

# Summary of Key Issues and Review of Alternatives

## Chapter 6 Telecommunications


This Element covers telecommunications infrastructure including broadband internet and telephone service.

Chapter 6 Telecommunications				
Key Topics, Issues and Policies	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p><b>Telecommunications Availability</b>                      Access to broadband telecommunications services is essential to create jobs, improve our standard of living, promote public safety, educate our youth, and deliver essential services like health care.</p> <p>What role should the County play in the development and expansion of telecommunications services?</p> <p><b>Key Policies:</b>                      P3 with S1</p>	<p>Encourages the provision of broadband telecommunications services throughout the County through advocacy (T-P1, P2, P3, P8, P16, P17), coordinated utility/government agency/and community planning (T-P11) and through right of way planning and subdivision design (T-P5 and P10).</p>	<p>Does not contain policies relating to telecommunications services.</p>	<p>Contains the same telecommunications availability policies as the proposed Plan and add (IS-PX) to encourage community based organizations or community services districts to provide broadband services within communities where telecommunications service providers are unwilling or unable to do so.</p>	<p>Contains the same telecommunications availability policies as the proposed Plan, but does not include policies relating to facility design review.</p>
<p><b>Telecommunications Infrastructure and Planning</b></p>	<p>Adds subdivision improvement requirements (T-P10),</p>	<p>Does not contain policies relating to</p>	<p>Contains the same telecommunications</p>	<p>Does not establish design standards for</p>


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<b>Key Topics, Issues and Policies</b>	<b>Plan Update Approach (Alternative B)</b>	<b>Existing Framework Plan (Alternative D)</b>	<b>Alternative A</b>	<b>Alternative C</b>
<p>There is interest in the County taking an active role in Telecommunications infrastructure planning.</p> <p>Should the County require telecommunications infrastructure; such as fiber cable in subdivisions, for new development?</p> <p><b>Key Policies:</b> P10 and Px with S1 (IM1-2)</p>	<p>telecommunications facilities siting requirements (T-P3, T-S1, and T-IM7), encouragement for service providers to size facilities within the County rights of way to accommodate future expansion (T-P5), as well as ongoing telecommunications improvement planning (T-IM4 and T-IM6)</p>	<p>telecommunications services.</p>	<p>infrastructure and planning policies as the proposed Plan, with the addition of stricter telecommunications siting standards (T-S1).</p>	<p>the siting of telecommunications facilities and does not impose additional subdivision design standards.</p>
<p><b>Locating Wireless Telecommunications Facilities</b></p> <p>Permitting wireless telecommunications facilities can generate concerns relating to environmental, visual, and potential safety issues.</p> <p>What performance standards will protect the interests of neighborhoods while ensuring adequate wireless coverage and capacity?</p> <p><b>Key Policies:</b> P3 with S1 (IM6-7)</p>	<p>Establishes standards for siting wireless telecommunications facilities (T-P3, T-S1, and T-IM1) and conduct pre-planning for wireless (and wireline) facilities locations (T-IM7).</p>	<p>Does not contain policies relating to telecommunications services.</p>	<p>Includes more strict telecommunications siting standards (T-S1).</p>	<p>Would not establish telecommunications facility siting standards.</p>

## Plan Alternatives Comparison Chart Chapter 6 Telecommunications Element

Plan Alternative				Chapter 6. Telecommunications Element	Staff Remarks/ Implementation	Position R,M,D
				<b>6.4 Goals</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-G1. Availability.</b> Telecommunications available to every resident, business, and institution in Humboldt County at a level of service and price comparable to statewide availability and standards.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-G2. Broadband Access.</b> A broadband internet infrastructure that reliably connects Humboldt to national networks and extends throughout urbanized areas to our most rural communities.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-G3. New Construction.</b> Broadband service capability integrated into new buildings and developments.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-G4. Telecommunication Facilities.</b> Orderly and appropriate development of wireless telecommunication facilities within the county to achieve reliable access in a manner that will protect and promote public health and safety; prevent visual blight; preserve the county's rural character; and protect scenic, natural, and cultural resources.		

