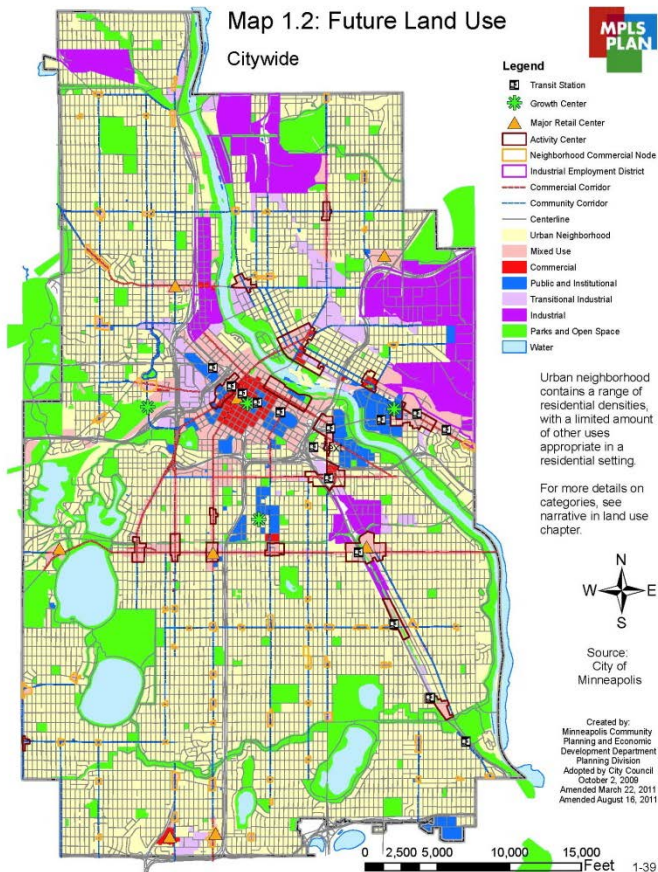




April 2, 2016 – Community Connections Conference

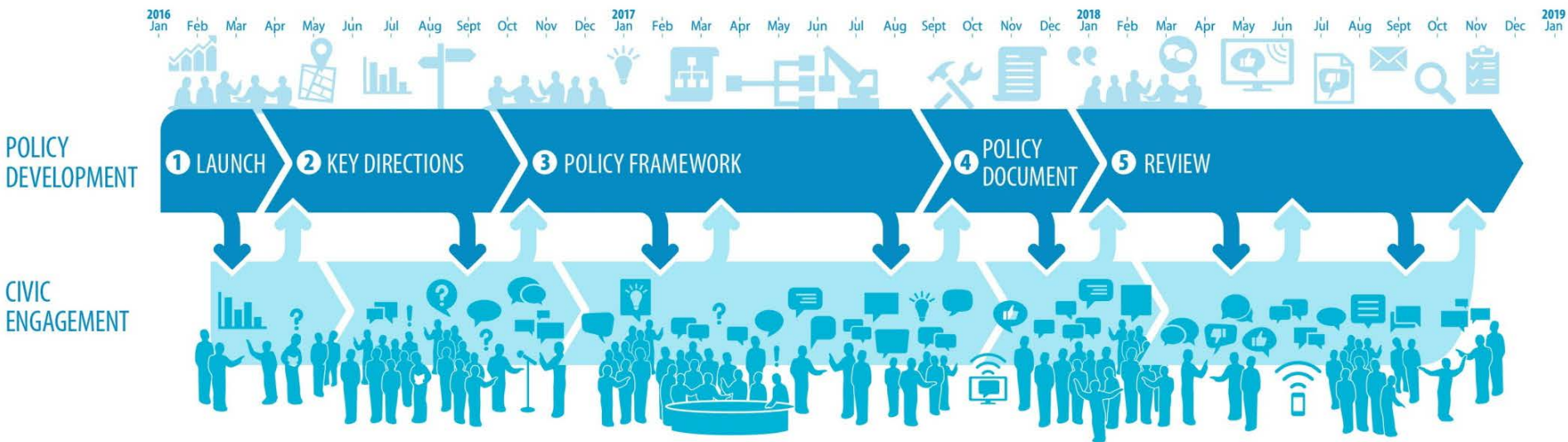
# **COMPREHENSIVE PLAN *UPDATE***



- Provides **long range policy guidance** for the City
- **Legally required** by state statute & Metropolitan Council regulation
- Must be updated every **10 years**
- Must be in compliance with **regional policy plans**
  - Transportation
  - Water
  - Parks
  - Housing



- Required by the Metropolitan Land Planning Act (§473)
  - Land use
  - Transportation
  - Housing
  - Parks and trails
  - Water resources
  - Implementation
  - *Natural resource protection*
  - *Historic resource protection*
  - *Public facilities plan*
- “Issues of regional importance” identified by Metropolitan Council
  - Economic competitiveness
  - Resilience
  - *Equity*





## *MISSION STATEMENT*

# **Minneapolis 2040:**

An inspiring city growing in equity,  
health, & opportunity.



Growth



Equity



Sustainability



Livability



Competitiveness



Good Government

The Process is:

**MEANINGFUL**

**RELEVANT**

**ACCESSIBLE**

**INCLUSIVE**

**EQUITABLE**

The Community is:

**REPRESENTED**

**INFORMED**

**HEARD**

**EMPOWERED**

- Meaningful and relevant dialogue
- Inclusive representation
- Access to information & opportunities
- An empowering experience
- Contributions are heard & have impact
- Effective use of resources



**PUBLIC LAUNCH ON APRIL 2**

communityconnectionsconference  
**BIG IDEAS**  
Your Minneapolis

 Search

twitter

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[Home](#)

## Frequently Asked Questions

- [What is Minneapolis 2040?](#)
- [How will the City use Minneapolis 2040?](#)
- [Why is the City updating its comprehensive plan?](#)
- [What are the comprehensive plan values?](#)
- [What is the Minneapolis 2040 process?](#)
- [How do I get involved?](#)
- [How will my voice be heard and my feedback used?](#)

### What is Minneapolis 2040?

It is the update to the City's Comprehensive Plan... It will shape citywide policies and



### Sign Up For Updates

Name

Email

Welcome to  
Minneapolis 2040





- Participate in discussion around key comprehensive plan values
- Share your “big ideas” for the comprehensive plan update

