GRAND JUNCTION CITY COUNCIL
MONDAY, JANUARY 18, 2016

WORKSHOP, 5:00 P.M.
CITY HALL AUDITORIUM
250 N. 5TH STREET

To become the most livable community west of the Rockies by 2025

1. **Wireless and Broadband Master Plan Update:** ***Attachment***
   Supplemental Documents

   For the City's broadband master plan, Diane Kruse with NEOfiber will give a presentation to update City Council on the work to-date, and will discuss next steps for expanding and enhancing the broadband capacity in the City. For the City's wireless master plan, Staff will provide an update and seek Council direction.

2. **First Street Design Concepts:**

   The City's 2016-2017 Capital Improvement Program includes the reconstruction of 1st Street from Ouray Avenue to North Avenue. Staff has developed a concept that not only reconstructs the street, but also meets future capacity needs, maintains current on-street parking, improves safety, accommodates bikes/pedestrians, and constructs aesthetic improvements that should help set the stage for private redevelopment/reinvestment in the corridor. Staff is looking for Council feedback on the proposed improvements prior to public outreach/public participation.

3. **Retreat Topics** Supplemental Documents

4. **Other Business**
   Supplemental Documents

5. **Board Reports**

CITY OF Grand Junction COLORADO

Date: January 7, 2016
Author: Scott Hockins
Title/ Phone Ext: Project Manager/1484
Proposed Meeting Date: January 18, 2016

CITY COUNCIL STAFF REPORT
WORKSHOP SESSION

Topic:	Broadband Master Plan and Wireless Master Plan Updates
Staff (Name & Title):	Jay Valentine, Internal Services Manager Jim Finlayson, IT Manager Scott Hockins, Project Manager

Summary:

For the City's broadband master plan, Diane Kruse with NEOfiber will give a presentation to update City Council on the work to-date, and will discuss next steps for expanding and enhancing the broadband capacity in the City. For the City's wireless master plan, Staff will provide an update and seek Council direction.

Background, Analysis and Options:

In April 2015, by an overwhelming majority of 77%, Grand Junction voters approved an override of Colorado Senate Bill 05-152. That override allows the City of Grand Junction to take steps to improve the Internet services for our community. As cities and towns across America compete for new business by offering high speed Internet services, it's imperative for the City of Grand Junction to keep up in order to foster economic growth and development for our citizens and businesses.

Broadband refers to high quality Internet services enabling faster and more reliable data transmission. It is an evolving term which is currently defined as Internet service at download speeds of at least 25 megabits per second. Broadband can provide access to a wide range of resources including education, entertainment, tele-health, commerce, and improved public safety services.

The broadband master planning process is underway and will provide information and recommendations that will allow the City to make informed decisions regarding investments in broadband infrastructure and actions the City can take to expand its use in the community. The plan will solicit input from all of the various stakeholders – businesses, citizens, providers, carriers, legislative representative and City staff – to ensure a coordinated approach that accelerates broadband development, increases cost savings, and takes advantage of funding opportunities that are available. It is expected that the plan will also provide direction related to code enhancements that will promote cost-effective broadband infrastructure construction in conjunction with City capital projects, as well as private utility and development efforts.

Wireless connectivity has become an increasingly important part of our everyday lives. Cell phones used to be just a way of making a phone call when you were away from home or work. Now we use smart phones and tablets to shop, find restaurants, compare prices, buy movie tickets, bank, navigate, stay in touch through social media sites, and to dial or text 911.

Wireless connectivity has become an essential tool for most families and businesses, but it is particularly critical for police and fire agencies. In response, more and more communities are preparing Wireless Master Plans to help guide the development and construction of wireless infrastructure. The City of Grand Junction and Mesa County are joining together to begin the planning process for this community.
The purpose of the master plan is similar to the goals and objectives of other long-range infrastructure plans, such as roadway improvements and the extension of water and sewer lines. The master plan for cell tower sites combines land-use planning strategies with radio frequency engineering models to create an illustrative planning tool to help manage the development of future sites. A comprehensive approach to wireless development in Mesa County will help align the needs of wireless broadband service providers with government and community.

Board or Committee Recommendation:

There were none.

Financial Impact/Budget:

Potential revenue opportunities are available when public property is leveraged for these types of projects.

Legal issues:

The override of SB 152 allows the City to participate in future partnerships.

Other issues:

None.

Previously presented or discussed:

Part of general discussions to implement the Economic Development Plan and Site Selection study recommendations and, specifically, at the City Council Retreats held on January 16, 2015 and May 15, 2015, and the workshops held on January 19, 2015 and August 17, 2015. The Broadband Master Plan contract with NEOfiber was approved by Council on September 2, 2015, and the Wireless Master Plan contract with CityScape was approved on May 20, 2015.

Attachments:

NEOfiber Agenda
NEOfiber - Advanced Broadband Networks, Why This Matters
CityScape – Public Land Leasing Opportunities
Wireless Master Plan – PowerPoint

NEO Fiber and the City of Grand Junction
City Council Meeting Agenda
January 18, 2016

Purpose: To provide an update on the broadband planning efforts underway.

Agenda:

1. Industry Context, Why this Matters and What can Municipalities Do?
2. Challenges to Abundant and Affordable Broadband – Why is this a Problem?
3. Options to Solve the Broadband Gap
    a. Policies and Ordinances that are Broadband Friendly
    b. Transform the Status Quo
    c. Potential Public Private Partnerships
4. Process, What are we working on now?
    a. Surveys
    b. Invitation to Bid, Downtown Development Authority
    c. Financial Modeling and Best Options to Further Explore
5. Questions and Answers

Limit: Not to exceed 1 hour

Advanced Broadband Networks: Solving the Digital Divide for our Communities What is at Stake and Why this Matters

A white paper written by NEO Fiber on the importance of advanced broadband networks and why communities need to identify strategies for improving broadband services.

Diane Kruse

NEO Fiber

970-309-3500

www.NEOfiber.net

Introduction, Solving the Digital Divide for our Communities, Background Information and Context

Our world is changing; and it is doing so rapidly. Technology is impacting every part and parcel of our lives -- from where and how we conduct work, to whether or not we thrive economically and socially. It has impacted the way we live, our entertainment, our culture, the way government services are provided and accessed, the way healthcare is being delivered, and the way we educate our children and provide education to better improve our workforce. With the introduction and accelerated advancement of technologies, having access to affordable, redundant and abundant broadband is quickly becoming the most critical infrastructure of our time, just like electricity and transportation were in the early 1900's. Advanced broadband infrastructure has the potential to create more jobs, increase the community's competitive ability globally, create new technologies, increase opportunities for the region's companies, enhance public safety, provide better and less expensive healthcare, and provide greater educational opportunities throughout our community. In a recent meeting/webinar and report produced by Brookings in May of this year, fiber was added as a critical infrastructure.[1]

Advanced broadband networks are creating seismic changes in local, state, national and global societies, as well as markets, business and in institutions around the world. Access to social media and the Internet has shifted governments, threatened national and local boundaries, inspired revolutions, and has changed us culturally. The Internet and its associated technologies have impacted wealth, work, education, government, health, public safety, and education. Having equal access to advanced broadband networks bridges the digital divide and creates better equality between the haves and the have-nots.

Like the introduction of electricity, advanced broadband networks are fundamentally changing our world in ways that were not expected or anticipated. Much like electricity, advanced broadband networks are the enabling technology in which all things are impacted. Electricity was invented to turn on the lights, but empowered – literally, the transformation to an industrial society. Advanced broadband networks are now the enabling technology to transform us yet again, to a global technology and information society; the new Knowledge Economy. (See *Captive Audience* by Susan Crawford).

Just as it was impossible to know in advance the impact that electrification would provide the critical infrastructure to power all of our modern appliances, computers, health monitoring systems, manufacturing facilities, computers, radio and television, and financial markets; so too, is it impossible to predict the impact and reach of advanced broadband networks. We do not yet know the far reaching impacts that the Internet will have on our lives and on generations to come. However, it is certain that

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[1] Joseph Kane and Robert Puentes, "Beyond Shovel Ready: The Extent and Impact of U.S. Infrastructure Jobs," Brookings Institution, (May, 2014) available at http://www.brookings.edu/research/interactives/2014/infrastructure-jobs#/M10420

NOT having access to advanced broadband networks would be equivalent to being in the dark without electricity!

Speed Matters. Global network traffic has quadrupled from 2009 to 2015. Both commercial and residential Internet bandwidth consumption are doubling every year.

Bandwidth refers to the capacity, or speed of the networks to carry traffic. The question is often presented, "How fast is fast enough?" and "What should be the definition of broadband?" The Federal Communications Commission (FCC) has proposed in the National Broadband Plan that broadband be defined as 50 Mbps "downstream" (to the consumer) and 20 Mbps "upstream" (from the consumer into the network) by 2015.[2] In February of 2015, the FCC increased the definition of broadband definition of broadband by raising the minimum download speeds needed from 4Mbps to 25Mbps, and the minimum upload speed from 1Mbps to 3Mbp. Given the growth trends in bandwidth needs and network traffic, this definition is conservative and barely meets the minimum needs for bandwidth consumption today and certainly does not address the needs that are forthcoming.

In the early days of the Internet, text messaging, email and web sites were not data-rich or bandwidth intensive and the average consumer did not need more than 7 Mbps of bandwidth. When YouTube burst upon the scene in 2005, this dramatically changed things. One video download was the equivalent of downloading 30,000 web pages. Since that time, videos and picture-rich content have been downloaded and uploaded on a regular basis by the masses. The applications we use on the Internet are becoming much more feature-rich and bandwidth intensive and our existing networks cannot keep up with the demand for networks that support these applications.

The Fiber to the Home Council (FTTH) stated its position clearly in a brief to the FCC. "Even today, with most users still operating on last-generation broadband technologies, the capabilities of advanced video, cloud-based services, and other bandwidth-intensive applications are growing at a pace beyond what our existing networks are capable. Cisco and other scientific companies talk about the network in terms of "terabytes" of capacity in the network center, or "core."[3] According to the Cisco 2012 Zettabyte Report, businesses today routinely require symmetrical gigabit service between their locations."[4]

Also referenced in the Cisco 2012 Zettabyte Report, global Internet traffic grew 45 percent during 2009 alone and has doubled every year since then. Both commercial and residential Internet bandwidth consumption are doubling every year, as video, cloud computing, advanced storage solutions,

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[2] Federal Communications Commission, *Connecting America: The National Broadband Plan* (Mar. 17, 2010). Available at http://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf

[3] Fiber to the Home Council, "America's Petition to the Federal Communications Commission for Rulemaking to Establish a Gigabit Communities Race-to-the-Top Program," July 23, 2013.

[4] Cisco, "*The Zettabyte Era*" (May 30, 2012).

telemedicine, telecommuting, video conferencing, etc., are becoming more prevalent from end users. Applications are becoming more bandwidth intensive and as more devices – tablets, Smartphones, computers, appliances – are being used both in the home and for business applications. ***Research conducted by Cisco states by 2016, there will be nearly three Internet Protocol or IP-connected devices per person.*** This prediction seems to be easily met, as in 2013, the number of Internet-enabled devices outnumbered the number of people in the world. The driver of this is not only smart-phones, tablets and computers, but even more so, the Internet of things – predominately wearables (clothing that has an Internet connection) and smart home applications. Additionally, with growth in Internet-connected televisions, radios, set-top boxes, Blu-ray players, Netflix, cameras and picture frames, the number of hours spent viewing entertainment applications online (i.e. movies and TV) have surpassed the number of hours spent viewing entertainment from traditional broadcast TV. Also driving the growth in the Internet of Things is the implementation of smart-grid and smart-city applications.

According to FTTH's brief to the FCC referenced above, "the average monthly traffic in 2014 on the Internet has been equivalent to 32 million people streaming Avatar in 3D, continuously for the entire month." In 2014, video downloads and uploads comprised 50 percent of all Internet traffic. In the coming years, the sum of all forms of Internet Protocol (IP) video (Internet video, video on demand, video files exchanged through file sharing, video-streamed gaming, and videoconferencing) will reach 86 percent of the total Internet traffic. Applications supported by cloud-based services through multiple devices have created the need for always-on connectivity and advanced broadband network bandwidth.

Although there have been tremendous improvements in wireless communications, and in technologies that beef-up existing cable networks, industry leaders are seeing the need to extend fiber optic network technologies further and deeper into neighborhoods, business parks and industrial centers. As more devices are connected to the Internet and applications are more bandwidth rich, there is a strong argument that favors more all-fiber connections to homes and businesses. The gold-standard for bandwidth capability is quickly becoming offering Gigabit services or speeds that support 1000 Mbps. With this being said, there is a strong need to also connect mobile and portable users through wireless or Wi-Fi technology and cellular networks need to also be upgraded. In areas where building an all-fiber optic network is cost-prohibitive, such as rural, mountainous and geographically disperse areas, a combination of technologies, relying on wireless and fiber optic cable may need to be considered.

