

# *DATA AS A CIVIC ASSET*

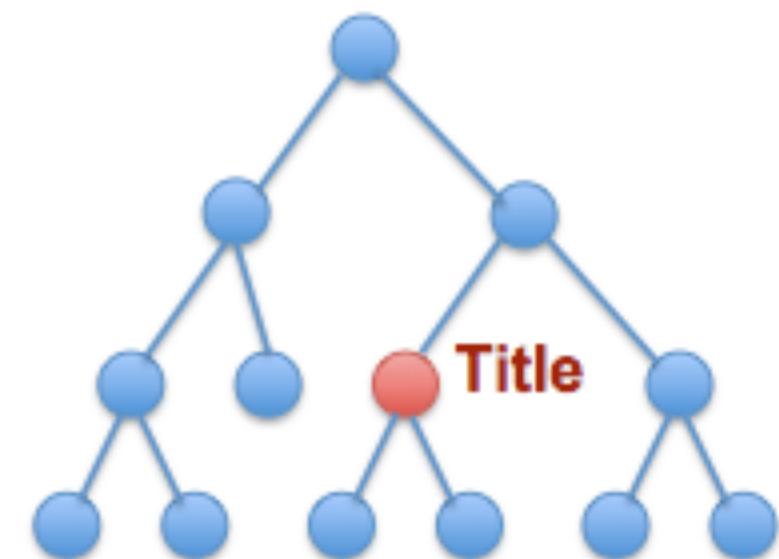
Robyn R. Mace, Ph.D., CPP  
Chief Data Officer, Metro Nashville Government

