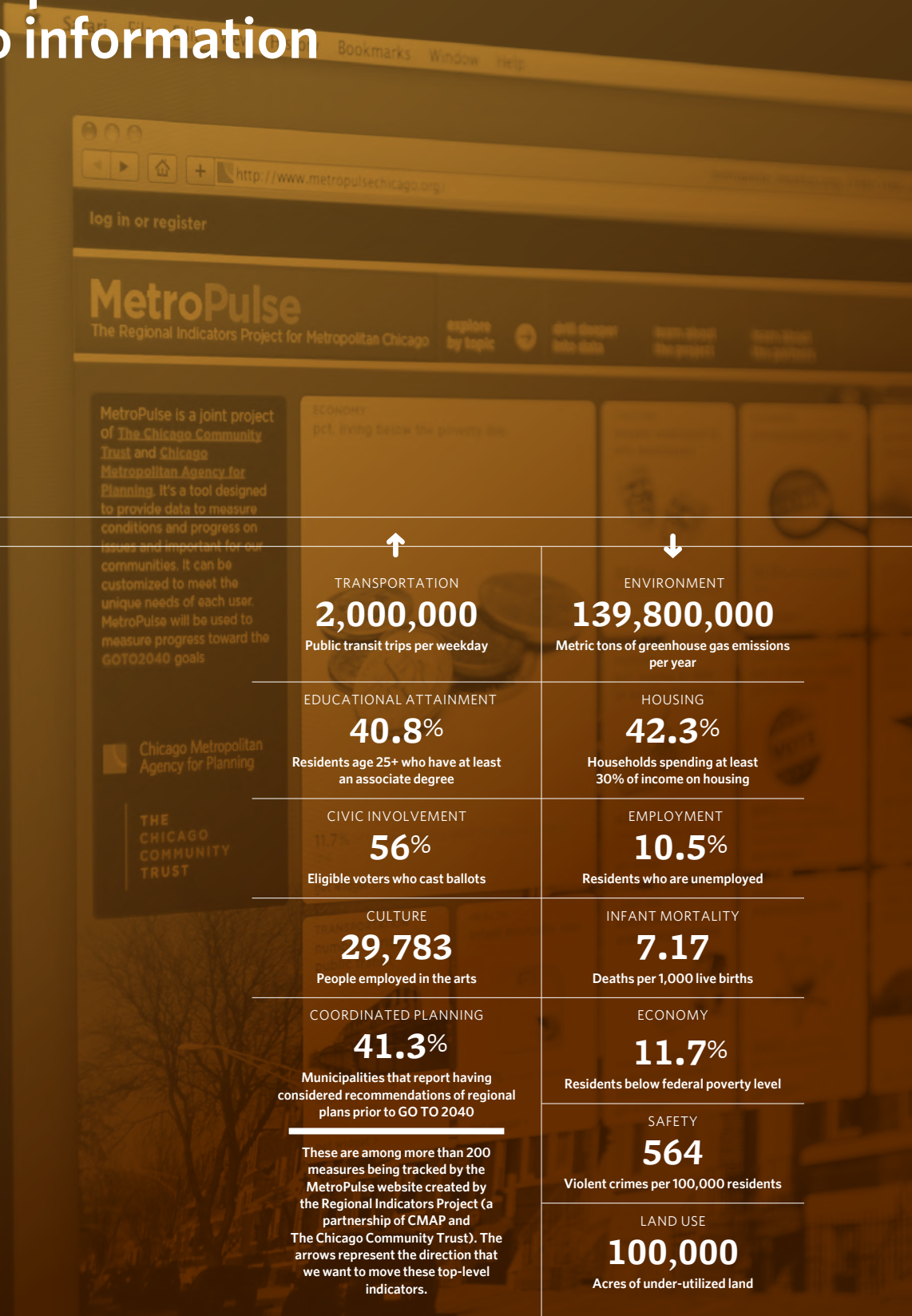


RECOMMENDATION

8 Improve access to information



MetroPulse is a joint project of The Chicago Community Trust and Chicago Metropolitan Agency for Planning. It's a tool designed to provide data to measure conditions and progress on issues and important for our communities. It can be customized to meet the unique needs of each user. MetroPulse will be used to measure progress toward the GOTO2040 goals

