

ON TO 2050

Natural Resources Snapshot - Phase 1 Research

February 2, 2017

Phase 1 Research

- Snapshot background
- Phase 1 Research
 - Climate and Emissions
 - 2010 Emissions
 - Air Quality
 - Climate Change Impacts
 - Natural Areas
 - Land Cover
 - Development and Conservation
- Discussion

Overview – Purpose of natural resources snapshot

- Lend existing conditions and trends background to environmental topics
- Draw upon and support other ON TO 2050 development work
- Review and update pertinent GO TO 2040 indicators

Overview – Related ON TO 2050 work

Strategy papers

- Green infrastructure
- Climate resilience
- Water
- Stormwater
- Lands in transition
- Energy

Layers

- Flood risk areas
- Conservation areas
- Climate vulnerability
- Water source protection
- Water quality
- Potential expansion areas
- Access to parks and open space

Overview – Scope

Phase 1: Understand and compile ON TO 2050 analyses already in process (Nov. – Dec. 2016)

Phase 2: Conduct new analyses for targeted topics TBD (Jan. – Mar. 2017)

Phase 3: Draft the snapshot (Apr. – Jun. 2017)

Climate Change and Emissions

- 2010 GHG Emissions Inventory
- Climate Change impacts
- Air Quality

Water Resources

- Water Supply
- Water Quality
- Stormwater

Natural Areas

- Ecosystem and Habitat Inventory
- Biodiversity
- Land Development and Conservation

Park Access

- Indicator Progress

Climate and Emissions

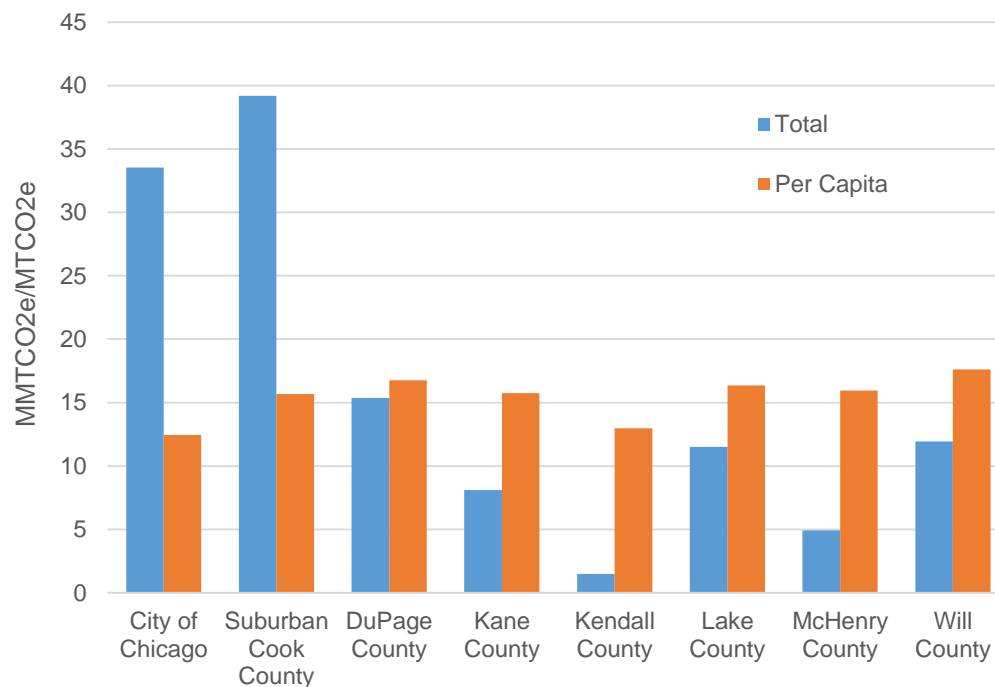
Emissions Inventory -2010

- 126.25 MMTCO₂e
- 14.79 per capita emissions

2010 Emissions by County

Jurisdiction	Total	Per Capita
City of Chicago	33.54	12.44
Suburban Cook County	39.18	15.68
DuPage County	15.37	16.76
Kane County	8.11	15.74
Kendall County	1.49	12.96
Lake County	11.5	16.34
McHenry County	4.92	15.94
Will County	11.94	17.62

