Indianola Avenue Complete Streets Study – Task 5 Parking Utilization Assessment

Overview

The City of Columbus has provided Michael Baker International with parking utilization counts for the following times:

- 2pm and 7pm on Friday, September 25th, 2020
- 2pm and 7pm on Saturday, September 26th, 2020
- 10pm on Wednesday, April 14th, 2021

The Indianola Avenue Complete Streets Study is investigating ways of calming traffic along this segment of Indianola Ave., as well as add additional amenities. The project study area is approximately 1.2 miles of Indianola Ave. between Hudson St. and North Broadway. The parking utilization was analyzed to determine what impacts there would be due to reductions to existing available parking.

Parking Utilization Count Summary

Counts were taken at various times and days to capture the different parking make-up. After the counts were analyzed, three distinct segments became apparent where parking was higher at different times. These segments are Hudson St. to Weber Rd., Weber Rd. to Midgard Rd., and Midgard Rd. to North Broadway. These segments and times, shown in **Table 1** below, were used to assess the impacts.

Table 1. Parking Availability and Parking Usage

Block Identification	Existing Spaces Available		Sept. 26th - 2pm	Sept. 26th - 7pm	Percent Utilization
	West Side (SB)	East Side (NB)	Bi-Direction	Bi-Direction	
Hudson St to Duncan St	16	33	-	**4**	6%
Duncan St to Arcadia Ave	14				
Arcadia Ave to Cliffside Dr	11	11	-	**6**	27%
Cliffside Dr to Olentangy St	8	6	-	**0**	0%
Olentangy St to Kelso Rd	8	10	-	**2**	11%
Kelso Rd to Crestview Rd	9	9	-	**13**	**72%**
Crestview Rd to Tulane Rd	6	6	-	**3**	25%
Tulane Rd to Tibet Rd	9	9	-	**1**	6%
Tibet Rd to Weber Rd	6	6	-	**8**	**67%**
Weber Rd to Melrose Ave	7	7	**10**	-	**71%**
Melrose Ave to Milford Ave	10	10	**13**	-	**65%**
Milford Ave to Midgard Rd	14	12	**13**	-	**50%**
Midgard Rd to Como Ave	11	10	-	**4**	19%
Como Ave to Walhalla Rd	7	7	-	**5**	36%
Walhalla Rd to Clinton Heights	4	9	-	**5**	38%
Clinton Heights to N. Broadway	6	8	-	**5**	36%
TOTAL	**146**	**153**	**36**	**56**	**31%**

A table of the full parking data provided by the City is included in **Appendix A**. Additionally, **Appendix B** shows a geographic representation of the data.

As shown in **Table 1**, there are a 146 existing parking spaces on the west side and 153 existing parking spaces on the east side, for a total of 299 existing parking spaces along the corridor. The highest overall parking utilization location occurs between Tibet Rd. and Milford Ave. with an average occupancy of at least 50%. The highest bi-directional utilization within a single block was observed between Kelso Rd and Crestview Rd. with 72% of the available parking spaces being occupied. This high parking occupancy aligns with the location of the various businesses on the west side of Indianola Ave.

Parking Removal Analysis

A total of 299 parking spaces are present within the corridor study area. If all parking were to be removed, approximately 83 vehicles at most, as seen during the highest observed timeframe, would be required to find alternative parking, likely via side streets.

If parking were to be reduced on one side, the total number of remaining parking spaces, approximately 150, would be able to accommodate the parking demand, 83 during the highest observed count. However, as **Table 1** shows, the parking is clustered around the Tibet Rd to Midgard Rd segment of Indianola Ave. Reducing parking in this segment would force the excess vehicles to side streets or to inconvenient blocks farther away along Indianola Ave.

Although the number of available parking spaces that would remain from removing parking on one side of the road seems feasible when considering the entire corridor, it is understood that removing parking on both sides within the vicinity of the existing business district would create an unacceptable burden. To alleviate this burden, a hybrid parking application was developed. In this application, parking is proposed to be removed at the following locations along Indianola Ave:

Hybrid Parking Removal

- West side between Hudson Ave. and Arcadia Ave.
- Both sides between Arcadia Ave. and Cliffside Dr.
- East Side between Cliffside Dr. and Weber Rd.
- No removal between Weber Rd. and Midgard Ave.
- West Side between Midgard Ave. and 300’ south of North Broadway

Appendix A compares the observed parking counts with the parking that will remain.

Economic Considerations

An expected concern related to loss of parking supply is that patronage will be reduced to various businesses that rely on the removed street parking. Industry literature and studies were researched to determine the expected effect on businesses when parking supply was converted to bicycle and pedestrian accommodations. Portland State University's Transportation Research and Education Center in Oregon conducted a study entitled *Understanding Economic and Business Impacts of Street Improvements for Bicycle and Pedestrian Mobility: A Multi-City Multi-Approach Exploration*, examining 14 corridors in six cities before and after parking was converted to bicycle and pedestrian street improvements. What the study overwhelmingly found was that the bicycle and pedestrian improvements had either a positive or non-significant impact on corridor employment and sales. Specifically, even in cases where a motor vehicle travel lane or parking was removed, food sales and employment tended to increase.

Recommendations

Due to the observed parking demand, the project team recommends that the parking be removed as detailed in the "Hybrid Parking Removal" shown above, understanding that the final parking count may be slightly higher or lower as determined by final design elements.

