NICTI Alternatives Analysis

I-90 Corridor Planning Council November 14, 2011



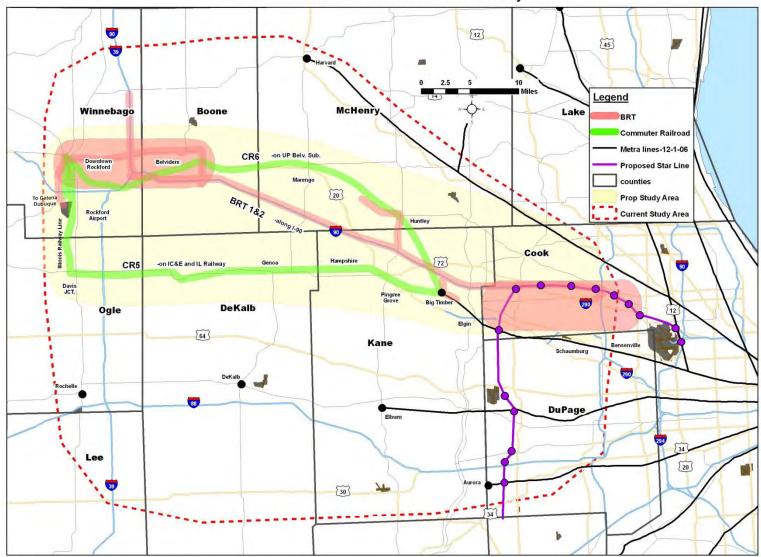




Summary of Build Alternatives

