MICHIGAN CITY/NICTD RAIL REALIGNMENT STUDY

NICTD

Michigan City, Indiana

OCTOBER 2013 | FINAL STUDY REPORT

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Project Lead:

TranSystems

EXPERIENCE | Transportation

with assistance from:

LAKOTA

GOODMAN WILLIAMS GROUP
REAL ESTATE RESEARCH

DLZ
ENGINEERS • ARCHITECTS • SCIENTISTS
PLANNERS • SURVEYORS

JJR

WEAVER BOOS CONSULTANTS

The McCormick Group, Inc.

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I. EXECUTIVE SUMMARY

The Michigan City Alternative Realignment Study (the Study) began on April 19, 2011 with a study kick-off meeting where the eight member Management Oversight Group (MOG), comprised of four members from the Northern Indiana Commuter Transportation District (NICTD) and four members from the City of Michigan City, met for the first time with TranSystems to discuss the goals of the study and how they would be achieved. TranSystems' charge was to conduct the planning, engineering and outreach necessary to allow NICTD and City of Michigan City to select a preferred alternative to realign the existing NICTD/South Shore Line route through Michigan City. See Figure 1, Study Area.

The MOG worked together over the course of the study toward evaluating numerous realignment alternatives that would eliminate the existing embedded "street running" track down the middle of 10th and 11th Streets through Michigan City. Although NICTD and Michigan City shared the goal of finding a new route for NICTD through Michigan City, both entities had different reasons and rationale that were applied during the evaluation process. Michigan City's priorities were increased economic development opportunities, improved quality of life and maintenance of access through town while NICTD's priorities were increased speed of travel, decreased maintenance costs and increased reliability of service. There were also some shared expectations between NICTD and Michigan City such as consolidating the two existing inadequate Michigan City stations at Pine Street and at Carroll Avenue to develop a modern passenger station with amenities and ample parking for Michigan City, improving the overall safety for the community and enhancing access to and from Chicago. Other considerations included the fact that South Shore Freight has leasing rights with NICTD to operate freight traffic on the same set of tracks through Michigan City. South Shore Freight currently operates seven daily trains through the streets of Michigan City. Throughout the study the MOG was very cognizant of obtaining feedback from the various stakeholders with one-on-one interviews and from the community through public meetings and workshops.

Three primary corridors to traverse through Michigan City were identified as follows:

1. **Central Corridor** - out of the street but similar to the existing alignment down 10th and 11th Streets to Carroll Avenue with variations using segments of residential property along the south side of 10th Street and 11th Street as well as keeping the tracks within the existing street right-of-way.

2. South Corridor – a new track connecting between the existing NICTD track by Illiana Block Company and following the southern border of the National Lakeshore eastward to connect onto the CSX right-of-way and staying on the north half of the CSX right-of-way to Karwick Park where the new NICTD track would rejoin the existing NICTD track toward South Bend.

3. **North Corridor** – establishing a new NICTD track from US 12 northward through the east edge of Northern Indiana Public Service Company (NIPSCO)'s Lincoln Yard then parallel with Amtrak crossing over Amtrak, Trail Creek and US 12 to connect with the old former Nickel Plate Railroad right-of-way down to Carroll Avenue. Variations of this route included staying west of Trail Creek and going under the US 12 highway bridge through the Blocksom Company and the Marina properties and east along 8th Street to the north end of the South Shore Freight tracks and then down to Carroll Avenue.

The evaluation of these corridors and their respective options centered around their impacts on the following areas:

- **Transportation System** – what effect would each realignment option have on NICTD's current travel times, ridership, service reliability, relationship with Amtrak, CSX and South Shore Freight and safety

- **Environment** – each realignment option was screened to determine the effects it may have on air and water quality, wetlands, endangered species, historic resources, parklands, designated National Lakeshore lands and permitting capabilities

- **Economic Development** – each corridor was evaluated to determine what level of economic development was possible and what potential growth it may provide for Michigan City

- **Community** –concerns were identified and evaluated for each option regarding neighborhood impacts, environmental justice, visual and aesthetics, sustainable design, mobility improvements, multi-modal connections and the integration of land use and land acquisition requirements

- **Economics** – a financial plan was prepared to identify capital costs for the Preferred Alternative, operating, maintenance and replacement costs, fuel savings, land development potential, business and residential enhancement potential and direct and indirect economic benefits.

During the two and one half years of the study, Michigan City underwent a change of elected officials and representatives on the MOG who brought some new perspectives to the process. However, the goal of deciding on a preferred realignment alternative was reached by consensus of the MOG by diligent effort and compromise. In the end the selection of the Central Corridor Alignment moving the new NICTD tracks completely out of 10th Street to the area immediately south of 10th Street and connecting to the new tracks positioned in the north half of 11th Street with a modern station located just east of Franklin Street was the preferred realignment option. This Preferred Alternative has several unique benefits:

- Maintains commuter rail service to the central business district of Michigan City and its retail shops, restaurants and businesses
- Develops a new, modern rail station with high level eight car platforms in the center of Michigan City with a parking structure that will serve as a catalyst for economic development and growth
- It enhances the overall safety of the community by eliminating the existing embedded "street running" track and establishing automatic grade crossing warning systems for all new highway grade crossings
- It is the least costly of the options to construct
- It provides the best running times and overall trip time savings for NICTD

The Central Corridor Alignment option merges the insightfulness of the planning process with technical railroad engineering expertise to satisfy the study design and evaluation criteria. The end result meets the vision for the community as it promotes an operationally efficient, safe commuter transit service that will attract more ridership and create an impetus for economic development for Michigan City.

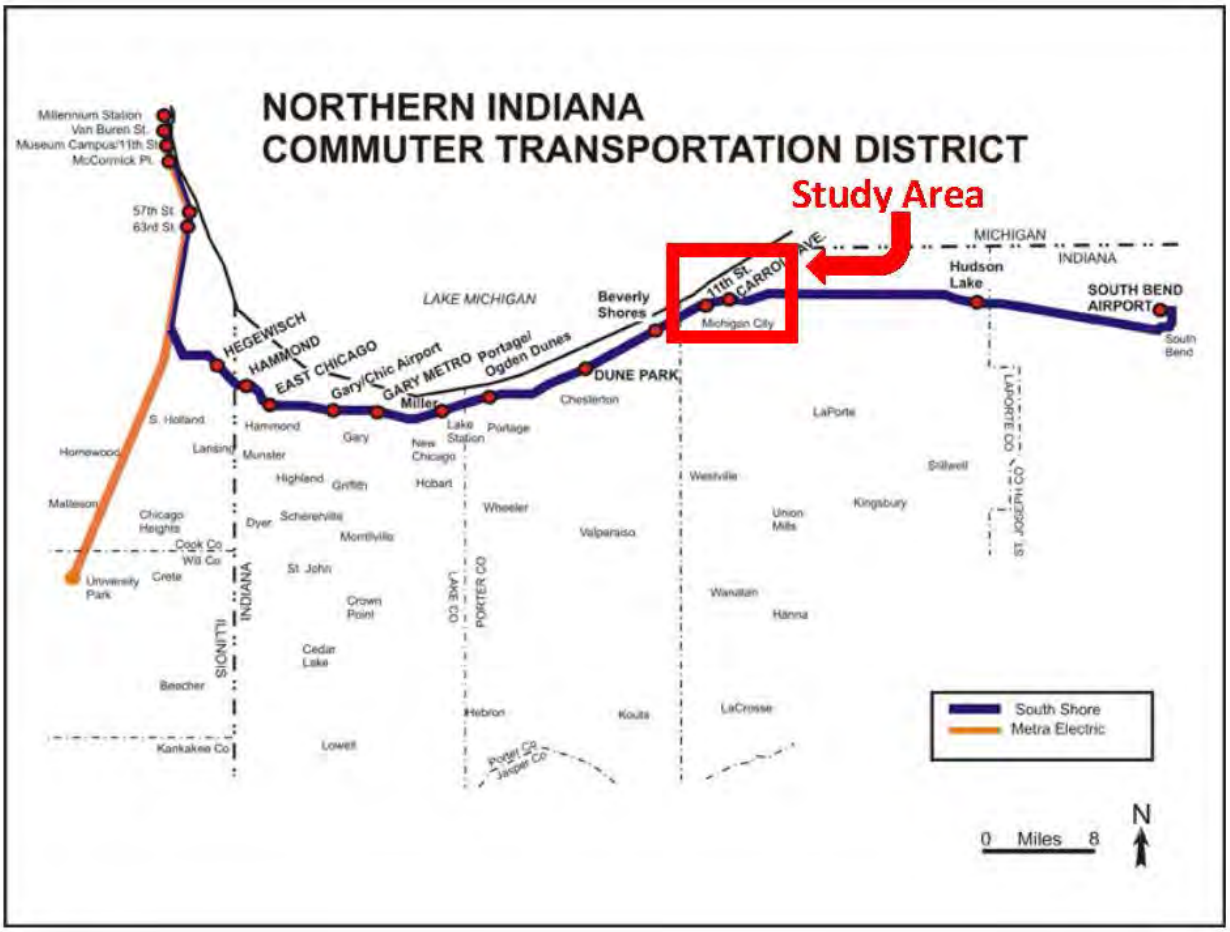

Figure 1: Study Area Map

II. STUDY STRUCTURE AND MANAGEMENT

The Michigan City Alternative Analysis Realignment Study (the Study) was a joint effort by the Northern Indiana Commuter Transit District (NICTD) and the City of Michigan City. The Study, which was funded by a federal Transportation Investment Generating Economic Recovery (TIGER) II grant, required NICTD and Michigan City to engage in intensive discussions in order to reach a common agreement to strike a balance between maximizing operational efficiency, passenger usage and improved infrastructure conditions for NICTD and positive economic development impact for Michigan City. To address these concerns, NICTD and Michigan City worked together in the alternative alignment selection process to explore various feasible realignment options that would improve operating flexibility and capacity, reduce maintenance costs and enhance vehicular and railroad safety while maximizing the potential to leverage the commuter rail service for positive growth and economic development for Michigan City.

At the beginning of the study, a Management Oversight Group (MOG) was formed by representatives from NICTD and Michigan City to work with TranSystems, the study consultant, to provide direction, comments and guidance as the study progressed. Michigan City was represented on the MOG by the Mayor, the City Planner, the City Engineer and one City Council Member. NICTD was represented by the General Manager, the Manager of Planning, the Chief Engineer and one member from their Board of Trustees. This group of eight individuals worked together as a cohesive unit to carefully establish the design criteria and evaluation matrix that would be applied to each feasible realignment option under consideration. Throughout the study's progress the MOG met on a monthly basis to consider the various realignment options and eventually reach the goal of selecting a preferred rail alignment that is in the best interests of NICTD and Michigan City.

The MOG also shared the study's progress and findings throughout the course of the Study with a wide array of stakeholders, community interests, businesses, adjoining railroads in Michigan City, members of the Michigan City Council, Federal, State and Local governmental entities and with the citizens through public open house meetings and workshops. The input received from these groups was factored into the alignment screening process by the MOG.

In conducting this study, the TranSystems team brought a "toolbox" of planning and engineering skills supported by national experience in railroad and commuter rail design engineering. This thoughtful balance of planning and engineering disciplines was beneficial to structure the progress of the study in order to merge the needs of both NICTD and Michigan City and to formulate the conceptual alignment options that are the basis of this study.

III. PUBLIC OUTREACH / STAKEHOLDER INVOLVEMENT

Two important components of the Michigan City Alternative Realignment Study were gathering input from key stakeholders and maintaining communication with the public regarding the development of the study.

A. STAKEHOLDER INVOLVEMENT

Very early in the study, scheduled meetings with key stakeholders were held in order to establish lines of communication, solicit their input and to build consensus in the community and among agencies for the Study. These stakeholders were considered an important part of the business community of Michigan City and, as decision leaders in the community, provided a broad view of the "pulse" of the civic representation of the area. Some of the stakeholders that were interviewed included:

Michigan City Parks & Recreation
Michigan City Engineer
United States Coast Guard
Northern Indiana Commuter Transit District
Michigan City Chamber of Commerce
Chicago South Shore & South Bend Railroad
CSX
National Park Service (Indiana Dunes National Lakeshore)
Michigan City Planning Department
Lighthouse Place Shopping Outlet
Save The Dunes
Hunden Strategic Partners
Elston Grove Historic District & Neighborhood Assn.
Blue Chip Casino
Indiana Department of Transportation
Michigan City Port Authority
Town of Trail Creek
NIPSCO
Amtrak
Community Housing Group
Art Space
MCNEAT
Michigan City Council
Main Street Association
Economic Development Alliance
North End Citizens Group
Citizens Advisory Group

A tremendous amount of insightful information was gathered from these stakeholders concerning opinions on how the NICTD commuter rail service plays a role in the community, how the rail service plays a role in their businesses / services and how future development of the rail service may improve and uplift the entire community. Many of these same stakeholders also attended the public open house meetings that were held, which reinforced their involvement and concern for this study.

B. PUBLIC OUTREACH

Public outreach was critical to the study process. It was important that the study's history and the current level of stakeholder expectations be respected. It was known from the outset of the study that public outreach was needed to be integrated into the study's technical analysis.

Early in the study, once data collection, design criteria, study objectives and initial engineering plans for the various realignment alternatives were developed, a public open house was scheduled for September 8, 2011 to share the preliminary study work with the public. This open house meeting was held at City Hall in Michigan City from 5:00pm to 9:00pm and was well advertised in advance of the meeting. A power point presentation was given to the audience showing the study's planning and engineering developments to date as well as a drawing of each proposed track realignment alternative that was under study. The attendees were also afforded an opportunity to review the track realignment alternatives at individual stations in an exhibit room and discuss each of them with the study team personnel. Comment cards were provided to the attendees to record their input on.

As the study progressed the Michigan City Council obtained some new members and the City elected a new Mayor as a result of the November 2011 elections. On February 1, 2012 a City Council Workshop was held for the benefit of the new City Council members and the new Mayor to apprise them of the developments of the study. The public was also invited to this workshop although no public comment was solicited. Another City Council Workshop was held on August 9, 2012. A presentation of the study's findings to date was given and the study team responded to questions from council members. Comment cards were provided to the attendees on which to record their input.

On August 16, 2012 a second public open house meeting was held at City Hall to present a realignment alternative to the community. This track realignment alternative was a northern route that relocated the NICTD track along the north side of Michigan City. This northern realignment alternative was not well received by the citizens in attendance.

After this meeting, the MOG refocused their efforts and developed a realignment alternative using the Central Corridor along 10th and 11th Street through Michigan City where the existing NICTD track is located. This realignment had variations from the original Central Corridor option originally proposed at the beginning of the study. The new Central Corridor option had less property impacts and less street closures. This proposed alternative was presented to the public at a Michigan City Council Workshop held on June 13, 2013.

In addition to these public open house forums and workshops a public web site was developed for the study. Study data, engineering plans, planning documents and other study developments were posted on the web site to assist in sharing information with the public. The web site also provided a central place where public comment was received and was responded to by the study team. The study website was accessed at ***www.emichigancity.com*** and by selecting the Michigan City/NICTD Rail Realignment Study icon on the Home page.

See Figures 2-5 for public meeting announcement flyers.

www.emichigancity.co
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NICTD

Michigan City/NICTD Rail Realignment Study

HOLD THE DATE!
September 8, 2011

You are invited to attend the first public open house for the Michigan City/ NICTD Rail Realignment Study

Date: Thursday, September 8, 2011.

Place: Michigan City, City Hall.
100 East Michigan Boulevard, Michigan City, IN

Time: 5:00 pm – 9:00 pm.

Attendees can review alignments, project data and planning/engineering efforts to-date.

PowerPoint presentations will be given promptly at 5:00 pm and again at 7:00 pm

The consultant team will be on-site to answer questions and receive your comments.

JOIN US.

QUESTIONS?

Michigan City Contact
John Pugh
(219) 873-1419
Ext. 324

Figure 2: September 8, 2011 Meeting Flyer

www.emichigancity.com

NICTD

Michigan City/NICTD
Rail Realignment Study Briefing Workshop

HOLD THE DATE!
February 1, 2012

QUESTIONS?

Contact **John Pugh** at
(219) 873-1419
Ext. 324

Michigan City/ NICTD Rail Realignment Study
Briefing Workshop
To brief city officials on prior efforts to date

Date: Wednesday, February 1, 2012
Place: Michigan City, City Hall, Lower Level
100 East Michigan Boulevard, Michigan City, IN

Time: 6:30 pm.—8:30 pm.

This briefing may be observed by the public

Figure 3: February 1, 2012 Meeting Flyer

www.emichigancity.com

NICTD

The City of Michigan City and NICTD Consultant Team provide final update to the evaluation process which created a preferred alignment consensus for the existing South Shore Rail Line

HOLD THE DATE!
August 16, 2012

The consultant team will update the public on the process undertaken by Michigan City and NICTD to arrive at a consensus on a preferred alignment.

Date: Thursday, August 16, 2012

Time: 5:00 pm—8:00 pm.

Place: Michigan City, City Hall, Lower Level
100 East Michigan Boulevard, Michigan City, IN

Public Open House from 5:00pm - 8:00pm, with presentations given at 5:00pm and 6:30pm respectively.

The public and interested stakeholders are invited to attend.

JOIN US.

QUESTIONS?

Contact **John Pugh** at
(219) 873-1419
Ext. 324

Figure 4: August 16, 2012 Meeting Flyer

Michigan City/NICTD Rail Realignment Study

You're Invited to a Michigan City, City Council Workshop!

The Management Oversight Group of the Michigan City Rail Realignment Study **INVITE YOU** to a Michigan City, City Council Workshop for the Michigan City/NICTD Rail Realignment Study.

Meeting Information

When: Thursday, June 13, 2013

Where: Michigan City,
City Hall, Lower Level
(City Council Chambers)
100 E. Michigan Boulevard
Michigan City, Indiana

Time: 6:00 pm.—8:00 pm.

This workshop will:

- Bring you up-to-date on the Alternative Analysis Study
- Preview the Central Corridor Option

JOIN US

The public is encouraged to attend.

The Management Oversight Group is comprised of representatives from both Michigan City and NICTD.

For more information or to leave a comment, please visit the project website at www.emichigancity.com or contact Craig Phillips via email at cphillips@emichigancity.com or (219) 873-1419, extension 2.

Figure 5: June 13, 2013 Meeting Flyer

IV. RAIL SERVICE AND OPERATIONS

The NICTD/South Shore Line operates between South Bend, Indiana and Chicago, Illinois with 20 station stops along the line. Commuter rail service to and from Michigan City consists of 27 trains per weekday, Monday thru Friday. There are 13 westbound trains from Michigan City toward Chicago beginning at 4:03am and continuing throughout the day until the last westbound departure at 8:16pm. Similarly there are 14 eastbound trains from Chicago into Michigan City every weekday with the first train leaving the Chicago Millennium Station at Randolph Street at 8:45am and continuing throughout the day with the last Chicago departure for Michigan City scheduled for 12:45am. The weekend and Holiday service is reduced to 17 trains (both directions) into and out of Michigan City (see Figure 6, NICTD Timetable).

There are two passenger stations in Michigan City. One is located on 11th Street at Pine (near the center of town) next to the historic South Shore Station building and the other is located at Carroll Avenue on the east side of Michigan City. These stations are approximately one and one half miles apart from each other. The Carroll Avenue station is the third and the Pine/11th Street Station is the fourth station on the South Shore line from the east (South Bend) terminal station. Both stations have low level boarding platforms however, handicap accessibility is provided at Carroll Avenue via portable lift. They are supported by surface parking areas for the commuters. The Pine Street Station has 37 parking spaces and Carroll Avenue Station has 201 plus overflow parking. NICTD employees also use the Carroll Avenoe parking lot limiting the spaces for commuters. The total annual ridership from Michigan City for 2012 was 239,283 or 6.5% of NICTD's system ridership (see Figure 7, Annual Boardings Table).

Since 1908, South Shore has operated on an embedded track structure contained within the street surface down the middle of 10th and 11th Streets through Michigan City. NICTD utilizes Electric Multiple Unit (EMU) cars with driving cabs powered from an overhead 1500 VDC catenary system. The maximum posted speed for this track segment (between Carroll Avenue and Sheridan Avenue) is 25 miles per hour (MPH) although most trains travel at speeds much slower approaching 10 MPH. The average dwell time, i.e. the time the train is stopped at a station to load and unload passengers, is eight minutes. The time it takes a NICTD train to stop at the Carroll Avenue station and also at the 11th and Pine Station and traverse 10th and 11th Streets through Michigan City under existing conditions is on average 21 minutes. In addition to NICTD operations, South Shore Freight operates on the same tracks through Michigan City as part of a lease agreement with NICTD. Approximately seven freight trains a day operate through the City.

passengers boarding and exiting the train

NICTD train en route

Figure 6a: NICTD Schedule - Daily Monday thru Friday Westbound to Chicago

Daily Monday thru Friday Westbound to Chicago Schedule

Effective: February 1, 2013

South Bend is on Eastern Time. **All other stations observe Central Time.**

Westbound trains will NOT board passengers between 63rd St. and Millennium Station at Randolph St.

