

AGENDA

**DES MOINES CITY COUNCIL
STUDY SESSION
City Council Chambers
21630 11th Avenue South, Des Moines**

July 2, 2015 – 7:00 p.m.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

COMMENTS FROM THE PUBLIC

Note: Comments must be limited to the items of business on the Study Session Agenda per Council Rule 10. Please sign in prior to the meeting and limit your comments to three (3) minutes.

DISCUSSION ITEMS

Item 1: 2014 SENIOR SERVICES ADVISORY COMMITTEE REPORT

Item 2: EMERGING ISSUES

Page 1 Item 3: INTERNET/TELECOMMUNICATIONS/CABLE

NEXT MEETING DATE

July 9, 2015

ADJOURNMENT

THIS PAGE LEFT INTENTIONALLY BLANK

AGENDA ITEM

BUSINESS OF THE CITY COUNCIL City of Des Moines, WA

SUBJECT: Internet/Telecommunications/Cable

FOR AGENDA OF: July 2, 2015

ATTACHMENTS:

DEPT. OF ORIGIN: Administration

DATE SUBMITTED: June 26, 2015

CLEARANCES:

☒ Legal _____

☒ Finance _____

☒ Marina _____

☒ Parks, Recreation & Senior Services _____

☒ Planning, Building & Public Works _____

☒ Police _____

☒ Courts _____

APPROVED BY CITY MANAGER
FOR SUBMITTAL: 

Purpose and Recommendation

The purpose of this agenda item is to allow the City Council to hear from and engage in a discussion with representatives of companies in the internet, telecommunications, and cable television industries regarding the current and future trends in these industries.

Motion

None.

Background and Discussion

At its November 15, 2014, goal setting retreat, the City Council decided to hold five study session meetings at which a single issue would be discussed. The state of the internet, telecommunications, and cable television industries was one of the issues chosen for discussion.

Several companies serving the Pacific Northwest were invited to attend the July 2nd City Council meeting to provide a five to ten minute presentation in which they would respond to the following questions and then be available to respond to questions and take part in a general discussion:

- Where these services are going in the future?
- What challenges and opportunities you are facing as you look forward?
- What specifically is happening in Des Moines with your company and the services you provide?
- What we can do to make our city a more robust telephone/television/internet environment for our residents?

The following companies will have representatives at the July 2nd meeting:

- Comcast – Terry Davis, Director Government Affairs/Franchising
- CenturyLink – Sue Anderson, Vice President, Operations and Don Hartzog, Senior Engineering Manager
- Sprint – Steve Leonard, RF Engineer and Kevin Foy, Western Washington Program/Project Manager
- AT&T – Carol Tagayun, Director External Affairs
- Zayo – Dylan Devito

Alternatives

NA

Financial Impact

NA

Recommendation

NA

Concurrence

NA



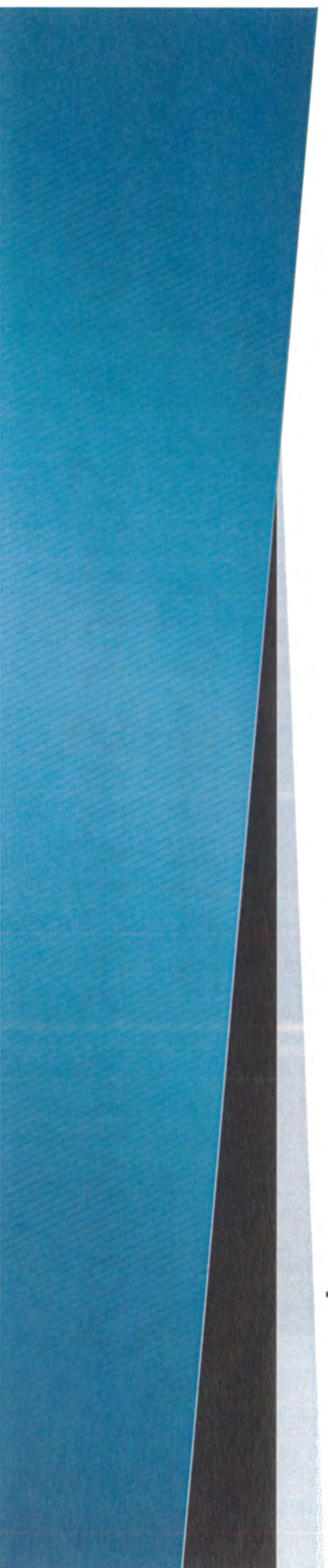
July 2, 2015

[illegible]



Des Moines / Normandy Park Senior Activity Center

Senior Services Advisory Committee
2014 Update



2015 Senior Services Advisory Committee



Each Committee Member Represents the Following Senior Services Topics:

Jeremy Nutting: Des Moines City Council committee liaison

Leanne Serrill: Senior Nutrition, Local, State, County & Federal Elected Officials liaison

Dr. Barbara Reid: Retirement Communities, Senior Nutrition

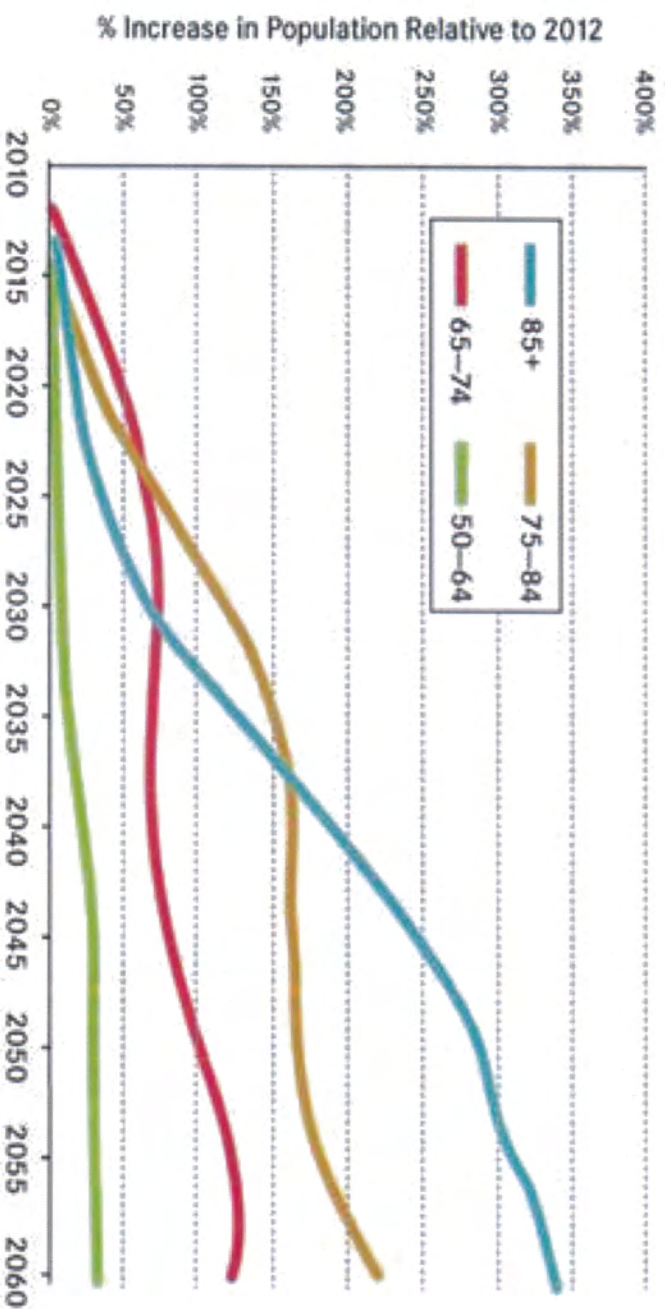
Sheila Dahlgren: Mental and Physical Health Connections, Meds Take Back, Normandy Park resident

Jill Martin: Adult Family Homes, Highline Medical Center, Meds Take Back, Mental & Physical Health Connections, Normandy Park resident

John McEvoy: Senior Center, Meals on Wheels, & Senior Shuttle

Absent: Dorothy Smith: Dental Services, Senior Scams, Places of Worship

The Older Population in Washington State



Did You Know?



