

Implementation of the Kane County 2040 Long Range Transit Plan



Transit-Supportive Corridors: Existing Conditions and Implementation Tools

May 2015

Funding Acknowledgement

This project was supported through the Chicago Metropolitan Agency for Planning's (CMAP) Local Technical Assistance (LTA) program, which is funded by the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), U.S. Department of Housing and Urban Development (HUD), Illinois Department of Transportation (IDOT), and the Chicago Community Trust. The Metropolitan Mayors Caucus (MMC) and CMAP would like to thank these funders for their support for this project.

CMAP is the region's official comprehensive planning organization. Its GO TO 2040 planning campaign is helping the region's seven counties and 284 communities to implement strategies that address transportation, housing, economic development, open space, the environment, and other quality of life issues.

See www.cmap.illinois.gov for more information.

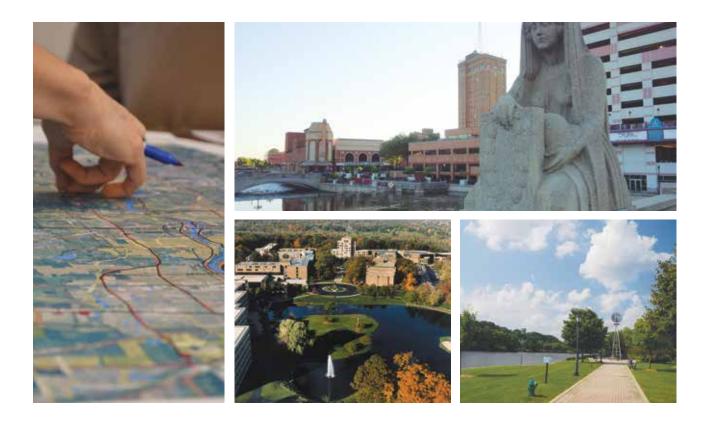


Table of Contents

Introduction	4
Section 1: Transit-Supportive Corridor Recommendations	8
Section 2: Model Zoning Ordinance	46
Section 3: Comprehensive Plan Language	62
Section 4: Moving Forward	70
Appendices (provided under separate cover)	76



INTRODUCTION



Purpose of the Report

This report has been prepared to assist Kane County and municipalities in implementing the 2040 Long Range Transit Plan. The report has been a collaborative project involving Kane County, the Chicago Metropolitan Agency for Planning (CMAP), regional transportation agencies and a steering committee consisting of municipal representatives.

The Overall Goals of this Report

This report has two overall goals that form the basis of the document. First, the results of the analysis completed for this report will assist the communities and Pace in focusing their resources in the shortterm (within 10 years). Kane County understands the importance of using resources efficiently, and the intent is that this list of corridors will be extremely beneficial for municipalities and Pace. The second goal is that this report will provide the foundation for comparing the existing conditions of the County with its long-term vision for an interconnected transit network. For many reasons, including a lack of transitsupportive development, many roadways throughout the County are not currently seen as being able to provide high quality transit service. However, in the long term, with proper planning and coordination by the County, municipalities, and Pace, these corridors can be developed into a network of successful transitsupportive corridors.

How Will this Report Support Transit Friendly Corridors?

This report will help municipalities, Kane County, and regional transportation agencies plan for, create, and support viable transit corridors. Section 1 includes a detailed analysis that identifies the current corridors within Kane County with the existing conditions that may be most suitable for transit service. This list can be helpful in assisting in the creation of service and non-service strategies for the corridors. In addition this report will be a tremendous asset when applying for grants or alternative funding sources to help justify the use of funds within a particular corridor.

What are the Municipal Benefits?

If municipalities work with transportation agencies to create successful transit-supportive corridors in their communities there are a number of benefits that can be expected. Key benefits include:

- 1. Increased public transit ridership potential.
- 2. Cost-effective public transit.
- 3. Reduced sprawl.
- 4. Reduced public infrastructure /service costs.
- 5. A foundation for the eventual development of other high-frequency modes of transit.
- 6. Increased likelihood of operational and capital funding earmarked for public transit infrastructure and services.

What Can Municipalities Do to Support Transit-Supportive Corridors?

This report includes important information that can be used by each municipality to promote transitsupportive corridors. A strategy for all communities regardless of whether they have a corridor highlighted in this analysis or not — is to include Pace in the development review process. This will help ensure that bus access and egress is properly designed if proposed to be a transit-supportive development. Section 2 provides a model zoning ordinance that can be used by communities. The ordinance included can be modified to reflect local circumstances. Section 3 includes examples of language to include in Comprehensive Plan updates. Language is provided for a number of typical plan sections and, like the ordinance language, can be modified to suit local desires.

In summary, the following are key activities that municipalities can do to support the creation of transit-supportive corridors:

- Promote higher-density development and a greater mix of uses within these corridors.
- Create and adopt zoning ordinance updates. (Using the model language in **Section 2** of this report.)
- Include supportive language in Comprehensive Plan updates. (see Section 3)
- Continue to promote pedestrian-friendly street design and consider adopting a Complete Streets policy.
- Take steps to improve the walkability and "bikeability" of your community.
- Include Pace in the development review process and incorporate Pace's Transit Supportive Guidelines in the planning and design process.

Section 1: TRANSIT-SUPPORTIVE CORRIDOR RECOMMENDATIONS



This section includes an analysis of the potential transit-supportive corridors and indicators that were identified early in the process by members of the Oversight Steering Committee (OSC).

Photo credit: Michael Kappel, Flickr user.

Analysis Process

Original Corridor Identification

At its initial meeting the OSC selected 86 unique corridor segments to be analyzed by CMAP staff (see Appendix C). Many of these original corridors were extremely short segments that were hard to compare to longer routes. The project team decided to connect logical segments and eliminate the corridors that fell mostly outside of Kane County, which resulted in the identification of 42 consolidated corridors (see Appendix B). It should be noted that consolidation caused some corridors to overlap, and some corridors that scored extremely low or had close parallel routes were also eliminated from the analysis.

Indicators

In order to conduct an analysis on the original group of corridors, the project team created a list of indicators by which to measure each corridor. The project team identified multiple indicators with assigned values to rank each corridor. The project team met with the OSC to finalize the list of indicators and members of the committee assisted in determining which indicators were most (and least) important. Based upon the results of that meeting the following is a description of the indicators used — grouped according to level of importance.



Indicator and Corridor Values

Each corridor was analyzed using the agreed upon indicators. Most indicator values were ranked and assigned a value from 1-42. For categories where many corridors were likely to have a score of zero (such as "access to higher education") a value was given according to the number of facilities that the corridor touched. For example, a corridor that did not connect any higher education facilities received a value of "o," a corridor that intersected one facility received a value of "5," two received a "10", and anything higher received a value of "25." Assigned values (rather than simple rankings) were used for access to libraries, access to higher education, access to medical facilities, and existing Pace service (shown in Table 1.1). These numbers were chosen because of the importance of having access to these destinations, and these numbers are comparative to the 1-42 rankings without significantly altering the final outcome.

Area included in the Analysis

For most indicators the analysis focused upon a corridor width, or buffer, extending 0.5 miles from the centerline of the route. These equate to areas that are a total of 1-mile in width. For existing Pace bus routes, a buffer of 0.25-miles is used for a total of 0.5 miles. A bus walk shed is typically considered to be 0.25 miles, while the typical walking distance for a Metra station is considered 0.5 miles. Because of this — different distances were used to conduct analysis for existing Pace bus routes compared to the transit-supportive corridor.

Table 1.1 Preliminary transit-supportive corridors

INDICATOR	RATIONALE	VALUE CALCULATION	SCORE
High Priority I	Measure		
Population density	Residents living in close proximity to routes provide transit support as a major group of potential riders.	Total residential population within a 0.5-mile buffer (meaning 0.5 miles from the centerline of the street for a total of 1 mile), values ranked 1 - 42, with highest rank going to highest population.	[Corridor Score]*2 (for possible scores between 2 and 84)
Transit connections	Transit connections extend the overall area that can be accessed via transit.	Total area that overlaps with Pace bus routes and Metra stations, calculated by creating a 0.25-mile buffer from Pace routes (for a total of 0.5 miles) and a 0.5-mile buffer from Metra stations (for a total of 1-mile). Values ranked 1 - 42, with highest rank going to the corridor that intersects or overlaps the most Pace routes and Metra station areas.	[Corridor Score]*2 (for possible scores between 2 and 84)
Job density	Employees working in close proximity to routes provide transit support as a major group of potential riders	Employment data is available by census tract. CMAP multiplied the number of jobs in each tract by the percentage of the tract overlapped by the corridor. So if a corridor overlaps 1/10th of a census tract that has 100 jobs, that section of the corridor is given a value of 10, and the sum of all sections were calculated and ranked 1 - 42.	[Corridor Score]*2 (for possible scores between 2 and 84)
Presence of existing Pace transit service	Current bus routes demonstrate existing demand for bus transit along the routes.	Corridors that overlapped with existing Pace bus service along the same route were given a value of 15. Corridors with no overlap of Pace bus routes were assigned a value of 0. The relatively low value of 15 was chosen because there were only 10 such corridors, and we didn't want this rank to significantly alter final results.	[Corridor Value]*2 (for a possible value of 0 or 30)
Walkability	Walkability increases transit and land use accessibility. One of the most significant factors in walkability is intersection density— short blocks increase walkability.	Intersection density was used to determine walkability. The number of intersections was divided by the length of the corridor, and the resulting values were ranked 1 - 42	[Corridor Score]*2 (for possible scores between 2 and 84)
Transit- dependent population	Households without a car or with only one car are more likely to rely on transit for mobility.	Using the Census 2011 ACS 5-year estimates of "Vehicles available" the percentage of households that have one car or no cars available for each segment of corridor was averaged, and the resulting values were ranked 1- 42.	[Corridor Score]*2 (for possible scores between 2 and 84)
Transit ridership	Areas with good existing transit ridership levels are more likely to be successful with additional transit lines.	Using census block group level data from the Center for Neighborhood Technology, we calculated the percentage of transit riders by block group and averaged that for the block groups that intersected the corridors and ranked the resulting values 1 - 42.	[Corridor Score]*2 (for possible scores between 2 and 84)



Table 1.1 Preliminary transit-supportive corridors (continued)

INDICATOR	RATIONALE	VALUE CALCULATION	SCORE
Medium Prior	ity Measure		
Access to community services	People need transit access to vital community services such as day care, vocational rehabilitation centers, and services for the elderly. These siwtes are also employment hubs.	After counting the number of community destinations within a 0.5-mile of street segments (1-mile total), we ranked the corridors from 1 - 42.	[Corridor Score]*1.5 (for possible scores between 1.5 and 63)
Access to medical facilities	Patients and visitors need transit access to critical medical care at major hospitals. These sites are also employment hubs.	We counted the number of medical facilities within a 0.5-mile of street segments (1-mile total). Since there are not many medical facilities throughout the county (highest corridor had 17, most had none), the corridors were given a value depending on the number of facilities.	The corridors were given values according to number of medical facilities accessed: 0 for none, 5 for 1, 10 for 2, and 25 for more than 2. Thirteen corridors got 25 points, 6 got 10 points, 5 got 5 points, and 18 got 0. These values were multiplied by 1.5 (for possible values of 0, 7.5, 15, or 37.5).
Access to grocery stores	People need transit access to fresh food at grocery stores, produce markets, and other types of food stores. These sites are also employment hubs.	We counted the number of grocery stores within a 0.5-mile of street segments (1-mile total) and ranked the corridors from 1 - 42.	[Corridor Score]*1.5 (for possible scores between 1.5 and 63)
Access to retail	People need transit access to retail opportunities to meet their shopping and socializing needs. These sites are also employment hubs.	We counted the number of retail businesses within a 0.5-mile of street segments (1-mile total) and ranked the corridors from 1 - 42.	[Corridor Score]*1.5 (for possible scores between 1.5 and 55.5)
Access to higher education	People need transit access to higher educational opportunities such as community colleges. These sites are also employment hubs.	We counted the number of higher educational institutions within a 0.5-mile of street segments (1-mile total). Since there are not many higher educational institutions throughout the county (highest corridor had 3, most had none), the corridors were given a value depending on the number of facilities.	The corridors were given values according to number of higher education facilities accessed: 0 for none, 5 for 1, 10 for 2, and 25 for more than 2. One corridor got 25 points, 3 got 10 points, 7 got 5 points, and 31 got 0. These values were multiplied by 1.5 (for possible values of 0, 7.5, 15, or 37.5).