Train Number	102	104	106	108	110	12	112	212	14	214	116	216	18	118	218	20	220	22	422	424
Station	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM/PM	PM	PM	PM	PM	PM	PM	PM	PM	PM
South Bend*						6:32			8:48				12:59			4:57		8:52	9:05	11:00
Hudson Lake						f5:56			f8:12				f12:23			f4:21		f8:14	f8:29	f10:24
*Carroll Ave (M. City)**	4:03	4:55	5:43	5:52	6:05	6:20	6:46		8:37		10:55		12:43	2:40		4:45		8:37	8:46	10:41
11th St (M. City)	4:09	5:01	------	5:58	6:11	6:26	6:52		8:43		11:01		12:49	2:46		4:51		8:43		
Beverly Shores	------	f5:11	------	------	f6:21	------	f7:02		8:53		f11:11		f12:59	f2:56		f5:00		f8:53		
Dune Park*	4:23	5:18	6:02	------	6:27	6:41	7:08		9:00		11:18		1:05	3:02		5:05		8:59		
Portage/Ogden Dunes*	4:32	5:27	------	6:19	6:36	6:50	7:18		9:08		11:26		1:13	3:10		5:14		9:07		
Miller	4:38	5:33	------	6:26	6:43	6:56	7:24		9:14		11:32		1:19	3:16		5:20		9:13		
Gary Metro Ctr*	4:44	5:40	------	6:33	6:50	7:04	7:31	7:54	9:22	10:12	11:39	12:22	1:26	3:23	4:34	5:27	6:54	9:19		
Gary/Chgo Airport	f4:50	f5:45	------	f6:38	f6:55	------	------	f7:59	f9:27	f10:17	f11:44	f12:27	f1:31	f3:28	f4:39	f5:32	f6:59	f9:24		
East Chicago*	4:57	5:53	------	6:46	7:03	7:15	7:42	8:07	9:35	10:25	11:52	12:35	1:39	3:36	4:47	5:40	7:07	9:32		
Hammond*	5:02	5:58	6:34	6:51	7:07	7:20	7:47	8:12	9:40	10:30	11:57	12:40	1:44	3:41	4:52	5:45	7:12	9:37		
Hegewisch*	5:08	6:04	6:41	6:58	7:14	7:27	7:54	8:18	9:47	10:37	12:04	12:46	1:50	3:47	4:58	5:51	7:18	9:44		
63rd St	------	------	------	------	------	d7:47	------	------	------	------	------	------	------	------	------	------	------	------		
57th St*	d5:29	d6:23	d7:05	d7:19	------	d7:50	d8:16	d8:39	d10:10	d10:58	d12:25p	d1:07	d2:11	d4:08	d5:19	d6:15	d7:40	d10:06		
McCormick Place*	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------		
Museum Campus/11th St.*	d5:38	d6:33	d7:15	d7:29	------	d7:59	d8:25	d8:47	d10:19	d11:06	d12:33p	d1:15	d2:19	d4:15	d5:28	d6:26	d7:49	d10:15		
Van Buren St*	d5:41	d6:36	d7:18	d7:32	d7:45	d8:02	d8:28	d8:50	d10:22	d11:09	d12:36p	d1:18	d2:22	d4:19	d5:31	d6:29	d7:52	d10:18		
Millennium Station at Randolph St*	5:43	6:38	7:21	7:35	7:47	8:08	8:31	8:52	10:28	11:12	12:39p	1:21	2:24	4:21	5:34	6:32	7:55	10:21		

*** =** Station accessible to persons with disabilities.
f = flag stop - push button located in or near shelter to activate strobe light to signal train to stop. Please push button at least 5 minutes before scheduled departure time of train. Strobe light will turn off automatically after 10 minutes. Passengers should remain visible to engineer when standing at platform. There is no strobe at McCormick Place or 63rd St.
Boarding and alighting at low level platforms: At the following stations boarding or alighting the train may only be done at doors manned by uniformed personnel: Hudson Lake, Carroll Ave., 11th Street (M. City), Beverly Shores, Dune Park, Portage/Ogden Dunes, Miller, Gary Metro Center, and Gary/Chicago Airport. If you are unsure which doors will open please ask train personnel.
"d" means train will depart station after discharging passengers – if you are boarding an eastbound train please anticipate that trains may depart up to 4 minutes before scheduled departure time.

Northern Indiana Commuter Transportation District – South Shore Line Schedules

Daily Monday thru Friday Eastbound from Chicago Schedule

Effective: February 1, 2013

South Bend is on Eastern Time. **All other stations observe Central Time.**

Eastbound trains will NOT disembark passengers between Millennium Station at Randolph St. and 63rd St..

Train Number	401	203	403	205	207	7	107	9	109	209	11	111	113	15	115	215	117	19	119	121	101
Station	AM	AM	AM	AM	AM	AM/PM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM/AM	AM
Millennium Station at Randolph St*		6:10		6:55	7:59	8:45	10:45	12:35	2:35	3:15	4:02	4:28	4:57	5:10	5:28	5:32	5:58	7:10	8:40	11:00	12:45
*Van Buren St**		6:13		6:57	8:02	8:48	10:48	12:38	2:38	3:18	4:05	4:31	5:01	5:13	5:31	5:35	6:01	7:13	8:43	11:03	12:48
Museum Campus/11th St.*		------		------	8:05	8:51	10:51	12:41	2:41	3:21	4:08	4:34	------	5:16	------	5:38	6:04	7:16	8:46	11:06	12:51
McCormick Place*		------		------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
57th St*		------		------	8:12	8:58	10:59	12:49	2:49	3:29	4:16	4:42	------	5:24	------	5:46	6:12	7:24	8:54	11:14	12:59
63rd St		------		------	------	------	------	------	2:52	-----	f4:19	------	------	------	------	------	------	------	------	------	------
Hegewisch*		6:45		------	8:33	9:19	d11:22	1:10	3:12	3:52	d4:40	d5:05	d5:35	d5:48	------	d6:09	d6:34	d7:46	d9:16	d11:36	d1:20
Hammond*		6:50		------	8:39	9:25	d11:28	1:15	3:18	3:57	d4:47	d5:12	d5:42	d5:55	------	d6:16	d6:41	d7:53	d9:22	d11:42	d1:26
East Chicago*		6:55		------	8:44	9:30	d11:33	1:20	3:23	4:02	d4:52	d5:17	d5:47	d6:00	d6:11	------	d6:46	d7:59	d9:26	d11:46	d1:31
Gary/Chgo Airport		f7:03		------	f8:52	f9:38	fd11:41	f1:28	f3:31	f4:10	d4:58	df5:25	------	df6:08	------	df6:28	df6:54	fd8:07	fd9:34	fd11:54	------
Gary Metro Ctr*		7:07		7:48	8:56	9:43	d11:47	1:34	3:38	4:14	d5:03	d5:31	d5:59	d6:14	d6:24	6:32	d7:00	d8:13	d9:39	d11:59	d1:42
Miller						9:49	d11:53	1:40	3:44		d5:10	d5:37	d6:05	d6:21	d6:31		d7:07	d8:20	d9:45	d12:05a	d1:48
Portage/Ogden Dunes*						9:55	d11:59	1:46	3:50		d5:19	d5:43	d6:11	------	d6:37		d7:13	d8:27	d9:51	d12:11a	d1:54
Dune Park*						10:03	d12:08	1:55	3:59		d5:28	d5:52	d6:21	d6:35	d6:46		d7:22	d8:36	d10:00	d12:20a	d2:03
Beverly Shores						f10:09	fd12:13	f2:01	f4:04		fd5:34	df5:58	-----	df6:40	df6:52		df7:28	fd8:42	fd10:05	fd12:25a	fd2:08
11th St (M. City)						10:19	d12:24	2:11	4:15		d5:44	d6:09	d6:37	d6:51	d7:02		d7:38	d8:53	d10:15	d12:35a	d2:18
Carroll Ave (M. City)*	4:10		6:30			10:27	12:29	2:22	4:21		d5:56	6:15	6:43	d7:02	7:08		7:44	d9:04	10:21	12:41a	2:24
Hudson Lake	f4:28		f6:48			f10:45		f2:40			fd6:14			df7:20				fd9:22			
South Bend*	5:51		8:11			12:08p		4:03			7:37			8:43				10:45			

***= Station accessible to persons with disabilities.**
f = flag stop - push button located in or near shelter to activate strobe light to signal train to stop. Please push button at least 5 minutes before scheduled departure time of train. Strobe light will turn off automatically after 10 minutes. Passengers should remain visible to engineer when standing at platform. There is no strobe at McCormick Place or 63rd St.
Boarding and alighting at low level platforms: At the following stations boarding or alighting the train may only be done at doors manned by uniformed personnel: Gary/Chicago Airport, Gary Metro Center, Miller, Portage/Ogden Dunes, Dune Park, Beverly Shores, 11th Street (M. City), Carroll Ave., and Hudson Lake. If you are unsure which doors will open please ask train personnel.
"d" means train will depart station after discharging passengers – if you are boarding an eastbound train please anticipate that trains may depart up to 4 minutes before scheduled departure time.

Northern Indiana Commuter Transportation District – South Shore Line Schedules

Figure 6b: NICTD Schedule - Daily Monday thru Friday Eastbound from Chicago

Weekend/Holiday Westbound to Chicago Schedule

Effective: February 1, 2013

South Bend is on Eastern Time. **All other stations observe Central Time.**

Westbound trains will NOT board passengers between 63rd St. and Millennium Station at Randolph St

Train Number	600	502	504	606	506	608	508	610	510	710
Station	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM
South Bend*		7:45	9:01		1:05		5:45		10:16	10:35
Hudson Lake		f7:08	f8:25		f12:28		f5:08		f9:39	f9:56
Carroll Ave (M. City)*	5:20	7:30	--	9:27	12:52	3:40	5:30	7:10	10:01	10:15
11th St (M. City)	5:25	7:36	--	9:33	12:58	3:46	5:36	7:16	10:07	
Beverly Shores	f5:35	f7:46	--	f9:43	f1:08	f3:56	f5:45	f7:26	f10:16	
Dune Park*	5:41	7:52	9:01	9:49	1:15	4:02	5:51	7:32	10:22	
Portage/Ogden Dunes*	5:50	8:00	--	9:57	1:24	4:10	5:59	7:40	10:30	
Miller	5:56	8:06	--	10:03	1:31	4:16	6:05	7:46	10:36	
Gary Metro Ctr*	6:04	8:12	--	10:09	1:38	4:22	6:11	7:52	10:42	
Gary/Chgo Airport	f6:09	f8:17	--	f10:14	f1:43	f4:27	f6:16	f7:57	f10:47	
East Chicago*	6:15	8:26	9:30	10:22	1:52	4:35	6:24	8:05	10:56	
Hammond*	6:20	8:31	--	10:27	1:57	4:40	6:29	8:10	11:01	
Hegewisch*	6:25	8:38	9:40	10:34	2:04	4:47	6:36	8:17	11:08	
63rd St	------	------	------	------	------	------	------	------	------	
57th St*	d6:46	d8:59	d10:03	d10:56	d2:25	d5:09	d6:57	d8:38	d11:29	
McCormick Place*	fd6:52	fd9:05	fd10:08	fd11:02	fd2:31	fd5:15	fd7:03	fd8:44	fd11:35	
Museum Campus/11th St.*	d6:55	d9:08	d10:11	d11:05	d2:34	d5:18	d7:06	d8:47	d11:38	
Van Buren St*	d6:58	d9:11	d10:14	d11:08	d2:37	d5:21	d7:09	d8:50	d11:41	
Millennium Station at Randolph St*	7:00	9:13	10:16	11:10	2:39	5:23	7:11	8:52	11:43	

*** =** Station accessible to persons with disabilities.
f = flag stop - push button located in or near shelter to activate strobe light to signal train to stop. Please push button at least 5 minutes before scheduled departure time of train. Strobe light will turn off automatically after 10 minutes. Passengers should remain visible to engineer when standing at platform. There is no strobe at McCormick Place or 63rd St.
Boarding and alighting at low level platforms: At the following stations boarding or alighting the train may only be done at doors manned by uniformed personnel: Hudson Lake, Carroll Ave., 11th Street (M. City), Beverly Shores, Dune Park, Portage/Ogden Dunes, Miller, Gary Metro Center, and Gary/Chicago Airport. If you are unsure which doors will open please ask train personnel.
"d" means train will depart station after discharging passengers – if you are boarding an eastbound train please anticipate that trains may depart up to 4 minutes before scheduled departure time

Northern Indiana Commuter Transportation District – South Shore Line Schedules

Figure 6c: NICTD Schedule - Weekend/Holiday Westbound to Chicago

Weekend/Holiday Eastbound from Chicago Schedule

Effective: February 1, 2013

South Bend is on Eastern Time. **All other stations observe Central Time.**

Eastbound trains will NOT disembark passengers between Millennium Station at Randolph St. and 63rd St..

Train Number	701	703	503	603	605	505	507	509	511	613	601
Station	AM	AM	AM	AM/PM	PM	PM	PM	PM	PM	PM/AM	AM
Millennium Station at Randolph St*			8:40	10:45	12:12	1:35	4:43	6:22	9:15	11:15	12:45
*Van Buren St**			8:43	10:48	12:15	1:38	4:46	6:25	9:18	11:18	12:48
Museum Campus/11th St.*			8:46	10:51	12:18	1:41	4:49	6:28	9:21	11:21	12:51
McCormick Place*			f8:49	f10:54	f12:21	1:44	f4:52	f6:31	f9:24	f11:24	------
57th St*			8:56	11:01	12:28	1:51	4:59	6:38	9:31	11:31	12:59
63rd St			------	------	------	------	------	------	------	------	------
*Hegewisch**			d9:18	d11:23	d12:50	d2:13	d5:21	d7:00	d9:53	d11:53	d1:20
Hammond*			d9:24	d11:29	d12:56	d2:19	d5:27	d7:06	d9:59	d11:59	d1:26
East Chicago*			d9:29	d11:34	d1:01	d2:24	d5:32	d7:11	d10:04	d12:04a	d1:31
Gary/Chgo Airport			fd9:37	fd11:42	fd1:10	fd2:32	fd5:40	fd7:19	fd10:12	fd12:12a	------
Gary Metro Ctr*			d9:42	d11:48	d1:15	d2:38	d5:46	d7:25	d10:18	d12:18a	d1:42
Miller			d9:48	d11:54	d1:21	d2:44	d5:52	d7:31	d10:24	d12:24a	d1:48
Portage/Ogden Dunes*			d9:54	d12:00p	d1:27	d2:50	d5:58	d7:37	d10:30	d12:30a	d1:54
Dune Park*			d10:04	d12:10p	d1:37	d3:00	d6:08	d7:47	d10:40	d12:40a	d2:03
Beverly Shores			fd10:09	fd12:15p	fd1:42	fd3:05	fd6:13	fd7:52	fd10:45	fd12:45a	fd2:08
11th St (M. City)			d10:20	d12:26p	d1:53	d3:16	d6:24	d8:03	d10:56	d12:56a	d2:18
Carroll Ave (M. City)*	5:05	5:55	d10:29	12:30p	1:57	d3:25	d6:33	d8:12	d11:05	1:05a	2:24
Hudson Lake	f5:22	f6:12	fd10:47			fd3:43	fd6:51	fd8:30	fd11:23**		
South Bend*	6:45	7:35	12:10			5:06	8:14	9:53	12:46a		

*** =** Station accessible to persons with disabilities.
f = flag stop - push button located in or near shelter to activate strobe light to signal train to stop. Please push button at least 5 minutes before scheduled departure time of train. Strobe light will turn off automatically after 10 minutes. Passengers should remain visible to engineer when standing at platform. There is no strobe at McCormick Place or 63rd St.
Boarding and alighting at low level platforms: At the following stations boarding or alighting the train may only be done at doors manned by uniformed personnel: Gary/Chicago Airport, Gary Metro Center, Miller, Portage/Ogden Dunes, Dune Park, Beverly Shores, 11th Street (M City), Carroll Ave., and Hudson Lake. If you are unsure which doors will open please ask train personnel.
**=Discharge passengers Only – no boarding
"d" means train will depart station after discharging passengers – if you are boarding an eastbound train please anticipate that trains may depart up to 4 minutes before scheduled departure time

Northern Indiana Commuter Transportation District – South Shore Line Schedules

Figure 6d: NICTD Schedule - Weekend/Holiday Eastbound from Chicago

Table 2: Estimated Annual Boardings, Alightings and Trains By Station: 2012

	Weekday			Weekend				
	Riders	**%**	**Trains**	**Riders**	**%**	**Trains**	**Total**	**%**
South Bend	147,292	4.7%	2,550	115,667	20.8%	1,110	262,959	7.2%
Hudson Lake	3,090	0.1%	2,550	2,267	0.4%	1,110	5,357	0.1%
Michigan City	164,802	5.3%	6,885	74,482	13.4%	1,887	239,283	6.5%
Beverly Shores	14,420	0.5%	5,610	3,163	0.6%	1,887	17,584	0.5%
Dune Park	259,563	8.3%	6,630	68,424	12.3%	1,998	327,987	8.9%
Portage/Ogden Dunes	125,146	4.0%	6,375	19,069	3.4%	1,887	144,215	3.9%
Miller	222,997	7.2%	6,630	29,164	5.2%	1,887	252,162	6.9%
Gary Metro Center	241,538	7.8%	9,180	52,272	9.4%	1,887	293,809	8.0%
Gary/Chicago Airport	58,066	1.9%	7,650	9,245	1.7%	1,776	67,311	1.8%
East Chicago	763,238	24.5%	8,670	75,603	13.6%	1,998	838,841	22.9%
Hammond	514,490	16.5%	8,925	51,599	9.3%	1,887	566,089	15.4%
Hegewisch	597,406	19.2%	8,925	54,964	9.9%	1,998	652,370	17.8%
TOTAL	3,112,048	100.0%		555,920	100.0%		3,667,968	100%

1/29/13

Based on 2011 on/off count

County Distribution

St. Joseph	7.2%
LaPorte	6.7%
Porter	13.4%
Lake	55.0%
Hegewisch	17.8%
Total	100.0%

Daily Scheduled Trains to and from Chicago

	Weekday	**Weekend**
South Bend	10	10
Michigan City	27	17
Gary Metro	36	17

Figure 7: Annual Boardings Table

bird's eye view of station area; Bing Maps

There are a total of 31 public at-grade highway (street) crossings between Carroll Avenue and Sheridan Avenue within a distance of approximately three miles (14,600LF). According to the FRA (Federal Railroad Administration) Office of Safety Accident Prediction System for 2009, three of the five highest hazard indices for at-grade highway crossings throughout the State of Indiana (over 2,000 at-grade crossings) are within the 10th and 11th Street corridor through Michigan City. They are: No. 2 Pine Street, No. 4 Wabash Street and No. 5 Franklin Street. Within NICTD's system (between South Bend, Indiana and Kensington Junction a distance of approximately 75 miles consisting of 140 at-grade highway crossings), 11 of the top 20 hazard indices are within the 10th and 11th Street running area through Michigan City. There are additional streets that intersect the railroad from one direction and do not physically cross the track but are considered crossings by the FRA.

This study considered the above mentioned conditions: 1) embedded track structure, 2) duplication of stations with extensive dwell times, low level boarding platforms with non-handicap accessibility and limited parking support and 3) public safety due to street running operations and exposure at street crossings, as primary goals to achieve by planning and engineering much needed improvements for enhanced commuter service to and from Michigan City.

V. ALTERNATIVE REALIGNMENT OPTIONS

During the course of the Michigan City Alternative Realignment Study every feasible track alignment option was examined. In addition to the alignment options identified in the Request for Proposal (initial study scope of work) prepared by both NICTD and Michigan City, several new alignment options and variations were developed by the study team and properly vetted for feasibility.

At the beginning of the study, the possible route alignments through Michigan City were defined as three major corridors. Within each corridor, alignment options were proposed to study. The corridors and alignments studied are defined below.

A. CENTRAL CORRIDOR

This route follows the existing NICTD track within 10th and 11th Streets from Sheridan Avenue to the Carroll Avenue Yard. Two variations of this Central Corridor Alignment were considered as follows:

- **Alignment Option 1** – relocate the track(s) to south of 10th and 11th Street completely outside of the street right-of-way
- **Alignment Option 1A** – construct two new tracks to the south of the 10th Street right-of-way and construct two new tracks along the north side of 11th Street, within the street right-of-way.

Possible station locations within the Central Corridor were considered at the west end of 10th Street north of the Indiana State Prison, between Franklin Street and Spring Street on 11th Street and just west of NICTD's Carroll Avenue Yard. These possible station locations were applicable for both options identified in the Central Corridor.

B. SOUTHERN CORRIDOR

This route departs from the existing NICTD tracks near Illiana Block Company west of Michigan City and traverses eastward just south of the Indiana Dunes National Lakeshore area to where it joins the existing CSX Railroad right-of-way, then follows along the north side of the CSX Railroad right-of-way to Karwick Park where it goes under the CSX Railroad and rejoins the NICTD tracks east of Michigan City. The alignment option associated with this corridor is:

- **Alignment Option 2** – South / CSX

A station location along this alignment option was located near Franklin Street on the former Al's Supermarket property.

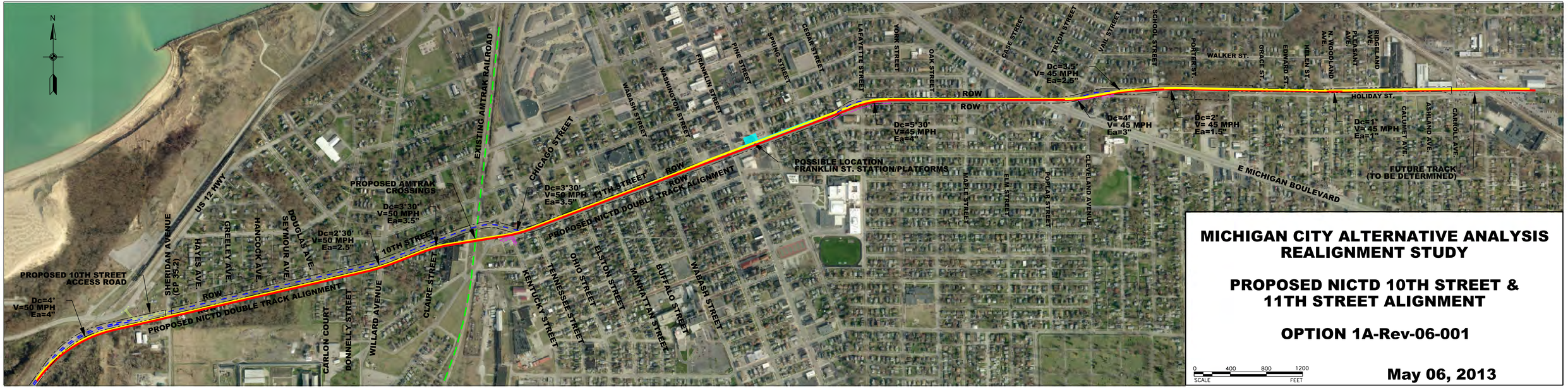
C. NORTHERN CORRIDOR

The Northern Corridor was defined as a route that follows the existing South Shore Freight tracks north from US 12 on the west side of Michigan City through the NIPSCO Lincoln Yard and eastward along Amtrak across Trail Creek to the old Nickel Plate Railroad right-of-way then south down the old Nickel Plate right-of way to NICTD's Carroll Avenue Yard. Several variations of this Northern Corridor alignment were considered:

- **Alignment Options 3 & 3A** – North and West of Trail Creek
- **Alignment Option 4** – North and East of Trail Creek
- **Alignment Option 5** – North Elevated on Structure
- **Alignment Option 6 & 6A** – North within US 12 and North & North of US 12
- **Alignment Option 7** – North Lakeshore Drive with Amtrak Relocation

Possible station locations were also considered for each of the Northern Corridor alignment options. These locations included the Marina and Blocksom property for Options 3 & 3A, north of US 12 across from the Blue Chip Casino for Option 4, atop the elevated railroad over City Hall for Option 5, and at ground level at City Hall for Options 6, 6A & 7.