Appendix A:

Parking Count Data

Block Identification	Existing Spaces		Spaces to Remain		September 25th - 2pm			September 25th - 7pm			September 26th - 2pm			September 26th - 7pm			April 14th - 10pm		
	West Side (SB)	East Side (NB)	West Side (SB)	East Side (NB)	West Side (SB)	East Side (NB)	Bi-Direction	West Side (SB)	East Side (NB)	Bi-Direction	West Side (SB)	East Side (NB)	Bi-Direction	West Side (SB)	East Side (NB)	Bi-Direction	West Side (SB)	East Side (NB)	Bi-Direction
Hudson St to Duncan St	16	33	**16**	0	0	0	1	0	0	2	0	0	0	0	0	**4**	0	1	1
Duncan St to Arcadia Ave	14		**14**	0	1			2			0			4			0		
Arcadia Ave to Cliffside Dr	11	11	0	0	0	0	0	0	2	2	1	0	1	3	3	**6**	3	6	9
Cliffside Dr to Olentangy St	8	6	**8**	0	0	0	0	1	0	1	1	0	1	0	0	**0**	1	0	1
Olentangy St to Kelso Rd	8	10	**8**	0	0	0	0	1	1	2	0	4	4	0	2	**2**	0	0	0
Kelso Rd to Crestview Rd	9	9	**9**	0	1	1	2	6	5	11	1	3	4	5	8	**13**	5	3	8
Crestview Rd to Tulane Rd	6	6	**6**	0	2	3	5	3	3	6	1	2	3	1	2	**3**	3	1	4
Tulane Rd to Tibet Rd	9	9	**9**	0	1	1	2	0	0	0	2	1	3	0	1	**1**	0	1	1
Tibet Rd to Weber Rd	6	6	**6**	0	2	1	3	5	1	6	5	3	8	5	3	**8**	2	4	6
Weber Rd to Melrose Ave	7	7	**7**	**7**	5	6	11	6	3	9	4	6	**10**	0	2	2	0	2	2
Melrose Ave to Milford Ave	10	10	**10**	**10**	7	6	13	4	5	9	6	7	**13**	4	5	9	2	5	7
Milford Ave to Midgard Rd	14	12	**14**	**12**	1	2	3	7	2	9	9	4	**13**	9	7	16	4	3	7
Midgard Rd to Como Ave	11	10	0	**10**	0	1	1	0	1	1	4	1	5	3	1	**4**	0	1	1
Como Ave to Walhalla Rd	7	7	0	**7**	1	0	1	3	5	8	1	3	4	2	3	**5**	1	2	3
Walhalla Rd to Clinton Heights Ave	4	9	0	**9**	2	1	3	2	1	3	3	4	7	2	3	**5**	1	6	7
Clinton Heights Ave to North Broadway	6	8	0	**8**	0	2	2	1	7	8	0	2	2	1	4	**5**	0	3	3
TOTAL	**146**	**153**	**107**	**63**	**23**	**24**	**47**	**41**	**36**	**77**	**38**	**40**	**78**	**39**	**44**	**83**	**22**	**38**	**60**

Michael Baker INTERNATIONAL

THE CITY OF COLUMBUS
ANDREW J. GINTHER, MAYOR

Appendix B:

Parking Occupation Maps

Indianola Parking

Sep. 25 - 2pm

- 0
- 1
- 2
- 3
- 4 - 7

0/6
2/8
2/4
1/9
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0/33

Indianola Parking

Sep. 25 - 7pm

- 0
- 1 - 2
- 3
- 4 - 5
- 6 - 7

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6/9
5/9
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Indianola Parking

Sep. 26 - 2pm

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- 2
- 3 - 4
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- 8 - 9

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Indianola Parking

Sep. 26 - 7pm

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E North Broadway St
Clinton Heights Ave
Walhalla Rd
E Longview Ave
E Como Ave
Brynhild Rd
Midgard Rd
Gudrun Rd
Mimming Rd
Milford Ave
Iswald Rd
Melrose Ave
E Weber Rd
Tibet Rd
E Tulane Rd
Crestview Rd
E Kelso Rd
Medary Ave
Olentangy St
Parkview Dr
Glen Echo Run
Cliffside Dr
E Arcadia Ave
E Duncan St
Glen Echo Cir
Calumet St
Druid St
Esmond St
Dayton Ave
Deming Ave
Kane Aly
Hibbert Ave
Gunnet Aly
Adams Ave
Pomeroy Pl
Medary Ave
Woodbine Pl
Kensington Pl W
Kensington Pl E
Olentangy St
Glen Echo Dr
Summit St
Glenmawr Ave
N 4th St
N Broadway Ln
Indianola Ave
CSX Transportation
Norfolk Southern
Silver Dr
Panic Lighting
Rod's Western Palace
Glen Echo Park
853 ft
861 ft
839 ft
849 ft

Indianola Parking

Apr. 14, 2021

- 0 - 1
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- 5 - 6

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E North Broadway St
Clinton Heights Ave
Walhalla Rd
E Longview Ave
E Como Ave
Brynhild Rd
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Iswald Rd
Melrose Ave
E Weber Rd
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Olentangy St
Parkview Dr
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Cliffside Dr
E Arcadia Ave
E Duncan St
Glen Echo Cir
Callumet St
Summit St
N Broadway Ln
Indianola Ave
Woodbine Pl
Esmond St
Druid St
Hibbert Ave
Dayton Ave
Deming Ave
Kane Aly
Kensington Pl W
Kensington Pl E
Glen Echo Dr
Glenmawr Ave
N 4th St
Gunnet Aly
Adams Ave
Pomeroy Pl
Silver Dr
CSX Transportation
Norfolk Southern
Panic Lighting
Rod's Western Palace
Glen Echo Park
853 ft
861 ft
839 ft
849 ft