Plan Alternative				Chapter 6. Telecommunications Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
				<b>6.4 Policies</b>		
A	B	C		<b>T-P1. Development of Telecommunications Infrastructure and Services.</b> Advocate for development of telecommunications infrastructure and services to facilitate the use of the best available technology for business, households, and government.	Iss, IM6, IM8	
				COMMENTS:		
A	B	C		<b>T-P2. Broadband Service Reliability.</b> Support efforts to increase reliability and continuity of service by broadband telecommunications providers through market development, installation of redundant infrastructure, diversification of providers, and system modernization.	Iss	
				COMMENTS:		
A	B			<b>T-P3. Telecommunications Facility Siting.</b> Design and site all facilities to minimize their visibility, prevent visual clutter, and reduce conflicts with surrounding land uses	Leg, Prog, QJ, Min, S1, IM1, IM6-7 	
				COMMENTS:		
A	B	C		<b>T-P4. e-Government Infrastructure.</b> Continue to expand the County's website and telecommunications capabilities, including the use of geographic information system resources, as a source of public information and as an aid in the delivery of public services.	Iss, Prog, IM10	

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				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P5. Telecommunications Facilities Within County Rights of Way.</b> Encourage telecommunications service providers to size underground and overhead facilities to accommodate future expansion, changes in technology, and, where possible, the facilities of other telecommunications providers.	Iss, Prog, IM3	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P6. Telecommuting.</b> Telecommuting and home-based businesses that use internet shall be considered principally permitted accessories to residential uses when operated in compliance with cottage industry performance standards.	Iss	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P7. Broadband Internet.</b> Promote the provision of broadband infrastructure in all communities.	Iss, Prog, IM4-9	
				<b>COMMENTS:</b>		
<b>A</b>				<b>T-PX. Local Government Broadband Communications Services.</b> Encourage and support the efforts of community based organizations or community services districts to construct, own, improve, maintain, and operate broadband facilities and to provide broadband services within communities where telecommunications service providers are unwilling or unable to so do.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P8. Broadband Internet.</b> Support the development and management of an alternative fiber optic line that connects to the fiber backbone running along the U.S. 5 corridor. The County shall support the expansion and delivery of broadband internet in	Iss, Prog, IM9	

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				the rural or remote communities in the county through all appropriate technologies.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P9. Workforce Development.</b> Continue to work with local businesses to identify special telecommunications needs, and to ensure that there are a variety of service providers available to address those needs.	Iss	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T-P10. Subdivision Improvement Requirements.</b> New residential and commercial development projects shall include the infrastructure components necessary to support modern communication technologies, such as conduit space within joint utility trenches for future high-speed data equipment, and flexible telephone conduit to allow for easy retrofit for high-speed data systems.	Leg, Prog, QJ, Min, IM2 	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P11. Joint Telecom Planning.</b> Work with local governments, utilities, schools, medical service providers, and neighboring counties to unify telecommunication infrastructure planning on a regional basis.	Iss	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P12. E-911.</b> Ensure that the county's radio, telecommunications, and internet services are capable of providing timely emergency information and facilitating rapid and reliable emergency response.	Iss, Prog	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P13. Cable Franchise Ordinance.</b> Ensure that the county's cable franchise ordinance is kept up-to-date to deal with the changing nature of federal and state	Prog, Iss	

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				law, as well as the changing nature of telecommunications technology so that the best possible services are available to residents		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P14. Wireless “Hot Spots”.</b> Encourage the installation of public-use wireless broadband antennas at every County-owned building.	Iss	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P15. Trip Reduction.</b> Encourage telecommunications infrastructure improvements as a means to reduce transportation impacts and improve air quality	Iss	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T-P16. Public Broadband Telecommunications Service Providers.</b> Support the provision of broadband telecommunications services by public agencies.	Iss, Prog, IM8	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-P17. Technology Awareness.</b> Promote awareness of broadband telecommunications technology by businesses and residents.	Iss	
				<b>COMMENTS:</b>		
				<b>6.5 Standards</b>		
	<b>B</b>			<b>T-S1. Telecommunications Siting Standard.</b> Siting of new telecommunications facilities shall comply with standards contained in a Telecommunications Facilities Ordinance that incorporates the following: A. Tiered Permitting. Utilize permit processes that vary depending upon the	This standard is consistent with a draft version of a proposed	