All of the above realignment options are depicted on referenced aerial maps within this report.


N
PROPOSED 10TH STREET ACCESS ROAD
Dc=4°
V=50 MPH
Ea=4"
SHERIDAN AVENUE (CP 352)
US 12 HWY
HAYES AVE.
GREELEY AVE.
HANCOCK AVE.
SEYMOUR AVE.
DOUGLAS AVE.
ROW
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
CARLON COURT
BONNELLY STREET
WILLARD AVENUE
CLAIRE STREET
10TH STREET
Dc=2°30'
V=50 MPH
Ea=2.5"
Dc=3°30'
V=50 MPH
Ea=3.5"
PROPOSED AMTRAK CROSSINGS
EXISTING AMTRAK RAILROAD
CHICAGO STREET
Dc=3°30'
V=50 MPH
Ea=3.5"
11TH STREET
ROW
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
KENTUCKY STREET
TENNESSEE STREET
OHIO STREET
ELSTON STREET
MANHATTAN STREET
BUFFALO STREET
WABASH STREET
WABASH STREET
WASHINGTON STREET
FRANKLIN STREET
PINE STREET
SPRING STREET
CEDAR STREET
LAFAYETTE STREET
POSSIBLE LOCATION
FRANKLIN ST. STATION/PLATFORMS
YORK STREET
OAK STREET
Dc=5°30'
V=45 MPH
Ea=4"
ROW
ROW
CASE STREET
TRYON STREET
Dc=3.5'
V= 45 MPH
Ea=2.5"
VAIL STREET
SCHOOL STREET
PORTER ST.
WALKER ST.
GRACE ST.
EDWARD ST.
HELEN ST.
N. WOODLAND AVE.
PLEASANT AVE.
RIDGELAND AVE.
HOLIDAY ST.
Dc=4'
V= 45 MPH
Ea=3"
Dc=2'
V= 45 MPH
Ea=1.5"
Dc=1'
V= 45 MPH
Ea=1"
CALUMET AVE.
ASHLAND AVE.
CARROLL AVE.
FUTURE TRACK
(TO BE DETERMINED)
E MICHIGAN BOULEVARD
MABLE STREET
ELM STREET
POPLAR STREET
CLEVELAND AVENUE
MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY
PROPOSED NICTD 10TH STREET &
11TH STREET ALIGNMENT
OPTION 1A-Rev-06-001
0 400 800 1200
SCALE FEET
May 06, 2013

MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY
PROPOSED NICTD ALIGNMENT ON CSX ROW
OPTION 2
AUGUST 9, 2011
0 500 1000 1500
SCALE FEET
TO CHICAGO
US ROUTE 12
CAROLINA AVENUE
ILLIANA BLOCK & BRICK CO.
W DUNES HIGHWAY
US ROUTE 12
NATIONAL LAKESHORE
SHERIDAN AVENUE
INDIANA STATE PRISON FACILITY
WOODLAWN AVENUE
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
EXISTING AMTRAK RAILROAD
EXISTING CSX RAILROAD
HITCHCOCK STREET
BEGIN CSX RAILROAD REALIGNMENT
OHIO STREET
MICHIGAN CITY SCHOOL PLANNING BUILDING
AMES FIELD
FRANKLIN STREET
PROPOSED 800' PLATFORM AND 2-STATION HOUSES WITH SAND-SIDE TRACK
PROPOSED REALIGNED CSX RAILROAD APPROXIMATELY 13,240'
HIGH AVENUE
CLEVELAND AVENUE
JACKSON STREET
WOODLAND AVENUE
E MICHIGAN BOULEVARD
SOUTH SHORE FREIGHT CONNECTION
NEW SINGLE TRACK BRIDGE
#10 RH TO
#10 LH TO
S CARROLL AVENUE
END CSX RAILROAD REALIGNMENT
ROSELIE AVENUE
#10 LH CROSSOVER
SOUTH SHORE RAILROAD
KARWICK NATURE PARK
#10 LH TO
NEW DOUBLE TRACK BRIDGE
NEW TRIPPLE TRACK BRIDGE
EXISTING CSX RAILROAD
#20 LH TO
WARNKE ROAD
ROYAL ROAD
EXISTING NICTD SINGLE TRACK
POTENTIAL SITE FOR NICTD MAINTAINCE FACILITY & YARD
US ROUTE 212
POTENTIAL SITE FOR NICTD MAINTAINCE FACILITY & YARD

MICHIGAN CITY ALTERNATIVE ANALYSIS REALIGNMENT STUDY

PROPOSED NICTD NORTH ALIGNMENT WEST OF TRAIL CREEK (AT-GRADE)

OPTION 3

AUGUST 9, 2011

MICHIGAN CITY ALTERNATIVE ANALYSIS REALIGNMENT STUDY

PROPOSED NICTD NORTH ALIGNMENT US ROUTE 12 MODIFICATION

OPTION COMBO 3-6

OCTOBER 19, 2011

MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY

PROPOSED NICTD NORTH ALIGNMENT
EAST OF TRAIL CREEK (AT-GRADE)

OPTION 4

AUGUST 9, 2011

MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY
PROPOSED NICTD NORTH ALIGNMENT
STRUCTURE ALTERNATIVE
OPTION 5
0 500 1000 1500
SCALE FEET
AUGUST 9, 2011
N
TRAIL CREEK
Dc=4' V=45MPH Ea=3"
2 TRACK STRUCTURE 11,945'
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
PROPOSED 800' ELEVATED CENTER PLATFORM AND STATION HOUSE WITH GANTLET
Dc=3°15' V=55MPH Ea=5"
NORTH ALIGNMENT ALTERNATIVE (FORMER NICKEL PLATE RIGHT OF WAY)
Dc=4' V=45MPH Ea=3"
#8 LH TO
Existing Nickel Plate Viaduct
BEGIN STRUCTURE
Dc=4' V=45MPH Ea=3"
EXISTING AMTRAK RAILROAD
PROPOSED SOUTHSHORE FREIGHT RUNAROUND TRACK (REALIGN FROM 12' EXISTING TRACK CENTERS TO 15')
Dc=4' V=50MPH Ea=4"
MATCH EXISTING
6TH STREET
END STRUCTURE
N. DICKSON STREET
SPRINGDALE AVENUE
Dc=4' V=50MPH Ea=4"
MATCH EXISTING
US ROUTE 12
US ROUTE 12 REALIGNMENT - 2,912' 25' OFFSET FROM EXISTING ℄ NICTD & 10' FROM EXISTING EDGE OF PAVEMENT (IMPACTS 11 PROPERTIES)
PLEASANT AVENUE
SOUTH SHORE FREIGHT 4 TRACK CLASSIFICATION YARD
Dc=4' V=50MPH Ea=4"
CARROLL AVENUE STATION

℄ 1' Ø NICTD CATENARY POLE
℄ 1' Ø NICTD CATENARY POLE
PROPOSED EDGE OF US 12
℄ YARD TRACK
14' C-C (TYP.)
℄ LEAD TRACK 1
14' C-C
℄ LEAD TRACK 2
9'
9'
℄ NICTD TRACK 1
14' C-C
℄ NICTD TRACK 2
9'
8'
℄ US 12
12'
12'
PROPOSED CROSS SECTION AT NIPSCO YARD
SECTION A-A
NOT TO SCALE
ACCESS ROAD/ SINGING SANDS TRAIL
N
NIPSCO LEAD
US ROUTE 12
Dcs4' V=50MPH Ea=4'
PROPOSED SOUTHSHORE FREIGHT RUNAROUND TRACK (REALIGN FROM 16' EXISTING TRACK CENTERS TO 14')
(SEE ABOVE LEFT)
A
A
US ROUTE 12 REDUCED TO 2 LANES
10TH STREET
DOUGLAS AVENUE
LINCOLN AVENUE
MATCH EXISTING
WILLARD AVENUE
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
US ROUTE 12
EXISTING NICTD ALIGNMENT
REALIGN US 12 TO E MICHIGAN BLVD.
EXISTING AMTRAK RAILROAD
WABASH STREET
WASHINGTON STREET
FRANKLIN STREET
PINE STREET
MICHIGAN BOULEVARD
E MICHIGAN BOULEVARD
NEW NICTD STATION
SPRING STREET
LOW LEVEL RAIL BRIDGE
TRAIL CREEK
11TH STREET STATION
11TH STREET
8TH STREET
TRAIL CREEK PATH
CARDINAL EXPRESSWAY
US ROUTE 12
#20 CROSSOVER
PEANUT BRIDGE
SOUTH SHORE FREIGHT TRACK #2 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #1 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #3 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #4 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #5 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #6 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK #7 (16'-6" CLEAR)
SOUTH SHORE FREIGHT TRACK

℄ 1' Ø NICTD CATENARY POLE
℄ 1' Ø NICTD CATENARY POLE
PROPOSED EDGE OF US 12
1'
℄ YARD TRACK
℄ LEAD TRACK 1
℄ LEAD TRACK 2
℄ NICTD TRACK 1
℄ NICTD TRACK 2
℄ US 12
14' C-C (TYP.)
14' C-C
9'
9'
14' C-C
9'
10'
10'
10'
10'
PROPOSED CROSS SECTION AT NIPSCO YARD
SECTION A-A
NOT TO SCALE
N
NIPSCO LEAD
US ROUTE 12
10TH STREET
10TH STREET
US ROUTE 12 REALIGNMENT - 2.9'S OF PRESENT FROM EXISTING ℄ NICTD & TO FROM EXISTING EDGE OF PAVEMENT (IMPACTS 11 PROPERTIES)
MATCH EXISTING
LINCOLN AVENUE
DOUGLAS AVENUE
(SEE ABOVE LEFT)
A
A
PROPOSED SOUTHSHORE FREIGHT RUNAROUND TRACK (REALIGN FROM 16' EXISTING TRACK CENTERS TO 14')
WILLARD AVENUE
US ROUTE 12
PROPOSED NICTD DOUBLE TRACK ALIGNMENT
EXISTING AMTRAK RAILROAD
EXISTING NICTD YARD
REALIGN US 12 TO WABASH STREET
NEW NICTD STATION
MICHIGAN BOULEVARD
PINE STREET
FRANKLIN STREET
WABASH STREET
WASHINGTON STREET
11TH STREET STATION
11TH STREET
11TH STREET
LOW LEVEL RAIL BRIDGE
SPRING STREET
US ROUTE 12
E MICHIGAN BOULEVARD
TRAIL CREEK
CANADIAN SOO RAILROAD
8TH STREET
TRAIL CREEK PATH
8TH STREET
US ROUTE 12
#20 CROSSOVER
PEANUT BRIDGE
SBF FULL TRACK X 2 (16'6" C-C EAR)
N. DICKSON ST.
SPRINGLAND AVE
SOUTH SHORE FREIGHT RUNAROUND TRACK
EXISTING NICTD ALIGNMENT
SCHOOL ST.
GRACE ST.
WOODLAND ST.
PLEASANT AVE
N. CARROLL AVE
CARROLL AVENUE STATION
Dcs=4' V=50MPH Ea=4"
Dcs=4' V=50MPH Ea=4"
Dcs=4' V=50MPH Ea=4"
Dcs=4' V=50 MPH Ea=4"
Dcs=7.5' V=20 MPH Ea=1"
Dcs=7.5' V=20 MPH Ea=1"
Dcs=7' V=50 MPH Ea=3"
Dcs=6' V=30 MPH Ea=2"
Dcs=7.5' V= 20 MPH Ea=1 1/2"
Dcs=7.5' V= 20 MPH Ea=1 1/2"
Dcs=7.5' V= 20 MPH Ea=1"
Dcs=7.5' V= 20 MPH Ea=1"
MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY
PROPOSED NICTD NORTH ALIGNMENT
US ROUTE 12
OPTION 6B
0
500
1000
1500
SCALE
FEET
JULY 17, 2012

MICHIGAN CITY ALTERNATIVE ANALYSIS
REALIGNMENT STUDY

PROPOSED NICTD NORTH ALIGNMENT
LAKE SHORE DRIVE CONCEPT

OPTION 7

AUGUST 9, 2011

VI. DESIGN CRITERIA / EVALUATION MATRIX

In order to select a Preferred Alternative, each of the alternatives was evaluated against the study design criteria established by the MOG at the beginning of the study. This screening process involved a data collection effort, numerous field trips, stakeholder meetings, railroad coordination meetings, public open house meetings, a preliminary engineering design effort, the preparation of probable construction cost estimates and an examination of a multitude of environmental, economic development and community issues for each alternative realignment option under consideration. In conjunction with the MOG, each alternative realignment option was discussed in detail and its advantages and disadvantages were weighed to determine if it met the goals of the study and would serve the best interests of both NICTD and Michigan City. The route alignment candidate that best addressed the study design criteria as established by the MOG was selected as the Preferred Alternative.

A. GOALS AND DESIGN CRITERIA

At the outset of the study, the MOG defined the goals of the study and the design criteria as follows:

- Eliminate Street Running
- Improve Safety By Reducing At-Grade Crossings
- Improve Operating Speed (Reduce Travel Time)
- Improve Capacity (Double Track) and Reliability
- Reduce Long Term Operating/Maintenance Costs
- Consolidate Two Michigan City Stations Into One Modern Station With Ample Parking, and Other Station Amenities
- Accommodate 8 car, ADA accessible, high level boarding platforms
- Promote Economic Development
- Address Michigan City Council Resolutions Number 4435 and 4452 (see appendix) [1]

[1] Resolutions 4435 and 4452 established the City's criteria for the study including key goals of economic development

B. EVALUATION MATRIX

Evaluation criteria were established to meet the goals and design criteria described above. The evaluation criteria were applied to each of the alignment alternatives described in Chapter VI. Some of the evaluation is based on quantitative data and some is based on qualitative data. The purpose was to identify the strengths and weaknesses of each alignment alternative compared to the other in order to make an informed decision and move forward with a Preferred Alternative. The evaluation criteria includes:

Category 1: Land Use and Economic Development

Measures:

- Potential for Transit Oriented Development (TOD)/economic development
- Proximity to nearby attractions
- Number of residential zoned parcels impacted
- Number of commercial/institutional/industrial / parkland zoned parcels impacted

Category 2: Environmental Impacts

Measures:

- Level of impacts to the following environmental concerns:
- Parklands/natural areas
- Wetlands/floodplains
- Water resources
- Historic/archeological
- Noise
- Recorded brownfields/hazardous material sites

Category 3: Access and Circulation

Measures:

- Number of existing at-grade crossings
- Number of remaining at-grade crossings
- Access/circulation issues/pedestrian and bike access

Category 4: Track Infrastructure

Measures:

- Track curvature and speed
- Horizontal clearance requirements
- Track gradient
- New maintenance facility required

Category 5: Capital Costs

Measures:

- Preliminary order of magnitude costs

The results of the evaluation for six of the seven realignment options are shown in Figure 8. Note that the seventh alignment option (Option 7) was determined to be not feasible by the MOG and was not carried forward in the evaluation process.

	OPTION 1/1A	OPTION 2	OPTION 3/3A	OPTION 4	OPTION 5	OPTION 6/6A
Land Use/Economic Development						
Potential for TOD/economic development	$7 to $28 million	$9 to $18 million	$46 to $64 million	$46 to $64 million	$46 to $64 million	$46 to $64 million
Nearby attractions	Central Business District; Lighthouse Place Outlet Mall	Ames Field	Central Business District; Lighthouse Place Outlet Mall; Washington Park; Blue Chip Casino	Central Business District; Lighthouse Place Outlet Mall; Washington Park; Blue Chip Casino	Central Business District; Lighthouse Place Outlet Mall; Washington Park; Blue Chip Casino	Central Business District; Lighthouse Place Outlet Mall; Washington Park; Blue Chip Casino
Number of residential buildings impacted	67	5	26	7	5	3 (6A) 9 (6B)
Number of commercial/ industrial buildings impacted	6	2	6	10	4	13
Brief description of impacted residential/ commercial properties	Single family and multi- family residential along 10th/11th Streets	Al's Supermarket; Warehouse properties along track; Illiana Block & Brick	Pioneer Lumber Co; Trail Creek Marina; Blocksom & Co.	Pioneer Lumber Co.	Pioneer Lumber Co	City Hall; Police Department; Chamber of Commerce
Environmental Impacts						
Parklands/natural areas	N/A	Karwick Park	Winding Creek Cove; Trail Creek Path; Singing Sands Trail	Winding Creek Cove; Peanut Trail; Singing Sands Trail	Peanut Trail; Singing Sands Trail	Peanut Trail; Singing Sands Trail
Wetlands/ floodplains	N/A	Wetlands located on west and east ends of corridor; floodplain between Franklin and Woodland Avenues; Trail Creek floodplain	N/A	N/A	N/A	N/A
Water resources	N/A	Drainage channel	Winding Creek Cove and Trail Creek	Trail Creek	Trail Creek	Trail Creek
Historic/ archeological	3 historic districts nearby; 13 recorded historic buildings	0	0	0	0	0
Noise	Sensitive receptors within ½ mile include residential, 7 schools, 1 hospital, 14 parks	Sensitive receptors within ½ mile include residential, 7 schools, 1 hospital, 12 parks	Sensitive receptors within ½ mile include residential, 5 schools, and 16 parks	Sensitive receptors within ½ mile include residential, 5 schools, and 16 parks	Sensitive receptors within ½ mile include residential, 5 schools, and 16 parks	Sensitive receptors within ½ mile include residential, 5 schools, and 16 parks
Recorded brownfields/ hazardous material sites	0	1 (former Karwick landfill)	2 (former Erincraft Co. /former Royal Metals Co.)	1 (former Royal Metals Co.)	1 (former Royal Metals Co.)	1 (former Royal Metals Co.)

Figure 8: Evaluation Matrix

(Figure 8: Evaluation Matrix Continued)

	OPTION 1/1A	OPTION 2	OPTION 3/3A	OPTION 4	OPTION 5	OPTION 6/6A
Access and Circulation						
Number of existing at- grade crossings	31	10	4	8	6	10
Number of potential at-grade closings	23	2	0	1	3	4
Number of remaining at-grade crossings	8	8	4	7	3	6
Access/circulation issues/pedestrian and bike access	Local street at-grade crossings to be closed	Local street at-grade crossings to be closed	Potential impact on new development along Trail Creek	Limited pedestrian access to station area due to Amtrak tracks, Route 12 bridge, and Trail Creek	Elevated structure so existing street infrastructure would remain the same	US 12 would be impacted, possibly reduced to two lanes of traffic
Track Infrastructure						
Track curvature and speed	Not restrictive -70 mph	Eastern connections restricted to 25 mph	Amtrak turnouts restricted to 15 mph	Amtrak turnouts restricted to 15 mph	Curves restricted to 45-50 mph	Curves restricted to 45-50 mph
Horizontal clearance requirements		55 feet	55 feet	55 feet	55 feet	55 feet
Track gradient	No restrictions	No restrictions	No restrictions	No restrictions	0.84% grade	No restrictions
New maintenance facility required	No	Yes	No	No	No	No
Capital Costs						
Preliminary order of magnitude costs	$99.4 million	$223 million	93.0 million	$93.0 million	$196.7 million	$194.7million

VII. EVALUATION OF PREFERRED ALTERNATIVE

A. DESCRIPTION OF PREFERRED ALTERNATIVE

Based on extensive analysis and evaluation, the Preferred Alternative selected was the Central Corridor Alignment - Option 1A. The Preferred Alternative follows the existing NICTD corridor along 10th and 11th Streets from Sheridan Avenue to the Carroll Avenue Yard, with the construction of two new tracks to the south of the 10th Street right-of-way from Sheridan Road to Chicago Street, continuing with two new tracks along the north side of the 11th Street right-of-way until Michigan Boulevard, at the point it is on dedicated NICTD right-of-way to Carroll Avenue Yard. The tracks along the north side of 11th Street will be raised out of the street, and protected by a 6 inch barrier curb. Vehicular traffic will be allowed to operate one way eastbound on 11th Street between Chicago Street and Michigan Boulevard.

See Figure 9 and Figure 10 for illustrations of the Preferred Alternative along 10th and 11th Streets.

Figure 9: 10th Street Illustrations

Figure 10: 11th Street Illustrations

B. STATION SITE SELECTION

A new Michigan City passenger rail station will serve as a catalyst to promote growth and development in Michigan City. Rail passenger stations become magnets that attract many different types of residential, commercial, retail, and other business development around them. The draw of hundreds of people to one location throughout any given day is an economic advantage that can uplift a community to benefit the local economy, tax structure and the overall standard of living. The potential for Transit Oriented Development (TOD) around a commuter rail station has proven itself around the country. The growth of businesses close to a station offers easy transit and connections for their clients. Retail establishments such as restaurants, coffee shops, stores and other shops not only provide ready access to the commuters, but offer services to the entire community. The consideration of a modern, well equipped station location was a major factor in the selection of a new realignment option for the NICTD service to Michigan City.

