



Prepared for:



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ROUTE PROFILES

INTRODUCTION

This document provides a detailed, diagnostic profile of each Bloomington Transit bus route.¹ If applicable, profile elements are separated by day type and by regular semester and summer service.

Each profile includes the following elements:

- Service description;
- Operating characteristics;
- High-level strengths and weaknesses;
- Service efficiency and productivity in terms of passengers per revenue hour, passengers per revenue trip, and operating cost per passenger;
- Ridership by stop and trip;
- On-time performance; and
- Service improvement opportunities.

Data Sources and Limitations

Ridership data was sampled using automated passenger counters (APCs). Data collection took place during fall and summer 2018. When trips were sampled more than once, average ridership values for boardings and alightings were used.

For the regular semester ridership assessment, trips unsampled in the APC dataset are provided in footnotes. For the summer dataset, given that the ridership sample is far from complete, footnotes are only provided when entire day types are missing.

Finally, maximum loads can exceed total boardings on a trip when passengers board on the previous trip and stay on the vehicle past the end of the line. With regard to graphs showing ridership by trip, in some instances, this can manifest itself as maximum loads appearing to exceed total ridership on a given trip.

¹ Profiles of each Indiana University Campus Bus route will be presented in the next 1-2 weeks.



ROUTE 1: NORTH FEE LANE – BHS NORTH / SOUTH WALNUT – CLEAR CREEK

Service Description

Route 1 (Figure 1) provides weekday and Saturday service from Clear Creek Shopping Center to Bloomington High School North via downtown Bloomington. The route is presented as two separate services, each with its own frequency and schedule, in BT's online materials:

- A north leg (Route 1 North) providing 60-minute weekday and Saturday service from the Transit Center to Bloomington High School North; and
- A south leg (Route 1 South) providing 30-minute weekday service and 60-minute Saturday service from the Transit Center to Clear Creek Shopping Center.

Route 1 travels primarily along N Prow Road, N Kinser Pike, W Winding Way, W Briarcliff Drive, State Road 45/46, N Walnut Street, N College Avenue, E 14th Street, E 17th Street, N Fee Lane, E 10th Street, N Woodlawn Avenue, E 7th Street, E Kirkwood Ave, and S Walnut Street. Major destinations served include Bloomington Meadows Hospital, two high schools, the Indiana University Campus, Kinser Crossing, Seminary Square, Walnut Park, Walnut Station, Clear Creek Shopping Center, Winslow Plaza, and the Brownstone and Walnut Grove apartment complexes. Passengers may transfer from Route 1 to several BT routes at the Transit Center (Routes 2, 3, 4, 5, 7) and BT and Indiana University Campus Bus routes along E 10th Street and N Woodlawn Avenue (BT Routes 6 and 9, and the IU A, E, W, and Night Owl Routes).

Figure 1 | Route 1 Maps: North - Fee Ln/BHS North (left); South - Walnut/Clear Creek (right)



Source: Bloomington Transit



Strengths

- Service available relatively late on weekdays
- Provides service to both IU and downtown Bloomington
- Northern branch serves areas of Bloomington not covered by any other routes
- Very regular clockface service frequency

Weaknesses

- Route 1 branches serve two unrelated markets; single route number may cause confusion
- Below-average ridership per hour and ridership per trip
- Redundancy with Route 7 south of downtown
- Poor on-time performance
- Large one-way loop on southern branch of route

The sections below provide details on Route 1's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.



Operating Characteristics Table 1 | Route 1 Operating Characteristics

Origin and Destination	Origin and Destination Bloomington High School North to Clear Creek Shopping		to Clear Creek Shopping Center
Annual Operating Costs ²	Annual Operating Costs ² \$828,183 (Rank: 6 of 9)		Rank: 6 of 9)
Annual Ridership		227,832 (Rank: 5 of 9)	
Average Daily Ridership Weekday		805 (Rank: 5 of 9)	
	Saturday	418 (Rank: 4 of 8)	
	Sunday	-	
Span	Weekday	6:25 AM-11:35 PM	
Saturday		7:25 AM-6:35 PM	
	Sunday		
Frequency	Weekday	North Fee Ln/BHS North:	South Walnut/Clear Creek:
		60 minutes	30 minutes
			(60 minutes 9:10 AM-1:10 PM and after 6:10 PM)
	Saturday	60 minutes	
Sunday			
Route Connections		2, 3, 4, 5, 6, 7, 9, A, E, W, W Limited, Night Owl	
Key Points of Interest		Bloomington Meadows Hospital, Bloomington High School North, Bloomington High School South, Templeton Elementary School, Indiana University Campus; Kinser Crossing, Seminary Square, Walnut Park, Walnut Station, and Clear Creek Shopping Centers; Winslow Plaza, Brownstone Apartments Walnut Grove Condos	

² Throughout this document, annual operating costs are ranked in order of lowest cost (1) to highest cost (32).



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 2 | Route 1 Weekday Service Productivity Metrics (Full Year and Regular Semester)

C C	Passengers per Hour
Full Year	Average: 28.4
Regular Semester	Average: 31.5
	Passengers per Trip
Full Year	Average: 20.8
Regular Semester	Average: 26.3
	Operating Cost per Passenger
Full Year	Average: \$3.60
Regular Semester	Average: \$3.30

Weekday On-Time Performance Table 3 | Route 1 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Average: 75.2%
Early: 5% On-Time: 61%	Late: 34%



Weekday Ridership by Stop

Route 1 North

Figure 2 | Route 1 North Weekday Ridership by Stop: Outbound (Regular Semester)







Bloomington Route Optimization Study | Existing Conditions

Figure 3 | Route 1 North Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 4 | Route 1 North Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 5 | Route 1 North Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions



Route 1 South³

Figure 6 | Route 1 South Weekday Ridership by Stop: Outbound (Regular Semester)



³ Ridership data for Clear Creek Shopping Center not available in ridership dataset due to detour at time of sampling





Figure 7 | Route 1 South Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions



Figure 8 | Route 1 South Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 9 | Route 1 South Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)



Weekday Ridership by Trip

Route 1 North

Figure 10 | Route 1 North Weekday Outbound Ridership by Trip (Regular Semester)





Figure 11 | Route 1 North Weekday Inbound Ridership by Trip (Regular Semester)



Route 1 South

Figure 12 | Route 1 South Weekday Outbound Ridership by Trip (Regular Semester)



Figure 13 | Route 1 South Weekday Inbound Ridership by Trip (Regular Semester)





Saturday Service Efficiency and Productivity Table 4 | Route 1 Saturday Service Productivity Metrics (Full Year and Regular Semester)

	Passengers per Hour
Full Year	Average: 24.7
Regular Semester	Average: 24.1
	Passengers per Trip
Full Year	Average: 22
Regular Semester	Average: 26.5
	Operating Cost per Passenger
Full Year	Average: \$4.28
Regular Semester	Average: \$4.37

Saturday On-Time Performance Table 5 | Route 1 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance	On-Time Performance Average: 78.6% Early: 16% 0n-Time: 76% Late: 8%	
Early: 16%	On-Time: 76%	Late: 8%



Saturday Ridership by Stop

Route 1 North

Figure 14 | Route 1 North Saturday Ridership by Stop: Outbound (Regular Semester)









Figure 16 | Route 1 North Saturday Ridership by Stop: Inbound (Regular Semester)





700 600 500 400 200 100 -200 -300 -400 -500 -600 -700																												 B A 	oardi lightii	ngs	
	BHS NORTH SIDE	BLOOMINGTON HIGH SCHOOL	WINDING WAY & KINGSLEY	WINDING WAY & WINDCREST	WINDING WAY & VALLEYVIEW	VALLEYVIEW & BRIARCLIFF	BRIARCLIFF NEAR VALLEYVI	BRIARCLIFF & KINSER PIKE	KINSER PIKE & W SKYLINE	KINSER PIKE & PARISH KRO	N COLLEGE MILLER-SHOWERS	COLLEGE & 17TH	COLLEGE & 15TH	11TH & WALNUT	WALNUT & 14TH	14TH BROWNSTONE APTS	14TH & DUNN BROWNSTONE	DUNN & 17TH	17TH & FESS	17TH IU ALUMNI CENTER	FEE BRISCOE QUAD	FEE MCNUTT QUAD	FEE & 11TH BUSINESS SCHO	10TH & WALNUT GROVE IU P	10TH GEOLOGY & INFORMATI	7TH & DUNN	DUNN & KIRKWOOD	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON	

Figure 17 | Route 1 North Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions
Route 1 South

Figure 18 | Route 1 South Saturday Ridership by Stop: Outbound (Regular Semester)









Figure 19 | Route 1 South Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 20 | Route 1 South Saturday Ridership by Stop: Inbound (Regular Semester)







Figure 21 | Route 1 South Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)



Saturday Ridership by Trip

Route 1 North

Figure 22 | Route 1 North Saturday Outbound Ridership by Trip (Regular Semester)





Figure 23 | Route 1 North Saturday Inbound Ridership by Trip (Regular Semester)



Route 1 South

Figure 24 | Route 1 South Saturday Outbound Ridership by Trip (Regular Semester)



Figure 25 | Route 1 South Saturday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer⁴

Weekday On-Time Performance Table 6 | Route 1 Weekday On-Time Performance Analysis (Summer)

On-Time Performance		Average: 72.8%					
Early: 10%	On-Time: 63%		Late: 27%				

⁴ Summer dataset does not include Saturday data



Weekday Ridership by Stop

Route 1 North

Figure 26 | Route 1 North Weekday Ridership by Stop: Outbound (Summer)







Figure 27 | Route 1 North Weekday Boardings and Alightings by Stop: Outbound (Summer)

Bloomington Route Optimization Study | Existing Conditions

700 600

500 400

Boardings

Alightings

KINSER PIKE & ROSEWOOD

WINDING WAY & KINGSLEY KINSER PIKEBHS NORTH ACUFF & ROSEWOOD

KINSER PIKE & ACUFF

PROW ROAD AT MEADOWS HOS

Figure 28 | Route 1 North Weekday Ridership by Stop: Inbound (Summer)





00 – 00 – 00 – 00 – 00 – 00 – 00 – 00 –																														■ Bo	oardii ghtir	ngs	
- 00 -	_	_			_	_	_	_	_		_	-	_		_	_	_		_		_	-	_	_	_			_	_		_		
00 -																																	
00 -																																	
00 -																																	
00 -																																	
0 – 00	PROW ROAD AT MEADOWS HOS	BHS NORTH SIDE	BLOOMINGTON HIGH SCHOOL	WINDING WAY & KINGSLEY	WINDING WAY & WINDCREST	WINDING WAY & VALLEYVIEW	VALLEYVIEW & BRIARCLIFF	BRIARCLIFF NEAR VALLEYVI	BRIARCLIFF & KINSER PIKE	KINSER PIKE & W SKYLINE	KINSER PIKE & PARISH KRO	N COLLEGEMILLER-SHOWERS	COLLEGE & 17TH	COLLEGE & 15TH	11TH & WALNUT	14THBROWNSTONE APTS	14TH & DUNN BROWNSTONE	17TH & INDIANA	DUNN & 17TH	FEE BRISCOE QUAD	FEE MCNUTT QUAD	FEE & 11TH BUSINESS SCHO	10TH & WALNUT GROVE IU P	10THGEOLOGY & INFORMATIC	WOODLAWN & 7TH MEMORIAL	7TH & FESS	7TH & INDIANA	7TH & DUNN	DUNN & KIRKWOOD	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON	DOWNTOWN TRANSIT CENTER

Figure 29 | Route 1 North Weekday Boardings and Alightings by Stop: Inbound (Summer)

_



Route 1 South

Figure 30 | Route 1 South Weekday Ridership by Stop: Outbound (Summer)







700 600 500 400 300 200 100 0 -100 -200 -300																									Alight	dings tings	
-400 -500 -600 -700	DOWNTOWN TRANSIT CENTER	WASHINGTON & SMITH.	WASHINGTON & 2ND	WASHINGTON & 1ST	WASHINGTON & DODDS	WASHINGTON & ALLEN	GRIMES & WASHINGTON	GRIMES & PALMER	GRIMES & HENDERSON	HENDERSON & DRISCOLL	HILLSIDE & HENDERSON	HILLSIDE & WOODLAWN	HUNTINGTON & THRONTON	MILLER & HUNTINGTON	MILLER WALNUT WOODS	MILLER & PARK	MILLER & HENDERSON	COMMUNITY HEALTH CENTER	SASSAFRASS HILL APARTMEN	NORTH DR BHS SOUTH	NORTH & HENDERSON	HENDERSON & SOUTH BHS SO	HENDERSON TIMBER RIDGE	HENDERSON WINSLOW PLAZA	MINSLOW & HENDERSON VILL	WINSLOW & WALNUT IU CRED	

Figure 31 | Route 1 South Weekday Boardings and Alightings by Stop: Outbound (Summer)

Figure 32 | Route 1 South Weekday Ridership by Stop: Inbound (Summer)







Bloomington Route Optimization Study | Existing Conditions

Figure 33 | Route 1 South Weekday Boardings and Alightings by Stop: Inbound (Summer)



Weekday Ridership by Trip

Route 1 North

Figure 34 | Route 1 North Weekday Outbound Ridership by Trip (Summer)



Figure 35 | Route 1 North Weekday Inbound Ridership by Trip (Summer)





Route 1 South

Figure 36 | Route 1 South Weekday Outbound Ridership by Trip (Summer)









Service Improvement Opportunities

Potential opportunities to strengthen Route 1 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Split route 1 into two routes. The northern and southern branches of Route 1 serve different markets and have different schedules. This may cause confusion for riders and potential riders. For example, assigning separate route numbers to the two branches of Route 1 would prevent passengers from accidently boarding the wrong branch of Route 1 at the Transit Center. Similarly, two route numbers with separate schedule brochures will ensure that passengers understand the service frequency to expect on the respective routes.
- Operate service north of Matlock Road during peak periods only. Ridership on Route 1 north of Matlock Road is relatively low, with the highest ridership occurring at Bloomington High School North. Service north of this Matlock Road could be limited to peak periods when students travel to and from school, and other commuters travel to and from work. During off-peak periods, the route could potentially turn around at the Marsh Supermarket.
- Swap segments of Route 1 and Route 6 to better align with likely travel patterns. Route 1 service north of Matlock Road serves Bloomington High School North and surrounding residential neighborhoods that are likely less likely to commute to Indian University than to downtown Bloomington. The current alignment of Route 1 requires riders to ride through the IU campus before finally reaching downtown. This may limit the appeal of the route to residents of the neighborhoods north of Matlock. On the other hand, Route 6 serves a number of high-density apartment complexes that are likely to attract IU students in search of near-campus affordable housing. Swapping segments of Route 1 and Route 6 south of 17th Street would better align both routes with likely travel patterns.
- Consolidate southern branch of Route 1 with Route 7. Route 7 and Route 1 both serve the Walnut Street and Henderson Street corridors, but follow slightly different alignments. Consolidating the two routes could create a frequent and simple service for riders, while saving resources for BT. Both routes currently operate one-way loops traveling southbound on Walnut Street and northbound on Walnut Street Pike. In both cases, ridership is significantly higher on Walnut Street Pike than on Walnut Street. A consolidated route could operate bidirectionally on Walnut Street, with buses either turning around at Kroger on Rhorer Road or via and end of line loop along Rhorer Road, Walnut Street, and Burks Drive. Consolidating the routes could also help reduce confusion during summer months and other times when IU is not in session. A consolidated route could operate with reduced frequency during academic break periods, but riders would not have to transition to a different route than the one to which they are accustomed.