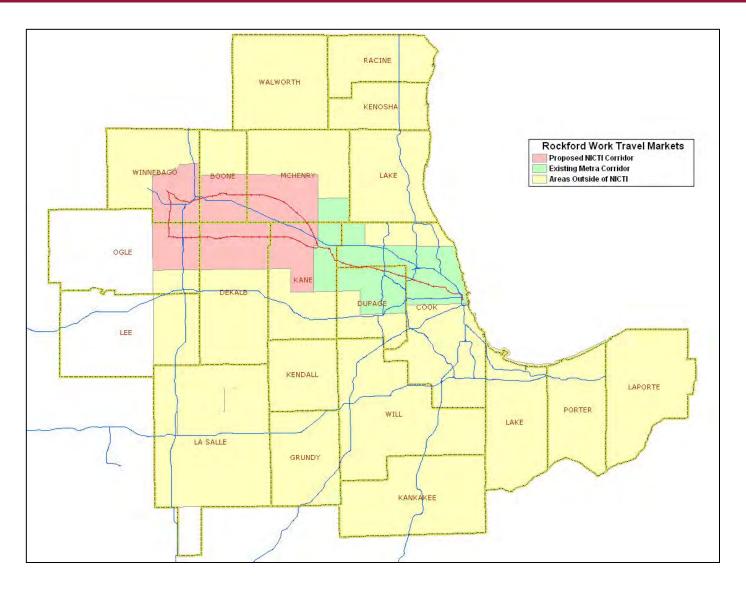






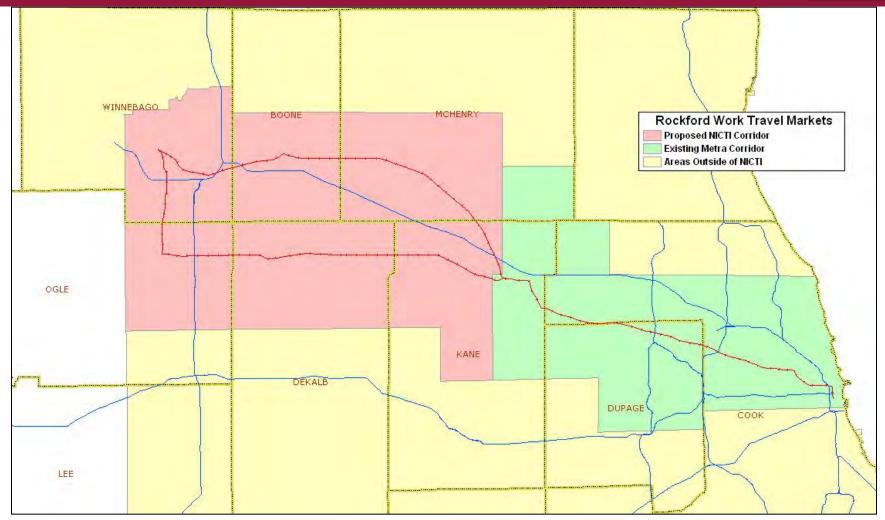
Work Travel Market





Work Travel Market

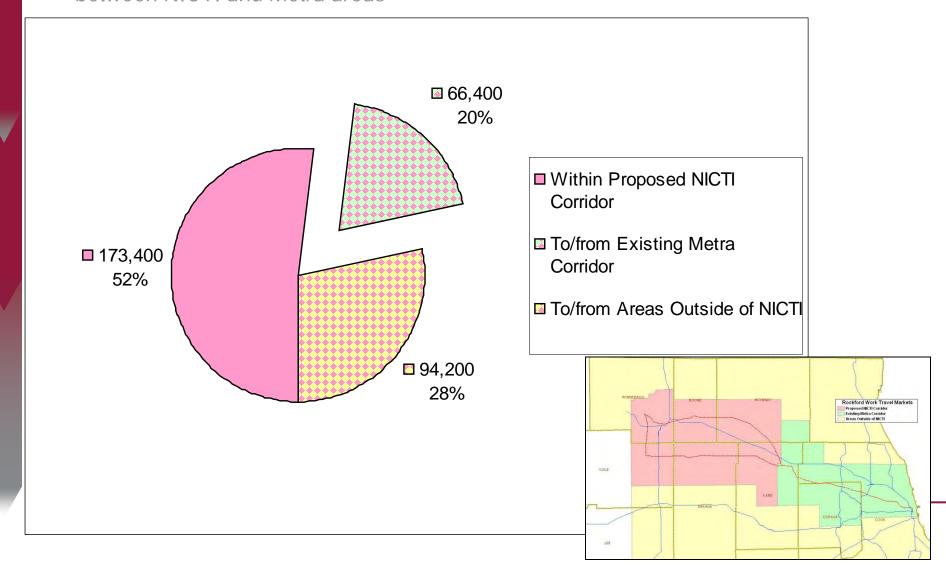