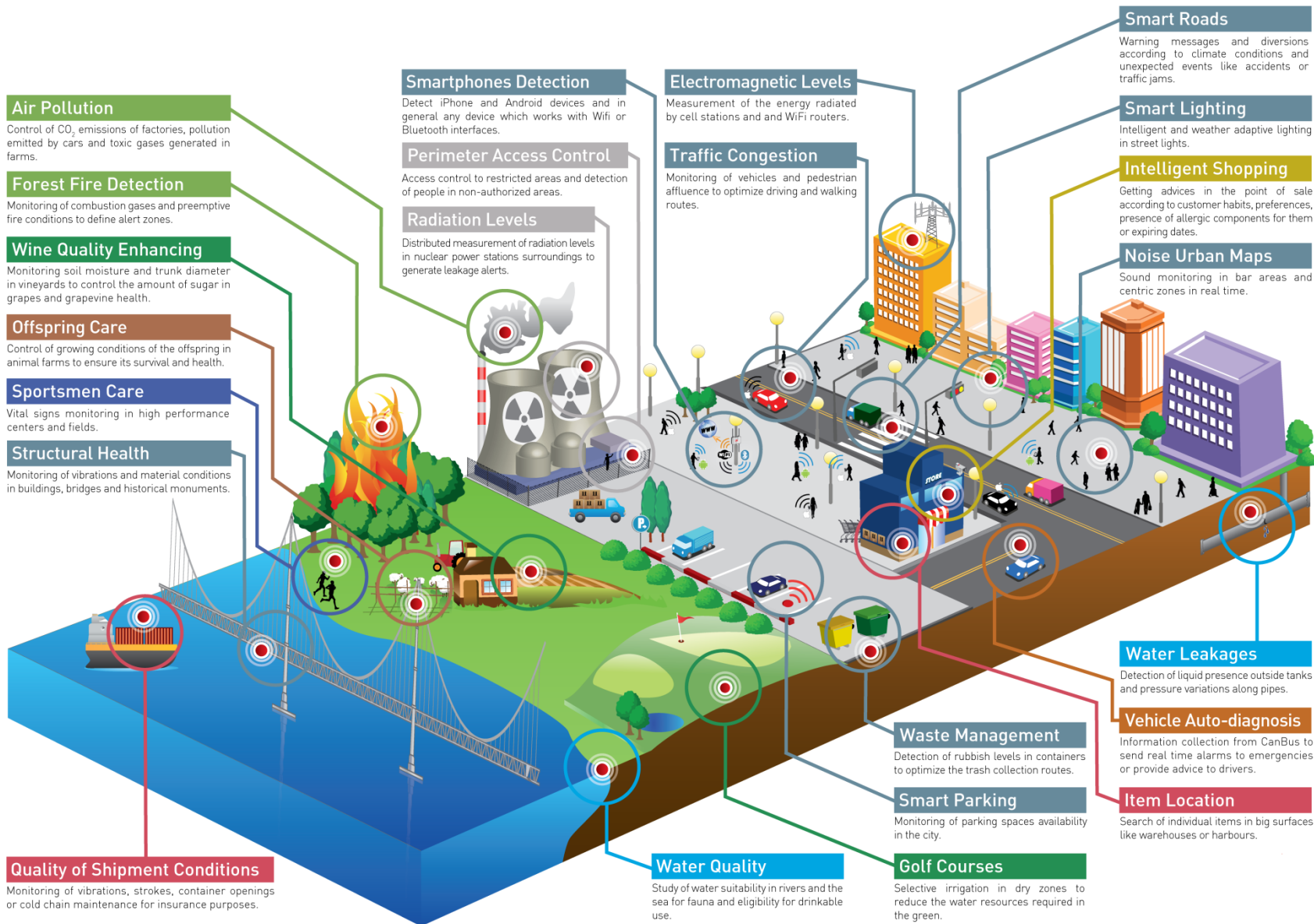
## #MplsBigIdeas

- Visit the website and sign up for future announcements of events and reports (including summary from this conference)

<http://minneapolis2040.com>

- **Matt Bailey** is IBM's Client Executive for public sector projects in Minnesota and North Dakota. He leads IBM's public sector practice for services, software, and hardware in these states. He joined IBM from the State of Minnesota, where he was Assistant Commissioner of Administration for Strategic Partnerships. In that role, he oversaw Minnesota's Enterprise Lean and Continuous Improvement program across state government. In prior roles, he led government reform efforts for the Commonwealth of Pennsylvania, served as Assistant City Controller of Philadelphia, and consulted with many state and local governments.
- **Bill Bushey** is co-founder and lead organizer of Open Twin Cities, an organization fostering civic technology and open government in Minnesota, as well as software engineer at GovDelivery. Bill holds a B.S. in Computer Science from Clarkson University and an M.S. from the Humphrey School of Public Affairs.
- **Paul Mogush** has worked as a city planner for the City of Minneapolis since 2005, primarily focusing on long range planning for transit oriented development on the south side of the city. His current focus is on bringing new technology tools into the City's comprehensive plan update process. Paul holds a Master of Urban and Regional Planning degree from the University of Minnesota.
- **Russell (Rusty) Smith** has 25 years in the hardware, software and telecommunications industry. During this time he has primarily worked with federal, state and local government entities throughout the continental US. He has been with Cisco Systems for eight years and primarily focused on helping state and local government meet the needs of their constituents, improve operation efficiencies, enhance quality and flow of information and establish resilient multi agency architectures. Rusty has been a resident of Minnesota for 26 years of which 12 of those he has called Minneapolis his home.





## The Internet of Things Moves In

The 2014 U.S. edition of Deloitte's Global Mobile Consumer Survey reveals that smartphone owners overindexed in their desire for Internet of Things (IoT) solutions for the home and car.