Application	Rate
Personal communications	300 to 9,600 bits/sec or higher
E-mail transmissions	2,400 to 9,600 bits/sec or higher
Remote control programs	9,600 bits/sec to 56 Kbits/sec
Digitized voice phone call	64,000 bits/sec
Database text query	Up to 1 Mbit/sec
Digital audio	1 to 2 Mbits/sec
Access images	1 to 8 Mbits/sec
Compressed video	2 to 10 Mbits/sec
Medical transmissions	Up to 50 Mbits/sec
Document imaging	10 to 100 Mbits/sec
Scientific imaging	Up to 1 Gbit/sec
Full-motion video	1 to 2 Gbits/sec

Service	Bandwidth	Number of Devices	Bandwidth Home Area Network	Bandwidth Residential Gateway to Network
TV	2 to 20 Mbps	3.5	2 to 70 Mbps	2 to 70 Mbps
DVR	2 to 20 Mbps	2	2 to 40 Mbps	0
Home Theater	1 to 6 Mbps	1	1 to 6 Mbps	0
Internet Browsing	1 to 20 Mbps	1 to 5	1 to 100 Mbps	1 to 10 MBPS
Printer	.5 to 1 Mbps	1 to 5	.5 to 5 Mbps	0
Digital imaging	1 to 20 Mbps	1 to 3	1 to 60 Mbps	0
On-line Gaming	.2 to 1 Mbps	1 to 3	.2 to 3 Mbps	.2 to 1 Mbps
Video Capture	.1 to 1 Mbps	1 to 10	.1 to 10 Mbps	.2 to 3 Mbps
Portable Audio	.1 to 20 Mbps	1 to 3	.1 to 60 Mbps	0
Total	**70 to 100 Mbps**		**12.5 to 354 Mbps +**	**4 to 84 Mbps +**

New Tools Enable Innovation

Applications and their Needed Bandwidth

While Internet bandwidth use is doubling, cellular networks are also greatly overextended.

In addition to explosive growth in Internet consumption from homes and businesses, mobile Internet use has also advanced dramatically. Smartphone applications are spurring higher consumption of multimedia services. With tablet computers and smartphones having easy access to games, e-books, TV programs, email, shopping, banking and social media sites, wireless service providers have been scrambling to upgrade their networks.

The need for advanced broadband connectivity must include both a consideration for fiber, connecting our businesses, offices and establishments, homes; as well as wireless and cellular, allowing for mobile and portable access as we travel, move about and commute.

Why This Matters

Stimulate Economic Development and Growth. **All-Fiber networks are imperative, critical and necessary to stimulate economic development and**

growth. States, municipalities, communities and regions that want to impact economic development must build 21st Century infrastructure.

States, municipalities, communities and regions that have deployed all-fiber networks have already seen the tremendous economic impact of building symmetrical gigabit networks. These communities have fostered an environment of innovation, economic development and growth, collaboration, and creative activities. ***According to a 2012 survey of economic development professionals, 60 percent said that 1 Gigabit of service had a "definite impact" on new businesses that moved to an area.*** As having access to advanced broadband services is the number one priority for large businesses as they are looking for commercial real estate, the communities that have built gigabit-enabled fiber networks have already benefited economically by attracting businesses and industries to re-locate to their communities.

	Definite Impact	Indirect impact	Too soon to tell	No Impact	Difficult to measure	Total
New businesses moved to your area	60.35% 137	16.30% 37	14.98% 34	3.52% 8	4.85% 11	227
Revived depressed communities	26.22% 59	22.67% 51	29.33% 66	11.11% 25	10.67% 24	225
Individuals' income earning increases	24.23% 55	22.03% 50	29.96% 68	6.61% 15	17.18% 39	227
Revived depressed business districts	26.87% 61	22.03% 50	29.52% 67	13.66% 31	7.93% 18	227
Local companies more profitable, competitive	36.12% 82	33.04% 75	20.26% 46	5.29% 12	5.29% 12	227
Increase in home-based businesses	53.95% 123	15.35% 35	19.30% 44	3.51% 8	7.89% 18	228

FIBER'S DIRECT IMPACT ON ATTRACTING NEW BUSINESSES TO A COMMUNITY.[5]

[5] Craig Settles, *Building the Gigabit City*, (e-book). Available at http://portal.calix.com/portal/calixdocs/mktg/w/gig/Building_the_Gigabit_City.pdf

	2–4 megabits per second (Mbps)	10–12 Mbps	20–25 Mbps	100–120 Mbps	500 Mbps	1 Gigabit	Total
Attract new businesses to your area	3.10% 7	4.87% 11	9.73% 22	26.55% 60	13.27% 30	42.48% 96	226
Help local companies grow	4.87% 11	7.52% 17	20.35% 46	29.20% 66	9.29% 21	28.76% 65	226
Increase home-based businesses	5.80% 13	13.84% 31	26.79% 60	25.89% 58	12.95% 29	14.73% 33	224
Individuals' income earning increases	8.64% 19	16.82% 37	23.18% 51	25.91% 57	11.36% 25	14.09% 31	220
Revive depressed business districts	6.31% 14	11.71% 26	18.92% 42	27.48% 61	12.61% 28	22.97% 51	222
Revive depressed communities	7.14% 16	16.52% 37	17.86% 40	27.23% 61	12.95% 29	18.30% 41	224

Broadband's impact on economic outcomes from the perspective of speed.[6]

Kansas City has already seen an uptake in new high-tech start-ups due mostly to Google's FTTH efforts. Through Homes for Hackers and the Kansas City Startup Village, entrepreneurs have built a community of innovators enticed by the possibilities presented by the Google Fiber network.[7] A prominent venture capitalist has even purchased a home in a Kansas City "fiberhood" to allow entrepreneurs to live for free in Kansas City and build gigabit-ready applications. High-tech companies recognize the benefits of these networks and are willing to relocate just to have access to them.

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[6] Settles, *Building the Gigabit City*.

[7] Kansas City Startup Village, available at http://www.kcstartupvillage.org; and Homes for Hackers, available at http://homesforhackers.com.

Other communities that have built fiber networks have shown economic growth by attracting manufacturing, high-tech and technology companies in large part because of their investment in all-fiber networks. These include:

Municipal FTTH Networks	New Companies, due in part, to All Fiber Infrastructure
Auburn, IN	Cooper Tire Expansion
Bristol, TN	Media General
Bristol, VA	Northup Grumman
	CGI
Chelan County, WA	Yahoo
Douglas County, WA	Sabey Corporation
Grant County, WA	MSN (Microsoft)
	Ask Jeeves
	Intuit
Independence, OR	Metal fabrication companies
Kutztown, PA	Film production companies
LENOSIWSCO, VA	Data Centers
Mason County, WA	Louisville Slugger
	Sims
	Technology companies
	Online engineering firms
Morristown, TN	Cogate Palmolive
Powell, WY	Alpine Access Virtual Call Center

These communities understand that symmetrical gigabit networks are essential for economic development and innovation.

Entrepreneurs have developed gigabit-ready applications through the US Ignite Partnership.[8] US Ignite is a non-profit, public-private organization that is supported by the White House Office of Science and Technology and the National Science Foundation. US Ignite is focusing on creating applications in the following disciplines of national priority:

- Education and Workforce
- Energy
- Health
- Public Safety
- Transportation
- Advanced Manufacturing

[8] US Ignite, available at https://us-ignite.org/about/what-is-us-ignite/

In addition to creating transformative applications, US Ignite connects people and resources, coordinates test beds, provides efforts towards scalability and providing these applications to the masses, informs the public and takes these applications to market. One cutting-edge application being developed by researchers at the University of Massachusetts, and supported by US Ignite, is the Collaborative Adaptive Sensing of the Atmosphere ("CASA") program. CASA uses predictive storm-tracking technology and "data 5 to 10 times more detailed than current radar systems" to provide citizens with advanced notification of severe weather events. These applications, as well as all of the other applications developed by US Ignite, are only possible with having access to a minimum of 100 Mbps of bandwidth. US Ignite is participating with municipalities and communities that have built out fiber networks and are offering this type of bandwidth to their constituents.

Telecommuting Opportunities

The number of people working from home or telecommuting has increased enormously in the past few years and will increase exponentially in the future. According to a study conducted by the Global Workplace Analytics[9], telework grew nearly 80% from 2005 to 2012. In 2010, based on its own limited survey, *WorldatWork* estimated that 16 million employees worked at home at least one day a month, a number that increased almost 62% between 2005 and 2010. Extrapolating from 2010 to 2014 would put the current number of those who telecommute at least one day a month at approximately 25 million.

According to the study, in twenty-five percent of the nation's 20 largest metro areas, more people now telecommute than use public transportation as their principal means of transportation to work. More importantly, according to Global Workplace Analytics, the estimated based upon the current labor force composition is that 64 million U.S. employees hold a job that is compatible with at least part-time telework (50% of the total workforce). 79% of U.S. workers say they would like to work from home at least part of the time (WorldatWork Telework Trendlines 2009) and 87% of federal employees say they want to work from home (2013 Federal Viewpoint Survey).

There are significant economic benefits from telecommuting and working from home. According to the Global Workplace Analytics website, "If those with compatible jobs and a desire to work from home did so just half the time (roughly the national average for those who do so regularly) the national savings would total over $700 Billion a year." Other data points from the website are:

- A typical business would save $11,000 per person per year
- The telecommuters would save between $2,000 and $7,000 a year
- The oil savings would equate to over 37% of our Persian Gulf imports
- The greenhouse gas reduction would be the equivalent of taking the entire New York State workforce permanently off the road.

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[9] Global Workplace Analytics Recent Statistics on Telecommuting available at http://www.globalworkplaceanalytics.com/telecommuting-statistics

- The Congressional Budget Office's estimate of the entire five-year cost of implementing telework throughout government ($30 million) is less than a third of the cost of lost productivity from a single day shut-down of federal offices in Washington DC due to snow ($100 million).

According to the Aspen Institute's Communications and Society Program's recent publication, "The Future of Work", (2011) work is no longer confined to a specific time and place. Open systems, open platforms, shared folders and databases, "crowdsourcing," and collaboration between employees, contractors, vendors and suppliers happens "in the cloud" facilitating the ability to work anywhere there is a high-speed Internet connection, at any time.[10]

Providing the ability for people to work from home or from Internet meeting rooms – i.e. the local coffee shops, libraries, community centers, co-working spaces, incubator locations or virtual offices -- requires access to advanced broadband services. The benefits and cost savings of telecommuting can only be realized when workers have access to abundant broadband. If work is portable, people will choose communities that are rich in culture, art, entertainment, recreation, educational opportunities for kids and adults and are affordable. Work is no longer tied to place. Communities need to change to attract and maintain this new *portable* workforce.

Every "Thing" will be Connected to the Internet: Medical Devices, Health Monitoring Systems, Our Cars, Our Clothes, Household Systems, Appliances, Energy Controls – the "Internet of Things."

Every good thing out there is connected to the Internet; the new "Internet of Things." These things include household systems that monitor security systems, locks, energy use, temperature, and water control. It includes appliances that call automatically for maintenance; make shopping lists, schedule events, order parts, and schedule repair -- all without the need for human intervention or oversight.

The Internet of Things includes medical devices that monitor our health, detect and alarm us when medical issues are present, clothes that detect glucose levels or heart conditions, and hats that monitor our brain activity. Cars are now connected to the Internet, monitoring the car's status and performance, notifying drivers of traffic delays, alternative routes, hazardous conditions and mechanical issues. Soon cars will drive themselves. Internet-connected cars will provide anti-collision technology, automatically braking and steering clear of accidents or potential accidents. Our coming and going, our location, customer information and applications will all be collected, stored and monitored. Some of this sounds a bit uncomfortable; however, the reality of all of this is here. Devices are all Internet-enabled.

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[10] David Bollier, *"The Future of Work, What it Means for Individuals, Markets, and Governments,"* Aspen Institute's Communications and Society Publication, (2011).

Although we as individuals will need to determine how far and how much data we want to have shared and collected, it is clear that the Internet of Things is only enabled with advanced broadband capacity.

Affordable Healthcare: The growing Baby Boomer population and the implementation of the Patient Protection & Affordable Care Act will create new challenges for our healthcare system.

The baby boomers are getting older; the largest portion of our population is aging. Concerns of increased healthcare costs with our aging society will need to be curbed by providing better, smarter, more cost-effective healthcare. Implementation of the Patient Protection and Affordable Care Act is placing new demands on the medical industry to become more efficient, cost effective and nimble, demanding that physicians interact with more patients.

Telemedicine is the use of information technology including the telephone, the Internet and personal computers, for diagnosing, treating and monitoring patients. Telemedicine is adding a new dimension to modern health care. These advances are not only making care more accessible and convenient, they are lowering the costs of medical care, while not sacrificing the quality of care, and in many studies, improving the quality of care. Physicians can consult with more patients, and patients can meet with their physicians in a shorter time period. Less time is spent checking the patient in and leading the patient to the exam room. In terms of economic advantages, telemedicine can save a great deal of time for patients who otherwise would have to leave work. Telemedicine can also eliminate many ER visits, which are often the most costly means of providing healthcare services.

