Analysis of Traffic Delays from Flooding

Des Plaines River Watershed Study

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Introduction

The Chicago District of the U.S. Army Corps of Engineers, in cooperation with the Illinois Department of Natural Resources, the Illinois Department of Transportation, the Lake County Division of Transportation and the Cook County Highway Department, intends to assess the delays to road traffic resulting from flooding of the Des Plaines River and its tributaries in Lake and Cook Counties, Illinois. The estimates relate to:

1. delays resulting from flooded roads;
2. delays due to flooded road repairs;
3. delays due to recommended plan project construction.

Traffic delays are to be estimated for a base year and several future years for floods of varying depths and duration. The usual flood frequency profile analyzed includes 2, 5, 10, 25, 50, 100 and 500-year frequency floods.

The Transportation Laboratory of the Department of Civil and Materials Engineering, University of Illinois at Chicago, has initiated an exploratory analysis, building on forecasts of current and future traffic made by the Chicago Area Transportation Study (CATS), the Federally designated metropolitan transportation planning organization for the six-county Northeastern Illinois region. This Progress Report describes studies performed to date during the first year of the study, beginning June 2001.

Method

The effects of flooding on traffic mainly pertain to the closing of bridges and associated roadways. The direct impact of such road closings is that drivers must find other routes of travel, which may lead to highly congested conditions, depending on the extent of the flooding. Indirect effects of road closings are that drivers may elect to travel by a different mode, such as public transit, or to a different destination, or cancel the trip altogether. As a first step in this study, we agreed to explore the effects of re-routing of travel only.

The approach to the study of re-routings, and the estimation of traffic delays, is to apply a Traffic Assignment Model (also known as a route choice model) to estimate road traffic delays from bridge closings on the main stem of the Des Plaines River identified during an earlier study, known as the 1999 Feasibility Report. Model outputs examined to date, and reported here, are total and mean vehicle travel time, and total and mean vehicle travel distance, between 21 districts comprising the larger Chicago metropolitan region.

The procedure for applying the model is the following.

1. Road segments subject to delays from flooding in the main stem of the Des Plaines River Watershed were identified in the CATS road network;

2. Additional arterial and collector road segments within the Watershed not represented in the CATS road network were examined to determine if they were critical to the analysis; to date, none has been identified, largely because CATS' road network is very detailed in the area of the study;

3. The zone system within and around the Watershed was examined to determine whether it is sufficiently detailed for the intended analysis; to date, we have not found it to be necessary to divide zones to provide for more detail;

4. CATS estimates of zone-to-zone automobile flows for the morning peak period in 1996 were extracted from the results of an analysis performed for air quality modeling purposes; the tests reported in this progress report, therefore, pertain to one hour during the morning peak period from 7 – 9 am.

5. The Traffic Assignment model was applied to flood scenarios involving the main stem of the Des Plaines River only for the following floods: 5, 10, 25, 50, 100, and 500 year frequencies, plus the normal or base case. The 2-year flood was also considered; since only one bridge on the main stem is disrupted by such a flood, the delays from a 2-year event are not distinguishable from normal conditions.

6. Total travel times and travel distances corresponding to these flood scenarios were identified, first on a zone-to-zone basis for the 1790 zones in the Chicago region, and then on an aggregated district-to-district basis.

7. Results of the analysis were summarized in tables, and examples plotted in charts for use by the Chicago District to demonstrate the results from the application of the model.

For interpreting the results achieved to date, a general understanding of the Traffic Assignment Model is useful. A more technical description of the model is included as an Appendix.

Given an estimate of the total flow of vehicles per hour from origin zone to destination zone, the model seeks to allocate the flows to one or more routes through the road network in order that *the travel time on the used routes between each origin-destination pair are equal, and less than*

the travel times on unused routes. In other words, the model assumes that each driver seeks to find her/his shortest route through the network in terms of travel time.

The travel time of each link and route in the network depends on the flows between all zones in the region, and not just the zone of interest. Hence, a very large-scale optimization problem is solved for a road network and zone system. It is a property of the solution to the problem that the flows on each link of the network are unique in the solution achieved. However, the route flows are not unique, since flows could be re-routed in many ways leaving the link flows unchanged. Therefore, one cannot draw conclusions about which particular zone-to-zone flows are affected by any bridge being closed.

The model also implicitly assumes that drivers know their best routes precisely, even though the flooded network may be different from the one they normally use. Since this assumption may be somewhat unrealistic in a flood condition, the results of the analysis may be considered to be a lower bound on the actual delays. Since some trips may not be made during a flood event, reducing the amount of travel overall, the use of this lower bound to approximate the overall effect of the flood seems reasonable. Moreover, for the purposes of scenario analyses, the results are fully consistent and therefore comparable.

A final assumption of the analysis is that all zone-to-zone flows do arrive at their destinations, although the travel times may be rather high. In other words, links do not become fully blocked by traffic. This phenomenon is a result of the simpler, steady state form of this model, as compared with a more precise, and much more computationally difficult, dynamic model.

Findings of the Analysis to Date

Links in the CATS' network determined to be affected by floods of various frequencies are shown in Table 1. Altogether 196 one-way links totaling 235.4 miles in length were identified based on maps furnished by the Chicago District. The flood frequencies range from the 5-year flood to the 500-year flood. The 2-year flood was not analyzed because only one minor bridge was affected.

In many cases the links affected consist of the pair that includes the Des Plaines River bridge subject to closure by flooding. In other cases, several or many links are closed at a given river mile location. For example at River mile 73.74, only two one-way links are closed by the 5-year flood, but 12 links are closed by the 500-year event.

The total origin-destination travel flows during the morning weekday peak period, in vehicles per hour, for 1996 are shown in Table 2. The total hourly flow is about 1,430,000 vehicles per hour. The flows between 1,790 zones were aggregated to 21 districts as follows:

1. four districts in the City of Chicago;
2. three districts in suburban Cook County;
3. six districts each consisting of one of the so-called collar counties around Cook County, including Lake County, Indiana;
4. four districts consisting of aggregations of outlying counties.

Then, each of the four districts traversed by the Des Plaines River was divided into two districts. These districts are from north to south: Lake County, IL; North Cook; West Chicago; and West Cook. These districts were formed so that the effect of bridge closings on areas traversed by the river could be directly identified. Map 1, following page 6 shows the locations of the districts.

Table 3-N shows the total travel time in hours for the normal or base no-flood condition. Tables 3-5 to 3-500 show the equivalent district-to-district travel times for the 5, 10, 25, 50, 100 and 500-year flood events. Inspection of these tables shows the effect of the various events on total travel times at various levels. The cell values show the time from the row district to the column district. Each row shows the travel times from the origin district to each of the destination districts. Similarly, each column shows the total travel times to that destination from each of the origin districts. The last column shows the total travel time from each origin district. Likewise, the last row shows the total travel time to each destination district. The total peak-hour travel time for the Chicago region is shown in the lower right corner.

By dividing the total travel time by the hourly flow, the mean travel time can be computed. Table 4-N shows the mean travel times for normal conditions. Then, Tables 4-5 to 4-500 show the mean travel times for the six flood conditions. Comparison of these tables reveals the effect of the various floods at the district-to-district level.

Table 5-N shows the district-to-district travel distances for normal conditions. Tables 5-5 to 5-500 show the travel distances for the six flood conditions. Since bridge closings result in rerouting of traffic flows, these mean travel distances are longer than those experienced during normal conditions. Finally, Tables 6-N, and 6-5 to 6-500, show the mean travel distances resulting from the normal and each of the flood conditions.

Figure 1 shows the increase in mean travel times from various flood events over the entire Chicago Region. Although the increase per vehicle is small when distributed over the region, the increases in the immediate subregion of the Des Plaines Watershed are much larger. Even so, an increase of over 10 % in total regional travel time is estimated for the 500-year flood. Figure 2 shows the mean travel time between two districts severely impacted by Des Plaines River floods, Lake County west of the River to North Cook County east of the River. About 3800 vehicles per hour make this journey in the morning peak period. The mean travel time in normal conditions is 36 minutes, increasing to 66 minutes in the 500-year flood event, an increase of 84 %. Similar increases may be observed for other origin district to destination district pairs. By inspecting Tables 6-5 through 6-500, the increases in travel time for each OD pair may be determined. Figures 3 and 4 show comparable results for mean travel distance.

Next Steps

The second part of the project concerns the question of ranking of possible improvements in the road system to reduce delays from flooding. The basic idea of our approach is the following. A road closed by flooding not only affects the traffic flows that normally use that road, but also affects other nearby roads. In other words, the effects of two roads being flooded are not independent of each other. To rank the importance of each road, these interdependencies must be considered.

Suppose we assume the objective of road improvements with respect to flooding is to reduce total traffic delays as much as possible. Therefore, we wish to minimize the total travel time, or possibly some combination of travel time and distance. The funds available to improve roads are unlikely to be enough to protect all roads from flooding for all events. In other words, there is a budget constraint.

Therefore, our objective is to minimize total delay, subject to the budget constraint. However, the total delay depends upon which roads are closed in a certain flood event. This delay is determined by solving the Traffic Assignment Problem, given the closed roads. This can be stated a little more formally as follows:

Minimize: *Total Traffic Delay = function (link flows, link times)*

Subject to: *Budget Constraint*

where the link flows and link times are determined by the solution of:

Traffic Assignment Problem for the available links

Formally, this problem is known as a Bilevel Programming Problem, which is relatively difficult to solve even for a moderate sized network. Therefore, we need to find a simplified method to solve the problem, known as a heuristic.

Presently, we are beginning to experiment with such heuristics. One idea we are evaluating is to remove from the network all of the links disrupted by a certain flood event, such as the 25-year event. Then pairs of one-way links at a given river mile that are closed by that flood are replaced in the network, one at a time, and the Traffic Assignment Problem solved. The result gives a measure of importance of that pair of links. Next, we will look for two sets of link pairs that have the greatest benefit, and so forth.

What we expect to find is that sets of links selected for improvement should be geographically separated from each other, since sets of links that are nearby are to some extent redundant. Our approach to the analysis seeks to provide for a way to quantify this effect.

Schedule

Comments on this progress report are requested in the next few weeks. The results of the above experiment should be available by May. We will then prepare a final report, and possibly suggest further studies.

Appendix

Traffic Assignment Problem

The Traffic Assignment Problem with fixed demand is defined as follows:

$$\min_{\mathbf{h}} z(\mathbf{h}) = \sum_a \int_0^{f_a} t_a(x)dx$$

$$\text{s.t.} \sum_{r \in R_{pq}} h_{pqr} = T_{pq}, \text{ for all } pq$$

$$h_{pqr} \geq 0, \quad r \in R_{pq}, \text{ for all } pq$$

where $f_a \equiv \sum_{pq} \sum_{r \in R_{pq}} h_r \delta^a_{pqr}$ for all a

$t_a(f_a)$ = travel time on link a at flow f_a

T_{pq} = flow of vehicles per day from origin zone p to destination zone q

h_{pqr} = flow of vehicles per day on route r, $r \in R_{pq}$, the set of routes from p to q

$\delta^a_{pqr} = 1$, if link a belongs to route r, $r \in R_{pq}$; 0, otherwise

The Gap at iteration k may be defined as:

$$\text{Gap}(k) = \sum_a t_a(f_a(k)) \cdot (y_a(k) - f_a(k)) \leq 0$$

where $y_a(k)$ is the vehicle flow on link a at iteration k given by an all-or-nothing assignment based on link travel times, $(t_a(f_a(k)))$.

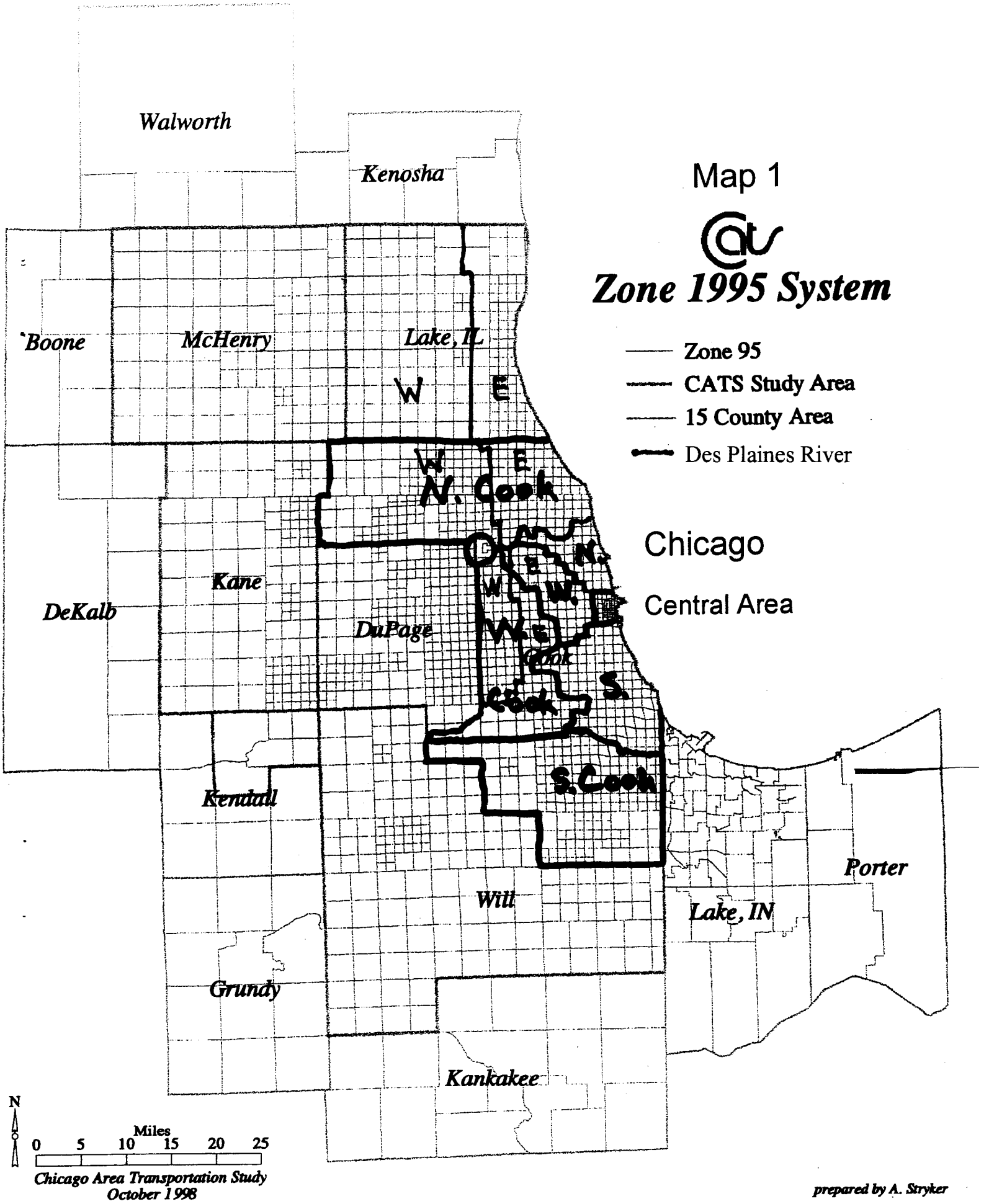
Using the Gap, a Lower Bound (LB) on the value of the Objective Function $z(\mathbf{h})$ is defined as:

$$\text{LB}(k) = z(\mathbf{h}(k)) + \text{Gap}(k) = \sum_a \int_0^{f_a(k)} t_a(x)dx + \sum_a t_a(f_a(k)) \cdot (y_a(k) - f_a(k))$$

The Best Lower Bound (BLB) is then defined as: BLB = $\max_k [LB(k)]$, and

Relative Gap (k) = $\dfrac{-\text{Gap}(k)}{|\text{BLB}|} \geq 0$, where $|\text{BLB}|$ is the absolute value of the Best Lower Bound.

In this study we have used the Emme/2 software system to solve the Traffic Assignment Problem to a Relative Gap of 1 %. Although a higher convergence may be necessary for ranking alternative road improvements, this level of precision seems adequate for the present objectives of the study.


Map 1
Zone 1995 System
Zone 95
CATS Study Area
15 County Area
Des Plaines River
Chicago
Central Area
Walworth
Kenosha
Boone
McHenry
Lake, IL
W
E
N. Cook
Kane
DeKalb
DuPage
Cook
S.
S. Cook
Kendall
Will
Porter
Lake, IN
Grundy
Kankakee
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Miles
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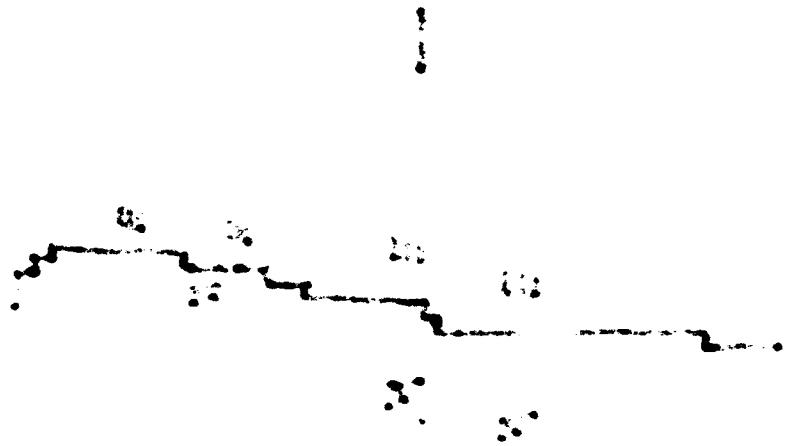
Chicago Area Transportation Study
October 1998
prepared by A. Stryker



LIST OF TABLES

1. Links on the Chicago Regional Road Network Closed by Flood Events
2. Estimated District to District Vehicle Flows during 1996 Weekday Morning Peak Period
3. Total Travel Time from District to District – Normal to 500 Year Scenarios
4. Mean Travel Times from District to District – Normal to 500 Year Scenarios
5. Total Travel Distance from District to District – Normal to 500 Year Scenarios
6. Mean Travel Distances from District to District – Normal to 500 Year Scenarios

LIST OF FIGURES

1. Mean Travel Time for the Chicago Region
2. Mean Travel Time from West Lake County to East North Cook County
3. Mean Travel Distance for the Chicago Region
4. Mean Travel Distance from West Lake County to East North Cook County

Table 1. Links on the Chicago Regional Road Network Closed by Flood Events

Number of Links in the Regional Road Network - 39,282 links

Total Link Length in the Regional Road Network - 34,690 miles

					Scenarios and Status of Links: 1 - closed; 0 - open.					
Flood Frequency					5 year	10 year	25 year	50 year	100 year	500 year
Total Number of Links Closed:					74	90	116	150	174	196
Length of Closed Links (miles):					82.34	104.94	136.31	178.39	210.13	235.40
river mile	from node	to node	lanes	length						
44.51	22609	9805	2	0.60	0	0	0	0	1	1
44.51	9805	22609	2	0.60	0	0	0	0	1	1
46.40	20579	3207	2	0.50	0	0	0	0	0	1
46.40	3207	20579	2	0.50	0	0	0	0	0	1
49.00	22530	22537	2	0.75	0	1	1	1	1	1
49.00	22537	22530	2	0.75	0	1	1	1	1	1
49.61	10898	22528	1	0.11	0	0	0	1	1	1
49.61	10903	3423	1	0.16	0	0	0	1	1	1
49.61	22528	10898	1	0.11	0	0	0	1	1	1
49.61	22528	3422	3	0.96	0	0	0	1	1	1
49.61	3422	10899	1	0.20	0	0	0	1	1	1
49.61	3423	22531	3	0.96	0	0	0	1	1	1
50.21	10829	22535	1	0.14	0	0	0	0	0	1
50.21	22532	22535	2	0.90	0	0	0	0	0	1
50.21	22535	10829	1	0.14	0	0	0	0	0	1
50.21	22535	22532	2	0.90	0	0	0	0	0	1
51.04	11185	20560	2	0.50	0	0	0	0	0	1
51.04	20560	11185	2	0.50	0	0	0	0	0	1
51.04	22471	22473	1	0.50	0	0	0	0	0	1
51.04	22473	22471	1	0.50	0	0	0	0	0	1
51.62	10897	10898	2	0.13	1	1	1	1	1	1
51.62	10897	22530	2	0.48	1	1	1	1	1	1
51.62	10898	10897	2	0.13	1	1	1	1	1	1
51.62	10898	22532	2	0.50	1	1	1	1	1	1
51.62	20542	22799	2	0.23	1	1	1	1	1	1
51.62	20548	22467	3	0.52	1	1	1	1	1	1
51.62	20548	3658	2	0.50	1	1	1	1	1	1
51.62	20549	22415	1	1.27	0	0	1	1	1	1
51.62	20549	5805	2	0.50	1	1	1	1	1	1
51.62	20560	22471	2	0.47	1	1	1	1	1	1
51.62	20560	22532	2	0.25	1	1	1	1	1	1
51.62	20572	20573	3	0.50	0	0	1	1	1	1
51.62	20572	22530	2	1.02	1	1	1	1	1	1
51.62	20572	3207	2	0.51	1	1	1	1	1	1
51.62	20573	20572	3	0.50	0	0	1	1	1	1
51.62	22415	20549	1	1.27	0	0	1	1	1	1
51.62	22467	20548	3	0.52	1	1	1	1	1	1
51.62	22467	22472	2	1.06	1	1	1	1	1	1
51.62	22471	20560	2	0.47	1	1	1	1	1	1
51.62	22471	22472	2	0.36	1	1	1	1	1	1
51.62	22472	22467	2	1.06	1	1	1	1	1	1
51.62	22472	22471	2	0.36	1	1	1	1	1	1
51.62	22472	22474	2	0.46	0	0	0	0	0	1
51.62	22473	22474	1	0.39	1	1	1	1	1	1
51.62	22474	22472	2	0.46	0	0	0	0	0	1
51.62	22474	22473	1	0.39	1	1	1	1	1	1

river mile	from node	to node	lanes	length	5 year	10 year	25 year	50 year	100 year	500 year
51.62	22474	5804	2	0.30	1	1	1	1	1	1
51.62	22530	10897	2	0.48	1	1	1	1	1	1
51.62	22530	20572	2	1.02	1	1	1	1	1	1
51.62	22532	10898	2	0.50	1	1	1	1	1	1
51.62	22532	20560	2	0.25	1	1	1	1	1	1
51.62	22799	20542	2	0.23	1	1	1	1	1	1
51.62	22799	3658	2	0.15	1	1	1	1	1	1
51.62	3207	20572	2	0.51	1	1	1	1	1	1
51.62	3658	20548	2	0.50	1	1	1	1	1	1
51.62	3658	22799	2	0.15	1	1	1	1	1	1
51.62	5804	22474	2	0.30	1	1	1	1	1	1
51.62	5804	5805	2	0.26	1	1	1	1	1	1
51.62	5805	20549	2	0.50	1	1	1	1	1	1
51.62	5805	5804	2	0.26	1	1	1	1	1	1
52.91	20549	22467	3	0.57	0	0	0	0	0	1
52.91	22467	20549	3	0.57	0	0	0	0	0	1
55.10	11270	20529	2	0.50	0	1	1	1	1	1
55.10	20529	11270	2	0.50	0	1	1	1	1	1
55.10	20542	22412	2	0.52	0	0	0	1	1	1
55.10	22412	20542	2	0.52	0	0	0	1	1	1
55.65	11270	20535	2	0.75	0	1	1	1	1	1
55.65	20523	20529	2	0.99	0	1	1	1	1	1
55.65	20529	20523	2	0.99	0	1	1	1	1	1
55.65	20535	11270	2	0.75	0	1	1	1	1	1
55.65	20535	22411	2	0.08	0	0	0	0	0	1
55.65	22411	20535	2	0.08	0	0	0	0	0	1
56.92	20529	22373	2	1.06	0	0	0	0	1	1
56.92	22373	20529	2	1.06	0	0	0	0	1	1
57.92	11201	20523	2	0.75	0	0	0	0	0	1
57.92	11201	20530	2	1.12	0	0	0	0	0	1
57.92	20523	11201	2	0.75	0	0	0	0	0	1
57.92	20530	11201	2	1.12	0	0	0	0	0	1
60.00	20517	20518	2	0.74	0	0	1	1	1	1
60.00	20518	20517	2	0.74	0	0	1	1	1	1
60.20	20517	22309	2	0.35	0	0	0	1	1	1
60.20	22309	20517	2	0.35	0	0	0	1	1	1
62.00	10549	22245	2	0.24	0	0	0	0	1	1
62.00	22243	22244	2	0.83	0	0	0	0	0	1
62.00	22244	22243	2	0.83	0	0	0	0	0	1
62.00	22245	10549	2	0.24	0	0	0	0	1	1
64.22	13056	22089	1	0.20	0	0	1	1	1	1
64.22	13056	22246	1	0.80	0	0	1	1	1	1
64.22	20497	22089	1	0.70	0	0	1	1	1	1
64.22	20498	22089	2	0.42	0	0	0	0	1	1
64.22	20498	8996	2	0.14	0	0	0	0	1	1
64.22	20504	22089	2	0.55	0	0	0	0	1	1
64.22	20504	22244	2	1.05	0	0	0	0	1	1
64.22	22089	13056	1	0.20	0	0	1	1	1	1
64.22	22089	20497	1	0.70	0	0	1	1	1	1
64.22	22089	20498	2	0.42	0	0	0	0	1	1
64.22	22089	20504	2	0.55	0	0	0	0	1	1
64.22	22244	20504	2	1.05	0	0	0	0	1	1
64.22	22246	13056	1	0.80	0	0	1	1	1	1

