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## 1.0 INTRODUCTION

Following is the final report for the Comprehensive Operational Analysis (COA) of the IndyGo<sup>1</sup> Transit System. This work effort was conducted as part of the Regional Rapid Transit Study (“DiRecTionS”) being conducted by the Indianapolis Metropolitan Planning Organization (MPO). The objective of this effort was to perform a COA of IndyGo’s existing services provided in the Indianapolis region and provide a basis for the development of improved bus services that will not only address current demand, but will also provide service to the region as the economy continues to expand. The IndyGo service area has changed markedly over the past 10-20 years as new growth, both population and employment, has gravitated to the I-465 outerbelt and beyond. This has led to a shift in travel patterns (work trips and otherwise) by Indianapolis area residents and workers. The shift in residential and commercial development experienced in Indianapolis, as also experienced in most major cities around the United States, has led transit agencies to look for ways to change and improve transit services (coverage and efficiency) to meet the needs of this changing travel market.

The completion of the COA provides a review of IndyGo’s overall transit system effectiveness and efficiency, and provides the opportunity to design a revised system to meet current and future mobility needs of the Indianapolis region. The primary focus of this study effort was to optimize the current fixed route transit network (providing IndyGo with sound near term service efficiency recommendations), and provide a sound base transit system from which future transit initiatives/networks will be developed as part of the Regional Rapid Transit Study<sup>2</sup>. Building future transit networks based upon an efficient and effective existing transit system enhances the efficiency and effectiveness of those future transit networks.

### 1.1 Project Objectives

The last Comprehensive Operational Analysis conducted on Indianapolis Transit service was completed in 1990. Since the completion of this analysis, IndyGo has undertaken several service expansions and reductions of the transit system, resulting in a transit system much different that that of 14 years ago. Additionally, community population and employment has grown significantly, travel patterns and land use development patterns have reshaped the community and its traffic congestion levels, and transit use and demand has changed to a large degree. As a result, a comprehensive analysis of the existing transit service and the identification of new strategies for future transit service growth were undertaken. Prior to the start of the COA, the following key objectives were established:

- Provide a reliable database and a statistical picture of the overall ridership by stop and route productivity and performance (by segment) upon which existing transit service can be evaluated with respect to measures of efficiency and effectiveness.
- Evaluate existing IndyGo fixed route bus service to determine changes to route alignments, schedules and service frequencies that will improve individual route and systemwide service efficiency, effectiveness and productivity.
- Reduce operating costs initially, and provide for an opportunity from which to build future efficient and effective service initiatives.

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<sup>1</sup> IndyGo is the informal name for the Indianapolis Public Transportation Corporation (IPTC), incorporated under Indiana Code (I.C.) 36-9-4.

<sup>2</sup> A secondary, more technical objective of the COA was to provide the basis for developing the baseline (i.e., non-rapid transit) alternative required by the U.S. Federal Transit Administration (FTA) in evaluating funding requests for fixed guideway transit projects.



- Increase ridership and operating revenue.
- Minimize impacts on existing riders and provide improved mobility opportunities for the future.
- Meet Environmental Justice requirements (Title VI).
- Identify unmet transit needs and develop service proposals for near term, mid-range and long-term timeframes that can assist IndyGo and the community transition from the existing fixed route bus transit system into a multimodal transit network.
- Develop service proposals that can be incorporated in IndyGo short- and long-range plans that are consistent with other regional planning efforts.

IndyGo transit operations, equipment and facility requirements were evaluated for three time horizons: Near-Term (1-3 years), Short-Range (4-9 years) and Long-Range (10-15 years). The core of the COA is the Near-Term Plan. It recommends route changes designed to improve service efficiency, improve connectivity, apply resources where they are most needed, and modernize the route network based upon current and projected conditions within the service area. The COA also provides short and long-range direction in terms of service expansion, equipment requirements, and facility needs.

## 1.2 Report Outline

The following chapters present the results of the COA.

### Chapter 2.0 Analysis of Existing Service

This Chapter describes the following three tasks completed as part of the Analysis of Existing Service: 1) **Data Collection**, including a summary of ridecheck results, evaluation of existing ridership and route performance, review and analysis of previous on-board survey results, service area field observations, and results of front line staff interviews and public involvement, 2) **Evaluation of Existing Service**, including the development of service performance monitoring indicators, route performance profiles and service efficiency analysis, and key operational, alignment and schedule issues, and 3) **Service Needs Analysis**, including a travel pattern analysis, socioeconomic / land use analysis, and peer group analysis.

### Chapter 3.0 Recommended Service Plans

This chapter presents the service plan recommendations for **Near-Term (1-3 years)**, **Short-Range (4-9 years)** and **Long-Range (10-15 years)**. This section generally describes the service plan recommendations, summarizing operating and capital facility requirements (used in Chapter 3 to estimate annual operating and maintenance and capital cost estimates). Detailed descriptions of route-by-route service recommendations are provided in Appendix A. These descriptions identify route alignment, service level (i.e., frequency of service) and span and days of service recommendations.

### Chapter 4.0 Implementation of Service Plan Recommendations

This chapter addresses several issues that are important in implementing the COA Near-Term, Short-Range and Long-Range Plans. These include: service continuity, service phasing and implementation strategies, annual operating costs, differentiation by service type, route nomenclature, service monitoring, fleet management, capital improvements, and future opportunities.



## 2.0 ANALYSIS OF EXISTING SERVICE

This Chapter describes the following three tasks completed as part of the Analysis of Existing Service: 1) **Data Collection**, including a summary of ridecheck results, evaluation of existing ridership and route performance, review and analysis of previous on-board survey results, service area field observations, and results of front line staff interviews and public involvement, 2) **Evaluation of Existing Service**, including the development of service performance monitoring indicators, route performance profiles and service efficiency analysis, and key operational, alignment and schedule issues, and 3) **Service Needs Analysis**, including a travel pattern analysis, socioeconomic / land use analysis, and peer group analysis.

### 2.1 Data Collection

The purpose of the Data Collection Task was to assemble and review all information presently available and to collect new data for a comprehensive analysis of the IndyGo transit system, route ridership and performance, system operations, and procedures. This task consisted of the following subtasks:

Prior to the start of the COA service planning efforts, the consultant team collected and reviewed previous planning studies to gain an understanding of previous and on-going plans. These studies and reports pertain to the existing and envisioned transit system, as well as current and planned transportation and land use conditions that could affect transit service. Following is a list of relevant studies by the Indianapolis Public Transportation Corporation (IndyGo), the Indianapolis MPO, and others that were reviewed:

- *Indianapolis Metro Comprehensive Service Analysis*, July 1990
- *Downtown Indianapolis Transit Center Study*, January 1998
- *Central Indiana Transportation and Land Use Vision Plan, Executive Summary*
- *Indianapolis Park-and-Ride Service Plan*, July 1999
- *IPTC Financial and Management Plan, Year 2000*, August 1999
- *Regional Mass Transit Service Plan for Central Indiana*, December 1999
- *Indianapolis Transit System Review*, May 2000
- *IndyGo's Five Year Implementation Plan*, January 2001
- *Official Thoroughfare Plan for Marion County, Indiana*, June 2002
- *Update of the Indianapolis Regional Transportation Plan for 2025*, August 2003
- *Indianapolis Regional Center Plan 2020*, March 2004
- *2005-2007 Indianapolis Regional Transportation Improvement Program*, July 2004
- *Capital Improvement Program 2004-2008*, August 2004
- *Rebuilding Public Transportation in Indianapolis*, August 2004
- *IndyGo Downtown Transit Center Feasibility Study*, (study in progress)

The consultant team also reviewed all available data and reports that pertain to the existing transit service, for both ridecheck and service evaluation purposes. Following is a list of the data sources provided by IndyGo to the consultant team:

- 1980 Service Standards
- GFI Farebox Reports
- Operating Statistics
- Budget Master Listing
- National Transit Database (NTD) Reports for FY 2002 and 2003



- Vehicle Inventory
- Vehicle Requirements
- Public Schedules and System Map
- Route Interval Sheets
- Interlining Combinations
- Service Run Cut
- 1997 - 2003 Route Ridership Statistics
- 2004 Year to Date Ridership Statistics
- Hyperfix Service Plan
- Route Restructuring Service Analysis Data
- Service Changes to Take Place in February 2005
- Presentation Regarding System Service Enhancement Opportunities
- Presentation to the City of Lawrence Regarding Potential New Transit Service

### 2.1.1 Ridecheck Survey

As with most Comprehensive Operational Analyses (COA's), a major piece of the data collection effort is the ridecheck survey. The ridecheck survey consists of the collection/recording of bus passenger boardings and alightings by bus stop as well as recording bus departure times from timepoints selected along the route alignment. Passenger boardings and alighting data provides transit service planners with a detailed view of passenger activity by route, by route segment and by individual bus stop. This data allows for determination of productive and unproductive segments or areas of a route alignment as well as helps display passenger load information (i.e., passengers on board the bus at any given point along the route). Once the passenger boardings and alightings have been recorded in the ridecheck survey spreadsheets passenger load information is calculated and bus capacity utilization can be ascertained. Additionally, actual bus departure times recorded at individual schedule timepoints located along the route provides for the determination of on-time performance or schedule adherence. As part of the Indianapolis COA a ridecheck survey was conducted to gather passenger activity (boardings and alightings), passenger load volumes and actual bus departure times at timepoints. Data collected as part of this survey has been organized into various report formats and is reported in detail in the Task 2 Technical Memorandum – Evaluation of Existing Service, Route Profiles.

### 2.1.2 On-Board Survey Analysis

In the fall of 2001, NuStats Research and Consulting (NuStats) conducted a comprehensive on-board survey of IndyGo fixed route passengers. The results of this survey effort are documented in a summary report dated January 2002 and cross-tabulation reports for weekday, Saturday, and Sunday survey results. The summary report identifies the survey methodology (e.g., the sampling plan, data weighting and expansion, survey design and execution, and data entry and geocoding), the data collection results, and the data findings.

The COA consultant team reviewed not only the summary report, but also the cross-tabulation reports, and the final data file containing the data from each collected questionnaire, to identify information important to the COA. Examples of on-board survey data examined that would be used in development of future service plans include, origin – destination information, socioeconomic data, frequency of use, and suggestions for service adjustments/expansion. Survey results in the tables that follow are from the cross-tabulation reports presenting the weighted and expanded data set.



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## Existing Rider Profile

From the results of the on-board survey, an existing weekday rider profile has been defined, which provides a sense of what type of individual the existing service captures. While the on-board survey provides a wealth of information regarding characteristics of existing riders, the Nu-Stats report focused on several socioeconomic factors most pertinent to transit service planning, including age, ethnicity, income, vehicle availability, and transit usage. It also provided a summary of the types of service improvements existing riders indicated were most needed.

Tables 2.1 through Table 2.4 present key socioeconomic characteristics of existing weekday riders. Routes highlighted in gray indicate routes that have been discontinued since the completion of the on-board survey, including all express routes and five local routes. The data was analyzed and is presented at the system level and route level, as well as at the local bus and express bus levels. The existing weekday rider profile follows the tables.

Based on the system totals, when the on-board survey was conducted in 2001, the typical weekday IndyGo rider was a Black/African American of post-college working age (25 to 64 years old), who had a modest household income of under \$10,000 per year, did not have a personal vehicle available to make their transit trip, and used the bus to travel five days per week. Comparing local bus riders to express bus riders, it is apparent that these two types of service served significantly different transit markets, as is typically the case. The express routes were used more predominately by post-college working age persons and less by younger riders, who had significantly higher incomes, had somewhat better access to personal vehicles to make their trips, and more often used the bus to travel five days a week.

An analysis of the routes (local only, excluding express) at the sub-regional level was also performed. Routes were stratified into three general corridors crossing the county from west to east. These were generally defined as routes serving areas north of 38<sup>th</sup> Street, those serving areas south of Rockville Road and Washington Street, and those serving the central corridor between these two areas. Over 70 percent of riders using north and central corridor local routes were Black/African-American, while 54 percent of the riders using south corridor routes were Caucasian. Household incomes of riders using central corridor routes were generally lower than riders using north and south corridor routes. Only 19 percent of riders using south corridor routes used the bus to travel more than five days per week, compared to 30 percent of central and north corridor riders.



**Table 2.1  
 Gender and Age of Weekday Riders**

Route	Gender				Age							
	Male		Female		16 - 18		19 - 24		25 - 64		65+	
	#	%	#	%	#	%	#	%	#	%	#	%
2 - East 34th Street	397	45.9%	467	54.1%	78	10.0%	101	12.9%	591	75.6%	12	1.5%
3 - Michigan Street	440	38.2%	712	61.8%	61	6.1%	133	13.3%	776	77.8%	28	2.8%
4 - Fort Harrison	363	46.7%	414	53.3%	40	6.5%	128	20.9%	429	70.0%	16	2.6%
5 - E. 25th St./North Harding	591	40.5%	869	59.5%	97	7.4%	184	13.9%	975	73.9%	63	4.8%
8 - Washington Street	2122	55.2%	1723	44.8%	196	5.8%	641	18.9%	2501	73.8%	51	1.5%
9 - Airport Zone	82	67.8%	39	32.2%	3	2.8%	6	5.6%	99	91.7%	0	0.0%
10 - 10th Street	1776	46.3%	2062	53.7%	255	7.8%	627	19.3%	2249	69.1%	122	3.8%
11 - East 16th Street	86	45.7%	102	54.3%	13	8.1%	22	13.7%	126	78.3%	0	0.0%
12 - Beechcrest	687	52.8%	615	47.2%	62	5.5%	122	10.8%	937	83.1%	7	0.6%
14 - Prospect	21	38.9%	33	61.1%	4	9.1%	11	25.0%	29	65.9%	0	0.0%
15 - Riverside	327	46.3%	380	53.7%	106	15.5%	94	13.8%	466	68.3%	16	2.3%
16 - Beech Grove	95	35.7%	171	64.3%	16	6.4%	46	18.3%	180	71.7%	9	3.6%
17 - College	960	55.3%	777	44.7%	184	11.1%	268	16.2%	1169	70.5%	37	2.2%
18 - Nora	437	45.8%	518	54.2%	28	3.2%	168	19.4%	659	76.0%	12	1.4%
19 - Castleton	1479	47.8%	1618	52.2%	176	6.1%	519	18.0%	2094	72.8%	89	3.1%
21 - East 21st Street	299	43.2%	393	56.8%	57	9.3%	61	9.9%	494	80.2%	4	0.6%
22 - Shelby	251	47.3%	280	52.7%	54	10.6%	83	16.2%	351	68.7%	23	4.5%
24 - Mars Hill	191	52.9%	170	47.1%	32	9.4%	30	8.8%	256	75.3%	22	6.5%
25 - West 16th Street	850	59.0%	591	41.0%	81	7.4%	196	18.0%	794	72.8%	20	1.8%
26 - Keystone Crosstown	155	49.5%	158	50.5%	25	9.3%	28	10.4%	213	78.9%	4	1.5%
27 - Butler	83	41.1%	119	58.9%	12	7.7%	7	4.5%	127	81.9%	9	5.8%
28 - St. Vincent	210	34.5%	399	65.5%	28	4.8%	63	10.8%	471	80.5%	23	3.9%
30 - 30th Street Crosstown	251	39.3%	387	60.7%	34	6.3%	66	12.2%	436	80.4%	6	1.1%
31 - Greenwood	226	43.6%	292	56.4%	57	12.9%	33	7.5%	337	76.4%	14	3.2%
34 - Michigan Road	247	44.7%	305	55.3%	52	9.1%	96	16.8%	393	68.6%	32	5.6%
37 - Park 100	1137	61.5%	713	38.5%	49	3.0%	286	17.3%	1306	79.0%	12	0.7%
38 - Lafayette Square	620	42.7%	833	57.3%	103	9.0%	186	16.2%	819	71.3%	40	3.5%
39 - East 38th Street	1323	47.1%	1485	52.9%	302	14.0%	408	18.9%	1426	66.0%	23	1.1%
40 - Chapel Hill Express	4	15.4%	22	84.6%	0	0.0%	4	15.4%	20	76.9%	2	7.7%
44 - Castleton Express	18	50.0%	18	50.0%	0	0.0%	0	0.0%	34	100.0%	0	0.0%
45 - East 38th Street Express	50	36.0%	89	64.0%	3	3.5%	11	12.8%	70	81.4%	2	2.3%
46 - South Meridian Express	6	30.0%	14	70.0%	2	10.0%	0	0.0%	18	90.0%	0	0.0%
48 - Mitthoeffer Express	19	29.2%	46	70.8%	2	3.3%	0	0.0%	57	93.4%	2	3.3%
49 - Ameriplex	5	35.7%	9	64.3%	0	0.0%	3	18.8%	13	81.3%	0	0.0%
55 - English	91	27.9%	235	72.1%	5	1.7%	29	10.1%	231	80.8%	21	7.3%
70 - Eastside Circulator	121	39.7%	184	60.3%	38	14.6%	65	25.0%	155	59.6%	2	0.8%
<b>Local Routes</b>	<b>15923</b>	<b>48.3%</b>	<b>17053</b>	<b>51.7%</b>	<b>2248</b>	<b>7.8%</b>	<b>4710</b>	<b>16.4%</b>	<b>21102</b>	<b>73.3%</b>	<b>717</b>	<b>2.5%</b>
<b>Express Routes</b>	<b>97</b>	<b>33.9%</b>	<b>189</b>	<b>66.1%</b>	<b>7</b>	<b>3.1%</b>	<b>15</b>	<b>6.6%</b>	<b>199</b>	<b>87.7%</b>	<b>6</b>	<b>2.6%</b>
<b>System Total</b>	<b>16020</b>	<b>48.2%</b>	<b>17242</b>	<b>51.8%</b>	<b>2255</b>	<b>7.8%</b>	<b>4725</b>	<b>16.3%</b>	<b>21301</b>	<b>73.4%</b>	<b>723</b>	<b>2.5%</b>

Notes:

1) Shading indicates routes discontinued since the NuStats survey.



**Table 2.2**  
**Ethnicity of Weekday Riders**

Route	Ethnicity											
	Black/African American		White		Hispanic		Asian American		Native American		Other	
	#	%	#	%	#	%	#	%	#	%	#	%
2 - East 34th Street	650	85.0%	77	10.1%	7	0.9%	7	0.9%	5	0.7%	19	2.5%
3 - Michigan Street	641	63.2%	307	30.2%	27	2.7%	4	0.4%	17	1.7%	19	1.9%
4 - Fort Harrison	512	83.4%	66	10.7%	2	0.3%	5	0.8%	16	2.6%	13	2.1%
5 - E. 25th St./North Harding	1199	92.6%	72	5.6%	4	0.3%	0	0.0%	8	0.6%	12	0.9%
8 - Washington Street	1685	50.0%	1383	41.1%	137	4.1%	26	0.8%	83	2.5%	54	1.6%
9 - Airport Zone	64	60.4%	38	35.8%	0	0.0%	1	0.9%	0	0.0%	3	2.8%
10 - 10th Street	2153	67.1%	888	27.7%	65	2.0%	25	0.8%	26	0.8%	50	1.6%
11 - East 16th Street	103	61.3%	59	35.1%	2	1.2%	0	0.0%	2	1.2%	2	1.2%
12 - Beechcrest	524	50.6%	481	46.5%	2	0.2%	0	0.0%	28	2.7%	0	0.0%
14 - Prospect	20	50.0%	15	37.5%	4	10.0%	0	0.0%	1	2.5%	0	0.0%
15 - Riverside	511	79.7%	94	14.7%	16	2.5%	8	1.2%	0	0.0%	12	1.9%
16 - Beech Grove	131	48.5%	120	44.4%	7	2.6%	0	0.0%	0	0.0%	12	4.4%
17 - College	1251	79.5%	223	14.2%	20	1.3%	0	0.0%	26	1.7%	53	3.4%
18 - Nora	560	64.6%	280	32.3%	0	0.0%	7	0.8%	7	0.8%	13	1.5%
19 - Castleton	2071	71.9%	633	22.0%	121	4.2%	4	0.1%	30	1.0%	20	0.7%
21 - East 21st Street	357	57.2%	199	31.9%	0	0.0%	9	1.4%	18	2.9%	41	6.6%
22 - Shelby	167	33.9%	231	46.9%	45	9.1%	8	1.6%	11	2.2%	31	6.3%
24 - Mars Hill	94	27.2%	232	67.2%	0	0.0%	0	0.0%	1	0.3%	18	5.2%
25 - West 16th Street	680	62.4%	360	33.0%	12	1.1%	12	1.1%	12	1.1%	14	1.3%
26 - Keystone Crosstown	202	73.5%	50	18.2%	7	2.5%	0	0.0%	4	1.5%	12	4.4%
27 - Butler	129	87.2%	15	10.1%	0	0.0%	0	0.0%	4	2.7%	0	0.0%
28 - St. Vincent	481	83.7%	70	12.2%	17	3.0%	0	0.0%	0	0.0%	7	1.2%
30 - 30th Street Crosstown	481	87.5%	63	11.5%	0	0.0%	0	0.0%	6	1.1%	0	0.0%
31 - Greenwood	118	28.1%	269	64.0%	17	4.0%	0	0.0%	8	1.9%	8	1.9%
34 - Michigan Road	392	70.4%	105	18.9%	36	6.5%	0	0.0%	14	2.5%	10	1.8%
37 - Park 100	1355	80.8%	225	13.4%	23	1.4%	8	0.5%	8	0.5%	58	3.5%
38 - Lafayette Square	862	76.1%	225	19.9%	0	0.0%	0	0.0%	7	0.6%	38	3.4%
39 - East 38th Street	1914	87.7%	177	8.1%	28	1.3%	3	0.1%	12	0.5%	49	2.2%
40 - Chapel Hill Express	8	40.0%	12	60.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
44 - Castleton Express	10	27.8%	26	72.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
45 - East 38th Street Express	76	91.6%	2	2.4%	2	2.4%	0	0.0%	0	0.0%	3	3.6%
46 - South Meridian Express	0	0.0%	18	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
48 - Mitthoeffer Express	39	65.0%	19	31.7%	0	0.0%	0	0.0%	0	0.0%	2	3.3%
49 - Ameriplex	5	38.5%	8	61.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
55 - English	116	39.1%	156	52.5%	11	3.7%	4	1.3%	8	2.7%	2	0.7%
70 - Eastside Circulator	192	74.7%	45	17.5%	5	1.9%	0	0.0%	0	0.0%	15	5.8%
<b>Local Routes</b>	<b>19620</b>	<b>68.9%</b>	<b>7166</b>	<b>25.2%</b>	<b>615</b>	<b>2.2%</b>	<b>131</b>	<b>0.5%</b>	<b>362</b>	<b>1.3%</b>	<b>585</b>	<b>2.1%</b>
<b>Express Routes</b>	<b>133</b>	<b>61.3%</b>	<b>77</b>	<b>35.5%</b>	<b>2</b>	<b>0.9%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>5</b>	<b>2.3%</b>
<b>System Total</b>	<b>19753</b>	<b>68.8%</b>	<b>7243</b>	<b>25.2%</b>	<b>617</b>	<b>2.2%</b>	<b>131</b>	<b>0.5%</b>	<b>362</b>	<b>1.3%</b>	<b>590</b>	<b>2.1%</b>

Notes:

1) Shading indicates routes discontinued since the NuStats survey.



**Table 2.3**  
**Household Income of Weekday Riders**

Route	Household Income (see Note 2)									
	Under \$10,000		\$10,000 - \$14,999		\$15,000 - \$24,999		\$25,000 - \$49,999		\$50,000 +	
	#	%	#	%	#	%	#	%	#	%
2 - East 34th Street	246	38.1%	128	19.8%	131	20.3%	120	18.6%	21	3.3%
3 - Michigan Street	317	34.9%	183	20.1%	250	27.5%	141	15.5%	18	2.0%
4 - Fort Harrison	211	38.5%	91	16.6%	114	20.8%	95	17.3%	37	6.8%
5 - E. 25th St./North Harding	407	38.4%	243	22.9%	232	21.9%	153	14.4%	24	2.3%
8 - Washington Street	1184	37.7%	628	20.0%	743	23.7%	475	15.1%	109	3.5%
9 - Airport Zone	19	20.2%	22	23.4%	33	35.1%	17	18.1%	3	3.2%
10 - 10th Street	1171	41.8%	618	22.1%	554	19.8%	408	14.6%	49	1.8%
11 - East 16th Street	39	25.0%	29	18.6%	44	28.2%	35	22.4%	9	5.8%
12 - Beechcrest	253	32.0%	125	15.8%	351	44.4%	62	7.8%	0	0.0%
14 - Prospect	13	35.1%	5	13.5%	10	27.0%	8	21.6%	1	2.7%
15 - Riverside	160	32.0%	90	18.0%	123	24.6%	102	20.4%	25	5.0%
16 - Beech Grove	95	39.6%	15	6.3%	57	23.8%	56	23.3%	17	7.1%
17 - College	473	36.2%	267	20.4%	246	18.8%	239	18.3%	81	6.2%
18 - Nora	235	29.2%	156	19.4%	188	23.4%	175	21.7%	51	6.3%
19 - Castleton	707	28.7%	472	19.2%	768	31.2%	431	17.5%	82	3.3%
21 - East 21st Street	139	25.6%	150	27.6%	152	28.0%	98	18.0%	4	0.7%
22 - Shelby	137	33.6%	75	18.4%	113	27.7%	55	13.5%	28	6.9%
24 - Mars Hill	101	34.2%	66	22.4%	97	32.9%	30	10.2%	1	0.3%
25 - West 16th Street	205	22.9%	240	26.8%	300	33.4%	132	14.7%	20	2.2%
26 - Keystone Crosstown	75	31.4%	46	19.2%	84	35.1%	33	13.8%	1	0.4%
27 - Butler	50	35.5%	24	17.0%	19	13.5%	44	31.2%	4	2.8%
28 - St. Vincent	99	22.0%	138	30.7%	162	36.0%	45	10.0%	6	1.3%
30 - 30th Street Crosstown	171	33.9%	108	21.4%	102	20.2%	106	21.0%	18	3.6%
31 - Greenwood	70	18.2%	82	21.4%	113	29.4%	93	24.2%	26	6.8%
34 - Michigan Road	167	32.8%	112	22.0%	143	28.1%	55	10.8%	32	6.3%
37 - Park 100	374	25.5%	252	17.2%	461	31.5%	325	22.2%	53	3.6%
38 - Lafayette Square	365	36.9%	218	22.1%	297	30.1%	101	10.2%	7	0.7%
39 - East 38th Street	662	34.6%	354	18.5%	488	25.5%	330	17.3%	79	4.1%
40 - Chapel Hill Express	4	20.0%	2	10.0%	0	0.0%	10	50.0%	4	20.0%
44 - Castleton Express	0	0.0%	0	0.0%	5	16.7%	10	33.3%	15	50.0%
45 - East 38th Street Express	16	20.5%	11	14.1%	28	35.9%	20	25.6%	3	3.8%
46 - South Meridian Express	0	0.0%	0	0.0%	0	0.0%	2	14.3%	12	85.7%
48 - Mitthoeffer Express	7	13.7%	4	7.8%	17	33.3%	19	37.3%	4	7.8%
49 - Ameriplex	0	0.0%	2	13.3%	9	60.0%	2	13.3%	2	13.3%
55 - English	63	25.4%	61	24.6%	58	23.4%	51	20.6%	15	6.0%
70 - Eastside Circulator	120	46.2%	50	19.2%	58	22.3%	27	10.4%	5	1.9%
<b>Local Routes</b>	<b>8328</b>	<b>33.6%</b>	<b>5050</b>	<b>20.4%</b>	<b>6500</b>	<b>26.3%</b>	<b>4044</b>	<b>16.3%</b>	<b>828</b>	<b>3.3%</b>
<b>Express Routes</b>	<b>27</b>	<b>14.0%</b>	<b>17</b>	<b>8.8%</b>	<b>50</b>	<b>25.9%</b>	<b>61</b>	<b>31.6%</b>	<b>38</b>	<b>19.7%</b>
<b>System Total</b>	<b>8355</b>	<b>33.5%</b>	<b>5067</b>	<b>20.3%</b>	<b>6550</b>	<b>26.3%</b>	<b>4105</b>	<b>16.5%</b>	<b>866</b>	<b>3.5%</b>

Notes:

- 1) Shading indicates routes discontinued since the NuStats survey.
- 2) Household Income in 2000 (before taxes).



**Table 2.4**  
**Vehicle Availability and Transit Usage of Weekday Riders**

Route	Car Available for Trip				Days per Week Trip is Made					
	Yes		No		Less than 5		5		6 to 7	
	#	%	#	%	#	%	#	%	#	%
2 - East 34th Street	181	24.5%	559	75.5%	260	30.8%	361	42.7%	224	26.5%
3 - Michigan Street	272	27.0%	737	73.0%	327	29.9%	483	44.2%	282	25.8%
4 - Fort Harrison	174	28.4%	438	71.6%	196	28.8%	291	42.7%	194	28.5%
5 - E. 25th St./North Harding	317	24.0%	1004	76.0%	369	26.1%	642	45.4%	404	28.6%
8 - Washington Street	536	15.9%	2843	84.1%	983	27.5%	1263	35.3%	1328	37.2%
9 - Airport Zone	36	34.6%	68	65.4%	24	20.9%	78	67.8%	13	11.3%
10 - 10th Street	636	20.6%	2452	79.4%	1264	36.4%	1168	33.6%	1044	30.0%
11 - East 16th Street	35	20.8%	133	79.2%	45	22.6%	100	50.3%	54	27.1%
12 - Beechcrest	104	10.6%	880	89.4%	328	28.8%	535	47.0%	275	24.2%
14 - Prospect	15	30.6%	34	69.4%	20	37.0%	11	20.4%	23	42.6%
15 - Riverside	184	31.5%	401	68.5%	196	29.6%	299	45.1%	168	25.3%
16 - Beech Grove	48	19.7%	196	80.3%	93	34.7%	127	47.4%	48	17.9%
17 - College	393	25.3%	1158	74.7%	500	29.2%	720	42.1%	491	28.7%
18 - Nora	199	24.1%	627	75.9%	224	24.3%	459	49.8%	239	25.9%
19 - Castleton	715	24.1%	2246	75.9%	865	27.7%	1220	39.1%	1039	33.3%
21 - East 21st Street	95	15.4%	520	84.6%	263	39.1%	278	41.3%	132	19.6%
22 - Shelby	92	19.5%	380	80.5%	200	39.1%	238	46.6%	73	14.3%
24 - Mars Hill	67	19.4%	279	80.6%	108	29.3%	195	52.8%	66	17.9%
25 - West 16th Street	226	20.5%	878	79.5%	486	40.5%	363	30.3%	351	29.3%
26 - Keystone Crosstown	42	14.2%	253	85.8%	91	29.9%	138	45.4%	75	24.7%
27 - Butler	41	22.3%	143	77.7%	60	32.3%	74	39.8%	52	28.0%
28 - St. Vincent	158	26.1%	448	73.9%	170	27.7%	283	46.2%	160	26.1%
30 - 30th Street Crosstown	83	15.1%	467	84.9%	264	44.3%	179	30.0%	153	25.7%
31 - Greenwood	157	33.8%	308	66.2%	94	19.3%	282	57.9%	111	22.8%
34 - Michigan Road	86	15.6%	465	84.4%	174	28.8%	220	36.4%	210	34.8%
37 - Park 100	459	27.9%	1188	72.1%	377	20.6%	923	50.5%	526	28.8%
38 - Lafayette Square	257	21.4%	945	78.6%	474	35.4%	480	35.9%	384	28.7%
39 - East 38th Street	630	28.6%	1569	71.4%	814	34.0%	761	31.8%	817	34.2%
40 - Chapel Hill Express	10	45.5%	12	54.5%	2	7.7%	22	84.6%	2	7.7%
44 - Castleton Express	18	40.9%	26	59.1%	16	35.6%	23	51.1%	6	13.3%
45 - East 38th Street Express	34	27.2%	91	72.8%	25	18.7%	78	58.2%	31	23.1%
46 - South Meridian Express	14	77.8%	4	22.2%	6	30.0%	14	70.0%	0	0.0%
48 - Mitthoeffer Express	17	27.0%	46	73.0%	4	6.5%	48	77.4%	10	16.1%
49 - Ameriplex	3	21.4%	11	78.6%	2	12.5%	12	75.0%	2	12.5%
55 - English	69	26.2%	194	73.8%	84	28.4%	141	47.6%	71	24.0%
70 - Eastside Circulator	66	24.8%	200	75.2%	80	27.0%	94	31.8%	122	41.2%
<b>Local Routes</b>	<b>6376</b>	<b>22.5%</b>	<b>22024</b>	<b>77.5%</b>	<b>9435</b>	<b>33.2%</b>	<b>12418</b>	<b>43.7%</b>	<b>9131</b>	<b>32.2%</b>
<b>Express Routes</b>	<b>93</b>	<b>34.2%</b>	<b>179</b>	<b>65.8%</b>	<b>53</b>	<b>19.5%</b>	<b>185</b>	<b>68.0%</b>	<b>49</b>	<b>18.0%</b>
<b>System Total</b>	<b>6469</b>	<b>22.6%</b>	<b>22203</b>	<b>77.4%</b>	<b>9488</b>	<b>33.1%</b>	<b>12603</b>	<b>44.0%</b>	<b>9180</b>	<b>32.0%</b>

Notes:

1) Shading indicates routes discontinued since the NuStats survey.



IndyGo riders were also asked to identify the area of service that they felt needed the most improvement. As shown in Table 2.5, increased frequency of service and later evening service are the two top improvement areas cited by weekday riders (at nearly 31 percent and 27 percent, respectively). Increased frequency of service was cited by passengers on 16 routes as the top improvement, particularly riders on routes 15, 18, 19, and 37. Later evening service was cited by passengers on the remaining 19 routes as the top improvement, particularly riders on routes 21, 24, 27, and 49. Making transferring easier downtown and starting morning service earlier were each cited as the top improvement by over 12 percent of weekday riders.

**Table 2.5**  
**Service Improvements Most Desired by Weekday Riders**

Route	Area of Service Needing Most Improvement											
	Easier Downtown Transfers		Start AM Service Earlier		End PM Service Later		Increase Frequency of Service		Improve Access to Bus Stops		Add a New Route	
	#	%	#	%	#	%	#	%	#	%	#	%
2 - East 34th Street	80	12.9%	110	17.8%	164	26.5%	156	25.2%	54	8.7%	42	6.8%
3 - Michigan Street	114	12.7%	120	13.4%	275	30.7%	259	28.9%	51	5.7%	36	4.0%
4 - Fort Harrison	72	12.8%	64	11.4%	165	29.3%	163	29.0%	55	9.8%	31	5.5%
5 - E. 25th St./North Harding	198	18.6%	172	16.2%	268	25.2%	289	27.2%	64	6.0%	44	4.1%
8 - Washington Street	422	14.3%	357	12.1%	875	29.7%	726	24.6%	268	9.1%	177	6.0%
9 - Airport Zone	12	15.2%	16	20.3%	19	24.1%	13	16.5%	10	12.7%	3	3.8%
10 - 10th Street	336	12.4%	459	16.9%	700	25.8%	796	29.3%	207	7.6%	111	4.1%
11 - East 16th Street	18	12.0%	18	12.0%	59	39.3%	32	21.3%	18	12.0%	5	3.3%
12 - Beechcrest	156	15.8%	65	6.6%	261	26.4%	321	32.4%	31	3.1%	151	15.3%
14 - Prospect	4	10.8%	6	16.2%	14	37.8%	9	24.3%	1	2.7%	0	0.0%
15 - Riverside	49	9.2%	45	8.5%	131	24.6%	200	37.6%	49	9.2%	29	5.5%
16 - Beech Grove	15	6.6%	20	8.8%	80	35.1%	77	33.8%	2	0.9%	24	10.5%
17 - College	213	15.5%	184	13.4%	326	23.7%	414	30.1%	102	7.4%	97	7.1%
18 - Nora	82	10.7%	61	8.0%	142	18.6%	290	38.0%	86	11.3%	40	5.2%
19 - Castleton	315	12.7%	254	10.2%	444	17.9%	969	39.0%	219	8.8%	210	8.5%
21 - East 21st Street	55	9.5%	79	13.7%	265	45.8%	103	17.8%	33	5.7%	41	7.1%
22 - Shelby	79	17.5%	31	6.9%	160	35.5%	109	24.2%	24	5.3%	31	6.9%
24 - Mars Hill	14	4.2%	25	7.6%	145	43.9%	88	26.7%	17	5.2%	16	4.8%
25 - West 16th Street	101	10.9%	83	9.0%	304	32.9%	319	34.5%	37	4.0%	81	8.8%
26 - Keystone Crosstown	16	6.7%	49	20.4%	51	21.3%	86	35.8%	21	8.8%	10	4.2%
27 - Butler	6	4.3%	9	6.5%	58	41.7%	39	28.1%	19	13.7%	4	2.9%
28 - St. Vincent	46	9.1%	70	13.9%	126	25.0%	162	32.2%	46	9.1%	53	10.5%
30 - 30th Street Crosstown	45	8.8%	93	18.2%	161	31.6%	143	28.0%	31	6.1%	26	5.1%
31 - Greenwood	26	7.3%	31	8.7%	114	31.9%	87	24.4%	51	14.3%	27	7.6%
34 - Michigan Road	78	15.0%	66	12.7%	154	29.6%	140	26.9%	22	4.2%	43	8.3%
37 - Park 100	81	5.3%	193	12.7%	373	24.5%	634	41.7%	112	7.4%	53	3.5%
38 - Lafayette Square	158	15.5%	105	10.3%	244	24.0%	333	32.7%	115	11.3%	38	3.7%
39 - East 38th Street	264	13.9%	252	13.2%	437	22.9%	583	30.6%	203	10.7%	109	5.7%
40 - Chapel Hill Express	0	0.0%	4	18.2%	2	9.1%	6	27.3%	0	0.0%	0	0.0%
44 - Castleton Express	5	17.2%	8	27.6%	3	10.3%	10	34.5%	0	0.0%	3	10.3%
45 - East 38th Street Express	7	8.5%	11	13.4%	18	22.0%	26	31.7%	10	12.2%	5	6.1%
46 - South Meridian Express	2	12.5%	2	12.5%	0	0.0%	2	12.5%	0	0.0%	0	0.0%
48 - Mitthoeffer Express	4	6.8%	4	6.8%	15	25.4%	13	22.0%	6	10.2%	6	10.2%
49 - AmeriPLEX	0	0.0%	2	13.3%	8	53.3%	5	33.3%	0	0.0%	0	0.0%
55 - English	35	14.5%	16	6.6%	77	32.0%	61	25.3%	20	8.3%	12	5.0%
70 - Eastside Circulator	29	12.3%	35	14.8%	92	39.0%	33	14.0%	10	4.2%	24	10.2%
<b>Local Routes</b>	<b>3119</b>	<b>12.5%</b>	<b>3090</b>	<b>12.4%</b>	<b>6692</b>	<b>26.8%</b>	<b>7639</b>	<b>30.6%</b>	<b>1978</b>	<b>7.9%</b>	<b>1568</b>	<b>6.3%</b>
<b>Express Routes</b>	<b>18</b>	<b>8.7%</b>	<b>29</b>	<b>13.9%</b>	<b>38</b>	<b>18.3%</b>	<b>57</b>	<b>27.4%</b>	<b>16</b>	<b>7.7%</b>	<b>14</b>	<b>6.7%</b>
<b>System Total</b>	<b>3137</b>	<b>12.5%</b>	<b>3119</b>	<b>12.4%</b>	<b>6730</b>	<b>26.8%</b>	<b>7696</b>	<b>30.6%</b>	<b>1994</b>	<b>7.9%</b>	<b>1582</b>	<b>6.3%</b>

Notes:

1) Shading indicates routes discontinued since the NuStats survey.



### Origin / Destination Analysis

Also as part of the 2001 NuStats on-board survey, survey respondents were asked to specify (name, address) and categorize (home, work, etc.) the locations where their trips started (origins) and ended (destinations), and indicate where they got on and off the bus. NuStats then geocoded trip pairs of start and end points. This origin and destination data were used to assist the COA consultant team in developing near-term and short-range service changes/initiatives.

Tables 2.6 and 2.7 present the locations where trips started (origins) and ended (destinations) by location type (e.g., work, home, etc.) from the cross-tabulation reports. As trip purposes tend to vary on weekdays and weekends, the data is presented for weekday, Saturday, and Sunday service at the system level. For weekday trips, the data is also presented for the local and express routes (no express service was operated on weekends). The weighted and expanded data set in the cross-tabulation reports does not pair origins and destinations (e.g., home to work), but does provide a sense of trip purpose.

**Table 2.6  
 Trip Origins by Location Type**

	Work		Home		Shopping		College or Other School		Medical Services		Social, Church, or Personal		Other	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Weekday Routes:</b>														
Local	7974	28.1%	11869	41.8%	2716	9.6%	1203	4.2%	727	2.6%	2897	10.2%	983	3.5%
Express	101	40.7%	109	44.0%	11	4.4%	4	1.6%	0	0.0%	16	6.5%	7	2.8%
<b>Total</b>	<b>8075</b>	<b>28.2%</b>	<b>11978</b>	<b>41.9%</b>	<b>2727</b>	<b>9.5%</b>	<b>1207</b>	<b>4.2%</b>	<b>727</b>	<b>2.5%</b>	<b>2913</b>	<b>10.2%</b>	<b>990</b>	<b>3.5%</b>
<b>Saturday Routes (Total)</b>	<b>1373</b>	<b>19.1%</b>	<b>3288</b>	<b>45.7%</b>	<b>1033</b>	<b>14.4%</b>	<b>216</b>	<b>3.0%</b>	<b>154</b>	<b>2.1%</b>	<b>878</b>	<b>12.2%</b>	<b>253</b>	<b>3.5%</b>
<b>Sunday Routes (Total)</b>	<b>1935</b>	<b>31.0%</b>	<b>2323</b>	<b>37.3%</b>	<b>1035</b>	<b>16.6%</b>	<b>49</b>	<b>0.8%</b>	<b>43</b>	<b>0.7%</b>	<b>687</b>	<b>11.0%</b>	<b>162</b>	<b>2.6%</b>

**Table 2.7  
 Trip Destinations**

	Work		Home		Shopping		College or Other School		Medical Services		Social, Church, or Personal		Other	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Weekday Routes:</b>														
Local	8924	31.1%	10908	38.0%	2206	7.7%	1305	4.6%	1111	3.9%	3244	11.3%	977	3.4%
Express	145	53.9%	100	37.2%	2	0.7%	7	2.6%	0	0.0%	12	4.5%	3	1.1%
<b>Total</b>	<b>9069</b>	<b>31.3%</b>	<b>11008</b>	<b>38.0%</b>	<b>2208</b>	<b>7.6%</b>	<b>1312</b>	<b>4.5%</b>	<b>1111</b>	<b>3.8%</b>	<b>3256</b>	<b>11.2%</b>	<b>980</b>	<b>3.4%</b>
<b>Saturday Routes (Total)</b>	<b>1868</b>	<b>25.9%</b>	<b>2415</b>	<b>33.5%</b>	<b>1263</b>	<b>17.5%</b>	<b>155</b>	<b>2.2%</b>	<b>158</b>	<b>2.2%</b>	<b>1020</b>	<b>14.2%</b>	<b>320</b>	<b>4.4%</b>
<b>Sunday Routes (Total)</b>	<b>1396</b>	<b>21.4%</b>	<b>3307</b>	<b>50.7%</b>	<b>835</b>	<b>12.8%</b>	<b>39</b>	<b>0.6%</b>	<b>53</b>	<b>0.8%</b>	<b>768</b>	<b>11.8%</b>	<b>125</b>	<b>1.9%</b>

Not surprisingly, the survey results reveal a majority of trips to and from home and work, according to weekday, Saturday, and Sunday respondents. On weekdays, only 30 percent of local bus trips began or ended at a location other than home or work. For express bus trips, home and work trips are even more prevalent, with only 15 percent of origins and 9 percent of destinations reported as other categories.



Trips for shopping purposes or social/church/personal business were next most commonly cited. Not surprisingly, these trips were more common on the weekend than during the week. Generally, shopping trips were more prevalent as a percentage of route totals on routes serving key shopping areas.

In addition to the expanded survey results discussed above, the COA consultant team examined the origins and destinations cited by riders in the final data file to identify major activity centers and trip attractors. These include the government buildings and Circle Centre Mall downtown, IUPUI and adjacent hospitals, Washington Square Mall and the shopping centers immediately to the east, Castleton Square Mall, Lafayette Square Mall, Ivy Tech State College (main campus), the airport, and Methodist Hospital.

### 2.1.3 Service Area Field Observations

Effective route service planning requires a thorough understanding of the IndyGo transit system. To supplement the data collected and reviewed as described above, members of the consultant team spent time “in the field” driving the study area and IndyGo routes, watching transit operations, and documenting their observations. Field observation is clearly one of the most critical components to the process of fully understanding IndyGo’s transit services, operating environment, local geography and customer mobility needs.

The purpose of this in-field investigation was threefold: (1) to gain firsthand knowledge and understanding of the markets that each route serves, observing major trip attractors (hospitals, shopping centers, apartment complexes, schools and colleges, social service agencies, etc.) and general socioeconomic characteristics, (2) to review and evaluate suggestions made by staff, and (3) to investigate possible new routes, route extensions, and route modifications.

General issues and opportunities observed during the initial field observations include the following:

- The route system is primarily oriented to downtown Indianapolis (i.e., radial network), resulting in less effective service to other service area activity centers.
- Many IndyGo routes have multiple branches that can be very confusing to passengers.
- Deviations to serve specific locations are also common, but may not be productive.
- Infrequent select trips are made to outlying locations (many of which were previously service by discontinued routes).
- Non-exclusive downtown loop operations are difficult and time-consuming, particularly during congested peak periods.
- Downtown Transit Operations: Passengers experience difficulty making transfers along the downtown loop, as buses are scheduled to arrive concurrently at key locations along Ohio Street. Transfers are missed as some buses arrive early attempting to ensure passengers on those buses the increased opportunity of making their transfer connection, however departing early and negating the ability of passengers from other routes making connections to those routes that arrive/depart early.
- Additional crosstown routes could provide important activity center connections and reduce the need to transfer downtown. However, corridors with consistent transit market potential are difficult to identify, particularly north of 38<sup>th</sup> Street. Additionally, the lack of transit facilities throughout the transit system reduces the ability of operating effective crosstown routes with strong activity center transit center facilities to anchor the service.
- The revitalization of the downtown area and surrounding neighborhoods (generally north and northeast) is impressive and suggests opportunities for circulator and shuttle services.
- Several existing transfer points are located in older shopping centers/malls that are in decline (e.g., Eastgate Consumer Mall, Lafayette Square Mall) or have closed.



- In general, passenger amenities (i.e., shelters, benches, adequate access to/from bus stop) are inadequate and need improvement. This applies to transit center locations as well as individual bus stop locations.
- IndyGo's current service area does not reach some of the newer developments in Marion County that appear to be good transit market areas (apartments, shopping centers, mobile home parks, etc.).
- A number of communities in outlying counties appear to have good potential for some form of transit service(s).
- A number of the outlying community's exhibit qualities and travel patterns supportive of express type service, yet no service currently operate to/from these communities.

#### 2.1.4 Agency Staff Input

Although the collection and review of existing data sources and field observation is essential to the development of schedule and route modifications, it is critical that the consultant team receive staff input concerning route history, service performance, current service plans (or thoughts) and route recommendations. The COA went beyond a simple review of existing transit service planning procedures by emphasizing direct communications with the front-line staff responsible for the planning, implementation, and operation of existing and future services. The results of this task have assisted the consultant team by 1) providing insider insight to issues specific to particular routes or areas of the Indianapolis region, and 2) establishing contacts with which to seek input and feedback on service recommendations.

Members of the consultant team spent three days conducting staff interviews. IndyGo management staff arranged and scheduled seven group sessions at the request of the consultant team. During five sessions lasting 1½ hour each, the team met with 28 front-line staff (bus operators, road supervisors, etc.) at IndyGo's garage. While potential topic areas were suggested, each session was held on an informal basis where staff could make suggestions and pass on their observations about current route productivity, possible route modifications or extensions, and other operating issues.

Two additional sessions were held during the same time period, one with IndyGo senior management staff and the other with IndyGo's planning, scheduling, and operations management staff. These meetings provided valuable insights into the larger local and regional framework guiding current transit planning, coordination, and funding initiatives in Indianapolis, as well as additional input regarding service planning focus areas and specific thoughts on service modifications.

Additionally, members of the consultant team spent time in the bus operators break room speaking with bus operators concerning their insights on service related issues. Once again this was a very fruitful experience, resulting in many excellent ideas related to the improvement of IndyGo bus service. During the course of the meetings, many valuable route specific comments and suggestions were made and documented by the consultant team. Field-work conducted after these meetings allowed the team to evaluate suggestions and comments immediately afterwards. Following is a brief list of some of the comments received during these interview sessions.

##### Front-line Staff

- Span of service should be extended, particularly at night and on weekends
- Frequency should be improved on key routes
- Scheduling changes (e.g., changes in run times) have impacted passengers' ability to make connections (transfers) between routes
- Schedule adherence and customer service have become conflicting goals for operators
- The downtown loop has outlived its time; a downtown transit center would be very beneficial to transferring



passengers

- Some end-of-line layover points are in dangerous areas or lack restrooms available to operators, particularly at night
- Need additional crosstown routes connecting radial routes; the need for a crosstown route on 38<sup>th</sup> Street from Eagle Creek to German Church was heavily emphasized
- Other crosstown corridors/connections suggested include 86<sup>th</sup> Street, Pendleton Pike to Washington Road at German Church, Shadeland/Arlington/Emerson, Lynhurst/Moller/Georgetown, and Glendale to Greenwood Park Mall via Emerson/County Line
- Consider reinstating (perhaps modified) 70/Eastside Circulator, 9/Airport Zone, 27/Butler, 44/Castleton Express, and 46/South Meridian Express
- Need additional peak (possibly express) service on 37/Park 100 to Hewlett-Packard
- Most frequently cited route extensions include 4/Fort Harrison, 30/30<sup>th</sup> Street Crosstown, 38/Lafayette Square, and 39/East 38<sup>th</sup> Street
- Areas most frequently cited that need new or additional transit service include Lawrence/Pendleton Pike, German Church Road, Washington Square Mall and beyond to Wal-Mart/Meijer, airport, southside hospitals and Greenwood Park Mall, Carmel/Fishers, Plainfield, and Avon

#### Senior Management

- Additional local funding available starting in 2005 for improvements to system
- Initial focus areas: frequencies, signage and shelters, communications system
- Identify new transit centers in urban centers, where routes could make connections and turn back
- Fill gaps in service/service areas, such as burgeoning retail centers and areas beyond Marion County (commute and reverse commute)
- Support “urban living” downtown and in surrounding revitalized neighborhoods with circulators and connector routes
- Develop key corridors with very frequent service in exclusive lanes

#### Planning/Scheduling/Operations

- Looking at modifications (extensions, frequencies) to take place in early 2005 to 37/Park 100, 38/Lafayette Square, and 39/E. 38<sup>th</sup> Street routes
- Need to streamline and simplify additional routes that are confusing to passengers (e.g., routes 2, 4, 12, and 18)
- For Lawrence, have looked at circulator service that extends out Pendleton Pike, as well as a connector to Castleton Square Mall
- May be able to eliminate legs on 10/10<sup>th</sup> Street (northwest) and 4/Fort Harrison (Shadeland)
- Should modify 30/30<sup>th</sup> Street Crosstown to eliminate service to LaRue Carter Hospital; could either extend route or turn back service at Marion College
- Crosstown route on Emerson or Post would be better than Shadeland; if on Emerson, could connect to a transit center at Glendale
- In addition to Glendale, think there may be a need for a transit center on the west side, perhaps at the post office on High School, and on the south side, possibly at the University of Indianapolis
- Would like to provide fixed-route service in 86<sup>th</sup> corridor from new shopping center at I-465 on west to Castleton



Square Mall on east

- Recognize need to serve subsidized housing and transit dependent population that were served by 70/Eastside Circulator
- Interested in express service from Lawrence, Fishers, and maybe Greenwood
- See need to serve Plainfield, Avon, Noblesville, and possibly Carmel
- Other growth areas may need to serve include warehouses and mobile home parks behind the airport and near Bluff Road on the south side

## 2.2 Evaluation of Existing Service

Below is a brief description of the evaluation of existing service performed as part of the COA. The evaluation of existing service comprised the development of service performance monitoring indicators, the preparation of route performance profiles and service efficiency analysis, and the identification of key operational, alignment and schedule issues on a route-by-route level. Each of these efforts is briefly described below.

### 2.2.1 Service Performance Monitoring Indicators

The objective of this task was to recommend the appropriate performance monitoring indicators (operational, financial and customer service) for IndyGo's bus system based on existing bus system performance indicators and on the results of a peer group analysis (described briefly below). These performance indicators were used in analyzing and evaluating alternatives for restructuring the system in subsequent tasks of the COA.

### Transit Industry Practices

An excellent synthesis of transit industry practices regarding bus route evaluation measures (that is, performance monitoring indicators) was prepared by the Transit Cooperative Research Program (TCRP) in their *Synthesis 10: Bus Route Evaluation Standards* (1995). As described in this report, there are many different types of standards that can be used in the evaluation of existing or new routes. In addition, TCRP *Report 88: A Guidebook for Developing a Transit Performance-Measurement System* (2003) provides processes for determining the most appropriate performance indicators that address customer-oriented and community issues.

Many performance indicators and measures have been developed and used in a variety of ways in response to differing transit system goals and objectives. The TCRP *Synthesis 10* report describes numerous performance and service criteria used in the process of evaluating bus routes. These criteria initially serve as indicators that gauge the quality and quantity of service offered by a public transit system's bus routes. They also include a number of items that determine, as well as reflect, the manner in which transit systems offer service to the public, and are often directly related to the costs of service provision. Route evaluation standards can be divided into five broad categories: route design, schedule design, economics and productivity, service delivery monitoring and passenger comfort and safety.

Under the **Route Design** category, the following fifteen criteria are used to evaluate the basic structure and design of a transit system's route network. These criteria measure factors such as location of transit services, the structure and configuration of transit routes and patron accessibility to transit services:

- Population density
- Employment density
- Spacing between other bus routes and corridors



- Limitations on the number of deviations or branches
- Equal (geographic) coverage throughout the local tax base
- System design considerations such as enhancement of timed transfers
- Streamlining/reduction of routing duplications
- Network connectivity
- Service equity
- Route directness
- Proximity to residences
- Proximity to non-residential generators
- Limitation on the number of transfers required of riders
- Bus stop siting requirements
- Bus stop spacing requirements

The criteria for **Schedule Design** are used in designing or redesigning a route's frequency and help determine and establish the scheduled interval between buses as well as the starting and ending time of service on a given day (span of service). Schedule design issues are often the items that largely determine and reflect service quality to the customer. These criteria include the following:

- Differing levels of service (local versus express)
- Maximum number of standees
- Maximum intervals
- Peak versus off-peak periods
- Minimum intervals
- Standees versus no standees
- Duration of standee time
- Timed meets, or time to be spent waiting at a transfer point
- Use of clock-face schedules
- Span of service

The criteria for **Economic and Productivity** standards measure financial and ridership performance at the route level. The criteria are as follows:

- Passengers per hour
- Cost per passenger
- Passengers per mile
- Passengers per trip
- Passenger miles
- Revenue per passenger per route (either in absolute dollars or as a percentage of variable cost)
- Subsidy per passenger
- Route level minimum variable cost recovery ratio
- Route level minimum cost that also includes semi variable and/or fully allocated/fixed costs
- Route level performance relative to other routes in the system

The next category is **Service Delivery** standards that measure a route's service as actually delivered to a passenger. Service Delivery criteria include the following:

- On-time performance
- Headway adherence (evenness of interval)



Finally, **Passenger Comfort and Safety** measures the quality of service that is provided. These criteria are as follows:

- Passenger complaints
- Missed trips and unscheduled extras
- Accidents
- Passenger environment conditions (for example, vehicle cleanliness, vehicle condition, missing bus stop signs, blank destination signs)
- Special information (or special intervals) in areas where riders do not feel secure waiting for buses

All of these standards can be used in one way or another to determine the effectiveness of a route and whether or not changes need to be made. However, some standards are used more widely than others reflecting the particular needs of each transit agency and the availability of data. Most transit systems collect data and report several of the above criteria for the evaluation of system-wide operations. For route-specific analyses, however, most transit agencies rely on a much more limited list of criteria and standards.

### **Recommended Performance Monitoring Indicators**

When developing transit performance guidelines, criteria and standards, it is important to strike a balance between the benefits that result from having a structured monitoring and evaluation process and the staff resources and data requirements needed to support such a process. On the one hand, a highly structured monitoring and evaluation process can provide a mechanism for ensuring that decisions made regarding the provision of transit services are founded on sound data and operating practices. Such an approach should lead to a system of highly productive transit services. On the other hand, this approach may require an extensive amount of data collection, analysis and documentation that would consume a large commitment in staff resources, or at least more than are currently available to most transit agencies, including IndyGo.

Two sets of performance monitoring indicators are proposed. The first set, **Route & Schedule Design Standards**, codify good transit planning and operations practices. Most of the data required is readily available, although additional staff resources may be necessary to compile analyze and report. These guidelines and standards serve several purposes: (1) they serve to inform decision-makers, who may not have a background in the transit industry, about good transit practices; (2) they provide an objective basis for planning new services and evaluating existing services; (3) they serve as a “compass” to both staff and decision-makers who often may be caught up in reactive responses to external factors; and (4) they support the route performance evaluation process and standards described in the second set of performance monitoring indicators.

The second set of indicators, **Route Performance Evaluation Measures**, are the factors used in a periodic (annual) evaluation of existing services that generates recommendations for service changes designed to improve the productivity of existing and planned services.

The recommended Route & Schedule Design Standards and Route Performance Evaluation Process are described in more detail in COA Task 2 Technical Memorandum – Existing Service Evaluation Report.

### **2.2.2 Route Performance Profiles & Service Efficiency Analysis**

To develop sound Near-Term and Short-Range service plans for the Indianapolis area, it is critical to conduct a comprehensive evaluation of the existing transit services. A comprehensive evaluation involves a review of route performance data and report. The emphasis of this task was to create a set of performance reports for all existing



IndyGo fixed routes. This involved the assembly of available data related to service performance and the development of consistent summary profiles by route.

As part of the COA study, route performance profiles were developed for each route. These profiles are very detailed and are presented in COA Task 2 Technical Memorandum – Existing Service Evaluation Report. Each profile includes a summary page highlighting key information, such as daily service characteristics, monthly route performance, and weekday ridecheck survey results; a route map depicting ridecheck counts by route segment; graphs of ridecheck ons/offers and line loads; and the actual ridecheck tables. This profile information, as well as the key operational, alignment, and schedule issues was used as inputs to the development of the COA Service Plans.

### 2.2.3 Key Operational, Alignment and Schedule Issues

After completion of the individual route profiles, the COA consultant team reviewed key operational, service alignment, and schedule issues for each IndyGo route. This information was used to develop the COA Service Plans presented in Chapter 3 of this report. For each route, the following topic areas were addressed:

- Existing Service & Passenger Characteristics
- Route Alignment Issues
  - Route Complexity
  - Directness of Route Alignment
  - Major Trip/Ridership Generators
  - End of Line Locations
  - Reverse Commute/Bi-Directional Demand
  - Traffic and Bus Turning Movement Issues
- Schedule Issues
  - Headways (trunk, branches, one-way pairs)
  - Hours & Days of Operation
  - Capacity Utilization
  - Schedule Arrival & Departure Times at Key Generators
  - Transfer Connections and Schedule Timing
  - Interlining
  - Time Point Locations
  - Schedule Adherence
  - Cycle Times
  - Equipment Utilization

Although each of these topic areas were addressed with each route in detail, major issues systemwide became very clear. The following items appear to be the most significant overall system level issues that will need to be addressed through the implementation of the COA recommendations:

#### Downtown Loop / Pulse

The existing downtown loop operation, where all local bus routes utilize Ohio Street, Capital Avenue, Maryland Street and Delaware Street, has been used for well over a decade. The bus loop operation was designed to ensure all downtown bound bus routes made connections to all other routes serving downtown, as well as provide a larger geographical distribution/collection of transit riders in the downtown area. Several capital improvements have occurred over the years to improve operational efficiency of the downtown bus loop, such as bus prioritization at key intersections to allow buses advancement through an intersection in advance of general automobile traffic and merge



left across several left lanes without automobile traffic conflict, and passenger shelters at key high ridership bus stops.

As part of the COA Study, the consultant team has reviewed the downtown bus loop operations for efficiency and effectiveness. Through this analysis, the team has discovered several operational and customer problems with current operations, suggesting the need to explore other options for providing bus transit service to the downtown area. Following are a list of barriers to efficient and effective bus operations in the downtown core.

- **Downtown Bus Loop Travel Time** – currently buses are given a set amount of time to travel around the downtown bus loop, dependent on the location they enter the loop, whether they serve the entire loop, and where they depart the loop. Experience has shown that actual travel times exceed scheduled travel times consistently, resulting in buses departing downtown behind schedule. Late departures from downtown can have significant impacts on some short routes, as some of these routes have minimal layover times at the non-downtown end-of-lines. Note, no or very minimal layover is given at the downtown end of the route, because buses operate along curbside lanes eliminating the ability to stage a bus as others need to proceed. As IndyGo continues to grow the size of their bus fleet, increasing service frequencies and the number of buses operating along the downtown bus loop, bus schedule delays will continue to grow at an increasing rate.
- **Passenger Confusion and Route-to-Route Transfer Difficulties** – currently most bus routes are scheduled to arrive at the downtown loop at both 10 and 40 minutes after the hour or at 20 and 50 minutes after the hour. This is commonly referred to as a pulse time system. The routes are scheduled to arrive at these times to minimize transfer times between routes, specifically for those routes operating less frequently (e.g., 60 minutes). This system, although designed to ensure passenger connections, in fact results in missed transfers. Buses arriving at the downtown bus loop at the same time line up “nose-to-tail” in the curb lane often times along two to three block in downtown along Ohio Street. Passengers exit the buses and attempt to figure out if the bus they are trying to catch is behind the bus they exited or in front, with the result being temporary confusion. Some passengers have a good sense of which direction the bus route is that they are trying to catch, however this can vary on a daily basis, resulting from variability in travel times due to traffic, traffic signals and which bus operator is driving. The result of this confusion is passengers missing transfer connections to other routes causing them to wait until the next bus on that route arrives, which in some cases could be an hour.
- **Safety** – in addition to passenger confusion, panic ensues as these passengers rush to catch their transfer bus. The net result is poor decision making and increased safety risks. Passengers currently run between buses, often crossing the street mid-block risking being hit by automobile traffic or other buses.
- **Impacts on Bus Route On-Time Performance** – on-time performance is impacted in two ways by the current downtown bus loop operations; 1) bus operators attempt to arrive downtown early to assist their passengers by being at the front of the bus line-up, thus their passengers know the bus they are trying to catch is more than likely coming from behind the bus they exited, so all they have to do is wait where they exited and catch their transfer bus. This reduces confusion and safety risks for these passengers, however results in bus operators competing against each other for lead position in the line up, again resulting in increased safety risks (i.e., speeding, unsafe bus operations and still riders confused and rushing to catch other buses. The result is bus operators leaving the time point prior to the downtown bus loop early in order to make “lead or poll position”, impacting on-time performance at this time point; 2) on-time performance is also impacted as buses arrive and depart downtown bus loop time points early or arrive early and have to wait (leaving late) at the beginning of the line-up for passenger attempting to run to the front of the line to catch the bus.
- **Inefficiencies Caused by Time Pulse** – the time pulse is achieved along the downtown bus loop by ensuring the route schedule is written to meet these times, often at the expense of other transfer



connections throughout the system. Often times transfer connections at other transfer locations are missed by minutes because the bus cannot wait any longer or arrive any earlier because the focus is on making the downtown pulse. This is very common around the transit industry and is not typically a problem in transit systems that operate very frequent transit service (e.g., 15 minutes or more frequent). However, with systems like IndyGo, most routes operate at 30 to 60 minute service frequencies resulting in more emphasis placed on timed transfer (i.e., those transfers that are scheduled to occur between two or more routes at a given location at a given time) for those locations with the greatest ridership and transfer activity (typically downtowns). Not only does the downtown time pulse result in missed transfer connections throughout the system, it restricts the transit scheduler to ensuring all route schedules are written around a specific event (i.e., downtown pulse) reducing the ability to link and interline bus routes through non-downtown locations, resulting in schedule inefficiencies and potential under utilization of equipment.