According to the Wellness Councils of America (WELCOA), as many as 70 percent of primary care visits, and 40 percent of emergency room visits to treat acute medical conditions could have been diagnosed and prescribed medication all over the phone.[11] The methodology of providing care has not changed; however, the medium for providing care has. The physician can perform diagnostic testing, interview the patient, check vital signs, etc. remotely using videoconferencing and remote monitoring equipment, and the telephone or internet; instead of providing these services in person.

The American Telemedicine Association highlights various reports on the efficacy, cost savings, improved healthcare and patient benefits of telemedicine.[12] One report highlights the experience of UPMC Health Plan, an integrated delivery and financing system headquartered in Pittsburgh, Pennsylvania, in its efforts to support primary care practices as they converted to patient-centered medical homes. From 2008 through 2010, sites participating in the UPMC pilot achieved lower medical and pharmacy costs; more efficient service delivery, such as lower hospital admissions and readmissions

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[11] Wellness Council of America, "Collecting Data to Drive Health Efforts," available at https://www.welcoa.org/resources/collecting-data-drive-health-efforts-classic-edition/

[12] American Telemedicine Association, numerous case studies available at http://www.americantelemed.org/about-telemedicine/telemedicine-case-studies

and less use of hospital emergency departments; and a 160 percent return on the plan's investment when compared with nonparticipating sites.

Presbyterian Healthcare Services based in Albuquerque, New Mexico, adapted the Hospital at Home® model developed by the Johns Hopkins University Schools of Medicine and Public Health to provide acute hospital–level care within patients' homes. In this program, patients show comparable or better clinical outcomes compared with similar inpatients, and they show higher satisfaction levels. Available to Medicare Advantage and Medicaid patients with common acute care diagnoses, this program achieved savings of 19 percent over costs for similar inpatients. These savings were predominantly derived from lower average length-of-stay and use of fewer lab and diagnostic tests compared with similar patients in hospital acute care.

Additionally, patients that are participating in a home health program or telemedicine program experience higher satisfaction as they receive more personal one-on-one care, without taking time from work to travel to a medical clinic and wait for their appointment with the doctor. The source of satisfaction for most patients is the ability to see a specialist trained in the area most closely related to the patient's condition, the feeling of getting personalized care from a provider who has the patient's interest in mind, and the ability to communicate with the provider in a very personal and intimate manner over the telecommunications technologies.

With the Internet of Things for Medical Devices, it is now possible to remotely monitor a patient's health with the use sensors, detectors, actuators and the Internet. Medical remote monitoring devices are connected to the Internet where a patient's vital statistics get transmitted via a gateway onto secure cloud-based platforms where the data is collected, stored, monitored and analyzed. These devices can monitor and alert physicians or loved ones if a patient's vitals fall outside a healthy range. Scanners can monitor inventory levels for pharmaceuticals before a medication runs out and order supplies and inventory ensuring that hospitals and clinics have the needed supplies.

Other medical applications enabled with advanced broadband include medical training and consultation with other physicians and providers, electronic health records, and the ability to log-in and read patient charts, MRIs and X-rays.

Education and Distance Learning: **Our workforce must continue to evolve through workforce training and education. The manner in which we provide education to our kids and to adults is changing, requiring us to access information and education through distance learning and reverse classroom experiences.**

The concept of working for a single company or within a single industry for thirty years until retirement is no longer an economic reality. Workers will change careers an average of seven times during their lifetime. Workers cannot expect to enjoy a "steady job" with a lifelong employer, nor expect that employer to provide the training and skills needed as the work changes. Workers will require on-going training, education and mentorship. Many of these resources for further education and mentoring are now mostly available on-line and virtual. Educational institutions, workforce training, universities, and corporations must provide education when people can use it, rather than at a specific place and time, working around lifestyle, schedules and work/home priorities and pressures.

Homework assignments, testing and accessing educational videos are all on-line. The methodology by which education is happening is changing. Schools are providing the reverse classroom, or flip education; a concept that includes providing a video of the lesson online. Students download the lesson remotely while at home, watch the lecture, can pause, reflect, rewind and watch again. The classroom time is then used for more in-depth study, homework, questions and interaction between the students and teachers.

The FCC adopted a benchmark for schools of 100 Mbps per 1,000 users through the July 2014 E-rate Modernization Order. Currently approximately 35% of schools lack access to fiber, and thus likely fall short of this benchmark. The FCC has a long-term goal of 1 Gbps per 1,000 users.

Public Safety: Our first responders need reliable, ubiquitous coverage, higher standards than what our commercial networks currently have, interoperability between networks and priority access to information and databases.

Emergency response teams have unique needs and higher standards for broadband and communications. Our first responders need networks that are reliable, always on, secure, provide ubiquitous coverage, interoperability between network and priority access to information and databases. Their devices need to be small, lightweight, versatile and autonomous, wearable and portable. The devices need to be capable of sensing the environment, of tracing and tracking resources and able to convey a wealth of information to other responders, civil protection authorities and to crisis management centers. Sensor-nets can provide for situational awareness for disasters, fires, emergencies, car wrecks and other events, but these sensors require access to high bandwidth and the current wireless networks do not currently support these applications adequately.

Police officers are ready to trade in their handheld radios for use of their iPhones, iPads, and Android devices while on the job. Until recently, this has created a problem for law enforcement agencies as smartphones and tablets haven't been able to connect to conventional Land-Mobile Radio (LMR)

networks. U.S. public safety agencies will soon be able to use the FirstNet network that provides priority access for law enforcement, first responder and public safety agencies. This is critical during disasters when cell phone networks can become congested, as FirstNet is a network that will have spectrum dedicated exclusively for public safety entities.

Additionally, most devices for law enforcement include video applications – camera-equipped police and camera-equipped cars, cameras on traffic stops and enforcement of speed sensors and speeding tickets, and live ambulance video-links to hospitals. The existing wireless networks cannot support the applications that are in use today. The 911 system cannot process videos from citizens, but as we are finding during emergencies, the public is often the "eyes and ears" during these crises as citizens are videotaping events as they happen. Having the public be able to record events and send the information to first responders allows for better transparency, honesty and less mistakes.

Digital Inclusion and Civic Engagement: The Great Equalizer between the Haves and the Have-nots.....or Not?

Broadband must be ubiquitous or it will further create a digital divide between the haves and the have-nots. When broadband is ubiquitous it can be the great equalizer between different economic classes. In 2014, the International Economic Development Council asked economic development professionals if broadband service could "encourage individual entrepreneurship among under-served constituents," and 35 percent said that it is quite likely and 14 percent said that they had seen it firsthand (see Table 4). Ubiquitous broadband access can help create social equality. However, not having advanced broadband access available to everyone can create further inequalities of wealth and potentially can create further gaps in education, social institutions and government resources. Broadband must be abundant, redundant and available to everyone.

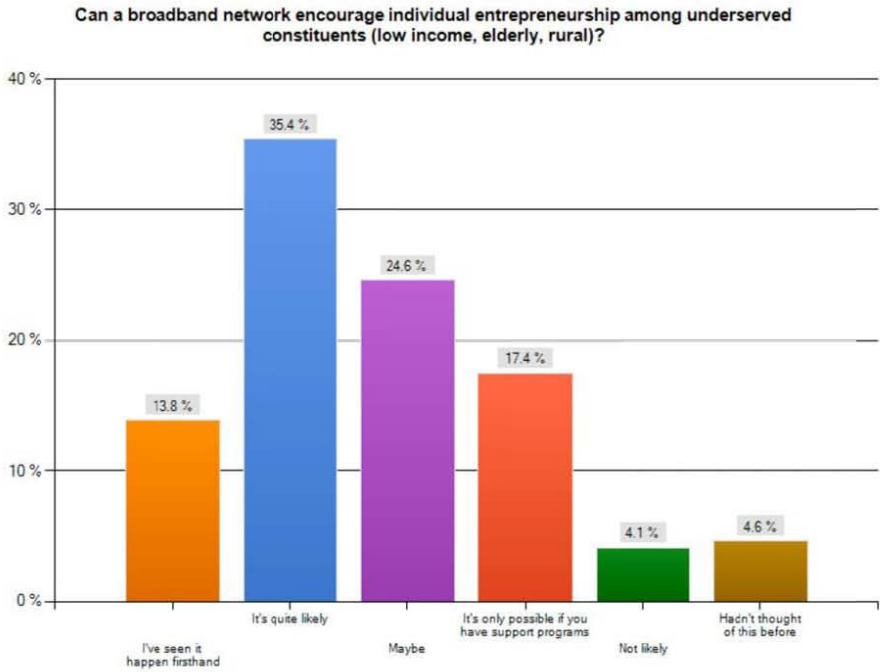

TABLE 1 ENTREPRENEURSHIP AMONG UNDERSERVED CONSTITUENTS.[13]

Civic Engagement, Transparency, Access to Government Resources.

Advanced Broadband Networks can transform civic engagement, access to government resources and transparency of government. All government documents, including GIS data, applications, information on initiatives, information on financial contributions etc. are now available on-line. Documents must be able to be in a standardized format, searchable and available where data can be edited and used by other programs. Providing citizens access to this data provides further transparency, community engagement, public input, and public impact on government.

Higher Home Values

Finally, statistics from the FTTH Council state that real estate developments communities that have deployed FTTH networks have instantly improved home sales values. According to the FTTH Council, access to fiber adds 3.1% to the value of a home and having a Gigabit available increases home values by 7% over homes that have access to 25 Mbps or less.

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[13] International Economic Development Council, "The Broadband-Driven Economy."

Better Broadband Boosts Home Value: Got Fiber?

The FTTH Council just released a study showing the positive correlation between home prices and fiber-delivered Internet, adding increased property value to the already long list of fiber's benefits.

Access to fiber adds **3.1%** to the value of a home.

The Fiber Effect
Access to fiber in your neighborhood raises the value of your home by
1.3%

+

The Speed Effect
Being able to get speeds up to one gigabit boosts the value another
1.8%

Put another way: that's an additional $5,437 for the sample median home price or like adding

A full fireplace.

Half of a bathroom.

Or a quarter of a swimming pool!

The Gigabit Effect
Homes where one Gbps is available...

...have a transaction price over 7% more than similar homes where 25 Mbps or less is available.

Source:
Molnar, G., Scvage, S., & Sicker, D. (2015). Reevaluating the Broadband Bonus: Evidence from Neighborhood Access to Fiber and United States Housing Prices.

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Public Land Leasing Opportunity

The Wireless Telecommunications Master Plan (Master Plan) serves as a general planning tool for the City of Grand Junction and Mesa County. The master plan is intended to balance the goals of providing good wireless network services throughout the service areas while minimizing the visual impacts of the telecommunications infrastructure.

The master plan serves as an illustrative planning tool and guide for developing planning policies for future wireless communications infrastructure and will identify publicly owned properties that can be part of a network deployment solution for service providers. This analysis will help establish a policy framework and suggestions for minimizing the future number of telecommunication facilities and recommendations for design standards to guide decisions regarding the siting of telecommunication facilities. The maser plan is intended to provide a framework for wireless deployment and be a fluid document to service providers to use as a guideline for deployment of wireless services.

Leasing Public Land

Leasing publicly owned lands assures the community the preference of preferred infrastructure materials and technologies presently available to the industry. As public sites are developed, the infrastructure installed becomes the precedent of how future sites should be developed on private land. For example, many slick sticks and flagpole towers are available to the industry, as well as other creative ideas for concealment towers; some are more aesthetically pleasing and more practical than other types. As the local government utilizes these products, their applications become the standard for future tower sites on both public and private land. As public land sites are considered and utilized for these purposes, staff gains invaluable knowledge on how wireless sites are constructed, which will aid them in reviewing and processing future site plan designs and evaluations on both public and private properties. Leasing public lands for purposes of new wireless infrastructure can create new sources of public revenue. As new sites are developed on public land, the community generates lease revenue from that tower owner and tenant.

How Specific Cell Tower Sites are Chosen

When wireless service providers determine that a new cell tower or antenna site is needed in a given area, the radio frequency (RF) engineering department issues what is commonly known as a "Search Ring." A Search Ring is a circle or other shape drawn on a map that indicates where a site could be located to meet the requirements. The size of this search ring varies depending upon the topography of the area, the demographics (where and what type of customer base) and other factors including whether the area is urban, suburban or rural in nature.

The Search Ring is handed to a Site Acquisition Agent (Site Ac) who either works for the wireless service provider or for a company that the wireless carrier has contracted with to find cell tower sites. The site specialist drives the geographic area of the search ring looking for suitable land sites that must meet minimum criteria that can include parcels that:

1. Are large enough for a cell tower—Normally (but not always) this is a parcel double the size of the height of the tower. So if a tower is 100 feet tall, the parcel must be 200' x 200'.
2. Have easy and inexpensive access from a public road.
3. Are meet zoning requirements. In many jurisdictions, towers are only allowed on commercially or industrially zoned parcels. Some areas allow towers on agriculturally zoned parcels, and most do NOT allow towers on residentially zoned parcels. (For more information on zoning requirements please see the following page.)
4. Do not have conditions that would make constructing a tower unduly expensive. These conditions can include wetlands, poor or rocky soil conditions, significant distance to the cell tower site from the main road, lots of trees, and possible hazardous waste on the property.
5. Have landowners who are willing to lease the site at rates acceptable to the wireless carrier.