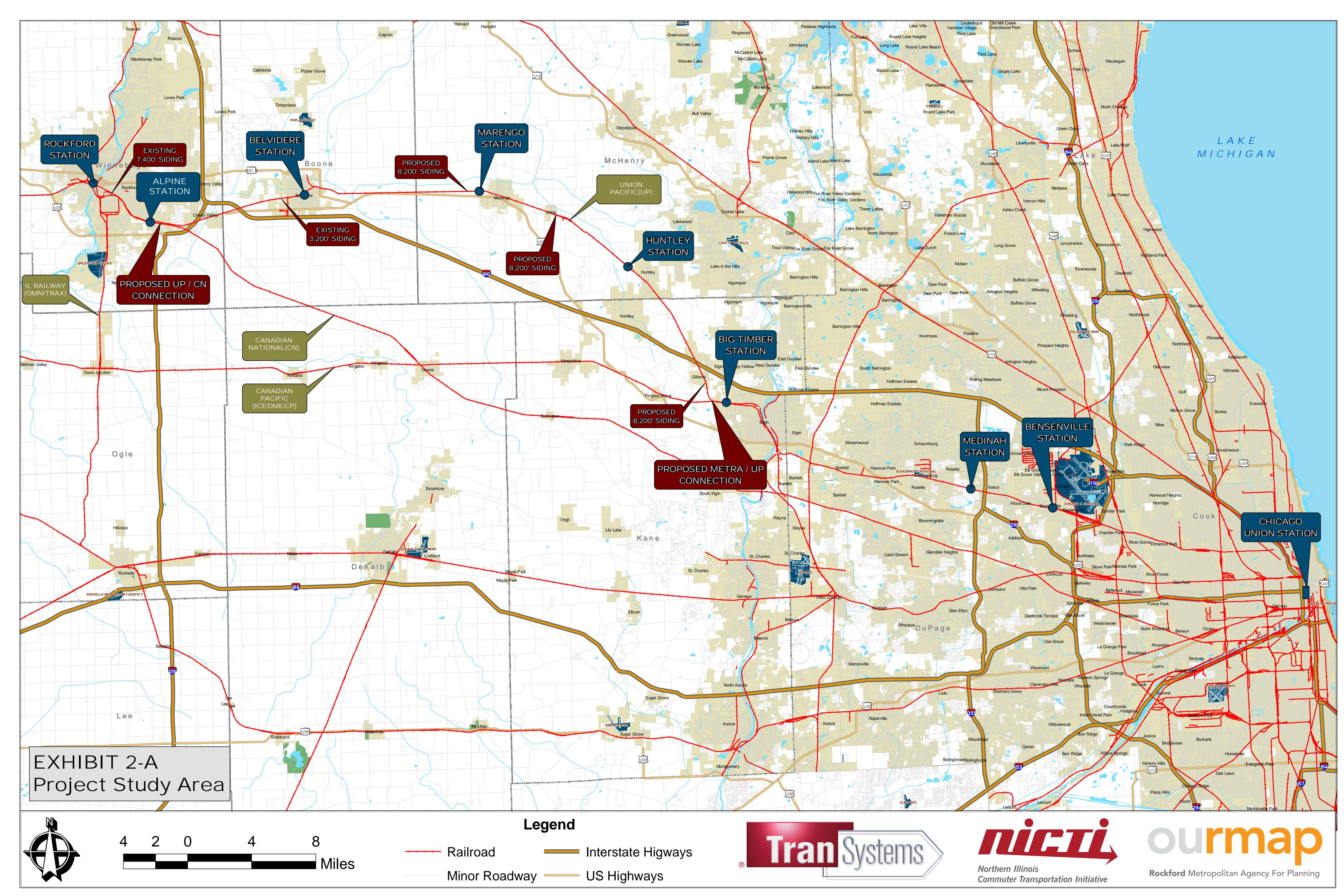


Likely Corridor Travel Market



 Corridor travel most likely to generate transit ridership will be those traveling between NICTI and Metra areas





