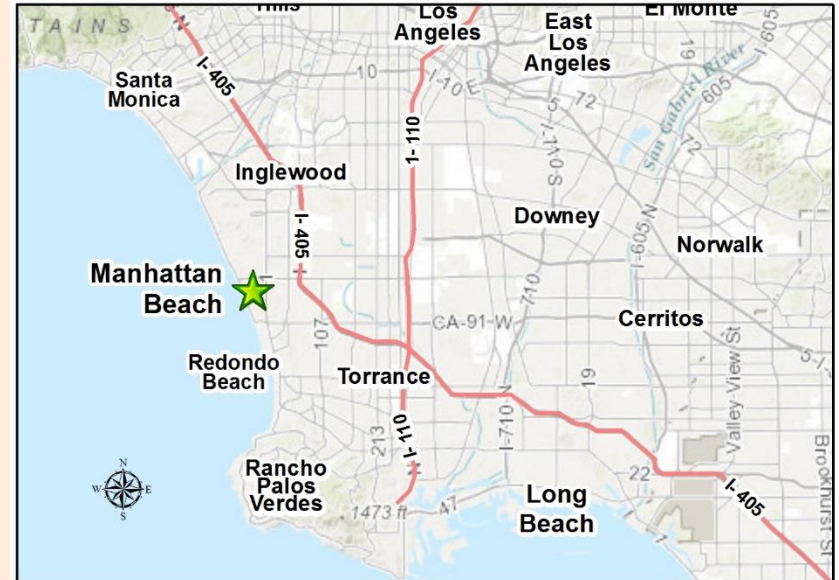


BUILDING A MUNICIPAL BROADBAND NETWORK



City of Manhattan Beach
Fiber-to-the-Home/Premise
Smart Cities Initiatives

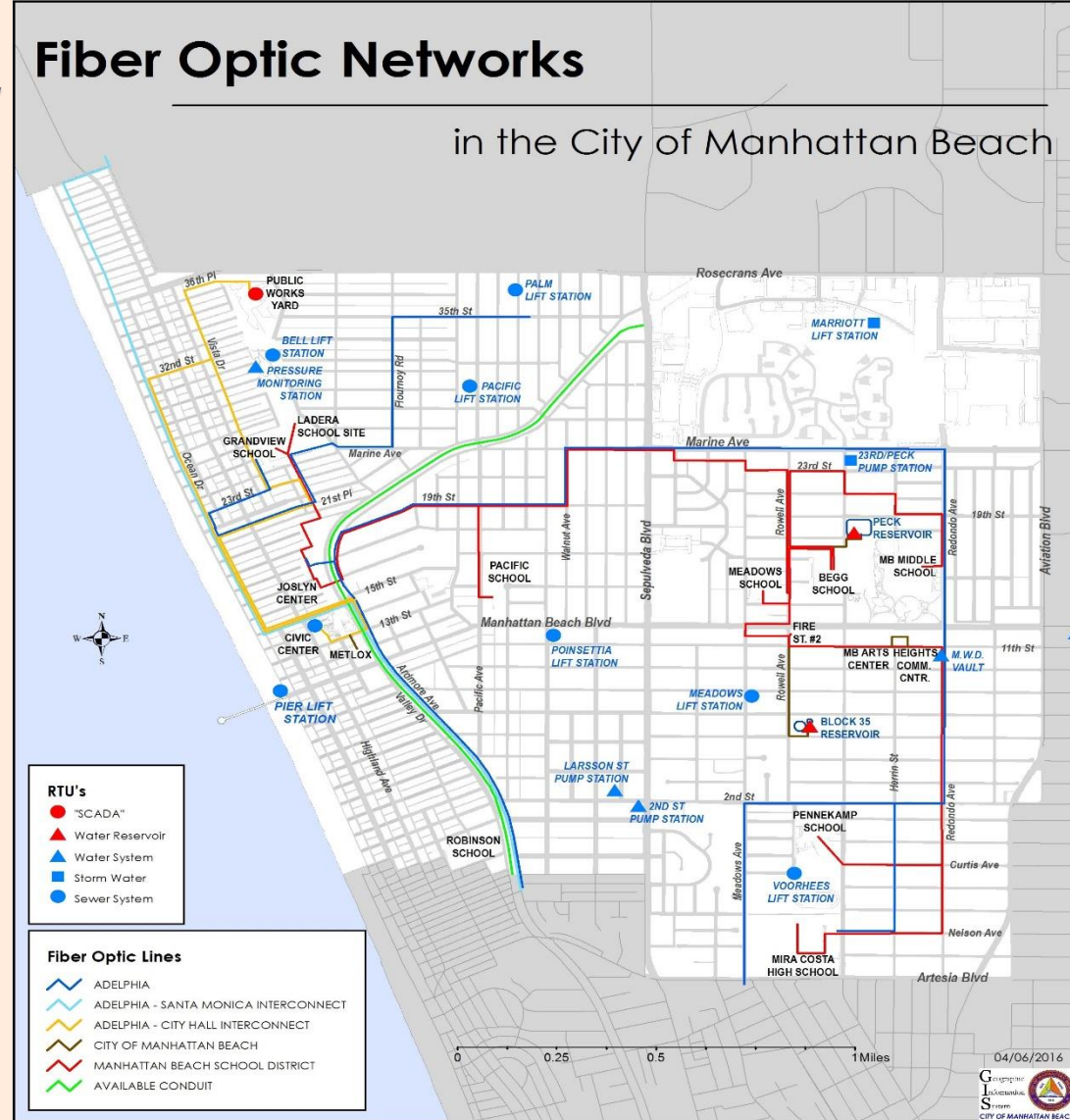


Benefits of a Municipal Broadband Network

- City-wide Fiber Infrastructure Supports Smart City Initiatives
 - Community Cameras
 - LED Street Light Projects
 - Parking Meters, Parking Structures, & Paystations
 - Traffic Signal Management
 - Transit Priority
 - Free Wi-Fi
 - Fiber-to-the-Home (FTTH)
 - Potential New Revenue Stream
- Moving the Initiatives forward
 - Contract with Consulting Firm
 - Develop Fiber Network Design
 - Develop a Business Plan
 - Economic Development Tool
 - Explore Benefit/Risk and Feasibility of Deploying Fiber to Provide Internet Access/Services to Manhattan Beach Residents and Businesses

