All meetings of the St. Louis Park Community Technology Advisory Commission will be conducted by telephone or other electronic means until further notice. This is in accordance with a local emergency declaration issued by the city council, in response to the coronavirus (COVID-19) pandemic.

All members of the Community Technology Advisory Commission will participate in the Tuesday, November 10, 2020, 6 p.m. meeting by electronic device or telephone rather than by being personally present at the commission’s regular meeting place at 5005 Minnetonka Blvd., St. Louis Park.

Members of the public can monitor this meeting by listen-only audio by calling 1.312.535.8110 and entering access code 177 307 6315 for audio only. Cisco Webex will be used to conduct videoconference meetings of the Community Technology Advisory Commission, with commissioners and staff participating from multiple locations.

1. Call to order – roll call

2. Adoption of agenda

3. Approval of minutes
   a. Sept. 16, 2020

4. Smart cities
   a. Workshop recap from Aaryn Anderson, Insight (30 minutes)
   b. Identification of 2-3 initiatives to pursue (60 minutes)
   c. Development and assignment of committees (30 minutes)

5. Communications from the chair/commissioners

6. Staff items

7. Adjourn

If you cannot attend the meeting please contact Jacque Smith: jsmith@stlouispark.org or 952.924.2632 by 4 p.m. Monday, Nov. 9.
1. Call to order – roll call
   Meeting started 6:12 p.m. by videoconference
   Present: Bruce Browning, Cindy Hoffman, Abe Levine, Rolf Peterson, Kelly Heitz, Mike Siegler
   Absent: Mohamed Mohamud
   Guests: Sandeep Sinha, Shawn Wood, Aaryn Anderson
   Staff: John McHugh, Clint Pires, Jacque Smith

2. Adoption of agenda - Agenda adopted as presented

3. Introduction of new members
   Commission members introduced themselves to new members Kelly Heitz and Mike Siegler, who also introduced themselves to the commission. Staff members also introduced themselves.

4. Insight presentation
   Sandeep Sinha of Insight gave a presentation about smart cities. The key concept of smart cities is to find ways to improve quality of life for all citizens and to create a more efficient, responsive and sustainable city. It’s about outcomes in daily life – not technology.

   Pires provided in-depth information about the city’s five strategic priorities and suggested that by aligning any suggestions for smart cities with those priorities, the commission will be more likely to gain support from the city council for suggested initiatives.

   Browning asked about the need for internet access for citizens to engage with smart cities. Anderson stated that there are levels of access. For example, sensors on buses may send information on when the next bus will arrive through an app on a smartphone that would require internet access, but could also send an SMS to a phone requiring only cell service, or send the info to a display board at the station which requires no internet access at all on the part of the user.

   Browning asked about concerns around facial recognition and privacy. Sinha said this isn’t really about the cameras but about how the data is used. For example, it can be used to exonerate someone who is suspected of a crime. Levine said that it’s been stated there’s no expectation of privacy in public spaces.

   Browning asked about how senior citizens and others who have challenges might be included in smart cities. Sinha acknowledged this is a concern and something to consider.

   Browning asked about the security of cloud storage. Peterson and Levine both affirmed stated their belief that the cloud is more secure than servers. Heitz said the security of even the cloud still depends on how you use it.
Levine asked for an explanation of predictive policing. Sinha replied that this uses data collection to identify areas of a city with more criminal activity, so that solutions can be targeted to those areas.

Levine asked about streetlights and if they can withstand the placement of additional equipment such as shot spotters or air quality sensors. Sinha said people have been very forward thinking in how the sensors have been developed and in most cases streetlights and wooden poles can handle the additional load.

Anderson stated the goal of the October workshop will be develop one to three smart city opportunities for smart cities in St. Louis Park. He further stated that participants should also consider how they might extend technology already in place. One example of this might be the sensors placed to read water meters in St. Louis Park – how might that be used further?

Levine asked for some specific dates from the Insight representatives related to the upcoming workshop. Smith asked that all participants take the online poll to identify dates that will work for them for the workshop; a date will be chosen based on when the majority can attend.

Smith said within a week she will plan to send a follow up to the commission members with their homework of brainstorming use cases. Insights would like to have another call with staff to develop an outline and create an agenda for the workshop. City staff also will work on list of staff to include in the workshop.

5. Approval of minutes
   a. February 12, 2020, minutes were approved with one correction that Rolf Peterson was present at the meeting. Browning motioned, Peterson seconded, all voted in favor of approval with the correction.

