Plan Area in part to accommodate the planned growth of Humboldt State University, work with the University to explore ways in which the University can contribute to the infrastructure costs associated with the planned growth.		
GA-11e. Multi-Modal System Improvements Funding. Identify, develop, and prioritize utility infrastructure projects that are eligible for Federal and State funds and continue to pursue all available options for funding new and improved circulation system facilities.		
GA-11f. Align Utility Infrastructure within Circulation System. To the degree possible, locate new utility infrastructure within existing and planned circulation system rights-of-way.		
GA-11g. Green Infrastructure. Continue to encourage the use of green infrastructure that promotes efficient water use and reduced water demand by requiring water-conserving	Z: Expand this policy to cover energy demand as well as water	Continue to encourage the use of green infrastructure that promotes efficient water and energy use. and Encourage reduced water demand by requiring water-conserving design and equipment in new construction and encouraging the retrofitting

design and equipment in new construction and encouraging the retrofitting of existing development with water-conserving devices.			of existing development with water-conserving devices. Encourage reduced energy demand by... See GA-11K
GA-11h. Natural Drainage. Encourage and maintain the use of natural stormwater drainage systems in a manner that preserves and enhances natural features while also allowing for maximum water reclamation and reuse.			
GA-11i. Recreation Opportunities. Continue to consider recreational opportunities and aesthetics in the design of stormwater/retention and conveyance facilities.			
GA-11j. Low Impact Design. Encourage and incentivize opportunities to incorporate Low Impact Development in both new construction and remodeling/renovation of existing structures and sites.			
GA-11k. Incentivize Energy Efficiency and Electrification as Community Amenities. Through the Gateway Area community benefit program, allow increased development intensity and simplified development processes for projects that exceed Title 24 energy efficiency requirements and all new construction to be electric only, with limited commercial cooking exceptions.	Connections to micro-grids/eco-blocks?	<p>The California Title 24 standard is advanced, but exceeding it is feasible using various innovative methods such as combined water heating and refrigeration and battery or thermal energy storage.</p> <p>The City should be encouraging user to do so by offering incentives. I prefer that incentives be adjustments to the building code, rather than financial subsidies. (see electrification suggestions in IPs)</p>	Electrification

GA-11l. Utility Undergrounding. Existing above-ground and new utilities shall be placed underground as feasible as determined by the City Engineer.		<p>I am not enthusiastic about utility undergrounding. It is much more expensive than above-ground utilities, does not significantly enhance safety, with the only remaining reason for doing so being aesthetics. A less expensive alternative to improve aesthetics would be to have approved artists and architects decorate above-ground utilities.</p> <p>We should greatly limit or completely eliminate installing natural gas lines.</p>	<u>Add language about improving aesthetics to this policy if undergrounding is not feasible. This is a lower priority to other community amenities.</u>
Additional policy suggestions:			

Infrastructure and Services- Implementation Programs:	Relevant Committee Comment	Committee recommended modification?
See Committee comment >	Propose locations/plan for where electric vehicle charging stations will be located	
Electrification measures (Winkler)		<p>W: Incentivize in Amenities options or require for all new development using Gateway Plan streamlining:</p> <ul style="list-style-type: none"> • High-efficiency electric heat pumps for space heating, air conditioning, water heating and clothes drying • High-quality electric induction cooking is available for all restaurants. Another alternative for restaurants who have a strong desire to use a gaseous fuel, is to use propane, rather than natural gas, which would increase monthly fuel costs, but would eliminate the need and cost for natural gas infrastructure. • Cost of gas infrastructure, if any, should be paid by the limited number of commercial users and not by other users. • Gas connections should only be available to a limited number of commercial customers and not be available to users, in general.

		Add these in the list of community amenities.
Sewer Pre-Treatment (Winkler)		Explore sewer on-site pre-treatment in areas of high population density/ or all areas within City. 9May be best housed in infrastructure Element, not only Gateway Area Plan, if citywide) Add these in the list of community amenities. Work with ES to determine whether to include.