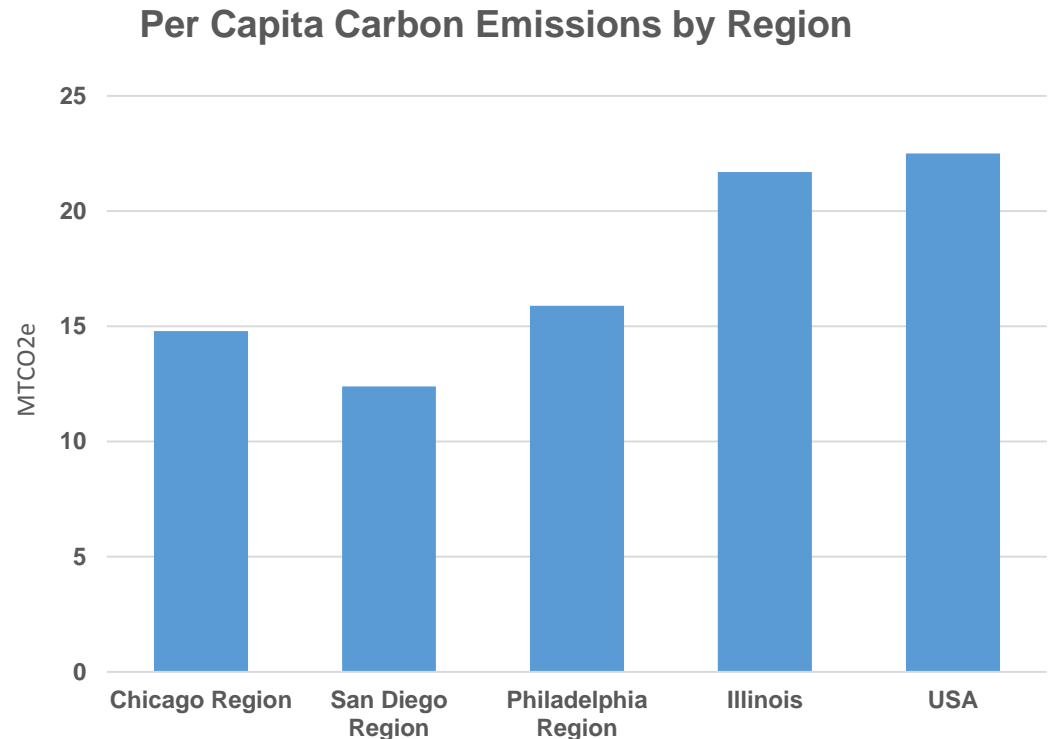
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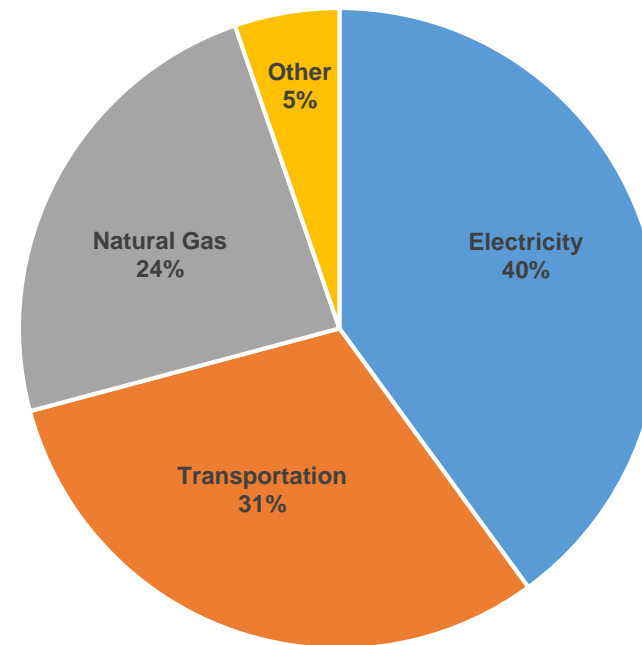


Emissions Inventory -2010

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2010 Emissions by Sector	
Sector	Total
Electricity (buildings)	50.4
Transportation (roads)	33.2
Natural Gas	30.1
Transportation (off-road)	5.74
Solid Waste	3.36
Water	1.52
Product Use	0.56
Wastewater	0.5
Industrial	0.39
Agriculture	0.34