Fiber Optic Networks

in the City of Manhattan Beach



Smart Cities Strategies

- What Consulting Services Provide -

- ▶ Highly Specialized Services
- ▶ Extensive Knowledge Depth and Breadth
- ▶ Tailored Broadband, Smart Cities and IT Planning
- ▶ Feasible Conceptual Network Designs and Technology Options
- ▶ Business Model and Financial Analysis
 - 10-Year Financial Pro Forma
 - Financial Planning and other Financial Models



What Are Other Cities Doing?

Citywide Municipal Fiber to the Home

Longmont, CO (86k)
Chattanooga, TN (171k)
Ammond, Idaho
Sandy, OR (10K)
Beverly Hills (planning; 35k)
Highland, IL (10k)

Municipal Fiber to the City Facilities and Businesses

Santa Monica (93k)
Burbank (105k)
Pasadena (141k)
El Segundo (17k)

Backbone Fiber Network (Corridors)

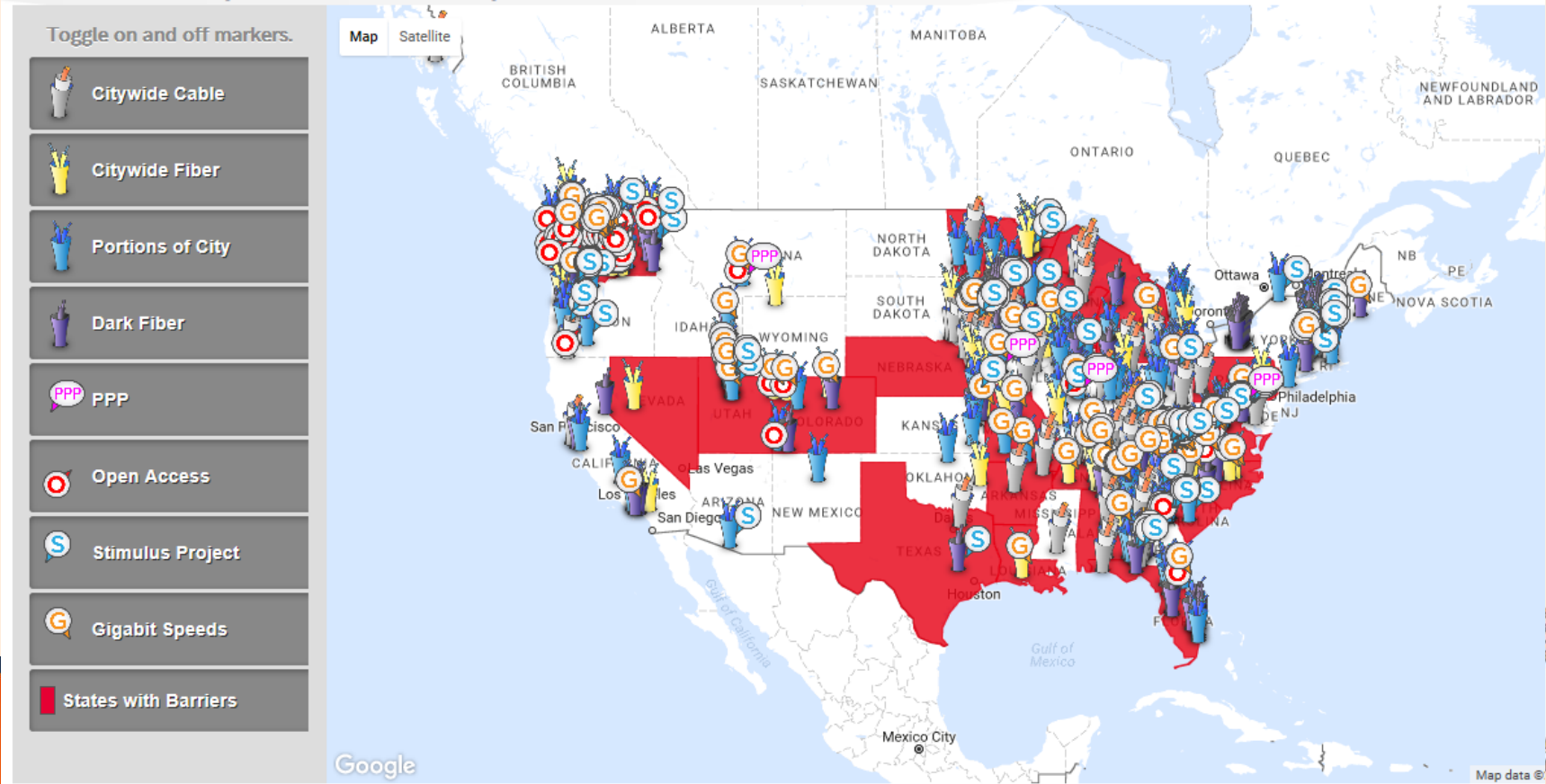
Southbay (COG)