Chicago Metropolitan Agency for Planning

THE CHICAGO COMMUNITY TRUST



TRANSPORTATION

2,000,000

Public transit trips per weekday



ENVIRONMENT

139,800,000

Metric tons of greenhouse gas emissions per year

EDUCATIONAL ATTAINMENT

40.8%

Residents age 25+ who have at least an associate degree

HOUSING

42.3%

Households spending at least 30% of income on housing

CIVIC INVOLVEMENT

56%

Eligible voters who cast ballots

EMPLOYMENT

10.5%

Residents who are unemployed

CULTURE

29,783

People employed in the arts

INFANT MORTALITY

7.17

Deaths per 1,000 live births

COORDINATED PLANNING

41.3%

Municipalities that report having considered recommendations of regional plans prior to GO TO 2040

ECONOMY

11.7%

Residents below federal poverty level

These are among more than 200 measures being tracked by the MetroPulse website created by the Regional Indicators Project (a partnership of CMAP and The Chicago Community Trust). The arrows represent the direction that we want to move these top-level indicators.

SAFETY

564

Violent crimes per 100,000 residents

LAND USE

100,000

Acres of under-utilized land

Communities across our region and the world become more interconnected with each passing day. Access to business transactions, travel options and directions, traffic reports, and weather forecasts that once may have required hours of research can now be accomplished with a few keystrokes. And just around the corner is some as-yet unknown invention to make these tasks even easier.

The public is demanding access to information at an increasing rate to know their options and to make better informed personal decisions. They are also making these demands of their government. Residents have a strong need for greater governmental transparency based on their right to see how tax dollars are spent, how government operates, and how decisions affecting their lives are made. Accessible public information also spurs economic competitiveness and innovation within the private sector. And, it is also necessary for measuring progress towards implementation of GO TO 2040.

For these reasons and more, information sharing is a core function of CMAP, which since its inception has been committed to providing high-quality information and analysis to facilitate regional decision making. Now the agency is prepared to lead by more than example by providing technical assistance for government units and other organizations across the seven counties to openly share their data with each other and with the public.

Data sharing should enable easy access to real-time, up-to-date public information, defined as any government data that does not jeopardize personal privacy or public safety, for example, construction permits or zoning ordinances. CMAP is committed to leading this regional effort based on the principle that governments operate most effectively when they have and provide access to complete, accurate, and timely information. This principle relies on three facts:

The public is best-served when government information is freely accessible to all.

Every action or decision by a government entity should be based on high-quality information so that costs, benefits, and alternatives can be quickly and accurately evaluated.

Coordination of policies and operations across jurisdictions depends on the open sharing of information between public entities.

Policy challenges cannot be solved — and efficient government operations cannot be achieved — without comprehensive, current, and accurate data resources. Most issues in today's policy and planning environment are fundamentally data-driven and cross-jurisdictional, so understanding them requires a robust sharing of information. Despite legitimate concerns about cost, staff capacity, liability, privacy, and security, local governments

have strong incentives to increase the availability of their data. The expense is much less than the costs associated with inefficiency and ineffectiveness of efforts to retrieve data that is not readily accessible.

To bring about a new regionwide commitment to improving access to public-sector information, CMAP makes the following recommendations:

Develop a regional web portal

The Regional Indicators Project's new MetroPulse website (www.metropulsechicago.org), a collaboration of CMAP and the Chicago Community Trust, will be a hub for data about the region. This portal will allow public officials, business people, and residents to get the best available real-time regional and local data — and to measure progress — across more than 200 quality-of-life variables addressed by GO TO 2040. The site's launch will coincide with the start of the GO TO 2040 plan's implementation.

