Armour Road Walking and Biking Observations
Prepared by BikeWalkKC for the City of North Kansas City
July 27, 2020

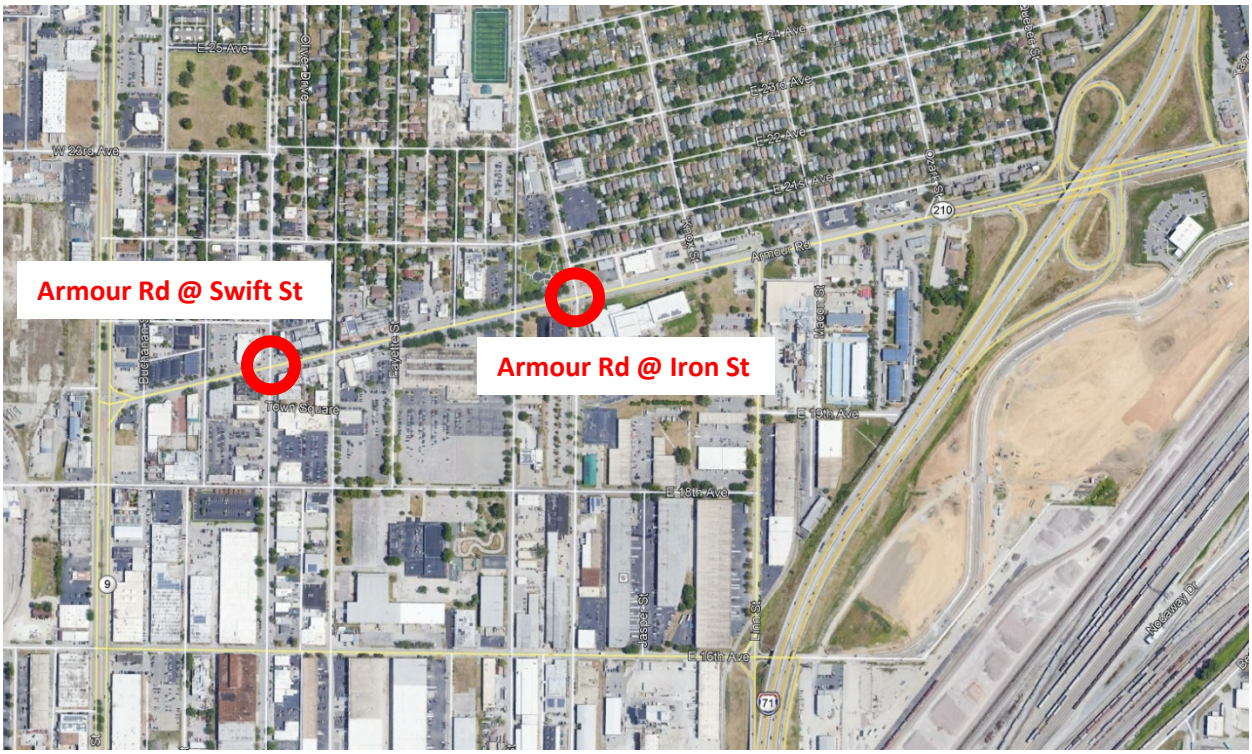
INTRODUCTION

Traffic observations were conducted at two intersections on Armour Road in North Kansas City to determine volumes and movement patterns for a typical weekday and typical weekend. Observations included through-movements and turn-movements for cars, trucks, buses, bicycles on the road, bicycles on the sidewalk and pedestrians on the sidewalk. 2020 observations were compared to 2019 observations to provide insight on changes in transportation patterns due to recent infrastructure improvements, changing travel patterns due to the ongoing pandemic, and other factors.

These observations may be useful for evaluation of existing infrastructure and for planning of future improvements to the transportation network. These observations may also be useful to better understand the behavior of different transportation modes in locations where projects are planned, completed, or under consideration. In combination with past and future data collection these traffic observations can assist North Kansas City in evaluating the performance of its infrastructure over time.

Observation Locations

- Armour Road and Swift Street: Thursday, June 4, 2020; Sunday, June 28, 2020
- Armour Road and Iron Street: Thursday, June 4, 2020; Sunay, June 28, 2020



Observation Methodology

Data was collected with traffic observation cameras placed at selected locations throughout North Kansas City. Cameras were positioned at intersections to capture all modes of transportation and all direction of travel. Observation days were selected to ensure typical temperature and weather conditions.

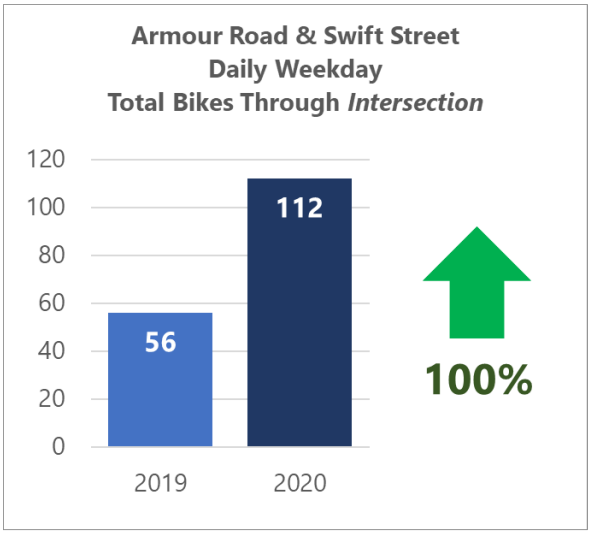
Camera footage was evaluated by a third-party analyst to document volumes and movements in 15-minute intervals from 6am to 8pm. For bicycle and pedestrian trips, BikeWalkKC applied industry standard adjustment factors to extrapolate 14 hour counts to full 24 hour counts, including guidance from the National Bicycle and Pedestrian Documentation Project (http://bikepeddocumentation.org/). For automobile trips, BikeWalkKC applied adjustment factors based on MoDOT's hourly estimates for various North Kansas City streets (https://www.modot.org/traffic-volume-maps).

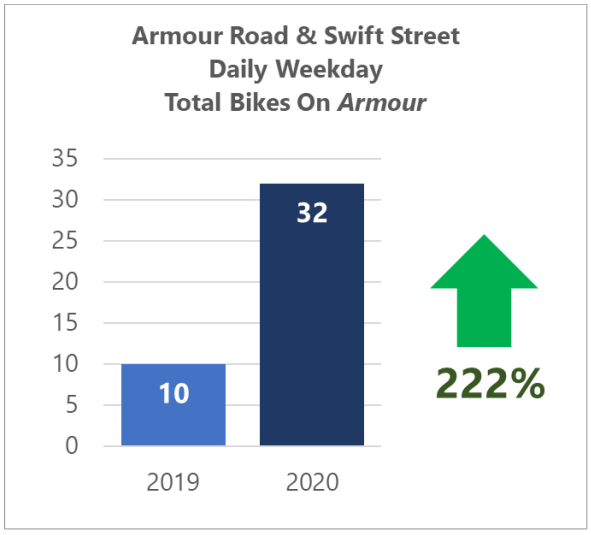
There are constraints in the detection algorithm for automatic data processing that prevent all bicycle trips from being counted. Specifically, bicycle turning movements on to or off of separated bicycle infrastructure (such as the protected bicycle lanes on Armour Road) and sidewalks are not always captured automatically. Bicycle trips that were not automatically detected have been manually logged and included in the following count summaries. More information about analysis of bicycle trips can be found at the following link: help.miovision.com/s/article/How-the-bicycle-classification-is-processed-in-vehicle-studies?language=en_US

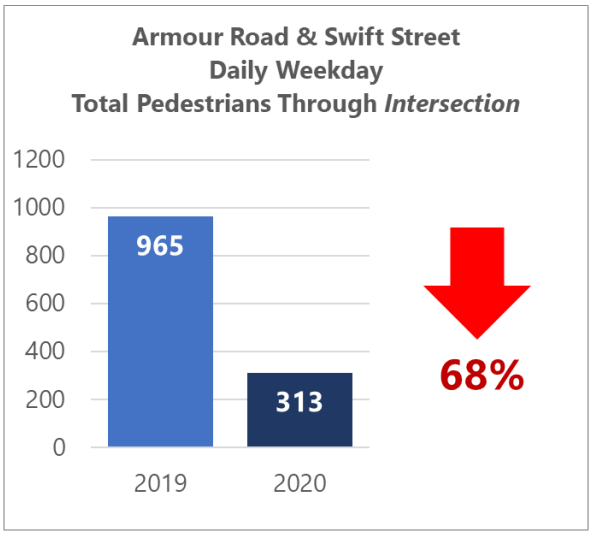
Accuracy for vehicle counts: For volumes of up to 100 vehicles in any given classification over a 15-minute period, counts are guaranteed accurate within 5 vehicles. For volumes greater than 100 vehicles in the same class and period, counts will be at least 95% accurate.