river mile	from node	to node	lanes	length	5 year	10 year	25 year	50 year	100 year	500 year
64.22	8996	20498	2	0.14	0	0	0	0	1	1
64.80	22088	8996	2	0.09	0	0	0	1	1	1
64.80	8996	22088	2	0.09	0	0	0	1	1	1
65.39	20492	22086	2	0.50	0	0	1	1	1	1
65.39	22086	20492	2	0.50	0	0	1	1	1	1
66.91	13055	22027	2	0.17	1	1	1	1	1	1
66.91	22027	13055	2	0.17	1	1	1	1	1	1
68.00	11442	13054	1	0.75	0	0	0	0	1	1
68.00	13054	11442	1	0.75	0	0	0	0	1	1
71.15	11411	11412	2	0.50	1	1	1	1	1	1
71.15	11411	11442	2	1.00	1	1	1	1	1	1
71.15	11412	11411	2	0.50	1	1	1	1	1	1
71.15	11412	21478	2	0.50	1	1	1	1	1	1
71.15	11414	21478	2	0.72	1	1	1	1	1	1
71.15	11442	11411	2	1.00	1	1	1	1	1	1
71.15	11442	22027	2	0.82	1	1	1	1	1	1
71.15	21478	11412	2	0.50	1	1	1	1	1	1
71.15	21478	11414	2	0.72	1	1	1	1	1	1
71.15	22027	11442	2	0.82	1	1	1	1	1	1
71.15	22027	22086	2	0.50	1	1	1	1	1	1
71.15	22086	22027	2	0.50	1	1	1	1	1	1
71.15	22086	8996	2	0.51	1	1	1	1	1	1
71.15	8996	22086	2	0.51	1	1	1	1	1	1
71.72	11377	20466	2	0.71	0	0	1	1	1	1
71.72	20466	11377	2	0.71	0	0	1	1	1	1
73.74	11334	20654	2	1.23	0	0	0	1	1	1
73.74	11377	11414	3	0.38	1	1	1	1	1	1
73.74	11377	20654	2	1.14	0	0	0	1	1	1
73.74	11414	11377	3	0.38	1	1	1	1	1	1
73.74	11414	11415	2	0.36	0	0	0	1	1	1
73.74	11415	11414	2	0.36	0	0	0	1	1	1
73.74	11415	11417	2	0.92	0	0	0	1	1	1
73.74	11417	11415	2	0.92	0	0	0	1	1	1
73.74	20654	11334	2	1.23	0	0	0	1	1	1
73.74	20654	11377	2	1.14	0	0	0	1	1	1
74.34	11334	20650	2	0.53	0	0	0	1	1	1
74.34	20650	11334	2	0.53	0	0	0	1	1	1
75.51	11335	5180	2	0.90	0	0	1	1	1	1
75.51	5180	11335	2	0.90	0	0	1	1	1	1
76.76	10116	21050	1	1.27	0	0	1	1	1	1
76.76	21050	10116	1	1.27	0	0	1	1	1	1
77.97	10116	11876	2	1.14	0	0	0	0	1	1
77.97	10116	11893	2	0.36	0	0	0	0	1	1
77.97	10117	11893	2	0.60	0	0	0	0	1	1
77.97	10117	21046	2	1.40	0	0	0	0	1	1
77.97	11876	10116	2	1.14	0	0	0	0	1	1
77.97	11893	10116	2	0.36	0	0	0	0	1	1
77.97	11893	10117	2	0.60	0	0	0	0	1	1
77.97	21046	10117	2	1.40	0	0	0	0	1	1
80.21	10122	21047	1	1.40	0	1	1	1	1	1
80.21	21047	10122	1	1.40	0	1	1	1	1	1
83.66	10317	21040	2	0.97	0	0	1	1	1	1
83.66	21040	10317	2	0.97	0	0	1	1	1	1

river mile	from node	to node	lanes	length	5 year	10 year	25 year	50 year	100 year	500 year
87.81	10411	10418	1	1.09	0	0	0	1	1	1
87.81	10418	10411	1	1.09	0	0	0	1	1	1
91.10	10452	21034	2	0.79	0	0	1	1	1	1
91.10	21034	10452	2	0.79	0	0	1	1	1	1
94.50	10638	11041	2	0.60	1	1	1	1	1	1
94.50	11041	10638	2	0.60	1	1	1	1	1	1
95.97	10636	9487	2	0.85	0	1	1	1	1	1
95.97	9487	10636	2	0.85	0	1	1	1	1	1
97.12	10659	4504	2	0.11	0	1	1	1	1	1
97.12	4504	10659	2	0.11	0	1	1	1	1	1
99.92	10663	10664	2	0.49	1	1	1	1	1	1
99.92	10663	10843	2	0.91	1	1	1	1	1	1
99.92	10664	10663	2	0.49	1	1	1	1	1	1
99.92	10830	10834	2	0.70	1	1	1	1	1	1
99.92	10830	11117	2	1.00	1	1	1	1	1	1
99.92	10834	10830	2	0.70	1	1	1	1	1	1
99.92	10834	14510	2	0.25	1	1	1	1	1	1
99.92	10843	10663	2	0.91	1	1	1	1	1	1
99.92	10843	10844	2	0.26	1	1	1	1	1	1
99.92	10844	10843	2	0.26	1	1	1	1	1	1
99.92	10844	10848	2	1.01	1	1	1	1	1	1
99.92	10848	10844	2	1.01	1	1	1	1	1	1
99.92	10848	14510	2	0.50	1	1	1	1	1	1
99.92	10963	11117	2	1.63	1	1	1	1	1	1
99.92	11117	10830	2	1.00	1	1	1	1	1	1
99.92	11117	10963	2	1.63	1	1	1	1	1	1
99.92	14510	10834	2	0.25	1	1	1	1	1	1
99.92	14510	10848	2	0.50	1	1	1	1	1	1
107.11	10957	10958	1	0.73	0	0	1	1	1	1
107.11	10958	10957	1	0.73	0	0	1	1	1	1
109.90	12017	12028	1	2.00	0	1	1	1	1	1
109.90	12028	12017	1	2.00	0	1	1	1	1	1
110.04	10973	10974	1	1.00	0	0	0	1	1	1
110.04	10974	10973	1	1.00	0	0	0	1	1	1
110.04	10974	10975	1	0.75	0	0	0	1	1	1
110.04	10975	10974	1	0.75	0	0	0	1	1	1
110.04	10975	12223	1	0.25	0	0	0	1	1	1
110.04	12016	12017	1	0.50	1	1	1	1	1	1
110.04	12017	12016	1	0.50	1	1	1	1	1	1
110.04	12017	12019	1	4.00	0	0	0	1	1	1
110.04	12019	12017	1	4.00	0	0	0	1	1	1
110.04	12019	12223	1	0.50	0	0	0	1	1	1
110.04	12223	10975	1	0.25	0	0	0	1	1	1
110.04	12223	12019	1	0.50	0	0	0	1	1	1

Table 2. Estimated District to District Vehicle Flows during 1996 Weekday Morning Peak Period (vehicles per hour)

Destination District: → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South (7) Cook	DuPage (8)
Chicago Central Area (1)	24,602	4,328	4,047	405	3,826	539	245	805	441	296	387
North Chicago (2)	26,593	35,635	10,890	1,124	2,441	15,261	1,742	1,241	1,477	157	658
West Chicago -east (3)	19,715	11,491	31,353	2,172	4,896	5,601	2,104	7,812	7,579	263	2,518
West Chicago -west (31)	441	347	473	1,278	171	634	1,035	278	615	173	763
South Chicago (4)	26,627	3,028	9,179	181	60,391	481	253	13,633	2,468	9,247	1,824
North Cook -east (5)	2,855	8,873	3,616	2,163	462	36,170	11,329	1,102	2,173	97	1,674
North Cook -west (51)	2,215	1,332	1,719	3,799	291	12,374	63,756	1,139	4,062	99	18,081
West Cook -east (6)	5,006	1,145	9,116	858	11,782	982	884	20,189	10,400	5,670	6,476
West Cook -west (61)	2,408	744	4,385	2,074	1,599	1,252	2,321	5,761	15,127	442	11,956
South Cook (7)	3,663	266	848	183	12,508	103	107	10,234	2,095	48,985	3,686
DuPage (8)	2,824	659	2,493	2,211	1,569	1,565	16,021	4,662	15,026	1,013	106,397
Lake, Illinois -east (9)	176	472	235	368	58	9,042	3,541	120	280	20	239
Lake, Illinois -west (91)	130	152	143	324	47	3,826	10,961	97	268	18	941
Kane (10)	60	66	126	261	71	262	8,966	165	593	53	15,919
McHenry (11)	16	23	31	94	15	308	5,357	21	42	7	491
Will (12)	237	44	204	120	1,157	46	176	2,466	1,594	10,530	14,338
Lake, IN (13)	101	18	29	38	86	14	36	73	72	279	2,043
Kendall, Grundy, Kan. (14)	2,374	157	339	112	6,173	53	40	1,241	203	13,045	277
Kenosha, WI (15)	376	180	180	73	172	456	588	111	138	88	340
Boone & DeKalb (16)	399	179	211	69	275	195	391	176	180	211	681
Porter & Newton, IN (17)	738	221	259	58	561	175	197	219	143	532	317
Total Inflow	121,556	69,360	79,874	17,965	108,549	89,339	130,049	71,543	64,976	91,224	190,006

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Total Outflow	Origin District
54	38	39	12	50	85	193	357	395	707	41,851	Chicago Central Area (1)
324	104	54	24	41	14	94	173	178	219	98,442	North Chicago (2)
157	98	86	25	82	27	113	172	209	255	96,728	West Chicago -east (3)
164	154	147	79	111	38	117	68	68	58	7,211	West Chicago -west (31)
56	45	72	13	444	75	4,193	171	274	550	133,204	South Chicago (4)
3,245	1,247	135	84	40	13	53	428	194	175	76,127	North Cook -east (5)
2,182	4,969	5,063	981	115	31	42	556	380	197	123,382	North Cook -west (51)
60	47	86	16	708	52	395	108	175	215	74,370	West Cook -east (6)
101	86	156	25	263	34	63	131	178	142	49,246	West Cook -west (61)
19	17	47	7	6,352	230	11,518	87	209	525	101,687	South Cook (7)
196	424	9,016	183	4,073	732	101	321	668	316	170,468	DuPage (8)
25,348	8,939	56	558	10	2	12	1,639	84	60	51,258	Lake, Illinois -east (9)
11,244	21,050	633	4,237	13	4	10	1,120	107	59	55,384	Lake, Illinois -west (91)
79	653	31,881	2,447	1,001	1,646	14	142	734	73	65,213	Kane (10)
1,253	6,278	5,646	19,901	11	5	4	982	468	34	40,986	McHenry (11)
8	14	1,877	10	29,055	3,295	1,632	97	171	112	67,182	Will (12)
2	4	3,736	5	3,769	21,997	139	67	402	57	32,966	Lake, IN (13)
12	9	15	4	1,100	129	69,253	66	136	3,261	98,000	Kendall, Grundy, Kan. (14)
1,596	1,074	149	903	84	59	67	16,067	246	419	23,368	Kenosha, WI (15)
85	107	734	496	170	396	137	258	5,756	527	11,635	Boone & DeKalb (16)
60	60	74	34	113	57	3,170	450	524	4,818	12,780	Porter & Newton, IN (17)
46,245	45,420	59,701	30,042	47,604	28,920	91,320	23,458	11,557	12,780	1,431,490	

Table 3-N. Total Travel Time from District to District - Normal Scenario (vehicle-hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1,603	783	749	153	835	206	137	263	166	154	207
North Chicago (2)	9,350	6,165	3,368	458	1,152	4,269	825	562	672	123	416
West Chicago -east (3)	5,656	3,003	5,453	708	1,498	1,925	888	1,970	2,315	177	1,162
West Chicago -west (31)	207	123	131	83	108	211	297	104	149	143	322
South Chicago (4)	10,444	1,439	3,399	128	12,543	327	213	4,120	1,156	3,020	1,124
North Cook -east (5)	1,475	2,416	1,334	839	304	6,935	3,566	469	919	89	899
North Cook -west (51)	1,623	713	890	1,536	247	4,340	15,090	574	1,878	97	7,146
West Cook -east (6)	2,236	549	2,696	340	3,734	467	433	3,898	3,153	1,813	2,854
West Cook -west (61)	1,165	353	1,434	610	657	551	904	1,481	2,659	225	3,320
South Cook (7)	2,797	236	675	178	5,706	108	112	4,308	1,368	11,161	2,404
DuPage (8)	2,006	460	1,417	1,147	934	986	6,508	2,150	5,581	567	27,990
Lake, Illinois -east (9)	130	279	160	258	58	4,484	2,192	94	197	25	198
Lake, Illinois -west (91)	128	129	125	259	57	2,271	5,725	85	215	25	729
Kane (10)	65	67	119	220	80	226	4,432	147	473	60	8,063
McHenry (11)	22	29	37	99	23	289	3,722	26	45	11	446
Will (12)	213	46	166	122	784	51	162	1,469	991	4,192	7,371
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,451
Kendall, Grundy, Kan. (14)	2,284	168	342	156	4,355	70	57	1,092	217	7,355	313
Kenosha, WI (15)	600	262	273	99	298	574	785	182	201	170	531
Boone & DeKalb (16)	557	259	289	90	364	289	487	223	226	242	761
Porter & Newton, IN (17)	1,373	363	430	116	927	309	352	340	234	733	516
Total Inflow Time	44,072	17,872	23,529	7,651	34,762	28,909	46,931	23,634	22,891	30,610	68,222

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
34	30	34	13	35	95	139	458	469	745	7,309	Chicago Central Area (1)
172	77	51	26	38	19	93	221	245	282	28,585	North Chicago (2)
96	76	73	26	64	33	102	227	262	305	26,018	West Chicago -east (3)
94	101	106	69	98	48	136	78	82	81	2,772	West Chicago -west (31)
54	50	76	17	269	78	1,885	268	347	523	41,481	South Chicago (4)
979	511	108	71	41	18	60	454	270	252	22,010	North Cook -east (5)
953	1,799	1,923	537	105	37	56	645	448	307	40,943	North Cook -west (51)
49	42	75	19	364	55	277	161	213	234	23,662	West Cook -east (6)
65	61	108	24	134	37	63	167	206	177	14,399	West Cook -west (61)
24	24	53	11	2,409	187	5,118	161	245	423	37,707	South Cook (7)
160	306	3,653	158	1,648	406	113	456	702	427	57,777	DuPage (8)
6,596	3,980	60	435	14	3	18	1,047	140	112	20,479	Lake, Illinois -east (9)
4,822	6,288	442	2,030	16	7	16	787	161	117	24,437	Lake, Illinois -west (91)
78	417	8,225	1,100	599	729	22	200	518	130	25,970	Kane (10)
967	3,478	3,019	6,069	17	7	8	587	331	74	19,307	McHenry (11)
11	19	1,134	15	8,126	1,893	999	194	173	125	28,255	Will (12)
4	7	2,036	7	2,352	4,605	135	157	219	75	11,855	Lake, IN (13)
19	17	25	8	803	126	42,819	148	220	1,936	62,528	Kendall, Grundy, Kan. (14)
1,092	818	220	558	173	143	149	343	443	974	8,887	Kenosha, WI (15)
140	161	531	346	169	218	208	460	688	936	7,644	Boone & DeKalb (16)
118	123	141	76	154	83	4,564	1,043	997	593	13,585	Porter & Newton, IN (17)
16,527	18,384	22,092	11,616	17,629	8,829	56,980	8,263	7,379	8,827	525,610	

Table 3-5. Total Travel Time from District to District - 5 Year Scenario (vehicle-hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1,599	783	750	154	835	206	138	263	167	154	207
North Chicago (2)	9,272	6,159	3,369	462	1,151	4,268	836	563	677	123	417
West Chicago -east (3)	5,647	3,002	5,462	713	1,499	1,927	897	1,982	2,344	177	1,166
West Chicago -west (31)	205	123	132	83	108	213	300	104	150	143	322
South Chicago (4)	10,432	1,441	3,400	129	12,544	327	214	4,121	1,157	3,019	1,124
North Cook -east (5)	1,470	2,423	1,344	859	305	6,968	3,763	475	938	90	915
North Cook -west (51)	1,750	845	1,011	1,836	257	6,528	17,352	666	2,124	99	7,400
West Cook -east (6)	2,238	550	2,709	343	3,733	471	437	3,912	3,167	1,813	2,856
West Cook -west (61)	1,164	355	1,446	615	657	557	910	1,487	2,673	225	3,323
South Cook (7)	2,791	236	674	179	5,708	108	113	4,306	1,367	11,160	2,402
DuPage (8)	2,007	461	1,419	1,151	934	998	6,508	2,151	5,590	567	27,993
Lake, Illinois -east (9)	130	281	161	260	58	4,501	2,235	94	198	25	199
Lake, Illinois -west (91)	129	131	127	264	58	2,329	5,780	86	219	25	735
Kane (10)	65	67	119	221	80	229	4,434	147	474	60	8,065
McHenry (11)	22	30	37	100	23	292	3,722	26	45	11	447
Will (12)	213	46	166	122	785	51	162	1,468	991	4,192	7,366
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,452
Kendall, Grundy, Kan. (14)	2,289	168	343	157	4,375	70	57	1,093	217	7,397	313
Kenosha, WI (15)	601	263	274	99	298	578	792	183	202	171	533
Boone & DeKalb (16)	557	260	289	90	364	290	487	223	226	242	761
Porter & Newton, IN (17)	1,369	364	429	116	921	309	353	338	234	727	514
Total Inflow Time	44,090	18,015	23,702	8,004	34,791	31,243	49,537	23,770	23,237	30,646	68,511

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
35	30	34	13	35	95	138	459	470	746	7,310	Chicago Central Area (1)
172	78	51	26	38	19	93	222	245	282	28,524	North Chicago (2)
96	76	73	26	64	33	102	228	262	305	26,081	West Chicago -east (3)
94	102	106	69	98	48	136	78	82	81	2,778	West Chicago -west (31)
54	50	76	18	269	78	1,881	269	347	523	41,474	South Chicago (4)
980	520	109	72	41	19	60	455	271	252	22,330	North Cook -east (5)
1,247	2,023	1,939	544	107	38	56	662	453	313	47,250	North Cook -west (51)
49	43	75	19	364	55	277	161	213	234	23,721	West Cook -east (6)
65	61	108	24	134	37	63	168	206	177	14,454	West Cook -west (61)
24	24	53	11	2,409	187	5,104	162	245	423	37,685	South Cook (7)
161	306	3,653	158	1,648	406	113	457	702	427	57,812	DuPage (8)
6,628	4,054	60	440	14	3	18	1,055	141	112	20,667	Lake, Illinois -east (9)
5,056	6,315	442	2,032	16	7	16	793	161	118	24,841	Lake, Illinois -west (91)
79	417	8,224	1,101	599	729	22	200	518	130	25,980	Kane (10)
995	3,480	3,020	6,068	17	7	8	587	332	75	19,344	McHenry (11)
11	19	1,133	15	8,126	1,893	998	194	173	125	28,251	Will (12)
4	7	2,037	7	2,353	4,607	135	158	219	75	11,859	Lake, IN (13)
19	17	25	8	804	126	43,800	148	220	1,933	63,580	Kendall, Grundy, Kan. (14)
1,110	825	220	559	174	144	149	343	444	975	8,936	Kenosha, WI (15)
141	161	531	346	169	218	208	461	688	936	7,649	Boone & DeKalb (16)
118	123	141	76	154	83	4,501	1,044	997	586	13,497	Porter & Newton, IN (17)
17,138	18,732	22,110	11,631	17,635	8,833	57,879	8,304	7,388	8,825	534,020	

Table 3-10. Total Travel Time from District to District - 10 Year Scenario (vehicle-hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1,601	783	750	154	835	206	138	263	167	154	208
North Chicago (2)	9,339	6,162	3,375	463	1,154	4,271	837	564	681	124	418
West Chicago -east (3)	5,653	3,011	5,473	723	1,500	1,936	903	1,985	2,351	177	1,172
West Chicago -west (31)	205	123	132	83	109	213	300	107	153	143	322
South Chicago (4)	10,453	1,440	3,400	129	12,543	327	215	4,121	1,157	3,019	1,125
North Cook -east (5)	1,475	2,422	1,344	861	306	6,971	3,770	476	943	90	915
North Cook -west (51)	1,757	847	1,014	1,843	258	6,560	17,368	669	2,138	99	7,408
West Cook -east (6)	2,238	551	2,710	353	3,734	473	441	3,911	3,174	1,814	2,860
West Cook -west (61)	1,166	358	1,451	628	657	562	919	1,492	2,682	225	3,326
South Cook (7)	2,797	236	674	179	5,705	108	113	4,305	1,369	11,161	2,403
DuPage (8)	2,010	462	1,422	1,156	934	1,000	6,516	2,154	5,595	567	28,008
Lake, Illinois -east (9)	131	282	162	263	59	4,607	2,306	95	201	25	201
Lake, Illinois -west (91)	131	133	129	269	59	2,381	5,828	88	222	25	739
Kane (10)	65	67	119	221	80	229	4,439	147	475	60	8,068
McHenry (11)	22	30	38	100	23	295	3,735	26	46	11	447
Will (12)	213	46	166	122	784	51	162	1,468	991	4,192	7,369
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,452
Kendall, Grundy, Kan. (14)	2,292	168	343	157	4,369	70	57	1,092	217	7,372	313
Kenosha, WI (15)	612	268	279	101	303	591	804	186	206	173	541
Boone & DeKalb (16)	558	260	290	91	364	290	487	223	226	242	761
Porter & Newton, IN (17)	1,353	362	427	115	907	308	352	336	233	716	514
Total Inflow Time	44,213	18,039	23,740	8,063	34,783	31,474	49,737	23,788	23,303	30,615	68,569

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
35	31	34	13	35	95	139	460	470	745	7,316	Chicago Central Area (1)
172	79	51	26	39	19	93	222	245	282	28,616	North Chicago (2)
96	77	73	26	64	33	102	228	263	305	26,153	West Chicago -east (3)
95	103	106	69	98	48	136	78	82	81	2,787	West Chicago -west (31)
54	50	76	18	269	78	1,886	269	347	523	41,499	South Chicago (4)
984	527	109	72	41	19	60	457	271	252	22,367	North Cook -east (5)
1,276	2,022	1,939	544	107	38	57	661	453	313	47,371	North Cook -west (51)
50	43	75	19	364	55	277	161	213	234	23,750	West Cook -east (6)
65	62	108	24	134	37	63	168	206	177	14,511	West Cook -west (61)
24	24	53	11	2,408	187	5,118	162	245	423	37,704	South Cook (7)
162	307	3,653	158	1,648	406	113	458	702	427	57,858	DuPage (8)
6,861	4,797	62	483	14	3	18	1,069	144	113	21,898	Lake, Illinois -east (9)
6,040	6,361	443	2,028	17	7	17	793	161	119	25,989	Lake, Illinois -west (91)
81	417	8,224	1,100	599	729	22	200	518	130	25,991	Kane (10)
1,094	3,482	3,021	6,069	17	7	8	587	332	75	19,464	McHenry (11)
11	19	1,133	15	8,126	1,893	999	195	173	125	28,255	Will (12)
4	7	2,035	7	2,354	4,606	135	158	219	75	11,856	Lake, IN (13)
19	17	25	8	804	126	43,378	148	220	1,937	63,135	Kendall, Grundy, Kan. (14)
1,139	835	221	559	177	146	151	344	448	988	9,071	Kenosha, WI (15)
143	161	531	346	169	218	208	461	688	937	7,654	Boone & DeKalb (16)
118	124	141	76	153	83	4,377	1,046	997	567	13,304	Porter & Newton, IN (17)
18,523	19,543	22,114	11,670	17,636	8,833	57,357	8,325	7,396	8,828	536,550	

Table 3-25. Total Travel Time from District to District - 25 Year Scenario (vehicle-hours)

Destination District → / Origin District ↓	Chicago (1) Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	1,603	784	751	157	835	207	143	265	171	154	208
North Chicago (2)	9,430	6,186	3,388	476	1,157	4,281	887	568	693	124	424
West Chicago -east (3)	5,677	3,024	5,490	744	1,502	1,952	943	2,001	2,429	177	1,184
West Chicago -west (31)	208	126	134	85	110	220	309	109	154	144	323
South Chicago (4)	10,488	1,443	3,406	130	12,549	328	219	4,124	1,171	3,019	1,126
North Cook -east (5)	1,469	2,417	1,346	898	304	7,042	4,463	481	960	90	941
North Cook -west (51)	1,852	922	1,080	1,956	268	8,092	17,609	710	2,245	101	7,500
West Cook -east (6)	2,259	554	2,740	364	3,738	480	458	3,939	3,281	1,814	2,880
West Cook -west (61)	1,182	363	1,480	642	660	575	938	1,523	2,778	226	3,349
South Cook (7)	2,803	237	675	179	5,710	109	114	4,306	1,373	11,160	2,406
DuPage (8)	2,024	472	1,438	1,175	937	1,039	6,539	2,170	5,688	568	28,079
Lake, Illinois -east (9)	128	279	161	267	58	4,659	2,727	96	204	25	204
Lake, Illinois -west (91)	148	159	145	299	64	3,119	6,043	96	243	27	760
Kane (10)	67	69	122	228	81	244	4,456	150	482	60	8,086
McHenry (11)	23	31	39	104	23	340	3,747	27	47	12	451
Will (12)	214	46	167	122	785	51	162	1,469	996	4,192	7,375
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,452
Kendall, Grundy, Kan. (14)	2,297	168	343	157	4,362	70	58	1,091	217	7,356	313
Kenosha, WI (15)	621	273	284	104	307	607	837	190	212	176	552
Boone & DeKalb (16)	564	263	292	92	367	296	489	225	229	243	763
Porter & Newton, IN (17)	1,395	367	434	118	942	311	355	343	236	747	517
Total Inflow Time	44,591	18,209	23,958	8,350	34,856	34,045	51,542	23,960	23,884	30,638	68,892

