

# Broadband Feasibility Study Report

*May 25, 2017*

*Prepared in collaboration with South Bay Cities Council of Governments, South Bay Workforce Investment Board, and Magellan Advisors*





# Overview

## INTRODUCTIONS & OBJECTIVES

- **Jacki Bacharach** | Director South Bay Cities Council of Governments
- **Jan Vogel & Chris Cagle** | South Bay Cities Workforce Investment Board
- **Jory Wolf** | Vice President of Digital Innovations Magellan Advisors

### Key Contributors:

- **Greg Laudeman** | Sr. Consultant Magellan Advisors
- **Julie Stetz Lutes** | Sr. Analyst Magellan Advisors

## AGENDA

- Catalyst for the Fiber-Optic Feasibility Study Report
- Feasibility Study Report Process
- Findings & Recommendations
- Next Steps

# The South Bay Community



# Catalyst . . . . Why Fiber? Why Now?

ECONOMIC  
DRIVER

## SPRING 2016

Businesses leaving Torrance, cited **LACK OF TECHNOLOGICAL INFRASTRUCTURE** as a reason for the relocation

## SUMMER 2016

- EDD grant to obtain technical assistance
- Through a formal selection process, contracted Magellan Advisors to perform assessment and to develop a South Bay Regional Broadband, Fiber-Optic Master Plan

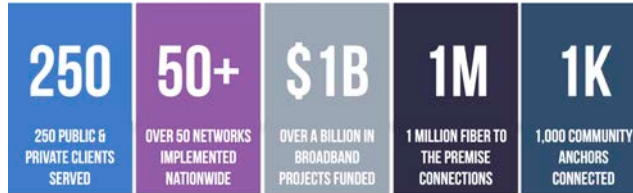
## SUMMER 2016 - Present

- Conducted workshops, interview sessions, assessment

# Magellan Advisors West Coast Projects

## Proven Process. Proven Results.

Magellan helps more communities achieve their broadband goals.



Magellan leads the industry in developing smart gigabit communities.