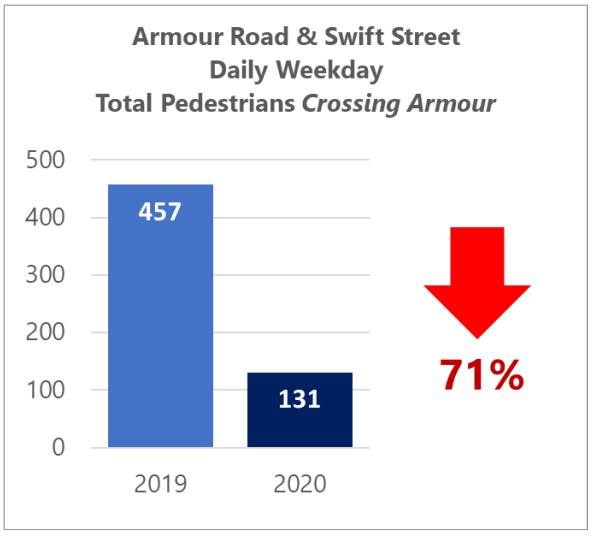
Accuracy for bicycle and pedestrian counts: For volumes of up to 50 bicycles or pedestrians in a 15-minute period, counts are guaranteed accurate within 5 pedestrians or bicycles. A minimum of 95% accuracy is guaranteed for volumes above 50 per 15-minute segment. When pedestrians are grouped in clusters, volumes are accurate to within +/- 25% per unique cluster.

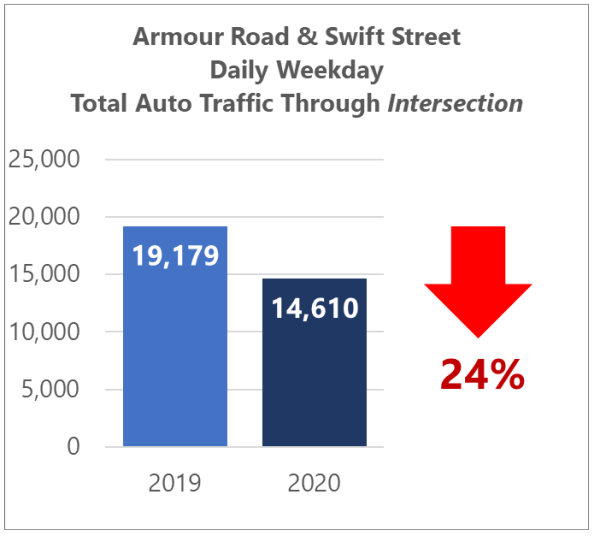
OBSERVATIONS SUMMARY – ARMOUR ROAD & SWIFT STREET WEEKDAY

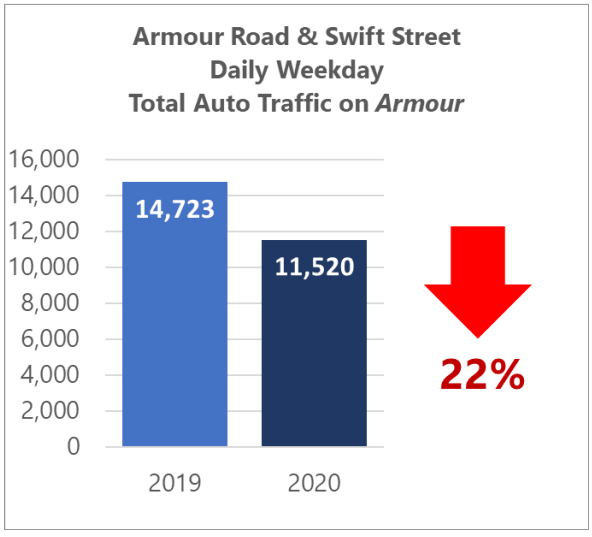




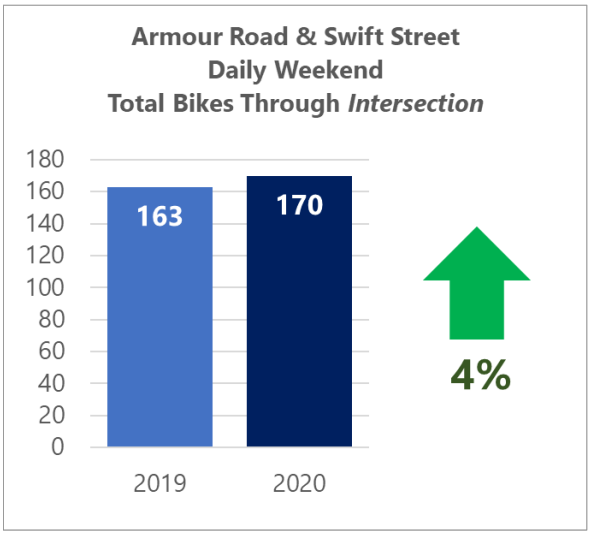


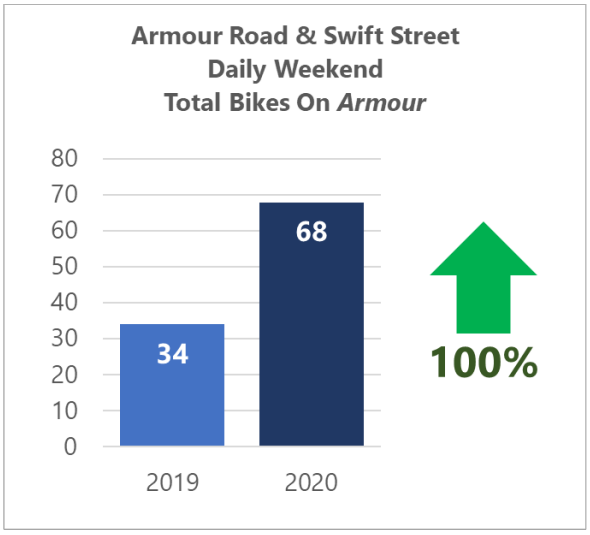


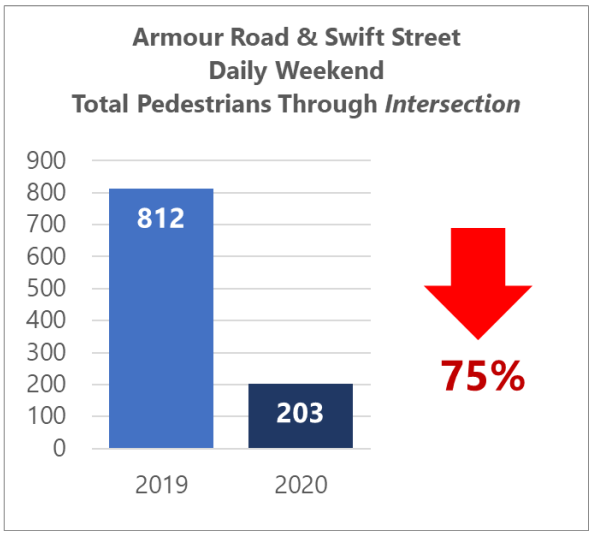


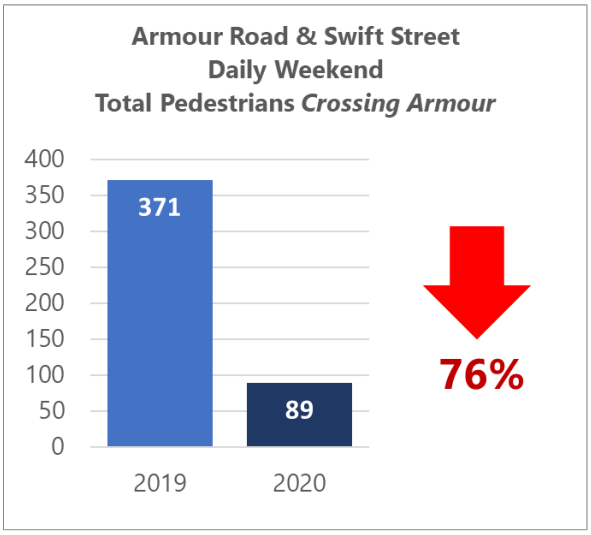


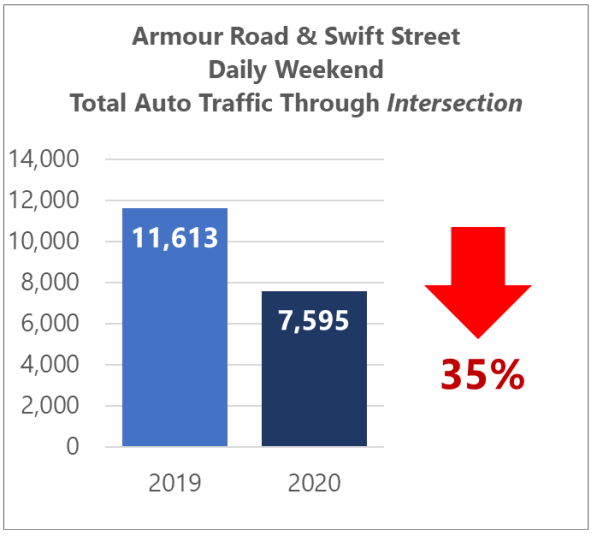
OBSERVATIONS SUMMARY – ARMOUR ROAD & SWIFT STREET WEEKEND