Lake (9) Illinois -e	Lake (91) Illinois -w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter, (17) Newton, IN	Outflow Time	Origin District
35	34	34	13	35	95	138	462	471	746	7,339	Chicago Central Area (1)
171	90	52	26	39	19	93	223	246	283	28,856	North Chicago (2)
97	82	74	27	64	33	102	229	264	305	26,401	West Chicago -east (3)
95	107	106	70	98	48	136	79	83	81	2,824	West Chicago -west (31)
54	53	76	18	269	78	1,885	270	348	523	41,578	South Chicago (4)
1,013	670	113	78	41	19	60	461	273	252	23,389	North Cook -east (5)
1,748	2,018	1,940	544	108	38	58	678	455	317	50,239	North Cook -west (51)
50	44	75	19	364	55	277	163	213	235	24,003	West Cook -east (6)
66	63	109	24	134	37	63	170	207	178	14,766	West Cook -west (61)
24	24	53	11	2,409	187	5,119	162	245	423	37,728	South Cook (7)
169	304	3,653	157	1,649	406	113	461	703	428	58,173	DuPage (8)
6,948	5,935	65	538	14	3	18	1,076	147	113	23,667	Lake, Illinois -east (9)
7,995	6,448	445	2,033	17	7	17	806	163	123	29,159	Lake, Illinois -west (91)
89	414	8,225	1,099	599	730	23	201	519	131	26,073	Kane (10)
1,328	3,458	3,028	6,067	17	7	8	588	332	75	19,751	McHenry (11)
11	19	1,134	15	8,127	1,893	999	196	173	125	28,272	Will (12)
4	7	2,036	7	2,353	4,606	135	159	219	75	11,860	Lake, IN (13)
19	17	25	9	803	126	42,978	149	220	1,956	62,734	Kendall, Grundy, Kan. (14)
1,168	845	223	559	180	148	152	344	452	997	9,232	Kenosha, WI (15)
145	161	531	346	169	218	209	463	688	941	7,692	Boone & DeKalb (16)
118	125	141	76	155	83	4,719	1,049	1,000	616	13,847	Porter & Newton, IN (17)
21,348	20,916	22,139	11,737	17,644	8,837	57,306	8,388	7,421	8,921	547,582	

Table 3-50. Total Travel Time from District to District - 50 Year Scenario (vehicle-hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1,601	785	750	167	834	209	153	271	209	154	253
North Chicago (2)	9,444	6,206	3,403	500	1,161	4,296	937	579	746	124	444
West Chicago -east (3)	5,681	3,049	5,546	783	1,503	1,989	1,004	2,050	2,797	177	1,346
West Chicago -west (31)	224	134	141	86	115	232	318	112	156	145	324
South Chicago (4)	10,478	1,445	3,403	135	12,559	331	228	4,135	1,241	3,018	1,155
North Cook -east (5)	1,511	2,437	1,364	945	310	7,188	5,257	495	1,016	91	976
North Cook -west (51)	2,076	1,021	1,197	2,122	288	9,747	18,129	766	2,343	102	7,601
West Cook -east (6)	2,310	568	2,817	387	3,765	498	486	3,976	3,566	1,816	3,009
West Cook -west (61)	1,394	389	1,649	656	698	599	950	1,630	2,850	227	3,362
South Cook (7)	2,800	237	677	181	5,716	110	115	4,313	1,383	11,162	2,414
DuPage (8)	2,399	500	1,597	1,207	970	1,085	6,572	2,250	5,730	569	28,090
Lake, Illinois -east (9)	131	281	164	277	60	4,727	3,254	100	211	26	210
Lake, Illinois -west (91)	166	179	163	331	69	3,914	6,268	105	261	27	787
Kane (10)	73	74	132	238	83	264	4,481	155	485	60	8,092
McHenry (11)	24	33	42	110	24	377	3,765	28	48	12	454
Will (12)	217	47	169	124	790	52	163	1,475	1,005	4,193	7,388
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,453
Kendall, Grundy, Kan. (14)	2,292	168	343	158	4,362	71	58	1,092	219	7,358	314
Kenosha, WI (15)	642	281	294	109	316	628	868	197	219	180	568
Boone & DeKalb (16)	587	270	303	94	374	305	491	227	230	243	764
Porter & Newton, IN (17)	1,398	367	435	119	946	312	357	345	238	751	518
Total Inflow Time	45,588	18,498	24,629	8,780	35,039	36,954	53,898	24,379	25,032	30,661	69,523

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
35	35	38	13	35	95	138	466	485	746	7,472	Chicago Central Area (1)
172	95	54	27	39	19	93	225	249	283	29,095	North Chicago (2)
98	88	80	28	65	34	102	232	271	306	27,227	West Chicago -east (3)
98	112	108	71	98	48	139	81	83	81	2,907	West Chicago -west (31)
55	55	77	18	270	78	1,884	272	351	524	41,712	South Chicago (4)
1,042	885	117	85	42	19	61	465	279	254	24,839	North Cook -east (5)
2,242	2,051	1,945	545	108	38	59	700	457	320	53,857	North Cook -west (51)
52	46	78	20	365	55	278	167	216	236	24,710	West Cook -east (6)
68	64	109	24	134	37	64	173	207	178	15,462	West Cook -west (61)
24	24	53	11	2,409	187	5,123	164	245	424	37,772	South Cook (7)
175	306	3,652	157	1,649	406	114	469	703	428	59,028	DuPage (8)
7,026	6,801	68	570	14	3	19	1,087	150	114	25,291	Lake, Illinois -east (9)
9,673	6,606	449	2,043	17	7	18	821	165	126	32,196	Lake, Illinois -west (91)
97	413	8,227	1,100	600	730	23	202	519	131	26,175	Kane (10)
1,477	3,456	3,036	6,069	17	7	8	589	332	76	19,985	McHenry (11)
11	19	1,134	15	8,126	1,893	1,000	199	173	126	28,320	Will (12)
4	7	2,037	7	2,353	4,606	135	161	219	75	11,865	Lake, IN (13)
19	17	25	9	803	126	43,004	149	220	1,958	62,767	Kendall, Grundy, Kan. (14)
1,194	862	225	560	185	152	155	347	460	1,017	9,457	Kenosha, WI (15)
150	161	531	346	169	218	210	467	688	943	7,772	Boone & DeKalb (16)
119	126	142	77	155	83	4,758	1,053	1,003	623	13,924	Porter & Newton, IN (17)
23,831	22,229	22,181	11,793	17,655	8,843	57,385	8,490	7,476	8,968	561,832	

Table 3-100. Total Travel Time from District to District - 100 Year Scenario (vehicle-hours)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	1,597	786	750	172	834	210	158	271	213	154	256
North Chicago (2)	9,277	6,181	3,390	518	1,153	4,294	981	579	768	124	453
West Chicago -east (3)	5,663	3,059	5,539	837	1,503	2,012	1,058	2,054	2,911	177	1,393
West Chicago -west (31)	226	137	144	87	116	241	322	113	157	145	325
South Chicago (4)	10,476	1,446	3,402	137	12,554	332	232	4,137	1,246	3,018	1,157
North Cook -east (5)	1,505	2,437	1,371	993	309	7,198	5,781	499	1,054	91	1,008
North Cook -west (51)	2,123	1,057	1,234	2,156	292	10,357	18,162	784	2,376	103	7,631
West Cook -east (6)	2,310	570	2,813	403	3,769	503	500	3,981	3,615	1,816	3,029
West Cook -west (61)	1,405	397	1,683	661	702	623	955	1,654	2,866	227	3,367
South Cook (7)	2,800	237	677	181	5,717	111	115	4,313	1,384	11,161	2,412
DuPage (8)	2,414	509	1,618	1,215	974	1,121	6,578	2,266	5,757	569	28,100
Lake, Illinois -east (9)	131	284	167	285	60	4,766	3,457	102	215	26	214
Lake, Illinois -west (91)	172	187	170	345	71	4,120	6,575	110	272	28	811
Kane (10)	74	75	134	241	83	273	4,487	156	487	60	8,093
McHenry (11)	25	34	43	112	25	387	3,789	29	49	12	456
Will (12)	217	47	170	124	791	53	163	1,475	1,006	4,193	7,388
Lake, IN (13)	140	26	41	53	98	22	45	79	76	227	1,452
Kendall, Grundy, Kan. (14)	2,293	168	343	159	4,372	71	59	1,094	219	7,381	314
Kenosha, WI (15)	647	284	297	111	318	634	889	200	223	182	575
Boone & DeKalb (16)	590	273	305	95	375	309	492	228	231	243	764
Porter & Newton, IN (17)	1,372	364	431	117	923	311	357	340	237	729	516
Total Inflow Time	45,458	18,558	24,722	9,002	35,038	37,948	55,154	24,462	25,362	30,664	69,714

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
35	36	38	13	35	95	138	468	487	745	7,490	Chicago Central Area (1)
172	99	54	28	39	19	93	225	251	282	28,979	North Chicago (2)
99	91	81	28	65	34	102	234	273	306	27,518	West Chicago -east (3)
99	115	108	72	98	48	139	82	84	81	2,940	West Chicago -west (31)
55	56	78	18	270	78	1,883	273	352	523	41,721	South Chicago (4)
1,046	954	121	87	42	19	61	466	282	253	25,575	North Cook -east (5)
2,352	2,124	1,946	545	109	38	60	713	458	321	54,941	North Cook -west (51)
53	47	78	20	365	55	278	168	216	236	24,823	West Cook -east (6)
69	65	109	24	135	37	64	174	207	178	15,602	West Cook -west (61)
25	24	53	11	2,409	187	5,121	165	245	424	37,772	South Cook (7)
176	310	3,652	158	1,649	406	114	472	703	428	59,189	DuPage (8)
7,042	6,804	70	572	14	3	19	1,088	151	115	25,582	Lake, Illinois -east (9)
9,850	6,654	452	2,046	18	7	19	826	167	128	33,026	Lake, Illinois -west (91)
99	416	8,226	1,100	599	730	23	202	519	131	26,208	Kane (10)
1,490	3,462	3,036	6,070	17	7	8	589	332	76	20,047	McHenry (11)
11	19	1,134	15	8,126	1,893	999	199	173	126	28,322	Will (12)
4	7	2,036	7	2,354	4,607	135	161	219	75	11,865	Lake, IN (13)
19	18	25	9	804	126	43,559	150	221	1,953	63,357	Kendall, Grundy, Kan. (14)
1,202	860	225	560	187	153	156	346	463	1,022	9,534	Kenosha, WI (15)
152	162	531	346	169	218	210	468	688	944	7,793	Boone & DeKalb (16)
119	126	142	77	154	83	4,528	1,054	1,003	588	13,570	Porter & Newton, IN (17)
24,168	22,450	22,194	11,804	17,656	8,844	57,709	8,521	7,493	8,935	565,856	

Table 3-500. Total Travel Time from District to District - 500 Year Scenario (vehicle-hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1,598	787	750	214	835	212	176	271	267	154	276
North Chicago (2)	9,494	6,206	3,408	668	1,165	4,324	1,124	583	991	125	519
West Chicago -east (3)	5,697	3,133	5,558	1,288	1,513	2,097	1,326	2,062	4,850	179	1,823
West Chicago -west (31)	246	153	176	95	123	263	324	129	168	147	330
South Chicago (4)	10,530	1,453	3,420	154	12,578	335	245	4,146	1,317	3,020	1,174
North Cook -east (5)	1,515	2,436	1,364	1,223	311	7,239	6,388	497	1,261	92	1,108
North Cook -west (51)	2,240	1,124	1,347	2,286	303	10,738	18,226	855	2,415	103	7,650
West Cook -east (6)	2,316	576	2,825	581	3,789	524	618	4,026	4,847	1,818	3,399
West Cook -west (61)	1,574	463	2,263	720	732	690	986	2,046	3,037	227	3,415
South Cook (7)	2,811	238	682	187	5,727	112	117	4,323	1,399	11,163	2,425
DuPage (8)	2,564	550	1,844	1,266	1,000	1,179	6,599	2,443	5,794	570	28,130
Lake, Illinois -east (9)	132	283	168	306	60	4,781	3,602	105	234	26	225
Lake, Illinois -west (91)	177	192	178	357	72	4,186	6,611	115	275	28	813
Kane (10)	76	78	143	248	84	280	4,490	164	490	60	8,097
McHenry (11)	25	35	45	114	25	393	3,792	30	49	12	457
Will (12)	221	48	174	128	796	54	164	1,483	1,018	4,194	7,405
Lake, IN (13)	141	26	41	54	99	23	45	79	77	227	1,453
Kendall, Grundy, Kan. (14)	2,294	169	343	164	4,365	71	60	1,095	222	7,370	316
Kenosha, WI (15)	648	284	299	114	319	635	898	204	229	183	585
Boone & DeKalb (16)	602	279	313	96	379	315	493	231	233	243	765
Porter & Newton, IN (17)	1,403	368	436	122	948	313	362	346	241	751	521
Total Inflow Time	46,304	18,881	25,778	10,387	35,223	38,763	56,649	25,231	29,413	30,692	70,885

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Time	Origin District
35	38	39	14	35	95	138	469	496	746	7,645	Chicago Central Area (1)
173	104	59	29	39	19	93	226	258	284	29,892	North Chicago (2)
102	100	91	31	66	34	102	237	283	307	30,879	West Chicago -east (3)
101	116	109	72	99	49	141	82	84	82	3,089	West Chicago -west (31)
55	57	79	19	270	78	1,884	274	356	524	41,970	South Chicago (4)
1,049	995	127	90	43	19	61	466	289	254	26,826	North Cook -east (5)
2,401	2,125	1,946	545	109	39	60	716	459	322	56,006	North Cook -west (51)
54	52	84	21	367	56	278	172	222	236	26,860	West Cook -east (6)
70	65	109	25	135	37	65	176	208	179	17,221	West Cook -west (61)
25	25	54	11	2,409	187	5,125	166	246	424	37,854	South Cook (7)
179	310	3,654	158	1,650	406	114	474	703	429	60,018	DuPage (8)
7,056	6,970	71	576	14	3	19	1,088	153	115	25,986	Lake, Illinois -east (9)
9,968	6,690	453	2,049	18	7	19	825	167	128	33,328	Lake, Illinois -west (91)
101	416	8,227	1,100	600	730	23	202	519	131	26,258	Kane (10)
1,503	3,466	3,040	6,071	17	7	8	589	332	76	20,085	McHenry (11)
11	19	1,134	15	8,127	1,893	1,000	201	174	126	28,385	Will (12)
4	7	2,037	7	2,353	4,606	135	162	219	75	11,871	Lake, IN (13)
19	18	25	9	804	126	43,197	150	221	1,937	62,976	Kendall, Grundy, Kan. (14)
1,201	863	226	560	189	154	156	346	466	1,023	9,582	Kenosha, WI (15)
153	162	531	346	169	219	210	471	688	944	7,845	Boone & DeKalb (16)
119	127	143	77	155	83	4,762	1,056	1,009	622	13,966	Porter & Newton, IN (17)
24,380	22,725	22,238	11,824	17,668	8,847	57,592	8,546	7,554	8,963	578,544	

Table 4-N. Mean Travel Times from District to District - Normal Scenario (hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	0.065	0.181	0.185	0.377	0.218	0.382	0.559	0.326	0.378	0.521	0.535
North Chicago (2)	0.352	0.173	0.309	0.408	0.472	0.280	0.473	0.453	0.455	0.784	0.633
West Chicago -east (3)	0.287	0.261	0.174	0.326	0.306	0.344	0.422	0.252	0.305	0.672	0.461
West Chicago -west (31)	0.469	0.355	0.278	0.065	0.635	0.332	0.287	0.372	0.243	0.828	0.422
South Chicago (4)	0.392	0.475	0.370	0.708	0.208	0.679	0.842	0.302	0.468	0.327	0.616
North Cook -east (5)	0.517	0.272	0.369	0.388	0.659	0.192	0.315	0.426	0.423	0.921	0.537
North Cook -west (51)	0.733	0.536	0.518	0.404	0.849	0.351	0.237	0.504	0.462	0.987	0.395
West Cook -east (6)	0.447	0.480	0.296	0.397	0.317	0.476	0.490	0.193	0.303	0.320	0.441
West Cook -west (61)	0.484	0.475	0.327	0.294	0.411	0.440	0.390	0.257	0.176	0.510	0.278
South Cook (7)	0.764	0.888	0.796	0.978	0.456	1.055	1.051	0.421	0.653	0.228	0.652
DuPage (8)	0.710	0.698	0.568	0.519	0.596	0.630	0.406	0.461	0.371	0.560	0.263
Lake, Illinois -east (9)	0.737	0.591	0.679	0.700	1.007	0.496	0.619	0.784	0.703	1.281	0.826
Lake, Illinois -west (91)	0.988	0.852	0.872	0.800	1.212	0.594	0.522	0.880	0.801	1.387	0.775
Kane (10)	1.083	1.018	0.942	0.841	1.120	0.861	0.494	0.890	0.799	1.117	0.507
McHenry (11)	1.349	1.255	1.197	1.053	1.545	0.938	0.695	1.241	1.079	1.671	0.909
Will (12)	0.899	1.044	0.816	1.016	0.678	1.113	0.920	0.596	0.622	0.398	0.514
Lake, IN (13)	1.383	1.467	1.405	1.404	1.133	1.587	1.234	1.075	1.054	0.814	0.710
Kendall, Grundy, Kan. (14)	0.962	1.071	1.010	1.389	0.705	1.317	1.438	0.880	1.067	0.564	1.131
Kenosha, WI (15)	1.594	1.456	1.518	1.356	1.730	1.259	1.334	1.641	1.460	1.926	1.559
Boone & DeKalb (16)	1.396	1.446	1.371	1.312	1.326	1.480	1.244	1.270	1.252	1.146	1.116
Porter & Newton, IN (17)	1.859	1.644	1.661	2.012	1.653	1.759	1.787	1.549	1.634	1.379	1.627
Mean Inflow Time	0.363	0.258	0.295	0.426	0.320	0.324	0.361	0.330	0.352	0.336	0.359

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean Time	Origin District
0.640	0.789	0.870	1.078	0.691	1.117	0.717	1.284	1.187	1.054	0.175	Chicago Central Area (1)
0.530	0.747	0.951	1.086	0.942	1.359	0.984	1.281	1.377	1.288	0.290	North Chicago (2)
0.609	0.769	0.846	1.053	0.777	1.218	0.902	1.318	1.255	1.197	0.269	West Chicago -east (3)
0.574	0.654	0.722	0.877	0.888	1.256	1.162	1.153	1.204	1.396	0.384	West Chicago -west (31)
0.967	1.099	1.058	1.382	0.606	1.042	0.450	1.573	1.264	0.950	0.311	South Chicago (4)
0.302	0.410	0.804	0.846	1.021	1.417	1.147	1.061	1.393	1.437	0.289	North Cook -east (5)
0.437	0.362	0.380	0.548	0.917	1.186	1.313	1.161	1.177	1.559	0.332	North Cook -west (51)
0.821	0.900	0.873	1.172	0.515	1.053	0.701	1.490	1.217	1.091	0.318	West Cook -east (6)
0.642	0.705	0.692	0.949	0.510	1.106	0.989	1.276	1.156	1.244	0.292	West Cook -west (61)
1.292	1.366	1.129	1.608	0.379	0.813	0.444	1.864	1.172	0.805	0.371	South Cook (7)
0.813	0.721	0.405	0.864	0.405	0.555	1.119	1.420	1.052	1.351	0.339	DuPage (8)
0.260	0.445	1.074	0.780	1.353	1.576	1.552	0.639	1.668	1.865	0.400	Lake, Illinois -east (9)
0.429	0.299	0.698	0.479	1.312	1.667	1.713	0.702	1.504	1.977	0.441	Lake, Illinois -west (91)
0.990	0.638	0.258	0.450	0.598	0.443	1.554	1.408	0.707	1.768	0.398	Kane (10)
0.772	0.554	0.535	0.305	1.547	1.495	2.020	0.597	0.709	2.217	0.471	McHenry (11)
1.345	1.329	0.604	1.514	0.280	0.574	0.612	2.007	1.015	1.117	0.421	Will (12)
1.638	1.678	0.545	1.504	0.624	0.209	0.975	2.350	0.545	1.304	0.360	Lake, IN (13)
1.587	1.774	1.600	1.996	0.730	0.981	0.618	2.241	1.609	0.593	0.638	Kendall, Grundy, Kan. (14)
0.684	0.761	1.476	0.618	2.055	2.432	2.234	0.021	1.798	2.323	0.380	Kenosha, WI (15)
1.655	1.495	0.723	0.698	0.992	0.551	1.522	1.784	0.119	1.775	0.657	Boone & DeKalb (16)
1.963	2.055	1.912	2.262	1.363	1.447	1.440	2.320	1.902	0.123	1.063	Porter & Newton, IN (17)
0.357	0.405	0.370	0.387	0.370	0.305	0.624	0.352	0.638	0.691	0.367	

Table 4-5. Mean Travel Times from District to District - 5 Year Scenario (hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	0.065	0.181	0.185	0.379	0.218	0.383	0.565	0.327	0.379	0.521	0.535
North Chicago (2)	0.349	0.173	0.309	0.411	0.472	0.280	0.480	0.454	0.459	0.784	0.634
West Chicago -east (3)	0.286	0.261	0.174	0.328	0.306	0.344	0.426	0.254	0.309	0.672	0.463
West Chicago -west (31)	0.465	0.356	0.278	0.065	0.633	0.336	0.290	0.374	0.244	0.827	0.422
South Chicago (4)	0.392	0.476	0.370	0.710	0.208	0.680	0.848	0.302	0.469	0.326	0.616
North Cook -east (5)	0.515	0.273	0.372	0.397	0.660	0.193	0.332	0.431	0.432	0.923	0.547
North Cook -west (51)	0.790	0.635	0.588	0.483	0.884	0.528	0.272	0.584	0.523	1.001	0.409
West Cook -east (6)	0.447	0.481	0.297	0.400	0.317	0.480	0.494	0.194	0.305	0.320	0.441
West Cook -west (61)	0.484	0.478	0.330	0.296	0.411	0.445	0.392	0.258	0.177	0.510	0.278
South Cook (7)	0.762	0.887	0.795	0.978	0.456	1.055	1.055	0.421	0.653	0.228	0.652
DuPage (8)	0.711	0.699	0.569	0.521	0.595	0.637	0.406	0.461	0.372	0.560	0.263
Lake, Illinois -east (9)	0.738	0.595	0.683	0.705	1.009	0.498	0.631	0.788	0.707	1.284	0.830
Lake, Illinois -west (91)	0.996	0.866	0.884	0.815	1.222	0.609	0.527	0.893	0.814	1.398	0.781
Kane (10)	1.083	1.021	0.944	0.845	1.120	0.872	0.495	0.891	0.800	1.117	0.507
McHenry (11)	1.351	1.262	1.203	1.060	1.550	0.949	0.695	1.246	1.084	1.676	0.910
Will (12)	0.898	1.044	0.816	1.017	0.678	1.115	0.920	0.595	0.622	0.398	0.514
Lake, IN (13)	1.381	1.466	1.403	1.405	1.133	1.588	1.236	1.075	1.055	0.814	0.711
Kendall, Grundy, Kan. (14)	0.964	1.075	1.013	1.394	0.709	1.322	1.446	0.881	1.068	0.567	1.132
Kenosha, WI (15)	1.597	1.462	1.525	1.363	1.732	1.268	1.346	1.646	1.466	1.929	1.564
Boone & DeKalb (16)	1.396	1.448	1.372	1.315	1.327	1.486	1.245	1.271	1.254	1.146	1.116
Porter & Newton, IN (17)	1.853	1.645	1.660	2.006	1.643	1.760	1.788	1.543	1.631	1.368	1.624
Mean Inflow Time	0.363	0.260	0.297	0.446	0.321	0.350	0.381	0.332	0.358	0.336	0.361

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean Time	Origin District
0.641	0.793	0.871	1.080	0.691	1.117	0.716	1.287	1.187	1.054	0.175	Chicago Central Area (1)
0.531	0.754	0.952	1.088	0.942	1.358	0.982	1.284	1.378	1.287	0.290	North Chicago (2)
0.610	0.775	0.848	1.055	0.778	1.218	0.901	1.321	1.256	1.197	0.270	West Chicago -east (3)
0.574	0.659	0.722	0.878	0.888	1.255	1.160	1.156	1.204	1.394	0.385	West Chicago -west (31)
0.967	1.104	1.058	1.384	0.606	1.042	0.449	1.575	1.265	0.950	0.311	South Chicago (4)
0.302	0.417	0.812	0.852	1.025	1.420	1.147	1.065	1.399	1.438	0.293	North Cook -east (5)
0.572	0.407	0.383	0.555	0.932	1.218	1.332	1.192	1.191	1.589	0.383	North Cook -west (51)
0.822	0.907	0.874	1.173	0.515	1.053	0.701	1.492	1.217	1.091	0.319	West Cook -east (6)
0.643	0.709	0.692	0.950	0.510	1.106	0.988	1.279	1.156	1.244	0.294	West Cook -west (61)
1.292	1.370	1.129	1.609	0.379	0.813	0.443	1.865	1.172	0.805	0.371	South Cook (7)
0.818	0.723	0.405	0.863	0.405	0.555	1.118	1.423	1.052	1.352	0.339	DuPage (8)
0.261	0.454	1.081	0.790	1.356	1.579	1.552	0.644	1.674	1.868	0.403	Lake, Illinois -east (9)
0.450	0.300	0.698	0.480	1.318	1.672	1.722	0.708	1.508	1.988	0.449	Lake, Illinois -west (91)
1.001	0.638	0.258	0.450	0.599	0.443	1.554	1.409	0.707	1.769	0.398	Kane (10)
0.795	0.554	0.535	0.305	1.550	1.495	2.024	0.598	0.709	2.222	0.472	McHenry (11)
1.345	1.331	0.604	1.514	0.280	0.575	0.612	2.012	1.015	1.117	0.421	Will (12)
1.639	1.681	0.545	1.504	0.624	0.209	0.974	2.357	0.545	1.305	0.360	Lake, IN (13)
1.591	1.787	1.601	2.002	0.731	0.982	0.632	2.247	1.612	0.593	0.649	Kendall, Grundy, Kan. (14)
0.695	0.768	1.477	0.619	2.065	2.445	2.236	0.021	1.801	2.325	0.382	Kenosha, WI (15)
1.664	1.497	0.723	0.698	0.992	0.551	1.522	1.785	0.119	1.776	0.657	Boone & DeKalb (16)
1.965	2.059	1.911	2.261	1.359	1.445	1.420	2.322	1.902	0.122	1.056	Porter & Newton, IN (17)
0.371	0.412	0.370	0.387	0.370	0.305	0.634	0.354	0.639	0.691	0.373	