Table 1.1 Preliminary transit-supportive corridors (continued)

INDICATOR	RATIONALE	VALUE CALCULATION	SCORE
Low Priority Mea	asure		
Access to entertainment	Transit access to cultural, entertainment and social destinations such as movie theaters and museums is a major quality- of-life benefit for many people. These sites are also employment hubs.	We counted the number of entertainment destinations within a 0.5-mile of street segments (1-mile total), and ranked the corridors from 1-42.	[Corridor Score] (for possible scores between 1 and 42)
Access to libraries	People of all ages need transit access to educational opportunities such as libraries.	We counted the number of libraries within a 0.5-mile of street segments (1-mile total). Since there are not many libraries throughout the county (highest corridor had 3, most had none), the corridors were given a value depending on the number of facilities.	The corridors were given values according to number of libraries accessed: 0 for none, 5 for 1, 10 for 2, and 25 for more than 2. One corridor got 25 points, 3 got 10 points, 10 got 5 points, and 28 got 0. (for possible scores of 0, 5, 10, or 25).
Vehicle Miles Traveled (VMT) per household	Areas with lower average VMT are likely to have more people walking, biking, and using transit.	Using census block group level data from the Center for Neighborhood Technology, we calculated the average VMT by block group and averaged that for the block groups that intersected the corridors and ranked the resulting values 1 - 42, with lowest VMT levels receiving the highest scores.	[Corridor Score] (for possible scores between 1 and 42)
Access to K-12 schools	People of all ages need transit access to educational opportunities. Although most public schools in suburban areas use school buses and not public transit, these sites are also employment hubs, and therefore support staff transit opportunities.	We counted the number of K-12 educational institutions within a 0.5-mile of street segments (1-mile total), and ranked the corridors from 1 - 42.	[Corridor Score] (for possible scores between 1 and 42)
Local Housing + Transportation costs	Housing and transportation costs make up a large proportion of household budgets. Areas with the lowest total housing plus transportation (H+T) costs are most affordable and typically offer various transportation options.	Using census block group level data from the Center for Neighborhood Technology, we calculated the average H+T costs by block group and averaged that for the block groups that intersected the corridors and ranked the resulting values 1 - 42 Corridors with the lowest H+T cost scored the highest.	[Corridor Score] (for possible scores between 1 and 42)

Note: Numbers are for identification and not rankings.

Source: Chicago Metropolitan Agency for Planning.

Figure 1.1 Preliminary existing transit-supportive corridors



Source: Chicago Metropolitan Agency for Planning.



Analysis Results

Each corridor has a subtotal for the high priority measures, the medium priority measures, and the low priority measures. The subtotal for the medium priority measures was multiplied by 1.5, and the subtotal for high priority measures was multiplied by two. The final ranking adds up the three weighted subtotal columns. For the high priority measures, there was a total possible score of 494; for the medium priority measures the total possible score was 241.5; and the total possible score for low priority measures was 173.

Adding all tiers of measures together, the highest possible score was 908.5. The corridor that scored the highest had 848.5 points, and the corridor that scored the lowest had 51.5 points.

The ranking of each Transit-Supportive Corridor is shown in Tables 1.2a-c, and the final ranking of the corridors is mapped on Figure 1.2. The top ten corridors are listed in Table 1.3, and more detailed maps of the top ten corridors are then shown on Figures 1.3 to 1.12.

Photo credit: David Wilson, Flickr user.



Table 1.2a Corridor analysis — low priority measures

ID	CORRIDOR NAME	FINAL RANK	H+T SCORE	K12 SCORE	VMT SCORE	LIBRARIES COUNT	ENTER- TAIN SCORE	TOTAL: LOW PRIORITY MEASURES
37	City of Elgin to the City of Geneva primarily along IL Route 31	1	32	42	37	5	41	157
25	Galena Boulevard to New York Street through Downtown Aurora	2	39	39	42	0	37	157
9	Village of Montgomery to City of Geneva along IL Route 31	3	37	38	38	5	42	160
36	City of Elgin to the Village of Algonquin along IL Route 25	4	38	40	41	5	35	159
23	City of Aurora to the City of Elgin along Farnsworth Avenue/Kirk Road	5	35	41	36	0	40	152
3	City of Elgin to Big Timber Road along IL Route 31	6	36	34	39	5	33	147
31	Jericho Road from Downtown Aurora to Orchard Road	7	40	23	40	0	36	139
17	City of Elgin to the City of Geneva along Routes 25 and 64	8	34	37	34	0	38	143
34	State Street through Downtown Geneva	9	31	33	32	0	28	124
18	Village of Algonquin to Big Timber Metra station primarily along IL Route 31	10	33	30	29	5	27	124
38	River Road between North Aurora and Geneva	11	30	27	27	0	34	118
32	Campton Hills to St. Charles along Main Street/Route 64	12	28	36	28	0	39	131
40	Aurora to Batavia along Randall Road	13	29	34	31	25	26	145
2	Aurora to Montgomery along Ogden Avenue	14	42	19	35	0	18	114
26	Randall Road between South Elgin and Batavia	15	11	12	22	0	31	76
39	Randall Road between South Elgin and Algonquin	16	18	30	21	0	25	94
7	Between Gilberts and East Dundee along Higgins Road	17	27	23	25	0	18	93
42	Downtown Batavia	18	25	23	30	10	31	119
13	Elburn to Geneva	19	15	27	18	0	28	88
19	South Elgin	20	26	30	26	0	12	94
24	North Aurora to Warrenville	21	24	27	24	0	22	97
1	Montgomery to Aurora along Route 31	22	41	19	33	0	7	100
16	Fabyan Parkway	23	20	12	23	0	22	77
33	Orchard Road from Montgomery to Randall Road	24	23	23	19	5	15	85
30	Big Timber Road	25	22	1	16	0	1	40
21	Bowes Road	26	16	6	17	10	12	61
8	Huntley Road	27	17	6	20	0	7	50
5	Highway 20	28	10	12	14	5	3	44
27	IL Route 47	29	14	12	5	5	28	64
11	Silver Glen Road	30	3	1	11	0	15	30
15	Big Rock to Elgin along US Route 30	31	13	6	8	5	22	54
20	Red Gate Road	32	7	12	12	0	12	43
10	McDonald Road	33	8	12	13	0	3	36
12	IL Route 38	34	12	6	7	0	18	43
35	Hampshire to Pingree Grove along IL Route 72	35	19	12	6	0	1	38
6	Jericho Road from Orchard Road to IL Route 47	36	21	1	15	0	7	44
22	Bunker Road	37	1	19	9	0	18	47
41	Bliss Road		6	1	10	10	3	30
29	Virgil to Campton Hills	39	2	19	3	0	15	39
28	Plank Road	40	9	6	2	0	7	24
14	Kaneville to Batavia	41	5	6	4	5	7	27
4	Corron Road	42	4	1	1	0	3	9

*For the columns in bold, corridors were given points according to the number of features located within the corridor, rather than a rank. This was done when there were low numbers of facilities, to prevent the absence or prescence of a feature to significantly change the outcomes.

Source: Chicago Metropolitan Agency for Planning.

Table 1.2b Corridor analysis — medium priority measures

ID	CORRIDOR NAME	FINAL RANK	HIGHER ED COUNT	RETAIL SCORE	GROCERY SCORE	MED FAC COUNT	COMM SER SCORE	TOTAL: MEDIUM PRIORITY MEASURES	X1.5
37	City of Elgin to the City of Geneva primarily along IL Route 31	1	10	40	40	25	40	155	232.5
25	Galena Boulevard to New York Street through Downtown Aurora	2	5	35	39	25	39	143	214.5
9	Village of Montgomery to City of Geneva along IL Route 31	3	5	41	41	25	42	154	231.0
36	City of Elgin to the Village of Algonquin along IL Route 25	4	5	27	37	25	36	130	195.0
23	City of Aurora to the City of Elgin along Farnsworth Avenue/Kirk Road	5	5	42	42	25	41	155	232.5
3	City of Elgin to Big Timber Road along IL Route 31	6	10	32	29	25	33	129	193.5
31	Jericho Road from Downtown Aurora to Orchard Road	7	5	30	34	10	37	116	174.0
17	City of Elgin to the City of Geneva along Routes 25 and 64	8	5	39	29	25	38	136	204.0
34	State Street through Downtown Geneva	9	0	36	29	25	31	121	181.5
18	Village of Algonquin to Big Timber Metra station primarily along IL Route 31	10	25	29	29	5	31	119	178.5
38	River Road between North Aurora and Geneva	11	0	34	35	10	35	114	171.0
32	Campton Hills to St. Charles along Main Street/Route 64	12	0	37	36	10	34	117	175.5
40	Aurora to Batavia along Randall Road	13	0	23	19	5	24	71	106.5
2	Aurora to Montgomery along Ogden Avenue	14	0	18	28	5	21	72	108.0
26	Randall Road between South Elgin and Batavia	15	0	38	37	25	27	127	190.5
39	Randall Road between South Elgin and Algonquin	16	10	31	24	25	29	119	178.5
7	Between Gilberts and East Dundee along Higgins Road	17	0	24	26	5	25	80	120.0
42	Downtown Batavia	18	0	28	29	0	30	87	130.5
13	Elburn to Geneva	19	0	33	22	25	28	108	162.0
19	South Elgin	20	0	21	17	25	18	81	121.5
24	North Aurora to Warrenville	21	0	22	26	5	22	75	112.5
1	Montgomery to Aurora along Route 31	22	0	19	17	0	17	53	79.5
16	Fabyan Parkway	23	0	25	19	10	16	70	105.0
33	Orchard Road from Montgomery to Randall Road	24	0	16	22	10	23	71	106.5
30	Big Timber Road	25	0	20	19	0	15	54	81.0
21	Bowes Road	26	0	13	11	0	20	44	66.0
8	Huntley Road	27	0	8	16	10	19	53	79.5
5	Highway 20	28	0	15	6	25	13	59	88.5
27	IL Route 47	29	5	26	24	0	25	80	120.0
11	Silver Glen Road	30	0	12	6	0	10	28	42.0
15	Big Rock to Elgin along US Route 30	31	0	13	11	0	14	38	57.0
20	Red Gate Road	32	0	3	1	0	10	14	21.0
10	McDonald Road	33	0	17	1	0	10	28	42.0
12 25	IL Route 38 Hampshire to Pingree Grove along IL Route 72	34	0	7	1	0	7	15	22.5
35 6	Veterans Parkway	35 36	0	9 1	6	0	3	18 10	27.0 15.0
6 22	Bunker Road	36	0	10	11	0	3	29	43.5
22 41	Bliss Road	38	0	4	1	0	8	13	43.5
41 29	Virgil to Campton Hills	39	0	4	11	0	° 2	24	36.0
29	Plank Road	40	0	4	6	0	6	16	24.0
20 14	Kaneville to Batavia	40	0	4	11	0	3	18	24.0
4	Corron Road	42	0	1	1	0	1	3	4.5

*For the columns in bold, corridors were given points according to the number of features located within the corridor, rather than a rank. This was done when there were low numbers of facilities, to prevent the absence or prescence of a feature to significantly change the outcomes.

Source: Chicago Metropolitan Agency for Planning.

Table 1.2c Corridor analysis — high priority measures and total weighted score

ID	CORRIDOR NAME	FINAL RANK	LOW VEHICLE SCORE	WALKABILITY SCORE	PACE ROUTE COUNT	JOBS SCORE	TRANSIT SCORE	TRANSIT RIDERSHIP SCORE	POPULATION DENSITY SCORE	TOTAL: HIGH PRIORITY MEASURES	X2	WEIGHTED SCORE
37	City of Elgin to the City of Geneva primarily along IL Route 31	1	35	42	15	41	38	38	37	246	492	882
25	Galena Boulevard to New York Street through Downtown Aurora	2	39	41	15	33	42	39	42	251	502	874
9	Village of Montgomery to City of Geneva along IL Route 31	3	32	38	15	40	37	36	39	237	474	865
36	City of Elgin to the Village of Algonquin along IL Route 25	4	42	37	15	32	40	41	41	248	496	850
23	City of Aurora to the City of Elgin along Farnsworth Avenue/Kirk Road	5	38	29	15	42	33	37	36	230	460	845
3	City of Elgin to Big Timber Road along IL Route 31	6	41	40	15	30	39	42	38	245	490	831
31	Jericho Road from Downtown Aurora to Orchard Road	7	37	35	15	24	41	40	40	232	464	777
17	City of Elgin to the City of Geneva along Routes 25 and 64	8	36	39	0	39	30	35	32	211	422	769
34	State Street through Downtown Geneva	9	30	30	15	36	36	32	26	205	410	716
18	Village of Algonquin to Big Timber Metra station primarily along IL Route 31	10	33	28	15	38	32	30	27	203	406	709
38	River Road between North Aurora and Geneva	11	26	34	15	34	31	27	29	196	392	681
32	Campton Hills to St. Charles along Main Street/ Route 64	12	24	31	15	31	25	31	28	185	370	677
40	Aurora to Batavia along Randall Road	13	31	36	15	26	34	29	35	206	412	664
2	Aurora to Montgomery along Ogden Avenue	14	40	33	15	19	29	34	34	204	408	630

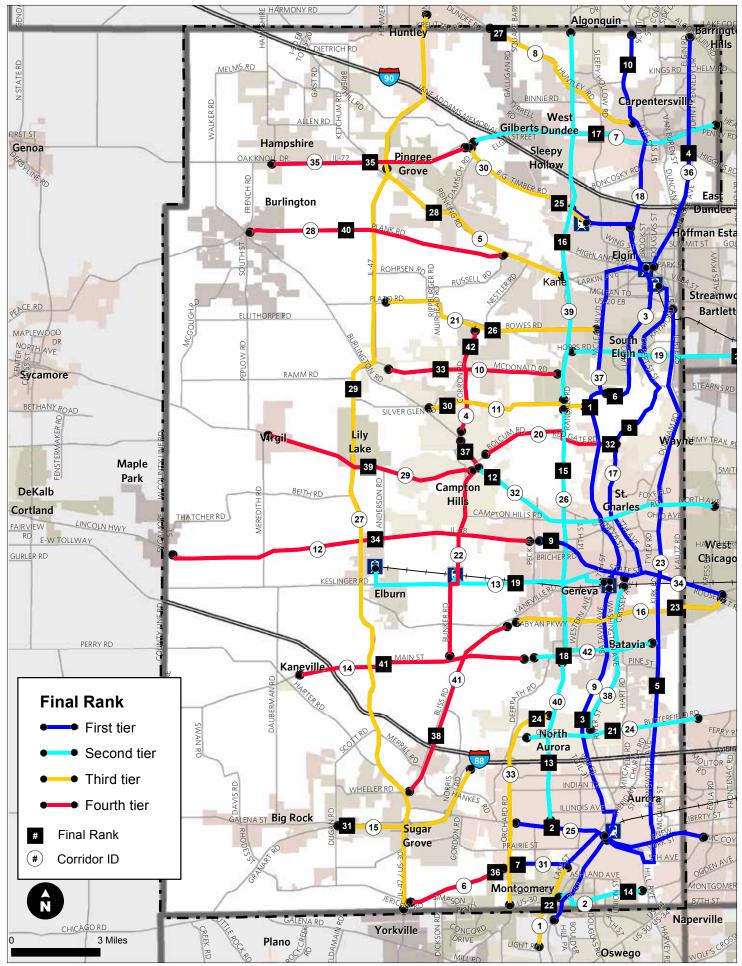
Table 1.2c Corridor analysis — high priority measures and total weighted score (continued)

