Planning for Sustainability at a Regional Scale



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Performance Measures for Transportation and Livable Communities Sept. 7, 2011

Project Overview

Examine approaches to planning for and implementing sustainability at a regional scale

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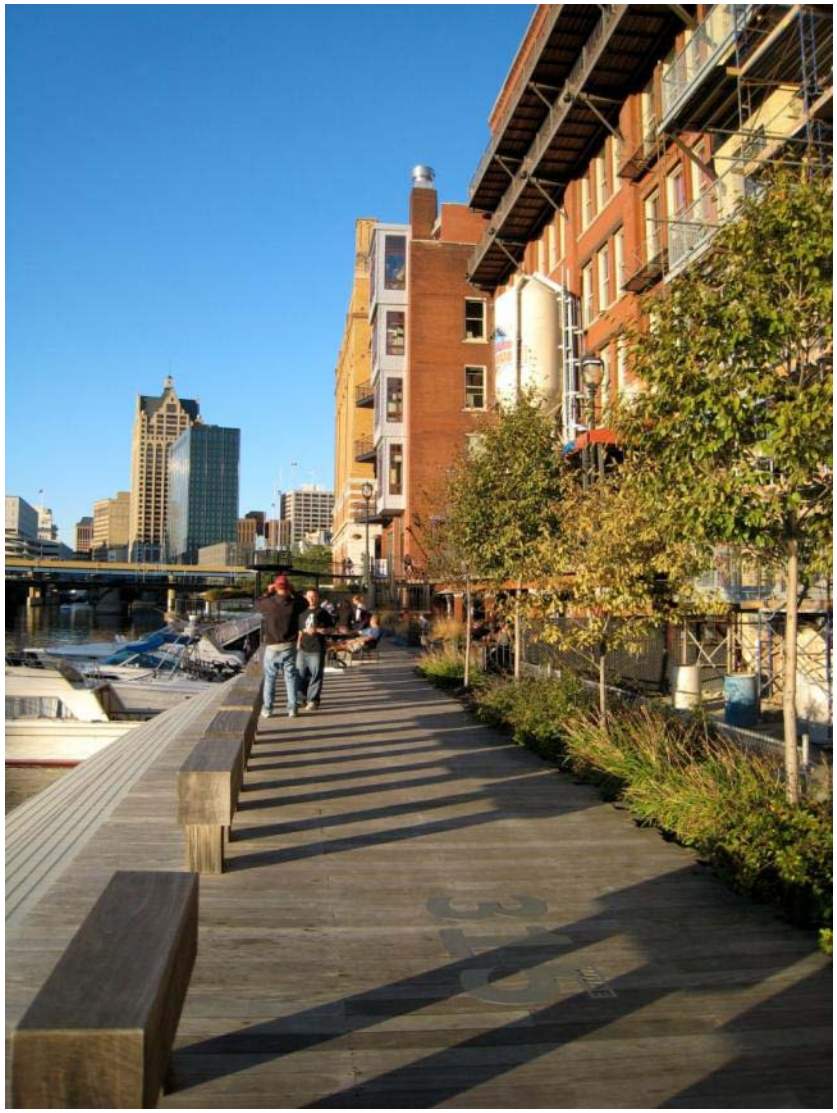
Model Framework for Regional Sustainability Planning and Implementation



Project Overview

Framework used by organizations and stakeholders:

- interested in regional sustainability planning
- evaluating sustainability planning efforts