COMBINED TRAIN SCHEDULES, METRA / NICTI / AMTRAK May 20, 2009

Stations 22 A Downtown Rockford LV Alpine Rd Downtown Belvidere Marengo Huntley		2202 AM	2204 AM	2206 AM	2208 AM	2210 AM	2212 AM	100 AM 5:26	2214 AM	2216 AM	2218 AM	2220	102	2222	2224	104	2226	2228	AMK	2230	2232	2234
Downtown Rockford LV Alpine Rd Downtown Belvidere Marengo	M	AM	AM	AM	AM	AM	AM		AM	AM	ΛМ											
Alpine Rd Downtown Belvidere Marengo								5.26			AIVI	AM	AM	AM	AM	AM						
Downtown Belvidere Marengo								0.20					6:01			6:34			7:36			
Marengo								5:36					6:11			6:44			7:46			
								5:51					6:26			6:59			8:19			
Huntley								6:04					6:39			7:12						
nunney								6:15					6:50			7:23						
Big Timber Rd -		-	5:27	5:45	-	6:12	-	6:32	-	6:51	-	-	7:05	7:24	-	7:38	-	8:36		9:36	10:22	11:22
Elgin 4:	17	4:52	5:33	5:51	-	6:18	-		-	6:57	-	-		7:31	-		7:48	8:42		9:42	10:28	11:28
National St 4:	19	4:54	5:35	5:53	-	6:20	-		-	6:59	-	-		7:33	-		7:50	8:44		9:44	10:30	11:30
Bartlett 4:	26	5:02	5:43	6:01	-	6:30	-		-	7:08	7:13	-		7:42	-		7:59	8:52		9:52	10:38	11:38
Hanover Park 4:	30	5:05	5:47	6:04	-	6:34	-		6:57	7:12	-	-		7:46	-		8:03	8:55		9:55	10:41	11:41
Schaumburg 4:	34	5:09	5:51	6:08	-	6:38	-		7:02	7:16	7:21	-		7:50	-		8:07	8:59		9:59	10:45	11:45
Roselle 4:	39	5:14	5:56	6:13	6:26	6:44	6:54	V	7:08			7:37			-		8:12	9:04		10:04	10:50	11:50
Medinah 4:	41	5:16	5:58	6:15	6:28	-	6:57	7:08	7:11			7:40			-		8:15	9:06		10:06	10:52	11:52
Itasca 4:	45	5:20	6:02	6:19		6:50			7:15		٧	7:43			-		8:19	9:10		10:10	10:56	11:56
Wood Dale 4:	49	5:23	6:06	6:23		6:55		V	7:18		7:30	7:47			-		8:23	9:14	V	10:14	11:00	12:00
Bensenville 4:	53	5:27	6:10	6:27		6:59	٧	7:17	7:22			7:51			-		8:27	9:18	9:55	10:18	11:04	12:04
Manheim -		5:32		6:33	٧	-	7:09		-	٧	٧	-		٧	-		8:31	-		-	-	-
Franklin Park 4:	59	5:34		6:35	6:42	7:05	7:12		7:28	7:32	7:38	7:57		8:05	8:10		8:34	9:24		10:24	11:10	12:10
River Grove 5:	02	5:38			6:46		7:16				7:43				8:14			9:28		10:28	11:13	12:13
Elmwood Park 5:	04	5:41			6:49		7:19				7:46				8:17			9:31		10:31	11:16	12:16
Mont Clare 5:	06	5:43			6:51		7:21				7:48				8:19			9:33		10:33	11:18	12:18
Mars -		5:45			6:53		7:23		_		7:50				8:21			•		-	•	-
Galewood 5:	80	5:47			6:55		7:25				7:52				8:23			9:35		10:35	11:20	12:20
Hanson Park		5:49			6:57		7:28				7:54				8:26			•			-	
Grand/Cicero \	/	5:51	٧	٧	6:59	٧	7:30		٧	٧	7:56	٧		٧	8:28		٧	9:38		٧	11:23	٧
Western Ave 5:	18	6:00	6:30	6:51	7:07	7:22	7:40		7:45	7:48	8:05	8:11		8:21	8:36		8:48	9:46	٧	10:45	11:31	12"30
Chicago Union Station AR 5:	30	6:13	6:42	7:03	7:20	7:36	7:53		7:57	8:00	8:18	8:23		8:33	8:49		9:00	10:00	10:25	10:58	11:43	12:42