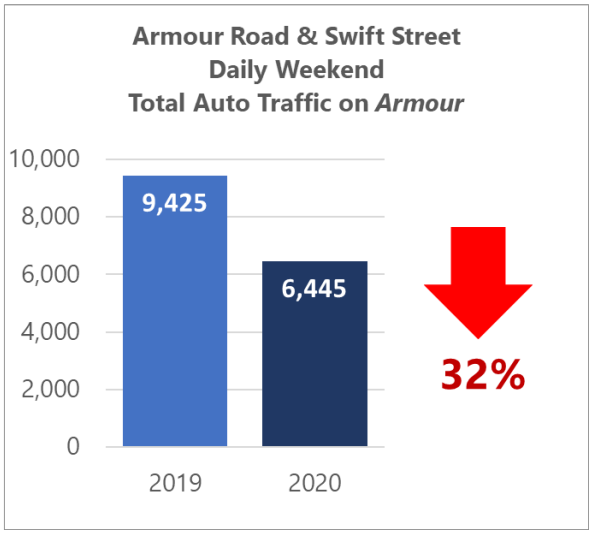




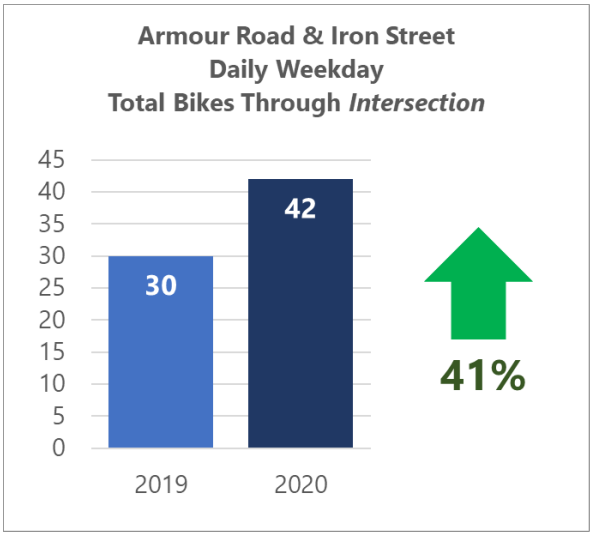


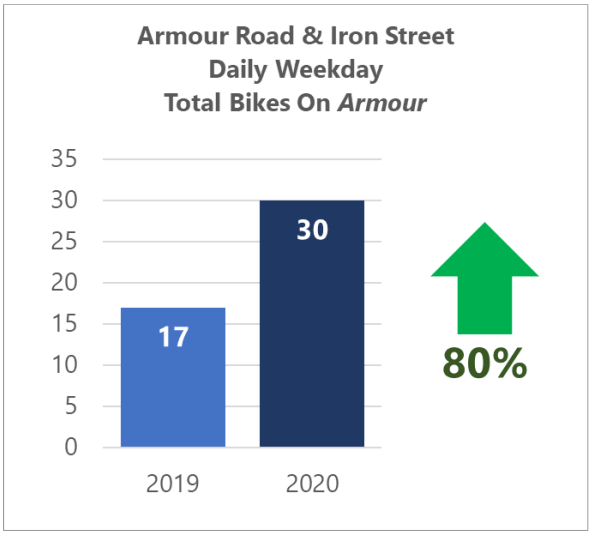


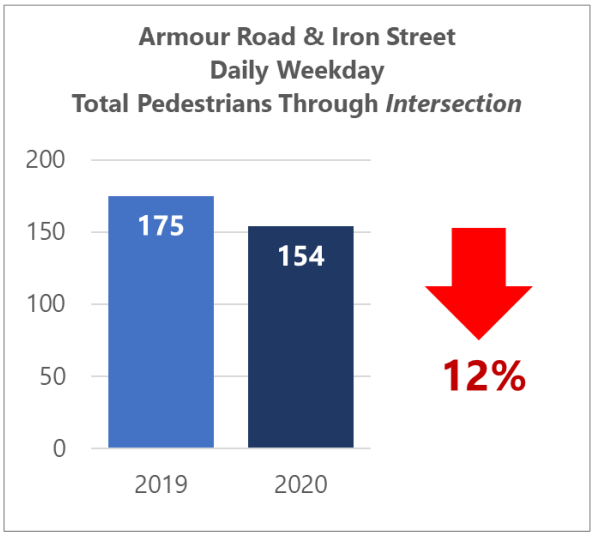


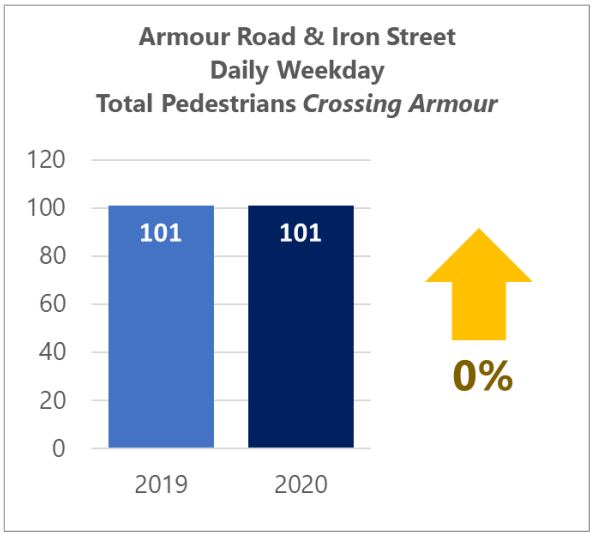


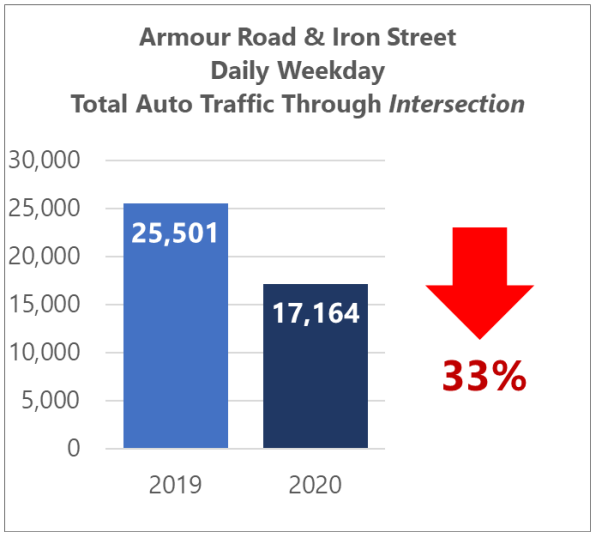
OBSERVATIONS SUMMARY – ARMOUR ROAD & IRON STREET WEEKDAY