Nashville Software School  
November 4, 2017

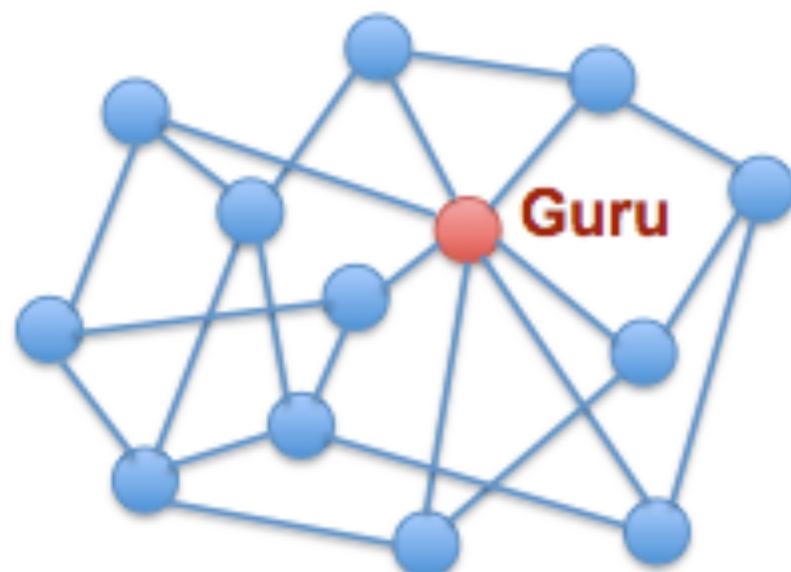
## Industrial Age Org

viral shift

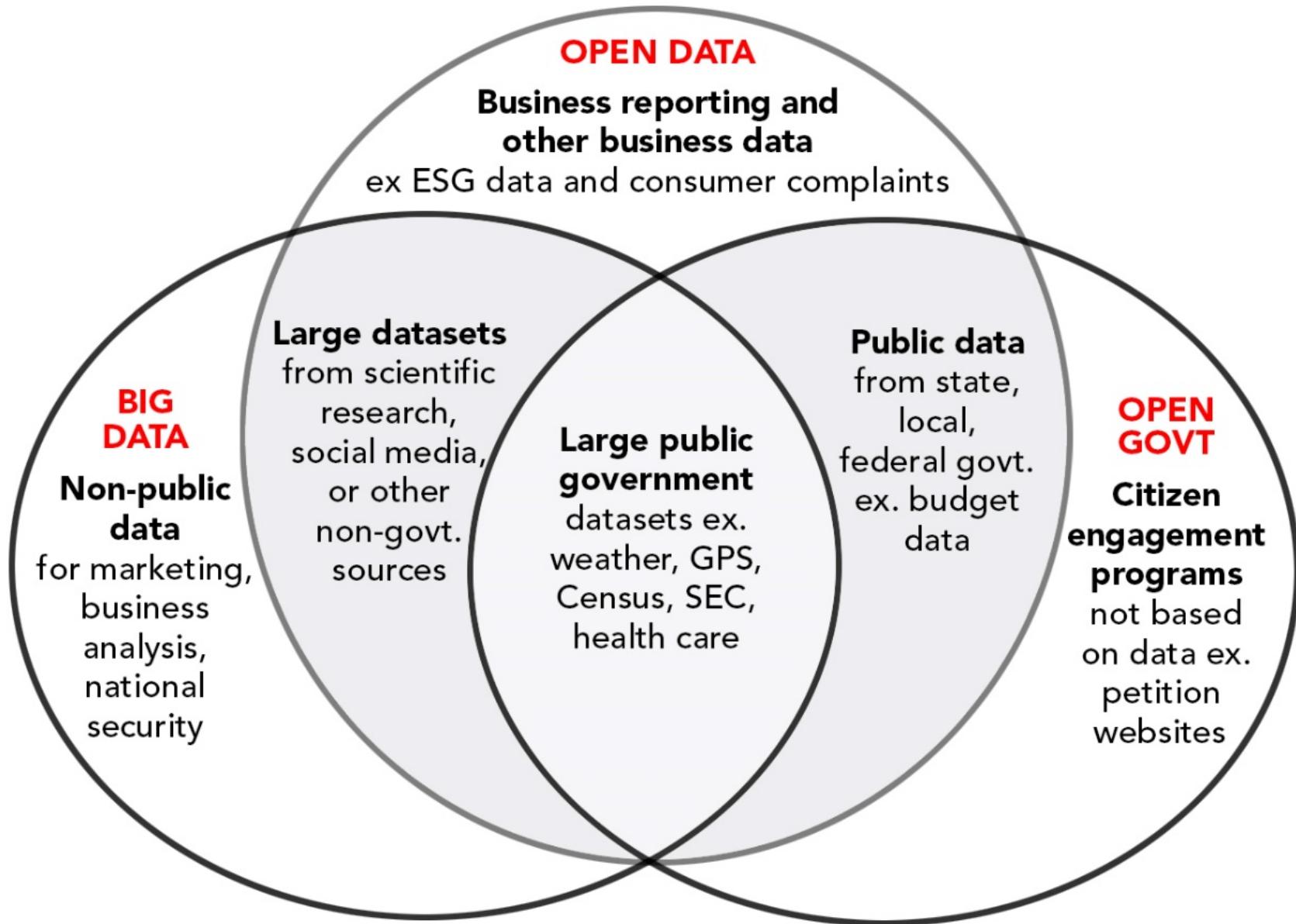
## Information Age Org



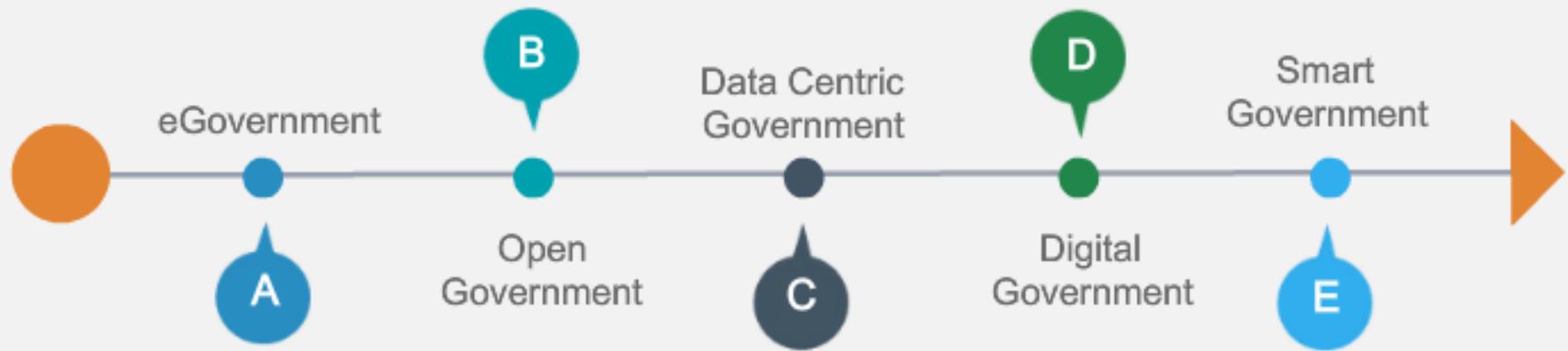
Share only as needed

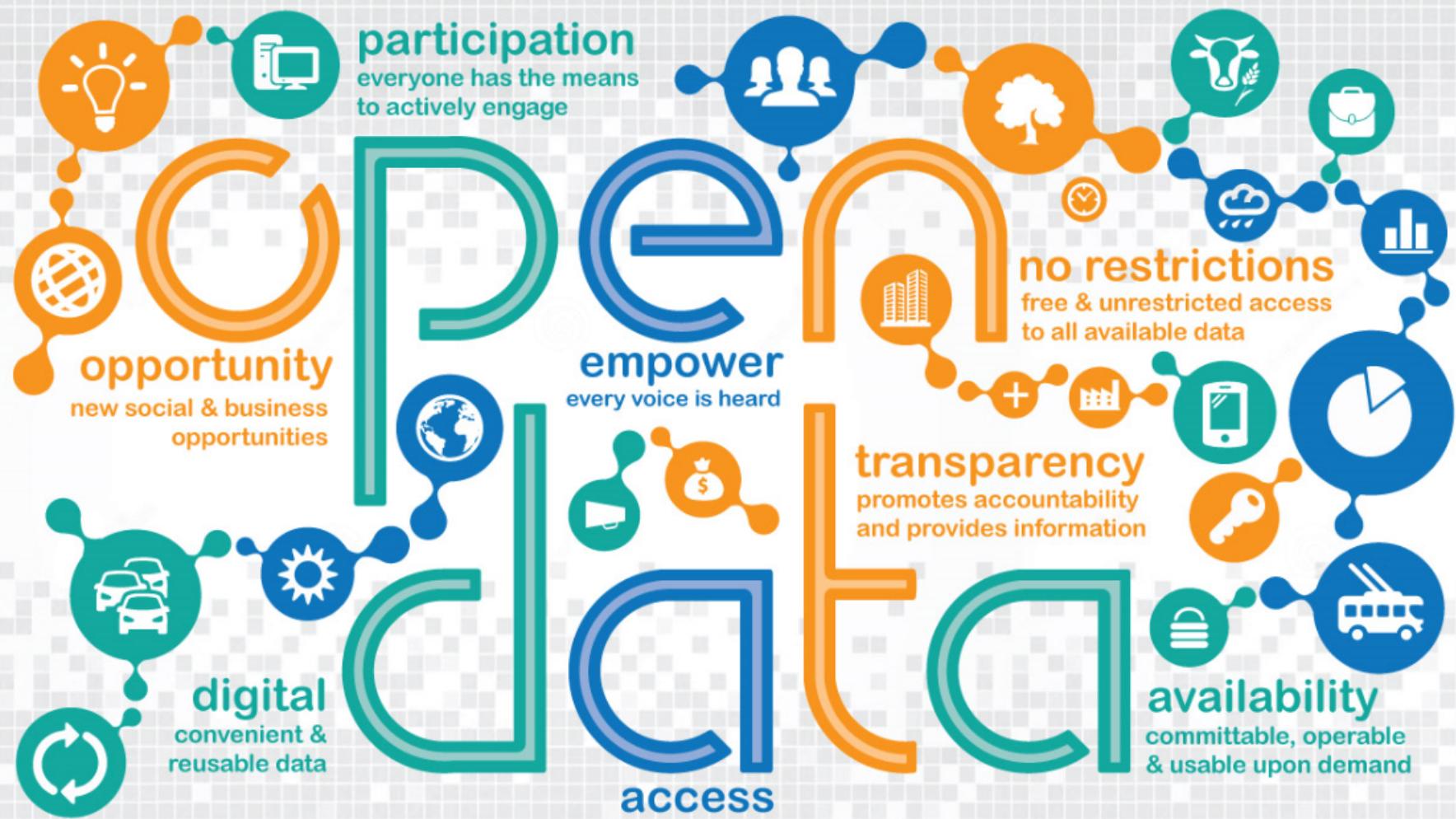


Share as much as possible



# DIGITAL GOVERNMENT MATURITY MODEL





### Availability & Access

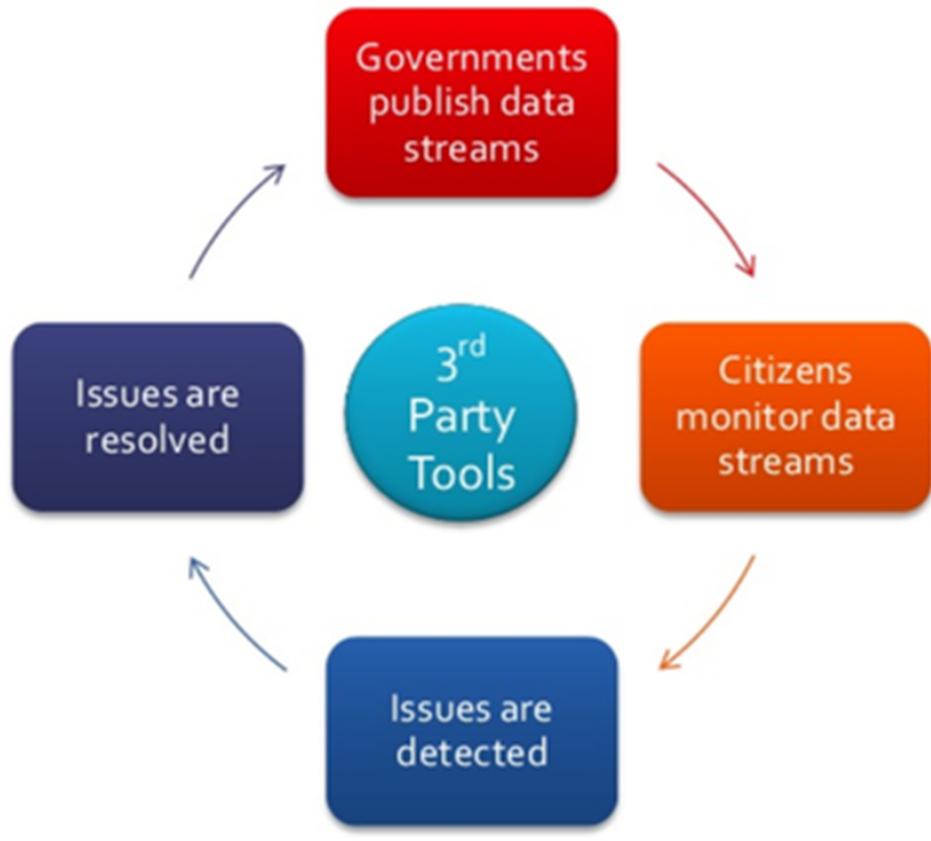
