

Written materials relating to an item on this agenda that are distributed to the legislative bodies within 72 hours before the item is to be considered at its regularly scheduled meeting will be made available for public inspection at the City Clerk's Office, 300 West Third Street 4th Floor during customary business hours. Agenda reports are also on the City of Oxnard web site at www.oxnard.org.



This meeting is held pursuant to the State Emergency Services Act, the Governor's Emergency Declaration, and Governor's Executive Order N-29-20 to allow members of the City Council or staff to participate via teleconference.

Pursuant to the Ventura County Public Health Official's order and Governor's Executive Order N-33-20, all city buildings are temporarily closed to the public. The public is encouraged to view the meeting from home on the City's website at Oxnard.org/city-meetings, Spectrum channel 10, Frontier channel 35, or YouTube at Youtube.com/oxnardnews. Video recordings are typically available online immediately following the meeting.

The public may provide comments to the City Council via email at cityclerk@oxnard.org no later than 2:00 p.m. on the day of the meeting. Please identify the agenda item in the email Subject line.

A telephone option for public comments is also available at this time due to the State of California "Stay At Home" order. Requests to speak must be submitted no later than 2:00 p.m. on the day of the meeting. Use the form on the city's website to submit your request: Oxnard.org/city-meetings, or call the City Clerk's Office at (805) 385-7803, or email your request to cityclerk@oxnard.org (identify the agenda item in the Subject line).

AGENDA
OXNARD CITY COUNCIL
HOUSING AND ECONOMIC DEVELOPMENT COMMITTEE
Council Chambers, 305 West Third Street
April 14, 2020
Regular Meeting - 4:30 to 5:45 PM

A. ROLL CALL, POSTING OF AGENDA, FLAG SALUTE

B. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

At this time, the legislative body will consider public comments for a maximum of fifteen minutes. A person may address the legislative body only on matters not appearing on the agenda and within the subject matter jurisdiction of the legislative body. Speaker cards will not be accepted after the beginning of the general public comment period. Based on the number of speaker cards submitted, the presiding officer may impose time limits per speaker. Typically, speakers are limited to two minutes, but shorter time may be established as deemed necessary. A person not able to address the legislative body at this time because the fifteen minutes expires may do so just prior to adjournment of the meeting. The legislative body cannot enter into a detailed discussion or take action on any items presented during public comments at this time. Such items may only be referred to the City Manager for administrative action or scheduled on a subsequent agenda for discussion.

C. CONSENT AGENDA

1. City Clerk Department

SUBJECT: Approval of Minutes.

RECOMMENDATION: That the Housing and Economic Development Committee approve the minutes of the March 24, 2020 regular meeting as presented.

Contact: Michelle Ascencion, (805) 385-7805

In compliance with the Americans with Disabilities Act, if you require special assistance to participate in a meeting, please contact the City Clerk's Office at 385-7803. Notice at least 72 hours prior to the meeting will enable the City to reasonably arrange for your accessibility to the meeting.

Agenda Item time estimates: (Staff Presentation / Committee Discussion / Public Comment)

D. REPORTS

1. Information Technology Department

SUBJECT: Fiber Master Plan Adoption. (45/30/15)

RECOMMENDATION: That the Housing and Economic Development Committee recommends the City Council:

1. Adopt the Fiber Master Plan; and
2. Discuss and provide direction on
 - a. Adopting a requirement that Development Agreements include deployment of fiber optic network infrastructure;
 - b. Evaluating and adopting a requirement that discretionary permit approvals include deployment of fiber optic network infrastructure; and
 - c. Creation of a broadband infrastructure development impact fee to expand and maintain broadband infrastructure.

Contact: Keith Brooks, (805) 385-7597

E. ITEMS FOR FUTURE AGENDAS

F. ADJOURNMENT

MINUTES
OXNARD CITY COUNCIL
HOUSING AND ECONOMIC DEVELOPMENT COMMITTEE
Regular Meeting
March 24, 2020

A. ROLL CALL, POSTING OF AGENDA, FLAG SALUTE

At 4:30 p.m., Chair Madrigal called to order the regular meeting of the Oxnard City Council Housing and Economic Development Committee in the City Hall Council Chambers at 305 W. Third Street, Oxnard, California. The City Clerk called the roll and announced the posting of the agenda. Members Gabriela Basua, Tim Flynn, and Chair Oscar Madrigal were present via telephone.

Staff members present were Ashley Golden, Assistant City Manager; Kenneth Rozell, Chief Assistant City Attorney; Jeffrey Lambert, Community Development Director; Rosie Ornelas, Economic Development Manager; and Michelle Ascencion, City Clerk.

B. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA (None received.)

C. CONSENT AGENDA

City Clerk Department

1. SUBJECT: Approval of Minutes.

RECOMMENDATION: That the Housing and Economic Development Committee approve the minutes of the February 25, 2020 regular meeting as presented.

It was moved by Member Flynn, seconded by Chair Madrigal, to approve the minutes as presented.
VOTE: Flynn and Madrigal voted in favor; Basua abstained. The motion carried 2-0-1.

D. REPORTS

Community Development Department

1. SUBJECT: Economic Development Strategy Preliminary Report.

RECOMMENDATION: That the Housing and Economic Development Committee receive information and provide input on the proposed Economic Development Strategy and three-year action plan.

The Community Development Director introduced the Economic Development Manager, who gave a report. Discussion ensued among the Committee and staff. No formal action was required.

E. ITEMS FOR FUTURE AGENDAS

Member Flynn requested an item on other future plans and strategies from the Economic Development division.

F. ADJOURNMENT

There being no further business on the agenda, and without objection, Chair Madrigal adjourned the meeting at 5:01 p.m.

MICHELLE ASCENCION, CMC
City Clerk

OSCAR MADRIGAL
Chair

DRAFT



**HOUSING AND ECONOMIC DEVELOPMENT COMMITTEE
AGENDA REPORT
REPORTS
AGENDA ITEM NO. D.1**

DATE: April 14, 2020
TO: Housing and Economic Development Committee
FROM: Keith Brooks, Chief Information Officer, (805) 385-7597, keith.brooks@oxnard.org
SUBJECT: Fiber Master Plan Adoption. (45/30/15)

RECOMMENDATION

That the Housing and Economic Development Committee recommends the City Council:

1. Adopt the Fiber Master Plan; and
2. Discuss and provide direction on
 - a. Adopting a requirement that Development Agreements include deployment of fiber optic network infrastructure;
 - b. Evaluating and adopting a requirement that discretionary permit approvals include deployment of fiber optic network infrastructure; and
 - c. Creation of a broadband infrastructure development impact fee to expand and maintain broadband infrastructure.

BACKGROUND

EXECUTIVE SUMMARY

The City, in partnership with Magellan Advisors, developed a Fiber Master Plan to realize the goals as outlined in the City's Information Technology Master Plan and Fiber Master Plan mandate as adopted by Council. The Plan provides a blueprint for how the City can leverage its investment in fiber optic infrastructure for the benefit of government innovation, businesses and anchor institutions, and possible future educational and residential use. The fiber network could enhance existing and future commercial zones and developments by providing Internet service directly to businesses and institutions through third party public-private partnerships (P3) at competitive rates. It could also allow the City the flexibility of later providing Smart City applications such as security cameras for police and traffic control, municipally-provided Wi-Fi internet access, support for smart sensors, smart parking and traffic detection, and pedestrian/bicycle safety technologies, among many others. In short, there are many possibilities for fiber in Oxnard.