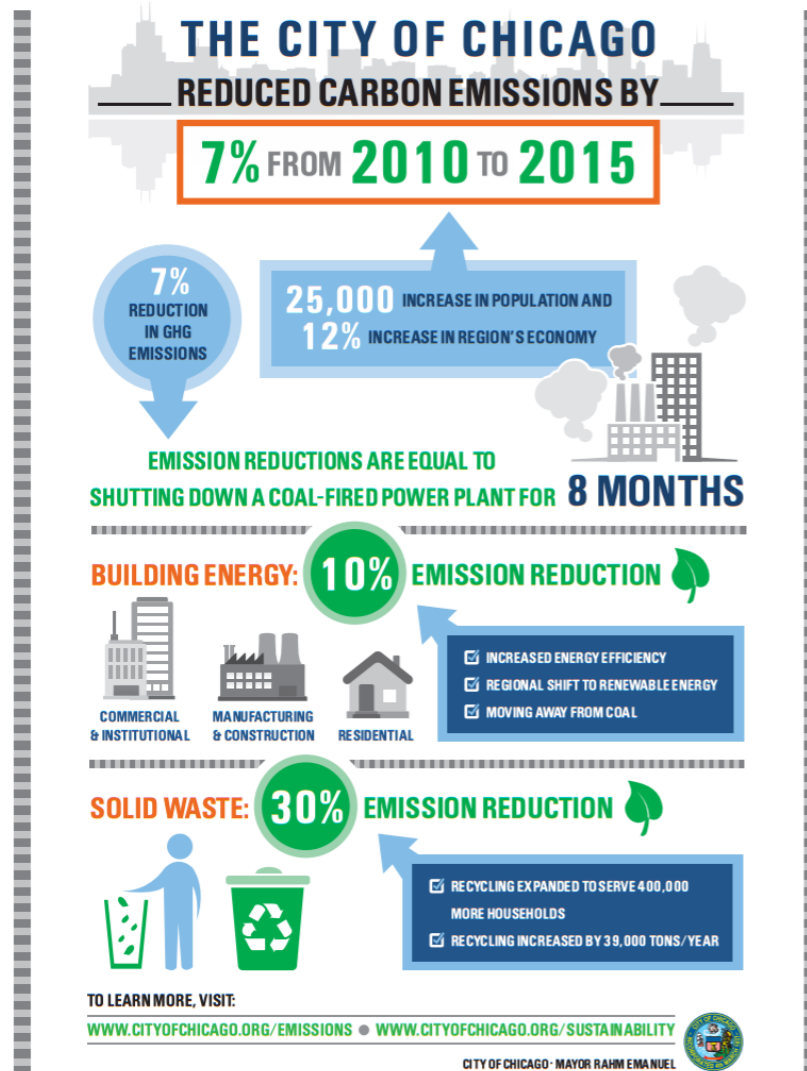
2010 Emissions by Sector



Climate and Emissions

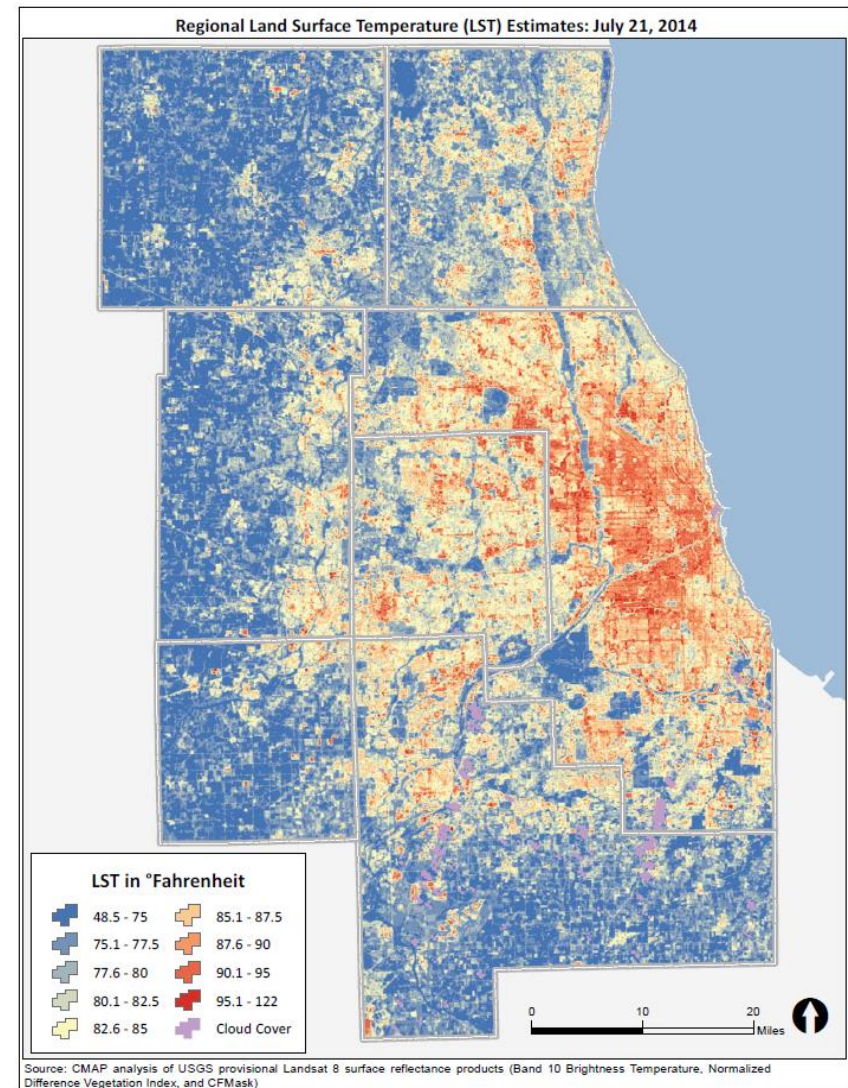
Chicago 2015 Inventory

- 7% reduction in GHG emissions
 - With 25,000 increase in population
 - 12% growth in economy
- Largest reductions in solid waste



