



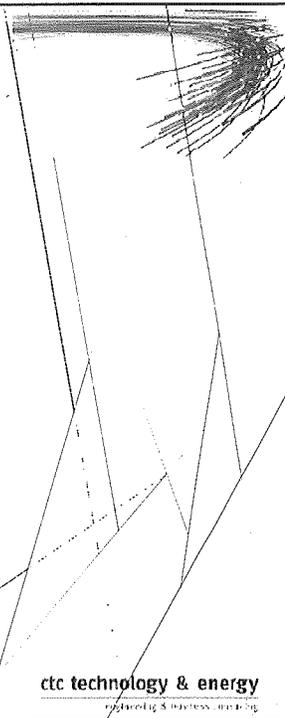
**CITY OF HUNTINGTON BEACH
SUPPLEMENTAL COMMUNICATION
Robin Estanislau, City Clerk
Office of the City Clerk**

TO: Honorable Mayor and City Councilmembers
FROM: Robin Estanislau, City Clerk *RE*
DATE: 9/19/2016
SUBJECT: SUPPLEMENTAL COMMUNICATIONS FOR THE SEPTEMBER 19, 2016, REGULAR CITY COUNCIL/PFA MEETING

Attached are the Supplemental Communications to the City Council (received after distribution of the Agenda Packet):

STUDY SESSION

#1. PowerPoint presentation submitted by Antonia Graham, Assistant to the City Manager, dated September 2016, entitled *Broadband Strategic Plan – City of Huntington Beach, California*.



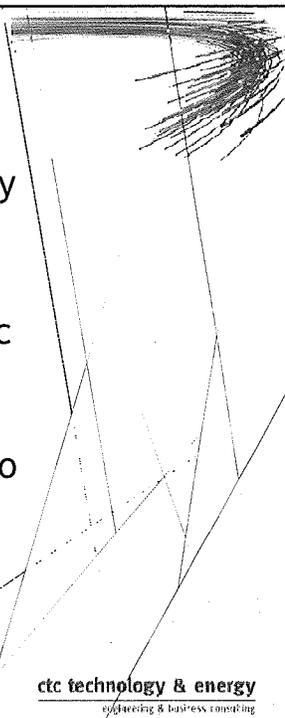
Broadband Strategic Plan

City of Huntington Beach, California

September 2016

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Project Background

The City of Huntington Beach retained CTC Technology & Energy (CTC) to perform three tasks:

1. Conduct a broadband market analysis
2. Develop a strategic plan to maximize the economic development benefits of the City's broadband assets
3. Provide recommendations for long-term planning to improve the economic development potential to attract, retain, and expand businesses.

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**SUPPLEMENTAL
COMMUNICATION**

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Meeting Date: 9-19-2016

Agenda Item No.: SS#1

City's Objectives

- ▶ Economic development
 - ▶ Expand technology sector
 - ▶ Diversify economy
 - ▶ Attract and retain new companies in different sectors
 - ▶ Promote tourism
- ▶ Incent private sector investment in key focus areas
- ▶ Expand broadband connectivity to city-owned buildings

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Target Economic Focus Areas

- ▶ Beach and Edinger Corridors
- ▶ Bella Terra
- ▶ Gothard Industrial Corridor
- ▶ Holly-Seacliff underused parcels
- ▶ Main Street & Pire
- ▶ Northwest Industrial Area
- ▶ Southeast Opportunity Area

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Gaps in Broadband Service Availability

- ▶ Availability of business broadband services
 - ▶ Location
 - ▶ Speed
 - ▶ Reliability
- ▶ Quality of mobile wireless coverage
- ▶ Availability of fiber-based residential services

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Broadband Deployment Objectives & Challenges

- ▶ Broadband deployment objectives
 - ▶ Affordability
 - ▶ Cash flow
 - ▶ Competition in market
 - ▶ Consumer choice
 - ▶ Ownership and control of assets (business development)
 - ▶ Performance
 - ▶ Risk aversion
 - ▶ Ubiquity

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Common Goal Alignment

	Ubiquity	Choice	Competition	Ownership	Performance	Affordability	Risk Aversion	Cash Flow
Ubiquity	NA	A	A	A	NI	C	C	C
Choice	A	NA	A	A	A	A	C	NI
Competition	A	A	NA	A	A	A	C	NI
Ownership	A	A	A	NA	A	A	A	C
Performance	NI	A	A	A	NA	NI	A	A
Affordability	C	A	A	A	NI	NA	C	C
Risk Aversion	C	C	C	A	A	C	NA	A
Cash Flow	C	NI	NI	C	A	C	A	NA

