

Healthy Planning: A review of developed community comprehensive plans

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MDH & Comprehensive Planning

MDH Mission: Protect, maintain and improve the health of all Minnesotans

MDH Framework:

1. Promote health throughout the lifespan
2. Make physical environments safe and healthy
3. Prepare for and respond to disasters and emergencies

Factors responsible for population health



Health status is determined by: genetics 30%; health care 10%; social, environmental conditions, and behavior 60%

N Engl J Med 2007;357:1221-8.

Health/Planning Intersections

- ❖ Car-friendly communities have almost double the rate of obesity as pedestrian-friendly communities and higher injury costs.
- ❖ Access to public parks and recreational facilities has been linked to reductions in crime and juvenile delinquency.
- ❖ Children with Attention Deficit Disorder do better in school when they play outside in green spaces.



MDH Recent Activities

- ❖ Collaborate with Metropolitan Council (Council), EQB, DNR, MNDOT, Agriculture, PCA
- ❖ Provide education/training
 - ✓ *City/Regional Planning & Public Health Roundtable (2010)*
 - ✓ *Five trainings on health impact assessment (HIA) (2009-2011)*
 - ✓ *Presented to the Community Development Committee (May 21)*
 - ✓ *Presented to Council staff (July 26)*
 - ✓ *Presenting at MN APA Conference (Sept 28)*
- ❖ Develop reports/tools on EAW process, health indicators for local planning, planning for extreme heat events

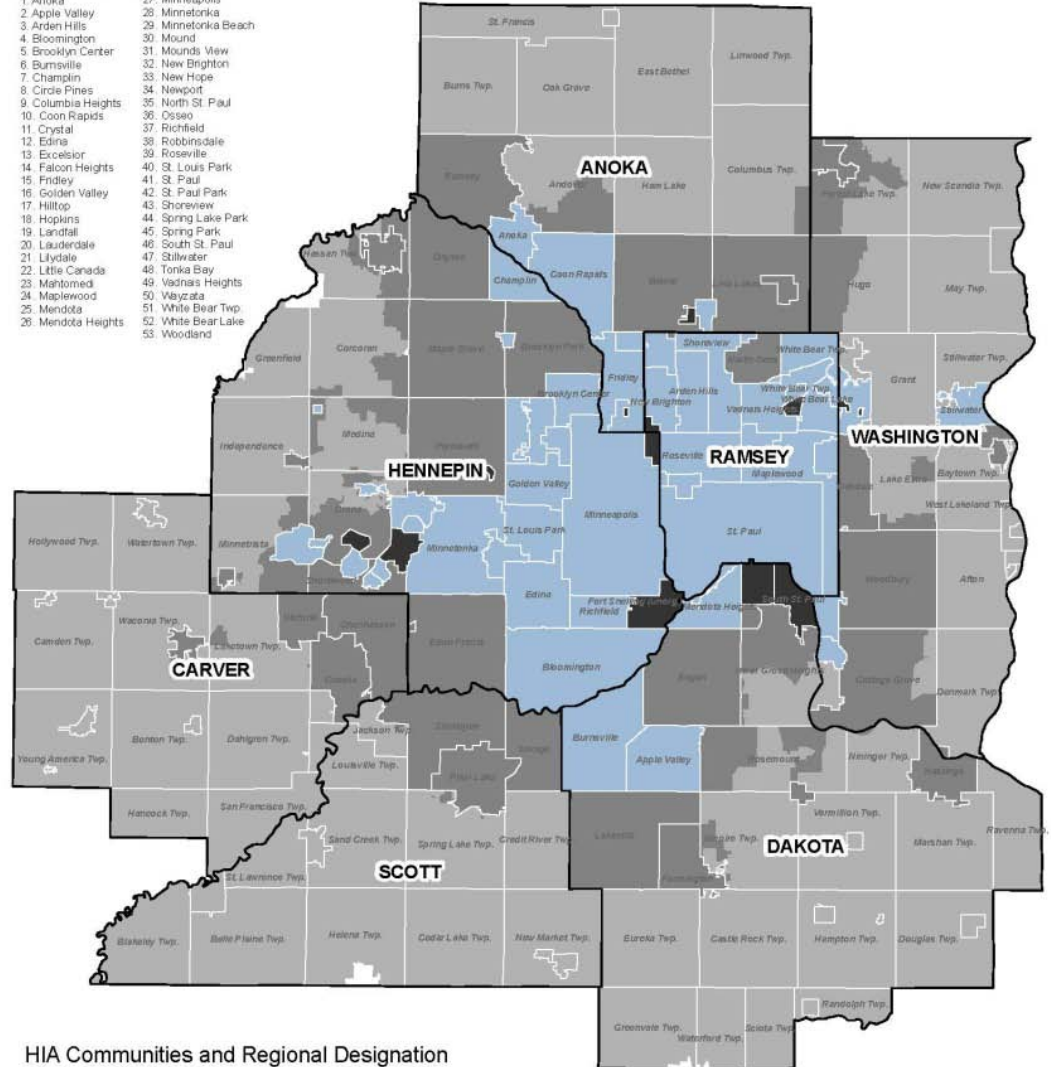
Appendix B - Map of 53 Developed Communities