What's Happening Nationally

- 95 Communities with a municipal FTTP network reaching most parcels
- 77 Communities with cable reaching most of the community
- 200 Communities with fiber to parts of the community
- 130 Communities with Dark Fiber

Community Network Map



Community Network Map



Fiber Master Plan

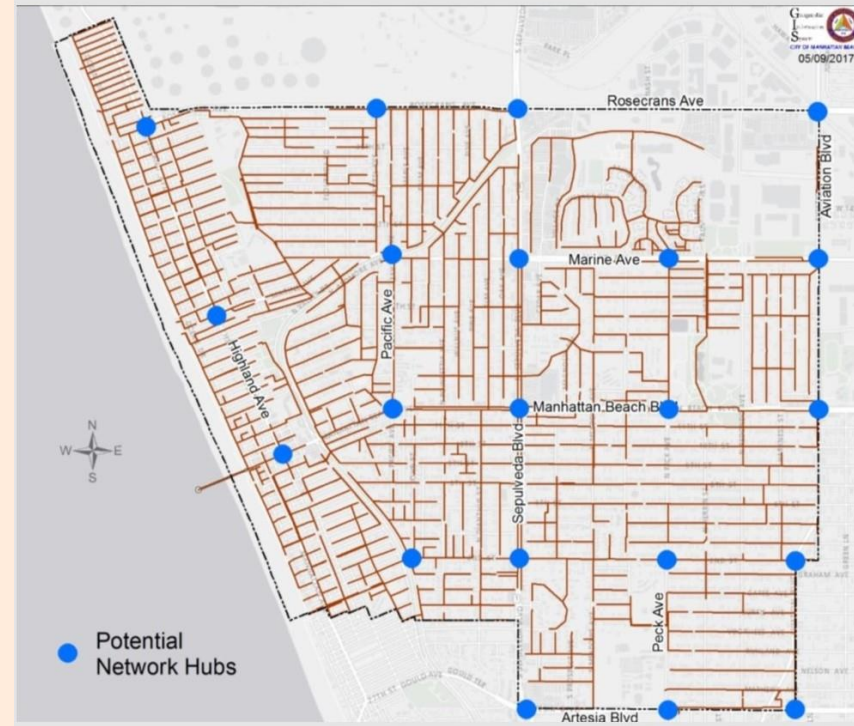
Core Objectives

- ❖ *Feasibility Analysis, Economic Forecast and Business Models/Strategies*
- ❖ *Network Infrastructure Design to support FTTH/Smart Cities plans)*
- ❖ *Policy Conception (Broadband Networks Operations and Telecom)*
- ❖ *Fiber + Wireless Infrastructure = Smart City*

Fiber-to-the-Home and Premises

- ❖ 1 Gbps Internet Speed
- ❖ Highly Competitive Service/Content Providers
- ❖ Public Safety (cameras, etc.)
- ❖ (Smart) Utilities and Transportation

Conceptual Fiber-to-the-Home Network



Fiber Master Plan

Professional Services

1. Staff Issued RFP#1099-77 for City-wide Fiber Master on 10/31/2017
2. Three Proposals Received and Evaluated
3. Two Vendors Interviewed and Reference Checks Completed
4. Staff Recommends Magellan Advisors Based on:
 - ❖ Comprehensive Response Delivering Practical Broadband and Technology Solutions
 - ❖ Rich Experience with Fiber Design, Smart City Initiatives and Broadband Planning
 - ❖ Best Understanding of the Scope of Work
 - ❖ Project Team Qualifications
 - ❖ Excellent References for Completing Past Projects on Time and within Budget
 - ❖ “Hands-On” Company with Strong Project Management
 - ❖ Completed Plans and Implementations for Numerous Institutions and Municipalities



Questions?