Open data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading from the internet in a convenient and modifiable form.

### Reuse & Redistribution

Open data must be provided under terms that permit reuse and redistribution including the interoperability with other datasets.

### Universal Participation

Everyone must be able to use, reuse and redistribute - there should be no discrimination against fields of endeavour or against persons or groups.



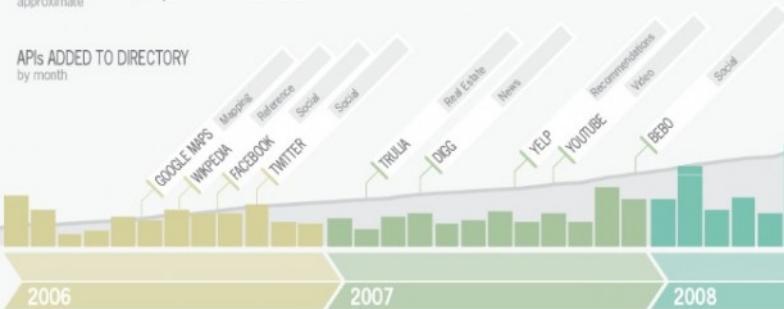
- Governments publish data streams
- 3<sup>rd</sup> parties create tools for analysis and oversight
- Citizens collaboratively monitor their government
- Citizens detect issues, give feedback
- Issues are resolved

Source: [Visiblegovernment.ca](http://Visiblegovernment.ca) <http://www.slideshare.net/jenniferbell/benefits-of-open-government-data>