Table 4-10. Mean Travel Times from District to District - 10 Year Scenario (hours)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	0.065	0.181	0.185	0.380	0.218	0.383	0.565	0.327	0.380	0.521	0.537
North Chicago (2)	0.351	0.173	0.310	0.412	0.473	0.280	0.481	0.454	0.461	0.786	0.635
West Chicago -east (3)	0.287	0.262	0.175	0.333	0.306	0.346	0.429	0.254	0.310	0.673	0.465
West Chicago -west (31)	0.466	0.355	0.279	0.065	0.636	0.335	0.290	0.383	0.249	0.828	0.422
South Chicago (4)	0.393	0.476	0.370	0.710	0.208	0.680	0.848	0.302	0.469	0.326	0.617
North Cook -east (5)	0.517	0.273	0.372	0.398	0.663	0.193	0.333	0.432	0.434	0.925	0.547
North Cook -west (51)	0.793	0.636	0.590	0.485	0.887	0.530	0.272	0.588	0.526	1.003	0.410
West Cook -east (6)	0.447	0.481	0.297	0.411	0.317	0.482	0.499	0.194	0.305	0.320	0.442
West Cook -west (61)	0.484	0.481	0.331	0.303	0.411	0.449	0.396	0.259	0.177	0.510	0.278
South Cook (7)	0.764	0.887	0.795	0.979	0.456	1.056	1.055	0.421	0.653	0.228	0.652
DuPage (8)	0.712	0.701	0.570	0.523	0.596	0.639	0.407	0.462	0.372	0.560	0.263
Lake, Illinois -east (9)	0.741	0.598	0.689	0.716	1.020	0.510	0.651	0.798	0.718	1.297	0.839
Lake, Illinois -west (91)	1.011	0.880	0.898	0.828	1.239	0.622	0.532	0.907	0.827	1.413	0.785
Kane (10)	1.085	1.023	0.946	0.847	1.122	0.875	0.495	0.892	0.801	1.118	0.507
McHenry (11)	1.356	1.266	1.206	1.063	1.555	0.958	0.697	1.249	1.089	1.679	0.912
Will (12)	0.899	1.044	0.816	1.018	0.678	1.116	0.921	0.595	0.622	0.398	0.514
Lake, IN (13)	1.383	1.466	1.404	1.406	1.133	1.589	1.236	1.075	1.055	0.814	0.711
Kendall, Grundy, Kan. (14)	0.966	1.075	1.013	1.395	0.708	1.323	1.446	0.880	1.068	0.565	1.132
Kenosha, WI (15)	1.627	1.490	1.553	1.390	1.764	1.297	1.366	1.675	1.495	1.957	1.587
Boone & DeKalb (16)	1.397	1.448	1.373	1.317	1.327	1.487	1.246	1.271	1.255	1.147	1.117
Porter & Newton, IN (17)	1.832	1.637	1.651	1.989	1.618	1.757	1.787	1.532	1.625	1.347	1.622
Mean Inflow Time	0.364	0.260	0.297	0.449	0.320	0.352	0.382	0.332	0.359	0.336	0.361

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean Time	Origin District
0.643	0.802	0.872	1.081	0.691	1.117	0.717	1.289	1.188	1.054	0.175	Chicago Central Area (1)
0.531	0.763	0.953	1.091	0.943	1.360	0.985	1.286	1.379	1.289	0.291	North Chicago (2)
0.613	0.785	0.850	1.057	0.779	1.219	0.903	1.324	1.257	1.198	0.270	West Chicago -east (3)
0.577	0.664	0.722	0.878	0.888	1.256	1.162	1.158	1.204	1.396	0.386	West Chicago -west (31)
0.969	1.111	1.059	1.384	0.606	1.042	0.450	1.577	1.265	0.950	0.312	South Chicago (4)
0.303	0.422	0.812	0.857	1.026	1.422	1.151	1.068	1.400	1.441	0.294	North Cook -east (5)
0.585	0.407	0.383	0.555	0.933	1.218	1.336	1.189	1.192	1.590	0.384	North Cook -west (51)
0.827	0.913	0.874	1.174	0.515	1.053	0.701	1.496	1.218	1.091	0.319	West Cook -east (6)
0.649	0.715	0.693	0.952	0.510	1.107	0.990	1.284	1.157	1.244	0.295	West Cook -west (61)
1.295	1.373	1.128	1.609	0.379	0.813	0.444	1.868	1.172	0.805	0.371	South Cook (7)
0.826	0.723	0.405	0.863	0.405	0.555	1.119	1.424	1.052	1.352	0.339	DuPage (8)
0.271	0.537	1.110	0.867	1.371	1.586	1.566	0.652	1.707	1.885	0.427	Lake, Illinois -east (9)
0.537	0.302	0.700	0.479	1.324	1.679	1.743	0.708	1.512	2.005	0.469	Lake, Illinois -west (91)
1.022	0.638	0.258	0.449	0.598	0.443	1.556	1.407	0.707	1.770	0.399	Kane (10)
0.873	0.555	0.535	0.305	1.551	1.496	2.028	0.598	0.709	2.225	0.475	McHenry (11)
1.349	1.332	0.604	1.514	0.280	0.575	0.612	2.017	1.015	1.117	0.421	Will (12)
1.643	1.682	0.545	1.504	0.624	0.209	0.975	2.363	0.545	1.305	0.360	Lake, IN (13)
1.595	1.791	1.601	2.001	0.730	0.982	0.626	2.249	1.611	0.594	0.644	Kendall, Grundy, Kan. (14)
0.713	0.777	1.482	0.619	2.093	2.474	2.267	0.021	1.817	2.356	0.388	Kenosha, WI (15)
1.685	1.497	0.723	0.698	0.992	0.551	1.523	1.787	0.119	1.777	0.658	Boone & DeKalb (16)
1.968	2.063	1.911	2.262	1.354	1.443	1.380	2.325	1.901	0.118	1.041	Porter & Newton, IN (17)
0.401	0.430	0.370	0.388	0.370	0.305	0.628	0.355	0.640	0.691	0.375	

Table 4-25. Mean Travel Times from District to District - 25 Year Scenario (hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	0.065	0.181	0.186	0.387	0.218	0.384	0.585	0.328	0.387	0.520	0.538
North Chicago (2)	0.355	0.174	0.311	0.424	0.474	0.281	0.509	0.457	0.469	0.786	0.645
West Chicago -east (3)	0.288	0.263	0.175	0.343	0.307	0.349	0.448	0.256	0.321	0.673	0.470
West Chicago -west (31)	0.472	0.363	0.284	0.066	0.641	0.346	0.299	0.390	0.251	0.829	0.423
South Chicago (4)	0.394	0.477	0.371	0.718	0.208	0.682	0.864	0.303	0.474	0.326	0.617
North Cook -east (5)	0.515	0.272	0.372	0.415	0.659	0.195	0.394	0.437	0.442	0.922	0.562
North Cook -west (51)	0.836	0.692	0.628	0.515	0.922	0.654	0.276	0.623	0.553	1.025	0.415
West Cook -east (6)	0.451	0.484	0.301	0.425	0.317	0.489	0.518	0.195	0.315	0.320	0.445
West Cook -west (61)	0.491	0.488	0.338	0.309	0.413	0.460	0.404	0.264	0.184	0.512	0.280
South Cook (7)	0.765	0.889	0.797	0.979	0.456	1.060	1.064	0.421	0.655	0.228	0.653
DuPage (8)	0.717	0.716	0.577	0.532	0.597	0.664	0.408	0.466	0.379	0.561	0.264
Lake, Illinois -east (9)	0.730	0.590	0.686	0.726	1.010	0.515	0.770	0.806	0.727	1.295	0.853
Lake, Illinois -west (91)	1.137	1.048	1.014	0.921	1.357	0.815	0.551	0.995	0.907	1.485	0.807
Kane (10)	1.108	1.058	0.969	0.874	1.131	0.929	0.497	0.906	0.813	1.122	0.508
McHenry (11)	1.408	1.323	1.251	1.108	1.596	1.104	0.700	1.283	1.121	1.701	0.919
Will (12)	0.900	1.046	0.819	1.018	0.678	1.123	0.923	0.596	0.625	0.398	0.514
Lake, IN (13)	1.384	1.468	1.405	1.406	1.133	1.594	1.238	1.076	1.059	0.814	0.711
Kendall, Grundy, Kan. (14)	0.968	1.076	1.014	1.395	0.707	1.324	1.458	0.879	1.068	0.564	1.130
Kenosha, WI (15)	1.652	1.517	1.583	1.432	1.787	1.331	1.422	1.713	1.536	1.988	1.620
Boone & DeKalb (16)	1.412	1.466	1.386	1.335	1.337	1.514	1.249	1.279	1.268	1.150	1.119
Porter & Newton, IN (17)	1.890	1.660	1.679	2.035	1.680	1.773	1.801	1.564	1.648	1.405	1.631
Mean Inflow Time	0.367	0.263	0.300	0.465	0.321	0.381	0.396	0.335	0.368	0.336	0.363

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean Time	Origin District
0.642	0.878	0.878	1.095	0.691	1.117	0.717	1.295	1.191	1.054	0.175	Chicago Central Area (1)
0.530	0.863	0.966	1.111	0.944	1.363	0.985	1.293	1.386	1.290	0.293	North Chicago (2)
0.614	0.834	0.857	1.068	0.780	1.220	0.903	1.331	1.261	1.198	0.273	West Chicago -east (3)
0.580	0.692	0.726	0.885	0.888	1.256	1.166	1.170	1.208	1.399	0.392	West Chicago -west (31)
0.969	1.159	1.062	1.395	0.606	1.042	0.450	1.583	1.268	0.951	0.312	South Chicago (4)
0.312	0.537	0.835	0.926	1.027	1.422	1.146	1.077	1.410	1.437	0.307	North Cook -east (5)
0.801	0.406	0.383	0.555	0.939	1.226	1.365	1.220	1.197	1.614	0.407	North Cook -west (51)
0.833	0.932	0.880	1.185	0.515	1.054	0.702	1.508	1.222	1.093	0.323	West Cook -east (6)
0.653	0.728	0.696	0.957	0.512	1.109	0.993	1.294	1.162	1.248	0.300	West Cook -west (61)
1.296	1.388	1.130	1.613	0.379	0.813	0.444	1.875	1.173	0.806	0.371	South Cook (7)
0.860	0.717	0.405	0.863	0.405	0.555	1.121	1.435	1.052	1.355	0.341	DuPage (8)
0.274	0.664	1.163	0.966	1.379	1.587	1.556	0.656	1.745	1.880	0.462	Lake, Illinois -east (9)
0.711	0.306	0.703	0.480	1.354	1.709	1.839	0.719	1.529	2.070	0.526	Lake, Illinois -west (91)
1.124	0.633	0.258	0.449	0.599	0.443	1.567	1.412	0.707	1.778	0.400	Kane (10)
1.060	0.551	0.536	0.305	1.559	1.498	2.056	0.598	0.709	2.247	0.482	McHenry (11)
1.352	1.330	0.604	1.513	0.280	0.575	0.612	2.026	1.015	1.118	0.421	Will (12)
1.644	1.685	0.545	1.504	0.624	0.209	0.975	2.372	0.545	1.305	0.360	Lake, IN (13)
1.595	1.835	1.603	2.011	0.730	0.981	0.621	2.254	1.611	0.600	0.640	Kendall, Grundy, Kan. (14)
0.732	0.787	1.494	0.619	2.130	2.510	2.289	0.021	1.837	2.379	0.395	Kenosha, WI (15)
1.713	1.497	0.723	0.698	0.993	0.552	1.529	1.793	0.120	1.785	0.661	Boone & DeKalb (16)
1.972	2.085	1.914	2.267	1.369	1.450	1.488	2.334	1.907	0.128	1.083	Porter & Newton, IN (17)
0.462	0.461	0.371	0.391	0.371	0.306	0.628	0.358	0.642	0.698	0.383	

Table 4-50. Mean Travel Times from District to District - 50 Year Scenario (hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	0.065	0.181	0.185	0.411	0.218	0.388	0.624	0.336	0.475	0.520	0.653
North Chicago (2)	0.355	0.174	0.312	0.444	0.475	0.281	0.538	0.466	0.505	0.789	0.675
West Chicago -east (3)	0.288	0.265	0.177	0.360	0.307	0.355	0.477	0.262	0.369	0.675	0.534
West Chicago -west (31)	0.509	0.386	0.297	0.067	0.674	0.366	0.308	0.402	0.254	0.836	0.425
South Chicago (4)	0.393	0.477	0.371	0.742	0.208	0.688	0.903	0.303	0.503	0.326	0.633
North Cook -east (5)	0.529	0.275	0.377	0.437	0.672	0.199	0.464	0.449	0.468	0.935	0.583
North Cook -west (51)	0.937	0.767	0.697	0.558	0.990	0.788	0.284	0.673	0.577	1.035	0.420
West Cook -east (6)	0.461	0.496	0.309	0.451	0.320	0.507	0.550	0.197	0.343	0.320	0.465
West Cook -west (61)	0.579	0.522	0.376	0.316	0.436	0.479	0.409	0.283	0.188	0.513	0.281
South Cook (7)	0.764	0.890	0.799	0.990	0.457	1.070	1.072	0.421	0.660	0.228	0.655
DuPage (8)	0.850	0.758	0.641	0.546	0.618	0.693	0.410	0.483	0.381	0.562	0.264
Lake, Illinois -east (9)	0.745	0.596	0.699	0.753	1.028	0.523	0.919	0.835	0.751	1.316	0.877
Lake, Illinois -west (91)	1.275	1.178	1.136	1.021	1.458	1.023	0.572	1.088	0.974	1.528	0.837
Kane (10)	1.219	1.121	1.049	0.910	1.159	1.006	0.500	0.936	0.819	1.123	0.508
McHenry (11)	1.510	1.414	1.343	1.172	1.669	1.224	0.703	1.334	1.151	1.712	0.926
Will (12)	0.912	1.063	0.832	1.030	0.682	1.143	0.927	0.598	0.631	0.398	0.515
Lake, IN (13)	1.385	1.474	1.409	1.415	1.136	1.604	1.240	1.080	1.062	0.814	0.711
Kendall, Grundy, Kan. (14)	0.966	1.074	1.012	1.408	0.707	1.327	1.475	0.880	1.078	0.564	1.134
Kenosha, WI (15)	1.706	1.560	1.633	1.495	1.837	1.378	1.475	1.778	1.591	2.038	1.668
Boone & DeKalb (16)	1.470	1.507	1.436	1.366	1.361	1.563	1.255	1.293	1.277	1.151	1.120
Porter & Newton, IN (17)	1.893	1.661	1.680	2.053	1.686	1.777	1.812	1.572	1.662	1.414	1.636
Mean Inflow Time	0.375	0.267	0.308	0.489	0.323	0.414	0.414	0.341	0.385	0.336	0.366

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean	Origin District
0.647	0.923	0.966	1.131	0.694	1.116	0.715	1.306	1.226	1.055	0.179	Chicago Central Area (1)
0.532	0.919	0.996	1.144	0.950	1.366	0.987	1.302	1.405	1.293	0.296	North Chicago (2)
0.624	0.891	0.928	1.118	0.785	1.226	0.903	1.349	1.297	1.200	0.281	West Chicago -east (3)
0.600	0.726	0.733	0.902	0.890	1.258	1.184	1.197	1.216	1.408	0.403	West Chicago -west (31)
0.976	1.204	1.079	1.436	0.607	1.042	0.449	1.595	1.278	0.953	0.313	South Chicago (4)
0.321	0.710	0.869	1.003	1.043	1.437	1.157	1.088	1.437	1.449	0.326	North Cook -east (5)
1.028	0.413	0.384	0.555	0.945	1.232	1.399	1.259	1.202	1.626	0.437	North Cook -west (51)
0.865	0.975	0.906	1.224	0.516	1.058	0.703	1.549	1.235	1.099	0.332	West Cook -east (6)
0.675	0.740	0.696	0.961	0.512	1.110	1.011	1.319	1.163	1.253	0.314	West Cook -west (61)
1.312	1.402	1.133	1.619	0.379	0.813	0.445	1.897	1.174	0.808	0.371	South Cook (7)
0.891	0.721	0.405	0.863	0.405	0.555	1.129	1.460	1.052	1.357	0.346	DuPage (8)
0.277	0.761	1.211	1.021	1.405	1.608	1.573	0.663	1.783	1.901	0.493	Lake, Illinois -east (9)
0.860	0.314	0.710	0.482	1.388	1.739	1.911	0.733	1.548	2.117	0.581	Lake, Illinois -west (91)
1.218	0.633	0.258	0.449	0.599	0.443	1.578	1.420	0.707	1.780	0.401	Kane (10)
1.179	0.550	0.538	0.305	1.567	1.500	2.079	0.600	0.710	2.258	0.488	McHenry (11)
1.376	1.338	0.604	1.515	0.280	0.575	0.613	2.056	1.015	1.120	0.422	Will (12)
1.663	1.692	0.545	1.504	0.624	0.209	0.975	2.403	0.545	1.306	0.360	Lake, IN (13)
1.599	1.857	1.609	2.029	0.730	0.982	0.621	2.266	1.614	0.601	0.640	Kendall, Grundy, Kan. (14)
0.748	0.802	1.507	0.620	2.190	2.572	2.334	0.022	1.868	2.426	0.405	Kenosha, WI (15)
1.771	1.502	0.723	0.698	0.993	0.552	1.534	1.811	0.120	1.788	0.668	Boone & DeKalb (16)
1.976	2.099	1.920	2.275	1.372	1.452	1.501	2.341	1.914	0.129	1.090	Porter & Newton, IN (17)
0.515	0.489	0.372	0.393	0.371	0.306	0.628	0.362	0.647	0.702	0.392	

Table 4-100. Mean Travel Times from District to District - 100 Year Scenario (hours)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	0.065	0.182	0.185	0.424	0.218	0.389	0.644	0.336	0.484	0.520	0.660
North Chicago (2)	0.349	0.173	0.311	0.461	0.472	0.281	0.563	0.466	0.520	0.786	0.689
West Chicago -east (3)	0.287	0.266	0.177	0.385	0.307	0.359	0.503	0.263	0.384	0.675	0.553
West Chicago -west (31)	0.513	0.396	0.304	0.068	0.677	0.380	0.312	0.407	0.256	0.836	0.426
South Chicago (4)	0.393	0.478	0.371	0.754	0.208	0.689	0.917	0.303	0.505	0.326	0.634
North Cook -east (5)	0.527	0.275	0.379	0.459	0.669	0.199	0.510	0.453	0.485	0.935	0.602
North Cook -west (51)	0.959	0.794	0.718	0.568	1.004	0.837	0.285	0.689	0.585	1.041	0.422
West Cook -east (6)	0.461	0.498	0.309	0.470	0.320	0.512	0.566	0.197	0.348	0.320	0.468
West Cook -west (61)	0.584	0.533	0.384	0.319	0.439	0.497	0.412	0.287	0.189	0.514	0.282
South Cook (7)	0.765	0.891	0.799	0.993	0.457	1.077	1.076	0.421	0.661	0.228	0.654
DuPage (8)	0.855	0.771	0.649	0.550	0.621	0.716	0.411	0.486	0.383	0.562	0.264
Lake, Illinois -east (9)	0.747	0.601	0.709	0.773	1.031	0.527	0.976	0.853	0.766	1.324	0.892
Lake, Illinois -west (91)	1.324	1.235	1.188	1.065	1.498	1.077	0.600	1.139	1.011	1.566	0.862
Kane (10)	1.231	1.143	1.063	0.921	1.164	1.040	0.500	0.945	0.822	1.124	0.508
McHenry (11)	1.537	1.445	1.369	1.194	1.687	1.258	0.707	1.353	1.165	1.724	0.930
Will (12)	0.914	1.067	0.835	1.033	0.683	1.155	0.928	0.598	0.631	0.398	0.515
Lake, IN (13)	1.385	1.476	1.410	1.417	1.137	1.612	1.240	1.080	1.063	0.814	0.711
Kendall, Grundy, Kan. (14)	0.966	1.076	1.013	1.415	0.708	1.330	1.486	0.881	1.079	0.566	1.136
Kenosha, WI (15)	1.719	1.577	1.654	1.523	1.849	1.392	1.511	1.804	1.616	2.057	1.690
Boone & DeKalb (16)	1.478	1.520	1.445	1.376	1.366	1.585	1.256	1.297	1.281	1.152	1.121
Porter & Newton, IN (17)	1.858	1.649	1.664	2.029	1.647	1.772	1.811	1.551	1.649	1.371	1.629
Mean Inflow Time	0.374	0.268	0.310	0.501	0.323	0.425	0.424	0.342	0.390	0.336	0.367

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean Time	Origin District
0.649	0.949	0.975	1.150	0.694	1.116	0.715	1.310	1.231	1.054	0.179	Chicago Central Area (1)
0.533	0.951	1.012	1.163	0.948	1.363	0.984	1.303	1.411	1.289	0.294	North Chicago (2)
0.632	0.922	0.942	1.139	0.786	1.227	0.903	1.356	1.305	1.200	0.284	West Chicago -east (3)
0.607	0.746	0.737	0.913	0.890	1.259	1.185	1.206	1.221	1.408	0.408	West Chicago -west (31)
0.978	1.225	1.082	1.448	0.607	1.042	0.449	1.599	1.282	0.952	0.313	South Chicago (4)
0.322	0.765	0.894	1.028	1.049	1.441	1.154	1.090	1.453	1.446	0.336	North Cook -east (5)
1.078	0.427	0.384	0.555	0.947	1.233	1.408	1.284	1.204	1.631	0.445	North Cook -west (51)
0.873	0.998	0.911	1.232	0.516	1.059	0.703	1.558	1.238	1.099	0.334	West Cook -east (6)
0.682	0.756	0.697	0.965	0.512	1.110	1.012	1.327	1.164	1.253	0.317	West Cook -west (61)
1.315	1.414	1.133	1.621	0.379	0.813	0.445	1.902	1.174	0.807	0.371	South Cook (7)
0.899	0.731	0.405	0.863	0.405	0.555	1.130	1.467	1.052	1.357	0.347	DuPage (8)
0.278	0.761	1.244	1.026	1.420	1.618	1.577	0.664	1.799	1.906	0.499	Lake, Illinois -east (9)
0.876	0.316	0.715	0.483	1.420	1.759	1.950	0.737	1.563	2.150	0.596	Lake, Illinois -west (91)
1.254	0.636	0.258	0.450	0.599	0.443	1.581	1.421	0.707	1.782	0.402	Kane (10)
1.189	0.551	0.538	0.305	1.571	1.501	2.091	0.600	0.710	2.268	0.489	McHenry (11)
1.382	1.350	0.604	1.515	0.280	0.575	0.612	2.062	1.015	1.119	0.422	Will (12)
1.667	1.705	0.545	1.505	0.624	0.209	0.975	2.408	0.545	1.306	0.360	Lake, IN (13)
1.603	1.877	1.611	2.040	0.730	0.982	0.629	2.272	1.617	0.599	0.647	Kendall, Grundy, Kan. (14)
0.753	0.801	1.512	0.620	2.213	2.592	2.347	0.022	1.880	2.439	0.408	Kenosha, WI (15)
1.790	1.510	0.723	0.698	0.994	0.552	1.535	1.815	0.120	1.790	0.670	Boone & DeKalb (16)
1.977	2.108	1.918	2.278	1.360	1.446	1.428	2.343	1.914	0.122	1.062	Porter & Newton, IN (17)
0.523	0.494	0.372	0.393	0.371	0.306	0.632	0.363	0.648	0.699	0.395	