1. STATION DESIGN CRITERIA

There are many factors to consider when determining the location for a new, modern commuter rail station. NICTD has established standards for their passenger stations that are being utilized on all new and renovated stations along their system. Some of these standards are:

- **High Level Platforms** – The high level platforms are the same height as the entry doors of the cars. This enables a smooth transition between the platform and the car when boarding and alighting occurs. It also enables riders with physical difficulties to easily access the cars. Most importantly, high level platforms greatly reduce the station dwell time which promotes a more efficient overall trip time for the commuter rail service.

- **Platform Length** – Standard NICTD platforms are 730 feet long which will accommodate an eight car train. This length is required in order to place all car doorways adjacent to the platform and eliminate the necessity of asking passengers to walk between the cars through the interior of the train (an arduous task) in order to alight the train. The platforms are located on tangent track in order to obtain a uniform "gap" (distance between the edge of the platform and the edge of the car doorway) so passengers may access the cars safely.

- **Gauntlet Tracks** - This additional set of rails are needed to offset the horizontal clearance between the facing edge of the platform and the centerline of the main track to enable freight equipment to safely travel through the platform area. The passenger trains use the gauntlet rails to get next to the platform. The gauntlet rails extend beyond each end of the platform approximately 130 feet in each direction and require additional tangent length besides the 730 feet for the actual platform.

- **ADA Accessibility** – All rail passenger stations must satisfy federal ADA accessibility standards with ramp access to the platforms, tactile strips along the edge of the platform, and conformance to the surface slope configuration of the platform. For platforms that are located between two tracks, the ramps are positioned at the ends of the platforms and extend about 70 feet on either end of the platform

- **Passenger / Pedestrian Circulation** – There must be sufficient ingress and egress from the platform to accommodate the passenger boardings and alightings. This is accomplished with stair access positioned at numerous locations throughout the length of the platform and often at the ends of the platform in addition to accessible ramps. Where two main tracks serve a station, the platform configurations may vary with two single platforms or one common center platform. In either case careful consideration must be provided for passenger and pedestrian safety to cross over the tracks (see Figure 11).

- **Parking** – Adequate parking must be provided at the station to support the passenger loadings. This may be accomplished with surface parking lots, a parking structure or a combination thereof. The area immediately surrounding the station site must be evaluated for its ability to provide the needed parking support. Also street access and traffic circulation around the station area must also be considered. Between 500 and 800 parking spaces would be required for the new station and the preference by the City is to contain most of those spaces in structured parking lots.

- **Amenities** – An appropriately sized station house (depot) to provide shelter, restrooms, ticketing, small vending operations and other services to the passengers may be included in the station layout plan.

2. STATION SITE SELECTION

The above listed station design criteria was applied along the Central Corridor to select a location for the new commuter rail station. Three potential sites were examined; 1) just east of Sheridan Avenue and north of the Indiana State Prison along 10th Street, 2) immediately east or west of Franklin Street on 11th Street and 3) just west of Carroll Avenue. Although each location had its merits it became readily apparent that a station near the center of Michigan City will provide the best access and connections to existing businesses and shops in Michigan City while providing for additional growth and economic development. Due to the need for approximately 1000 feet of tangent track area for the station platform, handicap ramps and gauntlet tracks the decision became whether to block Washington and Wabash Streets (west of Franklin Street) or block Pine and Spring Streets (east of Franklin Street). The selection of the site just east of Franklin was made because more north / south traffic utilized Washington and Wabash streets. Also the current South Shore station façade between Franklin Street and Pine Street may be preserved to provide a focal point for further development.

Figures 12 and 13 show station and platform typical sections. Figure 14 shows an illustration of the proposed station.

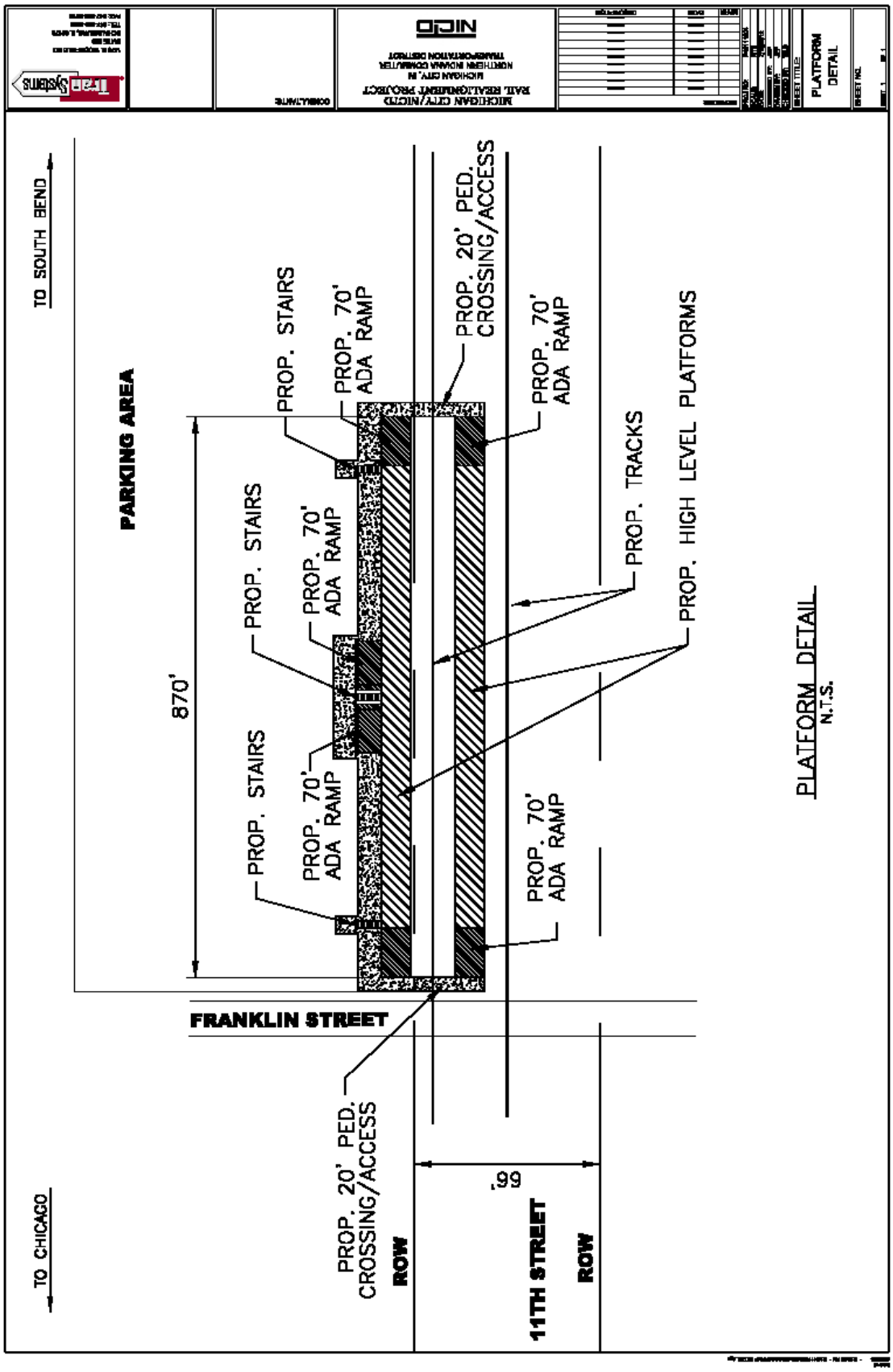


Figure 11: Passenger/Pedestrian Circulation

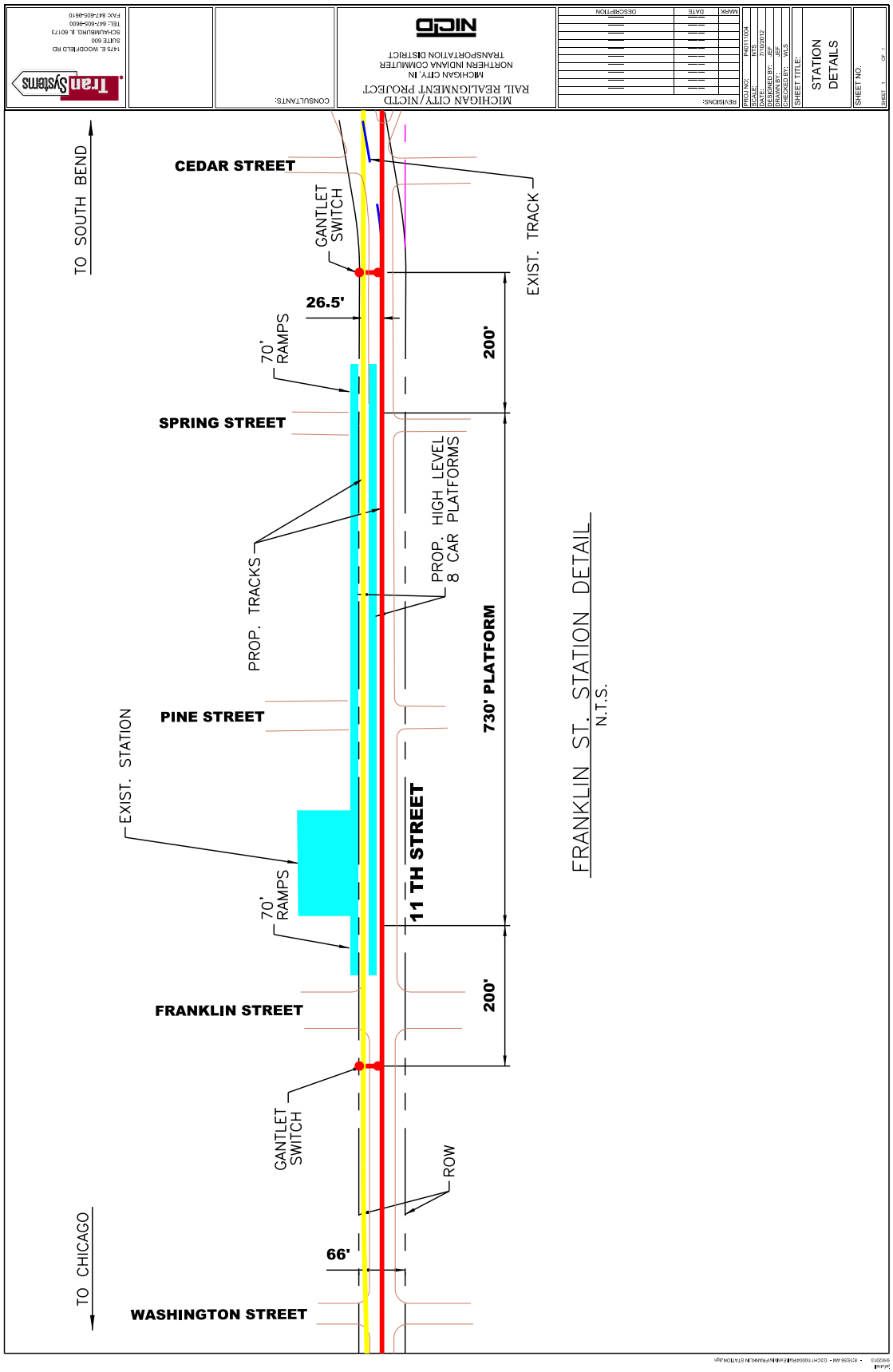


Figure 12: Station and Platform Typical Sections

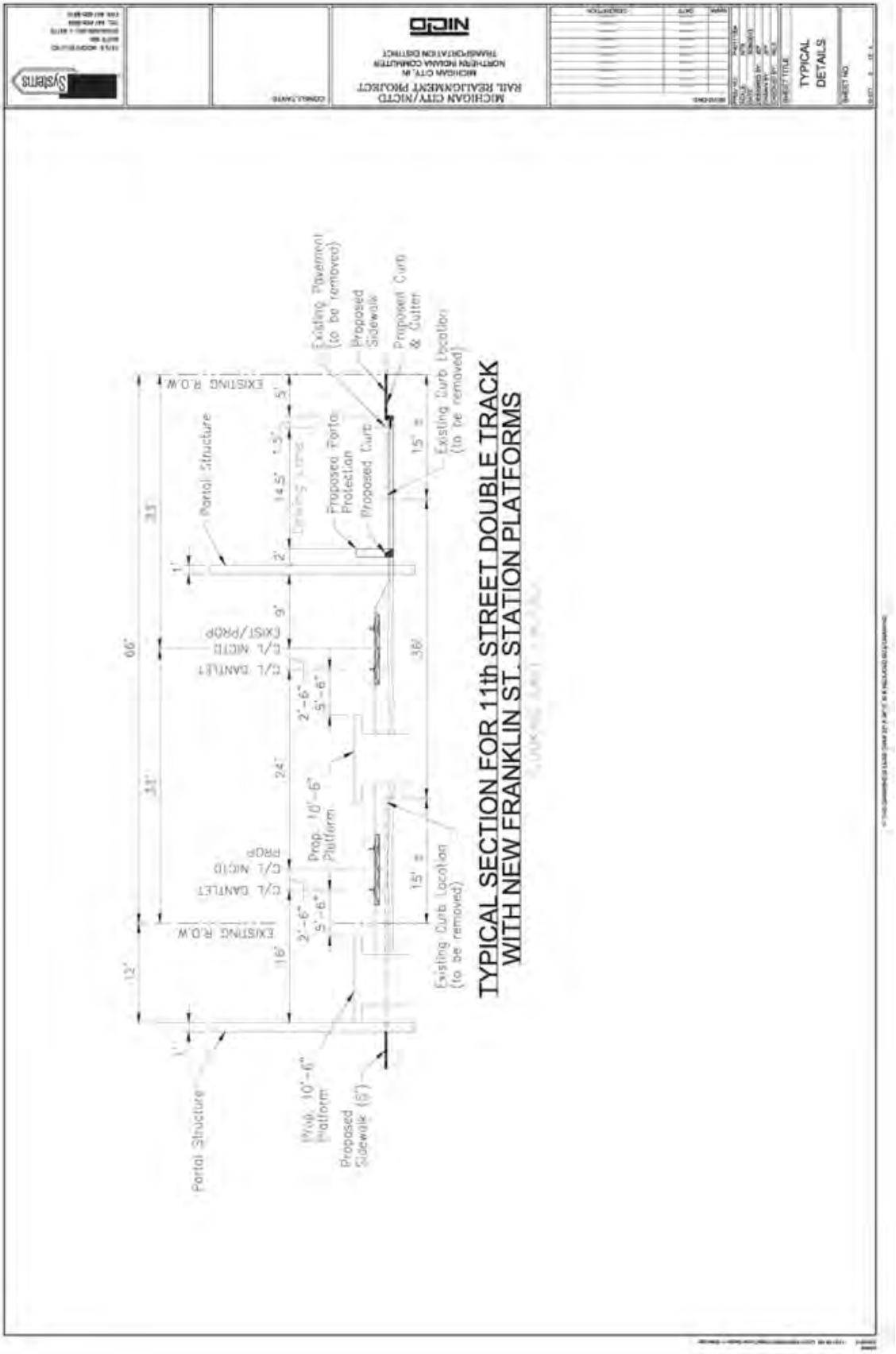


Figure 13: Station and Platform Typical Sections

Figure 14: Proposed Franklin Street Station

C. ENVIRONMENTAL ANALYSIS

A "fatal flaw" environmental and socio-economic evaluation of each of the alternatives was conducted in the selection of the Preferred Alternative. The environmental and socio-economic characteristic of the Central Corridor Alignment is discussed in detail in this chapter. As the study moves forward into other stages, a more in-depth analysis of the Central Corridor will occur.

1. NEPA PROCESSING AND ENVIRONMENTAL DOCUMENTATION

All studys which use federal funding must meet applicable Federal (and in some cases local State) laws and regulations requiring identification and evaluation of the study's environmental impacts. This includes environmental documentation, coordination, and general National Environmental Policy Act (NEPA) compliance procedures. For federally funded studys, the provisions of the *CEQ (Council on Environmental Quality) Regulations* constitute the policy guidance and should be viewed accordingly.

The primary purpose of environmental documentation is to ensure that the policies and goals defined in NEPA are incorporated into the ongoing programs and actions for the Federal and Local agencies of jurisdiction. Environmental documentation is intended to accomplish more than mere disclosure; it is used in conjunction with other relevant material to plan actions and to make decisions.

Environmental documentation is also required to reflect compliance with other applicable Federal and State laws, regulations, and Executive Orders (i.e. addressing protection of threatened and endangered species, farmland protection, historic preservation, environmental justice, and protection of floodplains and wetlands).

The initial step was to determine the appropriate level or type of environmental document. Depending on the specific circumstance involved, the environmental documentation for a study will be one of the following three types:

- Categorical Exclusion
- Environmental Assessment (EA) or
- Environmental Impact Statement (EIS)

See the attached flow diagram in Figure 15 for the NEPA processing steps for each type of environmental document. The selection of the appropriate environmental documentation type for a study is based upon the following factors:

- The study's potential for significant environmental impacts, and
- The involvement of Federal funding participation or Federal approvals.

Generally, the environmental documents should cover the following subject areas:

a. Affected Environment

Discussion should provide a concise, general description of the study area that may be likely to experience some change as a result of the proposed undertaking. In determining the extent of this area, consideration should be given to the potential effects of all alternatives under study. In addition, any sensitive resources (i.e. wetlands, cultural resources) in the area should be noted relative to the study alternatives.

b. Environmental Consequences

Discussions should briefly summarize the results of the areas listed below. Each area should be addressed and all potential adverse environmental impact should be identified and discussed. If there are no potential adverse impacts for a particular issue, then the basis for that conclusion should be stated.

- Social/Economics
- Agricultural
- Cultural
- Air Quality
- Noise and Vibration
- Energy
- Natural Resources
- Water Quality/Resources
- Floodplains
- Wetlands
- Special Waste
- Special Lands
- Permits/Certifications, and
- Other Issues

c. Coordination

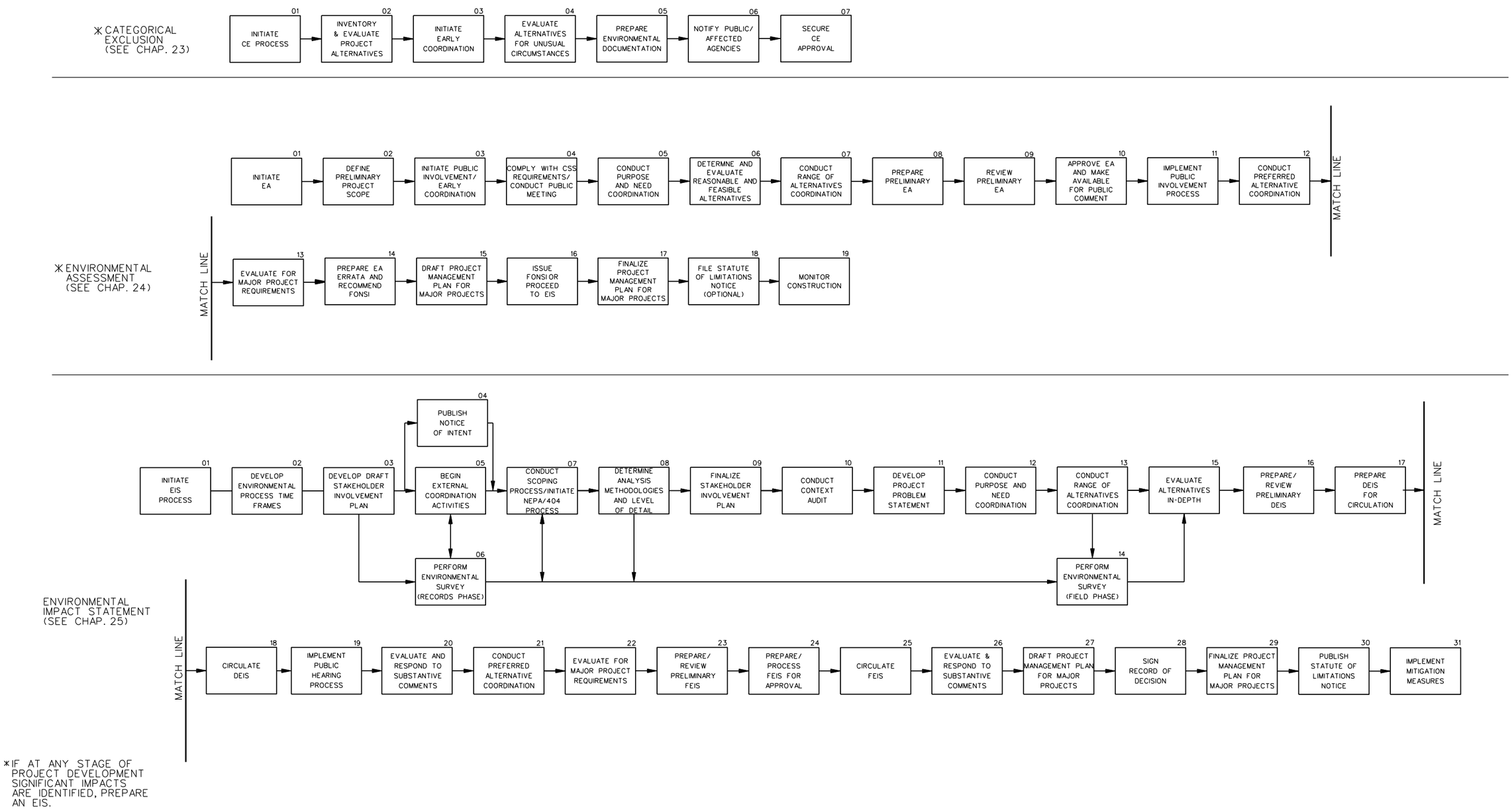
Discussion should identify the contacts, meetings, and correspondence with agencies, organizations, or people with special expertise or jurisdiction by law for any of the environmental issues. Recommendations, comments, and approvals should be briefly summarized.

d. Measures to Minimized Harm, Mitigation, and Commitments, as applicable

When describing the alternatives considered for the study, discussions should reflect options for avoiding and minimizing impacts to sensitive environmental resources. Additionally, this subject area should briefly summarize specific mitigation measures which have been provided for the selected alternative and should identify any specific environmental commitments that have been made and to whom they were made.

e. Technical Report, as applicable, to support findings and mitigation measures

Discussion should briefly summarize the circumstances and findings of each technical report prepared for the study. Examples include Wetland Delineations Reports, Special & Hazardous Waste Reviews, Noise & Vibration Analysis, and Environmental Justice Studies.