Health Assessment Reviewed:

- 53 Developed Community Comp Plans
- 11 Health Indicators

Developed Communities Included in the HIA

1. Anoka	27. Minneapolis
2. Apple Valley	28. Minnetonka
3. Arden Hills	29. Minnetonka Beach
4. Bloomington	30. Mound
5. Brooklyn Center	31. Mounds View
6. Burnsville	32. New Brighton
7. Champlin	33. New Hope
8. Circle Pines	34. Newport
9. Columbia Heights	35. North St. Paul
10. Coon Rapids	36. Osseo
11. Crystal	37. Richfield
12. Edina	38. Robbinsdale
13. Excelsior	39. Roseville
14. Falcon Heights	40. St. Louis Park
15. Fridley	41. St. Paul
16. Golden Valley	42. St. Paul Park
17. Hilltop	43. Shoreview
18. Hopkins	44. Spring Lake Park
19. Landfall	45. Spring Park
20. Lauderdale	46. South St. Paul
21. Lilydale	47. Stillwater
22. Little Canada	48. Tonka Bay
23. Mahomet	49. Vadnais Heights
24. Maplewood	50. Wayzata
25. Mendota	51. White Bear Twp.
26. Mendota Heights	52. White Bear Lake
	53. Woodland



HIA Communities and Regional Designation

- Non-Council Areas
- Rural Areas
- Developing Areas
- Developed Areas Not Evaluated in HIA
- Developed Areas Evaluated in HIA



0 1 2 Miles

Process

- **Scoping:** MDH selected 11 health and climate change indicators based on two existing tools:
 1. Design for Health's *Comprehensive Plan Review Checklist, 2007*
 2. San Francisco Department of Health's *Healthy Development Measurement Tool Development Checklist, Version 3.02*
- **Assessment:** MDH used best available evidence from literature to describe health influence of indicators
- **Recommendations:** Each indicator had its own recommendations

Table 1: Results from the Health Indicators

Health Indicators	Yes	No
Health Indicator #1: Support Mixed Use	43	10
Health Indicator #2: Affordable Housing	53	0
Health Indicator #3: Life-Cycle Housing	45	8
Health Indicator #4: Complete Streets	8	45
Health Indicator #5: Transit Oriented Development	19	34
Health Indicator #6: Pedestrian/Bike Safety	30	23
Health Indicator #7: Park Needs	31	22
Health Indicator #8: Access to Trails	41	12
Health Indicator #9: Climate Change	13	40
Health Indicator #10: Green House Gases	11	42
Health Indicator #11: Severe Rain Events	0	53

Overview & Table of Results

- **53 Developed Community Comp Plans were reviewed**
- **11 Health Indicators**

Yes = Indicator addressed in plan
No = Indicator was not addressed in plan

Indicator 6: Pedestrian/bike safety

Importance of indicator:

- Traffic accidents are the leading cause of death from ages 1 to 34
 - In 2010, 808 vehicular crashes; 824 injured peds & 36 ped deaths

Results: 30 yes | 23 no

- 30 provided language that supports ped/bike safety or traffic calming techniques, by providing road design flexibility

Recommendations:

- Provide stronger emphasis on ped/bike safety, by incorporating design standards, such a traffic calming techniques and designated bike routes, within policy documents