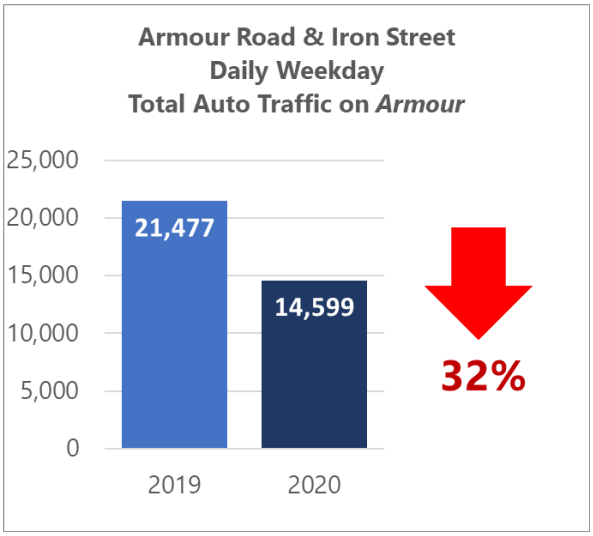




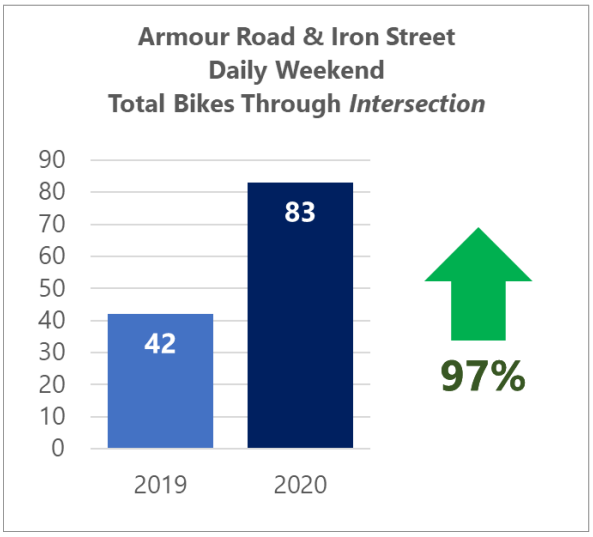


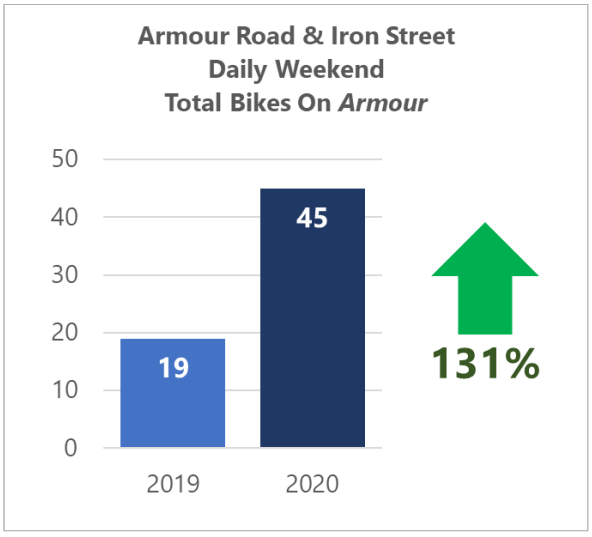


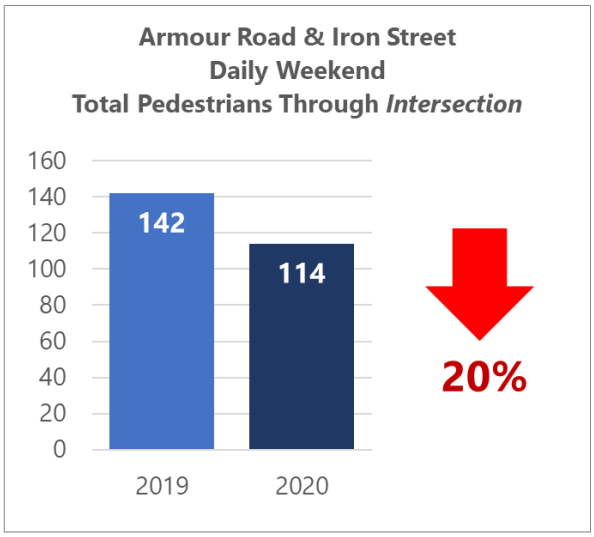


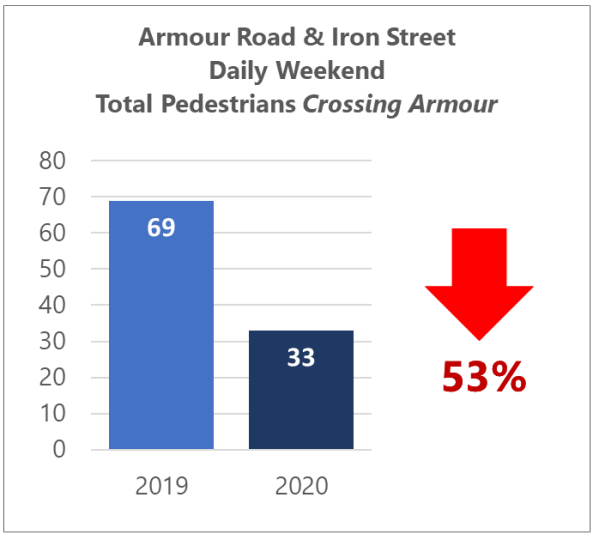


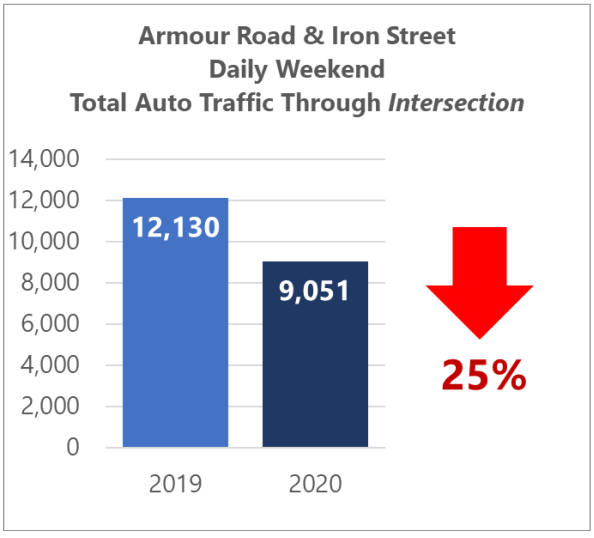
OBSERVATIONS SUMMARY – ARMOUR ROAD & IRON STREET WEEKEND

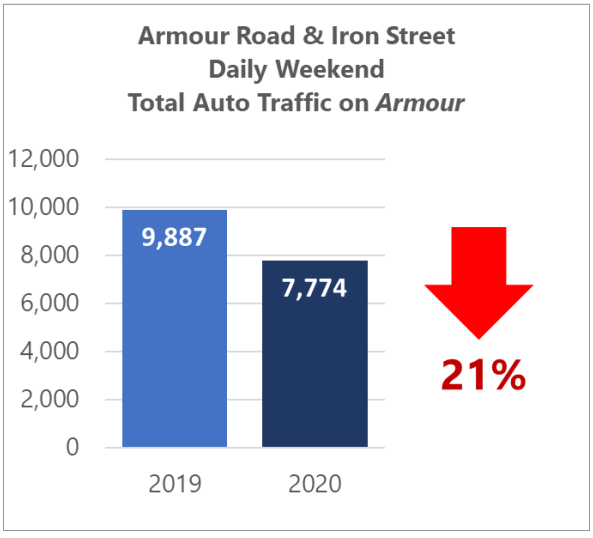






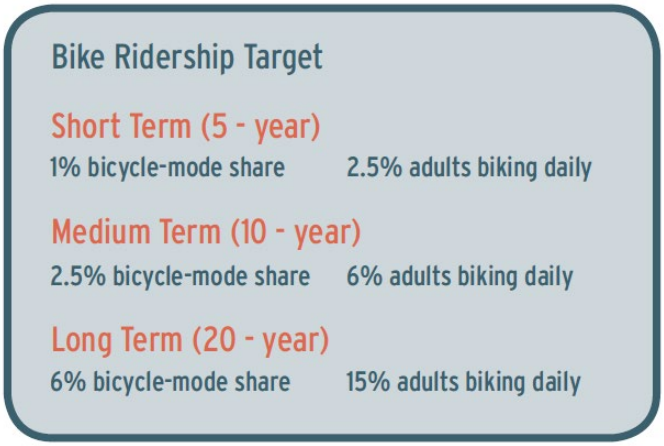






BICYCLE TRIPS AS A PERCENTAGE OF TOTAL TRIPS

Supporting a more balanced mix of modes in North Kansas City is important for many city goals, and the benefits to the community are scalable as more people bike. North Kansas City's Bicycle Master Plan identifies the following targets for bike ridership:



Traffic observations can provide insight into North Kansas City's progress toward bike ridership goals. However, the percentage of trips by bike varies significantly by street. While complete assessment of biking in North Kansas City will require more comprehensive data collection, spot observations can be useful for identifying the speed and magnitude of progress toward goals for biking in the community.