In summary the plan contains the following recommendations:

1. Implement Ordinances and Policies Supporting a Broadband Infrastructure Program
 - Establish Broadband Account in the accounting systems
 - Develop and Approve Dig Once Policy
2. Develop a Broadband Governance Program for Oversight
3. Launch Pilot P3 Broadband Program Using Existing Fiber Assets

- Approve Funding for Minimum Cost Pilot
 - Issue RFP for Public-Private Partners (P3) to Offer Broadband Services to Businesses
4. Connect Directly to Internet Points of Presence
 5. Develop Dark Fiber Leasing Programs
 6. Expand the Fiber Network
 7. Establish a Smart City Technology Governance Committee
 8. Develop a Communications Strategy for Broadband Program.

The Plan recommends a phased program strategy for the City of Oxnard to enable economic growth by offering high-speed broadband to Oxnard businesses at competitive rates.

One of the approaches to expand fiber as advocated in the Plan is leveraging new development to deploy fiber optic infrastructure. Staff recommends City Council consider a requirement to include broadband infrastructure as part of new Development Agreements and discretionary permit approvals, and create a fiber/broadband development impact fee to expand and maintain fiber optic network infrastructure.

INTRODUCTION

The Fiber Master Plan was funded in 2016 and in January of 2017 the City’s IT Department established a Technology Governance (Tech Gov) Fiber Master Plan Subcommittee to steer the City through the Plan's request for proposal (RFP) process. The City awarded the Fiber Master Plan contract to Magellan Advisors in March of 2018.

Why Fiber?

While other broadband access technologies exist using copper and wireless, fiber is much more future-proof. The next wave of technologies — especially artificial intelligence, the Internet of Things (IoT) and augmented reality — demand increasingly robust connections from both home and office. Fiber technology easily scales to the Gigabit speeds these services demand. Fiber is critical to the future of the smart home and the Smart City, since many of today's most connected cities determined that laying fiber is the foundation upon which many of tomorrow's most connected services will be built.

Fiber as Critical Infrastructure

The future of cities is one of resiliency, diversity, sustainability, and connectedness built on an infrastructure that anticipates the current and future needs of populations. Municipalities are increasingly recognizing the need to mitigate the risks posed by the “digital divide” by taking the opportunity to plan for initiatives that aim to improve the quality of life, expand economic development, and equip communities with improved technologies including the Internet and Smart City applications. To ensure that the needs of communities are met, governments are positioning fiber-optic infrastructure into a role as another utility in addition to power, gas and water. In fact, the United States Department of Agriculture ("USDA") 2017 Broadband Opportunity Council Report finds, in part, that:

“Broadband has steadily shifted from an optional amenity to a core utility for households, businesses and community institutions. Today, broadband is taking its place alongside water, sewer and electricity as essential infrastructure for communities.”

Cities across the country and in California are using municipal fiber networks to attract new competitively priced fiber and wireless service providers through opening commercial access to public broadband assets. Because local governments are not constrained by the profit motives held by retail internet service providers

(“ISPs”), cities are able to leverage their infrastructure, and through public-private partnerships (“P3s”), create effective broadband alternatives for area businesses and anchor institutions at lower costs with increased availability and higher bandwidth.

Oxnard’s Existing Fiber Network

The City of Oxnard’s existing fiber network system backbone spans 38.45 miles of underground conduit with fiber running through 31.81 miles of that conduit and copper wire running through 6.56 miles. Conduit is the tube or channel for conveying the fiber; you can think of conduit like a subway system while fiber is the actual subway. The existing network serves as a communications link for major City facilities and systems, including the traffic systems, fire stations, information technology data centers, and remote police locations. The majority of the existing fiber network system across the City was built in 2013, with an additional expansion added in 2016.

DISCUSSION

The Broadband Market in Oxnard

Magellan Advisors completed a Market Assessment of current commercial services offerings in the City, and worked with City staff in performing community outreach to assess Oxnard businesses’ view on the current state of broadband in the city.

An online broadband survey ran from August through November of 2018 to gauge satisfaction levels on a variety of service parameters. The results were striking.

- 71% of surveyed businesses stated that high speed broadband was either absolutely essential or very important to their day-to-day operations.
- 80% expect the need for high-speed internet access to increase somewhat or substantially over the next 3-5 years.
- 58% reporting being somewhat or very dissatisfied with current prices.
- 81% say very fast and inexpensive broadband is a priority to stay and grow in Oxnard.
- 75% supported community-based broadband network solutions to address these issues.

In addition to servicing the business community, educational institutions are also relying more heavily on high speed broadband networks. Students now have the ability, and in some cases the mandate, to take classes online. Last-mile fiber can make direct eye contact, full-size and fully human interaction with classmates and teachers, classroom collaboration and real-time participation in labs a reality.

Reina Bejerano, the Director for Learning Support Services and Chief Technology Officer for the Oxnard Union High School District, states:

“...with curriculum increasingly becoming more of a digital platform, it is our responsibility as educators to meet the needs of our students by having a robust infrastructure and network in place to deliver digital curriculum in its many forms, whether that be as simple as a digital textbook, an interactive game or activity, a demonstration, or a virtual experience...”

FIBER MASTER PLAN RECOMMENDATIONS

The Plan outlines specific recommendations in leveraging existing and future fiber optic network infrastructure to meet the goals outlined in the City’s IT Master Plan and Fiber Master Plan mandate as adopted by Council. Recommendations (1), (3) and (6) are discussed below.

Implement Ordinances and Policies Supporting a Broadband Infrastructure Program

Oxnard should create a “Dig Once” policy and modify its wireless ordinance to control right of way management and coordination and to incorporate broadband infrastructure expansion. These policies will lead to future opportunities for partnerships and reduce costs of new fiber network extensions.

Dig Once refers to a policy that fosters cooperation among entities (especially utilities) that occupy public rights-of-way. Generally Dig Once policies require planning and coordination for construction projects in the public right-of-way ("ROW"). For example, if the gas company wants to open a street to fix a gas line, it would have to coordinate with the City to ensure we only "dig once." The concept can also extend to required placement of conduit for fiber optics whenever the ground is opened. Staff are reviewing the requirements, impact and timeline to develop and present Council with a Dig Once policy appropriate for Oxnard. Should Council approve the Fiber Master Plan it will take about 12 months for staff to develop the policy.

The City’s wireless ordinance needs to be updated to address current wireless technologies, wireless facilities deployment demands and regulatory practices. To implement the Fiber Master Plan staff will modify the City’s wireless ordinances to address 5G and other “Smart City” sensor deployments prioritizing utilization of City vertical assets and fiber optic network infrastructure with a placement priority at major intersections in the right-of-way (ROW). Should Council approve the Master Plan, staff estimates approximately 18 months to present Council with a modified ordinance.

Launch Pilot P3 Broadband Program Using Existing Fiber Assets (including funding for the costs of the pilot)

The Plan recommends the city follow a similar path of many other municipalities across the country and in California by opening access to public broadband assets through public-private partnerships (“P3”) with Internet service providers. This model:

1. Permits Oxnard to retain public ownership of assets;
2. Outsources broadband service to possibly multiple Internet service provider partners;
3. Allows quickest time to market for offering Internet services through a pilot to interested businesses;
4. Creates new revenue streams; and
5. Reduces program risks.

The Plan recommends Oxnard launch a pilot program by developing and issuing a Request for Proposals (RFP) to identify one or more P3s to offer broadband services using existing Oxnard-owned assets. The RFP could open the possibility of offering broadband services to community anchor institutions and residential areas.

Magellan identified the lowest cost entry for the pilot broadband program, covering electronics, RFP preparation and evaluation costs. Entry excludes the costs of lateral construction and customer premise equipment at subscriber sites, which would be determined as part of the P3 Agreement. Minimum entry costs for the pilot are estimated at \$274,503.