- ▶ Approximately 70% of senior citizen participants are women; half of them live alone. The average age is 75.
- ▶ Compared with their peers, seniors center participants have higher levels of health, social interaction, and life satisfaction and lower levels of income.
- ▶ 75% of senior center participants visit their center 1–3 times per week. They spend an average of 3.3 hours per visit.
- ▶ Changing marital trends, such as the rise of divorces, as well as the increase in living alone among the 65 & older age group will likely increase the social support needs of aging Baby Boomers.
- ▶ Senior Centers help lower senior healthcare costs and help keep seniors in their communities.
- ▶ The 65 & older population was the only age group to see an increase in voter participation in the 2012 presidential election.

Did You Know?

➤ Senior Activity Centers are a great place for older adults to meet up, make friends, share a meal, keep fit and find entertainment and cultural opportunities in the community:

- Activities Computers Connections Culture Dancing Entertainment Events Food
- Friendship Fun Games Health Information Inspiration Intergenerational Learning Meals
- Music Outings Recreation Resources Travel Walking Wellness



Senior Center Revenue Sources

To maintain operations, the senior center must leverage resources from a variety of sources. For 2014 these included:

- ▶ Federal, state, county & local governments –
 - Des Moines – \$251,767 Normandy Park – \$25,378
- ▶ Special Events – \$5,662
- ▶ Public & Private grants – Des Moines Legacy Foundation – \$ 14,150
- ▶ Businesses – \$1,900
- ▶ Bequests – \$0 (made to Des Moines Legacy Foundation, our 501c3)
- ▶ Participant Contributions – programs, classes, trips, etc. – \$64,266
- ▶ In-Kind Donations – \$18,102 (office supplies, carpentry, transportation, etc.)
- ▶ Volunteer hours – \$15 an hour x 7,335 hours = \$110,025



2015 Committee Goals

- ▶ 1. Continue to promote aging “in community” & aging “with choice.”
- ▶ 2. Encourage connections to good nutrition for older adults in our communities.
- ▶ 3. Continue legislative outreach with local, county, and state officials.
- ▶ 4. Be a voice to the community, our area agencies serving seniors & our elected officials the importance of mental health programs for older adults in our communities.
- ▶ 5. Continue to support the safe disposal of prescription drugs.



Committee Challenges

1. The challenge of transportation for senior adults.
2. The challenge to meet the social service needs of participants who are homeless or have mental health issues.



Update



▶ A typical week at Des Moines Activity Center:

- ▶ 4 days of nutritional meals served to an average of 220 seniors.
- ▶ 294 Meals on Wheels to homebound seniors in Des Moines & Normandy Park.
- ▶ 3 health services (foot care, blood pressure, dental van).
- ▶ 6 classes (recreational & educational).
- ▶ 12 drop in activities (cards, Wii games, arts & crafts, etc.)
- ▶ 1-2 seasonal sports (softball, volleyball, Wii bowling).
- ▶ 1 day trip.
- ▶ 35 hours of Senior Shuttle transportation.
- ▶ 400 hours of volunteer support for programs & services.
- ▶ 5 fitness classes.
- ▶ 1 special presentation/lecture/workshop.
- ▶ 1 golf or horticulture outing.
- ▶ 8 loans of medical lending equipment.
- ▶ 3 information & assistance programs (legal, veterans support, & insurance).

Community Partners – It Takes a Village

- ▶ **Our Partners in Services for Seniors:**
- ▶ Area Retirement Communities – Normandy Park Senior Living, Fernwood, Wesley Homes, Judson Park
- ▶ Seniors Making Art – free art classes
- ▶ Catholic Community Services – nutrition program
- ▶ Group Health – Enhance Fitness
- ▶ Senior Services – Transportation, Senior Rights, Enhance Fitness, Senior Information & Assistance, Meals on Wheels
- ▶ AARP – Defensive Driving
- ▶ METRO – Senior Transportation
- ▶ Des Moines Legacy Foundation – funding
- ▶ ComfortKeepers, Stafford Healthcare – special events
- ▶ Normandy Park Cove – classroom space
- ▶ Des Moines Area Farmers Market
- ▶ Des Moines Area Food Bank





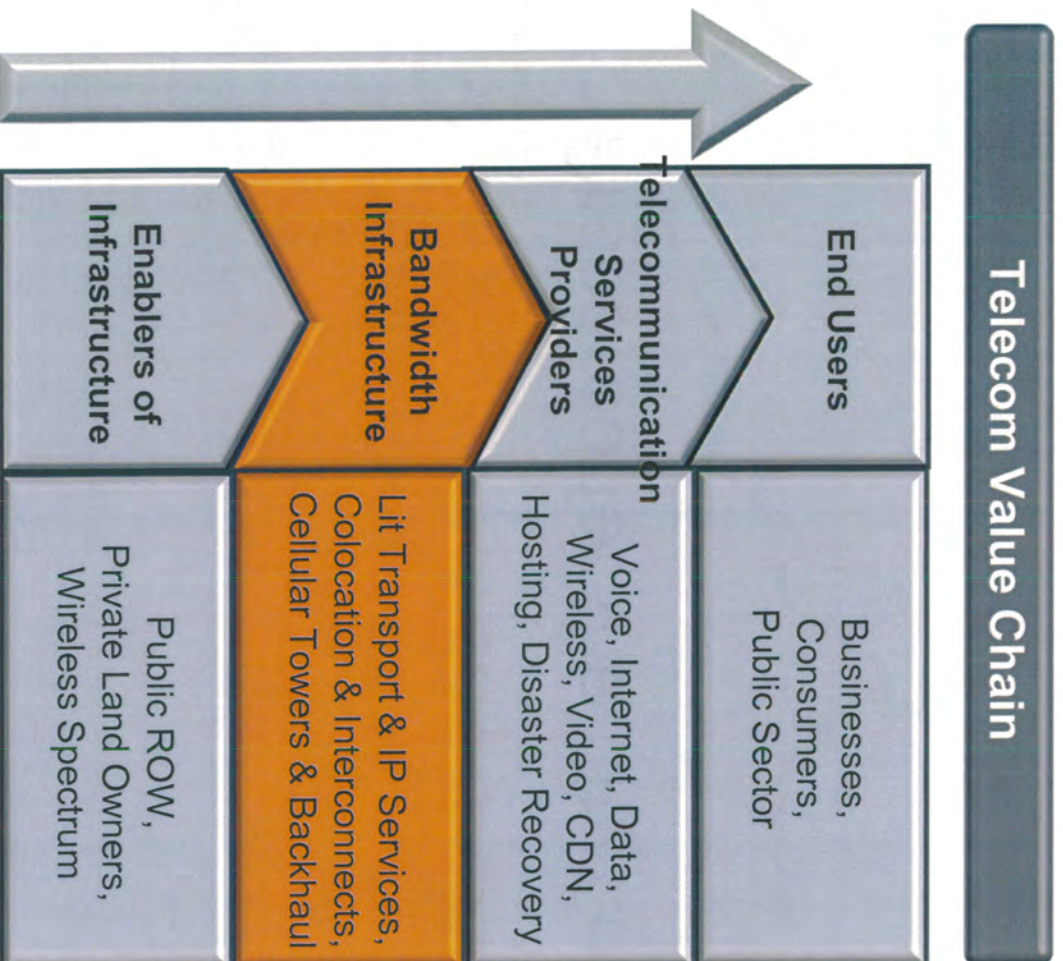
Zayo Overview

Prepared for the City Council of Des Moines, WA



zayo[®]