Would find value in smart HOME solutions

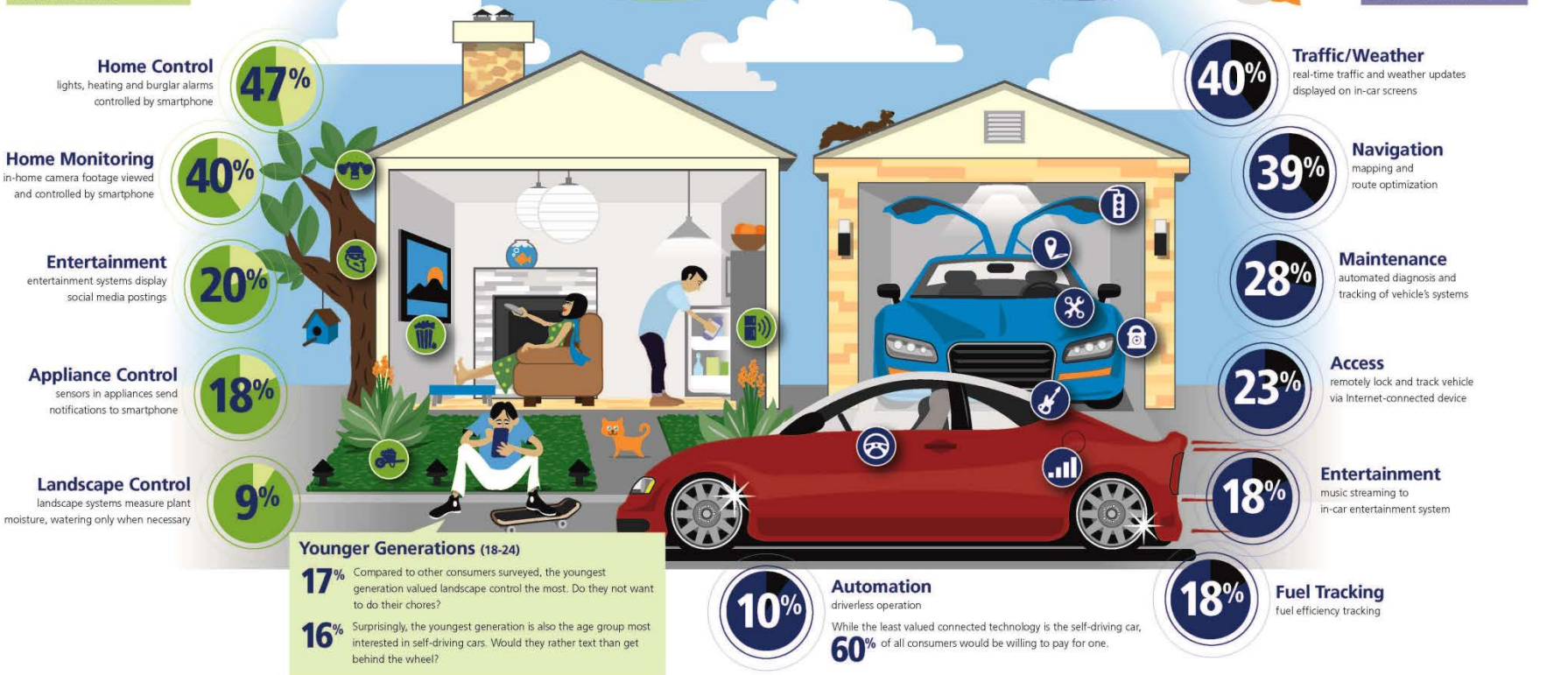
smartphone owners	65%
all consumers	55%
consumers willing to pay for smart home solutions	71%

Would find value in connected CAR solutions

smartphone owners	72%
all consumers	63%
consumers willing to pay for connected car solutions	60%

**SMART HOME**  
% of most valued technologies

**CONNECTED CAR**  
% of most valued technologies







Minneapolis  
2040

“Big Data”



Planning, Urban Design, Public Art, Research, and Civic Technology

# LONG RANGE PLANNING

## How We're Organized, How We Serve

*THEMATIC ORGANIZATION: Five Core Functions*





# LONG RANGE PLANNING

**Civic Technology** focuses on developing opportunities to utilize data and technology in municipal planning. Civic Technology supports all four of the division's functions and serves as a liaison to the City's Information Technology Department.



***Civic Technology: Tools & Policy for growth, innovation, transparency, & service.***

## ***Products***

- Interactive Tools & Dashboards
- Analytics & Data Visualization
- Growth Modeling
- Custom Apps
- Community Technology Resource Assessment\*

## ***Services***

- Tech Policy Research & Recommendations
- Digital Community Engagement
- VR/AR Pilot Initiative
- Cloud-based Collaboration

## ***Subscriptions***

- *Minneapolis Technology Report Card (Annual)\**
- *Data Alert - New Data Release GovDelivery*

*Planning, Urban Design, Public Art, Research, and Civic Technology*

# LONG RANGE PLANNING



# LONG RANGE PLANNING

## Minneapolis Market Rate Housing Inventory

Choose a housing inventory type:

- (All)
- Multi Family
- Single Family Owner
- Single Family Rental

NOTE: The margin of error in the results varies by scale. At the scale of the city, the margin of error is between 3-10% for the count of units. The margin of error increases at the community level to between 5-18%. The margin of error is smaller for the classifications from 50-100% AMI and larger for the other categories.

Questions about the data? Read methodology (<http://www.ci.minneapolis.mn.us/cped/index.htm>) then contact CPED/Brian Schaffer

### All Market Rate Housing Matrix in All Area

The housing cost matrix shows the distribution of all market rate units within the City Minneapolis. Costs were calculated for rents (in dollars). Monthly costs of ownership for single family owners were calculated using methods as defined by the Met Council. Units were classified by cost into one of six categories based on its affordability. Affordability assumes no more than 30% of a household's income is used towards housing. Area Median Income (AMI) for the metropolitan area is used as the income baseline.

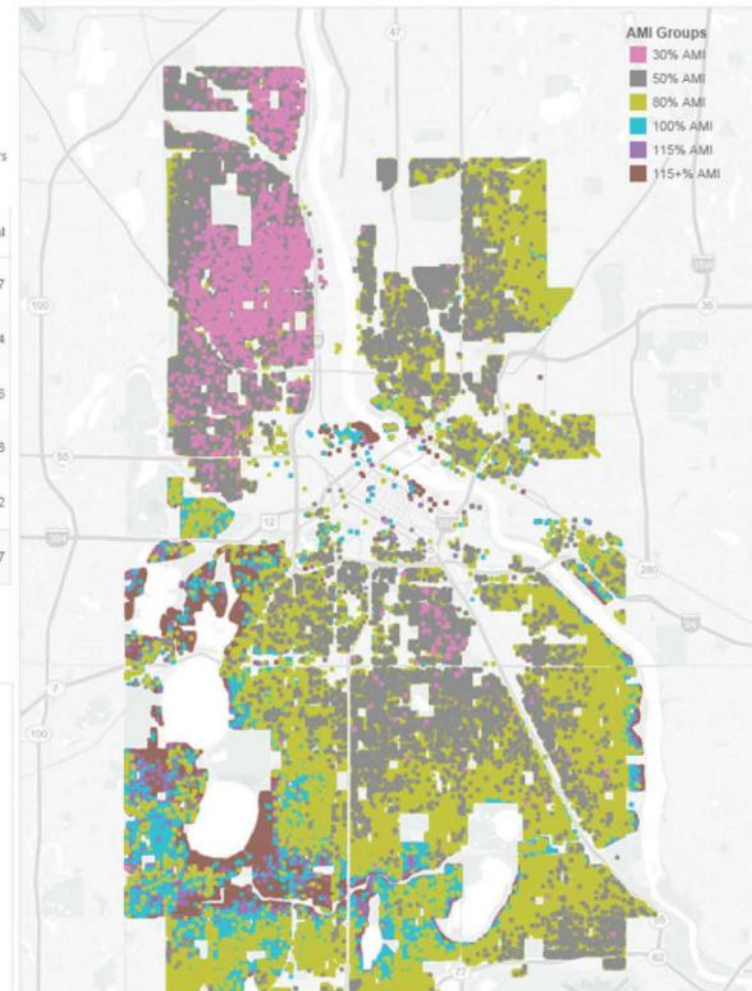
Bedrooms	30% AMI	50% AMI	80% AMI	100% AMI	115% AMI	115+% AMI	Grand Total
Studio	92	7,342	2,895	1,070	443	125	11,967
1 Bedroom	86	19,562	24,670	6,319	2,325	3,102	56,064
2 Bedrooms	425	11,397	31,348	8,515	3,058	5,053	59,796
3 Bedrooms	724	7,569	21,354	7,092	2,734	5,145	44,618
4+ Bedrooms	720	2,284	7,339	2,975	1,547	5,467	20,332
Grand Total	2,047	48,154	87,606	25,971	10,107	18,892	192,777

### Community Level Inventory of \* in \* Units at \*

This indicates the distribution of units within a particular community. The percent displayed is the number of units selected in the matrix as a percent of the total number of units within the community. The color (darker = more, lighter = less) indicates the number of units selected in the matrix as a percent of the number of matrix units in the City of Minneapolis.



