

Saint Paul Resilience Workshop Summary

On May 21st, the City of Saint Paul hosted a workshop for staff to begin creating a vision for a resilient Saint Paul. The workshop also aimed to: establish consensus amongst staff on the areas of greatest importance to building governmental resilience to climate change; continue building community support and cohesion for climate resilience efforts; and to initiate a more formal climate resilience effort throughout the City. To advance these goals, the workshop brought together staff from a number of city departments, including: Fire, Safety and Inspections, the Mayor's Office, Planning and Economic Development, Public Works, Office of Financial Services, Parks and Recreation, Public Health, Safety Inspections, and Saint Paul Regional Water.

**Moving Towards A Resilient
Saint Paul** ↗



The workshop began with a welcome and introductions led by the City's Environmental Policy Director, Anne Hunt. Anne gave a brief introduction to why preparing for climate change is critical for cities and why Saint Paul should be actively working to build resilience to climate change. Next, Mayor Coleman spoke about the importance of enhancing the city's resilience to climate change, emphasizing that not a week has gone by in the last year in which a "weather-related record" has not been set. According to Mayor Coleman, this speaks to why the city should be aggressively pursuing efforts to both mitigate and adapt to climate change. Mayor Coleman also noted that he would like to see Saint Paul become a national model for climate action, noting that building resilience to climate change is not a political issue, it's a critical issue for all cities around the world.

Next, Missy Stults and Beth Gibbons from the University of Michigan shared results from a pre-workshop survey that all workshop attendees took. The survey looked at actions different departments were already taking or planned to take to help the city prepare for climate change. The survey also asked respondents what their vision of a resilient Saint Paul was and to identify potential impediments to the achievement of that vision. Based on the results from the survey, Missy and Beth presented a draft vision of a resilient Saint Paul.

Following this session, attendees were broken into small groups and asked to critique, edit, and revise the draft vision of a Resilient Saint Paul. In particular, each group was asked to identify what they liked about the draft vision, what they thought was missing, and how they would revise the text. Once complete, each group was asked to share their results. After each small group reported their results, the full group was given an opportunity to respond. Suggestions on proposed revisions were documented and shared with participants via the final meeting notes.

Next, Dan Brown from the University of Michigan's Great Lakes Integrated Sciences and Assessments (GLISA) gave an overview of historical and current climate trends in the Minneapolis-Saint Paul metro region. Based on these trends, the Twin Cities region can expect to see the following changes to its climate in the coming years: warmer average temperatures, warmer low and winter temperatures, shorter winters, more total precipitation and more severe precipitation events.

Following Dan's presentation, Rick Larkin and Ricardo Cervantes shared examples of how the Safety and Inspections Department and the Emergency Management Department are currently impacted by changes in

weather and what their departments are doing to prepare to existing and projected future changes. This presentation was followed by another small group breakout session in which participants were asked to identify how various systems within the Saint Paul community have been or could be impacted by climate change. In total, participants focused on five sectors: the power grid; energy; public health (especially heat); storm-water management; and water resources. Each small group was asked to share how they thought existing and projected future changes in weather could affect their system (Figure 1), what actions are already underway to protect their system from climate change, and what future actions the City of Saint Paul could take to further build the resilience of the various systems to climate change.



Sector	Potential Impacts
Power Grid	<ul style="list-style-type: none"> • Stress to grid can lead to people that don't have heat, power outages due to wind, and flooding that can impact transmission. • More hot days can lead to increased demand for cooling. • Non-weather factors include: is development-outpacing capacity of the system? Is there redundancy in the system? Can you back feed information in? We may have capacity at plant, but do we have capacity in transmission and distribution to handle demand. • We currently have redundancy in the downtown (district heating and cooling plus Excel) plus emergency generation in key areas downtown. New power plant right on river that is solar powered. • We need redundancy (if one fails need to have another to back-up), maybe onsite generation for more facilities, investment in upgrading infrastructure and the network, underground versus above ground transmission capabilities. • Need better collaboration and communication, better and continued cross-departmental and cross organizational collaboration. Somehow we have to get citizen engagement and buy-in to what is happening and get away from the reliance always on the government.
Energy	<ul style="list-style-type: none"> • Demand for energy is always increasing, digital world with more computers. • It's going to get warmer and hotter during the summer months for prolonged times and we will need more energy to run cooling centers. Danger of more ice storms. • Opportunity for more alternative energy (have 10 solar installations within city facilities now), opportunity to look for more, maybe wind as well. • Economics is the main driver for the energy savings. • Multiple ways to receive energy – back-up generators, alternative energy, try new things (whatever that may be). • Continue to explore alternative energy usages within the city facilities (including fleets and electric vehicles and using ethanol products). • Solar chargers should be explored.
Stormwater	<ul style="list-style-type: none"> • Influx of water off of agricultural areas - land use changes. Perhaps regulate the agricultural comment in the same way cities might be regulated. • More winter precipitation falling as snow could mean less flooding (most flooding comes from snowpack melt).