Bandwidth Infrastructure

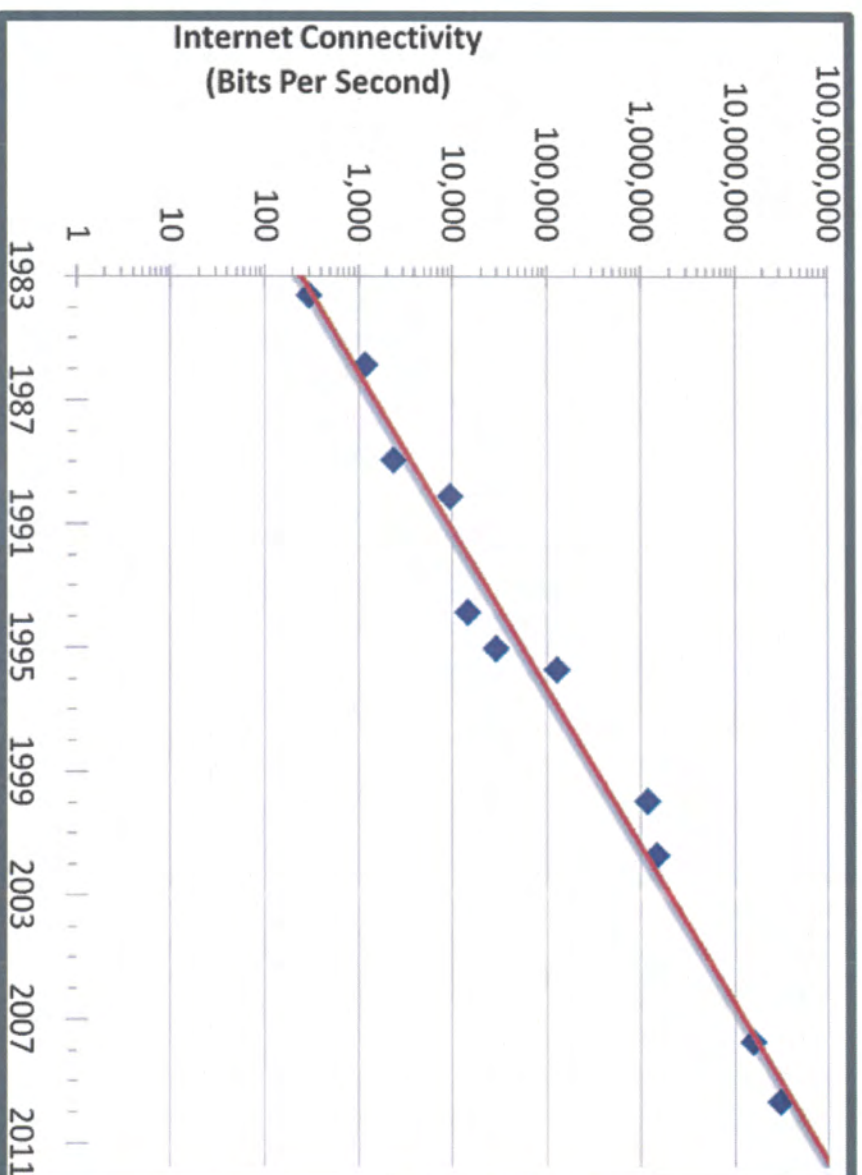


Zayo Differentiators

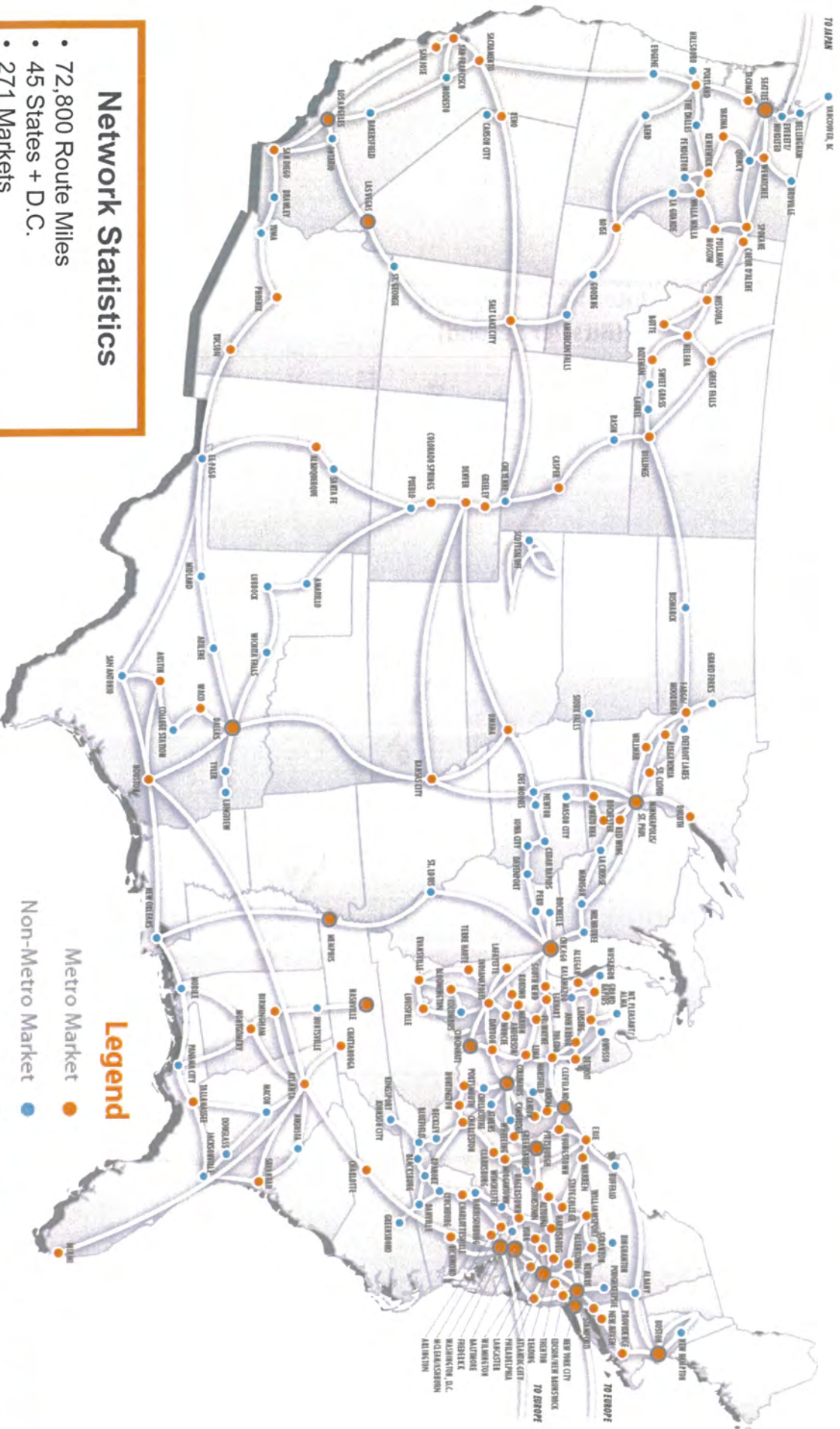
- Deep metro assets
- Intercity routes connecting metro areas across the country
- Strong financial foundation, access to capital and willingness to invest in customer solutions
- Construction and management expertise with large projects
- Secure and reliable all-optical network

Bandwidth Demands Growing

Nielsen's Law: bandwidth doubles every 21 months



U.S. Network



Network Statistics

- 72,800 Route Miles
- 45 States + D.C.
- 271 Markets
- 11,104 Buildings On-Net
- 141,000 Colocation Billable Sq Ft