Table 4-500. Mean Travel Times from District to District - 500 Year Scenario (hours)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	0.065	0.182	0.185	0.528	0.218	0.393	0.719	0.336	0.605	0.520	0.713
North Chicago (2)	0.357	0.174	0.313	0.594	0.477	0.283	0.645	0.470	0.671	0.792	0.790
West Chicago -east (3)	0.289	0.273	0.177	0.593	0.309	0.374	0.630	0.264	0.640	0.682	0.724
West Chicago -west (31)	0.559	0.440	0.371	0.074	0.720	0.415	0.313	0.464	0.274	0.846	0.432
South Chicago (4)	0.395	0.480	0.373	0.849	0.208	0.696	0.970	0.304	0.534	0.327	0.644
North Cook -east (5)	0.531	0.275	0.377	0.566	0.673	0.200	0.564	0.451	0.580	0.945	0.662
North Cook -west (51)	1.011	0.844	0.784	0.602	1.041	0.868	0.286	0.750	0.595	1.045	0.423
West Cook -east (6)	0.463	0.503	0.310	0.677	0.322	0.534	0.699	0.199	0.466	0.321	0.525
West Cook -west (61)	0.654	0.622	0.516	0.347	0.458	0.551	0.425	0.355	0.201	0.514	0.286
South Cook (7)	0.768	0.895	0.805	1.025	0.458	1.090	1.095	0.422	0.668	0.228	0.658
DuPage (8)	0.908	0.835	0.740	0.573	0.637	0.753	0.412	0.524	0.386	0.563	0.264
Lake, Illinois -east (9)	0.748	0.599	0.716	0.831	1.033	0.529	1.017	0.877	0.833	1.333	0.938
Lake, Illinois -west (91)	1.366	1.268	1.244	1.100	1.521	1.094	0.603	1.191	1.025	1.572	0.864
Kane (10)	1.270	1.193	1.135	0.950	1.183	1.070	0.501	0.990	0.826	1.125	0.509
McHenry (11)	1.582	1.488	1.430	1.217	1.716	1.277	0.708	1.398	1.170	1.725	0.931
Will (12)	0.930	1.087	0.855	1.065	0.688	1.182	0.935	0.602	0.639	0.398	0.516
Lake, IN (13)	1.390	1.486	1.419	1.445	1.140	1.628	1.246	1.085	1.070	0.814	0.711
Kendall, Grundy, Kan. (14)	0.967	1.076	1.013	1.461	0.707	1.334	1.520	0.882	1.091	0.565	1.142
Kenosha, WI (15)	1.721	1.577	1.663	1.564	1.853	1.393	1.526	1.837	1.665	2.071	1.719
Boone & DeKalb (16)	1.507	1.554	1.484	1.402	1.381	1.614	1.261	1.318	1.292	1.153	1.123
Porter & Newton, IN (17)	1.899	1.665	1.684	2.108	1.691	1.787	1.838	1.576	1.679	1.414	1.646
Mean Inflow Time	0.381	0.272	0.323	0.578	0.324	0.434	0.436	0.353	0.453	0.336	0.373

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outflow Mean	Origin District
0.651	1.000	1.014	1.216	0.699	1.117	0.715	1.313	1.255	1.055	0.183	Chicago Central Area (1)
0.535	1.007	1.094	1.230	0.959	1.374	0.988	1.308	1.455	1.295	0.304	North Chicago (2)
0.651	1.017	1.057	1.248	0.804	1.238	0.906	1.373	1.355	1.204	0.319	West Chicago -east (3)
0.615	0.753	0.746	0.922	0.897	1.265	1.202	1.214	1.229	1.417	0.428	West Chicago -west (31)
0.985	1.258	1.099	1.492	0.609	1.043	0.449	1.605	1.298	0.953	0.315	South Chicago (4)
0.323	0.798	0.944	1.062	1.070	1.459	1.158	1.091	1.493	1.452	0.352	North Cook -east (5)
1.101	0.428	0.384	0.555	0.949	1.235	1.421	1.288	1.205	1.635	0.454	North Cook -west (51)
0.902	1.098	0.977	1.327	0.518	1.064	0.704	1.592	1.270	1.101	0.361	West Cook -east (6)
0.696	0.759	0.699	0.970	0.513	1.110	1.023	1.340	1.167	1.255	0.350	West Cook -west (61)
1.325	1.427	1.137	1.635	0.379	0.813	0.445	1.914	1.178	0.808	0.372	South Cook (7)
0.912	0.732	0.405	0.863	0.405	0.555	1.132	1.476	1.053	1.358	0.352	DuPage (8)
0.278	0.780	1.279	1.033	1.448	1.641	1.578	0.664	1.820	1.907	0.507	Lake, Illinois -east (9)
0.887	0.318	0.716	0.483	1.425	1.762	1.958	0.736	1.566	2.154	0.602	Lake, Illinois -west (91)
1.273	0.637	0.258	0.449	0.599	0.443	1.585	1.423	0.707	1.783	0.403	Kane (10)
1.199	0.552	0.538	0.305	1.572	1.501	2.098	0.600	0.710	2.270	0.490	McHenry (11)
1.396	1.355	0.604	1.518	0.280	0.575	0.613	2.079	1.016	1.120	0.423	Will (12)
1.678	1.712	0.545	1.506	0.624	0.209	0.975	2.423	0.545	1.306	0.360	Lake, IN (13)
1.606	1.899	1.623	2.072	0.730	0.982	0.624	2.276	1.623	0.594	0.643	Kendall, Grundy, Kan. (14)
0.752	0.803	1.517	0.620	2.241	2.618	2.349	0.022	1.894	2.441	0.410	Kenosha, WI (15)
1.805	1.512	0.723	0.698	0.994	0.552	1.537	1.824	0.120	1.792	0.674	Boone & DeKalb (16)
1.981	2.124	1.931	2.295	1.373	1.452	1.502	2.348	1.925	0.129	1.093	Porter & Newton, IN (17)
0.527	0.500	0.372	0.394	0.371	0.306	0.631	0.364	0.654	0.701	0.404	

Table 5-N. Total Travel Distance from District to District - Normal Scenario (vehicle-miles/hour)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	36,064	25,687	25,351	7,536	30,642	9,040	6,423	10,862	7,544	7,674	10,041
North Chicago (2)	179,767	132,104	76,490	13,517	33,838	115,841	27,638	16,638	21,300	5,194	15,649
West Chicago -east (3)	137,417	70,627	128,991	19,240	44,299	55,757	30,942	52,246	66,411	7,588	41,955
West Chicago -west (31)	8,006	4,493	4,645	2,169	4,670	7,310	11,409	3,880	5,110	6,837	13,238
South Chicago (4)	263,306	43,712	91,774	5,061	328,776	12,349	8,704	115,949	37,878	113,934	43,566
North Cook -east (5)	50,054	69,458	40,017	22,894	11,903	199,325	109,247	14,887	30,226	4,088	33,689
North Cook - west (51)	60,340	24,663	31,452	44,651	9,794	130,337	438,333	20,847	66,782	4,377	236,384
West Cook -east (6)	64,769	15,586	68,240	10,129	102,837	14,612	16,309	103,087	89,918	62,566	99,856
West Cook -west (61)	40,249	11,684	42,390	16,570	23,152	18,991	34,530	44,421	72,966	9,272	114,038
South Cook (7)	90,196	8,264	22,880	7,459	190,124	4,331	4,763	131,695	46,165	364,648	83,432
DuPage (8)	73,561	16,789	49,017	36,340	37,061	35,527	218,118	76,236	175,243	23,147	831,209
Lake, Illinois -east (9)	5,205	10,745	6,144	9,552	2,427	146,571	72,839	3,738	7,823	1,143	8,216
Lake, Illinois -west (91)	4,888	4,788	4,690	9,053	2,335	71,937	163,171	3,269	8,166	1,106	26,269
Kane (10)	2,615	2,727	4,747	8,701	3,477	8,436	148,487	6,019	18,421	2,652	270,108
McHenry (11)	851	1,148	1,464	3,896	915	9,092	117,551	1,049	1,782	493	16,111
Will (12)	8,566	2,012	6,868	5,305	32,835	2,232	6,724	54,539	37,741	166,726	255,007
Lake, IN (13)	6,194	1,168	1,835	2,465	4,567	1,014	1,875	3,538	3,293	10,664	52,049
Kendall, Grundy, Kan. (14)	68,270	5,244	10,817	6,153	127,533	2,462	2,265	37,017	8,365	209,239	12,491
Kenosha, WI (15)	28,517	12,646	13,086	4,674	14,825	25,406	33,478	8,946	9,754	8,783	25,678
Boone & DeKalb (16)	30,115	13,998	15,658	4,823	20,645	15,396	25,670	12,359	12,212	14,468	39,166
Porter & Newton, IN (17)	36,252	12,449	14,223	4,033	23,858	11,921	15,808	11,478	9,206	19,113	22,237
Inbound Travel Distance	1,195,204	489,991	660,778	244,219	1,050,510	897,889	1,494,283	732,699	736,301	1,043,714	2,250,389

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,799	1,522	1,709	616	1,969	5,197	5,661	26,682	30,352	36,740	289,111	Chicago Central Area (1)
7,222	3,295	2,255	1,117	1,866	920	3,445	11,941	14,077	13,031	697,145	North Chicago (2)
4,158	3,290	3,287	1,183	3,117	1,711	3,965	12,454	15,751	14,765	719,152	West Chicago -east (3)
4,456	4,749	5,073	3,243	4,775	2,472	6,177	4,253	4,826	4,001	115,794	West Chicago -west (31)
2,432	2,243	3,511	779	13,301	3,954	60,045	14,491	21,021	24,173	1,210,959	South Chicago (4)
37,750	19,117	4,728	2,854	1,990	913	2,485	23,164	15,476	12,354	706,617	North Cook -east (5)
33,052	60,306	69,014	20,032	4,737	1,697	2,403	30,538	24,897	15,780	1,330,415	North Cook -west (51)
2,204	1,905	3,343	859	15,243	2,662	10,199	8,683	12,506	11,386	716,899	West Cook -east (6)
2,926	2,836	4,875	1,120	6,202	1,833	2,671	9,192	12,175	9,113	481,207	West Cook -west (61)
1,098	1,080	2,323	484	97,150	8,720	161,140	8,630	14,726	18,827	1,268,134	South Cook (7)
6,891	12,520	128,186	6,424	62,268	15,423	4,927	23,982	38,159	21,995	1,893,024	DuPage (8)
190,839	124,060	2,346	15,610	635	126	769	37,938	7,350	5,350	659,426	Lake, Illinois -east (9)
153,924	186,239	15,024	71,597	736	309	683	30,318	8,071	5,658	772,230	Lake, Illinois -west (91)
2,949	14,168	260,042	39,371	21,697	24,819	1,014	9,127	22,395	6,626	878,596	Kane (10)
32,541	116,058	101,119	207,480	737	294	357	21,834	13,638	3,636	652,047	McHenry (11)
516	905	39,299	680	287,672	73,785	36,090	10,058	9,356	6,429	1,043,344	Will (12)
193	324	68,614	285	96,749	145,065	5,384	8,105	9,301	3,721	426,404	Lake, IN (13)
772	669	1,084	360	29,987	4,960	715,887	7,245	11,537	51,434	1,313,788	Kendall, Grundy, Kan. (14)
38,410	30,394	9,805	20,833	8,632	7,190	7,328	12,583	24,354	50,975	396,299	Kenosha, WI (15)
7,292	8,149	22,627	14,178	9,387	9,403	11,506	26,018	25,117	54,825	393,012	Boone & DeKalb (16)
5,167	5,658	6,640	3,577	6,518	3,721	50,373	53,751	54,082	8,345	378,409	Porter & Newton, IN (17)
536,591	599,488	754,902	412,684	675,368	315,174	1,092,509	390,986	389,167	379,163	16,342,010	

Table 5-5. Total Travel Distance from District to District - 5 Year Scenario (vehicle-miles/hour)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	36,033	25,683	25,345	7,536	30,636	9,039	6,442	10,864	7,548	7,674	10,042
North Chicago (2)	179,794	132,062	76,460	13,534	33,847	115,814	27,746	16,609	21,448	5,194	15,663
West Chicago -east (3)	137,428	70,595	128,950	19,246	44,310	55,786	31,053	52,300	66,699	7,592	42,002
West Chicago -west (31)	8,004	4,491	4,648	2,170	4,669	7,356	11,470	3,881	5,109	6,836	13,274
South Chicago (4)	263,274	43,708	91,781	5,070	328,674	12,351	8,723	115,970	37,887	113,938	43,554
North Cook -east (5)	50,104	69,415	39,985	23,288	11,908	199,373	111,317	14,941	30,491	4,091	33,853
North Cook -west (51)	60,464	24,816	31,655	44,840	9,809	132,952	438,647	21,014	67,063	4,380	236,345
West Cook -east (6)	64,824	15,597	68,267	10,219	102,831	14,721	16,416	103,201	90,007	62,566	99,832
West Cook -west (61)	40,273	11,748	42,581	16,600	23,163	19,148	34,603	44,455	73,003	9,270	114,024
South Cook (7)	90,204	8,264	22,893	7,459	190,086	4,329	4,767	131,650	46,149	364,625	83,384
DuPage (8)	73,537	16,777	49,031	36,337	37,046	35,637	218,042	76,244	175,145	23,147	831,055
Lake, Illinois -east (9)	5,203	10,728	6,141	9,547	2,425	146,436	73,566	3,731	7,818	1,141	8,216
Lake, Illinois -west (91)	4,890	4,837	4,698	9,273	2,336	72,806	163,163	3,302	8,265	1,106	26,248
Kane (10)	2,621	2,723	4,750	8,701	3,476	8,531	148,434	6,020	18,416	2,652	270,024
McHenry (11)	851	1,150	1,465	3,896	915	9,179	117,521	1,049	1,782	493	16,109
Will (12)	8,565	2,011	6,870	5,302	32,831	2,234	6,725	54,532	37,736	166,718	254,986
Lake, IN (13)	6,193	1,168	1,834	2,464	4,566	1,015	1,875	3,538	3,293	10,664	52,054
Kendall, Grundy, Kan. (14)	68,242	5,243	10,817	6,158	127,494	2,459	2,268	37,014	8,366	209,224	12,493
Kenosha, WI (15)	28,568	12,668	13,105	4,683	14,834	25,530	33,577	8,952	9,767	8,784	25,699
Boone & DeKalb (16)	30,113	13,997	15,659	4,823	20,644	15,435	25,677	12,359	12,211	14,467	39,163
Porter & Newton, IN (17)	36,238	12,448	14,223	4,036	23,854	11,911	15,821	11,490	9,213	19,114	22,230
Total length (Inbound)	1,195,424	490,130	661,159	245,184	1,050,356	902,043	1,497,852	733,117	737,414	1,043,677	2,250,249

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,800	1,522	1,710	617	1,968	5,197	5,660	26,650	30,352	36,749	289,067	Chicago Central Area (1)
7,220	3,303	2,256	1,117	1,866	920	3,444	11,918	14,077	13,033	697,328	North Chicago (2)
4,162	3,349	3,290	1,183	3,121	1,711	3,964	12,451	15,756	14,769	719,714	West Chicago -east (3)
4,465	4,792	5,073	3,243	4,774	2,473	6,176	4,267	4,827	4,001	115,999	West Chicago -west (31)
2,435	2,243	3,511	779	13,302	3,954	60,038	14,490	21,021	24,170	1,210,871	South Chicago (4)
37,778	19,311	4,752	2,869	1,996	913	2,484	23,209	15,497	12,348	709,923	North Cook -east (5)
33,474	60,337	68,990	20,031	4,741	1,698	2,406	30,725	24,904	15,790	1,335,083	North Cook -west (51)
2,218	1,927	3,344	859	15,246	2,661	10,198	8,702	12,508	11,394	717,537	West Cook -east (6)
2,931	2,854	4,875	1,120	6,203	1,832	2,671	9,208	12,174	9,115	481,853	West Cook -west (61)
1,098	1,080	2,323	484	97,138	8,720	161,070	8,630	14,725	18,827	1,267,905	South Cook (7)
6,924	12,522	128,183	6,423	62,269	15,422	4,926	24,028	38,162	21,996	1,892,855	DuPage (8)
190,946	124,738	2,373	15,680	635	126	769	38,209	7,352	5,346	661,128	Lake, Illinois -east (9)
155,050	186,069	15,009	71,607	736	309	683	30,578	8,065	5,661	774,693	Lake, Illinois -west (91)
3,037	14,156	260,043	39,373	21,698	24,819	1,014	9,128	22,397	6,626	878,639	Kane (10)
32,878	116,033	101,122	207,458	737	294	358	21,865	13,637	3,636	652,426	McHenry (11)
516	905	39,285	680	287,651	73,782	36,086	10,095	9,355	6,429	1,043,293	Will (12)
193	324	68,618	285	96,747	145,061	5,384	8,138	9,301	3,721	426,436	Lake, IN (13)
772	668	1,085	360	29,986	4,960	715,775	7,242	11,537	51,438	1,313,601	Kendall, Grundy, Kan. (14)
38,836	30,471	9,798	20,869	8,647	7,203	7,328	12,579	24,369	50,969	397,238	Kenosha, WI (15)
7,309	8,148	22,630	14,178	9,384	9,404	11,507	26,036	25,116	54,824	393,085	Boone & DeKalb (16)
5,167	5,656	6,640	3,578	6,515	3,720	50,424	53,694	54,078	8,357	378,406	Porter & Newton, IN (17)
539,210	600,407	754,909	412,793	675,361	315,179	1,092,366	391,842	389,210	379,199	16,357,079	

Table 5-10. Total Travel Distance from District to District - 10 Year Scenario (vehicle-miles/hour)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	36,069	25,688	25,337	7,537	30,646	9,040	6,445	10,850	7,540	7,675	10,051
North Chicago (2)	179,793	132,108	76,484	13,565	33,845	115,818	27,771	16,597	21,320	5,193	15,656
West Chicago -east (3)	137,454	70,671	129,033	19,447	44,316	55,810	31,093	52,256	66,735	7,592	42,030
West Chicago -west (31)	8,011	4,497	4,675	2,179	4,696	7,360	11,449	4,070	5,192	6,839	13,240
South Chicago (4)	263,320	43,710	91,800	5,081	328,812	12,347	8,730	115,971	37,901	113,937	43,581
North Cook -east (5)	50,144	69,478	40,033	23,300	11,912	199,397	111,378	14,976	30,483	4,092	33,859
North Cook - west (51)	60,509	24,844	31,683	44,802	9,814	132,982	438,749	21,164	67,282	4,380	236,370
West Cook -east (6)	64,863	15,595	68,310	10,516	102,877	14,791	16,612	103,247	90,394	62,568	99,960
West Cook -west (61)	40,211	11,687	42,604	16,744	23,160	19,185	34,828	44,623	73,195	9,272	114,010
South Cook (7)	90,190	8,264	22,891	7,461	190,145	4,329	4,768	131,711	46,177	364,662	83,457
DuPage (8)	73,561	16,808	49,093	36,412	37,052	35,639	218,098	76,261	175,216	23,149	831,238
Lake, Illinois -east (9)	5,203	10,734	6,138	9,530	2,424	146,259	74,194	3,739	7,834	1,141	8,245
Lake, Illinois -west (91)	4,911	4,853	4,721	9,253	2,344	73,268	163,320	3,318	8,254	1,109	26,233
Kane (10)	2,619	2,725	4,748	8,700	3,477	8,597	148,479	6,021	18,413	2,653	270,064
McHenry (11)	852	1,150	1,464	3,895	915	9,183	117,575	1,049	1,783	494	16,118
Will (12)	8,566	2,012	6,870	5,306	32,831	2,235	6,725	54,530	37,731	166,719	255,005
Lake, IN (13)	6,195	1,168	1,835	2,465	4,567	1,015	1,876	3,539	3,294	10,664	52,057
Kendall, Grundy, Kan. (14)	68,234	5,241	10,812	6,162	127,600	2,459	2,269	37,028	8,366	209,324	12,495
Kenosha, WI (15)	28,565	12,662	13,076	4,651	14,825	25,486	33,228	8,954	9,759	8,781	25,672
Boone & DeKalb (16)	30,116	13,999	15,659	4,822	20,645	15,465	25,681	12,360	12,213	14,468	39,167
Porter & Newton, IN (17)	36,262	12,450	14,221	4,035	23,869	11,912	15,821	11,487	9,209	19,111	22,232
Inbound Travel Distance	1,195,649	490,344	661,487	245,864	1,050,775	902,576	1,499,087	733,750	738,291	1,043,821	2,250,739

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,797	1,527	1,713	616	1,969	5,197	5,661	26,515	30,368	36,739	288,981	Chicago Central Area (1)
7,218	3,309	2,255	1,118	1,866	920	3,444	11,860	14,077	13,029	697,247	North Chicago (2)
4,158	3,343	3,291	1,184	3,120	1,711	3,964	12,415	15,758	14,764	720,146	West Chicago -east (3)
4,468	4,798	5,072	3,243	4,777	2,474	6,177	4,267	4,828	3,993	116,304	West Chicago -west (31)
2,432	2,250	3,513	780	13,302	3,954	60,047	14,467	21,026	24,182	1,211,143	South Chicago (4)
37,801	19,257	4,753	2,869	1,996	913	2,484	23,090	15,500	12,346	710,062	North Cook -east (5)
33,915	60,294	68,988	20,032	4,741	1,698	2,406	30,271	24,904	15,789	1,335,618	North Cook - west (51)
2,219	1,925	3,345	859	15,246	2,662	10,200	8,703	12,511	11,391	718,795	West Cook -east (6)
2,937	2,858	4,873	1,121	6,201	1,832	2,670	9,211	12,172	9,114	482,509	West Cook -west (61)
1,099	1,082	2,323	484	97,163	8,721	161,158	8,631	14,726	18,827	1,268,268	South Cook (7)
6,968	12,523	128,195	6,422	62,277	15,421	4,928	23,864	38,161	21,996	1,893,285	DuPage (8)
191,211	136,901	2,485	16,484	635	126	769	38,344	7,406	5,343	675,145	Lake, Illinois -east (9)
175,836	186,409	15,032	71,451	736	309	685	30,699	8,060	5,677	796,477	Lake, Illinois -west (91)
3,175	14,164	260,073	39,369	21,701	24,820	1,014	9,098	22,397	6,627	878,932	Kane (10)
34,824	116,020	101,146	207,463	737	294	358	21,878	13,632	3,639	654,468	McHenry (11)
517	905	39,299	680	287,694	73,787	36,080	10,096	9,356	6,428	1,043,371	Will (12)
193	324	68,628	285	96,750	145,059	5,384	8,139	9,302	3,721	426,459	Lake, IN (13)
771	670	1,084	360	29,993	4,960	716,332	7,242	11,538	51,435	1,314,376	Kendall, Grundy, Kan. (14)
38,974	30,591	9,622	20,868	8,639	7,194	7,329	12,580	24,363	50,986	396,802	Kenosha, WI (15)
7,675	8,142	22,632	14,178	9,384	9,403	11,508	26,037	25,117	54,824	393,497	Boone & DeKalb (16)
5,163	5,669	6,639	3,579	6,516	3,720	50,452	53,645	54,083	8,348	378,423	Porter & Newton, IN (17)
563,352	612,960	754,963	413,444	675,444	315,176	1,093,051	391,049	389,285	379,198	16,400,307	

Table 5-25. Total Travel Distance from District to District - 25 Year Scenario (vehicle-miles/hour)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	36,037	25,689	25,334	7,535	30,651	9,039	6,460	10,829	7,558	7,675	10,049
North Chicago (2)	179,675	131,993	76,436	13,623	33,838	115,755	28,054	16,562	21,293	5,192	15,672
West Chicago -east (3)	137,353	70,565	128,889	19,520	44,305	55,878	31,406	52,189	67,179	7,593	42,130
West Chicago -west (31)	8,001	4,498	4,681	2,184	4,694	7,395	11,510	4,162	5,185	6,828	13,278
South Chicago (4)	263,023	43,675	91,739	5,100	328,596	12,346	8,774	115,932	37,997	113,931	43,540
North Cook -east (5)	50,126	69,531	40,095	23,613	11,918	199,770	118,155	15,018	30,577	4,098	34,629
North Cook -west (51)	61,046	25,284	32,175	44,236	9,882	144,408	438,742	21,418	67,494	4,394	236,247
West Cook -east (6)	64,695	15,564	68,279	10,689	102,748	14,876	16,867	103,340	91,126	62,558	100,011
West Cook -west (61)	40,316	11,678	42,835	16,957	23,179	19,272	34,845	44,916	73,701	9,269	113,934
South Cook (7)	90,190	8,262	22,896	7,470	190,002	4,329	4,779	131,648	46,273	364,581	83,390
DuPage (8)	73,498	16,780	49,030	36,432	37,051	36,305	217,963	76,495	174,947	23,149	830,551
Lake, Illinois -east (9)	5,196	10,747	6,132	9,527	2,421	146,700	81,090	3,736	7,852	1,138	8,477
Lake, Illinois -west (91)	5,237	5,311	5,068	9,160	2,441	76,840	163,205	3,409	8,432	1,122	26,241
Kane (10)	2,623	2,715	4,751	8,619	3,480	9,319	148,133	6,026	18,400	2,652	269,908
McHenry (11)	852	1,158	1,469	3,884	916	10,159	117,524	1,050	1,786	494	16,067
Will (12)	8,565	2,011	6,875	5,300	32,820	2,253	6,721	54,535	37,768	166,723	254,829
Lake, IN (13)	6,194	1,169	1,835	2,464	4,564	1,016	1,876	3,538	3,293	10,666	52,040
Kendall, Grundy, Kan. (14)	68,219	5,241	10,817	6,206	127,493	2,456	2,277	37,011	8,368	209,255	12,491
Kenosha, WI (15)	28,575	12,681	13,106	4,664	14,824	25,564	33,154	8,947	9,764	8,779	25,742
Boone & DeKalb (16)	30,114	13,999	15,668	4,816	20,643	15,538	25,676	12,366	12,223	14,467	39,147
Porter & Newton, IN (17)	36,227	12,442	14,215	4,061	23,856	11,885	15,875	11,498	9,259	19,125	22,229
Inbound Travel Distance	1,195,764	490,992	662,324	246,059	1,050,321	921,101	1,513,086	734,624	740,473	1,043,689	2,250,601

