## Broadband Infrastructure – Information Collection, Mapping and Regional Coordination

### Short Description

Motion to direct staff to digitally collect and disseminate information on proposed extensions to the community's communications and broadband infrastructure. By developing a robust internal process to catalogue, publically notice and map pending extensions, coordination between communications and data providers can be increased while impacts on the community's airspace, transportation and other vital infrastructure can be minimized.

### Policy Objectives

- Maximize the value of existing infrastructure and future improvements
- Provide insight into the communications infrastructure to inform Emergency Operations, Public Safety and Homeland Security planning with respect to critical infrastructure and continuity of governance
- Increase the visibility and importance of communications infrastructure in public planning documents
- Decrease administrative barriers to entry for communications providers and speed up permit processing times.

### Background

Local governments cannot impose local franchise requirements on telephone or cable operations, nor are they legally allowed to set up prerequisites for market entry for private telecommunications providers. However, California Public Utilities Code § 7901.1 (California Code - Section 7901.1) does ensure that "municipalities shall have the right to exercise reasonable control as to the time, place, and manner in which roads, highways, and waterways are accessed."

Like telephone (or even telegraph) corporations, telecommunications providers (either ILEC or CLECS) may construct "lines along and upon any public road or highway, along or across any of the waters or lands within this State, and may erect poles, posts, piers, or abutments for supporting the insulators, wires, and other necessary fixtures of their lines, in such manner and at such points as not to incommode the public use of the road or highway."

Although public works departments require applicants to detail where they are excavating when building out communications infrastructure, the maps submitted by applicants are not supplied in digital formats. As a result, visibility into the physical plant that makes up the internet in this region is limited, which has negative impacts for communities hoping to foster economic development and plan for long range contingencies.

This issue is known and well documented by the California Public Utilities Commission, and addressing it is of the major areas of work underwritten by the California Advanced Services Fund.

One of the persistent problems in the public sector is lack of human resources for long term data collection. Stretched by years of fiscal budget trimming, public works departments are struggling to keep up with existing workload. Under present conditions, securing a street opening permit may take some time, as individual plans must be laboriously checked and commented (typically on physical media) and then processed through public hearings.

Cataloguing existing broadband resources in electronic form could reduce administrative processing time, provide greater visibility into a community's broadband infrastructure and inform a communities' long range planning processes.

There are several existing models of how this data can be collected and utilized. While this specific initiative may seem novel, it is based on long standing procedures developed to help coordinate between utility and communications providers and local jurisdictions.

Nearly all communities in the Monterey Bay area members of Underground Service Alert of California - North; a nonprofit mutual benefit organization founded in 1976 that links the owners of underground service lines with potential excavators. USA's joint noticing system is a simple way to increase coordination of construction amongst providers and is a model that can be leveraged and emulated.

The City of Seattle Washington has developed a specific Planning Analysis and Coordination Tool (PACT) to increase communication and collaboration amongst providers and the City for communication infrastructure upgrades. In PACT, providers and utilities are given a login to the tool where they are required to map out their future plans (over a three year period) and the City of Seattle provides a quarterly report on the projects that it intends to undertake, which includes the method and scope of each project (aerial, boring, trenching, ect.)

Like Seattle's PACT program, the City of San Francisco also requires a high level of planning and coordination between providers to minimize impact on traffic flow and streets within the City. Protected behind a password protected wall, the City's Five Year excavation planning tool leverages the municipal GIS to increase coordination between providers. It can be found online here: http://bsm.sfdpw.org/5year/

Developing this tool for the Central Coast, using collected geo-spacial data will be a key objective of the Central Coast Broadband Consortium, but it will be necessary to direct public works staff to develop a process to collect and report this data.

**Discussion**

Future applicants for street opening or encumbrance permits for broadband, communications and utility infrastructure should be required to provide GIS or CAD drawings of the routes in question in order to catalogue where resources are in the ground.