# THE OPEN DATA MOVEMENT

RELEASE DATES: approximate

APIs ADDED TO DIRECTORY  
by month



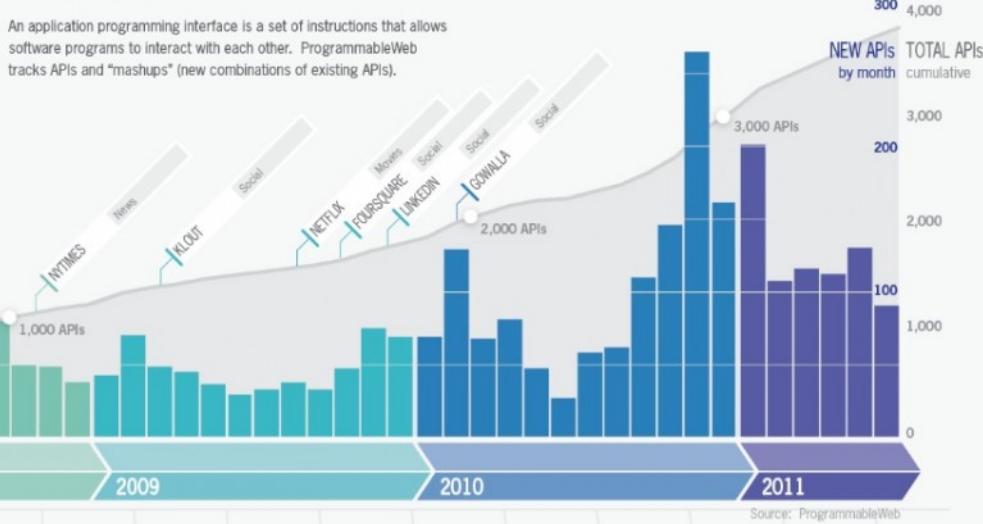
## PUBLIC DATA AROUND THE WORLD

From education to energy, health to poverty, and finance to demographics, governments and NGOs are opening up their data troves so that anyone can look for patterns and create informed solutions to global challenges.



## WHAT IS AN API?

An application programming interface is a set of instructions that allows software programs to interact with each other. ProgrammableWeb tracks APIs and "mashups" (new combinations of existing APIs).



## **Public**



- Better informed public having access to public sector data and related applications
- Speedier and smoother case processing at various public authorities

## **Businesses**



- Greater growth opportunities due to less red tape and cheaper procurement of public-sector data
- Greater innovation to develop new data based services and products and enhanced competitiveness
- Efficient and effective coordination with public authorities

