## **SMART CITY OVERVIEW**

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Prepared by: Dan Hoffman, Assistant City Manager File #170261



A Smart City is the intersection of the internet of things (IoT), information and communication technology (ICT) <u>AND</u> the public sector. A city uses those tools to improve quality of life and provide better service to all residents.

SMART CITY DEFINITION

### SMART CITY PILLARS

### There are four pillars to a *complete* smart city strategy.

### Infrastructure

The "plumbing" of smart cities: These are the streetlights, conduit, and sensors that put the physical in cyberphysical systems.

### Workforce Development

Training for staff to sustainably manage smart city deployments. Also, training for residents to take advantage of future jobs.

### Policy and Planning

Guidance and regulations that will provide staff the needed tools to effectively implement smart city projects.

### Economic Development

Inclusion of local companies and entrepreneurs in projects as well as partnerships with established corporations. Smart Cities: Why Now?

•Internet of Things (IoT) tech is the largest industrial trend on the planet. At the intersection of IoT and government is a smart city. •The data we must deal with has changed. Big data may be a buzzword, but impact is real. The variety, velocity and volume of data we now have access to is dramatically different.

### **SMART CITIES AND OUR STRATEGY**

Foster Greater Equity	Is broadband being deployed equitably? Are pilot areas located in underserved communities? Does everyone have access to future jobs?	((j)) Infrastructure
Strong Economy	Do local entrepreneurs have access to test beds? Are we using projects as a way to transfer tech? Are we using our infrastructure to attract new businesses?	Workforce Development
Better Future	Is sustainability "baked in" to our projects? Is data treated like a resource to be protected? Are our tactics "future proofing" our city?	Policy and Planning
Community Model	Are we sharing what we learn? Do all projects incorporate design thinking? Are we taking a "partner first" approach?	Economic Development

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Just a mobile app
Just an open data portal
Just a connected streetlight
Just high-speed connectivity
Just an interesting pilot project
Just a product you buy from a vendor

# ARE WE ASKING OURSELVES the following questions for each smart city project?

Does this help us deliver a service more effectively or efficiently?

Is this vendor driven? Does it lock us in with a vendor? Are we approaching this in an iterative, design-centered manner?

Are we communicating the project in an open and transparent manner? Are we comfortable ending it if it's not producing the expected results? Case Studies: Four Smart City Models

Columbus, Ohio
Kansas City, Missouri
Montgomery County, Maryland
Chicago, Illinois

### Columbus: The "Big Splash" Approach

#### Strengths:

- Significant funding
- Partnerships at all levels
- Knowledge transfers

Challenges:

- Large, complex project
- Significant external scrutiny



### Kansas City: The "Corridor" Approach

#### Strengths:

- Strong leadership
- Focused on one redevelopment area
- Strong community engagement Challenges:
- Somewhat vendor driven
- Minimal research involvement



### Montgomery County: The "Living Lab" Approach

#### Strengths:

- Nimble "R&D" model
- Strong community engagement
- Not limited to tech
- Partnerships at all levels Challenges:
- Too "bootstrapped"
- Political departmental leadership



### Chicago: The "Research Driven" Approach

#### Strengths:

- Strong University-City partnership
- Strong public-open data component

### Challenges:

- Very reliant on NSF funding
- New data has driven need for new policies





•The City is in the midst of constructing a "best of breed" hybrid from the previous examples that leverages our strengths (University, Living Lab, Design Thinking).

•The Partnership will be the vehicle for multiple projects, the Smart City Lab being prime among them.

•Progress is being made on further defining and operationalizing the Partnership and we anticipate bringing you an in-depth update in the near future. Subjects for Future Commission Consideration

Open Data and Performance
Governance Structures for Multipurpose Infrastructure
Broadband policies that encourage equitable infrastructure investment
Identify Priority Smart City needs (Transportation, Safety, Economy, Sustainability, Etc.)