Wireless providers prefer to locate on existing structures first before building a new tower. They do this because many zoning jurisdictions require this due diligence and because it reduces development costs and time to market. These structures can be buildings, existing towers, existing structures like water towers, or anything else that provides suitable heights. If there are suitable structures, the carrier will then just lease space on the tower, and no new tower will be built.

If there is not an existing tower, then the site specialist will approach those landowners who have parcels that meet the criteria listed above. They will contact multiple owners and find out which owners are interested. These sites then become candidates for the tower. The negotiations then begin.

When communities include a hierarchy of preference within regulations it makes it easier for wireless carriers to deploy quickly. Public land will not be able to accommodate all cell tower siting and communities showcasing public land for lease will not hurt private enterprise, it will only put them into the mix.

Leasing of public land can yield communities millions of dollars over the course of a contract.

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Lease Projections

The numbers below reflect an example of the development of six different type facilities, from the use of a Water Tank to a concealed flagpole. These six facilities have created more than $10 million dollars in gross revenue to the City over 30 years. Each facility is built for the maximum collocations and has the potential for additional revenue.

30-Year Wireless Projection - Sample City A

Service Provider	Site Location	Owner	Year 1-5	Year 6-10	Year 11-15	Year 16-20	Year 21-25	Year 26-30	30 Years
Carrier 1	Water Tank 1	City	132,942	154,117	178,664	207,120	240,109	278,352	1,191,304
Carrier 2	Water Tank 1	City	112,107	167,279	203,521	247,614	301,260	366,529	1,398,310
Carrier 3	Water Tank 1	City	81,600	154,734	179,379	207,950	241,071	279,467	1,144,201
Carrier 1	Park 1	City	38,708	75,549	91,916	111,830	136,059	165,536	619,598
Carrier 1	Utility 1	City	-	43,830	76,759	97,966	125,033	159,577	503,166
Carrier 1	Park 2	City	-	140,161	167,360	194,016	224,918	260,741	987,195
Carrier 1 Abate	Park 2	City	-	(140,161)	(17,139)	-	-	-	(157,300)
Carrier 2	Park 2	City	-	140,161	162,485	188,365	218,367	253,147	962,525
Carrier 1	Park 3	Carrier	102,140	152,511	185,552	225,753	274,663	334,170	1,274,789
Carrier 1	Park 4	Carrier	102,140	152,511	185,552	225,753	274,663	334,170	1,274,789
Carrier 2	Park 4	Carrier	29,673	56,267	65,229	75,618	87,662	101,624	416,073
Carrier 3	Park 4	Carrier	22,476	43,867	53,371	64,934	79,002	96,118	359,767
TOTAL CITY A			621,785	1,140,825	1,532,650	1,846,919	2,202,805	2,629,431	9,974,415

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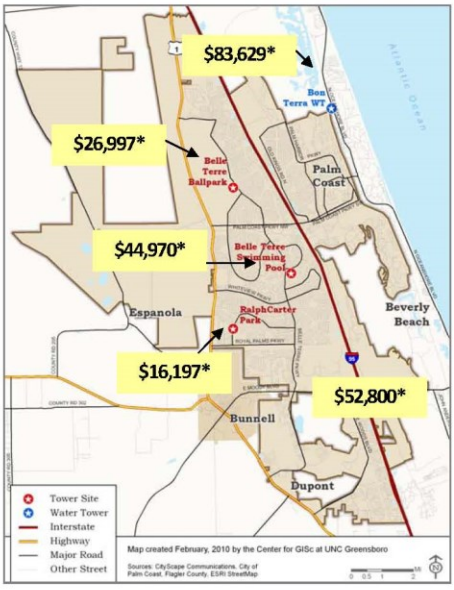
Helping Local Government Solve Wireless Telecommunications Issues

Profit from Planning and Solve Budget Issues



Palm Coast, Florida

Estimated Projections on Current Leases

*Approximate Annual Gross Lease Revenue 2010

City Size: 60 Square Miles

Population: 68,013

Total 8 Leases (up to 30 years)

Gross Annual Revenue $169,785

Gross Contract Total: $8.4 Million

Pending New Build: $52,800/$3.9 Million

Coconut Creek, Florida

Estimated Projections on Current Leases

*Approximate Annual Gross Lease Revenue 2010

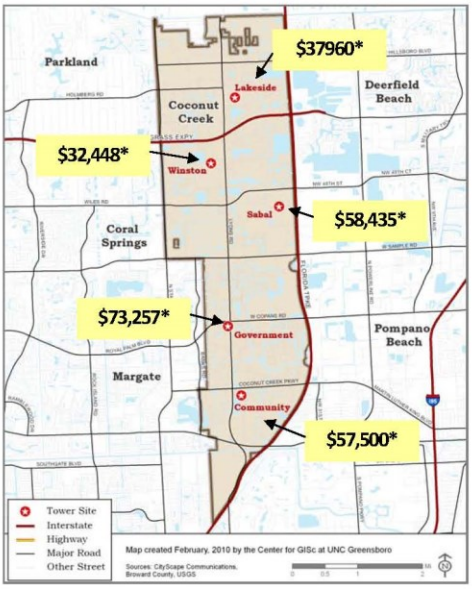
City Size: 11.5 Square Miles

Population: 50,436

Total 8 Leases (up to 25 years)

Gross Annual Revenue $243,376

Gross Contract Total: $7.6 Million



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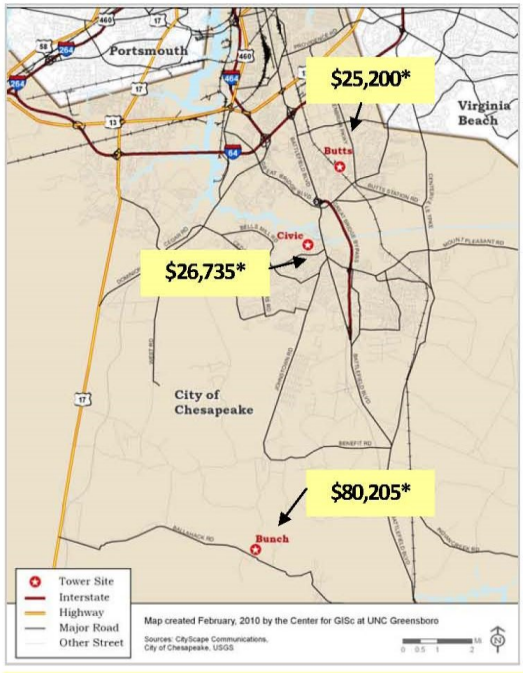


Chesapeake, Viriginia

Estimated Projections on Current Leases

*Approximate Annual Gross Lease Revenue 2010

City Size: 340.7 Square Miles
Population: 220,111
Total 5 Leases (up to 30 years)

Gross Annual Revenue $132,139

Gross Contract Total: $5.9 Million

Margate, Florida

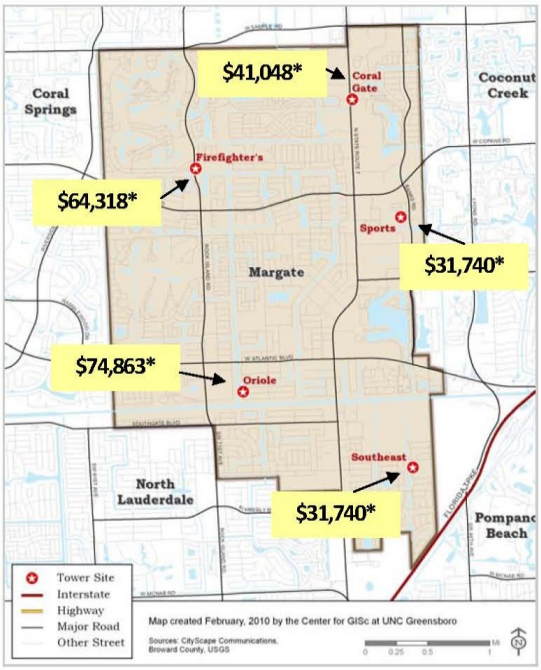
Estimated Projections on Current Leases

*Approximate Annual Gross Lease Revenue 2010

City Size: 8.81 Square Miles
Population: 54,086
Total 10 Leases (up to 30 years)

Gross Annual Revenue $306,156

Gross Contract Total: $9.7 Million



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WIRELESS MASTER PLAN UPDATE

Council Workshop – January 18, 2016

Project Update

- Contract signed with CityScape Consultants – May 28, 2015
  - *Scope of the contract includes all of Mesa County. Funding for the project was provided by the Grand Junction Regional Communication Center*
- Kickoff Meeting – June 30, 2015
  - *Preliminary analysis of coverage requirements and current tower locations*
- Stakeholder Meeting – August 26, 2015
  - *Initial composite coverage maps and expanded analysis of tower locations*
- Technical Review Meeting – December 7, 2015
  - *Projected coverage maps, final tower inventory, and proposed code changes*
- Community Preferences Survey Completed – December 31, 2015

SBA Communications comment on our process

"Thanks for the invite to the Wireless meeting. I wished more cities would take the initiative to design an ordinance that addresses the wireless industry."

Email from Danny Edwards, Director, Territory Sales NTB, 12/21/2015

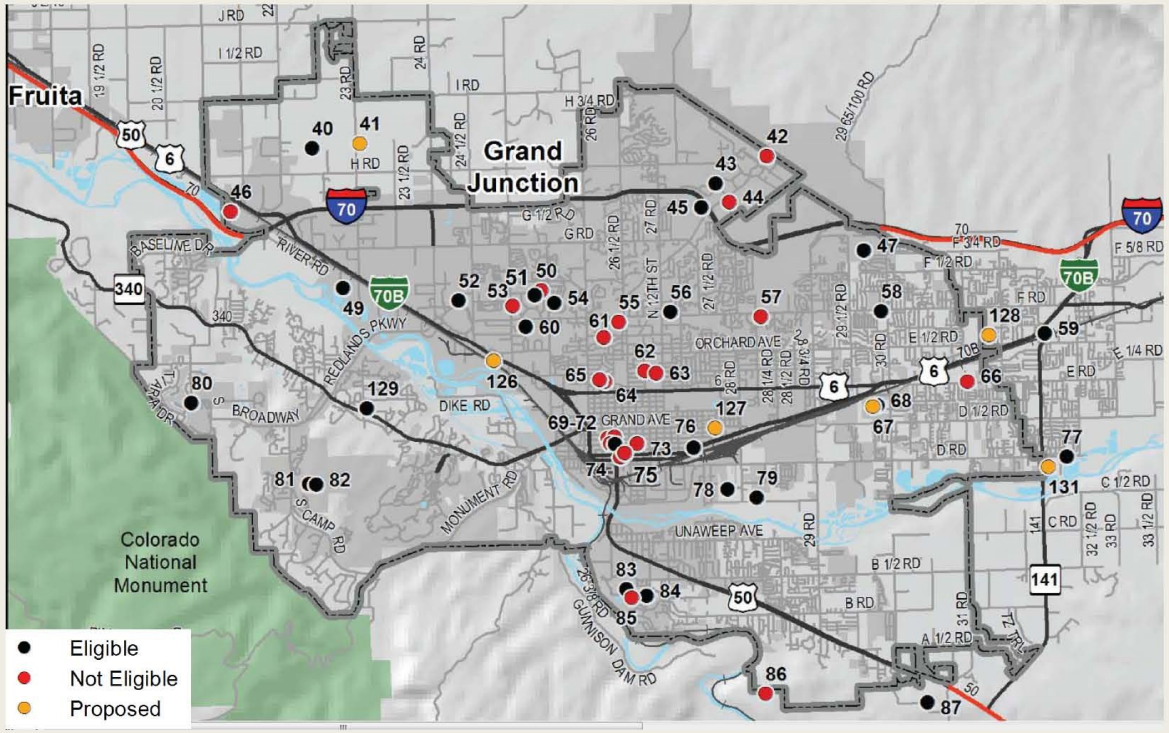
Compelling wireless trends

- Wireless technology has become an essential part of the national economy
  - *40% of 2014 holiday shopping occurred online. Probably more in 2015.*
  - *Of those who shop online, 53% use smartphones or tablets.*
  - *78% of shoppers use the Internet for buying research.*
- Mobile Media Time (i.e., time spent using smartphones and tablets) is now greater than desktop time for Internet users in the United States.
- The FCC redefined "broadband" as 25 Mbs download and 3 Mbs upload in 2015. In 2015, Verizon announced XLTE wireless network deployments in 400 communities which provides Internet service meeting the new broadband definition. Grand Junction is one of those communities where XLTE is being deployed. Speed tests in deployed areas in Grand Junction show speeds of up to 50 Mbs download and almost 20 Mbs upload.
- 5G wireless broadband will offer speeds 30 to 50 times 4G speeds. Verizon has announced field trials of its 5G network to begin in 2016 with "some level of commercial deployment" expected to begin as early as 2017.