Policy Chapter 7: Mobility	Relevant Committee Comment	Submitted Comment	Committee recommended modification?
GA-7a. Plan the Circulation System to Accommodate Planned Growth. In planning for improvements to the overall circulation system, design the system to accommodate the planned amount of growth outlined in other policies. Ensure the circulation system supports increased demands for all forms of mobility – vehicles, trucks, transit, bicycles, and pedestrians.		A: I would like to see a higher priority placed on increased pedestrian, bicycles, and transit and to de-prioritize vehicles	In planning for improvements to the overall circulation system, design the system to accommodate the planned amount of growth outlined in other policies. Ensure the circulation system supports increased demands for all forms of mobility – bicycles, pedestrians, alternative electric vehicles, transit, and then...vehicles, trucks,. (look for this throughout).
GA-7b. Design Mobility System per Plan Figures. Design and construct the mobility and circulation system of the Plan Area per Figure 8 and Figure 9 and the Cross Section and Intersection Design Concepts above, as well as in accordance with the Open Space, Streetscape, and Site Development sections of this Area Plan. In the engineering design stage of implementing the above cited Figures/Concepts, allow for deviations and alterations such as: a. Throughout the entire Plan Area, sidewalk widths may increase beyond six feet, especially on the north sides of east-west streets where expanded sidewalks on the sunny side of the street would allow welcomed outdoor seating. Adjusting sidewalk widths will necessitate adjustments to the dimensions of other features, such as drive lanes, parking lanes, bike lanes, etc. On-street parking lanes may need to be eliminated. b. Throughout the entire Plan Area, on-street parking angles may be adjusted as need to be either parallel, perpendicular,	Plan for Class 4 rather than Class 2 bike lanes to provide more protection for cyclists amid new one-way streets—potential physical separation/barriers (see bold section of existing policy)		e. Add: Emphasize Class IV where greatest benefit, and not in conflict with other community values or amenities where warranted..

angled-in, or reversed angled-in. Adjusting parking angles may necessitate adjustments to the dimensions of other features, such as sidewalks, drive lanes, bike lanes, etc.

c. Throughout the entire Plan Area, the presence of on-street parking may be eliminated in favor of adding or enhancing non-motorized facilities, such as sidewalks, bike lanes, landscaping, Class I trails, etc.

d. Outside of City rights-of-way, the alignments and widths of Class I trails (i.e. separated shared use paths) may need to be adjusted based on environmental constraints, community needs, the availability of right-of-way, and other factors.

e. **Throughout the entire Plan Area, Class II bicycle facilities (i.e. standard bike lanes) may be converted to Class IV bicycle facilities (i.e. protected bike lanes), which may necessitate adjustments to the dimensions of other features.**

f. Throughout the entire Plan Area, the widths, locations, styles, and details of various features may deviate from the cited map Figures at the time of final design based upon available traffic data, design context, and the latest guidelines provided by Caltrans, FHWA, AASHTO, NACTO, and other reliable sources. Features that are likely to require deviations include pavement markings, pavement color, pedestrian bump-outs, turn lanes, traffic control features, landscaping, and similar components.

g. The junction of 13th Street, K Street, L Street, and Alliance Ave may require an alternate design depending upon right-of-way acquisition, available traffic data, design context, and the latest guidelines provided by Caltrans, FHWA, AASHTO, NACTO, and other reliable sources.

h. New roadway connections where none currently exist (such as the far west end of 6th Street connecting K Street to the L Street right-of-way) may be designed and constructed as either new vehicular roadways, pedestrian-only thoroughfares, or bicycle/pedestrian facilities that allow restricted vehicular traffic. The City Engineer will determine which type of facility to