Indicator 7: Park needs

Importance of indicator:

- Parks promote physical activity among children and adults
- Parks are more likely to be used if they provide activities appropriate to the community

Results: 31 yes | 22 no

- 19 developed master plans, 11 policy statement, 1 included language on park needs

Recommendations:

- Encourage local agencies to establish park plans that address local needs and coordinate with regional systems

Indicator 8: Access to trails

Importance of indicator:

- Trails promote physical activity, access
- Trail proximity important for usage

Results: 41 yes | 12 no

- All comp plans inventoried existing trail systems, 19 developed master plans, 22 map depicting existing and future trails

Recommendations:

- Encourage plans to clearly identify future needs and link trails to residential areas.
- Coordinate local trail systems and adjacent community trail systems with regional system

Indicator 9: Climate Change

Why is MDH interested in climate change?

The screenshot shows the Minnesota Department of Health website. The main navigation bar includes 'HOME', 'TOPICS', and 'ABOUT US'. The page title is 'Climate and Health'. The main content area features a paragraph: 'The potential impact of climate change on public health is of rising concern. While there are known, effective public health responses to many of these impacts, the scope, timeline, and complexity of climate change challenges are unprecedented. Critical gaps remain in the resources, programs and expertise in Minnesota's public health system's capacity to address the consequences of climate change on public health. Through a grant from the Centers for Disease Control and Prevention (CDC), MDH is beginning to address these gaps and build the state's capacity to adapt to climate change and its implications on human health.' Below this is a 'Topic Areas' section with six cards: 'Climate Change 101', 'Extreme Heat Events', 'Water Quality and Quantity', 'Air Quality', 'Vector-Borne Diseases', and 'Planning Tools & Data'. A sidebar on the left lists 'Climate and Health' and 'Environmental Health Division' links. A right sidebar contains 'Share This', 'Get Email Updates', 'Spotlight' (Heat in the Heartland: 60 Years of Warming in the Midwest), and 'Questions?'.