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,798	1,618	1,712	617	1,969	5,197	5,664	26,390	30,366	36,766	288,951	Chicago Central Area (1)
7,227	3,529	2,257	1,124	1,867	920	3,444	11,807	14,077	13,035	697,381	North Chicago (2)
4,164	3,526	3,294	1,186	3,124	1,711	3,964	12,371	15,770	14,772	720,887	West Chicago -east (3)
4,468	4,818	5,074	3,243	4,768	2,464	6,193	4,267	4,819	4,061	116,590	West Chicago -west (31)
2,431	2,344	3,513	781	13,298	3,953	60,030	14,442	21,023	24,155	1,210,621	South Chicago (4)
38,206	19,866	4,969	2,982	2,002	914	2,483	23,029	15,621	12,345	719,948	North Cook -east (5)
39,489	60,326	68,930	20,032	4,739	1,700	2,428	30,064	24,906	15,829	1,353,768	North Cook -west (51)
2,226	1,952	3,353	863	15,248	2,662	10,196	8,707	12,521	11,395	719,875	West Cook -east (6)
2,937	2,929	4,874	1,121	6,200	1,832	2,674	9,209	12,169	9,126	483,973	West Cook -west (61)
1,096	1,090	2,321	484	97,134	8,720	161,073	8,624	14,725	18,829	1,267,917	South Cook (7)
7,286	12,544	128,166	6,423	62,267	15,418	4,927	23,883	38,160	21,998	1,893,273	DuPage (8)
191,419	149,998	2,832	17,937	636	126	766	38,388	7,624	5,329	698,071	Lake, Illinois -east (9)
195,345	186,567	14,997	71,643	736	309	713	30,805	8,026	5,783	821,391	Lake, Illinois -west (91)
3,837	14,135	259,998	39,355	21,685	24,817	1,017	9,098	22,390	6,628	879,585	Kane (10)
39,523	116,065	101,134	207,410	737	294	360	21,878	13,629	3,641	660,028	McHenry (11)
516	905	39,281	680	287,622	73,780	36,077	10,094	9,357	6,428	1,043,140	Will (12)
192	325	68,578	285	96,740	145,061	5,384	8,138	9,303	3,721	426,381	Lake, IN (13)
771	699	1,084	360	29,988	4,960	715,799	7,220	11,537	51,432	1,313,682	Kendall, Grundy, Kan. (14)
38,619	30,517	9,620	20,871	8,650	7,202	7,325	12,581	24,366	50,930	396,481	Kenosha, WI (15)
7,829	8,160	22,620	14,178	9,383	9,402	11,522	26,035	25,114	54,827	393,726	Boone & DeKalb (16)
5,146	5,772	6,638	3,583	6,516	3,720	50,445	52,992	54,083	8,363	377,927	Porter & Newton, IN (17)
594,525	627,683	755,244	415,159	675,307	315,163	1,092,482	390,021	389,588	379,391	16,483,597	

Table 5-50. Total Travel Distance from District to District - 50 Year Scenario (vehicle-miles/hour)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	35,997	25,642	25,322	7,534	30,648	9,025	6,465	10,802	7,739	7,677	11,269
North Chicago (2)	179,316	131,810	76,256	13,612	33,758	115,541	28,001	16,453	21,768	5,189	15,948
West Chicago -east (3)	138,286	70,381	128,848	19,454	44,329	55,815	31,081	52,068	66,385	7,594	42,417
West Chicago -west (31)	8,003	4,478	4,655	2,198	4,693	7,456	11,528	4,053	5,205	6,829	13,344
South Chicago (4)	262,442	43,557	91,669	5,103	328,344	12,322	8,947	115,843	38,593	113,954	44,976
North Cook -east (5)	50,031	69,410	39,957	23,721	11,899	201,046	127,285	14,904	31,281	4,098	34,833
North Cook -west (51)	60,993	25,326	31,904	44,067	9,961	164,972	439,816	21,370	68,073	4,397	236,442
West Cook -east (6)	64,879	15,508	68,047	10,613	102,420	14,577	16,719	103,296	91,362	62,545	100,122
West Cook -west (61)	40,927	11,733	42,264	17,040	23,188	19,436	34,963	45,273	74,212	9,273	114,195
South Cook (7)	90,175	8,259	22,654	7,494	189,645	4,326	4,778	131,414	46,311	364,503	83,260
DuPage (8)	80,976	17,001	49,286	36,510	37,498	36,676	218,007	76,620	175,443	23,137	830,122
Lake, Illinois -east (9)	5,194	10,733	6,124	9,498	2,419	146,650	97,469	3,707	7,884	1,137	8,494
Lake, Illinois -west (91)	5,272	5,445	5,105	9,253	2,477	94,390	164,812	3,419	8,594	1,125	26,417
Kane (10)	2,856	2,732	4,810	8,622	3,498	9,369	148,008	6,037	18,420	2,651	269,855
McHenry (11)	857	1,165	1,467	3,899	923	11,992	117,685	1,053	1,794	494	16,093
Will (12)	8,565	2,010	6,877	5,285	32,766	2,252	6,719	54,453	37,706	166,666	254,552
Lake, IN (13)	6,192	1,168	1,835	2,463	4,558	1,016	1,875	3,537	3,289	10,664	52,016
Kendall, Grundy, Kan. (14)	68,097	5,230	10,792	6,247	127,312	2,450	2,298	36,973	8,427	209,108	12,514
Kenosha, WI (15)	28,532	12,657	13,118	4,688	14,816	25,478	33,015	8,922	9,777	8,777	25,735
Boone & DeKalb (16)	30,693	14,020	15,734	4,814	20,672	15,569	25,670	12,361	12,225	14,470	39,141
Porter & Newton, IN (17)	36,175	12,423	14,199	4,080	23,834	11,869	15,902	11,493	9,322	19,124	22,203
Inbound Travel Distance	1,204,455	490,688	660,919	246,196	1,049,659	962,226	1,541,043	734,053	743,810	1,043,412	2,253,949

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,798	1,642	1,888	617	1,971	5,196	5,661	26,345	30,979	36,840	291,057	Chicago Central Area (1)
7,224	3,702	2,278	1,128	1,866	920	3,442	11,789	14,108	13,041	697,149	North Chicago (2)
4,158	3,614	3,356	1,177	3,125	1,718	3,972	12,357	15,861	14,809	720,803	West Chicago -east (3)
4,470	4,930	5,071	3,243	4,769	2,459	6,335	4,270	4,811	4,107	116,908	West Chicago -west (31)
2,429	2,394	3,616	794	13,293	3,953	60,003	14,444	21,154	24,175	1,212,004	South Chicago (4)
39,537	23,751	4,991	3,329	2,005	914	2,485	22,991	15,626	12,353	736,447	North Cook -east (5)
56,525	60,580	68,866	20,032	4,737	1,698	2,468	30,022	24,897	15,861	1,393,007	North Cook - west (51)
2,183	1,971	3,360	865	15,245	2,663	10,196	8,637	12,523	11,409	719,139	West Cook -east (6)
2,947	2,962	4,870	1,122	6,200	1,830	2,700	9,221	12,162	9,154	485,674	West Cook -west (61)
1,091	1,091	2,321	485	97,101	8,719	160,913	8,614	14,722	18,829	1,266,707	South Cook (7)
7,307	12,538	128,161	6,419	62,232	15,413	4,952	23,978	38,150	21,972	1,902,398	DuPage (8)
191,151	160,821	2,861	18,313	635	126	765	38,329	7,631	5,323	725,263	Lake, Illinois -east (9)
216,151	187,411	14,985	71,686	736	305	721	30,796	8,012	5,813	862,924	Lake, Illinois -west (91)
3,890	14,102	259,898	39,350	21,680	24,818	1,020	9,102	22,386	6,625	879,729	Kane (10)
43,498	116,122	101,155	207,387	737	294	361	21,875	13,631	3,643	666,125	McHenry (11)
514	905	39,273	679	287,522	73,787	36,057	10,078	9,356	6,428	1,042,450	Will (12)
192	325	68,558	285	96,738	145,077	5,384	8,140	9,299	3,721	426,331	Lake, IN (13)
763	706	1,087	363	29,971	4,960	715,736	7,204	11,546	51,455	1,313,240	Kendall, Grundy, Kan. (14)
38,337	30,853	9,570	20,862	8,658	7,210	7,318	12,580	24,332	50,852	396,087	Kenosha, WI (15)
7,838	8,153	22,621	14,178	9,375	9,403	11,533	26,045	25,109	54,847	394,469	Boone & DeKalb (16)
5,126	5,801	6,640	3,589	6,515	3,720	50,485	52,879	54,087	8,358	377,823	Porter & Newton, IN (17)
637,128	644,373	755,424	415,903	675,111	315,184	1,092,506	389,697	390,380	379,616	16,625,733	

Table 5-100. Total Travel Distance from District to District - 100 Year Scenario (vehicle-miles/hour)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	36,025	25,634	25,318	7,534	30,649	9,025	6,480	10,805	7,741	7,678	11,291
North Chicago (2)	179,385	131,862	76,268	13,671	33,757	115,521	28,510	16,453	21,682	5,190	16,029
West Chicago -east (3)	138,288	70,427	128,854	19,695	44,307	55,876	31,443	52,055	66,929	7,595	42,933
West Chicago -west (31)	8,014	4,508	4,701	2,205	4,698	7,531	11,442	4,087	5,205	6,829	13,303
South Chicago (4)	262,578	43,566	91,688	5,118	328,394	12,319	9,014	115,863	38,610	113,957	45,024
North Cook -east (5)	50,082	69,360	39,885	24,049	11,907	201,237	132,797	14,836	31,432	4,103	35,623
North Cook -west (51)	60,910	25,576	32,079	43,677	10,007	173,065	439,899	21,401	68,107	4,399	236,342
West Cook -east (6)	64,943	15,512	68,038	10,752	102,417	14,575	16,819	103,166	91,647	62,548	100,259
West Cook -west (61)	40,963	11,760	42,895	17,098	23,226	19,687	34,980	45,475	74,265	9,270	114,215
South Cook (7)	90,186	8,258	22,651	7,503	189,677	4,333	4,782	131,430	46,318	364,532	83,291
DuPage (8)	80,978	17,092	49,660	36,551	37,534	37,508	217,948	76,651	175,418	23,136	830,161
Lake, Illinois -east (9)	5,196	10,727	6,117	9,564	2,419	146,357	100,520	3,703	7,879	1,137	8,493
Lake, Illinois -west (91)	5,293	5,545	5,152	9,338	2,497	99,269	167,257	3,473	8,666	1,127	26,488
Kane (10)	2,859	2,739	4,814	8,621	3,498	9,430	148,034	6,046	18,425	2,651	269,883
McHenry (11)	861	1,170	1,477	3,912	926	12,183	117,849	1,055	1,800	495	16,125
Will (12)	8,566	2,011	6,888	5,287	32,762	2,271	6,717	54,414	37,684	166,674	254,553
Lake, IN (13)	6,192	1,169	1,835	2,464	4,559	1,019	1,874	3,536	3,289	10,663	52,017
Kendall, Grundy, Kan. (14	68,144	5,234	10,801	6,253	127,332	2,447	2,306	36,971	8,432	209,092	12,516
Kenosha, WI (15)	28,462	12,621	13,093	4,686	14,808	25,415	33,224	8,935	9,776	8,786	25,730
Boone & DeKalb (16)	30,701	14,027	15,749	4,822	20,677	15,611	25,671	12,363	12,226	14,470	39,135
Porter & Newton, IN (17)	36,177	12,425	14,206	4,097	23,845	11,831	15,935	11,493	9,326	19,111	22,198
Inbound Travel Distance	1,204,803	491,225	662,170	246,894	1,049,895	976,511	1,553,502	734,210	744,859	1,043,442	2,255,611

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,798	1,643	1,890	617	1,971	5,196	5,661	26,338	30,985	36,760	291,039	Chicago Central Area (1)
7,220	3,762	2,278	1,130	1,869	921	3,441	11,786	14,115	13,029	697,879	North Chicago (2)
4,161	3,622	3,367	1,179	3,131	1,719	3,970	12,368	15,877	14,786	722,581	West Chicago -east (3)
4,473	5,020	5,071	3,244	4,769	2,459	6,357	4,276	4,811	4,123	117,125	West Chicago -west (31)
2,429	2,398	3,617	796	13,296	3,954	60,019	14,444	21,161	24,210	1,212,454	South Chicago (4)
39,621	26,229	5,009	3,383	2,020	916	2,482	22,995	15,664	12,341	745,972	North Cook -east (5)
58,286	61,311	68,870	20,029	4,733	1,698	2,480	30,214	24,891	15,869	1,403,840	North Cook -west (51)
2,183	1,985	3,365	865	15,249	2,664	10,196	8,640	12,529	11,405	719,759	West Cook -east (6)
2,949	2,974	4,872	1,125	6,200	1,830	2,703	9,229	12,164	9,156	487,035	West Cook -west (61)
1,091	1,091	2,321	485	97,113	8,719	160,959	8,612	14,722	18,828	1,266,902	South Cook (7)
7,313	12,518	128,164	6,417	62,234	15,418	4,956	24,023	38,153	21,972	1,903,806	DuPage (8)
191,152	162,510	2,838	18,328	636	126	764	38,351	7,614	5,317	729,748	Lake, Illinois -east (9)
217,601	187,306	14,994	71,724	736	306	725	30,823	8,001	5,819	872,142	Lake, Illinois -west (91)
3,886	14,086	259,900	39,359	21,681	24,817	1,022	9,103	22,382	6,624	879,860	Kane (10)
43,695	116,138	101,173	207,389	737	295	361	21,881	13,630	3,645	666,796	McHenry (11)
514	905	39,272	680	287,557	73,776	36,064	10,076	9,355	6,428	1,042,454	Will (12)
192	325	68,594	285	96,735	145,067	5,384	8,142	9,299	3,721	426,361	Lake, IN (13)
763	706	1,088	365	29,973	4,959	715,498	7,194	11,557	51,425	1,313,056	Kendall, Grundy, Kan. (14)
38,357	30,829	9,545	20,862	8,658	7,204	7,317	12,580	24,322	50,795	396,005	Kenosha, WI (15)
7,825	8,141	22,621	14,178	9,375	9,403	11,535	26,050	25,109	54,847	394,536	Boone & DeKalb (16)
5,126	5,798	6,643	3,593	6,514	3,720	50,465	52,885	54,162	8,344	377,894	Porter & Newton, IN (17)
640,634	649,297	755,490	416,032	675,187	315,166	1,092,360	390,009	390,505	379,444	16,667,244	

Table 5-500. Total Travel Distance from District to District - 500 Year Scenario (vehicle-miles/hour)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	35,957	25,618	25,261	7,582	30,609	9,030	6,487	10,756	8,750	7,675	12,334
North Chicago (2)	179,031	131,622	75,545	14,015	33,733	115,239	28,520	16,344	24,846	5,193	16,632
West Chicago -east (3)	138,262	70,511	128,744	22,567	44,297	56,051	32,071	52,071	93,783	7,596	52,200
West Chicago -west (31)	8,015	4,507	4,875	2,150	4,702	7,608	11,292	4,199	5,321	6,862	13,213
South Chicago (4)	261,970	43,491	91,335	5,250	327,843	12,323	9,209	115,664	39,726	113,913	45,520
North Cook -east (5)	50,065	69,274	39,738	25,814	11,926	201,205	132,269	14,643	34,096	4,118	36,509
North Cook - west (51)	60,977	25,387	32,160	43,632	10,113	171,788	439,143	21,680	68,622	4,403	236,149
West Cook -east (6)	64,951	15,590	67,510	11,802	102,091	14,877	16,917	102,845	101,968	62,529	104,134
West Cook -west (61)	42,527	13,219	51,758	17,243	23,395	21,126	35,267	49,091	74,900	9,265	114,168
South Cook (7)	90,146	8,260	22,465	7,536	189,349	4,335	4,799	131,122	46,517	364,371	83,184
DuPage (8)	88,133	17,343	54,682	36,413	37,466	38,278	217,818	78,649	175,190	23,138	829,282
Lake, Illinois -east (9)	5,193	10,712	6,070	9,705	2,419	146,159	99,636	3,640	7,990	1,138	8,503
Lake, Illinois -west (91)	5,310	5,566	5,147	9,332	2,517	99,601	166,580	3,486	8,696	1,128	26,459
Kane (10)	2,888	2,749	5,051	8,616	3,492	9,476	147,793	6,113	18,427	2,650	269,705
McHenry (11)	863	1,173	1,474	3,917	936	12,185	117,731	1,059	1,815	494	16,106
Will (12)	8,566	2,016	6,883	5,277	32,664	2,282	6,711	54,419	37,712	166,635	254,366
Lake, IN (13)	6,189	1,171	1,834	2,463	4,550	1,021	1,874	3,539	3,288	10,662	52,008
Kendall, Grundy, Kan. (14)	67,978	5,222	10,757	6,386	127,039	2,436	2,358	36,895	8,465	208,774	12,499
Kenosha, WI (15)	28,488	12,630	13,149	4,686	14,817	25,444	32,890	8,958	9,801	8,804	25,690
Boone & DeKalb (16)	30,732	14,050	15,815	4,817	20,699	15,635	25,662	12,394	12,239	14,468	39,119
Porter & Newton, IN (17)	36,124	12,402	14,159	4,193	23,823	11,786	16,053	11,453	9,355	19,106	22,200
Inbound Travel Distance	1,212,365	492,513	674,413	253,397	1,048,480	977,884	1,551,080	739,020	791,506	1,042,922	2,269,981

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Distance	Origin District
1,797	1,645	1,927	618	1,971	5,195	5,656	26,313	31,028	36,773	292,983	Chicago Central Area (1)
7,222	3,742	2,328	1,132	1,876	924	3,439	11,776	14,217	13,034	700,410	North Chicago (2)
4,188	3,663	3,664	1,193	3,159	1,724	3,972	12,422	16,084	14,805	763,028	West Chicago -east (3)
4,472	4,959	5,069	3,242	4,765	2,458	6,478	4,282	4,808	4,179	117,457	West Chicago -west (31)
2,428	2,428	3,626	807	13,273	3,951	59,975	14,437	21,183	24,151	1,212,505	South Chicago (4)
39,596	26,119	5,039	3,397	2,055	928	2,480	22,990	15,742	12,316	750,319	North Cook -east (5)
58,400	61,271	68,839	20,025	4,735	1,698	2,517	30,224	24,894	15,889	1,402,545	North Cook - west (51)
2,221	2,004	3,477	871	15,232	2,669	10,188	8,701	12,580	11,398	734,556	West Cook -east (6)
2,957	2,981	4,879	1,128	6,175	1,827	2,730	9,242	12,161	9,165	505,203	West Cook -west (61)
1,087	1,093	2,322	486	97,071	8,719	160,799	8,605	14,723	18,830	1,265,821	South Cook (7)
7,322	12,511	128,138	6,416	62,172	15,410	4,944	23,996	38,146	21,974	1,917,419	DuPage (8)
190,863	161,957	2,830	18,349	639	127	764	38,344	7,613	5,315	727,965	Lake, Illinois -east (9)
217,187	187,067	14,983	71,725	736	306	738	30,808	7,998	5,820	871,191	Lake, Illinois -west (91)
3,897	14,074	259,747	39,340	21,678	24,816	1,022	9,095	22,380	6,626	879,634	Kane (10)
43,771	116,068	101,080	207,335	737	294	362	21,881	13,628	3,645	666,553	McHenry (11)
513	905	39,241	679	287,406	73,778	36,045	10,078	9,348	6,427	1,041,954	Will (12)
192	325	68,543	285	96,730	145,062	5,384	8,153	9,296	3,721	426,291	Lake, IN (13)
760	714	1,090	372	29,949	4,959	713,987	7,157	11,577	51,412	1,310,785	Kendall, Grundy, Kan. (14)
38,300	30,836	9,538	20,862	8,675	7,205	7,314	12,578	24,323	50,779	395,769	Kenosha, WI (15)
7,829	8,142	22,613	14,177	9,372	9,403	11,541	26,063	25,105	54,851	394,724	Boone & DeKalb (16)
5,116	5,794	6,660	3,604	6,513	3,719	50,468	52,755	54,538	8,329	378,151	Porter & Newton, IN (17)
640,118	648,296	755,633	416,044	674,920	315,174	1,090,802	389,901	391,374	379,439	16,755,262	

Table 6-N. Mean Travel Distances from District to District - Normal Scenario (miles)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	1.47	5.94	6.26	18.61	8.01	16.77	26.24	13.49	17.12	25.97	25.92
North Chicago (2)	6.76	3.71	7.02	12.02	13.86	7.59	15.87	13.40	14.43	33.01	23.80
West Chicago -east (3)	6.97	6.15	4.11	8.86	9.05	9.95	14.71	6.69	8.76	28.89	16.66
West Chicago -west (31)	18.15	12.95	9.81	1.70	27.35	11.53	11.03	13.93	8.31	39.47	17.35
South Chicago (4)	9.89	14.44	10.00	27.90	5.44	25.66	34.39	8.51	15.35	12.32	23.89
North Cook -east (5)	17.53	7.83	11.07	10.59	25.78	5.51	9.64	13.51	13.91	42.07	20.12
North Cook -west (51)	27.25	18.52	18.29	11.75	33.68	10.53	6.88	18.30	16.44	44.40	13.07
West Cook -east (6)	12.94	13.61	7.49	11.81	8.73	14.88	18.45	5.11	8.65	11.03	15.42
West Cook -west (61)	16.72	15.71	9.67	7.99	14.48	15.17	14.88	7.71	4.82	20.99	9.54
South Cook (7)	24.63	31.04	27.00	40.86	15.20	42.17	44.48	12.87	22.03	7.44	22.64
DuPage (8)	26.05	25.47	19.66	16.44	23.63	22.70	13.61	16.35	11.66	22.86	7.81
Lake, Illinois -east (9)	29.56	22.75	26.12	25.95	41.90	16.21	20.57	31.25	27.89	58.52	34.33
Lake, Illinois -west (91)	37.62	31.58	32.70	27.91	49.39	18.80	14.89	33.86	30.41	61.89	27.91
Kane (10)	43.52	41.55	37.61	33.32	48.68	32.18	16.56	36.45	31.07	49.76	16.97
McHenry (11)	53.09	48.86	47.02	41.41	62.82	29.55	21.94	49.72	42.55	72.65	32.84
Will (12)	36.08	45.35	33.74	44.22	28.37	48.72	38.30	22.12	23.68	15.83	17.79
Lake, IN (13)	61.19	66.34	63.41	65.41	52.85	73.04	51.79	48.30	45.87	38.28	25.48
Kendall, Grundy, Kan. (14)	28.76	33.50	31.94	54.69	20.66	46.25	57.17	29.83	41.17	16.04	45.10
Kenosha, WI (15)	75.80	70.20	72.81	64.31	86.17	55.74	56.89	80.60	70.79	99.38	75.41
Boone & DeKalb (16)	75.43	78.03	74.22	70.15	75.18	78.86	65.59	70.38	67.67	68.63	57.47
Porter & Newton, IN (17)	49.09	56.32	54.98	69.83	42.55	67.97	80.16	52.35	64.18	35.96	70.20
Inbound Mean Distance	9.83	7.06	8.27	13.59	9.68	10.05	11.49	10.24	11.33	11.44	11.84

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.42	39.81	43.94	53.05	39.43	60.93	29.31	74.76	76.75	51.94	6.91	Chicago Central Area (1)
22.32	31.77	41.98	47.05	45.72	66.37	36.49	69.13	79.28	59.47	7.08	North Chicago (2)
26.46	33.43	38.21	47.41	37.81	62.40	35.14	72.27	75.39	57.93	7.43	West Chicago -east (3)
27.20	30.77	34.57	41.26	43.21	64.38	52.78	62.92	70.54	69.30	16.06	West Chicago -west (31)
43.29	49.42	48.99	61.61	29.95	52.85	14.32	84.99	76.60	43.94	9.09	South Chicago (4)
11.63	15.33	35.07	33.82	49.61	70.01	47.28	54.18	79.87	70.57	9.28	North Cook -east (5)
15.15	12.14	13.63	20.42	41.32	54.40	56.80	54.95	65.43	80.24	10.78	North Cook -west (51)
36.60	40.46	38.96	53.50	21.54	50.98	25.80	80.57	71.61	53.06	9.64	West Cook -east (6)
29.07	32.98	31.20	44.23	23.61	54.60	42.19	70.08	68.40	64.02	9.77	West Cook -west (61)
58.87	62.41	49.27	73.26	15.29	37.93	13.99	99.67	70.58	35.86	12.47	South Cook (7)
35.09	29.53	14.22	35.19	15.29	21.07	48.88	74.60	57.12	69.66	11.10	DuPage (8)
7.53	13.88	41.99	28.00	63.41	76.91	65.29	23.15	87.37	88.94	12.86	Lake, Illinois -east (9)
13.69	8.85	23.74	16.90	58.86	73.98	71.87	27.06	75.57	95.29	13.94	Lake, Illinois -west (91)
37.19	21.69	8.16	16.09	21.68	15.08	70.44	64.18	30.52	90.29	13.47	Kane (10)
25.97	18.49	17.91	10.43	66.97	62.35	88.75	22.23	29.15	108.26	15.91	McHenry (11)
63.60	62.90	20.93	68.04	9.90	22.40	22.11	104.08	54.75	57.33	15.53	Will (12)
79.04	77.63	18.37	62.81	25.67	6.59	38.80	121.16	23.14	65.06	12.93	Lake, IN (13)
64.67	71.55	70.79	84.88	27.25	38.58	10.34	109.82	84.58	15.77	13.41	Kendall, Grundy, Kan. (14)
24.06	28.29	65.78	23.07	102.24	121.95	110.04	0.78	98.88	121.62	16.96	Kenosha, WI (15)
86.01	75.85	30.83	28.60	55.12	23.75	84.09	100.82	4.36	104.02	33.78	Boone & DeKalb (16)
86.09	94.40	89.88	106.27	57.70	64.86	15.89	119.53	103.15	1.73	29.61	Porter & Newton, IN (17)
11.60	13.20	12.64	13.74	14.19	10.90	11.96	16.67	33.67	29.67	11.42	