CHICAGO TO ROCKFORD - MONDAY through FRIDAY																						
Stations	2221	2223	2225	2227	107	2229	2231	2233	109	2235	2237	2239	111	2241	2243	2245	AMK	2247	2249	2251	2253	2255
	PM	PM	PM																			
Chicago Union Station LV	2:30	3:30	4:05	4:20		4:30	4:50	4:55		5:05	5:17	5:23		5:27	5:46	6:10	6:15	6:40	7:40	8:40	9:40	10:40
Western Ave	2:39	3:39	4:14	4:30		4:39		5:05		5:15	5:27	5:33		5:36	5:56	6:19		6:49	7:49	8:49	9:49	10:49
Grand/Cicero	2:45	3:45	4:21			4:46								5:43		6:26				8:56		
Hanson Park	-	-	4:24			4:49								5:46		6:29		٧	٧	-	٧	V
Galewood	2:49	3:49	4:26			4:52								5:48		6:31		6:59	7:59	9:00	9:58	10:58
Mars	•	3:51	4:28			4:54				٧				5:50		6:33		•	•	-	•	-
Mont Clare	2:51	3:53	4:30			4:56				5:25				5:52		6:35		7:02	8:02	9:02	10:00	11:00
Elmwood Park	2:53	3:55	4:32			4:58		I		5:27	- 1			5:54		6:37		7:04	8:04	9:04	10:02	11:02
River Grove	2:55	3:58	4:34	٧		5:01	٧	٧		5:30				5:57	٧	6:41		7:07	8:07	9:06	10:04	11:04
Franklin Park	2:59	4:02	4:40	4:44		5:07	5:13	5:19		5:34				6:00	6:12	6:45		7:11	8:11	9:10	10:08	11:08
Manheim	-	-	•	4:46		•		-		5:36		٧			•	•	٧	•	-	•	•	-
Bensenville	3:04	4:08	•	4:51		•	_	5:24				5:51	6:11	٧	6:19	6:50	6:55	7:17	8:17	9:15	10:13	11:13
Wood Dale	3:08	4:12	•	4:55		•		5:28				5:55		6:09	6:23	6:54		7:21	8:21	9:19	10:17	11:17
Itasca	3:12	4:15	•	5:00		•	_	5:31				5:59	٧		6:27	6:58		7:25	8:25	9:23	10:21	11:21
Medinah	3:16	4:19	•	5:04		•	٧	5:35		٧		6:03	6:20		6:31	7:02		7:29	8:29	9:27	10:25	11:25
Roselle	3:18	4:22	•	5:07		•	5:27	5:38		5:48	V	6:08	_	- 1	6:34	7:05		7:31	8:31	9:29	10:27	11:27
Schaumburg	3:23	4:28	•	5:13		•	5:32	5:44		1	5:59		_	- 1	6:39	7:10		7:37	8:37	9:34	10:32	11:32
Hanover Park	3:27	4:33	•	5:17		•	5:36	5:48		- 1	6:05		_	V	6:43	7:14		7:40	8:41	9:38	10:36	11:36
Bartlett	3:30	4:37	ı	5:21		•	5:40	5:52		V	6:09		_	6:25	6:47	7:18		7:44	8:45	9:41	10:39	11:39
National St	3:39	4:46	•	5:30		•	5:49	6:02		6:06	6:18	٧	_	-	6:56	7:27		7:52	8:53	9:50	10:48	11:48
Elgin	3:41	4:48	•	5:32		•	5:51	-		6:13	6:20	6:30	٧	-	6:58	7:31		7:54	8:55	9:52	10:50	11:50
Big Timber Rd	3:50	4:58	•	5:43	5:46	•	6:01	-	6:16	-	6:29	6:39	6:46	-	7:07	-		8:04	9:03	10:01	10:59	11:59
Huntley					5:59				6:29				6:59									
Marengo					6:09				6:39				7:09				V					
Downtown Belvidere					6:22				6:52				7:22				8:17					
Alpine Rd					6:38				7:08				7:38				8:42					
Downtown Rockford AR					6:50				7:20				7:50				8:52					

SCHEDULE KEY

2221	METRA MILWAUKEE DISTRICT / WEST LINE, EFFECTIVE MAY 19, 2008
107	NICTI ALTERNATIVES ANALYSIS, DECEMBER 10, 2007
AMK	AMTRAK FEASIBILITY REPORT, REVISED JUNE 22, 2007