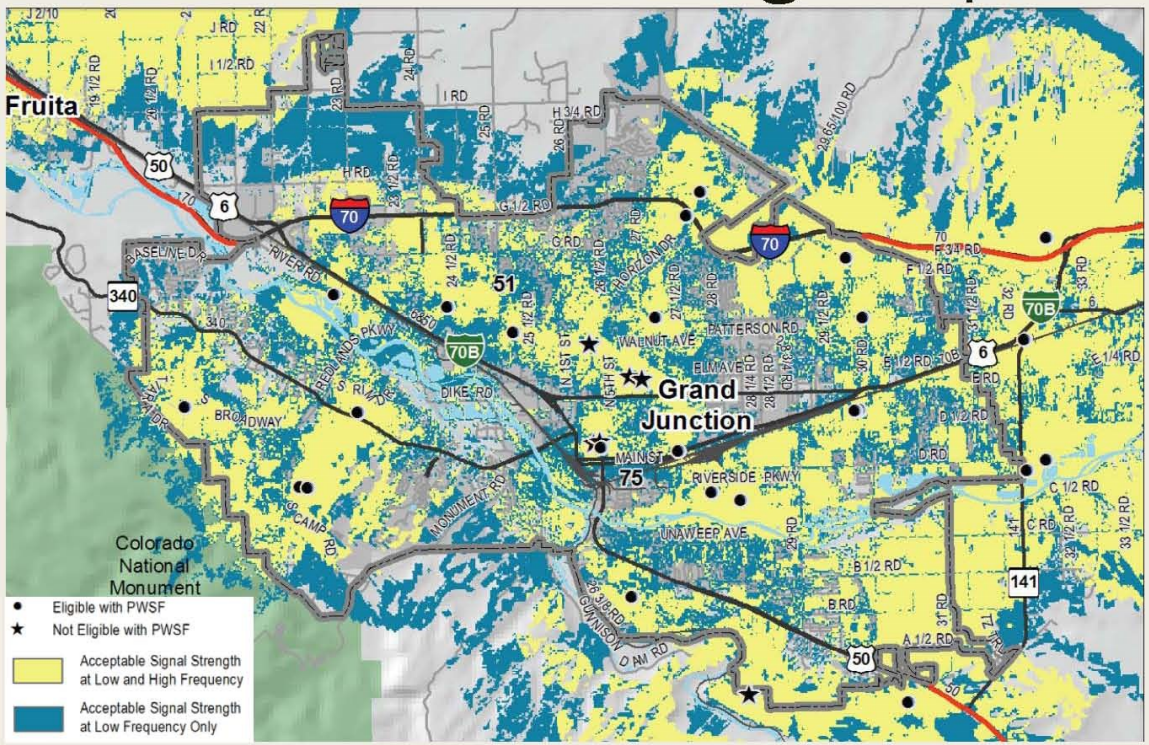
Both land based and wireless Internet enabling infrastructures are essential

- Land based broadband and wireless broadband are both critical elements of a technological infrastructure to support economic and community development.
- Deploying fiber to an area to meet the needs of land based broadband users will enable new wireless technologies to be deployed to meet the needs of wireless broadband users.
- New and upgraded wireless facilities will require the deployment of fiber resources that will facilitate the availability of land based broadband services for users requiring the benefits that fiber based broadband provides.

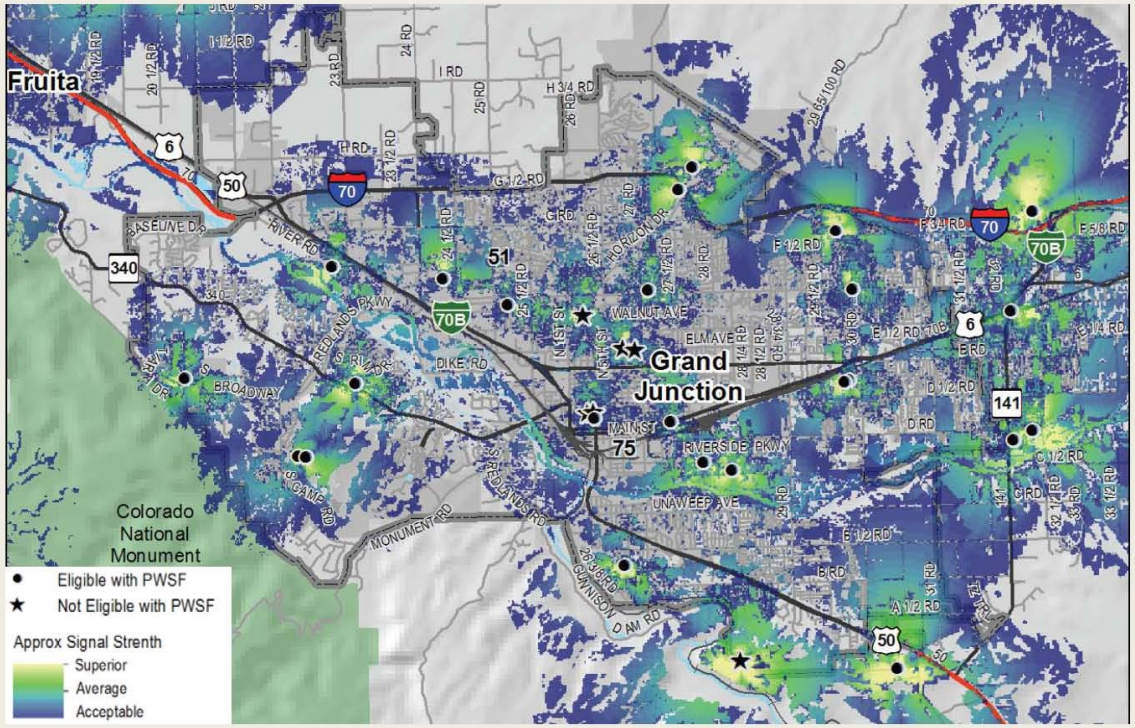
Current Tower Infrastructure (All Types)



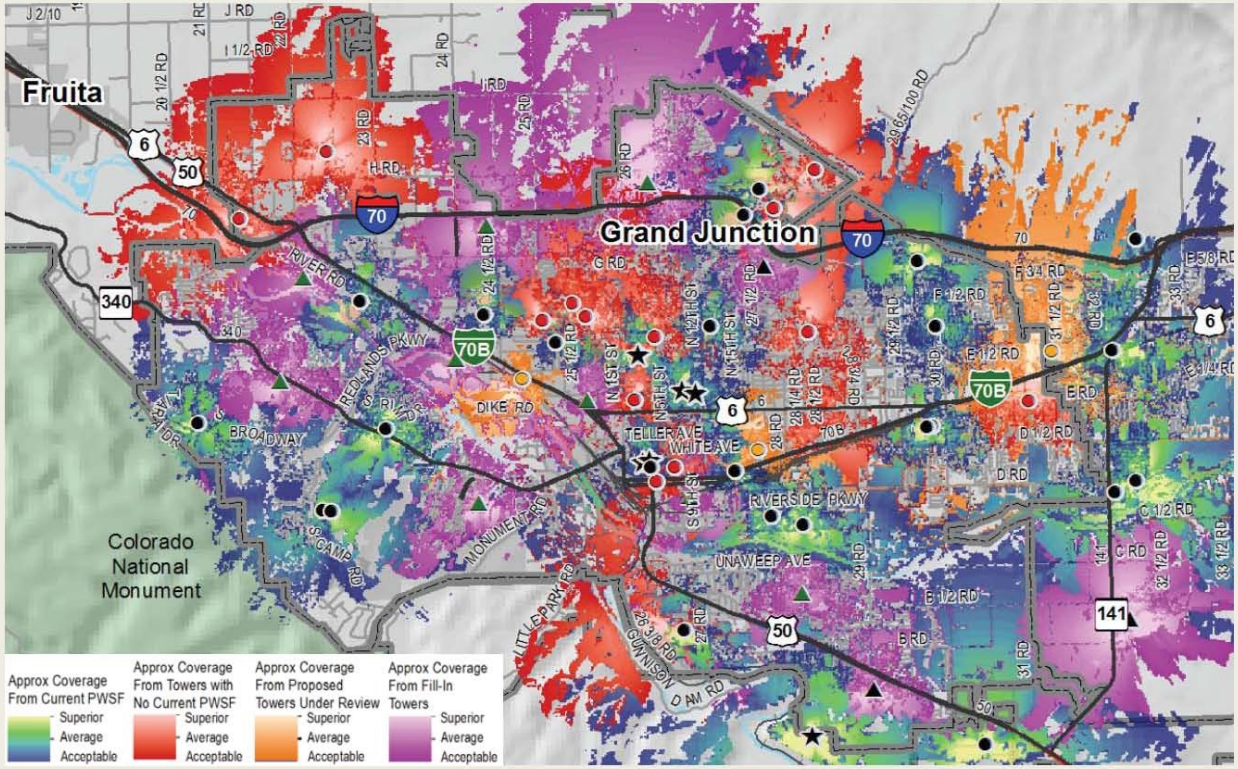
Current Theoretical Coverage Map



Projected Coverage Gaps over 15 Years



Gap Coverage Options



Consultant recommendations for filling Gaps

- Maximize use of existing Tower Infrastructure
  - *Collocation of multiple carriers on existing Personal Wireless Service Facilities (PWSF)*
  - *Add PWSF to existing towers and structures not currently used for PWSF*
- Between 11 and 18 new towers will be required over the next 15 years
  - *New Tower structures on public properties*
  - *New Tower structures on non-public properties where public properties aren't available or won't work for the carrier network.*
- Revise development code to incorporate regulation changes, streamline the permitting process and to establish a preferred hierarchy of construction options for tower developers and carriers.

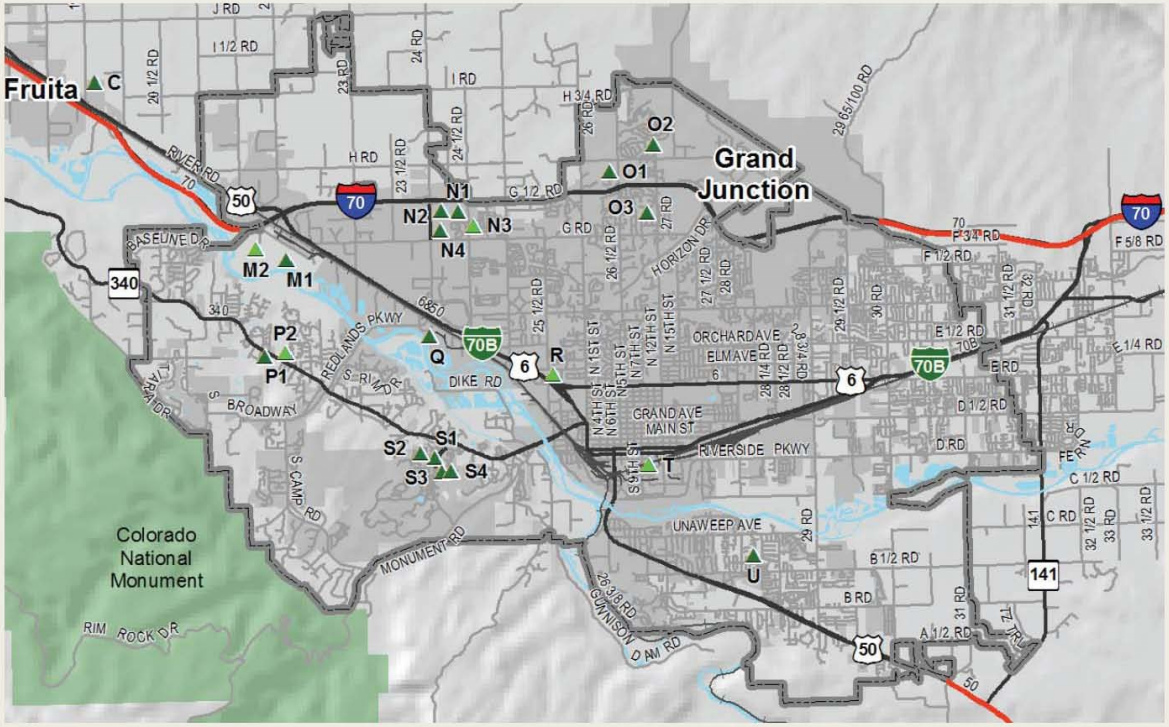
WMP Survey Results

- Targeted survey sent to 480 constituents across the County (and was available on the website for any interested party). 134 responses received (28% return rate).
- Findings
  - *People care about where and what types of towers are located*
  - *89% said providers should be required to place facilities on existing towers and structures before allowing construction of a new tower. 96% favored use of existing structures when possible.*
  - *Concealed towers and facilities were overwhelmingly preferred over non-concealed towers in all locations.*
  - *Respondents were generally open to almost any type of tower in business districts, commercial, industrial and rural areas but were very concerned about tower placement and types in residential and public park areas.*
  - *Respondents favored tower placement in parks over residential areas.*
  - *Towers placed in residential or public park areas must be of a concealed type, preferably on buildings and other existing structures.*

Reasons why the City should consider use of Public Property

- In addition to influencing tower construction using zoning ordinances, placement of towers on City owned property allows the City to control:
  - *The type of tower built*
  - *Location of the tower on the property*
  - *Ongoing maintenance of the tower*
- Public properties (and potentially private properties) can be prescreened and identified on a priority list so that permitting can be expedited – reducing construction time for the tower builder.
- Lease revenue from the use of City-owned properties provides a stable alternative revenue source (potential funding source for Public Safety?).

