## Summary of the FAP 342 / Route 53 Extension Analyses

1962	Regional plan identifies need for north-south link					
1964-70	IDOT constructs current Route 53 from Dundee Road to Lake Cook Road					
1970-90	Two environmental studies of the North Extension are initiated and eventually discontinued					
	based on roadway priorities					
1993	General Assembly authorizes the Tollway to extend IL-53					
1993-97	IDOT and Tollway prepare Phase I Environmental Studies					
1998	Lake County Transportation Improvement Project (LCTIP) Formed					
2005	LCTIP discontinued					
2006	Route 120 Corridor Planning Council established					
2007	Tollway Board Resolution					
2009	Lake County Referendum (76% support)					
2009	Unified Vision and feasibility analysis published by the Rt. 120 Corridor Planning Council					
2010	Central Lake County Corridor included as a major priority project in CMAP GO TO 2040 plan					
2011	Tollway Board adopts "Move Illinois" Capital Program					

## **Major Findings of the LCTIP Process**

Reduction of north-south travel times and congestion were a major goal of the LCTIP analysis. The process began with analysis of twelve alternative alignments based on the alignments and/or starting points of six existing roads. This set included north-south and east-west corridors as well as analysis of five community-bypass options for significantly developed areas. All alternatives were compared to a "No Action" baseline, which excluded any new north-south road but included other projected road and transit improvements expected to happen regardless of the LCTIP outcome. Prior to significant analysis, the set of twelve alternatives was trimmed to seven due to overall route miles as compared to vehicles served, similarity between alternatives, or the number of property owners displaced as compared to other alternatives. The final seven alternatives included north-south and east-west corridors, new road and existing road expansion scenarios, and freeway, tollway and arterial road typologies. The chart below summarizes the final seven alternatives and their scores for congestion and travel time metrics.

	Travel Time Savings <sup>a</sup>			Traffic Relief on North-South Roads <sup>b</sup>		Uncongested North- South Lane Miles LOS A,B,C c,d		
Alternative <sup>e</sup>	Peak Period Hours of Travel Time Saved	% Improvement over No-Action	Score	Miles	Score	Percent	Score	Total Score
1-94	65,900	15%	3	67.9	3	38%	5	11
IL 83/US 45 with US 12	75,100	17%	6	88.12	6	38%	5	17
IL 83/US 45 (with IL 120)	71,400	16%	5	68.28	4	38%	5	14
IL 53 Freeway/ Tollway	83,400	19%	7	124.57	7	41%	7	21
IL 53 Arterial	70,200	16%	4	82.8	5	39%	6	15
IL 120 Bypass	64,000	14%	2	65.64	2	37%	2	6
US 12	62,700	14%	1	61.47	1	33%	1	3

Source: Lake County Transportation Improvement Program

<sup>&</sup>lt;sup>a</sup> Travel Times Savings: This is a measure of the improvement in travel times for all trips that begin and end in Lake, northern Cook, and/or eastern McHenry counties. As an example, a 15-percent improvement would save about 10 minutes for a 1-hour trip during the afternoon rush hour, year 2020.

The two finalist alternatives, the IL 53 Freeway/ Tollway and the IL 83/US 45 with US 12, were selected based on scoring of travel time saved as well as traffic relief and uncongested miles on north-south roads. The IL 53 freeway/Tollway alternative included 12 new interchanges, including Lake-Cook Road, IL 22, Midlothian Road, Peterson Road, US 45, Hunt Club Road, Milwaukee Avenue, I-94, O'Plaine Road, Alleghany Road, Fairfield Road, and Wilson Road.

<sup>&</sup>lt;sup>b</sup> Traffic Relief on North-South Roads: This is a measure of the total miles of existing north-south roads that would carry at least 3,500 fewer vehicles each day, year 2020.

<sup>&</sup>lt;sup>c</sup> Uncongested North-South Travel: This is a measure of the percentage of north-south roads that would be uncongested during the afternoon rush hour, year 2020.

<sup>&</sup>lt;sup>d</sup> A difference of 8 percent represents approximately 100 lane miles.

<sup>&</sup>lt;sup>e</sup> LCTIP No-Action (Baseline) trip table