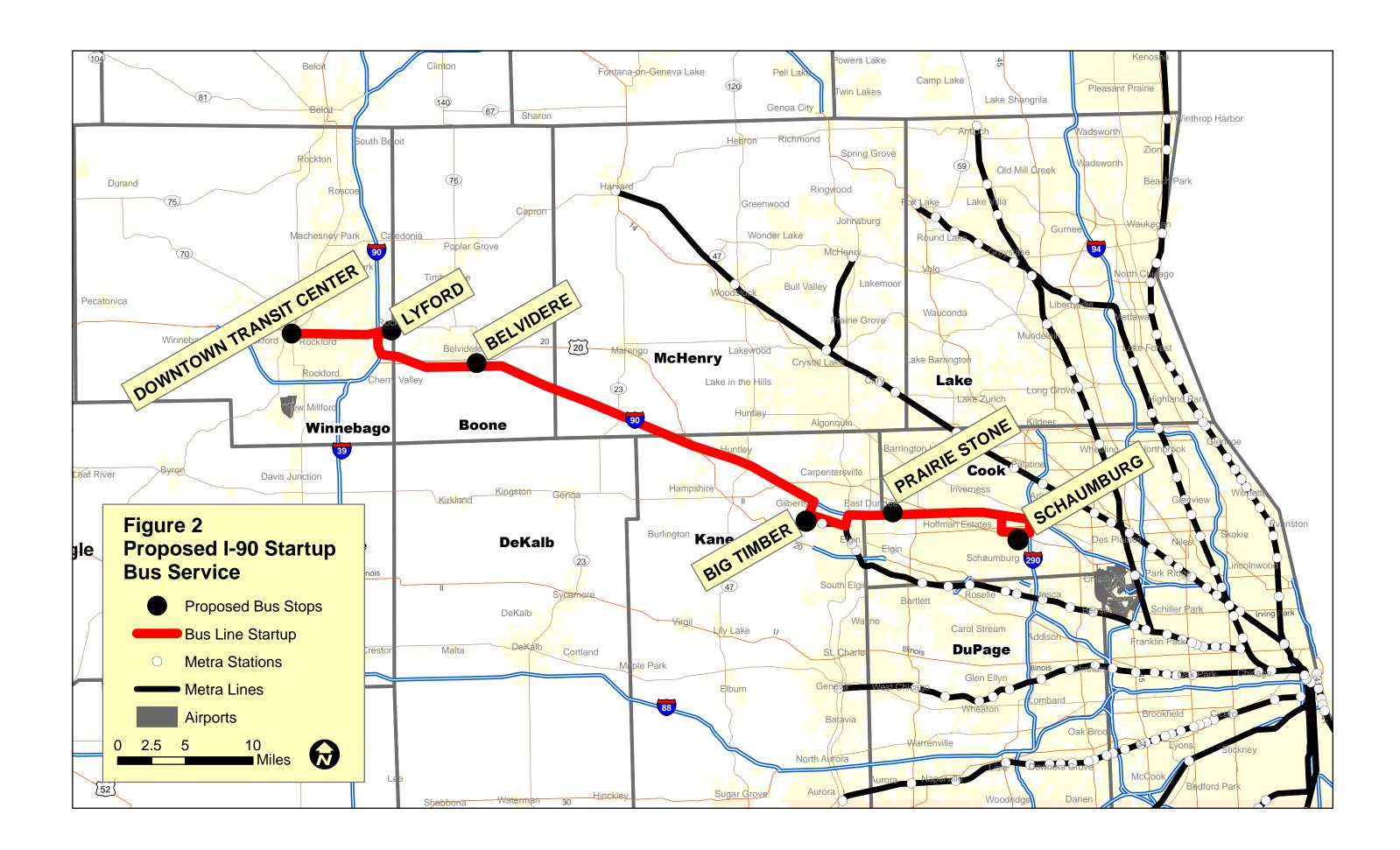
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TranSystems has been asked to investigate concepts for implementation of bus service in the Rockford-Chicago corridor, focused primarily on service for Rockford and Belvidere (the portion outside the RTA service area). In its earlier work for this project (2007-2008) TranSystems investigated a variety of concepts for service in the I-90 Tollway corridor. All involved operation of service exiting at Randall Road to access the Big Timber terminal of the Metra Milwaukee District service, with buses returning to I-90 to continue east to Schaumburg. Figure I shows relative distribution of residences of Metra riders from Big Timber and Harvard stations. Several alternative operating plans were developed, with varying outer terminals, intermediate routings, stops, frequencies, and days, and hours of service. This work has been reviewed to establish a basis for the current effort. A factor that has changed in the meantime is that Coach USA (Van Galder) has substantially increased the level of service on its Madison-Chicago route, now having 9 eastbound and 8 westbound trips operating nonstop between Rockford and Chicago Union Station, 7 days/week.

This effort is focused on a startup service directed at the biggest single market, peak period work trips. The Coach USA service is not timed to serve this market in the AM peak; it does, however, provide service in the PM peak.

Metra Rider Origins Mode of Access Lake (50) Big Timber Rd ROCK Geneva [14] Carpool 12 Drive Alone Beloit Dropped Off Walk À Harvard Bicycle Harvard Bus DOONE Carpool WINNESAGO Drive Alone Dropped Off Walk Poplar. # Grove Other Stations (23) Bicycle Rockford Bus Carpool Marengo Belvidere Drive Alone Dropped Off Walk 10 Genoa (23) Division of Capital & Strategic Planning February 2011

Figure 1: Map of Metra Rider Origins, based on Ticket-by-Mail Customer address



Buses for the relatively long trips to Big Timber and Schaumburg would need to be suitable for Interstate highway speeds. Buses used in such service elsewhere are typically equipped with such features as reclining seats, reading lights, power outlets at seats and WiFi service. Buses come in various sizes. The bus service could either be operated by Rockford MTD or a private contractor. In either case, the buses themselves could be purchased under Federal and State capital funding programs. Photos of "full size" and smaller "cutaway" (body on chassis) are shown in **Figures 3 and 4**.