Insight into these assets can help a municipality develop priority fiber routes that serve commercial and industrial areas and allow Cities and counties to incorporate those plans into other city initiatives (i.e. Wastewater, Water, Gas, Steam and Paving projects).

Once collected, this data provide a higher level of awareness of communications infrastructure which can have implications on zoning, land use and economic development initiatives as well as long term Capital Improvement Project planning. For example, alternate routes can be suggested to preserve the value of existing streets and minimize the impact of construction to residents, businesses and visitors to the Central Coast.

This geo-spacial data (valuable in itself for internal uses), can be leveraged even further when combined with an adopted policy to increase coordination and noticing between providers via a digital Planning and Coordination Tool.

**Fiscal Impact**

Unknown. The development of coordination and planning tool is the deliverable the CASF / CETF funded work of the Central Coast Broadband Consortium. Noticing through USA and cataloguing through GIS present negligible costs, mainly in staff time.

RESOLUTION NO.

RESOLUTION OF THE (CITY COUNCIL / BOARD OF SUPERVISORS) OF THE (CITY/ COUNTY) OF_____ DIRECTING STAFF TO DIGITALLY COLLECT AND DISSEMINATE INFORMATION ON PROPOSED EXTENSIONS TO THE COMMUNITY'S COMMUNICATIONS UTILITY AND BROADBAND INFRASTRUCTURE AND FURTHERMORE, TO DEVELOP AN INTERNAL PROCESS TO CATALOGUE, PUBLICLY NOTICE AND DIGITALLY MAP PENDING EXTENSIONS OF THE COMMUNITY'S UTILITY, COMMUNICATIONS AND BROADBAND INFRASTRUCTURE.

WHEREAS, the development of the internet and its associated technologies has had broad and significant impact on service delivery in public safety, education, healthcare and commerce; and

WHEREAS, the (City / County) of _____ is interested in closing the digital divide, fostering the attraction, expansion and retention of local businesses; and

WHEREAS, insight into the community's communications, utility and broadband infrastructure has the potential to inform Emergency Operations and Public Safety and Homeland Security planning with respect to critical infrastructure and continuity of governance ; and

WHEREAS, California Public Utilities Code § 7901.1 (California Code - Section 7901.1) does ensure that "municipalities shall have the right to exercise reasonable control as to the time, place, and manner in which roads, highways, and waterways are accessed; and

WHEREAS, the (City / County) of _____ wishes to facilitate the development of a more resilient and higher capacity communications infrastructure by reducing administrative barriers to entry for telecommunications, cable, communications, utility and internet service providers; and

WHEREAS, data on these utility, broadband and communications resources provide a higher level of awareness of vital infrastructure which can have implications on zoning, land use and economic development initiatives as well as long term Capital Improvement Project planning; and

WHEREAS, these insights can help the (City/ County) of _____ develop priority fiber routes that serve commercial and industrial areas and provide valuable input into other initiatives such as Wastewater, Water, Gas, Steam and Paving projects; and

WHEREAS, the Central Coast Broadband Consortium, utilizing funds from the California Public Utilities Commission is in the process of developing a regional broadband mapping, planning and coordination tool ; and

NOW, THEREFORE, BE IT RESOLVED by the (City Council / Board of Supervisors) of

the (County / City) of _____ as follows:

Section 1: Collection of Electronic Data: Future applicants for street opening or encumbrance permits for broadband, communications and utility infrastructure should be required to provide GIS or CAD drawings of the routes in question in order to catalogue where resources are in the ground.

Section 2: Staff Data Collection, reporting and noticing: staff processing applications for communications, utility and broadband service amendments or extensions shall catalogue electronically submitted information into the (City/County)'s GIS and provide access to these map layers to the Central Coast Broadband Consortium's regional mapping, planning and coordination tool.

PASSED AND ADOPTED this __th day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

APPROVED: _____
Chair

ATTEST: _____
City Manger / County Administrative Officer