Potential Public Property Sites to fill Gaps



Guidance Discussion

- Should the City encourage the use of public properties for the location of new PWSF towers that will be needed over the next 15 years?
- Should the City establish, via ordinance, a preferred hierarchy of location and style preferences and provide expedited permitting capabilities for development applications meeting those preferences?
- Should the City entertain a proposal from an established tower builder to lease space on the existing radio tower located on Fire Station 2 property?

Next Steps

- Incorporate Council Guidance into draft code revisions
- Work with the County and other municipalities to update their code requirements for wireless facilities
- Establish a process to work with wireless carriers and tower companies to expand services into areas with poor or non-existent coverage
- Public Meetings for Boards and Commissions
- Finalize and adopt code revisions
- Finalize and adopt the Master Plan

City of Grand Junction Broadband Planning Efforts

NEO Fiber

January 18, 2016

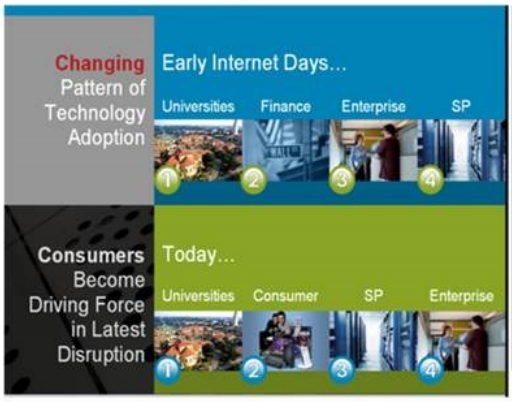
Purpose: To provide an update on the broadband planning efforts underway.

Agenda:

1. Industry Context, Why this Matters and What can Municipalities Do?
2. Challenges to Abundant and Affordable Broadband – Why is this a Problem?
3. Options to Solve the Broadband Gap
4. Process, What are we working on now?
5. Questions and Answers

Limit: Not to exceed 1 hour

Industry Context



Application	Rate
Personal communications	300 to 9,600 bits/sec or higher
E-mail transmissions	2,400 to 9,600 bits/sec or higher
Remote control programs	9,600 bits/sec to 56 Kbits/sec
Digitized voice phone call	64,000 bits/sec
Database text query	Up to 1 Mbit/sec
Digital audio	1 to 2 Mbits/sec
Access images	1 to 8 Mbits/sec
Compressed video	2 to 10 Mbits/sec
Medical transmissions	Up to 50 Mbits/sec
Document imaging	10 to 100 Mbits/sec
Scientific imaging	Up to 1 Gbit/sec
Full-motion video	1 to 2 Gbits/sec

Service	Bandwidth	Number of Devices	Bandwidth Home Area Network	Bandwidth Residential Gateway to Network
TV	2 to 20 Mbps	3.5	2 to 70 Mbps	2 to 70 Mbps
DVR	2 to 20 Mbps	2	2 to 40 Mbps	0
Home Theater	1 to 6 Mbps	1	1 to 6 Mbps	0
Internet Browsing	1 to 20 Mbps	1 to 5	1 to 100 Mbps	1 to 10 MBPS
Printer	.5 to 1 Mbps	1 to 5	.5 to 5 Mbps	0
Digital imaging	1 to 20 Mbps	1 to 3	1 to 60 Mbps	0
On-line Gaming	.2 to 1 Mbps	1 to 3	.2 to 3 Mbps	.2 to 1 Mbps
Video Capture	.1 to 1 Mbps	1 to 10	.1 to 10 Mbps	.2 to 3 Mbps
Portable Audio	.1 to 20 Mbps	1 to 3	.1 to 60 Mbps	0
Total	**70 to 100 Mbps**		**12.5 to 354 Mbps +**	**4 to 84 Mbps +**

New Tools Enable Innovation


Broadband Impacts Every Sector of Industry
Mobile Banking
Mobile Wallets
mCommerce
Electronic Medical Records
Telemedicine
mHealth
Biometrics
Remote Surveillance
Emergency Service
Smart Metering
Intelligent Building
Building Efficiency
Mobile Learning
Telepresence
Healthcare
Banking & Finance
Utilities
Education
Public Safety
Transportation
Intelligent Transport System
Smart Navigation System
Traffic Information System
In-vehicle Infotainment
Asset Tracking
Retail & Hospitality
Digital Signage
ePayment / Mobile Payment
Interactive / Smart Kiosks

Why is this Important?

- The community wants it. Favorable SB-152 Opt Out.
- Broadband is a critical infrastructure.
- The existing "model of scarcity" can be transformed in this process.
- Broadband infrastructure is necessary to support local tourism, economic development, industry, our schools and students, healthcare and everything that we do.

What exactly is the Problem? Solution?

Disrupting and Transforming the Status Quo

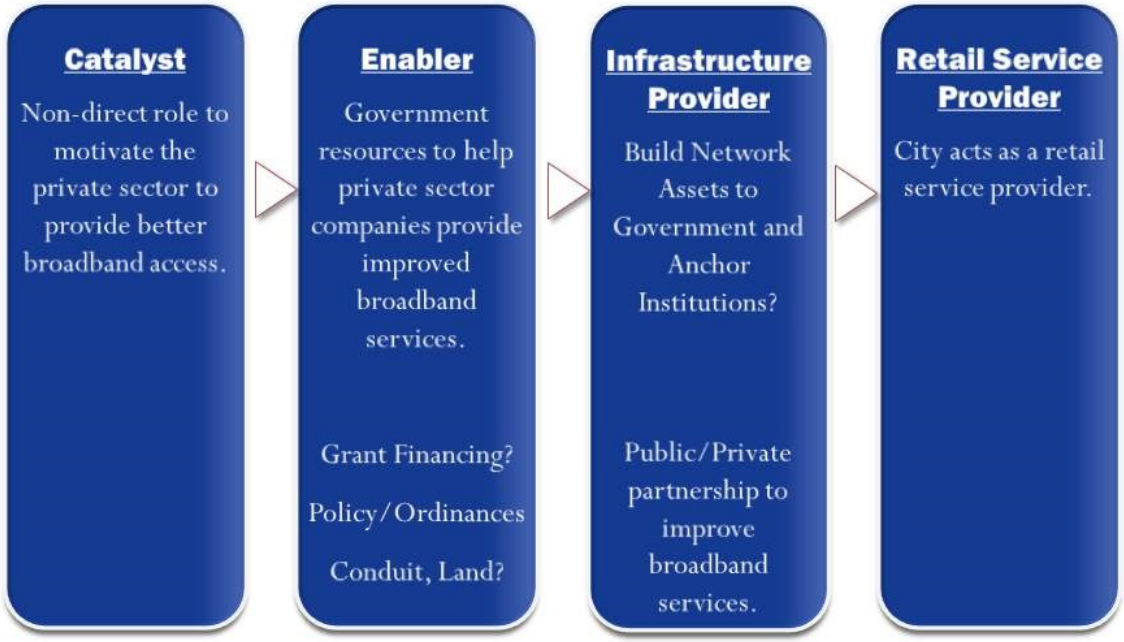
More or All-Fiber Networks are Expensive / Capital Intensive

Reduce Capital Costs

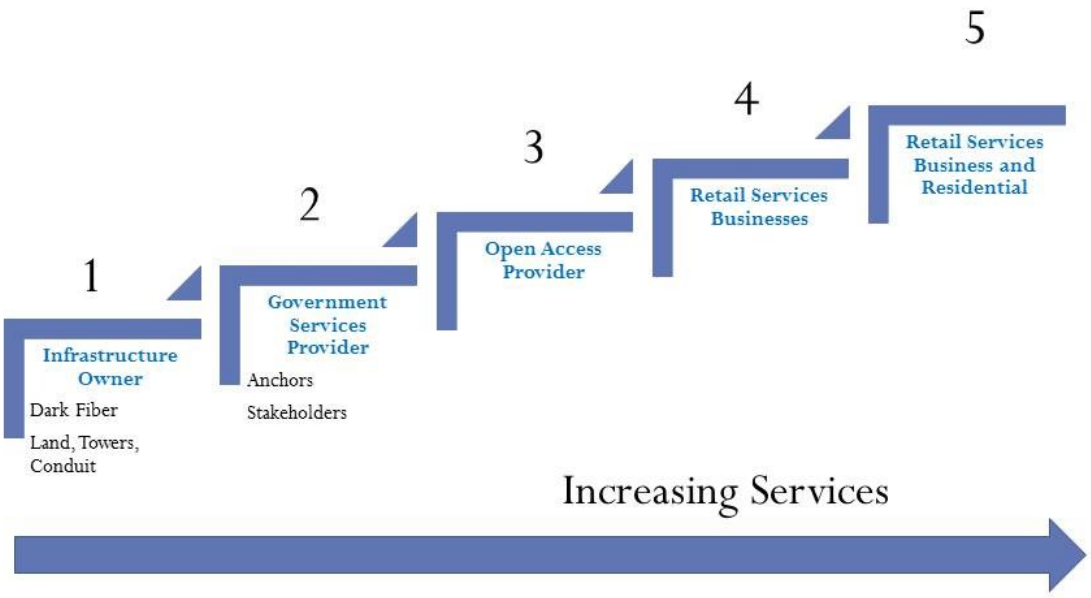
Create a Dynamic and Competitive Environment

Lessons Learned from the Industry

What can Government Do?



Service Delivery Models



What Are We Doing?

- Policies, Ordinances
- Surveys
- Community Engagement
- Invitation to Bid, Downtown Development Authority
- Identifying Assets
- Identifying Gaps
- Financial Modeling and Best Options to Further Explore
- Recommendations and Plan Forward

Thank you!

NEO Fiber

City Council

2015 Amended, 2016 Adopted and 2016 Amended Economic Development, Partnerships, Sponsorships, and Memberships as of 1/12/16