Figure 3: 55 Seat Bus Used in ChicaGo Dash Commuter Service, Operated for City of Valparaiso by a Contractor

Figure 4: "Cutaway"
Body on Chassis Bus
with 24 Seats Used by
Danville Mass Transit
for Service on Freeway
to Champaign



See **Figure 5** for a proposed schedule of this service.

Figure 5:

Proposed Startup Service: Rockford – Belvidere – Big Timber – Prairie Stone – Schaumburg

AM Period

Rockford MTD Dtn	Lyford Transfer	Belvidere	Big Timber Metra	Prairie Stone	Schaumburg				
Term	Facility	Derwidere	big i illibel wella	Traine Stone	NWTC	Convention Ctr			
4:28 AM	4:48	5:02	5:37 (meets 5:45 AM Metra)	5:48	6:01	6:07 AM			
4:55 AM	5:15	5:29	6:04 (meets 6:12 AM Metra)	6:15	6:28	6:34 AM			
5:34 AM	5:54	6:08	6:43 (meets 6:51 AM Metra)	6:54	7:07	7:13 AM			
6:07 AM	6:27	6:41	7:16 (meets 7:24 AM Metra)	7:27	7:40	7:46 AM			

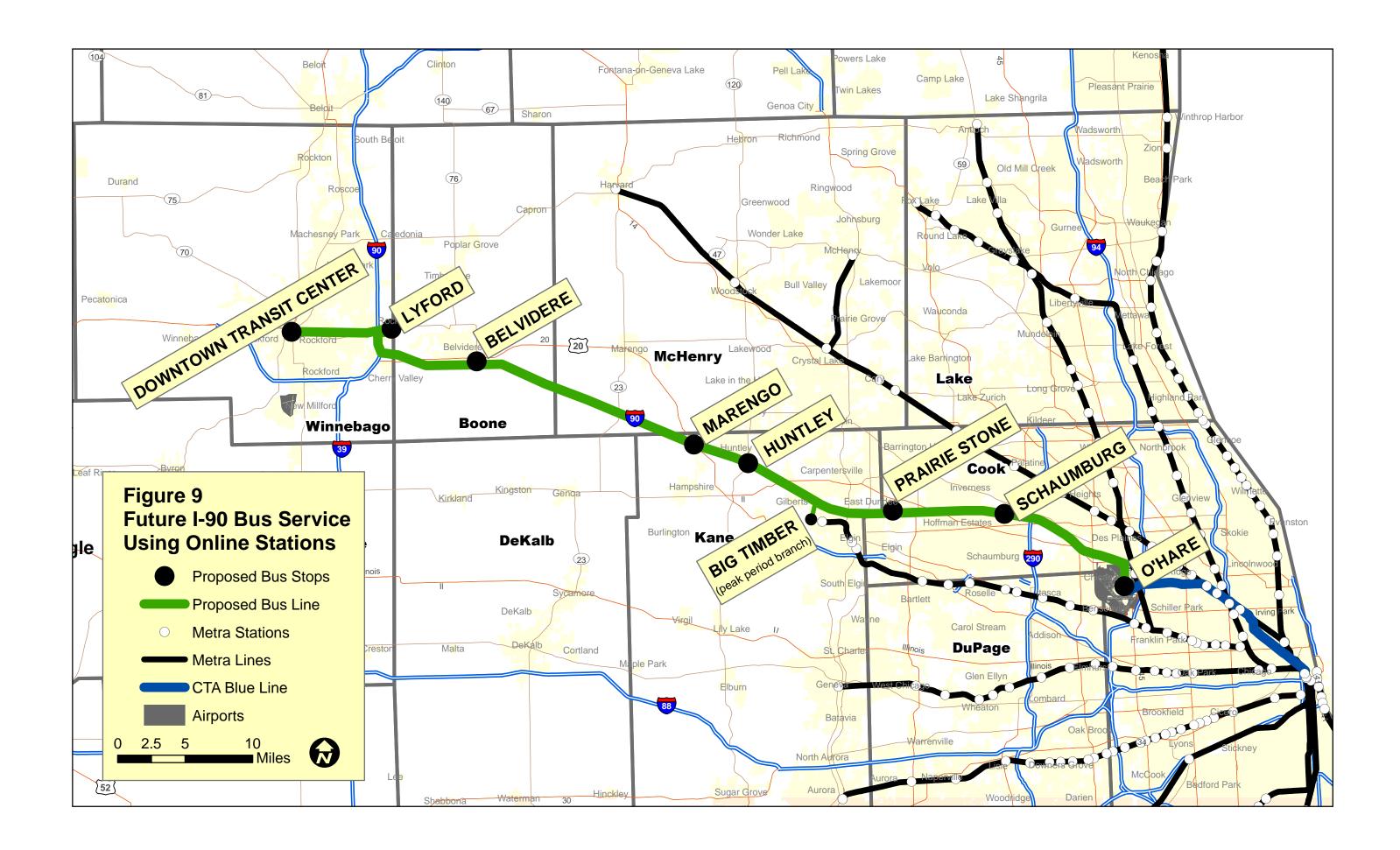
20 min 14 min 35 min 11 min 13 min 6 min Total = 1 hr 39 m