Define best practices for data sharing

By understanding how communities here and across the world address similar data challenges, our state and region can put these best practices to work for residents. CMAP will work with the State of Illinois, counties, municipalities, and other governmental bodies that possess data to implement technical improvements that facilitate open exchange of data.

Provide technical assistance to local governments and other pilot projects

CMAP will help local governments to post data online and host a regional online warehouse providing access to municipalities' information as an expansion of the Regional Indicators Project.

The remainder of this section has details about these and other information-sharing recommendations involving CMAP and many partners across the region. The section describes the benefits of improving information access, looks at current conditions (including inefficiencies and barriers), examines indicators and targets, summarizes a number of important implementation areas, and briefly considers costs and financing related to improving access to information.

8.1 Benefits

Governance

Elected officials need information to make informed decisions, and access to relevant data is fundamental to this process.

When information is not shared, governments spend time and money finding it (often buying it) from other sources — or they simply operate without the data, often yielding poor results. On a larger scale, by improving access to information through data sharing, each unit of government will achieve efficiencies by leveraging the good work that others have done, reducing costs, and freeing up resources that will then be available for other purposes.

Transparency is essential to good governance and public accountability. The current lack of transparency and accountability contributes to public cynicism about government in general, which is magnified significantly when corruption becomes a factor. This is reflected in low voter turnout, decreased civic involvement, and growing mistrust of government here and elsewhere in the U.S. One key to turning this distrust around is to make public information easily available, giving elected officials access to data resources for decision-making, and helping residents to see how those decisions are being made. Increased transparency also creates a participatory environment in which residents can regularly interact with units of government.

Like the region as a whole, CMAP depends on access to information. The agency needs better data — often at a high level of detail across geographies and time periods both large and small. Continual improvement in the quality and timeliness of data is necessary for CMAP to properly plan comprehensively by understanding the dynamic, interconnected factors of jobs, housing, water supply, human services, and many other policy issues.

Economic

Providing access to information is a fundamental part of creating a supportive business environment and can lead to a stronger economy, better business decision-making, and opportunities for innovation. Through GO TO 2040, CMAP is seeking to support economic growth and innovation, and one of the methods identified to achieve this is to promote data sharing. Businesses and individuals today are accustomed to basing their decisions on easily accessible information resources. With their enormous information resources, units of government can play a special role in providing crucial data for economic decision-making by individuals and businesses. While public information should be available free of charge, governments must act as wholesalers of data sources, not retailers. This means providing data resources across a broad range of topics so that consumers are free to pick and choose the data that best suits their specific needs. Examples include location decisions (where to live or open a business), transportation decisions (how and where to travel), educational decisions (where and how to access training and education), and human services access. Governments may not get directly involved in such choices, but they can provide information that is absolutely essential to businesses and individuals making the decisions.

Public information systems help to power economic growth. As metropolitan Chicago competes with other global centers of commerce, our region should follow examples being set by our most innovative peers. Open government and shared data resources are becoming the norm in many metropolitan regions across the U.S. Because modern society and the economy are increasingly driven by digital information, we can ill-afford to lag behind as an information-driven global center.

Such a commitment to data sharing can make economic development opportunities easier and more transparent. For example, when the Boeing Corporation sought a new location for its world headquarters in 2001, detailed public information about local markets and amenities was gathered by the public-private partnership (PPP) that submitted Chicago's successful bid package to Boeing. Chicago's growing reputation as a leader in technology and innovation played an important role in the selection process as well.

The private sector can take advantage of government data by developing innovative applications that better utilize and package this public information. For example, Chicago's own EveryBlock.com (recently acquired by MSNBC) has blazed an innovative and influential trail by making detailed municipal data available to millions of people in metropolitan regions across the country. And the Chicago Transit Authority (CTA) has partnered with Google to help establish a new standard for mapping transit routes, a model since adopted in many other cities.