			Use of Economic Development Contingency			
Item Ref.	Partner	2015 Amended Budget	2016 Adopted	2016 Amended	2016 B List	2016 Notes/Description
1	Associated Governments of Northwest Colorado	8,200	8,200	8,200		
2	Chamber of Commerce	6,300	6,225	6,225		
3	Western Colorado Latino Chamber of Commerce	60	60	60		
4	Club 20	4,100	4,100	4,100		
5	National League of Cities	4,467	4,467	4,467		
6	Metropolitan Planning Organization	33,568	28,397	28,397		
7	Colorado Water Congress	5,970	5,970	5,970		
8	5 2 1 Drainage Authority	123,000	123,000	123,000		
9	Parks Improvement Advisory Board (PIAB)	14,000	14,000	14,000		
10	Arts Commission	43,300			43,300	
11	Colorado Municipal League	41,263	40,025	40,025		
12	Colorado Communications and Utility Alliance	3,300	3,300	3,300		
13	Subtotal $	287,928 $	237,744 $	237,744 $	43,300	
14	Colorado Mesa University-Campus Expansion (10 yrs ending in 2017)	500,000			500,000	*Per Email Request from Derek Wagner to Tim Moore September 10th, 2015*
15	Colorado Mesa University-Classroom Building (15 yrs ending in 2027)	500,000	500,000	500,000		*Per Email Request from Derek Wagner to Tim Moore September 10th, 2015*
16	Grand Valley Transit (paid quarterly)	389,886	389,886	389,886		*2015/2016 Rate*
17	USA ProCycling			50,000		*Authorized by City Council December 2nd, 2015*
18	Downtown Business Improvement District	13,466	13,466	13,466		
19	Pro Mountain Bike Race (Epic Rides)	10,000	20,000	20,000		*Epic Rides (VCB, DDA, GJEP Also contribute $10k for total cash contribution of $40k. County pays for traffic Control @ 58k, and City contributes $10k in-kind) 2016 Contribution authorized by City Council Sept 2nd, 2015*
20	Standing Sponsorships (Hospice Gala, Centennial Band, High Five Robotics, etc)	10,000	5,000	5,000	5,000	
21	Housing Resources of Western Colorado	5,000			5,000	*Still trying to contact Housing Resources-Did not receive specific request.*
22	Kids Voting	5,000			3,500	*Per Request Letter dated August 27th, 2015 plus $500 table sponsorship at annual banquet.*
23	Business Incubator	53,600	53,600	53,600	5,300	*Per request letter dated July 17th, 2015*
24	Grand Junction Economic Partnership	40,000	40,000	40,000		*Per request letter dated July 31st, 2015*
25	Riverfront Commission	17,121	17,121	17,121		
26	Western Slope Center for Children	30,000	30,000	30,000		
27	Western Slope Center for Children-SANE Coordinator	5,000	5,000	5,000		
28	Mesa Land Trust-Operations	10,000	5,000	5,000	15,000	*Per request letter dated September 4, 2015*
29	Young Entrepeneur Academy (use of contingency)	5,000	4,000	4,000	1,000	
30	Foreign Trade Zone (use of contingency)	85,300				
31	Commercial Catalyst Pilot Program (use of contingency)	50,000	50,000	50,000		
32	Economic Development Branding and Marketing Plan (use of contingency)	140,000				
33	Global Petroleum (use of contingency)	6,500				
34	Business Incubator-Technology Accelerator (use of contingency)		29,000	29,000		
35	GJEP Job Incentive Program (use of contingency)				50,000	*2016 first of multiple year disbursement as jobs are created*
36	Greater Grand Junction Sports Commission (use of contingency)	15,000				*Council Workshop September 14, 2015 Request Letter August 26, 2015 request part of ED Partner Request*
37	Colorado Advanced Mftg Alliance-West Mftg Summit (use of contingency)	3,164				*Sponsorship ($2,500) + Travel Costs for Dan Gritzwald ($664) Authorized 2/4/15 by CC*
38	Museum of Western Colorado-Use of Heywood Trust Funds	78,500				*Authorized by City Council Per Council January 21st, 2015 Resolution No. 06-15 Use of Heywood Trust*
39	Match 1/2 of $25,000 funding effort for the Business Incubator-Laser Cutter	12,500				*Authorized by City Council at pre-meeting January 21, 2015 (use of ED contingency)*
40	Mesa Land Trust Buffer Program (East Orchard Mesa Farm)		15,000	15,000		*Authorized by City Council March 4th, 2015 to be funded by General Fund-Request by MLT is to carryforward*
41	Mesa Land Trust-Monument Trail (2015 planning) (use of contingency)	5,000				*Authorized by City Council at pre-meeting May 6th, 2015 (use of ED contingency)*
42	Legends Project (Funded by 1% of the Arts)	10,000				*Authorized by City Council June 1st, 2015*
43	Mesa County Library (use of Heywood Trust Funds)	78,500				*Approved by City Council July 1st, 2015 Resolution No. 33-15 Use of Heywood Trust*
44	Events Center Financial Feasibility Study (use of contingency)	40,000				*Authorized by City Council September 16th, 2015*
45	Additional Scope on Events Center TRCC Analysis	13,000				*Approved by City Council at pre-meeting October 7, 2015*
46	Boise Events Center Trip	5,000				*Approved by City Council at November 9th, 2015 Budget Workshop*
47	Parking Study (use of contingency)	18,000				*Authorized by City Council September 16th, 2015*
48	Broadband Strategic Plan (use of contingency)	83,000				*Authorized by City Council September 2nd, 2015*
49	Request from Chamber, BIC, GJEP (40% in 2016)		227,800	227,800	341,700	*Per request letter dated September 14th, 2015 (Recruitment $296k, Business Expansion/Retention $80k, Business Creation $147.5k, Packaging $46k)*
50	Homeward Bound-Shelter			43,498		*Authorized by City Council January 6th,2016*
51	Grand Junction Housing Authority-The Highlands				388,329	*Authorized by City Council April 1, 2015 Resolution No. 22-15 (Swr $195,563, Wtr $4,150, TCP $113,216, Parkland $14,400, Open Space $61,000)*
52	Homeward Bound-Pathways Village Appartments				100,000	*Discussed by City Council May 18, 2015*
53	Events Center					*Amount unknown at this time*
54	Broadband/Wireless Implementation					*Amount unknown at this time*
55	Marketying Plan After Branding					*Amount unknown at this time*
56	Foreign Trade Zone Implementation					*Amount unknown at this time*
57	Mesa Land Trust Capital Projects				115,000	*Per request letter dated September 4, 2015. Earmark funding then further approval with specific project.*
58	Conduit on Horizon Drive Project	28,000				*Approved by City Council at pre-meeting October 21, 2015*
59	Subtotal $	2,274,545 $	1,464,873 $	1,498,371 $	1,538,889	
60	Downtown Development Authority Sales Tax Increment Transfer (General Fund)	351,741	374,297	374,297		*Budgeted with Transfers*
61	Subtotal Before Capital TIF Transfer and VCB Transfer $	2,914,214 $	2,016,914 $	2,110,412 $	1,582,189	
62	Downtown Development Authority Sales Tax Increment Transfer (3/4% Capital)	131,903	140,361	140,361		
63	Vendors Fee Transfer to Visitor & Convention Center	675,623	689,135	689,135		*Budgeted as Revenue in VCB 102 Fund*
64	Total Economic Development, Partnerships, Sponsorships Before Contingency $	3,721,740 $	2,846,410 $	2,939,908 $	1,582,189	
65	Economic Development Contingency	-	171,892	78,394		*2015 contingency carried forward to 2016.*
66	A. Heywood Jones Trust Contingency	3,379				*Trust funds distributed to City restricted to Museum and Library purposes*
67	TOTAL $	3,725,119 $	3,018,302 $	3,018,302 $	1,582,189	

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2	**JOINT BOARDS**									
3	City/County	Administration	Joint Pool Board	2014	Creating a pool board and restating and amending the IGA between the City, County and SD on the pool operation and maintenance - also listed below under shared facilities	To detail the responsibilities of each entity and create an oversight board	School District 51		CCON/3500	
4	City/County	Police/Sheriff	Joint Board - 21st Judicial District Leadership Committee now called Criminal Justice Leadership	2009	Took on the duties of the Offender Management Group - Evidence Based Decision Making - City has limited involvement but membership should be maintained	To ensure that Mesa County has the best criminal justice system possible, to respond to issues of concern and act as a forum	DA, DOC, DYC, Public Defender/ Criminal Defense Bar, City of Fruita, Town of Palisade			
5	City/County	Public Works & Utilities (PW&U)/Public Works	Joint Board 5-2-1 Drainage Authority	2004	Creation - Agreements for permits and management listed separately	Address drainage issues regionally-stormwater management	Town of Palisade, City of Fruita, Grand Junction Drainage District		CCON/913	MCM2008-19
6	County	PW&U/ Building Dept.	Joint Board - Building Code Board of Appeals, Appointed by the County/ Ratified by the City.		Created in International Building Code	Considers exceptions to the building code, suggests amendments to the bldg code; adopts rules and regs based on the provisions of the bldg code; hears appeals from parties affected by the granting or refusal of a bldg permit				
7	City/County		Joint Board - Grand Junction Regional Airport Authority - City/County each appoint 3 members	1971	The City is a co-sponsor along with Mesa County on many FAA grant applications for capital improvements at the airport	Airport Authority oversees the operation of the airport and applies for grants to fund capital improvements	City & County each have 3 board members serving		HISTORY/760	
8	City/County		Joint Board - Riverview Technology Corporation	1997	Began as the Joint Utilization Commission	Ownership of property at 2591 B 3/4 Rd (DOE Property) and Economic Development			RESDOC/1081	MCM99-153 MCM97-214

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9	City/County	PW&U/ Planning	Joint Board - PDR Committee	2000	Creation - Cooperative planning areas and creation of committee - Help fund contractor and matching funds for PDR - data and tech support	Land Use - Purchase of Development Rights (PDR) Buffer Zones •IGA creating PDR Committee and establsihing buffers	Town of Palisade, City of Fruita, Mesa Land Trust		CCON/1588	MCM2000-39
10	City/County	Parks/Facilities & Parks	Joint Board - Riverfront Commission	1987	Created by Joint resolution in the minutes of July 1987, funding agreement by Resolution No. 31-97 (RESDOC/989) $17,122 by the City and the County each		Town of Palisade, City of Fruita		CCMIN/2618	MCA-2011-009
11	City/County	Fire/ Emergency Management	Joint Board - Emergency Management - Emergency Medical Services Advisory Council		Mesa County EMS Resolution	Participate, coordinate, facilitate EMS Council			REF/10	MCM 2004-220-2
12	City/County	Parks & Rec.	Joint Board - Parks Improvement Advisory Board (PIAB)		Cost share $14,000 each - City, County, District 51, CMU, & Grand Junction Baseball Inc. - Articles of Incorporation Amended in 2011 (POLPROEV/62)	Improvements to parks and sports facilities	School District #51, CMU, Grand Junction Baseball Inc.		POLPROEV/62	
13	County	PW&U/ Regional Transportation Office	Joint Board - Grand Valley Regional Transportation Committee (GVRTC)	2002	Creation and Funding (funding also listed under Finance below)	•Transportation Planning •Capital improvements •Regional Planning (MPO)	Town of Palisade, City of Fruita		CCON/3468	
14									CCON/1398	MCA2002-157
15	City/County		Joint Board - Grand Junction Economic Partnership			Economic Development				Agreement 11/25/2010
16	**SERVICES**									
17	City	PW&U	5-2-1 -Drainage Authority - City to provide services starting 2010 - $200,000/year	2009	Address drainage issues regionally-stormwater management	5-2-1 Authorization to handle permitting	Town of Palisade, City of Fruita, Grand Junction Drainage District		CCON/915	MCM2008-24
18									CCON/1110	

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19	City	Purchasing	Purchasing Cooperation	2014	City Purchasing provides procurement expertise to Mesa County for $65,000/year				CCON#3174	BOCC 2014-26
20	City	Parks & Rec/Facilities & Parks	Long Family Memorial Park Scheduling	2009, amended to 12/2012, new five year agreement in 2014 - $28,613/year	•City manages rentals/uses for Rec Program •County pays City to manage rentals $28,613	Scheduling and programming for Long Family Memorial Park			CCON#3057	MCA-2009-019
21	County	Police/Sheriff	Public Safety - Jail	per State Statutes	County operates - 2,544 jail bed days on municipal sentences in 2012				no written agreement	
22	County	Clerk & Recorder's Elections Division	Municipal Elections	2013	Conduct Elections Regular election in odd years - cost in 2015 $39,000	Bi-annual and as needed for special elections			CCON#3517	
23	County	Clerk & Recorder	Escrow Accounts with Clerk & Recorder	2009	Sets up escrow account and allows access to records of transactions				CCON#1578	
24	County	City Attorney & Muni Court/ Sheriff	Public Safety - Video arraignment	2004	With Mesa County Sheriff				CCON#1592	
25	County	County Animal Services - MCAS Advisory Board - City appoints one & County appoints three	Animal Services - County provides services - City provides municipal court services for animal control violations w/in City limits	Renewed annually	Animal control and sheltering services in Mesa County - City pays costs based on % of calls in city limits - City passes on all animal court fines collected-no administrative fee for court services is charged. 1/2016 Memo added as permanent amendment to annual contract clarifying payment for after hours emergency animal services.	Provide animal control services in City limits and provides spay/neuter vouchers to residents of City from grant dollars and joint veterinary partnership for donated service	County provides services for other municipalities also		CCON#3515	BOCC 2015-35
26	County	Public Works	Landfill	trash service - City is a customer of the landfill, biosolids discount approved by Resolution	•City uses Landfill for disposal of biosolids from Persigo •City trash service and household hazardous waste use Landfill for disposal	•County provides proper disposal of biosolids per state requirements •County provides a very cost effective solid waste program at the Landfill			CCON#2427	MCM2007-151 (a)

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27	City	Parks & Rec./Facilities	Art Program Assistance	2013	Arts and Culture Commission assists with rotating artwork at Old County Courthouse				CCON#2813	
28	County	Clerk & Recorder's Motor Vehicle Division	Sales Tax Collection on Motor Vehicles	1988	Vendor's Fee of 3.333% of tax collected is retained if paid by the 10th of the month following collection. (vendors fee apx $53,000 annually)				CCON#1660	MCA88-43
29	City	Finance Department	Sales Tax Information Disclosure	2008	Agreement to disclose confidential information in order to verify Mesa County's sales tax information	Maintain confidentiality on disclosed sales tax information			CCON#2327	
30	County	Treasurer	Per State Statutes		County keeps 2% administration fee from revenues collected (apx $220,000)	City property tax billing and collection	County provides for other taxing jurisdictions		no written agreement	
31	City	Police- 911 Communication Center/ Sheriff	Public Safety - 911 Communication Center Operations	1997	IGA on mission and responsibilities of GJRCC - City operates.	Dispatch services for public safety agencies - each agency pays its proprotionate share based on use	Palisade, Fruita, Lower Valley FD, East Orchard Mesa FD, Central Orchard Mesa FD, Clifton FD		CCON#1464	
32	City	Fleet/GVT	MOU for Grand Valley Bus Repair and Mainentance Services - $49 per hour for services rendered	2013	City to service GVT buses that run on CNG and cutaway buses	Maintenance and repair on GVT buses			CCON#2573	
33	GVT	Administration /Finance	Annual Funding Agreement (Resolution)	2014	Agreement among entities regarding the annual funding for Grand Valley Transit	funding of GVT	City of Fruita, Town of Palisade		CCON#3468	
34	County	PW&U/ County Building	Building Inspection Services	Renewed every two years	Perform building inspection on behalf of the City - Issues building permits and licenses contractors for the City - County retains all bldg permit/ licensing fees.	Provide Building Inspection Services for Mesa County	County provides services for other municipalities also		CCON#3550	BOCC 2015-64