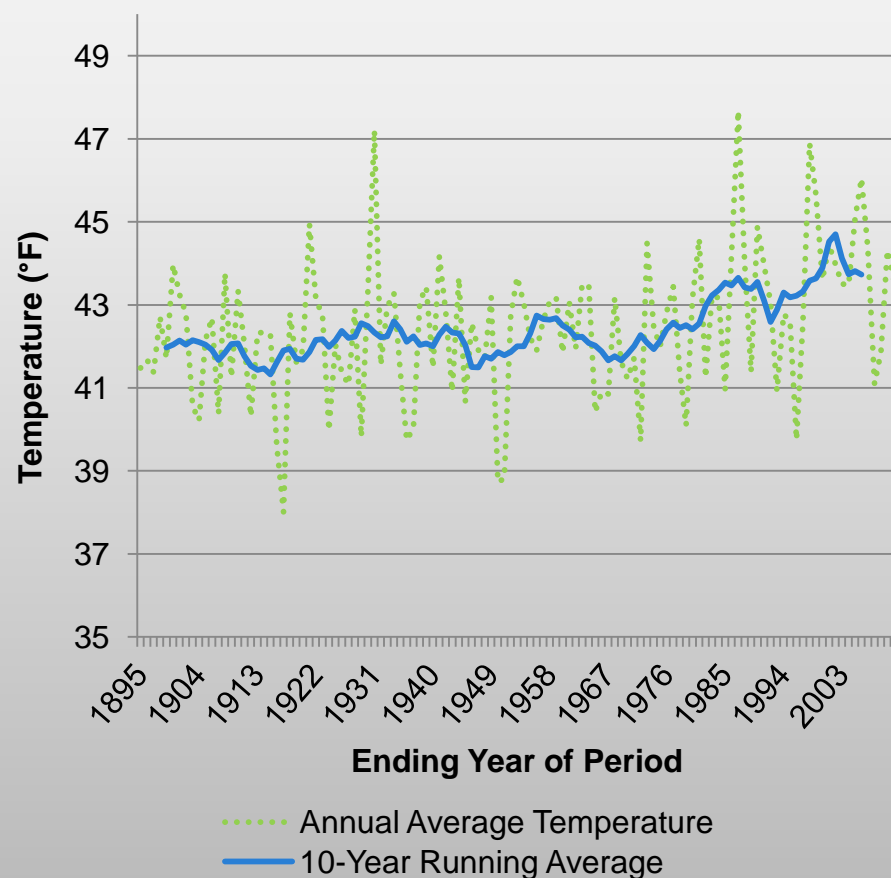
Temperature & dew point changes

- Since 1970, **Minnesota is the 3rd fastest warming state** in the US
- Overnight lows are rising almost twice as fast as the daytime highs
- The number of days with high dew point temperatures (≥ 70 °F) may be increasing
- In July 2011, Moorhead MN hit a dew point of **88°F** with an air temp of 93°F, creating a **heat index of 130°F**

Minnesota Average Temperature

12 month period ending December

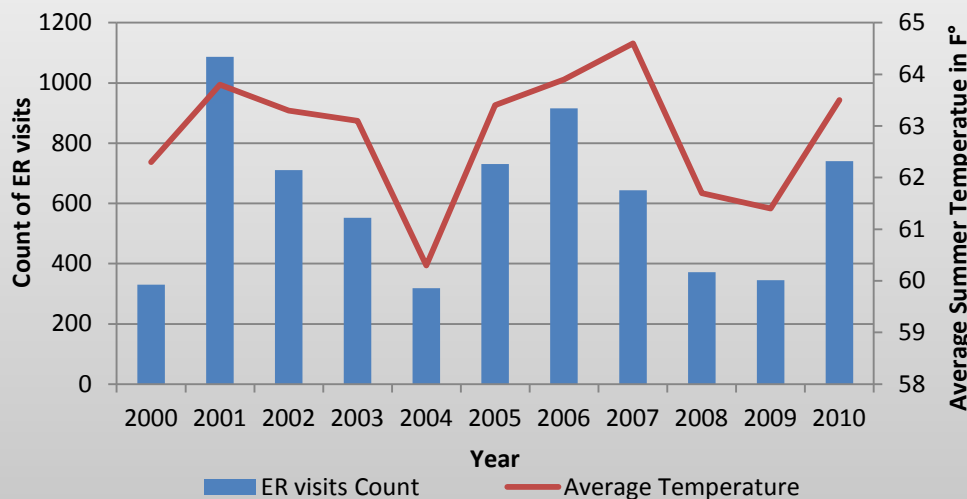
Source: Western Regional Climate Center



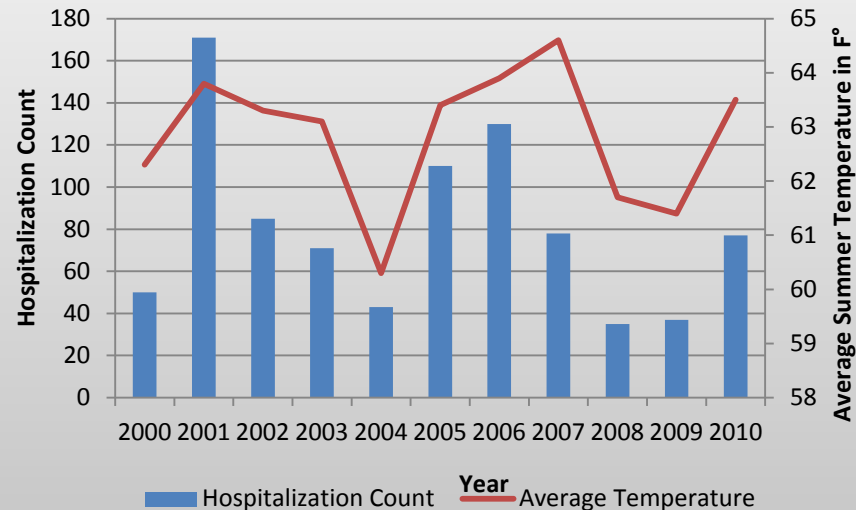
Extreme heat & increases in illnesses

Average summer temperatures (May-September) and count of emergency room visits and hospitalizations directly related to heat from 2000-2010*