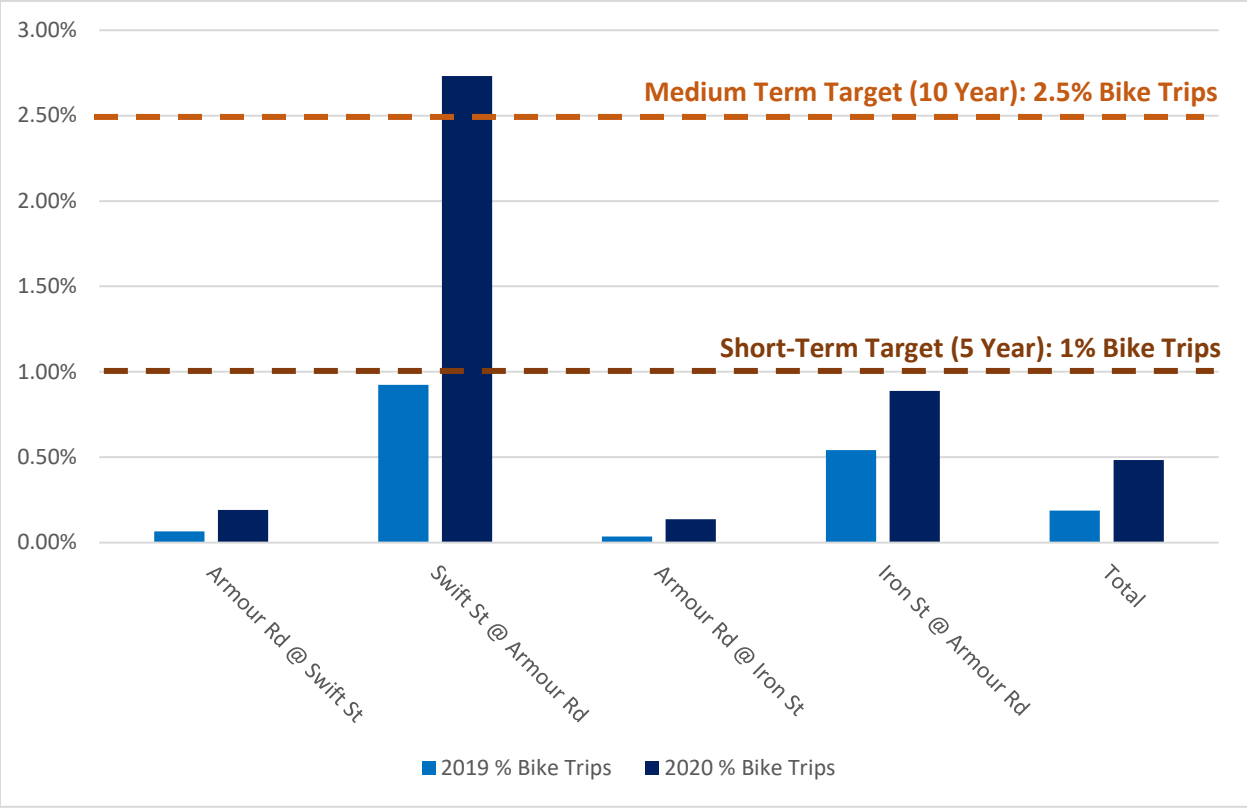
2019 Percent of Total Trips by Transportation Mode – Weekday

	By Car	By Truck	By Bus	By Bike	By Walking
Armour Rd @ Swift St	95.38%	0.91%	0.31%	0.07%	3.33%
Swift St @ Armour Rd	86.72%	1.68%	1.46%	0.92%	9.21%
Armour Rd @ Iron St	97.83%	1.19%	0.47%	0.04%	0.47%
Iron St @ Armour Rd	95.06%	1.56%	1.03%	0.54%	1.82%
Total	95.57%	1.18%	0.57%	0.19%	2.48%

2020 Percent of Total Trips by Transportation Mode - Weekday

	By Car	By Truck	By Bus	By Bike	By Walking
Armour Rd @ Swift St	97.19%	0.98%	0.08%	0.19%	1.55%
Swift St @ Armour Rd	89.85%	2.27%	1.21%	2.73%	3.95%
Armour Rd @ Iron St	97.76%	1.33%	0.09%	0.14%	0.68%
Iron St @ Armour Rd	95.34%	1.56%	0.18%	0.89%	2.03%
Total	96.55%	1.32%	0.21%	0.48%	1.44%

Percent of Total Trips by Bike - Weekday



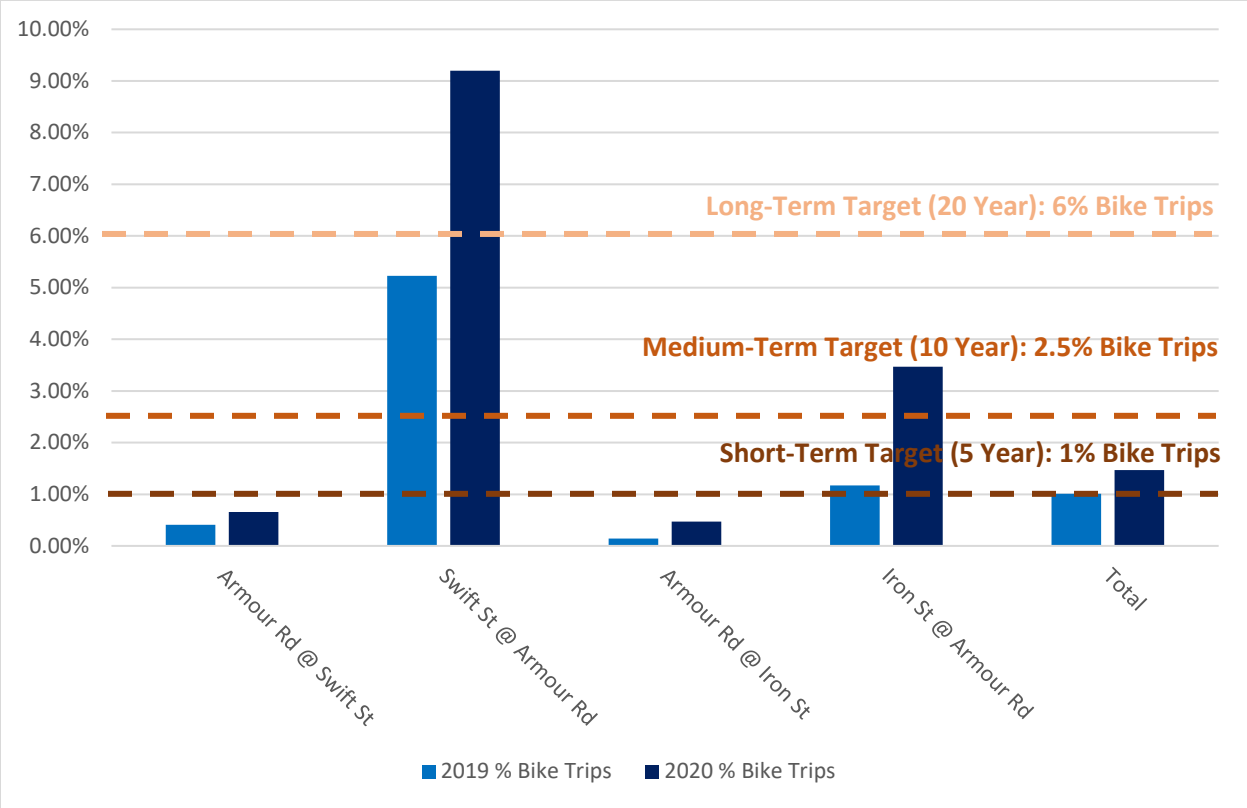
2019 Percent of Total Trips by Transportation Mode – Weekend

	By Car	By Truck	By Bus	By Bike	By Walking
Armour Rd @ Swift St	90.14%	0.87%	0.23%	0.41%	8.35%
Swift St @ Armour Rd	78.67%	0.90%	1.48%	5.23%	13.72%
Armour Rd @ Iron St	98.40%	0.24%	0.18%	0.15%	1.03%
Iron St @ Armour Rd	95.41%	0.36%	0.15%	1.17%	2.91%
Total	93.28%	0.51%	0.36%	1.01%	4.84%

2020 Percent of Total Trips by Transportation Mode - Weekend

	By Car	By Truck	By Bus	By Bike	By Walking
Armour Rd @ Swift St	97.17%	0.33%	0.13%	0.66%	1.72%
Swift St @ Armour Rd	83.10%	0.53%	0.62%	9.20%	6.54%
Armour Rd @ Iron St	97.54%	0.49%	0.17%	0.47%	1.33%
Iron St @ Armour Rd	93.24%	0.71%	0.18%	3.47%	2.40%
Total	95.92%	0.45%	0.19%	1.47%	1.97%