6. Communications from the chair/commissioners
   None

7. Staff items
   Smith let the commission know that Theo Pohlen’s term ended Aug. 31, 2020, but that he has reapplied for a second term on the commission.

Browning moved, Heitz seconded to adjourn. Meeting adjourned 7:51 p.m.
City of St. Louis Park Strategic Priorities

St. Louis Park is committed to being a leader in racial equity and inclusion in order to create a more just and inclusive community for all.

- Creating pipelines and opportunities for communities of color and indigenous people to be part of city leadership roles.
- Investing in small business and services owned by people of color and indigenous people.
- Expanding racial equity as an ongoing discussion within all areas of city business.
- Creating awareness and a learning environment where consequences and unintentional impact of our work and decisions are addressed.

St. Louis Park is committed to continue to lead in environmental stewardship.

- Supporting climate action plan strategies and goals through planning, education, resources, communication and implementation of programs and initiatives.
- Increasing opportunities to connect with nature in the city.
- Continuing to protect and improve the quality of natural resources, parks, lakes, creek, wetlands and surface water planning, and using green spaces effectively.
- Continuing to provide quality water to residents.

St. Louis Park is committed to providing a broad range of housing and neighborhood-oriented development.

- Providing more diverse and creative housing choices to meet the needs of current and future residents while preserving existing affordable housing.
- Fostering and facilitating reinvestment and redevelopment of neighborhood-oriented businesses and services.
- Promoting locally owned small business, especially in indigenous, immigrant and communities of color.
- Conducting research to further understand what people want and need access to in the community, i.e., food, services, housing options, business opportunities, gathering spaces.

St. Louis Park is committed to providing a variety of options for people to make their way around the city comfortably, safely and reliably.

- Continuing to expand the network of sidewalks, trails and bike facilities.
- Researching and implementing multiple and affordable mobility solutions for all.
- Fostering smart growth and transit-oriented housing development.
- Increasing pedestrian safety through crosswalk improvements and increased park and trail lighting.
- Expanding the number of north-south and east-west transit options.

St. Louis Park is committed to creating opportunities to build social capital through community engagement.

- Fostering and facilitating transparency between community and the City of St. Louis Park.
- Building strategies and opportunities to reach historically unheard voices and unseen communities within St. Louis Park.
- Building trust and deeper connections within communities of color and indigenous people.
- Connecting and engaging with St. Louis Park School District and other community organizations to meet the needs of current and future community.
- Continuing to support youth and future generations.
- Encourage neighborhood associations to deepen their reach and connections within the community.
St. Louis Park
Smart City Workshop

October 22 – 28, 2020
Over the course of two weeks Insight Digital Innovation worked with St. Louis Park to identify, detail and prioritize Smart City initiatives. The following slides provide the results of the participant questionnaire, interactive workshops and resulting key themes that emerged for further consideration by the Technology Advisory Council and St. Louis Park.
Use Case Definition
Use Case Definition

Use Case Definition

Smart city initiatives already in process

- Smart city initiatives planned or in consideration

GIS and Lidar solar suitability
- GIS - Analysis of ticketing
- Snow emergencies
- Where are tows occurring
- Has my car been towed? - Citizen front end, search
detials about fees, where it's at
- Dispatcher keeps log of towings - Check log prior to officer dispatch

Increase in flow
- Let residents know when the exceed usage and potential impact to billing
- Constant flow - alerting resident of potential usage
- Intelligence into billing - How are you using water?
- Energy bills - do not have access to water data
- Feed into monitoring system

Solar Suitability Assessment Map
- GIS and Lidar solar suitability
- Rate home to understand cost/payback
- A few years in, adjustments being made

City Water Monitoring
- City Water Monitoring
- Increase in flow
- Let residents know when the exceed usage and potential impact to billing
- Constant flow - alerting resident of potential usage
- Intelligence into billing - How are you using water?
- Energy bills - do not have access to water data
- Feed into monitoring system

WiFi street lighting replacements
- Smart - dimming based on environmental
- City wide goal to replace all
- Installing meters - currently flat rate billing
- Outlets for decorative lighting

Wireless Water Meters
- Smart city initiatives already in process

ChargePoint EV charging network
- Use Case Definition
- System that delivers updated information
- Water quality / status of pumps
- Proactive alerting of potential issues / out of balance
- Public - monitoring of water usage for daily/hourly baselines
- Identify leaks
- Inconsistencies in usage
- Understanding of flow/supply
- 30 day usage trends, providing data that is readily available (housing)
- Let residents know when they exceed usage and potential impact to billing

