

# Littleton's Smart City Roadmap



### **Overview**

Why would we want to be a smart city? What is a smart city? How do we become a "smarter" city? What initiatives have we completed? What are potential future initiatives?

- economic restructuring -- online retail and entertainment -- climate change -

Major technological, economic and environmental changes have generated interest in smart cities

> - aging populations -- urban population growth -- pressures on public finances -



Source: "Smart city" definition from Wikipedia. (10 April 2017). Retrieved April 12, 2017 from https://en.wikipedia.org/wiki/Smart\_city.







Littleton is impacted by changes such as the urbanization of the population





A *smart city* is a community vision to integrate data and technology to improve the efficiency of services and manage city assets



### What makes smart cities smart?

Collect data (facts, truth, evidence) – real-time Analyze data (automation) – real-time Modify service delivery – real-time



**Real-time data-driven decision making!** 



Six Components found in most Smart Cities - Smarter Transportation -- Smart Digital Infrastructure -- Citizen Engagement - Smart & Big Data -- Data Visualization - Leadership & Vision -



Source: Shark, A. R., Toporkoff, S., and Levy, S. (2014). Smarter Cities for a Bright Sustainable Future: A Global Perspective. (pp. 3 – 9).

#### Charlotte, NC

Over the past decade, Charlotte has undergone tremendous growth. According to the U.S. Census Bureau, Charlotte saw the 10<sup>th</sup> largest increase in population among large cities.

#### Chicago, IL

Chicago has decidedly embraced smart city principles. As Mayor Rahm Emanuel's top tech lieutenant put it, Chicago wants to become "the most data-driven government in the world."

### 📕 Philadelphia, PA

Philadelphia has embraced smart city initiatives to help promote equity throughout the city. Much of the city's urban population density is a result of its historically industrial economy, which by the 1970s had largely relocated or disappeared.



#### San Francisco, CA

San Francisco is a worldwide tourist destination that houses some of the world's largest financial institutions and is known as a city of innovation and technology.

# **Smart Cities**



### **Digital Strategy Vision**

Build, maintain, and enhance multidirectional digital connections amongst city employees, citizens, business, and government



Source: City of Vancouver Digital Strategy. (2013). Retrieved April 20, 2016, from http://vancouver.ca/files/cov/City\_of\_Vancouver\_Digital\_Strategy.pdf.



Source: City of Vancouver Digital Strategy. (2013). Retrieved April 20, 2016, from http://vancouver.ca/files/cov/City\_of\_Vancouver\_Digital\_Strategy.pdf.



# Intelligent Transportation Systems (ITS)





**Potential Engagement + Access Initiatives** 

Storm allo	ws city to launch snow removal app fo	or first time
By Mallory Panus	ska mpanuska@newspost.com Mar 14, 2017	
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<u>City Services</u> » <u>City Departments</u> »

### **Information Services**

#### **The Big Picture**

Government operates on information, particularly digital information, arguably its most important resource other than its human resources."



Government information must be systematically and efficiently managed, just as other key resources are managed, in the interest of economical government and responsive public service"

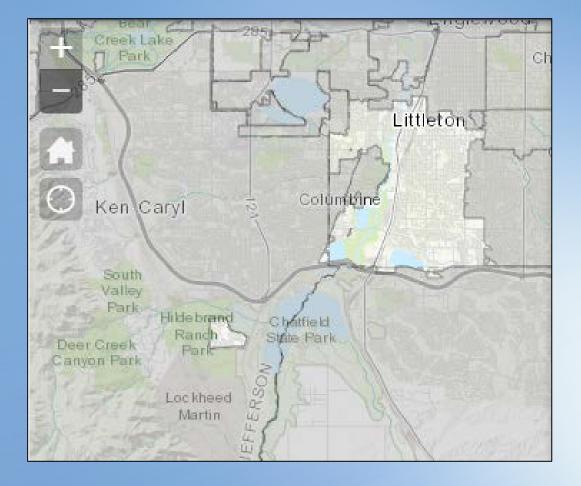
Source: Dr. Bruce W. Dearstyne, CIO Leadership for Cities and Counties: Emerging Trends and Practices (Public Technology Institute: 2009), 23.

#### **Department Mission**

Responsible for technology and communication systems used to collect, manage, store, and deliver information that supports the operations, management, and decision-making of the City of Littleton.