Climate and Emissions – Climate Change

- Warmer summers and winters
- More extreme precipitation events
- Longer periods of drought
- Declining air quality



Climate and Emissions – Air Quality

■ Regional Nonattainment

- 8-Hour Ozone

■ Local Nonattainment

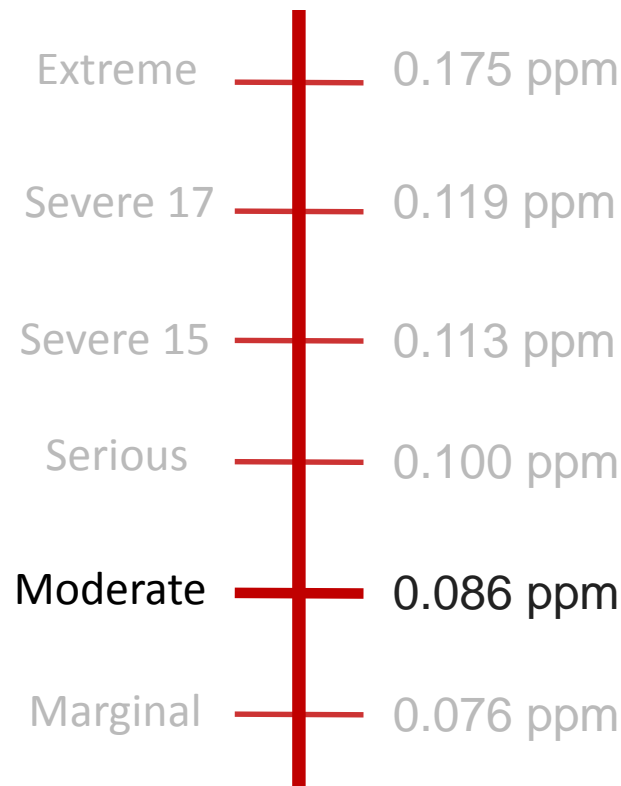
- Lead:

- Chicago

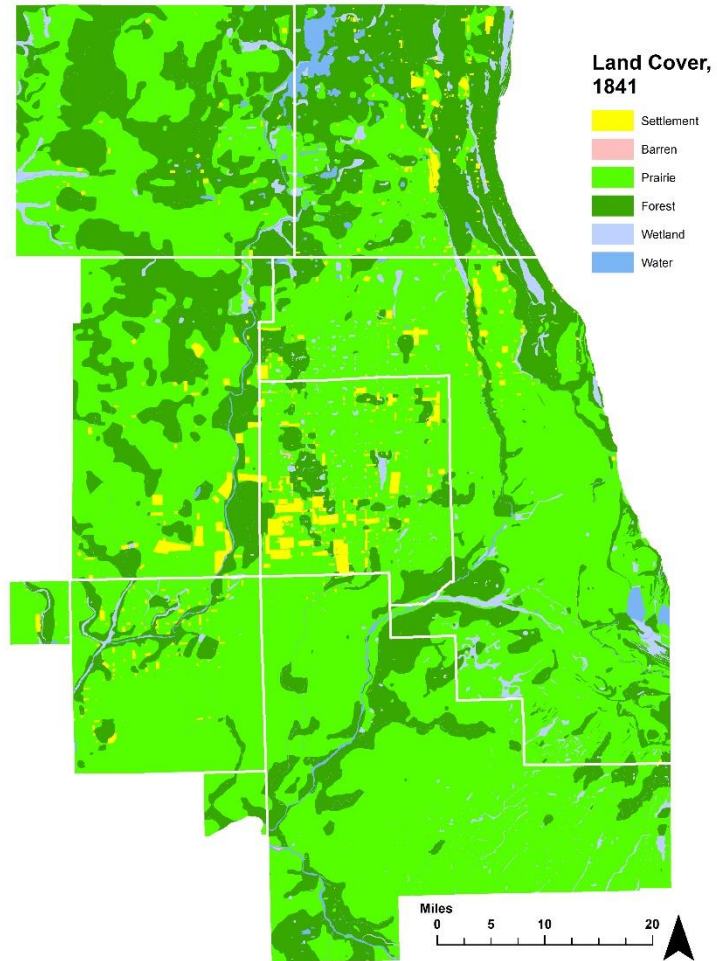
- SO₂:

- Village of Lemont
- Lemont Township
- DuPage Township
- Lockport

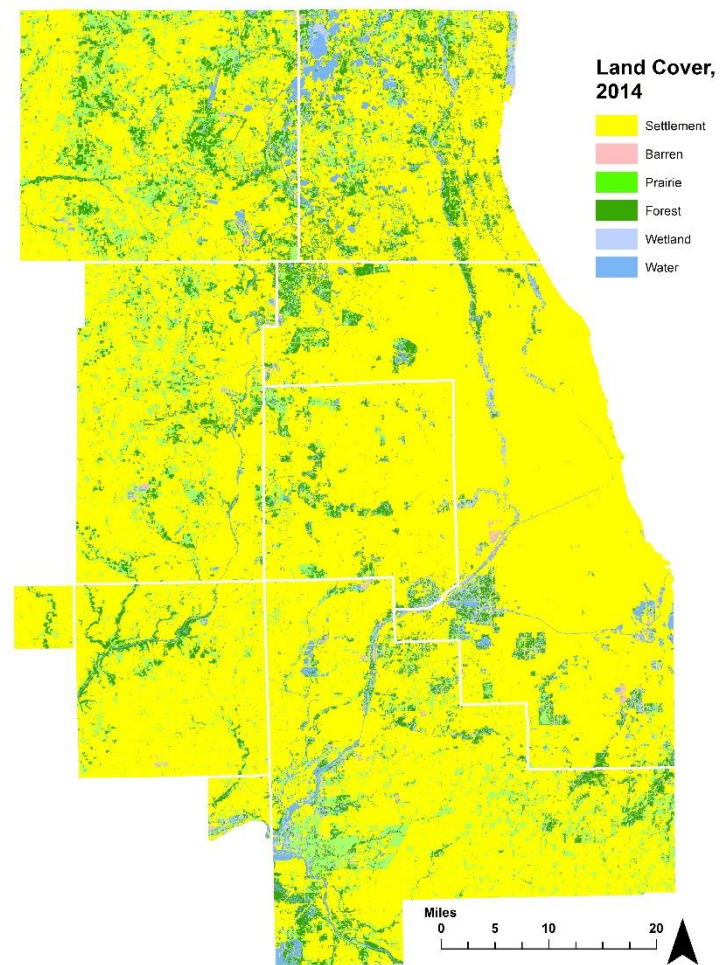
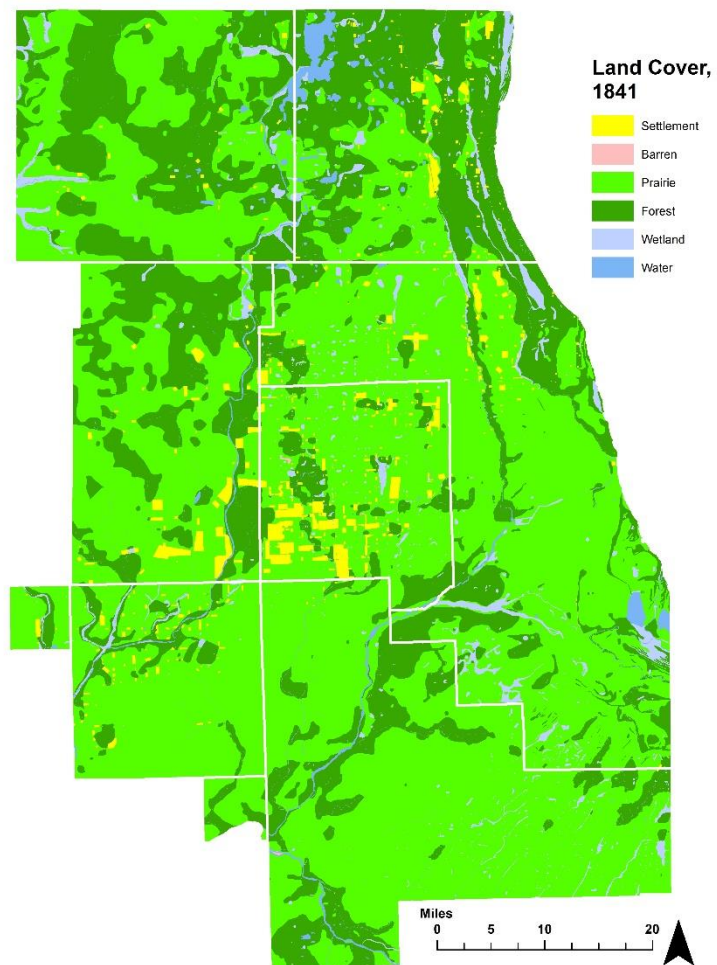
8-Hour Ozone
(2008 Standard) Classifications