Adaptable model – variety of contexts and users

Project Context

HUD-DOT-EPA alignment

Sustainable Communities Grants

- Twin Cities + Region 5

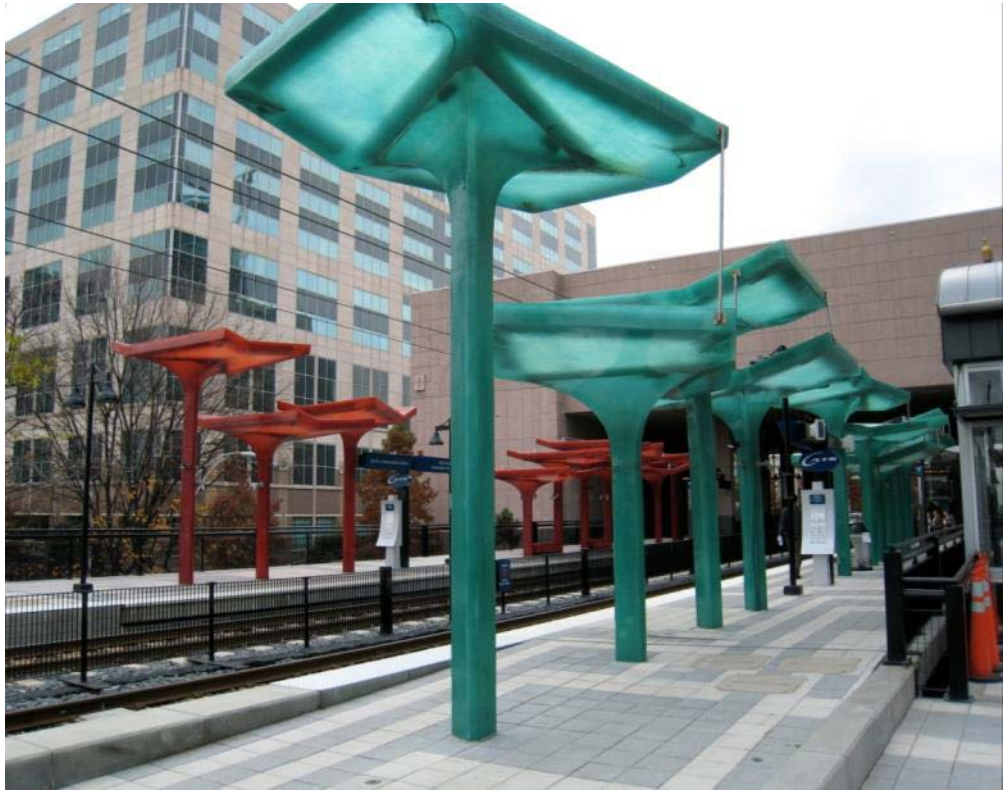
Funded by U of MN Center for Transportation Studies

Collaboration with research advisory group

Methodology

Case study analysis:

- **Content** of regional plans
- **Processes** used to develop plans
- Approaches to **implementation** and monitoring



Diverse set of cases – organizational context, geography, sustainability issues, planning issues

Methodology

Review planning documents

Interview key participants

Capital Regional District – *Regional Growth Strategy* (**Victoria, BC**)

New South Wales – *Metropolitan Plan for Sydney 2036* (Australia)