Table 6-5. Mean Travel Distance from District to District - 5 Year Scenario (miles)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1.46	5.93	6.26	18.61	8.01	16.77	26.32	13.49	17.13	25.97	25.93
North Chicago (2)	6.76	3.71	7.02	12.04	13.87	7.59	15.93	13.38	14.53	33.01	23.82
West Chicago -east (3)	6.97	6.14	4.11	8.86	9.05	9.96	14.76	6.70	8.80	28.90	16.68
West Chicago -west (31)	18.15	12.95	9.82	1.70	27.35	11.60	11.09	13.94	8.31	39.46	17.40
South Chicago (4)	9.89	14.44	10.00	27.95	5.44	25.67	34.46	8.51	15.35	12.32	23.88
North Cook -east (5)	17.55	7.82	11.06	10.77	25.79	5.51	9.83	13.56	14.03	42.10	20.22
North Cook -west (51)	27.30	18.63	18.41	11.80	33.73	10.74	6.88	18.45	16.51	44.43	13.07
West Cook -east (6)	12.95	13.62	7.49	11.91	8.73	15.00	18.58	5.11	8.65	11.03	15.42
West Cook -west (61)	16.73	15.79	9.71	8.00	14.49	15.30	14.91	7.72	4.83	20.98	9.54
South Cook (7)	24.63	31.05	27.01	40.86	15.20	42.15	44.52	12.86	22.02	7.44	22.62
DuPage (8)	26.04	25.45	19.66	16.44	23.62	22.77	13.61	16.35	11.66	22.86	7.81
Lake, Illinois -east (9)	29.55	22.71	26.11	25.94	41.87	16.20	20.78	31.20	27.88	58.42	34.33
Lake, Illinois -west (91)	37.63	31.90	32.76	28.59	49.41	19.03	14.89	34.21	30.78	61.87	27.89
Kane (10)	43.61	41.49	37.64	33.32	48.68	32.54	16.56	36.45	31.07	49.76	16.96
McHenry (11)	53.09	48.94	47.04	41.41	62.81	29.84	21.94	49.71	42.55	72.64	32.83
Will (12)	36.07	45.34	33.75	44.19	28.37	48.76	38.31	22.12	23.68	15.83	17.78
Lake, IN (13)	61.19	66.34	63.41	65.41	52.83	73.06	51.80	48.29	45.87	38.28	25.48
Kendall, Grundy, Kan. (14)	28.75	33.49	31.94	54.74	20.65	46.19	57.25	29.83	41.18	16.04	45.11
Kenosha, WI (15)	75.93	70.32	72.92	64.43	86.22	56.01	57.06	80.66	70.88	99.39	75.47
Boone & DeKalb (16)	75.42	78.03	74.22	70.15	75.18	79.06	65.61	70.38	67.67	68.63	57.47
Porter & Newton, IN (17)	49.08	56.31	54.98	69.90	42.54	67.91	80.23	52.40	64.23	35.96	70.17
Inbound Mean Distance	9.83	7.07	8.28	13.65	9.68	10.10	11.52	10.25	11.35	11.44	11.84

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.44	39.81	43.95	53.06	39.43	60.93	29.30	74.67	76.74	51.95	6.91	Chicago Central Area (1)
22.31	31.84	41.99	47.05	45.73	66.37	36.48	68.99	79.28	59.48	7.08	North Chicago (2)
26.48	34.02	38.24	47.41	37.85	62.42	35.14	72.25	75.42	57.95	7.44	West Chicago -east (3)
27.25	31.05	34.57	41.25	43.21	64.40	52.78	63.13	70.55	69.29	16.09	West Chicago -west (31)
43.34	49.40	49.00	61.60	29.95	52.85	14.32	84.98	76.60	43.94	9.09	South Chicago (4)
11.64	15.49	35.25	34.00	49.78	70.01	47.26	54.28	79.98	70.54	9.33	North Cook -east (5)
15.34	12.14	13.63	20.42	41.36	54.44	56.87	55.28	65.46	80.29	10.82	North Cook -west (51)
36.84	40.93	38.97	53.50	21.54	50.98	25.79	80.75	71.62	53.10	9.65	West Cook -east (6)
29.12	33.18	31.21	44.22	23.61	54.57	42.19	70.20	68.40	64.03	9.78	West Cook -west (61)
58.88	62.38	49.27	73.26	15.29	37.93	13.98	99.67	70.57	35.86	12.47	South Cook (7)
35.26	29.54	14.22	35.19	15.29	21.07	48.87	74.74	57.13	69.66	11.10	DuPage (8)
7.53	13.95	42.47	28.12	63.36	76.88	65.29	23.32	87.39	88.88	12.90	Lake, Illinois -east (9)
13.79	8.84	23.72	16.90	58.82	73.92	71.90	27.30	75.52	95.36	13.99	Lake, Illinois -west (91)
38.30	21.67	8.16	16.09	21.68	15.08	70.45	64.19	30.53	90.29	13.47	Kane (10)
26.24	18.48	17.91	10.42	66.97	62.30	88.82	22.26	29.15	108.26	15.92	McHenry (11)
63.59	62.91	20.93	68.03	9.90	22.39	22.11	104.46	54.75	57.32	15.53	Will (12)
79.05	77.70	18.37	62.81	25.67	6.59	38.80	121.66	23.14	65.06	12.94	Lake, IN (13)
64.74	71.49	70.82	84.88	27.25	38.58	10.34	109.77	84.58	15.77	13.40	Kendall, Grundy, Kan. (14)
24.33	28.36	65.73	23.11	102.43	122.17	110.03	0.78	98.94	121.60	17.00	Kenosha, WI (15)
86.22	75.84	30.83	28.60	55.10	23.75	84.10	100.89	4.36	104.02	33.79	Boone & DeKalb (16)
86.08	94.37	89.88	106.30	57.67	64.85	15.90	119.40	103.14	1.73	29.61	Porter & Newton, IN (17)
11.66	13.22	12.64	13.74	14.19	10.90	11.96	16.70	33.68	29.67	11.43	

Table 6-10. Mean Travel Distances from District to District - 10 Year Scenario (miles)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1.47	5.94	6.26	18.62	8.01	16.77	26.33	13.47	17.12	25.97	25.95
North Chicago (2)	6.76	3.71	7.02	12.06	13.87	7.59	15.94	13.37	14.44	33.00	23.81
West Chicago -east (3)	6.97	6.15	4.12	8.96	9.05	9.96	14.78	6.69	8.81	28.90	16.69
West Chicago -west (31)	18.17	12.97	9.88	1.70	27.50	11.61	11.07	14.61	8.45	39.48	17.36
South Chicago (4)	9.89	14.44	10.00	28.01	5.44	25.66	34.49	8.51	15.36	12.32	23.90
North Cook -east (5)	17.57	7.83	11.07	10.77	25.80	5.51	9.83	13.59	14.03	42.10	20.22
North Cook -west (51)	27.32	18.65	18.43	11.79	33.75	10.75	6.88	18.58	16.56	44.44	13.07
West Cook -east (6)	12.96	13.62	7.49	12.26	8.73	15.07	18.80	5.11	8.69	11.03	15.44
West Cook -west (61)	16.70	15.71	9.72	8.07	14.49	15.33	15.01	7.75	4.84	20.98	9.54
South Cook (7)	24.62	31.04	27.01	40.88	15.20	42.16	44.53	12.87	22.04	7.44	22.64
DuPage (8)	26.05	25.50	19.69	16.47	23.62	22.77	13.61	16.36	11.66	22.86	7.81
Lake, Illinois -east (9)	29.55	22.73	26.10	25.89	41.85	16.18	20.95	31.26	27.93	58.39	34.45
Lake, Illinois -west (91)	37.80	32.01	32.92	28.53	49.60	19.15	14.90	34.37	30.74	62.01	27.88
Kane (10)	43.58	41.51	37.62	33.32	48.68	32.79	16.56	36.46	31.06	49.77	16.96
McHenry (11)	53.10	48.96	47.03	41.40	62.82	29.85	21.95	49.75	42.58	72.68	32.85
Will (12)	36.08	45.35	33.75	44.23	28.37	48.79	38.31	22.12	23.68	15.83	17.78
Lake, IN (13)	61.21	66.34	63.41	65.42	52.85	73.07	51.81	48.30	45.88	38.28	25.48
Kendall, Grundy, Kan. (14)	28.75	33.48	31.93	54.77	20.67	46.19	57.26	29.84	41.18	16.05	45.12
Kenosha, WI (15)	75.93	70.28	72.75	63.98	86.17	55.92	56.47	80.67	70.82	99.36	75.40
Boone & DeKalb (16)	75.43	78.04	74.22	70.14	75.18	79.22	65.62	70.38	67.68	68.63	57.47
Porter & Newton, IN (17)	49.11	56.33	54.98	69.88	42.57	67.92	80.23	52.39	64.20	35.95	70.18
Inbound Mean Distance	9.84	7.07	8.28	13.69	9.68	10.10	11.53	10.26	11.36	11.44	11.85

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.38	39.95	44.04	53.05	39.43	60.93	29.31	74.29	76.78	51.94	6.91	Chicago Central Area (1)
22.31	31.90	41.99	47.08	45.73	66.37	36.48	68.66	79.28	59.46	7.08	North Chicago (2)
26.46	33.96	38.25	47.45	37.84	62.41	35.14	72.05	75.43	57.92	7.45	West Chicago -east (3)
27.27	31.08	34.56	41.26	43.23	64.42	52.78	63.11	70.57	69.16	16.13	West Chicago -west (31)
43.29	49.55	49.03	61.64	29.95	52.85	14.32	84.85	76.62	43.96	9.09	South Chicago (4)
11.65	15.45	35.26	33.99	49.78	70.02	47.27	54.01	79.99	70.53	9.33	North Cook -east (5)
15.55	12.13	13.63	20.42	41.36	54.44	56.88	54.47	65.45	80.28	10.83	North Cook -west (51)
36.86	40.88	38.99	53.52	21.54	50.98	25.80	80.76	71.63	53.08	9.67	West Cook -east (6)
29.19	33.23	31.19	44.24	23.61	54.59	42.18	70.21	68.39	64.03	9.80	West Cook -west (61)
58.91	62.50	49.28	73.28	15.30	37.94	13.99	99.68	70.58	35.86	12.47	South Cook (7)
35.48	29.54	14.22	35.18	15.29	21.07	48.88	74.23	57.12	69.66	11.11	DuPage (8)
7.54	15.31	44.47	29.56	63.38	76.92	65.28	23.40	88.03	88.82	13.17	Lake, Illinois -east (9)
15.64	8.86	23.75	16.86	58.83	73.90	72.14	27.40	75.47	95.62	14.38	Lake, Illinois -west (91)
40.03	21.68	8.16	16.09	21.68	15.08	70.45	63.98	30.53	90.30	13.48	Kane (10)
27.80	18.48	17.91	10.42	66.99	62.30	88.86	22.28	29.14	108.34	15.97	McHenry (11)
63.67	62.88	20.93	68.02	9.90	22.40	22.11	104.47	54.75	57.32	15.53	Will (12)
79.04	77.72	18.37	62.81	25.67	6.59	38.80	121.66	23.14	65.06	12.94	Lake, IN (13)
64.66	71.70	70.80	84.89	27.26	38.58	10.34	109.77	84.58	15.77	13.41	Kendall, Grundy, Kan. (14)
24.41	28.48	64.56	23.11	102.32	122.01	110.05	0.78	98.91	121.64	16.98	Kenosha, WI (15)
90.54	75.79	30.84	28.60	55.10	23.75	84.10	100.90	4.36	104.02	33.82	Boone & DeKalb (16)
86.02	94.60	89.86	106.34	57.68	64.85	15.91	119.29	103.15	1.73	29.61	Porter & Newton, IN (17)
12.18	13.50	12.65	13.76	14.19	10.90	11.97	16.67	33.68	29.67	11.46	

Table 6-25. Mean Travel Distances from District to District - 25 Year Scenario (miles)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1.46	5.94	6.26	18.61	8.01	16.77	26.39	13.45	17.16	25.97	25.94
North Chicago (2)	6.76	3.70	7.02	12.12	13.86	7.59	16.10	13.34	14.42	33.00	23.83
West Chicago -east (3)	6.97	6.14	4.11	8.99	9.05	9.98	14.93	6.68	8.86	28.90	16.73
West Chicago -west (31)	18.14	12.97	9.89	1.71	27.49	11.66	11.13	14.95	8.44	39.41	17.41
South Chicago (4)	9.88	14.42	9.99	28.11	5.44	25.66	34.67	8.50	15.40	12.32	23.87
North Cook -east (5)	17.56	7.84	11.09	10.92	25.81	5.52	10.43	13.63	14.07	42.16	20.68
North Cook -west (51)	27.57	18.98	18.71	11.64	33.98	11.67	6.88	18.81	16.62	44.58	13.07
West Cook -east (6)	12.92	13.59	7.49	12.46	8.72	15.15	19.09	5.12	8.76	11.03	15.44
West Cook -west (61)	16.75	15.70	9.77	8.18	14.50	15.40	15.01	7.80	4.87	20.98	9.53
South Cook (7)	24.63	31.04	27.02	40.92	15.19	42.15	44.63	12.86	22.08	7.44	22.62
DuPage (8)	26.02	25.46	19.66	16.48	23.62	23.20	13.61	16.41	11.64	22.86	7.81
Lake, Illinois -east (9)	29.51	22.75	26.07	25.89	41.80	16.23	22.90	31.24	28.00	58.26	35.42
Lake, Illinois -west (91)	40.31	35.03	35.34	28.24	51.63	20.08	14.89	35.31	31.41	62.76	27.88
Kane (10)	43.64	41.37	37.64	33.01	48.73	35.55	16.52	36.49	31.04	49.76	16.96
McHenry (11)	53.13	49.29	47.17	41.28	62.86	33.02	21.94	49.75	42.64	72.76	32.75
Will (12)	36.07	45.33	33.77	44.17	28.36	49.19	38.28	22.12	23.70	15.83	17.77
Lake, IN (13)	61.19	66.37	63.42	65.39	52.81	73.15	51.82	48.28	45.87	38.29	25.47
Kendall, Grundy, Kan. (14)	28.74	33.48	31.94	55.17	20.65	46.14	57.47	29.82	41.19	16.04	45.10
Kenosha, WI (15)	75.95	70.39	72.92	64.16	86.17	56.09	56.34	80.61	70.86	99.34	75.60
Boone & DeKalb (16)	75.42	78.04	74.26	70.04	75.18	79.59	65.61	70.42	67.73	68.62	57.44
Porter & Newton, IN (17)	49.06	56.29	54.95	70.32	42.55	67.76	80.50	52.44	64.55	35.98	70.17
Inbound Mean Distance	9.84	7.08	8.29	13.70	9.68	10.31	11.63	10.27	11.40	11.44	11.84

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.40	42.34	44.00	53.10	39.43	60.93	29.32	73.94	76.78	51.97	6.90	Chicago Central Area (1)
22.34	34.02	42.02	47.35	45.74	66.36	36.48	68.35	79.28	59.49	7.08	North Chicago (2)
26.49	35.81	38.29	47.53	37.89	62.40	35.13	71.79	75.48	57.96	7.45	West Chicago -east (3)
27.27	31.22	34.57	41.26	43.15	64.15	52.92	63.12	70.44	70.34	16.17	West Chicago -west (31)
43.28	51.63	49.03	61.76	29.94	52.84	14.32	84.70	76.61	43.91	9.09	South Chicago (4)
11.77	15.93	36.86	35.34	49.92	70.07	47.25	53.86	80.62	70.52	9.46	North Cook -east (5)
18.10	12.14	13.61	20.42	41.34	54.49	57.39	54.09	65.46	80.49	10.97	North Cook -west (51)
36.97	41.45	39.07	53.77	21.54	50.99	25.79	80.80	71.70	53.10	9.68	West Cook -east (6)
29.18	34.05	31.20	44.24	23.60	54.58	42.24	70.20	68.37	64.11	9.83	West Cook -west (61)
58.78	62.98	49.24	73.29	15.29	37.93	13.98	99.61	70.57	35.86	12.47	South Cook (7)
37.10	29.59	14.22	35.19	15.29	21.07	48.88	74.29	57.12	69.67	11.11	DuPage (8)
7.55	16.78	50.68	32.17	63.48	77.07	64.99	23.43	90.62	88.59	13.62	Lake, Illinois -east (9)
17.37	8.86	23.70	16.91	58.81	74.03	75.04	27.50	75.15	97.41	14.83	Lake, Illinois -west (91)
48.38	21.64	8.16	16.08	21.67	15.08	70.66	63.98	30.52	90.31	13.49	Kane (10)
31.55	18.49	17.91	10.42	67.00	62.37	89.30	22.28	29.13	108.39	16.10	McHenry (11)
63.52	62.91	20.92	68.04	9.90	22.39	22.11	104.45	54.76	57.32	15.53	Will (12)
78.98	77.86	18.36	62.81	25.67	6.59	38.80	121.65	23.14	65.06	12.93	Lake, IN (13)
64.60	74.78	70.77	85.05	27.25	38.58	10.34	109.44	84.58	15.77	13.40	Kendall, Grundy, Kan. (14)
24.19	28.41	64.54	23.11	102.46	122.15	109.99	0.78	98.93	121.51	16.97	Kenosha, WI (15)
92.35	75.95	30.82	28.60	55.09	23.75	84.21	100.89	4.36	104.02	33.84	Boone & DeKalb (16)
85.74	96.30	89.85	106.44	57.68	64.84	15.91	117.84	103.15	1.74	29.57	Porter & Newton, IN (17)
12.86	13.82	12.65	13.82	14.19	10.90	11.96	16.63	33.71	29.69	11.51	

Table 6-50. Mean Travel Distances from District to District - 50 Year Scenario (miles)

Destination District → / Origin District ↓	Chicago Cent Area	North (2) Chicago	West (3) Chicago-e	West (31) Chicago-w	South (4) Chicago	North (5) Cook-e	North (51) Cook-w	West (6) Cook-e	West (61) Cook-w	South Cook (7)	DuPage (8)
Chicago Central Area (1)	1.46	5.92	6.26	18.61	8.01	16.74	26.42	13.41	17.57	25.98	29.09
North Chicago (2)	6.74	3.70	7.00	12.10	13.83	7.57	16.07	13.26	14.74	32.98	24.25
West Chicago -east (3)	7.01	6.12	4.11	8.96	9.05	9.97	14.77	6.67	8.76	28.90	16.84
West Chicago -west (31)	18.15	12.91	9.84	1.72	27.49	11.76	11.14	14.56	8.47	39.42	17.49
South Chicago (4)	9.86	14.38	9.99	28.13	5.44	25.61	35.35	8.50	15.64	12.32	24.66
North Cook -east (5)	17.53	7.82	11.05	10.97	25.77	5.56	11.24	13.53	14.39	42.17	20.81
North Cook -west (51)	27.54	19.02	18.56	11.60	34.26	13.33	6.90	18.76	16.76	44.61	13.08
West Cook -east (6)	12.96	13.55	7.46	12.37	8.69	14.85	18.92	5.12	8.78	11.03	15.46
West Cook -west (61)	17.00	15.77	9.64	8.22	14.50	15.53	15.06	7.86	4.91	20.99	9.55
South Cook (7)	24.62	31.02	26.73	41.06	15.16	42.13	44.63	12.84	22.10	7.44	22.59
DuPage (8)	28.67	25.79	19.77	16.52	23.91	23.43	13.61	16.43	11.68	22.85	7.80
Lake, Illinois -east (9)	29.50	22.72	26.04	25.81	41.76	16.22	27.53	31.00	28.11	58.20	35.49
Lake, Illinois -west (91)	40.57	35.91	35.60	28.53	52.41	24.67	15.04	35.41	32.01	62.93	28.07
Kane (10)	47.52	41.62	38.11	33.02	48.98	35.74	16.51	36.56	31.07	49.73	16.95
McHenry (11)	53.41	49.57	47.10	41.44	63.41	38.98	21.97	49.91	42.86	72.79	32.80
Will (12)	36.07	45.32	33.79	44.05	28.31	49.15	38.27	22.09	23.66	15.83	17.75
Lake, IN (13)	61.17	66.35	63.42	65.37	52.74	73.13	51.79	48.28	45.81	38.28	25.46
Kendall, Grundy, Kan. (14)	28.69	33.41	31.87	55.53	20.62	46.02	57.99	29.79	41.48	16.03	45.19
Kenosha, WI (15)	75.84	70.26	72.99	64.49	86.12	55.90	56.11	80.39	70.95	99.31	75.58
Boone & DeKalb (16)	76.87	78.15	74.57	70.02	75.28	79.75	65.59	70.39	67.75	68.64	57.43
Porter & Newton, IN (17)	48.99	56.20	54.89	70.66	42.51	67.67	80.64	52.42	64.99	35.98	70.09
Inbound Mean Distance	9.91	7.07	8.27	13.70	9.67	10.77	11.85	10.26	11.45	11.44	11.86

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.39	42.95	48.53	53.06	39.48	60.92	29.31	73.81	78.33	52.08	6.95	Chicago Central Area (1)
22.33	35.69	42.40	47.48	45.72	66.37	36.46	68.25	79.45	59.52	7.08	North Chicago (2)
26.46	36.71	39.01	47.17	37.90	62.66	35.21	71.71	75.92	58.10	7.45	West Chicago -east (3)
27.28	31.94	34.55	41.26	43.15	64.03	54.13	63.17	70.32	71.14	16.21	West Chicago -west (31)
43.24	52.73	50.46	62.78	29.93	52.84	14.31	84.71	77.08	43.95	9.10	South Chicago (4)
12.18	19.05	37.02	39.45	50.00	70.06	47.28	53.77	80.65	70.57	9.67	North Cook -east (5)
25.91	12.19	13.60	20.42	41.33	54.44	58.33	54.02	65.43	80.65	11.29	North Cook -west (51)
36.26	41.87	39.16	53.86	21.54	51.00	25.79	80.15	71.70	53.17	9.67	West Cook -east (6)
29.28	34.44	31.18	44.27	23.60	54.52	42.64	70.30	68.33	64.31	9.86	West Cook -west (61)
58.50	63.03	49.23	73.40	15.29	37.93	13.97	99.50	70.56	35.86	12.46	South Cook (7)
37.21	29.57	14.22	35.16	15.28	21.06	49.13	74.59	57.11	69.59	11.16	DuPage (8)
7.54	17.99	51.20	32.84	63.38	77.03	64.92	23.39	90.70	88.48	14.15	Lake, Illinois -east (9)
19.22	8.90	23.68	16.92	58.81	73.10	75.88	27.49	75.02	97.91	15.58	Lake, Illinois -west (91)
49.06	21.59	8.15	16.08	21.66	15.08	70.90	64.01	30.51	90.27	13.49	Kane (10)
34.72	18.50	17.91	10.42	67.01	62.44	89.66	22.27	29.13	108.47	16.25	McHenry (11)
63.29	62.89	20.92	67.98	9.90	22.40	22.09	104.29	54.75	57.32	15.52	Will (12)
78.69	77.82	18.35	62.81	25.67	6.60	38.80	121.68	23.13	65.07	12.93	Lake, IN (13)
63.99	75.50	70.95	85.76	27.24	38.58	10.34	109.20	84.64	15.78	13.40	Kendall, Grundy, Kan. (14)
24.02	28.72	64.21	23.10	102.55	122.28	109.88	0.78	98.79	121.32	16.95	Kenosha, WI (15)
92.45	75.88	30.82	28.60	55.05	23.75	84.29	100.93	4.36	104.06	33.90	Boone & DeKalb (16)
85.40	96.79	89.89	106.62	57.68	64.84	15.92	117.59	103.16	1.73	29.56	Porter & Newton, IN (17)
13.78	14.19	12.65	13.84	14.18	10.90	11.96	16.61	33.78	29.70	11.61	

Table 6-100. Mean Travel Distances from District to District - 100 Year Scenario (miles)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1.46	5.92	6.26	18.61	8.01	16.74	26.48	13.42	17.57	25.98	29.15
North Chicago (2)	6.75	3.70	7.00	12.16	13.83	7.57	16.37	13.26	14.68	32.98	24.38
West Chicago -east (3)	7.01	6.13	4.11	9.07	9.05	9.98	14.94	6.66	8.83	28.91	17.05
West Chicago -west (31)	18.17	13.00	9.93	1.73	27.51	11.88	11.06	14.67	8.47	39.42	17.44
South Chicago (4)	9.86	14.39	9.99	28.21	5.44	25.60	35.62	8.50	15.64	12.32	24.69
North Cook -east (5)	17.54	7.82	11.03	11.12	25.78	5.56	11.72	13.47	14.46	42.22	21.28
North Cook -west (51)	27.50	19.20	18.66	11.50	34.41	13.99	6.90	18.79	16.77	44.63	13.07
West Cook -east (6)	12.97	13.55	7.46	12.53	8.69	14.85	19.03	5.11	8.81	11.03	15.48
West Cook -west (61)	17.01	15.81	9.78	8.24	14.53	15.73	15.07	7.89	4.91	20.98	9.55
South Cook (7)	24.62	31.02	26.73	41.10	15.16	42.19	44.66	12.84	22.11	7.44	22.60
DuPage (8)	28.67	25.93	19.92	16.53	23.93	23.96	13.60	16.44	11.67	22.85	7.80
Lake, Illinois -east (9)	29.51	22.71	26.01	25.99	41.77	16.19	28.39	30.96	28.09	58.18	35.48
Lake, Illinois -west (91)	40.74	36.58	35.93	28.79	52.82	25.94	15.26	35.97	32.28	63.07	28.15
Kane (10)	47.58	41.73	38.14	33.02	48.98	35.97	16.51	36.61	31.08	49.73	16.95
McHenry (11)	53.66	49.81	47.44	41.58	63.61	39.60	22.00	50.01	43.00	72.83	32.87
Will (12)	36.07	45.33	33.84	44.07	28.31	49.58	38.26	22.07	23.65	15.83	17.75
Lake, IN (13)	61.18	66.39	63.43	65.39	52.76	73.37	51.77	48.26	45.81	38.28	25.46
Kendall, Grundy, Kan. (14)	28.71	33.43	31.90	55.58	20.63	45.97	58.19	29.79	41.51	16.03	45.20
Kenosha, WI (15)	75.65	70.06	72.85	64.46	86.07	55.76	56.46	80.50	70.94	99.42	75.57
Boone & DeKalb (16)	76.89	78.19	74.65	70.13	75.30	79.97	65.60	70.40	67.75	68.64	57.43
Porter & Newton, IN (17)	48.99	56.21	54.92	70.96	42.53	67.46	80.80	52.42	65.02	35.95	70.07
Inbound Mean Distance	9.91	7.08	8.29	13.74	9.67	10.93	11.95	10.26	11.46	11.44	11.87