Percent of Total Trips by Bike – Weekend



Armour & Swift - Thu Jun 4 2020 - TMC

Thu Jun 4, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769349, Location: 39.142008, -94.577254

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US

Leg	Southbound Swift						Westbound Armour						Northbound Swift						Eastbound Armour						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2020-06-04 6:00AM	1	25	14	0	**40**	2	7	250	37	0	**294**	5	3	7	5	0	**15**	0	3	116	9	0	**128**	1	**477**
7:00AM	8	64	30	1	**103**	3	20	286	50	0	**356**	1	11	20	1	0	**32**	3	6	143	11	0	**160**	2	**651**
8:00AM	9	53	34	0	**96**	4	24	232	42	0	**298**	13	9	34	7	0	**50**	1	19	174	16	0	**209**	1	**653**
9:00AM	11	35	38	0	**84**	6	25	225	44	0	**294**	10	18	24	7	0	**49**	10	16	195	8	0	**219**	6	**646**
10:00AM	19	48	47	0	**114**	4	39	279	54	1	**373**	4	23	38	14	0	**75**	4	22	214	21	0	**257**	5	**819**
11:00AM	25	51	58	0	**134**	7	40	335	49	0	**424**	7	52	42	20	0	**114**	11	30	347	26	0	**403**	8	**1075**
12:00PM	25	73	67	0	**165**	11	41	358	60	0	**459**	11	53	55	25	0	**133**	17	40	356	30	0	**426**	6	**1183**
1:00PM	12	41	62	0	**115**	3	40	347	58	0	**445**	14	49	40	18	0	**107**	9	23	325	40	0	**388**	2	**1055**
2:00PM	26	46	54	0	**126**	14	42	339	36	0	**417**	2	47	33	27	0	**107**	6	24	332	35	0	**391**	3	**1041**
3:00PM	18	50	51	0	**119**	2	37	367	42	0	**446**	2	46	43	29	0	**118**	2	24	367	25	0	**416**	1	**1099**
4:00PM	9	32	44	0	**85**	13	35	398	31	0	**464**	2	46	61	45	0	**152**	6	22	390	31	0	**443**	1	**1144**
5:00PM	22	27	46	0	**95**	16	39	303	36	1	**379**	4	53	46	27	0	**126**	4	17	334	30	0	**381**	7	**981**
6:00PM	23	24	40	0	**87**	4	32	244	33	0	**309**	0	24	24	12	0	**60**	0	16	258	21	0	**295**	2	**751**
7:00PM	11	20	33	0	**64**	6	27	221	18	0	**266**	2	23	24	5	0	**52**	5	7	164	13	0	**184**	1	**566**
Total	219	589	618	1	**1427**	95	448	4184	590	2	**5224**	77	457	491	242	0	**1190**	78	269	3715	316	0	**4300**	46	**12141**
% Approach	15.3%	41.3%	43.3%	0.1%	**-**	-	8.6%	80.1%	11.3%	0%	**-**	-	38.4%	41.3%	20.3%	0%	**-**	-	6.3%	86.4%	7.3%	0%	**-**	-	-
% Total	1.8%	4.9%	5.1%	0%	**11.8%**	-	3.7%	34.5%	4.9%	0%	**43.0%**	-	3.8%	4.0%	2.0%	0%	**9.8%**	-	2.2%	30.6%	2.6%	0%	**35.4%**	-	-
Lights	213	536	601	1	**1351**	-	442	4134	583	2	**5161**	-	443	424	240	0	**1107**	-	261	3682	311	0	**4254**	-	11873
% Lights	97.3%	91.0%	97.2%	100%	**94.7%**	-	98.7%	98.8%	98.8%	100%	**98.8%**	-	96.9%	86.4%	99.2%	0%	**93.0%**	-	97.0%	99.1%	98.4%	0%	**98.9%**	-	97.8%
Articulated Trucks and Single-Unit Trucks	5	17	12	0	**34**	-	5	43	4	0	**52**	-	9	19	0	0	**28**	-	7	32	4	0	**43**	-	157
% Articulated Trucks and Single-Unit Trucks	2.3%	2.9%	1.9%	0%	**2.4%**	-	1.1%	1.0%	0.7%	0%	**1.0%**	-	2.0%	3.9%	0%	0%	**2.4%**	-	2.6%	0.9%	1.3%	0%	**1.0%**	-	1.3%
Buses	1	10	5	0	**16**	-	1	6	0	0	**7**	-	2	14	1	0	**17**	-	0	1	0	0	**1**	-	41
% Buses	0.5%	1.7%	0.8%	0%	**1.1%**	-	0.2%	0.1%	0%	0%	**0.1%**	-	0.4%	2.9%	0.4%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Bicycles on Road	0	26	0	0	**26**	-	0	1	3	0	**4**	-	3	34	1	0	**38**	-	1	0	1	0	**2**	-	70
% Bicycles on Road	0%	4.4%	0%	0%	**1.8%**	-	0%	0%	0.5%	0%	**0.1%**	-	0.7%	6.9%	0.4%	0%	**3.2%**	-	0.4%	0%	0.3%	0%	**0%**	-	0.6%
Pedestrians	-	-	-	-	-	89	-	-	-	-	-	75	-	-	-	-	-	74	-	-	-	-	-	42	
% Pedestrians	-	-	-	-	-	93.7%	-	-	-	-	-	97.4%	-	-	-	-	-	94.9%	-	-	-	-	-	91.3%	-
Bicycles on Crosswalk	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	6.3%	-	-	-	-	-	2.6%	-	-	-	-	-	5.1%	-	-	-	-	-	8.7%	-

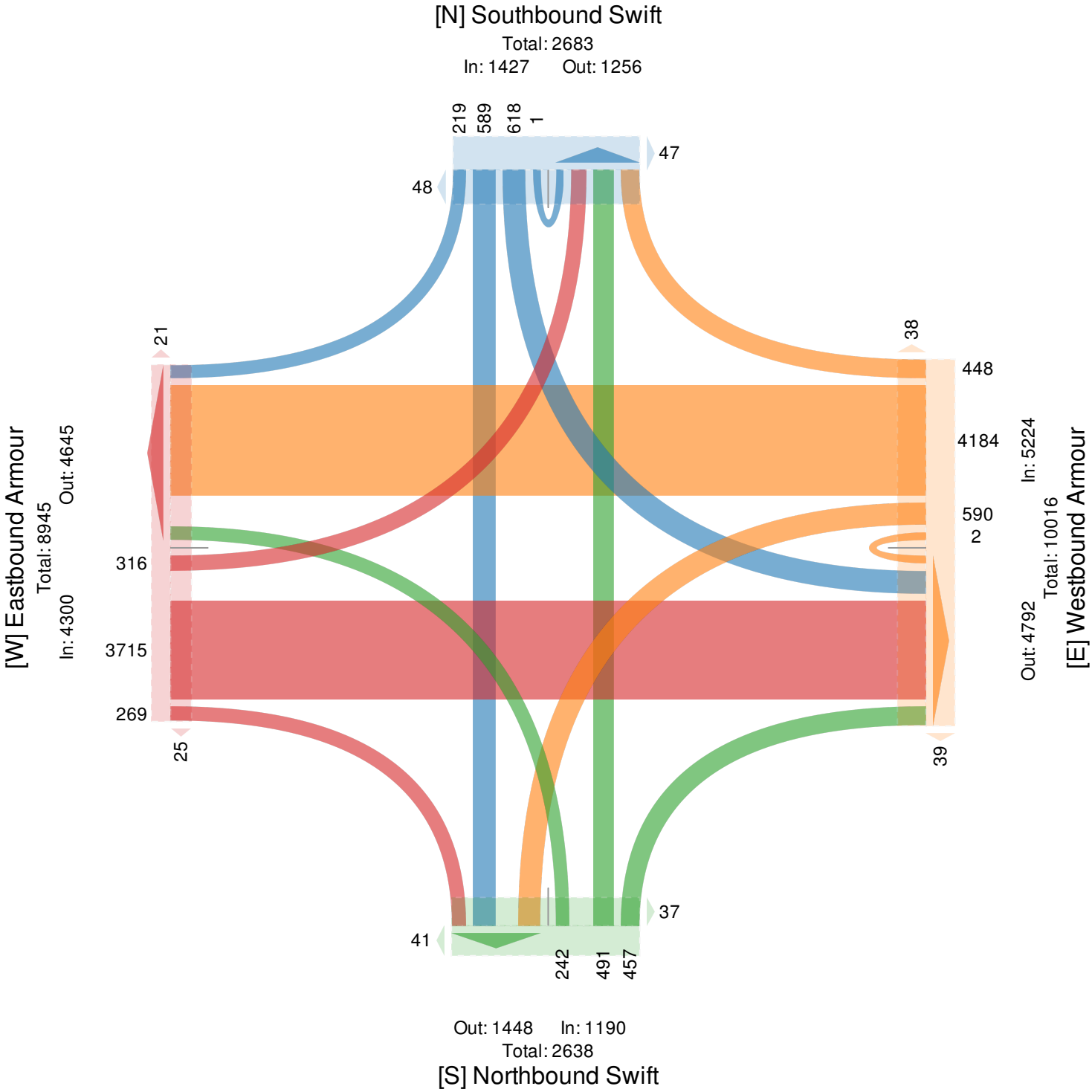
*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Additional Bicycle Trips		
1	10:13 AM	Eastbound Armour
2	10:21 AM	Westbound Armour to Southbound Swift
3	11:15 AM	Northbound Swift to Westbound Armour
4	12:19 PM	Southbound Swift to Westbound Armour
5	12:27 PM	Southbound Swift
6	12:46 PM	Northbound Swift to Westbound Armour
7	12:46 PM	Southbound Swift to Westbound Armour
8	12:46 PM	Southbound Swift to Westbound Armour
9	12:53 PM	Eastbound Armour to Southbound Swift
10	2:40 PM	Southbound Swift
11	4:28 PM	Southbound Swift
12	5:05 PM	Northbound Swift
13	5:14 PM	Northbound Swift
14	7:53 PM	Eastbound Armour