Our seven-county region has the potential to stay at the forefront of information technology by pooling public and private data resources to create advanced information systems. Metropolitan Chicago's prominent position as a hub for transportation, communications, and tourism ensures that skilled individuals from all over the world pass through or otherwise experience greater Chicago — and many of them settle here, to the benefit of our collective capacity for innovation. Private sector assets in our region include technology corporations and startups. The region is home to many universities and two national laboratories that are world leaders in technology research, development, education, and dissemination. Our philanthropic and nonprofit communities show a keen interest in modern technologies, such as the CityForward urban data analysis initiative led by IBM's Chicago office, whose goal is to help urban areas gain a deeper understanding of the major issues that face them.

These and many other examples show the power of combining public data with private innovation. In each case, access to data sources was more difficult and time-consuming than it would have been if facilitating access to public information had been a high priority of government. Reducing the transaction costs associated with government information would increase the return on society's investments in government information systems.

Tracking Progress

Data sharing is indispensable for quantifying progress and for effective decision-making because every important policy issue transcends local borders and affects everyone in the seven-county region. Tracking performance and making adjustments to reach the region's desired future is critical to the implementation of GO TO 2040. The Regional Indicators Project creates metrics for measuring economic, environmental, social, and cultural variables that are essential for sustainable prosperity. This GO TO 2040 project is a collaboration of CMAP and the Chicago Community Trust, which together have invested over \$1.5 million to develop a data warehouse and visualization tools that will improve understanding of how investment decisions affect the region, even down to the very local geographic scale.

The indicators are important for CMAP's efforts to develop and evaluate strategies for implementing GO TO 2040. As such, indicators are divided into the major themes identified in the Regional Vision, with equity, sustainability, and innovation woven throughout. Starting in November 2010, the Regional Indicators Project's MetroPulse website will let users track progress as measured by more than 200 indicators across different times and regional geographies. Because the project relies on a shared pool of current, accurate data, the region's success at achieving its goals will rely on the availability of a broad spectrum of public data. The site's launch will coincide with the start of the GO TO 2040 plan's implementation.

8.2 Current Conditions

A few public agencies in our region have responded to the prevailing trend towards providing access to information through data sharing by releasing more data and documents.

But a vast amount of local government information remains publicly unavailable and will grow larger as new technologies enable more extensive data gathering by government agencies. Moreover, the costs associated with data management as currently practiced — with each local government processing data in isolation, often duplicating the efforts of its peers — are needlessly high.

Residents, businesses, and institutions in our communities will increasingly expect governments to provide up-to-date information, which is not possible without regional coordination of data assets. Today's businesses and residents enjoy high-quality online information systems for banking, retail, travel, medicine, and a startling variety of other human activities. Governments are expected to provide comparable levels of service, which requires open information systems across departmental and jurisdictional boundaries. This subsection of the GO TO 2040 plan describes a number of current inefficiencies and some barriers that should be addressed to create open data sharing.