Solar panel data collection
- Use Case Definition
- System that delivers updated information
- Water quality / status of pumps
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- Inconsistencies in usage
- Understanding of flow/supply
- 30 day usage trends, providing data that is readily available (housing)
- Let residents know when they exceed usage and potential impact to billing

LED street lighting replacements
- Smart - dimming based on environmental
- City wide goal to replace all
- Installing meters - currently flat rate billing
- Outlets for decorative lighting

3D model of city including buildings and utilities for future planning
- Underground utilities - study ongoing to chart water utilities - water, storm, sewer.
- Statewide lidar collection - higher density
- Improved detail of 3D building
- Will replace current data set
Use Case Definition

**GIS ArcUrban**
- Adoption of zoning ordinances based on the built form created by ArcUrban and GIS mapping software.
- 3D model of city - using lidar data
- Buildings/trees - analyze changes
- Underground utilities - future use case - know based on property lines
- Surveys of properties - minimize impact with data available, minimize number of surveys required

**Zoning Agreements**
- Broadband Connections
- More residential apartment buildings and buildings in general to broadband connections

**My SLP Mapping**
- Resident can use to identify issues throughout city - Publicsoft
- Input from residents lead to response
- Mobile app - customer response management
- Both resident and staff use
- Usage from call center to input requests

**Westwood Hills Nature Center**
- Snow plowing technologies
  - Citizen involvement with city operations.
  - Trails - pawed (section - trial to understand impact)
  - Streets need to be plowed multiple times
  - Main streets prioritized
  - Dueing storm
  - Define what it means for a street to be cleared
  - Vehicle location - Telematics
  - Flow
  - Sat/Stand
  - Trails now, streets future
  - Sidewalks - future use case
- Recently opened with goal of being net zero facility
- Solar
- Geo Thermal
- Learnings on return/impact
- Digging use
- Could be used as a case study
- Kiosk inside center to display solar consumption/usage data

**Transportation Options**
- Transportation options for community
- Sensors and electricity in street to power buses, taxis, etc - can it be a revenue center?
- EVs could be impacted
- Climate impact - cut out greenhouse
- Bus scheduling, on-time arrivals (bus stop #s can be incorporated)
- Handicap access - not currently incorporated
- Rideshare?

**Integrations**
- Between enterprise systems - AVL, Permits, Property Data, Asset Management

**Smart Light Poles**
- Cell phone - 5G added to light pole - study ongoing
- LED smart lighting - impact on environmental conditions
- Environmental sensors
- POles connected to other poles
- EV charging

**Gun Shot Detection**
- Awareness
- Response

**Smart City Initiatives in Process**
- Smart city initiatives already in process

**Smart City Initiatives Planned or in Consideration**
- Smart city initiatives planned or in consideration

**Increased use of GIS technology by all city departments to help them with their responsibilities and making information easier to find for all.**

**Greater understanding of existing environment/make up of our city for analysis to help shape future policy. Create more information for residents through easily accessible methods. More tools to help staff complete their responsibilities in a more efficient manner.**
Use Case Definition

**Race Equity**
- Understand city demographics
- Availability of services & connectivity
- CDC SIV tool to map poverty concentration
- GIS overlay to race equity
- Utility rebate participation
- Upcoming Census data - American Community Survey - Living Atlas

**Traffic Management**
- Mass transit monitoring and alerting

**Security and Surveillance**
- Increased security and reduction in crime

**Online Scheduling and Payments for City Rentals and Resources**
- the nature center has canoes for rent - see availability, rent, and pay. Scheduling park structure or rental, view availability through the website to compare options without having to call separate facilities.

**Open Data Policy**
- Facilitate inter-departmental data sharing and analysis so that decisions are grounded in the most up-to-date and broad information available.
- Possibility of new services and analysis - independent app developers, students, and other community partners can use the provided data to make finding and utilizing information easier, or uncover interesting or helpful patterns.

**City Data Portal for Public Access**
- Removes need to manually respond to common public data requests, taking that burden off of clerical staff.
- City departmental data more discoverable (even if these are already accessible to staff, making them public where possible makes it easier to pull different data sets).

