

CMAP Research & Analysis Work Program

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January, 2008

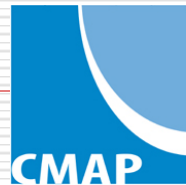


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History:

Data as a Planning Tool

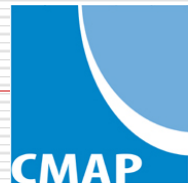
- ❑ “Great Society” – Quantitative Revolution in the social sciences
- ❑ Steady advances in computer power, storage capacity and programming
- ❑ Amazing advances in Geographic Information Systems.
- ❑ Slow progress in advanced planning methods



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History: Planning Data in northeastern Illinois

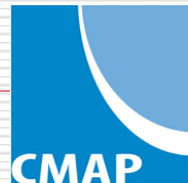
- CATS
 - Travel surveys
 - Network databases
 - Scenario modeling
- NIPC
 - Census repository
 - Household and job forecasts
 - Land use inventory



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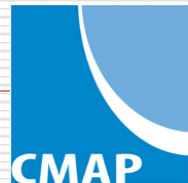
- Data:
 - *Collection*
 - *Exchange*
 - *Dissemination*
 - *Analysis*
 - *Evaluation*
 - *Modeling*



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Collection, Exchange, Dissemination

- Geographic Data
- Demographic Data
- Economic Data
- Transportation Data



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Regional Information

- Land Use
 - 2000, 2005...
- Capital Infrastructure
 - Highway, Rail, Water, Sewer
- Environmental
 - Air, Water, Open Space
- Administrative/Political
 - Global, US, MSA, Illinois, County, Municipal



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Demographic Data

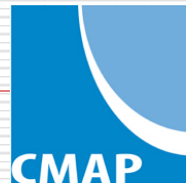
- Census
 - Decennial Count
 - Journey to Work
 - Special Counts
 - American Community Survey
- Travel Survey
 - 2007 Household Travel Inventory



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Economic Development

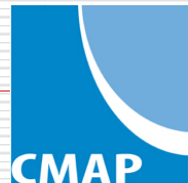
- Regional Scale
 - Commercial Development
- Community Development
 - Full Circle
 - Internet Mapping Service



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Transportation Data

- Highway and Rail Facility Inventories
- Capital Programs



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Analysis, Evaluation, Modeling

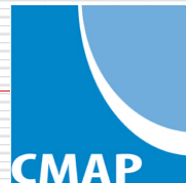
- Local impact analyses
- Developments of Regional Importance
- Regional scenario evaluations
- Simulation modeling
- Sensitivity modeling



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Local Impact Analyses

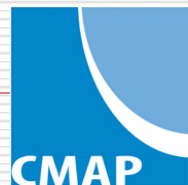
- Traffic Projections
- Facility Planning Areas
- Evacuation Planning



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Developments of Regional Importance

- Bigger than a breadbox?
- “System-wide” effects
- Require special legislation
- Have long-term fiscal implications



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Regional Scenario Evaluations

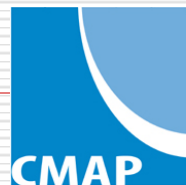
- Economic growth
- Transportation performance
- Air quality
- Water supply



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Simulation

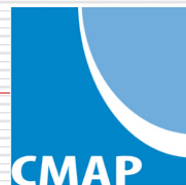
- Population Synthesis
- Transportation Microsimulation
- Land Use Development



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Sensitivity Modeling

- Policy influences on regional development patterns
- Economic development incentives
- Transportation pricing



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