### Map of All Housing Inventory



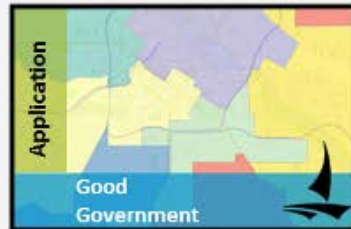
[Home](#) » [Resources](#)

## Interactive Maps

The maps linked below reflect existing conditions and policies related to the [comprehensive plan values](#) of growth, equity, sustainability, livability, competitiveness, and good government.



Equity & Racial Justice



Good Government



Health and Resilience



Economic Competitiveness

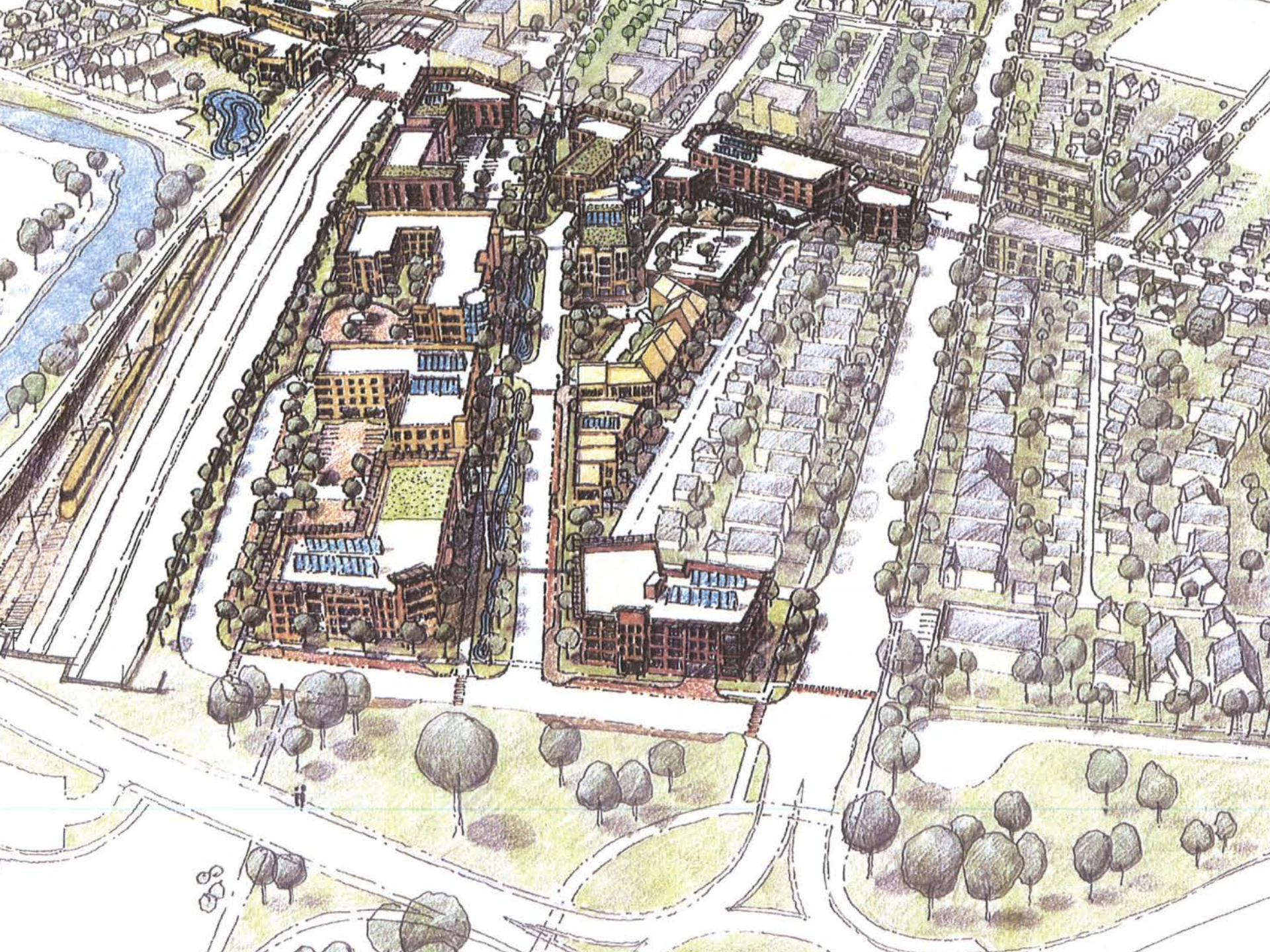
## Minneapolis is Growing

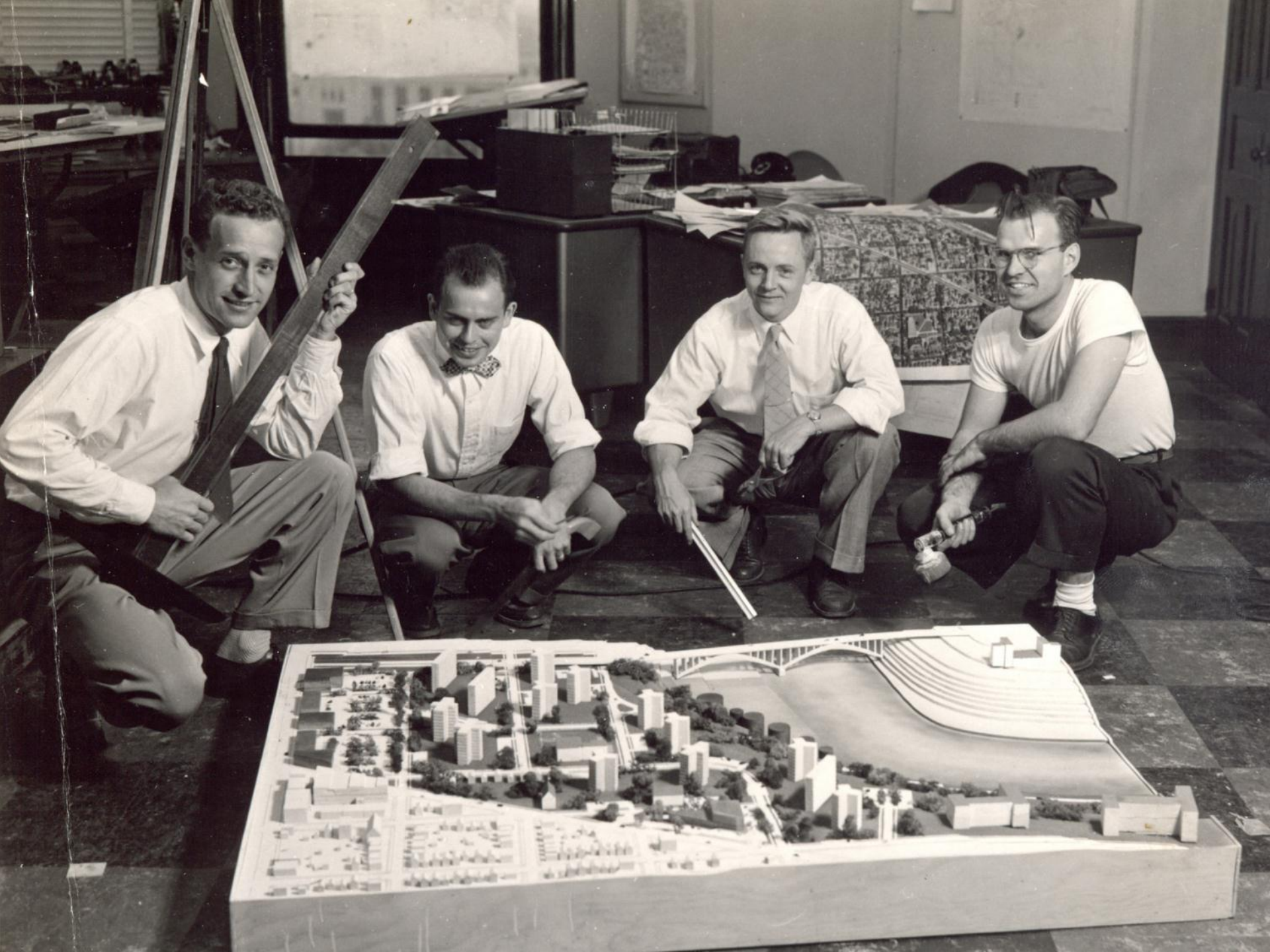
