

County of Santa Cruz

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BOARD OF SUPERVISORS

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AGENDA: 5/14/13

May 7, 2013

BOARD OF SUPERVISORS
County of Santa Cruz
701 Ocean Street
Santa Cruz, CA 95060

RE: BROADBAND CONNECTIVITY AND EXPANSION

Dear Members of the Board:

High-capacity Internet is one of the most effective tools communities have to spur economic development. The economy of the 21st century is predicated upon data and information, and a large barrier to economic growth for local government is the fact that our data infrastructure is generally outdated. It is important to look beyond the traditional model of economic development, which often relied exclusively on box stores or other major physical developments, toward a less-impactful, higher-return investment model.

For a region that rests in the shadow of Silicon Valley, and from which 30,000 people commute (many for technology-based jobs), it is important that we provide the resources necessary locally for our residents, businesses and schools to compete. Affording such local connectivity could have positive impacts on traffic and highway usage, educational outcomes and the tax base.

Broadband Internet connections can help sustain and expand the region's businesses so that they can reach global markets, achieve cost savings by government agencies, improve public safety communications, provide improved health and medical services at lower costs, offer workforce development to unemployed and underemployed and prepare local youth with the technical skills essential for their future. Many governmental models for expanded broadband connectivity exist and many have succeeded with a very limited investment of public sector dollars and administrative overhead.

Despite all these public benefits, the nation's telecommunications networks are for the most part the property of private concerns. As such, they are built and deployed where the market demands it or where policies are favorable. Given the relative lack of urban density in our county, and the absence of policies that encourage such partnership, Santa Cruz County is at an economic disadvantage in terms of broadband connectivity and expansion.

In order to address these issues, it is important to empower staff to research some of the best practices from other jurisdictions while they provide advice on what practices would work under the unique constructs of our county. A suggested framework to begin with would be to:

1. Explore Standards and Practices for the placement of broadband infrastructure in the public right of way. A key component for developing broadband resources is developing a set of accepted standards for placement of this resource in relation to existing municipal services.
2. Evaluate online tools for communication and coordination between private sector applicants for access to the public right of way. Exploration of online tools, like the ones developed in San Francisco, California, and Seattle, Washington, that increase planning and coordination between cable and telecommunications providers for installation of communications infrastructure countywide, is an important element of this plan.
3. Change administrative procedures to require submission of street opening and encroachment permits in electronic form for logging into Geographical Information Systems. Although the County currently requires applicants to detail where they are excavating when building communications infrastructure, the maps submitted by applicants are typically not supplied in digital formats. Coordinating infrastructure projects becomes a guessing game, sometimes resulting in expensive repairs to unmapped and damaged transmission lines. In evaluating this administrative change, staff should take care to address the collection and protection of confidential information about critical communications infrastructure.
4. Explore the development of a "dig once policy." In June of 2012, the White House directed the federal government to develop a "dig once" policy. The Executive Order called for "the installation of underground fiber conduit along highway and roadway rights of way." The Federal Highway Administration estimates that it is ten times more expensive to dig up and then repair an existing road to lay fiber than to dig a channel for it when the road is being fixed or built.

According to telecommunications industry estimates, more than half of the costs of new broadband are costs associated with digging up and repaving roadways. It is estimated that the inclusion of broadband conduit during road construction would add less than 1% to the cost of the overall project.

A "dig once" policy can be accomplished in several ways. In some jurisdictions, local policy requires that a telecommunications provider will, in the process of applying for access to the public right of way, allow the jurisdiction in question to catalogue the planned run in their internal databases, then notice all other known telecommunications and cable providers in order to coordinate the placement of conduit beneath an existing street, thereby limiting impact on streets and traffic.

BOARD OF SUPERVISORS
May 7, 2013
Page 3

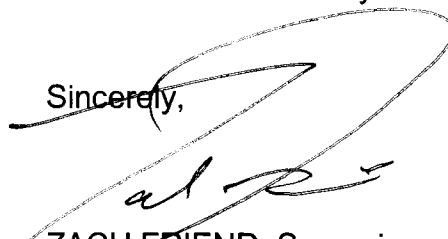
In some communities, this policy is augmented so that the municipality deploys additional "shadow" conduit as part of planned capital improvement project efforts, thus planning for the eventual deployment of additional telecommunications resources as demand increases in future years for utility, cable, communications or Internet service. This "shadow" conduit – which is deployed empty – is owned and maintained solely by the public agency and can later be rented to communications providers. Staff may explore options to monetize this conduit and recommend a use for any new revenue received from its rental.

This is a far-reaching agenda for increasing the region's access to broadband by lowering the administrative barriers to entry for, and increasing coordination between, private telecommunications providers.

In order to begin the discussion about ways to provide enhanced broadband connectivity and expansion, I recommend that the Board of Supervisors take the following actions:

1. Direct the County Administrative Officer to coordinate the efforts of staff in Public Works, Planning, and Information Services to use the above framework to explore and evaluate the series of government-driven administrative and planning initiatives that could lead to greater investment in Internet infrastructure in Santa Cruz County and work with regional stakeholders (such as UCSC, the Santa Cruz County Regional Transportation Commission and the Central Coast Broadband Consortium) on best practices.
2. Direct the County Administrative Officer to return to the Board of Supervisors on August 6, 2013, with recommendations for any actions they believe the Board should consider which would enhance broadband connectivity and expansion in Santa Cruz County.

Sincerely,



ZACH FRIEND, Supervisor
Second District

ZF:ted

cc: County Administrative Officer; Public Works Director; Planning Director;
Economic Development Coordinator; Information Services Director; UCSC;
Santa Cruz County Regional Transportation Commission; Central Coast
Broadband Consortium

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