Denver Regional Council of Governments – *Metro Vision 2035*

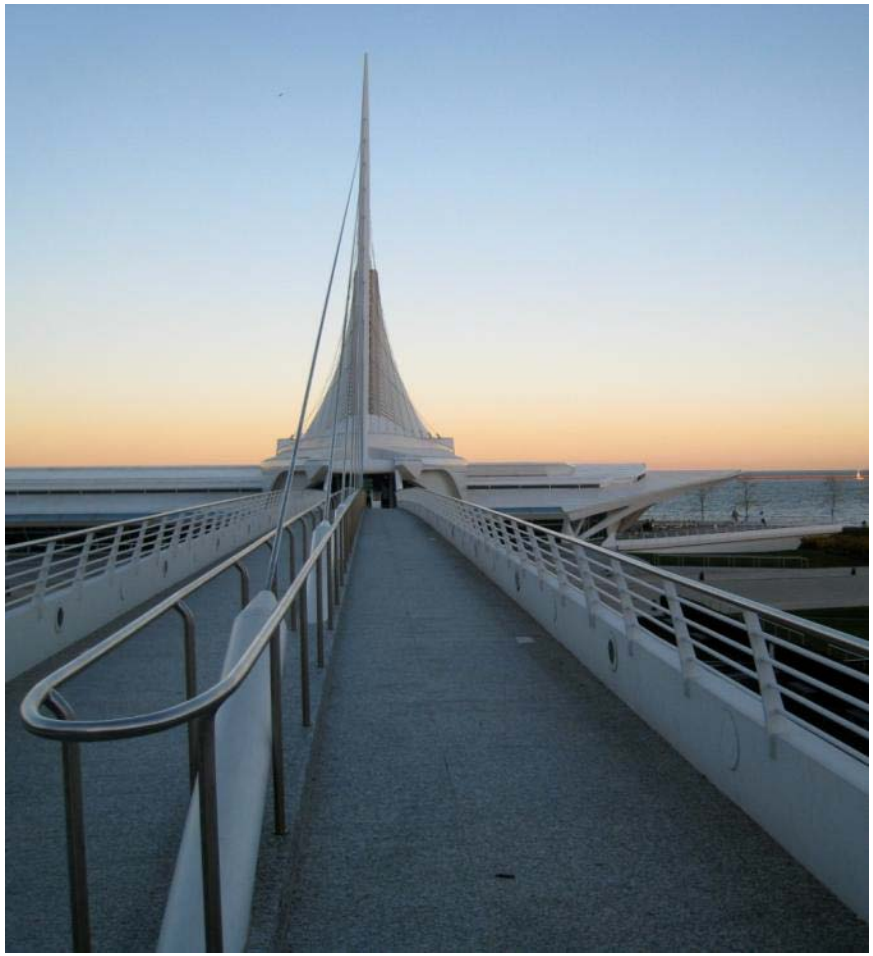
Chicago Metropolitan Agency for Planning – *Go To 2040*

St. Cloud Joint Planning District – *Sustainability Framework Plan* (MN)

Delaware Valley Regional Planning Council – *Connections 2035 Plan – Regional Plan for a Sustainable Future* (**Philadelphia**)

Long Island Regional Planning Council – *Sustainable Strategies for Long Island 2035 Plan*

Emerging Best Practices – Plan Content



Take the time to define sustainability relative to local context – land use, transportation, and environment most common

Document participation efforts in the plan

Display plan and background information online

Emerging Best Practices – Planning Process

Engage multiple stakeholders – including private sector, work through existing networks

Consider online participation and monitoring efforts

Issue-specific workgroups help make connections and offer resources

Emerging Best Practices – Implementation

Include clear implementation content in plan

Think beyond agency implementation – grants to support, toolkit

Start small – visible outcomes

Link to indicator or monitoring systems – varied approaches

MetroPulse

The Regional Indicators Project for Metropolitan Chicago

explore by topic | drill deeper into data | learn about the project | learn about the partners

MetroPulse is a web resource of the Regional Indicators Project, created in partnership by The Chicago Community Trust and the Chicago Metropolitan Agency for Planning. This customizable site provides extensive data about issues that shape the livability of our communities. MetroPulse was created to facilitate effective decision making and to measure the region's progress in implementing the GO TO 2040 comprehensive plan.

Chicago Metropolitan Agency for Planning

THE CHICAGO COMMUNITY TRUST

HEALTH
infant mortality

7.17 per 1,000 live births

learn more

CULTURE
arts employment

33,014 people

learn more

ECONOMY
unemployment rate

9% of workforce (IDES: Nov 2010)

learn more

ECONOMY
poverty rate

12.5% of the population (ACS: 2009)

learn more

ENVIRONMENT
greenhouse gas emissions

139.8 million metric tons

learn more

HOUSING
housing cost burden

43.9% of households pay at least 30% of income on housing (ACS: 2009)

learn more

CIVIC INVOLVEMENT
voting rate

56% of population over age 18

learn more

EDUCATION
educational attainment

40.8% of adults age 25+ have at least an associate degree

learn more

TRANSPORTATION
weekday trips on public transit

approximately **2** million

learn more

LAND USE
land considered underutilized (infill)