Legend

- Metro Market
- Non-Metro Market
- zColo Facility
- Network Route

zayo

Zayo Services

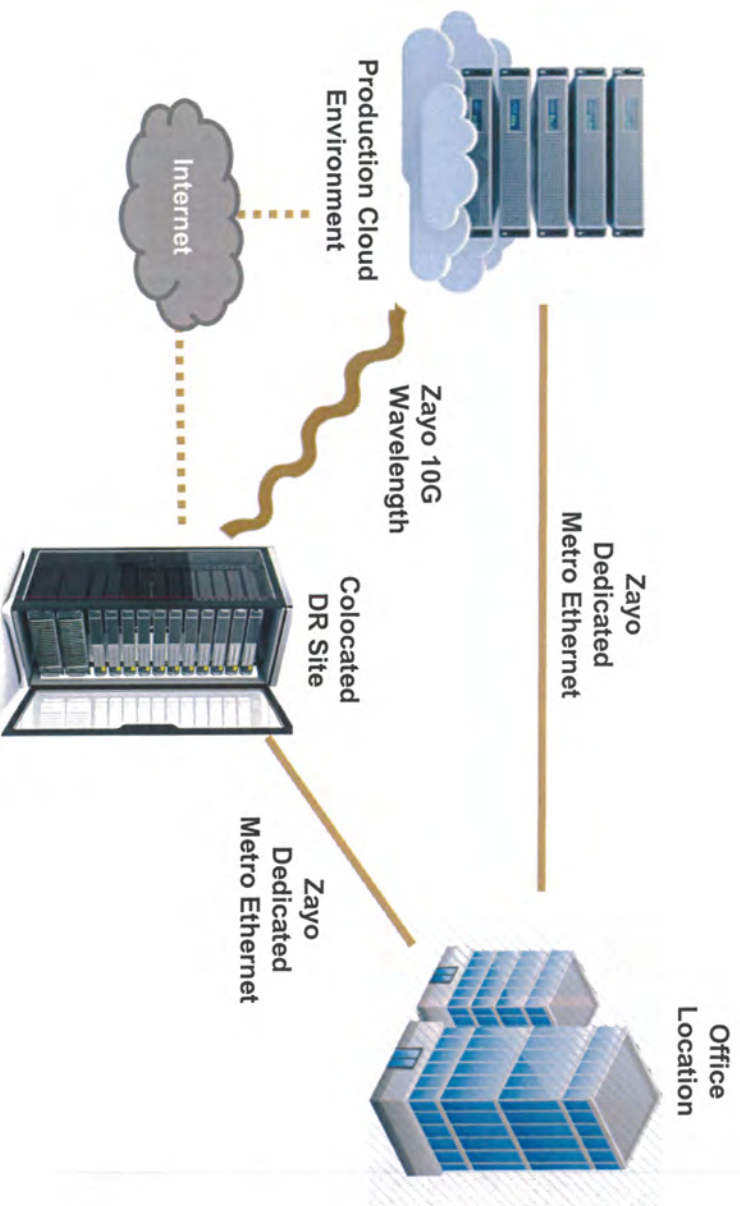
Zayo Group is a nationwide provider of fiber-based bandwidth and physical infrastructure...

- Mobile Infrastructure. Providing backhaul from existing wireless towers, and deploying small cell technology
- Dark Fiber. On-net and custom routes
- Colocation. Expanding national footprint of data centers
- *...and lit telecommunications services*
- Cloud and Connectivity
- Wavelengths. 1Gbps - 100Gbps
- Ethernet. 10Mbps - 10Gbps
- IP Transit and DIA. 10Mbps - 10Gbps
- VPN & SONET



Enterprise Architecture

Customers can leverage Zayo's network for Comprehensive Solutions



What is Dark Fiber?

Core building block for other Bandwidth Infrastructure



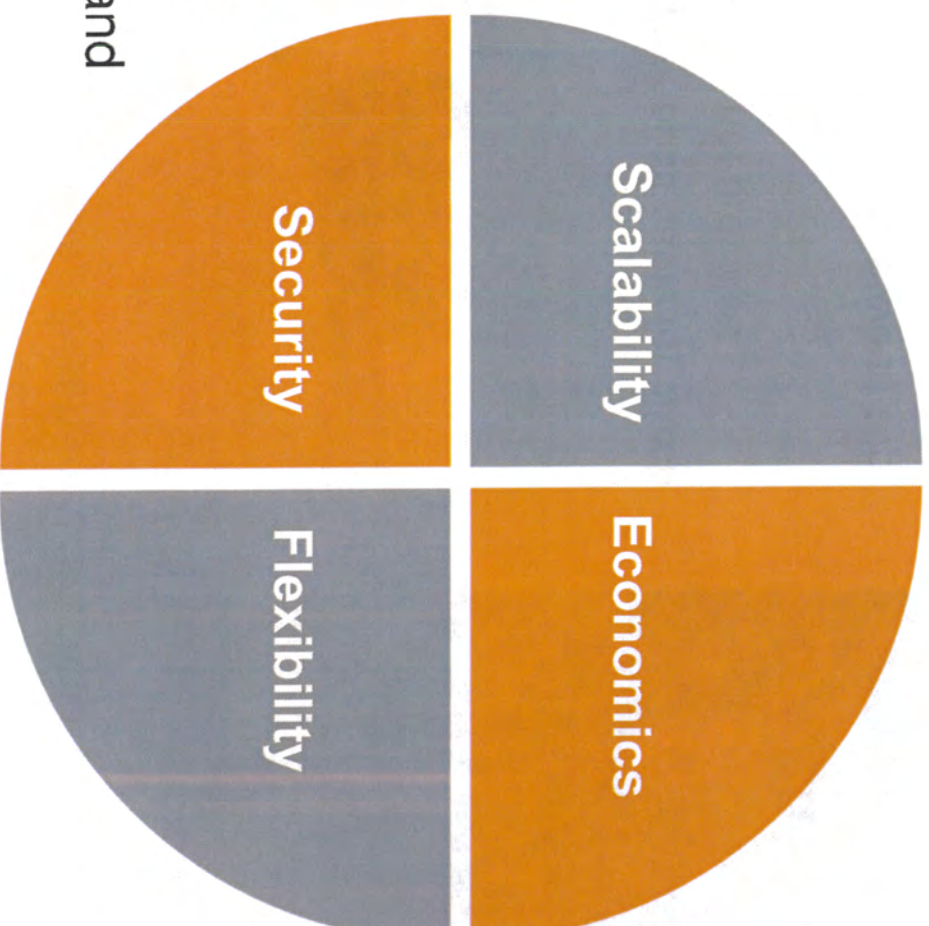
- Dark fiber refers to fiber optic cable for which the service provider has not provided modulating electronics.
- An optical, physical connection between two or more locations



Why Dark Fiber?

Utilize Zayo's existing infrastructure as well as our construction expertise

- Virtually unlimited bandwidth



- Fully dedicated infrastructure, including fiber and optronics
- Very low cost
- Customer controls all aspects of telecom infrastructure

Logical Designs

Dark fiber offers you A-Z custom routing

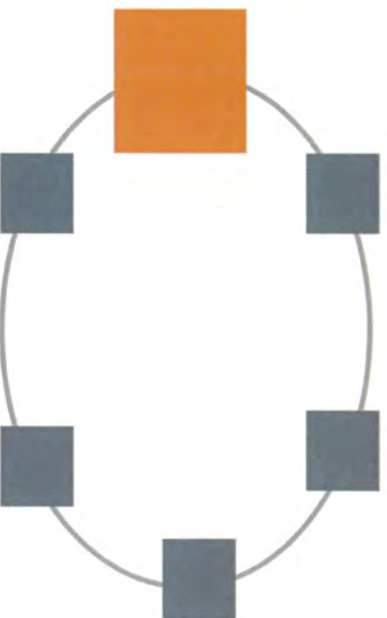
Point-to-Point

- Simplest network available
- Typically requires least capital investment



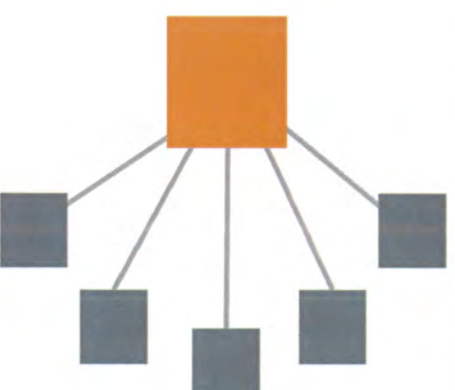
Ring

- Reliable solution for multiple locations
- Protects against fiber cut (50 ms recovery)



Hub-and-Spoke

- Simple design and trouble shooting
- Dedicated bandwidth to each end point
- Subject to fiber or port failures



Benefits to the Community

- Advanced communications infrastructure for community businesses, hospitals, educational institutions – and ultimately residents
- Increased competition in the telecom space is good for businesses and consumers
- Help attract new economic development to the City



COMCAST CABLE

CITY OF DES MOINES, WA

DATE: July 2, 2015

Terry Davis, Director of Govt. Affairs

State of the Industry

COMPETITION COMPETITION COMPETITION

Residential = Over the Top, Satellite Providers, Century Link wired providers, No TV

Business = Century Link, Other wholesale Internet Co., Long-haul Fiber Co.

Comcast is not going away!
We COMPETE everyday
across all product lines!