Expand the Network

The Plan outlines expansion phases including replacing copper twisted wire pair sections to fiber, building a pre-designed phase to support the city SCADA network and other “opportunistic” builds. Some of these expansion segments would provide resiliency to the network by creating alternate paths to the city’s data center, and allow P3s closer access to residential multi-dwelling units and some of the less advantaged areas of Oxnard.

Magellan recommends expansion take place through the policy initiatives outlined in the Plan, public projects,

new development, or other open trench opportunities.

STAFF RECOMMENDATIONS FOR IMPLEMENTATION OF THE PLAN

The Plan recommends that the City consider requiring any licensee who is permitted to install facilities underground to provide duct/conduit space for the City's use to extend its network. Staff has begun reviewing approaches to meet this recommendation which include the following:

1. Including a requirement to install municipal fiber optic infrastructure in future Development Agreements (specifically mentioned in the Plan)
2. Developing standard conditions of approval for future development projects to require any licensee who is permitted to install facilities underground to provide fiber optic infrastructure (duct/conduit space) for the City's use to extend its network. These conditions of approval would govern the deployment of fiber optic infrastructure and the inclusion of broadband infrastructure.
3. Creating a fiber/broadband development impact fee to expand and maintain fiber optic network infrastructure.

These three approaches warrant consideration and implementation but with further discussion and review of conditions and mechanisms for exceptions, enforcement and impact to be determined. Alternatively, the city could rely on a Dig Once policy for expansion of the network. However, the Dig Once policy will have its own set of conditions, exceptions and limitations and therefore restrict broadband infrastructure deployment. Addressing infrastructure deployment in the planning stages of development will yield better opportunities to proactively manage infrastructure growth with greater control and opportunity for targeted expansion. Taking no action through any of the approaches outlined above will result in severely diminished opportunistic expansion of the City's fiber optic infrastructure.

Should Council approve these recommendations, staff would require up to 18 months to present findings, and make final recommendations.

STRATEGIC PRIORITIES

This agenda item supports the Quality of Life strategy. The purpose of the Quality of Life strategy is to build relationships and create opportunities within the community for safe and vibrant neighborhoods, which will showcase the promising future of Oxnard. This item supports the following goals and objectives:

- Goal 1. Improve community safety and quality of life through a combination of prevention, intervention, and suppression efforts that address crime and underlying issues.
- Goal 3. Strengthen neighborhood development, and connect City, community and culture.

This agenda item supports the Organizational Effectiveness strategy. The purpose of the Organizational Effectiveness strategy is to strengthen and stabilize the organizational foundation of the City in the areas of Finance, Information Technology, and Human Resources, and to improve workforce quality while increasing transparency to the public. This item supports the following goals and objectives:

- Goal 1. To help foster a healthy and accountable corporate foundation by strengthening the support functions of the organization, which include Finance, Information Technology and Human Resources.
- Goal 3. Focus on creating a culture of learning and talent development that will lead to a quality workforce which meets the needs of our community.

This agenda item supports the Economic Development strategy. The purpose of the Economic Development strategy is to develop and enhance Oxnard's business climate, promote the City's fiscal health, and support economic growth in a manner consistent with the City's unique character. This item supports the following

goals and objectives:

Goal 1. Create vibrant and economically sustainable commercial, industrial and retail industries throughout the City.

Goal 2. Enhance business development throughout the City. Objective 2a. Develop a strong citywide economy which attracts investment, increases the tax base, creates employment opportunities, and generates public revenue.

Goal 3. Enhance business retention and attraction.

Goal 5. Revitalize Oxnard's downtown and pursue economic development opportunities.

This agenda item supports the Infrastructure and Natural Resources strategy. The purpose of the Infrastructure and Natural Resources strategy is to establish, preserve and improve our infrastructure and natural resources through effective planning, prioritization, and efficient use of available funding. This item supports the following goals and objectives:

Goal 1. Ensure Master plans for all City infrastructure are current, synchronized and consistent with the General Plan.

Goal 3. Ensure Funding is adequate to meet the goals of the master plans.

FINANCIAL IMPACT

No budget adjustment is necessary. Initial stages of the Fiber Master Plan can be funded through existing appropriations in the Information Technology Fund (731), by redirecting some savings in the telecommunications portion of the Fund that the Information Technology Department has generated in the last two years.

The Information Technology Department's (the "Department") Communications & Security Systems Division has completed an audit of telecommunications carrier lease line circuits (telephone lines, Internet and Data lines and services). As a result, the Department has been able to eliminate a significant number of lines no longer in use, which already has resulted in, and will continue to result in, hard-dollar savings in the Department's telecommunications budget allocated as part of the Information Technology Fund, which is an internal service fund.

The resulting dollar savings will benefit all the funds that pay into the Information Technology internal service fund. For example, the Water Fund, the Wastewater Fund, and the Environmental Resources Fund will all see their future charges from the Information Technology Fund reduced by their share of the amount of the savings from the audit of the telecommunications carrier lease line circuits.

To finance the early part of the operating costs of the Fiber Master Plan, staff proposes to keep the General Fund's share of those savings (\$90,000 so far; \$54,900 per year beginning in FY 2020-21) in the Information Technology Fund. These funds will be used to invest in broadband assets as described in the next paragraph and support operational and maintenance costs as part of the Fiber Master Plan.

The Fiber Master Plan calls for an upfront \$244,503 infusion of capital funds to purchase fiber optic network hardware. Staff will return to this committee in the future to discuss this transaction in more detail. This hardware will be used to transition Oxnard's closed fiber optic network to an open architecture accessible to broadband and "smart city" application providers as specified in the Plan.

Prepared by: Kevin Pisacich, Systems Administrator

ATTACHMENTS

1. Magellan Fiber Master Plan City of Oxnard Cover Page
2. Fiber Master Plan Presentation

Full Version Available at Oxnard Main Library and City Clerk's Office, and on City website:
<https://www.oxnard.org/wp-content/uploads/2020/03/Magellan-Fiber-Master-Plan-City-of-Oxnard.pdf>

CITY OF OXNARD

Fiber Master Plan



Fiber Master Plan

Becoming a Fiber City

*Keith Brooks, Chief Information Officer
Kevin Pisacich, IT Manager - Comm. & Security Systems
Jory Wolf - VP Digital Innovation, Magellan Advisors*



Background

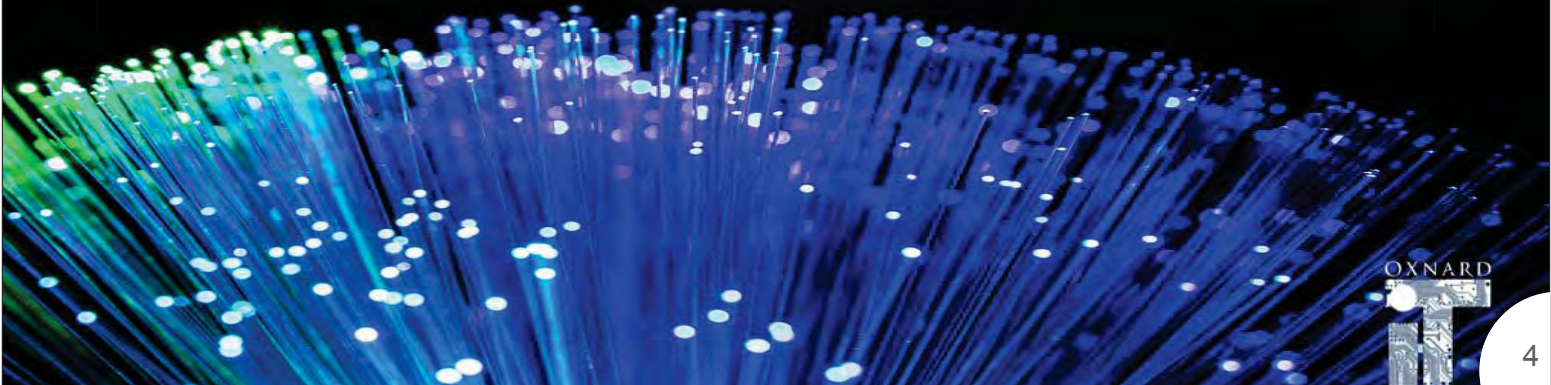
"The City should consider leveraging its current fiber infrastructure and resources, including shared resources available through agreements with other public agencies, in order to position itself to become a 'Fiber City.'" - IT Master Plan Consultant