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	<p>physical characteristics of the facility, its location, and its compliance with specific development and performance standards.</p> <p>B. Performance Standards. Standards for siting design, visibility, construction impacts, on-going operation, and other characteristics that affect the compatibility and environmental and safety impacts of proposed facilities.</p> <p>C. Site Co-location. When feasible, telecommunications facilities shall be located adjacent to, on, or incorporated into existing or proposed buildings, towers, or other structures. The County shall require new facilities to accommodate future co-location to the maximum extent feasible.</p> <p>D. Public Health and Safety. Applicants shall demonstrate that proposed facilities operate within Federal Communications Commission (FCC) emission regulations and guidelines.</p> <p>E. Location and Siting.</p> <ol style="list-style-type: none"> <li>1) Avoid siting along ridgelines unless screened from public view.</li> <li>2) Avoid siting within views of scenic highways, public parks, recreation or cultural facilities or other public lands and coastal scenic or view areas.</li> <li>3) Setbacks shall be required between telecommunication facilities and residential dwelling units, public or private schools, and child daycare facilities.</li> <li>4) An alternatives analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts.</li> </ol> <p>F. Design and Screening.</p> <ol style="list-style-type: none"> <li>1) Support structures shall be designed and painted to minimize visibility with a preference towards each of the following in the order so listed: 1) use of existing structures, 2) stealth designs for concealment, and 3) monopoles.</li> <li>2) Component parts, equipment cabinets, buildings, and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibility with</li> </ol>	<p>telecommunications ordinance.</p>	

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	<p>surrounding structures.</p> <p>3) Photosimulations or balloon tests with views from various vantage points shall be used to show visual impact of the proposed facility.</p> <p>G. Removal of Un-used Facilities. Require the timely removal of telecommunications towers and equipment when they are no longer needed as a condition of approval.</p> <p>H. Independent Review. Applicants may be required to pay the cost of independent review to evaluate siting alternatives, necessity based on adequacy of coverage or evaluation of radio frequency emissions in relation to FCC Maximum Permissible Exposure Limits.</p> <p>I. Waiver or Modification of Standards. Allow for a waiver or modification to standards and requirements based on specific findings showing non-detriment and necessity or that strict compliance would result in noncompliance with applicable federal or state law.</p>		
	<b>COMMENTS:</b>		
<b>A</b>	<p><b>T-S1. Telecommunications Siting Standard.</b> Siting of new telecommunications facilities shall comply with standards contained in a Telecommunications Facilities Ordinance that incorporates the following:</p> <p>A. Tiered Permitting. Utilize permit processes that vary depending upon the physical characteristics of the facility, its location, and its compliance with specific development and performance standards.</p> <p>B. Performance Standards. Standards for siting design, visibility, construction impacts, on-going operation, and other characteristics that affect the compatibility and environmental and safety impacts of proposed facilities.</p> <p>C. Site Co-location. When feasible, Telecommunications facilities shall be located adjacent to, on, or incorporated into existing or proposed buildings, towers, or other structures. The County shall require new facilities to accommodate future co-location to the maximum extent feasible.</p> <p>D. Public Health and Safety. Applicants shall demonstrate that proposed</p>	See <u>underline</u> and <del>strike through</del> text for differences with Alternative B.	