Future for Television



- Predictive Search
- Personal Recommendations
- Robust DVR
- Easy OnDemand Access
- Live Streaming
- Cloud DVR
- Mobility
- Voice Command
- Talking Guide
- Apps – MyAccount, Xhome

X1 Operating System

Comcast's new interactive TV experience makes it easier for our customers to discover, access, and share the entertainment they love.

Internet of Things



- Expansive Speed Choice
- 14 Speed Increased in Past 13 yrs
- Extreme 250 – Now Available
- Residential 2 Gig – This Summer
- Early 2016 – 1 Gig Technology (DOCSIS 3.1)
- In-Home Wireless Gateways – 270Mbps of throughput
- Continue to Push the Envelope on In-home Wireless Speeds
- Xfinity WiFi is the fastest with most coverage in the nation (8M Hotspots)

Xfinity Internet

Fast, Faster, Fastest... We bring the fastest speeds to the most homes in the United States

Economic Development



- Robust Speed Choices (up to 10 gig)
- Symmetrical Ethernet Options (Coax and Fiber)
- Business WiFi connections
- VoiceEdge Service – with App for mobile connectivity
- Best-in-Class Cloud Based Solutions
- 24x7 Business Support w/ 4 hr. Response Time

Comcast Business

Advanced business solutions designed to help keep businesses moving on the fast track to success.

Customer Experience



Federal Way Location –
31423 Pacific Highway S. (across
the parking lot from JoAnn's, H
Mart and Barnes and Noble)

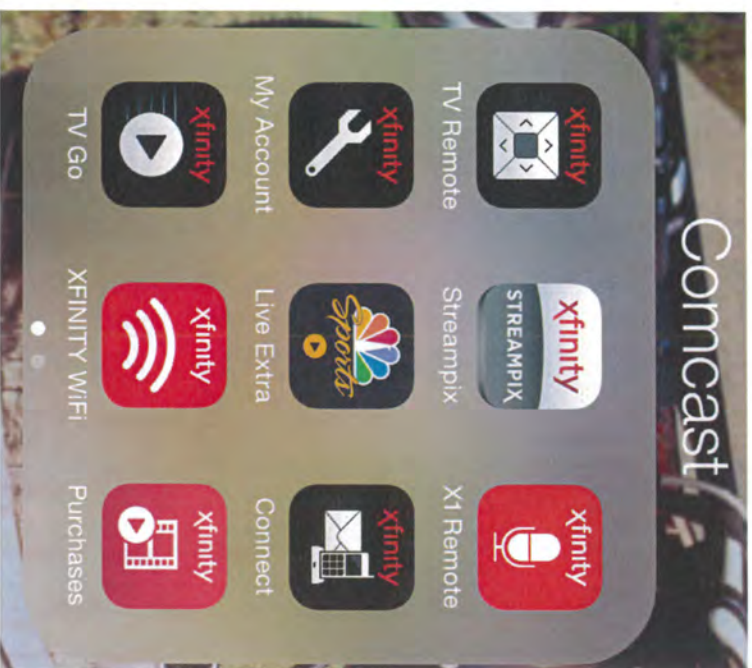
*****Opening Soon*****
(Late 2015/Early 2016)

Southcenter Location –
SW corner of W. Andover and
Strander Blvd. (Zoopla Complex)

Xfinity Stores

State-of-the-Art Retail Centers, helping our
customers manage their products and services.

Self Service & Mobility



- My Account App – pay bills, troubleshoot devices, outage update
- Remote App – Control box, schedule recordings, search TV shows and movies
- X1 TV – Live Streaming, Cloud DVR access, Download and Go
- Xfinity Connect – Mobile access to E-mail & Voicemail, Unlimited Nationwide calling and texting

Xfinity Apps

Innovative account access and entertainment mobility wherever our customers go

Bridging the Digital Divide

Nationally, nearly 500,000 lifetime connections over life of the program

Highline, Federal Way, and Kent School Districts are GREAT partners spreading the word to your families

City of Des Moines = 2,708 lifetime connections for your families

- Highline 1,007
- Federal Way 788
- Kent 913



Internet Essentials

This is our low-income Internet connection program, where we offer broadband for \$9.95 to eligible low-income families.