32 Miles of Fiber



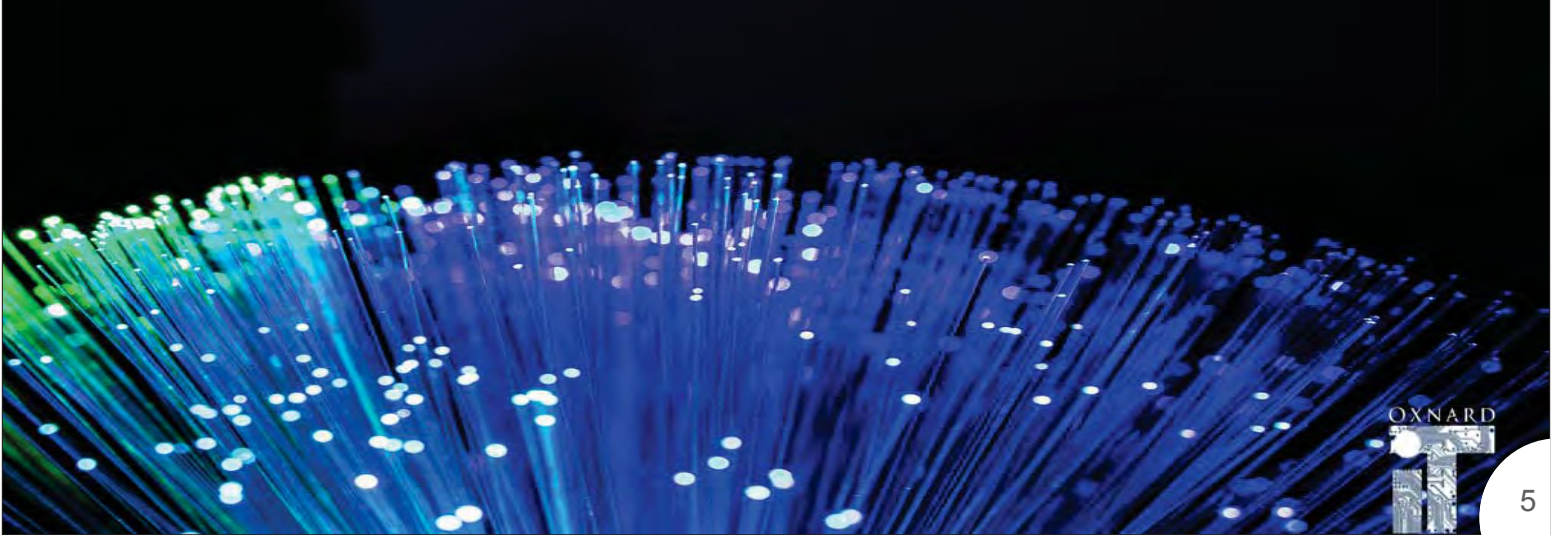
Vision

This is a crucial pathway to economic development and the ability to attract advanced businesses that offer high-paying jobs in the City of Oxnard. Access to high-speed internet and data networks will also give existing businesses the tools they need to expand.



Question:

Who would move into a house that had no Internet or slow Internet?



Internet Speed Analysis: Top 200 Cities

Most Impacted:

- Oxnard, CA
- Austin, TX
- Winston Salem, NC

42%

BROADBANDNOW®



What is Broadband?

High-speed Internet



7

How does it work?

Today

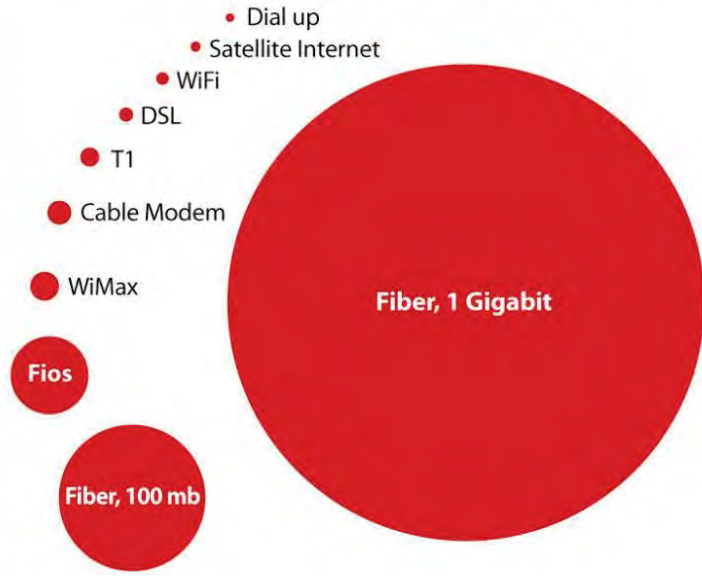
vs.

After lighting up fiber?



8

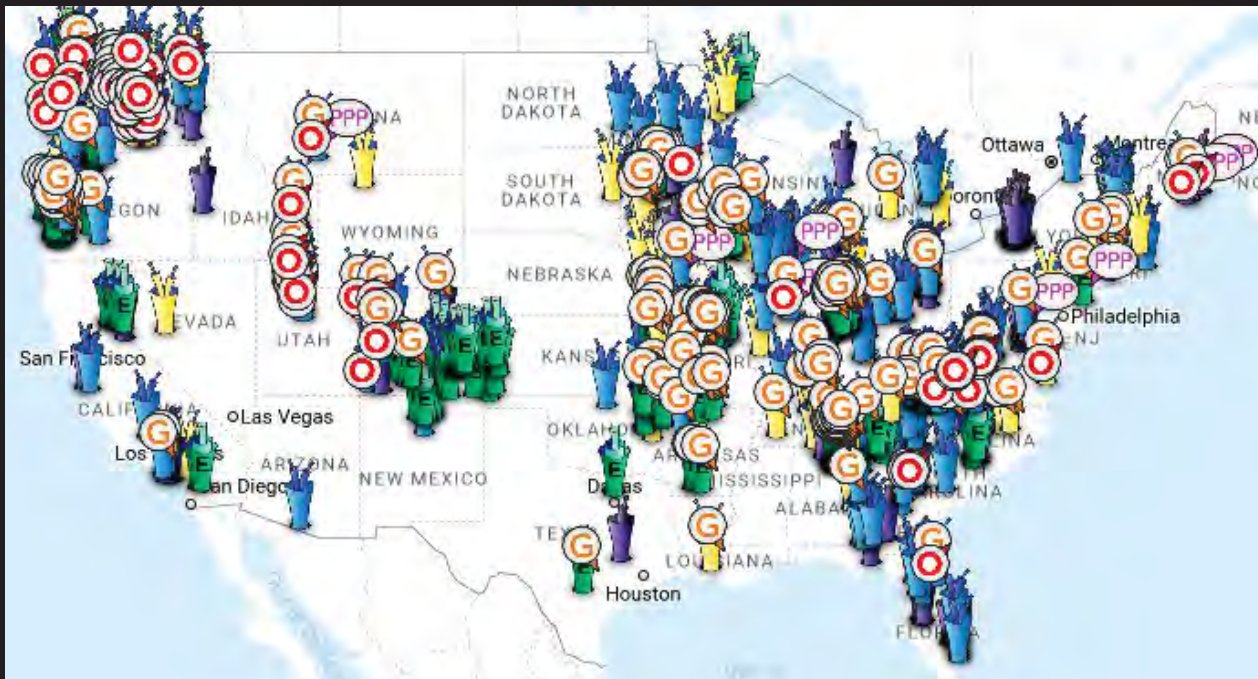
Bandwidth/Connectivity Comparisons Dial-up Modem to Gigabit Ethernet