The process to update the city's comprehensive plan will involve working together to shape the future of our city. The City Council has directed the Department of Community Planning and Economic...

Read

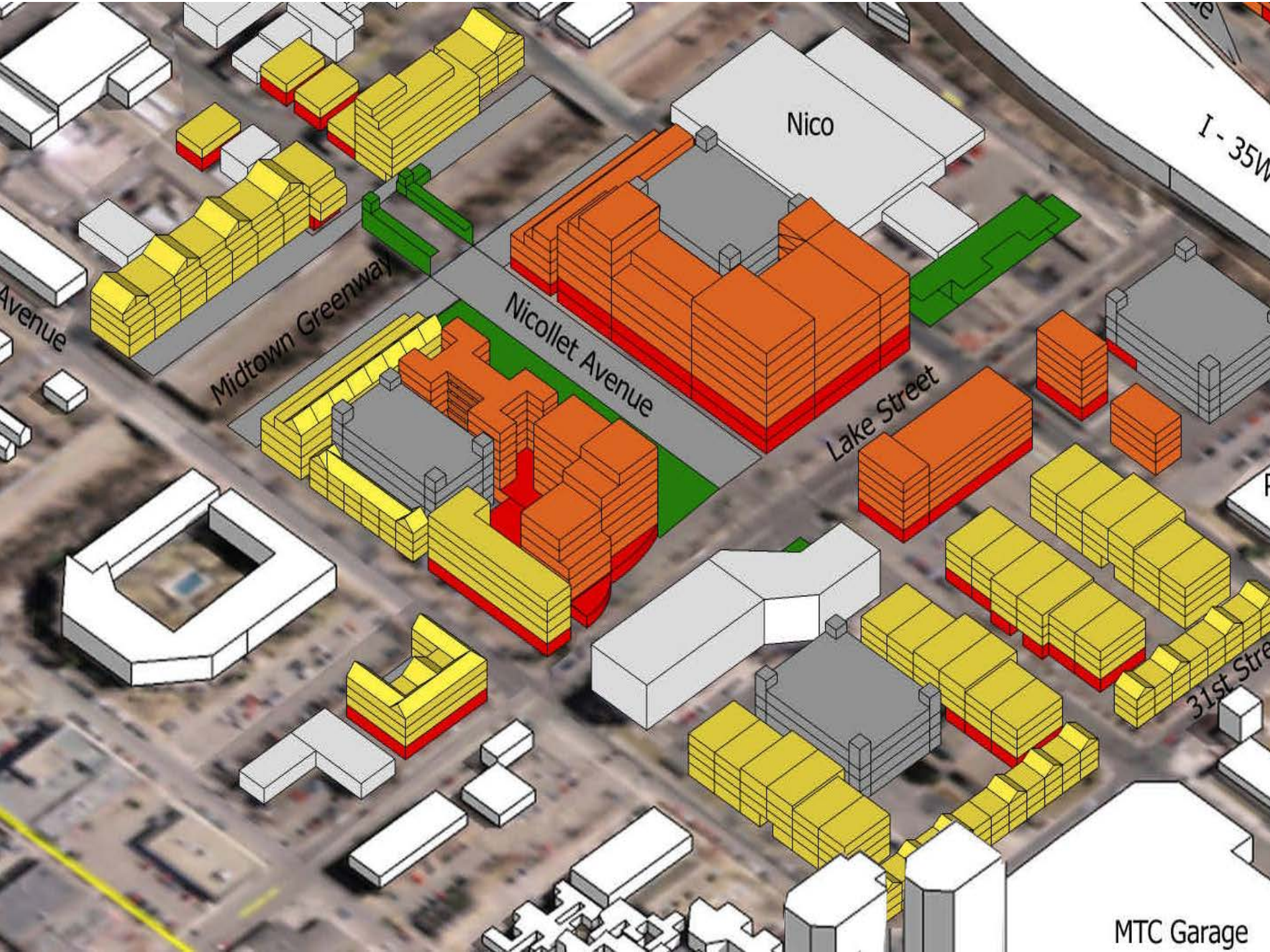












Nico

I-35W

Avenue

Midtown Greenway

Nicollet Avenue

Lake Street

31st Street

MTC Garage



People on the upper level balcony.

People sitting at a table in the middle ground.

Equipment table with a Dell monitor.

Group of people talking in the foreground.

Yellow display cases on the left side.

White pillar on the right side.

Director's chair on the right side.