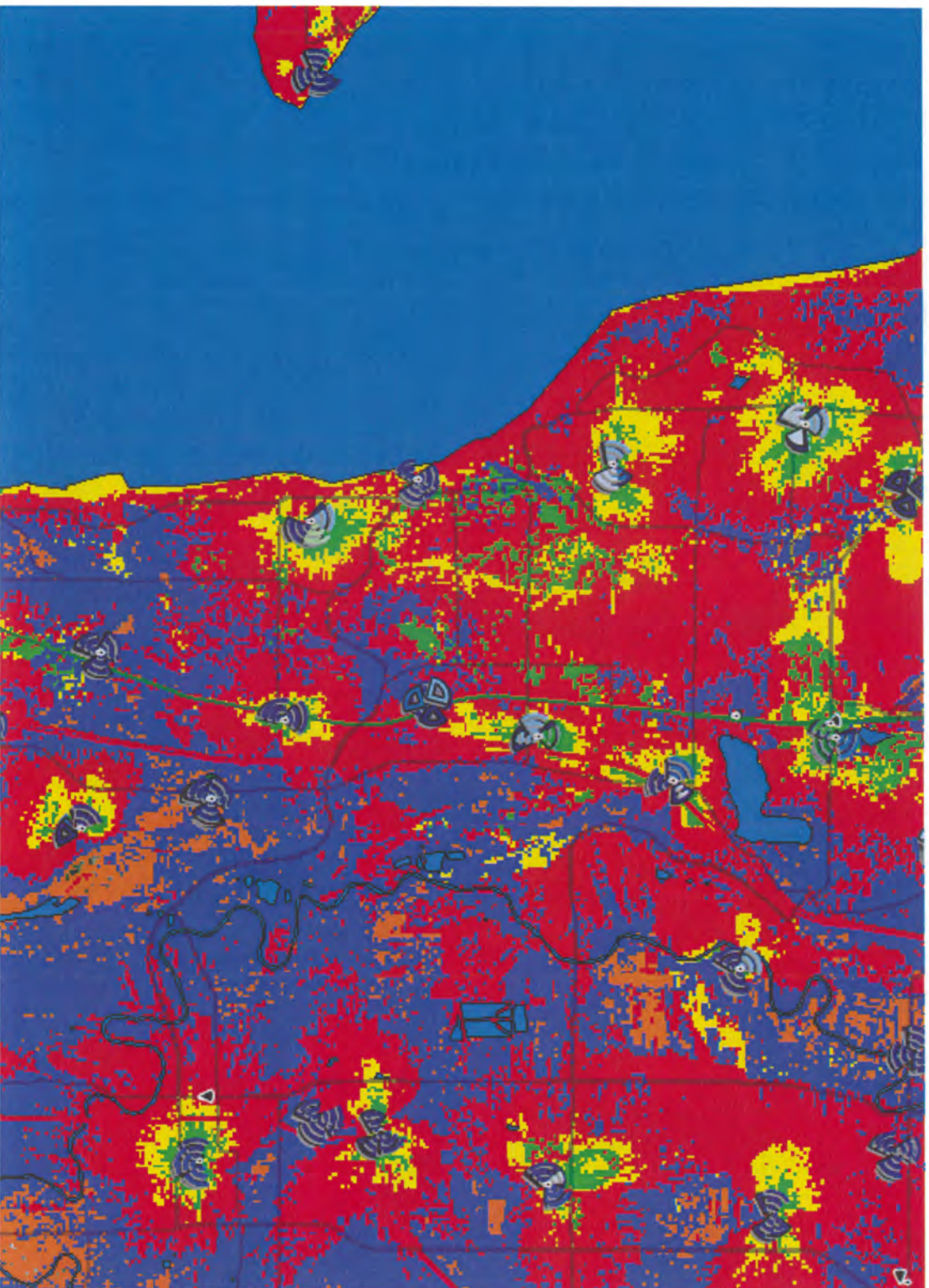
Des Moines Planned Coverage

June 24th, 2015

#gettingbettereveryday

#gettingbettereveryday

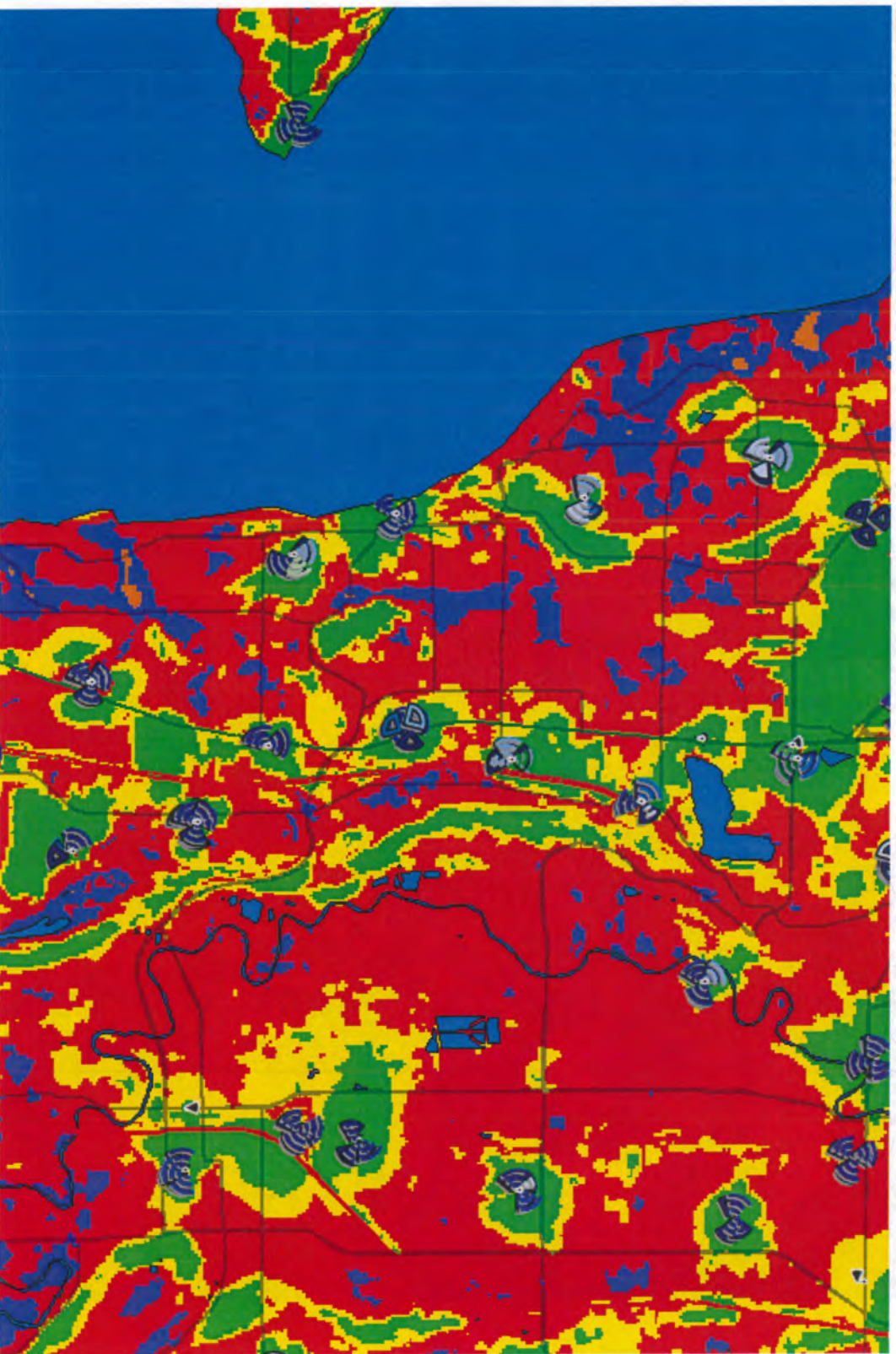
Current Coverage



©2015 Sprint. The information is subject to Sprint policies regarding use and is the property of Sprint and/or its relevant affiliates and may contain restricted, confidential or privileged materials intended for the sole use of the intended recipient. Any review, use, distribution or disclosure is prohibited without authorization.

#gettingbettereveryday

Planned Coverage



©2015 Sprint. This information is subject to Sprint policies regarding use and is the property of Sprint and/or its relevant affiliates and may contain restricted, confidential or privileged materials intended for the sole use of the intended recipient. Any review, use, distribution or disclosure is prohibited without authorization.

#gettingbettereveryday



City of Des Moines Presentation

SUE ANDERSON – VICE PRESIDENT OPERATIONS

DON HARTZOG – ENGINEERING SENIOR LEAD ANALYST -

This is CenturyLink

- A global communications, hosting, cloud and IT services company enabling millions of customers to transform their businesses and their lives through innovative technology solutions

- CenturyLink offers network and data systems management, Big Data analytics and IT consulting, and operates more than 55 data centers in North America, Europe and Asia.

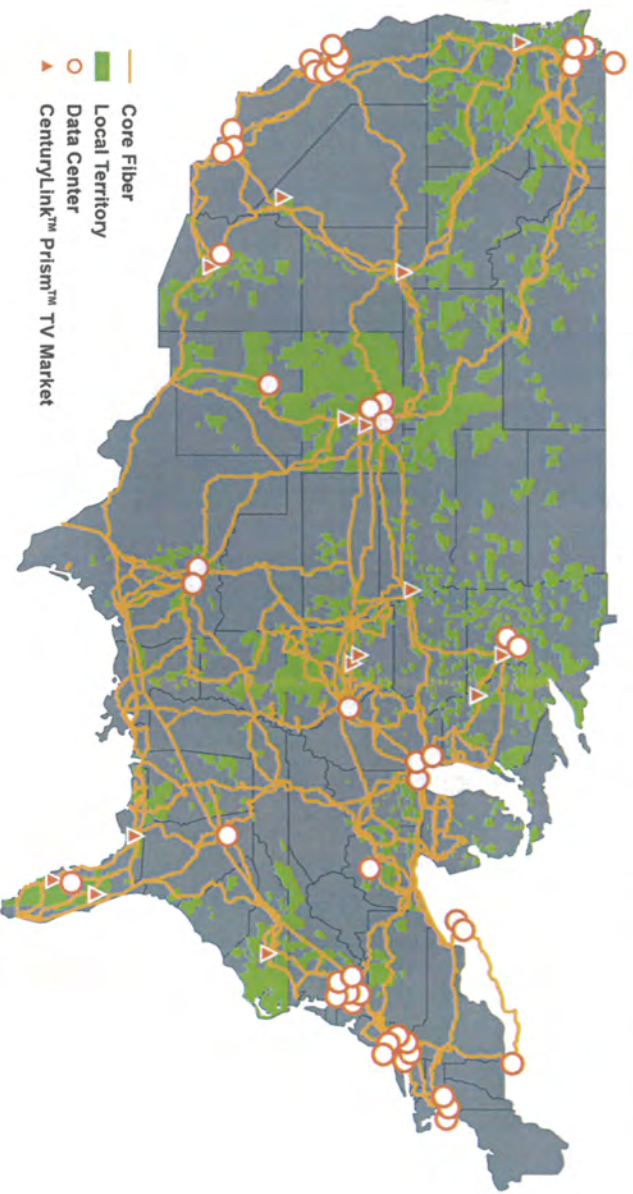
- CenturyLink employs 2,160 employees in Washington state



CenturyLink Today



❖ CenturyLink provides broadband, voice, video, data and managed services over a robust 250,000-route-mile U.S. fiber network and a 300,000-route-mile international transport network.