By Chad Trovinger/Graphic Designer

Fiber delivers
UNPARALLELED SPEED

Municipal Fiber Networks



Foundational principles

Network Design

Publicly
Owned

Open
Access

Demand
Driven

Phased
Expansion



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About Magellan Advisors

Magellan planned, built and operated over 50 next-generation broadband networks across the US valued at over \$1B USD.

250

250 PUBLIC &
PRIVATE CLIENTS
SERVED

50+

OVER 50 NETWORKS
IMPLEMENTED
NATIONWIDE

\$1B

OVER A BILLION IN
BROADBAND
PROJECTS FUNDED

1M

1 MILLION FIBER TO
THE PREMISE
CONNECTIONS

1K

1,000 COMMUNITY
ANCHORS
CONNECTED

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Magellan Advisors: West Coast Engagements

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 Inglewood, CA
City of Manhattan Beach, CA
City of Marion, CA
City of Mission Viejo, CA
City of Santa Ana, CA



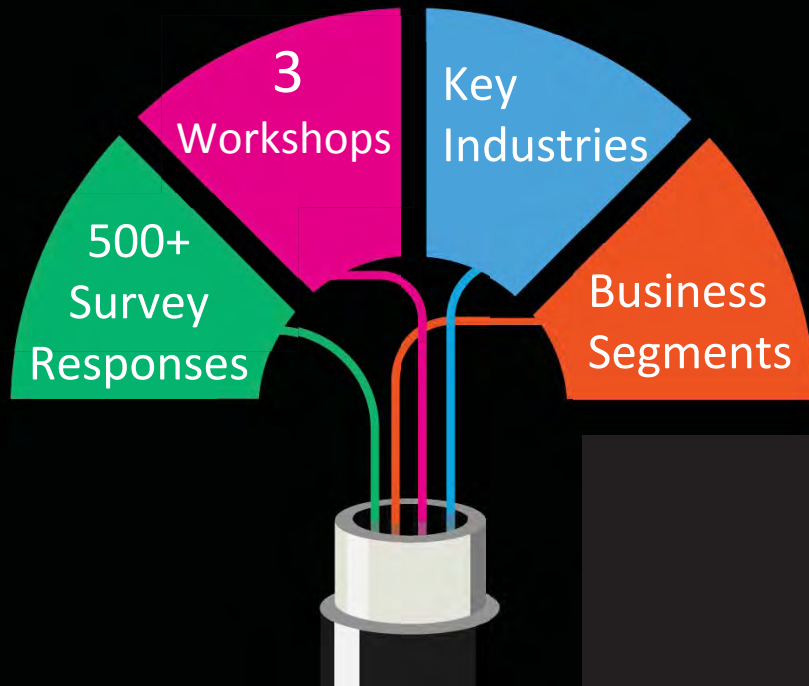
City of Rancho Cucamonga, CA
City of Riverside, CA
County of Sonoma, CA
City of San Leandro, CA
County of Stark, OH
City of Vallejo, CA
Port of Walla Walla, WA
City of West Hollywood, CA
Port of Whitman, WA
County of Yolo, CA
15 South Bay Cities COG, CA

Research & Outreach Efforts

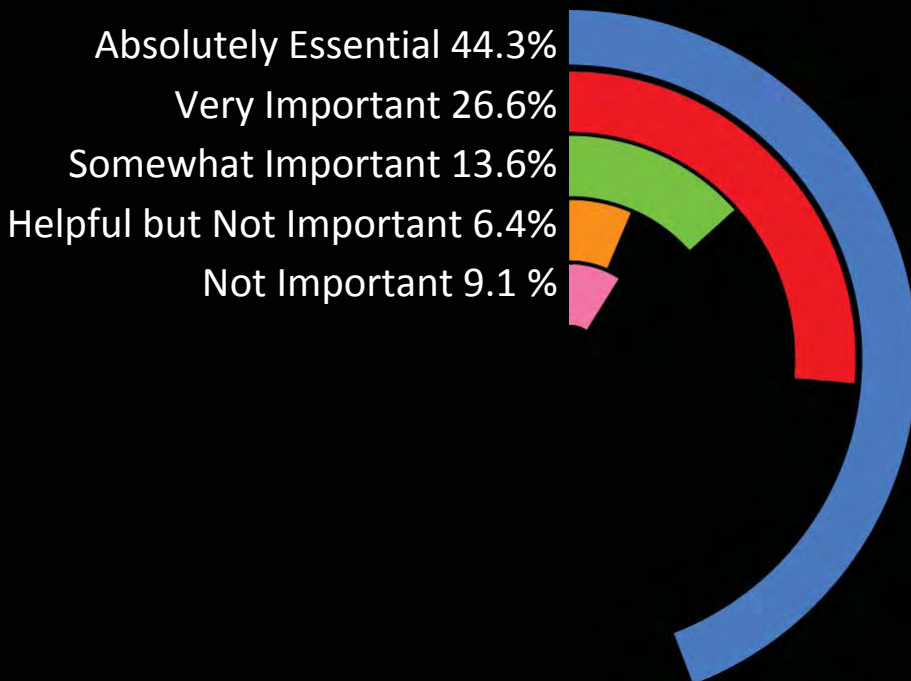
- Discussions with other cities
- Business Broadband Survey
- Interviews with every department
- Interviews with City Council Members
- Meetings with Anchor Institutions
- Meetings with Businesses
- Meetings with Public Sector Partners



Engagement Summary



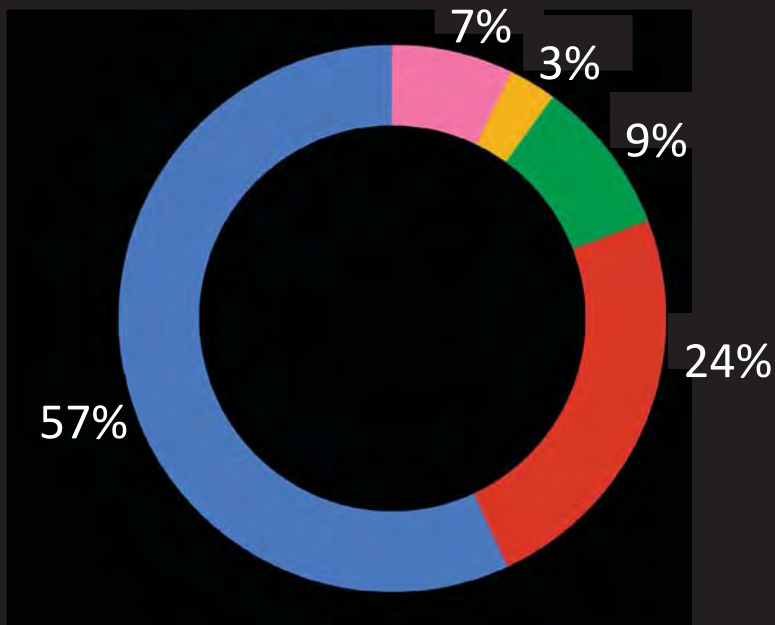
Survey Results



Surveyed businesses see broadband as **ABSOLUTELY ESSENTIAL** for a variety of their day-to-day operations.