**Required Broadband Access to All Multifamily Buildings**
- Availability of services & connectivity
- Race and Equity

**School Bus Apps**
- Conversations ongoing with school district
- City does not own buses, need cooperation with bus companies
- When did child get on/off bus, route tracking, accident report
- Minneapolis school currently in use

**Smart City Initiatives Already in Process**
- Smart city initiatives already in process

**Smart City Initiatives Planned or in Consideration**
- Smart city initiatives planned or in consideration
Prioritization Exercise
City Strategic Priorities

• Being a leader in racial equity and inclusion
• Continuing to lead in environmental stewardship
• Providing a broad range of housing and neighborhood-oriented development
• Providing a variety of options for people to make their way around the city comfortably, safely and reliably
• Creating opportunities to build social capital through community engagement
Use Case Prioritization

High

Low

[Diagram showing a matrix with Use Case Prioritization on the Y-axis and Measurable Benefit – Value Creation on the X-axis. Several use cases are plotted on the matrix, such as Open Data Policy, Surveillance Camera, Community Connect, and more.]

City Values of Importance – Aligned to City Goals

High
Key Themes, Smart City
GIS
Geographic data is the building block for smart city digital infrastructure allowing robust integrations to various platforms. It becomes essential to daily workflows, minimizes downtime for staff, and provides insights to city departments.

Supported Use Cases:
- Geographic Information Systems (GIS)
- Multiple system integrations
- GIS Urban
- 3D model of city including buildings and utilities for planning

Connected Community
Provide internet access to the community allowing all citizens equal ability to access the internet without barriers.

Supported Use Cases:
- Internet access
- Required broadband to multifamily buildings
- Public wi-fi network (5G, fiber, etc)
- Zoning Agreements - Broadband Connections

Environmental
Deliver sustainable assets to the public providing trusted resources and reducing the reliance on traditional power sources and legacy infrastructure.

Supported Use Cases:
- City water monitoring
- ChargePoint EV network
- Non-private EV charging system in public right of way
- LED streetlight replacements
- Westwood Hills Nature Center

Citizen Awareness
Connecting city resources to provide visibility into city operations and deliver data that supports more informed city and communities.

Supported Use Cases:
- Snow plowing technologies
- City water monitoring
- City data portal for public access
- Local connection platforms
- My SLP mapping
- Mass transit monitoring
- Bus routing options/scheduling
- Online scheduling and payments for city rentals and resources

Citizen Safety
Upgrade city infrastructure to provide a safer environment and secure open spaces for citizens while providing intelligence to public services. Create opportunities for public to opt-in to share data from private sources to enhance public safety.

Supported Use Cases:
- Surveillance camera community connect
- Smart light poles
- Gun shot detection
- Security and surveillance
If you would like to view the whiteboard from the virtual workshops visit the link below.

Click on ‘Continue as Guest’ in the top right of the webpage.

You will be asked to enter your email address. Once entered you will have access to the whiteboard of the SLP Smart City Workshop.

https://insight.invisionapp.com/freehand/document/ut0JIMiMJ
Thank you

Aaryn Anderson
Aaryn.Anderson@Insight.com
Smart City – St. Louis Park Discussions
Sandeep Sinha

Insight Presentation

Smart City

- Systematically applies digital technologies to
  - Reduce resource inputs
  - Improve quality of life
  - Increase competitiveness of the regional economy
  - Enables sustainable growth
Smart City creates more efficient, responsive and sustainable city

... that delivers better outcomes for the people who call it home

- 30–300 lives saved each year in a city of 5 million
- 30–40% lower crime incidents
- 8–15% lower disease burden
- 15–30 minutes shaved off the daily commute
- 25–80 liters of water saved per person per day
- 20–35% faster emergency response times

Core Technology Stack

Three layers of “smartness”:
- Adoption and usage, often leading to better decisions and behavior change
- Smart applications and data analysis capabilities
- The tech base includes networks of connected devices and sensors

Digital Experiences
Application Layer
Data Layer
Communication Layer
Physical Layer
St. Louis Park

“A place for all people”

- Develop creative housing solutions
- Develop future-forced transit and mobility solutions
- Continue to lead in environmental stewardship and ensure access to green spaces for future generations

City of Chicago – Public Safety

Reduced Response time by 30%

Monitor and collaborate
Citywide Security Systems
Federated Systems
Community Connect Assets

Understanding of current Situation
Situational Awareness Platform (What)
Intelligent Traffic Solution Platform (How)
Automatic License Plate Recognition Platform (Who)

Support the operator response
Collaborative Decision Management System
Evidence Management Platform
Harrisburg, PA
Harrisburg deployed over 4,000 connected LED streetlights spanning the whole city, reducing their utility bill by between 60 – 70%.