# Smarter Cities:

Capitalizing on new insights, creating system-wide efficiencies,  
collaborating in new ways

Matt Bailey

IBM Client Executive—MN Public Sector

[mjbailey@us.ibm.com](mailto:mjbailey@us.ibm.com)



The world we live in stresses our societal **planning and management** abilities, our physical **infrastructure** as well as our **health and personal growth**.



In the last century, water use has been **growing at more than 2X the rate of the population**.<sup>1</sup>



Between **2000** and **2012**, natural disasters caused **\$1.7 trillion** in damage and killed **1.1 million people**.<sup>5</sup>

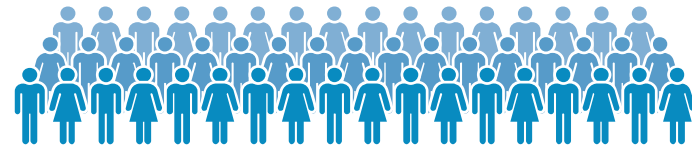


Traffic congestion costs:

US – **\$121 billion** annually<sup>2</sup>

UK – **£491 per car-commuting household/year**<sup>3</sup>

Beijing – **4.22% of GDP**<sup>4</sup>



By **2050**, **70%** of the global population is expected to **live in cities and urban areas**<sup>6</sup>

<sup>1</sup> <http://www.unwater.org/statistics/statistics-detail/fr/c/211811/>

<sup>2</sup> [https://www.rita.dot.gov/utc/utc/sites/rita.dot.gov.utc/files/utc\\_spotlights/pdf/spotlight\\_0313.pdf](https://www.rita.dot.gov/utc/utc/sites/rita.dot.gov.utc/files/utc_spotlights/pdf/spotlight_0313.pdf)

<sup>3</sup> <http://www.telegraph.co.uk/finance/newsbysector/transport/9734126/Traffic-congestion-costs-UK-economy-4.3bn-a-year.html>

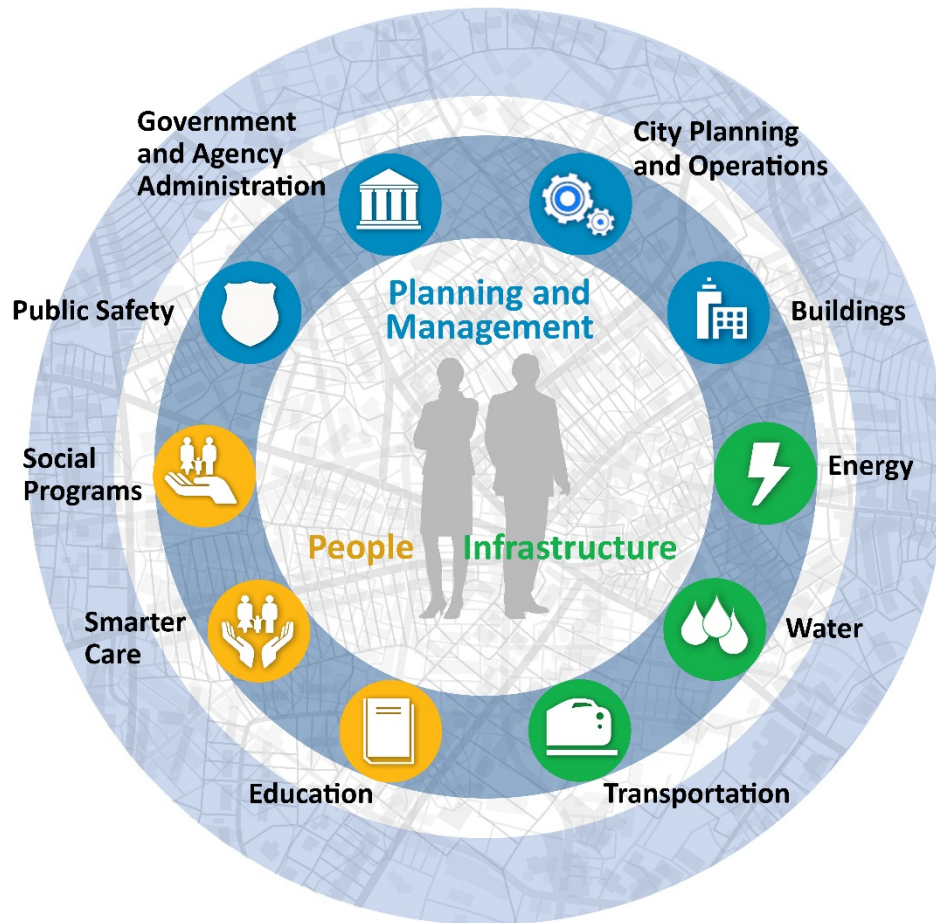
<sup>4</sup> <http://cedb.asce.org/cgi/WWWdisplay.cgi?295422>

<sup>5</sup> <https://www.dosomething.org/actnow/tipsandtools/11-facts-about-disasters>

<sup>6</sup> Meeting of the Minds Webinar, *From Fragile to Agile: Transforming Economies Through Business Models and Partnerships*, Riz Khaliq, August 13, 2014



Vibrant cities are realizing their full potential by **integrating** across functions, **capitalizing** on new insights, **creating** system-wide efficiencies and **collaborating** in new ways



## Planning and Management

Lead with vision and deep insight to improve efficiency, collaboration and response for government, public safety and city operations

## Infrastructure

Build resilient, sustainable infrastructure to increase efficiency, sustainability and proactively plan for energy, water and transportation

## People

Enable individuals' health and productivity to deliver better outcomes and reduced costs in social programs, health and education



# A comprehensive approach to city and regional functions **provides integrated insight across agency operations**

## Intelligent Operations Center for Smarter Cities

**Capitalize on new insights**, using real-time visibility of cross-city data to optimize cost efficiencies

**Create system-wide efficiencies** to proactively manage problems and mitigate impacts to services and citizens

**Collaborate in new ways** with business and citizen participation driving economic prosperity and enhancing citizen involvement



**Automated alerts notify emergency personnel when changes occur in the flood and landslide forecast**



“The system gives us **incredibly valuable insight** into trends and what we can expect in the future. We’re **moving from a break-fix mentality to a proactive planning mentality.**”

— Doug Craig, Mayor of Cambridge





# The Smarter City Overview – Operations Center Example



**Challenge:** Disconnected programs for parks, businesses, and marketing lead to underutilized resources and lost revenue opportunities.

**Solution Description:** Mobile application connects users to parks, businesses, events, and transit in a single application. County builds partnerships, sponsorships, and other revenue generating opportunities for increased economic vitality.

Data collected from city and private sector operations...



Park Foundation Program Information



Businesses (Restaurants, Bars, Nightclubs, other POI's)



County Concert In the Park

County-sponsored events

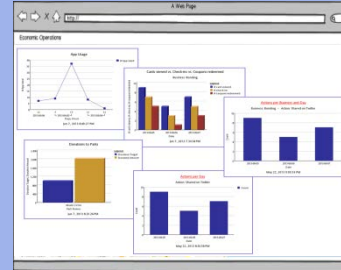


Transit schedules, arrival information, etc

Data is integrated, analyzed and visualized...

