Resilience Plan: A Milwaukee Metropolitan Area Case Study

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MMSD Overview

• Our mission is to protect public health and the environment though world-class, cost effective water resource management, leadership, and partnership. We envision a healthier, cleaner, resilient region.
What Does MMSD Do?

- Water Reclamation
- Manage Flooding

Who Does MMSD Serve?

1.1 Million Customers
28 Municipalities
411 Square Miles
Why Does A Utility Care About Resilience

• Everything is connected!
• Critical infrastructure (power, drinking water, wastewater, communications) are dependent on each other and equally vulnerable to changing urban conditions.
• MMSD relies on a strong tax base (influenced by businesses, transportation, amenities, public services, etc.) to fund repair and replacement of critical infrastructure.
• MMSD has a vested interest in the economic, environmental and social well-being of the region.

Resilience

*The purpose of the Resilience Plan is the identification, evaluation, and prioritization of risks followed by coordinated and economical application of recommendations to minimize, monitor and control the probability or impact of unforeseen events or to maximize the realization of opportunities.*
Meeting MMSD Objectives

• Supports the 2035 Vision

• 2050 Facilities Plan addresses internal risk

• Resilience Plan develops a coordinated approach to manage external systematic risks

Regional Challenges

• Distribution of minority populations aligns with significant disparities in income, poverty rates, and educational attainment between minority and non-minority populations

• Levy limits pose a challenge for how municipalities pay for critical services (police, schools, infrastructure, etc.)

• Climate change puts additional stress on our critical infrastructure when it must be maintained, improved, and expanded in uncertain financial and physical environments
Resilience Plan Objectives

- Identify and address challenges and risks in a proactive way
- Identify specific actions that stakeholders can implement in a cost-effective way that meets multiple goals
- Reduce the effect of the identified risks using a collective impact strategy in order to move in the same direction
- Risk has no geographic boundaries and often times risks and solutions are correlated

The Process

- Individual interviews with municipalities & key stakeholders
- Advisory Committee input
- Two workshops to come to consensus about regional risks and actions to reduce risks (December 2017 & May 2018)
- Review of 98 international, national, state, and municipal plans
- Plan review resulted in identification of 300 actions
- Ranking of priority actions using weighted ranking system
Risk Workshops & Stakeholder Engagement

Identified Risks

- Distribution Of Public Services
- Social Equity
- Ability To Adapt To Job Market Changes
- Vulnerability Of Critical Infrastructure
- Climatic Hazard
- Financial Constraints
VISION 1

Make the Milwaukee region a better place to live by improving the public’s participation in decision making and their environment.

Environment & Society

8 Actions

VISION 2

Boost the region’s economic vitality through innovative job creation and access to equal opportunities.

Economy & Society

6 Actions
VISION 3

Adapt infrastructure to the challenges of the 21st century.

Infrastructure & Environment

6 Actions

Implementing Resilience

• Internally
  • MMSD will integrate actions into current and future projects

• Externally
  • Will continue work with elected officials to identify which actions are priorities
  • Participate on City/County Climate Change and Social Equity Taskforce
  • Continue to meet with external partners such as businesses, economic development organizations, and workforce development groups to integrate actions