Tubic	e 1.20 Corridor ana	iysis nig	in prioricy n		ai weight		Continued	, 				
ID	CORRIDOR NAME	FINAL RANK	LOW VEHICLE SCORE	WALKABILITY SCORE	PACE ROUTE COUNT	JOBS SCORE	TRANSIT SCORE	TRANSIT RIDERSHIP SCORE	POPULATION DENSITY SCORE	TOTAL: HIGH PRIORITY MEASURES	X2	WEIGHTED SCORE
26	Randall Road between South Elgin and Batavia	15	20	27	15	29	35	22	24	172	344	611
39	Randall Road between South Elgin and Algonquin	16	21	22	15	35	26	21	25	165	330	603
7	Between Gilberts and East Dundee along Higgins Road	17	29	26	15	28	27	28	22	175	350	563
42	Downtown Batavia	18	11	32	0	20	22	23	31	139	278	528
13	Elburn to Geneva	19	12	25	0	27	28	19	18	129	258	508
19	South Elgin	20	15	20	15	15	23	20	33	141	282	498
24	North Aurora to Warrenville	21	19	24	0	22	20	24	30	139	278	488
1	Montgomery to Aurora along Route 31	22	34	12	0	25	19	33	17	140	280	460
16	Fabyan Parkway	23	22	10	0	37	18	25	16	128	256	438
33	Orchard Road from Montgomery to Randall Road	24	17	21	0	21	21	17	23	120	240	432
30	Big Timber Road	25	27	11	15	23	24	26	21	147	294	415
21	Bowes Road	26	23	23	0	14	17	16	19	112	224	351
8	Huntley Road	27	28	17	0	18	11	14	20	108	216	346
5	Highway 20	28	25	14	0	16	10	18	8	91	182	315
27	IL Route 47	29	9	5	0	1	9	2	5	31	62	246
11	Silver Glen Road	30	5	18	0	1	13	11	15	63	126	198
15	Big Rock to Elgin along US Route 30	31	10	13	0	1	1	7	10	42	84	195
20	Red Gate Road	32	5	15	0	1	16	15	13	65	130	194
10	McDonald Road	33	7	9	0	1	14	12	12	55	110	188
12	IL Route 38	34	14	3	0	17	12	10	3	59	118	184
35	Hampshire to Pingree Grove along IL Route 72	35	13	19	0	1	1	8	14	56	112	177
6	Veterans Parkway	36	18	4	0	13	1	13	9	58	116	175
22	Bunker Road	37	3	8	0	1	15	6	7	40	80	171
41	Bliss Road	38	1	16	0	11	1	1	11	41	82	132
29	Virgil to Campton Hills	39	8	7	0	1	1	4	6	27	54	129
28	Plank Road	40	16	1	0	10	1	9	1	38	76	124
14	Kaneville to Batavia	41	2	2	0	11	1	3	2	21	42	96
4	Corron Road	42	4	6	0	1	1	5	4	21	42	56

*For the columns in bold, corridors were given points according to the number of features located within the corridor, rather than a rank. This was done when there were low numbers of facilities, to prevent the absence or prescence of a feature to significantly change the outcomes.

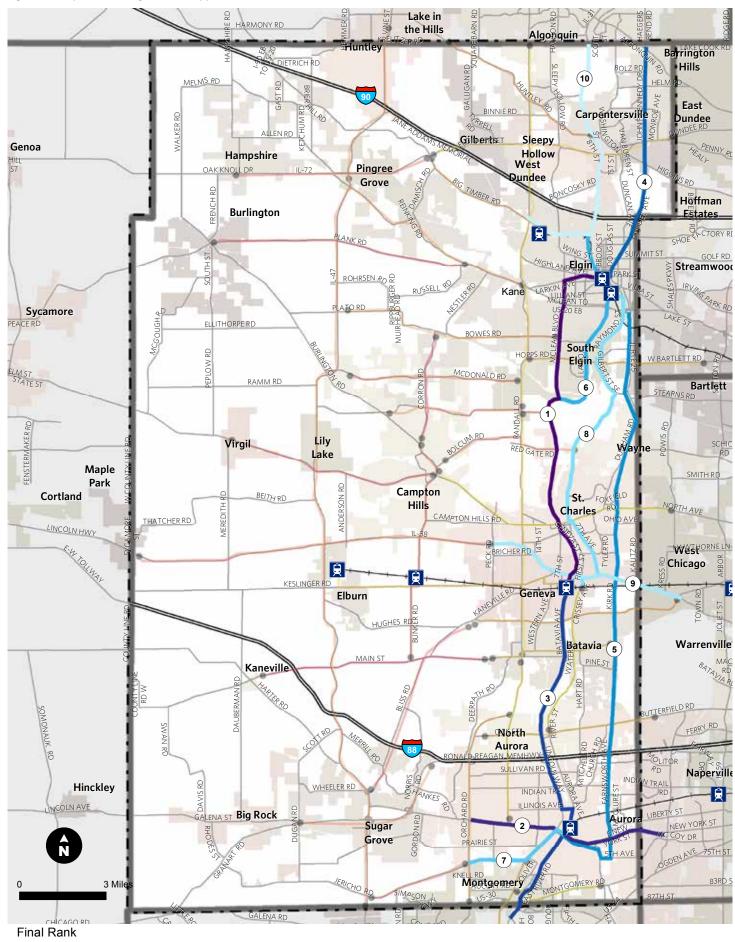
Source: Chicago Metropolitan Agency for Planning.

Figure 1.2 Final ranking



Source: Chicago Metropolitan Agency for Planning.

Figure 1.3. Top Ten Existing Transit-Supportive Corridors



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Top Ten Existing Transit-Supportive Corridors

Based Upon Existing Conditions

The indicators laid out in the report are based solely on existing conditions and might not capture corridors where opportunities exist for development and redevelopment that would allow for a successful transit-supportive corridor, such as Randall Road where significant planning and investment has already occurred to lay the groundwork for additional transit service.

Although the Randall Road corridor did not fall within the list of top ten existing transit-supportive corridors, it is still an important transit route within Kane County. Significant investment has been made along the corridor to improve transit and pedestrian infrastructure, however — as it exists today — the Randall Road corridor received low scores in a number of key criteria including walkability and population density. The ranking of the Randall Road corridor emphasizes the goal of continuing to improve and make development decisions within the corridor that supports transit use. The County, municipalities, and transit agencies should still continue to make investments in the corridor to improve its ranking and to increase its success as a long-term bus-rapidtransit corridor.

Top Ten

The following provides a more in-depth discussion for the top ten existing transit-supportive corridors (Table 1.3). These top ranked routes are based upon the results of the analysis shown in Tables 1.2s-c and are illustrated in Figure 1.3.

It is important to note that Pace may not be able to provide fixed-route transit service along the entire length of every corridor identified as a "top ten" transit-supportive corridors. For example, at this time there are no near-term plans to serve the entire length of corridors #1, #5, and #8. Moving forward, Pace would likely require a more detailed analysis of travel markets before new service is implemented. The design of fixed route service may not always correspond to a specific corridor depending on the travel markets served by a particular route. Additionally, service along a transit-supportive corridor may not necessarily be a fixed-route bus, but could encompass one or more of Pace's family of services, (vanpool, municipal vehicle, call-n-ride, etc.).

Table 1.3 Top Ten Existing Transit-Supportive Corridors

RANKING	PRIMARY TRANSIT NETWORK (PTN) ROUTE
1	City of Elgin to the City of Geneva primarily along IL Route 31
2	Galena Boulevard to New York Street through Downtown Aurora
3	Village of Montgomery to City of Geneva along IL Route 31
4	City of Elgin to the Village of Algonquin along IL Route 25
5	City of Aurora to the City of Elgin along Farnsworth Avenue/Kirk Road
6	City of Elgin to Big Timber Road along IL Route 31
7	Jericho Road from Downtown Aurora to Orchard Road
8	City of Elgin to the City of Geneva along Routes 25 and 64
9	State Street through Downtown Geneva
10	Village of Algonquin to Big Timber Metra station primarily along IL Route 31

Source: Chicago Metropolitan Agency for Planning.

Conclusion

The result of the analysis appears to match closely with the input provided by members of the steering committee, which included municipalities, the County, and transit agencies. Not surprisingly, the corridors that ranked highest are generally located in the eastern part of the county. This area has a robust transportation system that includes Pace bus routes and Metra stations, providing opportunities for connections to existing services.

The results also support the County's long-range planning efforts, which call for focusing growth in the eastern part of the County. Prioritizing transit investments in this part of the County will not only lead to the most successful transit services, but will also support the County's land use and development goals.





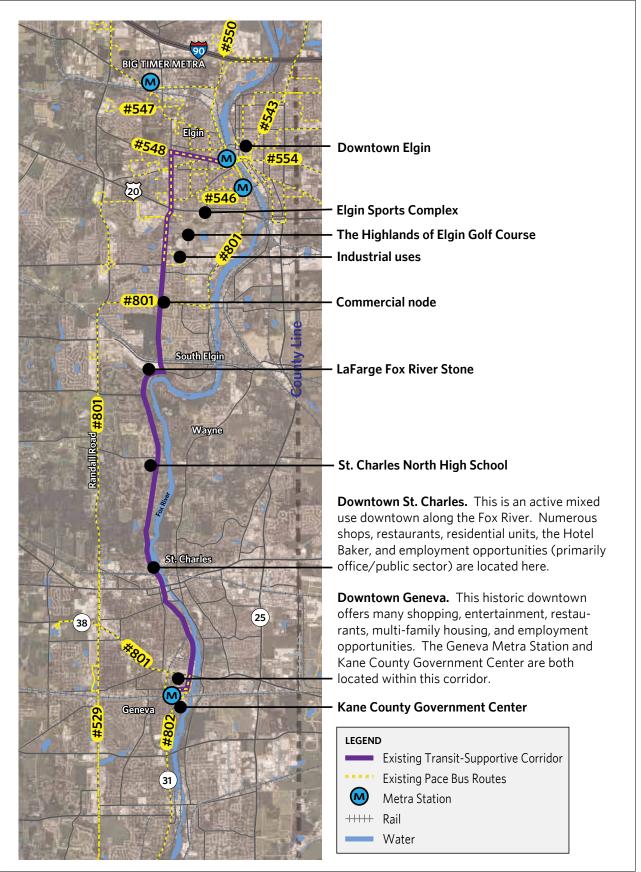
Third Street in Downtown Geneva. Photo credit: Michael Kappel, Flickr user.

Existing Transit-Supportive Corridor #1: Elgin to Geneva

- Description: This corridor runs between the City of Elgin and the City of Geneva following IL Route 31 and McLean Boulevard. The corridor is located along the west side of the Fox River and connects the Geneva Metra Station with the National Street Metra Station in Elgin.
- Length: 11 miles
- Street Jurisdiction:
 - o State Route 31
 - o City of Elgin McLean Boulevard, Highland Avenue
 - o City of South Elgin McLean Boulevard

- Public Transit Connections:
 - o Metra Stations Geneva Metra Station, Elgin Metra Station
 - Pace Routes #548, #554, #543, #547,
 #550, #801, #802
- Highly Ranked Criteria:
 - o K-12 (1st)
 - o Walkability (1st)
 - o Existing Pace bus routes (tied for 1st)
 - o Medical facilities (tied for 1st)
 - o Jobs score (2nd)
 - o Entertainment (2nd)
 - o Higher education (2nd)

Figure 1.4 Existing transit-supportive corridor #1: Elgin to Geneva



Source: Chicago Metropolitan Agency for Planning.

Existing Transit-Supportive Corridor #2: Galena Boulevard/New York Street

- **Description:** This corridor travels through the heart of Downtown Aurora along Galena Boulevard (west of the Fox River) and New York Street (east of the Fox River) with a connection to Route #530 in DuPage County.
- Length: 7.1 miles
- Street Jurisdiction:
 - o City of Aurora -New York Street and Galena Boulevard.