more than **100,000** acres

learn more

SAFETY
violent crimes

564.1 per 100,000 population

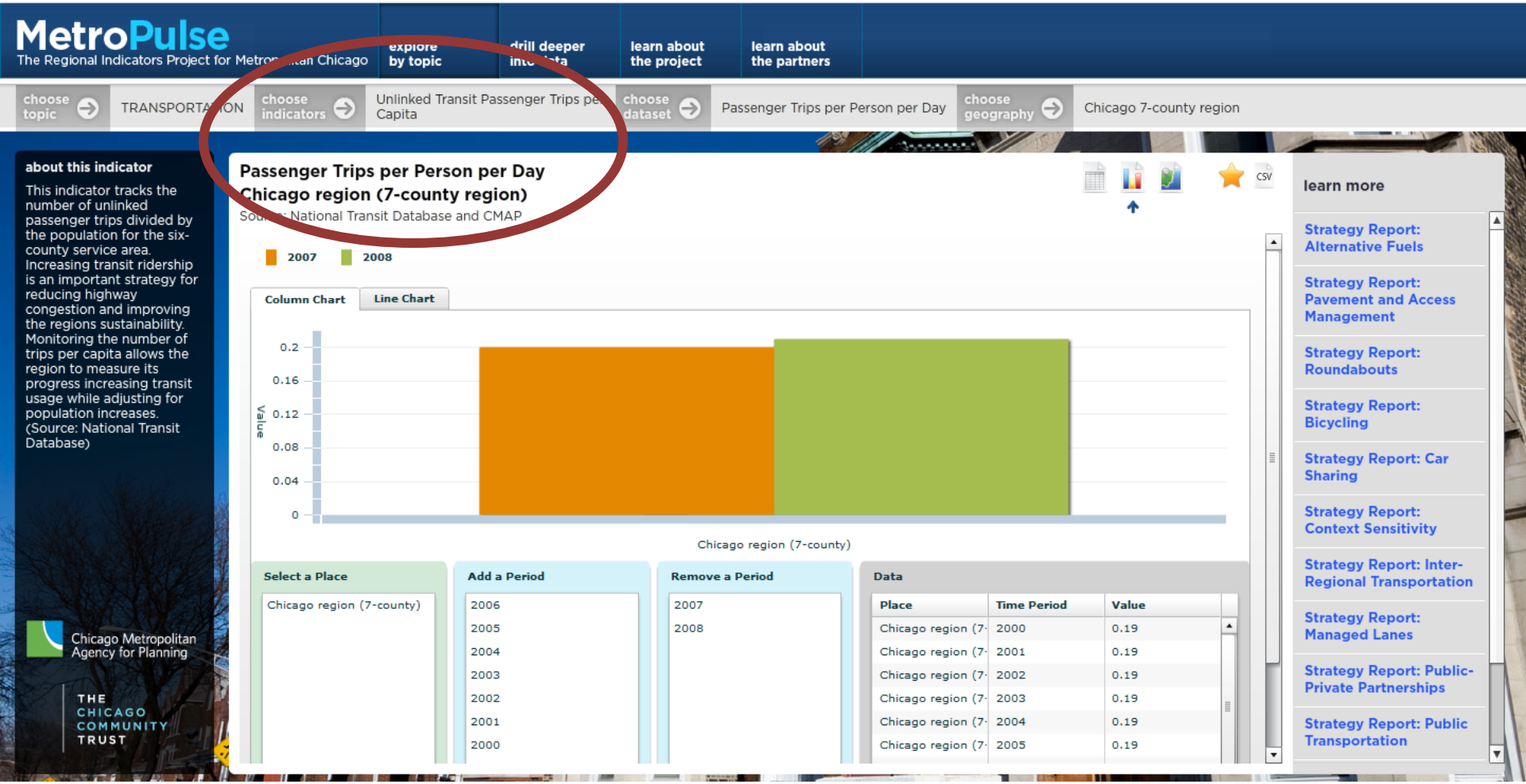
learn more

COORDINATED PLANNING
previous plan implementation

41.3% of municipalities adopted recommendations

learn more

http://www.metropulsechicago.org/#



Road condition, travel time index, % population obese, % of regional trails complete, pedestrian environment factor, % of transit vehicles and stations ADA compliant, bridge condition rating, schools with safe routes to school programs

about this indicator

The number of highway route miles with International Roughness Index (IRI) above 170 divided by the total number of highway route miles. A higher IRI is an indicator of unacceptable roughness or road conditions. In addition to being an annoyance to motorists and other roadway users, pavement in poor condition has a significant safety and economic impact on the regions residents through increased wear and tear on vehicles. Tracking the percentage of the road system above the roughness threshold will serve to indicate the overall condition of the system. More data on road condition is available in the Drill Deeper into Data section.