PM Period

Schaum	burg	Prairie Stone	Big Timber Metra	Belvidere	Lyford Transfer	Rockford MTD Dtn
Convention Ctr NWT C			J		Facility	Term
5:16 PM	5:22	5:35	5:46 (meets 5:43 PM Metra)	6:21	6:35	6:55 PM
5:34 PM	5:40	5:53	6:04 (meets 6:01 PM Metra)	6:39	6:53	7:13 PM
6:02 PM	6:08	6:21	6:32 (meets 6:29 PM Metra)	7:07	7:21	7:41 PM
6:40 PM	6:46	6:59	7:10 (meets 7:07 PM Metra)	7:45	7:59	8:19 PM

6 min 13 min 11 min 35 min 14 min 20 min Total = 1 hr 39 m

As stated at the beginning of the report, Coach USA (Van Galder) has substantially increased the level of service on its Madison-Rockford-Chicago route. It now has 9 eastbound and 8 westbound trips operating nonstop between Rockford and Chicago Union Station, 7 days/week. The principal service that is "missing" is eastbound AM peak period service. A table which shows how the proposed Rockford-Belvidere-Big Timber-Schaumburg service would relate to the Coach USA service has been prepared and is shown in **Figure 6.** The new service being proposed in this report is shown in red.



Capital and Operating Cost Estimates

Startup Service

It is assumed that startup service would consist of four morning trips from Rockford and Belvidere to Big Timber and Schaumburg with four trips returning in the afternoon. Order of magnitude costs (including contingency) are estimated as follows.

Capital costs

Buses:

5 "cutaway" (body on chassis) 24 seat buses @ \$100,000 = \$500,000 Alternate using 53+ seat intercity buses @ \$540,000 = \$2,700,000 Belvidere Park & Ride lot

New construction (50 spaces) = \$200,000

(Note: use of Tollway Oasis employee parking or Walmart parking might be accepted by owners for a limited period of time).

Operating costs

Based on current prices for long distance commuter bus service in the Chicago area, it is estimated that the annual operating costs for the startup service would be on the order of \$800-900,000 per year using a private contractor (\$200,000+ per year per daily round trip, based on a rate of about \$250 per bus hour). Although a ridership study has not been conducted, fares might reasonably be expected offset up to half of that. Costs will be toward the lower end if buses are purchased through a capital grant and provided to the contractor.

Future Belvidere Online Station

Capital cost is estimated at approximately \$28.6M, including widening of Tollway (sitework \$3.6M, Roadway \$10M, associated reconstruction of two bridges \$7.2M, and station with pedestrian bridges and elevators and pedestrian bridge over Tollway \$7.8M).

Exhibits

The exhibits on the following pages show proposed bus routings and park & ride locations associated with stops at Rockford Lyford Road, Belvidere (Oasis or Genoa Road), Elgin Big Timber Metra, Prairie Stone, and Schaumburg. A drawing of a proposed online station follows, based on design concepts applied at the I-35W station at 46th Street, Minneapolis.