• Public Transit Connections:

- o Metra Aurora Transportation Center
- Pace Routes #521, #524, #530, #802, #532,
 #529, #528, #533

• Highly Ranked Criteria:

- o Population density (1st)
- o Transit score (1st)
- o Vehicle miles traveled (1st)
- o Existing Pace bus routes (tied for 1st)
- o Medical facilities (tied for 1st)

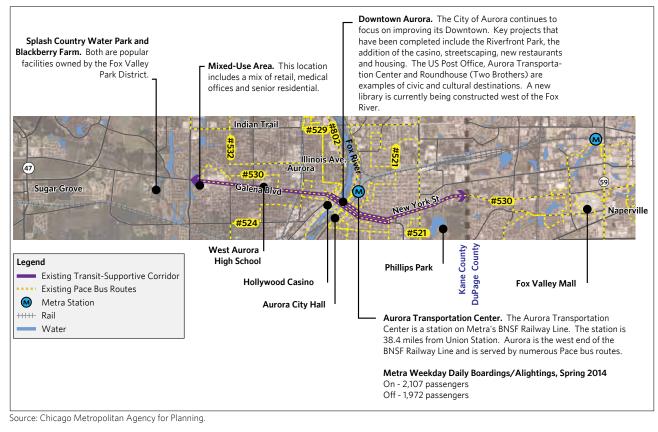


Figure 1.5 Existing transit-supportive corridor #2: Galena Boulevard/New York Street





Memorial Bridge in Downtown Aurora. Photo credit: Paul Sableman, Flickr user.

Existing Transit-Supportive Corridor #3: Montgomery to Geneva

- **Description:** This entire corridor runs between the Village of Montgomery and the City of Geneva, on both the east and wide sides of the Fox River.
- Length: 12 miles
- Street Jurisdiction:
 - o State Route 31, Route 25
 - o City of Aurora Galena Blvd., New York St.
- Public Transit Connections:
 - o Metra Geneva Metra Station, Aurora Transportation Center
 - Pace Routes #801, #802, #529, #532, #530, #521,
 #528, #533, #524
 - o Call-n-Rides The City of Geneva and the City of Batavia.
- Highly Ranked Criteria:
 - o Entertainment (1st)
 - o Commercial service (1st)
 - o Existing Pace bus routes (tied for 1st)
 - o Medical facilities (tied for 1st)

Two Metra Station Connections

There are two Metra stations in this corridor:

1. Aurora Transportation Center

The station is on Metra's BNSF Railway Line and is 38.4 miles from Union Station. Aurora is the west end of the BNSF Railway Line and is served by numerous Pace bus routes.

- A. Metra Weekday Daily Boardings/Alightings, Spring 2014
 - On 2,107 passengers
 - Off 1,972 passengers

2. Geneva Metra Station

Geneva's Metra station is served by Metra's Union Pacific/West Line. The station is 35.5 miles away from Ogilvie Transportation Center. The station is located along Third Street in Downtown Geneva.

- A. Metra Weekday Daily Boardings/Alightings, Spring 2014
 - On 1,732 passengers
 - Off 1,713 passengers



Downtown Geneva. The historic downtown offers many shopping, entertainment, restaurants, multi-family housing, and employment opportunities. The Geneva Metra Station and Kane County Government Center are both located within this area.

Kane County Government Center

Downtown Batavia. Known for its windmills and natural setting, Downtown Batavia offers many specialty stores, restaurants, and housing opportunities. The downtown area includes many parks and bike trails along the Fox River.

Pace Bus Route #802. This bus route provides transit service between Aurora and Geneva, serving the Aurora Transportation Center, North Aurora, Batavia, and the Geneva Metra Station. At the Geneva Metra Station Route #802 connects with Route #801, the Geneva Call-n-Ride and the Batavia Call-n-Ride.

Downtown Aurora. The City of Aurora continues to focus on improving its Downtown. Key projects that have been completed include the Riverfront Park, the addition of the casino, attractive streetscaping, several new restaurants and new housing opportunities.

Downtown Montgomery. Located along the Fox River at the southern end of Kane County, Downtown Montgomery consists of a mixture of residential, business, and civic uses. The Village constructed its new Village Hall within the Downtown which is an attractive focal point for the community.

Source: Chicago Metropolitan Agency for Planning.

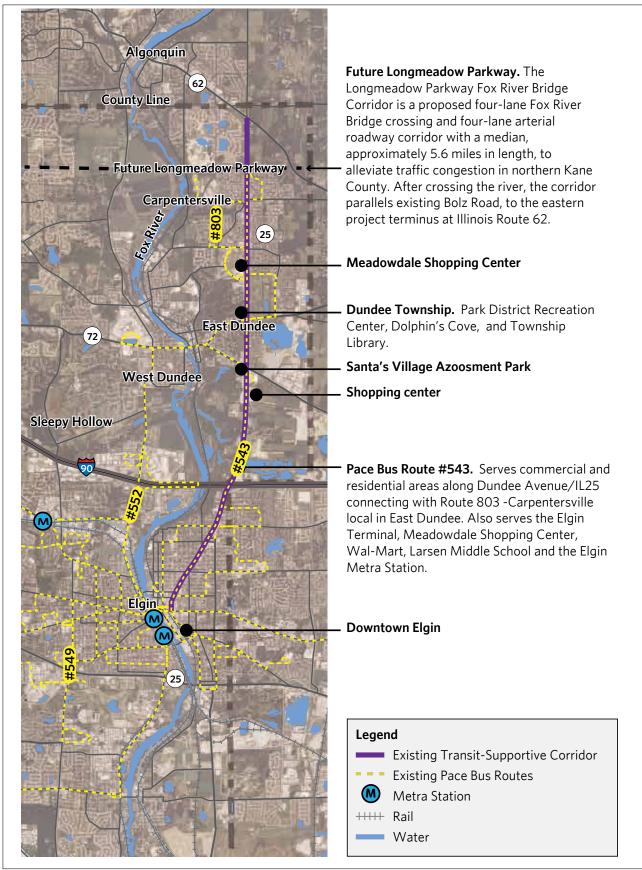


Existing Transit-Supportive Corridor #4: Elgin to Algonquin

- **Description:** This corridor runs between Downtown Elgin and the Village of Algonquin at the Kane County border. The corridor travels east of the Fox River primarily along State Route 25.
- Length: 8 miles
- Street Jurisdiction:
 - o State Route 25
 - o City of Elgin Dundee Avenue, Center Street
- Public Transit Connections:
 - o Pace Routes #803, #552, #543, #801, #549
- Highly Ranked Criteria:
 - o Low vehicle score (1st)
 - o Medical facilities (tied for 1st)
 - o Existing Pace bus routes (tied for 1st)

Downtown Elgin. Photo credit: John Trautschold, Flickr user.

Figure 1.7 Existing transit-supportive corridor #4: Elgin to Algonquin



Source: Chicago Metropolitan Agency for Planning.



Existing Transit-Supportive Corridor #5: Aurora to Elgin

- **Description:** This corridor travels east of the Fox River near the eastern border of Kane County (with DuPage County). The corridor begins new Downtown Elgin moving south along Route 25 onto Kirk Road. As it travels into the City of Aurora the corridor follows Farnsworth Avenue. Kirk Road is a significant job-producing industrial corridor with industrial parks in Geneva, St. Charles, and Batavia.
- Length: 15 miles
- Street Jurisdiction:
 - o State Route 25
 - o Kane County Kirk Road
 - O City of Aurora Farnsworth Avenue, Fifth Avenue, Smith Avenue, Galena Boulevard, New York Avenue, North Avenue, Union Avenue, Broadway Avenue

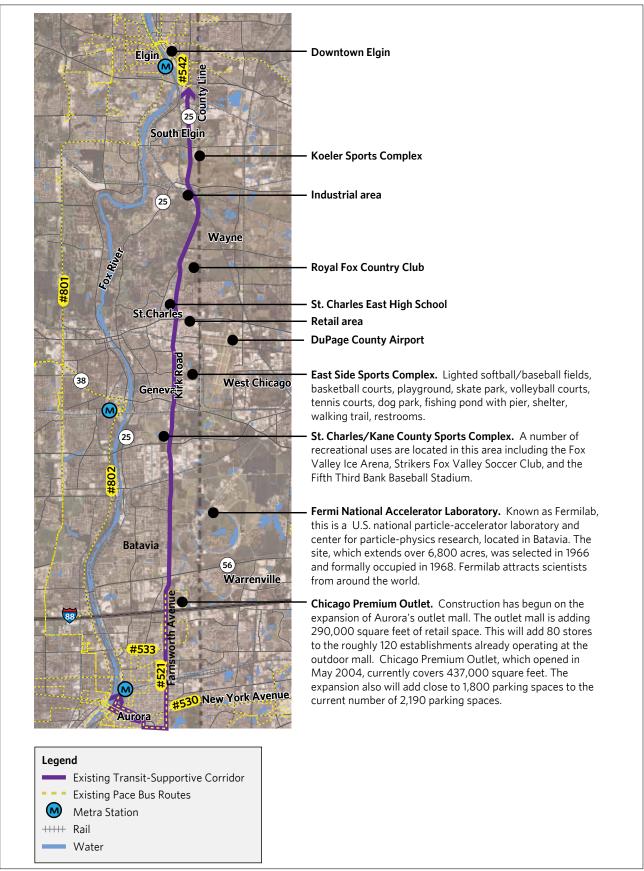
• Public Transit Connections:

- o Metra Station Aurora Transportation Center
- o Pace Routes #533, #521, #530, #545, #554, #542

• Highly Ranked Criteria:

- o Retail (1st)
- o Grocery store (1st)
- o Medical facilities (1st)
- o Low vehicle score (1st)
- o Jobs score (1st)
- o Existing Pace bus routes (tied for 1st)

Fifth Third Bank Ballpark. Photo credit: Michael Kappel, Flickr user. Figure 1.8 Existing transit-supportive corridor #5: Aurora to Elgin



Source: Chicago Metropolitan Agency for Planning.

Existing Transit-Supportive Corridor #6: South Elgin to Big Timber Road

- Description: This corridor connects South Elgin to Big Timber Road by traveling along LaFox Road/State Street/Route 31. The corridor passes the Elgin Metra Station and National Street Metra Station.
- Length: 6.5 miles
- Street Jurisdiction:
 - o State Highway Route 31
 - o City of South Elgin LaFox Road
 - o City of Elgin -LaFox Road, State Street

• Public Transit Connections:

- o Metra Stations Elgin Metra Station, National Street Metra Station
- Pace Routes #548, #554, #546, #801, #547, #542,
 #543, #549, #550, #541
- Highly Ranked Criteria:
 - o Transit Riderships score (1st)
 - o Existing Pace bus routes (tied for 1st)
 - o Medical facilities (tied for 1st)
 - o Higher education facilities (2nd)
 - o Existing Pace bus routes (tied for 1st)

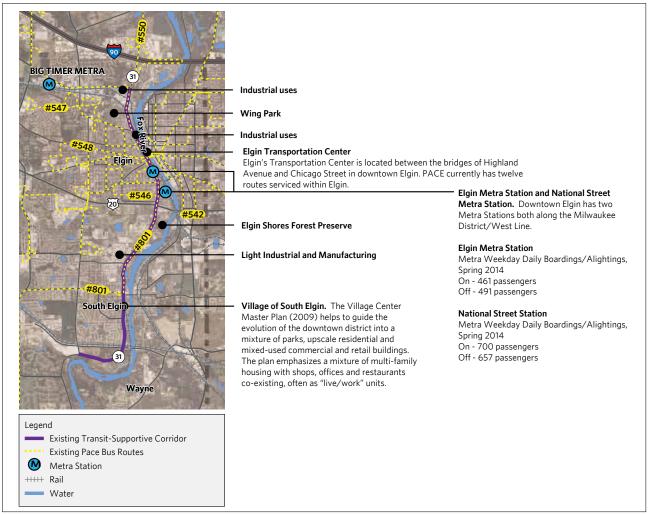


Figure 1.9 Existing transit-supportive corridor #6: South Elgin to Big Timber Road

Source: Chicago Metropolitan Agency for Planning.

The Elgin Metra station. Photo credit: Contemplative Imaging.

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Existing Transit-Supportive Corridor #7: Jericho Road and Lake Street

- **Description:** This corridor extends from Downtown Aurora along Jericho Road, where it generally parallels the Village of Montgomery boundary, to Orchard Road.
- Length: 3.2 miles
- Street Jurisdiction:
 - o City of Aurora Lake Street
 - o Kane County Jericho Road

- Public Transit Connections:
 - o Pace Routes #524, #530, #528, #533
- Highly Ranked Criteria:
 - o Existing Pace bus routes (tied for 1st)
 - o Medical facilities (2nd)
 - o Transit score (2nd)

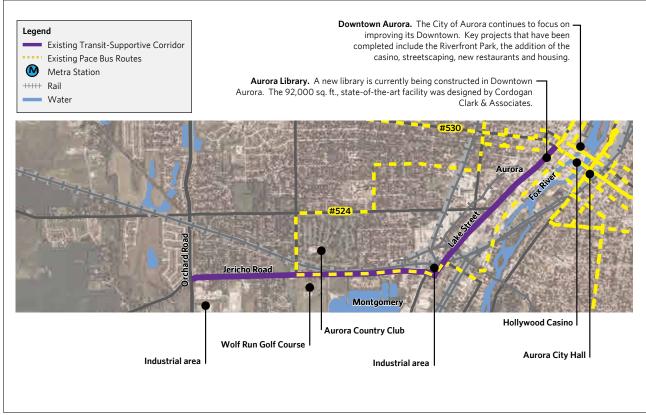


Figure 1.10 Existing transit-supportive corridor #7: Jericho Road and Lake Street

Source: Chicago Metropolitan Agency for Planning.

Hollywood Casino downtown Aurora. Photo credit: Doug Kerr, Flickr user.