- **Conflict with Automobile Traffic** – The downtown loop consists of left-turns, which, when combined with the right-side doors of vehicles, forces weaving conditions that can impact both automobile and bus performance. Although some signal prioritization occurs at select intersections, buses are still required to mix and compete with automobiles around the downtown bus loop, at the same time attempting to board passenger at some of the highest boarding bus stops in the system as they watch very closely so as not to hit bus passengers running between buses.

### Lack of Route Interlining

Interlining is the linking of two bus routes together through a common location (i.e., transit center, end-of-line, downtown bus loop). Buses arrive as one route and depart as the linked route. Advantages to interlining include efficient use of transit vehicles by sharing equipment, possible reductions in non-revenue travel time and distances, and through riding or the ability of a bus passenger to stay on the arriving bus and depart on another route towards their destination.

Currently very little interlining occurs within the IndyGo bus system. The route-by-route service analysis performed as part of this COA study revealed some inefficient use of buses. This was determined by the excessive amount of layover time given to some routes at their end-of-line locations. In some cases, interlining two routes (or more) together provides the transit scheduler the ability to share resources (buses) between routes, thus possibly saving resources overall. Example: If two routes each require 2.5 buses to maintain 30 minute frequencies, stand alone each route would be allocated 3 buses, resulting in excessive layover times on each route and inefficient use of the transit vehicles. If interlined together through a common location, these two routes would require 5 buses between them resulting in the need for one less bus and less vehicle hours and operating expense.

Again, although some minimal interlining does occur with the existing system, increased opportunities will present themselves as recommendations from the COA Service Plans begin to be implemented. Much of the existing limitations on interlining result from the time pulse that occurs at the downtown loop. Once service frequency improvements begin to be implemented, service will begin to operate frequent enough to reduce and eventually eliminate the need to continue the downtown loop pulse, thus increasing the ability to interline routes, share resources, and increase efficiencies.

### Transit Quality of Service and On-Time Performance

Typically, service quality evaluation involves the analysis of service supply versus service demand, i.e., is there sufficient service supplied versus what is required or in demand. Often, service analyzes only concentrate on whether the route operates frequent enough, long enough into the evening hours and on weekends. Although these are all very important to determining service effectiveness and efficiency. Service quality evaluation includes the evaluation



of items such as: bus stop accessibility, cleanliness, safety and shelter; transit vehicle cleanliness, comfort (quality of ride) and maintenance; value for fare given; and service levels, hours and days of service.

The provision of quality service is a very important element in attracting transit ridership, and thus service effectiveness and efficiency. Also of high importance to the evaluation of service quality is whether the service operates on-time (i.e., as stated on a published schedule). Generally, all public transit schedules state that the times listed on these schedules are approximate and can vary due to road and traffic conditions. With all the responsibilities required (passenger safety, safe traffic operations, fare collection, maintaining published schedule times, etc.) as well as distractions and delays (traffic, traffic signals, roadway construction, emergency vehicles, vehicular accidents) encountered by transit bus operators, maintaining a time schedule along a given route can be very difficult. Nevertheless, maintaining a high level of on-time performance is essential to providing a high quality of bus service.

On-time performance is measured by virtually every transit system in the world. It is essential to determining proper resource allocation (i.e., number of buses) and ensuring a high quality of service. What is considered good on-time performance, in light of the many possible deterrents to maintaining a published schedule? Transit industry on-time performance is typically measured as a percentage of trips or measured locations (such as timepoints on a schedule) that depart that location within a defined range of time (on-time range) near the published schedule time. Typically, early departures from time points is considered poor on-time performance, as passenger arriving at the bus stop very near the published schedule time would miss their bus. Although time can be exactly determined given a national time standard, times reflected on individual timepieces can vary quite significantly. Therefore some systems consider buses that depart time points a minute or two early as still being on-time. Buses leaving late from a time point can also be considered on-time within reason. On-time late departures from time points vary by system, and can range from 2 or 3 minutes to 5 or 6 minutes.

As part of the COA ridecheck survey performed, surveyor staff were asked to record departure times at all timepoints along the routes they surveyed. These individuals were also asked to synchronize their time pieces with that shown on the official IndyGo time clock located in the bus garage dispatch office. IndyGo bus operators are also asked to do the same. Thus, consistent directions are provided to both the bus operators and surveyors. Although asked to record time point departure times to the closest minute, some surveyors still missed recording time at some timepoints along a route. Overall, departure times were recorded at most of the time points in the system for virtually all of the trips survey (e.g., on weekdays, 9,078 timepoints were sampled on 915 of all trips operated on a typical weekday).

For the COA Study, on-time transit service was assumed to be those buses departing up to 2 minutes early and 5 minutes late at a given time point. This range is consistent with industry standards for on-time performance measurement and allows for inconsistency in time displayed on surveyor timepieces of variations in exact location of which the time was recorded. The COA ridecheck yielded a net systemwide on-time performance of 77%, which is lower than desirable. Some routes experienced much better on-time performance, with select routes achieving on-time performance in the high 90% range. Whether the surveyors properly recorded the time at the time points is certainly debatable, and on-time performance may have improved since the dates these were recorded in the fall of 2004. Nevertheless, poor on-time performance is identified as a significant issue with regards to evaluating the quality of transit service supplied. In all fairness however, on-time performance can change significantly on a daily basis, and some of the ridecheck surveys may have recorded non-typical days. Additionally, service adjustments have been made since the time the on-board ridecheck survey was performed and on-time performance has improved. Additionally, on-time performance checks have been completed between January 1, 2005 and April 30, 2005 by IndyGo Supervisory staff. These checks have yielded an on-time performance of 90.2%, which shows considerable improvements over results of on-time performance checks performed in the fall of 2004.



In conclusion, a program of continuous ridecheck / on-time performance check is encouraged. This program should involve the random selection of time points from which to check service on-time performance. As noted earlier in this report, all weekday fixed route bus trips should be sampled at least once annually. Supervisor checks combined with regularly scheduled time point performance checks should provide sufficient data to evaluate on-time performance on a systemwide as well as route level basis.

### **Branch operations**

Several input sources are considered by transit service planners in the design of public transit service. Service design involves alignment considerations, stop locations, service levels (i.e., frequency of service) and days of service, connectivity between routes and types of service, transit facilities and amenities to name a few. Alignment considerations impact the directness of travel for the passenger as well as what areas are served and ridership potential. There are several different schools of thought with regards to the design of a transit route, as well as goals for which the service is designed to accomplish. Nevertheless, poor or confusing route design impacts ridership potential. The best policy is to keep it simple.

IndyGo operates a number of routes throughout the system with turnback operations (buses that do not travel the entire length of the route, however turn around short of the full route length), as well as alignment branches on other routes (much like a tree, service at some point branches to two or more locations from the trunk alignment). Typically branch alignments and turnback service are effective where ridership demands are high along a portion of the route and diminish significantly at a given point. The branches are typically operated at the trunk frequency multiplied by the number of branches (e.g., 30 minute trunk frequency times two branches equals 60 minute frequency of each branch alignment). Other times, service on select branches can amount to only a couple or few trips daily, with all other service continuing along a second branch alignment or multiple other branch alignments. IndyGo operates several routes with turnback and branch operations. Upon further review of the ridecheck data results it was noted that many of the branch alignments which operated only select trips experienced extremely low ridership volumes.

As part of the Near-Term service plan, many of the existing inefficient branch alignments were proposed for elimination as others were assumed by other route modifications or by new routes entirely. The route recommendations designed in the Near-Term service plan attempt to continue to provide service where is effective, or where service could be effective should a sufficient level or quantity of service be supplied.

## **2.3 Service Needs Analysis**

While Task 2 of the COA focused heavily on existing service ridership patterns and use, performance and efficiency and effectiveness, Task 3 concentrates on future needs from a travel pattern and market/environment perspective. Three subtasks were performed to ascertain transit service needs in the Indianapolis region; 1) travel pattern analysis, 2) socioeconomic / land use analysis, and 3) a peer group analysis. The following section briefly describe the results of this analysis. A full description of these analyzes can be found in COA Technical Memorandum 3 – Service Needs Analysis.

### **2.3.1 Travel Pattern Analysis**

To gain a perspective of market potential for transit services, the COA consultant team examined travel patterns throughout the nine-county Indianapolis region. This effort involved an analysis of current and future travel patterns based on travel model projections. It presents a travel desire analysis for both work and non-work trip purposes suggesting where person trips may accumulate along regional corridors.



For the analysis, the consultant team used person trip estimates resulting from the Indianapolis Metropolitan Planning Organization's (Indianapolis MPO's) travel demand forecasting model, as enhanced for the study. Of particular relevance to the travel pattern analysis is the use of recently modified air passenger trip generation and distribution forecasts.

The Indianapolis MPO's model uses 1,285 traffic analysis zones (TAZs) to represent the nine-county region. TAZs are the standard geographical unit used in travel demand modeling, and are generally of small size (several blocks in dense urban areas to a few square miles in semi-rural areas) and of similar development characteristics. In the Indianapolis region, zone structure is generally most definitive (i.e., smaller zones) in the urbanized area encompassing Marion County and suburban portions of surrounding counties. Zonal definition becomes more aggregate moving outward, away from Indianapolis.

For the purposes of this analysis, the 1,285 TAZs were aggregated into 33 analysis districts reflecting major activity centers (e.g., downtown Indianapolis, the airport, and Keystone Crossing) and other clusters of trip activity. Similar to the zone structure, the districts are smaller in the urbanized area and larger in the outlying areas of the region.

### **Travel Desire Analysis for Work Trips**

Figures 2.1 and 2.2 show the results of assigning district-level work trips (HBW person trips) to the spider network, for the years 2000 and 2025 respectively. During the assignment process, trips are allowed to pass through district centroids, and person trip volumes accumulate en route along the links of the spider network. The assignment results do not reflect travel along highways; rather they define district-to-district people flows. Volumes reflect the sum of both travel directions.

In Figure 2.1, the assignment results suggest the highest volumes of persons traveling to and from work (69,391) accumulate between downtown Indianapolis and the high population density area immediately to the east, encompassing the Washington Street corridor. This movement is currently served by a number of IndyGo routes. Another 49,021 HBW trips accumulate between this district and the area to the northeast, including Lawrence and the population and employment centers between Pendleton Pike and I-70. IndyGo service is also provided in this generalized corridor, although not as extensively. Some 41,185 HBW trips accumulate between downtown Indianapolis and the area directly to the north, encompassing the well-served North Meridian corridor.

Outside the current IndyGo service area, the assignment results suggest work trip volumes in the mid-range (25,000 to 40,000) stretching out to several suburbs, such as the Carmel/Westfield, Fishers/Noblesville, and Avon/Plainfield areas.

Figure 2.2 presents the projected 2025 assignment results. The growth in work trip volumes reflects the region's general suburban growth trends, with population, households, and employment projected to continue to move further away from the urban core. The results reflect the growing need to connect suburban communities with the urban core. For instance, volumes between Carmel/Westfield are predicted to grow from 25,327 to 34,585, an increase of over 36 percent. Even more striking is the projected growth in suburb to suburb travel desire, such as between Carmel/Westfield and Fishers/Noblesville and between Avon/Plainfield and Southport/Greenwood.

Figure 2.1

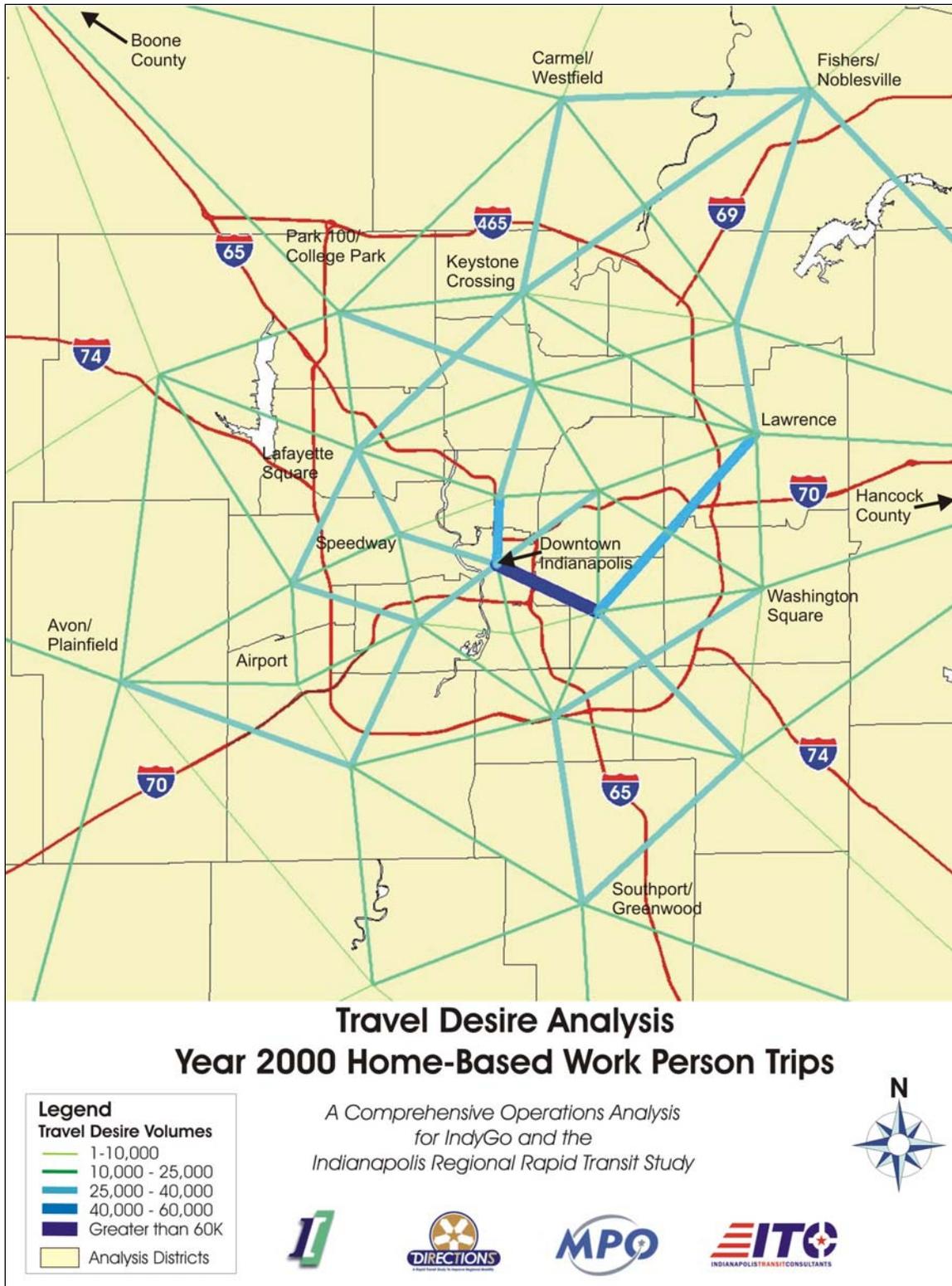
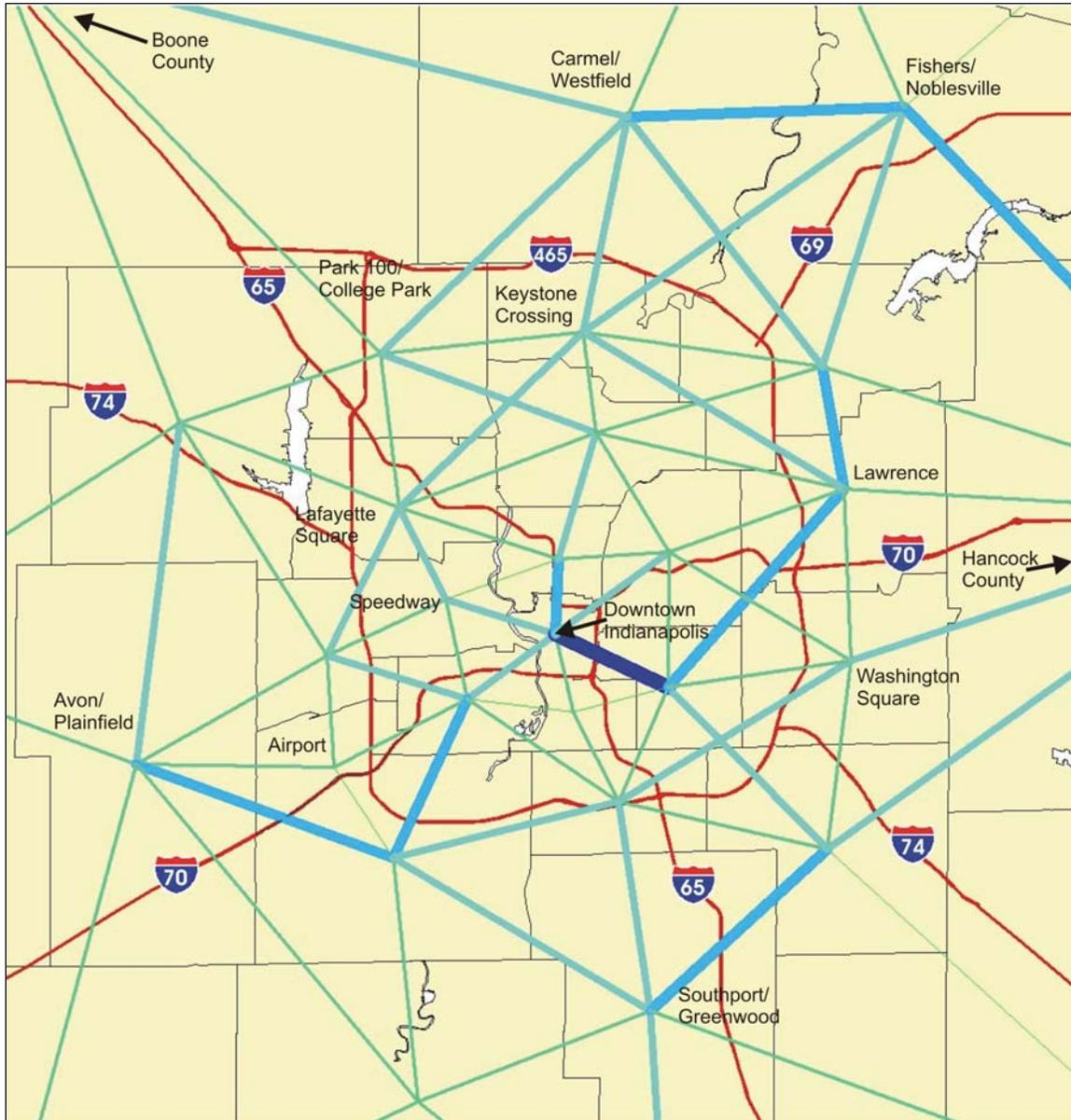


Figure 2.2



**Travel Desire Analysis**  
**Year 2025 Home-Based Work Person Trips**

Legend	
Travel Desire Volumes	
<span style="color: lightgreen;">—</span>	1-10,000
<span style="color: green;">—</span>	10,000 - 25,000
<span style="color: lightblue;">—</span>	25,000 - 40,000
<span style="color: mediumblue;">—</span>	40,000 - 60,000
<span style="color: darkblue;">—</span>	Greater than 60K
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Analysis Districts

*A Comprehensive Operations Analysis  
for IndyGo and the  
Indianapolis Regional Rapid Transit Study*





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### Travel Desire Analysis for Non-Work Trips

Figures 2.3 and 2.4 show the results of assigning district-level non-work person trips to the spider network, for the years 2000 and 2025 respectively. Compared with the work trip figures in the previous section, it is clear that non-work travel desires are significantly higher, as would be expected.

Similar to the work results, the highest accumulation of travel desire is just east of downtown Indianapolis. Travel desire is also high to districts with other key non-work destinations, such as the airport, Washington Square, and Keystone Crossing. Overall, however, non-work travel desires are more dispersed. The projected growth in non-work travel desires between 2000 and 2025 also reflects the region's suburban growth patterns, and the strong interaction between suburbs and the urban core, as well as between suburbs.

Figure 2.3

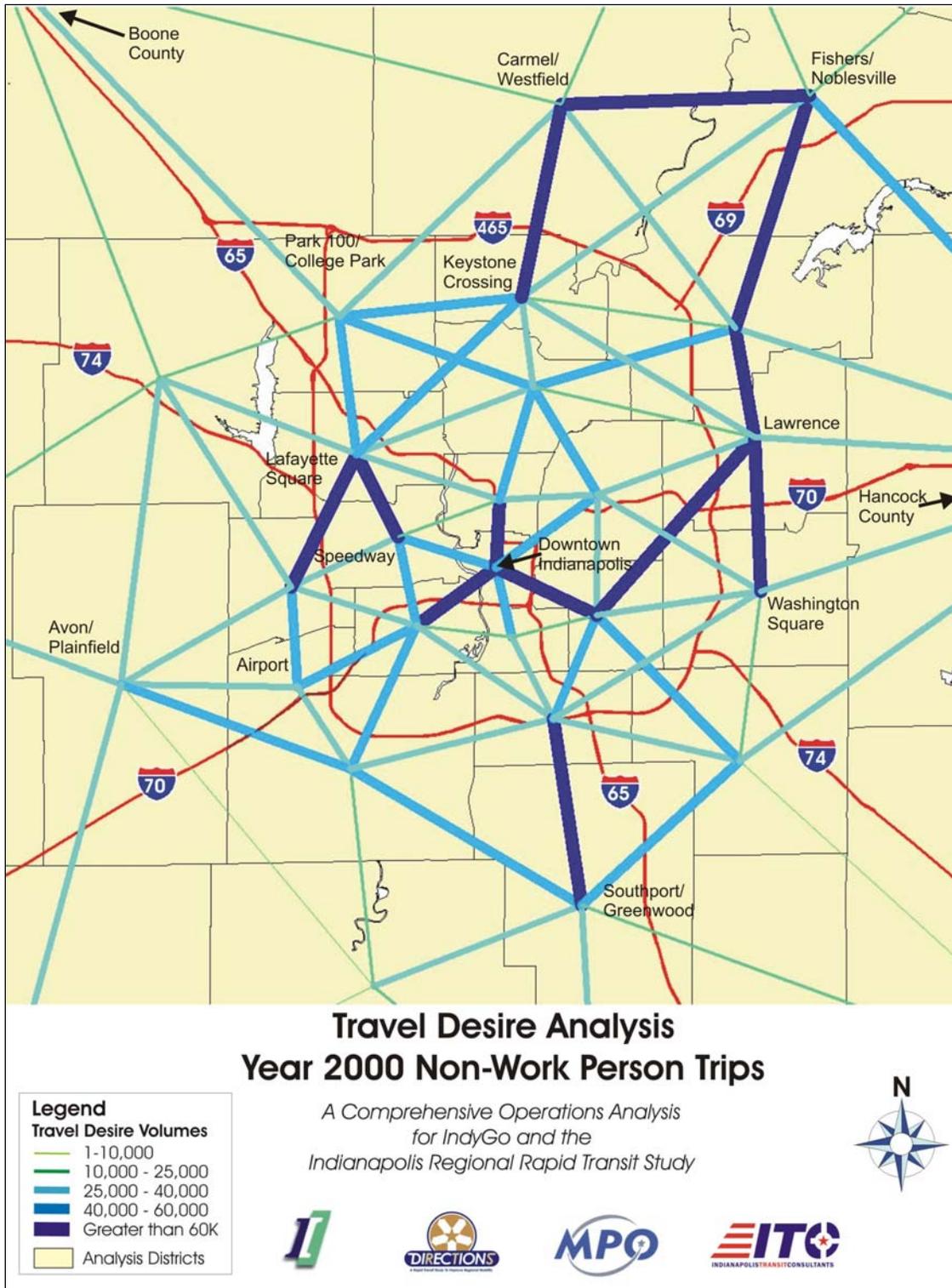
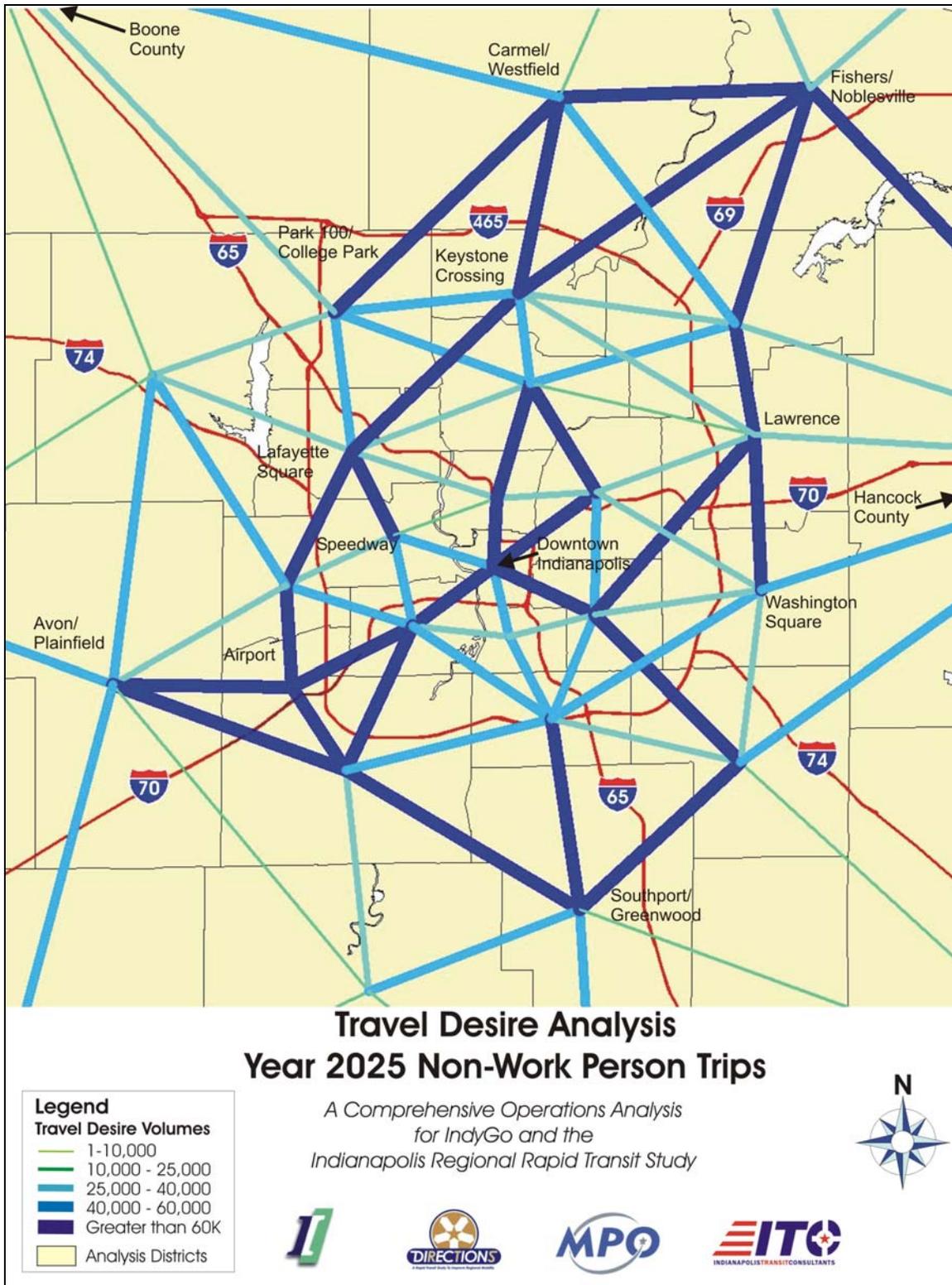


Figure 2.4



**2.3.2 Socioeconomic / Land Use Analysis**

The objective of this subtask was to perform an analysis of existing and future socioeconomic and land use data in relation to existing transit services, and to identify optimal areas for transit expansion. This analysis includes documentation/display of existing and future socioeconomic and land use data using Geographical Information System's (GIS). The COA consultant team documented and mapped those areas with the highest current propensity for transit, and assessed the correlation between these areas and the existing IndyGo service area. To identify areas with increased or new ridership potential, the consultant team mapped projected population and employment densities, and the highest projected growth areas.

Based on the ¼-mile buffer, IndyGo's current service area comprises approximately 139 square miles, nearly 137 square miles (98%) of which is located within Marion County. Service is also provided in portions of Hamilton, Hancock, Hendricks, and Johnson Counties, with only Hamilton County seeing an appreciable portion of its area (0.27%) with service.

**Land Use Characteristics**

The current Marion County Comprehensive Plan, which serves as a basis for zoning regulations and future land use, was adopted in 1991 (an update to the plan is in progress with the Indianapolis Insight study). Based on the land use classifications from the 1991 comprehensive plan, Figure 2.5 illustrates the land uses, by category and percentage, served by the existing IndyGo bus routes within Marion County. The predominant land use served is residential, accounting for approximately 59% (52,003 acres) of the total acreage served. The second highest land use within the service area is commercial, which accounts for approximately 14% (12,443 acres) of the service area.

**Figure 2.5**

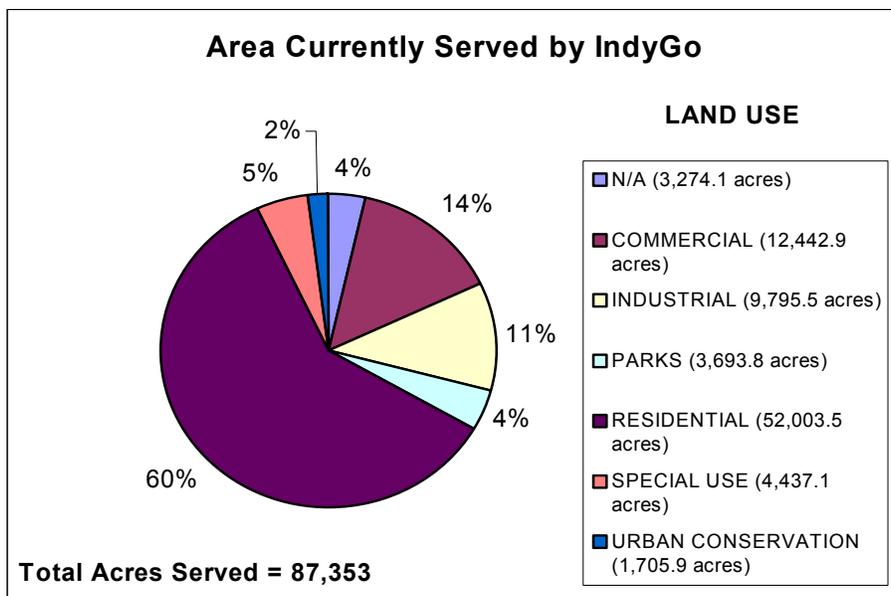




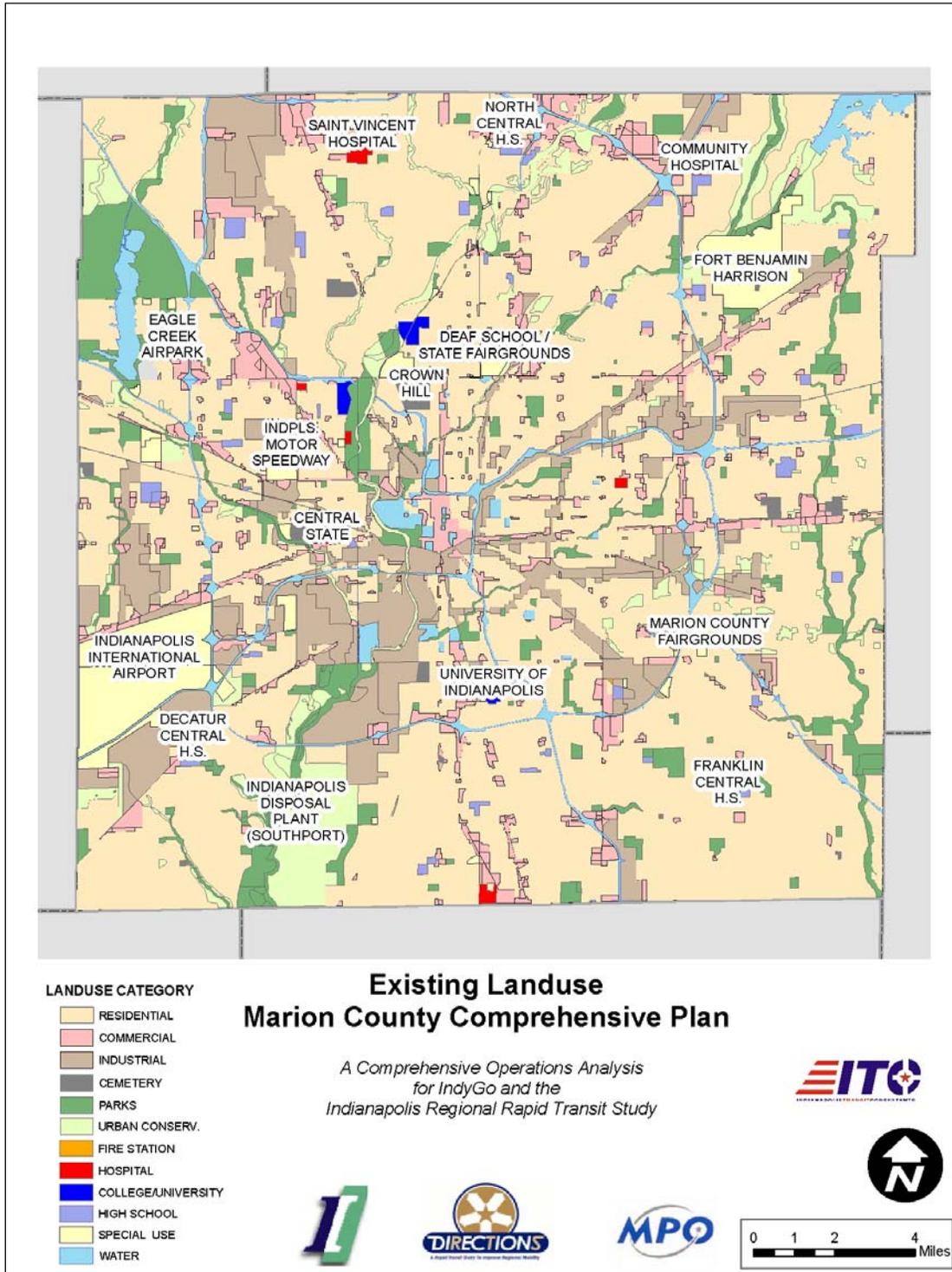
Table 2.8 presents a more disaggregate breakdown of the land uses within the IndyGo service area in Marion County, including the number of parcels and total acreage by land use. Again, residential is the predominant land use, and low-density is the highest classification within the residential category (32,195 acres or approximately 62% of the total residential land use.) Heavy industrial (6,484 acres) and commercial cluster (6,180 acres) comprise the largest non-residential uses. These categories are also depicted in Figure 2.6.

**Table 2.8**

<b>LAND USE (Marion County only)*</b>	<b>Parcels</b>	<b>Acres Served by IndyGo</b>
N/A	40	3,274.12
VERY LOW DENSITY RESIDENTIAL	51	7,791.08
LOW DENSITY RESIDENTIAL	203	32,195.02
MEDIUM DENSITY RESIDENTIAL	252	11,348.62
HIGH DENSITY RESIDENTIAL	28	668.78
FIRE STATION	2	8.92
HOSPITAL	7	674.06
JR. HIGH/MIDDLE SCHOOL	8	163.28
MIDDLE SCHOOL	1	8.09
PRIVATE HIGH SCHOOL	4	164.64
HIGH SCHOOL	1	107.34
SENIOR HIGH SCHOOL	12	490.28
COLLEGE OR UNIVERSITY	4	234.91
CEMETERY	8	577.75
LINEAR PARK	31	416.73
NEIGHBORHOOD PARK	29	443.72
COMMUNITY PARK	22	858.34
REGIONAL PARK	13	418.62
PROPOSED PARK	31	1,556.40
NEIGHBORHOOD SHOPPING CENTER	50	930.41
COMMERCIAL CLUSTER	256	6,179.78
HEAVY COMMERCIAL	7	69.08
COMMUNITY SHOPPING CENTER	45	1,964.06
REGIONAL SHOPPING CENTER	4	479.11
OFFICE CENTER	43	1,528.81
OFFICE BUFFER	112	1,291.61
AIRPORT RELATED	2	141.89
LIGHT INDUSTRIAL	87	3,251.24
HEAVY INDUSTRIAL	62	6,484.28
URBAN CONSERVATION	60	1,705.92
OTHER	27	1,925.90
	<b>Total</b>	<b>87,352.8</b>

\*From the Marion County Comprehensive Plan

Figure 2.6





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### Projected Socioeconomic Data

Projected socioeconomic data are not available for most information included in the Census. However, as part of the Indianapolis regional travel demand model, population and employment data forecasts for the year 2025 are available. Figures 2.7 and 2.8 present the projected population density and percent growth in population, respectively. Figure 2.8 indicates that much of the growth in Marion County's population, in terms of overall percent growth, is anticipated to occur in the southwest and southeast portions of the county. Most TAZs within these areas are expected to grow by more than 50%. However, Figure 2.7 suggests that even though these areas are growing, the projected densities are expected to remain less than 1,000 persons per square mile whereas most are currently less than 500 persons per square mile.

Figures 2.9 and 2.10 present the projected employment density and percent growth in employment, respectively. Similar to what is anticipated in terms of population growth, Figure 2.10 indicates that much of the county's employment growth is expected to occur in the southwest and southeast portions of the county, with significant growth also occurring in all directions outside I-465. However, as was the case with the projected population densities, the forecasted employment densities within these growth areas do not significantly differ from existing conditions. Sporadic TAZs are expected to change from 1,000 – 5,000 jobs per square mile, but there does not appear to be a focused area of anticipated employment growth.

Figure 2.7

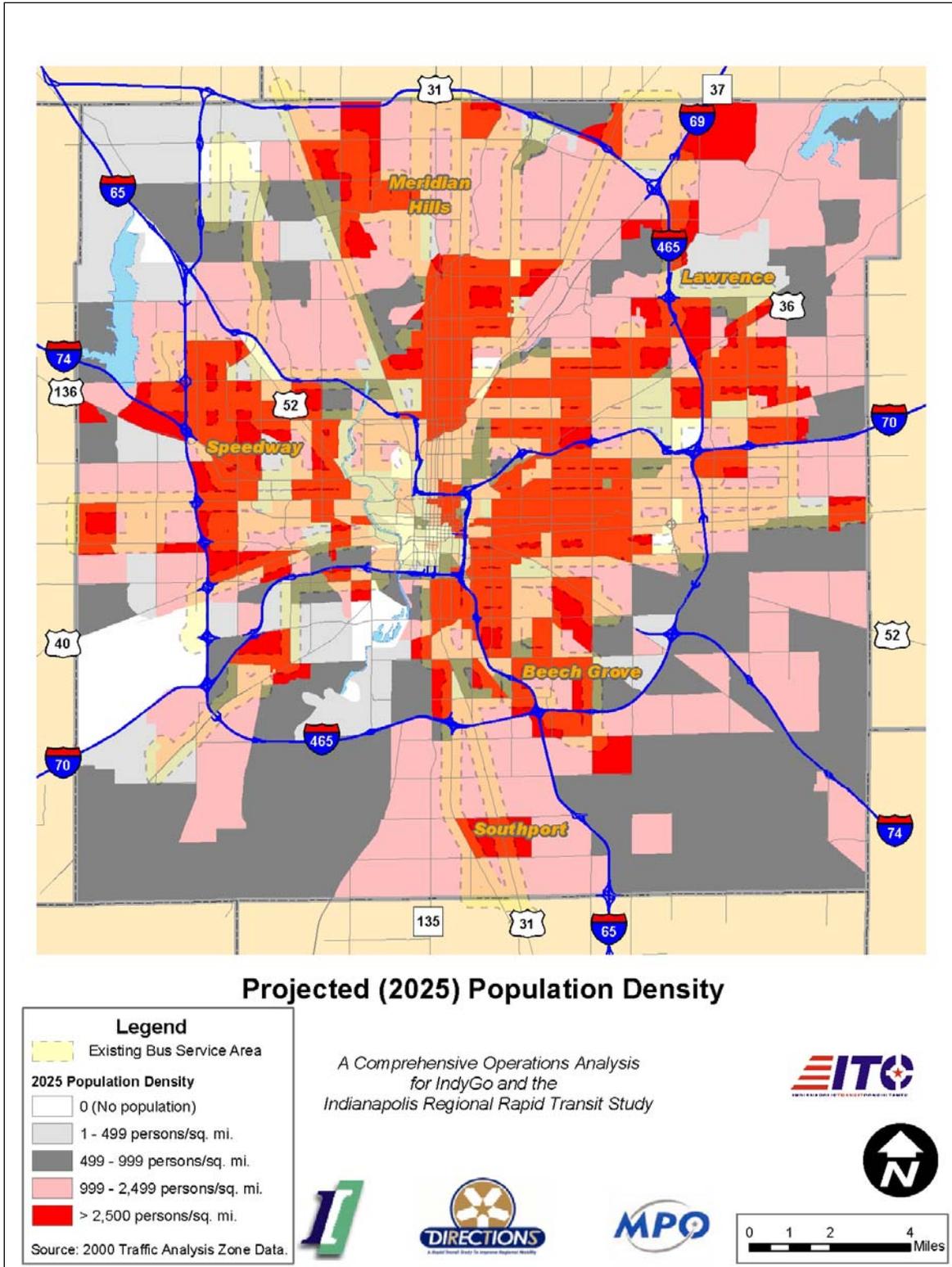


Figure 2.8

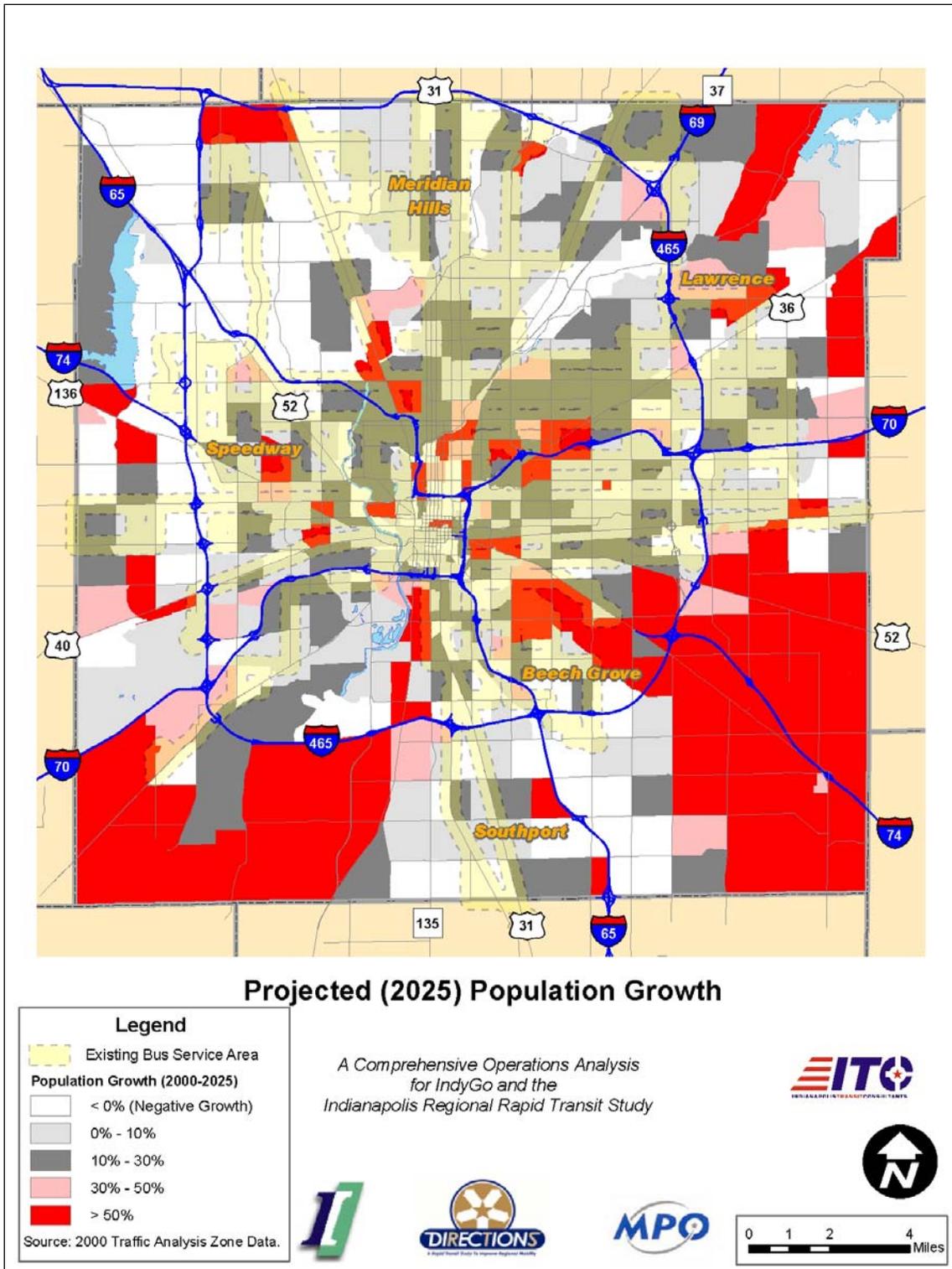


Figure 2.9

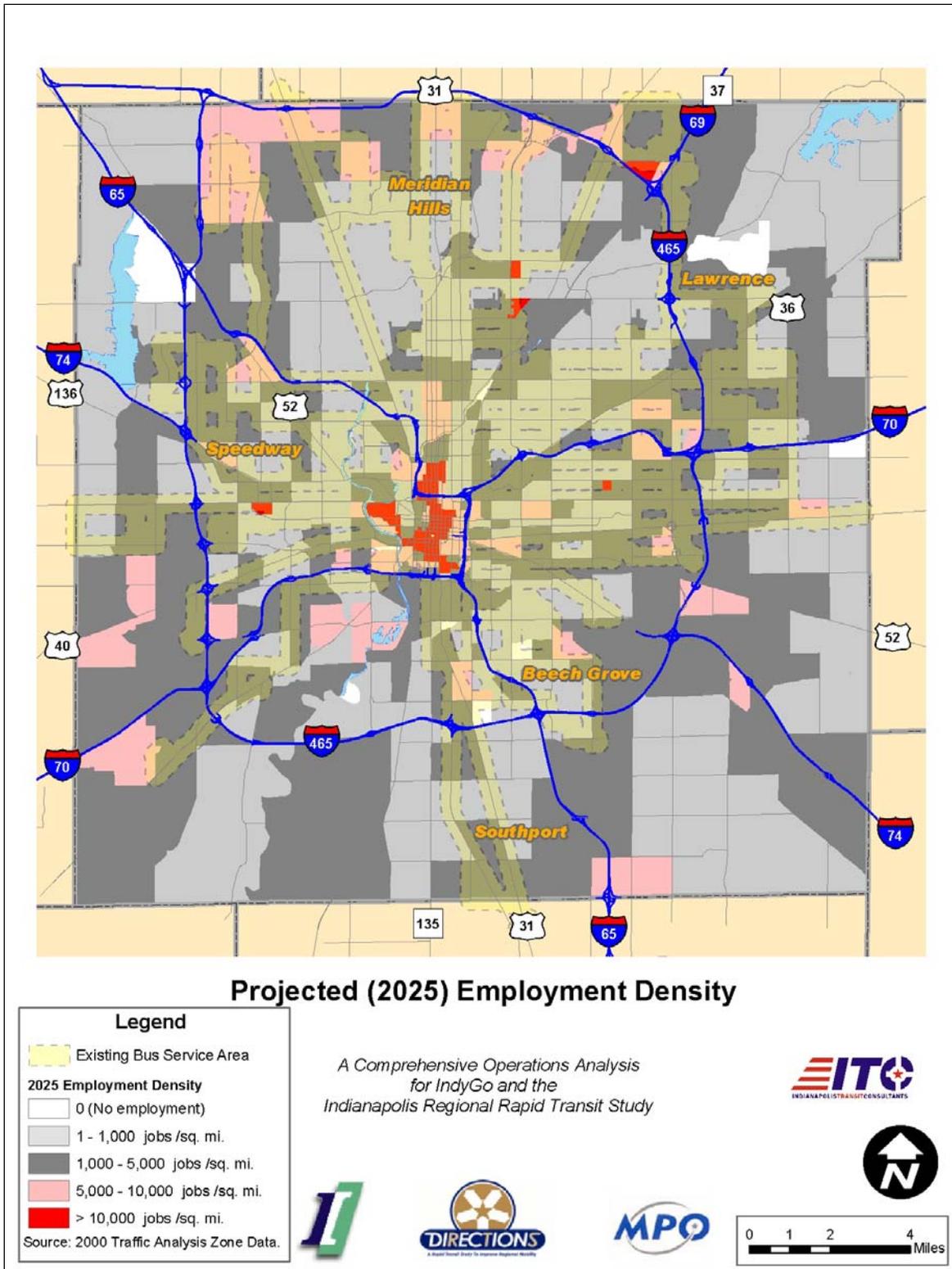
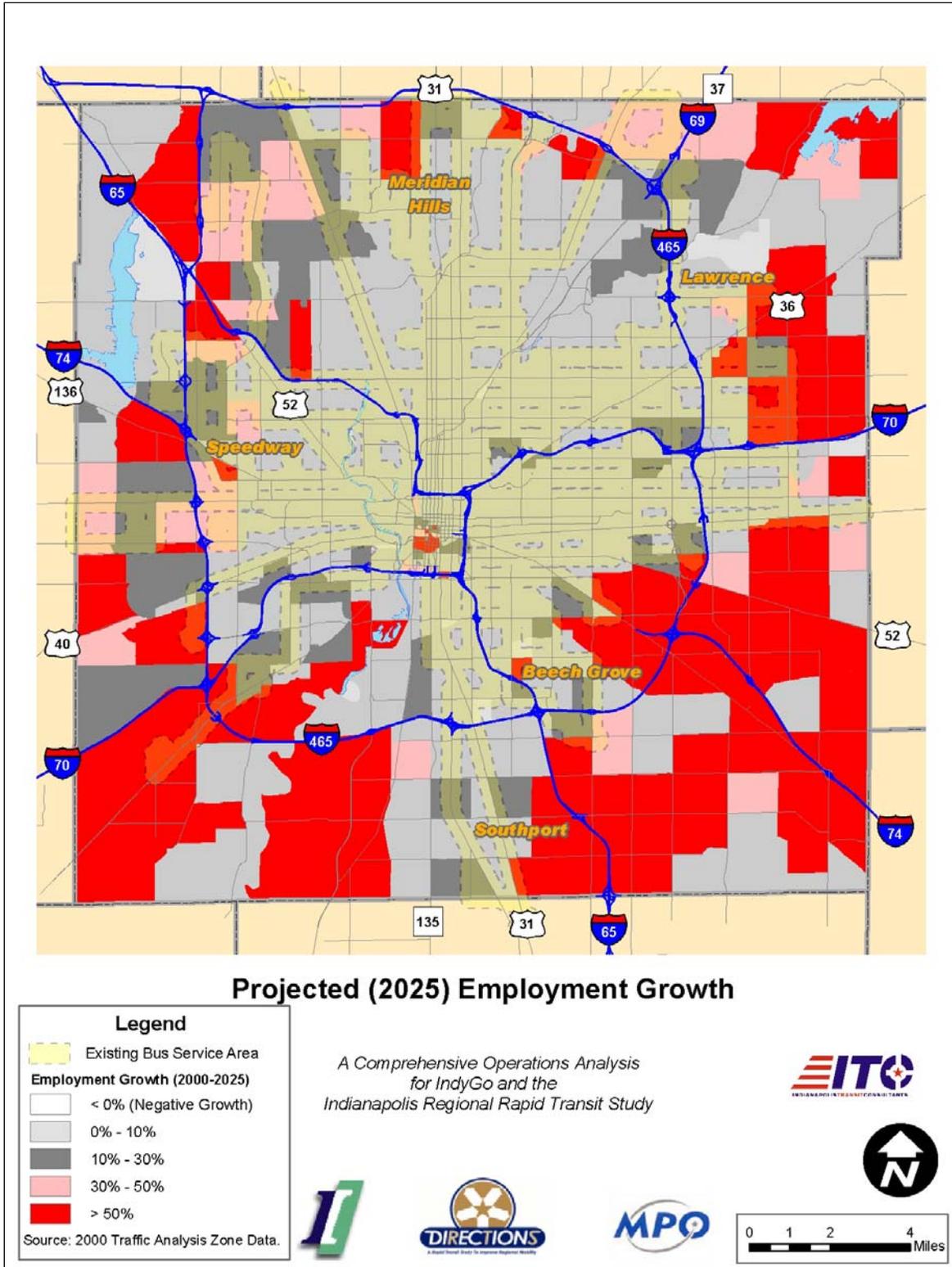


Figure 2.10





### 2.3.3 Peer Group Analysis

The objective of the peer group analysis is to review similar transit systems, both existing and future peers, and show how they compare to IndyGo's transit system. A number of cities with urban characteristics similar to Indianapolis were identified. Existing and future peer transit systems were selected based on bus fleet size, population and population density, and community characteristics. Additionally, future peer systems were selected based on communities of generally equal size that operate both bus and rail service systems. Representatives of IndyGo, the MPO, and COA consultants studied the original list of cities and made recommendations for those to be included in this study.

The Peer cities are presented in two groups. The first group includes cities with almost exclusive bus transit service as is the case in Indianapolis. These cities, listed in Table 2.9, are referred to as Current Peer cities and are assumed to be representative of transit conditions existing today in Indianapolis. The second group, listed in Table 2.10, includes cities with both rail and bus transit systems in operation. These cities are referred to as Future Peer cities and are assumed to be representative of transit operations that will exist in Indianapolis as the proposed rail transit system is developed in the nine-county Indianapolis region.

The data in Table 2.9 show that Indianapolis is in the middle of the group with respect to both urbanized area and urbanized population, ranks second behind San Antonio in both transit service area and service population, and is last in the number of buses needed to provide maximum service. Similar comments apply to Table 2.10. All cities in Tables 2.9 and 2.10 provide Demand Response service and some provide Van Pool service as well. None of the cities in Table 2.9 provide rail service but five of the cities have a small number of fixed guideway bus routes. However, a number of cities in Table 2.9 are in various stages of developing some form of fixed guideway transit service including Cincinnati, Charlotte, Jacksonville, Louisville, and San Antonio in addition to Indianapolis.

In order to conduct a peer analysis, performance and cost data have been collected for the peer transit agencies utilizing 1999, 2002, and 2003 National Transit Database (NTD) from the Federal Transit Administration. Additional data on hours of revenue service, number of passenger revenue miles, and unlinked passenger trips enable the calculation of several indicators of productivity and quality of service.

**Table 2.9**  
**IndyGo Current Peer Cities - 2003 Data**

City	Urbanized Population Rank	Urbanized Area Sq. Mis.	Urbanized Area Population	Service Area Sq. Mis.	Service Area Population	Buses in Maximum Service
Cincinnati	27	672	1,503,262	262	845,303	359
Charlotte	48	435	758,927	445	681,310	222
Columbus	37	398	1,133,193	398	1,133,193	247
<b>Indianapolis</b>	<b>34</b>	<b>553</b>	<b>1,218,919</b>	<b>373</b>	<b>791,926</b>	<b>132</b>
Jacksonville	44	411	882,295	242	899,992	144
Kansas City	30	584	1,361,744	396	756,557	264
Louisville	45	391	863,582	283	754,756	200
Milwaukee	33	487	1,308,913	237	940,164	431
Providence	35	504	1,174,548	504	920,310	205
San Antonio	31	408	1,327,554	1,229	1,468,673	401

Source: 2003 National Transit Database, Federal Transit Administration



**Table 2.10**  
**IndyGo Future Peer Cities - 2003 Data**

City	Urbanized Population Rank	Urbanized Area Sq. Mis.	Urbanized Area Population	Service Area Sq.Mis.	Service Area Population	Bus+Rail cars in Max Service
Buffalo	39	367	976,703	1,575	1,182,165	262+23
<b>Indianapolis</b>	<b>34</b>	<b>553</b>	<b>1,218,919</b>	<b>1,760</b>	<b>1,603,500</b>	<b>132+0</b>
Portland	24	474	1,583,138	574	1,253,502	562+69
Sacramento	29	369	1,393,498	369	1,393,498	197+32
St. Louis	18	829	2,077,662	606	1,480,635	358+44
Salt Lake	43	231	887,650	1,412	1,744,417	374+34

Source: 2003 National Transit Database, Federal Transit Administration

Note. The Indianapolis Metropolitan Planning Organization, as part of the DiRecTionS, The Rapid Transit Study, is planning for rapid transit options. Service area tentatively defined as 50% of the area of the 9-county Indianapolis Region. Service population defined as total population of the 9-county Indianapolis Region.

### Operating Costs

Bus transit operating costs for current peer cities ranged from \$31.1M for Indianapolis to \$115.7M for Milwaukee with a 10-city average of \$59.8M shown in Figure 5. For future peer cities, such costs ranged from \$59.2M for Buffalo to \$171.4M for Portland with a 5-city average of \$98.0M again, shown in Figure 5. Operating costs for demand response/van pool systems ranged from \$5.0M for Columbus to \$19.8M for San Antonio with an average of \$10.6M. For future peer cities, such costs ranged from \$2.5M for Buffalo to \$18.4M for Portland with an average of \$13.0M. Light rail transit operating costs for future peer cities ranged from \$17.0 for Buffalo to \$55.3M for Portland with an average of \$31.9M.

SUMMARY OF O&M COST DATA – ANNUAL 2003			
Mode	Statistic	Current Peer Cities	Future Peer Cities
Bus	Range	\$31.1M to 115.7M	\$59.2M to 171.4M
	Average	59.8M	98.0M
Demand Response	Range	5.0M to 19.8M	2.5M to 18.4M
	Average	10.6M	13.0M
Rail Transit	Range	N/A	17.0M to 55.3M
	Average	N/A	31.9M

### Capital Costs

Bus transit capital expenses ranged from \$2.6M in Jacksonville to \$25.9M for San Antonio with an average of \$12.0M. For future peer cities, such costs ranged from \$8.2M for Salt Lake City to \$30.7M for Portland with an average of \$19.0M. Capital expenses for demand response/van pool cities ranged from \$0.0 for three cities to \$4.1M for Cincinnati with an average of \$0.8M. For future peer cities, such costs ranged from \$0.0 for Buffalo to \$5.5M for Salt Lake City. Light rail capital expenses ranged from \$2.3M for Buffalo to \$103.2M for St. Louis with an average of \$71.6M.



SUMMARY OF CAPITAL COST DATA – ANNUAL 2003			
Mode	Statistic	Current Peer Cities	Future Peer Cities
Bus	Range	\$2.6M to 25.9M	\$8.2M to 30.7M
	Average	12.0M	19.0M
Demand Response	Range	0.0M to 4.1M	0.0M to 5.5M
	Average	0.8M	2.5M
Rail Transit	Range	N/A	2.3M to 103.2M
	Average	N/A	71.6M

Further detail on peer group analysis is provided in COA Technical Memorandum 3 – Service Needs Analysis.

**Peer Review Analysis Conclusions**

Study of the tabular data and figures generated in this analysis lead to some general conclusions regarding IndyGo’s bus transit operation with the 9 other members of the current peer cities.

1. Indianapolis ranks 6<sup>th</sup> in service area and 7<sup>th</sup> in service population compared to the 10 current peer cities. A comparison of data in tables 1 to 18 in Appendix A (2003 data) with tables 1 to 18 in Appendix C (2002 data) reveals little change.
2. Local funds are the largest percentage of O&M funds for all but three peer cities – Milwaukee, Providence, and Salt Lake City. Indianapolis ranked 13<sup>th</sup> of the 15 peer cities in the dollar amount of local funding with \$12.4M and a current peer average of \$32.8M.
3. Indianapolis had total O&M expenditures of \$39.8M in 2003, the lowest amount of any current peer city. This expenditure is \$31.7M below the current peer city average and \$111.3M below the future peer city average. Recall that current peer cities are not funding rail operations, as are the future peer cities. However, the future peer group is where Indianapolis is heading.
4. Indianapolis had total capital expenditures of \$8.9M in 2003 compared to an average of \$15.7M for current peer cities and an average of \$93.6M for future peer cities.
5. Indianapolis had bus transit O&M expenditures of \$31.1M in 2003, the lowest of any peer city, compared to a current peer city average of \$59.8M. Future peer cities averaged \$98.0M.
6. Indianapolis had bus capital expenditures of \$8.2M in 2003, the 7<sup>th</sup> lowest of the current peer cities, compared to an average of \$12.0M. Average bus capital expenditure in future peer cities averaged \$19.0M.
7. Indianapolis had bus fare box revenues of \$6.1M in 2003, the 8<sup>th</sup> lowest of the current peer cities, compared to an average \$12.4M, which is shown in Figure 16.
8. Several measures of service provided are expressed in terms operating characteristics. Indianapolis ranks 10<sup>th</sup> or last among the current peer cities in the following bus characteristics: Annual Vehicle Revenue Miles, Annual Vehicle Revenue Hours, and Vehicles for Maximum Service. They rank 9<sup>th</sup> in Annual Unlinked Trips and 8<sup>th</sup> in Annual Passenger Miles.