ROUTE 2: SOUTH ROGERS – COUNTRYVIEW / WEST 11TH STREET VIA SHOWERS COMPLEX

Service Description

Route 2 (**Figure 38**) offers 30-minute weekday and hourly Saturday service between the Countryview Apartments, off S Rockport Road, and to the intersection of Crescent Road and W 17th Street, via downtown Bloomington. The route is presented as two separate services in BT's online materials:

- A south leg (Route 2 South) providing service from the Transit Center to Countryview Apartments; and
- A west leg (Route 2 West) providing service from the Transit Center to the intersection of Crescent Road and W 17th Street.

Route 2 travels primarily along N Crescent Road, W 17th Street, W 11th Street, N Maple Street, N College Avenue, N Rogers Street, N Monroe Street, W 6th Street, S Walnut Street, S Washington Street, W 2nd Street, S College Avenue, S Morton Street, S Rogers Street, W Graham Drive, and S Rockport Road. Destinations served include South Central Community Action, Tri-North Middle School, Fairview Elementary School, Bloomington Graduation School, the Showers Complex, Bloomington Hospital, the Social Security administration, several apartment complexes, and Seminary Square Shopping Center. Passengers may transfer from Route 2 to several BT routes at the Transit Center (Routes 1, 3, 4, 5, 7) and Route 6 along N College Avenue.



Figure 38 | Route 2 Maps: South - Rogers/Countryview (left); West - 11th via Showers Complex (right)

Source: Bloomington Transit



Strengths

- Service available relatively late on weekdays
- Very regular clockface service frequency
- Low operating cost per passenger
- Strong on-time performance
- Southern branch serves area with high transit need

Weaknesses

- Route 2 branches serve two unrelated markets; single route number may cause confusion
- Below average ridership per trip (maximum load rarely reaches 10)
- Route stops short of several multi-family housing communities west of Rockport Road
- Western branch of route is circuitous with mostly one-way service

The sections below provide details on Route 2's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.



Operating Characteristics Table 7 | Route 2 Operating Characteristics

Origin and Destination		Crescent Road & W 17th Stre	et to Countryview Apartments				
Annual Operating Costs		\$576,261 (Rank: 4 of 9)					
Annual Ridership		229,492 (Rank: 4 of 9)					
Average Daily Ridership	Weekday	828 (Ran	k: 4 of 9)				
	Saturday	336 (Rank: 5 of 8)					
	Sunday	-					
Span	Weekday	6:19 AM-2	11:28 PM				
	Saturday	7:51 AM-	6:51 PM				
	Sunday	-	-				
Frequency	Weekday	South Rogers/Countryview Apts: 30 minutes (60 minutes after 6:40 PM)	West 11 th St Via Showers Complex: 30 minutes (60 minutes after 6:10 PM)				
	Saturday	60 minutes					
	Sunday	-	-				
Route Connections		1, 3, 4,	5, 6, 7				
Key Points of Interest		South Central Community Action, Tri-North Middle School, Fairview Elementary School, Bloomington Graduation School, Showers Complex, Bloomington Hospital, Social Security Office, Reserve at Chandler's Glen, Countryview Apartments, Seminary Square Shopping Center, Seminary Square Shopping Center					



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 8 | Route 2 Weekday Service Productivity Metrics (Regular Semester and Full Year)

Passengers per Hour									
Full Year	Average: 28.4								
Regular Semester	Average: 31.5								
Passengers per Trip									
Full Year	Average: 20.8								
Regular Semester	Average: 26.3								
	Operating Cost per Passenger								
Full Year	Average: \$3.60								
Regular Semester	Average: \$3.30								

Weekday On-Time Performance

Table 9 | Route 2 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 75.2%
Early: 10%	On-Time: 89%	Late: 1%



Weekday Ridership by Stop

Route 2 South

Figure 39 | Route 2 South Weekday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 40 | Route 2 South Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 41 | Route 2 South Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 42 | Route 2 South Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)





Route 2 West

Figure 43 | Route 2 West Weekday Ridership by Stop: Outbound (Regular Semester)









Bloomington Route Optimization Study | Existing Conditions

Figure 44 | Route 2 West Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 45 | Route 2 West Weekday Ridership by Stop: Inbound (Regular Semester)⁵



⁵ Route 2 West weekday inbound trips begin at College & 15th in the APC dataset.



Bloomington Route Optimization Study | Existing Conditions

Figure 46 | Route 2 West Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

700										
600									Boardings	****************
500										
400									Alightings	
300										
200										
100										
0										
-100										
-200										
-300										
-400										
-500										
-600										
-700	COLLEGE & 15TH	COLLEGE & 11TH	10TH & MORTON	MORTON & 9TH SHOWERS	MORTON & 7TH	MORTON & 6TH	6TH & WASHINGTON	WASHINGTON & KIRKWOOD	ARRIVING DOWNTOWN TRANSI	



Weekday Ridership by Trip

Route 2 South

Figure 47 | Route 2 South Weekday Outbound Ridership by Trip (Regular Semester)



Figure 48 | Route 2 South Weekday Inbound Ridership by Trip (Regular Semester)





Route 2 West

Figure 49 | Route 2 West Weekday Outbound Ridership by Trip (Regular Semester)



Figure 50 | Route 2 West Weekday Inbound Ridership by Trip (Regular Semester)





Saturday Service Efficiency and Productivity Table 10 | Route 2 Saturday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour										
Average: 24.7										
Average: 24.1										
Passengers per Trip										
Average: 22										
Average: 26.5										
Operating Cost per Passenger										
Average: \$4.28										
Average: \$4.37										

Saturday On-Time Performance Table 11 | Route 2 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 78.6%
Early: 11%	On-Time: 88%	Late: 1%



Saturday Ridership by Stop

Route 2 South

Figure 51 | Route 2 South Saturday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 52 | Route 2 South Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 53 | Route 2 South Saturday Ridership by Stop: Inbound (Regular Semester)




Bloomington Route Optimization Study | Existing Conditions

Figure 54 | Route 2 South Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

700 -																		
600 -																1	Boardings	s
500 -																	-	
400 -																	Alightings	
300 -																		
200 -																		
100 -																		
0 -																		
-100 -																		
-200 -																		
-300 -																		
-400 -																		
-500 -																		
-600 -																		
-700 -	COUNTRY VIEW SHELTER	GRAHAM & ROCKPORT	GRAHAM & BROWN	GRAHAM & MILTON	GRAHAM & ROGERS	ROGERS & COOLIDGE	ROGERS & JOY	ROGERS & ROCKPORT	OGERS & HILLSIDE COMMUN	ROGERS & WILSON	ROGERS & PATTERSON	ROGERS & DAVIS	ROGERS & DIXIE	ROGERS & WYLIE	ROGERS & 1ST	S MORTON KROGERS	WALNUT ST. THE PROJECT S	RRIVING DOWNTOWN TRANSI

Route 2 West

Figure 55 | Route 2 West Saturday Ridership by Stop: Outbound (Regular Semester)







Figure 56 | Route 2 West Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 57 | Route 2 West Saturday Ridership by Stop: Inbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 58 | Route 2 West Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

700																							
600																					Boa	ardings	
500																							
400																					Δlic	ntinge	
300																						Jiningo	
200																							
100																							
0		_				_			_	_	_	_	_	_				_	_				
-100																							
-200																							
-300																							
-400																							
-500																							
-600																							
-700																							
	13TH & SUMMIT	12TH & MONROE	MONROE &14TH	14TH & BLAIR TRI-NORTH M	BLAIR & DYER	BLAIR & 11TH	11TH & MAPLE	MAPLE & 13TH	MAPLE & 15TH	APLE SUNFLOWER APARTMEN	MAPLE & 17TH	17TH & JACKSON	17TH & WOODBURN	COLLEGE & 17TH	COLLEGE & 15TH	COLLEGE & 11TH	10TH & MORTON	MORTON & 9TH SHOWERS	MORTON & 7TH	MORTON & 6TH	6TH & WASHINGTON	WASHINGTON & KIRKWOOD	ARRIVING DOWNTOWN TRANSI



Saturday Ridership by Trip

Route 2 South

Figure 59 | Route 2 South Saturday Outbound Ridership by Trip (Regular Semester)



Figure 60 | Route 2 South Saturday Inbound Ridership by Trip (Regular Semester)





Route 2 West

Figure 61 | Route 2 West Saturday Outbound Ridership by Trip (Regular Semester)



Figure 62 | Route 2 West Saturday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer⁶

Weekday On-Time Performance Table 12 | Route 2 Weekday On-Time Performance Analysis (Summer)



⁶ Summer dataset does not include Saturday data



Weekday Ridership by Stop

Route 2 South

Figure 63 | Route 2 South Weekday Ridership by Stop: Outbound (Summer)





Bloomington Route Optimization Study | Existing Conditions

Figure 64 | Route 2 South Weekday Boardings and Alightings by Stop: Outbound (Summer)





Figure 65 | Route 2 South Weekday Ridership by Stop: Inbound (Summer)





FOURSQUARE ITP



Figure 66 | Route 2 South Weekday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions

Route 2 West

Figure 67 | Route 2 West Weekday Ridership by Stop: Outbound (Summer)









Figure 68 | Route 2 West Weekday Boardings and Alightings by Stop: Outbound (Summer)

Figure 69 | Route 2 West Weekday Ridership by Stop: Inbound (Summer)





Bloomington Route Optimization Study | Existing Conditions

Figure 70 | Route 2 West Weekday Boardings and Alightings by Stop: Inbound (Summer)

700										
600									Boardings	
500									0	
400									Alightings	
300									0.00	
200										
100										
0										
-100										
-200										
-300										
-400										
-500										
-600										
-700	—	Ŧ	7	(0	—	—	7	0	~	
	211	11	TON	ER¢	É.	6TÞ	TO	100		
	& 1	& 1	IOR	S	Š	N N	ING	Ŵ	EN	
	GE	GE	× ≈	HSH	TON	TON	R	KIRI	ULL (
	L E		E	911	OR	OR	×∧	8	ANS	
	CO	CO	10	8	Z	Z	Τ&	NO	TR	
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Weekday Ridership by Trip

Route 2 South

Figure 71 | Route 2 South Weekday Outbound Ridership by Trip (Summer)



Figure 72 | Route 2 South Weekday Inbound Ridership by Trip (Summer)





Route 2 West

Figure 73 | Route 2 West Weekday Outbound Ridership by Trip (Summer)



Figure 74 | Route 2 West Weekday Inbound Ridership by Trip (Summer)





Service Improvement Opportunities

Potential opportunities to strengthen Route 2 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Split Route 2 into two routes. The western and southern branches of Route 2 serve different markets. This may cause confusion for riders and potential riders. For example, assigning separate route numbers to the two branches of Route 2 would prevent passengers from accidently boarding the wrong branch of Route 2 at the Transit Center. Similarly, two route numbers with separate schedule brochures will ensure that passengers understand the service frequency to expect on the respective routes.
- Simplify western branch of Route 2 and reduce one-way service. The western branch of Route 2 has a fairly circuitous alignment that forces out-of-direction travel for many passengers. For example, a rider boarding at the Crestmont Community Apartments would have to travel north to 17th Street before beginning their trip south to downtown. To simplify the route, service could be eliminated along Blair Avenue, Maple Street, and 17th Street. Instead, inbound buses could turn south at Monroe Street and continue to downtown Bloomington via 11th Street and Morton Street. Ridership on the segments along Blair Avenue, Maple Street, and 17th Street is generally low, except at one stop at 17th and Maple. However, this stop is within two blocks of Kinser Pike, where there would still be service if the stop were eliminated.
- Split western branch coverage between two routes. To reduce the circuitousness of Route 2, the western branch of the route could be split among two separate routes. Service west of Maple Street could remain part of Route 2, while service along Maple and 17th Street could be consolidated with Route 6.
- Extend southern branch of route to Kegg Road to serve more multi-family housing. Several large multi-family housing communities have been built west of the current terminus of Route 2 at the Country View Apartments. Extending the route south along Rockport to Tapp Road, and then west on Tapp to Kegg Road, Sunstone Drive, and Adams Street would serve Monroe Place, Adams Village, and Blackwell Homes, among other communities.



ROUTE 3: COLLEGE MALL – E 3RD STREET / HIGHLAND VILLAGE – CURRY PIKE

Service Description

Route 3 (Figure 75) operates on weekdays and Saturdays from the Reserve on 3rd Apartments to South Curry Pike via downtown Bloomington. The route is presented as two separate services, each with its own frequency and schedule, in BT's online materials:

- An eastern branch providing 30-minute weekday and Saturday service from the Reserve on 3rd Apartments to the Transit Center; and
- A western branch providing 30-minute weekday and hourly Saturday service from the Transit Center to S Curry Pike.

Route 3 travels primarily along S Curry Pike, W Bloomfield Road, Constitution Way, W Gifford Road, Woodside Drive, S Park Square Drive, W Belle Avenue, W 3rd Street, N Gates Drive, S Adams Street, W Kirkwood Avenue, S College Avenue, E 3rd Street, S Washington Street, E Kirkwood Avenue, S Indiana Avenue, Atwater Avenue, S Woodscrest Drive, S College Mall Road, E Covenanter Drive, S Clarizz Boulevard, E Hagan Street, and S Smith Road. Route 3 trips serve destinations such as Highland Park Elementary School, the Convention Center, multiple Indiana University facilities, St. Charles School, and several apartment complexes and shopping centers. Passengers may transfer from Route 3 to several BT routes at the Transit Center (Routes 1, 2, 4, 5, and 7) and BT and IU Campus Bus routes along E 3rd Street and Atwater Avenue (BT Routes 8 and 9, and the IU A, B, E, and Night Owl Routes).

Figure 75 | Route 3 Maps: West - Highland Village/Curry Pike (left); East - College Mall/East 3rd Street (right)



Source: Bloomington Transit



Strengths

- Service available relatively late on weekdays
- Very regular clockface service frequency
- Below average operating costs per passenger
- Above average on-time performance

Weaknesses

- Second highest annual operating costs
- Below average ridership per hour and ridership per trip
- Western branch has much lower ridership than eastern branch and may justify different level of service
- Eastern branch duplicates service of Route 9 Limited, as well portions of Routes 6 and 8
- Inconsistent service to Orchard Glen Apartments served outbound only in the afternoon peak

The sections below provide details on Route 3's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.