NEPA PROCESSING ALTERNATIVES
(FHWA LEAD AGENCY)

Figure 22-3.A

2. SOCIO-ECONOMIC CONDITIONS

a. Population and Households

Michigan City has a population of 31,479 per the 2010 U.S. Census. There are 12,136 households, 58.9% (or 7,147 households) of which are family households. Over a quarter of households (25.7%) have children under the age of 18. 34.3% (or 4,163) of all households are single-person households. Over a quarter of all households (26.2%) have individuals 65 years and older.

b. Income

Income statistics for the City indicates that median household income (1999 data) was $33,732. 13.3% of the residents were below the poverty level. As indicated in Figure 16 higher portions of residents living in poverty are in the western side of the city and near the downtown, north of 10th Street.

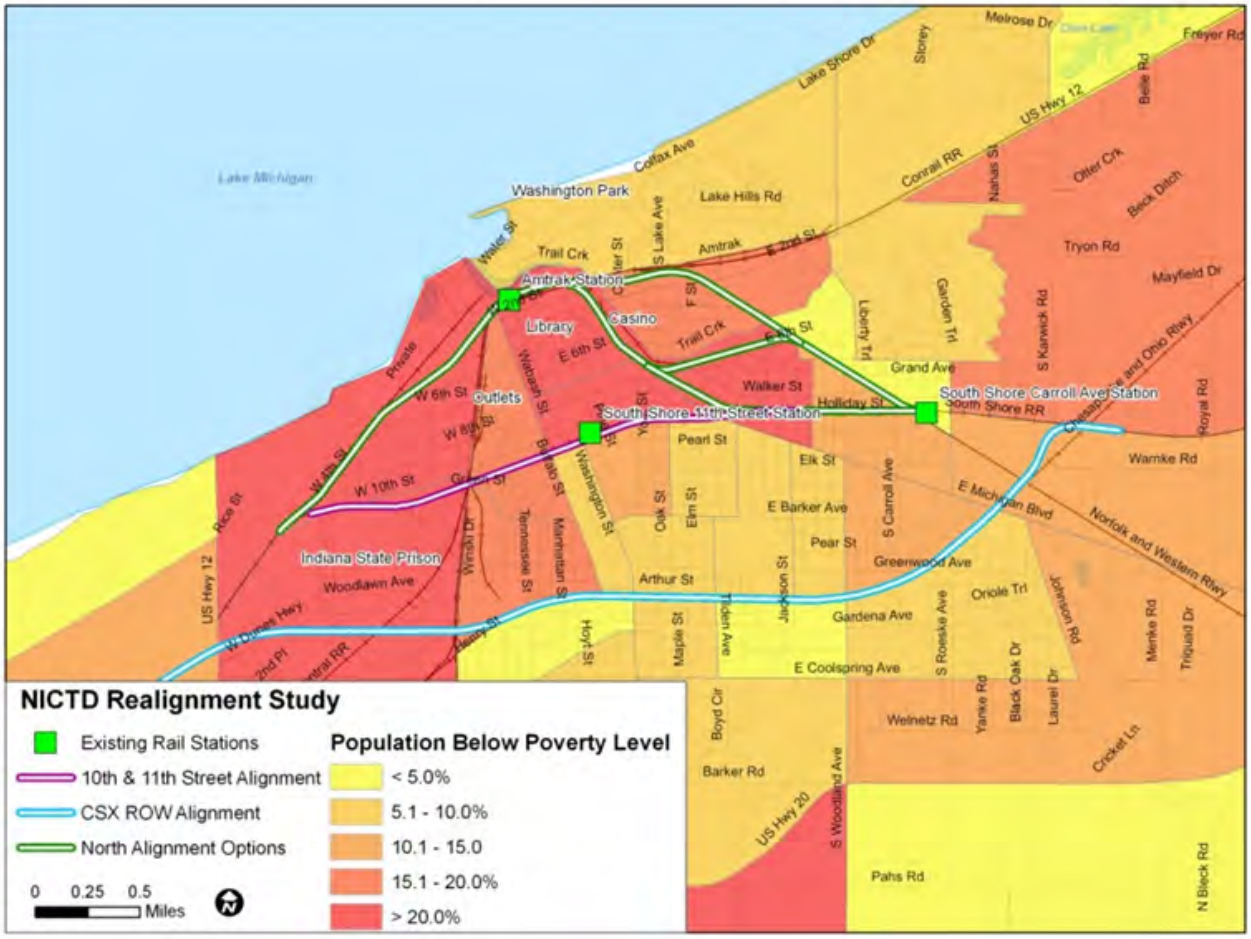


Figure 16: Population Below Poverty Level, U.S. Census Bureau

c. Race

Minority population for the City is shown in Figure 17. Minority population, mainly African- American, is most prevalent in the western, northern, and southeastern portions of the City.

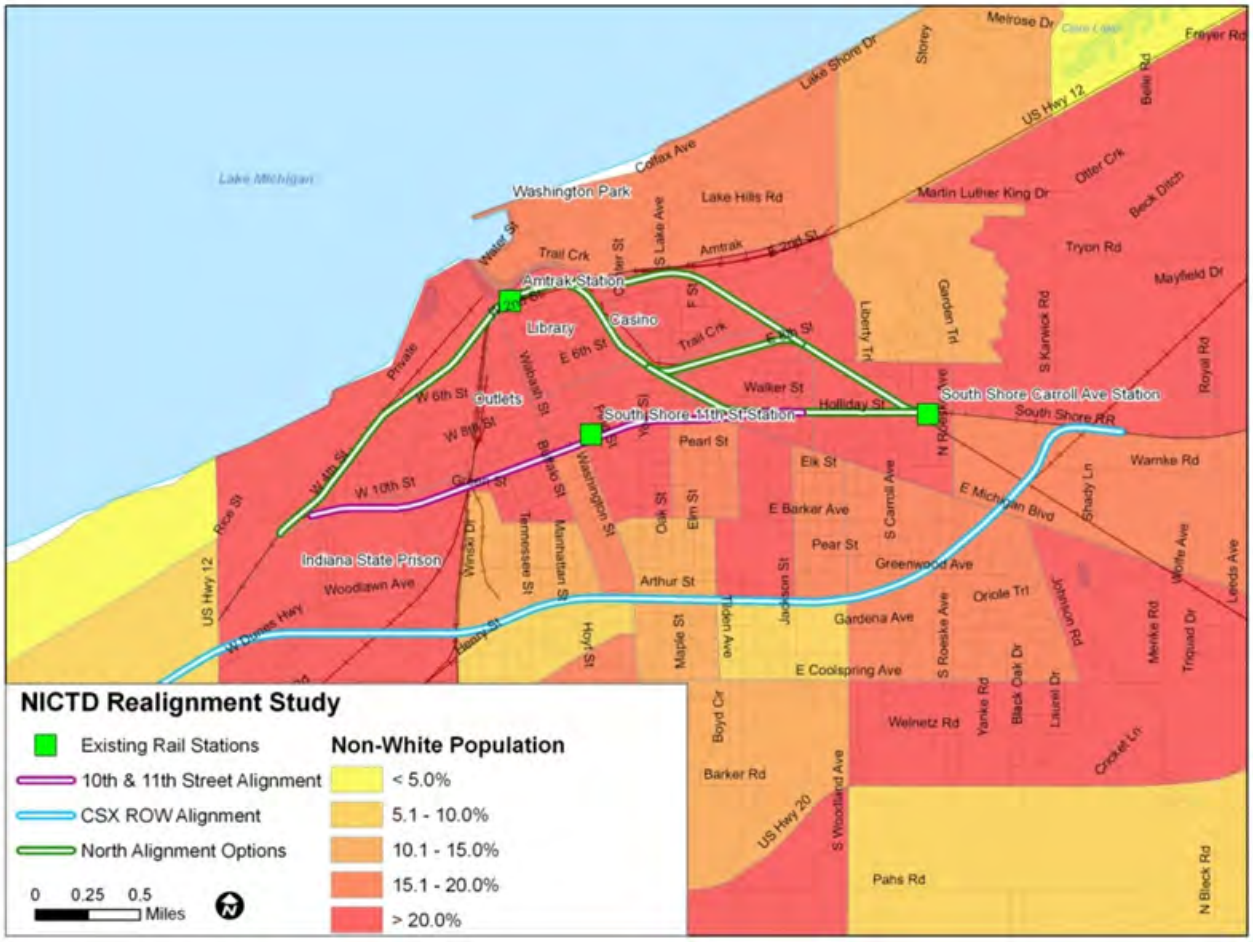


Figure 17: Population By Race, U.S. Census Bureau

3. ENVIRONMENTAL JUSTICE

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies[2]. The purpose of an Environmental Justice Review for the Michigan City/NICTD Alternative Realignment Study was to identify at risk elements of the community that may be adversely impacted by the rerouting of the South Shore Line through Michigan City. "Environmental Justice" is an obligation defined through a set of Environmental Justice Orders"[3]. These state that it is an obligation to avoid or minimize and mitigate adverse impacts to low-income and minority populations and to assure that disproportionately high and adverse impacts on these populations are identified and addressed. Public involvement and participation as the key to avoiding and mitigating environmental justice issues and state and federal documents provide guidelines to follow in order to ensure the proper steps are taken in the planning process.

According to the Northwest Indiana Regional Planning Commission (NIRPC), the entire City of Michigan City is considered an "Environmental Justice Community." As such, particular attention should be made for those areas where minorities or low income residents may be adversely impacted by this study. In considering the potential for environmental justice impacts of alternative rail alignments within the study area, the following documents were reviewed:

- **Indiana Department of Environmental Management (IDEM)** – Potential Areas of Environmental Justice Concern;
- **United States Environmental Protection Agency (USEPA)** – EJ View;
- **Indiana Department of Transportation (INDOT)** – Public Involvement Manual;
- **United States Department of Transportation (USDOT)** – An Overview of Transportation and Environmental Justice;
- **Indiana Department of Environmental Management (IDEM)** – Environmental Justice Policy NO: A-008-OEA-P-R2; and,
- **Indiana Department of Environmental Management (IDEM)** – Guide to Citizen Participation.

Potential environmental justice impacts of the Preferred Alternative will need to be further studied in the next steps of the study. As the study moves forward it is imperative that public outreach to these areas continues and mitigation measures are put in place.

4. WETLANDS, WATER QUALITY, AND NATURAL RESOURCES

There are no wetlands located with the Preferred Alternative alignment. Wetlands that are located in the Indiana Dunes National Lakeshore near the western edge of the alignment or within the Trail Creek watershed near the eastern edge of the alignment will not be impacted.

The Central Corridor is not proximate to any body of water or to natural areas so there will be no impacts to these resources.

[2] (Indiana Department of Environmental Management (IDEM) Environmental Justice Policy-A-008-OEA-08-P-R2).

[3] (Executive Order 12898, the USDOT Order on Environmental Justice, and the FHWA Order on Environmental Justice).

5. HISTORIC STRUCTURES

In evaluating the impact the proposed NICTD realignment options may have on historic structures, the following documents and agencies were consulted:

- National Register of Historic Places (National Park Services)
- Indiana Register of Historic Sites and Structures (Indiana Dept. of Natural Resources)
- Indiana Landmarks, Northern Regional Office
- LaPorte County Interim Report from the Indiana Division of Historic Preservation Archeology; dated 1989 City of Michigan City Historic Districts (Interim Report)
- Michigan City Historic Review Board

Once the initial data review was completed, a detailed analysis of the specific structures and historic districts was conducted. This analysis included field visits and a thorough review of structures considered or suspected of having some historically notable characteristics. It was important to identify any structures that contribute to the historic fabric of the community near the study area and to highlight those properties that may be of particular concern for the overall alignment options as this study progresses.

The Preferred Alternative is located in a neighborhood which has a variety of older residential and commercial buildings and is proximate to three historic districts:

- **Washington/ Wabash Street Historic District:** Bordered by 11th Street on the South, Wabash Street on the West, 4th Street on the North and includes buildings on the east side of Washington Street.
- **Franklin Street Historic District:** Bordered by 11th Street on the South, buildings on the West side of Franklin Street, 4th Street on the North and Pine Street on the East.
- **Elston Grove Historic District:** Extends north of 11th Street between Pine Street and Michigan Boulevard.

Near the Preferred Alternative corridor, a few structures were classified as "outstanding" or as "notable" examples of historic structures per the documents researched. These buildings are as follows:

- **915 S. Ohio Street:** single family house
- **109 E. 11th Street:** (former) South Shore Station
- **1122 Spring Street:** a "Free Classic" house circa 1910
- **505 E. 11th Street:** the 1920s First Christian Church at the corner of Cedar and 11th Streets
- **308 W. 11th Street:** single family house, circa 1895
- **411 W. 11th Street:** Saint Mary of the Immaculate Conception Catholic Church and its associated Queen Anne style Rectory

The Preferred Alternative will not directly impact any recorded historic structures. Conceptual plans show the former South Shore Station at 109 E. 11th Street being incorporated into a new station area east of Franklin Street. As plans move forward for the new station, coordination with the respective state and federal agencies will take place regarding the reuse of this building.

915 S. Ohio

South Shore Station, 11th Street

1122 Spring Street

First Christian Church, Cedar Street

St. Mary's Church and Rectory, 411 W. 11th Street

D. ECONOMIC DEVELOPMENT

The 10th and 11th Street corridors consist of a variety of land uses, but are generally comprised of single-family residential intermixed with commercial and institutional uses along with industrial/warehouse space on the west end of the corridor. A primary commercial node is centrally located around the intersection of 11th and Franklin Streets. This commercial area extends north into the downtown district along Franklin Street, Michigan City's "Main Street." Marquette High School occupies a large area of land west of the proposed station site at the intersection of 11th and Wabash Streets.

1. ZONING DISTRICTS

The zoning classifications along the Preferred Alternative include:

- Single and Multi-Family Residential (R1A, RID, R2B & R3B)
- Neighborhood and General Commercial (B1 & B2)
- Downtown Core (CBD1)
- Heavy Industrial (M2)

The residential districts are appropriate classifications for this study area as they provide housing for potential commuters. Current allowable densities in these districts would also assist in promoting Transit-Oriented Development in the station area.

Commercial zoned properties are generally clustered around the intersections of 11th Street with Franklin Street and Michigan Boulevard. These districts are properly concentrated around the strength of the downtown core and the high vehicular traffic area of Michigan Boulevard, respectively.

2. COMMUNITY FACILITIES

There are many existing developments that are considered to be "anchors" or destinations within ¼ mile radius to the Preferred Alternative. Lighthouse Place Premium Outlets, with 120 retail tenants, draws five to six million visitors annually from Northern Indiana, Southwestern Michigan, and the south portion of the Chicago area. Employment in the summer months is about 1,500, and the number of holiday jobs can be up to about 1,800.

St. Anthony Health, part of the Franciscan Alliance, is an acute care hospital providing comprehensive medical care including inpatient services such as an intensive care, mother and child care (maternity), emergency and urgent care, behavioral medicine, rehabilitation services, medical-surgery units, cancer care, and pediatrics. The hospital has 187 licensed beds. Career training is also offered at St. Anthony. St. Anthony has about 1,200 employees including HealthPartners, its affiliated medical group.

Marquette Catholic High School, 306 W 10th Street, is located on the southwest corner of 10th Street and Wabash. Built in 1955, the school has 195 students in grades 9 through 12, drawing from LaPorte and other surrounding counties. St. Paul Lutheran Church and School is located in the 800 block of N Franklin. The sanctuary was built in 1876. The school has about 225 students in K-8.

ArtSpace is redeveloping the Warren Building, 719-723 N Franklin. The seven-story building was built in 1925 as a hotel and is one of the tallest buildings in city. The Warren Building will be renovated to accommodate about 30 artists, who would live and work in the building.

The Hutchinson Mansion Inn, 220 W 10th Street, is a small bed and breakfast located on 10th Street between Wabash and Washington Streets. The restored 19th Century Victorian mansion has 6 bedrooms and the Carriage House has 3 suites.

In addition, there are other community facilities within proximity to the Central Corridor including:

- 18 parks and recreational facilities
- 8 (other) schools
- 1 long term care facility and 2 (other) medical facilities
- 1 fire station
- 2 religious centers

3. MARKET ANALYSIS AND STATION AREA CONCEPT PLANS

A market analysis was conducted at the initiation of the study to identify the economic potential along each of the corridors. Based on the potential of Transit Oriented Development within ½ mile of proposed station areas, conceptual land use plans were prepared. Different build-out scenarios were developed that reflected the potential for minimum, mid-level and maximum investment around each station area.

Figure 18 shows a mid- level investment for the Preferred Alternative. As indicated on the concept plan, the plan shows potential redevelopment that would be encouraged by the location of a new accessible modern station and associated parking. It is expected that the station area would spearhead new retail development on the east and west sides of Franklin Street north and south of 11th Street, and along Washington Street, as well as surrounding the new station and structured parking. It is estimated that 119,500 square foot of new commercial development would be generated by the station. Some infill housing is also expected proximate to the station.

It is assumed that the total value of these improvements would be approximately $8.5 million with an incremental assessed value worth over $7 million.

E. LOCAL STREETS & TRAFFIC

The selection of the Central Corridor Alignment option in the center of Michigan City will cause certain impacts to the existing local streets and alter some existing traffic patterns. Currently with the NICTD track embedded within the middle of 10th and 11th Streets, the highway traffic travels across and on top of the track for the entire length of both 10th and 11th Streets. The streets are essentially one continuous at-grade highway crossing without any automatic flashing lights, crossing gate arms and bells. In fact, the Federal Railroad Administration (FRA) Office of Safety's Accident Prevention System for 2009 lists Pine Street, Wabash Street and Franklin Street in the top five most dangerous crossings within the State of Indiana , out of the over 2000 highway grade crossings throughout the State.

Figure 18: Preferred Alternative at Mid-Level Investment

SITE DATA

A HISTORIC STATION BLOCK
- 5,000 sq. ft. historic station re-use
- 25,500 sq. ft. new commercial space
- Two-story, 200 space parking structure

B FRANKLIN STREET RETAIL NORTH
- 39,500 sq. ft. new commercial space
- 75 parking spaces (2/1000 sq. ft.)

C FRANKLIN STREET RETAIL SOUTH
- 25,000 sq. ft. new commercial space
- 100 parking spaces (4/1000 sq. ft.)

D MOOSE LODGE BLOCK
- 15,500 sq. ft. Moose Lodge + MC Interiors building
- 7,500 sq. ft. expansion area
- 118 shared surface parking spaces (5/1000 sq. ft.)

E WASHINGTON STREET RETAIL
- 12,500 sq. ft. new commercial space
- Two-story, 332 space parking deck

F SINGLE-FAMILY HOUSING INFILL
- 9 traditional neighborhood single-family homes

G LAPORTE COUNTY ADMIN. SITE
- 9,500 sq. ft. new commercial space
- 63 surface parking spaces (6.5/1000 sq. ft.)

CONCEPT SUMMARY

TOTAL HOUSING UNITS 9
- 9 single-family homes

TOTAL COMMERCIAL 119,500 sq. ft.
- 119,500 sq. ft. new commercial space

TOTAL PARKING 888 spaces
- 500 spaces for NICTD
- 388 for new retail space (3.25/1,000 sq. ft.)

Michigan City, Indiana

Michigan City/NICTD Rail Realignment Study

Central Alignment

LAKOTA
THE LAKOTA GROUP INC

0' 150' 30

June 5, 2013

1. AT-GRADE HIGHWAY CROSSING SAFETY IMPROVEMENTS

The proposed new NICTD Central Corridor Alignment addresses these at-grade highway crossing safety issues and greatly enhances the safety for the motorists and community using 10th and 11th Streets. The new NICTD tracks will be relocated to the north side of 11th Street and will be constructed on a standard ballast section that will be exposed without any street pavement overlay. There will be a concrete curb running parallel to the tracks that will serve as a deterrent for motorists and pedestrians from crossing at will over the tracks. All streets crossing over the tracks will have automatic flashing lights, crossing gate arms and bells that will deploy prior to a train's arrival at the crossing.

2. 10TH STREET

The existing NICTD track in the middle of 10th Street will be removed and the street will be repaved. The west end of 10th Street at Sheridan Avenue will be extended to connect directly into US 12. This will provide direct access from US 12 down 10th Street to the center of Michigan City. New attractive streetscape is proposed along the reconditioned section of 10th Street between Sheridan Avenue and Chicago Street. Both Sheridan Avenue and Willard Avenue will continue as north / south through streets across the new NICTD realignment. Carlon Court and Donnelly Street will access Willard Avenue to connect onto 10th Street. Similarly Claire Street will access either Willard Avenue or Chicago Street to connect onto 10th Street.

