Metropolitan **Planning** Council

CHICAGO DEMANDS TRANSPORTATION MANAGEMENT

The case for TDM in Chicagoland



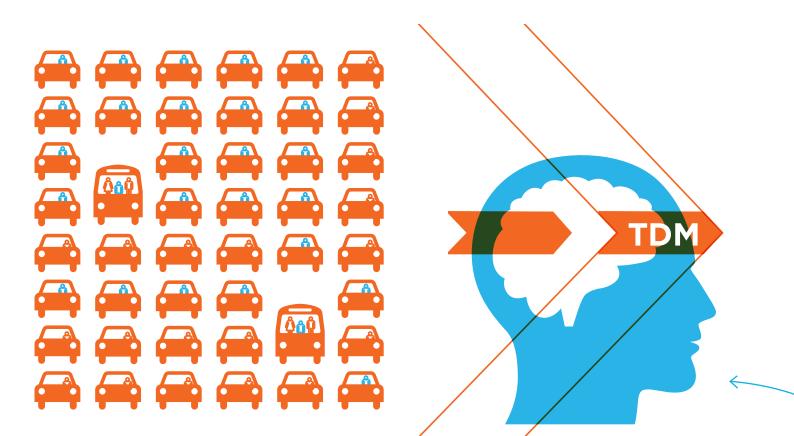
What is transportation demand management?

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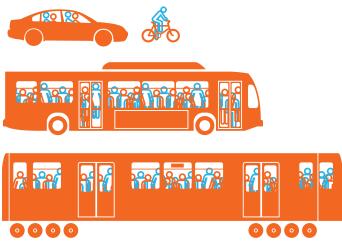
Metropolitan **Planning** Council

For eight decades, the Metropolitan Planning Council (MPC) has developed and implemented innovative, pragmatic solutions to planning and development challenges in Chicagoland. Through research, advocacy and demonstration projects, MPC is a trusted partner to governments, businesses and communities as each confronts the region's pressing needs so that everyone who lives and works here can thrive. Grounded in the greater Chicago metropolitan region, including northeastern Illinois, northwestern Indiana and southeastern Wisconsin, our solutions can be put to work in cities and regions across the U.S. and around the world. MPC's work has been proven to transform places and lives by focusing on **four critical aspects** of a healthy region:



The Chicago region has a rich network of transportation options, yet we waste billions of dollars and countless hours each year in traffic congestion. Although we continue to invest in rebuilding and expanding our transportation system, we cannot build our way out of congestion. We must make the most efficient use of our existing network: We need transportation demand management (TDM).

TDM can be thought of as a marketing campaign for all the Of the 10 largest metro areas in the United States, Chicago is the only one without a formal transportation demand manregion's transportation options: It promotes alternatives to driving alone, such as transit use and ridesharing. It provides agement organization. To evaluate the need for and prove the efficacy of TDM in Chicago, MPC ran a two-year pilot coordinated information and services for travelers, eliminating information gaps that might otherwise be a barrier. Tax that engaged more than 6,200 employees at 16 companies benefits and other financial incentives can sweeten the deal around the region. The pilot confirmed that area commuters for both commuters and employers. Effective TDM reduces were frustrated, but often unaware of all the options availcongestion and delays, improves regional mobility and able to them. The pilot also identified a number of relatively improves air quality. It reduces expenses for commuters and minor barriers that were discouraging employees from trying alternate commutes. A regional TDM strategy would take the lowers the cost of doing business, strengthening the regional efforts and lessons from MPC's pilot and institutionalize them. economy.



Chicago demands transportation management

It's the economy, stupid

MPC's 2008 Moving at the Speed of *Congestion* report showed that traffic congestion costs the Chicago area more than \$7.3 billion per year in wasted time and fuel.

Congestion increases peak period travel times by 22 percent, a drag on the region's economy.









Single-occupancy vehicle trips up 5 percent (share of all trips)



Public transit trips down 3 percent (share of all trips)



Congested travel up 19 percent (portion of vehicle miles traveled during peak hours)

It's only getting worse

In 2010, the City of Chicago released its Climate Action Plan, which featured research from the Civic Consulting Alliance and Boston Consulting Group. More than 60 regional stakeholders, local businesses and representatives of TDM programs throughout the United States weighed in, along with more than 20 human resources departments at area companies.

The good news: The research showed that from 1990 to 2008 the Chicago area's workforce grew. The bad news: Drive-alone rates increased faster than peer metropolitan areas (five percent in Chicago versus three percent nationally), while the share of public transit use and ridesharing declined.