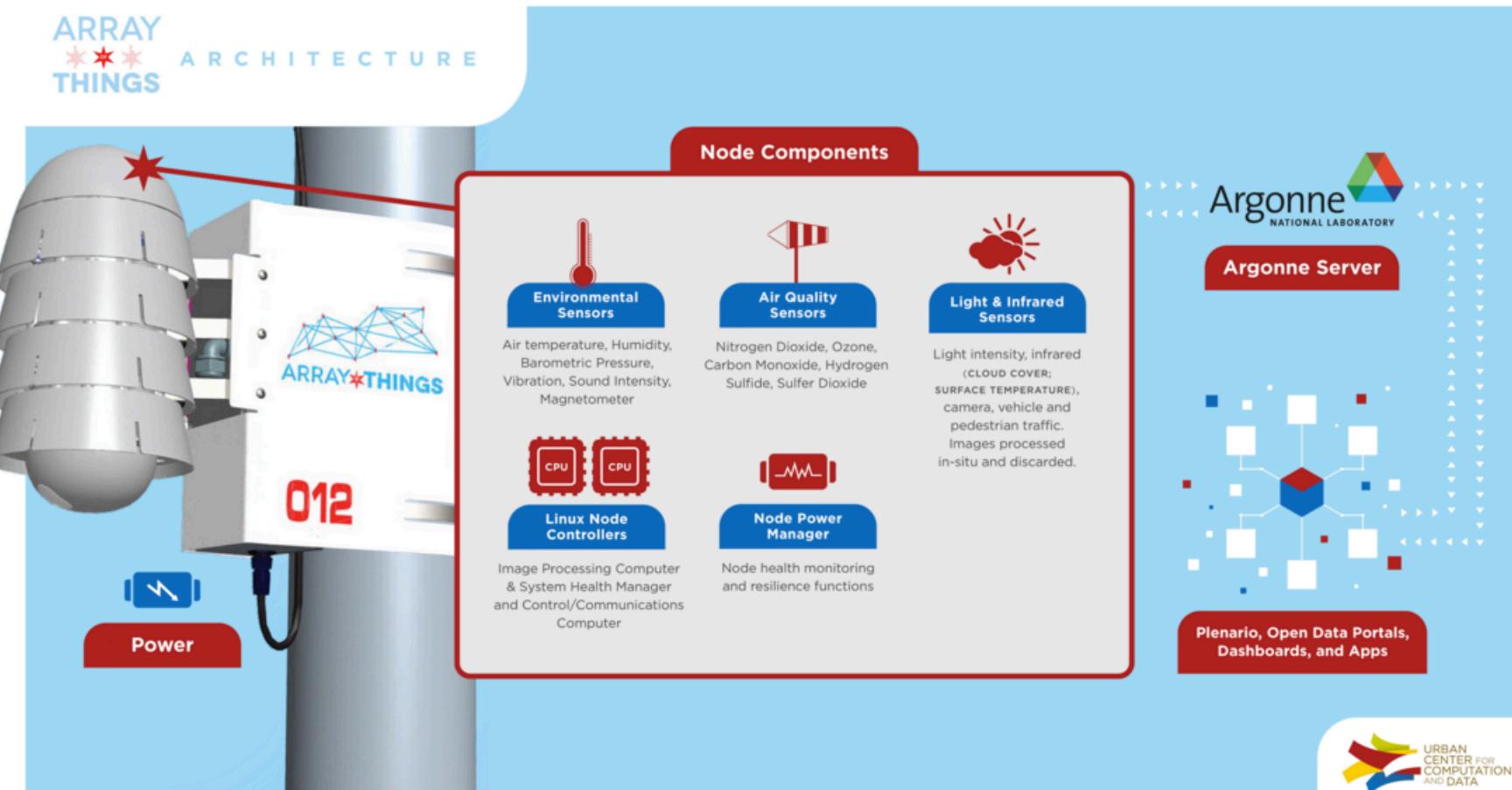
## **Public Authorities**



- Efficient and effective administration with faster case processing
- Reduction in the long term IT infrastructure expenditure
- Support and collaboration from motivated and technically advanced civil activists at no extra cost to improve processes
- Better utilisation of public sector workforce



# POSSIBILITIES OF URBAN TELEMETRY



## Information Technology Services

[IT Services](#) 

[Information Security](#) 

[Cable Television Services](#) 

[Strategic Plan](#) 

[What Drives Us](#) 

[History of ITS](#) 

[Strategic Roadmaps](#) 

[Plan Methodology](#) 

[Digital Inclusion](#) 

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## Strategic Roadmaps



## Business Applications Roadmaps

Service Line	Description
<a href="#">Business Solutions</a> 	EBS, ESS, Kronos, Oracle Hyperion PSB, SSS
<a href="#">Databases</a> 	MS SQL, Oracle, MS Access
<a href="#">Document Management &amp; Imaging</a> 	AX Web, Document Manager, and Kofax Capture Systems
<a href="#">Email &amp; Calendaring</a> 	Exchange, Outlook
<a href="#">hubNashville</a> 	Community Relationship Management
<a href="#">Land / Cityworks</a> 	Permits and Licensing, replacing KIVA
<a href="#">Mobile Applications</a> 	Mobile applications development
<a href="#">Nashville.gov</a> 	Web-based communications tools
<a href="#">Service Management</a> 	MS Service Manager & Self-Service Portal replacing SDE / Magic
<a href="#">SharePoint</a> 	Collaboration system
<a href="#">Tax Application</a> 	Trustee's eGov system
<a href="#">Web Applications</a> 	In-house / Vendor developed application support

## Data Roadmaps

Document	Description
<a href="#">Enterprise Data</a> 	Enterprise Data Management: Assets and Analytics
<a href="#">Open Data</a> 	Open Data portal, Data Coordinators network

# <https://data.Nashville.gov>

The screenshot shows the Data.Nashville.gov website. At the top, there's a navigation bar with links for Home, Catalog, Suggest Datasets, Data Policy, Developers, Help, and Other Resources. To the right of the navigation are social media icons for Facebook, Twitter, YouTube, LinkedIn, and a search bar. The main header features the "Data.Nashville.gov" logo and a search bar. Below the header is a large banner image of the Nashville city skyline at dusk. Overlaid on the banner is a dark rectangular box containing the text "Nashville Open Data Portal" and a descriptive paragraph about the portal's purpose. Below the banner is a grid of eight blue squares, each representing a different department or category: Business, Development & Housing (bar chart icon); Culture (paintbrush icon); Education (graduation cap icon); Environment (leaf icon); Health (heart rate monitor icon); Metro Government (building icon); Public Safety (life preserver icon); and Transportation (bus icon). At the bottom of the page are four small images: a map with location pins, a banner with the word "ELECTION", a topographic map, and a street view of buildings.

https://data.nashville.gov

 Data.Nashville.gov

Search

Home Catalog Suggest Datasets Data Policy Developers Help Other Resources

Nashville Open Data Portal

The data available on this site will empower the public to partner with Metro departments and agencies to co-create innovative web resources, insightful analytics on public programs and services, and new civic apps for the community.