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.40	42.99	48.59	53.07	39.48	60.93	29.31	73.80	78.35	51.97	6.95	Chicago Central Area (1)
22.31	36.27	42.40	47.57	45.79	66.42	36.44	68.23	79.49	59.46	7.09	North Chicago (2)
26.47	36.79	39.14	47.27	37.97	62.68	35.19	71.77	76.00	58.01	7.47	West Chicago -east (3)
27.30	32.52	34.55	41.27	43.16	64.03	54.32	63.26	70.32	71.40	16.24	West Chicago -west (31)
43.23	52.83	50.47	62.91	29.94	52.84	14.32	84.71	77.11	44.01	9.10	South Chicago (4)
12.21	21.04	37.15	40.09	50.37	70.21	47.23	53.78	80.84	70.50	9.80	North Cook -east (5)
26.72	12.34	13.60	20.42	41.29	54.44	58.61	54.36	65.42	80.69	11.38	North Cook -west (51)
36.25	42.17	39.22	53.88	21.54	51.02	25.79	80.17	71.74	53.15	9.68	West Cook -east (6)
29.30	34.57	31.19	44.39	23.61	54.52	42.69	70.35	68.34	64.32	9.89	West Cook -west (61)
58.50	63.04	49.24	73.41	15.29	37.93	13.97	99.47	70.56	35.86	12.46	South Cook (7)
37.24	29.53	14.22	35.15	15.28	21.07	49.17	74.72	57.11	69.59	11.17	DuPage (8)
7.54	18.18	50.78	32.87	63.49	77.08	64.88	23.40	90.51	88.39	14.24	Lake, Illinois -east (9)
19.35	8.90	23.69	16.93	58.85	73.30	76.35	27.52	74.92	98.02	15.75	Lake, Illinois -west (91)
49.00	21.56	8.15	16.09	21.66	15.08	70.98	64.01	30.51	90.27	13.49	Kane (10)
34.88	18.50	17.92	10.42	67.01	62.45	89.75	22.28	29.13	108.52	16.27	McHenry (11)
63.28	62.88	20.92	68.01	9.90	22.39	22.10	104.27	54.75	57.31	15.52	Will (12)
78.68	77.83	18.36	62.80	25.67	6.59	38.80	121.71	23.13	65.07	12.93	Lake, IN (13)
63.98	75.52	71.01	86.05	27.24	38.58	10.33	109.05	84.72	15.77	13.40	Kendall, Grundy, Kan. (14)
24.03	28.70	64.03	23.10	102.55	122.18	109.87	0.78	98.75	121.19	16.95	Kenosha, WI (15)
92.30	75.78	30.82	28.60	55.05	23.75	84.30	100.95	4.36	104.06	33.91	Boone & DeKalb (16)
85.40	96.74	89.92	106.73	57.67	64.84	15.92	117.61	103.30	1.73	29.57	Porter & Newton, IN (17)
13.85	14.30	12.65	13.85	14.18	10.90	11.96	16.63	33.79	29.69	11.64	

Table 6-500. Mean Travel Distances from District to District - 500 Year Scenario (miles)

Destination District →	Chicago	North (2)	West (3)	West (31)	South (4)	North (5)	North (51)	West (6)	West (61)	South	DuPage (8)
Origin District ↓	Cent Area	Chicago	Chicago-e	Chicago-w	Chicago	Cook-e	Cook-w	Cook-e	Cook-w	Cook (7)	
Chicago Central Area (1)	1.46	5.92	6.24	18.73	8.00	16.75	26.51	13.36	19.86	25.97	31.84
North Chicago (2)	6.73	3.69	6.94	12.46	13.82	7.55	16.37	13.17	16.83	33.00	25.29
West Chicago -east (3)	7.01	6.14	4.11	10.39	9.05	10.01	15.24	6.67	12.37	28.92	20.73
West Chicago -west (31)	18.18	13.00	10.30	1.68	27.54	12.00	10.91	15.08	8.66	39.61	17.32
South Chicago (4)	9.84	14.36	9.95	28.94	5.43	25.61	36.38	8.48	16.10	12.32	24.96
North Cook -east (5)	17.54	7.81	10.99	11.94	25.82	5.56	11.68	13.29	15.69	42.38	21.81
North Cook -west (51)	27.53	19.06	18.71	11.48	34.78	13.88	6.89	19.04	16.89	44.67	13.06
West Cook -east (6)	12.97	13.62	7.41	13.76	8.66	15.15	19.14	5.09	9.80	11.03	16.08
West Cook -west (61)	17.66	17.77	11.80	8.31	14.63	16.88	15.19	8.52	4.95	20.97	9.55
South Cook (7)	24.61	31.03	26.51	41.29	15.14	42.21	44.82	12.81	22.20	7.44	22.57
DuPage (8)	31.21	26.31	21.93	16.47	23.89	24.46	13.60	16.87	11.66	22.85	7.79
Lake, Illinois -east (9)	29.50	22.68	25.81	26.37	41.76	16.17	28.14	30.44	28.49	58.24	35.52
Lake, Illinois -west (91)	40.86	36.72	35.89	28.77	53.25	26.03	15.20	36.11	32.39	63.11	28.12
Kane (10)	48.06	41.89	40.02	32.99	48.90	36.15	16.48	37.02	31.09	49.71	16.94
McHenry (11)	53.79	49.92	47.33	41.63	64.26	39.61	21.98	50.19	43.36	72.81	32.82
Will (12)	36.07	45.45	33.81	43.99	28.23	49.81	38.23	22.07	23.67	15.83	17.74
Lake, IN (13)	61.14	66.50	63.39	65.38	52.64	73.50	51.77	48.30	45.79	38.27	25.46
Kendall, Grundy, Kan. (14)	28.64	33.36	31.77	56.76	20.58	45.77	59.51	29.73	41.67	16.00	45.14
Kenosha, WI (15)	75.72	70.11	73.16	64.47	86.13	55.82	55.89	80.71	71.12	99.62	75.45
Boone & DeKalb (16)	76.97	78.32	74.96	70.05	75.38	80.09	65.57	70.58	67.82	68.63	57.40
Porter & Newton, IN (17)	48.92	56.11	54.73	72.62	42.49	67.20	81.40	52.23	65.22	35.94	70.08
Inbound Mean Distance	9.97	7.10	8.44	14.11	9.66	10.95	11.93	10.33	12.18	11.43	11.95

Lake (9) Illinois-e	Lake (91) Illinois-w	Kane (10)	McHenry (11)	Will (12)	Lake (13) Indiana	KGK (14)	Kenosha WI (15)	Boone (16) & DeKalb	Porter (17) Newton, IN	Outbound Mean	Origin District
33.39	43.03	49.54	53.21	39.48	60.91	29.28	73.73	78.45	51.99	7.00	Chicago Central Area (1)
22.32	36.08	43.34	47.69	45.95	66.68	36.43	68.18	80.06	59.49	7.11	North Chicago (2)
26.65	37.21	42.59	47.83	38.32	62.87	35.21	72.08	76.99	58.09	7.89	West Chicago -east (3)
27.30	32.13	34.54	41.25	43.12	64.01	55.35	63.35	70.28	72.39	16.29	West Chicago -west (31)
43.22	53.49	50.60	63.77	29.89	52.81	14.30	84.67	77.19	43.90	9.10	South Chicago (4)
12.20	20.95	37.38	40.25	51.24	71.14	47.18	53.77	81.25	70.35	9.86	North Cook -east (5)
26.77	12.33	13.60	20.42	41.30	54.45	59.49	54.38	65.43	80.79	11.37	North Cook -west (51)
36.89	42.56	40.52	54.24	21.52	51.11	25.77	80.74	72.04	53.12	9.88	West Cook -east (6)
29.38	34.66	31.23	44.54	23.51	54.44	43.13	70.45	68.33	64.38	10.26	West Cook -west (61)
58.29	63.17	49.26	73.54	15.28	37.93	13.96	99.39	70.57	35.86	12.45	South Cook (7)
37.28	29.51	14.21	35.15	15.26	21.06	49.05	74.64	57.10	69.59	11.25	DuPage (8)
7.53	18.12	50.64	32.91	63.81	77.74	64.84	23.40	90.49	88.35	14.20	Lake, Illinois -east (9)
19.32	8.89	23.68	16.93	58.82	73.22	77.62	27.50	74.89	98.02	15.73	Lake, Illinois -west (91)
49.14	21.54	8.15	16.08	21.66	15.08	70.98	63.96	30.51	90.28	13.49	Kane (10)
34.94	18.49	17.90	10.42	66.97	62.44	89.88	22.28	29.13	108.53	16.26	McHenry (11)
63.14	62.90	20.90	67.92	9.89	22.39	22.09	104.29	54.71	57.31	15.51	Will (12)
78.72	77.77	18.35	62.81	25.67	6.59	38.80	121.87	23.12	65.07	12.93	Lake, IN (13)
63.66	76.36	71.16	87.90	27.21	38.57	10.31	108.50	84.87	15.76	13.38	Kendall, Grundy, Kan. (14)
23.99	28.70	63.99	23.10	102.75	122.20	109.82	0.78	98.75	121.15	16.94	Kenosha, WI (15)
92.35	75.78	30.81	28.59	55.03	23.75	84.34	101.00	4.36	104.07	33.93	Boone & DeKalb (16)
85.25	96.67	90.15	107.07	57.66	64.84	15.92	117.32	104.02	1.73	29.59	Porter & Newton, IN (17)
13.84	14.27	12.66	13.85	14.18	10.90	11.94	16.62	33.86	29.69	11.70	

Figure 1. Mean Travel Time for the Chicago Region

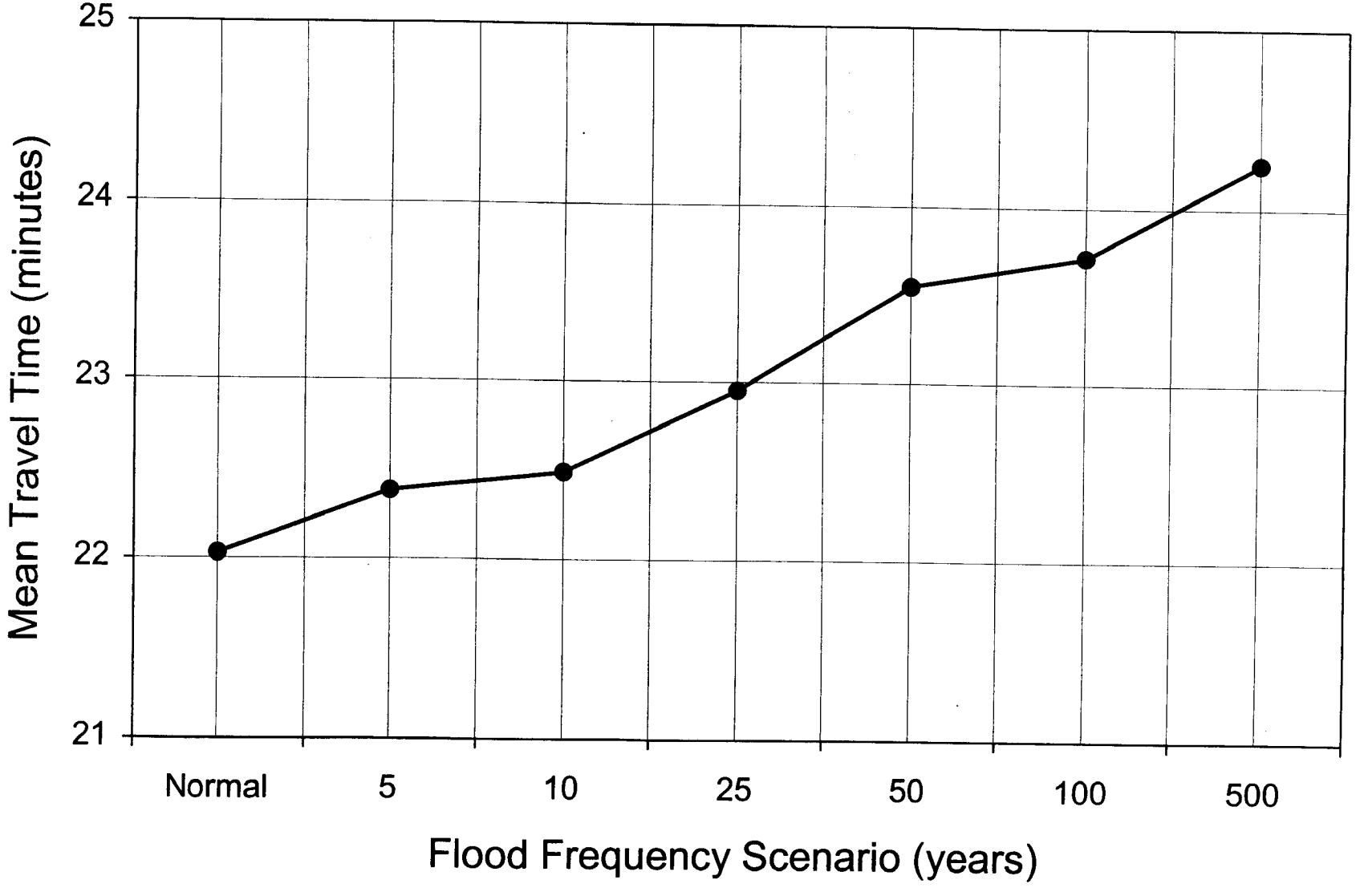


Figure 2. Mean Travel Time from
West Lake County to East North Cook County

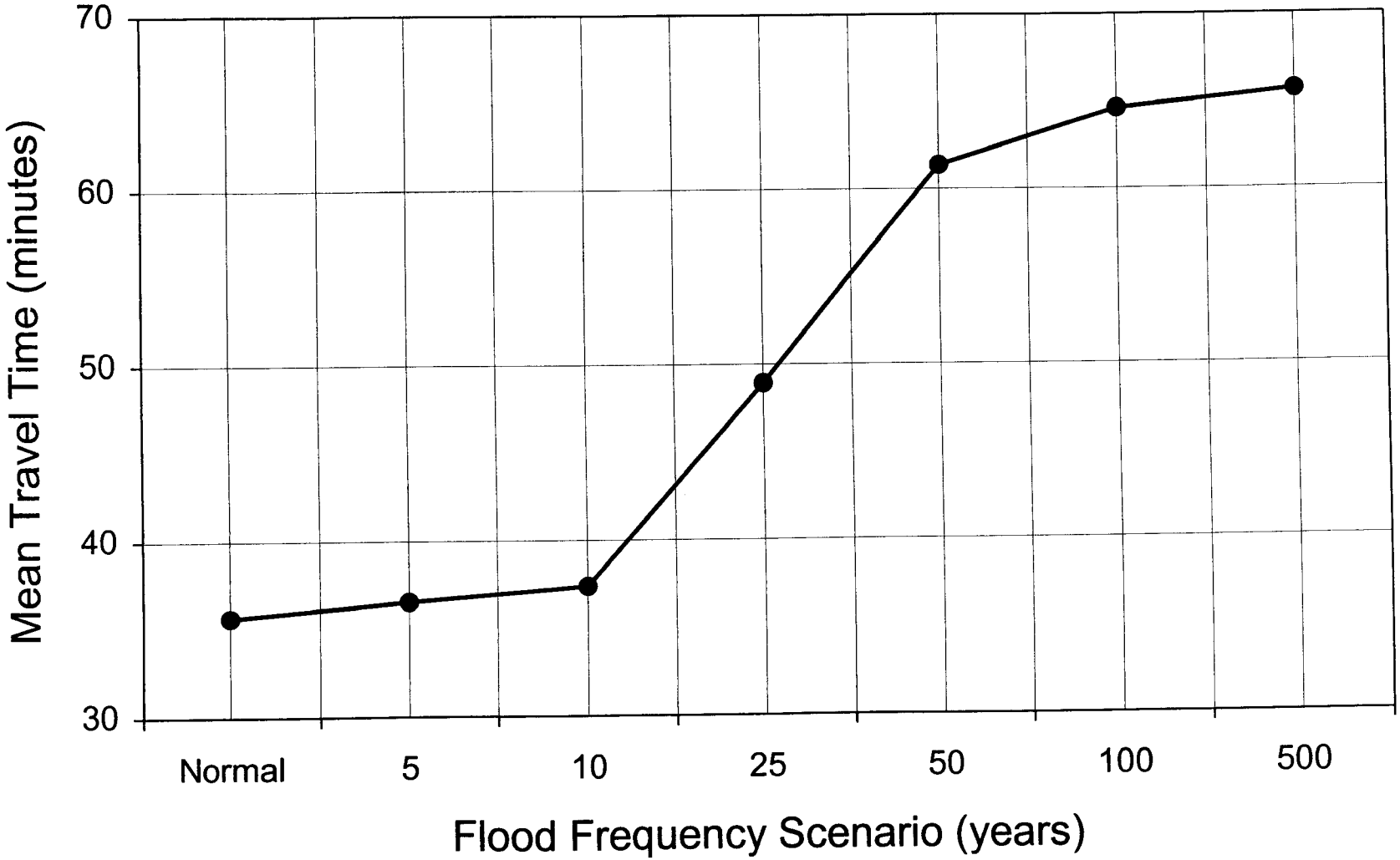


Figure 3. Mean Travel Distance for the Chicago Region

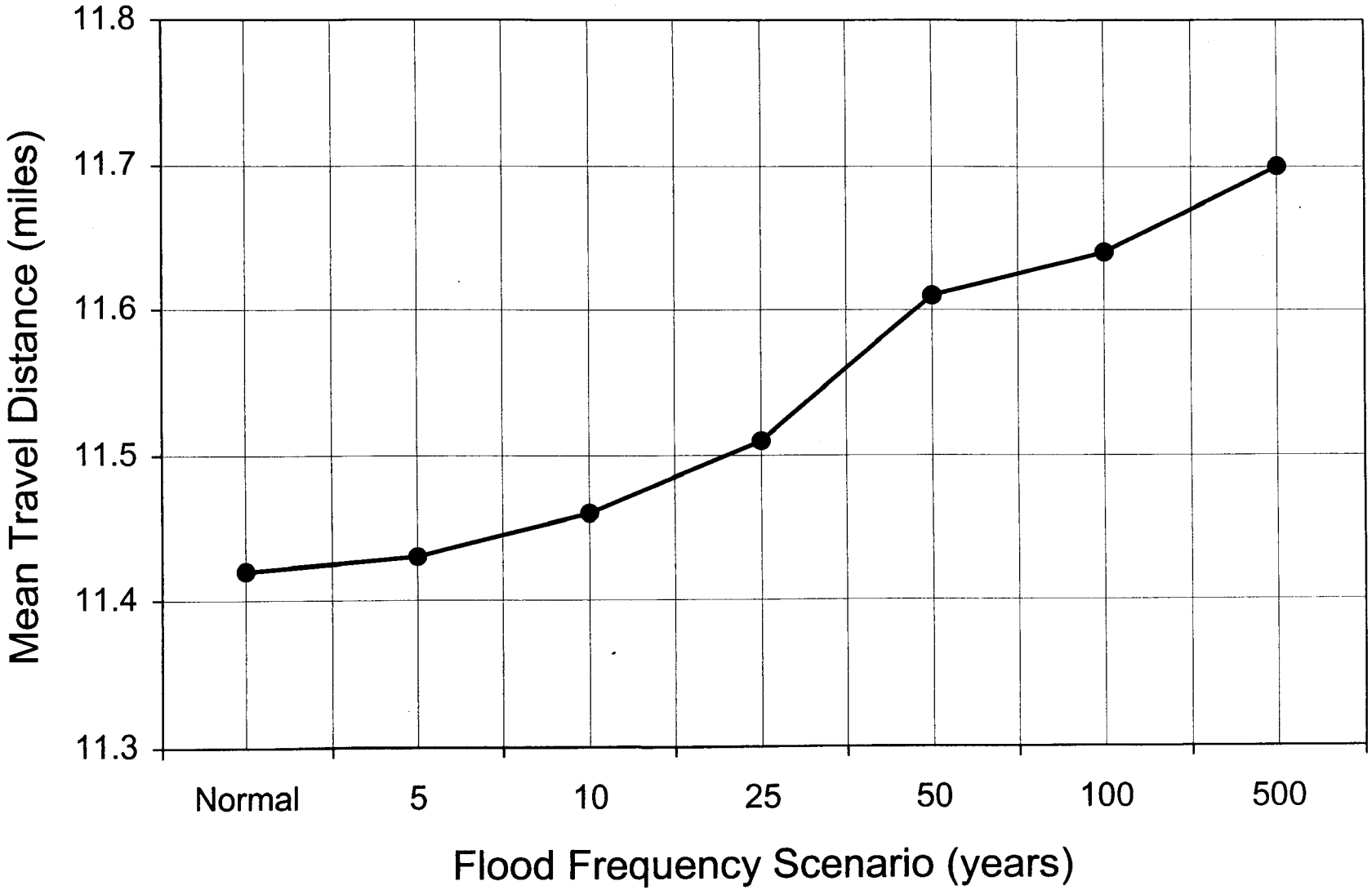
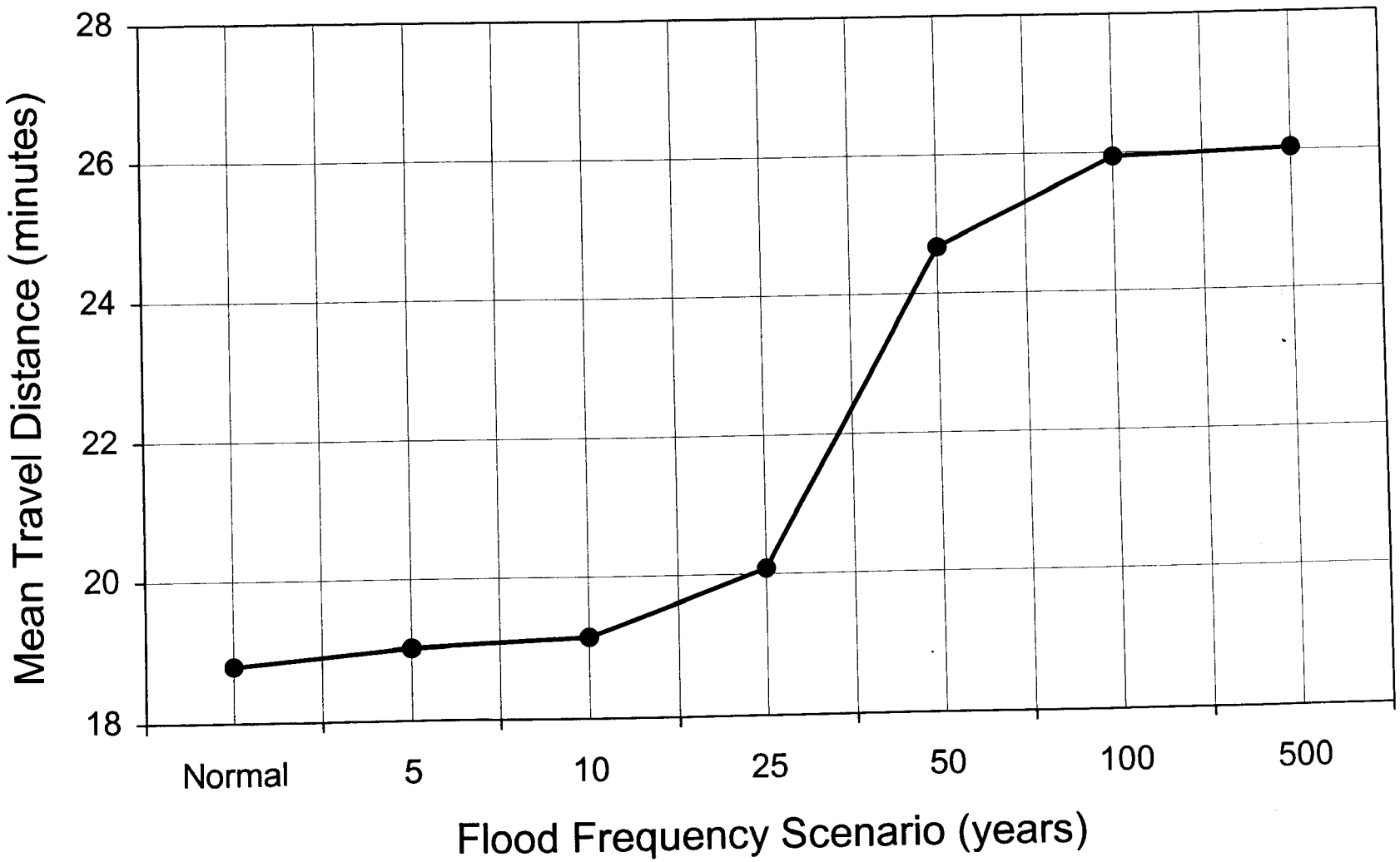



Figure 4. Mean Travel Distance from
West Lake County to East North Cook County