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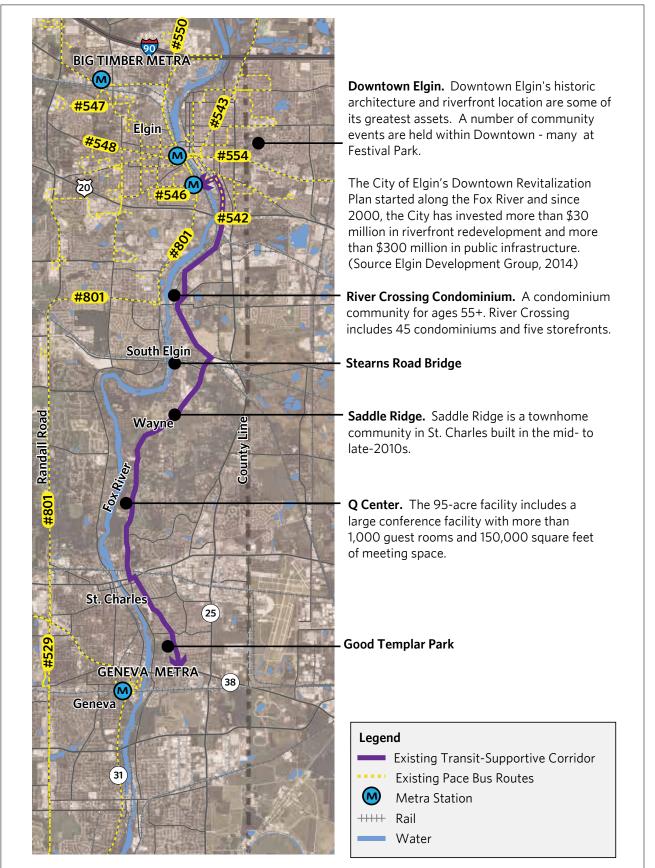
Q Conference Center. Photo credit: Q Conference Center.

Existing Transit Supportive Corridor #8: Elgin to Geneva

- **Description:** This corridor runs between the City of Elgin and the City of Geneva along the east side of the Fox River. The northern end of the corridor connects with Elgin's National Street Metra station.
- Length: 10 miles
- Street Jurisdiction:
 - o State Route 64, Route 25
 - o City of Geneva East Side Drive, 7th Avenue
 - o City of St. Charles 5th Avenue
 - o City of South Elgin Gilbert Street, State Street, South Elgin Boulevard, Raymond Street
 - o City of Elgin Raymond Street, National Street

- Public Transit Connections:
 - o Metra National Street Metra Station
 - o Pace Routes #542, #543. #801
- Highly Ranked Criteria:
 - o Medical facilities (tied for 1st)

Figure 1.11 Existing transit-supportive corridor #8: Elgin to Geneva



Source: Chicago Metropolitan Agency for Planning.

Existing Transit-Supportive Corridor #9: State Street/Route 38

- Description: This corridor runs east-west through Downtown Geneva along State Street/Route 38. The corridor connects Peck Road with Kautz Road.
- Length: 6.5 miles
- Street Jurisdiction:
 - o City of Geneva State Street
 - o State Route 38
- Public Transit Connections:
 - o Metra Geneva Metra Station
 - o Pace Routes #801, #802, #529

• Highly Ranked Criteria:

- o Medical facilities (tied for 1st)
- o Existing Pace bus routes (tied for 1st)

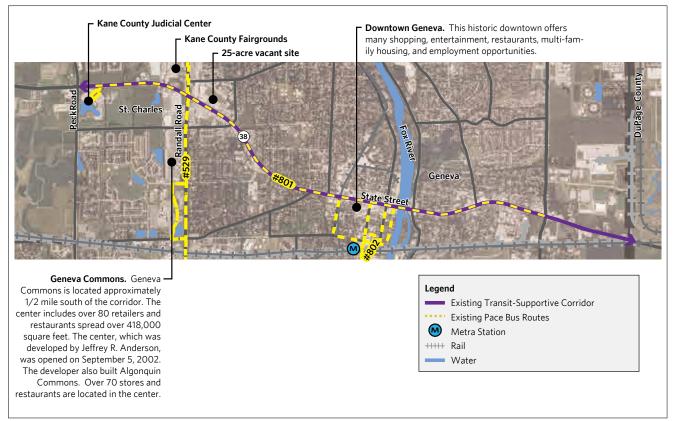
Figure 1.12 Existing transit-supportive corridor #9: State Street/Route 38

Geneva Metra Station

Geneva's Metra station is served by Metra's Union Pacific/West Line. The station is 35.5 miles away from Ogilvie Transportation Center. The station is located along Third Street in Downtown Geneva.

Metra Weekday Daily Boardings/ Alightings Spring 2014

- On 1,732 passengers
- Off 1,713 passengers



Source: Chicago Metropolitan Agency for Planning.





Sherman Hospital. Photo credit: Sherman Hospital.

Existing Transit Supportive Corridor #10: Big Timber to Algonquin

- **Description:** This corridor runs between the Village of Algonquin and the Big Timber Metra station in Elgin.
- Length: 9 miles
- Street Jurisdiction:
 - o State Route 31
 - o City of Elgin Big Timber Road
- Public Transit Connections:
 - o Metra Big Timber Metra station
 - o Pace Routes #552, #550
- Highly Ranked Criteria:
 - o Higher education facilities (1st)
 - o Existing Pace bus routes (tied for 1st)

One Metra Station is located within this corridor.

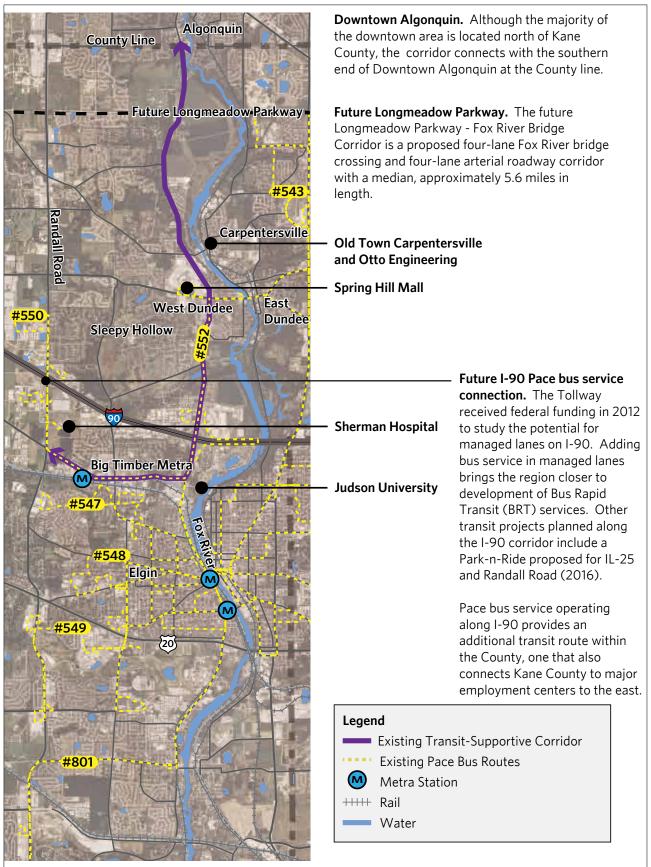
Big Timber Metra Station

This station, located northwest of Downtow Elgin near Randall Road, serves the Milwaukee District/ West Line.

Metra Weekday Daily Boardings/Alightings, Spring 2014

- On 782 passengers
- Off 737 passengers

Figure 1.13 Existing transit-supportive corridor #10: Big Timber to Algonquin



Source: Chicago Metropolitan Agency for Planning.

Section 2: MODEL ZONING ORDINANCE

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The success of transit services within a corridor relies in large part on supportive actions by the local governments along the route. This section includes a model zoning ordinance that municipalities can use and modify to fit their local needs. Due to the uniqueness of each municipality in Kane County, it is difficult to create one singular example of a zoning ordinance update or district language. Not only does each municipality have its own identity and development review process, but the County as a whole varies greatly—especially moving east and west.

Update Regulatory Documents

A key step towards supporting transit is to ensure that your municipal ordinance allow the type of development desired within the corridor. Municipalities should review their regulatory documents to determine if they will allow for and, in fact, promote the higher-density mixed use development pattern envisioned for transitsupportive corridors. In addition to revising zoning and subdivision ordinances, municipalities should also review their current development review process.

Include Kane County and Transit Agencies in the Development Review Process

As municipalities review development proposals in transit-supportive corridors, they should include involvement from County staff and public transit agencies (Metra and Pace). Through the Design Review Assistance for Transit (DRAFT) program (http://www.pacebus.com/guidelines/draft.asp), Pace can provide design review assistance to municipalities on request. As specific development proposals are submitted to municipalities for review, Pace should be given the opportunity to review site plans. Pace could review concept plans, preliminary plans for specific sites, and especially larger developments such as a Planned Unit Development (PUD). As part of the PUD process, Pace should review the development proposal to ensure that access/egress and possible transit routes are properly planned and designed.

2. Update Zoning Ordinances

Municipalities have a variety of options to support transit in their zoning codes. These include:

o Transit Overlay Zone

If the current zoning only needs minor modifications, an "overlay zone" might be appropriate. An overlay zone retains the existing zoning, but adds some supplemental provisions that apply only to the station area. In some cases an overlay zone is more restrictive, such as prohibiting auto-oriented uses, while in other cases it may be more flexible, such as allowing existing parking spaces as part of the new development requirement.

$\circ~$ New Zoning Districts

A second approach is to create an entirely new zoning district with its own land uses and development standards. An advantage to an entirely new zoning district is that regulations can be specifically tailored to clear objectives.

\circ Incentive Zoning

Developers may have such a strong desire to add building height or density to their proposed project, most likely due to a strong economy or demand for their project. In these cases, they may be willing to provide certain community amenities (such as open space, plazas, or LEED Green building technologies) in exchange for density bonuses. Another form of incentive zoning is the use of transferable development rights (TDR) programs. The County in conjunction with local municipalities should continue to investigate the use of TDRs.

Model Zoning Ordinances

Two examples of model ordinances were already provided in the County's 2040 Long Range Transit Plan, and these remain excellent examples of model zoning ordinances. They are:

- Massachusetts Smart Growth Toolkit Model TOD Bylaw (included in full at the end of this section). http://www.mass.gov/envir/smart_growth_toolkit/ bylaws/TOD-Bylaw.pdf
- Municipal Research and Services Center of Washington (MRSC). http://www.mrsc.org/subjects/Transpo/transitdev. aspx#example

In addition, several other examples were identified that provide good models for zoning ordinances:

- TOD Template Zoning Code Standards City of Philadelphia, PA (2009). http://planphilly.com/sites/planphilly.com/files/ Farr_report.pdf
- Regional Transportation Authority's (RTA) Zoning and Transit-Oriented Development: A Best Practices Report (2011). http://rtachicago.com/images/stories/Initiatives/ landuse_tod/Copy%200f%20Zoning%20Best%20 Practices%20Report.pdf
- City of Aurora Zoning Ordinance: Section 10.8 Overlay Districts. http://www.aurora-il.org/documents/planning/ ordinance/appendix_a_zoning.pdf
- City of Blue Island TOD Zoning Ordinance (2012). http://www.blueisland.org/zoning/
- U.S. Environmental Protection Agency (EPA) Smart Growth Development. http://www.epa.gov/dced/codeexamples.htm

Transit-Oriented Development Overlay District Model Bylaw Example

The following model zoning ordinance has not been customized for individual communities, but it is meant to provide a starting point if a municipality wishes to pursue modifying their zoning regulations in transitsupportive corridors.

Massachusetts Smart Growth Toolkit — Model TOD Bylaw

The Executive Office of Energy and Environmental Affairs (EEA) of Massachusetts created a Smart Growth/Smart Energy Toolkit. TheToolkit provides access to information on planning, zoning, subdivision, site design, and building construction techniques that can make smart growth and smart energy a reality in community. The materials within the Toolkit are designed to increase understanding of smart growth/smart energy tools and policies, as well as how to customize and apply the techniques to suit local circumstances.





Transit-Oriented Development Overlay District

Model Bylaw

This model Transit-Oriented Development bylaw provides a foundation for developing a municipal TOD bylaw for your community. No single "model" bylaw or ordinance can be adopted by a municipality without some tailoring to the unique characteristics and needs of that individual municipality. Therefore, readers are encouraged to revise and adapt the text to reflect your community's character; and to be compatible with your existing zoning bylaws/ordinances

Cities and towns are not required to adopt the exact procedures and regulations identified in this document since the development review process may vary considerably among municipalities across the state. Rather, municipalities must examine their development review processes to determine how the model bylaw can be adapted to fit into the existing procedures and regulations.

The annotations provided below will not be part of your bylaw/ordinance. These annotations are intended to provide background and context to explain the provisions of the model bylaw.

Several zoning bylaws (including draft bylaws, adopted bylaws, and model bylaws) from communities around the country were used to develop this bylaw. In some instances, language was taken verbatim from these bylaws. The Cities and Towns whose bylaws were consulted for this model include Abington, MA; Needham, MA; Somerville, MA; Concord, MA; Canton, MA; Ashland, MA; Woburn, MA; Lower Merion, PA; Hartford, CT; Columbus, OH; Minneapolis, MN; Seattle, WA; Salt Lake City, UT; Atlanta, GA; Sacramento, CA; Tempe, AZ; and Phoenix, AZ.