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	<p>facilities operate within Federal Communications Commission (FCC) emission regulations and guidelines.</p> <p>E. Location and Siting.</p> <ol style="list-style-type: none"> <li>1) <del>Avoid Prohibit</del> siting along ridgelines unless screened from public view <u>unless stealth design techniques are utilized.</u></li> <li>2) <del>Avoid Prohibit</del> siting within views of scenic highways, public parks, recreation or cultural facilities or other public lands and coastal scenic or view areas <u>unless stealth design techniques are utilized.</u></li> <li>3) Setbacks shall be required between telecommunication facilities and residential dwelling units, public or private schools, and child daycare facilities.</li> <li>4) An alternatives analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts.</li> </ol> <p>F. Design and Screening.</p> <ol style="list-style-type: none"> <li>1) Support structures shall be designed and painted to minimize visibility <u>to the maximum extent</u> with a preference towards each of the following in the order so listed: 1) use of existing structures, 2) stealth designs for concealment, and 3) monopoles.</li> <li>2) Component parts, equipment cabinets, buildings, and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibility with surrounding structures.</li> <li>3) Photosimulations or balloon tests with views from various vantage points shall be used to show visual impact of the proposed facility.</li> </ol> <p>G. Removal of Un-used Facilities. Require the timely removal of telecommunications towers and equipment when they are no longer needed as a condition of approval.</p> <p>H. Independent Review. Applicants may be required to pay the cost of independent review to evaluate siting alternatives, necessity based on adequacy of coverage or evaluation of radio frequency emissions in relation to FCC Maximum Permissible Exposure Limits.</p>		

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				l. Waiver or Modification of Standards. Allow for a waiver or modification to standards and requirements based on specific findings showing non-detriment and necessity or that strict compliance would result in noncompliance with applicable federal or state law.		
				<b>COMMENTS:</b>		
				<b>6.6 Implementation Measures</b>		
<b>A</b>	<b>B</b>			<b>T-IM1. Telecommunications Facilities Ordinance.</b> Adopt a Telecommunications Facilities Ordinance that: ensures compatibility of telecommunications facilities with nearby land uses, is proactive in the design and siting of wireless telecommunications facilities, provides incentives for unobtrusive and compatible wireless antennas, and establish clear standards for such facilities.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T-IM2. Broadband Deployment.</b> Revise subdivision regulations to require the provision, where feasible, of infrastructure for broadband internet.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T-IM3. Improvement Specifications within Road Rights-of-Way.</b> Review the Standard Improvement Specifications for Public Improvements to determine if a location for the placement of conduit for telecommunications use can be designated and to develop safe zones for installing new telecommunications infrastructure.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T-IM4. Telecommunications Infrastructure Inventory.</b> Create and maintain an inventory of telecommunications infrastructure located within and outside public		

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				rights-of-way and all existing and proposed telecommunications facilities and their locations in the county, including all available tall structures that could be used for telecommunications antennas.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T-IM5. Public Conduit.</b> Work with other local and state jurisdictions to evaluate the feasibility of installing publicly owned telecommunications conduit as part of capital construction projects such as water, wastewater, power, roads, and sidewalks.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T- IM6. Ongoing Telecommunications Planning.</b> Prepare and periodically update a telecommunications improvement program based on existing local, countywide, and regional telecommunications planning studies that identifies existing conditions, needed improvements, and funding programs and that establishes criteria for prioritizing projects.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>T- IM7. Pre-planning Facility Locations.</b> Establish and utilize wireless and wireline telecommunications siting standards, in coordination with other jurisdictions, to pre-identify areas where future commercial or public telecommunications facilities can be located.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T- IM8. Telecommunications for Rural Communities.</b> Advocate for and seek grant funding to deliver improved telecommunications to outlying rural communities. Provide technical assistance to community service districts interested in offering broadband telecommunications.		

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				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T- IM9. Broadband Reliability.</b> Advocate for and seek grant funding to support broadband service diversity and redundant fiber optic service to the county.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>T- IM10. e-Government.</b> Continuously improve County government's use of telecommunications and digital technology to educate and provide public services with a focus on internet services, geographic information systems, and public safety and emergency telecommunications.		
				<b>COMMENTS:</b>		