## Make Gigabit a Reality in Your Community

Magellan enables communities to plan, implement and manage Gigabit Broadband



## Magellan Clients (Partial List):

City of Carlsbad, CA

City of Concord, CA

City of Culver City, CA

City of El Segundo, CA

City of Fountain Valley, CA

City of Huntington Beach, CA

City of Manhattan Beach, CA

City of Rancho Cucamonga, CA

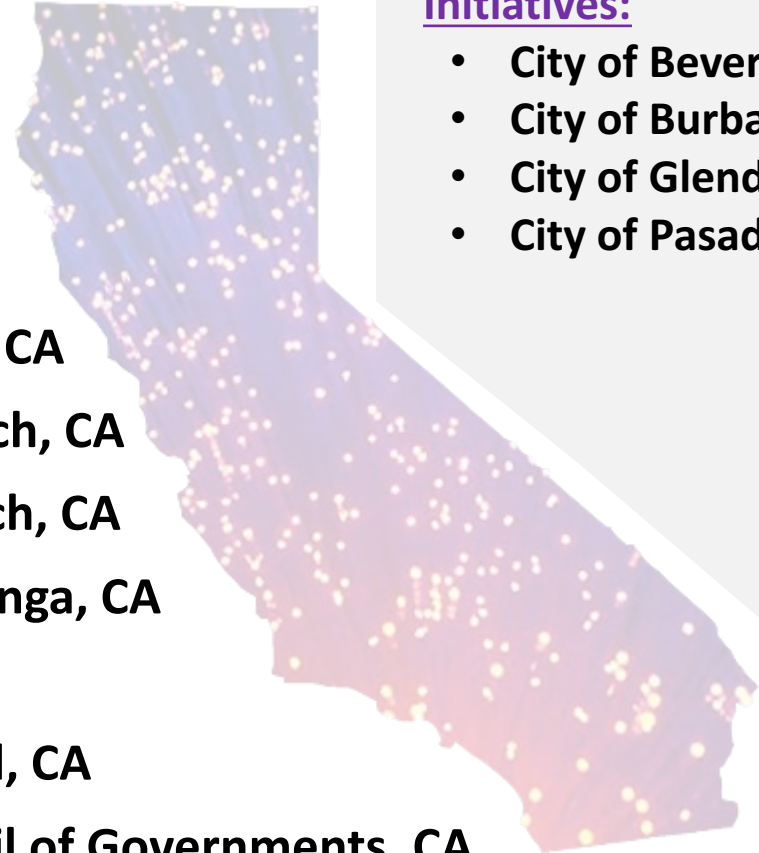
City of Vallejo, CA

City of West Hollywood, CA

South Bay Cities Council of Governments, CA

## Additional CA Broadband Initiatives:

- City of Beverly Hills
- City of Burbank
- City of Glendale
- City of Pasadena



# Fiber Optic Feasibility Study Process



Data Collection

- Analyzed industry and demographic data by city to aggregate regional findings and trends
- Conducted interviews and focus group sessions with community anchor institutions including the local business community, regional City CIOs and Economic Development Directors, Public Works Directors, Infrastructure Working Group, LA County Public Works, and regional telecommunications service providers
- Conducted business and city surveys on current network transport/IP services and costs
- Performed market research on providers and internet points of presence

Strategy Development

- Reviewed network design, build, management and operations of a broadband network
- Developed regional fiber-optic network design
- Solicited cost estimates for recommended regional design
- Recommended the development of a regional South Bay SMART-Net Task Force



# Findings & Recommendations

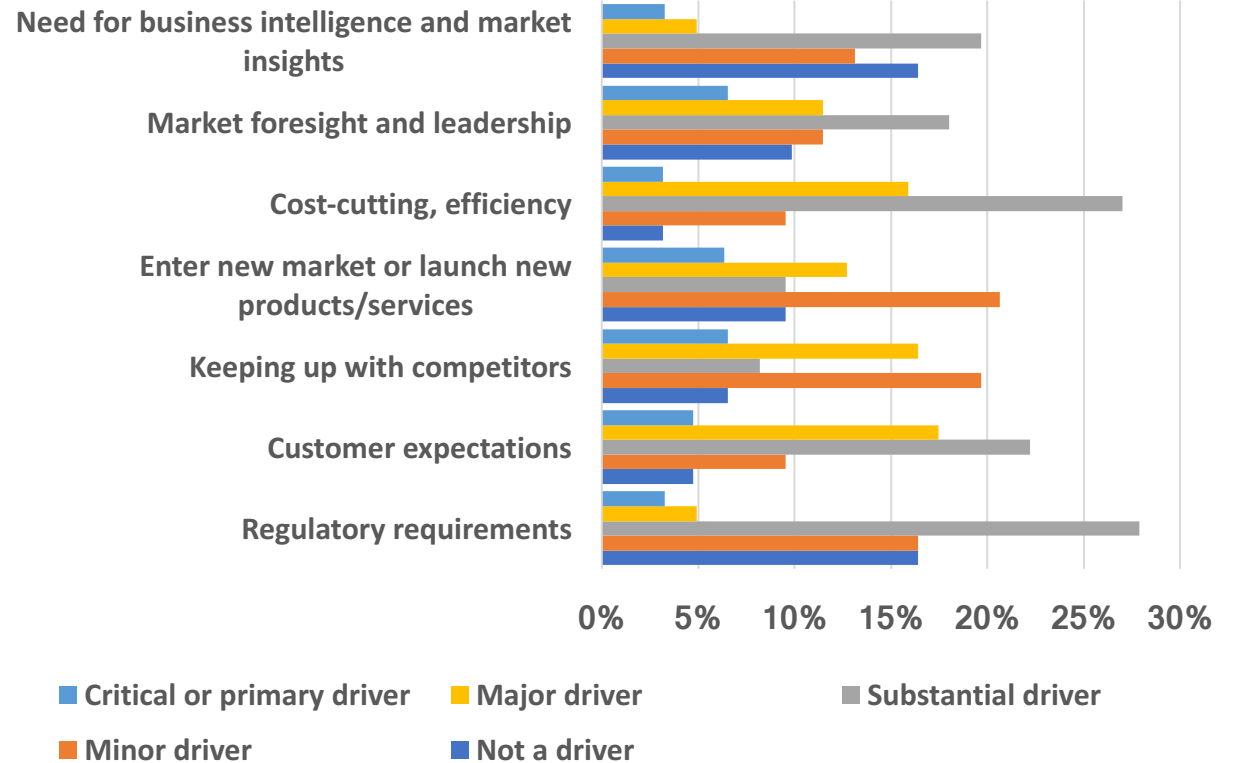
*Business, Community Anchors and Cities Interviews and Surveys*