Business, Development & Housing

Culture

Education

Environment

Health

Metro Government

Public Safety

Transportation

# Topics of the most popular open datasets

- 
- |    |   |  |
|----|---|--|
| 1  |    | <b>Police and crime:</b> Police incidents; jail bookings; police station locations; crime statistics       |
| 2  |    | <b>Transportation:</b> Taxi licenses; transit data; traffic counts; road infrastructure data; parking data |
| 3  |    | <b>Emergency calls:</b> Police, fire, and EMS responses; 911 calls; response times; incident reports       |
| 4  |    | <b>Development:</b> Commercial developments; housing developments; property data; housing affordability    |
| 5  |    | <b>Building safety:</b> Building permits; safety permits; certificates of occupancy                        |
| 6  |    | <b>Finance:</b> Revenue; spending; employee salaries; capital budgets; payments                            |
| 7  |   | <b>Elections:</b> Election results; polling locations; campaign finance reports                            |
| 8  |  | <b>Businesses and licenses:</b> Business licenses; liquor licenses; vendor, contract, and procurement data |
| 9  |  | <b>Inspections and service requests:</b> Restaurant health inspections; 311 requests; code violations      |
| 10 |  | <b>Education:</b> Schools information; student health data; after-school programs; library locations       |
-

## Open Government Data Ecosystem

Technology/  
Infrastructure

Innovation  
Financing

Citizen Engagement

Leadership

Policy/Legal Framework

Institutions

Applications &  
Co-Creation

Capacity Building



# CIVIC ANALYTICS, DATA SCIENCE & CULTURE

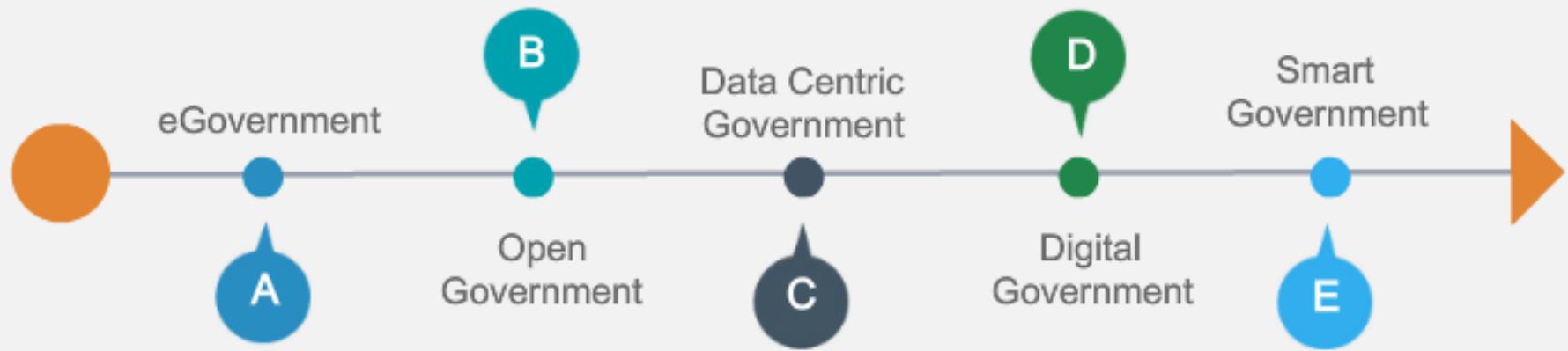
Challenges for Government: Data flows, fluidity and use