Section 1.0 Background and Authority

The Town finds that Transit Oriented Development benefits the general health and welfare of the inhabitants of the town by fulfilling existing housing, transportation and employment needs. Therefore, The Town implements this bylaw and designates certain zoning districts as Transit Oriented Development Districts ("TOD" Districts) to encourage furtherance of transit oriented development.

Section 2.0 Purpose

The purposes of the Transit Oriented Development (TOD) Overlay District are to:

- 1. Encourage a mix of moderate and high density development within walking distance of transit stations to increase transit ridership;
- 2. Create a pedestrian-friendly environment to encourage walking, bicycling and transit use;
- 3. Provide an alternative to traditional development by emphasizing mixed use, pedestrian oriented development;
- 4. Create a neighborhood identity that promotes pedestrian activity, human interactions, safety and livability;

Smart Growth / Smart Energy Toolkit

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TOD Model Bylaw

- 5. Encourage building reuse and infill to create higher densities;
- 6. Reduce auto dependency and roadway congestion by locating multiple destinations and trip purposes within walking distance of one another;
- 7. Provide a range of housing options for people of different income levels and at different stages of life.

Section 3.0 Authority

This Bylaw is adopted pursuant to M.G.L.c. 40A and the Home Rule Amendment to the Massachusetts Constitution.

Section 4.0 Applicability

The TOD Overlay District consists of those areas shown on [INSERT TITLE OF MAP] on file with the Town/City Clerk and dated [INSERT DATE MAP IS ADOPTED BY THE CITY/TOWN].

Typically these areas are within $\frac{1}{4}$ to $\frac{1}{2}$ mile of a transit station, measured from the center point of the passenger platform or passenger loading area.

Section 5.0 Definitions

Commercial Parking Facilities. Parking facilities created for the purpose of generating income from paid parking, but not including commuter parking lots owned by the transit operator.

Development. The construction of new buildings or structures and modification of, additions to, and expansion of existing buildings or structures.

Drive-Through Facility: Facilities that allow for transactions of goods or services without leaving a motor vehicle.

Fast Food Establishment. A food service business that offers relatively immediate service of semi-prepared or prepared foods for take-out or in-house consumption in disposable containers and serving walk-in and/or drive-through customers.

Mixed-Use. Development contained on a single parcel or adjoining parcels that includes different, complimentary uses (both residential and non-residential) and which provide for a variety of activities throughout the day.

Overlay Zoning District. A zoning district that encompasses one or more underlying zoning districts, and imposes additional or alternative requirements or provisions than required by the underlying zoning.

Park and Ride Lot. A parking structure or surface lot intended for use by persons riding transit or carpooling.

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TOD Model Bylaw

Pedestrian-Friendly Design. The design of communities, neighborhoods, streetscapes, buildings and other uses that promotes pedestrian comfort, safety, access and visual interest.

Public Seating Area. Any outside seating area designated for use by the public, including outdoor seating owned and operated by eating and drinking establishments.

Service-Oriented Office – Office uses with walk-in business and/or whose clientele is the general public.

Shared Parking. Parking that is utilized by two or more different uses that generate different peak period parking demand.

Strip Commercial Development. Commercial development characterized by a low density (one story) linear development pattern (usually one lot in depth), separate curb cuts for each use, no defined pedestrian system, and high traffic volumes. Parking lots are generally located between the street and the front entrance to the businesses.

Townhouse. A single family residence typically of two to three stories attached to a similar residence by a common sidewall.

Transit-Oriented Development. A development pattern created around a transit facility or station that is characterized by higher density, mixed uses, a safe and attractive pedestrian environment, reduced parking, and a direct and convenient access to the transit facility.

Transit Station. The area including the platform which supports transit usage and that is owned and/or operated by the transit agency.

Section 6.0 Procedural Requirements

Certain specified uses are allowed by right in the TOD District. Other uses may be allowed by Special Permit. The Planning Board shall be the Special Permit Granting Authority for any Special Permit granted in a TOD District. Procedural Requirements, including application requirements, abutter notification and public hearing shall be in accordance with the Special Permit Procedures as found elsewhere in the Town's Zoning Bylaw [REFERENCE SECTION OF BYLAW/ORDINANCE]. The Planning Board, acting as the Special Permit Granting Authority, may grant a Special Permit in a TOD District if it finds that the use will: 1) promote the purpose of the Overlay District as described in Section 2.0; and 2) include active ground floor uses, subordinate parking, and have upper floor residential units.

Smart Growth / Smart Energy Toolkit

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TOD Model Bylaw

Section 7.0 Use Regulations

Section 7.1 Allowed Uses:

The uses listed below in Table 1 are allowed in the TOD Overlay District

Table 1. Uses Allowed By Right in the TOD Overlay District

· · · ·
Apartments <above active="" business="" districts="" floor="" ground="" in=""></above>
Townhouses
Service-oriented office uses
Non-service oriented office uses on upper floors only
Mixed uses with ground floor retail, personal services and/or service-oriented offices
Banks
Retail under 10,000 square feet
Government buildings
Hospitals
Hotels
Transit stations
Restaurants (except fast food establishments which may only be authorized by Special Permit)
Civic, cultural and community facilities
Theaters, except drive-ins
Dry cleaners stores with cleaning facilities outside the TOD Overlay District
Buildings and uses accessory to the above, such as parking garages, gift shops, cafeterias and day
care facilities

A TOD overlay district should include a mix of uses to encourage activity throughout daytime and evening hours, and to encourage pedestrian travel for different trip purposes.

Section 7.2 Prohibited Uses

The uses listed below in Table 2 are prohibited in the TOD Overlay District

Table 2. Prohibited Uses in the TOD Overlay District

Auto sales, auto service and repair, auto storage and auto rental uses
Gasoline sales
Heavy equipment sales and service
Manufactured home sales
Salvage vards
Industrial uses
Towing services and vehicle storage vards
RV mobile home sales vards and storage
Car wash
Strip Commercial Development
Mini-storage and self-storage facilities
Commercial laundries with dry-cleaning operation on site
Warehousing and distribution facilities
Low density housing (less than 7 units per acre)
Golf Courses
Cemeteries
Boat sales and storage vards
Freight terminals
5

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4

TOD Model Bylaw

Amusement parks
Building contractors
Retail uses, except grocery stores, larger than 10,000 square feet, unless part of a mixed-
use development
Drive-in theaters
Drive-through facilities
Commercial parking facilities

Section 7.3 Special Permit Uses

The following uses (Table 3) may be allowed by Special Permit. The Planning Board, acting as the Special Permit Granting Authority, may grant a Special Permit in a TOD District if it finds that the use will: 1) promote the purpose of the Overlay District as described in Section 2.0; and 2) include active ground floor uses, subordinate parking, and have upper floor residential units.

Table 3. Uses th	at May Be	Allowed by	Special Permit
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Single family homes
Commercial surface parking lots
Laboratories
Fast Food Establishments
Research facilities
Stadiums and sports facilities with over 10,000 seats
Grocery stores over 10,000 square feet

The types of uses permitted, prohibited, or allowed with a Special Permit may differ based on the character of the area in which the TOD is located. The goal of a TOD is to encourage pedestrian oriented uses and discourage auto-dependent or auto-oriented uses. Further, TODs should encourage uses that can be easily served by transit, that have high levels of visitor activity, and/or that have high employment to floor area ratios. Thus, office, retail and entertainment establishments are encouraged, while industrial and warehouse uses (which generally have fewer visitors and two or less employees per 1,000 square feet) are prohibited. For example, TODs in small suburban centers may wish to prohibit fast food establishments outright, while planners may wish to integrate fast food establishments into stations located in dense urban settings. Communities may also wish to craft their bylaw to distinguish between types of fast food establishments. Other uses that might be permitted in some TOD districts and not in others include commercial parking facilities and single family homes. Commercial surface lots should only be allowed for commuter parking or for short term parking (1-2 hours) to serve retail or service uses. Such lots are generally not conducive to a pedestrian-friendly environment, and should be located to the rear of buildings, and not along major pedestrian ways.

Research has found that housing densities of at least 7-10 units per acre are required to support transit.¹ Thus, to accommodate single family homes, zoning must allow for 6,000 square foot or smaller lots, and should include a provision for a maximum lot size. Single family homes could be allowed on the periphery of a TOD adjacent to an existing single family neighborhood.

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5

TOD Model Bylaw

Section 8.0 Parking Requirements

Parking requirements within the TOD Overlay District are as follows:

- 1. A maximum of 1 parking space per multi-family unit, plus 1 guest space per 15 units, is permitted.
- 2. Parking for non-residential uses shall be provided at not more than 3 per 1,000 square feet (gross) and not less than 1 per 500 square feet (gross) for uses covering less than 1,000 square feet.
- 3. Further reduction in the number of required parking spaces may be permitted by a Special Permit granted by the Planning Board after a finding by the Board that the development will be adequately served by users of public transportation.
- 4. Shared parking is strongly encouraged. On lots serving more than one use, the total number of spaces required may be reduced, provided that the applicant submits credible evidence to the satisfaction of the City/Town Planning Board that the peak parking demand of the uses do not coincide, and that the accumulated parking demand at any one time shall not exceed the total capacity of the facility. Such evidence must take into account the parking demand of residents, employees, customers, visitors, and any other users of the lot. It must also take into account parking demand on both weekends and weekdays, and both during the daytime and overnight.
- 5. Where feasible, ingress and egress from parking shall be from side streets or alleys.
- 6. Surface parking lots must be to the rear of buildings, and shall not exceed one acre in size. Surface lots are prohibited in front of businesses.
- 7. Surface parking lots with more than thirty spaces shall be divided into separate areas by landscaped areas of at least 10 feet in width. A minimum of 15 percent of all surface lots shall be landscaped. No row of parking shall be more than 10 spaces wide without being interrupted by a landscaped area. Each landscaped area shall have at least one tree. Landscaped areas should be planted with low-maintenance, salt tolerant plants capable of withstanding extreme weather conditions.
- 8. Surface lots shall be screened along all sidewalks by a landscaped buffer of not less than six feet, or three foot walls or fencing compatible with the adjacent architecture.
- 9. Surface parking lots shall provide pedestrian walkways and connections to the sidewalk system.
- 10. On-street parking is permitted and encouraged.
- 11. Parking structures shall have well-designed and marked pedestrian walkways and connections to the sidewalk system.
- 12. Parking structures must include ground level retail along all streets and sidewalks.
- 13. Parking structures shall be designed to be compatible with adjacent buildings and architecture.
- 14. Bicycle racks shall be provided on site at a ratio of 1 space for every 15 automobile parking spaces or portion thereof.

The Massachusetts Office of Commonwealth Development is developing Bicycle Parking Facility Requirements for its Transit Oriented Development Bond Program. Municipalities adopting a TOD overlay district are encouraged to review these requirements and incorporate some of the bicycle parking design and materials requirements into their bylaws to ensure that quality bicycle parking is provided.

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6

TOD Model Bylaw

- 15. All parking lots and structures must provide pedestrian access ways to streets that meet the Dimensional Requirements detailed in section 9.0, below.
- 16. Signage that shows the location and best means of access to the transit station must be provided at all parking facilities.

The density and location of the TOD district will dictate whether or not structured parking should be encourage or allowed. In more suburban town centers, structured parking is less desirable than in more dense urban areas.

Section 9.0 Dimensional Requirements

The development standards in a TOD overlay district bylaw are intended to created densities that will support transit as well as to provide a pedestrian friendly environment.

- 1. Building Setbacks
 - a. A building shall have a minimum front yard setback of 0 feet and a maximum setback of five feet from the front property line. A setback may be increased to 25 feet from the front property line if a courtyard, plaza or seating area is incorporated into the development adjacent to the public street.

Limited setbacks help to create a pedestrian-friendly environment. Buildings with windows located close to the sidewalk provide a visually stimulating environment for pedestrians. Conversely, buildings set back too far from the pedestrian walkway result in a less pedestrian-inviting environment.

b. The minimum setback for a side yard shall be zero feet. Where deemed appropriate by the Planning Board, alleys between buildings may be encouraged for the provision of beneficial public connections between buildings, open spaces and streets. The maximum side setback shall be determined by the Planning Board, and shall not exceed 25 feet.

In smaller town centers or rural locations, it may be more appropriate to have side yard setbacks of up to 15 feet. In town centers or urban areas with substantial vehicle traffic, side setbacks may need to be up to 30 feet to accommodate two-way traffic to rear parking and loading areas.

- c. The minimum setback for a back yard shall be 15 feet.
- d. The setback provisions in section 1.a-c may be waived with a Special Permit issued by the Planning Board where such waiver would further the purposes of this Bylaw as listed in Section 2.0.

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7

TOD Model Bylaw

- 2. Bulk and Lot Coverage
 - a. Minimum lot coverage is 60 percent of the net lot area. This minimum may be reduced if a minimum of 40 percent of the lot is developed as improved public open space or if ingress, egress or other building code requirements would otherwise make the development infeasible. The Planning Board shall have final discretion in deciding if land constitutes improved open space for the purposes of this provision.
 - b. Maximum lot coverage is limited to 85 percent. This lot coverage may be increased to 100 percent for mixed use buildings, or for renovated historic structures.

The 100 percent lot coverage is not appropriate for small town centers and rural settings.

c. The maximum by-right floor-to-area ratio (FAR) is 1.5. The maximum FAR shall be 2.5, upon the discretion of the Planning Board. The Planning Board may issue a Special Permit to grant additional FAR beyond 1.5 up to 2.5 for affordable housing or for mixed use developments if it finds that such an increase furthers the purposes of this bylaw.