<p>design and install based on available traffic data, existing environmental constraints, community interests, right-of-way availability, and other engineering factors.</p> <p>i. The trail within the Q Street right-of-way south of 10th Street may eventually need to be converted into a full vehicular roadway with a cross-section similar to other two-way roads proposed within the Plan Area.</p>			
<p>GA-7c. Balanced Transportation System. Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.</p>		<p>W: I support this, but there are trade-offs between pedestrian safety and bicycle safety. For instance, bulb-out's potentially increase pedestrian safety, increase danger for bicyclists. Inserting bulb-outs for street trees improves aesthetics, but reduces street parking often forcing drivers to park in nearby residential areas.</p> <p>In general, I favor traditional streets with no curb projections, which are lower cost than newer methods for street design and produce no additional unwanted side-effects.</p>	<p>Carry forward to TSC for consideration.</p>
<p>GA-7d. Plan for Enhanced Transit Lines and Stops. As growth occurs in the Plan Area, work with relevant transit agencies to plan for enhanced transit lines and new transit stops in order to accommodate the new growth.</p>		<p>W: I support these</p>	<p>Noted.</p>
<p>GA-7e. Consider Non-motorized Campus Layouts. For areas that have incomplete block patterns and/or are currently lacking in vehicular roadways (such as the Barrel District), consider providing limited to no new facilities for motorized vehicles. Instead, consider creating a campus layout with vehicular access on the perimeter and robust non-motorized facilities throughout the interior. Plan for the infrastructure that would be required for these areas to serve as key park and ride/transit hubs. Where new vehicular roadways are constructed within currently roadless areas (such as the Barrel</p>		<p>A: All parking should be paid, potential for parking revenue, and/or ticketing revenue to be used to help support transit, pedestrian, and biking infrastructure</p>	<p>A: <u>Add language to policy 7-e: "Create/ or require potential for parking revenue, and/or ticketing revenue to be used to help support transit, pedestrian, and biking infrastructure [in Barrell District/ or in full Gateway Area]"</u></p> <p>Will create language that pushes this concept as far as possible.</p>

District), provide for a wide right-of-way whose cross section includes ample on-street parking, narrow vehicle lanes, bike lanes, sidewalks in excess of six feet, street trees, and enhanced pedestrian crossings at least every 300 feet.			
GA-7f. Barrel District Master Plan. For the Barrel District, require property owners to develop a Master Plan for a high density walkable mixed-use residential campus with minimal vehicular infrastructure and overall site design that supports a pedestrian-friendly public realm. Require that the Master Plan includes plans for a circulation system that is generally consistent with Figure 8 and Figure 9 and in accordance with the Open Space, Streetscape, and Site Development sections of this Area Plan. Allow the Master Plan to relocate the proposed circulation facilities within the Barrel District as long as the ultimate design honors the basic theme and overall design parameters consistent with the Policies herein. Require that new vehicular roadways provide for a wide right-of-way whose cross section includes ample on-street parking, narrow vehicle lanes, bike lanes, sidewalks in excess of six feet, street trees, and enhanced pedestrian crossings at least every 300 feet.			
GA-7g. Finish Incomplete Blocks with Active Transportation Infrastructure. Where the urban grid pattern is interrupted or incomplete, evaluate opportunities to continue the circulation block patterns with new connections that consist of entirely non-vehicular active transportation facilities.		<p>W: I intentionally live on the edge of downtown, an area with grid streets. I believe that traditional grid streets are best to support walking and bicycling and make best use of road land area.</p> <p>I believe that more recently developed areas such as Windsong have an inferior road design as compared with traditional grid streets.</p>	Noted.
GA-7h. Mobility Infrastructure that Supports Car-free Lifestyle. Plan and implement the mobility and circulation infrastructure of the Plan Area to support a car-free lifestyle, reduce greenhouse gas emissions, and minimize vehicle miles traveled, including:			

<p>a. Safe and Attractive Pedestrian Facilities. Connect the Plan Area to the Downtown/Plaza core with safe and attractive pedestrian friendly walking routes that incorporate art and street lighting.</p> <p>b. Shorten Pedestrian Crossing Distances. Shorten distances for pedestrian crossings along K Street and 11th Street to improve overall walkability in the Plan Area. Evaluate other roadways within the Plan Area that warrant shortened pedestrian crossings.</p> <p>c. Curb Extensions in All New Roadways. In all newly created roadways, incorporate curb extensions (“bumpouts”) to increase pedestrian visibility and safety at crosswalks, calm traffic speeds, and provide space for rain gardens, tree planting, street furnishings, and other amenities.</p> <p>d. Widened Sidewalks. Explore sidewalk widening strategies that include land dedication or easements to create unobstructed accessible pedestrian pathways.</p> <p>e. Intra-City Non-motorized Connectivity. Reduce vehicle trips from other parts of the City by creating pedestrian and bicycle-friendly corridors that draw residents and visitors to enter the Plan Area via means other than motorized vehicles. Fulfill the potential of the existing and planned Class I trails by planning for expanded perpendicular connections that will draw bikes/peds from beyond the Plan Area.</p>			
<p>GA-7i. No Net Loss of Class I Trail System. Retain the current total linear feet of Class I trails within the Plan Area, even if current facilities must be realigned or relocated to other routes within the Plan Area. For instance, if implementing the realigned roadway network shown in Figure 8 and Figure 9 impacts the existing Class I Rail-to-Trail facility within the L Street right-of-way, then design and construct a new Class I trail in another location within the Plan Area.</p>			
<p>GA-7j. Incentivize Active and Alternative Transportation as a Community Amenity. Through the Gateway Area community</p>		<p>W: I support these</p>	<p>Through the Gateway Area community benefit program, allow increased development intensity and simplified</p>