## Enterprise Data Management: Assets and Analytics

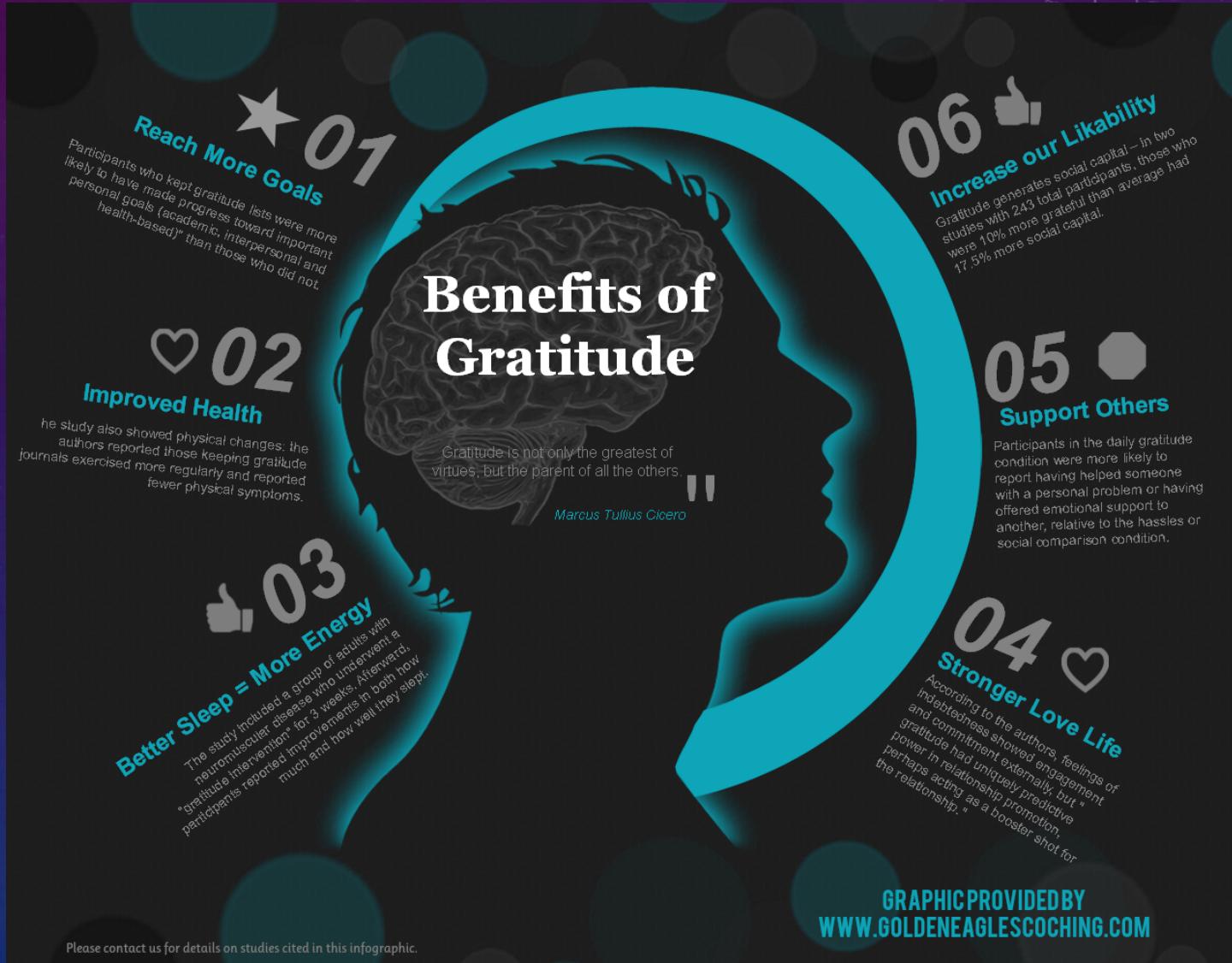
- Transit and Transportation (Optimizing the future)
  - 2018
- Public Safety
  - 2017 Traffic, with plans for expansion
- Mayor & Council (Elected Officials)
  - Regular, automatic reporting mechanisms
- **Codes Administration**

Context of funding, politics, culture, economy, demographics – and many other factors, including health, perception

# DIGITAL GOVERNMENT MATURITY MODEL



# THANK YOU!



# CIVIC ANALYTICS & OPEN DATA LINKS

- [Harvard Ash Center for Democratic Government and Innovation](#)
  - [Data-smart City Solutions](#)
- [Sunlight Foundation](#)
- [University of Chicago, Data Science for Social Good](#)
- Some of My Favorite Data Driven Cities
  - [Boston](#) (Open Data and Applied Analysis)
  - New Orleans (Project Scoping, Urban Analytics, Performance Reporting)
    - [DataDriven NOLA](#) and [NOLalytics](#) and [ResultsNOLA](#)
  - [Chicago](#) (Data Science and [Array of Things](#))
  - [San Francisco](#) (Training)
  - [LA GeoHub](#) (Geospatial display)