Long commutes, thin wallets

Housing and transportation costs combined eat up **50 percent of income** in the typical Chicago-area household, according to the Center for Neighborhood Technology's Housing + Transportation Affordability Index.

Texas A&M Transportation Institute's most recent data (2011) ranked the Chicago area as the third worst in the nation for traffic congestion, costing each commuter an average of \$1,153 annually.

Transportation demand management provides options for reducing this burden on household income.

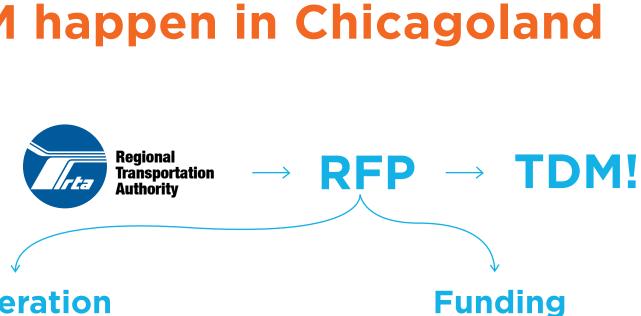
Predictably, congestion got worse. From 1990 to 2007, the portion of "rush hour" travel that suffered congestion rose from 60 to 79 percent. Chicago again fared worse than the rest of the nation, where congested travel grew less, from 59 to 74 percent.

- Starting in 2011, MPC surveyed more than 6,200 commuters from 16 area employers and found that commutes are not meeting expectations for time,
- cost or congestion avoidance.

How to make TDM happen in Chicagoland

Transportation demand management must serve the entire Chicago region, be mode-neutral and should be run by an experienced, professional TDM operator. It also requires a reliable funding source. Given these requirements, MPC recommends the Regional Transportation Authority (RTA) fund regional TDM and issue a request for proposals (RFP) to secure the best thirdparty operator.

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Structure and operation

Regional in nature

Commutes in the Chicago region have all sorts of origins and destinations: suburb to city, city to suburb, suburb to suburb. Some commutes extend beyond the region, to Rockford, Ill.; South Bend, Ind. or Milwaukee, Wis. TDM should serve any conceivable trip that starts or ends within the greater Chicago region.

Mode-neutral

TDM should promote all alternatives to driving alone, from transit and rideshare to biking and walking. Where feasible, telework and flexible work hours also should be promoted.



Third-party provider

As MPC's Commute Options pilot proved (see next page), running TDM requires expertise, effort and attention. RTA should choose an experienced TDM operator, whether it be a private company, a nonprofit or a joint venture of both.



The RTA currently has \$1 million in federal Congestion Mitigation and Air Quality Improvement (CMAQ) funding that is designated for TDM. MPC further recommends that the RTA allocate some portion of their Innovation, Coordination and Enhancement (ICE) funds to TDM. Additional funding options include:



Sales tax

RTA receives a portion of regional sales tax revenue. The RTA board could vote to allocate some of its discretionary funding to TDM.



IDOT general funds

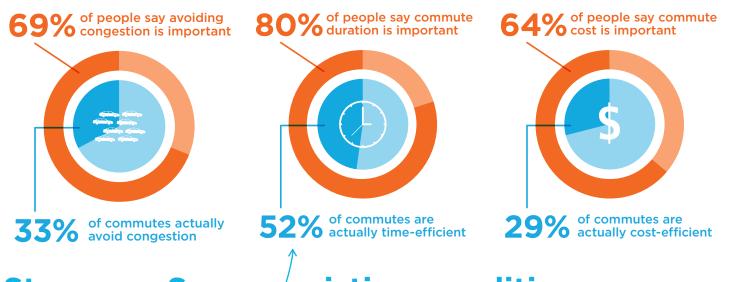
TDM around the nation often is funded by state departments of transportation. The III. Dept. of Transportation (IDOT) has expressed interest in contributing to Chicago TDM.

Private foundation grants

The organization running Chicago TDM could apply to various local and national foundations for funding.

Making the case: MPC's Commute Options pilot

MPC's Commute Options pilot implemented TDM on a limited scale in the Chicago region, proving the need and providing valuable insights for a large-scale, formal implementation of TDM. Inspired by the success of MPC's Employer-Assisted Housing initiative, the Commute Options pilot was employerbased: MPC recruited 16 employers from around the region, roughly half in Chicago and half suburban. Employers ranged from Webb deVlam, a 30-person design firm in Chicago's Fulton Market, to the 3,000-employee McDonald's Corporation headquarters in west suburban Oak Brook, Ill.