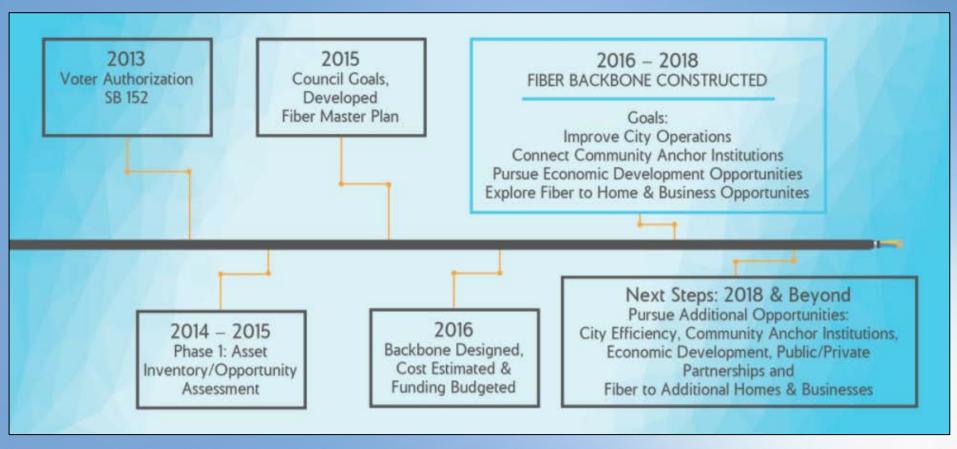
# **Completed Infrastructure & Assets Initiatives**





# **Potential Infrastructure & Assets Initiatives**





**Potential Infrastructure & Assets Initiatives** 



#### ARTICLE 10 UNDERGROUNDING OF OVERHEAD FACILITIES

§10.1 <u>Underground Electrical Lines In New Areas</u>. The Company shall, upon payment to the Company of the charges provided in its tariffs or their equivalent, place all newly constructed electrical distribution lines in newly developed areas underground in accordance with applicable laws, regulations and orders.

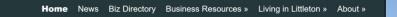
#### §10.2 Underground Conversion At Expense Of Company.

A. <u>Underground Fund</u>. The Company shall budget and allocate an annual amount, equivalent to one percent (1%) of the preceding year's Electric Gross Revenues (the "Fund"), for the purpose of undergrounding existing overhead distribution facilities in the City, as may be requested by the City, provided that the undergrounding shall extend for a minimum distance of one (1) block or 750 feet, whichever is less, or as may be mutually agreed by the parties. Except as provided in §6.8.F, no relocation expenses which the Company would be required to expend pursuant to Article 6 of this franchise shall be charged to this allocation.

B. <u>Unexpended Portion And Advances</u>. Any unexpended portion of the Fund shall be carried over to succeeding years and, in addition, upon request by the City designee, the Company agrees to expend amounts anticipated to be available under the preceding

# **Potential Infrastructure & Assets Initiatives**





usiness Resources »

#### **Business Resources & Services**

Business Resources »

#### **Grants & Incentives**

- Finance	City Services » City Departments » Finance »	
- Business & Sales/Use Tax License	Business & Sales/Use Tax License	
Business License & Sales/Use Tax Application	Font Size: 💽 🚍 🚹 <u>Share &amp; Bookmark</u> <u>Feedback</u> 🍓 <u>Print</u>	
Sales/Use Tax Payments	Online Business License & Sales/Use Tax Application	
+ Sewer/Storm Drainage Payments	Business License & Sales/Use Tax Application (PDF)	
How would you balance the city's budget?	<b>Before completing the form</b> above, use the <u>Address Wizard</u> to verify that the business location is within the Littleton city limits. You will need to know the answer to this when filling out your application and it will determine whether your application will require zoning review. For questions about this form, contact the <u>Revenue and Sales Tax Technician</u> <b>2</b> at 303-795-3768.	
+ Budgets & Financial Reports		
Bid Opportunities	If you have a new business, check out <u>Starting a Business</u> and other <u>no-cost business resources</u> provided by the City of Littleton. For more information about these services, contact the <u>Economic Development Department</u> 2 at 303-795-3749.	
Sales Tax Seminars		
Senior Property Tax Refunds		
Legal Notices - Finance	Pemit color/use tay returns and payments to:	
Document Downloads	Remit sales/use tax returns and payments to:	
Staff Directory - Finance	City of Littleton P.O. Box 1305 Englewood, CO 80150-1305	

# **Completed Economic Initiatives**



# Broadband, Property Values And Economic Growth

FALL 2016 | www.bbcmag.com | BROADBAND COMMUNITIES | What Fiber Broadband Can Do For Your Community | 19

#### 2014

Fiber to the Home Council Americas releases a study finding higher per capita GDP in U.S. metropolitan areas in which gigabit internet is widely available. Infrastructure investment, job creation, entrepreneurship, productivity gains and companies relocating to or expanding in gigabit cities are all elements of this growth. R ecent studies continue to show that access to high-quality broadband boosts property values and contributes to economic vitality.