CenturyLink is an Industry Leader

- ▶ Serves customers ranging from domestic and international Fortune 500 companies to families in rural America
- ▶ Committed to being the broadband leader in our markets (consumer offerings in parts of 37 states including voice, video, security, wireless/resell)
- ▶ Global leader in managed hosting and cloud services
- ▶ Offers network and data systems management, big data analytics and IT consulting, and operates more than 55 data centers in North America, Europe and Asia



Bringing CenturyLink's Strategic Vision to Puget Sound

- Rapidly bringing Gigabit fiber and other fiber based services Puget Sound homes and businesses
- Over 150,000 homes to be passed in 2015
- Over 64,000 gigabit enabled business locations in Washington State
- Serving businesses of all sizes and types

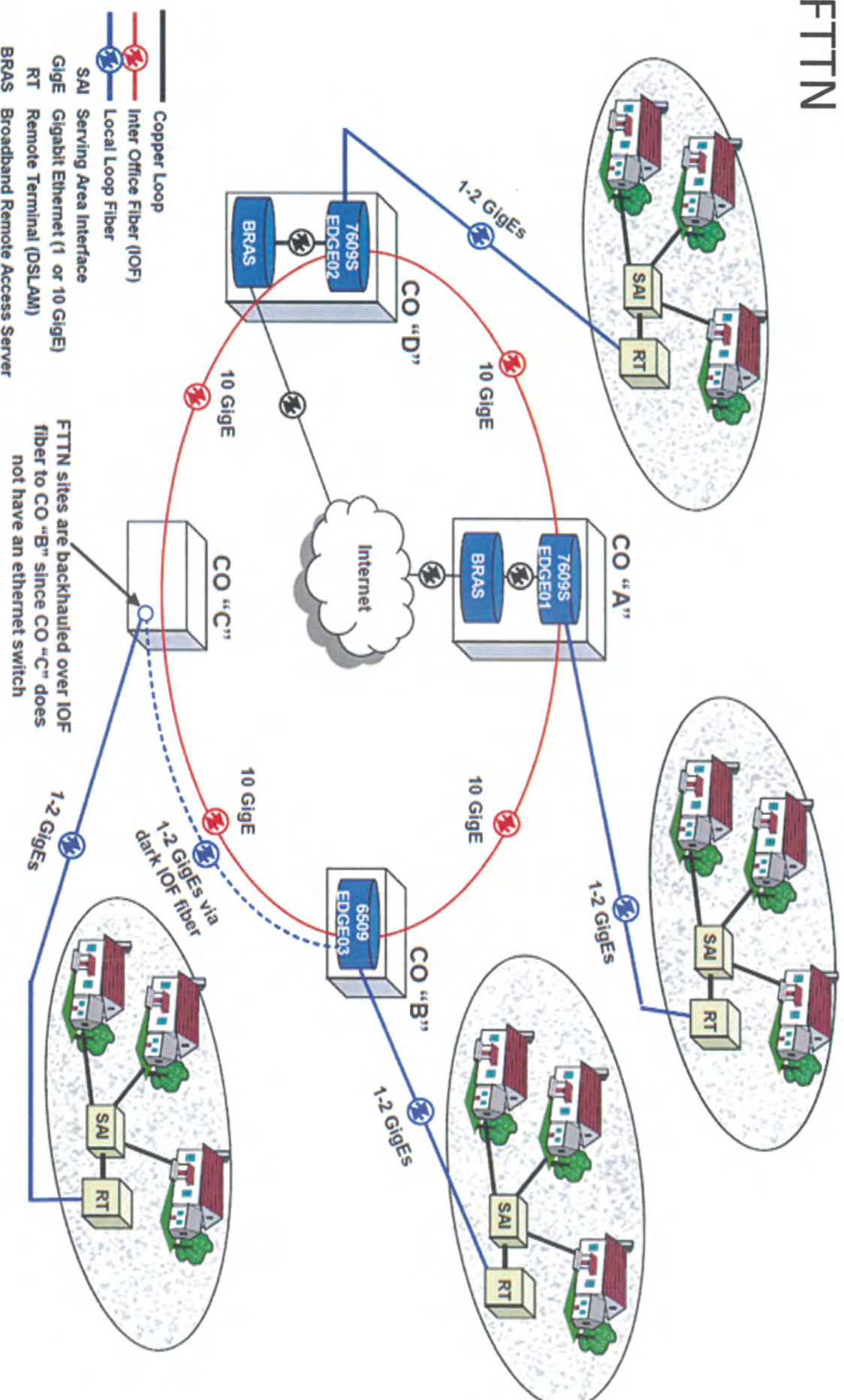


Bringing CenturyLink's Strategic Vision to Puget Sound

- Why Fiber?
 - Ultra fast speed fiber delivered service to the home/business
 - Room for growth as bandwidth needs increase
 - Internet traffic expected to triple by 2019
 - Dedicated connection to CenturyLink's tier 1 network
 - Allows easy access to cloud and unified communication solutions
- Position the market for the future and supports premier products that require high bandwidth solutions such as PRISM TV, Over The Top video (OTT), Cloud Computing, and Smart Home services

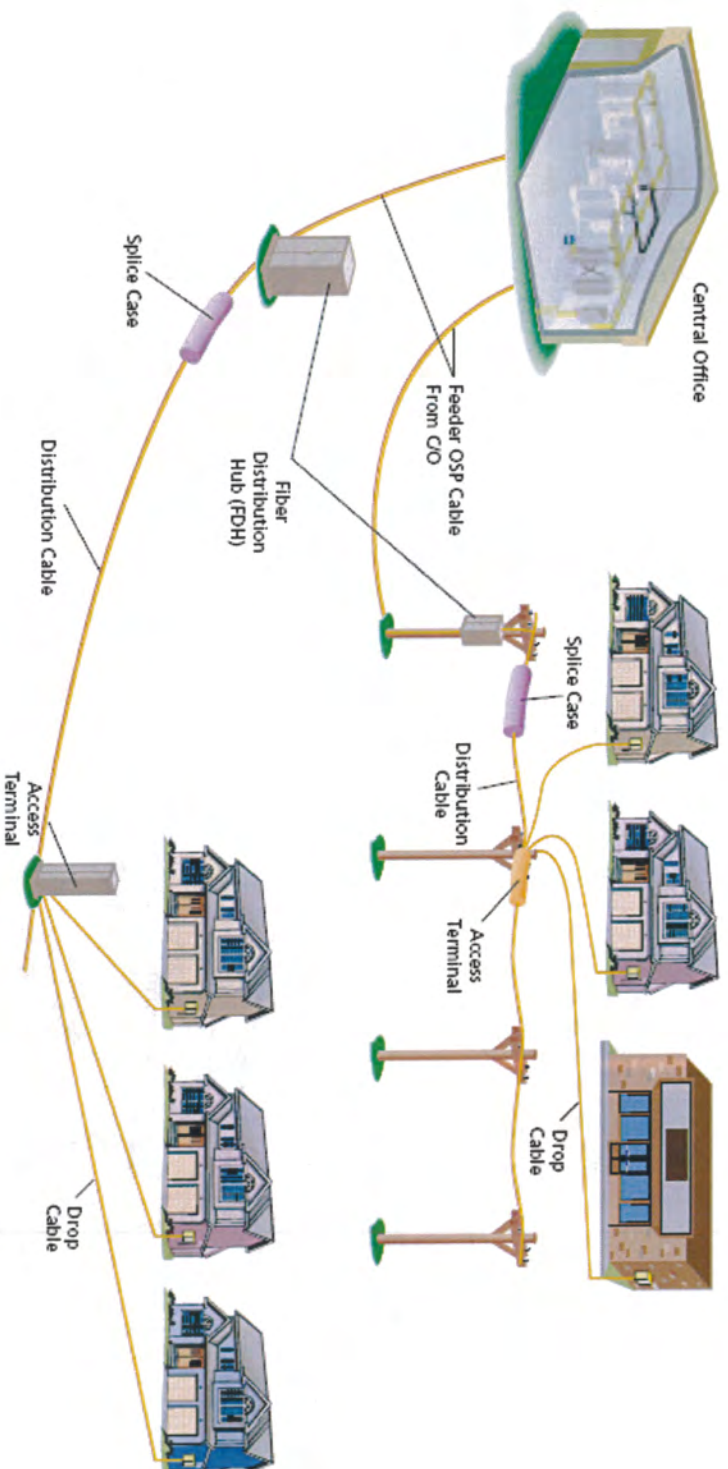
Fiber to the Node (FTTN) architecture

FTTN



Fiber to the Premise Architecture

FTTX Fiber Architecture



CenturyLink Capital Investment

- CenturyLink is investing Millions of dollars to deliver fiber technologies within the Puget Sound Region
- In 2014, CenturyLink enabled 24,864 living units throughout the Puget Sound area with Gigabit Passive Optical Network (GPON) – Primarily in Apartments and Condos
- In 2015 the plan for is to pass another 150,000+ single family units with GPON and other fiber technologies
- CenturyLink's investment enables fiber technology to both residential and business customers, and helps encourage economic growth
- CenturyLink has hired and continues to hire Broadband Technicians into living wage scale positions.

