

BUSINESS VISION WORKGROUPS

Infrastructure, Telecom and Wi-Fi Subcommittee

“Sausalito a Broadband friendly community”

OVERVIEW:

The Infrastructure, Telecom and Wi-Fi Subcommittee was given the task of evaluating the City’s current communications infrastructures: Cellular, Broadband, Radio, and Wireless. We also examined how they impact Residents, Businesses, Public Services and Visitors.

The Committee’s evaluation found that the City needs to more aggressively support advances in telecom and digital technologies and encourage the installation of new systems as they emerge. By having state-of-the-art infrastructures that can support choice in wireless, digital and broadband technologies, the City will stimulate economic growth, entice new businesses, help retain existing ones, improve real-estate rentals and sales, and enhance public safety and our quality of life.

INVENTORY:

With limited time and Staff, the committee found the following:

(This is not intended to be a complete telecom inventory)

Currently there are fourteen (14) fixed cellular sites within the City and six (6) just outside City limits which supply mobile digital and phone services within Sausalito. The City is served by two main Broadband providers: AT&T and Comcast, who both have fiber optic nodes within the City. The Comcast system is a closed system and not available to others. There are smaller Broadband providers but they are using the AT&T infrastructure. It should be noted that AT&T is currently building a new Video and Broadband network throughout California which will directly compete with Cable Television suppliers. This network should bring new Broadband technologies and opportunities to Sausalito if sited correctly.

Since the first installation of a telephone in Sausalito in 1890's, the town has been a pass-through for communication cables from San Francisco North. This is still true today with fiber and copper backbone cables traversing the Bridgeway corridor. Sadly, there are very limited local facilities (such as fiber nodes) to access these cables except through AT&T at their switching office on Turney Street.

A very important issue brought to the attention of the Group was the need current and future businesses have for high-speed access - "A big pipe" to the Internet. These and other digital services are lacking, especially east of the Bridgeway corridor. This lack of infrastructure has caused businesses to leave Sausalito and deterred new ones from locating here. Lastly, there are about six (6) Wi-Fi hotspots within the City which are provided by public businesses to the public at no charge. A single hotspot is provided by the City at its Public Library.

"VISION" SURVEY POINTS ADDRESSED:

On behalf of those polled, the Gene Bregman & Associates survey identified the desire for better cellular phone access in town, and the elimination of "dead spots". The Group looked at the current locations of cellular services and concluded that there were indeed areas that likely need improvement.

The survey chronicled the desire for a City-wide Wi-Fi internet system. The Group reviewed the proposal for the Marin County-wide Wi-Fi system and concluded that while it would satisfy this need, the system is still in the conceptual stage. As to Sausalito installing a City-wide Wi-Fi or Wi-Max system, cost would be a major factor. Current projected installation costs are sixty thousand (\$60K+) plus per square mile with a maintenance cost of eighty thousand (\$80K+) plus dollars annually. These costs cannot be absorbed within the current City budget and would need to be supported through advertising and / or subscriptions. Additionally, although a City-wide

Wi-Fi / Wi-Max system is a popular survey topic, actual annual use may not be sufficient to support the investment and / or entice a vendor to supply this service. Regardless of these challenges, the benefits of ubiquitous Wi-Fi / Wi-Max service throughout Sausalito would be of undeniable value to the City.

RECOMMENDATIONS:

Form a Permanent Telecommunications Committee (Commission)

A major finding by The Group was the need for a Telecommunications Committee / Commission (TCC) appointed by the City Council. Council should act on this proposal at its earliest convenience as there is clearly a benefit to forming such a group. Firstly, the TCC would advise Council and Staff on all communications issues affecting the City, and work as a liaison with providers and the City in siting future facilities. Secondly the TCC would act as a liaison between the City and vendors for all future installations and help City Staff enforce current codes, laws and contracts. Lastly, the TCC would work with prospective and current providers to ensure that existing and future facilities maintain adequate standby and alternative powering capabilities to help withstand outages due to catastrophic events.

