

Infrastructure to Support Economic Development

Final Report

For

**Chicago Metropolitan Agency for Planning
(CMAP)**

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Executive Summary

This report covers the following types of infrastructure for the CMAP region:

- Transportation
- Electricity and Natural Gas
- Telecommunications
- Waste Disposal and Recycling
- Water Management
- Public Buildings
- Convention Facilities

This report provides economic development perspectives and recommendations for these infrastructure systems. Two common findings have emerged. First, the responsibility for urban infrastructure is highly fragmented, and some infrastructure systems function at a higher level than do others. Second, some infrastructure systems are in more urgent need of improvement than others, although they all need improvement taking the 2040 horizon. A basic conclusion is that CMAP can usefully serve as advisor and catalyst for all infrastructure systems.

The report makes the following recommendations:

General

Infrastructure Recommendation #1. *CMAP should consider establishing a permanent Advisory Committee on Infrastructure. Since the responsibility for infrastructure systems is fragmented among numerous agencies and private firms, CMAP can appropriately act as an advisor on infrastructure systems as a whole. A part of the mandate is to help transfer expertise on new infrastructure technologies to CMAP communities.*

Infrastructure Recommendation #2. *CMAP should commission studies on the impact of financing of infrastructure on communities within the CMAP region, giving attention to internal and external sources of funding.*

Transportation

Infrastructure Recommendation #3. *CMAP should convene a permanent Deferred Maintenance Task Force. Among the suggested concerns are:*

- a) *Obtaining annual estimates of maintenance backlogs*
- b) *Costs of achieving minimum acceptable standards*
- c) *Prioritizing according to importance of need*
- d) *Implications of continued deferral both as to added cost and impacts on service quality*

- e) *Ways to set up protected funds for infrastructure maintenance that cannot be raided for other purposes.*

Infrastructure Recommendation #4: *CMAP should set up a committee on programs to enhance transportation amenities that contribute to economic development of member communities.*

Infrastructure Recommendation #5: *Implementation of the CREATE project to reduce the freight rail bottleneck.*

Infrastructure Recommendation #6: *Improvements in CTA transit facilities to reduce travel times and expand rush-hour capacity. This report does not discuss specifics of improvements in the mass transit system because CMAP staff has indicated that they are preparing the report on this issue.*

Infrastructure Recommendation #7: *CMAP should monitor the activity at O'Hare and Midway airports with an emphasis on planning for any eventual need for additional airport capacity or a third airport.*

Electricity and Natural Gas

Infrastructure Recommendation #8: *CMAP should work with the ICC, FERC, PJM (the RTO that is relevant to the Chicago area), the IPA, and other groups on economic development considerations surrounding the future planning for electricity and natural gas capacity, transmission and distribution delivery infrastructure, generation, and supply. CMAP could form a utilities committee to track developments, regulatory changes, and future supply requirements for the electricity and natural gas industries in Illinois.*

Telecommunications

Infrastructure Recommendation #9: *In view of the complexity of telecommunications and the many issues to be considered in deciding how best to proceed in this area, CMAP should set up a Task Force on Telecommunications to explore ways that CMAP can help foster growth of telecommunications activities in the Chicago region. The Task Force would include officials from member communities and outside experts on the telecommunications industry and on associated information-based industries.*

Infrastructure Recommendation #10: *CMAP could provide technical assistance to communities to extend fiber-optic infrastructure to public and educational sites and to reduce the digital divide in the Chicago area in other ways.*

Waste Disposal and Recycling

Infrastructure Recommendation #11. *CMAP should examine the potential for incentive-based strategies to reduce household and commercial hazardous waste generation including labeling and information and price mechanisms to facilitate market transition to environmentally-friendly products. In addition, CMAP should assess the strategies for encouraging proper disposal of household hazardous waste generating products including deposit-refund systems, additional disposal and recycling facilities and education and information about disposal.*

Infrastructure Recommendation #12. *CMAP should assess the potential to increase methane capture of landfills as a pollution-reduction strategy, an energy generation market, and as a future stream of revenue generation in regional, domestic and international carbon offset markets.*

Infrastructure Recommendation #13. *CMAP should examine and assess strategies to incorporate economic redevelopment options for closed landfills into long-term land use planning. Connect the viability of landfills as potential revenue generating site for waste to energy technology development.*

Infrastructure Recommendation #14. *CMAP should examine the feasibility of large-scale waste to energy facilities including costs, scale and the potential to aggregate waste generators. Further examine the potential to integrate waste generators and energy producers through economic incentives and market-based instruments.*

Water Management

Infrastructure Recommendation #15. *Examine the potential to facilitate the transition from flat-rate water pricing to metered pricing. In addition, explore the use of variable pricing including seasonal pricing and block rate pricing based on experiences in other metropolitan areas.*

Infrastructure Recommendation #16. *Explore the effect of additional incentives for conservation including education and information about water use, grants and tax credits for water-saving appliances and water conservation strategies including rain barrels, green roofs and grey water systems.*

Infrastructure Recommendation #17. *Assess the potential for economic development of new technology in water treatment and delivery, and reductions in energy use.*

Infrastructure Recommendation #18. *Examine the potential to improve wastewater treatment technology and energy efficiency to reduce energy use and costs associated with water treatment.*

Infrastructure Recommendation #19. *Construct a set of ecological indicators based on an ecological assessment of the ecosystem services generated under various land-use and urbanization scenarios for the region as a whole.*

Infrastructure Recommendation #20. *Estimate the economic values associated with the urbanization scenarios using the market values for economic activity and the non-market values associated with the relevant ecological indicators.*

Infrastructure Recommendation #21. *Conduct a comprehensive economic analysis of the use of integrated green infrastructure for managing storm water under various climate scenarios. This includes the use of individual building-level systems such as green roofs and rain barrels to broader land use such as compact development and conservation design planning.*

Infrastructure Recommendation #22. *Assess the scope of green infrastructure recognizing that protected natural areas will appreciate over time unlike man-made infrastructure which depreciates. Assess the capacity of green infrastructure and the extent to which it can reduce the burden on existing and planned physical infrastructure for wastewater and stormwater in the region.*

Public Buildings

Infrastructure Recommendation #23. *CMAP should issue manuals giving recommendations for modernizing public buildings based partly on directives of energy efficiency programs, LEED, and federal and state guidelines.*

Infrastructure Recommendation #24. *CMAP can act as a one-stop shop for municipalities applying for funds, giving particular attention to smaller communities with few planning resources, educating local officials, and facilitating collaboration among private and public stakeholders in the building process.*

Convention and Meeting Facilities

Infrastructure Recommendation #25. *CMAP should set up a task force for enhancing the contribution of the conventions and meetings industry to economic development of the Chicago region. The task force, to be composed of public officials and representatives from the convention and meetings industry, should be charged with developing a white paper on appropriate roles for local governments, to be considered by the CMAP Board. Toward this end, the task force should*

- a) *Talk with national experts on the convention and meetings industry, with regard to short- and long-term influences at the national level and the competitive position of the major centers of convention and meeting*

activity in different parts of the country. Advice should be sought on things that can be done to promote Chicago's competitiveness.

- b) Commission studies to quantify the direct and indirect effects of the convention and meetings industry on employment and income in the Chicago region, taking into account hotel, restaurant and other ancillary visitor spending.*
- c) Deal with public and private financing issues. Attention should be given to overcoming past tendencies to base planning decisions on initial cost estimates that turn out to substantially exceeded when the facilities are built.*