9. Indianapolis ranks below average in terms of operating costs per vehicle revenue mile, per vehicle revenue hour, per passenger mile, and per passenger trip. This means that Indianapolis is operating more efficiently than many other peer cities. On the other hand, the numbers of unlinked passenger trips per vehicle revenue mile and revenue hour are also low. This means that Indianapolis is achieving low passenger productivity than the other peer cities.
10. The annual bus O&M expenditures per capita are shown in Figure 17 for all peer cities. Indianapolis ranks last among all peer cities.
11. The annual O&M and capital expenditures combined per capita are shown in Figure 18 for all peer cities and shown in Figures 17 and 18. Indianapolis ranks next to last among all peer cities.

A general conclusion derived from these observations is that Indianapolis (IndyGo) operates an efficiently run organization but one that provides limited service to the citizens of Indianapolis. IndyGo appears to be a very much under funded transit system. As the Indianapolis region moves into providing rail transit service accompanied by expanded bus service throughout the region, it will become increasingly important that significant funding sources are made available to IndyGo and, eventually, to the Central Indiana Regional Transportation Authority (CIRTA).



### 3.0 RECOMMENDED SERVICE PLANS

The following sections identify proposed operations and capital improvements for the IndyGo fixed route transit system for the Near-Term, Short-Range and Long-Range Service Plans. These service plans cover a period of 15 years, identifying incremental improvements in service area coverage, service level improvements (i.e., frequency, hours and days of service), and the introduction of new service types currently not operated by IndyGo (e.g., limited stop and express services). These service plans have been designed to assist IndyGo and region with the development of improved transit service. As with any planning document, changes occur in input assumptions, funding and political interests, resulting in modifications to documented plans. Therefore, the service plans contained in this document are designed to guide service improvement, and are not meant to be a hard / inflexible plan for service must be implemented. However, there are some service improvements identified within the following service plans that must be implemented jointly. Should the region decide to focus on a specific type of service improvement (e.g., service frequency or service coverage), attention should be given to the interrelatedness of specific service recommendations.

#### 3.1 Near-Term (1-3 years) Service Plan

The Near-Term Service Plan (1-3 years) recommendations were designed to address existing system inefficiencies, improve system connectivity, eliminate confusing / out of direction travel, eliminate unproductive service, and begin to improve system service levels (service frequency, span of service hours and weekend service). The Near-Term plan was designed to provide IndyGo with an efficient base transit system from which to continue improve service levels and service area coverage in the Short-Range timeframe. In addition to service alignment and service level improvements, transit center and park & ride facility improvements are identified to improve system attractiveness and ease of system use.

In summary, the Near-Term Service Plan proposes the following service and facility improvements; further detail is provided in Appendix A:

- **New routes** (11 Total - 7 local routes, 4 express routes).
  - Route 6 – North Harding (portion of existing Route 5)
  - Route 86 – 86<sup>th</sup> Street Crosstown
  - Route 87 – Mitthoeffer Crosstown
  - Route 91 – Westside Crosstown
  - Route 94 – South County Circulator
  - Route 96 – Castleton North
  - Route 100 – Carmel
  - Route 101 – West Carmel
  - Express Route 200 – Westfield / Carmel
  - Express Route 202 – Lawrence
  - Express Route 205 – Airport
  - Express Route 210 – Fishers
  
- **Alignment Changes** to 15 of the existing local bus routes.
  - Route 2 – East 34<sup>th</sup> Street (discontinued branches, operate all trips to Crossroads)
  - Route 3 – Michigan Street (eliminate Arlington Avenue segment, extend west to Girl School Road)



- Route 5 – East 25<sup>th</sup> Street (eliminate segment west of downtown – cover with new route 6, extend to Fort Harrison via existing route 4 alignment northeast of 38<sup>th</sup> Street)
- Route 10 – 10<sup>th</sup> Street (eliminate High School Road branch – covered by new route 91, modify west end of route to serve Country Club Road)
- Route 16 – Beech Grove (extend south on Emerson Avenue to St. Francis Hospital at Stop 11 Road)
- Route 18 – Nora (eliminate circulation north of 86<sup>th</sup> Street, operate all trips directly to Keystone Crossing)
- Route 22 – Shelby (eliminate service to the Community Hospital South – covered by new route 94, extend all trips to Greenwood Mall)
- Route 25 – West 16<sup>th</sup> Street (eliminate Moller Road to Renn Lane and replace with alignment to Eagle Creek Parkway)
- Route 26 – Keystone Crosstown (eliminate segment southeast of Keystone Avenue and Hanna Avenue to the K-Mart and replace with extension to Hanna Avenue and East Street)
- Route 30 – 30<sup>th</sup> Street Crosstown (extend all trip east to Washington Square Mall via Post Road and 10<sup>th</sup> Street, and extend west to Speedway Shopping Center)
- Route 34 – Michigan Road (eliminate deviations to 96<sup>th</sup> Street)
- Route 37 – Park 100 (deviate route to serve proposed transit stop in Trader's Point Shopping Center, extend route west of I-465 to InTech office complex)
- Route 38 – Lafayette Square (extend route west to Eagle Creek)
- Route 39 – East 38<sup>th</sup> Street (eliminate service south of 38<sup>th</sup> Street to 30<sup>th</sup> Street, extend all service north to Fort Harrison)
- **Service Frequency Improvements** on 14 of the existing local bus routes.
  - Weekday
    - Peak: Routes 3, 18, 26, 37, 38, 39
    - Midday: 3, 8, 26, 30, 34, 37, 39
    - Evening: 5, 6, 8, 10, 18, 26, 37
  - Saturday
    - Peak: 5, 6, 26, 31, 34, 37
    - Midday: 26, 31
    - Evening: 5, 6, 8, 10, 18, 26
  - Sunday
    - Peak: 10, 31, 39
    - Midday: 31, 39
    - Evening: 10, 17
- **Extended Service Hours** (earlier morning and/or later evening) on 14 of the existing local bus routes.
  - Weekday Route: 3, 11, 16, 17, 18, 22, 24, 25, 26, 34, 37, 38
  - Saturday Route: 2, 3, 5, 8, 10, 16, 17, 18, 24, 25, 26, 31, 34, 37, 38, 39
  - Sunday Route: 2, 3, 5, 8, 10, 17, 24, 25, 26, 31, 37, 38, 39
- **New Weekend Service** (Saturday and/or Sunday) on 7 of the existing local bus routes.
  - Saturday Route: 11, 22, 30
  - Sunday Route: 11, 16, 18, 22, 25, 26, 30, 34
- **New Transit Centers (2)**
  - Glendale Mall



- Keystone Crossing Fashion Mall
- **New Park & Rides (7)**
  - U.S. 31 & 151<sup>st</sup> Street (north of Carmel) – Routes 100, 200
  - Merchants Square Mall (Keystone Avenue & 116<sup>th</sup> Street) - Routes 100, 101, 200
  - Keystone Crossing Fashion Mall (Keystone Avenue & 86<sup>th</sup> Street) – Routes 18, 26, 86, 100, 101, 200
  - Glendale Mall (Keystone Avenue & 62<sup>nd</sup> Street) – Routes 17, 19, 26, 200
  - Fort Harrison – Routes 5, 39, 87, 202
  - Fishers Train Station – Route 210
  - Indianapolis Metropolitan Airport – Routes 96, 210

Figure 3.1, 3.2 and 3.3 on the following pages illustrate the proposed Near-Term local and express bus system, respectively. Table 3.11 below identifies daily and annual operating requirements for the COA Near-Term Service Plan. Appendix B contains detailed operating requirements on a route level basis for the COA Near-Term Service Plan.

**Table 3.1**  
**COA Near-Term Operating Requirements**

<b>Day of Week / Annual</b>	<b>Revenue Bus Hours</b>	<b>Revenue Bus Miles</b>	<b>Peak Vehicles</b>	<b>Fleet Vehicles</b>
Weekday Service	577,876	8,376,674	170	204
Saturday Service	74,818	1,076,072	101	n/a
Sunday Service	63,928	899,226	80	n/a
<b>Annual Service</b>	<b>716,622</b>	<b>10,351,972</b>	<b>170</b>	<b>204</b>

**Figure 3.1**

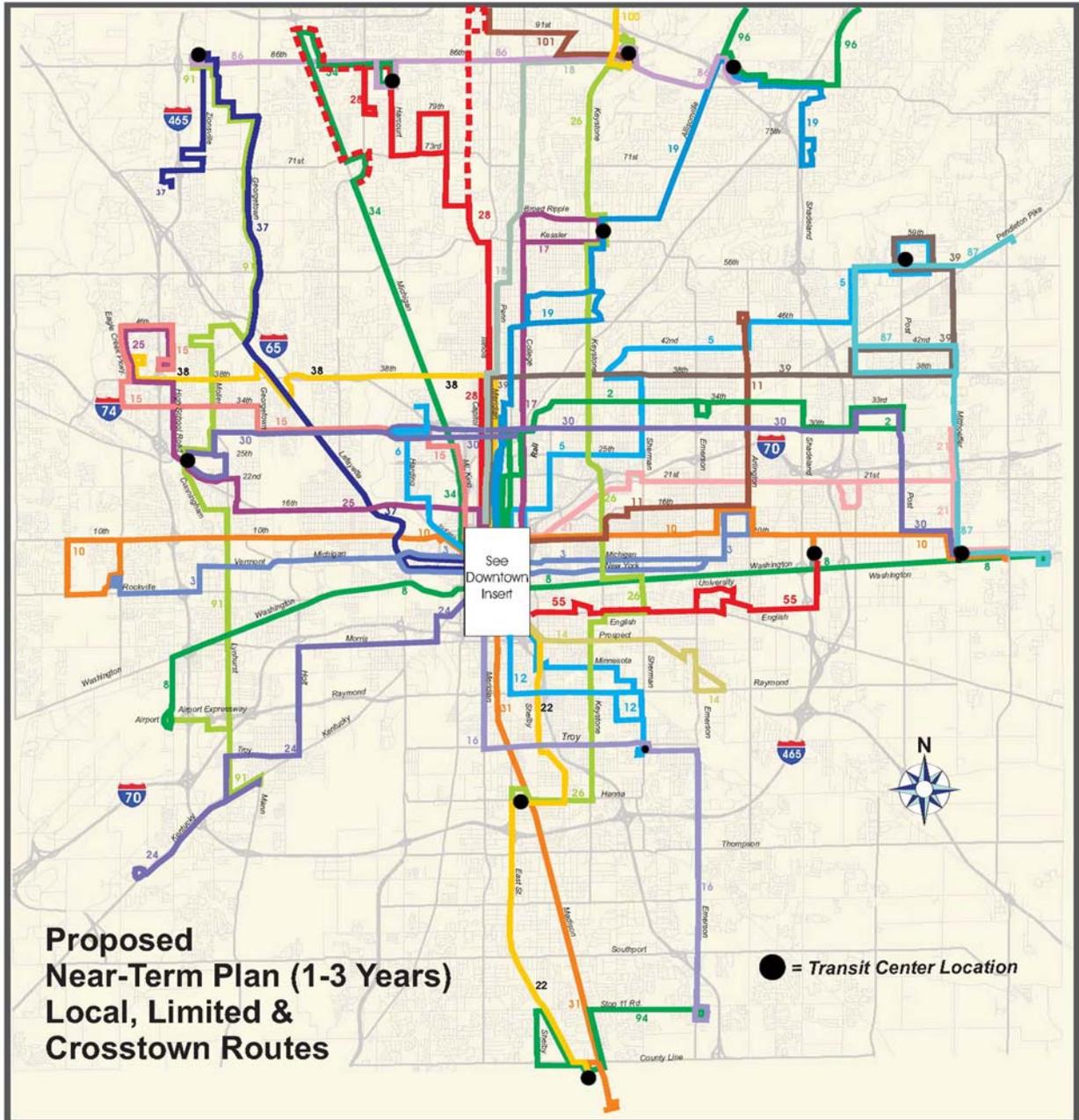


Figure 3.2

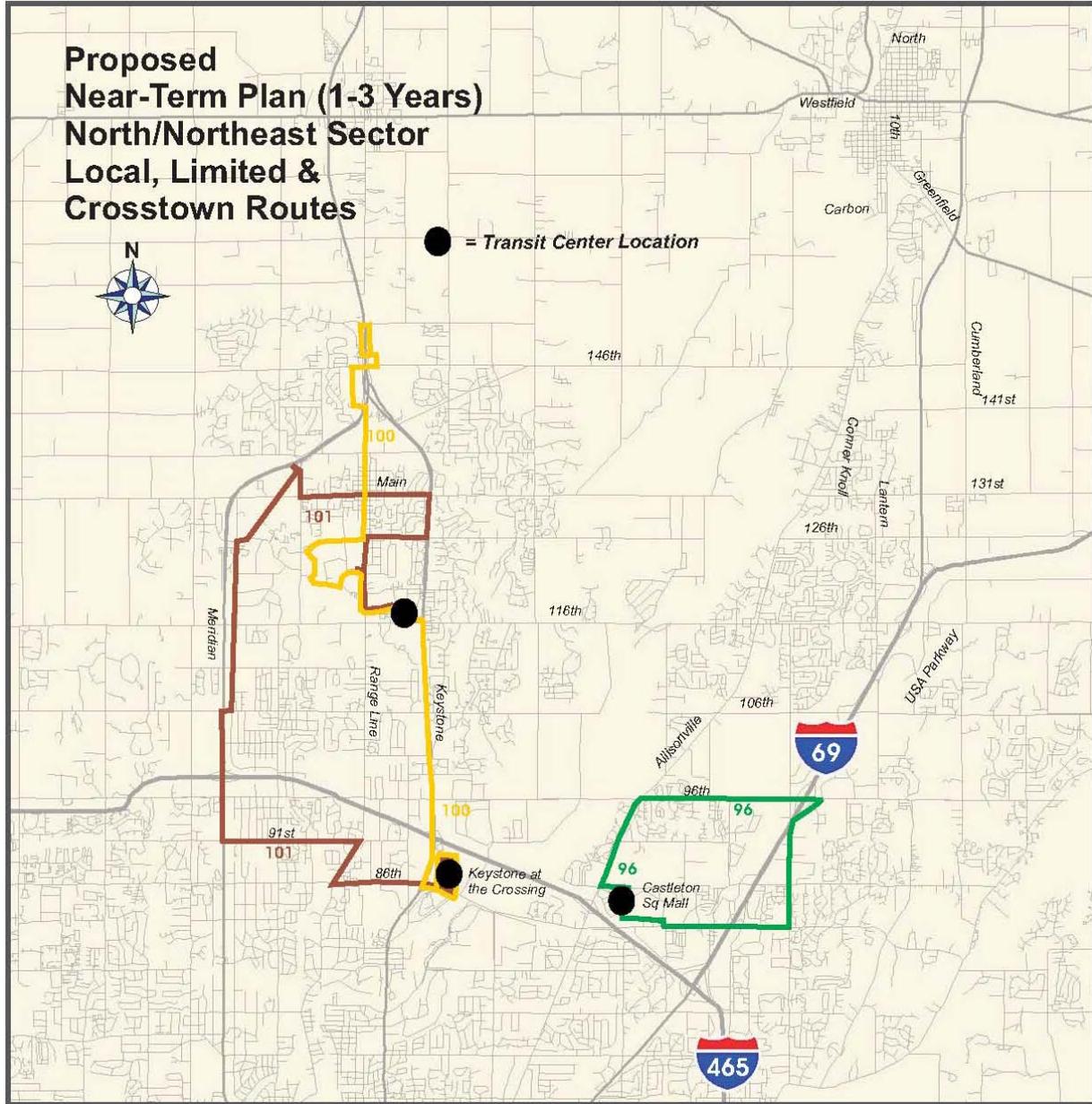


Figure 3.3





### 3.2 Short-Range (4-9 years) Service Plan

The Short-Range Service Plan (4-9 years) recommendations are designed to build upon the more efficient near-term service plan. While additional new routes (circulators, local, limited stop and express) are added in the Short-Range Plan expanding system area coverage, emphasis is also placed on improved corridor level service (service frequency improvements, limited stop service and express bus service) and overall system service frequency improvements.

In summary, the Short-Range Service Plan proposes the following service and facility improvements (in addition to those identified in the Near-Term Service Plan):

- **New Routes** (12 Total - 6 local routes, 2 limited stop routes and 4 express routes).
  - Route 88 – Shadeland Crosstown
  - Route 89 – Emerson Crosstown
  - Route 90 – 56<sup>th</sup> / Butler Crosstown
  - Route 92 – Northside Crosstown
  - Route 93 – Raymond Street Crosstown
  - Route 97 - Fishers / Castleton
  - Limited Stop Route 8L – Washington Street Limited
  - Limited Stop Route 34L – Michigan Road Limited
  - Express Route 201 – Noblesville
  - Express Route 205 – AmeriPlex
  - Express Route 206 – Plainfield / Mooresville
  - Express Route 211 - Franklin
  
- **Alignment Changes** to 5 of the existing local bus routes and expansion of 1 route proposed in the Near-Term Plan.
  - Route 12 – Beechcrest (eliminate East Street/Raymond Street alignment and replace with new route 93)
  - Route 14 – Prospect (eliminate segment east of Sherman Drive and replace with new route 93, extend route south along Sherman Drive to K-Mart at Emerson Avenue & Thompson Road)
  - Route 19 – Castleton (eliminate route segment east of Castleton Square Mall transit center)
  - Route 21 – East 21<sup>st</sup> Street ( eliminate segment north of 21<sup>st</sup> Street and Mitthoeffer Road, operate all trips to East Washington Street Meijers)
  - Route 28 – St. Vincent (eliminate branch trips to 96<sup>th</sup> Street and to Michigan Road, end all trips at St. Vincent’s Hospital)
  - Route 94 – South County Circulator (modify Near-Term Alignment to include service to Southport Road)
  
- **Service Frequency Improvements** on 25 of the existing local bus routes and 7 routes proposed in the Near-Term Plan.
  - Weekday
    - Peak: 10, 31, 94
    - Midday: 11, 16, 17, 18, 19, 21, 22, 24, 25, 37, 38, 39, 87, 94
    - Evening: 2, 8, 10, 26, 28, 30, 31, 34, 86
  - Saturday
    - Peak: 3, 8, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, 28, 30, 37, 38, 39, 87, 94



- Midday: 3, 5, 8, 19, 24, 25, 26, 34, 37, 39, 94, 96, 100, 101
- Evening: 10, 28, 31, 34, 37, 86
- Sunday
  - Peak: 2, 3, 5, 6, 8, 18, 19, 22, 25, 26, 28, 30, 31, 34, 37, 38, 39, 86, 87, 91, 94, 100, 101
  - Midday: 2, 3, 8, 10, 28, 37, 94, 96
  - Evening: 17, 19, 28, 39
- **Extended Service Hours** (earlier morning and/or later evening) on 19 of the existing local bus routes and 2 routes proposed in the Near-Term Plan.
  - Weekday Route: 2, 15, 19, 21, 26, 28, 31, 86, 87
  - Saturday Route: 2, 10, 12, 14, 15, 19, 21, 24, 25, 28, 30, 31, 34, 37, 86, 87
  - Sunday Route: 2, 3, 8, 12, 14, 15, 18, 19, 25, 26, 28, 31, 34, 37, 38, 86
- **New Sunday Service** on 2 of the existing local bus routes.
  - Sunday Route: 21, 24
- **New Transit Centers** (3 in addition to the Near-Term Plan).
  - Castleton Square Mall
  - Fort Harrison
  - Washington Square Mall
- **New Park & Rides** (14 in addition to the Near-Term Plan).
  - S.R. 37 & S.R. 238 (Southeast of Noblesville) – Route 201
  - Castleton Square Mall – Routes 19, 86, 88, 96, 97, 201
  - AmeriPlex – Route 205
  - I-70 & S.R. 267 (Plainfield/Mooresville) – Route 206
  - Washington Square Mall – Routes 8, 8L, 10, 21, 30, 87
  - Eastgate Mall – 8, 8L, 10, 88, 93
  - East Street & Hanna Avenue – Routes 22, 26, 31, 89, 204
  - Thompson Road & Emerson Avenue – Routes 14, 16
  - Michigan Road & 86<sup>th</sup> Street – Routes 34, 34L, 86
  - Michigan Road & Kessler Boulevard – Routes 34, 34L
  - Washington Street & Lynhurst Drive – Routes 8, 8L, 91
  - I-65 & King Street (C.R. 44, Exit 90) Franklin – Route 211
  - C.R. 500 N (Whiteland-Exit 95) Whiteland – Route 211
  - Main Street (Greenwood - Exit 99) Greenwood – Route 211

Figure 3.4, 3.5 and 3.6 on the following pages illustrate the proposed Short-Range local, limited stop and express bus system, respectively. Table 3.2 below identifies daily and annual operating requirements for the COA Short-Range Service Plan. Appendix C contains detailed operating requirements on a route level basis for the COA Short-Range Service Plan.



**Table 3.2**  
**COA Short-Range Operating Requirements**

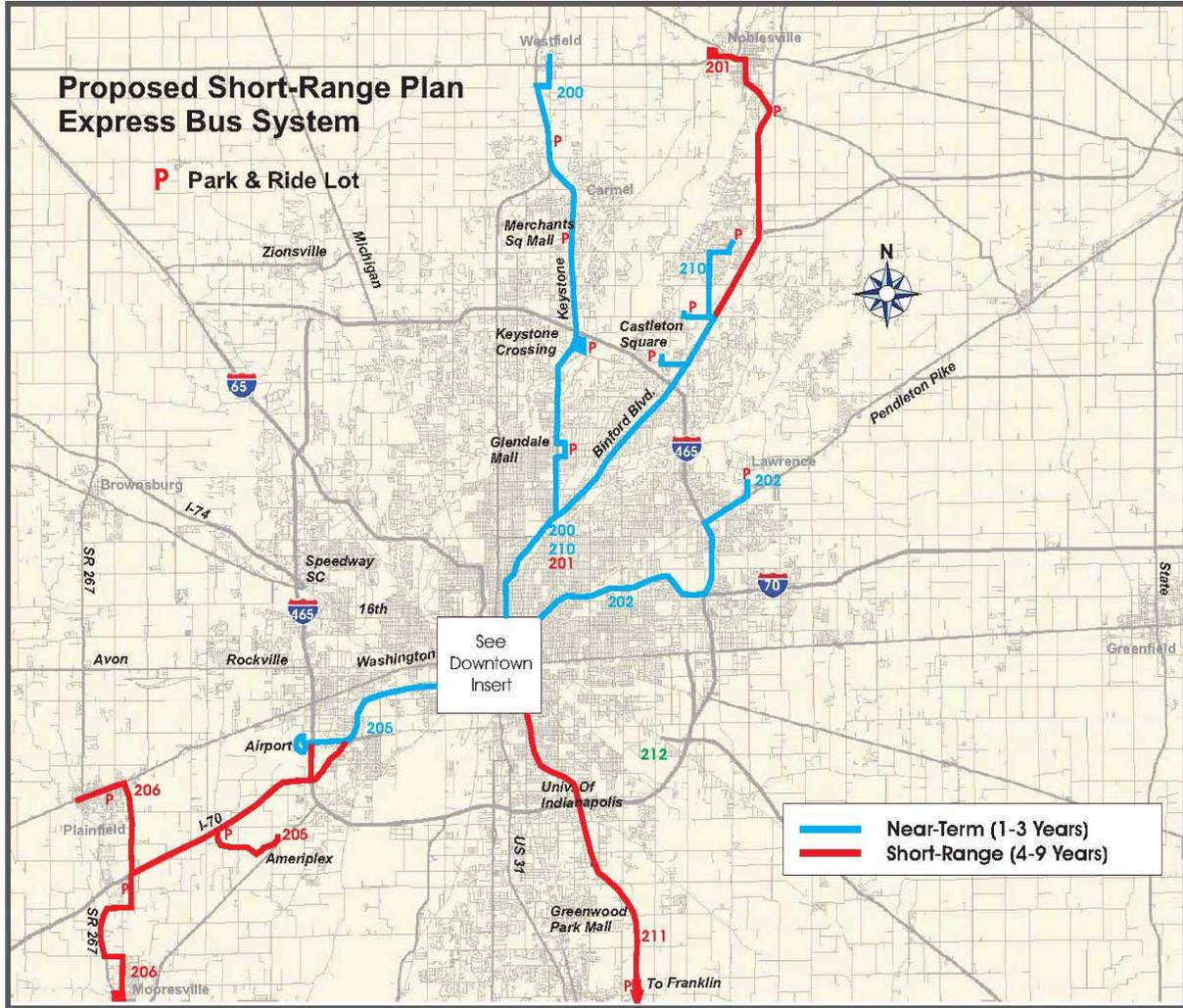
<b>Day of Week / Annual</b>	<b>Revenue Bus Hours</b>	<b>Revenue Bus Miles</b>	<b>Peak Vehicles</b>	<b>Fleet Vehicles</b>
Weekday Service	923,228	12,891,908	242	290
Saturday Service	140,832	1,894,173	194	n/a
Sunday Service	124,091	1,654,201	165	n/a
<b>Annual Service</b>	<b>1,188,151</b>	<b>16,440,282</b>	<b>242</b>	<b>290</b>



Figure 3.5



**Figure 3.6**



### 3.3 Long-Range (10-15 years) Service Plan

The Long-Range Service Plan (10-15 years) recommendations build upon the Short-Range Service Plan, adding some additional routes designed to ultimately serve as feeder bus routes for rapid transit service. While additional new routes (circulators, local, limited stop and express) are added in the Long-Range Plan expanding system area coverage, much like the Short-Range Plan, the Long-Range Plan emphasizes improved corridor level service (service frequency improvements and express bus service) and overall system service frequency improvements.

In summary, the Long-Range Service Plan proposes the following service and facility improvements (in addition to those identified in the Near-Term and Short-Range Service Plan):

- **New Routes** (12 Total - 6 local routes, 6 express routes).
  - Route 71 – 71<sup>st</sup> Street Crosstown
  - Route 98 – Fishers South
  - Route 99 – Fishers North
  - Route 102 – Noblesville
  - Route 116 – 116<sup>th</sup> Street
  - Route 146 – 146<sup>th</sup> Street
  - Express Route 203 – Greenfield
  - Express Route 204 – Greenwood
  - Express Route 207 – Avon
  - Express Route 208 – Brownsburg
  - Express Route 209 – Zionsville
  - Express Route 212 - Shelbyville
  
- **Service Frequency Improvements** on 21 of the existing local bus routes and 14 routes proposed in the Near-Term and Short-Range Plans.
  - Weekday:
    - Peak: 18, 19, 26, 30, 31, 34, 86, 88, 91, 100
    - Midday: 10, 12, 14, 15, 26, 28, 31, 37, 86, 88, 91, 92, 93
    - Evening: 16, 17, 18, 19, 22, 24, 25, 38, 87, 88, 92, 93, 101, 8L, 34L
  - Saturday:
    - Peak: 10, 12, 17, 19, 26, 31, 34, 37, 39, 86, 88, 91
    - Midday: 10, 11, 12, 14, 15, 16, 17, 18, 21, 22, 26, 28, 30, 37, 38, 39, 86, 87, 88, 89, 90, 92, 93, 97
    - Evening: 17, 18, 19, 24, 25, 26, 30, 87, 88, 89, 91, 100, 101, 8L, 34L
  - Sunday:
    - Peak: 10, 11, 12, 14, 15, 16, 17, 21, 28, 37, 86, 89, 92
    - Midday: 10, 14, 15, 18, 19, 21, 25, 26, 30, 31, 34, 38, 39, 86, 87, 88, 89, 90, 91, 100, 101, 8L, 34L
    - Evening: 10, 18, 19, 26, 30, 31, 34, 37, 86, 88, 89, 91, 100, 101, 8L, 34L
  
- **Extended Service Hours** (earlier morning and/or later evening) on 11 of the existing local bus routes and 12 routes proposed in the Near-Term and Short-Range Plans.
  - Weekday Route: 16, 21, 30, 31, 34, 86, 87, 88, 89, 90, 92, 94, 96, 100, 101
  - Saturday Route: 11, 16, 21, 22, 26, 30, 31, 34, 37, 38, 86, 88, 91, 92, 93, 94, 96, 100, 101
  - Sunday Route: 16, 30, 31, 34, 37, 38, 39, 86, 87, 88, 89, 91, 100, 101



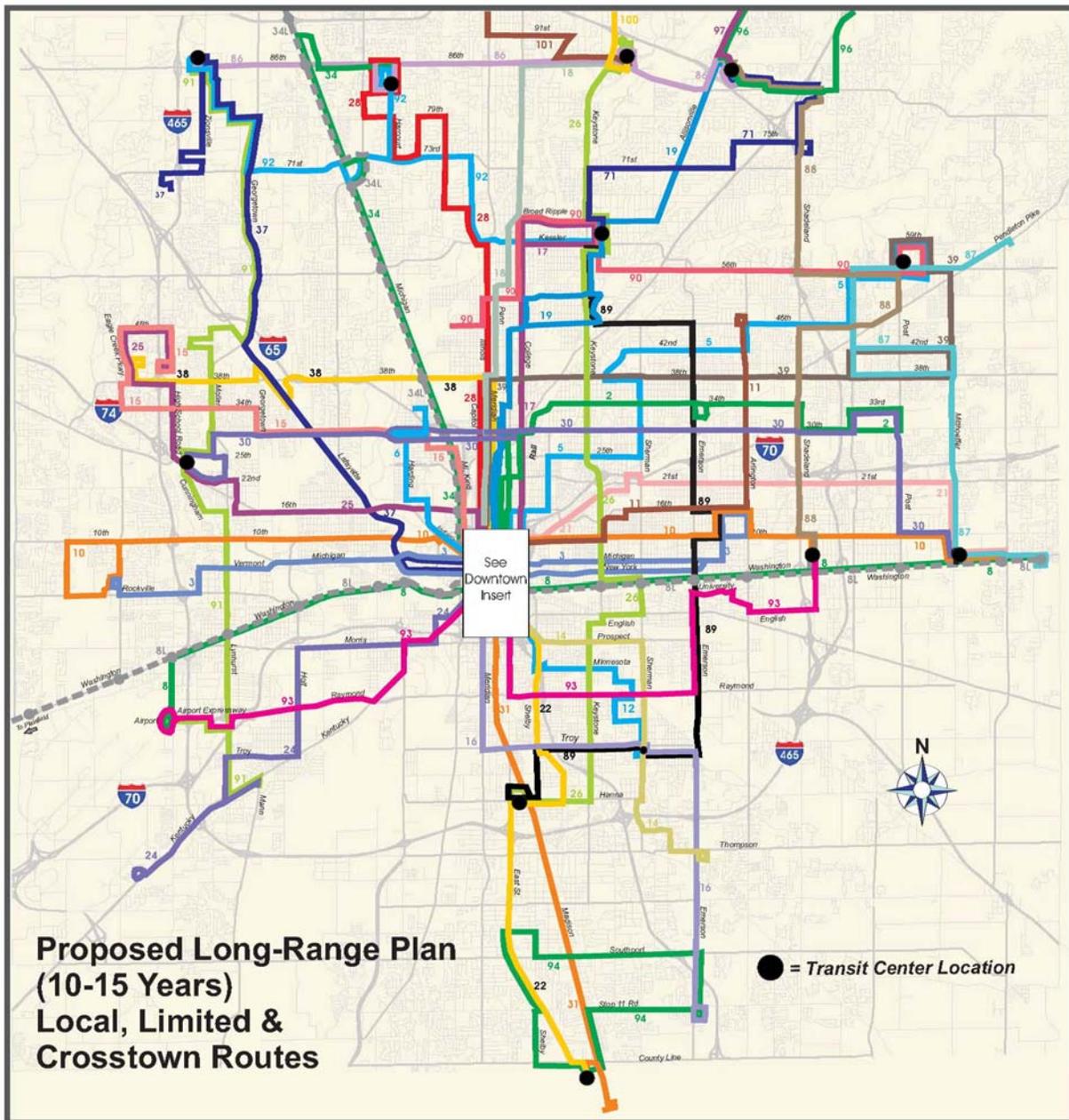
- **New Transit Centers** (6 in addition to the Near-Term and Short-Range Plans).
  - Speedway Shopping Center
  - Trader's Point Shopping Center
  - St. Vincent's Hospital
  - Eastgate Mall
  - Greenwood Mall
  - Hanna Avenue & East Street
  
- **New Park & Rides** (6 in addition to the Near-Term and Short-Range Plans).
  - I-70 & S.R. 9 (Greenfield) – Route 203
  - Greenwood Mall – Routes 22, 31, 94, 204
  - U.S. 36 & S.R. 267 (Avon) – Route 207
  - I-74 & S.R. 267 (Brownsburg) – Route 208
  - Speedway Shopping Center – Routes 25, 30, 91, 208
  - S.R. 334 & Anson Development (Zionsville) – Route 209

Figure 3.7, 3.8 and 3.9 on the following pages illustrate the proposed Long-Range local, limited stop and express bus system, respectively. Table 3.3 below identifies daily and annual operating requirements for the COA Long-Range Service Plan. Appendix D contains detailed operating requirements on a route level basis for the COA Long-Range Service Plan.

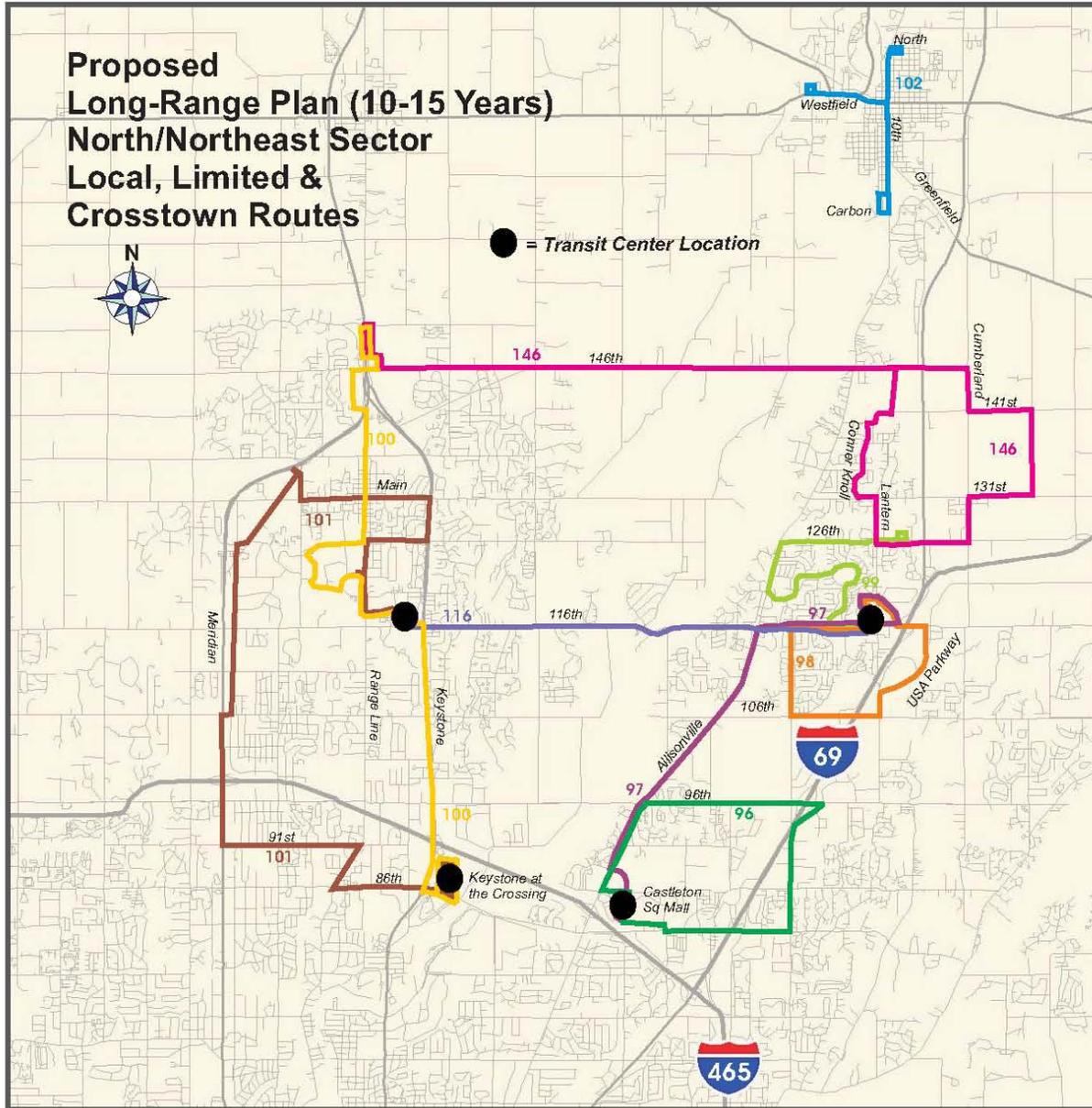
**Table 3.3**  
**COA Long-Range Operating Requirements**

<b>Day of Week / Annual</b>	<b>Revenue Bus Hours</b>	<b>Revenue Bus Miles</b>	<b>Peak Vehicles</b>	<b>Fleet Vehicles</b>
Weekday Service	1,265,472	18,038,573	325	390
Saturday Service	192,495	2,512,723	236	n/a
Sunday Service	179,098	2,334,570	204	n/a
<b>Annual Service</b>	<b>1,637,065</b>	<b>22,885,866</b>	<b>325</b>	<b>390</b>

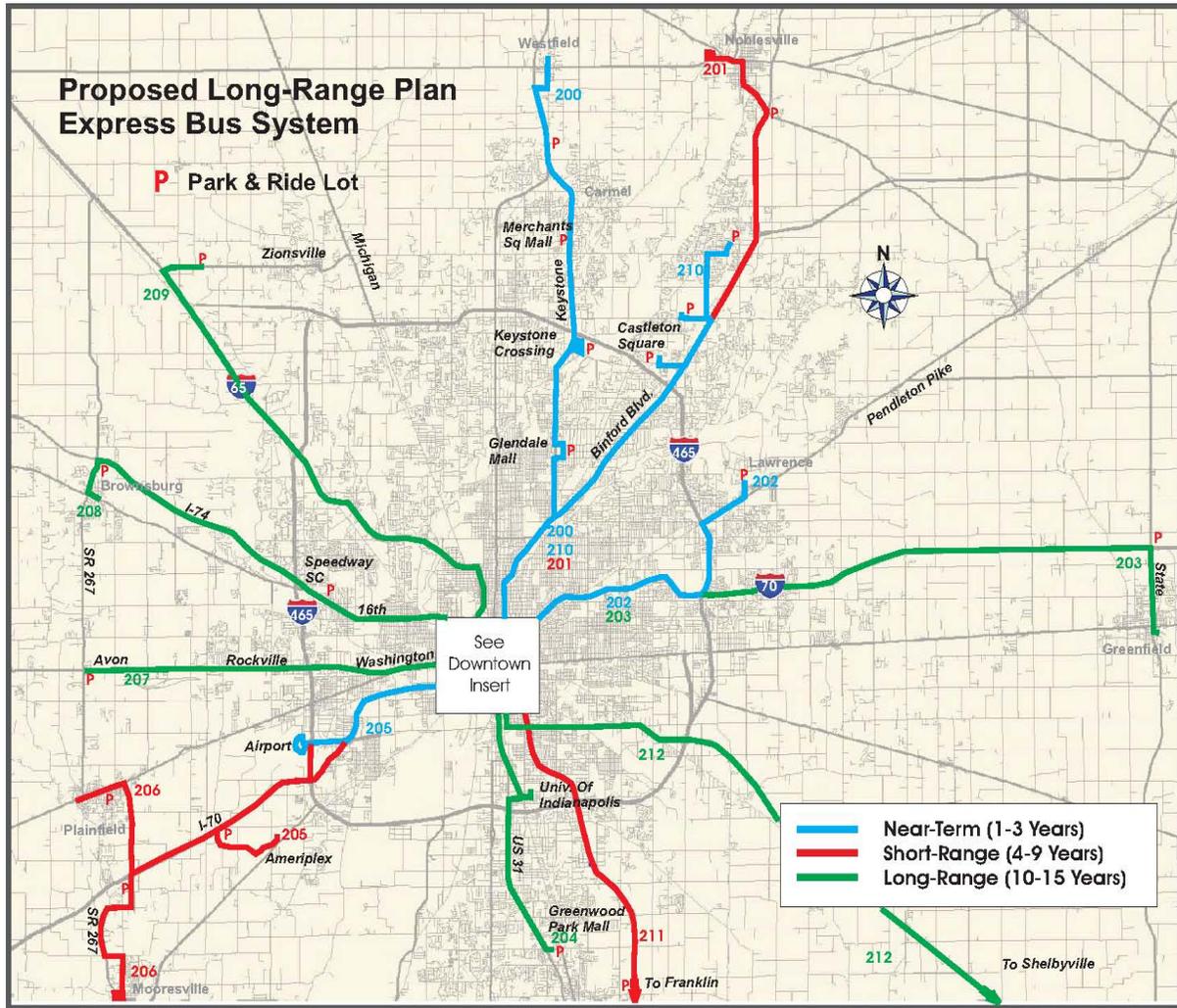
Figure 3.7



**Figure 3.8**



**Figure 3.9**



### 3.4 Downtown Transit Operations

#### Downtown Transit Center Feasibility Study

In the fall of 2004, IndyGo conducted a Downtown Transit Center Feasibility Study. The purpose of this study was to develop alternative downtown bus operating schemes that would serve major activity centers and anticipated growth and planned development areas in downtown. Alternative operating concepts were developed identifying ways bus routes could be either routed through downtown without circulating the existing bus loop, and concepts in which bus routes would terminate downtown at a transit center or series of transit centers. From that study, recommendations were made to develop downtown transit centers. Three primary locations were identified as best serving the downtown area while providing the most flexibility in serving downtown with bus service: 1) the Dome - a site located on the south side of the RCA Dome (on South Street), 2) Virginia Avenue - a site located within Virginia Avenue right-of-way between Maryland Street and Washington Street, and 3) Indiana Avenue - a site located at the northeast quadrant of the block bound by Indiana Avenue, Vermont Street and Capital Avenue.

While the Downtown Transit Center Feasibility Study and the COA were both conducted during the same timeframe, recommendations on downtown transit centers have not been included into the individual route service recommendations for the COA. Thus, the service recommendations for the COA continue to assume the existing downtown bus loop until plans advance further as to the exact locations to be pursued, the timing in which the downtown transit center or centers would be constructed and implemented, and when funding would be secured to complete these transit centers.

#### COA Long-Range Plan - Downtown Transit Center Operations (Conceptual Draft)

Because the COA is being conducted as a part of the Regional Rapid Transit Study (“diRecTionS”), some assumptions were made with regards to downtown bus transit centers, and conceptual downtown bus operations plans were developed for each of the rapid transit service alternative alignments. Each of these alternative alignments assumed the long-range construction of the three transit centers identified above: RCA Dome, Virginia Avenue and Indiana Avenue. The following figures (3.10 & 3.11) depict in concept how the COA Long-Range Service Plan could be modified to serve these three transit centers.

Figure 3.10

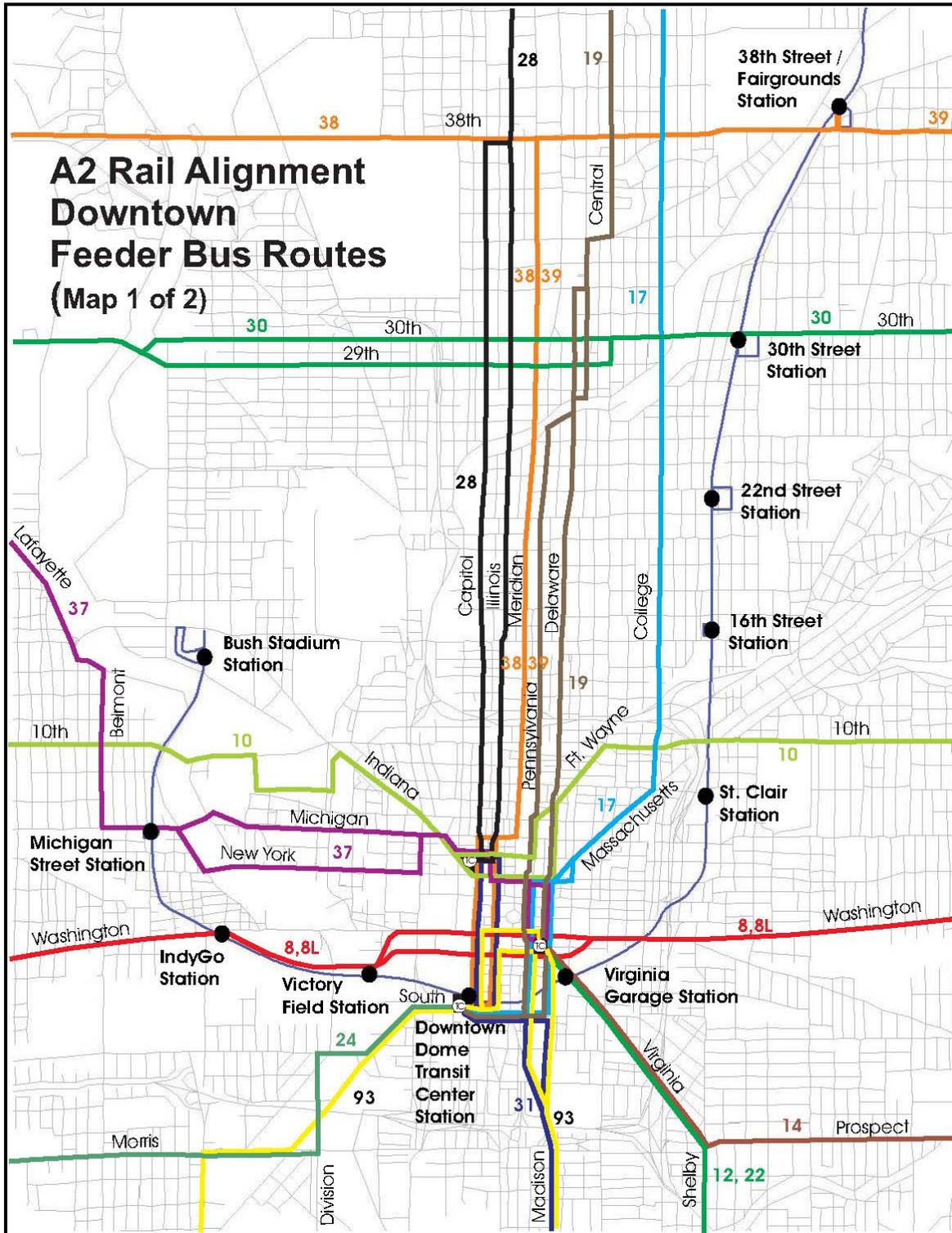
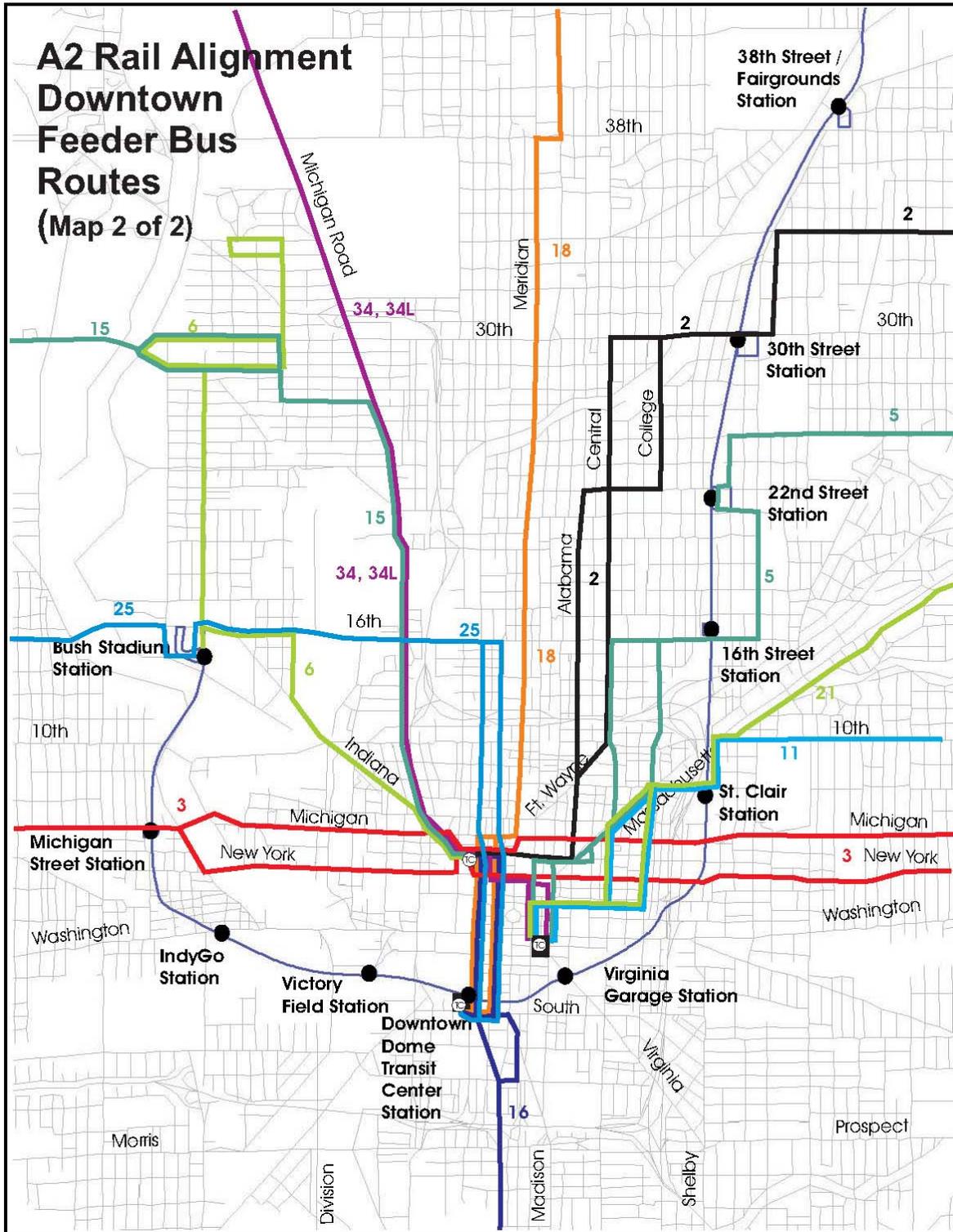


Figure 3.11



### 3.5 Ridership Estimates

Ridership estimates have been developed for each of the COA Service Plan Horizons, Near-Term, Short-Range and Long-Range. These estimates were developed using historical ridership productivity rates, existing ridership volumes and productivity, and peer group average ridership performance and productivity data.

As part of the peer group analysis, ridership productivity rates were gathered (based on FY 2003 NTD data) for IndyGo and its current and future peers. Service ridership productivity for IndyGo and its peer systems was measured in ridership (unlinked passenger trips) per vehicle revenue mile. Using this ratio for ridership productivity, IndyGo averaged 1.63 riders per vehicle revenue mile, while its current peers average 1.95 and future peers average 2.10. IndyGo ridership and ridership productivity has declined over the past couple of years as a result of a series of service reductions resulting from budgetary constraints. As a result, the recent IndyGo ridership productivity rate has dropped to 1.14. This is anticipated to rise over the coming year as IndyGo has added back some service in February 2005, in the form of service frequency improvements on routes 37, 38 and 39. Generally, service frequency improvements receive the largest return of ridership gains in comparison to other forms of service improvements.

Utilizing historical ridership productivity trend data for IndyGo, plus peer system ridership productivity, annual ridership estimates were developed for the three COA Service Plan periods. Table 3.4 below identifies peer ridership and ridership productivity (both current and future peers), and provides estimates for Near-Term, Short-Range and Long-Range COA Service Plans.

**Table 3.4  
Peer Ridership/Productivity &  
COA Service Plan Ridership Estimates**

	<b>Average Weekday Ridership</b>	<b>Annual Ridership</b>	<b>Annual Rev. Miles</b>	<b>Ridership Per Rev. Mile</b>
<b>Current Peers</b>				
Cincinnati	82,656	23,872,078	11,511,422	2.07
Charlotte	60,867	18,389,837	9,501,432	1.94
Columbus	54,109	15,626,090	8,673,312	1.80
Jacksonville	29,240	8,484,871	9,333,566	0.91
Kansas City	44,338	13,116,956	7,760,344	1.69
Louisville	44,118	12,900,738	7,439,078	1.73
Milwaukee	187,998	57,112,663	17,884,171	3.19
Providence	54,623	16,265,825	7,579,895	2.15
San Antonio	131,442	39,270,650	19,313,639	2.03
<b>Average</b>	<b>76,599</b>	<b>22,782,190</b>	<b>10,999,651</b>	<b>1.95</b>
<b>Future Peers</b>				
Buffalo	63,499	18,142,026	8,282,214	2.19
Portland	214,158	66,432,912	23,776,175	2.79
Sacramento	70,065	19,756,481	7,922,888	2.49
St. Louis	101,298	30,601,497	16,932,502	1.81
Salt Lake City	74,877	20,665,353	17,353,805	1.19
<b>Average</b>	<b>104,779</b>	<b>31,119,654</b>	<b>14,853,517</b>	<b>2.10</b>
<b>COA</b>				
<b>Near-Term</b>	<b>45,169</b>	<b>14,234,096</b>	<b>10,352,070</b>	<b>1.38</b>
<b>Short-Range</b>	<b>70,780</b>	<b>23,016,567</b>	<b>16,440,405</b>	<b>1.40</b>
<b>Long-Range</b>	<b>99,150</b>	<b>32,311,723</b>	<b>22,283,947</b>	<b>1.45</b>



### 3.6 O&M and Capital Cost Estimate

This section summarizes Operating and Maintenance (O&M) and Capital cost estimates for the Near-Term, Short-Range and Long-Range Service Plans. O&M costs are based on service supplied and capital costs are based on capital facility requirements required to successfully implement the service plan recommendations identified in the COA.

#### 3.6.1 Operating and Maintenance (O&M) Cost Estimates

The projected annual operating and maintenance costs for the COA recommendations have been developed using IndyGo's FY 2005 cost structure. The O&M cost model is resource build up in nature with cost estimates identified on a departmental basis. Fixed costs are assigned to support services departments (e.g., administration) while variable costs are assigned to service supply and support departments (e.g., operations and maintenance). All cost projections are fully allocated costs. Cost driving variables include peak and fleet buses, annual revenue vehicle hours and revenue vehicle miles.

Table 3.5 summarizes annual O&M costs for the three COA service plan periods. O&M cost estimates are provided in current year (2005) dollars and future year dollars assuming the mid year of each service plan period (e.g., 2011 for the Short-Range Service Plan).

**Table 3.5  
 COA Annual O&M Cost Estimates**

			Year	
			2005	2005
			O&M Costs	O&M Costs
<b>2005 Existing IndyGo Service</b>				
	<b>Miles</b>	<b>Hours</b>		
Weakday	4,962,300	353,430	36,711,062	36,711,062
Saturday	649,376	45,656	14,524,069	14,524,069
Sunday	400,084	28,072	13,248,006	13,248,006
<b>Total</b>	<b>6,011,760</b>	<b>427,158</b>	<b>42,073,803</b>	<b>42,073,803</b>
			<b>Future Year \$</b>	
<b>2006 Near Term Service Plan</b>				
	<b>Miles</b>	<b>Hours</b>	<b>2005</b>	<b>2006</b>
			<b>O&amp;M Costs</b>	<b>O&amp;M Costs</b>
Weakday	8,376,750	577,830	24,578,614	55,692,562
Saturday	1,076,088	74,828	16,679,607	17,305,093
Sunday	899,232	63,916	15,822,724	16,416,076
<b>Total</b>	<b>10,352,070</b>	<b>716,574</b>	<b>63,772,574</b>	<b>66,164,046</b>
			<b>Future Year \$</b>	
<b>2011 Short Term Service Plan</b>				
	<b>Miles</b>	<b>Hours</b>	<b>2005</b>	<b>2011</b>
			<b>O&amp;M Costs</b>	<b>O&amp;M Costs</b>
Weakday	12,892,035	923,355	77,629,535	96,817,890
Saturday	1,894,152	140,816	21,123,678	26,344,999
Sunday	1,654,218	124,120	19,902,576	24,822,066
<b>Total</b>	<b>16,440,405</b>	<b>1,188,291</b>	<b>96,246,454</b>	<b>120,036,513</b>
			<b>Future Year \$</b>	
<b>2017 Long Term Service Plan</b>				
	<b>Miles</b>	<b>Hours</b>	<b>2005</b>	<b>2017</b>
			<b>O&amp;M Costs</b>	<b>O&amp;M Costs</b>
Weakday	18,038,700	1,265,565	103,329,382	160,724,136
Saturday	2,512,744	192,504	24,539,576	38,170,190
Sunday	2,334,558	179,104	23,601,733	36,711,418
<b>Total</b>	<b>22,886,002</b>	<b>1,637,173</b>	<b>149,536,995</b>	<b>200,749,047</b>



### 3.6.2 Capital Cost Estimates

COA capital investment requirements include new buses, and the planning design and construction of new transit centers and park & ride lots. Tables 3.6 and 3.7 identify transit center and park & ride lot locations, routes serving these locations, number of bus bays required (transit centers) and parking spaces required (park & ride lots).

**Table 3.6**  
**Transit Center Requirements by COA Service Plan**

# Transit Centers	Near-Term					Short Range					Long Range				
	Routes	Peak Period Frequency (min)	Buses/Peak Hour	Location Served	Bus Bay Requirements	Routes	Peak Period Frequency (min)	Buses/Peak Hour	Location Served	Bus Bay Requirements	Routes	Peak Period Frequency (min)	Buses/Peak Hour	Location Served	Bus Bay Requirements
<b>1 Glendale Mall</b>	17	15	4	EOL	2	17	15	4	EOL	2	17	15	4	EOL	2
	19	30	4	Mid-Route	1.5	19	30	4	Mid-Route	1.5	19	20	6	Mid-Route	2
	26	30	4	Mid-Route	1.5	26	30	4	Mid-Route	1.5	26	15	8	Mid-Route	2
	71	n/a	n/a	EOL	n/a	71	n/a	n/a	EOL	n/a	71	30	2	EOL	1
	89	n/a	n/a	EOL	n/a	89	30	2	EOL	1	89	30	2	EOL	1
	90	n/a	n/a	Mid-Route	n/a	90	30	4	Mid-Route	1.5	90	30	4	Mid-Route	2
	92	n/a	n/a	EOL	n/a	92	30	2	EOL	1	92	30	2	EOL	1
<b>Total</b>	200	30	4	Mid-Route	1.5	200	30	4	Mid-Route	1.5	200	15	8	Mid-Route	2
				Future Growth	8.5				Future Growth	5				Future Growth	2
					16					15					15
				<b>Transit Center Needed</b>						24					36
<b>2 Castleton Square Mall</b>	19	30	4	Mid-Route	1.5	19	30	2	EOL	1	19	20	3	EOL	1.5
	71	n/a	n/a	EOL	n/a	71	n/a	n/a	EOL	n/a	71	30	2	EOL	1
	86	30	2	EOL	1	86	30	2	EOL	1	86	15	4	EOL	2
	88	n/a	n/a	EOL	n/a	88	30	2	EOL	1	88	15	4	EOL	2
	96	n/a	n/a	EOL	n/a	96	30	2	EOL	1	96	30	2	EOL	1
	97	n/a	n/a	EOL	n/a	97	30	2	EOL	1	97	30	2	EOL	1
	201	n/a	n/a	Mid-Route	n/a	201	30	4	Mid-Route	1.5	201	n/a	n/a	Mid-Route	n/a
<b>Total</b>				Future Growth	7.5				Future Growth	3.5				Future Growth	1.5
					6					14					10
				<b>Transit Center Needed</b>						10					17
<b>3 Keystone Crossing Fashion Mall</b>	18	30	2	EOL	1	18	30	2	EOL	1	18	20	3	EOL	1.5
	26	30	2	EOL	1	26	30	2	EOL	1	26	15	4	EOL	2
	86	30	4	Mid-Route	1.5	86	30	4	Mid-Route	1.5	86	15	8	Mid-Route	2
	100	30	2	EOL	1	100	30	2	EOL	1	100	30	2	EOL	1
	101	30	2	EOL	1	101	30	2	EOL	1	101	1	2	EOL	1
	200	30	4	Mid-Route	1.5	200	30	4	Mid-Route	1.5	200	15	8	Mid-Route	2
	<b>Total</b>				Future Growth	4				Future Growth	4				Future Growth
					16					16					27
				<b>Transit Center Needed</b>						11					11
<b>4 Speedway Shopping Center</b>	25	30	4	Mid-Route	1.5	25	30	4	Mid-Route	1.5	25	30	4	Mid-Route	1.5
	30	30	2	EOL	1	30	30	2	EOL	1	30	20	3	EOL	1.5
	91	30	4	Mid-Route	1.5	91	30	4	Mid-Route	1.5	91	15	8	Mid-Route	2
	208	n/a	n/a	Mid-Route	n/a	208	n/a	n/a	Mid-Route	n/a	208	30	4	Mid-Route	1.5
<b>Total</b>				Future Growth	4				Future Growth	4				Future Growth	1.5
					10					10					8
				<b>Transit Center Needed</b>						8					19
<b>5 Traders Point Shopping Center (86th &amp; Zionsville)</b>	37	15	8	Mid-Route	2	37	15	8	Mid-Route	2	37	15	8	Mid-Route	2
	86	30	2	EOL	1	86	30	2	EOL	1	86	15	4	EOL	2
	91	30	2	EOL	1	91	30	2	EOL	1	91	15	4	EOL	2
	92	n/a	n/a	EOL	n/a	92	60	1	EOL	0.5	92	60	1	EOL	0.5
<b>Total</b>				Future Growth	4				Future Growth	3.5				Future Growth	1.5
					12					8					8
				<b>Transit Center Needed</b>						13					17
<b>6 St. Vincent Hospital</b>	28	30	2	EOL	1	28	30	2	EOL	1	28	30	2	EOL	1
	34	30	2	EOL	1	34	30	2	EOL	1	34	20	3	EOL	1.5
	86	30	4	Mid-Route	1.5	86	30	4	Mid-Route	1.5	86	15	8	Mid-Route	2
	92	n/a	n/a	EOL	n/a	92	60	1	EOL	0.5	92	60	1	EOL	0.5
<b>Total</b>				Future Growth	2.5				Future Growth	2				Future Growth	1
					8					9					14
				<b>Transit Center Needed</b>						6					6
<b>7 Fort Harrison</b>	5	30	2	EOL	1	5	30	2	EOL	1	5	30	2	EOL	1
	39	15	4	EOL	2	39	15	4	EOL	2	39	15	4	EOL	2
	87	30	4	Mid-Route	1.5	87	30	4	Mid-Route	1.5	87	30	4	Mid-Route	1.5
	88	n/a	n/a	Mid-Route	n/a	88	30	4	Mid-Route	1.5	88	15	8	Mid-Route	2
	90	n/a	n/a	EOL	n/a	90	30	2	EOL	1	90	30	2	EOL	1
	202	30	2	EOL	1	202	30	2	EOL	1	202	15	4	EOL	2
<b>Total</b>				Future Growth	5.5				Future Growth	3				Future Growth	1.5
					12					18					24
				<b>Transit Center Needed</b>						11					11
<b>8 Washington Square Mall</b>	8	15	8	Mid-Route	2	8	15	8	Mid-Route	2	8	15	8	Mid-Route	2
	8L	n/a	n/a	Mid-Route	n/a	8L	30	4	Mid-Route	1.5	8L	30	4	Mid-Route	1.5
	10	30	4	Mid-Route	1.5	10	15	8	Mid-Route	2	10	15	8	Mid-Route	2
	21	30	4	Mid-Route	1.5	21	30	4	Mid-Route	1.5	21	30	4	Mid-Route	1.5
	30	30	2	EOL	1	30	30	2	EOL	1	30	20	3	EOL	1.5
	87	30	4	Mid-Route	1.5	87	30	4	Mid-Route	1.5	87	30	4	Mid-Route	1.5
	<b>Total</b>				Future Growth	3.5				Future Growth	1.5				Future Growth
					22					11					31
				<b>Transit Center Needed</b>						30					11
<b>9 Eastgate</b>	8	15	8	Mid-Route	2	8	15	8	Mid-Route	2	8	15	8	Mid-Route	2
	10	30	4	Mid-Route	1.5	10	15	8	Mid-Route	2	10	15	8	Mid-Route	2
	55	30	2	EOL	1	55	n/a	n/a	EOL	n/a	55	n/a	n/a	EOL	n/a
	88	n/a	n/a	EOL	n/a	88	30	2	EOL	1	88	15	4	EOL	2
	93	n/a	n/a	EOL	n/a	93	30	2	EOL	1	93	30	2	EOL	1
<b>Total</b>				Future Growth	5.5				Future Growth	2.5				Future Growth	1.5
					14					10					26
				<b>Transit Center Needed</b>						24					10
<b>10 Greenwood Mall</b>	22	30	2	EOL	1	22	30	2	EOL	1	22	30	2	EOL	1
	31	30	4	EOL/Mid-Rte	2	31	20	6	EOL/Mid-Rte	2	31	15	8	EOL/Mid-Rte	3
	94	60	1	Mid-Route	1	94	30	4	Mid-Route	1.5	94	30	4	Mid-Route	1.5
	204	n/a	n/a	EOL	n/a	204	n/a	n/a	EOL	n/a	204	30	2	EOL	1
<b>Total</b>				Future Growth	4				Future Growth	3.5				Future Growth	1.5
					7					8					16
				<b>Transit Center Needed</b>						12					8
<b>11 Hanna &amp; East</b>	22	30	4	Mid-Route	1.5	22	30	4	Mid-Route	1.5	22	30	4	Mid-Route	1.5
	26	30	2	EOL	1	26	30	2	EOL	1	26	15	4	EOL	2
	31	30	4	Mid-Route	1.5	31	20	6	Mid-Route	2	31	15	8	Mid-Route	2
	204	n/a	n/a	Mid-Route	n/a	204	n/a	n/a	Mid-Route	n/a	204	30	4	Mid-Route	1.5
<b>Total</b>				Future Growth	4				Future Growth	3.5				Future Growth	1
					10					12					20
				<b>Transit Center Needed</b>						8					8

**Table 3.7  
Park & Ride Lot Requirements by COA Service Plan**

#	Park & Ride Location	Route's Served	Near-Term 1-3 Years	Short-Range 4-9 Years	Long-Range 10-15 Years	Parking Spaces
1	U.S. 31 & 151st Street (North of Carmel)	200 (100, 146)	X	X	X	300
2	Merchants Square Mall Keystone Ave. & 116th Street (Carmel)	200 (100, 101, 116)	X	X	X	150
3	Keystone Crossing Fashion Mall Keystone Ave. & 86th Street)	200 (18, 26, 86, 100 101, 200)	X	X	X	100
4	Glendale Mall	200 (17, 19, 26, 71, 89, 90, 92)	X	X	X	200
5	Fort Harrison	202 (5, 39, 87, 88, 90)	X	X	X	300
6	Fishers Train Station (Future Rapid Transit Station)	210 (97, 98, 99, 116)	X	X	X	300
7	Indianapolis Metropolitan Airport	210 (96)	X	X	X	200
8	S.R. 37 & S.R. 238 (SE of Noblesville)	201		X	X	200
9	Castleton Square Mall (near Mall area, preferably at future Rapid Transit station site)	201 (19, 71, 86, 88, 96, 97)		X	X	200
10	Ameriplex (located near I-70 & Six Points Road intersection)	205		X	X	300
11	I-70 & S.R. 267	206		X	X	350
12	Washington Square Mall	8, 8L, 10, 21, 30 87		X	X	150
13	Eastgate Mall	8, 8L, 10, 88, 93		X	X	150
14	East Street & Hanna Avenue	22, 26, 31, 89, 204		X	X	100
15	Thompson Rd. & Emerson Ave.	14, 16		X	X	75
16	Michigan Road & 86th Street	34, 34L, 86		X	X	100
17	Michigan Road & Kessler Blvd.	34, 34L		X	X	75
18	Washington St. & Lynhurst Dr.	8, 8L, 91		X	X	75
19	I-65 & King Street (C.R. 44, Exit 90) Franklin	211		X	X	75
20	C.R. 500 N (Whiteland-Exit 95) Whiteland	211		X	X	75
21	Main Street (Greenwood - Exit 99) Greenwood	211		X	X	100
22	I-70 & S.R. 9	203			X	300
23	Greenwood Mall	204 (22, 31, 94)			X	300
24	Avon (located near U.S. 36 & S.R. 267)	207			X	300
25	Brownsburg (located near I-74 & S.R. 267, possibly at Brownsburg Village)	208			X	200
26	Speedway Shopping Center	208 (25, 30, 91)			X	100
27	Zionsville (located on S.R. 334, east on I-65, possibly incorporated with new Anson Development)	209			X	300
28	I-74 & C.R. 9 (Morristown Road) Shelbyville	212			X	100

**Total Parking Spaces                    5175**

Table 3.8 below summarizes the annual bus operating and capital cost estimates for the Near-Term, Short-Range and Long-Range COA Service Plans.