## Top 3 Regional Factors Driving Technology Utilization

*(Substantial Drivers and Above)*

1. Cost Cutting Efficiency (46%)
2. Customer Expectations (43%)
3. Regulatory Requirements, and Market Foresight and Leadership (36%)

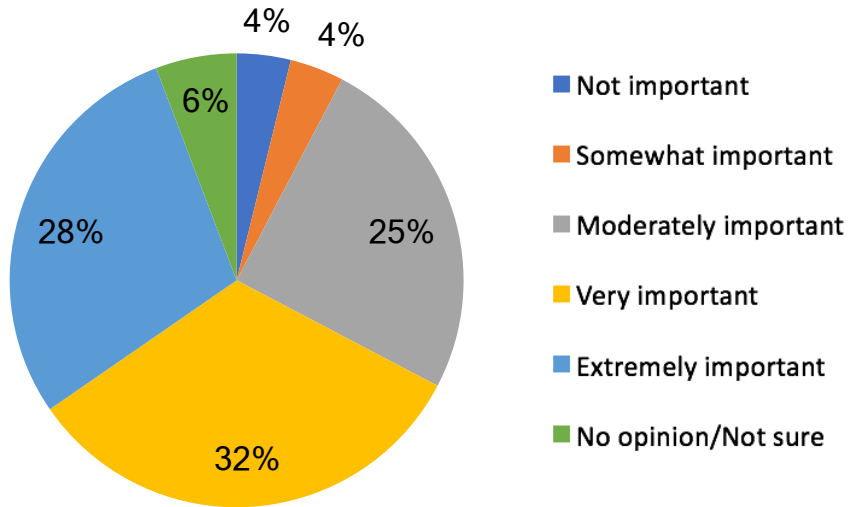
**Reliability + Speed = Growth of Business**



# Findings & Recommendations

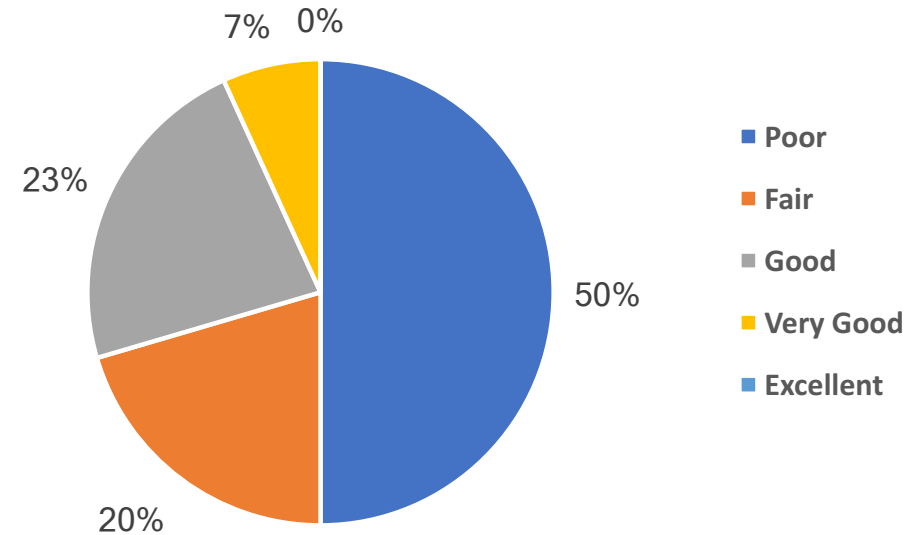
*Business, Community Anchors and Cities Interviews and Surveys*