Armour & Swift - Thu Jun 4 2020 - TMC

Thu Jun 4, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769349, Location: 39.142008, -94.577254

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US



Armour & Swift - Sun Jun 28 2020 - TMC
Sun Jun 28, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769353, Location: 39.142008, -94.577254

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US

Leg / Direction	Southbound Swift Southbound						Westbound Armour Westbound						Northbound Swift Northbound						Eastbound Armour Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2020-06-28 6:00AM	2	2	5	0	**9**	0	3	44	1	0	**48**	4	1	1	0	0	**2**	2	0	30	1	0	**31**	0	**90**
7:00AM	1	8	9	0	**18**	1	3	43	2	0	**48**	2	2	2	2	0	**6**	3	1	47	0	0	**48**	0	**120**
8:00AM	9	9	9	0	**27**	1	2	80	6	0	**88**	8	2	5	0	0	**7**	2	3	61	5	0	**69**	1	**191**
9:00AM	6	13	18	0	**37**	2	11	109	16	0	**136**	5	6	11	3	0	**20**	1	4	132	3	0	**139**	1	**332**
10:00AM	4	11	21	0	**36**	4	12	176	17	0	**205**	4	8	8	3	0	**19**	2	5	158	10	0	**173**	0	**433**
11:00AM	19	16	24	0	**59**	5	25	205	20	0	**250**	1	19	22	7	0	**48**	0	13	211	13	0	**237**	2	**594**
12:00PM	11	22	26	0	**59**	11	21	237	15	0	**273**	6	18	18	12	0	**48**	5	7	240	22	0	**269**	3	**649**
1:00PM	9	18	37	0	**64**	7	35	243	17	0	**295**	2	25	27	5	0	**57**	3	8	225	28	0	**261**	7	**677**
2:00PM	13	19	41	0	**73**	5	33	219	21	0	**273**	1	17	10	8	0	**35**	4	8	190	17	0	**215**	2	**596**
3:00PM	13	19	36	0	**68**	3	16	203	11	0	**230**	2	9	19	4	0	**32**	2	12	195	27	0	**234**	3	**564**
4:00PM	13	13	26	0	**52**	5	19	213	17	0	**249**	3	12	13	5	0	**30**	3	10	199	14	0	**223**	3	**554**
5:00PM	13	17	32	0	**62**	4	19	220	13	0	**252**	4	14	12	4	0	**30**	2	13	206	13	0	**232**	0	**576**
6:00PM	10	10	24	0	**44**	11	21	191	7	0	**219**	2	13	9	4	0	**26**	5	10	209	12	0	**231**	8	**520**
7:00PM	12	8	21	0	**41**	12	19	182	10	0	**211**	7	6	14	2	0	**22**	4	10	175	15	0	**200**	3	**474**
Total	135	185	329	0	**649**	71	239	2365	173	0	**2777**	51	152	171	59	0	**382**	38	104	2278	180	0	**2562**	33	**6370**
% Approach	20.8%	28.5%	50.7%	0%	-	-	8.6%	85.2%	6.2%	0%	-	-	39.8%	44.8%	15.4%	0%	-	-	4.1%	88.9%	7.0%	0%	-	-	-
% Total	2.1%	2.9%	5.2%	0%	**10.2%**	-	3.8%	37.1%	2.7%	0%	**43.6%**	-	2.4%	2.7%	0.9%	0%	**6.0%**	-	1.6%	35.8%	2.8%	0%	**40.2%**	-	-
Lights	130	150	320	0	**600**	-	232	2351	167	0	**2750**	-	142	137	58	0	**337**	-	100	2270	180	0	**2550**	-	6237
% Lights	96.3%	81.1%	97.3%	0%	**92.4%**	-	97.1%	99.4%	96.5%	0%	**99.0%**	-	93.4%	80.1%	98.3%	0%	**88.2%**	-	96.2%	99.6%	100%	0%	**99.5%**	-	97.9%
Articulated Trucks and Single-Unit Trucks	1	2	1	0	**4**	-	1	8	3	0	**12**	-	1	1	0	0	**2**	-	1	5	0	0	**6**	-	24
% Articulated Trucks and Single-Unit Trucks	0.7%	1.1%	0.3%	0%	**0.6%**	-	0.4%	0.3%	1.7%	0%	**0.4%**	-	0.7%	0.6%	0%	0%	**0.5%**	-	1.0%	0.2%	0%	0%	**0.2%**	-	0.4%
Buses	2	0	5	0	**7**	-	3	2	0	0	**5**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	14
% Buses	1.5%	0%	1.5%	0%	**1.1%**	-	1.3%	0.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Bicycles on Road	2	33	3	0	**38**	-	3	4	3	0	**10**	-	9	33	1	0	**43**	-	3	1	0	0	**4**	-	95
% Bicycles on Road	1.5%	17.8%	0.9%	0%	**5.9%**	-	1.3%	0.2%	1.7%	0%	**0.4%**	-	5.9%	19.3%	1.7%	0%	**11.3%**	-	2.9%	0%	0%	0%	**0.2%**	-	1.5%
Pedestrians	-	-	-	-	-	60	-	-	-	-	-	47	-	-	-	-	-	34	-	-	-	-	-	27	
% Pedestrians	-	-	-	-	-	84.5%	-	-	-	-	-	92.2%	-	-	-	-	-	89.5%	-	-	-	-	-	81.8%	-
Bicycles on Crosswalk	-	-	-	-	-	11	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	6	
% Bicycles on Crosswalk	-	-	-	-	-	15.5%	-	-	-	-	-	7.8%	-	-	-	-	-	10.5%	-	-	-	-	-	18.2%	-