Operating Characteristics Table 13 | Route 3 Operating Characteristics

Origin and Destination		Walmart to Reserve	e on 3 rd Apartments			
Annual Operating Costs		\$1,261,539 (Rank: 8 of 9)				
Annual Ridership		411,452 (R	ank: 3 of 9)			
Average Daily Ridership	Weekday	1,149 (Ra	nk: 3 of 9)			
	Saturday	926 (Ran	k: 2 of 8)			
	Sunday	-	-			
Span	Weekday	6:02 AM-:	11:37 PM			
	Saturday	7:31 AM-	7:01 PM			
	Sunday	-	-			
Frequency	Weekday	College Mall/East 3rd Street:	Highland Village/Curry Pike:			
		20 minutos	20 minutos			
		(60 minutes after 9:00 PM)	(60 minutes after 7:30 PM)			
	Saturday	College Mall/East 3rd Street:	Highland Village/Curry Pike:			
		30 minutes	60 minutes			
	Sunday	-	-			
Route Connections		1, 2, 4, 5, 6, 7, 8, 9	9, A, B, E, Night Owl			
Key Points of Interest		Highland Park Elementary Sch School, IU Jordan Hall, IU Music S Charles School; Orchard Glen, Pa Ridge, The Monroe, The Fields, O Cambridge Square, Fountain Pa Meadow Park, Spring Mills, ar Walmart, Sam's Club, Aldi's, Kro Plaza, Whitehall Crossing, Eastla Center, Jackson Creek S	ool, Convention Center, IU Law School, IU Forest Quadrangle, St. tterson Pointe, The Dillon, Hunter Covenanter, Latimer, Park Doral, ark, Woodbridge III, Barrington, ad Reserve on 3 rd Apartments; ger, Whitehall Square, Whitehall and Plaza, College Mall Shopping Shopping Center, Target			



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 14 | Route 3 Weekday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour									
Full Year	Average: 28.4								
Regular Semester	Average: 31.5								
Passengers per Trip									
Full Year	Average: 20.8								
Regular Semester	Average: 26.3								
(S) Operating Cost per Passenger									
Full Year	Average: \$3.60								
Regular Semester	Average: \$3.30								

Weekday On-Time Performance

Table 15 | Route 3 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 75.2%					
Early: 7%	On-Time: 76%	Late: 17%					



Weekday Ridership by Stop

Route 3 East⁷

Figure 76 | Route 3 East Weekday Ridership by Stop: Outbound (Regular Semester)



⁷ Ridership data on limited AM/PM deviation serving 10th Street unavailable







Figure 77 | Route 3 East Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 78 | Route 3 East Weekday Ridership by Stop: Inbound (Regular Semester)









Figure 79 | Route 3 East Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

Route 3 West

Figure 80 | Route 3 West Weekday Ridership by Stop: Outbound (Regular Semester)







Figure 81 | Route 3 West Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)



Figure 82 | Route 3 West Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 83 | Route 3 West Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)



Weekday Ridership by Trip

Route 3 East

Figure 84 | Route 3 East Weekday Outbound Ridership by Trip (Regular Semester)



Figure 85 | Route 3 East Weekday Inbound Ridership by Trip (Regular Semester)





Route 3 West

Figure 86 | Route 3 West Weekday Outbound Ridership by Trip (Regular Semester)



Figure 87 | Route 3 West Weekday Inbound Ridership by Trip (Regular Semester)





Saturday Service Efficiency and Productivity Table 16 | Route 3 Saturday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour							
Full Year							
Regular Semester	Average: 24.1						
Passengers per Trip							
Full Year	Average: 22						
Regular Semester	Average: 26.5						
(S) Operating Cost per Passenger							
Full Year	Average: \$4.28						
Regular Semester	Average: \$4.37						

Saturday On-Time Performance Table 17 | Route 3 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance	69.5	Average: 78.6%
Early: 7%	On-Time : 70%	Late: 23%



Saturday Ridership by Stop

Route 3 East

Figure 88 | Route 3 East Saturday Ridership by Stop: Outbound (Regular Semester)









Bloomington Route Optimization Study | Existing Conditions

Figure 89 | Route 3 East Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)
Figure 90 | Route 3 East Saturday Ridership by Stop: Inbound (Regular Semester)









Bloomington Route Optimization Study | Existing Conditions

Figure 91 | Route 3 East Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

Boardings

Route 3 West

Figure 92 | Route 3 West Saturday Ridership by Stop: Outbound (Regular Semester)







Figure 93 | Route 3 West Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 94 | Route 3 West Saturday Ridership by Stop: Inbound (Regular Semester)





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Figure 95 | Route 3 West Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

FOURSQUARE ITP INTEGRATED TRANSPORTATION PLANNING

Saturday Ridership by Trip

Route 3 East

Figure 96 | Route 3 East Saturday Outbound Ridership by Trip (Regular Semester)⁸



110 Boardings - Max. Passenger Load 100 90 80 70 60 50 40 30 20 10 0 8:00 AM 8:30 AM 9:00 AM 9:30 AM 7:30 AM 4:30 PM 5:30 PM 6:00 AM 6:30 AM 7:00 AM 2:00 PM 2:30 PM 3:30 PM 4:00 PM 5:00 PM 6:00 PM 6:30 PM 7:00 PM 7:30 PM 8:00 PM 10:00 PM 10:30 PM 11:00 PM 12:00 AM 12:30 AM 1:00 AM 0:00 AM 10:30 AM 11:30 AM L2:00 PM 12:30 PM 1:30 PM 8:30 PM 9:00 PM 9:30 PM 11:00 AM 1:00 PM 3:00 PM L1:30 PM

Figure 97 | Route 3 East Saturday Inbound Ridership by Trip (Regular Semester)9

⁹ Does not include a sample of the following trips: 9:01 AM, 11:01 AM, 1:01 PM, 3:01 PM, 5:01 PM



⁸ Does not include a sample of the following trips: 8:40 AM, 10:40 AM, 12:40 PM, 2:40 PM, 4:40 PM

Route 3 West

Figure 98 | Route 3 West Saturday Outbound Ridership by Trip (Regular Semester)



Figure 99 | Route 3 West Saturday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer¹⁰

Weekday On-Time Performance Table 18 | Route 3 Weekday On-Time Performance Analysis (Summer)

On-Time Performance	62.2%	Average: 72.8%	
Early: 14%	On-Time: 62%	Late: 24%	

¹⁰ Summer dataset does not include Saturday data



Weekday Ridership by Stop

Route 3 East

Figure 100 | Route 3 East Weekday Ridership by Stop: Outbound (Summer)









Figure 101 | Route 3 East Weekday Boardings and Alightings by Stop: Outbound (Summer)

Figure 102 | Route 3 East Weekday Ridership by Stop: Inbound (Summer)







Figure 103 | Route 3 East Weekday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions

Route 3 West

Figure 104 | Route 3 West Weekday Ridership by Stop: Outbound (Summer)







Figure 105 | Route 3 West Weekday Boardings and Alightings by Stop: Outbound (Summer)



Figure 106 | Route 3 West Weekday Ridership by Stop: Inbound (Summer)







Figure 107 | Route 3 West Weekday Boardings and Alightings by Stop: Inbound (Summer)



Weekday Ridership by Trip

Route 3 East

Figure 108 | Route 3 East Weekday Outbound Ridership by Trip (Summer)



Figure 109 | Route 3 East Weekday Inbound Ridership by Trip (Summer)





Route 3 West

Figure 110 | Route 3 West Weekday Outbound Ridership by Trip (Summer)



Figure 111 | Route 3 West Weekday Inbound Ridership by Trip (Summer)





Service Improvement Opportunities

Potential opportunities to strengthen Route 3 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Split Route 3 into two routes. The eastern and western branches of Route 3 serve different markets. This may cause confusion for riders and potential riders. For example, assigning separate route numbers to the two branches of Route 3 would prevent passengers from accidently boarding the wrong branch of Route 3 at the Transit Center. Similarly, two route numbers with separate schedule brochures will ensure that passengers understand the service frequency to expect on the respective routes.
- Increase frequency on eastern branch and eliminate Route 9 Limited service. Route 9 Limited follows an alignment that is more similar to Route 3 than to Route 9. Presenting it as a variant of Route 9 likely creates some confusion among new riders and prospective riders. If Route 9 Limited is eliminated, its resources could be used to increase frequency on the eastern branch or Route 3, at least during peak periods. This would likely increase ridership on the eastern branch of Route 3.
- Restructure service on the west side of Bloomington with a combination of fixed-route and innovative microtransit. The west side of Bloomington includes several large clusters of retail and multi-family housing. These land-uses are typically strong transit trip generators. However, the roadway network supporting these developments is often unconducive to traditional fixed-route bus service with 40-ft vehicles. For example, the Oakdale Apartments and Basswood Apartments are set too far back from Bloomfield Road to support pedestrian access to the major arterial. Thus, Route 4 buses must deviate from the route's primary alignments and operate through parking lots and private driveways to reach riders. A different approach to serving the west side would be to interline the western branch of Route 3 with the southern branch of Route 2 by extending Route 2 to Heatherwood Park via Tapp Road and Leonard Spring Road. This would create a large bi-directional loop around the perimeter of the area. Service on the inside of the perimeter loop could be provided by microtransit. Microtransit is an innovative demand response service that typically uses smaller vehicles that can be dispatched directly by riders using a mobile app (call-up options are also available). Microtransit vehicles could connect residents of the difficult-to-serve apartment communities to retail destinations such as Walmart or Aldi, or to transit connections with other routes.
- Coordinate service to and around College Mall/Jackson Creek Shopping Center loop. Routes 3 East, 8 and 9 all serve the shopping, employment and residential loop along College Mall Rd, Covenanter Drive, and Clarizz Boulevard. College Mall could serve as a transit hub for this area, from which very frequent service could be provided to IU and downtown Bloomington. There could then be frequent shuttles serving the other destinations in eastern Bloomington.
- Consider bus priority measures on 3rd Street/Atwater Ave/Jordan Ave loop. 3rd Street, Atwater Avenue, and Jordan Avenue carry a high volume and frequency of bus riders on several routes. These routes could be more efficient and attain higher on-time performance if there were dedicated bus lanes along the one-way pairs, and in the parking lane of Jordan Avenue. However, the Draft Bloomington Transportation Plan (2018) recommends restoring 3rd Street and Atwater Ave to two-way routes, which would likely conflict with this opportunity.
- Increase Saturday frequency to every thirty minutes on Route 3 West. Route 3 has the second highest Saturday ridership. Route 3 East has 30-minute headways, Route 3 West only has hourly headways on Saturdays. Increasing frequency to every 30 minutes on Route 3 West would very likely attract more riders.



ROUTE 4: BLOOMFIELD ROAD – HEATHERWOOD / HIGH STREET – SHERWOOD OAKS

Service Description

Route 4 (**Figure 112**) 60-minute service on weekdays and Saturdays from Sherwood Oaks to Heatherwood Mobile Homes via downtown Bloomington. The route is presented as two separate services in BT's online materials:

- A southern branch providing service from Sherwood Oaks to the Transit Center; and
- A western branch providing service from the Transit Center to Heatherwood Mobile Homes.

The route travels primarily along S Leonard Springs Road, W Bloomfield Road, W 2nd Street, S Rogers Street, W 4th Street, E Kirkwood Avenue, E 3rd Street, Atwater Avenue, S Jordan Avenue, E Maxwell Lane, South High Street, E Hillside Drive, S Maxwell Street, S Highland Avenue, E Winslow Road, S Henderson Street, S Walnut Street Pike, and Allendale Drive. Major destinations served include Twin Lakes Recreation Center, Bloomington Hospital, the Convention Center, several Indiana University facilities, Winslow Woods Park, and several housing complexes. Passengers may transfer from Route 4 to BT routes at the Transit Center (Routes 1, 2, 3, 5, and 7) and BT and IU Campus Bus routes along E 3rd Street and Atwater Avenue (BT Route 9, and the IU A, B, E, and Night Owl Routes).

Figure 112 | Route 4 Maps: West – Bloomfield Road/Heatherwood (left); South – High Street/Sherwood Oaks (right)



Source: Bloomington Transit



Strengths

- Service available relatively late on weekdays
- Very regular clockface service frequency
- Serves a number of large multi-family housing communities
- Serves areas of Bloomington with relatively high transit need and not served by other routes

Weaknesses

- Serves large apartment communities that are difficult to serve efficiently due to their layout and roadway networks
- Lower than average ridership per hour and ridership per trip
- Higher than average operating cost per passenger
- Relatively low service frequency for route with such high concentrations of multi-family housing



Operating Characteristics Table 19 | Route 4 Operating Characteristics

Origin and Destination		Heatherwood Mobile Homes to Sherwood Oaks						
Annual Operating Costs		\$702,162 (Rank: 5 of 9)						
Annual Ridership		161,664 (F	ank: 6 of 9)					
Average Daily Ridership	Weekday	578 (Rank: 7 of 9)						
	Saturday	263 (Rank: 6 of 8)						
	Sunday							
Span	Weekday	6:35 AM-11:50 PM						
	Saturday	8:10 AM-6:50 PM						
	Sunday	-						
Frequency	Weekday	High Street/ Sherwood Oaks: 60 minutes	Bloomfield Rd/Heatherwood: 60 minutes					
	Saturday	60 m	inutes					
	Sunday							
Route Connections		1, 2, 3, 5, 7, 9, A, B, E, Night Owl						
Key Points of Interest		Bloomington Hospital, Convention Center, IU Law School, IU Jordan Hall, IU Music School, Winslow Woods Park, and Winslow Sports Complex; Heatherwood Mobile Homes, Woodland Spring, Oakdale Square, Rolling Ridge, Basswood, Bradford Ridge, Forest Ridge, Canterbury, Cooper Beach, Willows, Maxwell, Heritage, Henderson Court, Winslow Ridge, Sherwood Hills, and Acadia Court Apartments; Walmart, Winslow Plaza						



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 20 | Route 4 Weekday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour							
Full Year	Average: 28.4						
Regular Semester	Average: 31.5						
Passengers per Trip							
Full Year	Average: 20.8						
Regular Semester	Average: 26.3						
(S) Operating Cost per Passenger							
Full Year	Average: \$3.60						
Regular Semester	Average: \$3.30						
·							

Weekday On-Time Performance

Table 21 | Route 4 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 75.2%
Early: 14%	On-Time: 77%	Late: 9%



Weekday Ridership by Stop

Route 4 South

Figure 113 | Route 4 South Weekday Ridership by Stop: Outbound (Regular Semester)









Figure 115 | Route 4 South Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 116 | Route 4 South Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

FOURSQUARE ITP

Route 4 West

Figure 117 | Route 4 West Weekday Ridership by Stop: Outbound (Regular Semester) ¹¹



¹¹ Ridership data on segment serving Forest Ridge Apartments unavailable in outbound direction