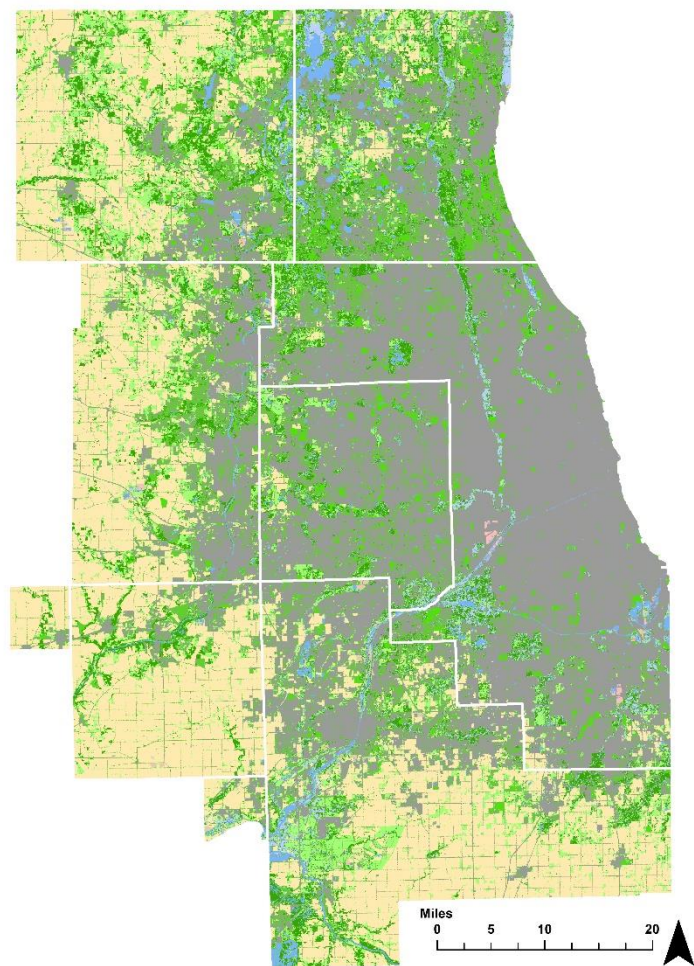
Natural Areas – Land Cover



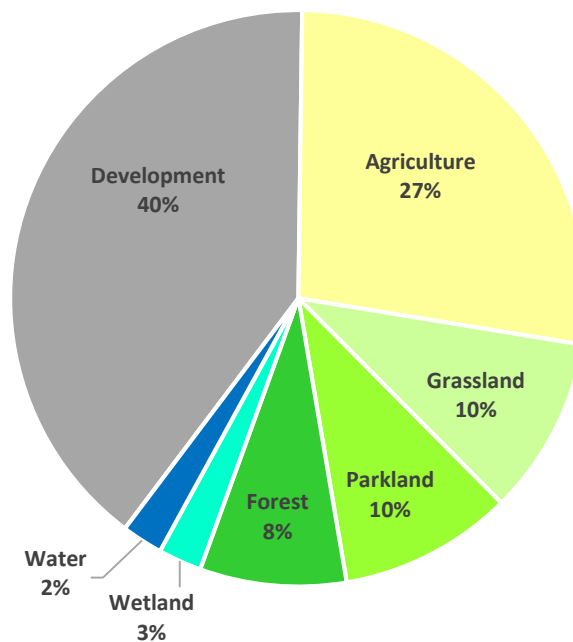