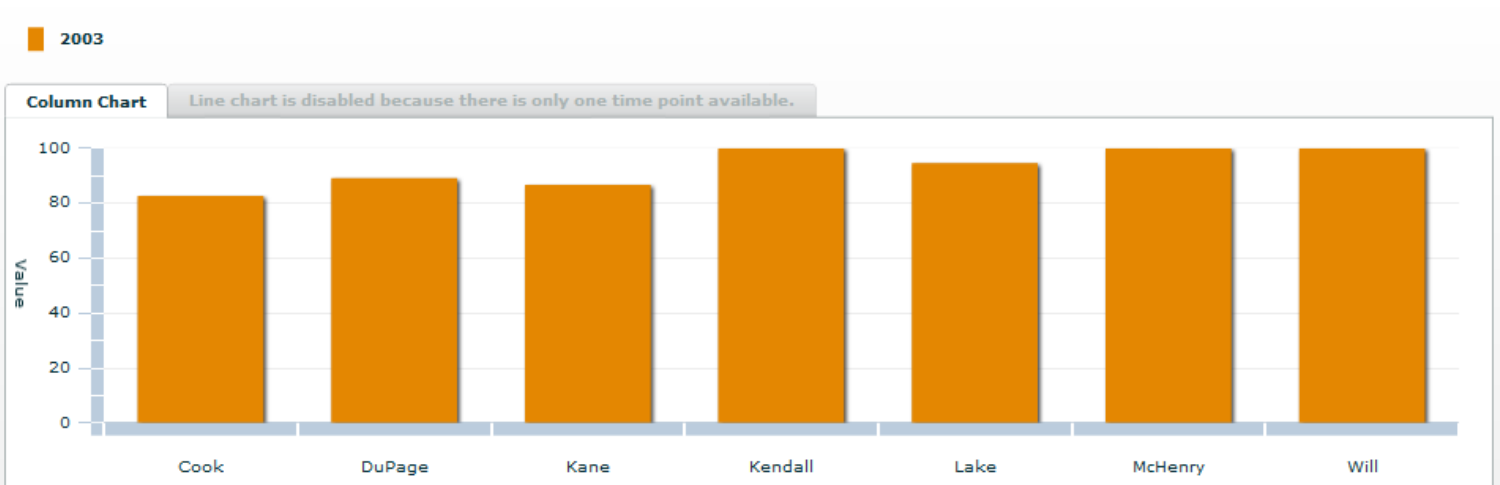
Chicago Metropolitan Agency for Planning

THE CHICAGO COMMUNITY TRUST

Acceptable Ride Quality By Percent of Route-miles for Interstate Freeway With Functional Class 1; 11; 12