Emergency Room Visits



Hospitalizations



*Data provided by MN Environmental Public Health Tracking

Precipitation changes

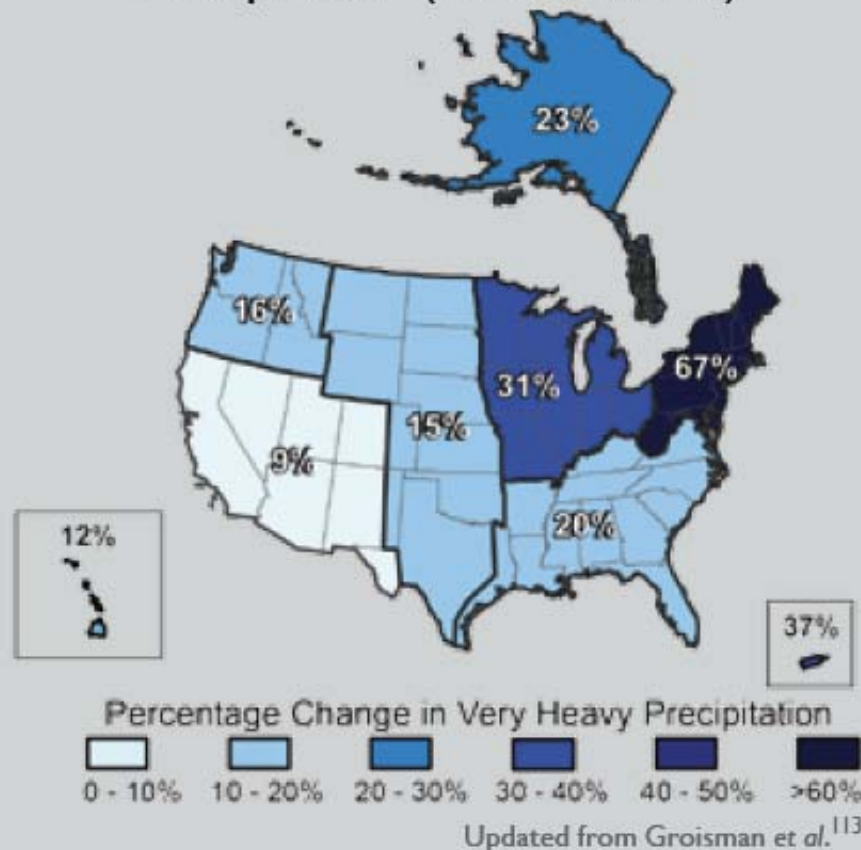
- Greatest increase in very heavy precipitation in the past 50 years occurred in the Northeast and the Midwest

(Karl et al. 2009)

- Total precipitation in the Midwest and Northeast is expected to increase the most with the largest increases in heavy precipitation events