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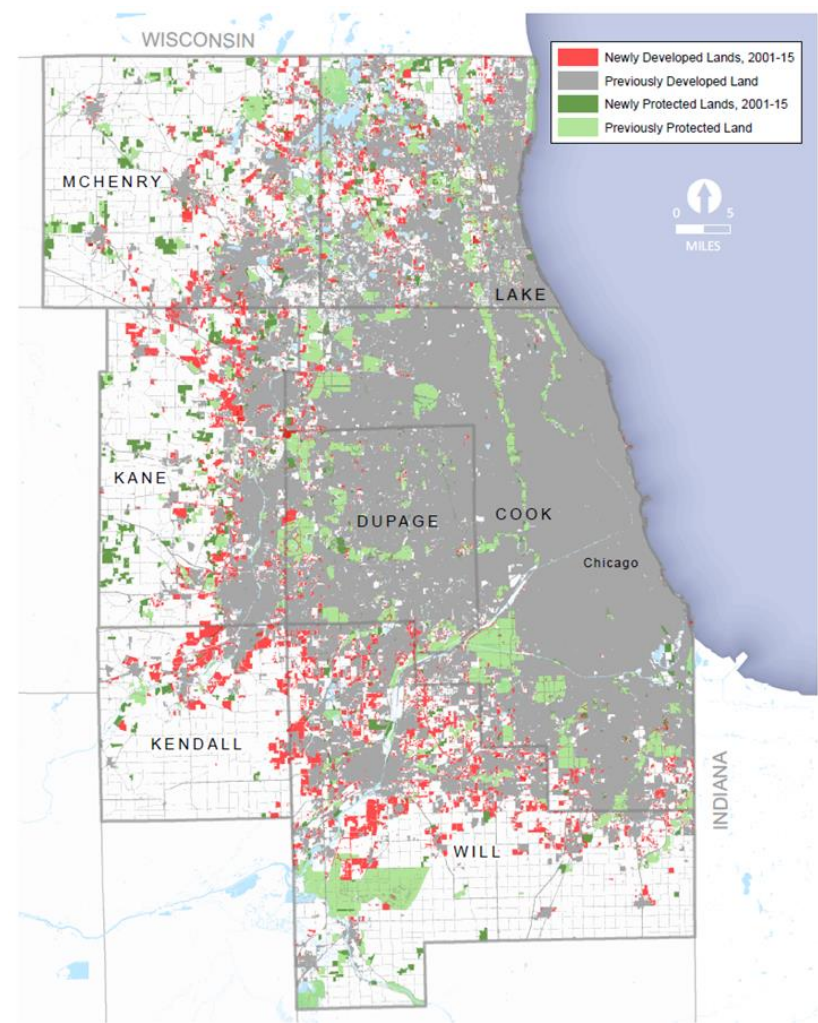
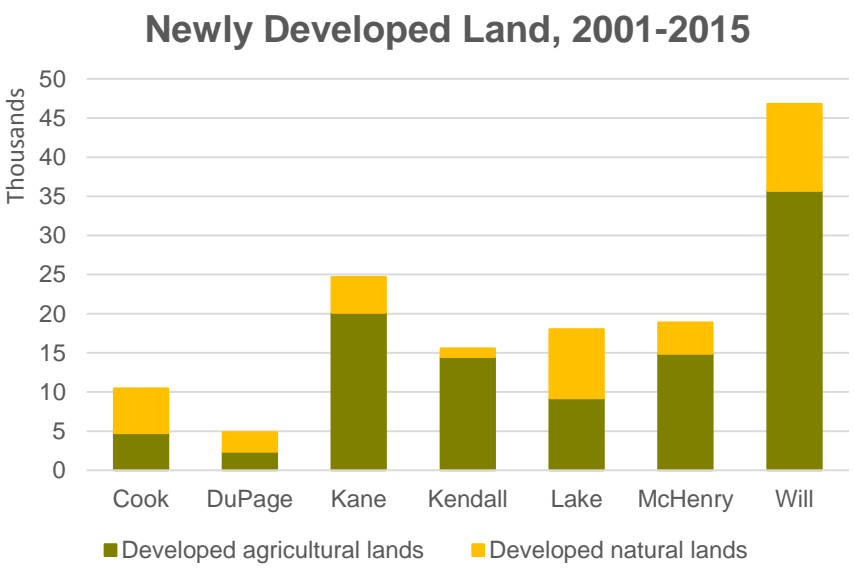