All counties in the 7-county Chicago region

Source: Highway Performance Monitoring System



Select a Place

Cook
DuPage
Kane
Kendall
Lake
McHenry

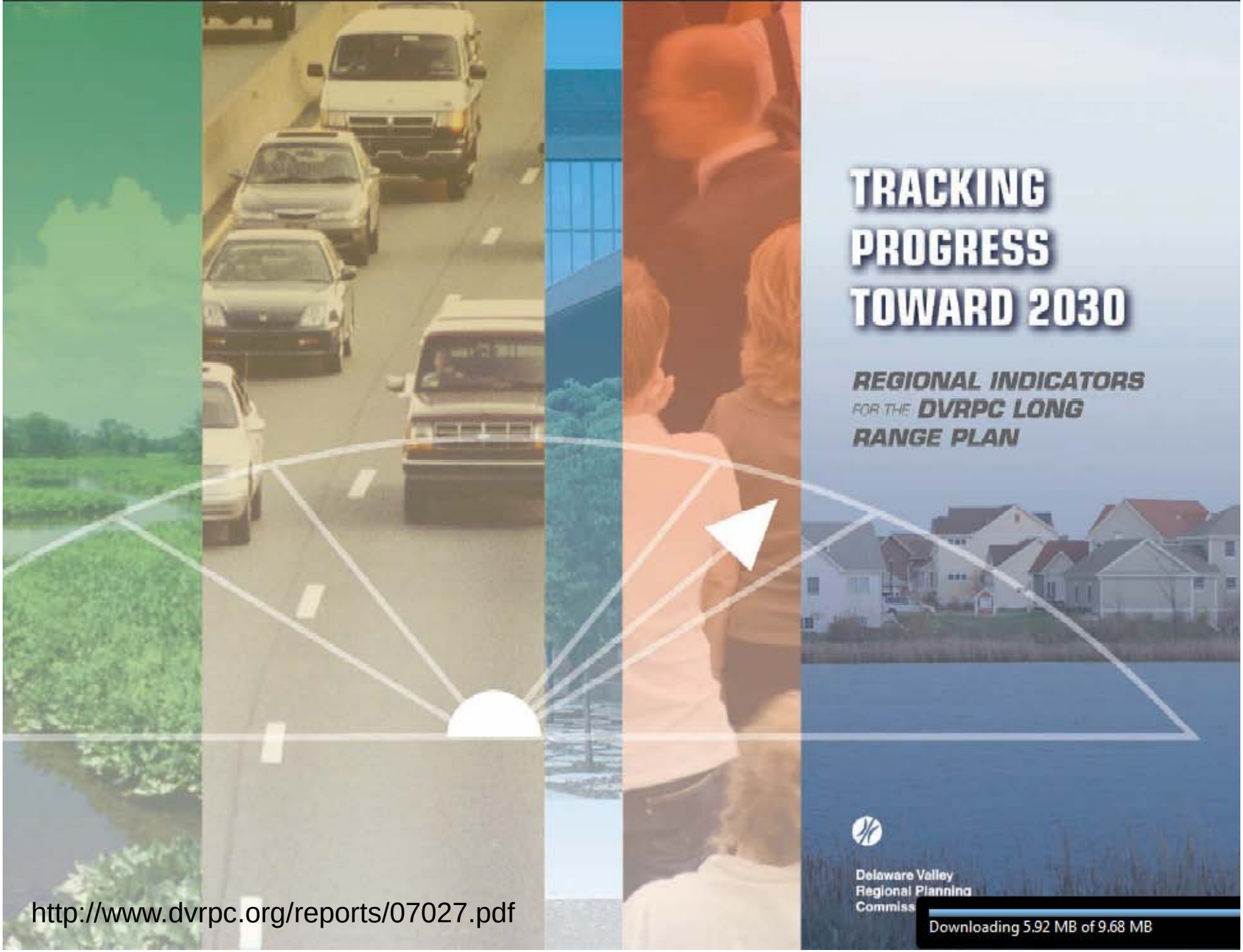
Add a Period

Remove a Period

2003

Data

Place	Time Period	Value
Cook	2003	82.60
DuPage	2003	89.10
Kane	2003	86.60
Kendall	2003	100.00
Lake	2003	94.50



http://www.dvrpc.org/reports/07027.pdf

SUMMARY TABLES / TRANSPORTATION

What We Track	How is the DVRPC Region Performing?	Trend
TR 1: Have vehicle crashes and fatalities declined?	Between 2001 and 2005, the DVRPC region experienced an 18% decrease in fatalities per million VMT and less than 1% decrease in all crashes per million VMT. However, the overall number of crashes rose by 4.6% during this same time period.	
TR 2: Is congestion getting worse?	Congestion appears to be stable – neither improving nor worsening, though VMT has increased.	
TR 3: Is transit ridership increasing?	While transit ridership has experienced some fluctuation, it has increased in the last 5 years.	
TR 4: Has the number of deficient bridges in need of rehabilitation or replacement decreased?	The number of bridges identified as structurally deficient in the DVRPC region has remained steady, but remains twice as high as the acceptable level set by FHWA in its current strategic plan.	
TR 5: Are roads better maintained?	The region saw a slight increase in road miles considered to be deficient, mostly due to NJDOT's stricter standards.	
TR 6: Are fewer people driving to work alone?	The number of people driving to work by themselves continues to increase and is now 73% of all commuters.	
TR 7: Are people driving less?	There are more cars and more drivers driving more miles every year in the region. The region appears to be more auto-dependent.	
TR 8: Are DVRPC's TIP investments in keeping with the LRP goals?	Approximately 97% of the mapped 2007-2010 TIP project funding supports the Long Range Plan and its stated goals.	