3. 11TH STREET

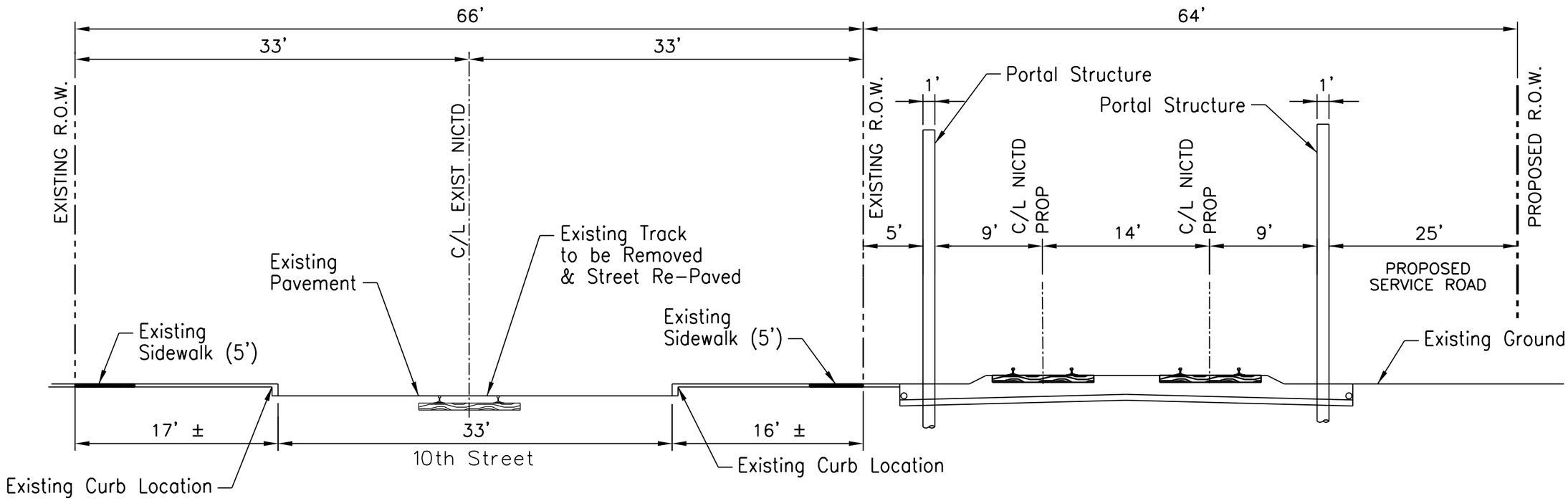
The two new NICTD tracks will be constructed in the north half of 11th Street between Kentucky Street and Michigan Boulevard. The south half of 11th Street in this segment will be open to one way vehicular traffic in an eastbound direction. All existing streets that connect into 11th Street from the south will continue to do so. The following streets will continue to have access across the newly aligned NICTD tracks: Ohio Street, Wabash Street, Washington Street, Franklin Street, Lafayette Street, Oak Street and Michigan Boulevard. The following streets will either be cul-de-saced or stub ended north of the northern edge of 11th Street: Kentucky Street, Tennessee Street, Elston Street, Manhattan Street, Buffalo Street, Pine Street, Spring Street, Cedar Street, York Street and Maple Street. The proposed new Michigan City train station will be constructed between the east edge of Franklin Street and just east of Spring Street.

4. MICHIGAN BOULEVARD TO CARROLL AVENUE

In this segment the following streets will continue to have access across the newly aligned NICTD tracks: Vail Street, School Street, N Woodland Avenue, Pleasant Avenue and Carroll Avenue. The following streets will either be cul-de-saced or stub ended north of the new NICTD tracks: Grace Street, Edward Street and Helen Street.

5. SUMMARY

It is important to note that the above street treatments are merely recommendations at this stage in the study and each street will receive further study in subsequent work as the study progresses. The Michigan City Department of Public Works will play an important role in determining the final outcome of the streets and traffic patterns within Michigan City. All of the above streets are depicted on the conceptual engineering plans for easier reference.



TYPICAL SECTION BETWEEN SHERIDAN AVENUE & KENTUCKY STREET

(LOOKING EAST - N.T.S.)

TranSystems
1475 E. WOODFIELD RD
SUITE 600
SCHAUMBURG, IL 60173
TEL: 847-605-9600
FAX: 847-605-9610

CONSULTANTS:

MICHIGAN CITY/NICTD
RAIL REALIGNMENT PROJECT
MICHIGAN CITY, IN
NORTHERN INDIANA COMMUTER
TRANSPORTATION DISTRICT

NICTD

REVISIONS:		
MARK	DATE	DESCRIPTION

PROJ NO:	P40111004
SCALE:	NTS
DATE:	9/9/2013
DESIGNED BY:	JEF
DRAWN BY:	JEF
CHECKED BY:	WLS

SHEET TITLE:

TYPICAL DETAILS

SHEET NO.
TYP-01-000

SHEET 1 OF 4

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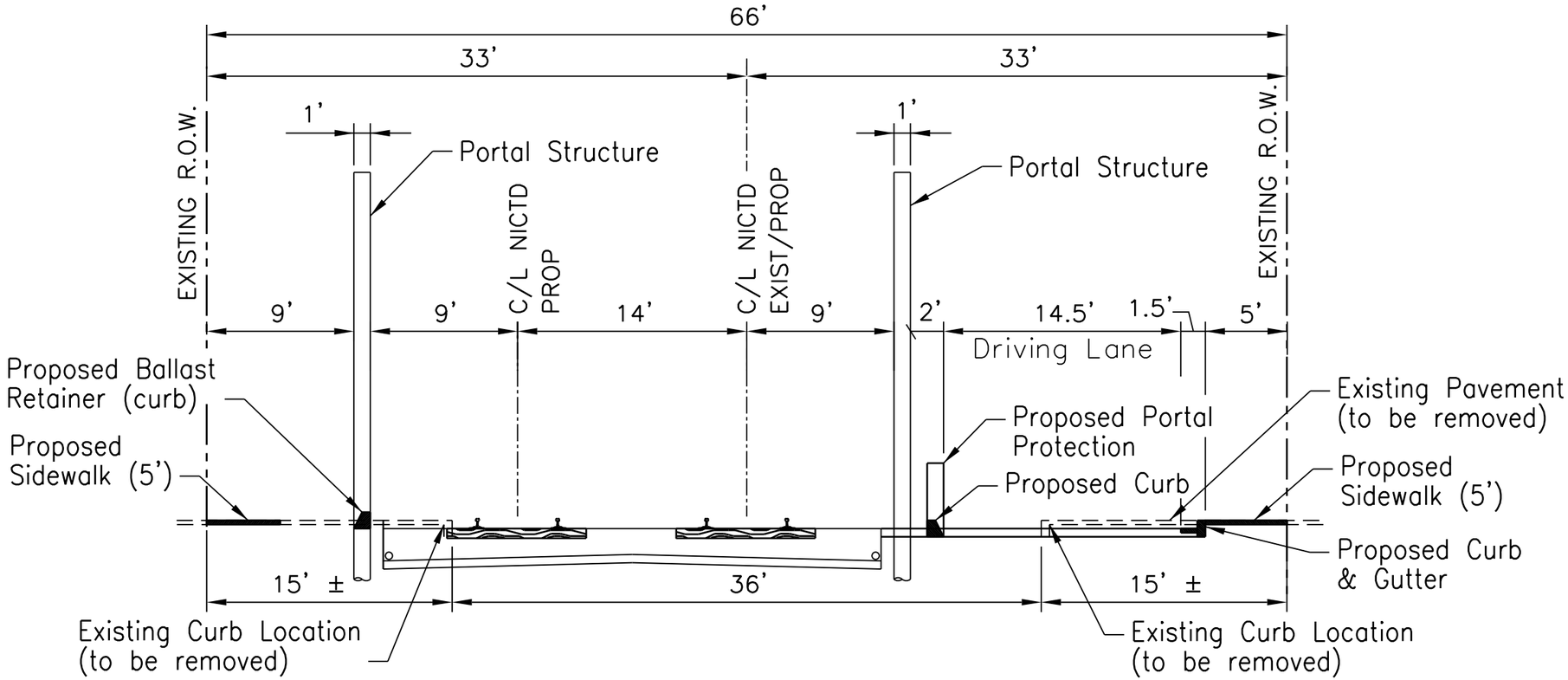

TYPICAL SECTION FOR 11th STREET DOUBLE TRACK

(LOOKING EAST - N.T.S.)

Transmystems
1475 E. WOODFIELD RD
SUITE 600
SCHAUMBURG, IL 60173
TEL: 847-605-9600
FAX: 847-605-9610

CONSULTANTS:

MICHIGAN CITY/NICTD
RAIL REALIGNMENT PROJECT
MICHIGAN CITY, IN
NORTHERN INDIANA COMMUTER
TRANSPORTATION DISTRICT

NICTD

REVISIONS:

MARK	DATE	DESCRIPTION

PROJ NO:	P40111004
SCALE:	NTS
DATE:	9/8/2013
DESIGNED BY:	JEF
DRAWN BY:	JEF
CHECKED BY:	WLS

SHEET TITLE:

TYPICAL DETAILS

SHEET NO.
TYP-02-000

SHEET 2 OF 4

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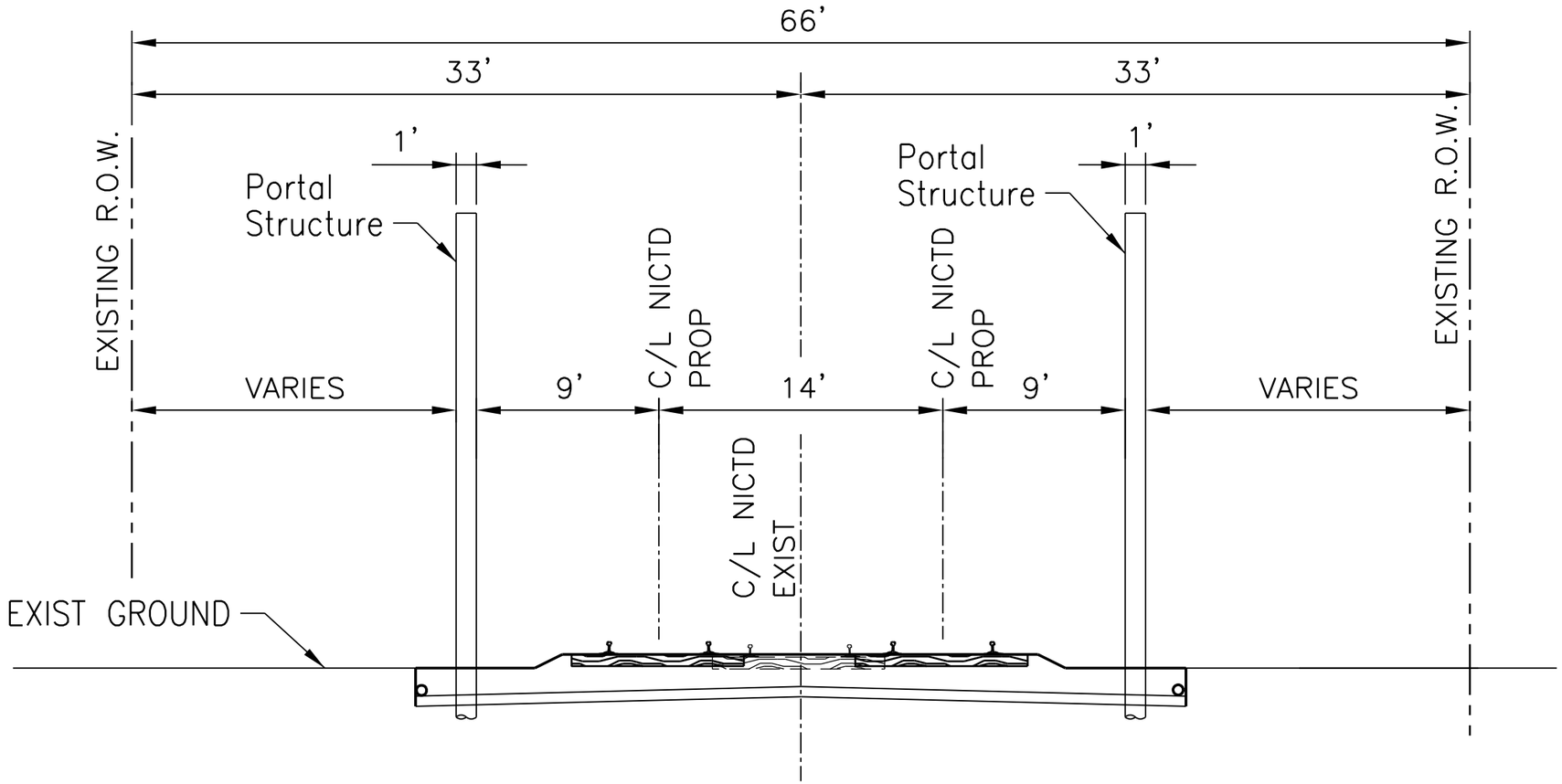

TYPICAL SECTION BETWEEN MICHIGAN BLVD. & CARROLL AVENUE

(LOOKING EAST - N.T.S.)

TranSystems
1475 E. WOODFIELD RD
SUITE 600
SCHAUMBURG, IL 60173
TEL: 847-605-9600
FAX: 847-605-9610

CONSULTANTS:

MICHIGAN CITY/NICTD
RAIL REALIGNMENT PROJECT
MICHIGAN CITY, IN
NORTHERN INDIANA COMMUTER
TRANSPORTATION DISTRICT

NICTD

REVISIONS:

MARK	DATE	DESCRIPTION

PROJ NO:	P40111004
SCALE:	NTS
DATE:	9/8/2013
DESIGNED BY:	JEF
DRAWN BY:	JEF
CHECKED BY:	WLS

SHEET TITLE:

TYPICAL DETAILS

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SHEET 4 OF 4

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SITE DATA

- PROPOSED STATION AND PLATFORMS
- PROPOSED ROAD CLOSURE
- PROPOSED ROAD EXTENSION/MODIFICATION
- PROPOSED @ GRADE ROAD\RAIL CROSSING
- PROPOSED CUL-DE-SAC ROAD CLOSURE

MICHIGAN CITY ALTERNATIVE ANALYSIS REALIGNMENT STUDY

PROPOSED NICTD 10TH STREET & 11TH STREET ALIGNMENT

OPTION 1A-Rev-06-001 STREET CLOSURES

May 06, 2013

VIII. CAPITAL COST ESTIMATE

An order of magnitude capital cost estimate was prepared for the Preferred Alternative and is displayed below. The capital cost estimate based on a conceptual level of engineering plans is approximately $99.4 million. This number contains a 20% contingency factor of $16.6 million which is normal for a project in its preliminary conceptual stage. The cost estimate is divided into three segments:

Name		From/To	Stationing	Distance (ft)	Distance (mi)	Description
1	WEST REALIGNMENT	West Tie-In Sheridan Avenue	0+100 19+15	1,950	0.37	West Tie-In to Sheridan Avenue
2	THRU TOWN	Sheridan Avenue Michigan Avenue	19+50 120+00	10,050	1.90	Sheridan to Michigan Avenue
3	EAST TO YARD	Michigan Avenue Carroll Avenue	120+00 174+42	5,442	1.03	Michigan to Carroll Avenue
				Total Distance	3.30	

Each of the above segments is further broken down to show the major categories of cost; 1) Track, 2) Station House and Platforms, 3) Station Parking Structure, 4) Demolition, Clearing & Earthwork, 5) Utilities, 6) Landscaping & Streetscape, 7) Roads & Parking Lots, 8) Systems (Signals, Control Points, Railroad Crossing Diamonds, Highway Grade Crossing Protection & Catenary), and 9) Right of Way Acquisition. Refer to the cost estimates on the following pages.

Conceptual Cost Estimate
NICTD/ Michgan City Option 1A
Alignment Parallel 10th ST & Thru 11th ST

		2014 Dollars	Segment 1	Segment 2	Segment 3
			WEST REALIGNMENT	THRU TOWN	EAST TO STATION
		$ 2,535,549	*$ 2,535,549*	*$ 61,446,876*	*$ 8,878,589*
10 TRACK		***$ 9,419,026***	***$ 401,206***	***$ 7,055,594***	***$ 1,962,226***
10.11	Track: Ballasted	$ 7,413,999	$ 401,206	$ 5,515,594	$ 1,497,200
10.12	Track: Special (switches, turnouts)	$ 2,005,027	$ -	$ 1,540,000	$ 465,027
20 STATIONS, STOPS, TERMINALS, INTERMODAL		***$ 19,027,223***	***$ -***	***$ 19,027,223***	***$ -***
20.01	At-grade station, stop, shelter, mall, terminal, platform	$ 7,958,359	$ -	$ 7,958,359	$ -
20.06	Automobile parking multi-story structure	$ 11,068,865	$ -	$ 11,068,865	$ -
40 SITEWORK & SPECIAL CONDITIONS		***$ 18,638,256***	***$ 586,964***	***$ 16,808,883***	***$ 1,242,409***
40.01	Demolition, Clearing, Earthwork	$ 8,261,993	$ 95,620	$ 7,837,219	$ 329,154
40.02	Site Utilities, Utility Relocation	$ 4,784,614	$ 290,697	$ 3,581,853	$ 912,063
40.06	Landscaping, erosion protection	$ 1,006,912	$ 1,192	$ 1,004,528	$ 1,192
40.07	Roads, parking lots	$ 4,584,737	$ 199,454	$ 4,385,282	$ -
50 SYSTEMS		***$ 19,139,010***	***$ 1,465,380***	***$ 12,240,176***	***$ 5,433,454***
50.01	Train control and signals	$ 8,500,442	$ 726,744	$ 5,745,525	$ 2,028,174
50.02	Traffic signals and crossing warning devices	$ 4,031,749	$ -	$ 2,687,833	$ 1,343,916
50.04	Traction power distribution: catenary and third rail	$ 6,606,818	$ 738,636	$ 3,806,818	$ 2,061,364
60 ROW, LAND, EXISTING IMPROVEMENTS		***$ 6,637,500***	***$ 82,000***	***$ 6,315,000***	***$ 240,500***
60.01	10th Street	$ 2,827,000	$ 82,000	$ 2,745,000	$ -
60.02	Franklin Station	$ 3,570,000	$ -	$ 3,570,000	$ -
60.02	Michigan Blvd. to Carroll Ave.	$ 240,500	$ -	$ -	$ 240,500
80 PROFESSIONAL SERVICES		***$ 9,933,527***			
80.01	Preliminary Engineering	$ 3,311,176			
80.02	Final Design	$ 3,311,176			
80.03	Project Management for Design and Construction	$ 3,311,176			

Subtotal	*$ 82,794,542*
Contingency (20%)	*$ 16,558,908*
Total	*$ 99,353,450*
Cost Per Route Mile	*$ 30,076,036*

10 - GUIDEWAY TRACK ELEMENTS

				Segment 1		Segment 2		Segment 3	
	INFLATION =	3%		WEST REALIGNMENT		THRU TOWN		EAST TO YARD	
	CURRENT YEAR =	2014							
		COST	UNIT	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
10.11 Track: Ballasted	*$ 7,413,999*				*$ 401,206*		*$ 5,515,594*		*$ 1,497,200*
COMMUTER RAIL									
Track, Complete (grading, subballast, rail, ties, ballast)	$ 5,132,417	$ 511	TF	0	$ -	10,050	$ 5,132,417	0	$ -
Track, Road Crossing	$ 292,302	$ 195	TF	0	$ -	1,000	$ 194,868	500	$ 97,434
Install Ties, Wood	$ 489,277	$ 81	EA	1,170	$ 94,343	0	$ -	4,898	$ 394,934
Surfacing	$ 357,632	$ 24	TF	3,900	$ 94,343	0	$ -	10,884	$ 263,289
Ballast, New	$ 267,069	$ 20	TON	5,705.7	$ 115,020	0.0	$ -	7,542.6	$ 152,050
Rail Replacement	$ 641,752	$ 42	LF	0	$ -	4,520	$ 188,310	10,884	$ 453,443
Realign Track	$ 233,550	$ 25	TF	3,900	97,500	0	$ -	5,442	$ 136,050
10.12 Track: Special (switches, turnouts)	*$ 2,005,027*				*$ -*		*$ 1,540,000*		*$ 465,027*
#8 Turnout	$ 100,794	$ 100,794	EA	0	$ -	0	$ -	1	$ 100,794
#10 Turnout	$ 114,233	$ 114,233	EA	0	$ -	0	$ -	1	$ 114,233
#20 Turnout	$ 1,000,000	$ 250,000	EA	0	$ -	4	$ 1,000,000	0	$ -
Gantlet switches	$ 40,000	$ 10,000	EA	0	$ -	4	$ 40,000	0	$ -
New Diamonds	$ 750,000	$ 250,000	EA	0	$ -	2	$ 500,000	1	$ 250,000

20 - STATIONS, STOPS, TERMINALS, INTERMODAL

				Segment 1		Segment 2		Segment 3	
	INFLATION =	3%		WEST REALIGNMENT		THRU TOWN		EAST TO STATION	
	CURRENT YEAR =	2014							
		COST	UNIT	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
20.01 At-grade station, stop, shelter, mall, terminal, platform	*$ 7,958,359*				*$ -*		*$ 7,958,359*		*$ -*
Station House	$ 1,194,052	$ 1,194,052	LSUM	0	$ -	1	$ 1,194,052	0	$ -
Lump Sum Estimate (Hegewisch const cost)	$ 6,764,306	$ 6,764,306	EA	0	$ -	1	$ 6,764,306	0	$ -
20.06 Automobile parking multi-story structure	*$ 11,068,865*				*$ -*		*$ 11,068,865*		*$ -*
600 Parking Spaces	$ 11,068,865	$ 11,068,865	EA	0	$ -	1	$ 11,068,865	0	$ -