Figure 118 | Route 4 West Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 119 | Route 4 West Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 120 | Route 4 West Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

700 600



Boardings

ARRIVING DOWNTOWN TRANSI

Weekday Ridership by Trip

Route 4 South

Figure 121 | Route 4 South Weekday Outbound Ridership by Trip (Regular Semester)



Figure 122 | Route 4 South Weekday Inbound Ridership by Trip (Regular Semester)





Route 4 West

Figure 123 | Route 4 West Weekday Outbound Ridership by Trip (Regular Semester)



Figure 124 | Route 4 West Weekday Inbound Ridership by Trip (Regular Semester)





Saturday Service Efficiency and Productivity Table 22 | Route 4 Saturday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour								
Full Year	Average: 24.7							
Regular Semester	Average: 24.1							
Passengers per Trip								
Full Year	Average: 22							
Regular Semester	Average: 26.5							
(S) Operating Cost per Passenger								
Full Year	Average: \$4.28							
Regular Semester	Average: \$4.37							

Saturday On-Time Performance

Table 23 | Route 4 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Average: 78.6	%
Early: 23%	On-Time: 77%	



Saturday Ridership by Stop

Route 4 South

Figure 125 | Route 4 South Saturday Ridership by Stop: Outbound (Regular Semester)




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Figure 126 | Route 4 South Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 127 | Route 4 South Saturday Ridership by Stop: Inbound (Regular Semester)





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Figure 128 | Route 4 South Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)



Route 4 West

Figure 129 | Route 4 West Saturday Ridership by Stop: Outbound (Regular Semester)







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Figure 130 | Route 4 West Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 131 | Route 4 West Saturday Ridership by Stop: Inbound (Regular Semester)





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																													■ Ali	ghtin	gs
HEATHERWOOD PARK	LEONARD SPRINGS & WOODHA	LEONARD SPRINGS & CEDAR	LEONARD SPRINGS & MAYBUR	WOODLAND SPRINGS APARTME	LEONARD SPRINGS & FAIRIN	LEONARD SPRINGS WAL-MART	STATE ROAD 45 WAL-MART	STATE ROAD 45 & HICKORY	BASSWOOD & BLOOMFIELD RD	BASSWOOD APARTMENTS	BASSWOOD & GREENLEAF	BASSWOOD & COPPER BEACH	BASSWOOD FOREST RIDGE AP	OAKDALE & BLOOMFIELD	BLOOMFIELD & ROLLING RID	BLOOMFIELD & CORY	BLOOMFIELD & ANNA LEE	BLOOMFIELD & LANDMARK	BLOOMFIELD & ADAMS	ADAMS & BLOOMFIELD	ADAMS & ALLEN	ALLEN THE WILLOWS	MOTHER HUBBARD S CUPBOAR	PATTERSON & ALLEN	PATTERSON & 2ND	2ND & WALKER	2ND & MAPLE VIM CLINIC	2ND BLOOMINGTON HOSPITAL	ROGERS & HOWE	ROGERS & 3RD	4TH & MADISON WONDERLAB

Figure 132 | Route 4 West Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)



Saturday Ridership by Trip

Route 4 South

Figure 133 | Route 4 South Saturday Outbound Ridership by Trip (Regular Semester)¹²



Figure 134 | Route 4 South Saturday Inbound Ridership by Trip (Regular Semester)¹³



¹² Does not include a sample of the following trips: 8:10 AM, 10:10 AM, 12:10 PM, 2:10 PM, 4:10 PM, 6:10 PM

¹³ Does not include a sample of the following trips: 8:35 AM, 10:35 AM, 12:35 PM, 2:35 PM, 4:35 PM



Route 4 West

Figure 135 | Route 4 West Saturday Outbound Ridership by Trip (Regular Semester)¹⁴



Figure 136 | Route 4 West Saturday Inbound Ridership by Trip (Regular Semester)¹⁵



¹⁵ Does not include a sample of the following trips: 9:35 AM, 11:35 AM, 1:35 PM, 3:35 PM, 5:35 PM



¹⁴ Does not include a sample of the following trips: 9:10 AM, 11:10 AM, 1:10 PM, 3:10 PM, 5:10 PM

Service Analysis: Summer

Weekday On-Time Performance Table 24 | Route 4 Weekday On-Time Performance Analysis (Summer)





Weekday Ridership by Stop

Route 4 South

Figure 137 | Route 4 South Weekday Ridership by Stop: Outbound (Summer)







Figure 138 | Route 4 South Weekday Boardings and Alightings by Stop: Outbound (Summer)

Bloomington Route Optimization Study | Existing Conditions



Figure 139 | Route 4 South Weekday Ridership by Stop: Inbound (Summer)





700 600 500 400 300 200																												■ B	oardi lightir	ngs	
100 0 -100 -200 -300 -400 -500 -600 -700																															
	WALNUT STREET PIKE & ALL	SOUTH HENDERSON AND WALN	WINSLOW & PICCADILLY HEN	WINSLOW & WESTMINSTER WA	WINSLOW & ACADIA	HIGHLAND & WINSLOW	YMCA SHELTER	HIGHLAND & SHORT MONTESS	HIGHLAND & MILLER	MILLER & COVEY	MILLER & MAXWELL	MAXWELL & THORNTON	MAXWELL & HILLSIDE	HILLSIDE & DORCHESTER HE	HILLSIDE & NANCY	HIGH & MOORES PIKE	HIGH & E COVENANTER	HIGH & MAXWELL	MAXWELL & MAXWELL TER.	MAXWELL & MITCHELL	SHERIDAN & JORDAN	JORDAN & 2ND	JORDAN & ATWATER	3RD & JORDAN	3RD JORDAN HALL	IU LAW SCHOOL	INDIANA & 4TH LAW SCHOOL	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON	DOWNTOWN TRANSIT CENTER

Figure 140 | Route 4 South Weekday Boardings and Alightings by Stop: Inbound (Summer)



Route 4 West

Figure 141 | Route 4 West Weekday Ridership by Stop: Outbound (Summer)





700 600 500 400 300 200 100 0 -100 -200 -300																								∎ Boar ∎ Aligh	dings tings	
-400 -500 -600 -700	DOWNTOWN TRANSIT CENTER	COLLEGE & 3RD	ROGERS & 3RD	ROGERS & HOWE	2ND BLOOMINGTON HOSPITAL	2ND & EUCLID	2ND & WALKER	PATTERSON & 2ND	PATTERSON & ALLEN	MOTHER HUBBARDS CUPBOARD	ALLEN & LARKSPUR	ALLEN & ADAMS	ADAMS & WOODHILL	ADAMS & BLOOMFIELD	BLOOMFIELD & LANDMARK	BLOOMFIELD & ANNA LEE	BLOOMFIELD & CORY	BLOOMFIELD & ROLLING RID	LEONARD SPRINGS & STATE	LEONARD SPRINGS & STAPLE	LEONARD SPRINGS & FAIRIN	LEONARD SPRINGS PLAZA WE	LEONARD SPRINGS & MAYBUR	LEONARD SPRINGS & CEDAR	LEONARD SPRINGS & WOODHA	HEATHERWOOD PARK

Figure 142 | Route 4 West Weekday Boardings and Alightings by Stop: Outbound (Summer)

Figure 143 | Route 4 West Weekday Ridership by Stop: Inbound (Summer)





700 600 500 400 300 200																		■ E ■ A	Boarding	5
-100																				
-200																				
-300																				
-500																				
-600																				
-700	HEATHERWOOD PARK	LEONARD SPRINGS & WOODHA	LEONARD SPRINGS & CEDAR	LEONARD SPRINGS & MAYBUR	WOODLAND SPRINGS APARTME	LEONARD SPRINGS & FAIRIN	LEONARD SPRINGSWAL-MART	STATE ROAD 45 WAL-MART	STATE ROAD 45 & HICKORY	BASSWOOD & BLOOMFIELD RD	BASSWOOD APARTMENTS	BASSWOOD & GREENLEAF	BASSWOOD & COPPER BEACH	BASSWOOD FOREST RIDGE AP	OAKDALE APARTMENTS SHELT	2NDBLOOMINGTON HOSPITAL	ROGERS & HOWE	ROGERS & 3RD	4TH & MADISON WONDERLAB	DOWNTOWN TRANSIT CENTER

Figure 144 | Route 4 West Weekday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions

Weekday Ridership by Trip

Route 4 South

Figure 145 | Route 4 South Weekday Outbound Ridership by Trip (Summer)



Figure 146 | Route 4 South Weekday Inbound Ridership by Trip (Summer)





Route 4 West

Figure 147 | Route 4 West Weekday Outbound Ridership by Trip (Summer)



Figure 148 | Route 4 West Weekday Inbound Ridership by Trip (Summer)





Saturday On-Time Performance Table 25 | Route 4 Saturday On-Time Performance Analysis (Summer)





Saturday Ridership by Stop

Route 4 South

Figure 149 | Route 4 South Saturday Ridership by Stop: Outbound (Summer)





200 100 0 -100 -200 -300 -400 -500 -600																								
-700	DOWNTOWN TRANSIT CENTER	3RD & LINCOLN	3RD & GRANT	ATWATER & FESS	ATWATER & WOODLAWN OPTOM	ATWATER & HAWTHORNE	ATWATER & JORDAN	JORDAN & 2ND	JORDAN & 1ST	MAXWELL & MITCHELL	MAXWELL & MAXWELL TER.	MAXWELL & HIGH	HIGH & MARILYN	HIGH & HILLSIDE	HILLSIDE & NANCY	HILLSIDE & LONGWOOD HERI	MAXWELL & THORNTON	MILLER & COVEY LN	MILLER & HIGHLAND	HIGHLAND & AZALEA	HIGHLAND & WINSLOW	ALLENDALE & BRADSHIRE	ALLENDALE & BROWNING	ALLENDALE & DUNSTAN

Figure 150 | Route 4 South Saturday Boardings and Alightings by Stop: Outbound (Summer)

FOURSQUARE ITP INTEGRATED TRANSPORTATION PLANNING



Boardings

Alightings

ALLENDALE & ESSEX

ALLENDALE & WESTMINSTER ALLENDALE & WELLINGTON W WALNUT STREET PIKE & ALL

Bloomington Route Optimization Study | Existing Conditions

700

600 500 400

300

Figure 151 | Route 4 South Saturday Ridership by Stop: Inbound (Summer)





700 600 500 400 300 200																													■ Bo	bardiı ightin	ngs	
100 0 -100 -200 -300 -400 -500 -600																																
-700	WALNUT STREET PIKE & ALL	SOUTH HENDERSON AND WALN	WINSLOW & PICCADILLY HEN	WINSLOW & WESTMINSTER WA	WINSLOW & ACADIA	HIGHLAND & WINSLOW	YMCA SHELTER	HIGHLAND & SHORT MONTESS	HIGHLAND & MILLER	MILLER & COVEY	MILLER & MAXWELL	MAXWELL & THORNTON	MAXWELL & HILLSIDE	HILLSIDE & DORCHESTER HE	HILLSIDE & NANCY	HIGH & MOORES PIKE	HIGH & E COVENANTER	HIGH & MAXWELL	MAXWELL & MAXWELL TER.	MAXWELL & MITCHELL	SHERIDAN & JORDAN	JORDAN & 2ND	JORDAN & ATWATER	3RD & JORDAN	3RD JORDAN HALL	IU LAW SCHOOL	INDIANA & 4TH LAW SCHOOL	KIRKWOOD & INDIANA	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON	DOWNTOWN TRANSIT CENTER

Figure 152 | Route 4 South Saturday Boardings and Alightings by Stop: Inbound (Summer)

FOURSQUARE ITP INTEGRATED TRANSPORTATION PLANNING

Route 4 West

Figure 153 | Route 4 West Saturday Ridership by Stop: Outbound (Summer)





400 300																								Aligh	tings	
200 100 0 -100 -200 -300 -400 500																										
-500 -600 -700	DOWNTOWN TRANSIT CENTER	COLLEGE & 3RD	ROGERS & 3RD	ROGERS & HOWE	2ND BLOOMINGTON HOSPITAL	2ND & EUCLID	2ND & WALKER	PATTERSON & 2ND	PATTERSON & ALLEN	MOTHER HUBBARDS CUPBOARD	ALLEN & LARKSPUR	ALLEN & ADAMS	ADAMS & WOODHILL	ADAMS & BLOOMFIELD	BLOOMFIELD & LANDMARK	BLOOMFIELD & ANNA LEE	BLOOMFIELD & CORY	BLOOMFIELD & ROLLING RID	LEONARD SPRINGS & STATE	LEONARD SPRINGS & STAPLE	LEONARD SPRINGS & FAIRIN	LEONARD SPRINGS PLAZA WE	LEONARD SPRINGS & MAYBUR	LEONARD SPRINGS & CEDAR	LEONARD SPRINGS & WOODHA	HEATHERWOOD PARK

Figure 154 | Route 4 West Saturday Boardings and Alightings by Stop: Outbound (Summer)

Bloomington Route Optimization Study | Existing Conditions



700

600 500 -



Boardings

Figure 155 | Route 4 West Saturday Ridership by Stop: Inbound (Summer)







Figure 156 | Route 4 West Saturday Boardings and Alightings by Stop: Inbound (Summer)



Saturday Ridership by Trip

Route 4 South

Figure 157 | Route 4 South Saturday Outbound Ridership by Trip (Summer)



Figure 158 | Route 4 South Saturday Inbound Ridership by Trip (Summer)





Route 4 West

Figure 159 | Route 4 West Saturday Outbound Ridership by Trip (Summer)









Service Improvement Opportunities

Potential opportunities to strengthen Route 4 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Split Route 4 into two routes. The two branches of Route 4 serve different markets. This may cause confusion for riders and potential riders. For example, assigning separate route numbers to the two branches of Route 4 would prevent passengers from accidently boarding the wrong branch of 4 at the Transit Center. Similarly, two route numbers with separate schedule brochures will ensure that passengers understand the service frequency to expect on the respective routes.
- Interline Route 4 with Route 7 to create an east side circulator. Route 4 and Route 7 could be interlined at the YMCA by extending Route 7 along Winslow Road and Highland Avenue. Route 4 could then be shortened by a similar distance. Making the YMCA an end-of-line location removes the perception that it is a mid-route deviation, and also allows for a convenient layover location for buses. An interlined service could operate bidirectionally and link key community destinations like Bloomington High School, Lucky's Market, the YMCA, and several large apartment communities. The circulator would allow other routes, including Route 1 and Route 5 to be streamlined to provide faster service to downtown and the IU campus.
- Restructure service on the west side of Bloomington with a combination of fixed-route and innovative microtransit. The west side of Bloomington includes several large clusters of retail and multi-family housing. These land-uses are typically strong transit trip generators. However, the roadway network supporting these developments is often unconducive to traditional fixed-route bus service with 40-ft vehicles. For example, the Oakdale Apartments and Basswood Apartments are set too far back from Bloomfield Road to support pedestrian access to the major arterial. Thus, Route 4 buses must deviate from the route's primary alignments and operate through parking lots and private driveways to reach riders. A different approach to serving the west side would be to interline the western branch of Route 3 with the southern branch of Route 2 by extending Route 2 to Heatherwood Park via Tapp Road and Leonard Spring Road. This would create a large bidirectional loop around the perimeter of the area. Service on the inside of the perimeter loop could be provided by microtransit. Microtransit is an innovative demand response service that typically uses smaller vehicles that can be dispatched directly by riders using a mobile app (call-up options are also available). Microtransit vehicles could connect residents of the difficult-to-serve apartment communities to retail destinations such as Walmart or Aldi, or to transit connections with other routes.
- Eliminate Saturday service on southern branch. On Saturdays, the southern branch of Route 4 has very low ridership, and high operating costs per passenger. Eliminating this service can save resources or allow resources to be reinvested in better performing services.