**Table 3.8**  
**Summary of Annual Bus**  
**O&M and Total Capital Costs**  
**By COA Service Plan**

Service Plan	Time Period	Annual O&M Costs (\$ Million, 2005)	Capital Costs			Total Capital Costs (\$ Million, 2005)
			Transit Centers	Park & Rides	Buses	
Existing Service	2005	\$42.07	n/a	n/a	n/a	n/a
Near-Term	1-3 Years	\$63.77	\$1.32	\$6.98	\$17.70	\$26.00
Short-Range	4-9 Years	\$96.25	\$1.62	\$9.11	\$25.80	\$36.53
Long-Range	10-15 Years	\$149.54	\$2.39	\$7.20	\$29.88	\$39.47

## 4.0 IMPLEMENTATION OF SERVICE PLAN RECOMMENDATIONS

It is appropriate that the final chapter of the COA deals with implementation, since this is the final step in any plan. Throughout the process of developing ideas and recommendations, the study team has focused on practical, readily implementable strategies for improving transit in the greater Indianapolis region. The implementation phase of this project is critical to the overall success of the study.

Fortunately, IndyGo has taken the approach that planning and implementation are ongoing, interrelated processes, and has already started to carry out recommendations even as this final report is being prepared. For example, the improvements suggested for improving route 37, 38 and 39 to improve service frequencies and address passenger overload issues. Such an interactive approach is the model for implementing COA recommendations, with route modifications followed up by monitoring and, where necessary, adjustments to the original plan. In a growing area like Indianapolis, it is probable that conditions affecting transit routes will continue to change rapidly, creating opportunity for adjustments to be made in implementing the recommendations. A flexible approach that includes extensive follow-up analysis of route and system changes enhances the usefulness of this plan.

This chapter addresses several issues that are important in implementing the COA Near-Term, Short-Range and Long-Range Plans. These include:

- Service continuity
- Service phasing and implementation strategies
- Annual operating costs
- Differentiation by service type
- Route nomenclature
- Service monitoring
- Fleet management
- Capital improvements, and
- Future opportunities.

### 4.1 Service Continuity

Change can be unsettling, particularly to long-time riders, even if the change is a clear improvement. The COA team has avoided the temptation to make changes for the sake of making changes, and has recommended improvements only in cases where there are clear benefits to be derived. Even these recommendations, however, will potentially cause rider confusion in the short-term. Thus, in implementing the proposed changes, it is important to present clear, concise information to riders that emphasizes the continuing as well as the new aspects of transit service. There are several strategies that IndyGo and other transit systems have used to communicate with riders regarding major COA service restructuring recommendations:

- Ensure that the front line staff is fully conversant with all of the service changes at the onset of the public announcement and throughout service implementation. The involvement of bus operators, street supervisors, and customer service staff in both understanding and communicating the service changes and their impacts on individual customers will be critical. To a great degree, their interest in learning about the changes will result from the sense of ownership that they feel in the IndyGo system.
- Develop clear, concise information aids, designed both for public presentations as well as individual riders.

- In conjunction with the service implementation, develop a coordinated, comprehensive ongoing public outreach and media campaign that recognizes that many IndyGo riders are not regular users.

There are several cases in which route changes are interrelated and need to be implemented simultaneously (documented above). In general, when one service is substituting for another, the changes need to be implemented together. This may appear obvious, but there are many examples from other transit systems where related changes were not made simultaneously, which detracted from the success of the planned improvements.

#### **4.2 Service Phasing and Implementation Strategies**

As noted above, it is important to preserve continuity of transit service when implementing changes if minimal disruption to existing customers is to be achieved. To preserve continuity, there are various implementation strategies that can be used. The most successful strategy has been to make all the changes affecting a particular geographic area together, as recently done by IndyGo in the February 2005 service change. The entire system is changed incrementally, one area at a time. The guiding concept behind this strategy is that riders in a given neighborhood will have to adjust to changes only once, at the time when their area is addressed. IndyGo can also focus its efforts in assisting riders in adapting to routing and scheduling changes to a single area at any one time.

Availability of funding sources may affect this strategy. For example, should limited or small increments of funding become available on an annual basis, IndyGo may need to spread service improvements throughout the region to satisfy community needs. In this case, adaptations to the plan are appropriate. Funding availability may result in a more incremental implementation schedule than desired, but delays with a single route should not impact other necessary changes.

On a broader scale, the COA plan has been divided into Near-Term, Short-Range and Long-Range Plans. Recommendations in the Near-Term Plan are most immediate and should be implemented within the next one to three years. The Short-Range Plan contains mid-range improvements to be implemented over the next four to nine years, and the Long-Range Plan's time horizon is ten to fifteen years. These breakdowns reflect the COA study team's best estimates regarding transit need and appropriate time frames, and are subject to revision, particularly as changes occur over the next several years. As noted earlier, COA are typically updated every three to five years. At that time service plans can be re-assessed for service implementation schedule and based on effectiveness of those service changes implemented.

Implementation should be accompanied by marketing efforts to ensure that riders have the information they need. Operating and customer service personnel also need to be fully informed and prepared to deal with recurrent questions from the riding public during the implementation period.

#### **4.3 Annual Operating Costs**

Implementation of the COA will affect IndyGo annual operating and maintenance (O&M) costs. The proposed service improvements will require additional staff for operations, vehicle maintenance, facility maintenance and general administration positions, such as customer service representatives. Materials and supplies will be required for the larger fleet and for the new transit facilities (transit centers and park & ride lots) throughout the community.

In addition to increased annual O&M costs, IndyGo will need to plan for a new bus operations and maintenance garage to accommodate the increased bus fleet. Planning, site selection, environmental analysis, site procurement, layout design and construction require extensive lead time. Should IndyGo become successful at increasing annual

operating funds to implement the service recommendations outlined in the three COA Service Plans, near-term action will be needed to initiate the advancement of a new bus operations and maintenance garage.

#### 4.4 Differentiation by Service Type

Nearly all of IndyGo bus routes currently in operation are local routes, with the prime differentiation being between downtown and crosstown routes. Recommendations in the COA call for additional crosstown routes, limited stop service within certain corridors, and express bus service with traditional park & ride service. As IndyGo evolves, it can be expected to differentiate its services to a far greater extent than occurs today.

As IndyGo implements new types of service, it may wish to change its equipment assignment and fare policy. Most systems with express service charge fares higher than those for local buses, on the assumption that premium service justifies premium fares. Often, higher-quality transit vehicles, like those used for HyperFix are reserved for these express routes as well. Limited-stop service is frequently offered at local fares, and similar coaches are used. The following sections present some ideas concerning how IndyGo may wish to differentiate its equipment, fares and bus stop access by type of service.

##### Equipment

The average bus vehicle for local fixed route service is assumed to be 35 to 40 feet long with a maximum speed of 55 miles per hour. The average seating capacity for these buses is approximately 36 passengers (29 for 35 foot buses, 38 – 43 for 40 foot buses), with an allowable 20 additional standees during peak period operations. It should be noted that IndyGo currently does not have articulated buses (60 seats), however have operated them previously. Articulated buses could be used in the future on high line load routes (e.g., 37, 39) to alleviate the need to operate additional vehicles to accommodate passenger volumes and peak loads. As noted above, over-the-road coaches (used on HyperFix) should be used by IndyGo or contracted by IndyGo to provide the express bus service identified in the COA Service Plans. A minimum capacity of 45 seats should be provided on the express service equipment.

##### Fare Structure

Since IndyGo does not presently operate express or premium bus services, it will be necessary to adopt an express route fare structure. IndyGo's current cash fares for local bus service is \$1.25 for adults and \$0.60 for seniors, persons with disabilities, medicare cardholders and youth 18 and under. The fare structure does not use transfers and IndyGo does offer 31 day, 10 trip, 7 day and 1 day passes.

Transit agencies frequently price express and premium services at about twice the cash fare for local service. Assuming this fare policy, the adult fare for the express bus service proposed in the Near-Term Service plan would be \$2.50 per one-way trip. Discounted fares should also be offered for express routes, assuming a similar discount rate or number of days for which the pass is valid as assumed with the local bus passes.

##### Number of Stops

Different types of service have different operating characteristics. Local bus service operates primarily on local and arterial streets and typically have bus stops located every quarter of a mile. Limited-stop service often operates on top of local bus service, but makes stops only at major intersections or transfer points, permitting greater operating speed. Express service picks up passengers in residential areas (often at gathering places such as park & ride lots to enhance efficiency) and generally operates on limited-access roads to major destinations such as downtown or suburban employment concentrations, where it will normally make several stops to distribute riders.

Two types of service, express and limited stop, may require different types of stop criteria. One or several park & ride lots would be located along the express route (e.g., route 200). In addition to serving the park & ride lots, buses could also pick up and discharge passengers along the route at limited locations (e.g., route 206). These additional stops would have a minimal effect on travel times from the park & ride lots, since these stops would occur prior to the express route serving its major park & ride lot (e.g., route 201, 203, 206, 208, and 209). Despite expected low use, these additional service stops would provide lifeline transit service to some of the outlying communities that would not justify local bus service operating from the urban core to these communities. Examples of communities that would be served by Express bus service, with some limited local bus service attached to the end of the route, are Westfield, Noblesville, Greenfield, Shelbyville, Mooresville, Plainfield and Brownsburg.

In downtown Indianapolis, express bus service is proposed to operate around an express bus loop, serving Ohio Street, West Street, Maryland Street and Delaware Street. This bus loop would allow Express bus riders, typically bound to the downtown area for work trips, closer access to employment sites.

#### 4.5 Route Nomenclature

IndyGo currently numbers its routes sequentially, with some route numbers consistent with the roadways served, e.g., route 10 serves 10<sup>th</sup> Street, and Route 30 serves 30<sup>th</sup> Street. As new routes are implemented and IndyGo begins to implement a regional express bus network, it may be desirable to reassess the current route nomenclature and consider one that can accommodate the increased number of routes and the differentiation by service type.

Several systems have established nomenclature schemes to differentiate various types of routes. Certain numbers may be reversed for express services and for limited-stop services or numbering schemes may differentiate east-west from north-south routes, or downtown routes from crosstown routes. Taken to extremes, these nomenclature systems can be unnecessarily restrictive, but a simple scheme can help riders to understand the different types of service. Some route nomenclature guidelines are evident: 1) the route name should clearly identify the route terminals as well as the primary travel path since most potential rider's associate the bus route with major destinations and road names; and 2) the route name or number should convey whether a different fare type is required to board. Currently the IndyGo system is similar to the first guideline in that some route numbers and names clearly identify the general roadway path and end of lines.

In this report, new routes were numbered consistent with the existing approach, beginning with route 71 – 71<sup>st</sup> Street and continuing with route 86 – 86<sup>th</sup> Street. Other route numbers have been identified which clearly identify roadways served or area of town, examples include: route 116 – 116<sup>th</sup> Street and route 146 – 146<sup>th</sup> Street. Limited stop routes have been identified using an “L” after the route number to signify “Limited Stop Service”. The limited stop service generally mirrors the fixed route service with the same route number (e.g., route 8 local and route 8L limited stop). Finally, the express routes in the COA service plans have been identified as 200 series routes, starting with route 200 – Westfield / Carmel. Other methods could include numbering express routes based on the area of the region they serve (i.e., north, south, east and west) or by the County they service (i.e., Marion County, Shelby County, Johnson County, etc.). Either way, express routes should have a distinctly different numbering scheme than that used for local bus service, so they can be easily identifiable by the customer. This will also allow for some flexibility in designing marketing and customer informational tools.

At a future date, IndyGo may wish to explore alternative route nomenclature that differentiates local, limited, crosstown and circulator service. For example, the circulator service could be designated with the letter “C” after the numeric designation (such as route 94C – South County Circulator). As an alternative, crosstown service could be designated with a route letter versus a number, using the alphabet (A through Z); an example would be the Westside Crosstown, which could be identified as Route F versus route 91 as designated in the COA service plan. This



nomenclature issue should be addressed as soon as possible, before too many new routes are implemented and the number of changes increases.

As a cautionary note, it may not be desirable to renumber current routes to conform to a new nomenclature, because some transit systems which have done this have created unnecessary confusion for their riders. New route numbers would be encouraged if significant changes are made to an existing route, which would provide an opportunity to slowly conform all routes to a new nomenclature. It is appropriate to introduce a new numbering system for new types of service only when it assists new and existing customers in learning about and using the IndyGo system.

#### **4.6 Service Monitoring**

The collection of data is fundamental for the effective planning and management of transit services. Ongoing monitoring of both service delivery and ridership normally takes place on a monthly, quarterly and annual basis.

Key information needed to monitor route performance effectively includes scheduled and operated service hours, service miles, vehicles, and one-way trips, ridership (by fare category, bus stop and trip), vehicle passenger loads, operating revenues and costs, schedule adherence and on-time performance. Detailed ridership and schedule adherence information is often collected by personnel riding the bus routes to record boardings and alightings by stop (as done for the COA ridercheck data collection), or more recently by prototype automated passenger counters (APC's) supported by automated vehicle location systems (AVL). IndyGo is pursuing the procurement of both of these systems, which will allow for the greater degree of data collection efficiency and effectiveness. Other information necessary in order to access how well the IndyGo network and routes are satisfying regional and local mobility needs includes changes in land use, employment, travel patterns, traffic circulation and demographics.

Transit systems similar in size as IndyGo often do not have routine data collection efforts beyond what is required by the Federal Transit Administrations (FTA) National Transit Database (NTD) program. IndyGo does significantly more than what is required by FTA's NTD program. As IndyGo grows, however, it will have a greater need to track detailed ridership information to understand how its routes are being used, especially given the service area's anticipated continued growth. The implementation of COA recommendations can provide an impetus to utilize the Service Monitoring Indicators developed as part of the COA, to continuously track boarding and alighting patterns to ensure that the recommendations work as intended and that service provision is appropriate to the demand on a given route (or even route segment) at a given time of day. It is recommended that IndyGo develop an ongoing ridecheck program that collects trip data for 100 percent of the weekday service annually and 100 percent of the weekend service every two years. This program should account to possible double or re-checks on routes where major service changes or improvements are made throughout the year.

#### **4.7 Fleet Management**

As described in Chapter 3, the fleet vehicle requirements increase significantly over the term of the COA. It will be necessary for IndyGo, as its fleet requirements grow, to conduct a periodic fleet management study which identifies when existing vehicles need to be replaced and new vehicles need to be procured. The fleet management study will ensure that not only does IndyGo have sufficient total buses to operate its planned level of service, but an adequate number of buses must be available for each bus type. Monitoring vehicle miles and maintenance schedules will provide IndyGo with the knowledge of when buses will need to be replaced and when buses need major mid-life overhauls. Maintaining a low average fleet age will help IndyGo provide quality transit service as well as maintain an efficient vehicle maintenance program.

#### 4.8 Capital Improvements

Throughout the COA Near-Term, Short-Range and Long-Range Plans, the need for additional transit related facilities is documented. With the expansion of the system in terms of routes, service and the number of buses, the number and type of facilities must drastically be increased. At present, the major facilities within the IndyGo system include the maintenance, operations and administration facility on Washington Street just west of downtown. Due to the significant expansion of transit service proposed in the COA, IndyGo will need to examine an additional maintenance and operations facility to accommodate the enlarged bus fleet. Although the COA recommends significant transit service and passenger facility improvements throughout the region, it does not address the location and size of a new Operations and Maintenance Base. Further study of possible site locations relative to service distribution and non-revenue operations is recommended. Proper lead time should be given to the site selection and planning, site environmental analysis, site procurement, site layout, design and construction to have a new facility ready at the time service levels demand a new facility. Additional consideration should also be given to the rehabilitation of the existing facility during the same time frame or shortly thereafter.

The COA study identified three forms of capital improvements (identified in Chapter 3 above) required to implement the service plan recommendations, 1) new buses, 2) transit centers and 3) park & rides. In addition to these capital improvements, IndyGo has been pursuing the development of downtown transit centers (as noted above). Although the locations and timeframes in which these facilities would come online are uncertain at the time of this study, additional transit facility capital costs would be anticipated to be significant and be phased over several years. Once the transit center locations and sizes have been determined for downtown, an additional analysis of impacts to existing downtown transit amenities should be undertaken.

#### 4.9 Future Opportunities

As previously mentioned, the planning horizon for the COA plan is 15 years. Within this time frame are opportunities to implement the regional transportation network and the regional transit system recommended in the COA. The following paragraphs outline several of the issues and opportunities regarding the COA transit network.

##### Funding

The majority of the additional service in the COA plan is local and express route service, including increasing service on existing routes or implementing new routes. The increase in service on existing routes comes in the form of an increase in peak and/or base frequency; initiation or extension of evening service; initiation or extension of weekend service; and modification of evening frequency. Before implementation of the new or improved service; several items require attention. The most significant item in providing the level and quality of transit system desired in the Indianapolis Region is the funding. IndyGo as currently funded has very little ability to significantly expand service coverage and service levels. Funding service on an annual basis, while accommodating cost increases (e.g., increased fuel costs, insurance costs), without a significant dedicated funding source, results in the inability for the transit agency to properly plan for service and quality of service improvements required to operate a World Class Public Transit System. Dedicated funding of the program is paramount in importance to the expansion of the program. Another important issue is the provision of capital facilities to accommodate the program (described above). Finally, timing and staging of the service is an issue, since many of the route recommendations depend on other new or restructured routes. As new funding becomes available, IndyGo working with its funding partners, will need to identify packages of service changes/improvements that can be implemented together to achieve the designed intent of the service changes.

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### **Activity Center Connectivity**

One of the key Near-Term and Short-Range service recommendations is the system connectivity. Connecting activity centers together improves overall system effectiveness and efficiency, providing dramatic improvements in community mobility and significant reductions in transit travel times. Activity Center connectivity can not be overemphasized. Currently, IndyGo operates a radial oriented transit system as a result of limited funding and system evolution. The result is lengthy transit travel times for those users of the system not bound for downtown Indianapolis (e.g., west side transit service has very little interconnectivity between routes). Improving transit travel times through improved system connectivity will result in increased use by existing transit users and increase the ability to attract new users, specifically those individuals with other options that are sensitive to trip travel times.

### **Express Bus Service**

Currently, IndyGo does not operate express bus service. As the recommendations of this COA begin to be implemented, express bus service will become increasingly important in the development of the transit system. Providing improved, automobile competitive transit travel times will begin to attract new customers to the transit system. Attracting new customers will increase system ridership as well as increase community support for transit service in the region. The express bus service designed in the COA service plans attempt to provide traditional park & ride type express service, while also providing some lifeline service to communities currently not serviced by public transit. Many of the routes identified in the COA service plans provide some local / limited stop service to outlying communities (e.g., Greenfield, Brownsburg, Westfield, Mooresville, Plainfield, and Shelbyville) before serving a park & ride lot and expressing to downtown Indianapolis. This type of service design is intended to provide service to those with limited auto ownership and those choosing to use public transit as an alternative to driving.

### **Regional Rapid Transit Service**

Another important assumption regarding the area's transportation system is the status of the rapid transit service (DiRecTionS) program. The Metropolitan Planning Organization (MPO) is studying the advancement of rapid transit service in the region in many corridors. This study effort has narrowed to an initial corridor from downtown Indianapolis to the Northeast as far as Noblesville. As this corridor and others in the region advance through the planning, design and construction phases of project development, IndyGo and the MPO will need to re-examine the assumptions put forth in this COA and continually coordinate / update the bus service plans identified in the corridor plans with the COA and the IndyGo five year service development plan.



**APPENDIX A  
COA SERVICE PLAN RECOMMENDATIONS  
Route-by-Route**



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 2 – East 34<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended that this route be simplified by eliminating service beyond the terminal loop to the Crossroads Rehabilitation Center, discontinuing two route patterns to: 1) 25<sup>th</sup> Street & Routiers Street and 2) Building 400/Finance Center in Lawrence. Currently, some trips start/turnback at 32<sup>nd</sup> Street and Emerson Avenue. All trips are proposed to operate the entire length of the route. Service to Lawrence along Franklin Road, 42<sup>nd</sup> Street, and Post Road would be provided by the new proposed crosstown routes #87 and #88. See existing and proposed route alignment maps on the following pages.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 2 service level improvements are proposed in the short-range (4 to 9 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Weekday evening service would be improved from 60-minute to 30-minute headways. In addition, Sunday peak and midday service would be improved from 60-minute to 30-minute headways, consistent with existing and proposed Saturday service levels.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 2 in the three service plan timeframes are as follows:

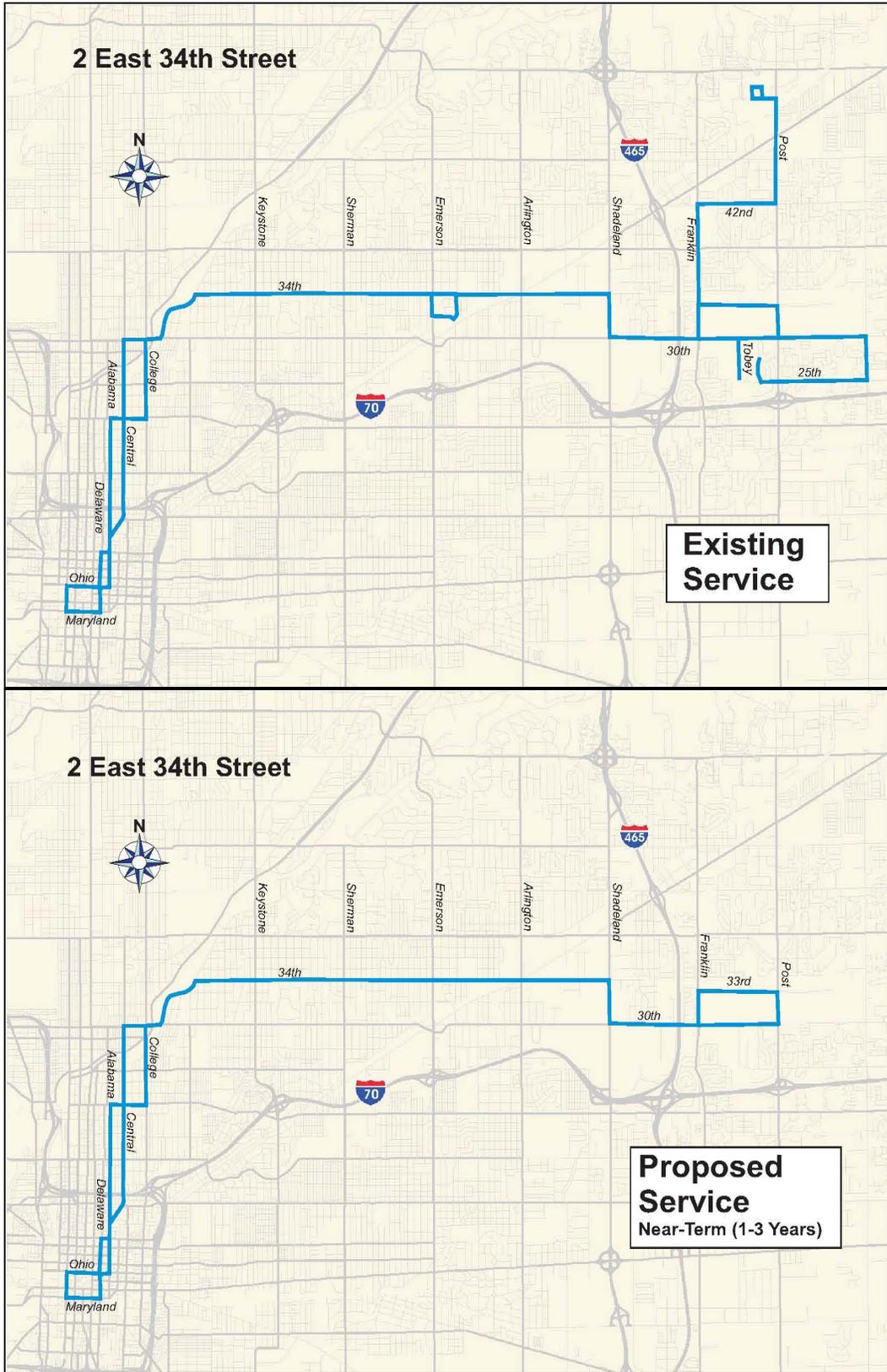
- **Near-Term:** Service on weekdays and Saturdays would be provided from 5:00 a.m. to 10:00 p.m., and on Sundays from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Weekday service would be extended to 4:00 a.m. to 12:00 a.m., and Sunday service would be extended to 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 2 - East 34th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	67	62	80	80
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	30	30	30	30
	Evening	60	60	30	30
	Peak Buses	6	4	4	5
	Revenue Hours	48.28	62.00	80.00	86.00
	Revenue Miles	804.7	812.2	1048.0	1048.0
Span of Service	4:45 am – 10:25 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	56	62	62	62
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	30	30	30	30
	Evening	60	60	60	60
	Peak Buses	3	4	4	5
	Revenue Hours	33.67	62.00	62.00	68.00
	Revenue Miles	588.0	812.2	812.2	812.2
Span of Service	6:17 am – 10:25 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	29	30	62	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	60	60	60	60
	Peak Buses	2	2	4	5
	Revenue Hours	16.00	24.14	62.00	68.00
	Revenue Miles	273.0	393.0	812.2	812.2
Span of Service	7:10 am – 9:15 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 3 – Michigan Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended that this route be extended on the west side to the Crestwood Village Apartments at Girls School Road (also served by route #10) via Rockville Road, and shortened on the east side, ending at a terminal loop in the Community Hospital East area. Service on Arlington Road north of 16<sup>th</sup> Street to Devington Plaza would be provided by the proposed realignment of route #11.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 3 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years), as described below:

- **Near-Term:** Weekday peak and midday service would be improved from 40-minute and 80-minute headways, respectively, to 30-minute headways in both periods. In addition, Sunday evening service would be added at 60-minute headways, consistent with existing and proposed weekday and Saturday evening service levels.
- **Short-Range:** Saturday and Sunday peak and midday service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 3 in the three service plan timeframes are as follows:

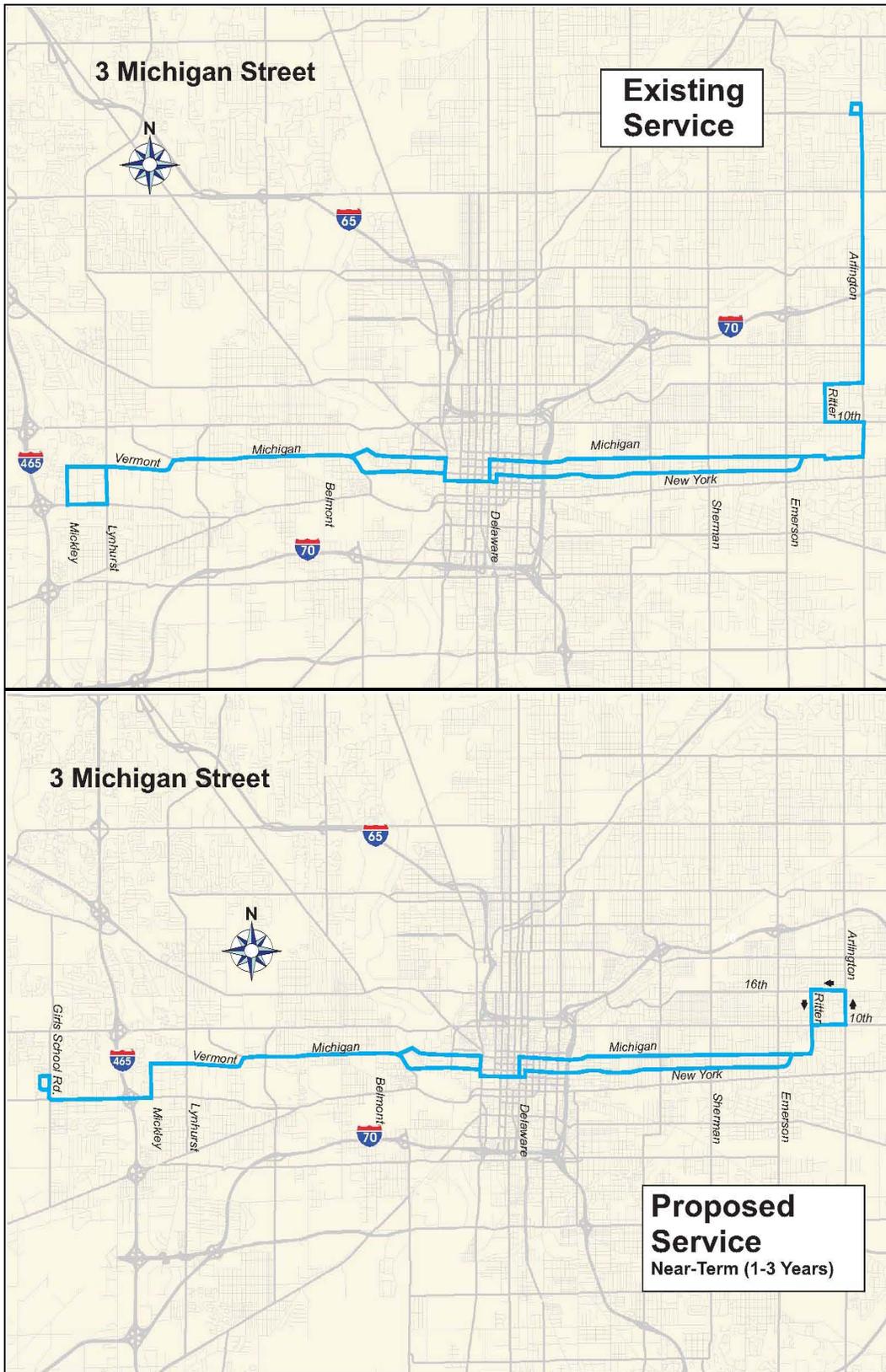
- **Near-Term:** Service on all days would start earlier and end later, with weekday and Saturday service provided from 5:00 a.m. to 10:00 p.m. and Sunday service provided from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Sunday service hours would be extended to 5:00 a.m. to 10:00 p.m., consistent with Near-Term proposed weekday and Saturday spans of service.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 3 - Michigan Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	36	62	62	62
	<u>Average Headway</u>				
	AM, PM Peak	40	30	30	30
	Midday	80	30	30	30
	Evening	60	60	60	60
	Peak Buses	4	5	5	5
	Revenue Hours	38.13	77.50	77.50	77.50
	Revenue Miles	558.7	930.0	930.0	930.0
Span of Service	5:15 am-9:05 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	30	34	62	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	60	60	60	60
	Peak Buses	2	3	5	5
	Revenue Hours	26.90	42.50	77.50	77.50
	Revenue Miles	500.3	510.0	930.0	930.0
Span of Service	5:48 am-8:33 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	26	30	62	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	-	60	60	60
	Peak Buses	2	3	5	5
	Revenue Hours	22.87	37.50	77.50	77.50
	Revenue Miles	432.8	450.0	930.0	930.0
Span of Service	6:50 am-7:46 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 4 – Fort Harrison

#### Proposed Service Changes

##### Alignment

It is recommended that within the Near-Term Plan this route be eliminated, given the route's poor level of service to its three route patterns and unnecessary complexity. The proposed extensions of routes #5 and #39 to Lawrence would replace service to the Finance Center and Building 400, via 42<sup>nd</sup> Street and 46<sup>th</sup> Street and via 38<sup>th</sup> Street, respectively. The proposed new crosstown route #88 would provide service along Shadeland Avenue north to Community Hospital North, as well as to Lawrence.

##### Service Levels and Span of Service

This route, which currently operates on weekdays and Saturdays, would be eliminated in the near-term (1 to 3 years).



**Proposed Operating Requirements**

**Route 4 -Fort Harrison**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	45	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	30	n/a	n/a	n/a
	Midday	60	n/a	n/a	n/a
	Evening	60	n/a	n/a	n/a
	Peak Buses	4	n/a	n/a	n/a
	Revenue Hours	41.77	n/a	n/a	n/a
	Revenue Miles	684.4	n/a	n/a	n/a
Span of Service	5:05 am-10:16 pm	n/a	n/a	n/a	
Saturdays	One Way Trips	31	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	60	n/a	n/a	n/a
	Midday	60	n/a	n/a	n/a
	Evening	60	n/a	n/a	n/a
	Peak Buses	2	n/a	n/a	n/a
	Revenue Hours	27.08	n/a	n/a	n/a
	Revenue Miles	482.9	n/a	n/a	n/a
Span of Service	6:10 am-11:05 pm	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 5 – East 25<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended that this route be split into two routes, with the proposed route #5 covering the eastern side and a new proposed route #6 covering the western side (as discussed below under *Route 6 - North Harding*) of the existing route. The proposed #5 route would follow the existing routing east of downtown to Sherman Avenue and 38<sup>th</sup> Street, and would be extended northeast from that point to a terminal loop in Lawrence. Routing to the new end of line would be similar to that provided by the existing route #4, via 42<sup>nd</sup> and 46<sup>th</sup> streets, Franklin Road, and 56<sup>th</sup> Street. The current mid-route pattern deviating along Hillside Avenue, Bloyd Avenue, and Olney Street would be eliminated, as the reduction in trunk headways required to serve this alignment is not justified based on ridership.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 5 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years), as described below:

- **Near-Term:** Weekday and Saturday evening service levels would be improved from 70-minute to 60-minute headways. In addition, Saturday peak period service would be improved from 60-minute to 30-minute headways.
- **Short-Range:** Both Saturday midday and Sunday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 5 in the three service plan timeframes are as follows:

- **Near-Term:** Service on weekdays would be provided from 4:00 a.m. to 12:00 a.m., on Saturdays from 5:00 a.m. to 10:00 p.m., and on Sundays from 6:00 a.m. to 9:00 p.m.
- **Short-Range and Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 5 - East 25th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	66	68	68	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	30	30	30	30
	Evening	70	60	60	60
	Peak Buses	4	6	6	6
	Revenue Hours	55.47	102.00	102.00	102.00
	Revenue Miles	796.0	1142.4	1142.4	1142.4
Span of Service	4:47 am-12:10 am	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	34	46	62	62
	<u>Average Headway</u>				
	AM, PM Peak	60	30	30	30
	Midday	60	60	30	30
	Evening	70	60	60	60
	Peak Buses	2	6	6	6
	Revenue Hours	27.70	69.00	93.00	93.00
	Revenue Miles	406.0	772.8	1041.6	1041.6
Span of Service	6:10 am-10:25 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	30	34	42	42
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	60
	Evening	60	60	60	60
	Peak Buses	2	3	6	6
	Revenue Hours	23.62	51.00	63.00	63.00
	Revenue Miles	351.4	571.2	705.6	705.6
Span of Service	7:10 am-9:10 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 6 – North Harding Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** As discussed briefly above under *Route 5 - East 35<sup>th</sup> Street*, this is a new recommended route, covering the western side of the existing route #5. The proposed alignment would follow the same alignment as the existing route 5 from downtown to 36<sup>th</sup> Street and Elmira Street. The route 6 alignment eliminates the existing route 5 Elmira Street / Harding Street loop north of 30<sup>th</sup> Street due to very low ridership (12 daily boardings) and out of direction travel for ridership originating on the existing Clifton Street branch.

##### Service Levels

Route 6 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years), as described below:

- **Near-Term:** Weekday service would be operated every 30 minutes in the peak and midday periods and every 60 minutes in the evenings. Saturday service would be every 30 minutes in the peak periods and every 60 minutes in the midday and evenings, while Sunday service would be every 60 minutes all day.
- **Short-Range:** Sunday peak period service would be improved to 30-minute headways.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 6 in the three service plan timeframes would be consistent with those proposed for Route 5, as follows:

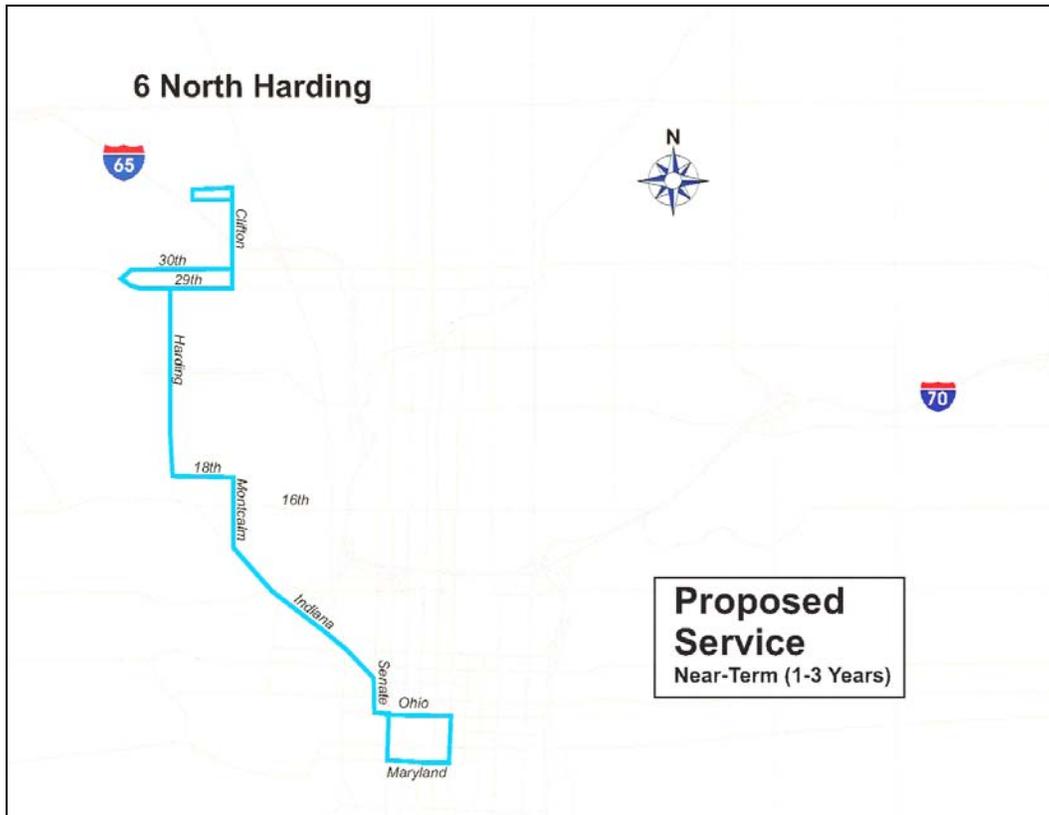
- **Near-Term:** Service on weekdays would be provided from 4:00 a.m. to 12:00 a.m., on Saturdays from 5:00 a.m. to 10:00 p.m., and on Sundays from 6:00 a.m. to 9:00 p.m.
- **Short-Range and Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 6 - North Harding**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	68	68	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	30	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	2
	Revenue Hours	n/a	34.00	34.00	34.00
	Revenue Miles	n/a	360.4	360.4	360.4
Span of Service	n/a	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	46	46	46
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	2
	Revenue Hours	n/a	23.00	23.00	23.00
	Revenue Miles	n/a	243.8	243.8	243.8
Span of Service	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	42	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	1	2	2
	Revenue Hours	n/a	15.00	21.00	21.00
	Revenue Miles	n/a	159.0	222.6	222.6
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 8 – Washington Street

#### Proposed Service Changes

##### Alignment

No changes to the existing alignment of this route are proposed. However, additional limited stop service in this corridor is proposed, as discussed later under *Route 8L - Washington Street Limited*.

##### Service Levels

Route 8 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years), as described below:

- **Near-Term:** Weekday midday service levels would be improved from 30-minute to 15-minute headways. Weekday and Saturday evening service would be provided at consistent 30-minute headways, rather than ranging from 30 to 70 minutes, while Sunday evening service would be added, also at 30-minute headways.
- **Short-Range:** Weekday evening service levels would be improved to 20-minute headways. On Saturdays and Sundays, peak and midday service levels would be improved from 30-minute headways to 15-minute and 20-minute headways, respectively.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 8 in the three service plan timeframes are as follows:

- **Near-Term:** Weekday and Saturday service would be provided from 4:00 a.m. to 12:00 a.m., while Sunday service hours would be extended incrementally to 5:00 a.m. to 10:00 p.m.
- **Short-Range:** Sunday service hours would be extended to 4:00 a.m. to 12:00 a.m., consistent with the proposed weekday and Saturday spans of service.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 8 - Washington Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	79	136	148	148
	<u>Average Headway</u>				
	AM, PM Peak	15	15	15	15
	Midday	30	15	15	15
	Evening	30-70	30	20	20
	Peak Buses	8	12	12	13
	Revenue Hours	92.72	204.00	222.00	240.50
	Revenue Miles	1468.2	2815.2	3063.6	3063.6
Span of Service	4:40 am-12:37 am	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	64	80	136	136
	<u>Average Headway</u>				
	AM, PM Peak	30	30	15	15
	Midday	30	30	15	15
	Evening	30-70	30	30	30
	Peak Buses	6	6	12	13
	Revenue Hours	76.35	120.00	204.00	221.00
	Revenue Miles	1256.8	1656.0	2815.2	2815.2
Span of Service	5:53 am-12:12 am	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	54	68	108	108
	<u>Average Headway</u>				
	AM, PM Peak	30	30	20	20
	Midday	30	30	20	20
	Evening	-	30	30	30
	Peak Buses	6	6	9	10
	Revenue Hours	64.50	102.00	162.00	180.00
	Revenue Miles	1065.8	1407.6	2235.6	2235.6
Span of Service	6:53 am-8:59 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 10 – 10<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended that this route be extended on the west side, utilizing Country Club Road as the western terminus loop turn around versus the existing Transfer Road and Raceway Road loop options. Additionally, it is proposed to eliminate the High School Road branch from this route and operate all trips to Country Club Road, thus eliminating rider confusion. Service to the High School Road branch would be assumed with a combination of a new route 91 and a reconfigured route 25. Near Term service plans recommend the re-establishment of a transit center at the Eastgate Mall site. Once this transit center is re-established, route 10 is proposed to deviate along Shortridge Road to serve this location.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 10 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday, Saturday, and Sunday evening service levels would be improved incrementally to consistent 60-minute headways. In addition, Sunday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Short-Range:** Weekday and Saturday evening service levels would be further improved to 30-minute headways, with peak period service levels also improved from 30-minute headways to 15 minutes on weekdays and 20 minutes on Saturdays. Finally, Sunday midday service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Final incremental improvements in service levels would result in peak/midday/evening headways of 15/15/30 on weekdays, 20/30/30 on Saturdays, and 30/30/30 on Sundays.

##### Span of Service

The proposed spans of service for Route 10 in the three service plan timeframes are as follows:

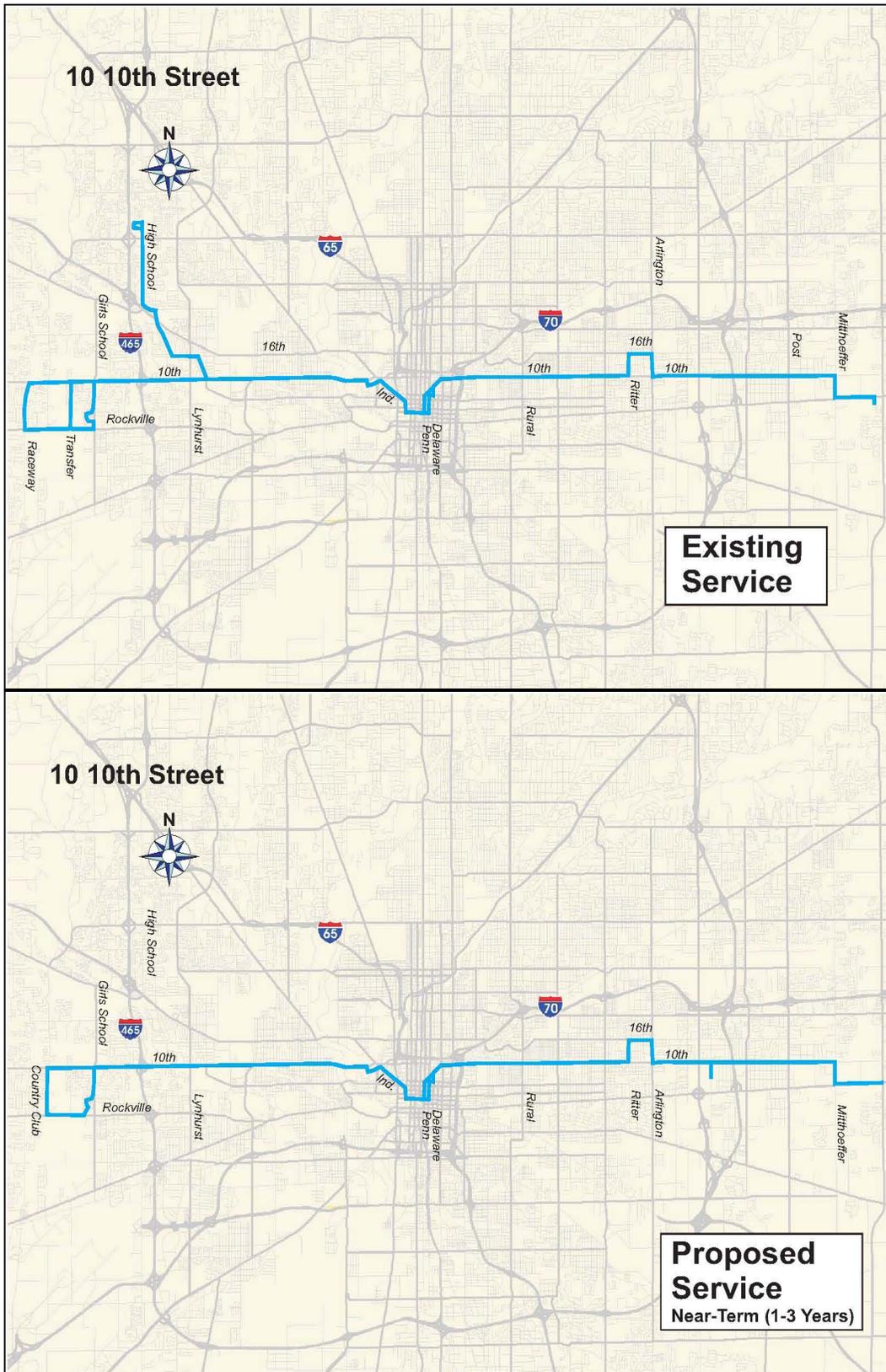
- **Near-Term:** Weekday service would be provided from 4:00 a.m. to 12:00 a.m., while Saturday and Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Short-Range:** Saturday service hours would be extended to 4:00 a.m. to 12:00 a.m., consistent with the proposed weekday span of service.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 10 - 10th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	71	68	104	136
	Average Headway				
	AM, PM Peak	30	30	15	15
	Midday	30	30	30	15
	Evening	70	60	30	30
	Peak Buses	10	6	13	14
	Revenue Hours	103.17	102.00	176.00	238.00
	Revenue Miles	1505.3	1373.6	2100.8	2747.2
Span of Service	4:52 am-12:18 am	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	63	62	92	92
	Average Headway				
	AM, PM Peak	30	30	20	20
	Midday	30	30	30	30
	Evening	70	60	30	30
	Peak Buses	6	6	10	10
	Revenue Hours	75.10	93.00	158.00	158.00
	Revenue Miles	1241.8	1252.4	1858.4	1858.4
Span of Service	6:10 am-10:25 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	31	46	62	68
	Average Headway				
	AM, PM Peak	60	30	30	30
	Midday	60	60	30	30
	Evening	40-90	60	60	30
	Peak Buses	3	6	7	7
	Revenue Hours	36.57	69.00	108.50	119.00
	Revenue Miles	611.9	929.2	1252.4	1373.6
Span of Service	6:40 am- 9:16 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 11 – 16<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended that this route be extended north on Arlington Avenue from 21<sup>st</sup> Street to the Devington Center (current route 3 end of line), assuming the Arlington Avenue portion of the existing route 3. Currently route 11 operates a limited number of trips to the Crossroad facility with a majority of the trip short-turned at Kitley Avenue and 23<sup>rd</sup> Street. Northeast of Arlington Avenue and 21<sup>st</sup> Street ridership is very low with the Kitley Avenue branch accounting for 16 daily boardings and 19 alightings and the Crossroads branch accounting for 5 boardings and 4 alightings. The addition of the Arlington segment to this route is anticipated to improve this routes productivity, allowing the route 3 to be extended further west (see route 3 alignment recommendation).
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 11 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Saturday and Sunday service would be added, at 60-minute headways all day.
- **Short-Range:** Weekday midday and Saturday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Saturday midday and Sunday peak period service levels would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 11 in the three service plan timeframes are as follows:

- **Near-Term:** Weekday service hours would be extended to 5:00 a.m. to 10:00 p.m., while new Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Saturday service hours would be extended to 5:00 a.m. to 10:00 p.m., consistent with the proposed weekday span of service.



**Proposed Operating Requirements**

**Route 11 - East 16th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	37	46	62	62
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	60	60	60	60
	Peak Buses	2.5	3	3	3
	Revenue Hours	22.82	34.50	46.50	46.50
	Revenue Miles	377.1	469.2	632.4	632.4
Span of Service	5:39 am-7:46 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	34	42	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	3	3
	Revenue Hours	n/a	25.50	31.80	46.50
	Revenue Miles	n/a	346.8	428.4	632.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	30	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	60	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	3
	Revenue Hours	n/a	22.50	22.50	31.50
	Revenue Miles	n/a	306.0	306.0	428.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 12 – Beechcrest

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the short-range (4-9 years), as described below:

- **Near-Term:** no alignment changes proposed.
- **Short-Range:** It is recommended to eliminate the East Street / Raymond Street route pattern (replaced by new route 93) and operate all trips along the Virginia Avenue / Minnesota Street route pattern to the existing end of line located at Sherman Drive and Albany Street near the St. Francis Hospital.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 12 service level improvements are proposed in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** No change from existing service levels.
- **Long-Range:** Weekday and Saturday midday service levels, as well as Saturday and Sunday peak period service levels, would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 12 in the three service plan timeframes are as follows:

- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 12 - Beechcrest**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	43	43	46	62
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	2	2	2	2
	Revenue Hours	19.25	19.25	23.00	31.00
	Revenue Miles	321.4	321.4	368.0	496.0
Span of Service	5:10 am-10:20 pm	5:10 am-10:20 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	31	31	34	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	60	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	1	1	1	2
	Revenue Hours	13.32	13.32	17.00	31.00
	Revenue Miles	231.7	231.7	272.0	496.0
Span of Service	6:15 am-10:20 pm	6:15 am-10:20 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	28	28	30	42
	<u>Average Headway</u>				
	AM, PM Peak	60	60	60	30
	Midday	60	60	60	60
	Evening	60	60	60	60
	Peak Buses	1	1	1	2
	Revenue Hours	11.98	11.98	15.00	21.00
	Revenue Miles	207.9	207.9	240.0	336.0
Span of Service	7:16 am- 9:15 pm	7:16 am- 9:15 pm	6:00 am -9:00 pm	6:00 am -9:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 14 – Prospect

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the short-range (4-9 years), as described below:

- **Near-Term:** No alignment changes proposed.
- **Short-Range:** It is recommended to eliminate the portion of this route east of Sherman Drive (replaced by segments of new routes 89 and 93), and operate this route south along Sherman Drive, Redfern Drive, 9<sup>th</sup> Avenue and Thompson Road to the K-Mart at Emerson Avenue (covering portion of existing route 26).
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 14 service level improvements are proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Saturday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Weekday and Saturday midday service levels would be improved from 60-minute to 30-minute headways. Sunday peak and midday service levels would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 14 in the three service plan timeframes are as follows:

- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 14 - Prospect**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	41	41	46	62
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	2	2	3	3
	Revenue Hours	17.82	17.82	34.50	46.50
	Revenue Miles	304.2	304.2	414.0	558.0
Span of Service	5:18 am-9:47 pm	5:18 am-9:47 pm	5:00 am -10:00 pm	5:00 am -10:00 pm	
Saturdays	One Way Trips	31	31	46	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	1	1	3	3
	Revenue Hours	13.43	13.43	34.50	46.50
	Revenue Miles	230.3	230.3	414.0	558.0
Span of Service	6:18 am-9:49 pm	6:18 am-9:49 pm	5:00 am -10:00 pm	5:00 am -10:00 pm	
Sundays	One Way Trips	28	28	30	58
	<u>Average Headway</u>				
	AM, PM Peak	60	60	60	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	1	1	2	3
	Revenue Hours	11.90	11.90	22.50	43.50
	Revenue Miles	204.4	204.4	270.0	522.0
Span of Service	7:18 am-8:39 pm	7:18 am-8:39 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 15 – Riverside

#### Proposed Service Changes

##### Alignment

No alignment changes are recommended for this route.

##### Service Levels

Route 15 service level improvements are proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Saturday peak period service levels would be improved from 60-minute to 30-minute headways, and Sunday evening service at 60-minute headways would be added.
- **Long-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 30/30/60, seven days a week.

##### Span of Service

The proposed spans of service for Route 15 in the three service plan timeframes are as follows:

- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday and Saturday service would be provided from 4:00 a.m. to 12:00 a.m., while Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 15 - Riverside**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	51	51	52	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	5	4	4	5
	Revenue Hours	40.60	40.60	52.00	74.00
	Revenue Miles	717.6	717.6	728.0	952.0
Span of Service	4:45 am-10:26 pm	4:45 am-10:26 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	32	32	52	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	2	2	4	5
	Revenue Hours	25.83	25.83	52.00	74.00
	Revenue Miles	460.8	460.8	728.0	952.0
Span of Service	6:10 am-11:10 pm	6:10 am-11:10 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	14	14	34	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	60	30
	Midday	60	60	60	30
	Evening	-	-	60	60
	Peak Buses	1	1	2	5
	Revenue Hours	10.85	10.85	34.00	68.00
	Revenue Miles	206.6	206.6	476.0	868.0
Span of Service	7:10 am-8:40 pm	7:10 am-8:40 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 16 – Beech Grove

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended for this route to be extended further south along Emerson Avenue from the existing end of line at the K-Mart Plaza at Thompson Road to the St. Francis Hospital at Stop 11 Road (connections to proposed new route 94). This extension provides new service to St. Francis Hospital directly from downtown and Beech Grove.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 16 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday and Saturday evening service would be added at 60-minute headways, as well as adding all day Sunday service at 60-minute headways.
- **Short-Range:** Weekday midday and Saturday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Weekday evening, Saturday midday, and Sunday peak period service levels would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 16 in the three service plan timeframes are as follows:

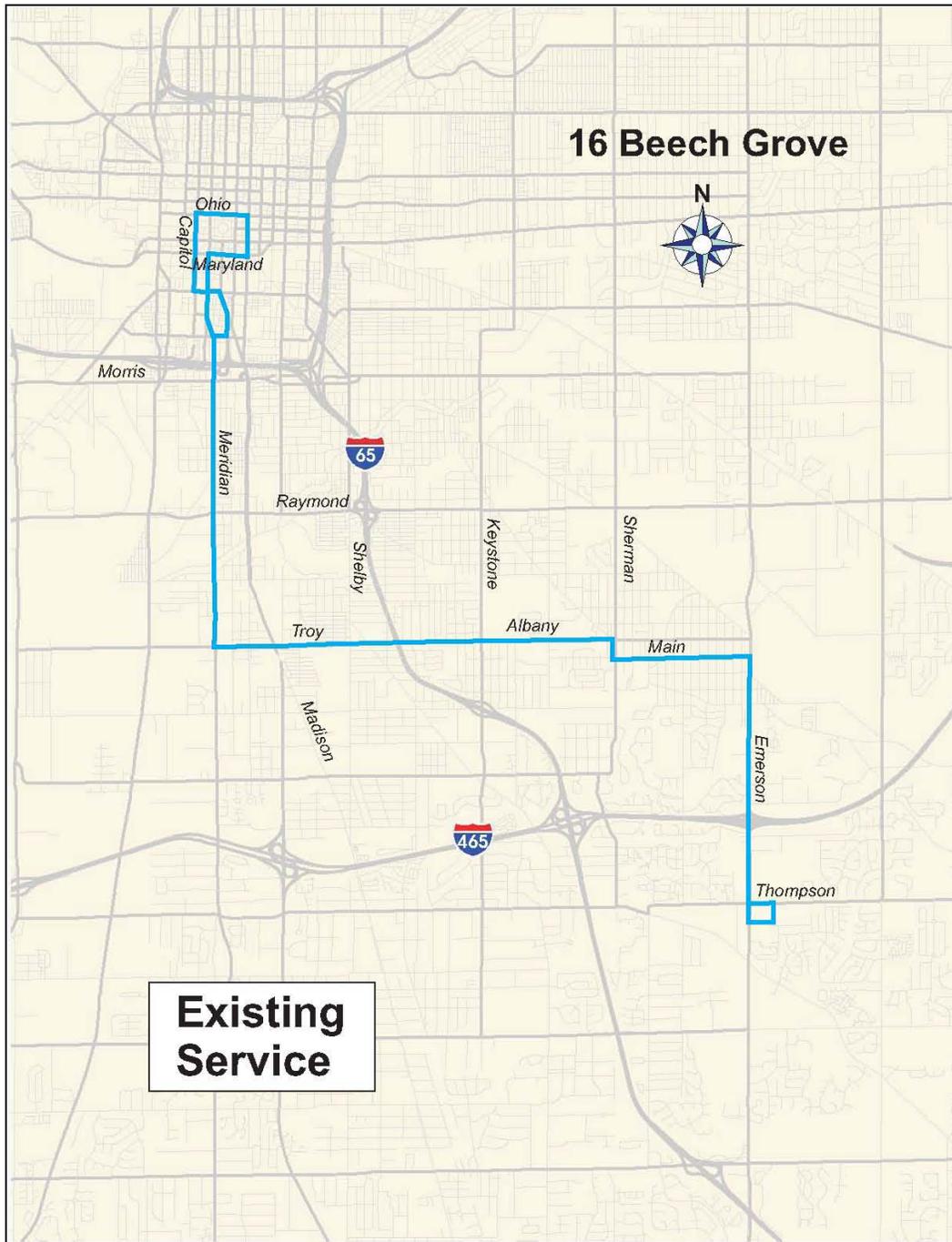
- **Near-Term:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Service hours would be extended to 4:00 a.m. to 12:00 a.m. on weekdays and 5:00 a.m. to 10:00 p.m. on Saturdays and Sundays.