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35	**MAINTENANCE**									
36	County	Parks & Rec/Facilities & Parks	Colorado River Boat Ramp Operation & Maintenance	1977	County to Maintain				CCON/1656	
37	City/County	Parks & Rec/Facilities & Parks	Parks - Indian Wash Maintenance	1965	Const/Operation/ Cost share	Vegetation control North Avenue to I-70 B	U.S. Soil Conservation Service, Upper Grand Valley Soil Conservation District		CCON/2397	
38	City/County	Parks & Rec/Facilities & Parks	Riverfront Trail from Loma to Palisade	2011	Historically, Mesa County or the municipality within whose boundaries a portion of the trail system has been located, has informally accepted responsibility for operation, maintenance, law enforcement and liability for portions of the trail system within their geographic boundaries	To clarify the responsibilities of the jurisdictions on the trail sections being constructed			CCON/3	
39	City	PW&U	Buthorn Waste and Drainage Ditch Maintenance	1950			Grand Junction Drainage District		CCON/1336	
40	**COMPUTER SYSTEMS/COMMUNICATIONS**									
41	City	Police & IT/Sheriff	New World Aegis (CAD/RMS/ JMS) Integrated System	2010	Computer aided dispatch, record management systems, and Jail Management System, Project Charter - MOU completed 12/2015 - Software License agreement still in effect (CCON/1717)	To share Public Safety Information County Wide using a single integrated system - the city hosts the system. IT staff from City and County support it. Costs are shared by City, County and other Public Safety agencies	21 Public Safety Agencies in Mesa County		CCON/2475	

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42	City	Police & IT/Sheriff	COPLink	2008	Established as part of the State Colorado Information Sharing Consortium (CISC)	To make Law Enforcement information available across the state - City Hosts the Western Slope Node - Shared Costs by City, County and Western Slope Agencies	Part of State Wide Consortium for Law Enforcement Information Sharing - Currently 90 agencies participating		CCON/2118	
43	City/County	Fire/Emergency Management	High Plains	2005	Shared Fire/ EMS Records - City hosts City server, all others are on the County server	Fire/EMS Incident Reporting	All 11 Fire Dsitricts			
44	County	IT/Emergency Management	Emergency Management - 900 MHz Antenna - 510 29 1/2 Road	2008	•City utilizes 900 MHz system •County hosts antenna site at the Human Services building				CCON/1665	MCA 2008-081
45	**SHARED FACILITIES**									
46	City/County	Administration/Parks & Rec/Facilities	Operation and Maintenance of Orchard Mesa Pool	2014	Creating a pool board and restating and amending the IGA between the City, County and SD on the pool operation and maintenance	To detail the responsibilities of each entity and create an oversight board	School District 51		CCON/3500	
47	County/City	Facilities	Public Safety Training IGA and created advisory board (Regional Public Safety Training Advisory Board)	11/29/2012	CMU owns property where the facility partners desire to construct a training facility for public safety and fire - creates an advisory board	Construct several training facilities at Whitewater Hill - (currently there are two City modulars on the site)	Colorado Mesa University, 21st Judical District Forfeiture Board		CCON/2553	
48	County/City	Facilities	Employee Parking Garage	2004	Operation and maintenance of employee parking garage	City Cost Share 40%			CCON/1651	MCA 2004-133

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49	County	Facilities	Western Colorado Dragway	2011	Used by Fire Department to train for CDL driving	CDL driving training			CCON#2432	
50	City/County	Parks & Rec/Facilities & Parks	Parks - Lower No Thoroughfare Trail	2008	Trail Improvement project, GOCO grant requires County have limited ownership interest, County funded construction, City maintains trail				CCON#1668	MCA2008-063
51	County	Regional Transportation Office	Transportation - GVT Transfer Station (Steamplant Property)	2007	Construction of a transfer station for Grand Valley Transit - City - property for transfer station, ongoing operations $419,885, design and project management of pullouts, sidewalks & F 1/8 Rd, CNG bus maintenance & fueling, installation/ removal of bus stop signs	•County - initial investment - TANF funds •County - Ongoing operations $909,754 •County - Grants for pullouts, sidewalks, and F 1/8 Road •County - Bus maintenance & fueling •County - Installation/ removal of bus stop signs			CCON#1119	MCA2007-071
52	City/County	Police/Sheriff	Public Safety - POST Academy	2006	Both the city and the county contribute to the academy, but the majority of the partnership is with the college - extensive training	Cooperative agreement for peace officers academy	CMU		CCON#3521	
53	**LAND USE/PLANNING**									
54	Land Use Housing Strategy moved to inactive list									
55	City/County	PW&U/ Planning	Persigo Wastewater Treatment Plant	1998	Growth policies with the 201 Sewer Services Area	Persigo Annexation Agreement: City - Ownership of distribution system (IGA) - County - Joint ownership of treatment plant			CCON#1678	
56	County	Regional Transportation Office	Transportation - Metropolitan Planning Organization (MPO) Regional Transportation Office (RTPO	1998	Mechanism for consulting on transportation planning from a regional perspective		Town of Palisade, City of Fruita		CCON#1620	

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57	**HEALTH**									
58	City/County	Health Department	MOA to Reduce PM10 in the Grand Valley	2010		An agreement with the Air Pollution Control Divison of State Health to reduce particulates in the air	Colorado Dept. of Health and Environment		CCON#2474	MCA 2010-005
59	County	Health Department	Mosquito Control		West Nile-briquettes				CCON#1607	MCM2004-061 MCA2005-068
60	**SEWER SERVICE**									
61	City/County	PW&U (Persigo)/ Public Works	Persigo - Country Meadows in the 201	1995	Provide sewer service to property outside the 201 boundary				CCON#1988	
62	City/County	PW&U (Persigo)/ Public Works	Persigo - Independence Valley	1998	Provide sewer service to property outside the 201 boundary				CCON#1482	MCA98-58
63	City/County	PW&U (Persigo)/ Public Works	Persigo - Orchard Mesa Sanitation District	2004	Total service agreement	Transfers operation and assets to the City as manager of Persigo	Orchard Mesa Sanitation District	Dissolved in 2015	CCON#1089	MCA2004-028
64									CCON#1724	MCA2004-030
65	City/County	PW&U (Persigo)/ Public Works	Persigo - Provide Sewer Service-Doug Jones	1996	Provide sewer service to property outside the 201 boundary and close to Orchard Mesa Sanitation District lines	Excluding from 201			CCON#1568	MCA96-33
66	City/County	PW&U (Persigo)/ Public Works	Persigo - Rosevale Sewer Extension	1996	Sewer Service Agreement and DOLA loan	Sewer Service	Colorado Dept. of Local Affairs		CCON#1055	MCA96-34
67	**PUBLIC SAFETY/EMERGENCY SERVICES**									
68	City/County	Fire/Police/Sheriff	Multi-Agency Fire Investigation Partnership	2014	Combine skills and expertise for arson investigations	Fire Investigations	Clifton fire, Lower Valley Fire, Palisade Fire, Fruita Police, Palisade Police		CCON#3400	

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69	City/County	Police/Sheriff	Public Safety - Western Colorado Auto Theft Task Force	2010		Combat Auto Theft	Colorado State Patrol, Fruita Police Department, Mesa County District Attorney's Office		CCON#2429	
70	City/County	Police/Sheriff	Public Safety - Western Colorado Joint Drug Task Force	2008	•City has 4 employees •County has 7 employees + $350K grant from HIDTA (grant pays for two of SO employees, balance pays for OT, investigative funds for all members) - grant funds used for overtime	Reduce Drug Use	Drug Enforcement Agency (DEA) liaison		CCON#2424	
71	City/County	Police/Sheriff	Public Safety - Mesa County DUI Task Force	2009	agreement continuous annually under the terms of the agreement	Multi agency effort to apprehend DUI offenders - each agency pays for costs for their own officers	Colorado State Patrol, City of Fruita, Town of Palisade, District Attorney of the 21st Judicial District		CCON#2428	
72	County	Police/Sheriff	Public Safety - Graffiti Abatement	2011		Uses work-ender program participants to abate graffiti			CCON#2426	
73	City/County	Police, Fire, & Comm Ctr/Sheriff, Health Dept. & Emergency Management	Public Safety - Incident Management	1998	$5,000 paid by City	All agencies to participate in standardized incident command system during a large scale event	Lower Valley Fire Protection District, Colorado State Patrol, Clifton Fire Dept. Palisade Fire Dept. St. Mary's EMS Dept.		CCON#2425	

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74	City	Fire/ Emergency Management	Emergency Management - DERA (HazMat)	2013	City provides county-wide HAZMAT response, County delegates DERA authority via annual contract in the amount of $44,900, DERA for Hazardous Materials and Emergency Response. Previously the City also provided Superfund Amendments and Re-authorization Act (SARA) services for the County.Currently the MC Emerg Manager completes the SARA reporting requirements.	HazMat Response			CCON#3795	MCA-2012-057
75	City/County	PW&U/ Emergency Management	Emergency Management - Hazard mitigation	2010	City participates in hazard mitigation planning and carries out projects •County maintains FEMA approved Hazard Mitigation Plan	Joint hazard mitigation plan - hazardous materials and emergency response	City of Fruita, Town of Collbran, Town of Palisade, Lower Valley Fire Protection District, 5-2-1 Drainage Authority, Plateau Valley Fire Protection District, Grand Junction Rural Fire Protection District		RESDOC/4533	MCR2009-029 MCM2009-225
76	City/County	Fire/ Emergency Management	Emergency Management - Emergency Medical Services (EMS)	2004	EMS services in Ambulance Service Area some of which is in unincorporated Mesa County, per Resolution identifying Grand Junction Ambulance Service Area	License ambulances in Mesa County, coordinate QA/QI probationary EMT, manage electronic medical records	Palisade, Lower Valley, DeBeque, Plateau Valley, Central Orchard Mesa, Lands End, Gateway/ Unaweep		REF/10	MCM 2004-220-2
77	City/County	Joint Information Center Committee PIOs city and county wide	Memorandum of Understanding	2007	Agreement to cooperate when needed in emergency situations	Emergency public information provision	Hospitals, School District, BLM, DOW, Xcel		CCON#2579	

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78	City/County	Police	Communication Center Agreement for Airport on Emergency Dispatch Services	2010					No agreement needed as they are a user agency as of 2010	
79	City/County	Police/Sheriff/DHS/ Workforce Center	Memorandum of Understanding for service to Domestic Violence Victims	2007			Hilltop, Gateway Youth and Family Serivces, 21st Judicial District Probation Dept. & DA, Homeward Bound, Western Colorado Area Health Education Center, Colorado Legal Services		CCON/2816 our copy is unsigned	
80	Western Slope Center for Children	Police/Sheriff/DHS/ MC Sexual Assault Response Team	MOU to establish policies for child abuse cases	2015	Agreement among entities regarding investigation, assessment, treatment, and prosecution of child abuse cases		21st Judicial District Attorney's Office, Fuita Police, Palisade Police		CCON/3803	

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81	City/County	Police/Sheriff	21st Judicial District Critical Incident Response Team Protocol	2012	To investigate incidents where a law enforcement officer uses deadly force and other special investigations or criminal incidents requiring unusual investigative resources.		DA, Town of Palisade, City of Fruita, CSP, CBI		CCON/2815	
82	**MISCELLANEOUS**									
83	City/County	PW&U/GVT	Bus Benches & Shelters Advertising	2004	Assigns the advertising contract with Outdoor Promotions to Colorado West Outdoor Advertising, For locations within the City limits				CCON/1121	MCM2001-147

C:\Users\stepht\Documents\Offline Records (03)\City County Partnerships - All.XLSX

Entity Providing	City/County Department	Agreement	Date of Agree-ment	Reason/ History/ Notes	Purpose	Other Partners	Recommended Action	City Link	County File #
SERVICES									
City	Clerk & Recorder	Liquor License Training	1998	City trains applicants for County licenses					
County	Public Works	GPS System - surveying		County capitalized and maintains the GPS system that allows digital surveying equipment to be used in the County. This system services all entities and private surveyors in the County.					
County	IT	Aerial Photos		Coordinate aerial photos are done in order to gain efficiencies of one contract and one flight.					
City/County	Public Works	Specialty Equipment Sharing		To ensure that each entity does not duplicate low-use specialty equipment like vacuum trucks, sewer cameras, jet rodding vehicles, etc.					
City	Public Works	Traffic Signal Technical Support			Since the bulk of county's urban traffic control devices are City of GJ controlled, the County uses their technical support to assist with the design and appropriate maintenance of traffic signals.				
City	Public Works	Technical expertise sewer waste water conveyance		County has utilized Grand Junction waste water expertise in developing watewater PIDS and sewer capital projects					
City/County	Public Works			Emergency Management Support	When emergencies or disasters occur, assist with equipment or other materials.				
City/County	Public Works	Coordination of Road & Bridge Maintenance Activities		To ensure road & bridge maintenance activities at jusidictional boundaries are coordinated for efficiencies. Driven by annexation processes.					
City/County	Public Works	Coordinate Annual Overlay		Coordinate County overlay schedule with City of Grand Junction's utility maintenance and replacement schedules so as to minimize road cuts.					
City/County	Public Works	Coordinate Landfill rates		Coordinate adjusted rates for biosolid receipts for Persigo Water Treatment Plan					