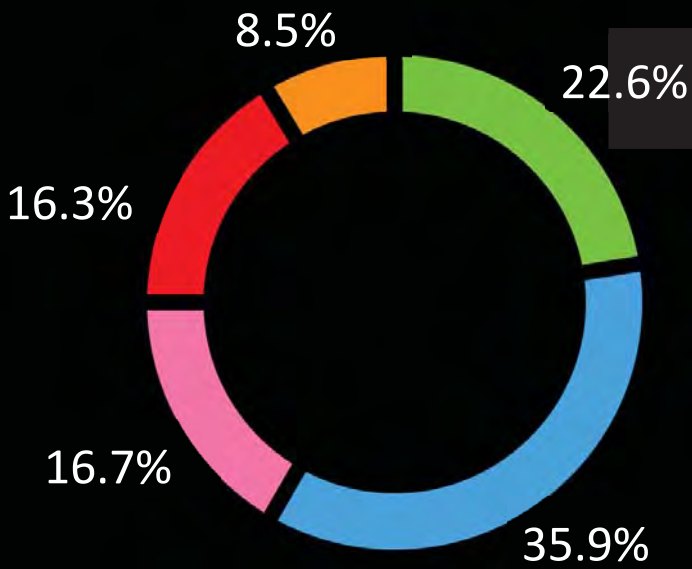
Survey Results



81% say **Very fast and inexpensive broadband is a PRIORITY to STAY and GROW in Oxnard**



Survey Results



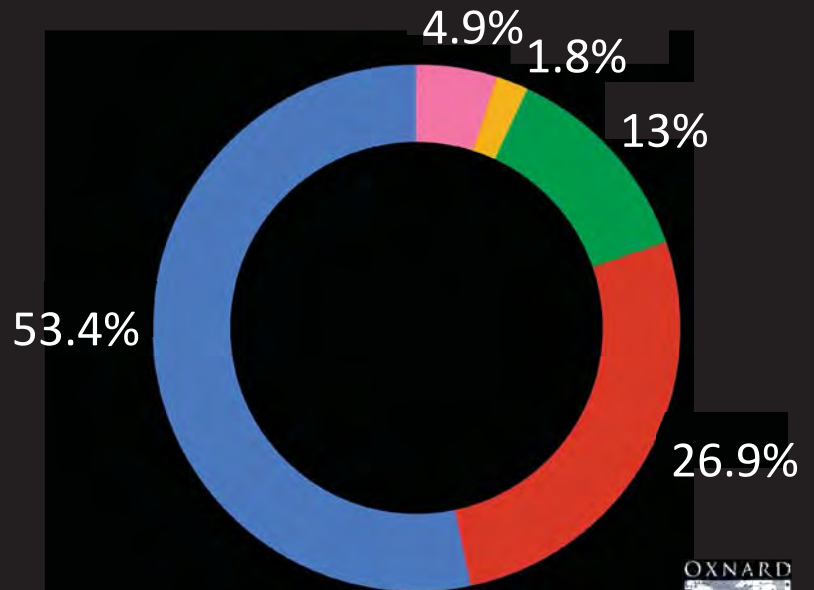
PRICE was the measurement of **highest dissatisfaction**

- Very dissatisfied
- Somewhat dissatisfied
- Neither/Not Sure
- Somewhat satisfied
- Very satisfied



Survey Results

Surveyed businesses expect the need for high-speed internet access to increase somewhat or substantially over the next 3-5 years.



Results: Key Issues

“It's too expensive to have here at the office, so I use my phone and broadband at home if necessary.”

“It's only a matter of time before we need faster Internet access as technologies improve and expand.”

“A predictably good and fast internet service is critical to our business.”

“Internet is the future of business and education. We need a reliable, fast, and secure broadband service but for that future.”



Overview of Fiber Plan Recommendations

1. Implement policies supporting the broadband program
2. Develop governance programs for broadband
3. Launch P3 pilot program using existing assets
4. Expand the fiber network
5. Connect to an Internet Point of Presence
6. Develop a dark fiber leasing program
7. Establish a Smart City Technology Governance Subcommittee
8. Develop a communications strategy for broadband



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Broadband Policies



“Dig Once” promotes planning and coordination for construction projects in the public right-of-way (“ROW”).

Wireless ordinances address 5G and other “Smart City” sensor deployments.



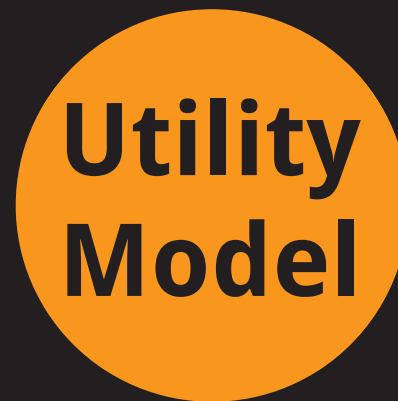
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Pilot and Expansion Phases



RFP - P3s & Utility Models

Public Private Partnerships

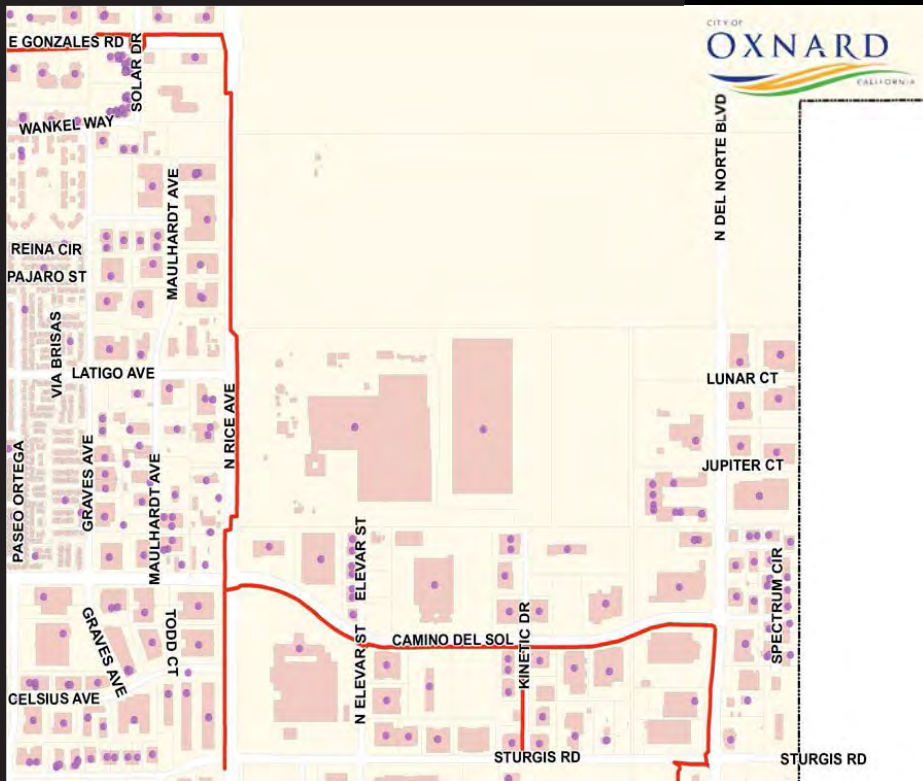
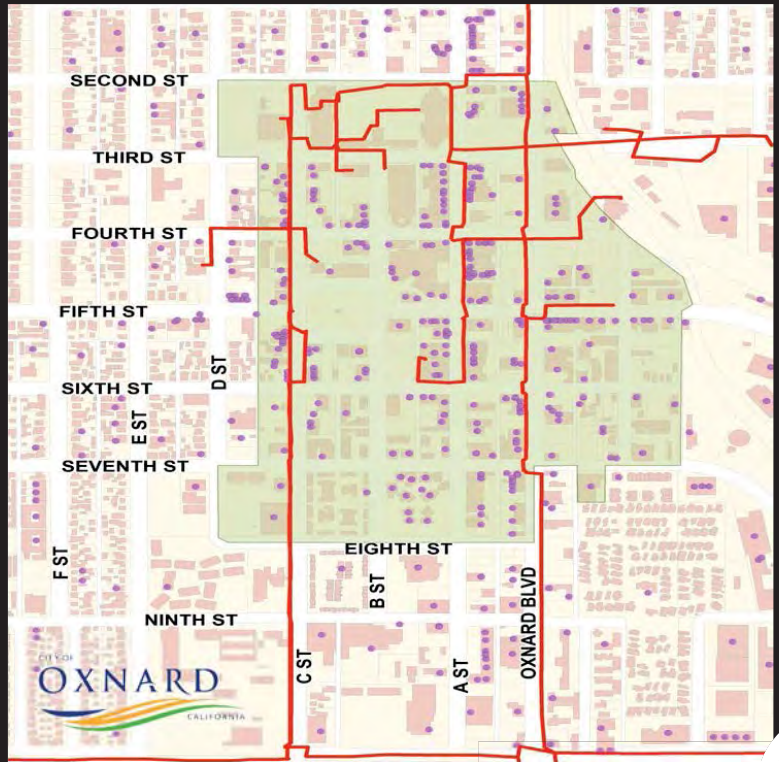