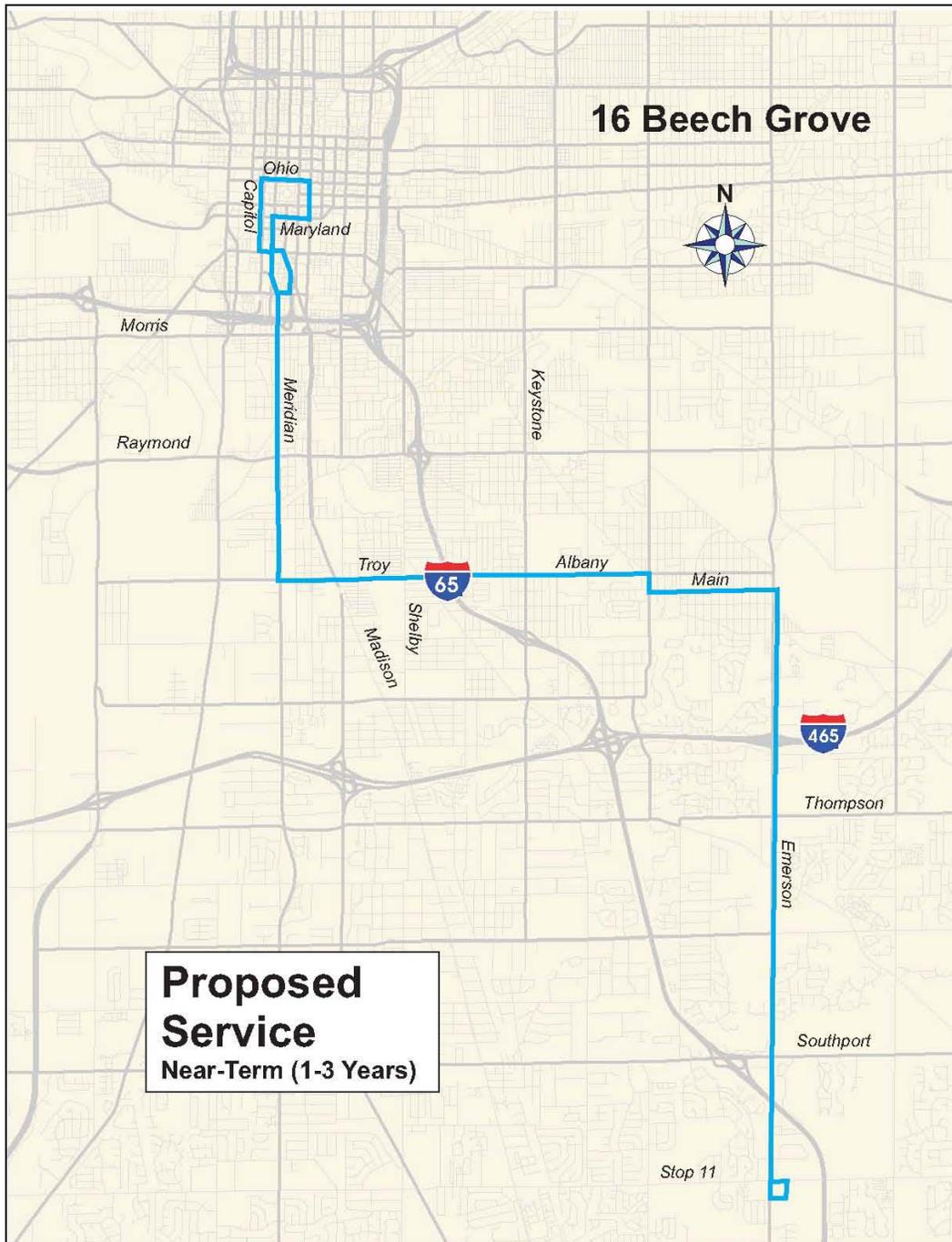


**Proposed Operating Requirements**

**Route 16 - Beech Grove**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	35	46	62	80
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	-	60	60	30
	Peak Buses	3	3	3	4
	Revenue Hours	20.98	34.50	46.50	80.00
	Revenue Miles	366.1	538.2	725.4	936.0
Span of Service	5:06 am-7:15 pm	5:00 am -10:00 pm	5:00 am -10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	26	30	42	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	-	60	60	60
	Peak Buses	1.5	2	3	4
	Revenue Hours	14.95	22.50	31.50	68.00
	Revenue Miles	286.0	351.0	491.4	795.6
Span of Service	6:36 am-7:15 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am -10:00 pm	
Sundays	One Way Trips	n/a	30	30	46
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	60	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	4
	Revenue Hours	n/a	22.50	22.50	46.00
	Revenue Miles	n/a	351.0	351.0	538.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am -10:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 17 – College

#### Proposed Service Changes

##### Alignment

No alignment changes are recommended for this route.

##### Service Levels

Route 17 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Sunday evening service levels would be improved from 70-minute to 60-minute headways.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 15/15/30 on weekdays, 20/30/30 on Saturdays, and 30 minutes all day on Sundays.
- **Long-Range:** Final improvements in service levels would result in peak/midday/evening headways of 15/15/20 on weekdays, 20/30/30 on Saturdays, and 30/30/30 on Sundays.

##### Span of Service

The proposed spans of service for Route 17 in the three service plan timeframes are as follows:

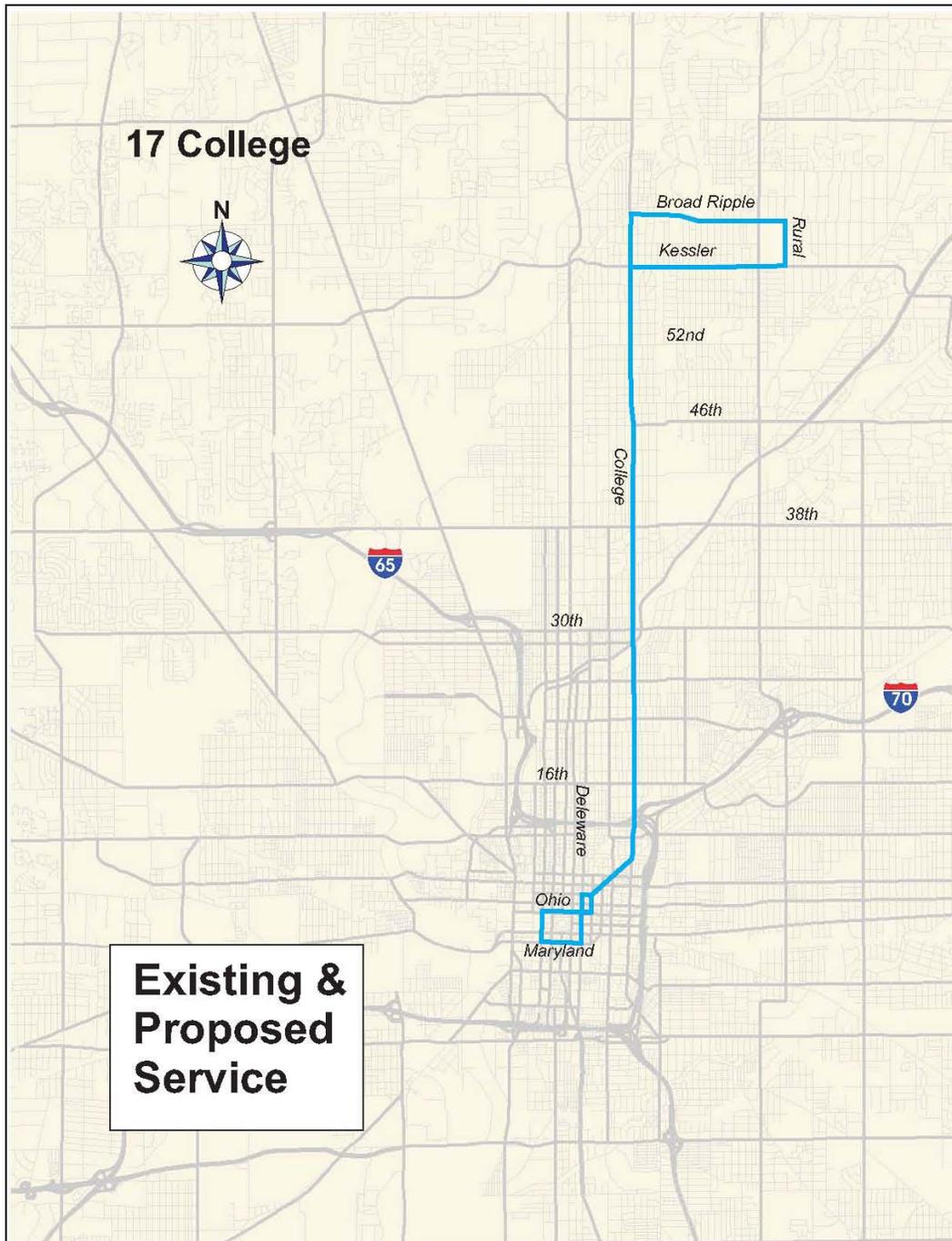
- **Near-Term:** Weekday service would be provided from 4:00 a.m. to 12:00 a.m., while Saturday and Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Short-Range and Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 17 - College**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	78	96	128	140
	Average Headway				
	AM, PM Peak	15	15	15	15
	Midday	30	30	15	15
	Evening	30	30	30	20
	Peak Buses	6	6	7	8
	Revenue Hours	51.63	72.00	112.00	122.50
	Revenue Miles	739.6	916.8	1222.4	1337.0
Span of Service	4:48 am-10:30 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	62	60	72	72
	Average Headway				
	AM, PM Peak	30	30	20	20
	Midday	30	30	30	30
	Evening	30	30	30	30
	Peak Buses	3	4	5	6
	Revenue Hours	40.92	45.00	60.00	66.50
	Revenue Miles	590.4	573.0	687.6	687.6
Span of Service	6:05 am-10:30 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	54	54	60	60
	Average Headway				
	AM, PM Peak	30	30	30	30
	Midday	30	30	30	30
	Evening	70	60	30	30
	Peak Buses	3	4	4	4
	Revenue Hours	36.13	40.50	60.00	60.00
	Revenue Miles	514.5	515.7	573.0	573.0
Span of Service	7:02 am-9:20 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 18 – Nora

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended for this route to operate direct service to the Keystone Crossing Mall, thus eliminating the existing out of direction travel along 91<sup>st</sup> Street, Spring Mill Road and 96<sup>th</sup> Street (served by proposed new route 101). Under this recommendation, all trips would operate north along College Avenue and east along 86<sup>th</sup> Street to Keystone Crossing Mall, reducing out of direction travel time.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 18 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday peak period service levels would be improved from 45-minute to 30-minute headways. Weekday and Saturday evening service levels would be improved from 90-minute to 60-minute headways. Finally, Sunday service would be added all day at 60-minute headways.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 30/30/60 on weekdays, and 30/60/60 on Saturdays and Sundays.
- **Long-Range:** Final improvements in service levels would result in peak/midday/evening headways of 20/30/30 on weekdays, and 30 minutes all day on Saturdays and Sundays.

##### Span of Service

The proposed spans of service for Route 18 in the three service plan timeframes are as follows:

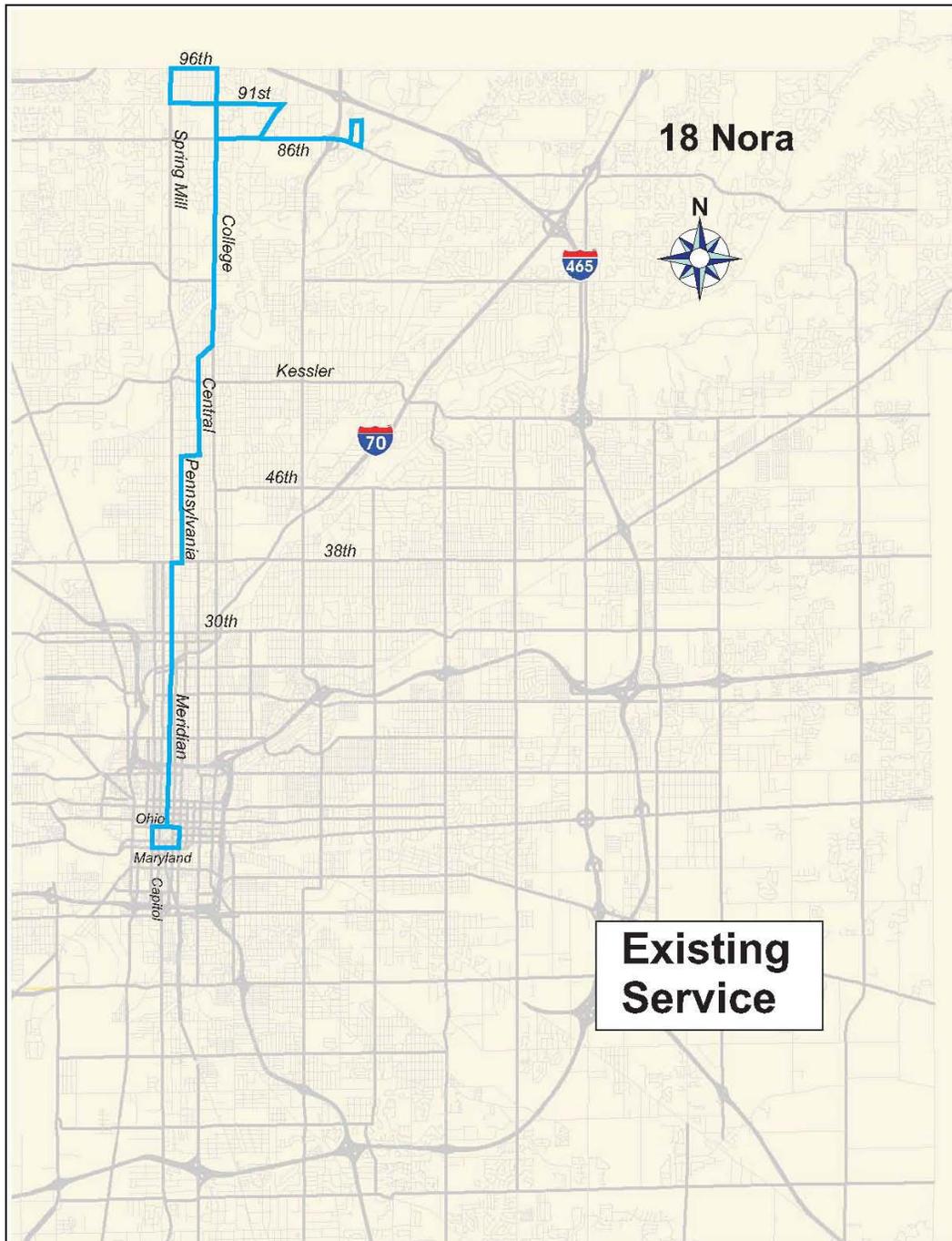
- **Near-Term:** Weekday and Saturday service would be provided from 4:00 a.m. to 12:00 a.m., while Sunday service would be added from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Sunday service would be extended to 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 18 - Nora**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	37	52	68	92
	<u>Average Headway</u>				
	AM, PM Peak	45	30	30	20
	Midday	60	60	30	30
	Evening	90	60	60	30
	Peak Buses	3	4	5	7
	Revenue Hours	32.22	52.00	85.00	112.00
	Revenue Miles	526.1	691.6	904.4	1223.6
Span of Service	5:48 am-10:55 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	28	40	52	80
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	90	60	60	30
	Peak Buses	2	2	5	5
	Revenue Hours	23.42	40.00	58.00	100.00
	Revenue Miles	428.4	532.0	691.6	1064.0
Span of Service	6:30 am-10:50 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sunday	One Way Trips	n/a	30	46	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	2	5	5
	Revenue Hours	n/a	30.00	52.00	85.00
	Revenue Miles	n/a	399.0	611.8	904.4
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 19 – Castleton

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the short-range (4-9 years), as described below:

- **Near-Term:** No alignment changes are proposed.
- **Short-Range:** It is recommended to modify the existing route to end at the Castleton Square Mall. The existing route 19 alignment east of Castleton Square Mall would be replaced with proposed new route 88 (new route 71 in long-range plan).
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Route 19 service level improvements are proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Improvements in service levels would result in peak/midday/evening headways of 30/30/60 on weekdays and Saturdays, and 30/60/60 on Sundays.
- **Long-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 20/20/30 on weekdays and Saturdays, and 30 minutes all day on Sundays.

##### Span of Service

The proposed spans of service for Route 19 in the three service plan timeframes are as follows:

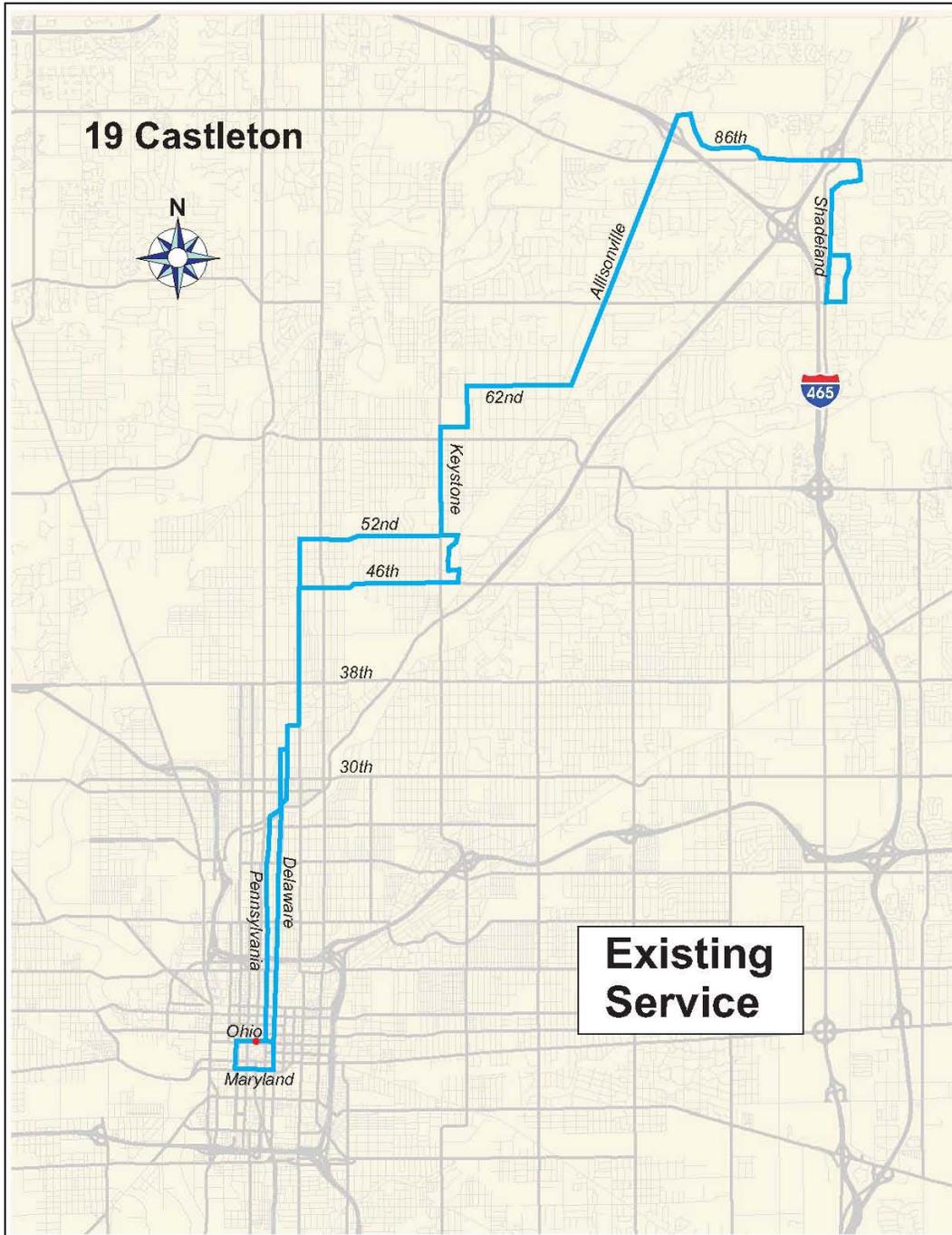
- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday and Saturday service would be extended to 4:00 a.m. to 12:00 a.m., while Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.

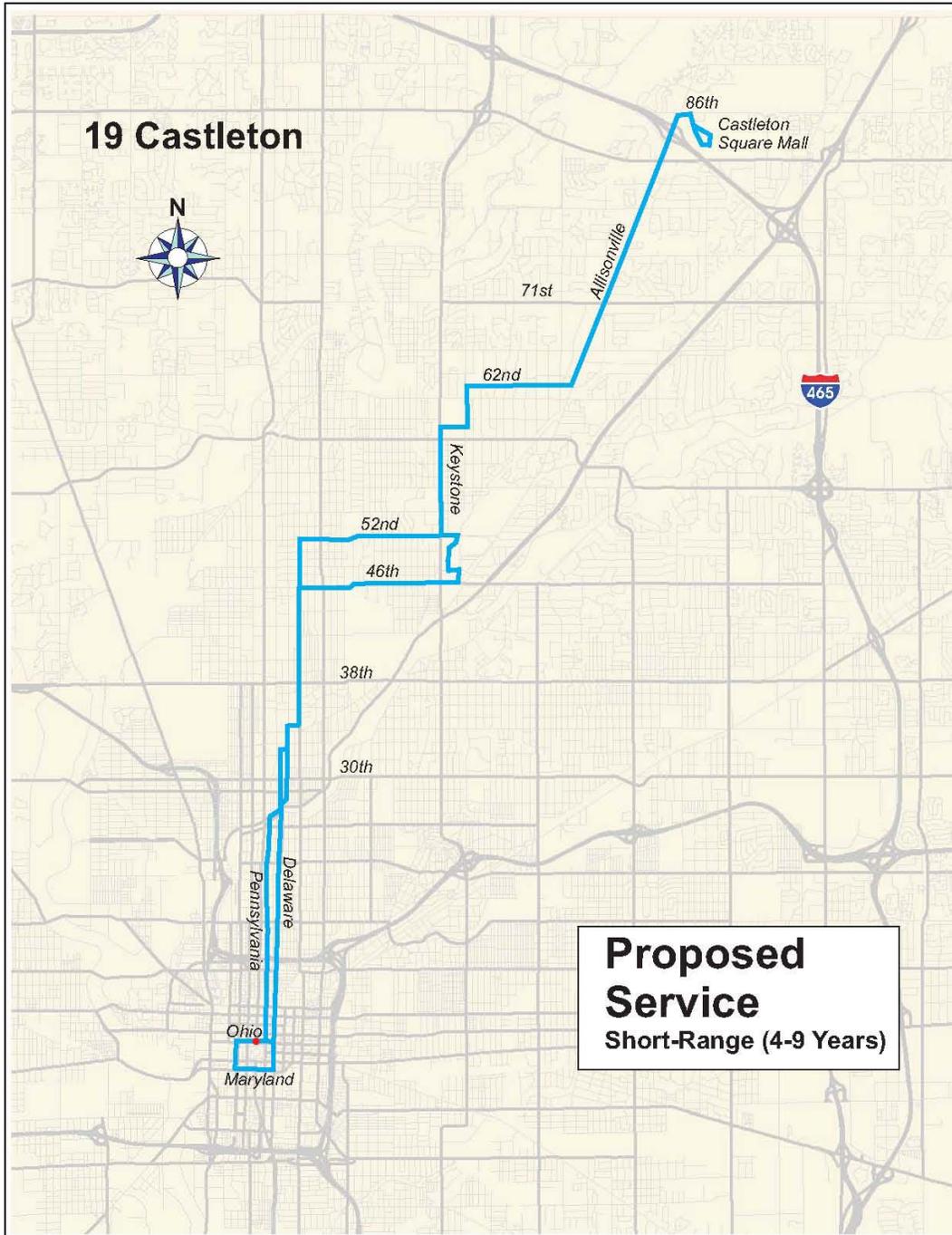


**Proposed Operating Requirements**

**Route 19 - Castleton**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	49	49	68	92
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	20
	Midday	60	60	30	30
	Evening	60	60	60	30
	Peak Buses	6	5	5	8
	Revenue Hours	52.98	52.98	85.00	118.00
	Revenue Miles	886.5	886.5	1054.0	1426.0
Span of Service	4:40 am-10:25 pm	4:40 am-10:25 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	32	32	68	92
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	20
	Midday	60	60	30	30
	Evening	60	60	60	30
	Peak Buses	3	3	5	8
	Revenue Hours	35.10	35.10	85.00	118.00
	Revenue Miles	600.0	600.0	1054.0	1426.0
Span of Service	6:11 am-10:26 pm	6:11 am-10:26 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	28	28	46	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	2	2	5	5
	Revenue Hours	28.85	28.85	57.50	85.00
	Revenue Miles	525.0	525.0	713.0	1054.0
Span of Service	7:08 am-9:09 pm	7:08 am-9:09 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 21 – East 21<sup>st</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the short-range (4-9 years), as described below:

- **Near-Term:** No alignment changes are proposed.
- **Short-Range:** It is recommended to modify the existing route alignment to operate all trips to the Wal-Mart on East Washington Street, thus eliminating the peak period branch service currently operated to the community Wal-Mart Center on Mitthoeffer Road at 30<sup>th</sup> Street. Additionally, it is recommended to eliminate the existing short turn route alignment to the Noble Center and the Franklin Road, 16<sup>th</sup> Street, Wellesley Boulevard loop.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Route 21 service level improvements are proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Weekday midday and Saturday peak period service levels would be improved from 60-minute to 30-minute headways. In addition, Sunday service would be added at 60-minute headways all day.
- **Long-Range:** Additional improvements in service levels would result in 30-minute all day headways on weekdays, and peak/midday/evening headways of 30/30/60 on Saturdays and Sundays.

##### Span of Service

The proposed spans of service for Route 21 in the three service plan timeframes are as follows:

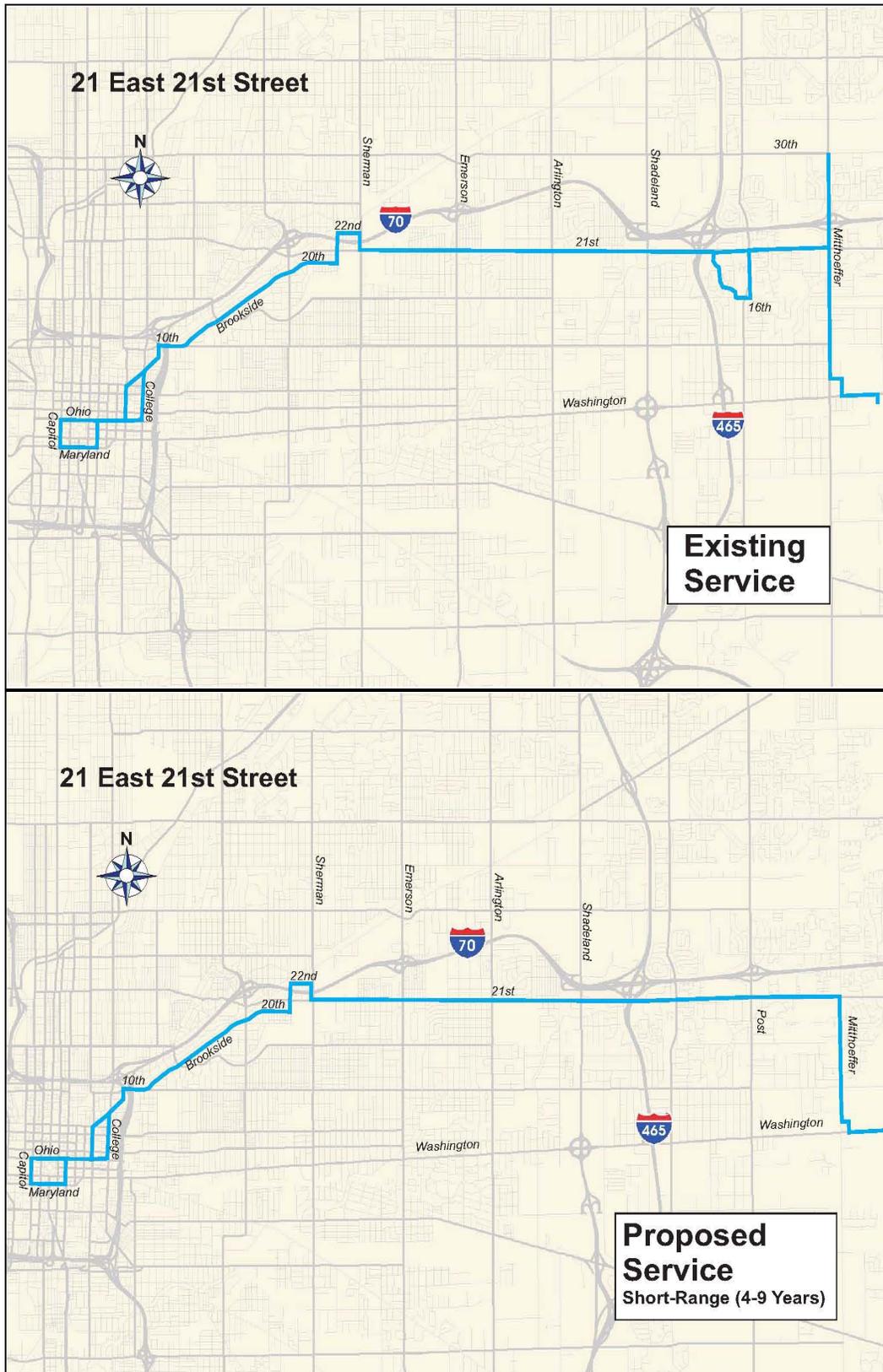
- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday service would be extended incrementally to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Weekday service would be extended to 4:00 a.m. to 12:00 a.m., while Saturday service would be extended to 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 21 - East 21st Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	39	39	68	80
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	30	30	30	30
	Peak Buses	3	3	4	4
	Revenue Hours	28.43	28.43	68.00	80.00
	Revenue Miles	467.1	467.1	836.4	984.0
Span of Service	5:09 am-7:17 pm	5:09 am-7:17 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	24	24	42	62
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	60	60	60	60
	Peak Buses	2	2	4	4
	Revenue Hours	21.60	21.60	42.00	62.00
	Revenue Miles	342.0	342.0	516.6	762.6
Span of Service	6:19 am-7:07 pm	6:19 am-7:07 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	30	58
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	60	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	2	4
	Revenue Hours	n/a	n/a	30.00	58.00
	Revenue Miles	n/a	n/a	369.0	713.4
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 22 – Shelby

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended to modify the existing route alignment to operate directly to the Greenwood Mall via South East Street (U.S. 31) south of Southport Road. The segment of the existing route 22 that operates along South Shelby Street and County Line Road, serving the Community Hospital South, would be assumed by a proposed new route 94. Additionally, with all trips extended to the Greenwood Mall, the short-turn loop along East Street, National Avenue and Madison Avenue would be eliminated. All trips would operate Hanna Avenue, south on South East Street.
- **Short-Range:** No alignment changes proposed.
- **Long-Range:** No alignment changes proposed.

##### Service Levels

Route 22 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Saturday and Sunday service would be added, at 60-minute headways all day.
- **Short-Range:** Weekday midday and Saturday and Sunday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Weekday evening and Saturday midday service levels would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 22 in the three service plan timeframes are as follows:

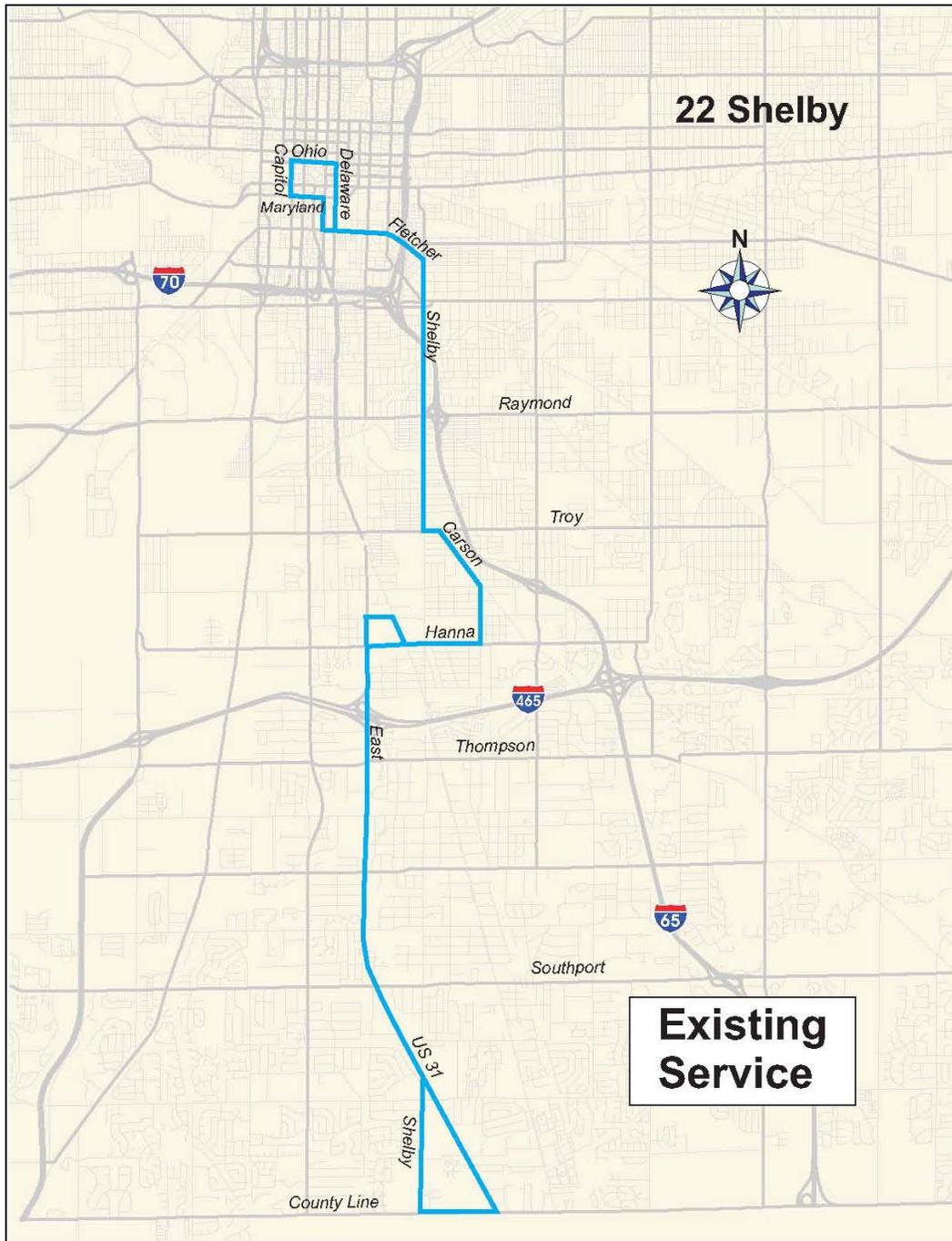
- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be added from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Saturday service would be extended to 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 22 - Shelby**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	37	46	62	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	30	60	60	30
	Peak Buses	3	4	4	4
	Revenue Hours	22.37	51.50	71.50	79.00
	Revenue Miles	364.2	602.6	812.2	890.8
Span of Service	5:18 am-7:10 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	30	42	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	34.50	46.50	71.50
	Revenue Miles	n/a	393.0	550.2	812.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	42	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	34.50	46.50	46.50
	Revenue Miles	n/a	393.0	550.2	550.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 24 – Mars Hill

#### Proposed Service Changes

##### Alignment

No alignment changes are recommended for this route. It is recommended for all trips operate the entire length of the route to the Ameriplex.

##### Service Levels

Route 24 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday and Saturday evening service would be at 60-minute headways.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 30/30/60, seven days a week.
- **Long-Range:** Evening service level improvements would result in 30-minute all day headways on weekdays and Saturdays. No change to Sunday headways.

##### Span of Service

The proposed spans of service for Route 24 in the three service plan timeframes are as follows:

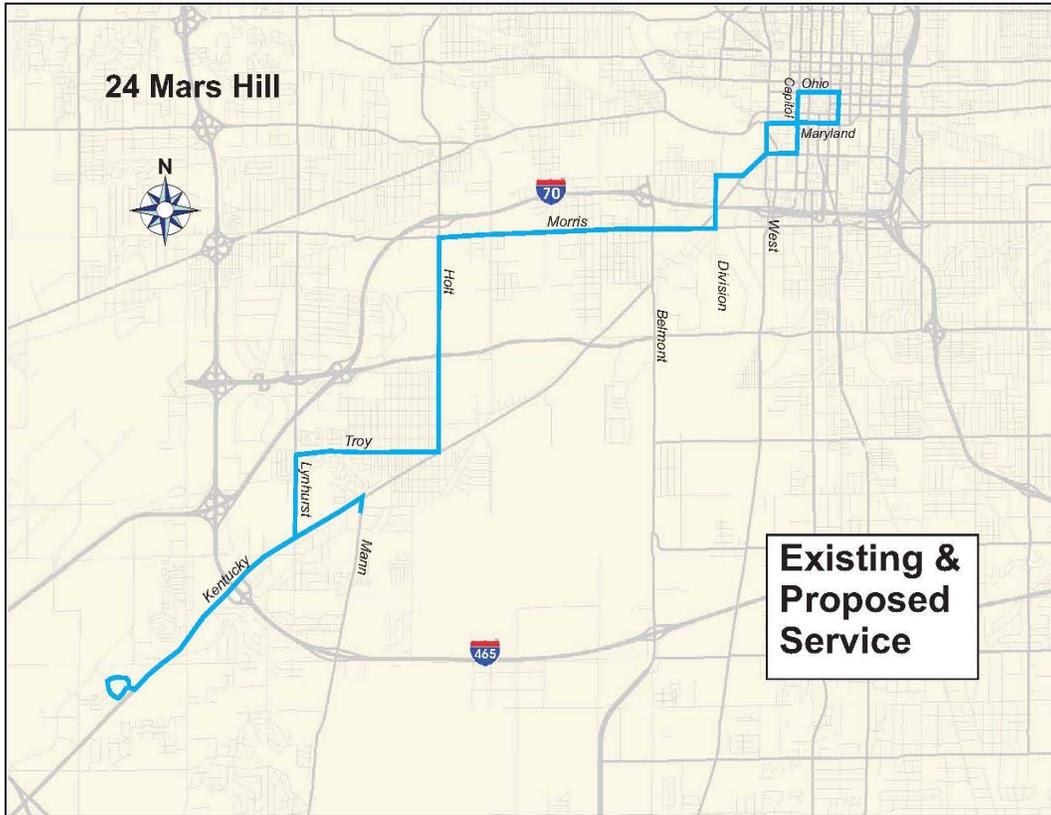
- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Sunday service would be added from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 24 - Mars Hill**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	38	46	62	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	2 trips	60	60	30
	Peak Buses	3	3	4	4
	Revenue Hours	23.40	34.50	62.00	68.00
	Revenue Miles	426.2	529.0	713.0	782.0
Span of Service	5:06 am-7:19 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	22	30	62	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	1 trip	60	60	30
	Peak Buses	1.5	2	4	4
	Revenue Hours	12.10	22.50	62.00	68.00
	Revenue Miles	235.4	345.0	713.0	782.0
Span of Service	7:10 am-6:40 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	58	58
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	58.00	58.00
	Revenue Miles	n/a	n/a	667.0	667.0
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 25 – West 16<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended to modify the existing route alignment north of the Speedway Shopping Center to the following alignment – north on High School Road, west on 38<sup>th</sup> Street, north on Eagle Creek Parkway, east on 46<sup>th</sup> Street, south on High School Road, terminating at Gateway Drive (same end of line loop currently operated by route 15). This route alignment provides direct service to the Speedway Shopping Center and connections to routes 30 (extended) and 91 (new).
- **Short-Range:** No alignment changes are recommended.
- **Long-Range:** No alignment changes are recommended.

##### Service Levels

Route 25 service level improvements are proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Sunday service at 60-minute headways all day would be added.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 30/30/60 on weekdays and Saturdays, and 30/60/60 on Sundays.
- **Long-Range:** Evening service level improvements would result in 30-minute all day headways on weekdays and Saturdays. Sunday service levels would be improved to 30/30/60.

##### Span of Service

The proposed spans of service for Route 25 in the three service plan timeframes are as follows:

- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Saturday and Sunday service would be extended to 5:00 a.m. to 10:00 p.m., consistent with the weekday span of service.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 25 - West 16th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	42	46	62	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	30	30
	Evening	60	60	60	30
	Peak Buses	3	4	4	4
	Revenue Hours	32.03	51.50	71.50	79.00
	Revenue Miles	454.0	621.0	837.0	918.0
Span of Service	5:00 am-9:15 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	27	30	62	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	60	60	60	30
	Peak Buses	2	2	4	4
	Revenue Hours	19.97	34.50	71.50	79.00
	Revenue Miles	321.6	405.0	837.0	918.0
Span of Service	6:31 am-7:52 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	46	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	34.50	51.50	71.50
	Revenue Miles	n/a	405.0	621.0	837.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 26 – Keystone Crosstown

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended to modify the existing route alignment, 1) to serve the transit stop at the Glendale Mall, and 2) west on Hanna Avenue, north on Madison Avenue, west on National Avenue, south on East Street and returning east on Hanna Avenue (reverse direction of existing route 22 short turned trips). This end of line travel pattern will allow the route to serve a proposed shelter and pull-out bay on Hanna Avenue between East Street and Madison Avenue as the end of line, as well as provide connections to the route 22 and 31.
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Weekday, Saturday, and Sunday service level improvements to Route 26 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Improvements in service levels would result in peak/midday/evening headways of 30/60/60 on weekdays and 60-minute all day headways on Saturdays and Sundays.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 30/30/30 on weekdays, 30/30/60 on Saturdays, and 30/60/60 on Sundays.
- **Long-Range:** Final incremental improvements in service levels would result in peak/midday/evening headways of 15/15/30 on weekdays, 15/30/30 on Saturdays, and 30 minutes all day on Sundays.

##### Span of Service

The proposed spans of service for Route 26 in the three service plan timeframes are as follows:

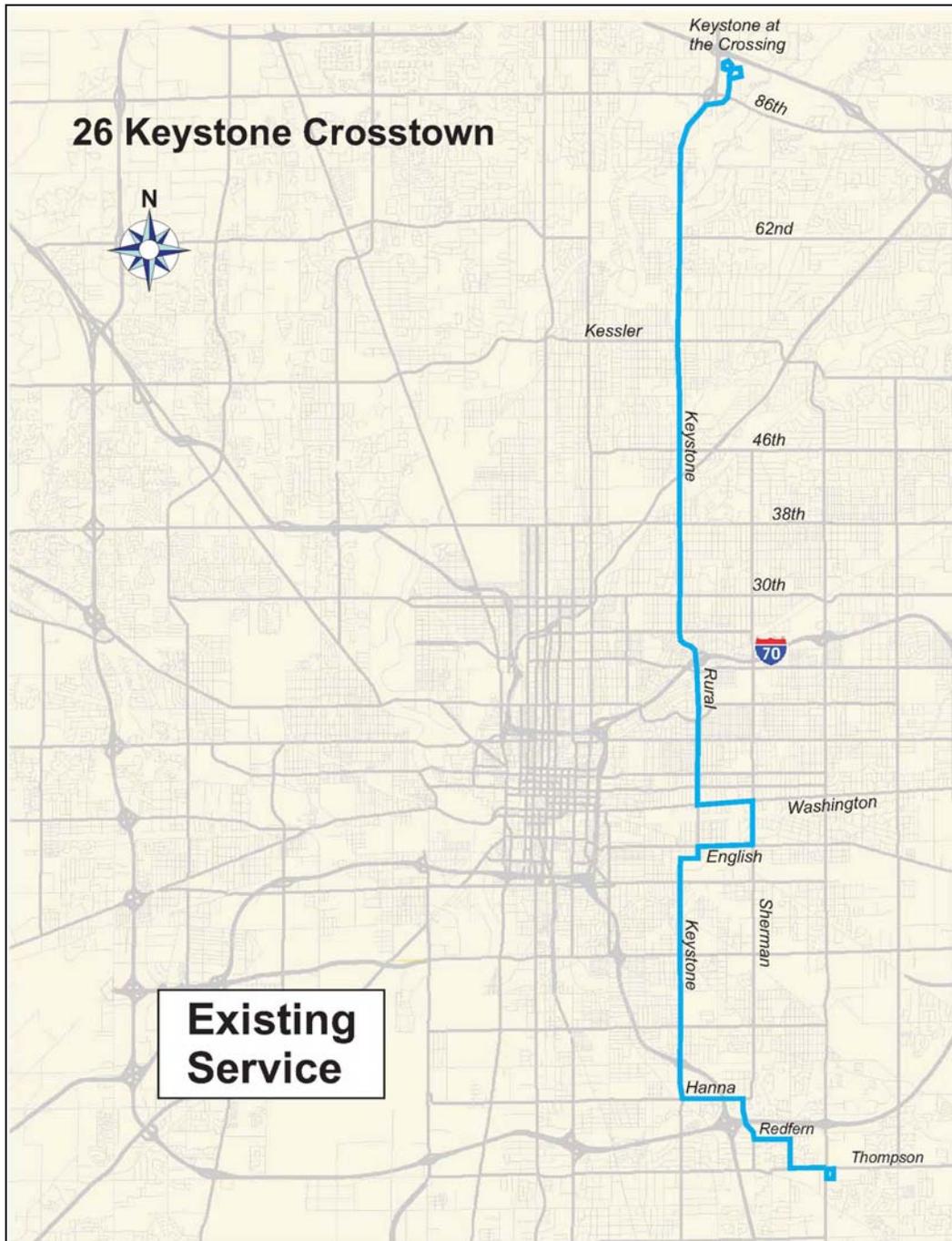
- **Near-Term:** Weekday and Saturday service would be extended to 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Weekday service would be extended to 4:00 a.m. to 12:00 a.m., while Sunday service would be extended to 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Saturday service would be extended to 4:00 a.m. to 12:00 a.m., consistent with the weekday service span.

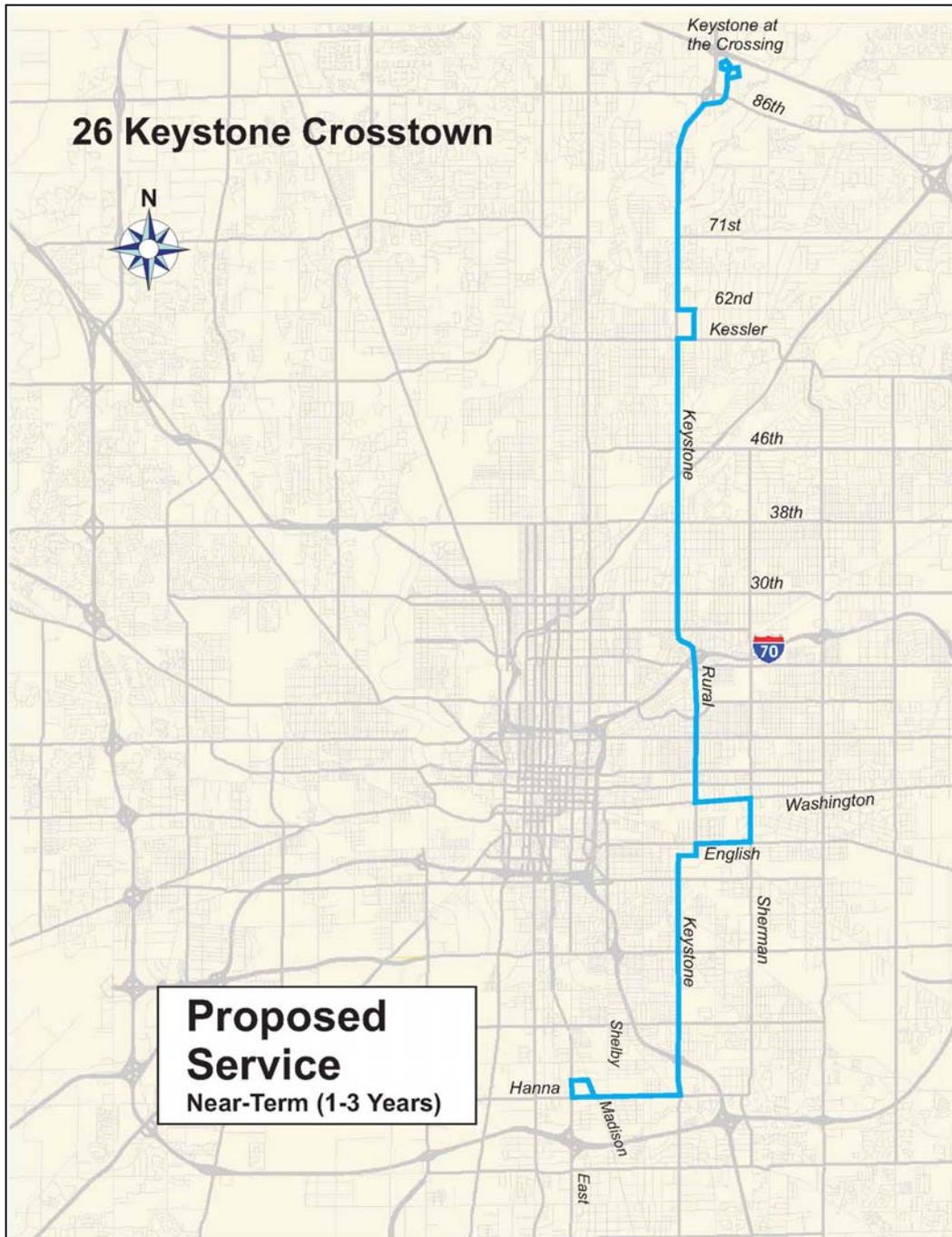


**Proposed Operating Requirements**

**Route 26 - Keystone Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	38	46	80	136
	Average Headway				
	AM, PM Peak	40	30	30	15
	Midday	70	60	30	15
	Evening	70	60	30	30
	Peak Buses	4	4	5	9
	Revenue Hours	41.70	46.00	100.00	153.00
	Revenue Miles	1004.7	726.8	1264.0	2148.8
Span of Service	6:00 am-10:32 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	26	34	62	104
	Average Headway				
	AM, PM Peak	65	60	30	15
	Midday	65	60	30	30
	Evening	70	60	60	30
	Peak Buses	4	2	5	9
	Revenue Hours	26.00	34.00	77.50	117.00
	Revenue Miles	494.0	537.2	979.6	1643.2
Span of Service	8:00 am-10:10 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	15	30	46	68
	Average Headway				
	AM, PM Peak	30	60	30	30
	Midday	30	60	60	30
	Evening	-	60	60	30
	Peak Buses	2	2	5	5
	Revenue Hours	8.75	30.00	57.50	85.00
	Revenue Miles	196.5	474.0	726.8	1074.4
Span of Service	8:57 am-6:52 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 28 – St. Vincent

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the short-range (4-9 years), as described below:

- **Near-Term:** No alignment changes are proposed.
- **Short-Range:** It is recommended to eliminate the limited trip branch service along Spring Mill Road and beyond St. Vincent's Hospital to Michigan Road. Each of these branches carries minimal ridership. Additionally, it is recommended all trips terminate at St. Vincent's Hospital, serving the Women's Hospital first via Harcourt Road, 79<sup>th</sup> Street, Township Line Road, 86<sup>th</sup> Street to St. Vincent's Hospital.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Route 28 service level improvements are proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** No change from existing service levels.
- **Short-Range:** Weekday and Saturday evening service levels would be improved from 90-minute to 60-minute headways. Saturday peak hour service levels would improve from 60-minute to 30-minute headways. In addition, Sunday service would be improved from 120-minute to 60-minute headways all day.
- **Long-Range:** Weekday and Saturday midday service levels, as well as Sunday peak period service levels, would be improved from 60-minute to 30-minute headways.

##### Span of Service

The proposed spans of service for Route 28 in the three service plan timeframes are as follows:

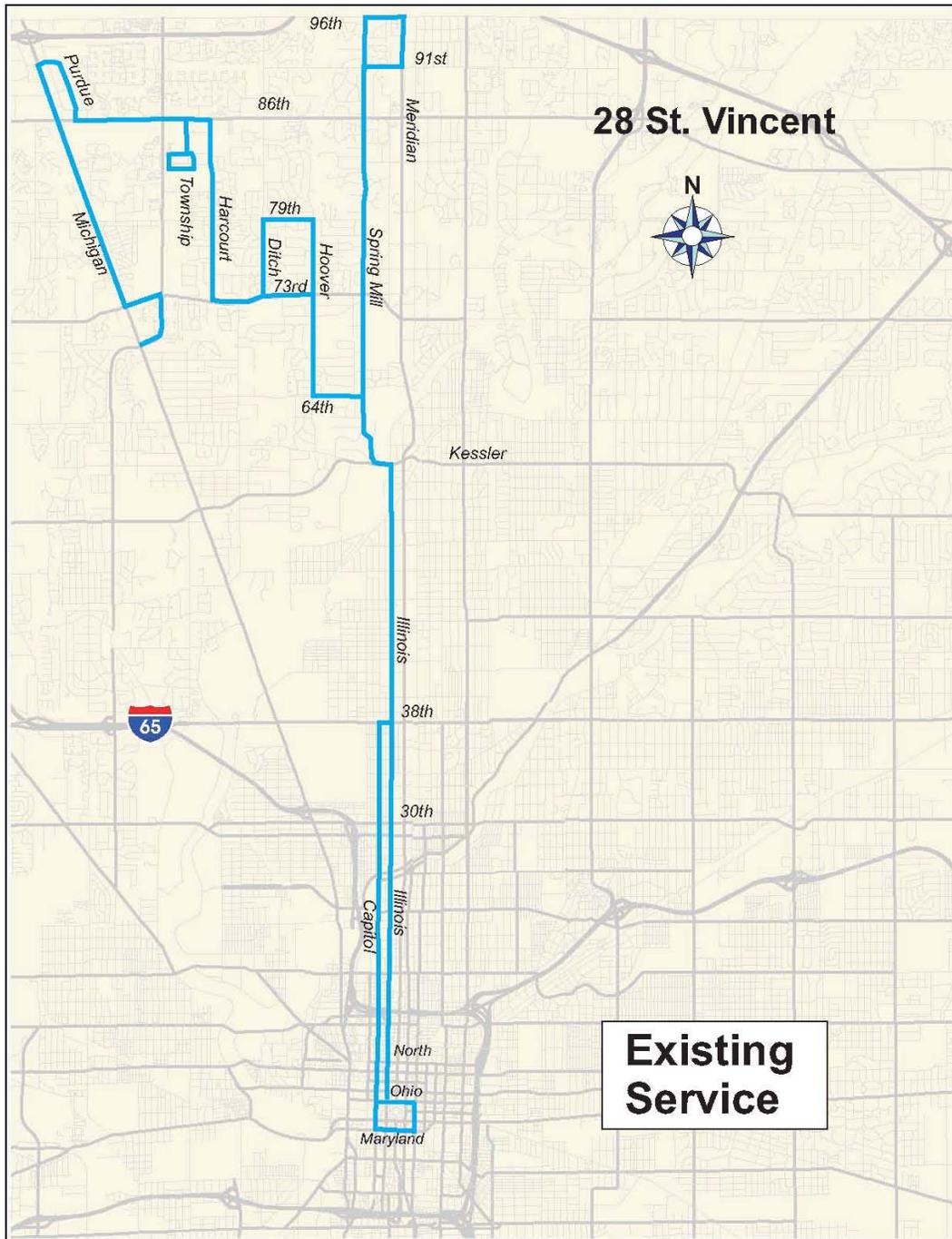
- **Near-Term:** No change to existing span of service.
- **Short-Range:** Weekday and Saturday service would be extended 4:00 a.m. to 12:00 a.m., while Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 28 - St. Vincent**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	42	42	52	68
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	30
	Midday	60	60	60	30
	Evening	90	90	60	60
	Peak Buses	4	4	4	5
	Revenue Hours	36.72	36.72	52.00	85.00
	Revenue Miles	657.4	657.4	816.4	1067.6
Span of Service	5:58 am-11:40 pm	5:58 am-11:40 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	31	31	52	68
	<u>Average Headway</u>				
	AM, PM Peak	60	60	30	30
	Midday	60	60	60	30
	Evening	90	90	60	60
	Peak Buses	2	2	4	5
	Revenue Hours	23.53	23.53	52.00	85.00
	Revenue Miles	483.6	483.6	816.4	1067.6
Span of Service	6:40 am-11:40 pm	6:40 am-11:40 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	14	14	34	46
	<u>Average Headway</u>				
	AM, PM Peak	120	120	60	30
	Midday	120	120	60	60
	Evening	120	120	60	60
	Peak Buses	1	1	2	5
	Revenue Hours	12.12	12.12	34.00	57.50
	Revenue Miles	242.2	242.2	533.8	722.2
Span of Service	7:50 am-10:00 pm	7:50 am-10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 30 – 30<sup>th</sup> Street Crosstown

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended for this route to be extended further west on 30<sup>th</sup> Street to Moller Road, south to the Speedway Shopping Center. Additionally, it is recommended for this route to be extended further east along 30<sup>th</sup> Street to Franklin Road north to 33<sup>rd</sup> Street, south on Post Road, east on 10<sup>th</sup> Street to Mitthoeffer Road, ending at the Washington Square Mall (connections to route's 8,10, 21 and 87). Service on Route 30 along Arlington Avenue and Shadeland Avenue would be eliminated and replaced with service on route 11 and 88, respectively.
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Service level improvements to Route 30 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Improvements in service levels would result in peak/midday/evening headways of 30/30/60 on weekdays. Additionally, Saturday and Sunday service would be added, at 60-minute headways all day.
- **Short-Range:** Additional improvements in service levels would result in weekday headways of 30 minutes all day, and Saturday and Sunday peak/midday/evening headways of 30/60/60.
- **Long-Range:** Final incremental improvements in service levels would result in peak/midday/evening headways of 20/30/30 on weekdays, and 30 minutes all day on Saturdays and Sundays.

##### Span of Service

The proposed spans of service for Route 30 in the three service plan timeframes are as follows:

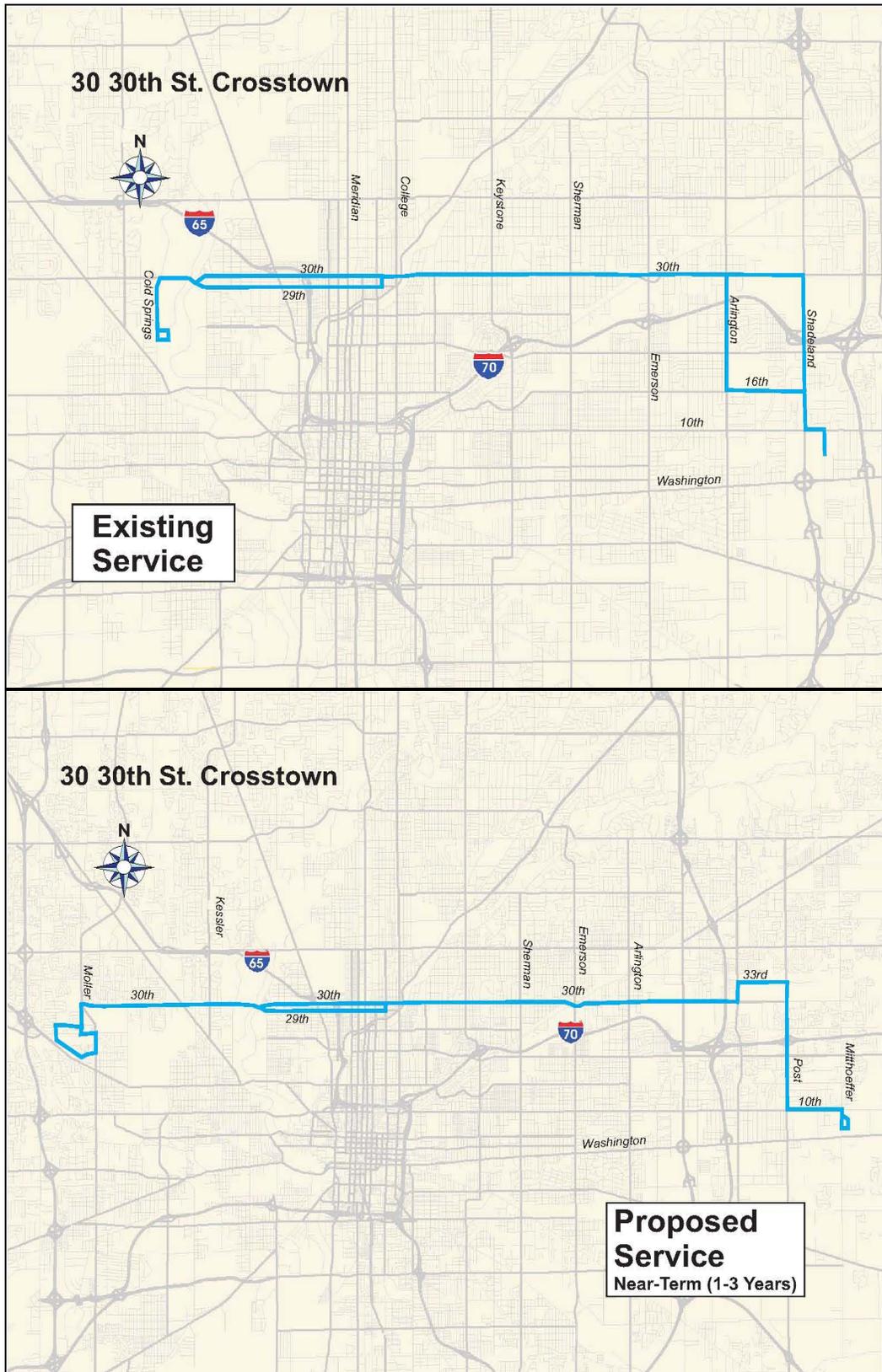
- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Weekday service would be extended to 4:00 a.m. to 12:00 a.m., while Saturday and Sunday service would be from 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 30 - 30th Street Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	55	62	68	92
	<u>Average Headway</u>				
	AM, PM Peak	30	30	30	20
	Midday	45	30	30	30
	Evening	30	60	30	30
	Peak Buses	4	5	6	9
	Revenue Hours	37.08	77.50	102.00	138.00
	Revenue Miles	723.0	1395.0	1530.0	2070.0
Span of Service	5:20 am-10:12 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	30	42	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	3	6	6
	Revenue Hours	n/a	37.50	63.00	102.00
	Revenue Miles	n/a	675.0	945.0	1530.0
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	42	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	3	6	6
	Revenue Hours	n/a	37.50	63.00	102.00
	Revenue Miles	n/a	675.0	945.0	1530.0
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 31 – Greenwood

#### Proposed Service Changes

##### Alignment

No alignment changes are recommended for this route.