“"We live in a data-driven world, but we’re not going to monitor stuff just to monitor it – it has to make sense to the city!”
Wayne S. Martin Esq., – Harrisburg’s City Engineer

Some example of Smart City Initiatives

<table>
<thead>
<tr>
<th>City/Country</th>
<th>Scenario</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY, Seattle (various</td>
<td>Public Transportation and Digital Technology – Mobile App to deliver</td>
<td>NY commuter reduced saved 15 mins a day on commute time</td>
</tr>
<tr>
<td>cities around the world)</td>
<td>real time information, links to digital signage, and digital payments</td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Smart Parking - adjusting parking prices based upon demand, making</td>
<td>Significant increase in bus ridership and a reduction in traffic flow</td>
</tr>
<tr>
<td></td>
<td>payments easier, and significantly improving parking-related information dissemination</td>
<td></td>
</tr>
<tr>
<td>Louisville, KY</td>
<td>Digital Health - one of the largest studies of asthma conducted in a real-world setting to use digital health technology to improve asthma.</td>
<td>78% reduction in rescue inhaler use and a 48% improvement in symptom-free days.</td>
</tr>
<tr>
<td>Detroit, New Orleans</td>
<td>Community Connect – Sharing Private videos with law enforcement to improve public safety</td>
<td>Crime reduction and safer communities</td>
</tr>
</tbody>
</table>

710/2020
Key Learnings from failed Smart City Initiatives

• Internal stakeholder alignment (and disagreements)
• Investment Planning and Business model
• Citizen involvement
• Scenario Prioritization and Requirement Definitions
• Technical Changes
• Political support

Smart City Opportunities – Ideas to get started

Economy
• Digital business licensing and Permitting
• Local e-career centers

Safety and security
• Real-time crime center
• Predictive policing

Environment and energy
• Real-time air quality information
• Smart streetlights with LED bulbs

Mobility
• Real-time public transit information
• Smart parking

Government and education
• Digital citizen services
• Personalized education

Living and Health
• Smart health
• Citywide alerts and notification
Organizing and Initiating smart city projects

Guidelines for Starting Smart City Initiatives

- Develop vision aligned with city's strategic initiative
- Assemble Project Team
- Develop scenarios, set priorities
- Develop Project Concepts
- Secure funding
- Define the technology platform (Data, Cloud, Openness, Security...)
- Develop roadmaps
- Select Partners for engagement and implementation
- Implement the project
- Mobilize internal and external stakeholders engagement (e.g. citizens)
- Remove implementation risks
- Continue to measure against outcomes
- Design operating model with scaling
- Initiate a continuous improvement process
- Leverage synergies between different initiatives
Let’s identify scenarios that you might be interested in.....
Backup
Community technology advisory commission
Proposed smart cities committee framework

• Committee topic selection (done before any committees are established)
• Determine members
  • no more than 3 total from commission, city liaison, plus others as we determine)
• Establish committee chair (must be a commission member)
• Explore options to support and guide committees
• City liaisons serve committees in providing information as needed. Committees develop initiatives.
• Tentative date of final deliverable (end of February?)
• Deliverables
  o Definition of charter, goals and objectives
    • Due week after Thanksgiving
    • Must include tie to a specific city goal, perhaps more than one
  o Definition of deliverables and timeline – Due December 10. Includes statement of support needed from city and others
  o Final deliverable and report to commission – end of February? Deliverables include:
    ▪ Statement of charter, goals and objectives and outcomes that define success
    ▪ Adherence to city council strategic goals by describing how the initiative supports city council strategic goals
    ▪ High-level definition of the application and how it benefits city residents, or provides operational efficiencies
    ▪ Very high-level architecture, i.e., phone app, communications, back-end processing, data flow, etc.
    ▪ Provide real examples of where this initiative has been tried, along with results and outcomes
    ▪ City resident feedback obtained for public facing initiatives
• Meetings as frequently as determined by the committee; location/method to be determined by committee
• Committee chair to keep CTAC chair informed of progress on an ongoing basis. Include city liaisons
• Potential interim full commission meetings to hear how’s it going (by videoconference). Staff to provide guidance to ensure compliance with open meeting laws.
• Members agree to ensure that they adhere to their action item responsibilities and attend all meetings to the best of their ability.