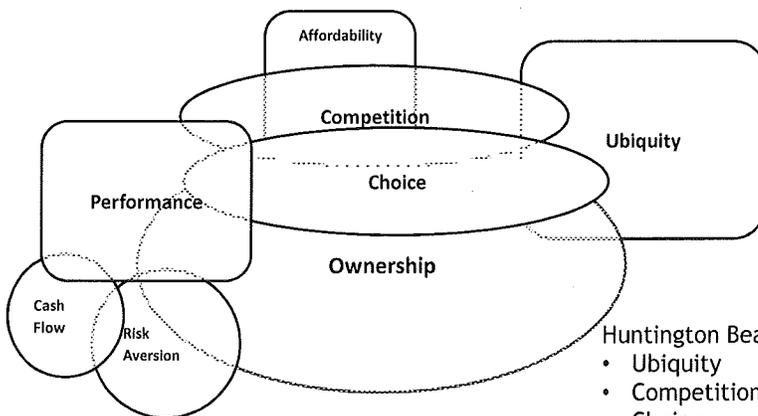
A align
 C conflict
 NA not applicable
 NI no impact

Huntington Beach Priorities (for businesses)

- Ubiquity
- Competition
- Choice

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Interactions Between Objectives



Huntington Beach Priorities (for businesses)

- Ubiquity
- Competition
- Choice

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Broadband Deployment Objectives & Challenges

- ▶ Markets with existing FTTP
 - ▶ Rate of return (return on investment, or ROI) challenges
- ▶ Sale to Frontier has created dissatisfaction, but FTTP deployment still makes it more difficult for a new entrant
 - ▶ Business gaps do exist - the FTTP build concentrated on residences

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Recommendations

1. Develop a “Dig Once” ordinance
2. Build network extensions to City-owned properties and high-value facilities, and interconnect with outside networks
3. Pursue discussions with private partners
4. Develop and distribute a request for information (RFI) or request for proposal (RFP)

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1) Develop a Dig-Once Ordinance

- ▶ Encouraging or requiring simultaneous construction and co-location of facilities in the public right-of-way (ROW) will reduce the long-term cost to build communications facilities
 - ▶ Coordinate fiber construction with road construction and other disruptive activities in the public ROW
 - ▶ Construct spare conduit capacity where multiple service providers or entities may require infrastructure
 - ▶ Prioritize projects
 - ▶ Create standards

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2) Extending connectivity to City-owned buildings

- ▶ Phase 1: Infrastructure Audit
- ▶ Phase 2: Address Critical Needs through Interim Strategies
- ▶ Phase 3: Infrastructure Remediation
- ▶ Phase 4: Construct Additional Distribution Fiber
- ▶ Phase 5: Construct Laterals to City Facilities
- ▶ Phase 6: Construct Additional Fiber Routes to Provide Redundancy

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Middle-Mile Network in the Focus Areas

- ▶ Estimates for each area with the route down the main road in each area
- ▶ 144-count fiber
- ▶ High-level cost estimates: \$5.4 Million
- ▶ Does not include
 - ▶ Last mile fiber
 - ▶ Permitting
 - ▶ Pole attachment licensing
 - ▶ Network electronics

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Middle-Mile Fiber: High-Level Cost Estimates

Economic Focus Areas	Cost Estimate
Bella Terra	\$448,000
Gothard Industrial Corridor	1,200,000
Holly-Seacliff	352,900
Main Street and Pier	305,400
Northwest Industrial Area	2,842,600
Southeast Opportunity Area	211,400
Total	\$5,360,300

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3) Pursue Discussions with Private Partners

- ▶ Engage carriers
 - ▶ Crown Castle
 - ▶ TelePacific
 - ▶ AT&T
- ▶ Monetize current and future fiber and infrastructure assets, examples:
 - ▶ Lease the City's fiber/conduit network
 - ▶ Sample rates in California vary between \$1,000 to \$30,000 per strand mile per year, depending on location
 - ▶ Populate the City's conduit with new fiber as the partner deploys its own fiber
- ▶ Consider economic development incentives

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4) Develop and Distribute an RFI/RFP

- ▶ Use a standard template to allow comparative review
- ▶ Outline goals and objectives
- ▶ Outline the City's role - permitting to assets
- ▶ Encourage a variety of business models

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Business Model A

- ▶ Public Private-Partnership Approach
 - ▶ Model 1 - Private Investment with Private Partners
 - ▶ Model 2 - Public Sector Incenting Private Investment
 - ▶ Model 3 - Shared Investment and Risk

- ▶ Potential City Initiatives
 - ▶ Extend connectivity to City-owned buildings
 - ▶ Create a middle-mile network in the focus areas (\$5.4 million for dark fiber)
 - ▶ Create an FTTP network for business areas (\$16 to \$22 million for dark fiber)
 - ▶ Create an FTTP network for residential and business areas (\$116 million for dark fiber)

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Business Model B (not recommended)

- ▶ City Ownership Option - Retail Services
 - ▶ City-wide FTTP network to every home and business
 - ▶ High-level cost estimate: \$198 Million
 - ▶ 50 percent take rate (for cost estimate only)
 - ▶ Maintenance costs of up to \$4 Million per year

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Questions

Contact Information

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