##### Service Levels

Weekday, Saturday, and Sunday service level improvements to Route 31 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Improvements in service levels would result in peak/midday/evening headways of 30/30/60 on weekdays and Saturdays. Sunday service would be 60-minute headways all day.
- **Short-Range:** Additional improvements in service levels would result in peak/midday/evening headways of 20/30/30 on weekdays, 30 minutes all day on Saturdays, and 30/60/60 on Sundays.
- **Long-Range:** Final incremental improvements in service levels would result in peak/midday/evening headways of 15/20/30 on weekdays, 20/30/30 on Saturdays, and 30 minutes all day on Sundays.

##### Span of Service

The proposed spans of service for Route 31 in the three service plan timeframes are as follows:

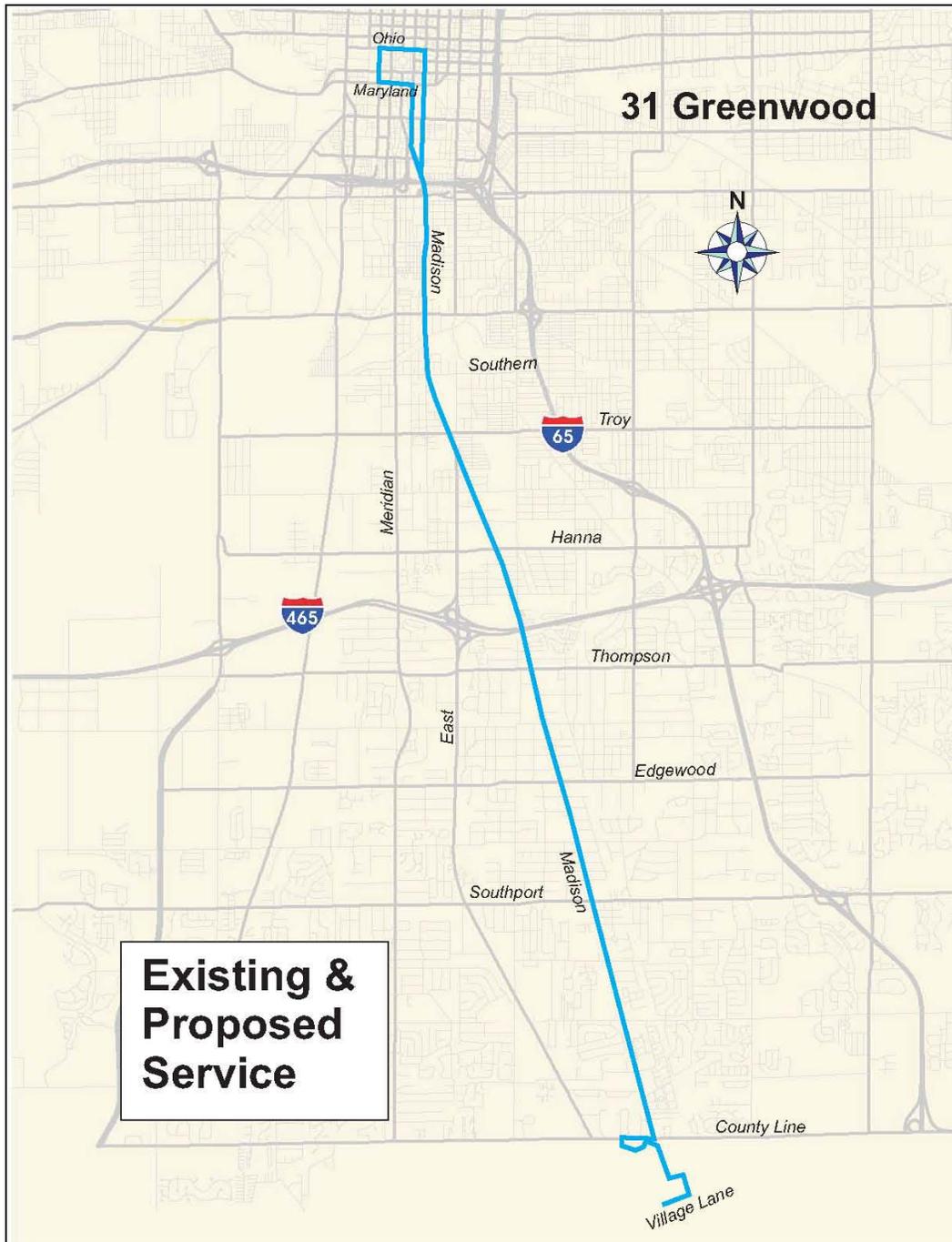
- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Saturday and Sunday service would be extended to 5:00 a.m. to 10:00 p.m., consistent with weekdays.
- **Long-Range:** Additional weekday, Saturday, and Sunday hours would result in service from 4:00 a.m. to 12:00 a.m., seven days a week.



**Proposed Operating Requirements**

**Route 31 - Greenwood**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	57	66	84	124
	<u>Average Headway</u>				
	AM, PM Peak	30	30	20	15
	Midday	30	30	30	20
	Evening	20-80	60	30	30
	Peak Buses	3	3	5	7
	Revenue Hours	36.22	49.50	70.00	108.50
	Revenue Miles	615.7	768.9	978.6	1444.6
Span of Service	5:00 am-9:45 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	33	62	72	96
	<u>Average Headway</u>				
	AM, PM Peak	50	30	30	20
	Midday	50	30	30	30
	Evening	50	60	30	30
	Peak Buses	2	3	3	5
	Revenue Hours	25.78	46.50	54.00	82.33
	Revenue Miles	428.8	722.3	838.8	1118.4
Span of Service	6:10 am-8:15 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	16	34	50	84
	<u>Average Headway</u>				
	AM, PM Peak	90	60	30	30
	Midday	90	60	60	30
	Evening	-	60	60	30
	Peak Buses	1	2	3	4
	Revenue Hours	11.58	34.00	43.00	84.00
	Revenue Miles	208.0	396.1	582.5	978.6
Span of Service	8:10 am-8:08 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 34 – Michigan Road

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended all trips terminate at St. Vincent's Hospital, thus eliminating the limited number of trips that currently end at Mayflower (5 daily boardings / 3 daily alightings).
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Weekday, Saturday, and Sunday service level improvements to Route 34 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday midday and Saturday peak period service levels would be improved from 60-minute to 30-minute headways. In addition, Sunday service would be added at 60-minute headways all day.
- **Short-Range:** Additional improvements in service levels would result in headways of 30 minutes all day on weekdays and Saturdays, and 30/60/60 peak/midday/evening headways on Sundays.
- **Long-Range:** Final incremental improvements in service levels would result in peak/midday/evening headways of 20/30/30 on weekdays, and 30 minutes all day on Saturdays and Sundays.

##### Span of Service

The proposed spans of service for Route 34 in the three service plan timeframes are as follows:

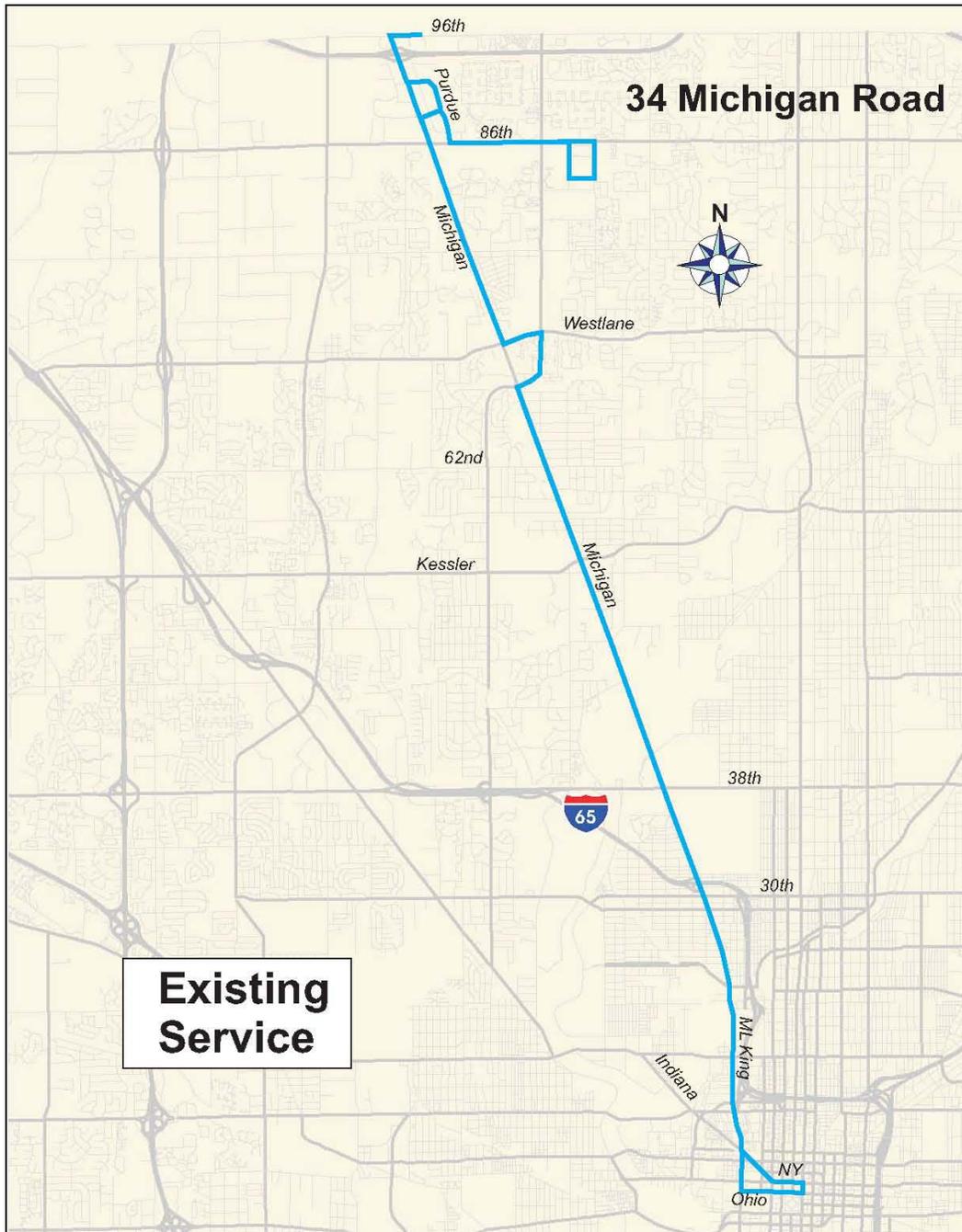
- **Near-Term:** Weekday service would be extended to 5:00 a.m. to 10:00 p.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Saturday and Sunday service would be extended to 5:00 a.m. to 10:00 p.m., consistent with weekdays.
- **Long-Range:** Additional weekday, Saturday, and Sunday hours would result in service from 4:00 a.m. to 12:00 a.m., seven days a week.

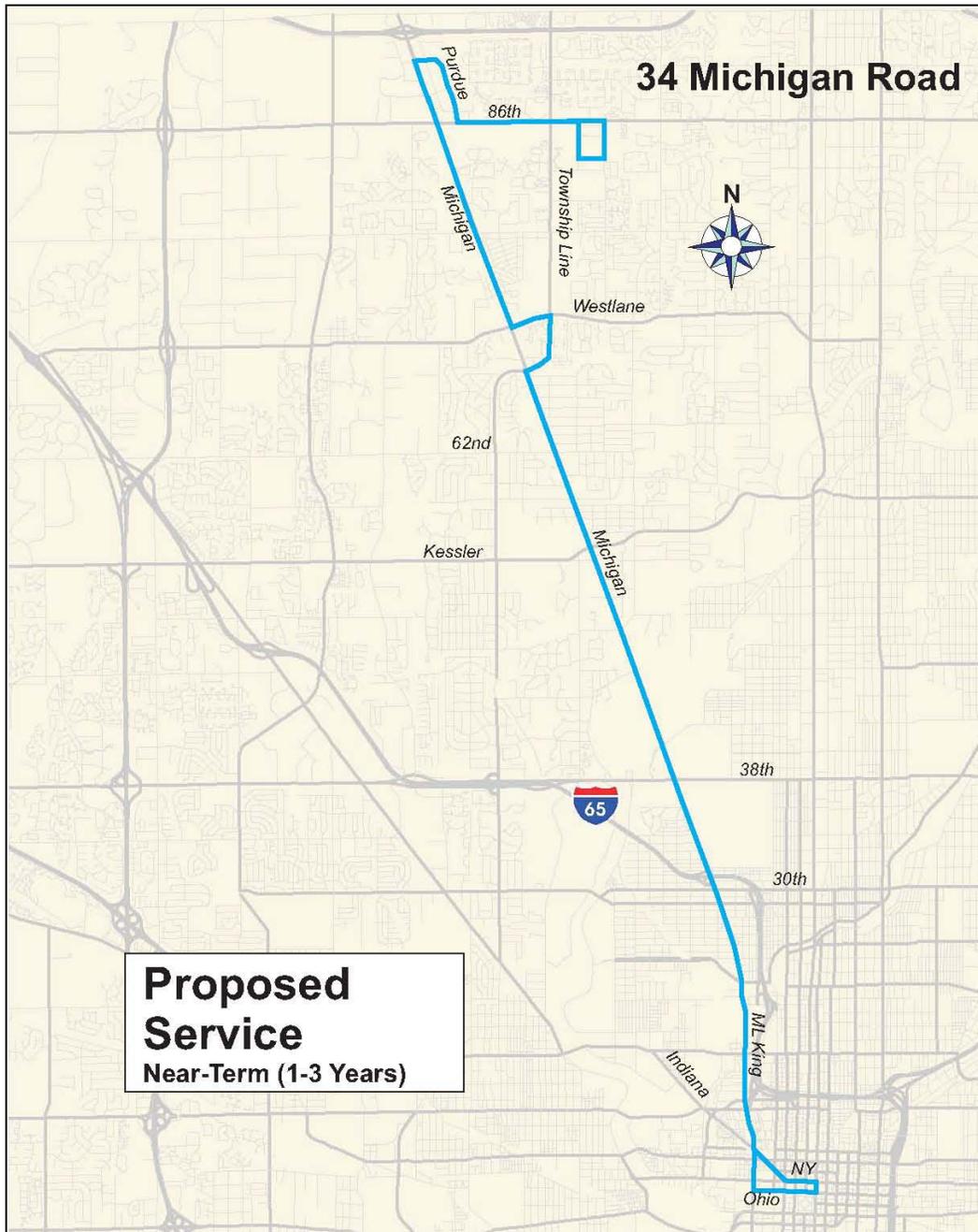


**Proposed Operating Requirements**

**Route 34 - Michigan Road**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	42	62	68	92
	Average Headway				
	AM, PM Peak	30	30	30	20
	Midday	60	30	30	30
	Evening	30	60	30	30
	Peak Buses	4	3	4	5
	Revenue Hours	33.67	46.50	68.00	86.00
	Revenue Miles	604.5	750.2	822.8	1113.2
Span of Service	5:11 am-8:55 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	28	42	68	80
	Average Headway				
	AM, PM Peak	60	30	30	30
	Midday	60	60	30	30
	Evening	60	60	30	30
	Peak Buses	2	3	4	4
	Revenue Hours	20.60	31.50	68.00	77.00
	Revenue Miles	401.5	508.2	822.8	968.0
Span of Service	5:56 am-8:10 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	n/a	30	46	80
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	30.00	46.00	80.00
	Revenue Miles	n/a	363.0	556.6	968.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 37 – Park 100

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is proposed to extend the route beyond its existing end of line at the convenience store located at 71<sup>st</sup> Street and Woodland Drive. The extended route alignment would continue to travel south on Woodland Drive, east on 73<sup>rd</sup> Street, south on Zionsville Road, west on 71<sup>st</sup> Street, south on InTech Boulevard, around the roundabout, east on Digital Way, turn in front of the first building, exit back onto Digital Way and return reverse route. End of line operations would occur on Woodland Boulevard just north of the convenience store. Additionally, it is recommended for this route to serve the Trader's Point Shopping Center at 86<sup>th</sup> Street and Zionsville Road (both outbound and inbound directions), providing connections to proposed new route's 86 and 91.
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Service level improvements to Route 37 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday service levels would be improved from 20/60/60 headways to 15/30/30 headways (peak/midday/evening). Saturday peak period service would be improved from 60-minute to 30-minute headways. In addition, Sunday evening service would be added at 60-minute headways.
- **Short-Range:** Weekday midday service levels would be further improved to 20-minute headways. Saturday service levels would be improved from 30/60/60 headways to 20/30/30 headways (peak/midday/evening). Sunday peak and midday service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Sunday evening service levels would be improved 30 minutes.

##### Span of Service

The proposed spans of service for Route 37 in the three service plan timeframes are as follows:

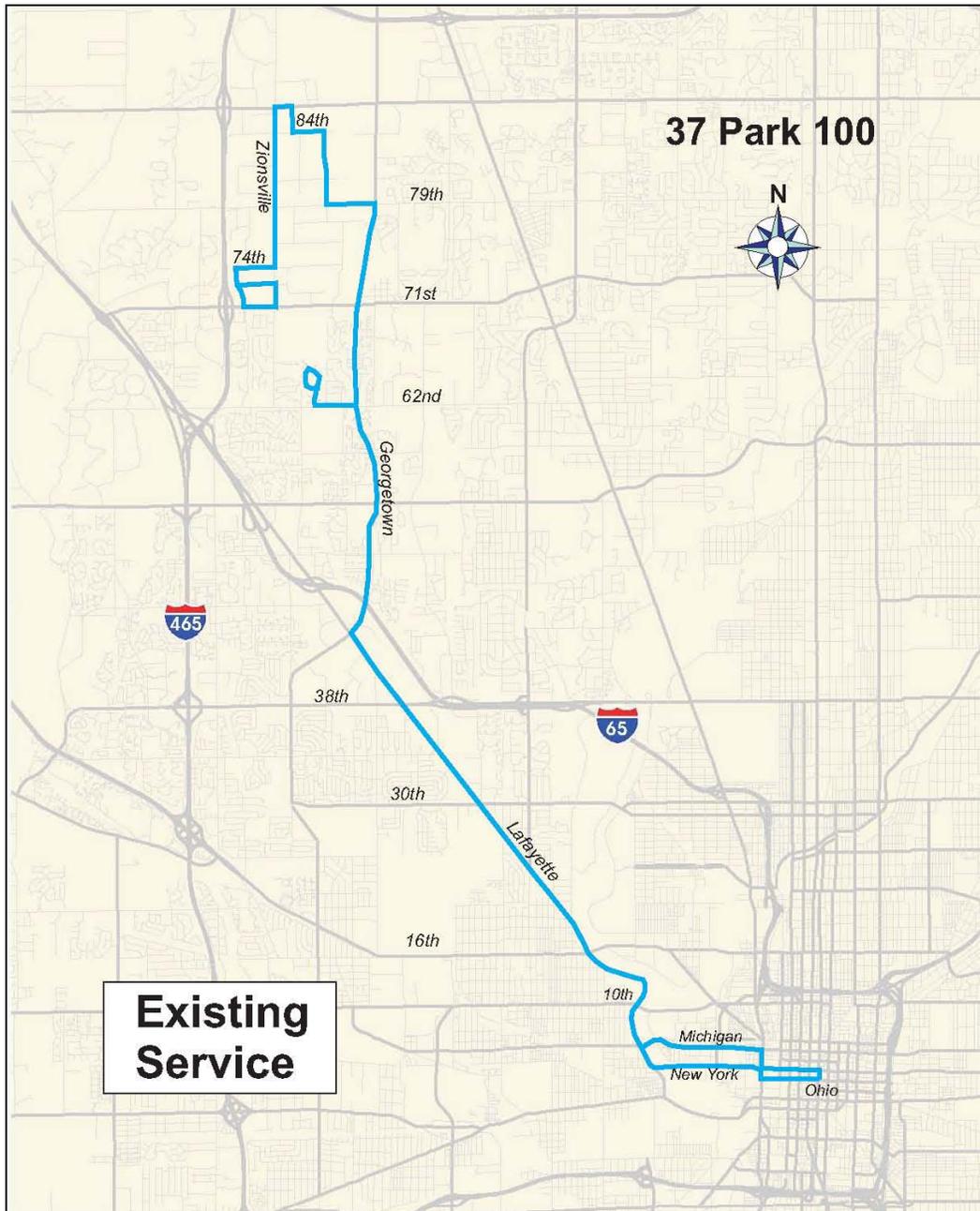
- **Near-Term:** Weekday service would be extended to 4:00 a.m. to 12:00 a.m., while Saturday and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Saturday and Sunday service would be extended to 5:00 a.m. to 10:00 p.m., consistent with weekdays.
- **Long-Range:** Additional Saturday and Sunday hours would result in service from 4:00 a.m. to 12:00 a.m., seven days a week.



**Proposed Operating Requirements**

**Route 37 - Park 100**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	54	104	108	120
	Average Headway				
	AM, PM Peak	20	15	15	15
	Midday	60	30	20	20
	Evening	60	30	30	30
	Peak Buses	7	9	10	10
	Revenue Hours	49.53	124.00	130.00	144.00
	Revenue Miles	1137.9	2090.4	2170.8	2412.0
Span of Service	5:11 am-11:40 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	25	42	80	92
	Average Headway				
	AM, PM Peak	60	30	20	20
	Midday	60	60	30	30
	Evening	60	60	30	30
	Peak Buses	2	5	7	8
	Revenue Hours	22.50	52.50	97.00	118.00
	Revenue Miles	455.6	844.2	1608.0	1849.2
Span of Service	6:58 am-7:40 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	12	30	62	80
	Average Headway				
	AM, PM Peak	60	60	30	30
	Midday	60	60	30	30
	Evening	-	60	60	30
	Peak Buses	1	3	5	5
	Revenue Hours	10.40	37.50	77.50	104.67
	Revenue Miles	217.8	603.0	1246.2	1608.0
Span of Service	7:11 am-7:10 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 38 – Lafayette Square

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** It is recommended to extend the route west to Eagle Creek Parkway. This recommendation has been implemented on February 13, 2005.
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Service level improvements to Route 38 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday peak period service levels would be improved from 30-minute to 15-minute headways. All other headways would remain 30 minutes.
- **Short-Range:** Weekday midday service levels would be improved to 15-minute headways. Saturday peak period service levels would be improved to 20-minute headways.
- **Long-Range:** Saturday midday service levels would be improved to 20-minute headways. These final incremental improvements would result in weekday and Saturday headways of 20/20/30 and Sunday headways of 30/30/30 (peak/midday/evening).

##### Span of Service

The proposed spans of service for Route 38 in the three service plan timeframes are as follows:

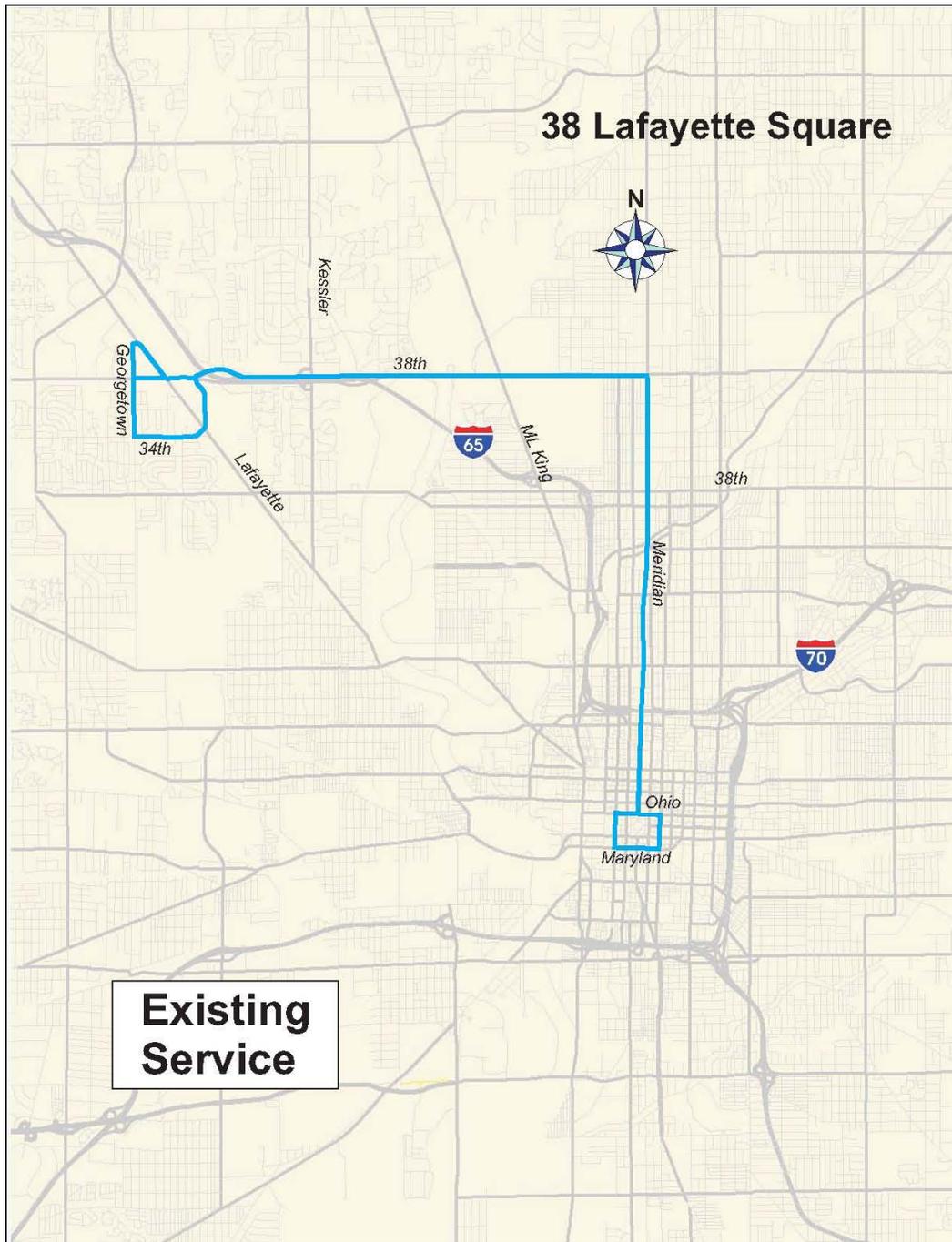
- **Near-Term:** Weekday and Saturday service would be extended to 4:00 a.m. to 12:00 a.m., while Sunday service would be from 5:00 a.m. to 10:00 p.m.
- **Short-Range:** Sunday service would be extended to 5:00 a.m. to 10:00 p.m., consistent with Saturdays.
- **Long-Range:** Additional Saturday and Sunday hours would result in service from 4:00 a.m. to 12:00 a.m., seven days a week.



**Proposed Operating Requirements**

**Route 38 - Lafayette Square**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	57	104	136	136
	Average Headway				
	AM, PM Peak	30	15	15	15
	Midday	30	30	15	15
	Evening	30	30	30	30
	Peak Buses	3	8	8	8
	Revenue Hours	39.38	104.00	136.00	136.00
	Revenue Miles	612.3	1289.6	1686.4	1686.4
Span of Service	6:56 am-10:25 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	52	68	80	108
	Average Headway				
	AM, PM Peak	30	30	20	20
	Midday	30	30	30	20
	Evening	30	30	30	30
	Peak Buses	4	4	6	6
	Revenue Hours	36.03	68.00	80.00	108.00
	Revenue Miles	551.2	843.2	992.0	1339.2
Span of Service	8:01 am-10:05 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	39	60	68	80
	Average Headway				
	AM, PM Peak	30	30	30	30
	Midday	30	30	30	30
	Evening	30	30	30	30
	Peak Buses	3	4	4	4
	Revenue Hours	24.10	60.00	68.00	80.00
	Revenue Miles	414.0	744.0	843.2	992.0
Span of Service	9:10 am-8:50 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	







## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 39 – East 38<sup>th</sup> Street

#### Proposed Service Changes

##### Alignment

Alignment changes are proposed in the near-term (1-3 years), as described below:

- **Near-Term:** With the implementation of route 87 – Mitthoeffer Crosstown, it is recommended for this route to be extended north along Mitthoeffer Road to Fort Harrison. Additionally it is recommended that the existing service south of 38<sup>th</sup> Street along Mitthoeffer Road be eliminated from route 39 and assumed by the proposed new route 87.
- **Short-Range:** No alignment changes are proposed.
- **Long-Range:** No alignment changes are proposed.

##### Service Levels

Service level improvements to Route 39 are proposed incrementally beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and the long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday service levels would be improved from 30-minute headways all day to 15/20/30 headways (peak/midday/evening). Sunday peak and midday service would be improved from 60-minute to 30-minute headways. In addition, Sunday evening service would be added until 10: p.m. at 60-minute headways.
- **Short-Range:** Weekday midday service levels would be improved to 15-minute headways. Saturday peak and midday and Sunday peak period service levels would be improved from 30-minute to 20-minute headways, while Sunday evening service would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Final incremental improvements to Saturday and Sunday service levels would result in weekday headways of 15/15/30, Saturday headways of 15/15/30, and Sunday headways of 20/20/30 (peak/midday/evening).

##### Span of Service

The proposed spans of service for Route 39 in the three service plan timeframes are as follows:

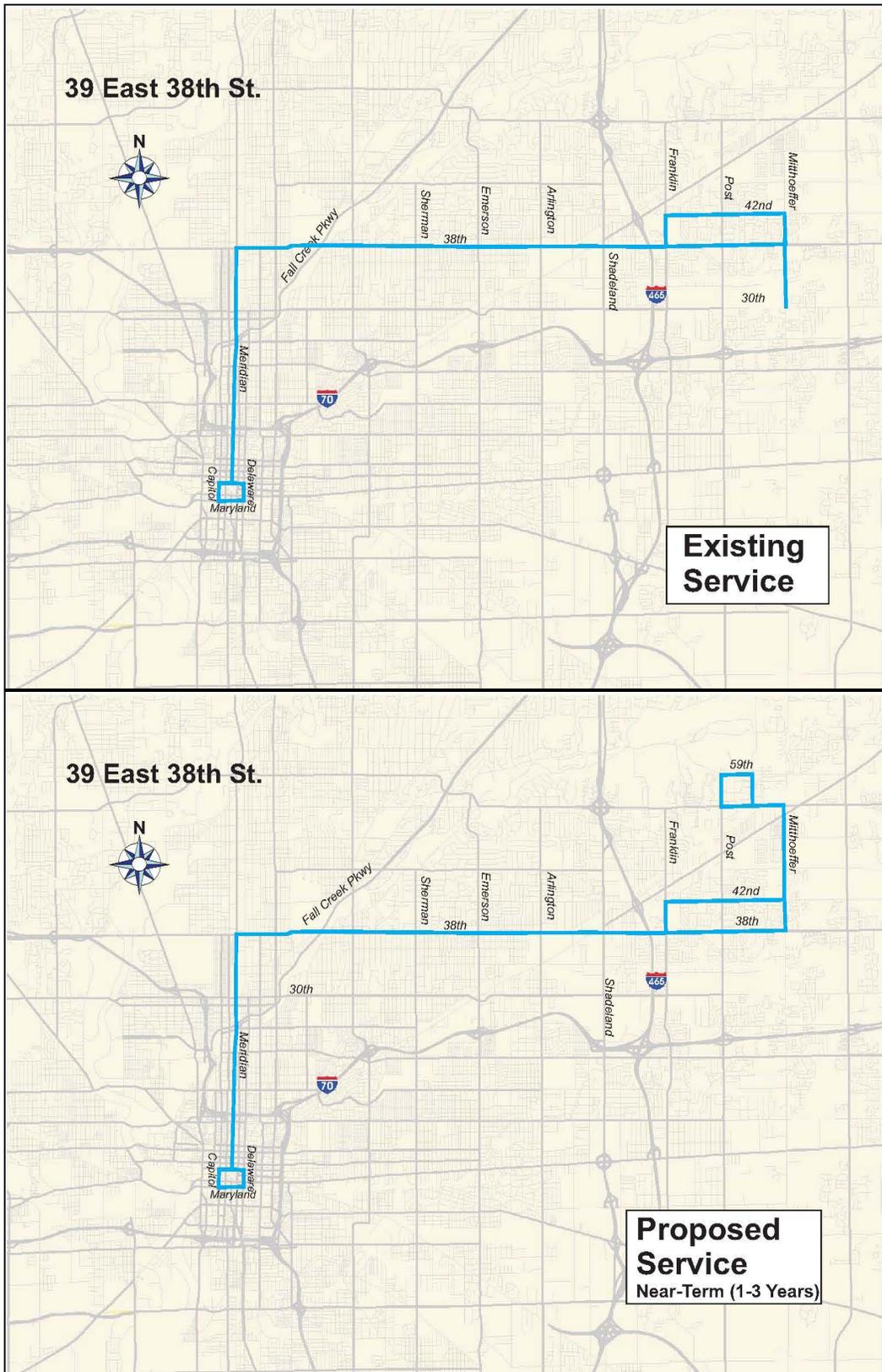
- **Near-Term:** Weekday and Saturday service would be extended to 4:00 a.m. to 12:00 a.m., and Sunday service would be operated from 5:00 a.m. to 10:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Additional Sunday hours would result in service from 4:00 a.m. to 12:00 a.m., seven days a week.



**Proposed Operating Requirements**

**Route 39 - East 38th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	71	120	136	136
	<u>Average Headway</u>				
	AM, PM Peak	30	15	15	15
	Midday	30	20	15	15
	Evening	30	30	30	30
	Peak Buses	7	10	11	11
	Revenue Hours	69.50	156.00	187.00	187.00
	Revenue Miles	1094.9	2280.0	2584.0	2584.0
Span of Service	4:17 am-12:32 am	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	57	80	108	136
	<u>Average Headway</u>				
	AM, PM Peak	30	30	20	15
	Midday	30	30	20	15
	Evening	30	30	30	30
	Peak Buses	4	5	8	11
	Revenue Hours	53.48	100.00	144.00	187.00
	Revenue Miles	871.1	1520.0	2052.0	2584.0
Span of Service	6:24 am-12:30 pm	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Sundays	One Way Trips	27	62	80	108
	<u>Average Headway</u>				
	AM, PM Peak	60	30	20	20
	Midday	60	30	30	20
	Evening	-	60	30	30
	Peak Buses	2	5	8	8
	Revenue Hours	23.73	77.50	103.00	144.00
	Revenue Miles	414.0	1178.0	1520.0	2052.0
Span of Service	6:49 am-9:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 55 – English

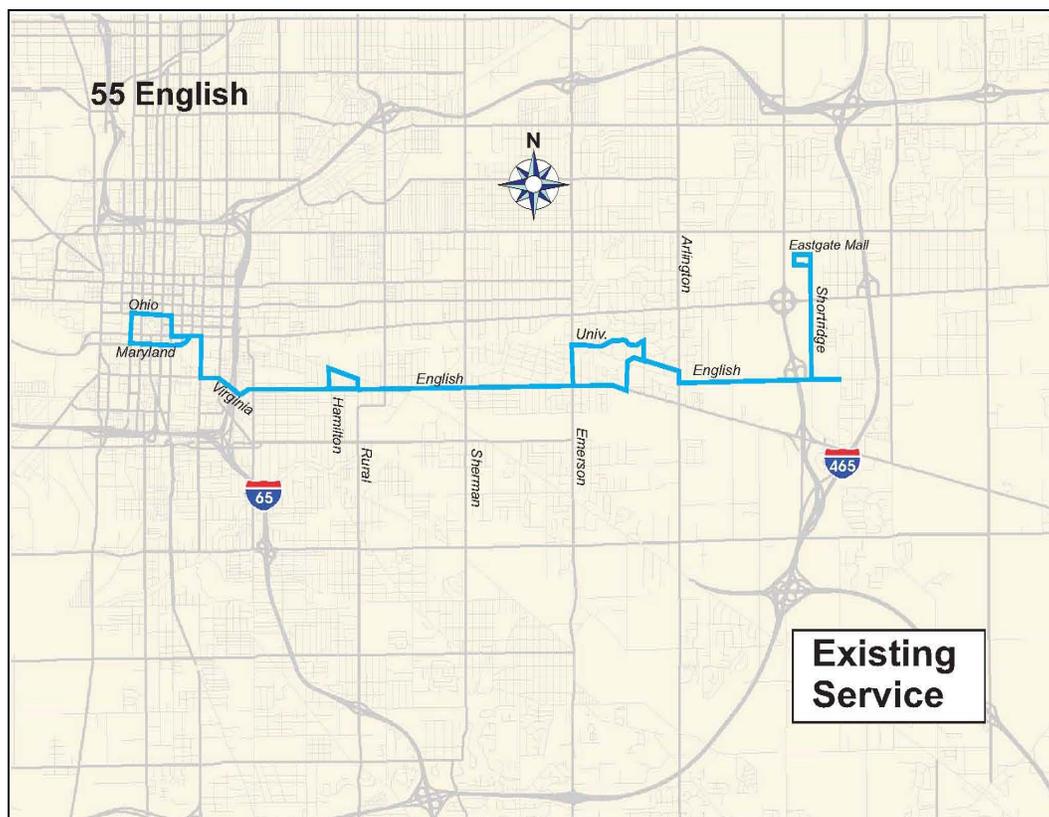
#### Proposed Service Changes

##### Alignment

This route is the poorest performing route in the system. No alignment changes are proposed in the Near-Term (1-3 years), however it is recommended that this route be eliminated and segments of this route be covered by proposed new route 93 and existing route 26.

##### Service Levels and Span of Service

This route, which currently operates on weekdays only, would be eliminated in the short-range (4 to 9 years), with no changes proposed in the near-term (1 to 3 years).





**Proposed Operating Requirements**

**Route 55 - English**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	37	37	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	30	30	n/a	n/a
	Midday	60	60	n/a	n/a
	Evening	30	30	n/a	n/a
	Peak Buses	2.5	2.5	n/a	n/a
	Revenue Hours	21.88	21.88	n/a	n/a
	Revenue Miles	371.4	371.4	n/a	n/a
Span of Service	5:37 am-7:14 pm	5:37 am-7:14 pm	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 90 – Blue Line

#### Proposed Service Changes

##### Alignment

This route is currently operated within the downtown area linking a small portion of downtown to the Indianapolis Zoo. Ridership is very low, with the ridecheck survey revealing only 28 weekday daily boardings from 73 daily trips, 2 Saturday daily boardings from 73 trips and 4 Sunday daily boardings from 73 trips. Clearly this route does not provide service where it is desired under its current route configuration. It is however believed that a downtown circulator could be effective and productive if placed appropriately, serving desirable origin–destination pairs. IndyGo is currently exploring alternative alignment configurations that could be operated using the existing funding sources used for the Route 90.

##### Service Levels and Span of Service

This circulator route, which currently operates seven days a week, would be eliminated in the near-term (1 to 3 years).



**Proposed Operating Requirements**

**Route 90 - Blue Line**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	73	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	10	n/a	n/a	n/a
	Midday	10	n/a	n/a	n/a
	Evening	10	n/a	n/a	n/a
	Peak Buses	3	n/a	n/a	n/a
	Revenue Hours	25.55	n/a	n/a	n/a
	Revenue Miles	320.5	n/a	n/a	n/a
Span of Service	9:00 am-9:21 pm	n/a	n/a	n/a	
Saturdays	One Way Trips	73	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	10	n/a	n/a	n/a
	Midday	10	n/a	n/a	n/a
	Evening	10	n/a	n/a	n/a
	Peak Buses	3	n/a	n/a	n/a
	Revenue Hours	25.55	n/a	n/a	n/a
	Revenue Miles	313.9	n/a	n/a	n/a
Span of Service	9:00 am-9:21 pm	n/a	n/a	n/a	
Sundays	One Way Trips	73	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	10	n/a	n/a	n/a
	Midday	10	n/a	n/a	n/a
	Evening	10	n/a	n/a	n/a
	Peak Buses	3	n/a	n/a	n/a
	Revenue Hours	25.55	n/a	n/a	n/a
	Revenue Miles	313.9	n/a	n/a	n/a
Span of Service	9:00 am-9:21 pm	n/a	n/a	n/a	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 50 – Downtown – IUPUI Circulator

#### Proposed Service

##### Alignment

This is a proposed new route in the **Near-Term (1-3 years)** that would operate between downtown Indianapolis and the IUPUI Campus. This route begins at Pennsylvania Street and New York Street southbound, turns west on Ohio Street, north on West Street, west on Michigan Street, north on University Boulevard, west on Wishard Boulevard, south on West Drive, east on Medical Drive, south on Barnhill Drive, and east on New York Street returning to the beginning of the route.

##### Service Levels

Route 50 service is proposed to begin in the near-term plan (1 to 3 years), as described below:

- **Near-Term:** Weekday only service would be provided at peak/midday/evening headways of 15/15/30 minutes.
- **Short-Range:** Weekday peak and evening period service levels would be improved to 10 and 20 minutes, respectively.
- **Long-Range:** Service would remain the same as the Short-Range Plan.

##### Span of Service

Route 50 service is proposed to begin in the near-term plan (1 to 3 years), as described below:

- **Near-Term:** Weekday only service would be provided from 5:00 a.m. to 10:00 p.m...
- **Short-Range & Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 50 - Downtown - IUPUI Circulator**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	116	154	154
	Average Headway				
	AM, PM Peak	n/a	15	10	10
	Midday	n/a	15	15	15
	Evening	n/a	30	20	20
	Peak Buses	n/a	2	3	3
	Revenue Hours	n/a	29.00	38.50	38.50
	Revenue Miles	n/a	286.5	380.4	380.4
Span of Service	n/a		5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	n/a
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	n/a





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 51 – Ivy Tech - IUPUI Circulator

#### Proposed Service

##### Alignment

This is a proposed new route in the **Near-Term (1-3 years)** that would operate between the Ivy Tech Campus and the IUPUI Campus. This route begins at Ivy Tech State College, travels west on West 27<sup>th</sup> Street, south on Capitol Avenue, west on 11<sup>th</sup> Street / 10<sup>th</sup> Street, south on University Boulevard, west on Wishard Boulevard, south on West Drive, east on Medical Drive, south on Barnhill Drive, and east on New York Street, north on University Boulevard, east on 10<sup>th</sup> Street, north on Senate Avenue, east on 16<sup>th</sup> Street, north on Illinois Street returning to Ivy Tech.

##### Service Levels

Route 51 service is proposed to begin in the near-term plan (1 to 3 years), as described below:

- **Near-Term:** Weekday only service would be provided at peak/midday/evening headways of 15/15/30 minutes.
- **Short-Range & Long-Range:** Service would remain the same as the Near-Term Plan.

##### Span of Service

Route 51 service is proposed to begin in the near-term plan (1 to 3 years), as described below:

- **Near-Term:** Weekday only service would be provided from 5:00 a.m. to 10:00 p.m...
- **Short-Range & Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 51 - Ivy Tech - IUPUI Circulator**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	116	124	124
	Average Headway				
	AM, PM Peak	n/a	15	15	15
	Midday	n/a	15	15	15
	Evening	n/a	30	30	30
	Peak Buses	n/a	3	3	3
	Revenue Hours	n/a	43.50	46.50	46.50
	Revenue Miles	n/a	386.3	412.9	412.9
Span of Service	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 71 – 71<sup>st</sup> Street Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the **Long-Range (10-15 years)** that would operate between the Castleton Square Mall and the Glendale Mall (see map below). This route begins at the Castleton Square Mall, travels east along 82<sup>nd</sup> Street, south on Clearvista Parkway, west on Clearvista Way, serving the Community Hospital, south on Shadeland Avenue, east on 75<sup>th</sup> Street, south on Shadeland Station Way to Shadeland Avenue, north to 75<sup>th</sup> Street (this segment top this point duplicates the existing route 19 – eliminated and replaced with this route and route 88). Service then continues west on 75<sup>th</sup> Street, south on Graham Road, and west on 71<sup>st</sup> Street, south on Keystone Avenue, east on 62<sup>nd</sup> Street and south on Rural Street to the Glendale Mall Transit Center.

##### Service Levels

Route 71 service is proposed to begin in the long-range plan (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided at peak/midday/evening headways of 30/30/60 minutes, seven days a week.

##### Span of Service

Route 71 service is proposed to begin in the long-range plan (10 to 15 years), as described below:

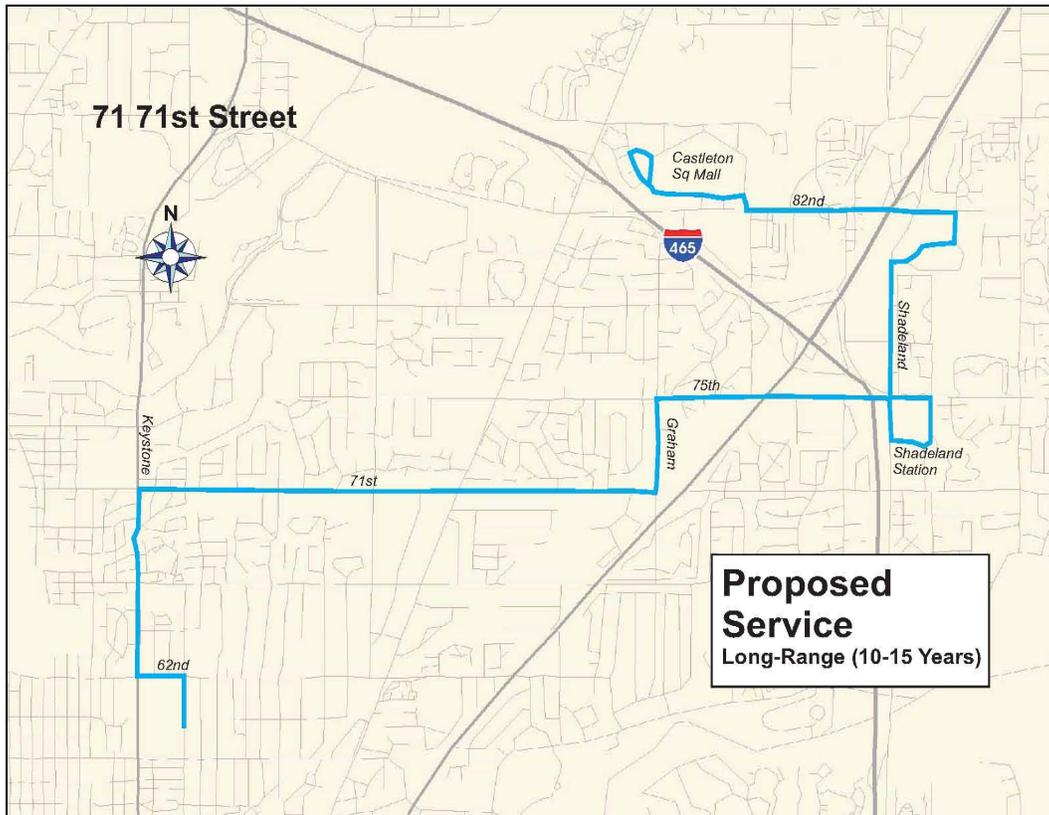
- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 71 - 71st Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	3
	Revenue Hours	n/a	n/a	n/a	46.50
	Revenue Miles	n/a	n/a	n/a	626.2
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	3
	Revenue Hours	n/a	n/a	n/a	46.50
	Revenue Miles	n/a	n/a	n/a	626.2
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	58
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	3
	Revenue Hours	n/a	n/a	n/a	43.50
	Revenue Miles	n/a	n/a	n/a	585.8
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 86 – 86<sup>th</sup> Street Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the **Near-Term (1-3 years)** that would operate along 86<sup>th</sup> and 82<sup>nd</sup> Streets connecting Traders Point Shopping Center at Zionsville Road and 86<sup>th</sup> Street and the Castleton Square Mall on 82<sup>nd</sup> Street, serving the Keystone Crossing Mall mid route.

##### Service Levels

Route 86 service is proposed to begin in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday and Saturday service would be provided at peak/midday/evening headways of 30/30/60 minutes, while Sunday service would be at 60-minute headways all day.
- **Short-Range:** Weekday and Saturday evening service levels would be improved from 60-minute to 30-minute headways, for 30-minute service all day. On Sundays, peak period service would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Additional improvements to service levels (all days) would result in weekday headways of 15/15/30, Saturday's headways of 20/20/30 and Sunday headways of 30/30/30 (peak/midday/evening).

##### Span of Service

The proposed spans of service for Route 86 in the three service plan timeframes are as follows:

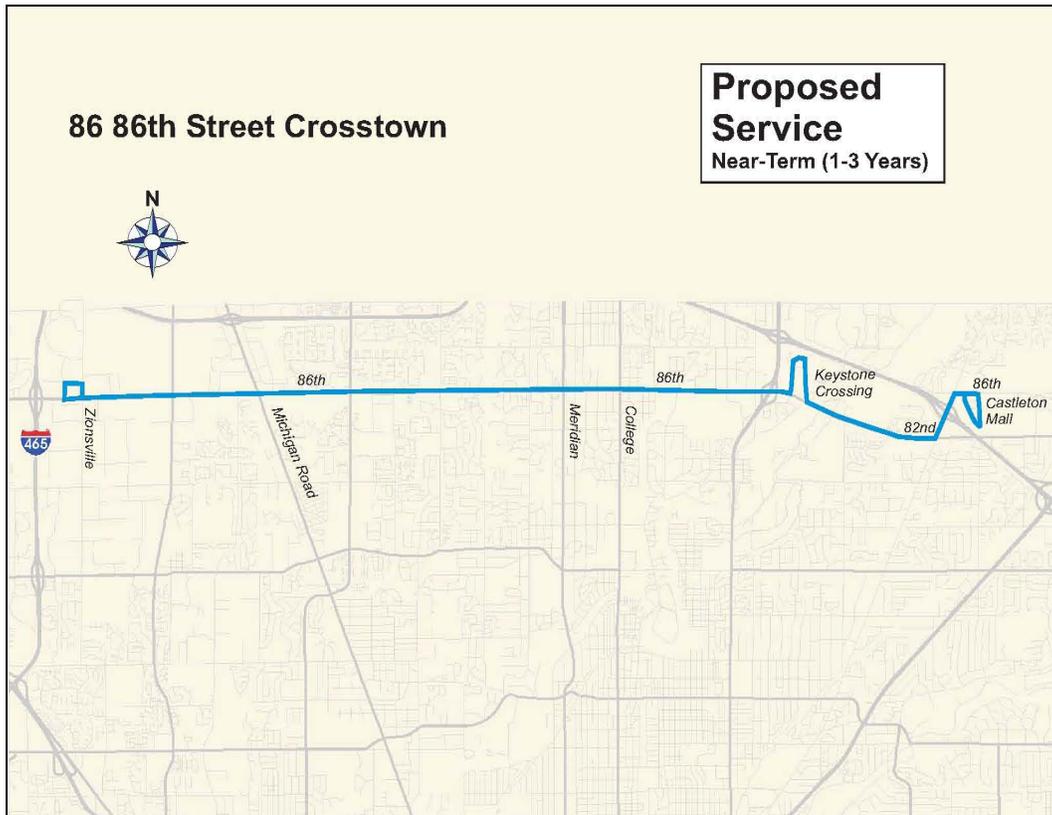
- **Near-Term:** Service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Service hours would be extended to 5:00 a.m. to 10:00 p.m., seven days a week.
- **Long-Range:** Service hours would be extended to 4:00 a.m. to 12:00 a.m., seven days a week.



**Proposed Operating Requirements**

**Route 86 - 86th Street Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	58	68	136
	Average Headway				
	AM, PM Peak	n/a	30	30	15
	Midday	n/a	30	30	15
	Evening	n/a	60	30	30
	Peak Buses	n/a	4	4	9
	Revenue Hours	n/a	58.00	68.00	142.00
	Revenue Miles	n/a	841.0	986.0	1972.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	58	68	108
	Average Headway				
	AM, PM Peak	n/a	30	30	20
	Midday	n/a	30	30	20
	Evening	n/a	60	30	30
	Peak Buses	n/a	4	4	7
	Revenue Hours	n/a	58.00	68.00	114.00
	Revenue Miles	n/a	841.0	986.0	1566.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	n/a	30	46	80
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	30.00	46.00	80.00
	Revenue Miles	n/a	435.0	667.0	1160.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 87 – Mitthoeffer Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that would operate between the Meijers Shopping Center on East Washington Street and the Wal-Mart on Pendleton Pike at 59<sup>th</sup> Street. This route is similar to the previously operated route 70. This route begins at the Meijers Shopping Center located on East Washington Street (just west of German Church Road), travel west on Washington Street, serve the Washington Square Mall transit stop, continuing north along Mitthoeffer Road. At Mitthoeffer Road and 38<sup>th</sup> Street, every other trip travels west on 38<sup>th</sup> Street to Franklin Road north, and the opposite trip travels Mitthoeffer Road north and 42<sup>nd</sup> Street west to Franklin Road north. Once on Franklin Road north of 42<sup>nd</sup> Street, all trips continue north, east on 56<sup>th</sup> Street and northeast along Pendleton Pike to the Wal-Mart at 59<sup>th</sup> Street.

##### Service Levels

Route 87 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday service would be provided at peak/midday/evening headways of 30/60/60 minutes, while Saturday and Sunday service would be at 60-minute headways all day.
- **Short-Range:** Weekday midday and Saturday and Sunday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Additional improvements to service levels (all days) would result in weekday and Saturday headways of 30 minutes all day, and Sunday peak/midday/evening headways of 30/30/60.

##### Span of Service

The proposed spans of service for Route 87 in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Weekday and Saturday service hours would be extended to 5:00 a.m. to 10:00 p.m.
- **Long-Range:** Weekday and Sunday service hours would be extended, resulting in weekday service from 4:00 a.m. to 12:00 a.m. and Saturday and Sunday service from 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 87 - Mitthoeffer Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	42	62	80
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	60	30	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	4	4	4
	Revenue Hours	n/a	37.50	62.00	80.00
	Revenue Miles	n/a	546.0	806.0	1040.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	30	46	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	25.50	46.00	68.00
	Revenue Miles	n/a	390.0	598.0	884.0
Span of Service	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 a.m.	5:00 am - 10:00 a.m.	
Sundays	One Way Trips	n/a	30	42	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	25.50	42.00	62.00
	Revenue Miles	n/a	390.0	546.0	806.0
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 a.m.	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 88 – Shadeland Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate between a re-established Eastgate Mall Transit Center and Castleton Square Mall. This route would operate along Shadeland Avenue between 10<sup>th</sup> Street and 82<sup>nd</sup> Street with a mid route deviate along 46<sup>th</sup> Street, Pendleton Pike, Post Road, and 56<sup>th</sup> Street to serve the Fort Harrison Transit Center (proposed). This route provides north-south crosstown service connecting the east and northeast service areas. Transfer connections can be made with 17 other IndyGo routes, either street side or at three transit center locations along the route (Eastgate Mall, Fort Harrison and Castleton Square Mall).

##### Service Levels

Route 88 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday service would be provided at peak/midday/evening headways of 30/30/60 minutes, while Saturday and Sunday service would be at headways of 30/60/60.
- **Long-Range:** Improvements to service levels (all days) would result in weekday headways of 15/15/30, Saturday headways of 20/30/30, and Sunday headways of 30 minutes all day.

##### Span of Service

The proposed spans of service for Route 88 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Service hours (all days) would be extended, resulting in weekday and Saturday service from 4:00 a.m. to 12:00 a.m. and Sunday service from 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 88 - Shadeland Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	62	136
	Average Headway				
	AM, PM Peak	n/a	n/a	30	15
	Midday	n/a	n/a	30	15
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	4	9
	Revenue Hours	n/a	n/a	62.00	153.00
	Revenue Miles	n/a	n/a	942.4	2067.2
Span of Service	n/a	n/a	5:00 am - 10:00 a.m.	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	n/a	46	92
	Average Headway				
	AM, PM Peak	n/a	n/a	30	20
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	4	7
	Revenue Hours	n/a	n/a	46.00	98.00
	Revenue Miles	n/a	n/a	699.2	1398.4
Span of Service	n/a	n/a	5:00 am - 10:00 a.m.	4:00 am - 12:00 am	
Sundays	One Way Trips	n/a	n/a	42	68
	Average Headway				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	4	7
	Revenue Hours	n/a	n/a	42.00	101.23
	Revenue Miles	n/a	n/a	638.4	1468.8
Span of Service	n/a	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 a.m.	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 89 – Emerson Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate along Emerson Avenue, connecting the Glendale Mall with the University of Indianapolis and south Indianapolis. This route begins at the Glendale Mall Transit Center, travel south on Rural Street, west on Kessler Boulevard, south on Keystone Avenue, East on 52<sup>nd</sup> Street, south on Kingsway Drive, east on Willowbrook Parkway, south on Pennwood Drive, east on 46<sup>th</sup> Street south on Emerson Avenue, east on 16<sup>th</sup> Street and south on Ritter Avenue to the Community Hospital East. From the Hospital the route continues south on Ritter Avenue, west on 10<sup>th</sup> Street, south on Emerson Avenue, west on Main Street (Beech Grove), north on Sherman Drive, west on Troy Avenue, south on Shelby Street (serving the University of Indianapolis), west on Hanna Avenue, north on Madison Avenue, west on National Avenue, south on East Street and east on Hanna Avenue to a proposed shelter and pull-out bay between East Street and Madison Avenue as the end of line, as well as provide connections to the route 22 and 31.

##### Service Levels

Route 89 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday service would be provided at 30-minute headways all day, Saturday service would be at peak/midday/evening headways of 30/60/60 minutes, and Sunday service would be at 60-minute headways all day.
- **Long-Range:** Improvements to service levels would result in all day headways of 30 minutes, seven days a week.

##### Span of Service

The proposed spans of service for Route 89 in the three service plan timeframes are as follows:

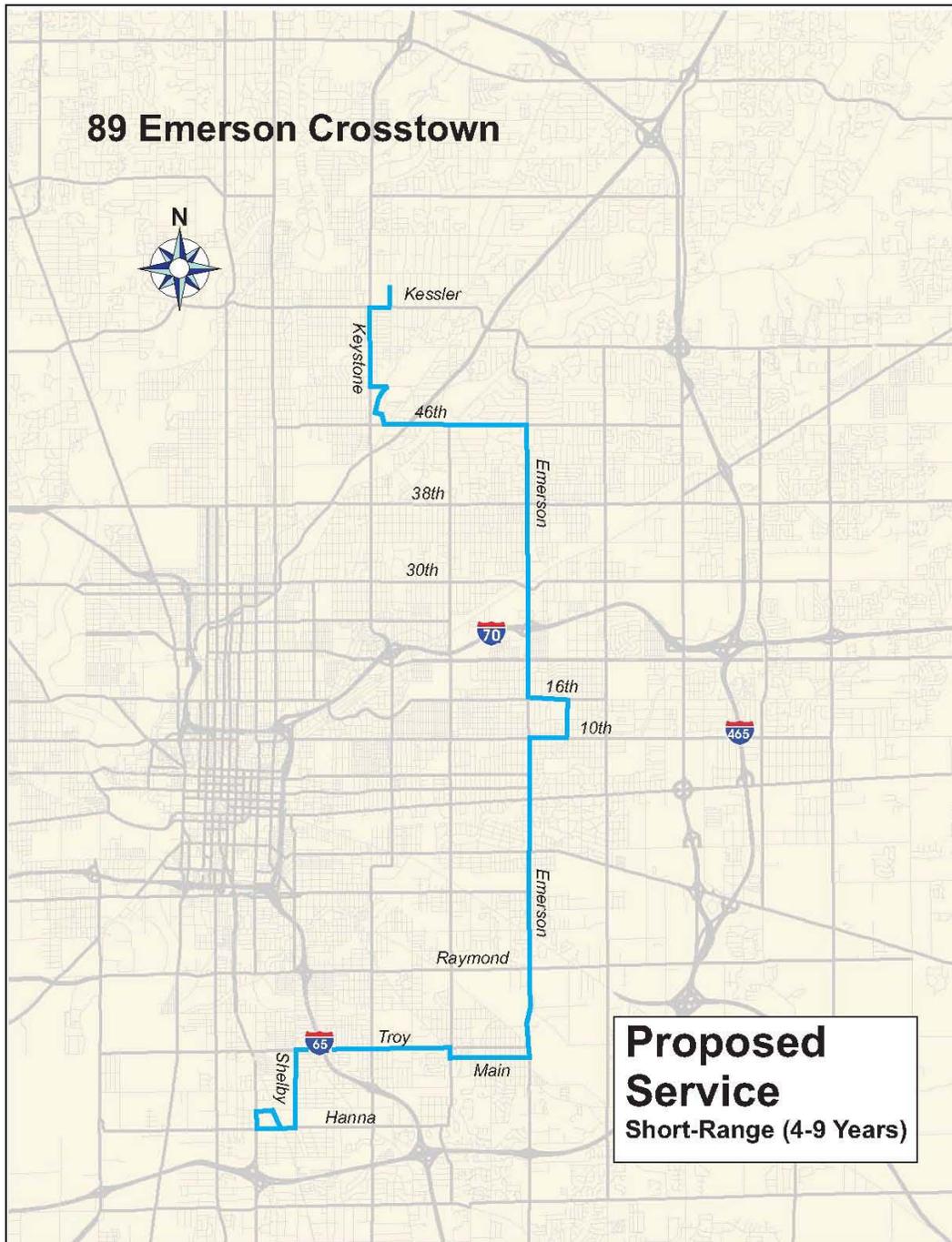
- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., while Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Weekday and Sunday service hours would be extended, resulting in weekday service from 4:00 a.m. to 12:00 a.m. and Saturday and Sunday service from 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 89 - Emerson Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	68	80
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	30	30
	Peak Buses	n/a	n/a	5	5
	Revenue Hours	n/a	n/a	85.00	100.00
	Revenue Miles	n/a	n/a	1244.4	1464.0
Span of Service	n/a	n/a	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	n/a	46	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	5	5
	Revenue Hours	n/a	n/a	57.50	85.00
	Revenue Miles	n/a	n/a	841.8	1244.4
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	30	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	60	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	3	5
	Revenue Hours	n/a	n/a	37.50	85.00
	Revenue Miles	n/a	n/a	549.0	1244.4
Span of Service	n/a	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 90 (New) – 56<sup>th</sup> Street/Butler Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate between Fort Harrison / Lawrence and the University of Butler Campus, also serving Glendale Mall and Broad Ripple. This route begins at the Fort Harrison Transit Center and operates west on 56<sup>th</sup> Street, north on Rural Street, west on 62<sup>nd</sup> Street / Broad Ripple Avenue, south on College Avenue, west on 52<sup>nd</sup> Street, south on Capitol Avenue and west on 46<sup>th</sup> Street into the University of Butler. This route provides east-west crosstown service linking Lawrence / Fort Harrison, the Glendale Mall Transit Center and the University of Butler (which recently lost fixed route transit service due to service cuts).