Importance of choice



**60%** of respondents state that a choice of providers was very or extremely important

Availability: Services from other providers



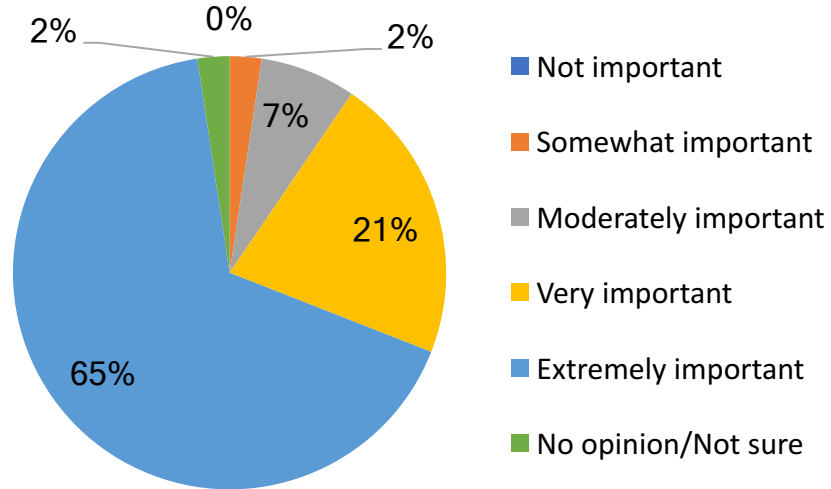
**70%** of respondents state that a availability of services are poor or fair



# Findings & Recommendations

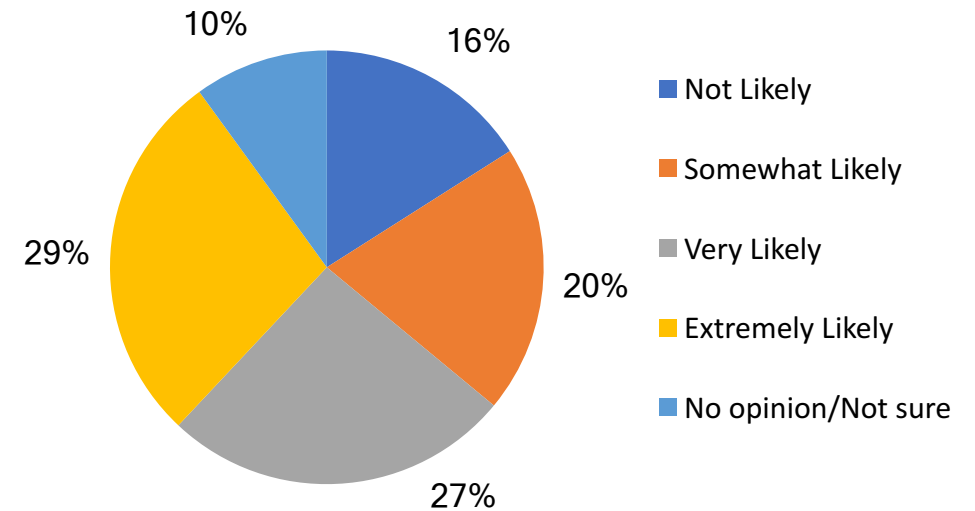
*Business, Community Anchors and Cities Interviews and Surveys*

Importance for location



**86%** of respondents stated that **Broadband** was a very to extremely important variable when deciding a location for their business

Likelihood of switching to a government-build network



**76%** of respondents state that they are somewhat to extremely likely to switch to a government-built network



# Findings & Recommendations

## Market Analysis & Costs

Currently, the cities are paying about **\$43 per Mbps download and \$63 per Mbps upload** per month.



Future **gigabit services cost estimates** range from **\$1.25 Mbps to \$0.68 Mbps** per month for bandwidth from 1 Gbps to 10 Gbps and over one to three year contracts.

“The {*Background Paper, Exploring the Relationship Between Broadband and Economic Growth*} concludes that a **10 percentage point increase in fixed broadband penetration would increase GDP growth by 1.21% in developed economies** and 1.38% in developing ones.”