#### 2016

Michael Render of RVA LLC surveyed MDU residents in the U.S. and Canada to find out what they would pay for access to ultra-high-speed, reliable broadband.

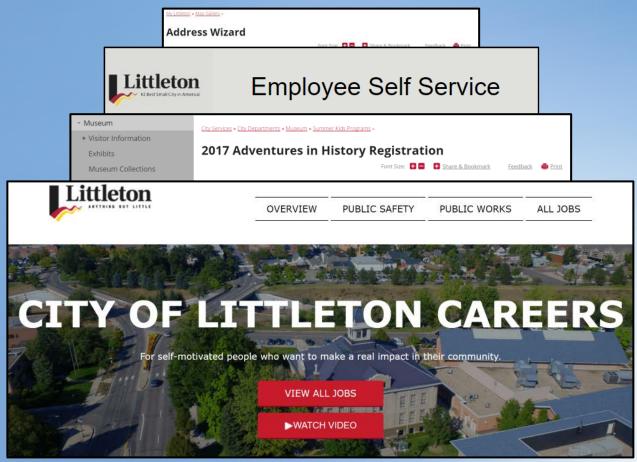
Fiber access increases residents' satisfaction with their homes and appears to reduce churn, helping building owners and operators maintain high levels of occupancy and provide a quality living environment.

#### 2015

FTTH Council Americas finds that access to fiber to the home increases a home's value by up to 3.1 percent. Using the National Broadband Map and a nationwide sample of real estate prices from 2011 to 2013, the study's authors investigated the relationship between fiber-delivered internet services and housing prices.

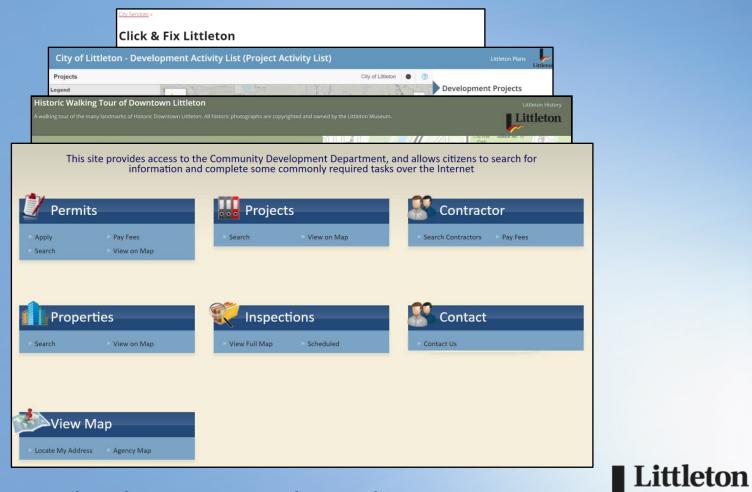


**Potential Economic Initiatives** 



Completed Organizational Digital Maturity Initiatives





Completed Organizational Digital Maturity Initiatives

### **Event Permits**

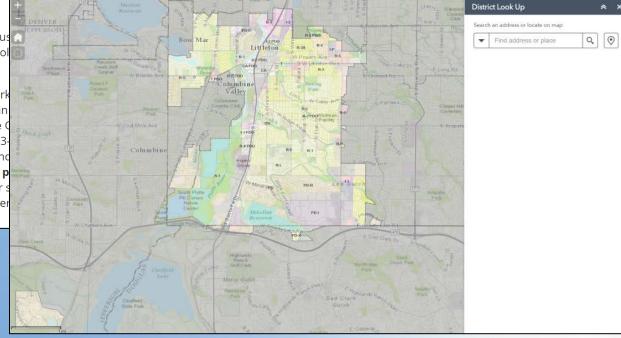
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#### Policies and Procedures

The purpose of this policy is to help regulate the temporary us also designed to help citizens, businesses, civic groups, school issue the permit.

- 1. Events with more than 100 attendees held in a city park
- 2. Most parks in the city are managed by South Suburban that the city manages that are available for events are C the Littleton Museum. For other parks, call SSPR at 303-
- 3. For events requiring minimal city staff involvement, and permit request must be received **at least two weeks p** minimal city staff involvement, and/or alcohol sales or s **eight weeks prior to the event.** The city may deny per



### **Potential Organizational Digital Maturity Initiatives**



### What makes smart cities smart?

Collect data (facts, truth, evidence) – real-time Analyze data (automation) – real-time Modify service delivery – real-time



**Real-time data-driven decision making!** 



**Questions?** 