##### Service Levels

Route 90 crosstown service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday service would be provided at peak/midday/evening headways of 30/30/60 minutes, Saturday service would be at headways of 30/60/60 minutes, and Sunday service would be at 60-minute headways all day.
- **Long-Range:** Improvements to service levels would result in weekday and Saturday peak/midday/evening headways of 30/30/60 minutes and Sunday service at headways of 30/60/60 minutes.

##### Span of Service

The proposed spans of service for Route 90 in the three service plan timeframes are as follows:

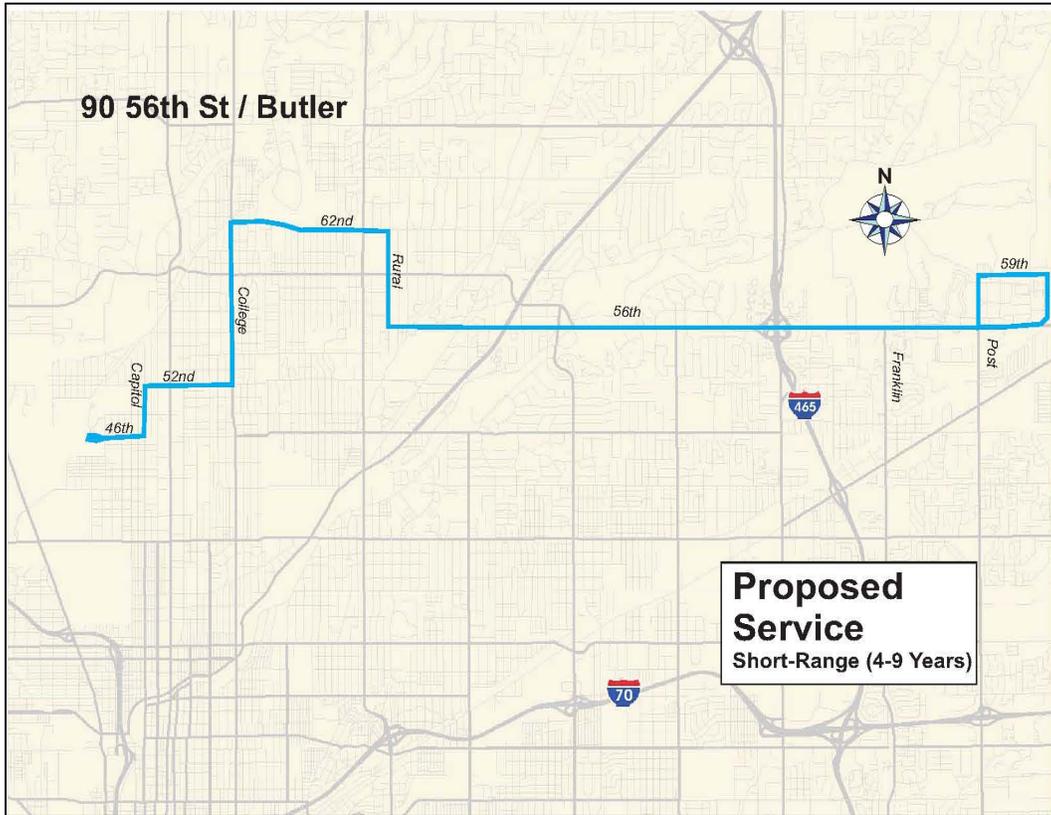
- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m., and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Weekday service would be improved to 4:00 a.m. to 12:00 a.m.



**Proposed Operating Requirements**

**Route 90 - 56th Street / Butler**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	62	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	62.00	68.00
	Revenue Miles	n/a	n/a	781.2	856.8
Span of Service	n/a	n/a	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	n/a	46	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	46.00	62.00
	Revenue Miles	n/a	n/a	579.6	781.2
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	30	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	60	30
	Midday	n/a	n/a	60	60
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	2	4
	Revenue Hours	n/a	n/a	30.00	42.00
	Revenue Miles	n/a	n/a	378.0	529.2
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 91 – Westside Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that would operate as a north-south crosstown on the westside of Indianapolis, connecting communities between 86<sup>th</sup> Street on the north and Kentucky Avenue on the south. Currently, riders on the Westside of Indianapolis are required to travel into downtown Indianapolis in order to travel to other destinations on the westside. This route begins at the Traders Point Shopping Center At 86<sup>th</sup> Street and Zionsville Road, travels east on 86<sup>th</sup> Street, travels through Park 100 via Moller Road, 84<sup>th</sup> Street, Norfolk Street, 81<sup>st</sup> Street, Allison Avenue and 79<sup>th</sup> Street to Georgetown Road. Once on Georgetown Road, service resumes southbound, then northwest on Lafayette Road, west on 46<sup>th</sup> Street, south on Moller Road, west on Renn Lane, south on Woodland Drive, east on 43<sup>rd</sup> Street, south on Moller Road, west on Meadowood Drive, south on Parkwood Drive through the Speedway Shopping Center. From the Speedway Shopping Center, service continues south on Cunningham Road, east on 16<sup>th</sup> Street, south on Lynhurst Drive, west on Southern Avenue and Fortune Circle East, north on Executive Drive and west on Airport Expressway to the Indianapolis Airport transit stop. From the airport, service would reverse its route alignment to Lynhurst Drive, where it would continue south to Kentucky Avenue and northeast to the Marsh Shopping Center at Mann Road.

This route provides connections with 13 local bus routes and two express bus routes, while serving transit centers at the Traders Point Shopping Center and Speedway Shopping Center.

##### Service Levels

Route 91 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday service would be provided at 30-minute headways all day, Saturday service at peak/midday/evening headways of 30/30/60 minutes, and Sunday service at 60-minute headways all day.
- **Short-Range:** Sunday peak period service levels would be improved from 60-minute to 30-minute headways.
- **Long-Range:** Additional improvements to service levels (all days) would result in peak/midday/evening headways of 15/15/30 on weekdays, 20/30/30 on Saturdays, and 30 minutes all day on Sundays.

##### Span of Service

The proposed spans of service for Route 91 in the three service plan timeframes are as follows:

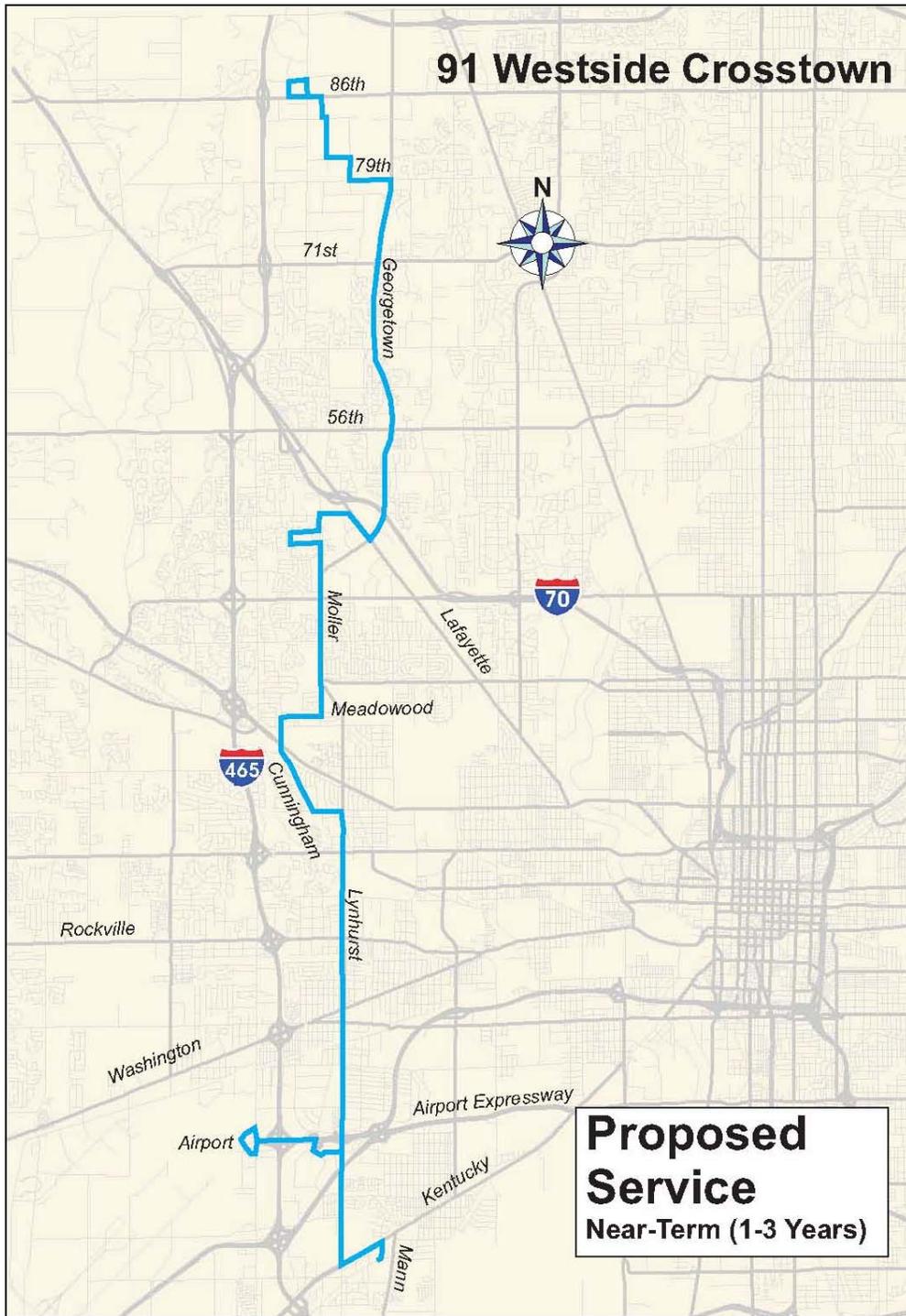
- **Near-Term:** Weekday service would be provided from 4:00 a.m. to 12:00 a.m., Saturday service would be from 5:00 a.m. to 10:00 p.m., and Sunday service would be from 6:00 a.m. to 9:00 p.m.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Saturday and Sunday service hours would be extended, resulting in weekday and Saturday service from 4:00 a.m. to 12:00 a.m. and Sunday service from 5:00 a.m. to 10:00 p.m.



**Proposed Operating Requirements**

**Route 91 - Westside Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	80	80	136
	Average Headway				
	AM, PM Peak	n/a	30	30	15
	Midday	n/a	30	30	15
	Evening	n/a	30	30	30
	Peak Buses	n/a	6	6	12
	Revenue Hours	n/a	106.00	120.00	204.00
	Revenue Miles	n/a	1728.0	1728.0	2937.6
Span of Service	n/a	4:00 am - 12:00 am	4:00 am - 12:00 am	4:00 am - 12:00 am	
Saturdays	One Way Trips	n/a	62	62	92
	Average Headway				
	AM, PM Peak	n/a	30	30	20
	Midday	n/a	30	30	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	6	6	9
	Revenue Hours	n/a	83.50	93.00	138.00
	Revenue Miles	n/a	1339.2	1339.2	1987.2
Span of Service	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	4:00 am - 12:00 am	
Sundays	One Way Trips	n/a	30	42	68
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	30
	Peak Buses	n/a	3	6	6
	Revenue Hours	n/a	40.50	63.00	102.00
	Revenue Miles	n/a	648.0	907.2	1468.8
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 92 – Northside Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate between the Glendale Mall and the Traders Point Shopping Center at 86<sup>th</sup> Street and Zionsville Road, with split branch operations to St. Vincent's Hospital at 86<sup>th</sup> Street and Harcourt Road. This route provides an east-west crosstown service providing transfer connections to 11 local bus routes and 1 express route (Glendale Mall). This route begins at the Glendale Mall Transit Center, travels south on Rural Street, west on Kessler Boulevard, north on Spring Mill Road, west on 73<sup>rd</sup> Street to Harcourt Road. At Harcourt Road two branches are proposed with alternating service to the St. Vincent's Hospital (via Harcourt Road) and Traders Point Shopping Center. Service continuing to Traders Point Shopping Center would continue west on 73<sup>rd</sup> Street / Westlane Road, south/southwest on Township Line Road, north on Michigan Road, west on 71<sup>st</sup> Street, north on Georgetown Road, west on 79<sup>th</sup> Street (Park 100), north on Allison Avenue, west on 81<sup>st</sup> Street, north on Norfolk Street, west on 84<sup>th</sup> Street, north on Moller Road and west on 86<sup>th</sup> Street to the Traders Point Shopping Center.

##### Service Levels

Route 92 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided at peak/midday/evening headways of 30/60/60 minutes and Sunday service would be at 60-minute headways all day.
- **Long-Range:** Improvements to service levels would result in weekday service at 30-minute headways all day, Saturday peak/midday/evening headways of 30/30/60 minutes, and Sunday service at headways of 30/60/60 minutes.

##### Span of Service

The proposed spans of service for Route 92 in the three service plan timeframes are as follows:

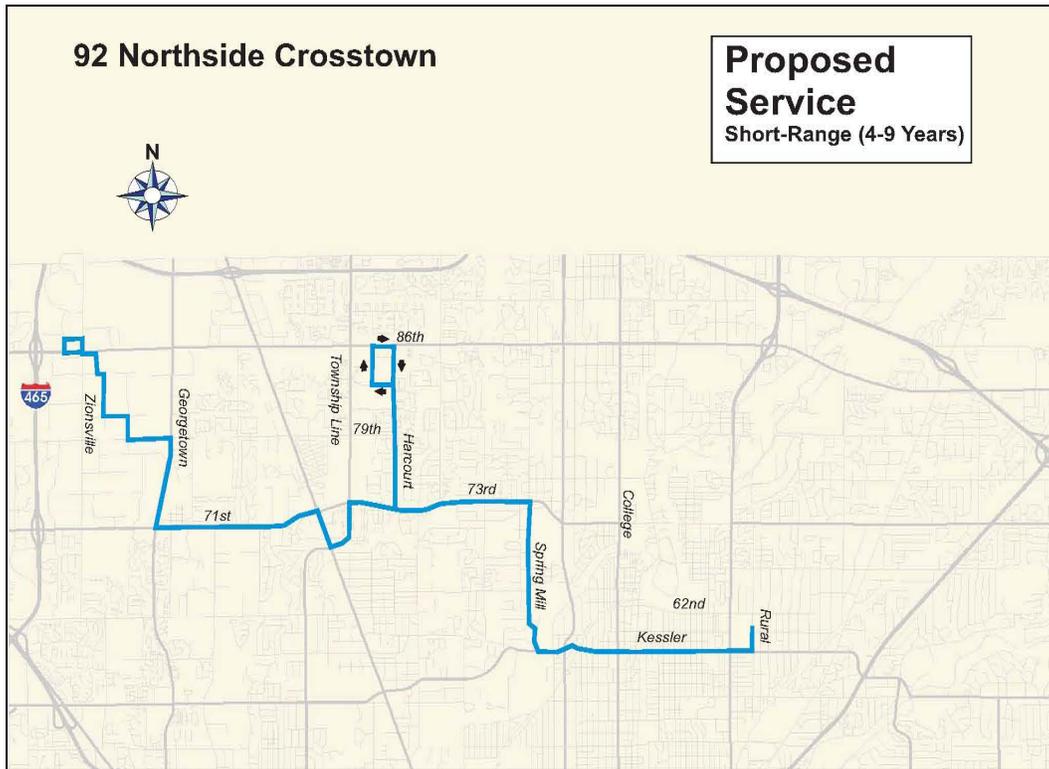
- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Long-Range:** Weekday and Saturday service hours would be extended, resulting in weekday and Saturday service from 5:00 a.m. to 10:00 p.m. and Sunday service from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 92 - Northside Crosstown**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	42	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	42.00	68.00
	Revenue Miles	n/a	n/a	487.2	788.8
Span of Service	n/a	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	42	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	42.00	62.00
	Revenue Miles	n/a	n/a	487.2	719.2
Span of Service	n/a	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	30	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	60	30
	Midday	n/a	n/a	60	60
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	2	4
	Revenue Hours	n/a	n/a	30.00	42.00
	Revenue Miles	n/a	n/a	348.0	487.2
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 93 – Raymond Street Crosstown

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate from a re-established Eastgate Mall Transit Center to the Indianapolis Airport. This route replaces portions of the existing route 55 east of Emerson Avenue and route 12 along Raymond Street, while providing fixed route bus service to employment concentrations southwest of downtown Indianapolis (e.g., Lilly Industrial Center and the Airport). This route begins at a re-established Eastgate Mall Transit Center, travels south on Shortridge Road, west on English Avenue, north on Arlington Avenue, northwest on Beechwood Avenue, north on Audubon Road, west on University Avenue, south on Emerson Avenue to Raymond Street. Once on Raymond Street, service would continue west, north on East Street, northwest on Virginia Avenue, north on Delaware Street, west on Washington Street (Maryland Street for eastbound service), south on Capitol Avenue, west on South Street, southwest on Kentucky Avenue, west on Morris Street, south on Harding Street, southwest on Kentucky Avenue, west on Raymond Street, south on Lynhurst Drive, west on Southern Avenue and Fortune Circle East, north on Executive Drive and west on Airport Expressway to the Indianapolis Airport transit stop.

##### Service Levels

Route 93 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided at peak/midday/evening headways of 30/60/60 minutes, seven days a week.
- **Long-Range:** Improvements to service levels would result in weekday service at 30-minute headways all day, Saturday peak/midday/evening headways of 30/30/60 minutes, and Sunday service at headways of 30/60/60 minutes.

##### Span of Service

The proposed spans of service for Route 93 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided from 5:00 a.m. to 10:00 p.m. on weekdays and from 6:00 a.m. to 9:00 p.m. on Saturdays and Sundays.
- **Long-Range:** Saturday service hours would be extended, resulting in weekday and Saturday service from 5:00 a.m. to 10:00 p.m. and Sunday service from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 93 - Raymond Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	46	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	69.00	101.63
	Revenue Miles	n/a	n/a	906.2	1339.6
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	42	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	63.00	93.00
	Revenue Miles	n/a	n/a	827.4	1221.4
Span of Service	n/a	n/a	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	42	42
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	60
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	63.00	63.00
	Revenue Miles	n/a	n/a	827.4	827.4
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 94 – South County Circulator

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that would initially operate between the St. Francis Hospital at Stop 11 Road and Emerson Avenue and the Community Hospital South on County Line Road just west of U.S. 31. Service is proposed to expand in the Short-Range (4-9 years) to serve Southport Road.

- **Near-Term:** This route begins at St. Francis Hospital, travels west on Stop 11 Road, south on Madison Avenue, west on County Line Road, serves the Greenwood Park Mall and the Community Hospital South, continues west then north on Shelby Street, east on Stop 11 Road, south on East Street (U.S. 31) and east on County Line Road returning reverse route to the St. Francis Hospital.
- **Short-Range:** This route is expanded to include Southport Road. Following the same alignment as the Near-Term from the St. Francis Hospital to the Community Hospital South, this route would continue north on Shelby Street, east on Stop 11 and north on East Street (U.S. 31) instead of south back to the Greenwood Park Mall. The expansion of this route would continue north on East Street (U.S. 31), east on Banta Road, south on Shelby Street, east on Southport Road and south on Emerson Avenue returning to the St. Francis Hospital. This circulator route would operate bi-directional service, i.e., clockwise and counterclockwise.

##### Service Levels

Route 94 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be provided at 60-minute headways all day, seven days a week.
- **Short-Range:** Peak and midday service levels would be improved, resulting in peak/midday/evening headways of 30/30/60 minutes, seven days a week.
- **Long-Range:** Service levels would remain the same as in the short-range.

##### Span of Service

The proposed spans of service for Route 94 in the three service plan timeframes are as follows:

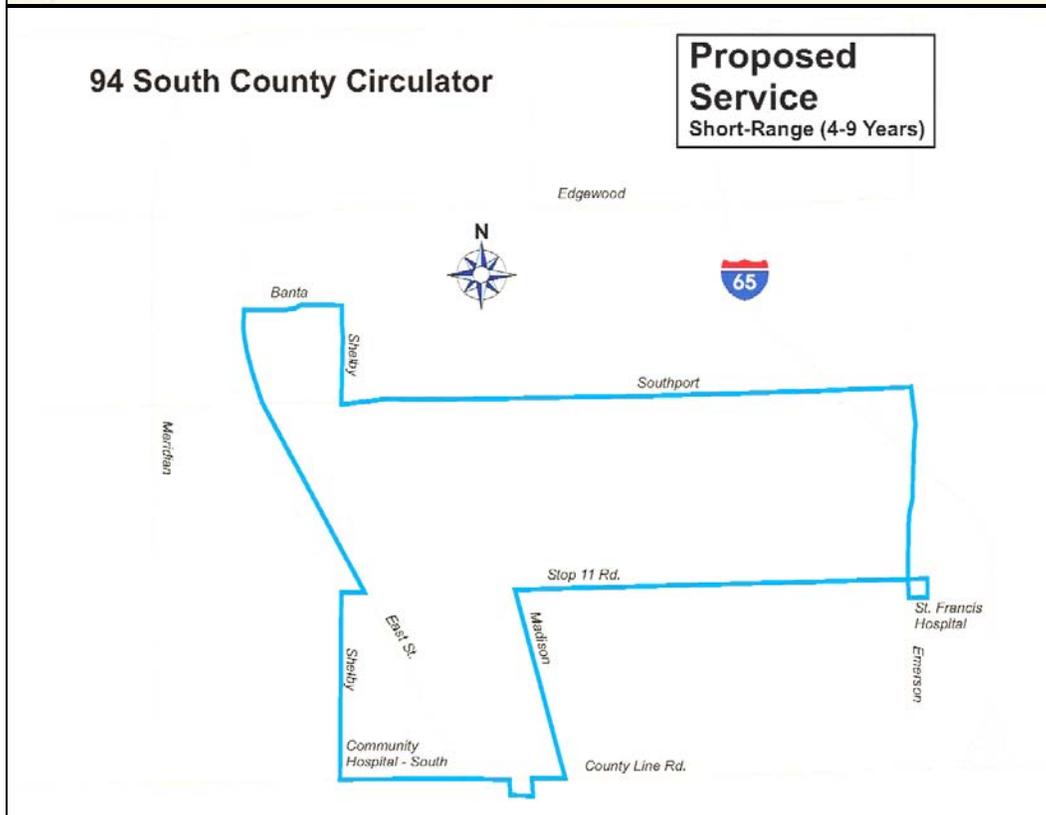
- **Near-Term:** Weekday service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Weekday and Saturday service hours would be extended, resulting in weekday and Saturday service from 5:00 a.m. to 10:00 p.m. and Sunday service from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 94 - South County Circulator**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	30	58	62
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	1	4	4
	Revenue Hours	n/a	15.00	58.00	62.00
	Revenue Miles	n/a	162.0	701.8	750.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	30	58	62
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	1	4	4
	Revenue Hours	n/a	15.00	58.00	62.00
	Revenue Miles	n/a	162.0	701.8	750.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	58	58
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	1	4	4
	Revenue Hours	n/a	15.00	58.00	58.00
	Revenue Miles	n/a	162.0	701.8	701.8
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 96 – Castleton North

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that would operate as a circulator service for the Castleton area. This route begins at the Castleton Square Mall, travels north//west on Castle Creek Parkway, north on Allisonville Road, east on 96<sup>th</sup> Street, south on North Hague Road, West on 82<sup>nd</sup> Street returning to the Castleton Square Mall Transit Center. This circulator route would operate clockwise and counterclockwise service. An optional alignment is proposed along Clearvista Parkway between North Hague Road and 82<sup>nd</sup> Street. Clearvista Parkway consists of numerous apartments and appears to be a good ridership market. This alignment is only recommended if a traffic signal can be located at Clearvista Parkway and North Hague Road in order for buses operating in a counterclockwise pattern to be able to turn left from Clearvista Parkway onto North Hague Road to continue northbound.

##### Service Levels

Route 96 service is proposed beginning in the Near-Term (1 to 3 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, and on Saturdays and Sundays at 60/60/60 minutes.
- **Short-Range:** Service levels remain the same as in the near-term.
- **Long-Range:** Improvements to service levels would result in peak/midday/evening headways of 30/30/60 minutes on Weekdays and Saturdays, Sundays remain the same as the near-term.

##### Span of Service

The proposed spans of service for Route 96 in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Service hours would be extended, resulting in weekday and Saturday service from 5:00 a.m. to 10:00 p.m. and Sunday service from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 96 - Castleton North**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	58	58	62
	Average Headway				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	30	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	3	3	3
	Revenue Hours	n/a	43.50	43.50	46.50
	Revenue Miles	n/a	446.6	446.6	477.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	30	30	62
	Average Headway				
	AM, PM Peak	n/a	60	60	30
	Midday	n/a	60	60	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	3
	Revenue Hours	n/a	22.50	22.50	46.50
	Revenue Miles	n/a	231.0	231.0	477.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 a.m.	
Sundays	One Way Trips	n/a	30	30	30
	Average Headway				
	AM, PM Peak	n/a	60	60	60
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	2
	Revenue Hours	n/a	22.50	22.50	22.50
	Revenue Miles	n/a	231.0	231.0	231.0
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 97 – Fishers / Castleton

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that would operate between Fishers and the Castleton Square Mall. This route begins at the Castleton Square Mall Transit Center, travels north/west on Castle Creek Parkway, north on Allisonville Road, east on 116<sup>th</sup> Street, north and east on Municipal Drive, south on Commercial Drive, returning west on 116<sup>th</sup> Street (reverse route to Castleton Square Mall).

##### Service Levels

Route 97 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, and on Saturdays and Sundays at 60/60/60 minutes
- **Long-Range:** Saturday peak service levels would be improved, resulting in service at peak/midday/evening headways of 30/60/60 minutes.

##### Span of Service

The proposed spans of service for Route 97 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided from 5:00 a.m. to 10:00 p.m. on weekdays and Saturdays, and from 6:00 a.m. to 9:00 p.m. on Sundays.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 97 - Fishers / Castleton**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	62	62
	Average Headway				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	3	3
	Revenue Hours	n/a	n/a	46.50	46.50
	Revenue Miles	n/a	n/a	421.6	421.6
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	34	46
	Average Headway				
	AM, PM Peak	n/a	n/a	60	30
	Midday	n/a	n/a	60	60
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	2	3
	Revenue Hours	n/a	n/a	25.50	34.50
	Revenue Miles	n/a	n/a	231.2	312.8
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	30	30
	Average Headway				
	AM, PM Peak	n/a	n/a	60	60
	Midday	n/a	n/a	60	60
	Evening	n/a	n/a	60	60
	Peak Buses	n/a	n/a	2	2
	Revenue Hours	n/a	n/a	22.50	22.50
	Revenue Miles	n/a	n/a	204.0	204.0
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 98 – Fishers South

#### Proposed Service

##### Alignment

This is a proposed new route in the Long-Range (10-15 years) that provides circulator bus service in the Fishers area, with the intent of providing feeder bus shuttle service to a high capacity transit system operating within the Northeast Corridor. This route begins at the Fishers Municipal Facility on Municipal Drive, travels north and east to Commercial Drive south, then east on 116<sup>th</sup> Street, south on USA Parkway (serving office buildings), south on Lantern Road, west on 106<sup>th</sup> Street, north on Hague Road and east on 116<sup>th</sup> Street returning to the Fishers Municipal Buildings.

##### Service Levels

Route 98 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, on Saturdays and Sundays at 60/60/60 minutes

##### Span of Service

The proposed spans of service for Route 98 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m. and on Saturdays and Sundays from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 98 - Fishers South**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	62
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	31.00
	Revenue Miles	n/a	n/a	n/a	359.6
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	30
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	174.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	30
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	174.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 99 – Fishers North

#### Proposed Service

##### Alignment

This is a proposed new route in the Long-Range (10-15 years) that provides circulator bus service in the Fishers area, with the intent of providing feeder bus shuttle service to a high capacity transit system operating within the Northeast Corridor. This route begins at the Fishers Municipal Facility on Municipal Drive, travels south, west on 116<sup>th</sup> Street, north on Holland Drive, counterclockwise around Ellipse Parkway, west on Sunblest Boulevard, north on Allisonville Road and east on 126<sup>th</sup> Street, terminating at a proposed high capacity transit station near US 37 or the railroad.

##### Service Levels

Route 99 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, on Saturdays and Sundays at 60/60/60 minutes

##### Span of Service

The proposed spans of service for Route 99 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m. and on Saturdays and Sundays from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 99 - Fishers North**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	62
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	31.00
	Revenue Miles	n/a	n/a	n/a	297.6
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	30
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	144.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	30
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	144.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 100 – Carmel

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that provides circulation within Carmel and connections to other IndyGo bus routes at the Keystone Crossing Mall Transit Center. This route begins at the Keystone Crossing Mall Transit Center, travel west on 86<sup>th</sup> Street, north on Keystone Avenue, west on 116<sup>th</sup> Street, through the Merchants Square Mall, continuing west along Medical Drive. At South Range Line Road, service continues north, then west on Gradle Drive, serving the Carmel City Hall and Municipal buildings. At 3<sup>rd</sup> Street, service travels south, then west on Carmel Drive, north on South Guilford Road, east on City Center Drive, north on Range Line Road to Meridian Street. At Meridian Street, service continues through Clay Terrace, east on 146<sup>th</sup> Street, north then west on Greyhound Pass, right (north) into Village Park Plaza (perimeter road), west on 151<sup>st</sup> Street, south on Meridian Street, then east and south on Greyhound Pass, returning south along the reverse route alignment. Long-Term, this route provides connections to four local routes (18, 26, 86 and 101) and one express route (200) at Keystone Crossing Mall.

##### Service Levels

Route 100 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, on Saturdays at 60/60/60 minutes, and on Sundays at 60-minute headways all day.
- **Short-Range:** Saturday service levels would be improved, resulting in service at peak/midday/evening headways of 30/60/60 minutes.
- **Long-Range:** Service levels would be improved to 30-minute headways during peak hours on Sundays.

##### Span of Service

The proposed spans of service for Route 100 in the three service plan timeframes are as follows:

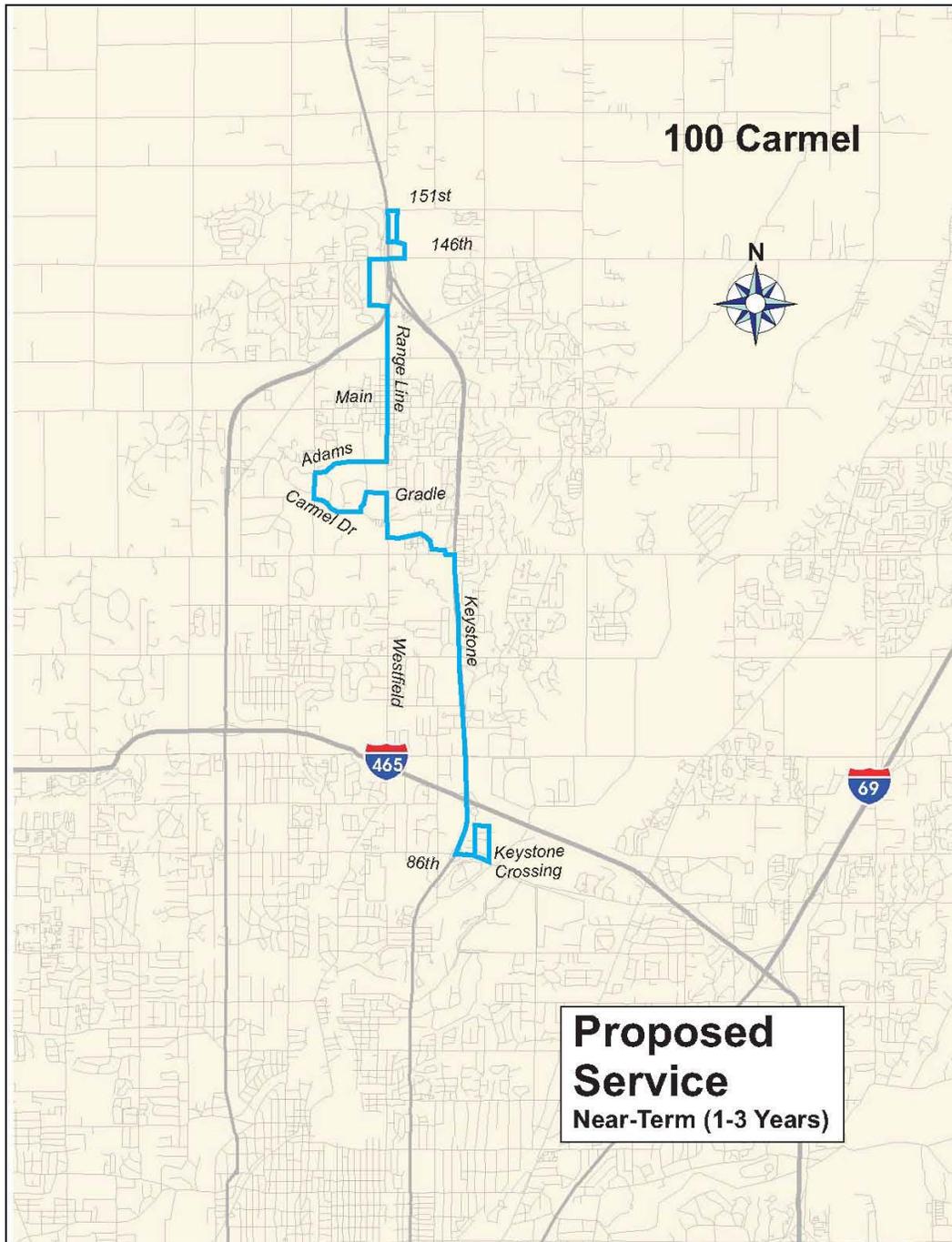
- **Near-Term:** Weekday service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Service hours would be extended to 5:00 a.m. to 10:00 p.m., seven days a week.



**Proposed Operating Requirements**

**Route 100 - Carmel**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	58	58	62
	Average Headway				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	30	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	3	3	3
	Revenue Hours	n/a	43.50	43.50	46.50
	Revenue Miles	n/a	603.2	603.2	644.8
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	30	42	46
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	3	3
	Revenue Hours	n/a	22.50	31.50	34.50
	Revenue Miles	n/a	312.0	436.8	478.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	30	46
	Average Headway				
	AM, PM Peak	n/a	60	60	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	3
	Revenue Hours	n/a	22.50	22.50	34.50
	Revenue Miles	n/a	312.0	312.0	478.4
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 101 – West Carmel

#### Proposed Service

##### Alignment

This is a proposed new route in the Near-Term (1-3 years) that provides circulation with Carmel and connections to other IndyGo bus routes at the Keystone Crossing Mall Transit Center. This route begins at the Keystone Crossing Mall Transit Center, travels west on 86<sup>th</sup> Street, north on Westfield Boulevard, west on 91<sup>st</sup> Street, north on North Meridian Street, east on 106<sup>th</sup> Street and north on North Pennsylvania Street to the Meijers Store at Carmel Drive. From the Meijers Store, service continues east on Carmel Drive and northeast on Old Meridian Street, serves the St. Vincent Carmel Hospital, continues south on Guilford Road, east on Main Street, south on Keystone Avenue, west on 126<sup>th</sup> Street, south on South Range Line Road, east on Medical Drive, terminating at the Merchants Square Mall Transit Stop. Like the Route 100, Long Term this route provides connections to four local routes (18, 26, 86 and 100) and one express route (200) at the Keystone Crossing Mall. Connections to Express Route 200 are also made at the Merchants Square Mall.

##### Service Levels

Route 101 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be provided at peak/midday/evening headways on weekdays at 30/30/60 minutes, on Saturdays at 60/60/60 minutes, and on Sundays at 60-minute headways all day.
- **Short-Range:** Saturday service levels would be improved, resulting in service at peak/midday/evening headways of 30/60/60 minutes.
- **Long-Range:** Service levels would be improved to 30-minute headways during peak hours on Sundays.

##### Span of Service

The proposed spans of service for Route 101 in the three service plan timeframes are as follows:

- **Near-Term:** Weekday service would be provided from 6:00 a.m. to 9:00 p.m., seven days a week.
- **Short-Range:** Span of service would remain the same as in the near-term.
- **Long-Range:** Service hours would be extended to 5:00 a.m. to 10:00 p.m., seven days a week.



**Proposed Operating Requirements**

**Route 101 - West Carmel**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	58	58	62
	Average Headway				
	AM, PM Peak	n/a	30	30	30
	Midday	n/a	30	30	30
	Evening	n/a	60	60	60
	Peak Buses	n/a	4	4	4
	Revenue Hours	n/a	58.00	58.00	62.00
	Revenue Miles	n/a	788.8	788.8	843.2
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	30	42	46
	Average Headway				
	AM, PM Peak	n/a	60	30	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	4	4
	Revenue Hours	n/a	30.00	42.00	46.00
	Revenue Miles	n/a	408.0	571.2	625.6
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	30	30	46
	Average Headway				
	AM, PM Peak	n/a	60	60	30
	Midday	n/a	60	60	60
	Evening	n/a	60	60	60
	Peak Buses	n/a	2	2	4
	Revenue Hours	n/a	30.00	30.00	46.00
	Revenue Miles	n/a	408.0	408.0	625.6
Span of Service	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	5:00 am - 10:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 102 – Noblesville

#### Proposed Service

##### Alignment

This is a proposed new route in the Long-Range (10-15 years) within the Noblesville area, providing circulator service and feeder bus service to proposed high capacity transit service options currently under study (DiRecTionS) by the Metropolitan Planning Organization. This route is designed to provide connections to the proposed high capacity transit alternatives. The alignment depicted on the map below, is designed to make connections to one of the four alignments currently under study. Variations to this alignment are proposed for the other three alignment alternatives. This route begins at the Shopping Center located on Westfield Road at River Avenue (northwest quadrant). Service continues east on Westfield Road which becomes Conner Street, south on 10<sup>th</sup> Street, west on Carbon Street, north on 8<sup>th</sup> Street, east on Gerald Street, returning north on 10<sup>th</sup> Street. At Conner Street, service continues north on 10<sup>th</sup> Street, east on North Street, and south on 12<sup>th</sup> Street, west on Evans Avenue, south on 10<sup>th</sup> Street and west on Conner Street / Westfield Road to the Shopping Center at River Avenue (northwest quadrant).

##### Service Levels

Route 102 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided at peak/midday/evening headways of 30/30/60 minutes, seven days a week.

##### Span of Service

The proposed spans of service for Route 102 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m. and on Saturdays and Sundays from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 102 - Noblesville**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	62
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	31.00
	Revenue Miles	n/a	n/a	n/a	235.6
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	58
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	29.00
	Revenue Miles	n/a	n/a	n/a	220.4
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	58
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	30
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	29.00
	Revenue Miles	n/a	n/a	n/a	220.4
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 116 – 116<sup>th</sup> Street

#### Proposed Service

##### Alignment

This is a proposed new route in the Long-Range (10-15 years) that provides connections between the Carmel area (from Merchants Square Mall transit stop) to Fishers along 116<sup>th</sup> Street, serving Fishers Station. Fishers Stations is a proposed rapid transit station on two of the four high capacity transit alignments currently under study (DiRecTionS) by the Metropolitan Planning Organization. This route alignment would be modified for the remaining two rapid transit alignments, which also propose station locations at 166<sup>th</sup> Street.

##### Service Levels

Route 116 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided at peak/midday/evening headways of 30/60/60 minutes, and on Saturdays and Sundays at 60-minute headways all day.

##### Span of Service

The proposed spans of service for Route 116 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m. and on Saturdays and Sundays from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 116 - 116th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	46
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	23.00
	Revenue Miles	n/a	n/a	n/a	262.2
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	171.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	1
	Revenue Hours	n/a	n/a	n/a	15.00
	Revenue Miles	n/a	n/a	n/a	171.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 146 – 146<sup>th</sup> Street

#### Proposed Service

##### Alignment

This is a proposed new route in the Long-Range (10-15 years) that provides connections between the north Carmel area (146<sup>th</sup> / 151<sup>st</sup> Street) to the north Fishers area (146<sup>th</sup> / 126<sup>th</sup> Street), along 146<sup>th</sup> Street. This route begins at the Village Park Plaza at 151<sup>st</sup> Street and Meridian Street, travel south on Meridian Street, east and south on Greyhound Pass, east on 146<sup>th</sup> Street to Fishers. In Fishers, this route provides circulation service to two proposed high capacity transit stations at 146<sup>th</sup> Street and 126<sup>th</sup> Street. Service continues east on 146<sup>th</sup> Street, south on Cumberland Road, east on 141<sup>st</sup> Street, south on Howe Road, west on 131<sup>st</sup> Street, south on Cumberland Road, west on 126<sup>th</sup> Street, north on Lantern Road, west on Lantern Farms Drive, north on Conner Knoll Parkway, east on 141<sup>st</sup> Street, north on Harrison Parkway, and west on 146<sup>th</sup> Street, returning to the Village Park Plaza along the reverse alignment.

##### Service Levels

Route 146 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided at peak/midday/evening headways of 30/60/60 minutes, and on Saturdays and Sundays at 60-minute headways all day.

##### Span of Service

The proposed spans of service for Route 146 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Weekday service would be provided from 5:00 a.m. to 10:00 p.m. and on Saturdays and Sundays from 6:00 a.m. to 9:00 p.m.



**Proposed Operating Requirements**

**Route 146 - 146th Street**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	46
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	4
	Revenue Hours	n/a	n/a	n/a	46.00
	Revenue Miles	n/a	n/a	n/a	676.2
Span of Service	n/a	n/a	n/a	n/a	5:00 am - 10:00 pm
Saturdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	30.00
	Revenue Miles	n/a	n/a	n/a	441.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm
Sundays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	60
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	60
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	30.00
	Revenue Miles	n/a	n/a	n/a	441.0
Span of Service	n/a	n/a	n/a	n/a	6:00 am - 9:00 pm





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 8L – Washington Street Limited

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that consists of limited stop service in the US 40/Washington Street corridor, operating between Avon Avenue at US 40/Main Street in downtown Plainfield to the west and the Meijers Store on East Washington Street in the Cumberland area. This service is designed to provide faster travel times along Washington Street serving major trip generators, while providing connections opportunities at all crossing route locations. When combined with the Route 8 in the Short-Range Plan (4-9 years), service would operate at peak/midday/evening headways of 10/10/15 weekday, 10/10/20 on Saturdays, and 12/15/20 on Sundays. Long Term (10-15 years), combined Route 8 and 8L weekday evening headways improve to 12 minutes, Saturday evenings to 15 minutes and Sunday midday and evening service to 12 and 15, respectively. Washington Street east of downtown Indianapolis is identified as a potential long term high capacity transit corridor. Combined Route 8 and 8L service within this corridor is designed to provide transit service levels that could be transitioned to high capacity transit service long term (beyond 15 years).

##### Service Levels

Route 8L service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided at peak/midday/evening headways on weekdays and Saturdays at 30/30/60 minutes, and on Sundays at 30/60/60 minutes.
- **Long-Range:** Improvements to service levels would result in 30-minute headways all day, seven days a week.

##### Span of Service

The proposed spans of service for Route 8L in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m. and on Sundays from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 8L - Washington Street Limited**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	62	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	93.00	102.00
	Revenue Miles	n/a	n/a	1463.2	1604.8
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	62	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	93.00	102.00
	Revenue Miles	n/a	n/a	1463.2	1604.8
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	42	60
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	6	6
	Revenue Hours	n/a	n/a	63.00	90.00
	Revenue Miles	n/a	n/a	991.2	1416.0
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 34L – Michigan Road Limited

#### Proposed Service

##### Alignment

This is a proposed new route in the Short-Range (4-9 years) that consists of limited stop service in the Michigan Road corridor, operating between Zionsville and downtown Indianapolis. This service is designed to provide faster travel times along Michigan Road, servicing major trip generators, while providing connection opportunities at all crossing route locations. This route would begin in Zionsville on Oak Street at the Zionsville Medical Center. Service would continue east on Oaks Street, south on 1<sup>st</sup> Street, and east on Sycamore Street, south on Michigan Road to downtown Indianapolis. When combined with the Route 34 in the Short-Range (4-9 years), service would operate at peak/midday/evening headways of 15/15/20 on weekdays and Saturdays, and 15/30/30 on Sundays. Long-Term (10-15 years), combined Route 34 and 34L weekday and Saturday peak headways improve to 12 minutes, while Sunday midday and evening headways improve to 15 minutes. Michigan Road is identified as a potential long term high capacity transit corridor. Combined Route 34 and 34L service within this corridor is designed to provide transit service levels that could be transitioned to high capacity transit service long term (beyond 15 years).

##### Service Levels

Route 34L service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided at peak/midday/evening headways on weekdays and Saturdays at 30/30/60 minutes, and on Sundays at 30/60/60 minutes.
- **Long-Range:** Improvements to service levels would result in 30-minute headways all day, seven days a week.

##### Span of Service

The proposed spans of service for Route 34L in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday and Saturday service would be provided from 5:00 a.m. to 10:00 p.m. and on Sundays from 6:00 a.m. to 9:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 34L - Michigan Road Limited**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	62	68
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	62.00	68.00
	Revenue Miles	n/a	n/a	1060.2	1162.8
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Saturdays	One Way Trips	n/a	n/a	45	60
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	30	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	3	4
	Revenue Hours	n/a	n/a	45.00	60.00
	Revenue Miles	n/a	n/a	823.5	1098.0
Span of Service	n/a	n/a	5:00 am - 10:00 pm	5:00 am - 10:00 pm	
Sundays	One Way Trips	n/a	n/a	45	60
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	60	30
	Peak Buses	n/a	n/a	3	4
	Revenue Hours	n/a	n/a	45.00	60.00
	Revenue Miles	n/a	n/a	823.5	1098.0
Span of Service	n/a	n/a	6:00 am - 9:00 pm	6:00 am - 9:00 pm	





## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 200 – Westfield/Carmel Express

#### Proposed Service Characteristics

This proposed new express route would operate between the cities of Westfield and Carmel and downtown Indianapolis, providing a mixture of limited stop and express service. Major stops would be at four new park & ride lots proposed at Village Park Plaza and Merchant's Square Mall, as well as at Keystone Crossing and Glendale Mall (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning in the vicinity of Main and Union streets, this route would make several stops in Westfield, operating south along Union Street and west along David Brown Drive to US 31 (North Meridian Street). The route would continue with limited stops on US 31, US 431 (Keystone Avenue), and Fall Creek Parkway, stopping at park & ride lots at the Village Park Plaza at 151<sup>st</sup> Street and Merchant's Square Mall at Carmel Drive, Keystone Crossing (via 86<sup>th</sup> Street), and the proposed Glendale Mall Transit Center (on Rural Street). Access to the downtown express loop would be via Central Avenue, Fort Wayne Avenue, and Pennsylvania Street (southbound) and Illinois Street (northbound).

##### Service Levels

Weekday Route 200 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be operated every 30 minutes in the peak periods only. Service would be in both the peak and reverse commute directions, providing jobs access from the urban core to Keystone Crossing and other outlying employers.
- **Short-Range:** Midday service at 60-minute headways would be added to the near-term service plan levels, as a convenience to customers and to improve access to jobs with non-traditional work hours (e.g., retail and service jobs).
- **Long-Range:** Peak and midday service would be improved to 15-minute and 30-minute headways, respectively.

##### Span of Service

The proposed weekday spans of service for Route 200 in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m.
- **Short-Range:** Midday service from 9:00 a.m. to 4:00 p.m. would be added.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 200 - Westfield / Carmel Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	24	38	76
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	15
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	4	4	8
	Revenue Hours	n/a	24.00	38.00	76.00
	Revenue Miles	n/a	602.4	953.8	1907.6
	<u>Span of Service</u>				
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
<u>Span of Service</u>					
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
<u>Span of Service</u>					



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 201 – Noblesville Express

#### Proposed Service Characteristics

This proposed new express route would operate between the City of Noblesville and downtown Indianapolis, providing a mixture of local and express service. Major stops would be at a new proposed park & ride lot in the vicinity of SR 37 and Greenfield Avenue, and at Castleton Mall (every other trip only) (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at the shopping center at Westfield Road and River Avenue (northwest quadrant), this route would operate with frequent stops in Noblesville, operating east along Conner Street into downtown Noblesville and south on 10<sup>th</sup> Street. The route would continue non-stop along Greenfield Avenue to a park & ride lot near its intersection with SR 37, and provide express service south on SR 37 through Fishers and southwest on I-69, Binford Boulevard, and Fall Creek Parkway. Every other trip would also stop at Castleton Square Mall, via 82<sup>nd</sup> Street. Access to the downtown express loop would be via Central Avenue, Fort Wayne Avenue, and Pennsylvania Street (southbound) and Illinois Street (northbound).

##### Service Levels

Weekday Route 201 service is proposed beginning in the short-range (4 to 9 years), and would be replaced in the long-range (10 to 15 years) by regional rapid transit service in the corridor, as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Weekday service would be operated every 30 minutes in the peak periods and every 60 minutes in the midday. Service would be in both the peak and reverse commute directions, providing jobs access from the urban core to Castleton Square Mall and other outlying employers.
- **Long-Range:** Weekday service would be improved to 15 minutes peak, 30 minutes midday and 30 minutes evening. Service would continue to be operated in both the peak and reverse commute directions, providing jobs access from the urban core to Castleton Square Mall and other outlying employers.

##### Span of Service

The proposed weekday spans of service for Route 201 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday period from 9:00 a.m. to 4:00 p.m.
- **Long-Range:** Weekday evening service is added until 9:00 p.m.



**Proposed Operating Requirements**

**Route 201 - Noblesville Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	38	84
	Average Headway				
	AM, PM Peak	n/a	n/a	30	15
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	n/a	30
	Peak Buses	n/a	n/a	4	8
	Revenue Hours	n/a	n/a	38.00	84.00
	Revenue Miles	n/a	n/a	1067.8	2360.4
	Span of Service	n/a	n/a		
	AM, PM Peak	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	7 - 9 p.m.	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 202 – Lawrence Express

#### Proposed Service Characteristics

This proposed new express route would operate between the City of Lawrence and downtown Indianapolis, from a new park & ride lot proposed at the Finance Center (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at a park & ride lot at the Finance Center at 56<sup>th</sup> Street and Post Road, this route would operate non-stop express service south on Post Road, Pendleton Pike, and I-465, and west on I-70 and I-65. Access to the downtown express loop would be via Pennsylvania Street (southbound) and Illinois Street (northbound).

##### Service Levels

Weekday Route 202 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Weekday service would be operated every 30 minutes in the peak periods only. Service would be in both the peak and reverse commute directions, providing jobs access from the urban core to major employers in the City of Lawrence.
- **Short-Range:** Midday service at 60-minute headways would be added to the near-term service plan levels, as a convenience to customers who and to improve access to jobs with non-traditional work hours (e.g., retail and service jobs).
- **Long-Range:** Peak and midday service would be improved to 15-minute and 30-minute headways, respectively.

##### Span of Service

The proposed weekday spans of service for Route 202 in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m.
- **Short-Range:** Limited midday service from 11:00 a.m. to 2:00 p.m. would be added.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 202 - Lawrence Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	24	30	60
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	15
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	2	2	5
	Revenue Hours	n/a	12.00	15.00	36.00
	Revenue Miles	n/a	326.4	408.0	816.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	11 a.m. - 2 p.m.	11 a.m. - 2 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
<u>Span of Service</u>					
AM, PM Peak	n/a	n/a	n/a	n/a	
Midday	n/a	n/a	n/a	n/a	
Evening	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
<u>Span of Service</u>					
AM, PM Peak	n/a	n/a	n/a	n/a	
Midday	n/a	n/a	n/a	n/a	
Evening	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 203 – Greenfield Express

#### Proposed Service Characteristics

This proposed new express route would operate between the City of Greenfield and downtown Indianapolis, providing a mixture of local and express service, with a new park & ride lot proposed in the vicinity of I-70 and State Street (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at the government buildings on State Street (north of Osage Street), this route would provide local service with frequent stops in Greenfield, operating north on State Street to a park & ride lot at the I-70 interchange (most likely on the north side). From the park & ride lot, the route would provide express service west on I-70 and I-65. Access to the downtown express loop would be via Pennsylvania Street (southbound) and Illinois Street (northbound).

##### Service Levels

Weekday Route 203 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Peak direction weekday service would be operated every 30 minutes in the peak periods and every 60 minutes in the midday.

##### Span of Service

The proposed weekday spans of service for Route 203 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday from 11:00 a.m. to 2:00 p.m.



**Proposed Operating Requirements**

**Route 203 - Greenfield Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	4
	Revenue Hours	n/a	n/a	n/a	30.00
	Revenue Miles	n/a	n/a	n/a	789.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	11 a.m. - 2 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 204 – Greenwood Express

#### Proposed Service Characteristics

This proposed new express route would operate between a new park & ride lot at Greenwood Park Mall and downtown Indianapolis, with an intermediate stop at the University of Indianapolis (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at a park & ride lot at Greenwood Park Mall, this route would operate express service north on US 31. It would make an intermediate stop at the University of Indianapolis (via Hanna), and continue north on Madison Avenue. Access to the downtown express loop would be via Delaware Street (northbound) and Pennsylvania Street (southbound).

##### Service Levels

Weekday Route 204 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Peak direction service would be operated every 30 minutes in the peak periods.

##### Span of Service

The proposed weekday spans of service for Route 204 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m.



**Proposed Operating Requirements**

**Route 204 - Greenwood Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	24
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	12.00
	Revenue Miles	n/a	n/a	n/a	288.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	n/a	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 205 – Ameriplex / Airport Express

#### Proposed Service Characteristics

This proposed new express route would operate between downtown Indianapolis, the Indianapolis International Airport, and Ameriplex (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

From the downtown express bus loop, this route would operate via West Street (southbound) and Missouri Street (northbound) to/from I-70. The route would continue westbound on I-70 and Airport Expressway, with a stop at the airport. Most trips would continue to the Ameriplex business park, via the Airport Expressway, I-70 westbound, and the proposed Six Points Road interchange west of the airport, and then circulating through Ameriplex via Ameriplex Parkway and South Decatur Boulevard, with frequent stops.

##### Service Levels

Route 205 service, seven days a week, is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be operated between downtown and the airport (no service to Ameriplex) at 20-minute headways all day, seven days a week. Service would be in both the peak and reverse commute directions, providing access both to and from the airport.
- **Short-Range:** Service would be extended to Ameriplex every other trip, resulting in 20-minute headways to the airport and 40-minute headways to Ameriplex.
- **Long-Range:** Headways would be improved, resulting in 15-minute headways to the airport and 30-minute headways to Ameriplex.

##### Span of Service

The proposed spans of service for Route 205, seven days a week, in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided in the AM and PM peak periods (6:00 to 9:00 a.m. and 4:00 to 7:00 p.m.), in the midday from 9:00 a.m. to 4:00 p.m., and evenings from 7:00 to 10:00 p.m.
- **Short-Range and Long-Range:** Span of service would remain the same as in the near-term.



**Proposed Operating Requirements**

**Route 205 - Airport / Ameriplex Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	90	90	120
	<u>Average Headway</u>		<b>Airport Only</b>	<b>Airport &amp; Ameriplex</b>	<b>Airport &amp; Ameriplex</b>
	AM, PM Peak	n/a	20	20/40	15/30
	Midday	n/a	20	20/40	15/30
	Evening	n/a	20	20/40	15/30
	Peak Buses	n/a	3	5	6
	Revenue Hours	n/a	45.00	67.50	90.00
	Revenue Miles	n/a	819.0	1233.0	1644.0
	<u>Span of Service</u>	n/a			
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	7 - 9 p.m.	7 - 9 p.m.	7 - 9 p.m.	
Saturdays	One Way Trips	n/a	90	90	120
	<u>Average Headway</u>		<b>Airport Only</b>	<b>Airport &amp; Ameriplex</b>	<b>Airport &amp; Ameriplex</b>
	AM, PM Peak	n/a	20	20/40	15/30
	Midday	n/a	20	20/40	15/30
	Evening	n/a	20	20/40	15/30
	Peak Buses	n/a	3	5	6
	Revenue Hours	n/a	45.00	67.50	90.00
	Revenue Miles	n/a	819.0	1233.0	1644.0
	<u>Span of Service</u>	n/a			
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	7 - 9 p.m.	7 - 9 p.m.	7 - 9 p.m.	
Sundays	One Way Trips	n/a	90	90	120
	<u>Average Headway</u>		<b>Airport Only</b>	<b>Airport &amp; Ameriplex</b>	<b>Airport &amp; Ameriplex</b>
	AM, PM Peak	n/a	20	20/40	15/30
	Midday	n/a	20	20/40	15/30
	Evening	n/a	20	20/40	15/30
	Peak Buses	n/a	3	5	6
	Revenue Hours	n/a	45.00	67.50	90.00
	Revenue Miles	n/a	819.0	1233.0	1644.0
	<u>Span of Service</u>	n/a			
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	7 - 9 p.m.	7 - 9 p.m.	7 - 9 p.m.	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 206 – Mooresville/Plainfield Express

#### Proposed Service Characteristics

This proposed new express route would operate between the cities of Mooresville and Plainfield, the Indianapolis International Airport, and downtown Indianapolis, providing a mixture of local and express service. Service would alternate between two branches on the western end of the route: one from Mooresville and the other from Plainfield, meeting at a park & ride lot at the I-70 and SR 237 interchange (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

The branch from Mooresville would provide local service looping through downtown via Main, Monroe, High, and Indiana streets, and operating north on Indiana Street to Hendricks County Road. From there the route would operate non-stop via SR 267 to the park & ride lot at the I-70 interchange. The branch from Plainfield would provide local service from Center Street in downtown Plainfield via Main Street to a park & ride lot at the JC Penney shopping center east of Simmons Street, then operating non-stop east on Main Street and south on SR 267 to the park & ride lot at the I-70 interchange. The route would continue east on I-70 and north on I-465, and west on Airport Expressway to the airport. Service from the airport to downtown Indianapolis would operate via Airport Expressway and I-70. Access to the downtown express loop would be via Missouri Street (northbound) and West Street (southbound).

##### Service Levels

Weekday Route 206 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be operated from between the park & ride lot at the I-70 and SR 237 interchange and downtown Indianapolis, with an intermediate stop at the airport, at 30-minute peak and 60-minute midday headways. Service from Mooresville and Plainfield to the I-70 park & ride lot would be provided on alternating trips, at 60-minute peak and 120-minute midday headways to each branch. Service would be in both the peak and reverse commute directions, providing access both to and from the airport.
- **Long-Range:** Midday headways would be improved to match peak headways, with 30-minute trunk service and 60-minute branch service.

##### Span of Service

The proposed weekday spans of service for Route 206 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided in the AM and PM peak periods (6:00 to 9:00 a.m. and 4:00 to 7:00 p.m.), and in the midday from 9:00 a.m. to 4:00 p.m.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 206 - Mooresville / Plainfield Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	38	52
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	30/60	30/60
	Midday	n/a	n/a	60/120	30/60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	4	4
	Revenue Hours	n/a	n/a	38.00	52.00
	Revenue Miles	n/a	n/a	881.6	1206.4
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 207 – Avon Express

#### Proposed Service Characteristics

This proposed new express route would operate between a proposed park & ride lot in the City of Avon and downtown Indianapolis (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at a proposed park & ride lot in the vicinity of SR 237 and US 36 in downtown Avon, this route would operate express service east on US 36/Rockville Road and Washington Street. Access to the downtown express bus loop would be via Maryland (eastbound) and Washington (westbound). Additional stops should be located at crossing local bus route to provide connectivity without requiring all riders to travel to downtown Indianapolis to access local bus routes (e.g., routes 3, 10, 37 and 91).

##### Service Levels

Weekday Route 207 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Peak direction service would be operated every 30 minutes in the peak periods and every 60 minutes in the midday.

##### Span of Service

The proposed weekday spans of service for Route 207 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday from 11:00 a.m. to 2:00 p.m.



**Proposed Operating Requirements**

**Route 207 - Avon Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	2
	Revenue Hours	n/a	n/a	n/a	12.60
	Revenue Miles	n/a	n/a	n/a	378.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	11 a.m. - 2 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 208 – Brownsburg Express

#### Proposed Service Characteristics

This proposed new express route would operate between the City of Brownsburg and downtown Indianapolis, providing a mixture of local and express service. Major stops would be at a new park & ride lot proposed at Brownsburg Village and at the Speedway Shopping Center (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at the Brownsburg Shopping Center on Main Street near Hornday Road, this route would provide local service with frequent stops in Brownsburg, operating west on Main Street through downtown and north on Green Street to a park & ride lot at Brownsburg Village at Northfield Drive near I-74. From the park & ride lot, the route would operate express service via I-74, Crawfordsville Road with an intermediate stop at the Speedway Shopping Center, and 16<sup>th</sup> Street. Access to the downtown express bus loop would be Dr. Martin Luther King Jr. Drive, 10<sup>th</sup> Street and Pennsylvania Street (inbound) and 11<sup>th</sup> Street and Illinois (outbound).

##### Service Levels

Weekday Route 208 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Peak direction service would be operated every 30 minutes in the peak periods and every 60 minutes in the midday.

##### Span of Service

The proposed weekday spans of service for Route 208 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday from 11:00 a.m. to 2:00 p.m.



**Proposed Operating Requirements**

**Route 208 - Brownsburg Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	3
	Revenue Hours	n/a	n/a	n/a	17.50
	Revenue Miles	n/a	n/a	n/a	525.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	11 a.m. - 2 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 209 – Zionsville Express

#### Proposed Service Characteristics

This proposed new express route would operate between the proposed Anson mixed-use development west of Zionsville and downtown Indianapolis (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at the proposed Anson mixed-use development in Eagle Township (west of Zionsville), this route would operate west along SR 334 to I-65, then southeast on I-65. Access to the downtown express bus loop would be via Pennsylvania Street (inbound) and Illinois Street (outbound).

##### Service Levels

Weekday Route 209 service is proposed beginning in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Peak direction service would be operated every 30 minutes in the peak periods and every 60 minutes in the midday.

##### Span of Service

The proposed weekday spans of service for Route 209 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday from 11:00 a.m. to 2:00 p.m.



**Proposed Operating Requirements**

**Route 209 - Zionsville Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	30
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	3
	Revenue Hours	n/a	n/a	n/a	19.80
	Revenue Miles	n/a	n/a	n/a	594.0
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	11 a.m. - 2 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 210 – Fishers Express

#### Proposed Service Characteristics

This proposed new express route would operate between Fishers and downtown Indianapolis, with an intermediate park & ride stop on 96<sup>th</sup> Street near the Indianapolis Metropolitan Airport. (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at a park & ride located at the Fishers Station, this route would operate express service via 116<sup>th</sup> Street, I-69 to 96<sup>th</sup> Street where the route would exit I-69 and serve a park & ride, then re-enter I-69 and express to downtown Indianapolis via I-69, Binford Boulevard, and Fall Creek Parkway. Connections would be made to local bus service at the Fishers park & ride and on 96<sup>th</sup> Street.