Inefficiencies

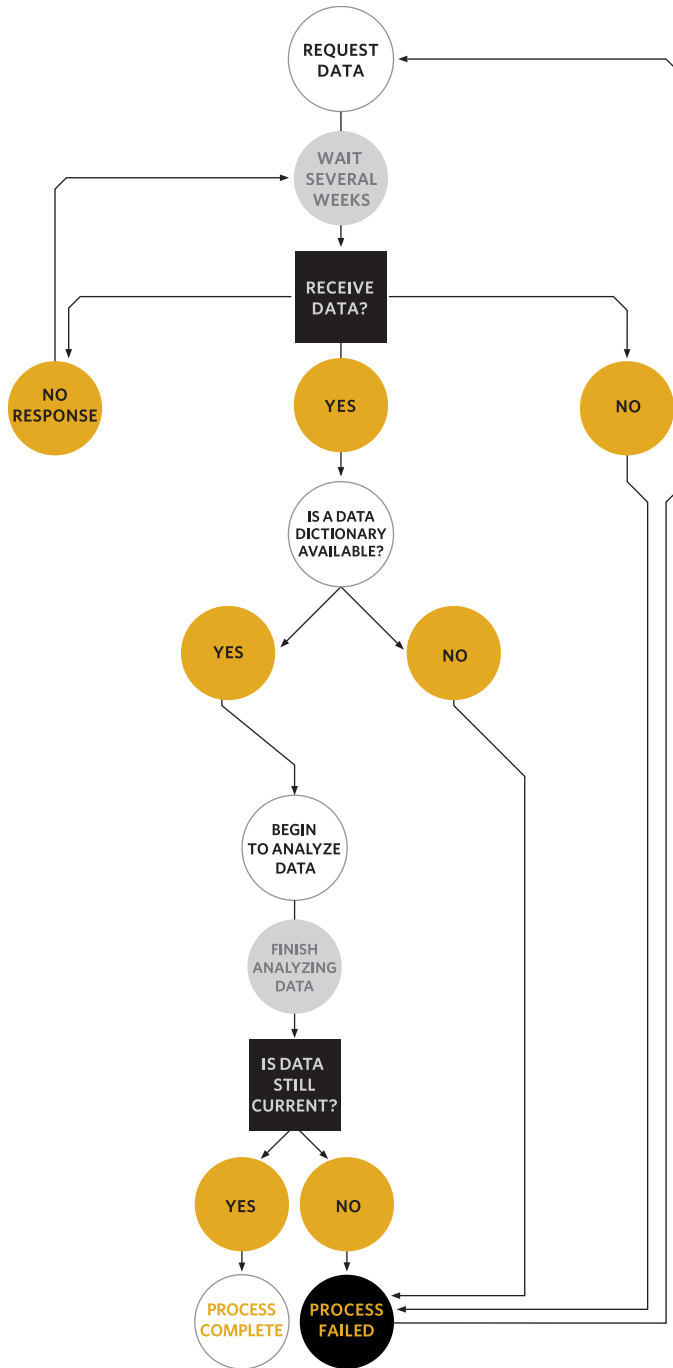
At present, gathering public data is time-consuming and inefficient. Here is a step-by-step example that is all-too-common among governments:

1. **One government agency or institution (the “requesting agency”) asks for data from another (the “providing agency”).**
2. **The request may be issued multiple times and may take many weeks to get a response. Sometimes the providing agency’s response is negative (e.g., the data isn’t available, or the point of contact doesn’t know who has it). Sometimes there is no response.**
3. **Once acquired, the data must be processed by the requesting agency, which requires expertise that is in short supply at many local governments.**
4. **Processing the information requires a data dictionary that may or may not have been available from the providing agency.**
5. **By the time processing is complete, the data may be out of date, and so the next request cycle begins.**
6. **Meanwhile, other requesting agencies are seeking the same data and investing their scarce resources in processing that data — an ongoing duplication of effort.**
7. **Multiple agencies may process the data differently, creating the possibility of discrepancies.**
8. **Back at the providing agency, data requests are received over and over again, which consumes valuable staff time and stretches the already overburdened pool of technically skilled people.**

Inefficiencies inherent in this current practice reappear each time an important policy or planning decision is made. And this can happen over and over. For individual residents and businesses, the result is often a loss of confidence and a sense of cynicism or even suspicion about government capabilities and motives. Answers to simple questions (what day the garbage is collected) or more complex ones (precisely how are tax dollars being spent) need to be transparent and easily accessible. In this age of technology, requiring residents and businesses to make repeated phone calls in tracking down information is inefficient, unnecessary, and harmful to those governments and the communities they serve.

Figure 46. Step-by-step example of gathering public data

At present, gathering public data is time-consuming and inefficient.



Source: Chicago Metropolitan Agency for Planning, 2010

Promising Trends

Data sharing and transparency (open data, documents, and communications) are gaining strength locally and nationally. This is an important foundation of experience on which our region must build. Meanwhile, new legal and administrative frameworks in Illinois and nationally have made government data sharing an important issue to address proactively, because it may be mandated in the future.