Economic Vitality

End user sees destination information and how to get there. Can share information via twitter and facebook, and receive incentives for businesses, transit, events, etc.



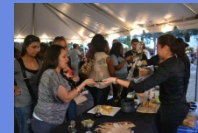
County and businesses can see coupon and application usage

Smarter decisions are made...



Citizens/Tourists: Attend events, connect with city and businesses, get great deals!

Businesses: \$\$ from sales across city, view redeemed coupons

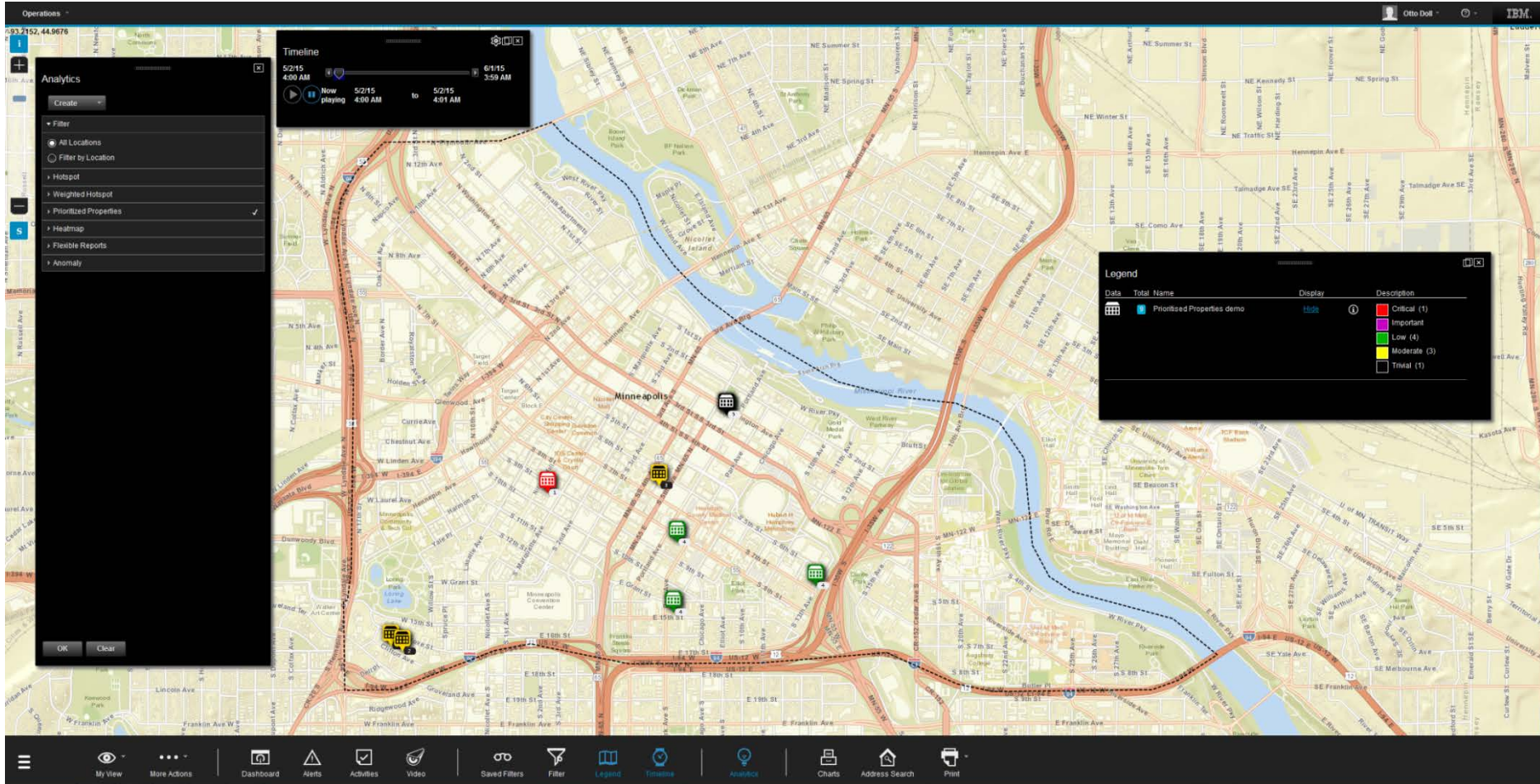


Parks: Highly attended, well-sponsored events (with add'l tax and membership revenue)

Transit: Increased ridership and revenue, coordination of transit with user needs



# The Minneapolis Intelligent Operations Platform



## Minneapolis Strategic Information Center



- ❑ Better coordinate city operations to gain efficiencies
- ❑ Deal more effectively with special events
- ❑ Improve handling of emergencies

## Establish Event Horizon Picture: Past, Present and Future



## City Analysts



Consumers



Producers



Explorers

IOP

Dashboards, Reports, Workflows with Secure Access

Advanced Analytics

Comparative Statistics

Prioritization

Event Planning

Alerting

Information Exchange

Real Time Updating

City Systems of Record



Public Works  
Graffiti



Police  
Incidents



Traffic  
Accidents



Reg Svcs  
Permits



Fire  
Incidents



Non-City  
Agencies



Citizens  
311/911

DID Events



## Route Tracking

Workers track frequent routes

## Prioritization

Workers look for tasks to do first

## Event

## Correlation

Workers seek the cause that makes the effect happen

## Historical Position Tracking

Workers track positions over time

## Hotspot Detection

Workers search for places of more than usual interest, activity, or popularity



## Anomaly Detection

Workers look for deviations from the common rule, type, form, or arrangement

## Heat Mapping

Workers look at data density

## Pattern Discovery

Workers look for a reliable model of traits, acts, tendencies, or other observable characteristics of a person, group, or institution