- Current system is separated which really helps with risks.
- Maybe being more restrictive in how private property deals with storm water.
- Right now we are getting more water through infiltration, we get double benefit, water quality improvement plus opportunity to alleviate some capacity issues.
- In the future we could use a sanitary system to heat or cool wastewater - like a hospital (through heat exchanged, to transfer some of that energy into the water supply coming into the building. Starting to become commercially viable).

Public Health

- Extreme heat, water quality, disease, infestation, air quality all affect public health.
- Several days over 90 last year for an extended period of time - likely to have more of these events.
- There are messages that are already put together in regards to how the public can prepare themselves for these events - on the downside, we don't know if those systems are as effective as we'd like.
- Should explore other system by which people might be able to find a respite or place to go (including a plan) in the event that an extreme heat event takes place.
- We have relationships, plans with emergency management folk, and with all the departments in regards to temporary housing in the event it reaches that point.
- Can explore better, more cost effective, and maybe more regional approach to the issue. It's not just a Saint Paul problem, or a Ramsey County problem; it's relevant across the state. We need to partner with our corporate and business partners as they are impacted by these events as well.
- Continued emergency management planning, exercise in temporary housing planned for later this year.
- Community health citizens advisory committee
- What's needed are better partnerships, better financial means, and a plan with clear triggers for city and county about what will happen and when.

Water Resources

- A little concerned about quality and quantity.
- Salt management, salt usage, erosion control (especially in the winter), are issues.
- Land use is very key (land use, pavements, tree canopy).
- Current green infrastructure practices throughout the city are helping.
- Understand the science and bring that into our codes (storm water runoff for quality or quantity) to better reflect that there are new understandings about precipitation patterns on an event and annual basis. Potentially communicating better to businesses along the river corridor. Materials that we use to provide safe transportation (how do we continue to understand alternatives) do we need to change the public's behavior?
- Areas for potential improvement include code and market based changes and incentives, public versus private actions, additional training and staff around erosion control, how to bring plans, codes and other institutional frameworks into the 21st century by adding this dimension of climate change or resilience into operations. How do we add this lens into the framework we have for operating?

This session was followed by a brief presentation by Missy Stults from the University of Michigan that highlighted actions other cities around the U.S. are taking to build resilience to climate change. Next, participants were placed back into breakout groups and asked to revisit their draft vision of a resilient Saint Paul and identify any actions they as individuals or Department Heads will take to help achieve a more resilient Saint Paul.

The workshop ended with the formation of an interdepartmental working group tasked with refining the resilient Saint Paul vision statement and devising a strategy for next steps. Figure 2 highlights some of the

participant's desires in the future vision of a resilient Saint Paul.

Figure 2: Components Needed in a Resilient Saint Paul Vision

- 3 components- aspiration, definition/action, future state
- A resilient Saint Paul is a great place to live and do business (quality life).
- Recognized as a leader in flexibility, proactive planning, and overcoming challenges by finding opportunities for growth in an expanding world.
- Maintaining a high quality of life and infrastructure for our residents.
- Finding opportunities for a collaborate growth in a changing climate.
- A resilient Saint Paul will create a certain type of environment that is diverse and dynamic enough to provide for a great place to live, work, and do business.
- Needs to highlight leadership role, local specific changes to assist in administrative transition. Also, education and outreach to citizens and staff. The whole idea of "climate" is missing.
- Needs to be resident and customer focused.
- Needs to acknowledge recreation, resources/assets, specific references to safety and health, and specificity of "climate change".
- The City of Saint Paul has a positive outlook, quality, and there is lot of opportunity to get involved.
- Needs to be delivered in "one breath".
- Incorporate partnership and responsibly and be clear who the audience is for the vision.
- Align with "Most livable city in America".
- Need specificity and definition.
- A vision is never achieved; it should be an ongoing process.
- Needs to be financially prudent.
- Positive and forward thinking. Collaborative, live, work, and do business.
- Needs specificity (social, economic, and environmental).