The floor-area ratio is the ratio of the gross square footage of structures on a site to the gross square footage of the site. For example, an FAR of 1.0 on a 10,000 square foot site could be achieved with a one-story building of 10,000 square feet, a two story building in which each floor measures 5,000 square feet, a four story building in which each floor measures 2,500 square feet, etc. The FAR controls the density of the site. A high FAR will allow higher densities than a low FAR. FAR allows flexibility in design while controlling for overall building size. The FAR is used in conjunction with height limits, setbacks, and lot coverage to arrive at acceptable densities and design of a development.

Each Planning Board must adopt an FAR that is suitable for the character of the neighborhood in which the TOD is located. In rural areas, a 2.5 FAR will be too high, and even the 1.5 FAR may need to be reduced to conform to the surrounding built environment. In urban areas, the acceptable FAR may be significantly higher than 2.5. The primary goal of TOD is to concentrate development in the area around the train station, and to create a pedestrian-friendly environment. Higher density allowed by a higher FAR helps to achieve these goals.

It is important to ensure that the provisions for minimum lot coverage coupled with minimum height are within the by-right FAR when implemented.

3. Building Height Requirements

a. The minimum allowable building height is 28 feet above grade.

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8

TOD Model Bylaw

The minimum height is meant to encourage density and create an aesthetic appeal				
throughout the TOD area. When determining minimum height, local officials must				
require a height that allows for at least two stories. Urban practitioners may want to				
consider requiring a height that allows for at least three stories.				

b. The maximum building height is 78 feet above grade.

In more rural areas or smaller town centers, it may be appropriate to reduce this maximum height to 45 feet or three stories. In more urban areas, the height can be much higher and should reflect the character of the neighborhood in which the overlay district is located.

c. Notwithstanding the building height provisions noted above, no building shall exceed by more than two stories or thirty feet, whichever is less, the height of the tallest building or buildings that front on the same street and are located within 150 feet of such building.

This standard can be relaxed in dense urban areas. The allowed building heights should reflect the context in which the TOD is located. In areas with buildings exceeding 78 feet, the maximum height should be set to reflect the height of surrounding buildings.

d. No portion of a building locate within 50 feet of an existing one or two family dwelling in a residential zoning district shall be permitted to exceed three stories or 45 feet, whichever is less.

4. Driveways

- a. The creation of new sidewalk curb cuts shall be avoided whenever an alternative point of access is available or can be created. Shared access agreements are encouraged.
- b. The minimum width for one-way traffic is 12 feet, and the maximum 18 feet.
- c. The minimum width for two-way traffic is 18 feet and the maximum is 22 feet.

5. Sidewalks

a. A minimum unobstructed sidewalk width of five feet is required. Sidewalk width can be up to 20 feet, and is dependent on expected level of activity.

Smaller towns may want to decrease the allowable sidewalk width.

b. Sidewalks shall be constructed along the frontage of all public streets.

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9

TOD Model Bylaw

c. Pedestrian scale lighting fixtures no greater than 15 feet in height shall be provided along all sidewalks and walkways to provide ample lighting during nighttime hours.

Lighting height may be lower in smaller town centers and rural areas, and up to 20 feet in more urban areas.

d. All sidewalks and walkways shall meet ADA requirements.e.

Section 10.0 Design Standards

The design standards included in a TOD overlay district bylaw are intended to create a pedestrian friendly environment. Landscaping should both provide shade and create an aesthetically pleasing setting. The pedestrian environment is further enhanced by locating building facades close to the sidewalk, and by ensuring the facades are architecturally interesting. Street level windows add to the interest of a pedestrian way. Street furniture will provide opportunities for pedestrians to rest and relax, and trash receptacles will help keep the pedestrian ways clean. Lighting will help increase the safety of the area in the evening.

When evaluating the design components of plans, the Planning Board should consider who will be using the area around the transit station and when the station area will be used. Will the area have a lot of daytime or nighttime activity? Will the area be a destination for work or entertainment? What types of activities does the community want to encourage in the station area? For example, if a TOD is located in a primarily residential area, the Planning Board may require fewer benches than would be required in an area with heavy daytime pedestrian traffic. Further, the Planning Board should consider how projects in the station area tie into the surrounding neighborhoods and existing built environment. Buildings should be designed and materials chosen to fit into the existing built environment, or to create a new sense of place. (This goal will differ based on the existing characteristics of an area. For example, in a location with important historic character; the Planning Board may wish to encourage design that will blend with the surroundings. Conversely, in an area characterized by strip mall development, the Planning Board may wish to encourage design elements that will create a new identity for the area.)

- 1. Streetscapes
 - a. Street trees shall be planted by the developer along all public rights-of-way. Street trees shall be planted at intervals of no more than 40 feet. Tree species shall be selected that require minimal maintenance and are of native origin.

In more dense urban areas, communities may wish to allow non-native species that are more tolerant of pollution and other harsh conditions found in congested, built-up areas.

- b. Pedestrian amenities such as benches, public art, planters, trash receptacles, etc. are encouraged and shall be located along sidewalks, and in landscaped areas, open spaces and plazas.
- c. All new utilities shall be placed underground

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10

TOD Model Bylaw

- 2. Building Facades.
 - a. All buildings must provide a main entrance on the façade of the building facing the transit station or streets leading to the transit station.
 - b. The main entrance of any building shall face the street. The main entrance shall not be set back more than five feet from the front property line, unless a public seating area or plaza is provided in front of the building.
 - c. Facades over fifty feet in length shall be divided into shorter segments by means of façade modulation, repeating window patterns, changes in materials, canopies or awnings, varying roof lines and/or other architectural treatments.
 - d. The ground floor of a front commercial façade shall contain a minimum of 50 percent glass.

The purpose of specifying glass is to allow for views into the interior of the building, providing interest for pedestrians. Clear glass that permits a clear view into a building is preferable to tinted or reflective glass that prohibits views into a building

- e. Architectural style and materials shall be compatible with the surrounding area, and facades must provide a visually interesting environment.
- f. All buildings shall articulate the line between the ground and upper levels with a cornice, canopy, balcony, arcade, or other visual device.
- g. All structured parking must be designed so that the only openings at street level are those to accommodate vehicle ingress and egress, and pedestrian access to the building. All openings must be designed so that vehicles are not visible from the sidewalk. The remainder of the street frontage must be available for retail or commercial usage.
- 3. Signage
 - a. Height. No signs shall extend higher than the height of the ground story.
 - b. Size. No façade sign shall exceed 25 percent of the ground floor wall area. No other sign shall exceed 25 square feet in size. Signs may be double sided.
 - c. Design. All signs within a given district shall be complimentary in their use of color, shape, and material.

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11

TOD Model Bylaw

Section 11.0 Exemptions and Exclusions

This bylaw shall apply to all new construction in the TOD District. It shall apply to reconstruction or redevelopment when the redevelopment will result in an increase of property value of 50% or greater of the assessed values of the existing property. The provisions of this bylaw shall apply to reconstruction of existing property where the reconstruction will result in less than 50% increase in property value over the assessed value of the existing property to the maximum extent feasible.

Section 12.0 Severability

If any provision of this bylaw is found to be invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected but shall remain in full force. The invalidity of any section of this bylaw shall not affect the validity of the remainder of the Town's/City's Zoning Bylaw/Ordinance.

(Footnotes)

¹See, for example, Newman, P. and J. Kenworthy, *Cities and Automobile Dependence*, Gower Publishing Company Limited, Hants, England, 1989, and Parsons Brinkerhoff QQuade and Douglas, Inc., *Report 16: Transit and Urban Form, Volume 1*, Transportation Research Board, National academy Press, Washington, D.C., 1996.

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12

TOD Model Bylaw

Section 3: COMPREHENSIVE PLAN LANGUAGE



This section is intended to be used as a guide for communities interested in advancing transit in their planning updates. As communities prepare comprehensive plans, transit oriented development (TOD) plans, or similar planning documents, they could use this language as a starting point for their treatment of the transit-supportive corridors, though modification for local circumstances would be necessary.

Elgin bus terminal.

One of the first tools a community can use to begin to direct development into a specific transit-supportive corridor is a comprehensive plan. Comprehensive plans can indicate that a municipality envisions the creation of a transit-supportive corridor, and that it is promoting appropriate growth in strategic corridors. A comprehensive plan can be a signal to property owners and developers that the municipality is likely to encourage development in a corridor and as a result indicates to developers where they are likely to experience a more favorable regulatory process.

Some municipalities, especially those with an existing Metra station or Pace bus route, have created detailed development plans specifically around smaller areas such as Metra stations, commercial corridors, or downtowns. These may be called TOD plans, downtown plans, station area plans, or similar terms, and are generally referred to as TOD plans in this document. TOD plans can be key catalysts for transitsupportive development as they are generally more detailed and focused than comprehensive plans.

Like comprehensive plans, TOD plans help municipalities identify the scale and type of development that is suitable for the area. In general, TOD plans include an analysis of current land uses, market demand for housing and residential development, transportation systems, parking, architecture, street design, and similar topics. They also analyze the impact of current zoning and the potential impact of revised zoning with higher densities and different lot coverage, setbacks, height limits, and parking requirements.

Regardless of whether a community is preparing a comprehensive plan or TOD plan, the process often includes development of a vision, goals and objectives, and recommendations. Potential language to include in each of these sections of a local plan is included below. The following language is based upon comprehensive plans that have been created for numerous communities throughout the Chicago region as part of CMAP's Local Technical Assistance (LTA) program, existing Kane County community plans, and from other Kane County plans and studies.

Vision Statement Language

A vision statement is commonly included in comprehensive plans to help "paint the picture" of what the future of the community could be if the recommendations of the plan are implemented. In many cases, the vision is written in such a way as to show the community 10-15 years in the future.

If a transit-supportive corridor is desired within a particular municipality, language should be included within vision statements that support it. For example, long-range aspirations that support the type of development patterns and characteristics that are desired within the corridor would be appropriate. Terms such as "higher density", "mixed-use", "compact", "nodal development", "walkable", and "supportive of public transit" could be used within a vision statement to help illustrate the type of growth desired.



Goals and Objectives Examples

Building upon the vision statement, community plans should follow with goals and objectives that support promote transit-supportive corridors. The following are examples of goals and objectives for the land use and transportation categories.

Land Use Goal

• To promote a land use pattern within the corridor that supports a variety of living, shopping, working, and recreation opportunities and allows a variety of travel modes, including walking, bicycling, and using public transit.

Land Use Objectives

- Encourage a mix of uses within the corridor that is compact and supports public transit. Mixed-use developments should include a variety of housing types including multi-family, retail, professional office uses, open space, and community facilities.
- Strive to create an attractive appearance along the corridor through the use of design and development guidelines, code enforcement, and zoning requirements.

Transportation Goal

• To promote key corridors by providing choice among multiple modes of transportation (public transit, walking, cycling, and autos) that enable residents to efficiently navigate the corridor and the larger community.

Transportation Objectives

- Pursue a high-quality multimodal transportation system throughout the community. Implement Complete Streets policies and non-motorized transportation plans that improve community health and provide sustainable alternatives to vehicular circulation.
- Support public transit through continual coordination with Metra and Pace. Provide new bus shelters and rider amenities such as bike parking, route maps, and informational signage at Pace bus stops wherever possible.
- Promote local trails and regional bike trail connections that connect to transit-supportive corridors and to neighboring communities, which will allow residents to access amenities outside local boundaries and attract visitors from throughout the region.
- Address gaps in the pedestrian system where they exist, with the goal of making the entire corridor walkable.

Recommendation Considerations

Land Use Recommendations

As stated in the Kane County 2040 Long Range Transit Plan, land use plays a critical role in how often people travel by each available mode – automobile, transit, bicycle, or walking. The features of land use and urban form that encourage more compact development and support efficient transit service have come to be known as the "Ds": Density, Diversity, Design, Destination Accessibility, and Distance to Transit.

The following are land use recommendation examples that municipalities should consider in their updated plans:

- Support compact, mixed-use developments within transit-supportive corridors. Comprehensive plans should identify areas where mixed-use developments are encouraged. Mixed-use projects can contain a mix of residential, retail, office, and institutional uses arranged in a compact and pedestrian-friendly development pattern. Buildings could be configured as single-use buildings interconnected in a pedestrian-friendly manner and with complementary uses in proximity (e.g., a residential building next to a commercial and office building) or could mix uses within the same building in appropriate locations.
- Mixed-use development can be a very effective longrange strategy to make transit more attractive. When a wide variety of uses are located in proximity to each other, walking and bicycling are also supported.
- Establish density targets. Although density is only one variable influencing transit use, studies have found that transit ridership increases significantly with increased land use density. There is no magic number for an appropriate density target for all transit station communities, but 7 units per acre is often used as a basic level of residential density needed to support high-quality bus service. Many different variables should influence any density targets that are established.