<p>benefit program, allow increased development intensity and simplified development processes for projects that provide on-site active and alternative transportation amenities, such as electric vehicle charging stations, employee showers, on-site bike parking, bus passes for residents, dedication of parcel frontage to transportation uses, and related amenities that stimulate non-motorized and zero-carbon transportation options.</p>		<p>A: Encourage car share as an alternative to car ownership for residents; would require having dedicated parking for car share vehicles; Covered and secure bike parking and charging for e-bikes</p>	<p>development processes for projects that provide on-site active and alternative transportation amenities, such as electric vehicle charging stations, employee showers, on-site <u>covered and secure</u> bike parking, bus passes for residents, dedication of parcel frontage to transportation uses, <u>charging stations for e-bikes</u>, and related amenities that stimulate non-motorized and zero-carbon transportation options.</p>
<p>GA-7k. Incentivize Dedication of Parcel Frontage as a Community Amenity. Through the Gateway Area community benefit program, allow increased development intensity and simplified development processes for projects that dedicate parcel frontage for the creation of expanded right-of-way for the purposes of additional pedestrian facilities, off-street parking, open space, and/or other designated enhancements to the public realm.</p>			
<p>GA-7l. Parking Standards. Do not require off-street parking as a development standard in most cases. Discourage large volumes of off-street parking and instead support more valuable land uses and streetscapes that prioritizes human activity and movement. Encourage and incentivize the dedication of parcel frontage on block-long development projects that can be dedicated to additional on-street parking.</p>			
<p>GA-7m. Parking Lot Locations. Disallow the placement of parking lots along street frontages in the interest of maintaining continuous building frontages along the primary commercial streets and improving walkability. Parking lots and structures must be located behind buildings, or otherwise located subordinate and obscured by design features.</p>			
<p>GA-7n. Minimize Vehicle Trips via Land Use. Adopt and maintain zoning regulations that allow for a mix of land uses in order to reduce vehicle trips and the overall need for automobile use.</p>			
<p>Mobility Implementation Programs</p>			

Imp-GA-7.1. State and Federal Transportation Grants. Actively track and pursue transportation infrastructure grants for the planning, design, permitting, and construction of the mobility improvements presented in this section. Identify, develop, and prioritize transportation projects that are eligible for Federal and State funds and continue to pursue all available options for funding new and improved circulation system facilities.			
Imp-GA-7.2. Circulation Projects in Capital Improvement Program. Generate a list of circulation construction projects that will be required to implement this plan and then add those projects to the City's Capital Improvement Plan.			
Imp-GA-7.3. Fair Share Contribution for New Development. Evaluate options and then adopt a program in which new development is responsible for constructing, dedicating, and/or paying a predetermined fair share contribution for any circulation system upgrades necessary to serve the development.			

Z: Policy Chapter 2. Community Benefits and Development Standards

Specify language establishing restrictions and/or guidelines for building heights and setbacks based on solar shading of existing structures. For example, required setbacks and allowable heights could be defined based on guidelines stipulated in the CA Public Resource Code Section 25980-25986 Chapter 12. Solar Shade Control Act.

While this legislation only applies to shading due to vegetation (trees and shrubs), it can also be applied to new or modified structures. This legislation specifies that vegetation is not allowed to shade solar access by any greater than 10% between the hours of 10 AM and 2 PM. While the Solar Shade Control Act references shading on actual solar collectors, these guidelines could apply to the roofs of existing structures where solar collectors could potentially be installed.

Also, Sections 801 and 801.5 of the CA Civil Code allow for Solar Easements to be established, which allow a solar energy system owner access to sunlight across an adjacent parcel. Solar easements are specific to receiving sunlight for solar energy systems and cannot be used to simply ensure access to sunlight for any purpose.

Come up with something like this. Be flexible in the standard so as to not prevent addition of housing. Solar heat gain.