City of Long Beach
Working Together to Serve

Memorandum

NB-27

Date: May 3, 2016

To: Honorable Mayor Garcia and Members of the City Council

From: Stacy Mungo, Councilwoman, Fifth District
Lena Gonzalez, Councilwoman, First District
Rex Richardson, Councilmember, Ninth District

Subject: **AGENDA ITEM: DIG ONCE POLICY TO ENHANCE COMMUNICATIONS INFRASTRUCTURE AS A LOCAL ECONOMIC DRIVER**

RECOMMENDATION:

Recommendation to request City Attorney, in coordination with the Technology and Innovation and the Public Works Departments, to draft an ordinance amending the Long Beach Municipal Code to require the installation of communications infrastructure in excavation projects in the public right-of-way where the City has determined that it is both financially feasible and consistent with the City's long-term goals of furthering economic opportunity through connectivity.

BACKGROUND:

Municipalities across the region, state and nation are continuously undertaking "smart" initiatives with a focus on leveraging technology and improving infrastructure to create a better place to live, work and visit, and certainly Long Beach is a leader in this urban innovation movement. At the intersection of people, communities, businesses and government is the need for infrastructure to keep pace with growing populations and which better position cities to advance economic development opportunities and conditions.

The City of Long Beach has already begun to initiate high-tech infrastructure and intelligent governance projects through our in-house Innovation Team (i-team) and the Technology and Innovation Department (TID) in the development of a Citywide Fiber Optic Network Deployment Plan, which was released as a Request for Proposal (RFP) in December 2015. The overarching goal of this master plan is to invest in the City's high tech infrastructure to promote economic, social, civic and workforce development.

As outlined in the City's recent proposal for the U.S. Department of Transportation's Smart City Challenge, over the past decade Long Beach has installed over sixty-three (63) miles of fiber optic cable and also envisions building the backbone of a high tech city by constructing a fiber optic connection to the CoreSite One Wilshire (LA1) data center in downtown Los Angeles. This is the West Coast's largest telecommunication hub and customer ecosystem and is the most densely interconnected building in the world where dark fiber allows for cross connections of domestic and international carriers.

The City also has current and near term projects that will add an additional twenty-five (25) miles of fiber based technology along major corridors, retrofit approximately forty-five (45) miles of conduit and existing copper based systems to fiber optic technology, and install an additional hundred miles of conduit and fiber optic technology that will further expand the overall system.

DISCUSSION:

According to the Federal Communications Commission (FCC), the largest cost element for deploying broadband is burying fiber optic cables and conduit underground, and similarly, the Federal Highway Administration (FHWA) reports that ninety (90) percent of the cost of deploying broadband is when the work requires significant excavation of the roadway. Data from the U.S. Department of Transportation Intelligent Transportation Systems Joint Program Office indicates the average cost of deploying fiber-optic cable is about $27,000 per mile.

Therefore, "dig once" policies, programs and/or practices are designed to minimize the number and scale of excavations when installing telecommunications infrastructure in the public right-of-way and to foster public-private partnerships and a cooperative planning process around joint use or build agreements. The joint use of trenches is often a practical solution to expedite the deployment of fiber along main corridors and to ensure providers of broadband services, including utility companies, install their infrastructure at the same time, in the same trench or conduit, and on a shared-cost basis.

Coordinating large-scale capital projects with the installation of conduits and/or fiber optic cables also saves money by reducing costs incurred for repeated excavation in an area or part of the city where the entire street or corridor may have been recently (re-)paved or developed. In some cases, the laying of empty conduits in the public right-of-way during new construction projects may help to prepare for future fiber optic needs and coverage expansion, and this can be achieved by allowing qualified broadband deployments to be installed through a streamlined permitting process granted to telecommunication providers.

Consequently, as part of the planning and construction process for the City's various capital improvement projects, every attempt should be made to deliver on Long Beach's vision of connected infrastructure, connected people, and a connected city. To create more efficient delivery of and access to vital technology infrastructure that drives economic opportunity, the City should strive to place communication conduit in the public right-of-way during excavation, by both government and private entities, where technically and financially feasible.

Moreover, a report back from the City Manager is respectfully requested that would offer a potential roadmap for a community broadband strategy to help bridge the "digital divide", expand public technology infrastructure, and enhance fiber network capacity, connectivity and usability for all Long Beach stakeholders.

FISCAL IMPACT:

The approval of the requested action is anticipated to have no significant fiscal impact and feasibly would have a positive effect on potential new revenue sources.

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REQUEST TO ADD AGENDA ITEM

Date: April 27, 2016

To: Maria de la Luz Garcia, City Clerk

From: Councilwoman Stacy Mungo, Fifth District

Subject: Request to Add Agenda Item to Council Agenda of ***May 3, 2016***

Pursuant to Municipal Code Section 2.03.070 [B], the City Councilmembers signing below request that the attached agenda item (due in the City Clerk Department by Friday, 12:00 Noon) be placed on the City Council agenda under New Business via the supplemental agenda.

The agenda title/recommendation for this item reads as follows:

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Council District	Authorizing Councilmember	Signed by
5	Stacy Mungo	Stacy Mungo
1	Lena Gonzalez	
9	Rex Richardson	

cc: Office of the Mayor