ROUTE 5: SARE ROAD

Service Description

Route 5 (Figure 161) provides hourly service on weekdays Figure 161 | Route 5 Sare Road Map and Saturdays between downtown Bloomington (the Transit Center) and Jackson Creek Middle School on Sare Road. The route travels primarily along E Kirkwood Avenue, E 3rd Street, Atwater Avenue, S Jordan Avenue, S Sheridan Drive, E Maxwell Lane, S High Street, E Rogers Road, and Sare Road. All Route 5 trips travel the full alignment, serving destinations such as the IU Law School, Jordan Hall, the IU Music School, Childs Elementary School, Jackson Creek Middle School, and several housing complexes. Passengers may transfer from Route 5 to several BT routes at the Transit Center (Routes 1, 2, 3, 4, and 7) and BT and IU Campus Bus Routes along E 3rd Street and Atwater Ave (BT Route 9, and the IU A, B, and E Routes).

Rogers ES Binford ES 0A0 Maxwell 080 T 🌵 IU Building 着 Park Business Ð ++++ Railroad eritag

Strengths

- Service available relatively late on weekdays
- Very regular clockface service frequency
- Relatively strong on-time performance
- Provides fairly direct service from Sare Road corridor with high concentration of multi-family housing to both IU and downtown Bloomington

Weaknesses

- Below average ridership per hour and ridership per trip
- Above average cost per passenger
- Very low ridership on Saturdays

The sections below provide details on Route 5's operating

characteristics and service performance, culminating in a list of service improvement opportunities for the route.





Source: Bloomington Transit

Operating Characteristics Table 26 | Route 5 Operating Characteristics

Origin and Destination		Transit Center to Jackson Creek Middle School
Annual Operating Costs		\$330,263 (Rank: 3 of 9)
Annual Ridership		65,267 (Rank: 8 of 9)
Average Daily Ridership	Weekday	239 (Rank: 8 of 9)
	Saturday	76 (Rank: 8 of 8)
	Sunday	
Span	Weekday	7:03 AM-11:00 PM
	Saturday	8:03 AM-7:00 PM
	Sunday	-
Frequency	Weekday	60 minutes
	Saturday	60 minutes
	Sunday	-
Route Connections		1, 2, 3, 4, 7, 8, 9, A, B, E, Night Owl
Key Points of Interest		IU Law School, IU Jordan Hall, IU Music School, Childs Elementary School, Jackson Creek Middle School; Maxwell Terrace, Heritage, Woodland, Meadow Creek, Steeplechase Apartments, Oaklawn Townhomes



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 27 | Route 5 Weekday Service Productivity Metrics (Full Year and Regular Semester)

Ø	Passengers per Hour
Full Year	Average: 28.4
Regular Semester	Average: 31.5
	Passengers per Trip
Full Year	Average: 20.8
Regular Semester	Average: 26.3
	Operating Cost per Passenger
Full Year	Average: \$3.60
Regular Semester	Average: \$3.30

Weekday On-Time Performance Table 28 | Route 5 Weekday On-Time Performance Analysis (Regular Semester)





Weekday Ridership by Stop Figure 162 | Route 5 Weekday Ridership by Stop: Outbound (Regular Semester)








Figure 163 | Route 5 Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 164 | Route 5 Weekday Ridership by Stop: Inbound (Regular Semester)





																										■ B ■ A	lighti	ings ngs
																						• •						
JACKSON CREEK MIDDLE SCH	SARE & MILL STONE	SARE & CANADA	SARE & E. CREEKS EDGE IM	SARE & OLSON OAKLAWN	SARE & MEADOWCREEK BOULE	SARE & ROGERS	ROGERS & SPICEWOOD	ROGERS & WINDING BROOK	HIGH CHILDS ELEMENTARY	HIGH & MEADOWBLUFF	HIGH & WIMBLET ON	HIGH & ARDEN	HIGH & MOORES PIKE	HIGH & E COVENANTER	HIGH & MAXWELL	MAXWELL & MAXWELL TER.	MAXWELL & MITCHELL	SHERIDAN & JORDAN	JORDAN & 2ND	JORDAN & ATWATER	3RD & JORDAN	3RD JORDAN HALL	I U LAW SCHOOL	INDIANA & 4TH LAW SCHOOL	KIRKWOOD & INDIANA	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON

Figure 165 | Route 5 Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)



Weekday Ridership by Trip

Figure 166 | Route 5 Weekday Outbound Ridership by Trip (Regular Semester)





Figure 167 | Route 5 Weekday Inbound Ridership by Trip (Regular Semester)



Saturday Service Efficiency and Productivity Table 29 | Route 5 Saturday Service Productivity Metrics (Full Year and Regular Semester)

Sector 1	Passengers per Hour
Full Year	Average: 24.7
Regular Semester	Average: 24.1
	Passengers per Trip
Full Year	Average: 22 6.3
Regular Semester	Average: 26.5
	Operating Cost per Passenger
Full Year	Average: \$4.28
Regular Semester	Average: \$4.37

Saturday On-Time Performance Table 30 | Route 5 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 78.6%
Early: 5%	On-Time: 84%	Late: 12%



Saturday Ridership by Stop Figure 168 | Route 5 Saturday Ridership by Stop: Outbound (Regular Semester)





700 600																										Boarc	lings	
500 400 300																										Alight	ings	
100																											10101010101010101	
-100 -200 -300 -400 -500 -600 -700																												
	DOWNTOWN TRANSIT CENTER	LINCOLN & KIRKWOOD	KIRKWOOD & GRANT	KIRKWOOD & DUNN DUNKIRK	DUNN & 4TH	ATWATER & FESS	ATWATER & WOODLAWN OPTOM	ATWATER & HAWTHORNE	ATWATER & JORDAN	JORDAN & 2ND	JORDAN & 1ST	MAXWELL & MITCHELL	MAXWELL & MAXWELL TER.	Maxwell & High	HIGH & MARILYN	HIGH & HILLSIDE	HIGH & ARDEN	HIGH & GREENBRIAR	HIGH & ROCK CREEK CHILDS	ROGERS & THE STANDS	ROGERS SHERWOOD OAKS CHR	ROGERS & SARE	SARE & SOUTHERN OAKS	SARE STEEPLECHASE APARTM	SARE STEEPLECHASE APARTM	SARE & CANADA	SARE & MILL STONE	JACKSON CREEK MIDDLE SCH

Figure 169 | Route 5 Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 170 | Route 5 Saturday Ridership by Stop: Inbound (Regular Semester)





																										■ B ■ A	lighti	ngs
JACKSON CREEK MIDDLE SCH	SARE & MILL STONE	SARE & CANADA	SARE & E. CREEKS EDGE IM	SARE & OLSON OAKLAWN	SARE & MEADOWCREEK BOULE	SARE & ROGERS	ROGERS & SPICEWOOD	ROGERS & WINDING BROOK	HIGH CHILDS ELEMENTARY	HIGH & MEADOWBLUFF	HIGH & WIMBLETON	HIGH & ARDEN	HIGH & MOORES PIKE	HIGH & E COVENANTER	HIGH & MAXWELL	MAXWELL & MAXWELL TER.	MAXWELL & MITCHELL	SHERIDAN & JORDAN	JORDAN & 2ND	JORDAN & ATWATER	3RD & JORDAN	3RD JORDAN HALL	I U LAW SCHOOL	INDIANA & 4TH LAW SCHOOL	KIRKWOOD & INDIANA	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON

Figure 171 | Route 5 Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

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Saturday Ridership by Trip

Figure 172 | Route 5 Saturday Outbound Ridership by Trip (Regular Semester)





Figure 173 | Route 5 Saturday Inbound Ridership by Trip (Regular Semester)



Service Analysis: Summer¹⁶

Weekday On-Time Performance Table 31 | Route 5 Weekday On-Time Performance Analysis (Summer)



¹⁶ Summer dataset does not include Saturday data.



Weekday Ridership by Stop Figure 174 | Route 5 Weekday Ridership by Stop: Outbound (Summer)







Bloomington Route Optimization Study | Existing Conditions

Figure 175 | Route 5 Weekday Boardings and Alightings by Stop: Outbound (Summer)



Figure 176 | Route 5 Weekday Ridership by Stop: Inbound (Summer)





700 600 500 400 300 200 100 0 -100 -200																												Boardi Iighti	ngs	
-300 -400 -500 -600 -700	JACKSON CREEK MIDDLE SCH	SARE & MILL STONE	SARE & CANADA	SARE & E. CREEKS EDGE IM	SARE & OLSON OAKLAWN	SARE & MEADOWCREEK BOULE	SARE & ROGERS	ROGERS & SPICEWOOD	ROGERS & WINDING BROOK	HIGH CHILDS ELEMENTARY	HIGH & MEADOWBLUFF	HIGH & WIMBLETON	HIGH & ARDEN	HIGH & MOORES PIKE	HIGH & E COVENANTER	HIGH & MAXWELL	MAXWELL & MAXWELL TER.	MAXWELL & MITCHELL	SHERIDAN & JORDAN	JORDAN & 2ND	JORDAN & ATWATER	3RD & JORDAN	3RD JORDAN HALL	IU LAW SCHOOL	INDIANA & 4TH LAW SCHOOL	KIRKWOOD & INDIANA	KIRKWOOD & GRANT	KIRKWOOD & LINCOLN LIBRA	KIRKWOOD & WASHINGTON	DOWNTOWN TRANSIT CENTER

Figure 177 | Route 5 Weekday Boardings and Alightings by Stop: Inbound (Summer)



Weekday Ridership by Trip

Figure 178 | Route 5 Weekday Outbound Ridership by Trip (Summer)









Service Improvement Opportunities

Potential opportunities to strengthen Route 5 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Consolidate Route 5 and southern branch of Route 4. Routes 5 and the southern branch of Route 4 follow the same alignment until Hillside Drive, where the two routes diverge. Route 5 ridership is fairly light between Hillside Drive and Rogers Road, so the route could instead follow the Route 4 alignment from Hillside to Winslow Road and then rejoin the existing Route 5 alignment from Rogers Road to Jackson Creek Middle School.
- Eliminate Route 5 Saturday service. On Saturdays, Route 5 has very low ridership, and high operating costs per passenger. This service may be a candidate to be eliminated, having resources reallocated to other, better performing services that serve more people.



ROUTE 6: CAMPUS SHUTTLE / CAMPUS LIMITED

Service Description

Route 6 (**Figure 180**) provides service every 20 minutes on weekdays and 80-minute weekend service from The Arch Apartments to Knightridge Apartments via the Indiana University campus. Route 6 Limited provides 20-minute, limited shuttle service on weekdays on the trunk segment of Route 6: from Smallwood Apartments to Fountain Park Apartments via the campus. Route 6 travels primarily along Northlane Drive, W Gourley Pike, N Kinser Pike, W 17th Street, N College Avenue, N Walnut Street, E 7th Street, N Woodlawn Avenue, E 10th Street, N Smith Road, E Hagan Street, S Park Ridge Road, E 3rd Street, and Knightridge Road. Route 6 full alignment trips serve several IU facilities, myriad apartment complexes, and 10th and Bypass Shopping Center. Passengers may transfer from Route 6 to several BT routes (Routes 1, 2, 3, 8, and 9) and all IU Campus Bus routes. Route 6 and 6 Limited operate on a reduced service schedule when IU is not in regular session.

Figure 180 | Route 6 Maps: Campus Shuttle (above); Route 6 Limited (below)



Source: Bloomington Transit



Strengths

- Provides high frequency service to key destinations
- Ranks first in average daily weekday and annual ridership
- Relatively high ranking in average Saturday ridership
- Above-average weekday and Saturday service productivity during regular semester service in terms of passengers per hour, passengers per trip, and operating costs per passenger

Weaknesses

- High overall operating costs
- Passenger loads exceed seating capacity on some peak-period trips
- Low weekday on-time performance during regular semester service
- Reduced summer service

The sections below provide details on Route 6's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.

Operating Characteristics

Table 32 | Route 6 and 6 Limited Operating Characteristics

Origin and Destination		Campus Shuttle:	Limited:								
		The Arch Apartments to Knightridge Apartments	Smallwood Apartments to Fountain Park Apartments								
Annual Operating Costs		\$1,320,475	(Rank: 9 of 9)								
Annual Ridership	_	1,070,945 (Rank: 1 of 9)								
Average Daily Ridership	Weekday	4,004 (Ra	nk: 1 of 9)								
	Saturday	537 (Rank: 3 of 8)									
	Sunday	346 (Rank: 2 of 2)									
Span: Regular Semester ¹⁷	Monday-Thursday	Campus Shuttle:	Limited:								
		6:50 AM-11:30 PM	7:30 AM-9:50 PM								
	Friday	Campus Shuttle:	Limited:								
		6:50 AM-11:30 PM	7:10 AM-2:10 PM								
	Saturday	Campus Shuttle:	Limited:								
		7:30 AM-11:30 PM									

¹⁷ This table provides span and frequency information for operation during regular semester and summer service. Span and frequency information are subject to change during other semester break periods.