Step one: Survey/existing conditions

In the first phase of Commute Options, MPC surveyed more than 6,200 employees, representing 45 percent of all workers at the 16 participating employers. Employees were asked detailed guestions, including:

- How they traveled to work, how much time their commute required and what distance it covered;
- If they drove alone, what barriers prevented them from considering other transportation modes; and
- If their commute met expectations for time and cost.

The survey indicated that 74 percent of suburban respondents drove alone every day, mirroring data from the U.S. Census' 2006 American Community Survey, which reported that 73 percent of regional workers drove alone to work. This suggests that the survey captured a representative sample of commuters.

The results also revealed that many employees had long, frustrating commutes, and that they would consider changing their commutes if certain problems could be addressed. The primary barriers that drivers cited as preventing them from considering other commute modes included:

- A need for flexibility, such as running errands on the way to or from work, or the ability to leave early in case of an emergency.
- Perceived inconvenience of public transit: service is not conveniently located, service is slow or service is too infrequent.
- Perceived lack of safety or security of other modes, especially public transit, biking or walking.
- Lack of information or awareness of transit or other options.

Step two: Make targeted recommendations



if barriers were

addressed

FOODS

Because every employer's situation presented unique commute challenges and opportunities, MPC designed customized recommendations for each, as a formal TDM entity would. Options included:

- - work more convenient.

• Promoting pre-tax transit benefits, which allow commuters to contribute up to \$245 of pre-tax income each month towards transit fare or passes. The RTA estimates that the pre-tax benefit program can save a typical commuter as much as \$100 a month. (Unless Congress acts to preserve the current benefit level, the maximum benefit will be reduced to \$130 in January 2014.)

Promoting existing bus and rail service that is convenient to office locations.

• Installing **bus and train tracker displays** (with real-time arrival information) in convenient, highly-visible locations at the workplace to promote awareness of transit service and make riding it more convenient.

• Participating in commuter challenges (such as Active Transportation Alliance's Bike Commuter Challenge during Bike to Work Week) that reward employees for using alternative modes of transportation.

• Installing secure, indoor bike racks and other amenities to make biking to

 Instituting shuttle bus service connecting corporate locations to nearby rail or bus stations, or shuttles between corporate campuses.

 Moving some or all employees to more transit-accessible office locations, or locations closer to employees' homes.

• Creating or formalizing a telework policy that allows employees to work from home or another remote location one or more days each week.

• Allowing employees to use corporate car sharing memberships, and working with car sharing providers to locate cars on or near corporate campuses.

• Creating an emergency ride home program that guarantees employees a way to return home (such as paying for a cab fare or car share) in case of a family illness or other emergency.

 Although it was not yet an option during the Commute Options pilot, the Chicago Dept. of Transportation's new Divvy bike sharing offers a great way for employees to cover the "last mile" between the train station and the office. Divvy provides options for corporate membership, which allows employers to offer Divvy memberships at a discount or at no cost to employees.

Step three: Evaluate the results

Just as the various employers that participated in Commute Options required unique recommendations, each presented unique lessons and insights over the course of the pilot. These case studies highlight some of the challenges that Chicago's TDM provider will encounter, as well as some of the most effective solutions.

The Burke Group Mid-size suburban employer

The Burke Group is an engineering firm with several regional locations, including around 250 workers in suburban Rosemont, Ill., which was the focus of this study. (President Christopher B. Burke, Ph.D. serves on MPC's Board of Governors.) Even before the Commute Options pilot, the company had an active Bike to Work program that provided financial and other incentives for employees that bike to work, which an impressive 73 percent of Burke employees had taken advantage of at least once. Thanks to strong internal promotion, 84 percent of employees were aware of the pre-tax transit benefit program available to them. Transit options for employees include several immediately adjacent Pace routes, plus the CTA Blue Line and Metra North Central Line. However, each of these rail stations is nearly a mile away and therefore not walkable or particularly convenient.

As part of MPC's Commute Options pilot, Burke and IGO CarSharing (now Enterprise CarShare) entered into an innovative partnership that dedicated two shared cars at the Rosemont CTA Station exclusively for Burke employee use Monday through Friday. These vehicles serve as both a convenient shuttle from the train station to the office and as a replacement for corporate fleet vehicles. Burke also added an emergency ride home program for employees.