Several cities and regions across the U.S. have adopted sweeping open data policies, bringing new efficiencies to government operations, improving public satisfaction, and raising expectations for other state and local governments to adopt similar policies. Our seven-county region can learn from experiences of communities and regions elsewhere. Washington, D.C., and Baltimore established ambitious standards almost a decade ago, and other cities such as New York and San Francisco have followed suit. Some states, notably Utah and Massachusetts, have also implemented open data programs. These efforts and others have been accelerated by the increasing momentum of open standards (i.e., non-proprietary tools) for facilitating access to data.

The federal government adopted transparency as a comprehensive guiding policy following President Obama's Open Government Directive in January 2009. All federal executive departments and agencies were instructed to post their data online in formats that can be retrieved, indexed, and searched by commonly used web applications. More important for local governments were the reporting guidelines attached to federal American Recovery and Reinvestment Act of 2009 (ARRA) funds, which essentially mandated transparency regarding these expenditures. And it is likely that federal requirements for public data reporting will increase over the coming years.

In January 2010 the State of Illinois adopted a revised Freedom of Information Act (FOIA), which puts heightened responsibility on all public agencies to make their information available. Public institutions in Illinois are now required to respond in a timely way to information requests, or risk intervention by the Illinois Attorney General. This legal shift makes it even more advantageous for units of local government to proactively post their data in an Internet-accessible format.

Barriers

Often there are valid reasons that certain government data is not easily available. Reluctance to provide data does not necessarily represent recalcitrance on the part of local governments, but rather reflects concerns about cost, staff capacity, liability, privacy, and even public safety. These concerns are not unfounded, but their causes can be overcome in most cases by following standard practices. The following are some perceived barriers to providing open information access.

Many local governments are not equipped to quickly and accurately retrieve their administrative and operational data upon demand.

Potential inaccuracies in the data might lead constituents to make faulty decisions or reach unfounded conclusions.

The cost of procuring and maintaining robust data systems can be very high.

Staff reductions and attrition sometimes cause local governments to lose expertise and institutional knowledge about their own data resources.

Release of personally identifiable data can violate privacy in some cases.

Release of data about critical infrastructure can increase vulnerabilities to vandalism or terrorism.

The GO TO 2040 recommendations for improving access to information are intended to address and overcome these inefficiencies and barriers.

8.3 Indicators and Targets

Already, some local governments have posted useful data sets online, while others have provided raw data directly to CMAP and other stakeholders.

This trend should accelerate as the federal government ratchets up its requirements for open data reporting.

CMAP will measure the success of efforts at data sharing and transparency by tracking two data sets that should be made available by municipalities:

Construction permits

Zoning ordinances (including maps)

Initially, it should focus on making those data sets accessible online by targeting and working with large municipalities within the region (greater than 40,000 population).

The region's goal should be, within a decade, for all relevant data that does not jeopardize personal privacy or public safety to be available from every government entity and every publicly funded institution in the region. Each year should bring new data sets into the pool of available resources. Our goal should be to increase the number of high-quality public data sets made available each year by at least 10 percent.

8.4 Recommendations

Upon its creation, CMAP committed in its 2006 Strategic Report to providing high-quality information and analysis through coordinated technical assistance to facilitate regional decision making.

Long responsible for maintaining and providing access to the region's comprehensive inventory of information on land use, transportation, and environmental analysis, the regional planning agency is seeking to enhance this information and to serve as the definitive source for federal, state, and local planning databases and other public information.

To lead the region's data sharing efforts, CMAP will provide technical assistance for government units and other organizations across the seven counties to openly share their data with each other and with the public. By maintaining the Regional Indicators Project's MetroPulse website, defining best practices, and implementing technical assistance, the agency is committed to providing the latest, most-thorough information to the public and decision makers across the region.

CMAP's web-based data activities must focus on two areas: 1) Acquiring useful raw data (i.e., inputs); and 2) Providing useful data products (i.e., outputs).