LAUNCH IT!



Pilot Phase

Downtown Core



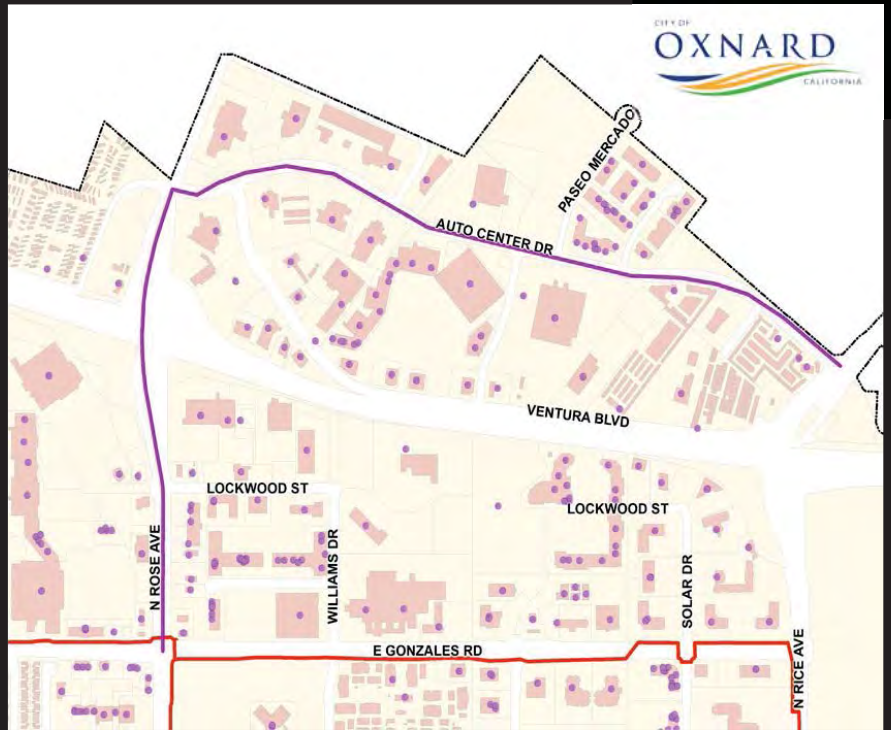
Pilot Phase

Eastern Business Parks



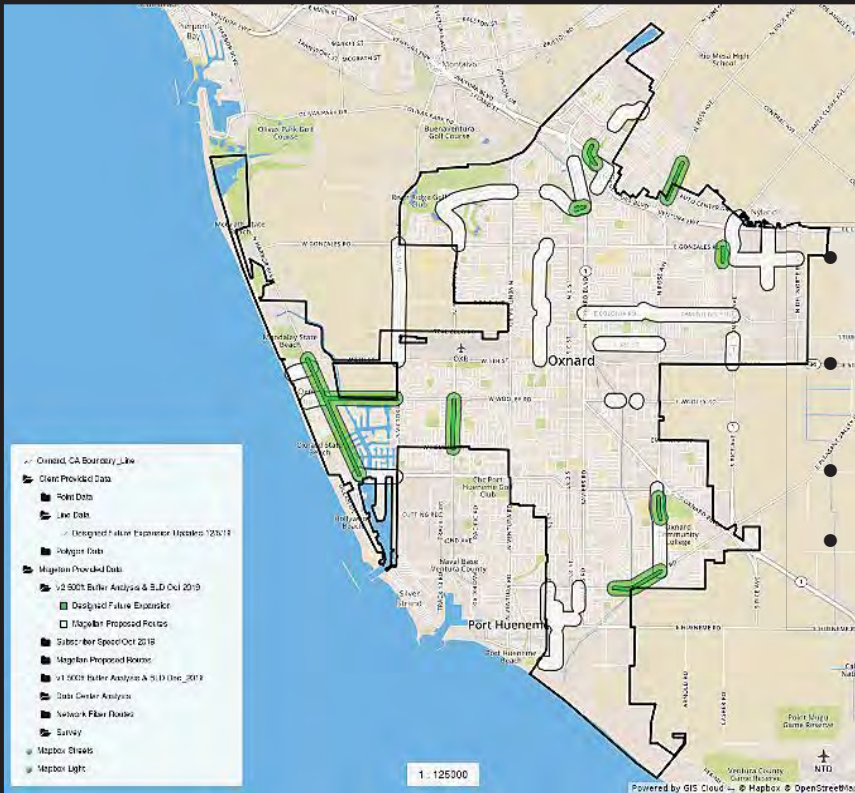
Pilot Phase

Auto Center Dr



Opportunistic Build

- Replace old copper
- New developments
- Public Works projects



Opportunistic Expansion

Dig Once
Joint Trench Leased Line Replacement
Development Agreements
Abandoned Sewer Lines **Residential Broadband**
Earthquake Seismic Array **Wireless carrier revenue**
Traffic Management
Utilities Monitoring & Metering **IoT**



Leveraging Development



Discretionary permits

Development
Agreements

Development Impact Fees



What will it do for Oxnard?