## Comparative Statistics

Workers seek to compare against others



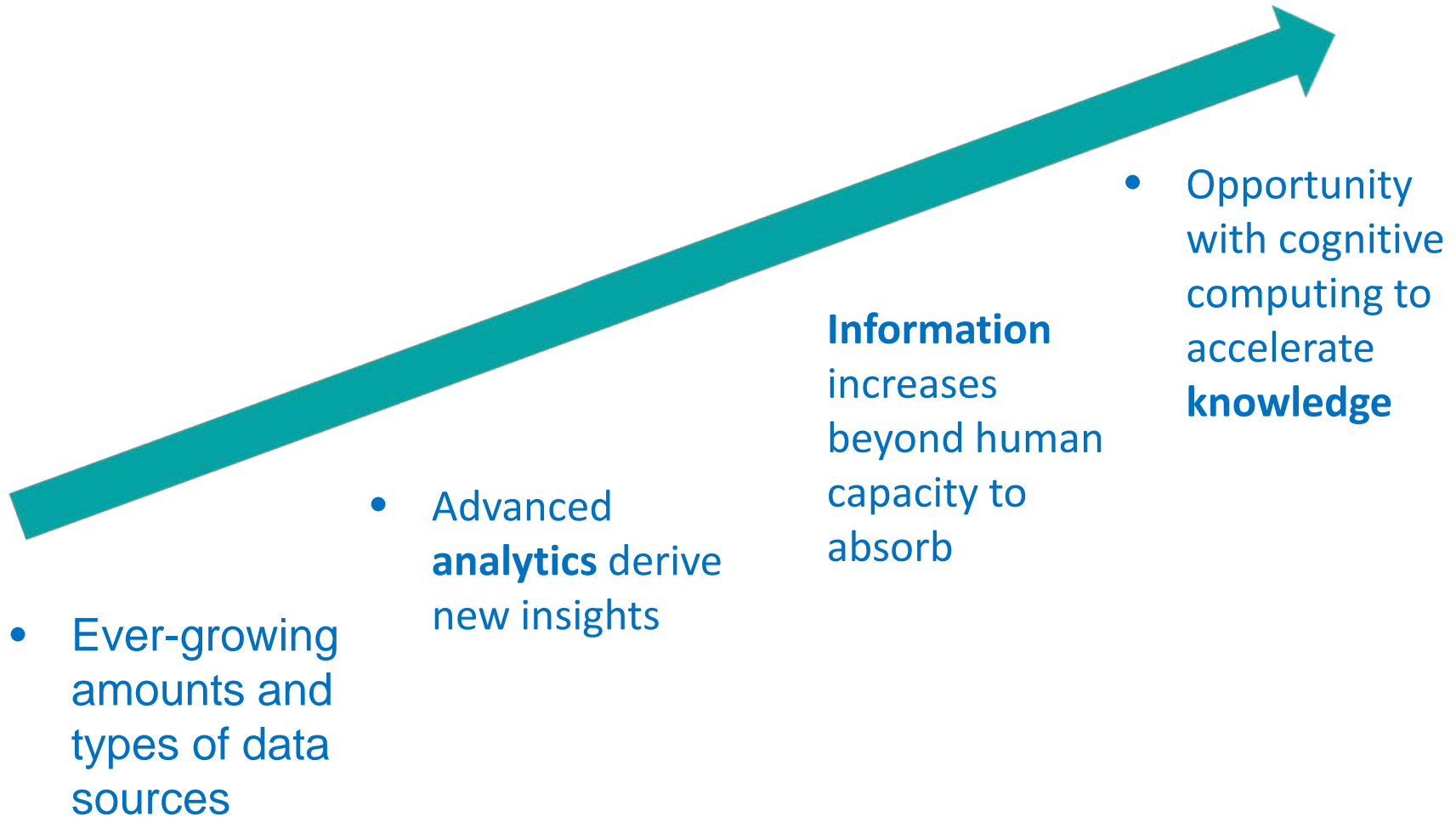
## Challenge

## Technique

- |   |  |
|---|--|
| <input type="checkbox"/> Why a geography of disinvestment?                                | <input type="checkbox"/> Discover pattern through event correlation; compare against all vacant lots |
| <input type="checkbox"/> Can City add 100,000 people?                                     | <input type="checkbox"/> Determine impact of 7-story zoning restrictions                             |
| <input type="checkbox"/> Are City processes, activities and policies creating inequities? | <input type="checkbox"/> Determine any unintended consequences of existing service models            |
| <input type="checkbox"/> Who is a bad landlord?   | <input type="checkbox"/> Discover pattern through event correlation; compare against all landlords   |



# The next generation: Cognitive computing—going beyond data and analytics to knowledge

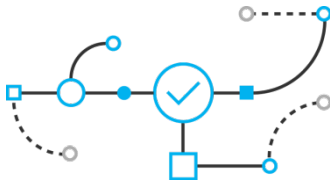


# Watson, a cognitive system



## Understands

Watson can read & understand documents & data – both structured & unstructured – at a massive scale.



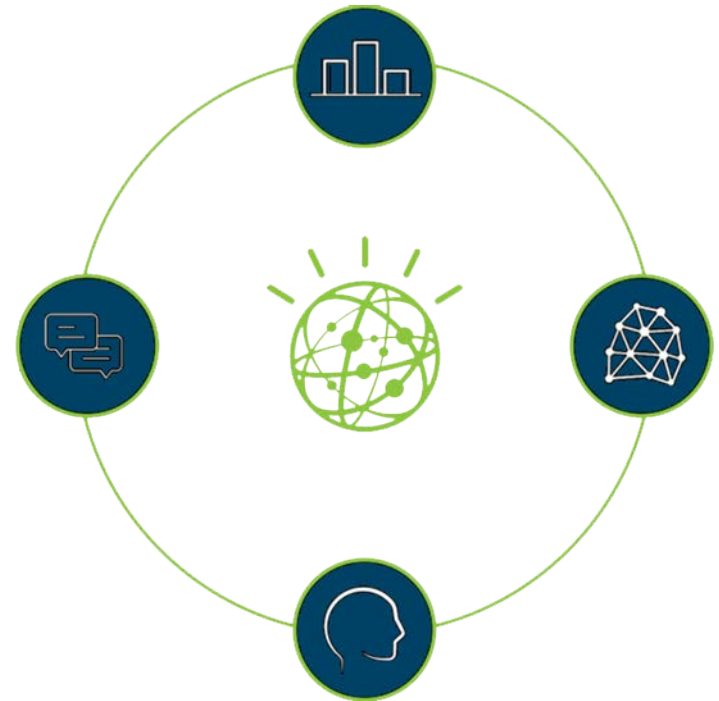
## Reasons

Watson searches & analyzes data, returning evidence-based recommendations.



## Learns

Decisions made by leading experts feed the engine. Watson learns & improves over time.

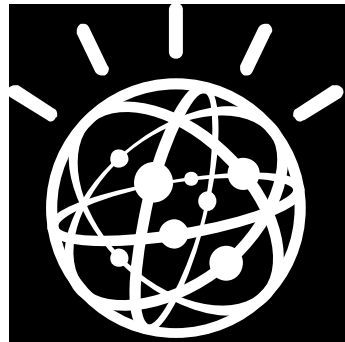




## Example: the potential for cognitive in Social Programs

### Discovery:

- Draw rapid insights from case notes, big data sources (e.g. social media)
- Identify and predict risk factors, and find better interventions



### Optimization:

- Share, scale the expertise of caseworkers around the world
- Enhance call center and operations support
- Focus resources on high-need populations with better precision

### Client Experience:

- Intuitive phone and on-line support for client navigation and questions
- Promote citizen engagement with mobile access to cognitive-enabled systems

### Outcomes:

- Inform choices of interventions most likely to succeed
- Match providers with clients with better accuracy to help improve results