The agency will aggressively acquire the data needed to build state-of-the-art data systems. By providing tangible data products to the region, CMAP will give government units and other partners a strong incentive to provide their best, most current data to CMAP.

As these data products emerge, the agency will encourage willing local government entities and others to participate in pilot projects. With these factors in mind, the following are the recommendations for implementation of data sharing.

Develop a Regional Web Portal

CMAP will implement the Regional Indicators Project, which will make important data sets available on the Internet and serve as an online hub for data about the region, similar to the federal website at <http://data.gov>. CMAP has already acquired, cleaned, and uploaded more than 650 tables that describe the over 200 tracking indicators that will be available on the Regional Indicators Project's MetroPulse website. Following the launch of this site, CMAP will continue to acquire new data sets and integrate local data with state and federal data as seamlessly as possible in a regional online data warehouse, so that data about issues — transportation, housing, and natural resources, for example — can be accessed for varying geographic levels. This commitment will add value to planning, analysis, and governance activities in our region.

Define Best Practices for Data Sharing

CMAP will define best practices for transparency and data sharing for the region's units of government based on an assessment of best practices from other regions and input from the State of Illinois, counties, municipalities, and other governmental bodies that possess data, such as transportation agencies. The best practices will look to define the “who, what, where, and how” of data sharing and include more technical information, especially with regard to how data is shared. To define these, CMAP will participate in (and convene when appropriate) regional discussions about data sharing protocols and procedures.

Provide Technical Assistance to Local Governments and Other Pilot Projects

CMAP will provide technical assistance to local governments wishing to post data online and host a regional online data warehouse to provide access to this information. The online warehouse will be an expansion of the Regional Indicators Project. In addition to local governments, CMAP will also seek opportunities to form partnerships around data-sharing pilot projects with other interested regional partners, such as transportation agencies, workforce development agencies, and municipal water suppliers in order to make this data more accessible.

In addition to what is described above, CMAP will actively work with all willing units of government to promote data sharing and transparency with the goal of making all relevant administrative and operational data available to the public via the Internet, excluding data that compromises confidentiality or public safety. The State of Illinois should commit to adopting similar protocols as the federal government has in terms of data sharing and transparency. Federal and state governments should also require comprehensive, detailed reporting as a condition of federal and state funding programs.

Finally, CMAP will maintain a catalog of data sets provided by selected public entities and will evaluate our progress on a regular basis to determine effectiveness and identify possible alternatives. This last point is especially important since this recommendation is largely contingent on oftentimes rapidly changing technology, so a commitment to regular evaluation is a key to its success.

8.5 Implementation Action Areas

The following tables are a guide to specific actions that need to be taken to implement GO TO 2040. The plan focuses on three implementation areas for improving access to information:

- Launch the Regional Indicators Project’s MetroPulse Website**
- Develop Regional Best Practices**
- Provide Direct Technical Assistance and Conduct Data Sharing Pilot Programs**

Implementation Action Area #1: Launch the Regional Indicators Project’s MetroPulse Website

<p>Launch the Regional Indicators Project’s MetroPulse website</p> <p>LEAD IMPLEMENTERS: CMAP, the Chicago Community Trust</p>	<p>In collaboration with the Trust, CMAP will roll out a website that describes the tracking indicators. The website will also allow users to tabulate, graph or map this information. It will also allow users to save visualizations on a free account for instant recall.</p>
<p>Continually improve the usability of the Regional Indicators Project’s MetroPulse website</p> <p>LEAD IMPLEMENTERS: CMAP, the Chicago Community Trust</p>	<p>A MetroPulse iPhone application will be made available to the public free-of-charge. It will enable users to choose either a) one county or municipality and compare up to seven indicators datasets that describe that geography; or b) one indicator and compare up to seven counties or municipalities. It will also enable users to save these visualizations to their MetroPulse website account.</p>
<p>Train stakeholder groups in the use of the MetroPulse website</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>CMAP will develop dual training/focus group sessions to help maximize the utility of the existing website for target user groups (i.e., municipal staff, community organizations, researchers, etc.). Information from focus group discussions will identify the level at which information is accessed, how data informs policy decisions, what are the most common barriers to sharing data, what datasets are in highest demand and how should data be visualized to make the greatest impact.</p>
<p>Prepare biennial Regional Indicators Project reports</p> <p>LEAD IMPLEMENTERS: CMAP, the Chicago Community Trust</p>	<p>Every two years, produce a report that summarizes the current state of the indicators. Produce the first “baseline” report in 2010, concurrent with the release of GO TO 2040.</p>