##### Service Levels

Route 210 service is proposed beginning in the near-term (1 to 3 years), with increasing service levels in the short-range (4 to 9 years) and long-range (10 to 15 years), as described below:

- **Near-Term:** Service would be operated every 30 minutes in the peak periods only.
- **Short-Range:** Midday service at 60-minute headways would be added to the near-term service plan levels, as a convenience to customers and to improve access to jobs with non-traditional work hours (e.g., retail and service jobs).
- **Long-Range:** Peak and midday service would be improved to 15-minute and 30-minute headways, respectively.

##### Span of Service

The proposed weekday spans of service for Route 210 in the three service plan timeframes are as follows:

- **Near-Term:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m.
- **Short-Range:** Midday service from 9:00 a.m. to 4:00 p.m. would be added.
- **Long-Range:** Span of service would remain the same as in the short-range.



**Proposed Operating Requirements**

**Route 210 - Fishers Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	24	38	76
	<u>Average Headway</u>				
	AM, PM Peak	n/a	30	30	15
	Midday	n/a	n/a	60	30
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	3	3	7
	Revenue Hours	n/a	16.16	25.59	51.17
	Revenue Miles	n/a	484.8	767.6	1535.2
	<u>Span of Service</u>				
	AM, PM Peak	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	9 a.m. - 4 p.m.	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	<u>Average Headway</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
	<u>Span of Service</u>				
	AM, PM Peak	n/a	n/a	n/a	n/a



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 211 – Johnson County Express

#### Proposed Service Characteristics

This proposed new express route would operate between Franklin, Whiteland, Greenwood and downtown Indianapolis (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

Beginning at a park & ride located at I-65 and King Street (CR 44, Exit 90), this route would operate express service via I-65, with intermediate park & ride stops at CR 500 N (Whiteland - exit 95) and Main Street (Greenwood – Exit 99), then express to downtown Indianapolis via I-65.

##### Service Levels

Route 211 service is proposed beginning in the short-range (4 to 9 years), with increasing service levels in the long-range (10 to 15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be operated every 30 minutes in the peak periods only.
- **Long-Range:** Midday service at 60-minute headways would be added to the short-range service plan levels, as a convenience to customers and to improve access to jobs with non-traditional work hours (e.g., retail and service jobs).

##### Span of Service

The proposed weekday spans of service for Route 211 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m.
- **Long-Range:** Midday service from 9:00 a.m. to 4:00 p.m. would be added.



**Proposed Operating Requirements**

**Route 211 - Johnson County Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	0	24	38
	Average Headway				
	AM, PM Peak	n/a	n/a	30	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	3	3
	Revenue Hours	n/a	n/a	16.46	26.06
	Revenue Miles	n/a	n/a	576.0	912.0
	Span of Service	n/a	n/a		
	AM, PM Peak	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	



## Comprehensive Operational Analysis (COA) Service Plan Recommendations

### Route 212 – Shelbyville Express

#### Proposed Service Characteristics

This proposed new express route would operate between Shelbyville and downtown Indianapolis, providing a mixture of local and express service. Major stops would be at a new park & ride lot in the vicinity of I-74 and CR 9 (Morristown Road). (see Express Bus System Map at the end of the express bus route descriptions).

#### Proposed Service

##### Alignment

This service would begin in Shelbyville near Colescott Street, travel north on Harrison Street (CR 9) serving local bus route stops to I-74, where a park & ride would be located. From the park & ride, this route would travel I-74 to Southeastern Avenue, west on Raymond Street and north on East Street into downtown Indianapolis.

##### Service Levels

Route 212 service is proposed beginning in the long-range (10-15 years), as described below:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be operated every 30 minutes in the peak periods and 60 minutes in the midday.

##### Span of Service

The proposed weekday spans of service for Route 211 in the three service plan timeframes are as follows:

- **Near-Term:** Not applicable.
- **Short-Range:** Not applicable.
- **Long-Range:** Service would be provided in the AM and PM peak periods, from 6:00 to 9:00 a.m. and from 4:00 to 7:00 p.m., and in the midday from 9:00 a.m. to 4:00 p.m.



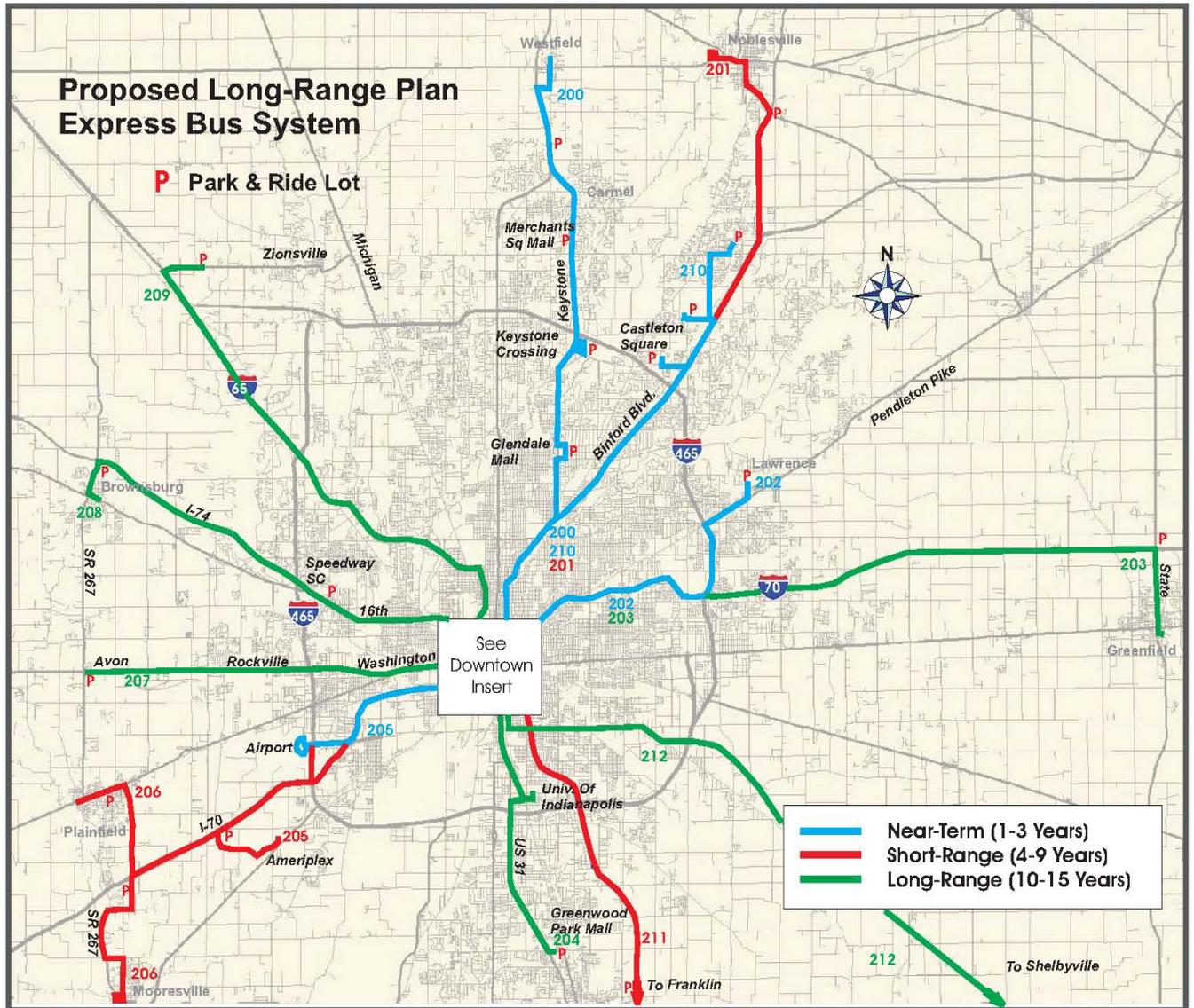
**Indianapolis Metropolitan Planning Organization  
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**Proposed Operating Requirements**

**Route 212 - Shelbyville Express**

Day of Week	Operating Requirements	Existing Service	Near-Term Service Plan (1-3 Years)	Short-Range Service Plan (4-9 Years)	Long-Range Service Plan (10-15 years)
Weekdays	One Way Trips	n/a	n/a	n/a	38
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	30
	Midday	n/a	n/a	n/a	60
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	4
	Revenue Hours	n/a	n/a	n/a	34.53
	Revenue Miles	n/a	n/a	n/a	1208.4
	Span of Service	n/a	n/a	n/a	n/a
	AM, PM Peak	n/a	n/a	n/a	6 - 9 a.m.; 4 - 7 p.m.
Midday	n/a	n/a	n/a	9 a.m. - 4 p.m.	
Evening	n/a	n/a	n/a	n/a	
Saturdays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	
Sundays	One Way Trips	n/a	n/a	n/a	n/a
	Average Headway				
	AM, PM Peak	n/a	n/a	n/a	n/a
	Midday	n/a	n/a	n/a	n/a
	Evening	n/a	n/a	n/a	n/a
	Peak Buses	n/a	n/a	n/a	n/a
	Revenue Hours	n/a	n/a	n/a	n/a
	Revenue Miles	n/a	n/a	n/a	n/a
Span of Service	n/a	n/a	n/a	n/a	





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COMPREHENSIVE OPERATIONAL ANALYSIS**



**APPENDIX B  
COA NEAR-TERM SERVICE PLAN  
OPERATING REQUIREMENTS**



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			Peak Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Local	2	E. 34th St	Downtown-Crossroads	30	30	30	60	24	32	6	62	51.4	62.0	812.2	4.0	
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	62.9	77.5	930.0	5.0	
	5	E. 25th	Downtown to Fort Harrison	30	30	30	60	24	32	12	68	83.7	102.0	1142.4	6.0	
	6	North Harding	Downtown to 36th & Elmira	30	30	30	60	24	32	12	68	27.1	34.0	360.4	2.0	
	8	Washington St.	Airport to Meijer	15	15	15	30	48	64	24	136	183.9	204.0	2815.2	12.0	
	10	10th St.	Wash & G. Church to Cranston & W. Way	30	30	30	60	24	32	12	68	96.8	102.0	1373.6	6.0	
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	60	60	24	16	6	46	28.0	34.5	469.2	3.0	
	12	Beechcrest	Ohio & Penn to 18th & Albany	30	30	60	60	24	16	3	43	16.8	19.3	321.4	2.0	
	14	Prospect	Ohio & Penn to Raymond & Emerson	30	30	60	60	24	16	1	41	16.0	17.8	304.2	2.0	
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	60	60	24	16	11	51	38.0	40.6	717.6	4.0	
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	60	60	24	16	6	46	31.1	34.5	538.2	3.0	
	17	College	Ohio & Meridian to Glendale via Broad Ripple	30	30	60	60	20	16	12	48	33.3	36.0	456.0	3.0	
			Ohio & Meridian to Glendale via Kessler	30	30	60	60	20	16	12	48	33.3	36.0	460.8	3.0	
	18	Nora	Capitol & Market to Keystone Crossing	30	30	60	60	24	16	12	52	48.6	52.0	691.6	4.0	
	19	Castleton	Penn & Ohio to 75 & Shadeland	30	30	60	60	24	16	9	49	50.0	53.0	886.5	5.0	
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	60	60	22	16	1	39	26.0	28.4	467.1	4.0	
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	60	60	24	16	6	46	42.2	51.5	602.6	4.0	
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	60	60	24	16	6	46	32.9	34.5	529.0	3.0	
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	60	60	24	16	6	46	44.2	51.5	621.0	4.0	
	28	St. Vincent	Capitol & Market to Women's Hospital	30	30	60	90	22	16	4	42	35.0	36.7	657.4	4.0	
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	60	60	60	120	14	16	3	33	23.6	24.8	432.3	1.5	
			Ohio & Penn to Greenwood Mall	60	60	60	120	14	16	3	33	19.8	24.8	336.6	1.5	
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	30	60	24	32	6	62	43.0	46.5	750.2	3.0	
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	15	15	30	30	48	32	24	104	105.3	124.0	2090.4	9.0	
	38	Lafayette Square	Capitol & Market to Eagle Creek	15	15	30	30	48	32	24	104	87.0	104.0	1289.6	8.0	
	39	E. 38th St.	Capitol & Market to Fort Harrison	15	15	20	30	48	48	24	120	136.4	156.0	2280.0	10.0	
	55	English	Ohio & Pennsylvania to Eastgate	30	30	60	n/a	22	10	0	32	18.7	21.9	371.4	3.0	
	Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	30	30	60	60	24	16	6	46	41.9	46.0	726.8	4.0
		30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	30	60	24	32	6	62	75.6	77.5	1395.0	5.0
		86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossing	30	30	30	60	24	32	2	58	46.5	58.0	841.0	4.0
		87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	60	60	24	16	2	42	30.5	37.5	546.0	4.0
		88	Shadeland Crosstown	Castleton Square to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
		89	Emerson Crosstown	Glendale Mall to Hanna & East	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
		90	56th / Butler Crosstown	Butler Univ to Fort Harrison	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
91		Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	30	30	24	32	24	80	95.0	106.0	1728.0	6.0	
92		Northside Crosstown	86th & Zionsville to Glendale Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
			St. Vincents Hosp to Glendale Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
93		Raymond St. Crosstown	Airport to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
71		71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
100		Carmel	Keystone Crossing to Rangeline & 151st	30	30	30	60	24	32	2	58	33.4	43.5	603.2	3.0	
101		West Carmel	Keystone Crossing to Medical Dr.	30	30	30	60	24	32	2	58	43.6	58.0	788.8	4.0	
116		116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
146		146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
Circulator	94	South County Circ.	Comm. Hosp. to St. Francis Hosp	60	60	60	60	12	16	2	30	10.4	15.0	162.0	1.0	
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	30	30	30	60	24	32	2	58	37.2	43.5	446.6	3.0	
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkwy	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	50	Downtown-IUPUI Circulator	Downtown to/from IUPUI	15	15	15	30	48	64	4	116	23.9	29.0	286.5	2.0	
51	Ivy Tech-IUPUI Circulator	Ivy Tech to/from IUPUI	15	15	15	30	48	64	4	116	32.2	43.5	386.3	3.0		



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			Peak Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Limited Stop	8L	Washington Ltd.	Meijer to Airport	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
Express	200	Westfield/Carmel Express	Westfield/Carmel to Downtown	30	30	n/a	n/a	24	0	0	24	20.1	24.0	602.4	4.0	
	201	Noblesville Express	Noblesville to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	202	Lawrence Express	Lawrence to Downtown	30	30	n/a	n/a	24	0	0	24	10.9	12.0	326.4	2.0	
	203	Greenfield Express	Greenfield to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	204	Greenwood Express	Greenwood to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	205	Airport Express	Downtown to Airport	20	20	20	20	36	42	12	90	34.2	45.0	819.0	3.0	
	206	Plainfield/Mooresville Exp	Plainfield/Mooresville to Downtown via Airport	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	207	Avon Express	Avon to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	208	Brownsburg Express	Brownsburg to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	209	Zionsville Express	Zionsville to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	210	Fishers Express	Fishers to Downtown	30	30	n/a	n/a	24	0	0	24	16.2	18.0	484.8	3.0	
	211	Johnson County Express	Franklin to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	212	Shelbyville Express	Shelbyville to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
<b>Total Weekday Statistics</b>																
		Local														
		Crosstown														
		Circulator														
		Limited Stop														
		Express														
		Total														
<b>Total Annual Statistics</b>																



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Saturday				
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	Buses	
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	60	24	32	6	62	51.4	62.0	812.2	4.0	
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	60	60	60	60	12	16	6	34	34.4	42.5	510.0	3.0	
	5	E. 25th	Downtown to Fort Harrison	30	30	60	60	24	16	6	46	56.6	69.0	772.8	6.0	
	6	North Harding	Downtown to 36th & Elmira	30	30	60	60	24	16	6	46	18.4	23.0	243.8	2.0	
	8	Washington St.	Airport to Meijer	30	30	30	30	24	32	24	80	108.0	120.0	1656.0	6.0	
	10	10th St.	Wash & G. Church to Cranston & W. Way	30	30	30	60	24	32	6	62	88.2	93.0	1252.4	6.0	
	11	16th St.	Ohio & Penn to Arlington & 46th	60	60	60	60	12	16	6	34	20.8	25.5	346.8	2.0	
	12	Beechcrest	Ohio & Penn to 18th & Albany	60	60	60	60	12	16	3	31	12.1	13.3	231.7	1.0	
	14	Prospect	Ohio & Penn to Raymond & Emerson	60	60	60	60	12	16	3	31	12.0	13.4	230.3	1.0	
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	60	60	60	60	12	16	4	32	24.0	25.8	460.8	2.0	
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	60	60	60	60	12	16	2	30	20.3	22.5	351.0	2.0	
	17	College	Ohio & Meridian to Glendale via Broad Ripple	60	60	60	60	8	16	6	30	20.8	22.5	285.0	2.0	
			Ohio & Meridian to Glendale via Kessler	60	60	60	60	8	16	6	30	20.8	22.5	288.0	2.0	
	18	Nora	Capitol & Market to Keystone Crossing	60	60	60	60	12	16	12	40	37.3	40.0	532.0	2.0	
	19	Castleton	Penn & Ohio to 75 & Shadeland	60	60	60	60	12	16	4	32	34.0	35.1	600.0	3.0	
	21	E. 21st St.	Ohio & Meridian to Washington Mall	60	60	60	60	8	16	0	24	20.0	21.6	342.0	2.0	
	22	Shelby	Ohio & Penn to Comm. Hosp. South	60	60	60	60	12	16	2	30	28.1	34.5	393.0	2.0	
	24	Mars Hill	Ohio & Penn to Ameriplex	60	60	60	60	12	16	2	30	21.4	22.5	345.0	2.0	
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	60	60	60	60	12	16	2	30	29.6	34.5	405.0	2.0	
	28	St. Vincent	Capitol & Market to Women's Hospital	60	60	60	90	12	16	3	31	21.0	23.5	483.6	2.0	
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	60	60	60	120	14	16	1	31	22.2	23.3	406.1	1.5	
			Ohio & Penn to Greenwood Mall	60	60	60	120	14	16	1	31	18.6	23.3	316.2	1.5	
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	60	60	24	16	2	42	29.1	31.5	508.2	3.0	
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	30	30	60	60	24	16	2	42	42.5	52.5	844.2	5.0	
	38	Lafayette Square	Capitol & Market to Eagle Creek	30	30	30	30	24	32	12	68	56.9	68.0	843.2	4.0	
	39	E. 38th St.	Capitol & Market to Fort Harrison	30	30	30	30	24	32	24	80	90.9	100.0	1520.0	5.0	
	Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	60	60	60	60	12	16	6	34	30.7	34.0	537.2	2.0
		30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	60	60	60	60	12	16	2	30	36.6	37.5	675.0	3.0
		86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossir	30	30	30	60	24	32	2	58	46.5	58.0	841.0	4.0
		87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	60	60	60	60	12	16	2	30	21.6	25.5	390.0	2.0
		88	Shadeland Crosstown	Castleton Square to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
89		Emerson Crosstown	Glendale Mall to Hanna & East	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
90		56th / Butler Crosstown	Butler Univ to Fort Harrison	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
91		Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	30	60	24	32	6	62	74.0	83.5	1339.2	6.0	
92		Northside Crosstown	86th & Zionsville to Glendale Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
			St. Vincents Hosp to Glendale Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
93		Raymond St. Crosstown	Airport to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
71		71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
100	Carmel	Keystone Crossing to Rangeline & 151st	60	60	60	60	12	16	2	30	17.3	22.5	312.0	2.0		
101	West Carmel	Keystone Crossing to Medical Dr.	60	60	60	60	12	16	2	30	22.6	30.0	408.0	2.0		
116	116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0		
146	146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0		
Circulator	94	South County Circ.	Comm. Hosp. to St. Francis Hosp	60	60	60	60	12	16	2	30	10.4	15.0	162.0	1.0	
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	60	60	60	60	12	16	2	30	19.3	22.5	231.0	2.0	
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkw	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Saturday			Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Limited Stop	8L	Washington Ltd.	Meijer to Airport	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
Express	205	Airport Express	Downtown to Airport	20	20	20	20	36	42	12	90	32.8	45.0	819.0	3.0	
<b>Total Saturday Statistics</b>																
		<i>Local</i>										1,059	940	1,065	14,979	74
		<i>Crosstown</i>										274	249	291	4,502	21
		<i>Circulator</i>										60	30	38	393	3
		<i>Limited Stop</i>										0	0	0	0	0
		<i>Express</i>										90	33	45	819	3
		<i>Total</i>										1,483	1,251	1,439	20,694	101
<b>Total Annual Statistics</b>												77,116	65,057	74,818	1,076,072	



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			Buses
				Peak Period		Base	E/L	Peak	Midday	E/L	Total	In-Serv.	Platform	Rev.	
				Pk Dir	Rev. Pk	Period	Period	Trips	Trips	Trips	Trips	Hours	Hrs.	Miles	
Local	2	E. 34th St.	Downtown-Crossroads	60	60	60	60	12	16	2	30	24.1	30.0	393.0	2.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	60	60	60	60	12	16	2	30	30.5	37.5	450.0	3.0
	5	E. 25th	Downtown to Fort Harrison	60	60	60	60	12	16	6	34	41.8	51.0	571.2	3.0
	6	North Harding	Downtown to 36th & Elmira	60	60	60	60	12	16	2	30	12.0	15.0	159.0	1.0
	8	Washington St.	Airport to Meijer	30	30	30	30	24	32	12	68	92.0	102.0	1407.6	6.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	30	30	60	60	24	16	6	46	65.4	69.0	929.2	6.0
	11	16th St.	Ohio & Penn to Arlington & 46th	60	60	60	60	12	16	2	30	18.4	22.5	306.0	2.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	60	60	60	60	12	16	0	28	10.0	12.0	207.9	1.0
	14	Prospect	Ohio & Penn to Raymond & Emerson	60	60	60	60	12	16	0	28	11.0	11.9	204.4	1.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	60	60	60	-	8	6	0	14	10.0	10.9	206.6	1.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	60	60	60	60	12	16	2	30	20.3	22.5	351.0	2.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple Ohio & Meridian to Glendale via Kessler	60	60	60	120	8	16	3	27	18.7	20.3	256.5	2.0
	18	Nora	Capitol & Market to Keystone Crossing	60	60	60	60	12	16	2	30	28.0	30.0	399.0	2.0
	19	Castleton	Penn & Ohio to 75 & Shadeland	60	60	60	n/a	12	16	0	28	27.0	28.9	525.0	3.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	60	60	60	60	12	16	2	30	28.1	34.5	393.0	2.0
	24	Mars Hill	Ohio & Penn to Ameriplex	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	60	60	60	60	12	16	2	30	29.6	34.5	405.0	2.0
	28	St. Vincent	Capitol & Market to Women's Hospital	120	120	120	120	4	8	2	14	11.0	12.1	242.2	1.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31 Ohio & Penn to Greenwood Mall	120	120	120	120	8	8	1	17	12.2	17.0	222.7	1.0
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	60	60	60	60	12	16	2	30	20.8	30.0	363.0	2.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	60	60	60	60	12	16	2	30	30.4	37.5	603.0	3.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	30	30	30	30	24	32	4	60	50.2	60.0	744.0	4.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	30	30	30	60	24	32	6	62	70.5	77.5	1178.0	5.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	60	60	60	60	12	16	2	30	27.1	30.0	474.0	2.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	60	60	60	60	12	16	2	30	36.6	37.5	675.0	3.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossir	60	60	60	60	12	16	2	30	24.1	30.0	435.0	2.0
	87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	60	60	60	60	12	16	2	30	21.6	25.5	390.0	2.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	60	60	60	60	12	16	2	30	35.8	40.5	648.0	3.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall St. Vincents Hosp to Glendale Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	60	60	60	60	12	16	2	30	17.3	22.5	312.0	2.0
	101	West Carmel	Keystone Crossing to Medical Dr.	60	60	60	60	12	16	2	30	22.6	30.0	408.0	2.0
	116	116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	146	146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
Circulator	94	South County Circ.	Comm. Hosp. to St. Francis Hosp	60	60	60	60	12	16	2	30	10.4	15.0	162.0	1.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	60	60	60	60	12	16	2	30	19.3	22.5	231.0	2.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkw	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED NEAR-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			Buses
				Peak Period		Base	E/L	Peak	Midday	E/L	Total Daily	In-Serv.	Platform	Rev.	
				Pk Dir	Rev. Pk	Period	Period	Trips	Trips	Trips	Trips	Hours	Hrs.	Miles	
Limited Stop	8L	Washington Ltd.	Meijer to Airport	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
Express	205	Airport Express	Downtown to Airport	20	20	20	20	36	42	12	90	32.8	45.0	819.0	3.0
<b>Total Sunday Statistics</b>															
Local															
Crosstown															
Circulator															
Limited Stop															
Express															
Total															
<b>Total Annual Statistics</b>															



**APPENDIX C  
COA SHORT-RANGE SERVICE PLAN  
OPERATING REQUIREMENTS**



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			Peak Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	30	24	32	24	80	69.4	80.0	1048.0	4.0	
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	66.4	77.5	930.0	5.0	
	5	E. 25th	Downtown to Fort Harrison	30	30	30	60	24	32	12	68	88.2	102.0	1142.4	6.0	
	6	North Harding	Downtown to 36th & Elmira	30	30	30	60	24	32	12	68	28.5	34.0	360.4	2.0	
	8	Washington St.	Airport to Meijer	15	15	15	20	48	64	36	148	210.9	222.0	3063.6	12.0	
	10	10th St.	Wash & G. Church to Cranston & W. Way	15	15	30	30	48	32	24	104	155.9	176.0	2100.8	13.0	
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	30	60	24	32	6	62	40.0	46.5	632.4	3.0	
	12	Beechcrest	Ohio & Penn to 18th & Albany	30	30	60	60	24	16	6	46	20.8	23.0	368.0	2.0	
	14	Prospect	Ohio & Penn to Thompson & Emerson	30	30	60	60	24	16	6	46	26.9	34.5	414.0	3.0	
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	60	60	24	16	12	52	48.0	52.0	728.0	4.0	
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	30	60	24	32	6	62	44.2	46.5	725.4	3.0	
	17	College	Ohio & Meridian to Glendale via Broad Ripple	30	30	30	60	20	32	12	64	46.7	56.0	608.0	3.5	
			Ohio & Meridian to Glendale via Kessler	30	30	30	60	20	32	12	64	46.7	56.0	614.4	3.5	
	18	Nora	Capitol & Market to Keystone Crossing	30	30	30	60	24	32	12	68	66.9	85.0	904.4	5.0	
	19	Castleton	Penn & Ohio to Castleton	30	30	30	60	24	32	12	68	70.1	85.0	1054.0	5.0	
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	30	30	24	32	12	68	55.0	68.0	836.4	4.0	
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	30	60	24	32	6	62	61.4	71.5	812.2	4.0	
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	60	24	32	6	62	46.7	62.0	713.0	4.0	
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	30	60	24	32	6	62	64.8	71.5	837.0	4.0	
	28	St. Vincent	Capitol & Market to 86th & Harcourt	30	30	60	60	24	16	12	52	50.2	52.0	816.4	4.0	
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	40	40	60	60	20	16	6	42	31.7	38.5	550.2	2.75	
			Ohio & Penn to Greenwood Mall	40	40	60	60	20	16	6	42	26.6	31.5	428.4	2.25	
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	30	30	24	32	12	68	49.7	68.0	822.8	4.0	
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	15	15	20	30	48	48	12	108	115.3	130.0	2170.8	10.0	
	38	Lafayette Square	Capitol & Market to Eagle Creek	15	15	15	30	48	64	24	136	119.9	136.0	1686.4	8.0	
	39	E. 38th St.	Capitol & Market to Fort Harrison	15	15	15	30	48	64	24	136	163.0	187.0	2584.0	11.0	
	Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	30	30	30	30	24	32	24	80	75.8	100.0	1264.0	5.0
		30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	30	30	24	32	12	68	87.4	102.0	1530.0	6.0
		86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossin	30	30	30	30	24	32	12	68	59.1	68.0	986.0	4.0
		87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	30	60	24	32	6	62	48.4	62.0	806.0	4.0
		88	Shadeland Crosstown	Castleton Square to Eastgate Mall	30	30	30	60	24	32	6	62	56.6	62.0	942.4	4.0
89		Emerson Crosstown	Glendale Mall to Hanna & East	30	30	30	30	24	32	12	68	74.6	85.0	1244.4	5.0	
90		56th / Butler Crosstown	Butler Univ to Fort Harrison	30	30	30	60	24	32	6	62	46.9	62.0	781.2	4.0	
91		Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	30	30	24	32	24	80	103.3	120.0	1728.0	6.0	
92		Northside Crosstown	86th & Zionsville to Glendale Mall	60	60	120	120	12	8	1	21	16.6	21.0	273.0	2.0	
			St. Vincents Hosp to Glendale Mall	60	60	120	120	12	8	1	21	13.0	21.0	214.2	2.0	
93		Raymond St. Crosstown	Airport to Eastgate Mall	30	30	60	60	24	16	6	46	54.8	69.0	906.2	6.0	
71		71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
100		Carmel	Keystone Crossing to Rangeline & 151st	30	30	30	60	24	32	2	58	36.3	43.5	603.2	3.0	
101		West Carmel	Keystone Crossing to Medical Dr.	30	30	30	60	24	32	2	58	47.4	58.0	788.8	4.0	
116		116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
146	146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0		
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp. Southport	30	30	30	60	24	32	2	58	49.0	58.0	701.8	4.0	
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	30	30	30	60	24	32	2	58	31.9	43.5	446.6	3.0	
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	30	30	30	60	24	32	6	62	30.1	46.5	421.6	3.0	
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkw	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0	
	50	Downtown-IUPUI Circulator	Downtown to/from IUPUI	10	10	15	20	72	64	18	154	31.7	38.5	380.4	3.0	
51	Ivy Tech-IUPUI Circulator	Ivy Tech to/from IUPUI	15	15	15	30	48	64	12	124	34.4	46.5	412.9	3.0		



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			Peak Buses
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	30	60	24	32	6	62	77.0	93.0	1463.2	6.0
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	30	60	24	32	6	62	53.0	62.0	1060.2	4.0
Express	200	Westfield/Carmel Express	Westfield/Carmel to Downtown	30	30	60	n/a	24	14	0	38	31.8	38.0	953.8	4.0
	201	Noblesville Express	Noblesville to Downtown	30	30	60	n/a	24	14	0	38	35.6	38.0	1067.8	4.0
	202	Lawrence Express	Lawrence to Downtown	30	30	60	n/a	24	6	0	30	13.6	15.0	408.0	2.0
	203	Greenfield Express	Greenfield to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	204	Greenwood Express	Greenwood to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	205	Airport Express	Downtown to Airport	40	40	40	40	18	21	6	45	17.1	22.5	409.5	2.0
		Airport / AmeriPLEX Express	Downtown to Airport via AmeriPLEX	40	40	40	40	18	21	6	45	37.2	45.0	823.5	3.0
	206	Plainfield/Mooresville Exp	Plainfield to Downtown via Airport	60	60	120	n/a	12	7	0	19	14.8	19.0	444.6	2.0
			Mooresville to Downtown via Airport	60	60	120	n/a	12	7	0	19	14.6	19.0	437.0	2.0
	207	Avon Express	Avon to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	208	Brownsburg Express	Brownsburg to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	209	Zionsville Express	Zionsville to Downtown	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	210	Fishers Express	Fishers to Downtown	30	30	60	n/a	24	14	0	38	25.6	28.5	767.6	3.0
	211	Johnson County Express	Franklin to Downtown	30	30	n/a	n/a	24	0	0	24	16.5	18.0	576.0	3.0
	212	Shelbyville Express	Shelbyville to Downtown	30	30	n/a	n/a	24	0	0	24	21.8	24.0	763.2	4.0
<b>Total Weekday Statistics</b>															
Local												1,900			132
Crosstown												754			55
Circulator												456			16
Limited Stop												124			10
Express												272			29
Total												3,506			242
<b>Total Annual Statistics</b>												894,030			
												782,805			
												923,228			
												12,891,908			



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Saturday			Buses
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	60	24	32	6	62	54.2	62.0	812.2	4.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	66.4	77.5	930.0	5.0
	5	E. 25th	Downtown to Fort Harrison	30	30	30	60	24	32	6	62	80.4	93.0	1041.6	6.0
	6	North Harding	Downtown to 36th & Elmira	30	30	60	60	24	16	6	46	19.4	23.0	243.8	2.0
	8	Washington St.	Airport to Meijer	15	15	15	30	48	64	24	136	193.9	204.0	2815.2	12.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	20	20	30	30	36	32	24	92	138.0	158.0	1858.4	10.0
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	60	60	24	16	2	42	27.0	31.8	428.4	3.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	60	60	60	60	12	16	6	34	15.4	17.0	272.0	1.0
	14	Prospect	Ohio & Penn to Thompson & Emerson	30	30	60	60	24	16	6	46	26.9	34.5	414.0	3.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	60	60	24	16	12	52	48.0	52.0	728.0	4.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	60	60	24	16	2	42	30.0	31.5	491.4	3.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple	40	40	60	60	14	16	6	36	26.3	30.0	342.0	2.5
			Ohio & Meridian to Glendale via Kessler	40	40	60	60	14	16	6	36	26.3	30.0	345.6	2.5
	18	Nora	Capitol & Market to Keystone Crossing	30	30	60	60	24	16	12	52	51.3	58.0	691.6	5.0
	19	Castleton	Penn & Ohio to Castleton	30	30	30	60	24	32	12	68	70.1	85.0	1054.0	5.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	60	60	24	16	2	42	33.1	42.0	516.6	4.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	60	60	24	16	2	42	40.3	46.5	550.2	4.0
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	60	24	32	6	62	46.7	62.0	713.0	4.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	30	60	24	32	6	62	64.8	71.5	837.0	4.0
	28	St. Vincent	Capitol & Market to 86th & Harcourt	30	30	60	60	24	16	12	52	50.2	52.0	816.4	4.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	60	60	60	60	14	16	6	36	27.1	30.0	471.6	1.7
			Ohio & Penn to Greenwood Mall	60	60	60	60	14	16	6	36	22.8	24.0	367.2	1.3
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	30	30	24	32	12	68	49.7	68.0	822.8	4.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	20	20	30	30	36	32	12	80	85.4	97.0	1608.0	7.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	20	20	30	30	36	32	12	80	70.5	80.0	992.0	6.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	20	20	20	30	36	48	24	108	129.4	144.0	2052.0	8.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	30	30	30	60	24	32	6	62	59.1	77.5	979.6	5.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	60	60	24	16	2	42	54.0	63.0	945.0	6.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossin	30	30	30	30	24	32	12	68	59.1	68.0	986.0	4.0
	87	Mithoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	60	60	24	16	6	46	36.2	46.0	598.0	4.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	30	30	60	60	24	16	6	46	42.3	46.0	699.2	4.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	30	30	60	60	24	16	6	46	50.9	57.5	841.8	5.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	30	30	60	60	24	16	6	46	35.1	46.0	579.6	4.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	30	60	24	32	6	62	80.4	93.0	1339.2	6.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall	60	60	120	120	12	8	1	21	16.6	21.0	273.0	2.0
			St. Vincents Hosp to Glendale Mall	60	60	120	120	12	8	1	21	13.0	21.0	214.2	2.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	30	30	60	60	24	16	2	42	50.2	63.0	827.4	6.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	30	30	60	60	24	16	2	42	26.5	31.5	436.8	3.0
	101	West Carmel	Keystone Crossing to Medical Dr.	30	30	60	60	24	16	2	42	34.7	42.0	571.2	4.0
	116	116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	146	146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp, Southport	30	30	30	60	24	32	2	58	49.0	58.0	701.8	4.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	60	60	60	60	12	16	2	30	16.5	22.5	231.0	2.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	60	60	60	60	12	16	6	34	16.5	25.5	231.2	2.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkw	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Saturday			Buses	
				Peak Period		Base	E/L	Peak	Midday	E/L	Total Daily	In-Serv.	Platform	Rev.		
				Pk Dir	Rev. Pk	Period	Period	Trips	Trips	Trips	Trips	Hours	Hrs.	Miles		
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	30	60	24	32	6	62	77.0	93.0	1463.2	6.0	
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	30	60	24	32	6	62	53.0	62.0	1060.2	4.0	
Express	205	Airport Express	Downtown to Airport	40	40	40	40	18	21	6	45	17.1	22.5	409.5	2.0	
		Airport / Ameriplex Express	Downtown to Airport via Ameriplex	40	40	40	40	18	21	6	45	37.2	45.0	823.5	3.0	
<b>Total Saturday Statistics</b>																
		<i>Local</i>										1,536	1,494	1,704	22,215	116
		<i>Crosstown</i>										586	558	676	9,291	55
		<i>Circulator</i>										122	82	106	1,164	8
		<i>Limited Stop</i>										124	130	155	2,523	10
		<i>Express</i>										90	54	68	1,233	5
		<i>Total</i>										2,458	2,318	2,708	36,426	194.0
<b>Total Annual Statistics</b>												127,816	120,537	140,832	1,894,173	



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			Buses
				Peak Period		Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	
				Pk Dir	Rev. Pk										
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	60	24	32	6	62	54.2	62.0	812.2	4.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	66.4	77.5	930.0	5.0
	5	E. 25th	Downtown to Fort Harrison	30	30	60	60	24	16	2	42	54.5	63.0	705.6	6.0
	6	North Harding	Downtown to 36th & Elmira	30	30	60	60	24	16	2	42	17.8	21.0	222.6	2.0
	8	Washington St.	Airport to Meijer	20	20	20	30	36	48	24	108	153.9	162.0	2235.6	9.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	30	30	30	60	24	32	6	62	93.0	108.5	1252.4	7.0
	11	18th St.	Ohio & Penn to Arlington & 46th	60	60	60	60	12	16	2	30	19.3	22.5	306.0	2.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	60	60	60	60	12	16	2	30	13.6	15.0	240.0	1.0
	14	Prospect	Ohio & Penn to Thompson & Emerson	60	60	60	60	12	16	2	30	17.4	22.5	270.0	2.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	60	60	60	60	12	16	6	34	31.2	34.0	476.0	2.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	60	60	60	60	12	16	2	30	21.4	22.5	351.0	2.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple	60	60	60	60	8	16	6	30	21.9	30.0	285.0	2.0
			Ohio & Meridian to Glendale via Kessler	60	60	60	60	8	16	6	30	21.9	30.0	288.0	2.0
	18	Nora	Capitol & Market to Keystone Crossing	30	30	60	60	24	16	6	46	45.4	52.0	611.8	5.0
	19	Castleton	Penn & Ohio to Keyston	30	30	60	60	24	16	6	46	47.8	57.5	713.0	5.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	60	60	60	60	12	16	2	30	24.1	30.0	369.0	2.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	60	60	24	16	2	42	40.3	46.5	550.2	4.0
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	60	24	32	2	58	43.7	58.0	667.0	4.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	60	60	24	16	6	46	46.6	51.5	621.0	4.0
	28	St. Vincent	Capitol & Market to 86th & Harcourt	60	60	60	60	12	16	6	34	32.9	34.0	533.8	2.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	60	60	120	120	14	8	3	25	18.9	22.7	327.5	1.67
			Ohio & Penn to Greenwood Mall	60	60	120	120	14	8	3	25	15.9	20.3	255.0	1.33
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	60	60	24	16	6	46	33.6	46.0	556.6	4.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	30	30	30	60	24	32	6	62	66.2	77.5	1246.2	5.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	30	30	30	30	24	32	12	68	60.0	68.0	843.2	4.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	20	20	30	30	36	32	12	80	95.9	103.0	1520.0	8.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	30	30	60	60	24	16	6	46	44.2	57.5	726.8	5.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	60	60	24	16	2	42	54.0	63.0	945.0	6.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossin	30	30	60	60	24	16	6	46	40.4	46.0	667.0	4.0
	87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	60	60	24	16	2	42	33.1	42.0	546.0	4.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	30	30	60	60	24	16	2	42	38.7	42.0	638.4	4.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	60	60	60	60	12	16	2	30	33.0	37.5	549.0	3.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	60	60	60	60	12	16	2	30	22.7	30.0	378.0	2.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	60	60	24	16	2	42	55.0	63.0	907.2	6.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall	120	120	120	120	6	8	1	15	11.7	15.0	195.0	1.0
			St. Vincents Hosp to Glendale Mall	120	120	120	120	6	8	1	15	9.2	15.0	153.0	1.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	30	30	60	60	24	16	2	42	50.2	63.0	827.4	6.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	60	60	60	60	12	16	2	30	18.8	22.5	312.0	2.0
	101	West Carmel	Keystone Crossing to Medical Dr.	60	60	60	60	12	16	2	30	24.5	30.0	408.0	2.0
	116	116th St.	Merchants Sq. Mall to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	146	146th St.	Village Park Plaza to Fishers	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp, Southport	30	30	30	60	24	32	2	58	49.0	58.0	701.8	4.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	60	60	60	60	12	16	2	30	16.5	22.5	231.0	2.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	60	60	60	60	12	16	2	30	14.6	22.5	204.0	2.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pkw	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	99	Fishers North	Fishers Municipal Area to Forum	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	n/a	n/a	n/a	n/a	0	0	0	0	0.0	0.0	0.0	0.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED SHORT-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	60	60	24	16	2	42	52.2	63.0	991.2	6.0	
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	60	60	24	16	2	42	35.9	42.0	718.2	4.0	
Express	205	Airport Express	Downtown to Airport	40	40	40	40	18	21	6	45	17.1	22.5	409.5	2.0	
		Airport / Ameriplex Express	Downtown to Airport via Ameriplex	40	40	40	40	18	21	6	45	37.2	45.0	823.5	3.0	
<b>Total Sunday Statistics</b>																
<i>Local</i>												1,200	1,158	1,338	17,189	96
<i>Crosstown</i>												452	436	527	7,253	46
<i>Circulator</i>												118	80	103	1,137	8
<i>Limited Stop</i>												84	88	105	1,709	10
<i>Total</i>												90	54	68	1,233	5
<b>Total Annual Statistics</b>												1,944	1,816	2,140	28,521	165.0
												112,752	105,303	124,091	1,654,201	



**Indianapolis Metropolitan Planning Organization  
COMPREHENSIVE OPERATIONAL ANALYSIS**



**APPENDIX D  
COA LONG-RANGE SERVICE PLAN  
OPERATING REQUIREMENTS**



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			
				Peak Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	Peak Buses
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	30	24	32	24	80	72.5	86.0	1048.0	5.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	69.4	77.5	930.0	5.0
	5	E. 25th	Downtown to Fort Harrison	30	30	30	60	24	32	12	68	92.2	102.0	1142.4	6.0
	6	North Harding	Downtown to 36th & Elmira	30	30	30	60	24	32	12	68	29.8	34.0	360.4	2.0
	8	Washington St.	Airport to Meijer	15	15	15	20	48	64	36	148	220.5	240.5	3063.6	13.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	15	15	15	30	48	64	24	136	213.4	238.0	2747.2	14.0
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	30	60	24	32	6	62	41.8	46.5	632.4	3.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	30	30	30	60	24	32	6	62	29.4	31.0	496.0	2.0
	14	Prospect	Ohio & Penn to Thompson & Emerson	30	30	30	60	24	32	6	62	37.5	46.5	558.0	3.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	30	60	24	32	12	68	65.3	74.0	952.0	5.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	30	30	24	32	24	80	59.6	80.0	936.0	4.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple	30	30	30	40	20	32	18	70	53.4	61.3	665.0	4.0
			Ohio & Meridian to Glendale via Kessler	30	30	30	40	20	32	18	70	53.4	61.3	672.0	4.0
	18	Nora	Capitol & Market to Keystone Crossing	20	20	30	30	36	32	24	92	94.7	112.0	1223.6	7.0
	19	Castleton	Penn & Ohio to Castleton	20	20	30	30	36	32	24	92	99.4	118.0	1426.0	8.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	30	30	24	32	24	80	68.1	80.0	984.0	4.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	30	30	24	32	12	68	70.8	79.0	890.8	4.0
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	30	24	32	12	68	53.5	68.0	782.0	4.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	30	30	24	32	12	68	74.8	79.0	918.0	4.0
	28	St. Vincent	Capitol & Market to 86th & Harcourt	30	30	30	60	24	32	12	68	68.7	85.0	1067.6	5.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	30	30	40	60	26	24	12	62	48.9	54.3	812.2	3.5
			Ohio & Penn to Greenwood Mall	30	30	40	60	26	24	12	62	41.1	54.3	632.4	3.5
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	20	20	30	30	36	32	24	92	70.3	86.0	1113.2	5.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	15	15	20	30	48	48	24	120	133.9	144.0	2412.0	10.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	15	15	15	30	48	64	24	136	125.4	136.0	1686.4	8.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	15	15	15	30	48	64	24	136	170.4	187.0	2584.0	11.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	15	15	15	30	48	64	24	136	135.1	153.0	2148.8	9.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	20	20	30	30	36	32	24	92	123.6	138.0	2070.0	9.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossi	15	15	15	30	48	64	24	136	123.6	142.0	1972.0	9.0
	87	Mithoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	30	30	24	32	24	80	65.0	80.0	1040.0	4.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	15	15	15	30	48	64	24	136	129.5	153.0	2067.2	9.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	30	30	30	30	24	32	24	80	91.5	100.0	1464.0	5.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	30	30	30	60	24	32	12	68	53.7	68.0	856.8	4.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	15	15	15	30	48	64	24	136	184.1	204.0	2937.6	12.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall	60	60	60	60	12	16	6	34	27.7	34.0	442.0	2.0
			St. Vincents Hosp to Glendale Mall	60	60	60	60	12	16	6	34	21.7	34.0	346.8	2.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	30	30	30	30	24	32	12	68	83.9	101.6	1339.6	6.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	30	30	30	60	24	32	6	62	36.3	46.5	626.2	3.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	30	30	30	60	24	32	6	62	40.5	46.5	644.8	3.0
	101	West Carmel	Keystone Crossing to Medical Dr.	30	30	30	60	24	32	6	62	52.9	62.0	843.2	4.0
	116	116th St.	Merchants Sq. Mall to Fishers	30	30	60	60	24	16	6	46	16.6	23.0	262.2	2.0
	146	146th St.	Village Park Plaza to Fishers	30	30	60	60	24	16	6	46	36.6	46.0	676.2	4.0
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp. Southport	30	30	30	60	24	32	6	62	54.7	62.0	750.2	4.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	30	30	30	60	24	32	6	62	38.8	46.5	477.4	3.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	30	30	30	60	24	32	6	62	35.1	46.5	421.6	3.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pk	30	30	30	60	24	32	6	62	27.7	31.0	359.6	2.0
	99	Fishers North	Fishers Municipal Area to Forum	30	30	30	60	24	32	6	62	22.9	31.0	297.6	2.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	30	30	30	60	24	32	6	62	21.4	31.0	235.6	2.0
	50	Downtown-IUPUI Circulator	Downtown to/from IUPUI	10	10	15	20	72	64	18	154	31.7	38.5	380.4	3.0
	51	Ivy Tech-IUPUI Circulator	Ivy Tech to/from IUPUI	15	15	15	30	48	64	12	124	34.4	46.5	412.9	3.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF WEEKDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Weekday			Peak Buses
				Peak Period		Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	
				Pk Dir	Rev. Pk										
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	30	30	24	32	12	68	89.2	102.0	1604.8	6.0
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	30	30	24	32	12	68	61.2	68.0	1162.8	4.0
Express	200	Westfield/Carmel Express	Westfield/Carmel to Downtown	15	15	30	n/a	48	28	0	76	68.0	76.0	1907.6	8.0
	201	Noblesville Express	Noblesville to Downtown	15	15	30	30	48	28	8	84	78.7	84.0	2360.4	8.0
	202	Lawrence Express	Lawrence to Downtown	15	15	30	n/a	48	12	0	60	29.6	36.0	816.0	5.0
	203	Greenfield Express	Greenfield to Downtown	30	30	60	n/a	24	6	0	30	27.8	30.0	789.0	4.0
	204	Greenwood Express	Greenwood to Downtown	30	30	n/a	n/a	24	0	0	24	9.6	12.0	288.0	2.0
	205	Airport Express	Downtown to Airport	30	30	30	30	24	28	8	60	24.6	30.0	546.0	2.0
		Airport / Ameriplex Express	Downtown to Airport via Ameriplex	30	30	30	30	24	28	8	60	51.9	60.0	1098.0	4.0
	206	Plainfield/Mooresville Exp	Plainfield to Downtown via Airport	60	60	60	n/a	12	14	0	26	20.3	26.0	608.4	2.0
			Mooresville to Downtown via Airport	60	60	60	n/a	12	14	0	26	19.9	26.0	598.0	2.0
	207	Avon Express	Avon to Downtown	30	30	60	n/a	24	6	0	30	12.6	15.0	378.0	2.0
	208	Brownsburg Express	Brownsburg to Downtown	30	30	60	n/a	24	6	0	30	17.5	22.5	525.0	3.0
	209	Zionsville Express	Zionsville to Downtown	30	30	60	n/a	24	6	0	30	19.8	24.0	594.0	3.0
	210	Fishers Express	Fishers to Downtown	15	15	30	n/a	48	28	0	76	51.2	59.0	1535.2	7.0
	211	Johnson County Express	Franklin to Downtown	30	30	60	n/a	24	14	0	38	26.1	28.5	912.0	3.0
	212	Shelbyville Express	Shelbyville to Downtown	30	30	60	n/a	24	14	0	38	34.5	38.0	1208.4	4.0
<b>Total Weekday Statistics</b>															
Local												2,180			147
Crosstown												1,278			87
Circulator												650			22
Limited Stop												136			10
Express												612			59
Total												4,856			325
<b>Total Annual Statistics</b>												1,238,280			18,038,573



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Saturday			
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	Buses
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	60	24	32	6	62	56.6	68.0	812.2	5.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	69.4	77.5	930.0	5.0
	5	E. 25th	Downtown to Fort Harrison	30	30	30	60	24	32	6	62	84.1	93.0	1041.6	6.0
	6	North Harding	Downtown to 36th & Elmira	30	30	60	60	24	16	6	46	20.3	23.0	243.8	2.0
	8	Washington St.	Airport to Meijer	15	15	15	30	48	64	24	136	202.7	221.0	2815.2	13.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	20	20	30	30	36	32	24	92	144.3	158.0	1858.4	10.0
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	30	60	24	32	6	62	41.8	46.5	632.4	3.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	30	30	30	60	24	32	6	62	29.4	31.0	496.0	2.0
	14	Prospect	Ohio & Penn to Thompson & Emerson	30	30	30	60	24	32	6	62	37.5	46.5	558.0	3.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	30	60	24	32	12	68	65.3	74.0	952.0	5.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	30	30	24	32	12	68	50.7	68.0	795.6	4.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple	40	40	60	60	14	16	6	36	27.5	33.3	342.0	3.0
			Ohio & Meridian to Glendale via Kessler	40	40	60	60	14	16	6	36	27.5	33.3	345.6	3.0
	18	Nora	Capitol & Market to Keystone Crossing	30	30	30	30	24	32	24	80	82.2	100.0	1064.0	5.0
	19	Castleton	Penn & Ohio to Castleton	20	20	30	30	36	32	24	92	99.4	118.0	1426.0	8.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	30	60	24	32	6	62	52.2	62.0	762.6	4.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	30	60	24	32	6	62	64.2	71.5	812.2	4.0
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	30	24	32	12	68	53.5	68.0	782.0	4.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	30	30	24	32	12	68	74.8	79.0	918.0	4.0
	28	St. Vincent	Capitol & Market to 86th & Harcourt	30	30	30	60	24	32	12	68	68.7	85.0	1067.6	5.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	40	40	60	60	20	16	12	48	37.8	42.3	628.8	2.5
			Ohio & Penn to Greenwood Mall	40	40	60	60	20	16	12	48	31.8	40.0	489.6	2.5
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	30	30	24	32	24	80	61.1	77.0	968.0	4.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	20	20	30	30	36	32	24	92	102.7	118.0	1849.2	8.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	20	20	20	30	36	48	24	108	99.6	108.0	1339.2	6.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	15	15	15	30	48	64	24	136	170.4	187.0	2584.0	11.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	15	15	30	30	48	32	24	104	104.0	117.0	1643.2	9.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	30	30	24	32	12	68	91.4	102.0	1530.0	6.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossi	20	20	20	30	36	48	24	108	98.0	114.0	1566.0	7.0
	87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	30	30	24	32	12	68	55.4	68.0	884.0	4.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	20	20	30	30	36	32	24	92	87.8	98.0	1398.4	7.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	30	30	30	30	24	32	12	68	78.0	85.0	1244.4	5.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	30	30	30	60	24	32	6	62	49.0	62.0	781.2	4.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	20	20	30	30	36	32	24	92	124.8	138.0	1987.2	9.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall	60	60	60	120	12	16	3	31	25.3	31.0	403.0	2.0
			St. Vincents Hosp to Glendale Mall	60	60	60	120	12	16	3	31	19.9	31.0	316.2	2.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	30	30	30	60	24	32	6	62	76.7	93.0	1221.4	6.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	30	30	30	60	24	32	6	62	36.3	46.5	626.2	3.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	30	30	60	60	24	16	6	46	30.3	34.5	478.4	3.0
	101	West Carmel	Keystone Crossing to Medical Dr.	30	30	60	60	24	16	6	46	39.6	46.0	625.6	4.0
	116	116th St.	Merchants Sq. Mall to Fishers	60	60	60	60	12	16	2	30	10.7	15.0	171.0	1.0
	146	146th St.	Village Park Plaza to Fishers	60	60	60	60	12	16	2	30	23.7	30.0	441.0	2.0
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp. Southport	30	30	30	60	24	32	6	62	54.7	62.0	750.2	4.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	30	30	30	60	24	32	6	62	38.8	46.5	477.4	3.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	30	30	60	60	24	16	6	46	26.1	34.5	312.8	3.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pk	60	60	60	60	12	16	2	30	13.4	15.0	174.0	1.0
	99	Fishers North	Fishers Municipal Area to Forum	60	60	60	60	12	16	2	30	11.1	15.0	144.0	1.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	30	30	30	60	24	32	2	58	20.0	29.0	220.4	2.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF SATURDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency			Calculated Trips				Average Saturday			Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.		Rev. Miles
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	30	30	24	32	12	68	89.2	102.0	1604.8	6.0
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	30	30	24	32	12	68	61.2	68.0	1162.8	4.0
	205	Airport Express	Downtown to Airport	30	30	30	30	24	28	8	60	24.6	30.0	546.0	2.0
		Airport / Ameriplex Express	Downtown to Airport via Ameriplex	30	30	30	30	24	28	8	60	51.9	60.0	1098.0	4.0
<b>Total Saturday Statistics</b>															
<i>Local</i>															
<i>Crosstown</i>															
<i>Circulator</i>															
<i>Limited Stop</i>															
<i>Total</i>															
<b>Total Annual Statistics</b>															



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles	Buses
Local	2	E. 34th St.	Downtown-Crossroads	30	30	30	60	24	32	6	62	56.6	68.0	812.2	5.0
	3	Michigan Street	W. Way & Cranston to Comm. Hosp. East	30	30	30	60	24	32	6	62	69.4	77.5	930.0	5.0
	5	E. 25th	Downtown to Fort Harrison	30	30	60	60	24	16	2	42	57.0	63.0	705.6	6.0
	6	North Harding	Downtown to 36th & Elmira	30	30	60	60	24	16	2	42	18.6	21.0	222.6	2.0
	8	Washington St.	Airport to Meijer	20	20	20	30	36	48	24	108	160.9	180.0	2235.6	10.0
	10	10th St.	Wash & G. Church to Cranston & W. Way	30	30	30	30	24	32	12	68	106.7	119.0	1373.6	7.0
	11	16th St.	Ohio & Penn to Arlington & 46th	30	30	60	60	24	16	2	42	28.2	31.5	428.4	3.0
	12	Beechcrest	Ohio & Penn to 18th & Albany	30	30	60	60	24	16	2	42	19.9	21.0	336.0	2.0
	14	Prospect	Ohio & Penn to Thompson & Emerson	30	30	30	60	24	32	2	58	35.2	43.5	522.0	3.0
	15	Riverside	Capitol & Market to Glen Arm & Westhaven	30	30	30	60	24	32	6	62	59.6	68.0	868.0	5.0
	16	Beech Grove	Ohio & Penn to Stop Eleven & Emerson	30	30	60	60	24	16	6	46	34.3	46.0	538.2	4.0
	17	College	Ohio & Meridian to Glendale via Broad Ripple	60	60	60	60	8	16	6	30	22.9	30.0	285.0	2.0
			Ohio & Meridian to Glendale via Kessler	60	60	60	60	8	16	6	30	22.9	30.0	288.0	2.0
	18	Nora	Capitol & Market to Keystone Crossing	30	30	30	30	24	32	12	68	69.9	85.0	904.4	5.0
	19	Castleton	Penn & Ohio to Castleton	30	30	30	30	24	32	12	68	73.3	85.0	1054.0	5.0
	21	E. 21st St.	Ohio & Meridian to Washington Mall	30	30	30	60	24	32	2	58	48.7	58.0	713.4	4.0
	22	Shelby	Ohio & Penn to Comm. Hosp. South	30	30	60	60	24	16	2	42	42.1	46.5	550.2	4.0
	24	Mars Hill	Ohio & Penn to Ameriplex	30	30	30	60	24	32	2	58	45.7	58.0	667.0	4.0
	25	W. 16th St.	Capitol & Market to Gateway & Westhaven	30	30	30	60	24	32	6	62	67.7	71.5	837.0	4.0
	28	St. Vincent	Capitol & Market to 86th & Harcourt	30	30	60	60	24	16	6	46	46.5	57.5	722.2	5.0
	31	Greenwood	Ohio & Penn to K-Mart & U.S. 31	60	60	60	60	14	16	12	42	33.1	42.0	550.2	2.0
			Ohio & Penn to Greenwood Mall	60	60	60	60	14	16	12	42	27.8	42.0	428.4	2.0
	34	Michigan Road	Ohio & Meridian to St. Vincent Hospital	30	30	30	30	24	32	24	80	61.1	80.0	968.0	4.0
	37	Park 100	Penn & Ohio to Intech Blvd. & Digital Way	30	30	30	30	24	32	24	80	89.3	104.7	1608.0	5.0
	38	Lafayette Square	Capitol & Market to Eagle Creek	30	30	30	30	24	32	24	80	73.7	80.0	992.0	4.0
	39	E. 38th St.	Capitol & Market to Fort Harrison	20	20	20	30	36	48	24	108	135.3	144.0	2052.0	8.0
Crosstown	26	Keystone Crossing	Keystone Crossing to Hanna & East	30	30	30	30	24	32	12	68	67.6	85.0	1074.4	5.0
	30	30th St. Crosstown	Wash. Sq. to Speedway Shpg. Ctr.	30	30	30	30	24	32	12	68	91.4	102.0	1530.0	6.0
	86	86th Crosstown	86th & Zionsville Rd to 86th & Keystone Crossi	30	30	30	30	24	32	24	80	72.5	80.0	1160.0	4.0
	87	Mitthoefer Crosstown	Pendleton Pike & 59th to Meijer	30	30	30	60	24	32	6	62	50.6	62.0	806.0	4.0
	88	Shadeland Crosstown	Castleton Square to Eastgate Mall	30	30	30	30	24	32	12	68	92.0	101.2	1468.8	7.0
	89	Emerson Crosstown	Glendale Mall to Hanna & East	30	30	30	30	24	32	12	68	78.0	85.0	1244.4	5.0
	90	56th / Butler Crosstown	Butler Univ to Fort Harrison	30	30	60	60	24	16	2	42	33.6	42.0	529.2	4.0
	91	Westside Crosstown	86th & Zionsville to Kentucky & Mann	30	30	30	30	24	32	12	68	92.0	102.0	1468.8	6.0
	92	Northside Crosstown	86th & Zionsville to Glendale Mall	60	60	120	120	12	8	1	21	17.3	21.0	273.0	2.0
			St. Vincents Hosp to Glendale Mall	60	60	120	120	12	8	1	21	13.6	21.0	214.2	2.0
	93	Raymond St. Crosstown	Airport to Eastgate Mall	30	30	60	60	24	16	2	42	52.5	63.0	827.4	6.0
	71	71st St.	Glendale Mall to Castleton Sq. Mall	30	30	30	60	24	32	2	58	34.0	43.5	585.8	3.0
	100	Carmel	Keystone Crossing to Rangeline & 151st	30	30	60	60	24	16	6	46	30.3	34.5	478.4	3.0
	101	West Carmel	Keystone Crossing to Medical Dr.	30	30	60	60	24	16	6	46	39.6	46.0	625.6	4.0
	116	116th St.	Merchants Sq. Mall to Fishers	60	60	60	60	12	16	2	30	10.7	15.0	171.0	1.0
	146	146th St.	Village Park Plaza to Fishers	60	60	60	60	12	16	2	30	23.7	30.0	441.0	2.0
Circulator	94	South County Circ.	Comm. Hosp., St. Francis Hosp. Southport	30	30	30	60	24	32	2	58	51.2	58.0	701.8	4.0
	96	Castleton North	Castleton Sq. Mall to Hague, 96th & Allison	60	60	60	60	12	16	2	30	18.8	22.5	231.0	2.0
	97	Fishers / Castleton	Castleton Sq. Mall to Fishers Comm. Park	60	60	60	60	12	16	2	30	17.0	22.5	204.0	2.0
	98	Fishers South	Comm Park to 116th, Hague, 106th & USA Pk	60	60	60	60	12	16	2	30	13.4	15.0	174.0	1.0
	99	Fishers North	Fishers Municipal Area to Forum	60	60	60	60	12	16	2	30	11.1	15.0	144.0	1.0
	102	Noblesville	Western Plaza to Carbon & 8th to 12th & North	30	30	30	60	24	32	2	58	20.0	29.0	220.4	2.0



# Indianapolis Metropolitan Planning Organization COMPREHENSIVE OPERATIONAL ANALYSIS



**INDYGO BUS ROUTES  
PROPOSED LONG-TERM SERVICE ESTIMATES  
CALCULATION OF SUNDAY OPERATING STATISTICS**

Service	Rte. #	Route Name	Route Pattern	Service Frequency				Calculated Trips				Average Sunday			Buses	
				Peak Period Pk Dir	Rev. Pk	Base Period	E/L Period	Peak Trips	Midday Trips	E/L Trips	Total Daily Trips	In-Serv. Hours	Platform Hrs.	Rev. Miles		
Limited Stop	8L	Washington Ltd.	Meijer to Airport	30	30	30	30	24	32	4	60	78.7	90.0	1416.0	6.0	
	34L	Michigan Rd. Ltd.	106th & Michigan to Downtown	30	30	30	30	24	32	4	60	54.0	60.0	1026.0	4.0	
	205	Airport Express	Downtown to Airport	30	30	30	30	24	28	8	60	24.6	30.0	546.0	2.0	
		Airport / Ameriplex Express	Downtown to Airport via Ameriplex	30	30	30	30	24	28	8	60	51.9	60.0	1098.0	4.0	
<b>Total Sunday Statistics</b>																
		<i>Local</i>														
		<i>Crosstown</i>														
		<i>Circulator</i>														
		<i>Limited Stop</i>														
		<i>Total</i>														
<b>Total Annual Statistics</b>																