More Internet Service Provider Options

Telemedicine

Museum Educational Seminars

City-Wide Wifi

Lower Telco "Leased Line" Costs

E-Rate / CENIC for Schools

High-Resolution Security Cameras

Homework Hot Spots

Traffic Signals

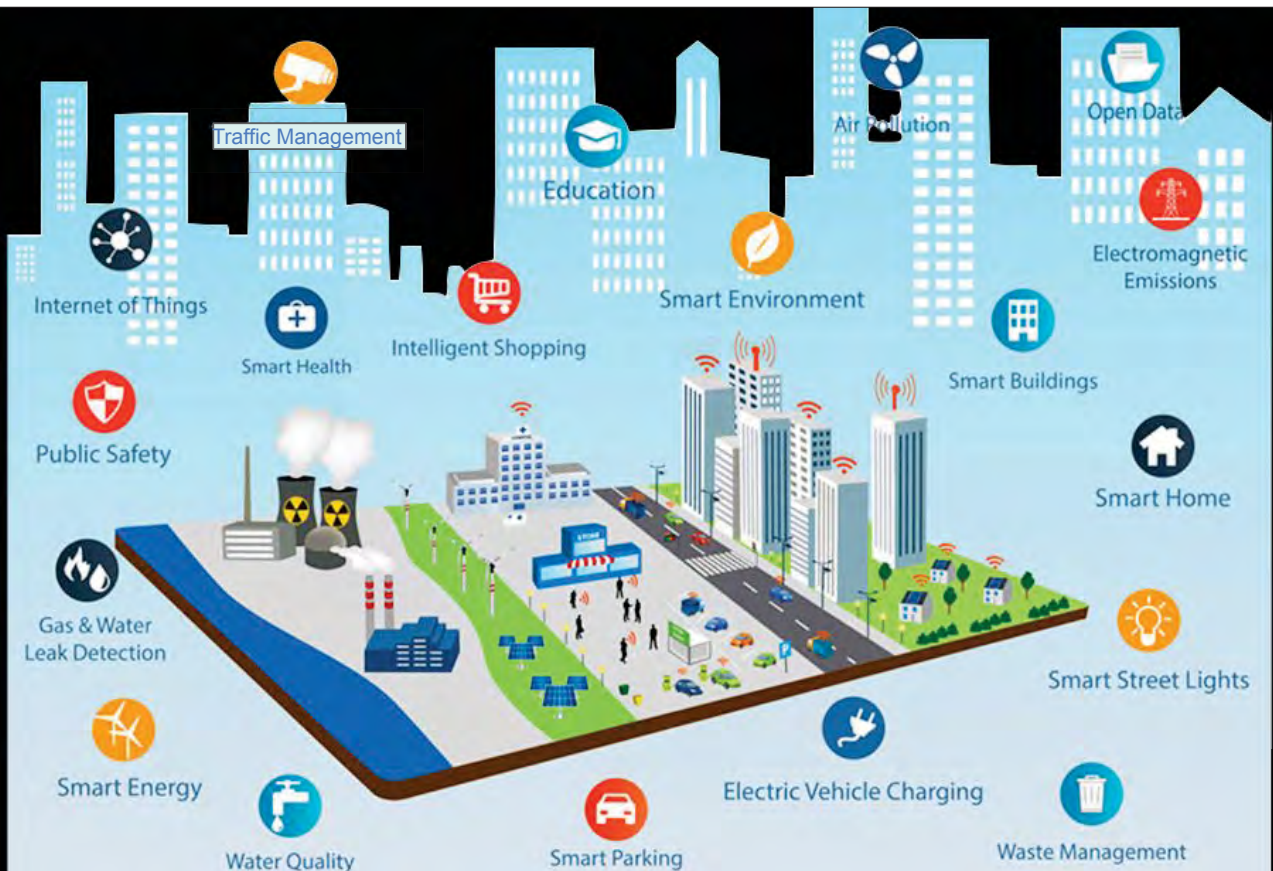
IoT

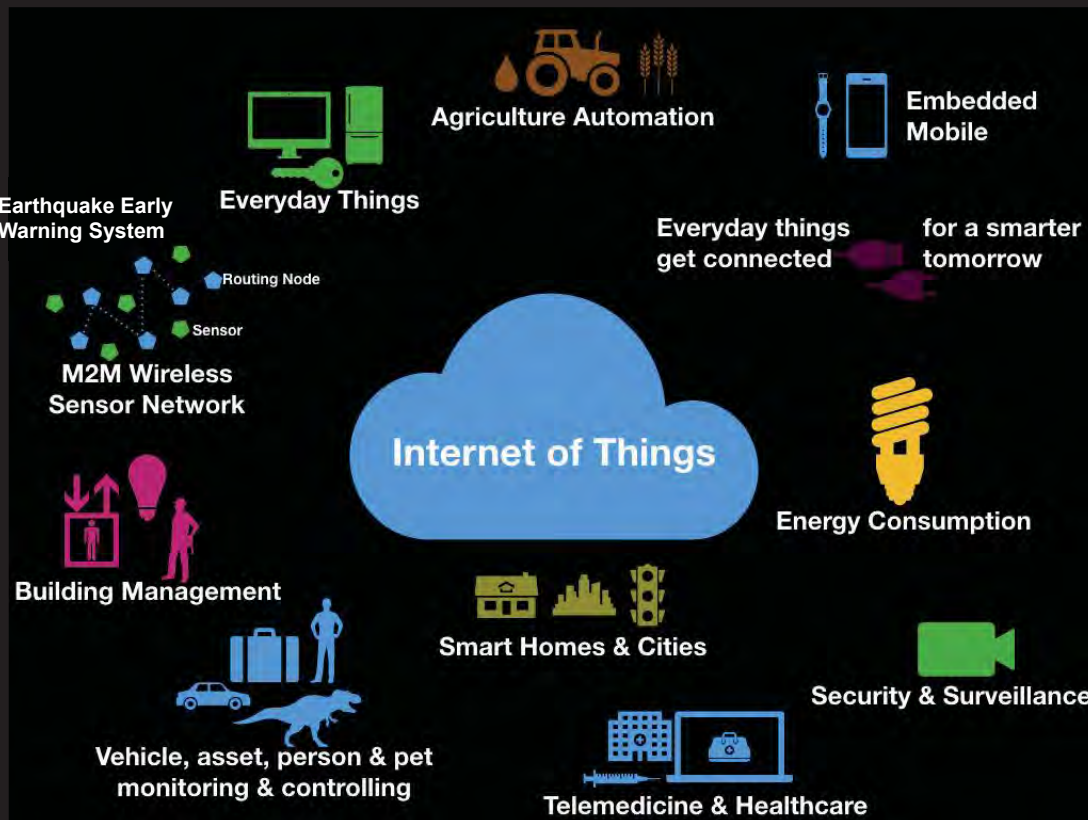
Utilities Monitoring & Metering

Wireless carrier revenue



Smart Cities





Potential Municipal IOT Devices?

- | | | | | |
|---------------------|--------------|---------------------------|-----------------------------|----------------------|
| Smart meters | Smartphones | Street Lights | Smart Refuse Bins | Parking Availability |
| Parking Enforcement | TVs | Vehicles | Sewage Flow | Smart Park Watering |
| Traffic Enforcement | RFID Tags | Circuit NIUs | City Building HVAC/Lighting | Road Signage |
| Smart Screens | GPS Trackers | Valves & Meters | Automobiles | Air Quality |
| Kiosks | Appliances | Traffic Signals & Sensors | Card Access | Vending Machines |
| | | Water Pumps | EV Charging Station | |



It all runs on Fiber...



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This is a new utility!

Think about fiber like you do about
Gas, Water and Power.

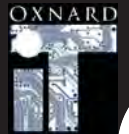


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Questions?



fiberfeedback@oxnard.org



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Resources



oxnard.org/fiber-future



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Recommendations



That the Council Committee:

- 1. Recommend Council Approval of the Fiber Master Plan; and**
- 2. Provide Direction on**
 - **Discretionary Permits**
 - **Development Agreements**
 - **Development Impact Fees**