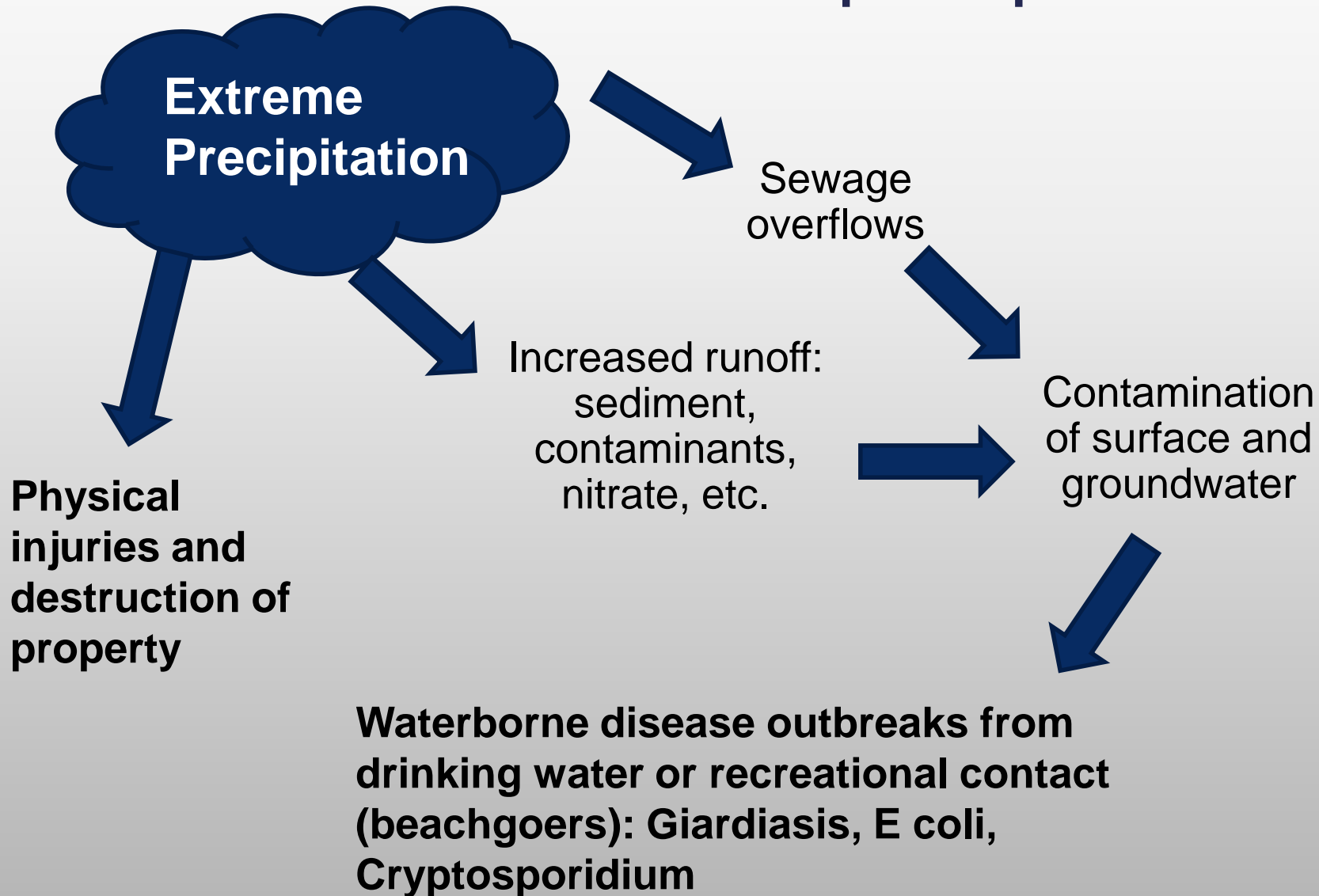
(Karl et al. 2009)

Increases in Amounts of Very Heavy Precipitation (1958 to 2007)



Very heavy precipitation is defined as the heaviest 1% of daily events from 1958 to 2007 for each region.

Public health issues & precipitation



Indicator 9: Climate Change

Importance of indicator:

- Extreme heat, extreme precipitation, drought, wildfires, change in infectious diseases

Results: 13 yes | 40 no

- 4 recognized US conference of Mayors Climate Protection Agreement, 3 had specific policies related to climate change, 6 stressed climate uncertainties or challenges posed by climate change
- 2010 Master Water Supply Plan, 2030 WRMP, and 2030 TPP address climate change

Recommendations:

- Continue to explore ways climate change can be incorporated into comprehensive planning

Indicator 10: GHGs

Importance of indicator:

- Prevent or mitigate public health issues associated with climate change

Results: 11 yes | 42 no

- Provided policy statements that addressed reductions via mass transit and sustainable site design
- 2030 TPP provides strategies to reduce transportation emissions and overall reduction of GHG emissions

Recommendations:

- Request comp plans to discuss strategies to reduce GHG emissions in transportation and land use chapters