- Support a node-centric approach to commercial development. Concentrate pedestrian-friendly commercial (and/or mixed-use) at major nodes. Creating nodes will improve the corridor's aesthetics, pedestrian, and vehicular circulation, and long-term economic viability. On the other hand, auto-oriented and large-scale commercial development should be directed to major transportation corridors that are not identified as priority transit-supportive corridors.
- Create design and development standards. Municipalities should create design and development standards that create attractive buildings and also support developments that meet Leadership in Energy and Environmental Design-Neighborhood Development (LEED-ND) standards. LEED-ND standards support the development and retrofit of neighborhoods that create positive change by integrating smart location choice, strong neighborhood design, and green infrastructure and buildings.
- The Kane County 2040 Long Range Transit Plan also recommends the creation of development design guidelines and the integration of design review into the development review process. In addition, as municipalities review development proposals, other potentially impacted entities, such as transit providers (Pace, Metra) should be included in the development review process. For example, representatives from Pace could identify potential opportunities or issues with a proposed site plan that may have an impact on future bus circulation within or to the site.
- Pace adopted its own Transit Supportive Guidelines in 2013 to assist municipalities in development review. (http://www.pacebus.com/guidelines/Pace_Design_ Guidelines.pdf). The guidelines should be used by municipalities, developers, and property owners when designing and reviewing developments within transitsupportive corridors to support Pace ridership and circulation.

Transportation Recommendations

Beyond recommendations for land use, municipalities can also provide direct recommendations in their local plans to create a transportation network of which public transit is a key component. Recommendation examples that municipalities should consider include:

- Support public transit. Municipalities should continue to support public transit agencies in their efforts to provide effective and efficient transit service. Municipalities should work with transit agencies and other government agencies such as Kane County and IDOT to advance transit improvements, such as pedestrian signal timing, street lighting, landscape improvements, and bus stop amenities. Improvements such as these will require coordination between the municipality, Pace, Metra, Kane County, and IDOT.
- Minimize surface parking within transit-supportive corridors. Parking lots should not dominate the frontage of transit-supportive corridors or pedestrian-oriented streets and should not interrupt pedestrian routes. Parking lots should be located behind buildings or in the interior of a block, whenever possible. Where parking is or can be located at the side or rear of buildings, attractive, public pedestrian connections to the primary street should be created. When parking is located in the front, landscaping or fencing should be used to help minimize negative impacts. The installation of an effective screen would help to improve the appearance of the property while also separating pedestrian areas from vehicles which in turn supports walkability.

- Promote and adopt Complete Streets policies. The concept of Complete Streets is to design roadways to accommodate pedestrians, bicyclists, transit, and cars, creating multi-modal transportation networks. The National Complete Streets Coalition defines a complete street policy as a "policy to ensure that transportation planners and engineers consistently design and operate the entire roadway with all users in mind including bicyclists, public transportation vehicles and riders and pedestrians of all ages and abilities." (Source: National Complete Streets Coalition, http://www.completestreets.org)
- Encourage connectivity. An interconnected street system is essential to making a transit-supportive corridor function as a pedestrian-oriented activity center. A major function of the street system is to facilitate pedestrian circulation within the corridor and to link adjacent neighborhoods. The street system should provide direct connections to transit facilities, commercial uses, parks and other destinations in the corridor.
- Create transportation demand management (TDM) programs. As recommended in Kane County's 2040 Long Range Transit Plan, municipalities should include Transportation Demand Management (TDM) programs in their local comprehensive plans. TDM programs are strategies and policies that reduce or redistribute travel demand (specifically that of single-occupancy private vehicles). As stated in the 2040 LRTP, large employers or associations representing multiple employers would have responsibility for executing TDM plans and providing parking incentives and tax benefits. In addition, Pace administers the regional rideshare and vanpool programs (see www.pacerideshare.com for more information).





Municipal Case Studies

Several communities within Kane County have recently created comprehensive plans or TOD plans that support the type of development desired within transit-supportive corridors. The following are recent examples:

- City of Batavia Comprehensive Plan http://www.cityofbatavia.net/content/ articlefiles/7235-July2010-Comprehensive%20 Plan%20Complete.pdf
- Village of Carpentersville Comprehensive Plan http://vil.carpentersville.il.us/Services/ CommunityDevelopment/PDF/ ComprehensivePlan.pdf
- City of Geneva Comprehensive Plan http://www.geneva.il.us/DocumentCenter/View/183
- City of Geneva Downtown/Station Area Master Plan http://www.geneva.il.us/DocumentCenter/View/186
- Village of Huntley TOD Design Guidelines http://www.huntley.il.us/depts/ development_services/planning/documents/ ApprovedHuntleyTODGuidelines-2009-06-30.pdf
- Village of Huntley Downtown Revitalization Plan http://www.huntley.il.us/documents/ DowntownRevitalizationPlan-Adopted.pdf
- Village of Montgomery Transit-Oriented Development Plan http://ci.montgomery.il.us/DocumentCenter/Home/ View/131
- Village of South Elgin Comprehensive Plan http://www.plansouthelgin.com/2030plan/ SouthElgin2030ComprehensivePlan.pdf
- City of St. Charles Comprehensive Plan http://www.stcharlesil.gov/sites/default/files/ planning/comprehensive/adoptedversion.pdf

Batavia riverwalk. Photo credit: Michael Kappel, Flickr user.



Section 4: MOVING FORWARD



Kane County and its municipalities can take action to advance the implementation of transit-supportive corridors through land use policies and the provision of infrastructure improvements.

Actions for Transit-Supportive Land Use

Transit-supportive land uses are integral to a viable transit system and are a significant consideration towards the implementation of these corridors. Included are key activities that partners in Kane County can do to support the creation of transitsupportive land uses within the corridors:

Municipalities/County

- 1. Promote higher-density development and a greater mix of uses within the transit-supportive corridors.
- 2. Create and adopting zoning ordinance updates (see Section 2).
- 3. Include supportive language in Comprehensive Plan updates (see Section 3).
- 4. Include Pace in the development review process.

Transit Agencies

- *Pace.* Municipalities and the County should continue to coordinate with Pace in terms of current operations and planned routes, including transit-supportive corridors. Representatives from Pace should be included in the planning for these corridors as well as individual development reviews to help ensure transit access/egress and circulation. Through its new DRAFT program, Pace should provide regular assistance with development review to interested communities.
- *RTA*. As municipalities undertake Transit-Oriented Development (TOD) plans with funding assistance provided by the Regional Transportation Authority (RTA), language that supports transit-supportive corridors should be included.

Kane County

Kane County Planning Cooperative. An effective way for Kane County to remain engaged with local municipalities in implementing the transit-supportive corridors and land uses is through its Planning Cooperative. One of the Cooperative's fundamental goals is to help municipalities "fill in the gaps" in local planning resources by providing technical assistance. A potential project for the Planning Cooperative could be assisting a Kane County municipality in adopting one of the model zoning ordinances referenced in this report (with customization for local conditions). A Health Impact Assessment could be a potential tool for assisting municipalities in adoption of such an ordinance. The HIA would allow the County and municipalities to evaluate the health impacts of adopting policies or ordinances based on the local conditions.

Kane County Division of Transportation (KDOT) and County Development and Community Services Department. In addition to working with the County Planning Cooperative, municipalities should also consider working with County staff to provide guidance whenever feasible. Two County departments that could provide valuable information and guidance from is the Division of Transportation and the Development and Community Services Department. For example, both departments currently provides technical assistance to the sixteen townships and coordinates with State, regional, and local agencies on transportation and land use issues.

CMAP

When working with Kane County municipalities through its Local Technical Assistance (LTA) program, CMAP should include language that supports transitsupportive corridors in the plans, zoning revisions, and other planning documents that it produces. CMAP should also inform Kane County municipalities about toolkits that they can use on their own, such as the "Parking Strategies to Support Livable Communities" toolkit, which is particularly relevant in creating a pattern of land use that supports public transit. (www.cmap.illinois.gov/programs-and-resources/ local-ordinances-toolkits/parking)

Actions for Transit Supportive Infrastructure

To encourage residents, consumers and employees who live, shop and work within the transit-supportive corridors to reduce their reliance on single occupancy vehicles, it is important to create a pedestrian-friendly atmosphere that encourages pedestrian movement from the transit service to destination point. The following actions can provide assistance in creating a more transit-supportive environment.

Municipalities/County

- Continue to promote pedestrian-friendly street design and consider adopting a Complete Streets policy.
- Take steps to improve the walkability and "bikeability" of the community.
- Apply for infrastructure funding. Municipalities and the County should continue to apply for funding to plan, construct, and operate transit supportive infrastructure. Two important funding sources that could be used to implement transit-supportive strategies include the Congestion Mitigation and Air Quality (CMAQ) program and the Surface Transportation Program (STP). Municipalities, the County, Pace, and the RTA are examples of applicants. Each can act independently and apply for projects on their own or applicants can team up to submit larger interjurisdictional projects (for example, improvements in each of the top 5 corridors could be grouped together and submitted as one project).

Besides the continued coordination on operations and planned routes, local agencies should coordinate with Pace on transit supportive infrastructure improvements and programming of potential funds through Pace's annual program and budget. Pace has been a successful recipient of grant funding to implement transit supportive infrastructure throughout Kane County.



Potential Funding

Potential funding sources for infrastructure improvements include:

CMAQ

Many projects which are eligible for CMAQ funding could contribute to implementing a transit-supportive corridor.

- Transit service operations. CMAQ funds could be used to extend existing or add new transit service operations. The match would be 80/20 with the 20 percent of the project cost being paid by the applicant. As an example, funds could be used to add weekend bus service (where currently no weekend service exists) or to add additional service to an existing route. It should be noted that because CMAQ is focused on project start-ups, service operations can only be funded for three years.
- Capital improvements. CMAQ funds can be used to construct a number of infrastructure improvements including: sidewalks that connect directly into transit services, bus shelters, drop-off/turn-around areas, and traffic signals (TSP – Transit Signal Prioritization). As an example, the last funding round of CMAQ included the addition of new bus stop improvements along Randall Road. CMAQ funds could also be used to purchase new transit vehicles.

If municipalities, the County or other agencies such as Pace or RTA are interested in a future project they should contact the Kane/Kendall Council of Mayors Planning Liaison. For more information regarding the CMAQ program please visit http://www.cmap.illinois. gov/mobility/strategic-investment/cmaq.

STP

The Kane/Kendall Council of Mayors (KKCOM) administers Surface Transportation Program (STP) funds suballocated to the Kane and Kendall County area. The Surface Transportation Program (STP) provides funding to municipalities for projects on the Federal-Aid Highway System. The Kane/Kendall Council of Mayors receives approximately \$8.5 million a year in STP funds.

Approximately every three years, the Council has a call for all eligible projects. STP funds have typically been used to fund capital improvements. Examples of eligible project types:

- Roadway rehabilitation, reconstruction, restoration
- Widening / add lanes
- Intersection improvements
- Traffic signal improvements
- Transit and bicycle and pedestrian projects





RTA Community Planning Program

The Regional Transportation Authority (RTA) also funds transit-oriented development (TOD) zoning projects for bus corridors through its Community Planning program. The Community Planning program provides funding and planning assistance to applicants for implementation and planning projects that benefit the community and the regional transit system. Eligible implementation projects include zoning code updates, TOD developer discussion panels, pedestrian access improvement plans, and other innovative implementation approaches. Eligible planning projects include TOD plans, and corridor, subregional, or local access improvement plans. (http://www.rtachicago. com/community-planning/community-planning.html)

TIF district funds and/or development impact fees

Tax Increment Finance (TIF) districts and development impact fees are potential funding |sources for municipalities to help fund transit infrastructure.

Bus shelter advertisements.

Pace encourages Kane County and local municipalities to explore the use of advertising at bus stop shelters. The advertising shelter program makes it much more cost effective for Pace to provide passenger amenities, while generating revenue for local jurisdictions.

Additional funding opportunities

The County and municipalities should also pursue additional funding applications for projects that support transit-supportive corridors. The County has a long history of communicating and working with municipalities on potential grants. The County informs municipalities about upcoming grants through its Planning Cooperative and through the Kane/Kendall Council of Mayors newsletter. There is also a list of funding strategies in Kane County's 2040 Long Range Transit Plan that should be considered. (http:// kdot.countyofkane.org/2040%20Transit%20Plan/ KANE%20COUNTY%202040%20LRTP%20App%20 G%20Funding%20Strategies%20(Tech%20Memo%20 6).pdf)

Establish Sustainable Operations Funding

A sustainable operating plan is needed as to how to pay for transit service on the recommended corridors. Any new increase in service levels will need funds to maintain appropriate operations to both new corridors as well as existing routes. CMAQ funds may be used to help contribute to operations funding, however, even with CMAQ funds a sustainable plan to pay for service is necessary.





APPENDICES

6252



Acronym List

ACS	American Community Survey
СМАР	Chicago Metropolitan Agency for Planning
CMAQ	Congestion Mitigation and Air Quality
EEA	Entrepreneurial Excellence Awards
DRAFT	Design Review Assistance for Transit
HIA	Health Impact Assessment
H+T	Housing and Transportation
IDOT	Illinois Department of Transportation
ККСОМ	Kane/Kendall Council of Mayors
LEED	Leadership in Energy and Environmental Design
LEED-ND	Leadership in Energy and Environmental Design – Neighborhood Development
LTA	Local Technical Assistance
OSC	Oversight Steering Committee
PUD	Planned Unit Development
RTA	Regional Transportation Authority
STP	Surface Transportation Program
TSP	Transit Signal Prioritization
TDM	Transportation Demand Management
TDR	Transferable Development Rights
TOD	Transit Oriented Design
VMT	Vehicle Miles Traveled

- A. Transit-Supportive Data and Methodology
- B. Oversight Steering Committee Meetings Summaries
- C. Existing Conditions Summary
- D. Planning and Zoning Resources

Provided under separate cover.

Chicago Metropolitan Agency for Planning

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FY15-0112