GM 3

How is the DVRPC Region performing?

Land consumption per person continues to rise. In 2005, each resident consumed 13% more land than in 1990.

WHAT WE TRACK

GM 3: How much land does each person in the region consume?

INDICATOR

Developed acres per person by planning area.

Developed Land Per Person (square feet/person)					
	1990	2000	2005	% Change 2000-2005	% Change 1990-2005
Residential Land per Person	4500	5029	5180	3.0%	15.1%
Other Developed Land per Person	2224	2387	2423	1.5%	9.0%
Total Developed Land per Person	6724	7416	7604	2.5%	13.1%

SOURCE: DVRPC LAND USE FILES, 1990, 2000, AND 2005; AND US CENSUS 1990, 2000, AND 2005 ESTIMATES

In 2005, in all Planning Areas except Growing Suburbs, each person consumed more land for all land uses than in 1990. Growing Suburbs have experienced the largest population growth *(40% increase between 1990 and 2005)*, leading to slightly denser development patterns.

During that same time period, each person used nearly 6% less land.

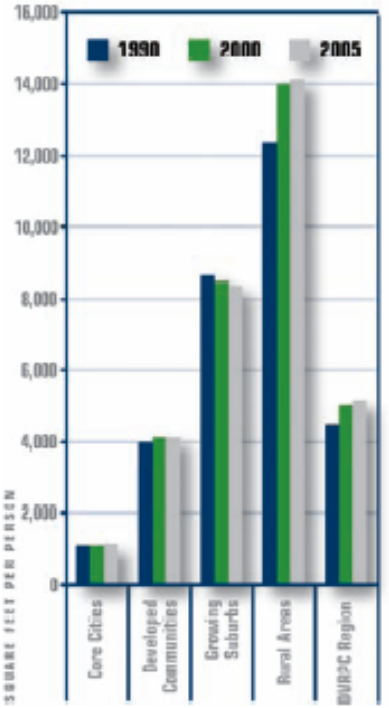
Conversely, Developed Communities, which lost 1% of their population, use 3% more land for residential uses and nearly 5% more land for all land uses.

People living in Rural Areas continue to consume land at a greater proportion than any other Planning Area category. Residential land use continues to be the dominant land use in Rural Areas and each person consumed 14% more land for residential uses in 2005 than in 1990.

The significant increase in the region's consumption of land between 1990 and 2005 is primarily due to increased development of all land use types in Growing Suburbs and Rural Areas.

The DVRPC region's average use of land per person is closest to that of a person living in a Developed Community. This indicates that the largest proportion of the region's residents live in Developed Communities and the largest proportion of developed land *(though not total land area)* is in Developed Communities.

RESIDENTIAL LAND PER PERSON BY 2030 PLANNING AREA



SOURCE: DVRPC LAND USE FILES, 1990, 2000, AND 2005; US CENSUS 1990, 2000, AND 2005 ESTIMATES; AND DVRPC DESTINATION 2030 PLANNING AREAS

MAKING A DIFFERENCE TOGETHER
The Regional Sustainability Strategy

search...