	Sunday	Campus Shuttle:	Limited:						
		9:30 AM-7:30 PM							
Frequency: Regular Semester	Monday-Thursday	Campus Shuttle:	Limited:						
		20 minutes (40 minutes after 6:30 PM)	20 minutes						
	Friday	Campus Shuttle:	Limited:						
		20 minutes (40 minutes after 5:50 PM)	20 minutes						
	Saturday-Sunday	Campus Shuttle:	Limited:						
		80 minutes	-						
Span: Summer	Monday-Friday	Campus Shuttle:	Limited:						
		7:20 AM-7:25 PM	7:47 AM-5:59 PM						
	Saturday-Sunday	Campus Shuttle:	Limited:						
		7:30 AM-7:20 PM							
Frequency: Summer	Monday-Friday	Campus Shuttle:	Limited:						
		40 minutes	40 minutes						
	Saturday-Sunday	Campus Shuttle:	Limited:						
		80 minutes							
Route Connections		1, 2, 3, 8, 9, A, B, E, W, W Limited, Night Owl							
Key Points of Interest		 IMU, IU Auditorium, IU Kelly Business School, IU Student Recreational Sports Center, IU Wells Library, and IU Cyberinfrastructure Building; The Crest, Smallwood, Eigenmann, Tulip Tree, Fountain Park, Woodbridge III, Barrington, Meadow Park, Springmill, Yorktown, Reserve on 3rd, Knightridge Apartments; 10th and Bypass Shopping Center 							



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 33 | Route 6 and 6 Limited Weekday Service Productivity Metrics (Full Year and Regular Semester)

C C	Passengers per Hour										
Full Year	Average: 28.4										
Regular Semester	Average: 31.5										
	Passengers per Trip										
Full Year	Average: 20.8										
Regular Semester	Average: 26.3										
	Operating Cost per Passenger										
Full Year	Average: \$3.60 \$1.19										
Regular Semester	Average: \$3.30 \$1.04										

Weekday On-Time Performance

Table 34 | Route 6 and 6 Limited Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 75.2%
Early: 18%	On-Time: 69%	Late: 13%



Weekday Ridership by Stop

Route 6

Figure 181 | Route 6 Weekday Ridership by Stop: Outbound (Regular Semester)









Figure 182 | Route 6 Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 183 | Route 6 Weekday Ridership by Stop: Inbound (Regular Semester)









Figure 184 | Route 6 Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

205

Route 6 Limited

Figure 185 | Route 6 Limited Weekday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 186 | Route 6 Limited Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 187 | Route 6 Limited Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 188 | Route 6 Limited Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)





Weekday Ridership by Trip

Route 6

Figure 189 | Route 6 Weekday Outbound Ridership by Trip (Regular Semester)



Figure 190 | Route 6 Weekday Inbound Ridership by Trip (Regular Semester)







Figure 191 | Route 6 Limited Weekday Outbound Ridership by Trip (Regular Semester)¹⁸





Figure 192 | Route 6 Limited Weekday Inbound Ridership by Trip (Regular Semester)¹⁹

¹⁸ Does include a sample of the following trips: 2:10 PM, 2:50 PM, 3:30 PM, 4:10 PM, 4:50 PM, 5:30 PM, 6:10 PM, 6:50 PM, 7:30 PM, 8:10 PM, 8:50 PM, 9:30 PM

¹⁹ Does not include a sample of the following trips: 1:50 PM, 2:30 PM, 3:10 PM, 3:50 PM, 4:30 PM, 5:10 PM, 5:50 PM, 6:30 PM, 7:10 PM, 7:50 PM, 8:30 PM, 9:10 PM



Saturday Service Efficiency and Productivity Table 35 | Route 6 Saturday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour
Average: 24.7
Average: 24.1
Passengers per Trip
Average: 22
Average: 26.5
Operating Cost per Passenger
Average: \$4.28
Average: \$4.37

Saturday On-Time Performance Table 36 | Route 6 and 6 Limited Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Average: 78.6%
Early: 15%)n-Time: 82% Late: 3 <mark>%</mark>



Saturday Ridership by Stop

Route 6

Figure 193 | Route 6 Saturday Ridership by Stop: Outbound (Regular Semester)







Figure 194 | Route 6 Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)



Figure 195 | Route 6 Saturday Ridership by Stop: Inbound (Regular Semester)







Figure 196 | Route 6 Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)


Saturday Ridership by Trip

Route 6

Figure 197 | Route 6 Saturday Outbound Ridership by Trip (Regular Semester)



Figure 198 | Route 6 Saturday Inbound Ridership by Trip (Regular Semester)





Sunday Service Efficiency and Productivity Table 37 | Route 6 Sunday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour									
Full Year	Average: 43.9								
Regular Semester	Average: 54.4 40.2								
Passengers per Trip									
Full Year	Average: 43.1								
Regular Semester	Average: 62.4								
Operating Cost per Passenger									
Full Year	Average: \$1.69								
Regular Semester	Average: \$1.40								

Sunday On-Time Performance Table 38 | Route 6 and 6 Limited Sunday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Average: 70.4%
Earty: 4% On-T	ime: 96%



Sunday Ridership by Stop

Route 6

Figure 199 | Route 6 Sunday Ridership by Stop: Outbound (Regular Semester)







Figure 200 | Route 6 Sunday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions



Figure 201 | Route 6 Sunday Ridership by Stop: Inbound (Regular Semester)







Figure 202 | Route 6 Sunday Boardings and Alightings by Stop: Inbound (Regular Semester)



Sunday Ridership by Trip

Route 6

Figure 203 | Route 6 Sunday Outbound Ridership by Trip (Regular Semester)



Figure 204 | Route 6 Sunday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer²⁰

Weekday On-Time Performance Figure 205 | Route 6 and 6 Limited Weekday On-Time Performance Analysis (Summer)



²⁰ Summer ridership data is unavailable for the following day types and directions: Saturday (outbound/inbound); Sunday (inbound). Summer on-time performance data is also unavailable for Saturday.



Weekday Ridership by Stop

Route 6

Figure 206 | Route 6 Weekday Ridership by Stop: Outbound (Summer)







Figure 207 | Route 6 Weekday Boardings and Alightings by Stop: Outbound (Summer)



Figure 208 | Route 6 Weekday Ridership by Stop: Inbound (Summer)









Figure 209 | Route 6 Weekday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions

700 600

500 400

300 200 100 -100 -200 -300 -400 Boardings

Alightings

THE ARCH APARTMENTS

KINSER PIKE & GOURLEY PI

THE ARCHGOURLEY PIKE

17TH & WOODBURN 17TH & KINSER PIKE

Route 6 Limited

Figure 210 | Route 6 Limited Weekday Ridership by Stop: Outbound (Summer)







Figure 211 | Route 6 Limited Monday-Thursday Boardings and Alightings by Stop: Outbound (Summer)





Figure 212 | Route 6 Limited Weekday Ridership by Stop: Inbound (Summer)





Bloomington Route Optimization Study | Existing Conditions

Figure 213 | Route 6 Limited Weekday Boardings and Alightings by Stop: Inbound (Summer)





Weekday Ridership by Trip

Route 6

Figure 214 | Route 6 Weekday Outbound Ridership by Trip (Summer)



Figure 215 | Route 6 Weekday Inbound Ridership by Trip (Summer)





Route 6 Limited

Figure 216 | Route 6 Limited Weekday Outbound Ridership by Trip (Summer)



Figure 217 | Route 6 Limited Weekday Inbound Ridership by Trip (Summer)





Sunday On-Time Performance Figure 218 | Route 6 and 6 Limited Sunday On-Time Performance Analysis (Summer)²¹

Lany. 20% On-hime. 72% Eate. 0%

²¹ Route 6 is the only BT route for which Sunday Summer on-time performance data was recorded. As such, no performance comparison to an average was created.



Sunday Ridership by Stop

Route 6

Figure 219 | Route 6 Sunday Ridership by Stop: Outbound (Summer)







Figure 220 | Route 6 Weekday Boardings and Alightings by Stop: Outbound (Summer)



Sunday Ridership by Trip

Route 6

Figure 221 | Route 6 Weekday Outbound Ridership by Trip (Summer)





Service Improvement Opportunities

Potential opportunities to strengthen Routes 6 and 6 Limited are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Configure 6 Limited to serve the new hospital. The Indiana University Health Bloomington Hospital is being relocated from southwest Bloomington to a new facility at 2000 North Range Road, the current site of the IU golf driving range. Currently, this site is not served by any Bloomington Transit route. The 6 Limited's eastern end could be reconfigured to serve the site, circling via Range Road inbound, and exiting outbound using State Route 45/46.
- Increase weekend frequency to hourly. Route 6 ranks relatively high in average Saturday ridership and is one of two BT routes deemed worthy of Sunday service. However, Route 6 operates with 80-minute service frequency of weekends, which limits the route's convenience and appeal for most riders. Operating weekend service at least hourly would result in an easy-to-remember clock-face schedule, meaning each stop is served at the same number of minutes past the hour, each hour. The simplicity of a clock-face schedule, coupled with more frequent service, would very likely attract more riders.
- Decrease the number of stops along 10th Street to improve on-time performance. During regular semester service, Route 6's on-time performance is 59 percent, well below the system average and 80 percent, a common industry standard. While reducing the number of total stops served along 10th Street could create longer walks to bus stops for some riders, this intervention could also reduce total boarding and dwell times to offer a faster service.
- Install pedestrian safety interventions around 10th Street and Fee Lane. The region around the area of 10th Street and Fee Lane is home to several Indiana University buildings, including the School of Public and Environmental Affairs, the Kelley School of Business, and Hodge Hall Undergraduate Center. Although there is a crosswalk along 10th Street, this convergence can lead to an abundance of pedestrian activity, slowing buses and creating safety concerns. Interventions to slow pedestrian activity, such as enhanced or signalized crosswalks, could lead to safer crossings and improve on-time performance on Route 6.
- Eliminate Limited service during summer periods. Route 6 Limited ridership is generally very low during the summer service period. Most trips carry fewer than 10 passengers. Eliminating Route 6 Limited service during summer months would help reduce the annual operating cost of the route with limited impact on ridership.
- Create bus-priority measures on congested portions of 10th Street. 10th Street through IU has high ridership and low on-time performance. The City, University and BT could work together to create bus priority measures to increase the efficiency of buses moving through the corridor. This could include limiting non-transit vehicles during some portions of the day or forcing vehicles to turn at each block. This would retain abutter access, but limit through movements.



ROUTE 7: HENDERSON – WALNUT EXPRESS

Service Description

Route 7 (Figure 222) provides 15-20-minute service on weekdays from E Winslow Road to E 3rd Street south of the Indiana University campus. The route travels primarily along E Winslow Road, S Henderson Street, E Hillside Drive, S Walnut Street, S College Avenue, E 3rd Street, and Atwater Avenue. Route 7 trips serve Bloomington South High School, Templeton Elementary School, IU Law School, IU Swain Hall, IU Jordan Hall, the IU School of Music, Brandon Court, Timber Ridge, Summit Pointe, Regency Place Apartments, Winslow Plaza, Walnut Park, and Walnut Station Shopping Center. Passengers may transfer from Route 7 to several BT routes in downtown Bloomington (Routes 1, 2, 3, 4, and 5) and BT and IU Campus Bus routes along 3rd Street and Atwater Avenue (BT Route 9 and the IU Campus Bus A, B, and E Routes). Route 7 does not operate during IU break periods, including summer.



Strengths

- Provides relatively high-frequency service (when IU in session) in key corridors
- Above-average on-time performance
- Service available relatively late on Mondays-Thursdays
- Low operating cost

Weaknesses

- Below-average ridership per trip and ridership per hour
- Relatively large one-way terminal loop
- Somewhat redundant with southern branch of Route 1
- No summer service

The sections below provide details on Route 7's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.



Operating Characteristics Table 39 | Route 7 Operating Characteristics

Origin and Destination		Winslow Plaza to 3 rd Street & Jordan Avenue						
Annual Operating Costs		\$290,261 (Rank: 2 of 9)						
Annual Ridership		96,003 (Rank: 7 of 9)						
Average Daily Ridership	Weekday	611 (Rank: 6 of 9) 						
	Saturday							
	Sunday							
Span	Monday-Thursday	7:00 AM-9:40 PM						
	Friday	7:00 AM-7:25 PM						
	Saturday	-						
	Sunday							
Frequency	Monday-Thursday	15/20 minutes						
		(35 minutes after 7:20 PM)						
	Friday	15/20 minutes						
		(35 minutes after 5:40 PM)						
	Saturday							
	Sunday							
Route Connections		1, 2, 3, 4, 9, A, B, E						
Key Points of Interest		Bloomington South High School, Templeton Elementary School, IU Law School, IU Swain Hall, IU Jordan Hall, IU School of Music, Brandon Court, Timber Ridge, Summit Pointe, and Regency Place Apartments. Winslow Plaza, Walnut Park and Walnut Station Shopping Center						



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 40 | Route 7 Weekday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour							
Full Year	Average: 28.4						
Regular Semester	Average: 31.5						
Passengers per Trip							
Full Year	Average: 20.8						
Regular Semester	Average: 26.3						
(S) Operating Cost per Passenger							
Full Year	Average: \$3.60						
Regular Semester	Average: \$3.30						

Weekday On-Time Performance

Table 41 | Route 7 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Average: 75.2%
Early: 10% On-	Time: 87% Late: 3%



Weekday Ridership by Stop

Monday-Thursday Schedule

Figure 223 | Route 7 Monday-Thursday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 224 | Route 7 Monday-Thursday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 225 | Route 7 Monday-Thursday Ridership by Stop: Inbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 226 | Route 7 Monday-Thursday Boardings and Alightings by Stop: Inbound (Regular Semester)

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Friday Schedule

Figure 227 | Route 7 Friday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 228 | Route 7 Friday Boardings and Alightings by Stop: Outbound (Regular Semester)



Figure 229 | Route 7 Friday Ridership by Stop: Inbound (Regular Semester)







Bloomington Route Optimization Study | Existing Conditions

Figure 230 | Route 7 Friday Boardings and Alightings by Stop: Inbound (Regular Semester)



Weekday Ridership by Trip

Monday-Thursday Schedule

Figure 231 | Route 7 Monday-Thursday Outbound Ridership by Trip (Regular Semester)²²



Figure 232 | Route 7 Monday-Thursday Inbound Ridership by Trip (Regular Semester)²³



²² Does not include a sample of the following trips: 7:09 AM, 7:44 AM, 8:44 AM, 9:29 AM, 10:04 AM, 10:39 AM, 11:49 AM, 12:29 PM, 1:09 PM, 1:49 PM, 2:29 PM, 3:09 PM, 4:29 PM, 5:09 PM, 5:49 PM

²³ Does not include a sample of the following trips: 7:00 AM, 7:35 AM, 8:10 AM, 8:45 AM, 9:20 AM, 9:55 AM, 10:30 AM, 11:05 AM, 11:40 AM, 12:20 PM, 1:40 PM, 2:20 PM, 3:00 PM, 3:40 PM, 4:20 PM, 5:00 PM, 5:40 PM



Friday Schedule

Figure 233 | Route 7 Friday Outbound Ridership by Trip (Regular Semester)²⁴



Figure 234 | Route 7 Friday Inbound Ridership by Trip (Regular Semester)25



²⁴ Does not include a sample of the following trips: 7:29 AM, 8:04 AM, 8:39 AM, 9:14 AM, 9:49 AM, 10:24 AM, 10:59 AM, 11:34 AM, 12:09 PM, 12:49 PM, 2:09 PM, 2:49 PM, 4:09 PM, 4:49 PM, 5:29 PM

²⁵ Does not include a sample of the following trips: 7:20 AM, 7:55 AM, 8:30 AM, 9:05 AM, 9:40 AM, 10:15 AM, 10:50 AM, 11:25 AM, 12:00 PM, 12:40 PM, 12:00 PM, 2:00 PM, 2:40 PM, 3:20 PM, 4:00 PM, 4:40 PM, 5:20 PM


Service Improvement Opportunities

Potential opportunities to strengthen Routes 7 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Consolidate Route 7 and the Route 1 South. Route 7 and Route 1 both serve the Walnut Street and Henderson Street corridors, but follow slightly different alignments. Consolidating the two routes could create a frequent and simple service for riders, while saving resources for BT. Both routes currently operate one-way loops traveling southbound on Walnut Street and northbound on Walnut Street Pike. In both cases, ridership is significantly higher on Walnut Street Pike than on Walnut Street. A consolidated route could operate bidirectionally on Walnut Street, with buses either turning around at Kroger on Rhorer Road or via and end of line loop along Rhorer Road, Walnut Street, and Burks Drive. Consolidating the routes could also help reduce confusion during summer months and other times when IU is not in session. A consolidated route could operate with reduced frequency during academic break periods, but riders would not have to transition to a different route than the one to which they are accustomed.
- Improve passenger amenities and pedestrian infrastructure to streamline route. If Route 7 is consolidated with Route 1, some destinations that currently receive direct service such as the Sassafras Hills Apartments and Walnut Woods Apartments would instead have service one or two blocks away. To compensate riders for the loss of direct service, BT could invest in enhanced shelters along Henderson Street to improve the waiting experience. Enhanced shelters may include lighting, heating, passenger information, and more available seating than a typical bus shelter. Passengers are often willing to walk a slightly longer distance to an enhanced shelter than a regular one. Bidirectional service along Walnut Street Pike could also allow buses to serve the Walnut Grove Apartments (currently on Route 1) from the street, rather than by entering the apartment complex property. However, this may require a cross-walk to allow residents of the apartment community to safely cross Walnut Street Pike, as well as concrete pad on the northbound side of the street to provide a safe and level waiting environment. Coordination with the City will likely be necessary to implement these improvements.