Survey the Needs of Landlords and Businesses within Sausalito

A survey is needed to fully understand the communication needs of property owners and businesses within the City. This survey will help the City to develop new services along

with future zoning and permitting amendments. This could be one of the first objectives of the TCC.

Audit Current Telecommunications Infrastructure within Sausalito

A full audit of electronic communications systems and infrastructures available to citizens and businesses does not exist and needs to be completed. Again, this would aid in future siting of these systems, along with assisting Staff with zoning amendments and the permitting process. During our investigation of existing facilities a very important issue came to our attention, Staff is not enforcing the Cities Telecommunications Ordinance as it relates to current cellular provider(s) renewals and RF exposure compliance testing which can directly affect public safety. As stated above the TCC could assist in resolving these issues.

Encourage Cellular Micro Sites to Fill Dead Spots in Town

There are reportedly numerous cellular service holes (i.e. dead spots) within the City where service is marginal or unavailable. This is largely due to cellular companies concentrating their services along the highway 101 corridor. The Group recommends that to alleviate any dead spots in Sausalito, carriers should be encouraged to pursue the installation of small, shared fill-in cellular sites using Distributed Antenna System (DAS) or other new microcellular technologies. These sites should have their antennas and radios shared by all providers so there is not a proliferation of individual carriers placing their own equipment in these areas. This will help to mitigate the overall impact of such sites, making them suitable in sensitive areas such as the Downtown Historic District. Alternatively, carriers should extend service from their existing sites using small remote antennas connected via fiber optic technologies. Such improvements are being implemented in similar situations elsewhere, and would lessen the impact that is associated with new large cell sites and their structures. The Group feels that micro sites have not been installed in the City due to the existing permitting process. Currently, if a carrier proposes a cellular site in town, the cost is the same for a large site as it is for a micro site. To encourage the installation of micro sites and the enhancement of existing sites, the City could offer incentives and or revise the permit approval process to favor these options.

Wi-Fi Throughout Sausalito

The City must maintain an active role in Marin County's proposal for a County wide wireless Internet service even though it is still in its infancy. With planning for the County system progressing, Council and Staff need to be proactive in the process especially where it will impact Sausalito. The committee also recommends that all proposals should give heavy consideration to a hardened system that would resist natural disasters and still function. At the same time, the TCC could investigate the technical feasibility of a municipal and / or independent financing of a Wi-Fi / Wi-Max system exclusively for Sausalito.

Wi-Fi Hotspots

We propose a trial City-owned free Wi-Fi hotspot at the ferry landing extending out as far as current technology would allow. The node could be sited in the Visitors Kiosk or in partnership with the Sausalito Yacht Club. This hotspot would enhance commuters waiting time and could be a visitor's information tool to downtown business and City services. Annual funding could be supported with local online advertising.

Lastly the Sausalito School District and / or the City should promote the installation of small public Wi-Fi hotspots at every one of the school buildings private and public within the City for the benefit of the students, their parents, and residents in these neighborhoods. An informal survey of Bayside Elementary and Willow Creek Academy shows that neither of these facilities is Wi-Fi enabled where Marin Academy is. These Hot Spots could be created using existing Internet connections at these schools at relatively little cost. The MLK recreation facility along with larger and more popular City Parks should also be Wi-Fi friendly.

CONCLUSION:

This report is submitted to the Sausalito City Council by the Business Vision Workgroups Infrastructure, Telecom and Wi-Fi Subcommittee. Our findings and

recommendations should not be construed as all encompassing. As new technologies evolve and emerge, Sausalito must strive to actively support their implementation as recommended by a Technology Committee / Commission and a cutting-edge strategic plan. A City-wide, modern, state-of-the-art communication system and infrastructure will ensure future economic growth and quality of life for our residents, businesses and visitors.

Subcommittee Members:

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