40 - SITEWORK SPECIAL CONDITIONS

					Segment 1		Segment 2		Segment 3	
		INFLATION =	3%		WEST REALIGNMENT		THRU TOWN		EAST TO YARD	
		CURRENT YEAR =	2014							
			COST	UNIT	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
40.01	*Demolition, Clearing, Earthwork*	*$ 8,261,993*				*$ 95,620*		*$ 7,837,219*		*$ 329,154*
	Pavement Removal	$ 157,813	$ 6	SY	0	$ -	23,777	$ 146,213	1,886	$ 11,600
	Track Removal, Labor	$ 144,862	$ 14	TF	0	$ -	10,110	$ 144,862	0	$ -
	Track Removal, Salvage Value	$ (201,198)	$ (597)	TN	0	$ -	337	$ (201,198)	0	$ -
	Building/Station Demolition	$ 7,315,435	$ 0.61	CF	0	$ -	11,695,860	$ 7,192,216	200,376	$ 123,219
	Earthwork, Excavation, Rural	$ 47,526	$ 11	CY	4,420	$ 47,526	0	$ -	0	$ -
	Earthwork, Excavation, Urban	$ 639,662	$ 18	CY	0	$ -	28,458	$ 509,701	7,256	$ 129,961
	Clearing & Grubbing, Rural	$ 840	$ 336	ACRE	2.5	$ 840	0.0	$ -	0.0	$ -
	Clearing & Grubbing, Urban	$ 44,570	$ 2,383	ACRE	0.0	$ -	17.9	$ 42,663	0.8	$ 1,907
	Road surface milling 2" along 10th Street	$ 2,761	$ 2	SY	0.0	$ -	1,380.6	$ 2,761	0.0	$ -
	Subballast (1.04CY/TF)	$ 109,722	$ 34	CY	1,372.2	$ 47,254	0	$ -	1,814	$ 62,468
40.02	*Site Utilities, Utility Relocation*	*$ 4,784,614*				*$ 290,697*		*$ 3,581,853*		*$ 912,063*
SEWER										
	Drainage, Road Crossing	$ 302,381	$ 20,159	LSUM	0	$ -	10	$ 201,587	5	$ 100,794
	Storm Sewer, Removal	$ 367,589	$ 60	FT	0	$ -	6,157	$ 367,589	0	$ -
	Storm Sewer, New	$ 1,514,467	$ 246	FT	0	$ -	6,157	$ 1,514,467	0	$ -
ELECTRICAL						$ -				
	Lighting Along 10th/11th	$ 2,600,177	$ 787,119	MILE	0.37	$ 290,697	1.90	$ 1,498,210	1.03	$ 811,270
40.06	*Landscaping, erosion protection*	*$ 1,006,912*				*$ 1,192*		*$ 1,004,528*		*$ 1,192*
	Seeding & Mulching	$ 6,912	$ 1,192	ACRE	1.0	$ 1,192	3.8	$ 4,528	1.0	$ 1,192
	Street scape	$ 1,000,000	$ 1,000,000	LSUM	0	$ -	1	$ 1,000,000	0	$ -
40.07	*Roads, parking lots*	*$ 4,584,737*				*$ 199,454*		*$ 4,385,282*		*$ -*
	Parking Lot, Complete (Pavement, Utilities, Drainage, Landscaping)	$ 3,431,348	$ 18	SF	0	$ -	186,000	$ 3,431,348	0	$ -
	Road re-surface - 2" along 10th Street	$ 34,514	$ 25	SY	0	$ -	1,380.6	$ 34,514	0	$ -
	Pavement, 12' Lane road repair	$ 919,420	$ 143	SY	0.00	$ -	6,416.67	$ 919,420	0.00	$ -
EXTENSION TO US 12										
	Pavement, 2 - 12' Lanes with Shoulders	$ 199,454	$ 1,008,735	MILE	0.20	$ 199,454		$ -	0.00	$ -

50 - SYSTEMS

				Segment 1		Segment 2		Segment 3	
	INFLATION =	3%		WEST REALIGNMENT		THRU TOWN		EAST TO STATION	
	CURRENT YEAR =	2014							
		COST	UNIT	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
50.01 Train control and signals	*$ 8,500,442*				*$ 726,744*		*$ 5,745,525*		*$ 2,028,174*
Upgrade Signaling System, Railroad, Single Track CTC to Double Track CTC	$ 6,500,442	$ 1,967,798	TM	0.37	$ 726,744	1.90	$ 3,745,525	1.03	$ 2,028,174
INTERLOCKINGS									
Signaling Coordiation for #20 Universal Crossover	$ 1,000,000	$ 1,000,000	EA	0	$ -	1	$ 1,000,000	0	$ -
Upgrade/Move AMTRAK signals	$ 1,000,000	$ 1,000,000	EA	0	$ -	1	$ 1,000,000	0	$ -
50.02 Traffic signals and crossing warning devices	*$ 4,031,749*				*$ -*		*$ 2,687,833*		*$ 1,343,916*
Gates and Flashing Lights w/ Bell	$ 4,031,749	$ 268,783	EA	0	$ -	10	$ 2,687,833	5	$ 1,343,916
50.04 Traction power distribution: catenary and third rail	*$ 6,606,818*				*$ 738,636*		*$ 3,806,818*		*$ 2,061,364*
Catenary	$ 6,606,818	$ 2,000,000	TM	0.37	$ 738,636	1.90	$ 3,806,818	1.03	$ 2,061,364

60 - ROW, LAND, EXISTING IMPROVEMENTS

				Segment 1		Segment 2		Segment 3	
		3%		WEST REALIGNMENT		THRU TOWN		EAST TO YARD	
		2014							
		COST	UNIT	QTY	TOTAL	QTY	TOTAL	QTY	TOTAL
60.01 10th Street	*$ 2,827,000*				*$ 82,000*		*$ 2,745,000*		*$ -*
Commercial Property	$ 500,000	$ 250,000	EA	0.0	$ -	2.0	$ 500,000	0.0	$ -
Residential Property	$ 2,175,000	$ 75,000	EA	0.0	$ -	29.0	$ 2,175,000	0.0	$ -
Additional New ROW	$ 152,000	$ 50,000	Acre	1.6	$ 82,000	1.4	$ 70,000	0.0	$ -
60.02 Franklin Station	*$ 3,570,000*				*$ -*		*$ 3,570,000*		*$ -*
Commercial Property	$ 1,000,000	$ 250,000	EA	0.0	$ -	4.0	$ 1,000,000	0.0	$ -
Residential Property	$ 2,550,000	$ 75,000	EA	0.0	$ -	34.0	$ 2,550,000	0.0	$ -
Additional New ROW	$ 20,000	$ 50,000	Acre	0.0	$ -	0.4	$ 20,000	0.0	$ -
60.03 Michigan Blvd. to Carroll Ave.	*$ 240,500*				*$ -*		*$ -*		*$ 240,500*
Commercial Property	$ -	$ 250,000	EA	0.0	$ -	0.0	$ -	0.0	$ -
Residential Property	$ 225,000	$ 75,000	EA	0.0	$ -	0.0	$ -	3.0	$ 225,000
Additional New ROW	$ 15,500	$ 50,000	Acre	0.0	$ -	0.0	$ -	0.3	$ 15,500

IX. FINANCIAL IMPLEMENTATION PLAN

The Financial Plan is a comprehensive document that reflects the project scope, schedule, estimate of cost, revenue funding plan, and risk/mitigation strategies for the proposed improvement of NICTD's rail alignment through Michigan City (the Project). This document describes a long term plan for implementation of the proposed improvements.

The Project has estimated total project costs of $112.6 million, escalated to the mid-point of construction using a 4% annual inflation rate. The Financial Plan and annual updates will enable decision makers to track the financial progress of the Project over time. The updates will document expenditures to date, document adjustments to the revenue streams, and highlight any significant deviations from the anticipated costs and funding.

A. FEDERAL FINANCIAL PLAN RULES

This project involves commuter railroads operating in the streets, and therefore could involve funding from the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and/or Federal Railway Administration (FRA). Attention must therefore be paid to the financial planning rules of all three of these agencies.

With regard to FHWA funding, on July 6, 2012, the President signed into law the new surface transportation act, Moving Ahead for Progress in the 21st Century (MAP 21) (Pub. L. 112-141). Changes to the requirements for a Financial Plan from the previous transportation act (i.e. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) include a phasing plan when there are insufficient financial resources to complete the entire project and an assessment of a public-private partnership to deliver the project. These changes are contained in section 1503(a)(4) of MAP 21 which amends 23 U.S.C. 106(h). With these amendments, 23 U.S.C 106 (h) reads as follows:

(h) Major Projects

(1) In general — Notwithstanding any other provision of this section, a recipient of Federal financial assistance for a project under this title with an estimated total cost of $500,000,000 or more, and recipients for such other projects as may be identified by the Secretary, shall submit to the Secretary for each project

(A) a project management plan; and
(B) an annual financial plan.

(2) Project management plan — A project management plan shall document—

(A) the procedures and processes that are in effect to provide timely information to the project decisionmakers to effectively manage the scope, costs, schedules, and quality of, and the Federal requirements applicable to, the project; and
(B) the role of the agency leadership and management team in the delivery of the project.

(3) Financial plan — A financial plan shall—

(A) be based on detailed estimates of the cost to complete the project; and
(B) provide for the annual submission of updates to the Secretary that are based on reasonable assumptions, as determined by the Secretary, of future increases in the cost to complete the project.

(i) Other Projects — A recipient of Federal financial assistance for a project under this title with an estimated total cost of $100,000,000 or more that is not covered by subsection (h) shall prepare an

annual financial plan. Annual financial plans prepared under this subsection shall be made available to the Secretary for review upon the request of the Secretary.

As the estimated total cost for this project is over the $100 million limit, the Financial Plan should satisfy the requirements of the "Other Projects" provision of MAP 21.

With regard to FTA funding, the FTA requires that each transit agency seeking a grant provide a financial plan for the agency, including a 20-year cash flow projection (**FTA Guidance for Transit Financial Plans**, June 2000). A key element of this financial plan is a capital plan for the proposed project, as well as agency-wide capital and operating plans. This Financial Plan is the initial capital plan for the proposed project.

The FRA's requirements for grants are similar to that of the FTA, in that an applicant must submit a project budget, operating financials, a capital program, and a financing approach.

B. ANNUAL UPDATES

The Financial Plan is effective for the entire construction life of the project and approximately one year after construction completion and is updated on a yearly basis. The initially approved Financial Plan will be the basis for all future updates.

The scope of the annual update shall be sufficient to identify and resolve any cost and/or funding changes (including cash flow) that have occurred since the previous submission. This will include any changes in project scope that impact the cost estimate and/or schedule of the project. In the instance of major cost or funding changes, the update may need to refine the cost and funding for future years in addition to those for the current year. The updates will reflect changes in total and remaining project cost and/or available funding.

The timing of the annual updates shall also be denoted with an identifier noting the "as of" date of the update. This will be the date that the financial information is extracted from the accounting system, i.e. expenditures to date.

C. PROJECT COSTS AND IMPLEMENTATION

This section summarizes estimation of costs that have been conducted throughout the study process. A cost estimate in 2014 dollars was escalated to the Mid-Point of Construction. It is based on the NEPA process being conducted from October 2013 through December 2014, Preliminary and Design Engineering being contracted from January 2015 through September 2015, and Final Design Engineering / Land Acquisition occurring from October 2015 through June 2016. Construction is then estimated to take approximately 15 months, with a mid-point of construction occurring November 2017.

1. COST ESTIMATE REVIEW

The Year of Expenditure (YOE) total cost estimate is approximately $112.6 million. YOE cost is the dollar amount of the cost estimate adjusted for inflation.

Delays in the timing of funding, as well as reductions in funding, pose a risk to the project schedule and budget. It is expected that state and federal funding will be secured for this project. In addition, public private partnerships will be explored, including funding through this mechanism.

2. PROGRAMMING PROJECT COST ESTIMATE

The most recent estimated total project construction cost, based on 2014 dollars, is $89.4 million. Preliminary engineering, final design and project management are expected to cost $9.9 million, for a total project cost of $99.4 million.

a. Inflation Assumptions

In preparing future cost estimates, it is necessary to make an assumption regarding the future rate of increase of construction costs. While no forecast of future cost inflation can be expected to be perfectly accurate, it is necessary that this estimate be reasonable[4]. Because the project includes both roadway and railroad construction elements, it is important to consider inflation rates for both types of construction.

For estimating roadway construction costs, the industry standard inflation rate of 4% is often used. Recent reported increases in highway construction costs and a recent forecast for future highway construction cost inflation prepared for Ohio DOT can also be considered.

Recent highway construction cost inflation estimates include:

- Parsons Brinkerhoff's Highway Construction Cost Index increased 1% from October 2011 to October 2012 (December 2012 issue of EFR).
- The FHWA National Highway Construction Cost Index from September 2011 to September 2012 showed a 4% annual increase in costs. (FHWA website)
- The ODOT Construction Cost Index measured inflation for FY 2011 at 9.5%. (ODOT website)

ODOT's annual 5-year forecast of highway construction cost inflation from July 2012 is set forth below in Table 1.

Table 1: July 2012 - Five-year Construction Cost Inflation Forecast

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
High	8.5%	9.0%	9.5%	10.0%	8.5%
Most Likely	4.4%	4.8%	5.7%	6.5%	4.6%
Low	1.0%	1.5%	2.0%	2.5%	1.0%

For railroad construction, there are few published studies but most railways assume a 5% inflation rate for construction costs. FTA projects typically assume a 4% inflation rate.

According to the Federal Reserve's economic projections (December 2012), the inflation for Personal Consumption Expenditures is expected to drop from recent levels and most likely average around 1.75% for the period 2013 – 2015 and around 2% thereafter.

[4] In a FHWA memo to division office planning staffs dated 8/18/06 stated that "For metropolitan long-range transportation plans, TIPs, and STIPs, FHWA and FTA generally would be comfortable if States used a four (4) percent annual inflation rate for construction costs for 2007 and beyond, for both highways and transit. While this is current practice for FTA's major programs, FHWA has not established a comparable rate. Recognizing that circumstances may vary from State-to-State, as well as between highway and transit projects, a State may assume a lower or higher rate based on their circumstances. As part of the financial analysis that accompanies metropolitan long-range transportation plans, TIPs, and STIPs, a brief explanation of the inflation rate that is assumed should be provided. This explanation need not be elaborate, merely reasonable." (emphasis added).

Based on the above, it appears that recent highway cost inflation varies greatly depending on the precise period over which it is measured, but has averaged between 4% and 5%. ODOT's forecast is for construction cost inflation to slowly increase from this range. Inflation for railroad construction is typically assumed to 5% while for transit projects it is 4%. However, the Federal Reserve's estimate is that overall inflation will remain significantly lower, and indeed drop from recent levels. As a result, a 4% inflation rate has been assumed for this project.

b. Current and Year of Expenditure (YOE) Costs

Detailed project costs and mid-point of construction costs is shown in Table 2 and 3.

Table 2: Detailed Costs by Segment (Current Year Costs)

Contract Description	Track Work	Proposed Station / Parking	Site Work / Road Work / Bridges	Signals / Systems	ROW / Land / Property Acquisition	Contingency	Prelim. Eng., Design and Project Mgmt.	Total Cost
Prelim. Eng., Design and Project Mgmt.							$9,933,527	$9,933,527
Construction	$9,419,026	$19,027,223	$18,638,256	$19,139,010	$6,637,500	$16,558,908		$89,419,923
Project Total	$9,419,026	$19,027,223	$18,638,256	$19,139,010	$6,637,500	$16,558,908	$9,933,527	$99,353,450

Table 3: Total Project Costs and Mid-Point of Construction with Year of Expenditure (YOE) Total Cost

Contract Description	Mid-Point of Construction	Total Corridor Cost (current Year)	Total Corridor Cost (YOE $)
Prelim. Eng., Design and Project Mgmt.	01-Jan-16	$9,933,527	$10,537,158
Construction	16-Nov-17	$89,419,923	$102,101,074
Project Total		$99,353,450	$112,638,233

D. PROJECT FINANCING AND REVENUES

1. GENERAL

At present, no funding for this project has been identified. However, there are numerous federal, state and local funding sources which could be used for this project as this project involves freight and commuter rail service operating in streets, and includes railroad safety and performance improvements, railroad street crossing closures, and possible economic development benefits. Several of these funding sources are discretionary grant programs, while others are apportioned by formula. Funding will need to be sought cooperatively by NICTD, Michigan City, and the Northwestern Indiana Regional Planning Commission (NIRPC, the regional MPO).

This project is included in the current effort by NICTD and the Northwestern Indiana Regional Development Authority to develop a Strategic Business Plan to guide commuter rail maintenance, enhancement and expansion over the next 20 years. The financial model component of the plan will include an identification of the capital requirements necessary to maintain South Shore in a state of good repair, enhancements to the existing service and expansion of commuter rail along the West Lake Corridor. The end product of this process will be a series of recommendations that will guide the timing of strategic investments and the mix of resources necessary to advance the projects.

2. FEDERAL FUNDING SOURCES

There are multiple possible federal funding sources for this project. These include the Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), and general Department of Transportation (DOT) programs. All four entities provide TIGER grant funding, including for freight rail projects and passenger rail projects. TIGER discretionary grants can be awarded to state and local governments and MPOs (among others). The primary selection criteria for TIGER discretionary grants are:

- Long-term outcomes
  - » Improving the state of good repair of existing transportation facilities and systems
  - » Contributing to the economic competitiveness of the US
  - » Fostering livable communities
  - » Improving environmental sustainability (e.g., improving energy efficiency)
  - » Improving the safety of US transportation facilities and systems
- Job creation and near-term economic activity

Because of its focus on safety, improved efficiency, and economic development, this project would appear to be appropriate for TIGER discretionary grant as part of the funding for the project.

The FRA's programs include the Rail Line Relocation & Improvement grant program (which has not been funded since FY 2011, but may be funded in the future) which is focused on rail improvements and relocations and the Railroad Rehabilitation & Improvement Financing loan program. The FTA's principal capital program is Section 5309 which covers Small Starts, New Starts, and Core Capacity Improvements. This project is neither a Small Start nor a New Start, and to be eligible as a Core Capacity improvement this corridor would need to be currently at or over capacity and this project will improve capacity by at least 10%. FTA also provides formula funds for Fixed Guideway Modernization and for urbanized areas. The principal applicable FHWA program is the Surface Transportation Program, and the Michigan City / LaPorte urbanized area is currently apportioned STP Group II (small urbanized area) funds. All of the formula funds are currently programmed in their entirety.

3. STATE & LOCAL FUNDING SOURCES

Currently NICTD relies on a small portion of the state sales tax dedicated to commuter rail to support its operations along with an annual allocation of the Public Mass Transportation Fund. NICTD also receives capital support from an indefinite situs tax on rail car leasing companies. These funds primarily cover debt service on bonds and secondarily, match federal capital grants. The state of Indiana also currently derives transportation funding from vehicle licenses, a motor fuels tax, title and driver license fees, motor carrier fees, tolls, and the state general sales and use tax. Local funding comes from a similarly broad range of sources, including user fees, fares, local income and property taxes, and vehicle registration fees. In addition, Michigan City could provide funding for some elements of the project from the Riverboat Gaming Fund or general obligation bonds, or from tax increment financing through cooperation of the Michigan City Redevelopment Commission. All of these funds are currently allocated to priorities, including other transportation operations and construction, but should be considered in future planning.

4. REGIONAL PLANNING

NIRPC, as the regional MPO, prepares the Long Range Transportation Plan and the annual Transportation Improvement Program for the area containing the project. The Long Range Transportation Plan identifies this project as a desired improvement, but neither it nor the Transportation Improvement Program currently contain this project as an item.

5. POSSIBLE ALTERNATIVE FUNDING SOURCES AND FINANCING METHODS

a. Public Private Partnership

Pursuant to MAP-21, all financial plans must include an assessment of the use of a public-private partnership to deliver the project. This assessment is required to include (*based on the FHWA Innovative Program Delivery website*, http://www.fhwa.dot.gov/ipd/p3/faqs/):

- Documentation of the results of the risk allocation analysis, if completed during the cost estimate review conducted prior to issuance of the NEPA Decision Document.
- A discussion of whether a public-private partnership or traditional procurement could more effectively leverage the revenue stream for the project, including the available debt capacity and cost of capital for both the public and private sector.
- A discussion of the current State-level legislative authorizations for public-private partnerships, including legislative authorizations regarding public sector debt capacity.
- A concluding statement regarding the appropriateness of a public-private partnership to deliver the project.

"Public-private partnerships" (P3s) refer to contractual agreements formed between a public agency and private sector entity that allow for greater private sector participation in the delivery of transportation projects. P3s provide benefits by allocating the responsibilities to the party - either public or private - that is best positioned to control the activity that will produce the desired result. With P3s, this is accomplished by specifying the roles, risks and rewards contractually, so as to provide incentives for maximum performance and the flexibility necessary to achieve the desired results. Projects are likely to benefit from P3s when tight schedules, complex design and construction or innovative finance are involved. P3s can include Design-Build (DB), Design-Build-Operate (DBO) as well as Design-Build-Operate-Maintain (DBOM) projects.

b. Risk Assessment

P3 approaches are most beneficial in situations where the mitigation of specific risks is uniquely within the control of a private entity. Examples of such situations are when there is an issue of the performance of new technology being provided by a contractor or when a contractor could design as well as construct, operate and/or maintain a project and it would benefit from having additional emphasis being placed on construction, operation, or maintenance concerns during the design phase of a project. P3 approaches are generally not appropriate when there are substantial risks that will be outside of the control of the private participant, at least with respect to such risks. Examples of these situations are when there is an expectation of a lengthy or uncertain environmental process, when there is substantial uncertainty regarding the land acquisition process, or when a key element in the project is coordination with / cooperation from a third-party.

This project is proximate to three historic districts and is located near to at least six historic structures. Furthermore, it is located within areas that have higher levels of minority residents as well as individuals living in poverty, which may give rise to Environmental Justice and Title VI issues. Therefore, there is significant uncertainty with regard to the environmental and political process, which suggest that a P3 approach may not be appropriate.

Regarding Design-Build contracts, the current uncertainty concerning the financing of this project would pose an additional risk. This is specifically reflected in the current uncertainty of implementing the project schedule based on available funding. Under these circumstances, it is unlikely that any company would agree to a Design-Build contract without substantial, and potentially expensive, provisions insuring them against the risks of project delays.

c. *Leverage Revenue Stream*

There is not expected to be a revenue stream associated with this project, unless fees are changed at the proposed station parking. However, the proposed station is located in a primarily residential area, where there is currently substantial free on-street parking. Charging fees at the station parking is not likely to be feasible unless a parking management program were implemented in the area surrounding the station to prevent commuters from using the on-street parking. There are 238 free parking spaces at the 2 existing stations, which would be eliminated under this project. These parking spaces currently fill quickly, indicating that there is likely unmet demand. Assuming that NICTD were able to charge a $1.00 per day parking charge (as at Metro Center in Gary, Indiana) this would generate approximately $60,000 per year in revenue, less any collection and enforcement costs. Assuming an interest rate of 3% on a 30 year bond and no collection and enforcement costs, this revenue would support a bond of about $1.2 million. Further investigation of the demand for parking, the potential for parking charges and the likely resulting revenue is recommended. If parking charges are deemed feasible and the revenue significant, a private contractor may be able to more effectively leverage the resulting revenue.

d. *Overall Assessment of Public Private Partnership Options*

In conclusion, while the lack of current financing and uncertainty regarding the environmental process makes it unlikely to use a public private partnership at this time. However, if parking revenue is determined to be feasible, it may be possible to use a public private partnership at the conclusion of the environmental process to improve efficiency in the project or more effectively leverage potential parking revenues.

e. *Alternative Financing Methods*

Vendor financing is a type of P3 approach. The key element in this funding approach is an agreement that specifies that the contractor agrees to provide initial financing that the government entity repays over a specified amount of time with interest. This is most commonly used in situations where there is a revenue stream associated with the project. As there is potential for parking revenue, the viability of vendor financing should be further considered for this project as a part of any potential financing package.