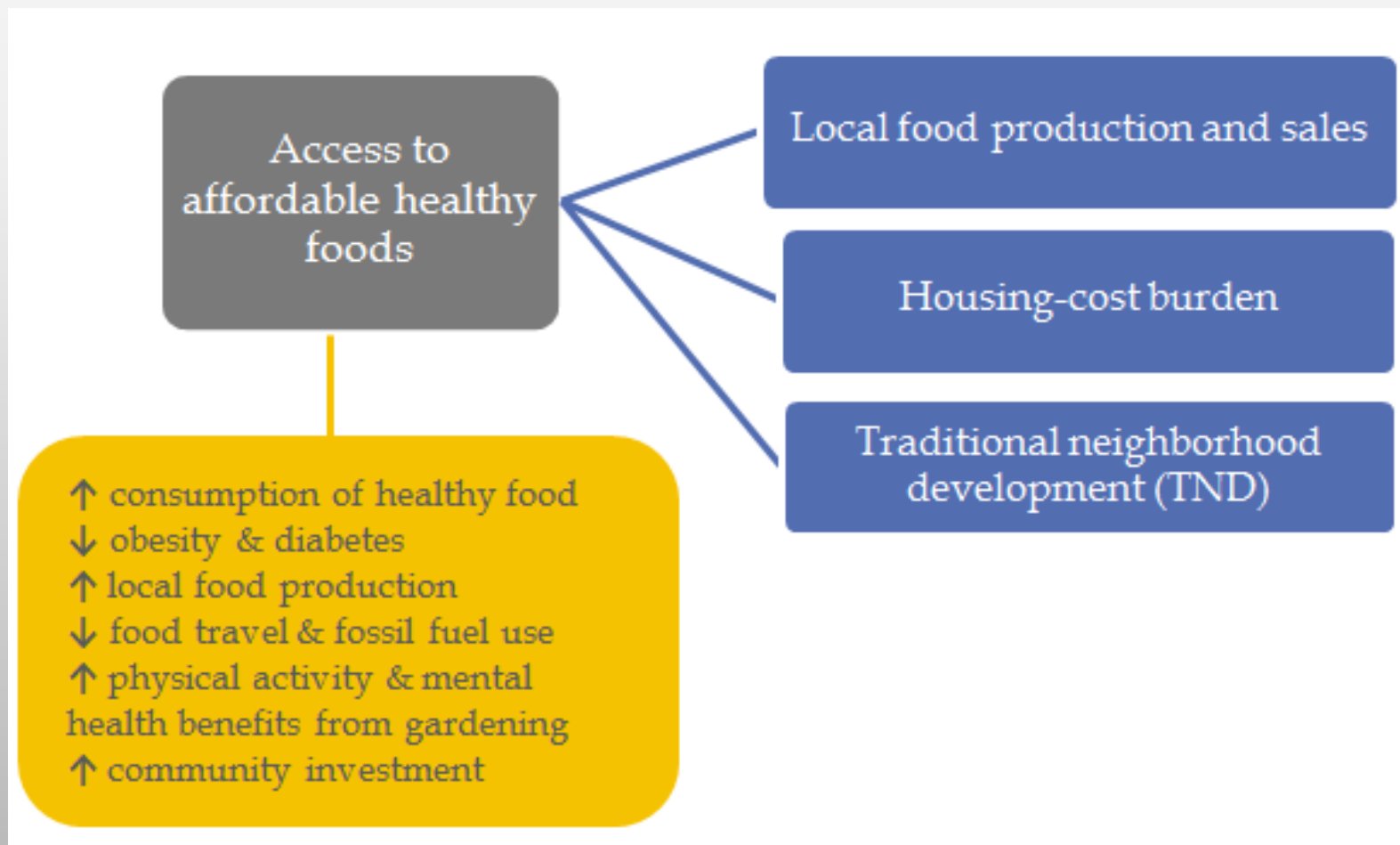
Additional Health & Planning Activities

- Healthy Planning “Suite”:
 - Second report on 12 additional indicators (2013)
 - “Minnesota Healthy Planning Training: Addressing Health in Comprehensive Plans” (Sept 28)
 - 8 desired health goals
 - 20 planning strategies to achieve desired health goals
 - “Minnesota Healthy Planning How-To Guide”
 - Detailed guidance on implementing strategies to achieve health goals as outlined in the training
- MN APA brown bags
- Collaboration with National APA

Healthy Planning: Health Goals

1. Healthy housing for all household sizes and incomes
2. Access to affordable healthy foods
3. Reduced exposure to air pollutants, hazardous materials, and/or nuisances
4. Increased physical activity
5. Increased availability of greenery
6. Increased safety of pedestrians, bicyclists and motorists
7. Secure communities
8. Climate resilient communities

Example: Access to affordable healthy foods



Council's role in health promotion

- ❖ Continue collaboration with MDH to have comprehensive planning more explicitly include public health and climate change
- ❖ Consider recommendations from MDH 2012 Healthy Planning report into future Metropolitan Council policy plans, especially the Thrive MSP 2040 Framework
- ❖ Promote recognition that comprehensive planning and public health are related and synergistic

Thank you!

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