ROUTE 8: EASTSIDE LOCAL

Service Description

Route 8 (Figure 235) provides hourly service on weekdays and Saturdays from Jackson Creek Middle School to the intersection of E 3rd Street and E Morningside Drive. The route travels primarily along S Sare Road, S College Mall Road, E 2nd Street, S Woodscrest Drive, E 3rd Street, S Kingston Drive, E Longview Avenue, N Pete Ellis Drive, E 10th Street, N Smith Road, and E Morningside Drive. Route 8 trips serve destinations such as Jackson Creek Middle School, Steeplechase, Oaklawn Park Townhomes, Meadow Creek, Renwick Village, Hunter Ridge, Cambridge Square, Fountain Park, Woodbridge III, Barrington, The Crest, Meadow Park, Spring Mill Apartments, Jackson Creek, College Mall, Eastland Plaza, Target, and Kmart. Available by phone request, Route 8 also offers one deviated service trip in each direction to the Stonebelt Center. Passengers may transfer from Route 8 to BT routes 3, 5, 6, and 9 in several locations.



Strengths

- Very regular clockface service frequency
- Low operating cost
- Above-average on-time performance
- Saturday service

Weaknesses

- Below-average ridership per trip and ridership per hour
- Above-average operating cost per passenger
- All weekday trips carry fewer than 10 passengers
- Very low ridership along Sare Road, between Moores Pike and Rodgers Road
- No direct service to IU or downtown
- No Sunday service

The sections below provide details on Route 8's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.





Operating Characteristics Table 42 | Route 8 Operating Characteristics

Origin and Destination		Jackson Creek Middle School to 3 rd Street & Morningside Drive
Annual Operating Costs		\$248,134 (Rank: 1 of 9)
Annual Ridership		29,901 (Rank: 9 of 9)
Average Daily Ridership	Weekday	93 (Rank: 9 of 9)
	Saturday	117 (Rank: 7 of 8)
	Sunday	
Span	Monday-Saturday	8:27 AM-7:08 PM
	Sunday	
Frequency	Monday-Saturday	60 minutes
	Sunday	
Route Connections		3, 5, 6, 9
Key Points of Interest		Jackson Creek Middle School, Steeplechase, Oaklawn Park Townhomes, Meadow Creek, Renwick Village, Hunter Ridge, Cambridge Square, Fountain Park, Woodbridge III, Barrington, The Crest, Meadow Park, and Spring Mill Apartments, Jackson Creek, College Mall, and Eastland Plaza Shopping Centers, Target, and Kmart.



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 43 | Route 8 Weekday Service Productivity Metrics (Full Year and Regular Semester)

G	Passengers per Hour
Full Year	Average: 28.4
Regular Semester	Average: 31.5
	Passengers per Trip
Full Year	Average: 20.8
Regular Semester	Average: 26.3
	Operating Cost per Passenger
Full Year	Average: \$3.60
Regular Semester	Average: \$3.30

Weekday On-Time Performance

Table 44 | Route 8 Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 75.2%
Early: 11%	On-Time: 78%	Lat <mark>e: 11%</mark>



Weekday Ridership by Stop Figure 236 | Route 8 Weekday Ridership by Stop: Outbound (Regular Semester)





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Figure 237 | Route 8 Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)

Figure 238 | Route 8 Weekday Ridership by Stop: Inbound (Regular Semester)





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Figure 239 | Route 8 Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

700 -600 -

MORNINGSIDE & 3RD

Weekday Ridership by Trip

Figure 240 | Route 8 Weekday Outbound Ridership by Trip (Regular Semester)







Saturday Service Efficiency and Productivity Table 45 | Route 8 Saturday Service Productivity Metrics (Full Year and Regular Semester)

	Passengers per Hour
Full Year	Average: 24.7
Regular Semester	Average: 24.1
	Passengers per Trip
Full Year	Average: 22
Regular Semester	Average: 26.5
	Operating Cost per Passenger
Full Year	Average: \$4.28
Regular Semester	Average: \$4.37

Saturday On-Time Performance Table 46 | Route 8 Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performance		Average: 78.6%
Early: 7%	On-Time: 86%	Lat <mark>e:</mark> 7%



Saturday Ridership by Stop Figure 242 | Route 8 Saturday Ridership by Stop: Outbound (Regular Semester)





700 600 500 400 300 200 100 0 -100 -200																															■ Boa	ardin ghtin	gs gs	
-200 -300 -400 -500 -600 -700	MORNINGSIDE & 3RD	MORNINGSIDE & PARK RIDGE	MORNINGSIDE & SHEFFIELD	MORNINGSIDE & SMITH	SMITH & MCCRACKEN WAY	SMITH MEADOW PARK	10TH & BARRINGTON	10TH & WOODBRIDGE	10TH FOUNTAIN PARK	PETE ELLIS & JOHN HINKLE	PETE ELLIS & AMY CEDARGA	PETER ELLIS & CAMBRIDGE	PETER ELLIS & CAMBRIDGE	CAMBRIDGE SQUARE APARTME	LONGVIEW & PETE ELLIS	LONGVIEW & KINGSTON	KINGSTON & 3RD	KINGSTON TARGET	COLLEGE MALL SHELTER	EASTLAND PLAZA CASA BRAV	COLLEGE MALL & 2ND	COLLEGE MALL HUNTER RIDG	JACKSON CREEK SHOPPING C	SARE & CATHCART RENWICK	SARE & MCCARTNEY SOUTH I	SARE & SPICEWOOD	SARE & BUTTONWOOD	SARE & ROGERS	SARE & SOUTHERN OAKS	SARE STEEPLECHASE APARTM	SARE STEEPLECHASE APARTM	SARE & CANADA	SARE & MILL STONE	JACKSON CREEK MIDDLE SCH

Figure 243 | Route 8 Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)



Figure 244 | Route 8 Saturday Ridership by Stop: Inbound (Regular Semester)





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Figure 245 | Route 8 Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)

Saturday Ridership by Trip

Figure 246 | Route 8 Saturday Outbound Ridership by Trip (Regular Semester)



Figure 247 | Route 8 Saturday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer

Weekday On-Time Performance Table 47 | Route 8 Weekday On-Time Performance Analysis (Summer)





Weekday Ridership by Stop Figure 248 | Route 8 Weekday Ridership by Stop: Outbound (Summer)





KINGSTON TARGET OLLEGE MALL SHELTER AND PLAZACASA BRAVA COLLEGE MALL SHELTER COLLEGE MALL & 2ND GE MALL HUNTER RIDG ON CREEK SHOPPING C & CATHCART RENWICK & MCCARTNEY SOUTH I SARE & SUTTONWOOD SARE & BUTTONWOOD SARE & BUTTONWOOD SARE & BUTTONWOOD SARE & ROGERS ARE & SOUTHERN OAKS STEEPLECHASE APARTM STEEPLECHASE APARTM STEEPLECHASE APARTM STEEPLECHASE APARTM	COLLEGE MALL & ZNU GE MALL HUNTER RIDG ON CREEK SHOPPING C & CATHCART RENWICK & MCCARTNEY SOUTH I SARE & SPICEWOOD SARE & BUTTONWOOD SARE & ROGERS	MORNINGSIDE & PARK RIDGE NINGSIDE & SHEFFIELD MORNINGSIDE & SMITH TH & MCCRACKEN WAY SMITH MEADOW PARK 10TH & BARRINGTON 10TH & BARRINGTON 10TH & WOODBRIDGE 10TH & WOODBRIDGE 10TH & WOODBRIDGE ER ELLIS & JOHN HINKLE EELLIS & JOHN HINKLE EELLIS & AMY CEDARGA ER ELLIS & CAMBRIDGE ER ELLIS & CAMBRIDGE ER ELLIS & CAMBRIDGE ER ELLIS & CAMBRIDGE ER ELLIS & CAMBRIDGE DGE SQUARE APARTME ONGVIEW & KINGSTON KINGSTON TARGET ONGVIEW & RINGSTON KINGSTON TARGET AND PLAZACASA BRAVA COLLEGE MALL SHELTER AND PLAZACASA BRAVA COLLEGE MALL RING SARE & SOUTHRN AND AND SARE & SPICEWOOD SARE & SPICEWOOD SARE & SOUTHERN OAKS SARE & SOUTHERN OAKS SARE & SOUTHERN OAKS SARE & SOUTHERN OAKS SARE & SOUTHERN OAKS
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Figure 249 | Route 8 Weekday Boardings and Alightings by Stop: Outbound (Summer)



Figure 250 | Route 8 Weekday Ridership by Stop: Inbound (Summer)





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Figure 251 | Route 8 Weekday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions



Weekday Ridership by Trip

Figure 252 | Route 8 Weekday Outbound Ridership by Trip (Summer)









Saturday On-Time Performance Table 48 | Route 8 Saturday On-Time Performance Analysis (Summer)





Saturday Ridership by Stop Figure 254 | Route 8 Saturday Ridership by Stop: Outbound (Summer)







Figure 255 | Route 8 Saturday Boardings and Alightings by Stop: Outbound (Summer)

Bloomington Route Optimization Study | Existing Conditions



Figure 256 | Route 8 Saturday Ridership by Stop: Inbound (Summer)





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Figure 257 | Route 8 Saturday Boardings and Alightings by Stop: Inbound (Summer)

FOURSQUARE ITP INTEGRATED TRANSPORTATION PLANNING



Saturday Ridership by Trip

Figure 258 | Route 8 Saturday Outbound Ridership by Trip (Summer)









Service Improvement Opportunities

Potential opportunities to strengthen Routes 8 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Interline southern branch of Route 8 with Route 3 to create one seat ride to downtown Bloomington. Route 8 is the only BT Route that does not serve either downtown of the IU campus. Passengers traveling to these destinations must transfer to other routes to complete their trips. The lack of one-seat service to central Bloomington likely limits the appeal of Route 8 and contributes to its position as the lowest ridership BT route. If Route 8 is interlined with Route 3, service east of College Mall Road could be shifted from Route 8 to a different route such as Route 9.
- Interline southern branch of Route 8 with Route 6 to create one seat ride to IU. Residents of the many apartment communities south of Rogers Road have direct service to downtown Bloomington via Route 5. This alignment also served the southern edge of the IU campus. Interlining the southern branch of Route 8 with Route 6 would also provide a direct connection from these large apartment complexes to the 10th Street corridor and the north side of the IU campus. If Route 8 is interlined with Route 6, service east of College Mall Road could be shifted from Route 8 to a different route such as Route 3.
- Improve passenger amenities and pedestrian infrastructure to streamline route. Route 8 ridership is very low along Sare Road between Moores Pike and Rogers Road, despite the presence of several fairly large multi-family housing developments including the City Flats and Hyde Park apartments. Ridership at these properties may be limited due to the lack of crosswalks and across Sare Street, as well as the lack of paved waiting area (or even passenger shelters) on opposite side of the street from each respective apartment property. Coordinating with the City to install crosswalks, and investing in passenger amenities such as pads and shelters, may help improve ridership along this segment of Sare Road.



ROUTE 9: IU CAMPUS – COLLEGE MALL – COVENANTER & CLARIZZ / LIMITED

Service Description

Route 9 (**Figure 260**) provides daily service between Clarizz Boulevard and the IU Campus via 10th Street. Weekday service operates up to every nine minutes, with less frequent service on weekends. The route travels primarily along S Jordan Avenue, E 3rd Street, S Indiana Avenue, E 7th Street, N Woodlawn Avenue, E 10th Street, State Road 46, S College Mall Road, E Buick Cadillac Boulevard, S Clarizz Boulevard, and E Covenanter Drive. Route 9 Limited operates every 30 minutes along a more streamlined alignment with service shifted from 10th Street.

Key destinations served by Route 9 include the IU Campus, the 10th Street Corridor, the IU Cyberinfrastructure Building, Eastland Plaza, Jackson Creek Shopping Center, College Mall, and several large apartment communities including Tulip Tree, Eastbay, Doral Apartments, Hunter Ridge, The Monroe, The Fields, Covenanter Hills, The Grove, and The Woods. Route 9 Limited serves only the south side of the IU campus via 3rd Street, as well as the St. Charles School. Passengers may transfer from Route 9 to several BT routes (Routes 1, 3, 4, 5, 6, 7, and 8) and all IU Campus Bus routes. Route 9 and 9 Limited operate reduced service when IU is not in regular session.

Figure 260 | Route 9 Maps: IU Campus/Mall/Convenanter & Clarizz (above); Route 9 IU Campus Limited (below)







Source: Bloomington Transit

Strengths

- High-frequency weekday service
- Second-highest annual ridership among BT routes
- Very strong productivity in terms of riders per hour and riders per trip
- Low operating cost per hour
- Seven-day-a-week service when IU is in session

Weaknesses

- 48 percent weekday on-time performance
- Ridership spike on last outbound trip of the day, suggesting service ends too early
- Route 9 Limited variant resembles Route 3 more than Route 9
- Very low weekday ridership per trip during Summer service period

The sections below provide details on Route 9's operating characteristics and service performance, culminating in a list of service improvement opportunities for the route.