By adding the Commute Options recommendations to its existing momentum in biking and pre-tax transit benefits, Burke achieved commendable results: a 9 percent decrease in drive-alone car usage, with an accompanying increase in transit, cycling and walking to work. Half of survey respondents had taken advantage of one of the new commute options, and 68 percent said switching their commute mode had saved them money.



The lesson: Incentives work. Offering car share vehicles and guaranteeing a ride home in case of emergencies provide the extra little push that many employees need to leave their cars at home.





Lovola University Large urban employer

Loyola University employs around 1,800 people at two city campuses: Lake Shore in Rogers Park and Water Tower near North Michigan Avenue. Loyola also participates in MPC's Employer-Assisted Housing initiative, which helps employees buy homes near their work location or the CTA Red Line, since both campuses are convenient to public transit. As such, Loyola already had a low drive-alone rate: half that of the average regional employer. However, MPC's survey showed that 88 percent of employees were unaware that they could be taking advantage of pre-tax transit benefits.

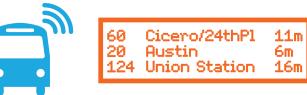
MPC recommended that Loyola promote its campus transportation website, which details all options available to employees, including pre-tax benefits, a shuttle to downtown Metra stations and discounts for car sharing. Drive-alone rates dropped 6 percent at the Lake Shore campus and 8 percent at the Water Tower campus, with accompanying increases in public transit use, ride-sharing and biking.

The lesson: Awareness is key. Promotion of alternatives is an easy and cost-effective way to contribute to congestion reduction.

Labelmaster Mid-size urban employer

Labelmaster employs around 175 workers at its facility on Chicago's far northwest side. Although it is directly served by CTA's 53 Pulaski bus and the 84 Peterson bus is nearby, Grainger free on-site parking leads most employees to drive to work. On MPC's recommendation, Labelmaster installed a CTA Large suburban employer Bus Tracker display in a prominent location and internally promoted transit use and pre-tax benefits. The real-time bus Grainger employs around 2,600 people at three suburban locations, including the Lake Forest campus that participated arrival display started conversations about commuting and encouraged employees to experiment. Those who did try tran- in the Commute Options pilot. With a location convenient to sit, biking or walking at least once subsequently commuted I-94 and out of reach from public transit, it's no surprise that that way repeatedly: More than half who tried an alternative 86 percent of surveyed employees drove to work alone every commute reported doing it 25 times or more during the day and 70 percent were unaware that pre-tax transit benefits were available. course of the pilot.

The lesson: Real-time information promotes As part of Commute Options, Grainger created a dedicated transit use. A simple addition like a train or bus shuttle to the nearest Metra station, instituted an emergency ride home program, and promoted pre-tax benefits and tracker display can go a long way. In addition, those ridesharing. The results were spectacular: Drive-alone rates who try an alternative commute once are often dropped 20 percent as transit use and ridesharing rates hooked and are likely to keep commuting that way. doubled. Of employees who switched to an alternate mode, 68 percent reported saving money—an average of \$151 for gas, tolls and car maintenance every month.





The lesson: Transit must be easy to reach. Even in a location where transit use seems improbable, making the train easy to access, combined with the prospect of saving money, can lure commuters out of their cars.

TDM: Effective around the nation

Seattle, Wash.

King County Metro, which operates local buses in Seattle and the surrounding area, runs a comprehensive TDM program, which includes support and resources for employers. The agency helps distribute **commuter bonus vouchers** that encourage employees to use alternative types of transportation. It also manages Flex Pass, a discount pass program that can include commute incentives.

Oakland, Calif.

The Alameda County Congestion Management Program negotiates with employers to provide incentives to reduce driving. An analysis of this TDM program's successes at four work sites showed that incentives significantly increased the number of participants in three of four locations and on average reduced commute trips by car by 16 to 20 percent.



Boulder, Colo.

The Boulder TDM program, called GO Boulder, promotes various transportation options, including telework, ridesharing and car sharing. GO Boulder has promoted a series of transportation management districts that correspond to the development in each of those areas and encourage better use of local options.

Nationwide: Ridesharing on-demand

Ridesharing is evolving for the 21st century: Services like Lyft, UberX and Sidecar allow commuters to request a ride on demand from their smartphone. Drivers are not professionals, merely average citizens who have chosen to share their car (and earn some extra cash), usually after undergoing an interview or background check. Driver trust is further established by reviews or ratings left by users.

The new ridesharing services have been incredible popular— Lyft was providing **30,000 rides a week** within its first year of business—but they have also been subject to legal and regulatory scrutiny. Although the current legal status of these services varies from region to region, California's Public Utilities Commission has endorsed them, deeming them "Transportation Network Companies" and subjecting them to unique rules and regulations.