An alternative to vendor financing is either a direct TIFIA loan or a commercial loan supported by a TIFIA loan guarantee or a FRA Railroad Rehabilitation & Improvement Financing loan. TIFIA loans and guarantees are products of the Transportation Infrastructure Finance and Innovations Act designed to advance qualified, large-scale projects that might otherwise be delayed or deferred due to uncertainty over the timing of revenues. TIFIA loans and loan guarantees can be used for up to 49% of the cost of the project and repaid over a period of 35 years. Such loans generally shall be repayable from dedicated revenue sources, but the DOT may accept general obligation pledges on a case-by-case basis. TIFIA loans and guarantees should be investigated further as a way to leverage future state transportation funds for this project.

f. *Phased Implementation*

The 23 U.S.C. 106(h), as amended by MAP 21, includes provision for a phasing plan that identifies incremental improvements or phases that will address the purpose and need of the project in short terms in the event that there are insufficient financial resources to complete the entire project. The project may be constructed in three phases starting with the west end and working eastward. Phase 1 would be between Sheridan Avenue and Chicago Avenue (10th Street). Phase 2 would be between Chicago Avenue and Michigan Boulevard (11th Street). Phase 3 would be between Michigan Boulevard and Carroll Avenue.

Phase 1 would consist of the following work. The demolition of the properties south of 10th Street and the construction of two new main tracks south of 10th Street between Sheridan and Chicago Avenue would

take place in Phase 1. The installation of two new crossing diamonds in the Amtrak main line would also be included in Phase 1 of the project.

Phase 2 would consist of constructing a new main track along the north side of 11th Street between Chicago Avenue and Michigan Boulevard. Once the new main track was constructed in 11th Street it would be connected to the northern most new track between Chicago and Sheridan. The tie- ins just west of Sheridan to the existing NICTD tracks and also at Michigan to the existing NICTD main track will allow the new north track to be placed in service between Michigan and Sheridan. This will also enable the existing embedded track in 10th Street to be removed and the 10th Street streetscape improvements to be accomplished. Also, the existing embedded track in 11th Street may be removed.

Phase 3 of the project will consist of constructing the new second main track in 11th Street using the vacated track centerline for the new main track, constructing a new second main track between Michigan and Carroll Avenue and constructing the new Franklin Station platforms. Completing the respective tie-ins at Chicago, Michigan and Carroll will establish two main tracks between Sheridan and Carroll.

The construction of the new parking garage and the preparation of the surface parking lot to support the new Franklin Station may occur while any of the above work is underway. This construction phasing scenario will allow for incremental funding to be obtained in order to support the project if necessary.

E. RISK IDENTIFICATION AND MITIGATION FACTORS

Like all other states, Indiana is currently experiencing fluctuations in the cost of projects. Much of this is related to changes in the costs of materials such as steel, cement and asphalt caused by nationwide and sometimes worldwide shortages. Variable project costs are also attributed to fuel costs, fluctuations of which can lead to higher than expected bid prices and can change based on world political scenarios and speculation in commodities markets. Compared to costs of projects in previous proposed improvement programs, average cost increases in the range of four percent (4%) or more have been common. Below is a list of construction and funding related risks and a discussion of mitigation strategies to lesson those risks.

1. COST ESCALATION RISKS AND MITIGATION STRATEGIES

Cost escalation is a risk that can affect the overall ability to achieve expectations of completing a project on time and within budget. Recent national events draw heightened attention to the need for cost management, and in particular, a focus on identifying and mitigating cost related risks. All design and construction projects have risk elements that can affect costs that should be identified and mitigated to the greatest extent possible. Risk elements include, but are not limited to: project scope and design, right-of-way acquisition, NEPA litigation, permitting, general construction related inflationary pressures, and schedules.

a. Project Scope, Design and Construction Estimating

With the likelihood of multiple construction contracts and several contractors being involved in construction of this project, careful attention needs to be given to design development and construction sequencing to keep the project on schedule. To mitigate risks to the cost and schedule associated with the project design, particular attention needs to be made to the following design elements: maintenance of railroad operations, maintenance of traffic, project controls (includes scope, cost, schedule, change management, reporting, risk analysis, hazardous waste investigations, document control, and construction cost trends); railroad force account work, public involvement as applicable, and design review.

Additionally, project construction costs will be re-evaluated as the designs progress. Constructability reviews will be utilized to help control construction costs. The cost analysis review process will continue through construction.

b. Right-of-Way Acquisition

There is some right-of-way acquisition that will need to occur. Currently the real estate market is generally flat with a glut of residential properties on the market. However, to reduce the risk of cost increases, it will be important to acquire all property needed as quickly as possible.

c. Permitting

Failure to secure permits on a timely basis can lead to construction delays and cost escalation. Contractors will be responsible for obtaining their own construction related permits. In order to mitigate potential permitting delays, all permitting agencies are being contacted during the design phase to apprise them of the project, and the permits needed.

d. Inflationary Pressures

Inflation is a key risk as it relates to the project budget and ultimate project completion. Inflation has been accommodated into the cost estimate at a 4% annual rate. However, if the project schedule is delayed due to a lack of funding or other reasons, the cost estimate can continue to grow as the cost of fuel, steel, asphalt, concrete and other commodities related to construction continue to rise. Cost management strategies and cost reduction opportunities to offset unforeseen inflationary increases will need to be explored as necessary. In addition, the coordination of utility relocations should be started early on in the project so that does not cause any unnecessary delays.

e. Title VI / Environmental Justice

The proposed project is located in an area with a higher percentage of minorities and individuals living below the poverty line than the average throughout Michigan City. Therefore, as the project will result in both benefits and disadvantages to this area, there is a potential for Title VI / Environmental Justice issues and claims, which could delay and/or increase the cost of the project.

f. Historic District and Buildings

The proposed project is located near three historic districts and several historic structures. As the project is developed, the potential impacts on these structures and areas will need to be identified in greater detail. If these impacts are adverse and significant, this could result in the need for mitigation, delaying and/or raising the cost of the project.

g. Environmental Issues

There are two wetlands near the project. While neither wetland area is, at this time, anticipated to be directly impacted, it is possible that impacts may be identified as the project is developed further. Any such impacts have the potential to delay the project or result in increased costs.

2. UNKNOWN FACTORS AFFECTING COSTS

All projects are subject to project unknowns. The progress of the project elements will need to be monitored carefully to identify, evaluate and mitigate the impacts of project unknowns as necessary throughout the life of the project. Mitigation strategies will be employed in an effort to contain the project costs within the estimates and contingencies currently established.

X. NEXT STEPS

The next steps to carry the Preferred Alternative forward include the NEPA environmental process as described in Chapter VII, preliminary engineering and design approval, final design engineering and land acquisition, and construction.

Each step is contingent on funding availability and support by both NICTD and Michigan City. Each step has its own time frame, but typical time frames once the notice to proceed is received are as follows:

- Environmental Process – NEPA (12/18 months)
- Preliminary Engineering / Design Approval (6/12 Months)
- Final Design Engineering / Land Acquisition (12/18 Months)
- Construction (12/18 Months)

XI. APPENDIX

1. RESOLUTION NO. 4435
2. RESOLUTION NO. 4452

FILED

NOV 2 5 2009

THOMAS F. FEDDER
CITY CLERK
CITY OF MICHIGAN CITY

MICHIGAN CITY COMMON COUNCIL

RESOLUTION No. 4435

RECOMMENDING CONTINUOUS PUBLIC INPUT OPPORTUNITIES, FACTORS TO BE CONSIDERED, AND FAIR AND OPEN MINDED SELECTION PROCESS FOR IDENTIFYING THE APPROPRIATE NEW ROUTE FOR THE NEW SOUTH SHORE RAIL CORRIDOR THROUGH MICHIGAN CITY

WHEREAS, the Northern Indiana Commuter Transportation District (referred to hereinafter as NICTD) has proposed to terminate its existing South Shore street-running railroad operations and two station locations in Michigan City and to replace them with a new route and station near the existing 11th Street corridor for the following expressed reasons:

- to comply with a federal mandate to upgrade to Positive Train Control which NICTD has asserted cannot be accomplished with the current in-street track configuration,
- to improve safety by eliminating several grade crossings,
- to reduce maintenance costs by eliminating the current maintenance-intensive configuration of tracks embedded in asphalt and catenary wire mounted on utility poles,
- to invest in new station facilities with the goal of attracting new, additional passengers,
- to increase South Shore passenger train speeds, thus reducing travel time and, thereby, attracting new, additional passengers;

and

WHEREAS, NICTD has proposed establishing a new right-of-way and track route primarily within the 10th/11th Street corridor which NICTD proposal includes the permanent closing 17 of 34 existing at-grade track crossings; and

WHEREAS, this NICTD proposal would require the acquisition and removal of over 100 private homes, businesses, and other privately owned buildings in order to establish the new right-of-way, station facilities, and related railroad operations; and

WHEREAS, an Economic Impact Study commissioned by the Michigan City North End Advocacy Team (MCNEAT), a grassroots organization of business and community leaders, was released in June, 2009 and concluded that new South Shore track and station improvements either within and/or near the existing South Shore route or in or adjacent to the existing Amtrak corridor along Lake Michigan would catalyze

significant economic development in the form of "transit oriented development" (TOD), downtown revitalization, and new jobs; and

WHEREAS, on the other hand, the Economic Impact Study concluded that relocation of the South Shore Line to the CSX Railroad alignment, approximately one mile south of the current location would not have the potential to create and capture the kind of significant economic benefits that would be realized by the other above described alternatives; and

WHEREAS, a series of public forums initiated by the City of Michigan City with the cooperation of NICTD were recently held in order to engage citizens of Michigan City in a discourse regarding the proposed improvements in which citizens identified significant community concerns regarding potential negative effects of the NICTD 10th/11th Streets proposal; and

WHEREAS, there has been a substantial outcry from citizens for NICTD to study the feasibility of the "northern Amtrak corridor " option as part of a comprehensive alternatives analysis, particularly as part of a Federally required environmental impact analysis, before it is officially eliminated from consideration by NICTD.

NOW, THEREFORE, BE IT RESOLVED by the Common Council of the City of Michigan City, Indiana as follows:

1. The Council recognizes the need for NICTD to comply with the Federal mandate for Positive Train Control.

2. The Council recognizes the need for NICTD to make reasonably necessary improvements to the South Shore Line in Michigan City in order to maximize the efficiency of its South Shore rail operations.

3. The Council recognizes that service improvements and new investment in the South Shore Line in Michigan City could provide significant economic benefits for Michigan City if the South Shore Line is either retained at or near its current location or moved to the Amtrak corridor.

4. The Council supports and will cooperate with efforts by NICTD to secure Federal funding to undertake an environmental impact assessment, investigation, route selection, planning, and preliminary engineering, including the study of NICTD's proposed location of the new South Shore Line track and facilities within the 10th/11th Street corridor and a similar analysis of the northern Amtrak corridor option in order to establish a baseline level of feasibility for each alternative.

5. Whichever route is ultimately selected and implemented, the Council supports efforts by NICTD to develop a preferred design for the new South Shore Line track and facilities that enhances safety and efficiency, while minimizing acquisitions, and building

an aesthetically attractive corridor that will enhance adjacent properties and Michigan City as a whole.

6. The Council believes the design of the new facilities must incorporate the following elements:

- Sensitivity to quality of life in terms of noise, vibration, and visual impacts;
- Sensitivity to the Historic District including minimizing impacts to historic structures and/or relocation/re-use of historic structures wherever possible;
- Developing attractive streetscape designs;
- Maintenance of the corridor;
- The construction of a full service train station with amenities with appropriate architecture;
- Minimizing street closures while prioritizing the need for maintaining adequate vehicular and pedestrian circulation through Michigan City;
- Providing attractive fencing (i.e. "wrought iron look" instead of chain link) along the right of way wherever fencing is required, as well as attractive landscaping and vegetative buffers;
- Pursuing a funding strategy for construction of multi-story parking structures rather than surface parking in order to maximize economic development potential and minimize property acquisition and displacements; and
- Developing an inter-modal bus transfer center at the new South Shore station that is compatible with the nearby streetscape, surrounding neighborhood, and land uses in the area.

7. The Council supports creation of an overall transit oriented development (TOD) strategy around the proposed new train station in conjunction with the proposed South Shore Line improvements that maximizes economic development potential, neighborhood revitalization, creation of an inviting pedestrian-friendly environment, and increased passenger numbers.

8. The Council supports efforts to manage a fair and equitable process for any acquisitions and relocations that will ultimately be required, including a commitment from the City to help residents in hardship situations.

9. The Council supports the creation of a Community Advisory Council (CAC) consisting of civic and business leaders as well as a representative sample of affected property owners that will work closely with the City of Michigan City and NICTD throughout the investigative, assessment, selection, planning, design, and implementation of the project.

10. The Council recognizes the need for the City of Michigan City and NICTD to continue their mutual participation in a continuing public process with the citizens of Michigan City in which citizens have the opportunity to express viewpoints, offer ideas and suggestions, and ask questions in order to gain a better understanding of the proposed project and the pros and cons of the alternative routes, and upon the selection

of the new route, the Council recognizes the need to continue this public process throughout the planning, design, and implementation stages of the project in order to achieve a successful project that will have the full support of the City's citizens and officials and maximize the benefits to Michigan City.

This Resolution shall take effect after the same has been passed by the Michigan City Common Council, approved by the Mayor, and any necessary publication.

Introduced By: _____
Richard Murphy, Member
Michigan City Common Council

_____
Robert McKee, President
Michigan City Common Council

Adopted by the Common Council of the City of Michigan City, Indiana by a vote of 6-3 this 1st day of December, 2009.

_____
Robert McKee, President
Michigan City Common Council

Approved by me this 2nd day of December, 2009.

_____
Charles Oberlie, Mayor
City of Michigan City

ATTEST:

_____
Thomas F. Fedder, Clerk
City of Michigan City

FILED

AUG 17 2010

THOMAS F. FEDDER
CITY CLERK
CITY OF MICHIGAN CITY

MICHIGAN CITY COMMON COUNCIL

RESOLUTION NO. 4452

AUTHORIZING THE APPLICATION FOR A TIGER II PLANNING GRANT TO STUDY ALTERNATIVES FOR REALIGNING THE SOUTH SHORE'S ROUTE THROUGH MICHIGAN CITY

WHEREAS, the Northern Indiana Commuter Transportation District (NICTD) has been working with the City of Michigan City on exploring options for re-routing South Shore trains through Michigan City; and

WHEREAS, the U.S. Department of Housing and Urban Development (HUD) and Department of Transportation (DOT) have issued a Notice of Funding Availability in the Federal Register dated June 24, 2010 soliciting applications for Community Challenge Planning Grants and Tiger II Planning Grants; and

WHEREAS, these two grants are highly competitive requiring a minimum non-federal share of 20% of total project cost; and

WHEREAS, NICTD in cooperation with the City of Michigan City, has submitted a pre-application for a Tiger II Planning Grant in the amount of $800,000 to evaluate realignment options and to arrive at a preferred alignment for further refinement and environmental analysis; and

WHEREAS, NICTD has proposed to terminate its existing South Shore street-running railroad operations and two station locations in Michigan City and to replace them with a new route and station near the existing 11th Street corridor for the following expressed reasons:

1) to comply with a federal mandate to upgrade to Positive Train Control which NICTD has asserted cannot be accomplished with the current in-street track configuration,
2) to improve safety by eliminating several grade crossings,
3) to reduce maintenance costs by eliminating the current maintenance-intensive configuration of tracks embedded in asphalt and cantinary wire mounted on utility poles,
4) to invest in new station facilities with the goal of attracting new, additional passengers, and

5) to increase South Shore passenger train speeds, thus reducing travel time and, thereby, attracting new, additional passengers;

and

WHEREAS, NICTD has proposed establishing a new right-of-way and track route primarily within the 10th/11th Street corridor which NICTD proposal includes the permanent closing of 17 of 34 existing at-grade track crossings; and

WHEREAS, this NICTD proposal would require the acquisition and removal of over 100 private homes, businesses, and other privately owned buildings in order to establish the new right-of-way, station facilities, and related railroad operations; and

WHEREAS, an Economic Impact Study commissioned by the Michigan City North End Advocacy Team (MCNEAT), a grassroots organization of business and community leaders, was released in June, 2009 and concluded that new South Shore track and station improvements either within and/or near the existing South Shore route or in or adjacent to the existing Amtrak corridor along Lake Michigan would catalyze significant economic development in the form of "transit oriented development" (TOD), downtown revitalization, and new jobs; and

WHEREAS, on the other hand, the Economic Impact Study concluded that relocation of the South Shore Line to the CSX Railroad alignment, approximately one mile south of the current location would not have the potential to create and capture the kind of significant economic benefits that would be realized by the other above described alternatives; and

WHEREAS, a series of public forums initiated by the City of Michigan City with the cooperation of NICTD were recently held in order to engage citizens of Michigan City in a discourse regarding the proposed improvements in which citizens identified significant community concerns regarding the potential negative effects of the NICTD 10th/11th Streets proposal; and

WHEREAS, there has been a substantial outcry from citizens for NICTD to study the feasibility of the "northern Amtrak corridor " option as part of a comprehensive alternatives analysis, particularly as part of a Federally required environmental impact analysis, before it is officially eliminated from consideration by NICTD.

NOW, THEREFORE, BE IT RESOLVED by the Common Council of the City of Michigan City, Indiana as follows:

1. The Council recognizes the need for NICTD to comply with the Federal mandate for Positive Train Control.

2. The Council recognizes the need for NICTD to make reasonably necessary improvements to the South Shore Line in Michigan City in order to maximize the efficiency of its South Shore rail operations.

3. The Council recognizes that service improvements and new investment in the South Shore Line in Michigan City could provide significant economic benefits for Michigan City if the South Shore Line is either retained at or near its current location or moved to the Amtrak corridor.

4. The Council supports and will cooperate with efforts by NICTD to secure Federal funding to undertake an environmental impact assessment, investigation, route selection, planning, and preliminary engineering, including the study of NICTD's proposed location of the new South Shore Line track and facilities within the 10th/11th Street corridor and a similar analysis of the northern Amtrak corridor option in order to establish a baseline level of feasibility for each alternative.

5. Whichever route is ultimately selected and implemented, the Council supports efforts by NICTD to develop a preferred design for the new South Shore Line track and facilities that enhances safety and efficiency, while minimizing acquisitions, and building an aesthetically attractive corridor that will enhance adjacent properties and Michigan City as a whole.

6. The Council believes the design of the new facilities must incorporate the following elements:

a) Sensitivity to quality of life in terms of noise, vibration, and visual impacts;
b) Sensitivity to the Historic District including minimizing impacts to historic structures and/or relocation/re-use of historic structures wherever possible;
c) Developing attractive streetscape designs;
d) Maintenance of the corridor;
e) The construction of a full service train station with amenities with appropriate architecture;
f) Minimizing street closures while prioritizing the need for maintaining adequate vehicular and pedestrian circulation through Michigan City;
g) Providing attractive fencing (i.e. "wrought iron look" instead of chain link) along the right of way wherever fencing is required, as well as attractive landscaping and vegetative buffers;
h) Pursuing a funding strategy for construction of multi-story parking structures rather than surface parking in order to maximize economic development potential and minimize property acquisition and displacements; and

i) Developing an inter-modal bus transfer center at the new South Shore station that is compatible with the nearby streetscape, surrounding neighborhood, and land uses in the area.

7. The Council supports creation of an overall transit oriented development (TOD) strategy around the proposed new train station in conjunction with the proposed South Shore Line improvements that maximizes economic development potential, neighborhood revitalization, creation of an inviting pedestrian-friendly environment, and increased passenger numbers.

8. The Council supports efforts to manage a fair and equitable process for any acquisitions and relocations that will ultimately be required, including a commitment from the City to help residents in hardship situations.

9. The Council supports the creation of a Community Advisory Council (CAC) consisting of civic and business leaders as well as a representative sample of affected property owners that will work closely with the City of Michigan City and NICTD throughout the investigative, assessment, selection, planning, design, and implementation of the project.

10. The Council recognizes the need for the City of Michigan City and NICTD to continue their mutual participation in a continuing public process with the citizens of Michigan City in which citizens have the opportunity to express viewpoints, offer ideas and suggestions, and ask questions in order to gain a better understanding of the proposed project and the pros and cons of the alternative routes, and upon the selection of the new route, the Council recognizes the need to continue this public process throughout the planning, design, and implementation stages of the project in order to achieve a successful project that will have the full support of the City's citizens and officials and maximize the benefits to Michigan City.

11. The Council supports an allocation of $100,000 of Casino Funds towards the local match for the TIGER II Planning Grant in order to evaluate realignment options and to arrive at a preferred alignment for further refinement and environmental analysis.

12. The Council may condition the appropriation of the match funds on Council members and/or representatives having input on the contents of the request for proposals for the engineering services; the parameters and design characteristics to be used as the basis for study by the selected engineer; and the selection of the engineering firm to perform the study.

This Resolution shall be in full force and effect after passage and approval by the Mayor.

Introduced by: _____
Richard Murphy

Co-Sponsor: _____
Robert McKee

Adopted by the Common Council of the City of Michigan City, Indiana by a vote of 7-0 this 17th day of August, 2010.

_____
Marc Espar, President
Michigan City Common Council

Approved by me this 18th day of August, 2010

_____
Charles Oberlie, Mayor
The City of Michigan City, Indiana

ATTEST:
_____
Thomas F. Fedder, City Clerk