How Does this Benefit Des Moines?

- Provides leading edge fiber services to consumers and businesses of all sizes
 - Flexible solutions
 - Room for growth
 - Makes communities more desirable for tech workers and businesses
 - Easy connections to the cloud
 - Build's on CenturyLink's legacy of service and commitment to the communities we serve

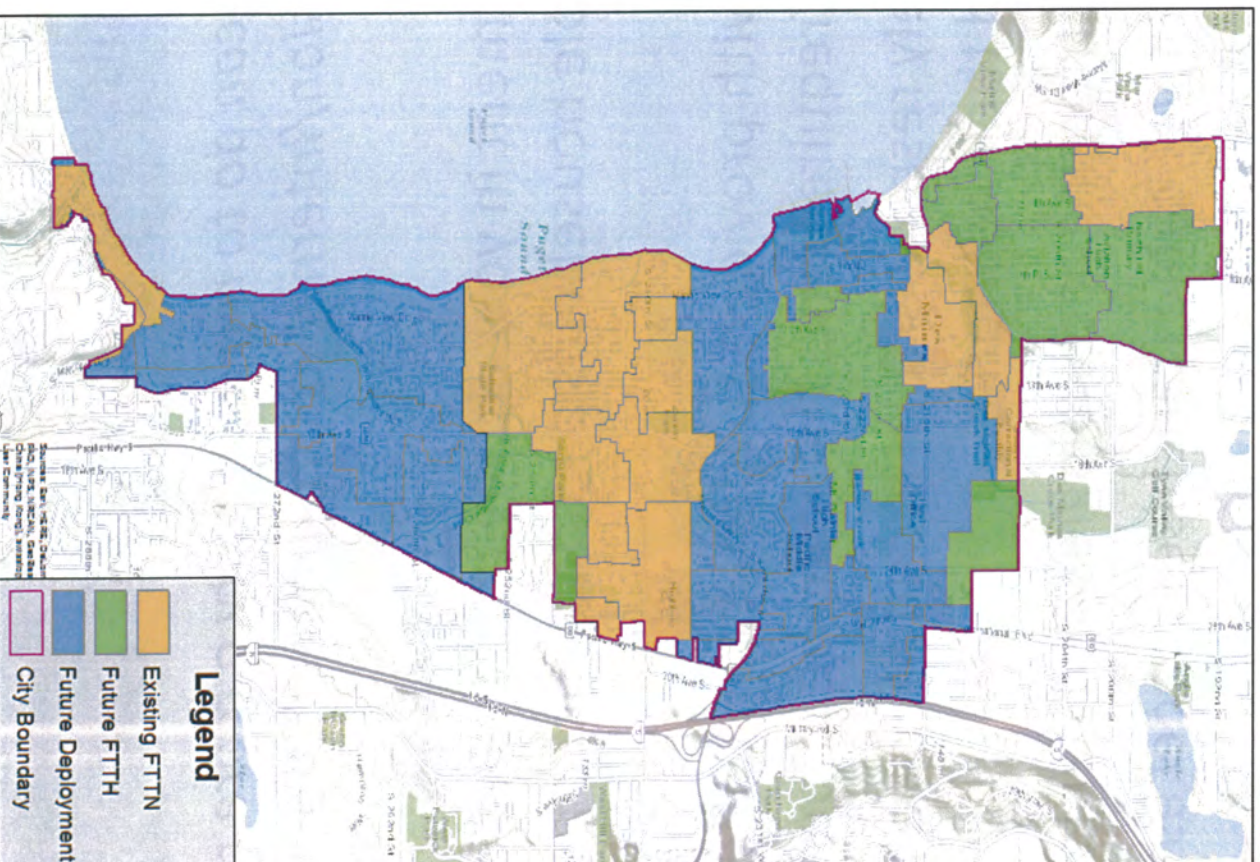
Making Des Moines more robust:

Question: *What we can do to make our city a more robust telephone/television/internet environment for our residents?*

Answer:

- Encourage investment in your city by partnering with private providers to enable households and bring fiber rich products to your residents
 - Open dialog with providers to identify and address regulations or permitting requirements that may be impeding deployment.
- Permitting – timely response/turn around time allow companies to quickly expand their networks
- Be open to new emerging technologies and deployment models
- Support “competitive” cable franchises model as contemplated by FCC rules

CenturyLink's view of Des Moines





CenturyLinkTM

CenturyLink is excited to bring further
opportunities to the City of Des Moines!

Questions?

-Confidential Use Only-

Disclose and distribute only to CenturyLink employees having a legitimate business need to know.
Disclosure outside of CenturyLink is prohibited without authorization.

State of the Technology Industry

Des Moines City Council Meeting

July 2, 2015

© 2015 AT&T Intellectual Property. All rights reserved. AT&T and the AT&T logo are trademarks of AT&T Intellectual Property. AT&T Proprietary (Internal Use Only). Not for use or disclosure outside the AT&T companies except under written agreement.



Current trends being observed across the industry.



People are choosing wireless technologies faster than ever before:

- More than half (56.8%) of Washington homes are now wireless-only or wireless-mostly.¹
- U.S. mobile data doubled from 2012 to 2013 and is projected to increase approximately 650 percent by 2018.²
- There are more than 310.6 million mobile phone subscribers in the U.S.³ And, as of March 2015, 187.5 million people in the U.S. own a smartphone.⁴



Individuals and households are not the only ones who are going wireless.

- Businesses increasingly depend on strong wireless service and mobile applications to carry them and their employees through the work day.
- Public safety is improved by the power of mobile communications as a critical tool for first responders in emergency situations.



This rapid adoption of wireless technologies is leading to surging demand for mobile data.



The demand for data is on the rise:

The surge in demand for mobile data is being driven by data-intensive apps and especially online video consumption.

Every minute, Americans:



30%

of smartphone-dependent Americans say that they “frequently” reach the maximum amount of data they pay for. And, 51 percent say this happens to them at least occasionally.²



The demand for data is on the rise:



57 percent of consumers in U.S. broadband households subscribe to an over-the-top (OTT) video streaming service.³



The amount of data used by TV and video streaming on mobile devices is projected to increase from *50 percent* in 2014 to *70 percent* in 2019.⁴



More than 50 percent of mobile data traffic on AT&T's network is now video.



Business and consumers' rapid adoption of mobile technologies and services has led to unprecedented growth in network data usage.



Because of this demand for advanced mobile technology and devices, it is essential that the networks that provide these invaluable services are upgraded and expanded.



AT&T: Working to Meet the Demand

AT&T is committed to expanding and improving our networks to deliver the quality high-speed services our customers demand.

- AT&T has invested more than **\$120 billion** to improve and expand its wireless and wireline networks over the past six years (2009-2014). During this period, we have invested more in the U.S. than any other public company.
- Our LTE network now covers more than **300 million** people in the United States and we have deployed wired high-speed Internet service to **57 million** customer locations along with providing high-speed fiber connections to **more than 1 million** U.S. business locations.

AT&T in Washington

- AT&T has invested more than **\$1.7 billion** in its best-in-class wireless network in Washington from 2012-2014.
- And, from 2012-2014, AT&T has made more than **1,500** network upgrades across Washington.
- Our mobile broadband network now covers **99.1%** of Washington's population.



This is just the beginning. The emergence of smarter, Internet-based networks and the Internet of Things is not only making our devices smarter but is connecting our world and creating smarter cities.



The Internet of Things and the Connected World



The Internet of Things and the Connected World

The Internet of Things and smart networks.

- The Internet of Things (IoT) relies heavily on fast, smart and reliable networks that need to be consistently invested in, expanded and upgraded.

City leaders can play a role in helping bring smarter networks and technologies to their citizens and communities.

- To bring more widespread access to smart networks, new technologies and eventually smart cities, local leaders need to review codes and regulations and ensure there is a regulatory environment in place that encourages investment and innovation.



Thank You.