Cambridge, Mass.

A municipal TDM ordinance requires that developers of new buildings reduce the rate at which their employees drive alone to 10 percent below the average rate of the surrounding area. Just two years after the ordinance passed, the rate of driving alone in the city had declined.

Arlington, Va.

New developments are required to incorporate TDM measures, including travel surveys, the distribution of brochures, bike parking and roadway improvements. Developments that are expected to produce traffic problems are required to subsidize transit, operate vanpool programs and improve intersections. According to a 2000 survey, TDM work sites in Arlington had **9 percent fewer vehicle trips** than non-TDM sites.

Source for TDM case studies: Victoria Transport Policy Institute

TDM: The time is now



The Chicago region is rich in transportation options, from traditional public transit networks to newer modes like car sharing and bike sharing.

Transit providers are already working hard to market their services and fill their trains and buses. The RTA's pre-tax benefit program has made transit more attractive to countless commuters both in the city and the suburbs. The Chicago Dept. of Transportation's Divvy bikeshare program has been wildly successful, and provides people in the city with a great alternative for short trips. And Pace Bus' tailored services to employers all over the region have made suburban job locations more attractive to populations that could not otherwise reach them.

As MPC's Commute Options pilot demonstrated, employers are willing to offer incentives to their employees to use modes of transportation other than driving alone. By providing shuttles to and from train stations, or emergency ride home services, or even simply encouraging carpooling, employers all over the region are helping to reduce congestion on the roads.

All of these efforts underscore both the need for a TDM strategy in the Chicago metropolitan area and the willingness to embrace a coordinated regional effort. Employers and transportation agencies understand their roles in reducing congestion.

But they need help. Specifically, they need coordination. If we want to make a dent in the \$7.3 billion we waste on congestion every year, our region needs a formal TDM strategy that can draw all of these disparate efforts together and effectively market them on a regional scale. Congestion has been reduced through coordinated TDM all over the country; it can happen here as well.

Chicago demands transportation management. Let's make it happen.

Commute Options pilot partners

Active Transportation Alliance Center for Neighborhood Technology Chicago Dept. of Transportation Chicago Metropolitan Agency for Planning Chicago Transit Authority Chicago Water Taxi Chicagoland Chamber of Commerce Enterprise CarShare (formerly IGO CarSharing in Chicago) Metra Metropolitan Mayors Caucus Pace **Regional Transportation Authority**

MPC project team

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Resources and further reading

Center for Neighborhood Technology Housing + Transportation Affordability Index: htaindex.cnt.org Chicago Climate Action Plan: www.chicagoclimateaction.org Chicago Metropolitan Agency for Planning Transportation Demand Management Strategy Paper: www.cmap.illinois.gov/strategy-papers/transportation-demand-management Employer-Assisted Housing: www.metroplanning.org/eah Moving at the Speed of Congestion: www.metroplanning.org/congestion Texas A&M Transportation Institute Urban Mobility Information: mobility.tamu.edu Victoria Transport Policy Institute TDM Encyclopedia: www.vtpi.org/tdm

Commute Options pilot employers

Champro Sports – Wheeling, Ill.

Chicago Public Schools Central Office – Loop, Chicago Al Raby High School – Garfield Park, Chicago Lincoln Elementary School – Lincoln Park, Chicago

The Burke Group – Rosemont, Ill. and other suburban locations

The Field Museum – Museum Campus, Chicago

Goose Island Beer Company – Near West Side, Chicago

Grainger – Lake Forest, Ill.

Illinois Tool Works - Glenview, Ill.

Labelmaster – North Park, Chicago

Loyola University – Lake Shore and Water Tower campuses, Chicago

McDonald's Corporation – Oak Brook, III.

- Moraine Valley Community College Palos Hills, Tinley Park and Blue Island, Ill.
- Newell Rubbermaid Oak Brook, Ill.
- Robinson Engineering South Holland, Ill. and four other suburban locations
- Shedd Aguarium Museum Campus, Chicago
- Underwriters Laboratories Northbrook, Ill.
- Webb deVlam Fulton Market, Chicago

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Our Mission

Since 1934, the Metropolitan Planning Council (MPC) has been dedicated to shaping a more sustainable and prosperous greater Chicago region. As an independent, nonprofit, nonpartisan organization, MPC serves communities and residents by developing, promoting and implementing solutions for sound regional growth.



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