—World Development Report 2016, *Background Paper Digital Dividends*, Michael Mingos

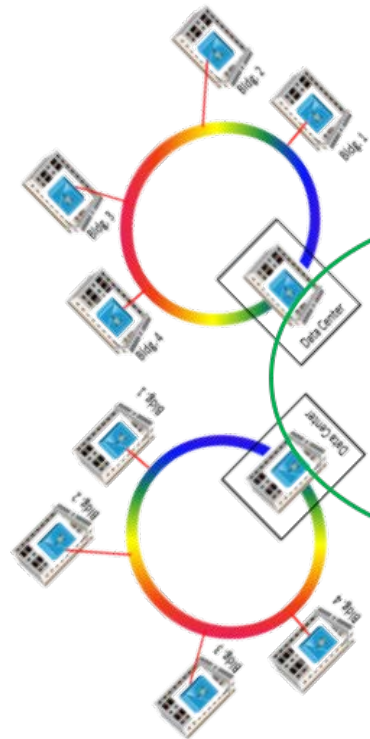
SOURCE: <http://pubdocs.worldbank.org/en/391452529895999/WDR16-BP-Exploring-the-Relationship-between-Broadband-and-Economic-Growth-Mingos.pdf>

# Findings & Recommendations

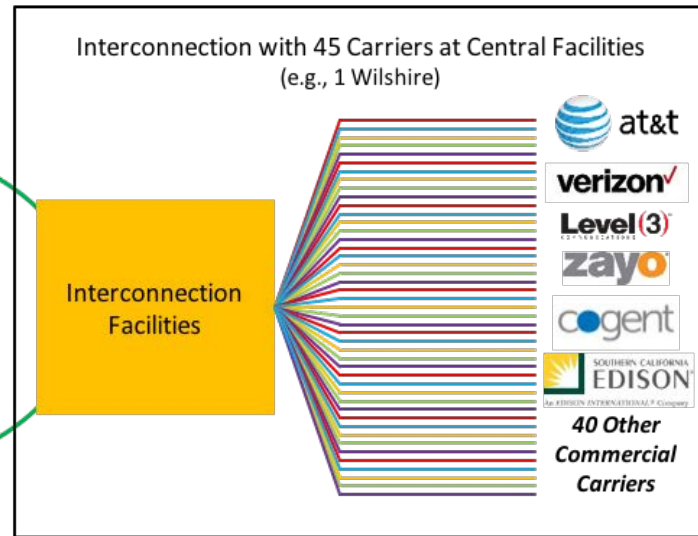
## South Bay Fiber Network Design

Single, self-healing inter-city network...

... connected to regional fiber-optic infrastructure...



Regional Network



# Next Steps

## South Bay Regional Priorities

1. Prepare a **LETTER OF INTEREST** for South Bay member cities regarding:
  - City Council Resolution
  - Resource commitment to a South Bay Innovation or SMART-NET Taskforce
  - Participation and presentations in workshops
2. Identify and secure **FUNDING** for Phase 1 of the South Bay Regional Network.
3. Establish an **AGREEMENT** for understanding among the cities to jointly purchase network services.
4. Develop a **CALENDAR** of activities and initiatives.
5. Conduct educational **SEMINARS** for the region.
6. Adopt broadband-friendly **POLICIES** across the South Bay.
7. Request **COMPETITIVE BIDS** to build-out and run the network.
8. **BUILD-OUT** a provider delivered network.
9. **COLLABORATE** with private sector to launch smart community applications, identify municipal revenue opportunities.
10. Integrate municipal infrastructure into the network and **EXPAND** network reach.

# Next Steps

2017

2018

JUN

JUL

AUG

SEP

OCT

NOV

DEC

JAN

FEB

MAR

1

LETTER OF INTEREST

*Prepare Letter of Interest*

2

FUNDING SOURCES – PHASE 1

*Identify additional network users and funding mechanisms*

3

AGREEMENTS

*Formalize agreements among South Bay cities to jointly purchase network services*

4

DEVELOP CALENDAR

*Policy development, Procurement process, Network implementation planning, “Smart City” applications collaboration and planning, other*

5

CONDUCT EDUCATIONAL SEMINARS

*Utilize the taskforce to conduct technology seminars within the region*





# Conclusions

*Economic attraction and retention come down to a simple reality . . . .*

A digitally skilled workforce and an extensive network infrastructure attract technically savvy people and businesses.

Availability of bandwidth and easy connectivity are current economic drivers.

A regional network will be developed using a collaborative forum to further government services and efficiencies that enable improved bandwidth within the region stimulating economic development.

*Broadband has become a UTILITY that is necessary for economic development and quality of life.*



SOUTH BAY CITIES  
COUNCIL OF GOVERNMENTS