Operating Characteristics Table 49 | Route 9 and 9 Limited Operating Characteristics

Origin and Destination		IU Campus/Mall/Convenanter & Clarizz: Convenanter Drive & Clarizz Boulevard to IU Campus	IU Campus Limited: Convenanter Drive & Clarizz Boulevard to 3 rd Street & Dunn Street					
Annual Operating Costs		\$1,149,405 (Rank: 7 of 9)						
Annual Ridership		1,020,390 (Rank: 2 of 9)						
Average Daily Ridership	Weekday	3,625 (Ra	ank: 2 of 9)					
	Saturday	1,189 (Rank: 1 of 8)						
	Sunday	588 (Rank: 1 of 2)						
Span: Regular Semester	Monday-Thursday	IU Campus/Mall:	IU Campus Limited:					
		7:24 AM-10:38 PM	7:30 AM-6:30 PM					
	Friday	IU Campus/Mall:	IU Campus Limited:					
		7:25 AM-10:45 PM	7:30 AM-6:30 PM					
	Saturday	IU Campus/Mall:	IU Campus Limited:					
		8:30 AM-10:30 PM	-					
	Sunday	IU Campus/Mall:	IU Campus Limited:					
		10:30 AM-9:45 PM						
Frequency: Regular Semester	Monday-Thursday	IU Campus/Mall:	IU Campus Limited:					
		9-10 minutes	30 minutes					
	Friday	IU Campus/Mall:	IU Campus Limited:					
		12 minutes	30 minutes					
		(45 minutes after 7:45 PM)						
	Saturday	IU Campus/Mall:	IU Campus Limited:					
		28 minutes						
		(45 minutes after 6:20 PM)						
	Sunday	IU Campus/Mall:	IU Campus Limited:					



		45 minutes					
Span: Summer	Monday-Friday	IU Campus/Mall:	IU Campus Limited:26				
		7:10 AM-10:30 PM	7:30 AM-6:30 PM				
	Saturday	IU Campus/Mall:	IU Campus Limited:				
		9:30 AM-6:15 PM	-				
	Sunday	IU Campus/Mall:	IU Campus Limited:				
		-	-				
Frequency: Summer	Monday-Friday	IU Campus/Mall:	IU Campus Limited:				
		20-25 minutes	30 minutes				
		(45 minutes after 12:45 PM)					
	Saturday	IU Campus/Mall:	IU Campus Limited:				
		40-45 minutes	-				
	Sunday	IU Campus/Mall:	IU Campus Limited:				
			-				
Route Connections		1, 3, 4, 5, 6, 7, 8, A, B, E, W, W Limited, Night Owl					
Key Points of Interest		IU Law School, IU Swain Hall, IU Auditorium, Indiana Memorial I Business School, IU Health C Sports Center, and IU Cyberinfr Hall, Tulip Tree Apartments, E Apartments, Hunter Ridge Apart The Fields Apartments, Coven Apartments, Eastland Plaza, C Shoppin	Jordan Hall, IU Music School, IU Jnion, IU Wells Library, UI Kelley enter, IU Student Recreational rastructure Building, Elgenmann astbay Apartments, Park Doral ments, The Monroe Apartments, anter Hills Apartments, Latimer ollege Mall, and Jackson Creek g Center.				

²⁶ Route 9 Limited ceases operation during IU's Spring, Fall, Thanksgiving, and Winter Break periods.



Service Analysis: Regular Semester

Weekday Service Efficiency and Productivity Table 50 | Route 9 and 9 Limited Weekday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour							
Full Year	Average: 28.4						
Regular Semester	Average: 31.5						
	Passengers per Trip						
Full Year	Average: 20.8						
Regular Semester	Average: 26.3						
(S) Operating Cost per Passenger							
Full Year	Average: \$3.60 \$1.14						
Regular Semester	Average: \$3.30 \$0.99						

Weekday On-Time Performance

Table 51 | Route 9 and 9 Limited Weekday On-Time Performance Analysis (Regular Semester)

On-Time Performance	Q 55.5	Average: 75.2%	
Early: 12%	On-Time: 56%	Late: 33%	



Weekday Ridership by Stop

Route 9: Monday-Thursday Schedule

Figure 261 | Route 9 Monday-Thursday Ridership by Stop: Outbound (Regular Semester)









Figure 262 | Route 9 Monday-Thursday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 263 | Route 9 Monday-Thursday Ridership by Stop: Inbound (Regular Semester)






Figure 264 | Route 9 Monday-Thursday Boardings and Alightings by Stop: Inbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions



Route 9: Friday Schedule Figure 265 | Route 9 Friday Ridership by Stop: Outbound (Regular Semester)







Figure 266 | Route 9 Friday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 267 | Route 9 Friday Ridership by Stop: Inbound (Regular Semester)









Figure 268 | Route 9 Friday Boardings and Alightings by Stop: Inbound (Regular Semester)

Route 9 Limited: Weekday Schedule Figure 269 | Route 9 Limited Weekday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 270 | Route 9 Limited Weekday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 271 | Route 9 Limited Weekday Ridership by Stop: Inbound (Regular Semester)







Figure 272 | Route 9 Limited Weekday Boardings and Alightings by Stop: Inbound (Regular Semester)







Weekday Ridership by Trip

Route 9: Monday-Thursday Schedule

Figure 273 | Route 9 Monday-Thursday Outbound Ridership by Trip (Regular Semester)



Figure 274 | Route 9 Monday-Thursday Inbound Ridership by Trip (Regular Semester)





Route 9: Friday Schedule

Figure 275 | Route 9 Friday Outbound Ridership by Trip (Regular Semester)²⁷



Figure 276 | Route 9 Friday Inbound Ridership by Trip (Regular Semester) 28



²⁷ Does not include a sample of the following trips: 7:41 AM, 7:51 AM, 8:01 AM, 8:26 AM, 8:36 AM, 8:46 AM, 9:11 AM, 9:21 AM, 9:31 AM, 9:56 AM, 10:06 AM, 10:16 AM, 10:51 AM, 10:51 AM, 11:20 AM, 11:36 AM, 11:46 AM, 12:03 PM, 12:11 PM, 12:21 PM, 12:31 PM, 12:56 PM, 1:06 PM, 1:16 PM, 1:26 PM, 1:46 PM, 2:01 PM, 2:11 PM, 2:21 PM, 2:41 PM, 2:56 PM, 3:06 PM, 3:16 PM, 3:36 PM, 3:46 PM, 3:56 PM, 4:06 PM, 4:26 PM, 4:36 PM, 4:51 PM, 5:01 PM, 5:31 PM, 5:46 PM, 5:56 PM, 6:21 PM, 6:46 PM, 7:11 PM, 7:36 PM, 8:01 PM, 8:46 PM, 9:31 PM, 10:16 PM

²⁸ Does not include a sample of the following trips: 7:25 AM, 7:35 AM, 7:45 AM, 8:10 AM, 8:20 AM, 8:30 AM, 8:55 AM, 9:05 AM, 9:15 AM, 9:40 AM, 9:50 AM, 10:00 AM, 10:25 AM, 10:35 AM, 10:45 AM, 11:10 AM, 11:20 AM, 11:30 AM, 11:47 AM, 11:55 AM, 12:05 PM, 12:15



Route 9 Limited: Weekday Schedule

Figure 277 | Route 9 Limited Weekday Loop Ridership by Trip (Regular Semester)²⁹



²⁹ Route 9 Limited ridership by trip data is not differentiated by direction.



PM, 12:40 PM, 12:50 PM, 1:00 PM, 1:10 PM, 1:30 PM, 1:45 PM, 1:55 PM, 2:05 PM, 2:25 PM, 2:40 PM, 2:50 PM, 3:00 PM, 3:20 PM, 3:30 PM, 3:40 PM, 3:50 PM, 4:10 PM, 4:20 PM, 4:35 PM, 4:45 PM, 5:15 PM, 5:30 PM, 5:40 PM, 6:05 PM, 6:30 PM, 6:55 PM, 7:20 PM, 7:45 PM, 8:30 PM, 9:15 PM, 10:00 PM

Saturday Service Efficiency and Productivity Table 52 | Route 9 and 9 Limited Saturday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour							
Average: 24.7							
Average: 24.1							
Passengers per Trip							
Average: 22							
Average: 26.5							
Operating Cost per Passenger							
Average: \$4.28 \$1.21							
Average: \$4.37 \$1.27							

Saturday On-Time Performance Table 53 | Route 9 and 9 Limited Saturday On-Time Performance Analysis (Regular Semester)

On-Time Performan	ce	6 4.7%	Average: 78.6%	
Early: 6%	On-Time: 65%		Late: 29%	



Saturday Ridership by Stop

Route 9

Figure 278 | Route 9 Saturday Ridership by Stop: Outbound (Regular Semester)





FOURSQUARE ITP



Figure 279 | Route 9 Saturday Boardings and Alightings by Stop: Outbound (Regular Semester)

Bloomington Route Optimization Study | Existing Conditions

Figure 280 | Route 9 Saturday Ridership by Stop: Inbound (Regular Semester)









Figure 281 | Route 9 Saturday Boardings and Alightings by Stop: Inbound (Regular Semester)



Route 9

Figure 282 | Route 9 Saturday Outbound Ridership by Trip (Regular Semester)



Figure 283 | Route 9 Saturday Inbound Ridership by Trip (Regular Semester)





Sunday Service Efficiency and Productivity Table 54 | Route 9 and 9 Limited Sunday Service Productivity Metrics (Full Year and Regular Semester)

Passengers per Hour								
Full Year	Average: 43.9							
Regular Semester	Average: 54.4							
	Passengers per Trip							
Full Year	Average: 43.1							
	36.7							
Regular Semester	Average: 62.4							
Operating Cost per Passenger								
Full Year	Average: \$1.69							
	\$1.34							
Regular Semester	Average: \$1.40 \$1.04							
	1							

Sunday On-Time Performance Table 55 | Route 9 and 9 Limited Sunday On-Time Performance Analysis (Regular Semester)

C	On-Time Performance	Average: 70.4%	
	On-Time: 45%	Late: 55%	



Sunday Ridership by Stop

Route 9

Figure 284 | Route 9 Sunday Ridership by Stop: Outbound (Regular Semester)





Bloomington Route Optimization Study | Existing Conditions

Figure 285 | Route 9 Sunday Boardings and Alightings by Stop: Outbound (Regular Semester)





Figure 286 | Route 9 Sunday Ridership by Stop: Inbound (Regular Semester)









Figure 287 | Route 9 Sunday Boardings and Alightings by Stop: Inbound (Regular Semester)

Sunday Ridership by Trip

Route 9

Figure 288 | Route 9 Sunday Outbound Ridership by Trip (Regular Semester)



Figure 289 | Route 9 Sunday Inbound Ridership by Trip (Regular Semester)





Service Analysis: Summer³⁰

Weekday On-Time Performance Table 56 | Route 9 and 9 Limited Weekday On-Time Performance Analysis (Summer)



³⁰ Summer ridership data is unavailable for Route 9 Limited.



Weekday Ridership by Stop

Route 9

Figure 290 | Route 9 Weekday Ridership by Stop: Outbound (Summer)





FOURSQUARE ITP INTEGRATED TRANSPORTATION PLANNING



Figure 291 | Route 9 Weekday Boardings and Alightings by Stop: Outbound (Summer)

Figure 292 | Route 9 Weekday Ridership by Stop: Inbound (Summer)







Bloomington Route Optimization Study | Existing Conditions

Figure 293 | Route 9 Weekday Boardings and Alightings by Stop: Inbound (Summer)



Weekday Ridership by Trip

Route 9

Figure 294 | Route 9 Weekday Outbound Ridership by Trip (Summer)



Figure 295 | Route 9 Weekday Inbound Ridership by Trip (Summer)





Saturday On-Time Performance Table 57 | Route 9 and 9 Limited Saturday On-Time Performance Analysis (Summer)

On-Time Performance		62.1%	Average: 75.6%	
Early: 11%	On-Time: 62%		Late: 27%	



Saturday Ridership by Stop

Route 9

Figure 296 | Route 9 Saturday Ridership by Stop: Outbound (Summer)









Bloomington Route Optimization Study | Existing Conditions

700 600

500 400

300 200 100 -100 -200 -300 -400 -500 -600 -700

INDIANA & KIRKWOOD

Figure 297 | Route 9 Saturday Boardings and Alightings by Stop: Outbound (Summer)

Figure 298 | Route 9 Saturday Ridership by Stop: Inbound (Summer)





700 - 600 - 500 - 300 - 200 - 100 - -100 - -200 - -300 - -400 -																			B	oardings	
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Figure 299 | Route 9 Saturday Boardings and Alightings by Stop: Inbound (Summer)

Bloomington Route Optimization Study | Existing Conditions



Saturday Ridership by Trip

Route 9

Figure 300 | Route 9 Saturday Outbound Ridership by Trip (Summer)



Figure 301 | Route 9 Saturday Inbound Ridership by Trip (Summer)





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Service Improvement Opportunities

Potential opportunities to strengthen Routes 9 are listed below. Some suggestions may be contradictory, as there is usually more than one approach to improving a route.

- Extend route later on weekdays during regular semester period. On Mondays through Thursdays, as well as on Fridays, Route 9 ridership spikes on the last trip of the day. This suggests that there is likely demand for later service during these service periods. One additional trip per day would help test the market for later service during regular semesters.
- Eliminate Route 9 Limited and reinvest resources into increased frequency on Routes 9 and 3. Route 9 Limited follows an alignment that is more similar to Route 3 than to Route 9. Presenting it as a variant of Route 9 likely creates some confusion among new riders and prospective riders. If Route 9 Limited is eliminated, its resources could be used to increase frequency on Route 9 and Route 3 during peak periods. Route 9 has issues with overcrowding on some peak period trips, so additional capacity along its regular alignment would help relieve this issue. Route 3 has fairly low ridership per trip, even compared to Route 9 Limited, which operates along a similar alignment, so increased peak period frequency may make the route more appealing to riders.
- Decrease weekday frequency during Summer service period. Route 9 carries fewer than 15 passengers on most weekday trips during the Summer service period. Reducing peak frequency from 20 minutes to 30 minutes may help reduce operating costs and improve ridership per trip.
- Decrease the number of stops along 10th Street to improve on-time performance. During regular semester service, Route 9's on-time performance is 48 percent, well below the system average, and 80 percent, a common industry standard. While reducing the number of total stops served along 10th Street could create longer walks to bus stops for some riders, this intervention could also reduce total boarding and dwell times to offer a faster service.
- Install pedestrian safety interventions around 10th Street and Fee Lane. The region around the area of 10th Street and Fee Lane is home to several Indiana University buildings, including the School of Public and Environmental Affairs, the Kelley School of Business, and Hodge Hall Undergraduate Center. Although there is a crosswalk along 10th Street, this convergence can lead to an abundance of pedestrian activity, slowing buses and creating safety concerns. Interventions to slow pedestrian activity, such as enhanced or signalized crosswalks, could lead to safer crossings and improve on-time performance on Route 9 and other routes in the corridor.