Implementation Action Area #2: Develop Regional Best Practices

<p>Increase the number of datasets shared by governments in the region with the public</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Develop a data warehouse with architecture flexible enough to store any new dataset that may arise in the foreseeable future. This warehouse should accommodate all types of geographies and all possible frequencies of update.</p>
<p>Enhance the region's data warehouse</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Continue to maintain, update and expand the region's data warehouse. Moving forward, this will include transitioning from a storage to an archival function. This includes integrating local data with federal and state data and creating live links to data providers similar to http://data.gov.</p>
<p>Define best practices for regional data sharing and transparency</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Convene a working group of willing governmental and nonprofit data providers (including the state, counties, and regional entities) to lead the development of policy briefs, reports and analyses based on a continuous assessment of existing conditions in our own region and in comparison with best practices identified across regions. Among other things, these deliverables will include technical documentation on server-to-server linkages, machine-readable formats, open APIs (application programming interfaces) and metadata.</p>

Implementation Action Area #3: Provide Direct Technical Assistance and Conduct Data Sharing Pilot Programs

<p>Develop and distribute data visualization tools to better inform decision making</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Expand and improve CMAP's data APIs so that partners can easily tap into the CMAP database using server-to-server links.</p>
<p>Develop pilot programs</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Conduct a pilot program to provide comprehensive technical assistance to one department from each of the following government entities: the state, one county, one municipality, and one regional transportation agency. Depending on the skill, technical capacity and organization of each entity's archive, these tasks will include data entry, data cleaning, development of data architecture, posting data online, development of server-to-server linkages and development of open APIs. This should be expanded to other willing partners who wish to participate.</p>
<p>Commit to increasing access to information through data sharing and transparency</p> <p>LEAD IMPLEMENTERS: State (various agencies), counties, municipalities</p>	<p>Post all administrative data online in either database or spreadsheet file formats.</p>
<p>Creating a mechanism to facilitate data sharing</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>Create a data portal for every county and municipality in the region, based on the Regional Indicators Project engine. The Regional Indicators Project system is very powerful, but it focuses on regional, not municipal data. Moreover, the indicators data sets are limited to the 200+ indicators selected by CMAP working committees and advisory councils organized by the Chicago Community Trust. This additional functionality will also allow them to upload their datasets to our website, and see these data sets appear in their data portal.</p>
<p>Increasing the accessibility of data and encouraging innovation</p> <p>LEAD IMPLEMENTERS: CMAP</p>	<p>As mobile devices become more prevalent, continue on the path of tooling our data engine to support mobile applications.</p>

8.6 Costs and Financing

Implementing data sharing will require significant investments for technical assistance and for re-tooling existing information systems.

These investments should be understood in the context of the ongoing upgrades that government entities routinely make, regardless of data sharing efforts. In other words, routine data system upgrades should always be viewed as opportunities to implement transparent data practices. In this way, costs would be incremental rather than abrupt.

Up-front investments would be needed for three of the implementation steps described above:

Create a regional web-based data warehouse and search engine similar to data.gov.

Provide technical assistance to local governments.

Conduct pilot projects for data sharing.

These initiatives might require investments in the hundreds of thousands of dollars. Costs should be set against the current cost of duplicative data processing, laborious exchange procedures, and operating with substandard data.

Financing for these activities should be built into CMAP's core operating budgets, and should include a meaningful investment in pass-through funds for partners in the selected pilot projects. Funding sources might include federal, state, and philanthropic contributions.