Regional Land Cover, 2014

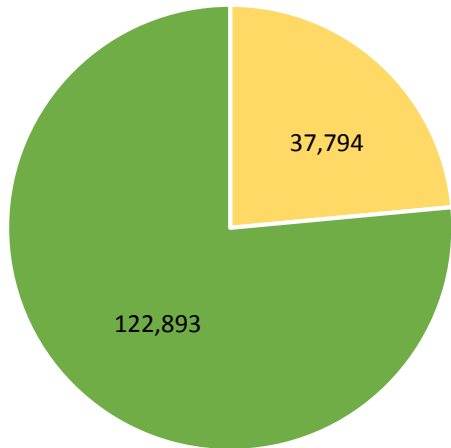


Natural Areas – Development since 2001

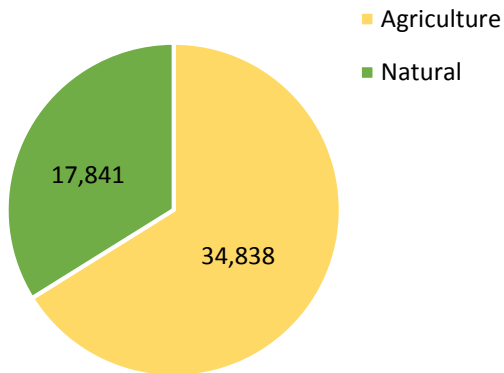
- 140,000 acres developed
- 60,000 acres conserved



Natural Areas – Preservation

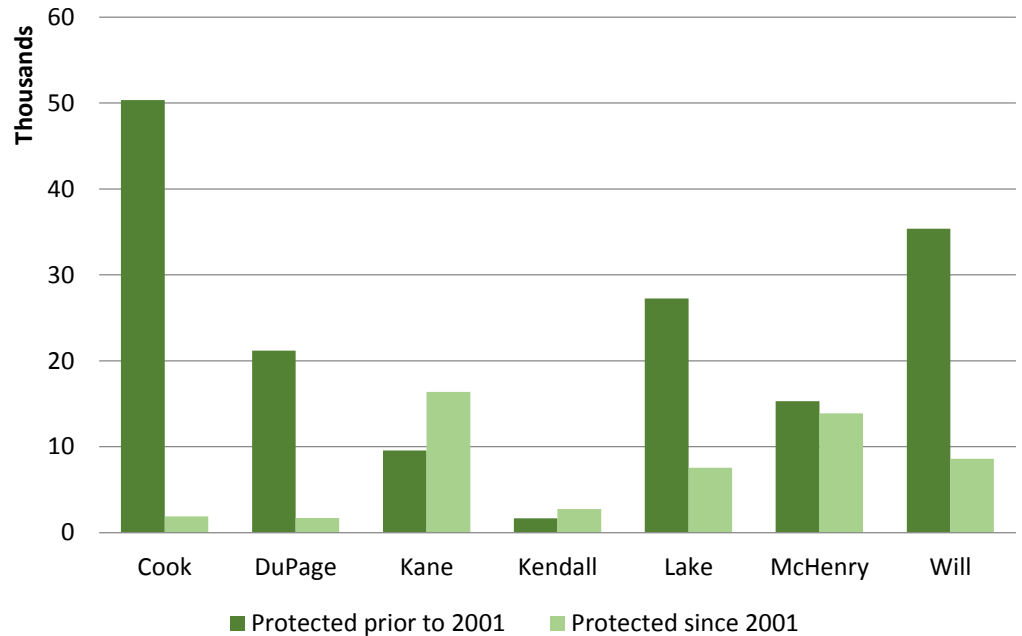


Protected Prior to 2001



Protected between 2001-2015

Protected Land by County



Phase 2 Research

- Compile ongoing research from strategy papers and layers
- Limited new analysis
- Update GO TO 2040 Indicators

Committee Presentations

- ENR Committee, spring
- Land Use Committee, spring

Publication

- Summer, 2017

ON TO 2050

Feedback