CRD

Home | Policy Themes | Background | Your Input | **Status Reports** | Next Steps

Natural Systems | Social Resilience | Built Environment


RESOURCE MANAGEMENT


CLIMATE CHANGE


ECOLOGICAL HEALTH


SOCIAL WELLBEING


ECONOMIC SUSTAINABILITY


FOOD SECURITY


SUSTAINABLE DEVELOPMENT


AFFORDABLE HOUSING


TRANSPORTATION

- ▶ Transit
- ▼ Travel Behaviour
  - Percentage of All Trips: Transit
  - Percentage of All Trips: Cycling
  - Percentage of All Trips: Pedestrian
  - Average Home to Work Trip Distance
  - Share of Trips by Primary Mode in the PM Peak
  - Share of Trips by Transit in PM Peak
  - Share of Non-Auto Trips in the Central Business District
  - Percentage of Journey-to-Work Trips by Bike
  - Percentage of Journey-to-Work Trips by Transit
  - Total and Per Capita Insured Passenger

http://sustainability.crd.bc.ca/status-reports.aspx

- ▶ Transit
- ▼ Travel Behaviour
  - Percentage of All Trips: Transit
  - **Percentage of All Trips: Cycling**
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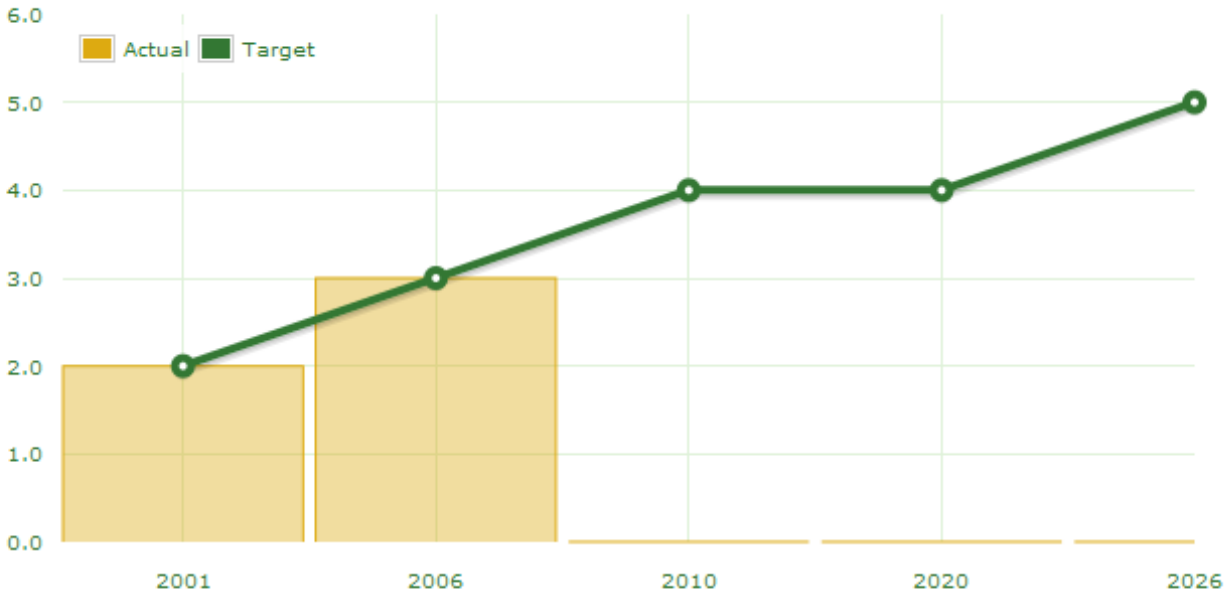
  - Percentage of Journey-to-Work Trips by Bike
  - Percentage of Journey-to-Work Trips by Transit
  - Total and Per Capita Insured Passenger Vehicles
  - Percentage of All Trips: Auto
- ▶ Cycling Initiatives

Status Report

Percentage of All Trips - Cycling

Status | Information | Feedback

% of trips taken by bike (Cycling Mode Share)



Target: To achieve a minimum cycling mode share of 5% by 2026.

This indicator measures the percentage of cycle, walk, transit and auto trips (within a 24 hour period on a typical weekday) for the Victoria CMA and the three sub-regions. This indicator differs from the previous indicator as it measures mode share for all trip purposes, not just commuting.

Next Steps

Develop Framework for Regional Sustainability Planning and Implementation

Final Framework available Fall 2011

For more info, contact cschively@umn.edu