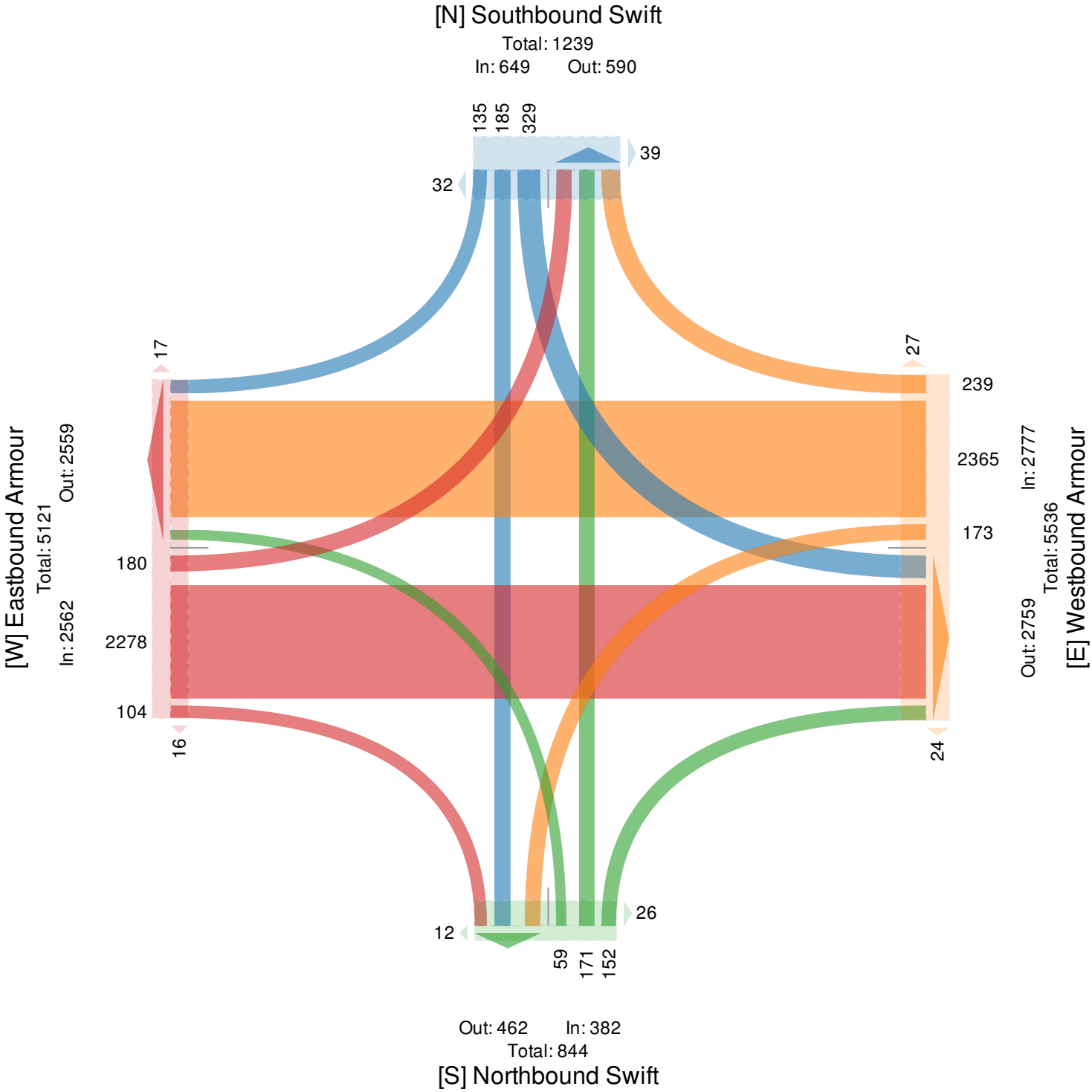
*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Additional Bicycle Trips		
1	9:26 AM	Northbound Swift
2	9:54 AM	Eastbound Armour to Southbound Swift
3	10:18 AM	Eastbound Armour U-Turn
4	10:27 AM	Westbound Armour to Northbound Swift
5	11:50 AM	Northbound Swift
6	11:50 AM	Northbound Swift
7	12:05 PM	Southbound Swift to Eastbound Armour
8	12:22 PM	Southbound Swift
9	12:22 PM	Southbound Swift
10	12:22 PM	Southbound Swift
11	12:22 PM	Southbound Swift
12	12:37 PM	Northbound Swift
13	12:54 PM	Northbound Swift
14	2:18 PM	Northbound Swift to Eastbound Armour
15	2:50 PM	Northbound Swift to Eastbound Armour
16	3:24 PM	Northbound Swift
17	3:54 PM	Westbound Armour to Northbound Swift
18	4:25 PM	Westtbound Armour
19	4:39 PM	Westbound Armour
20	4:49 PM	Westbound Armour
21	7:17 PM	Southbound Swift to Eastbound Armour
22	7:57 PM	Eastbound Armour

Armour & Swift - Sun Jun 28 2020 - TMC

Sun Jun 28, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769353, Location: 39.142008, -94.577254

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US



Armour & Iron - Thu Jun 4 2020 - TMC

Thu Jun 4, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769382, Location: 39.143035, -94.571475

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US

Leg / Direction	Southbound Iron / Southbound						Westbound Armour / Westbound						Northbound Iron / Northbound						Eastbound Armour / Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2020-06-04 6:00AM	6	16	20	0	**42**	0	9	352	53	0	**414**	2	10	5	4	0	**19**	2	2	127	2	0	**131**	0	**606**
7:00AM	6	27	28	0	**61**	4	13	425	53	0	**491**	4	37	12	5	0	**54**	1	13	173	5	0	**191**	0	**797**
8:00AM	6	21	31	0	**58**	7	23	345	67	0	**435**	0	39	10	8	0	**57**	1	10	214	2	0	**226**	1	**776**
9:00AM	7	24	48	0	**79**	8	28	342	48	0	**418**	0	43	19	9	0	**71**	1	8	261	3	0	**272**	3	**840**
10:00AM	16	19	62	0	**97**	5	35	376	48	0	**459**	0	66	23	15	0	**104**	3	11	296	4	0	**311**	0	**971**
11:00AM	16	19	59	0	**94**	5	32	489	77	0	**598**	0	54	14	18	0	**86**	7	11	471	8	0	**490**	0	**1268**
12:00PM	22	28	57	0	**107**	6	45	499	58	0	**602**	3	58	16	13	0	**87**	6	11	538	13	0	**562**	2	**1358**
1:00PM	16	14	45	0	**75**	2	38	450	54	0	**542**	3	62	13	9	0	**84**	2	12	457	6	0	**475**	1	**1176**
2:00PM	16	10	54	0	**80**	6	46	444	39	0	**529**	2	49	10	12	0	**71**	3	11	476	9	0	**496**	2	**1176**
3:00PM	13	19	41	0	**73**	3	39	421	58	0	**518**	4	73	25	20	0	**118**	1	10	538	7	0	**555**	1	**1264**
4:00PM	14	17	70	0	**101**	9	49	446	64	0	**559**	2	64	23	23	0	**110**	4	25	507	10	0	**542**	1	**1312**
5:00PM	4	13	36	0	**53**	3	41	377	46	1	**465**	4	68	23	22	0	**113**	2	19	468	15	0	**502**	4	**1133**
6:00PM	8	11	35	0	**54**	4	44	311	20	0	**375**	3	33	20	15	0	**68**	1	6	328	14	0	**348**	5	**845**
7:00PM	4	4	29	0	**37**	1	27	264	17	0	**308**	0	37	18	19	0	**74**	4	4	242	5	0	**251**	2	**670**
Total	154	242	615	0	**1011**	63	469	5541	702	1	**6713**	27	693	231	192	0	**1116**	38	153	5096	103	0	**5352**	22	**14192**
% Approach	15.2%	23.9%	60.8%	0%	**-**	-	7.0%	82.5%	10.5%	0%	**-**	-	62.1%	20.7%	17.2%	0%	**-**	-	2.9%	95.2%	1.9%	0%	**-**	-	-
% Total	1.1%	1.7%	4.3%	0%	**7.1%**	-	3.3%	39.0%	4.9%	0%	**47.3%**	-	4.9%	1.6%	1.4%	0%	**7.9%**	-	1.1%	35.9%	0.7%	0%	**37.7%**	-	-
Lights	153	230	607	0	**990**	-	461	5469	685	1	**6616**	-	681	219	191	0	**1091**	-	152	5019	102	0	**5273**	-	13970
% Lights	99.4%	95.0%	98.7%	0%	**97.9%**	-	98.3%	98.7%	97.6%	100%	**98.6%**	-	98.3%	94.8%	99.5%	0%	**97.8%**	-	99.3%	98.5%	99.0%	0%	**98.5%**	-	98.4%
Articulated Trucks and Single-Unit Trucks	1	5	7	0	**13**	-	7	67	14	0	**88**	-	10	10	1	0	**21**	-	0	73	1	0	**74**	-	196
% Articulated Trucks and Single-Unit Trucks	0.6%	2.1%	1.1%	0%	**1.3%**	-	1.5%	1.2%	2.0%	0%	**1.3%**	-	1.4%	4.3%	0.5%	0%	**1.9%**	-	0%	1.4%	1.0%	0%	**1.4%**	-	1.4%
Buses	0	1	1	0	**2**	-	1	5	0	0	**6**	-	1	1	0	0	**2**	-	1	4	0	0	**5**	-	15
% Buses	0%	0.4%	0.2%	0%	**0.2%**	-	0.2%	0.1%	0%	0%	**0.1%**	-	0.1%	0.4%	0%	0%	**0.2%**	-	0.7%	0.1%	0%	0%	**0.1%**	-	0.1%
Bicycles on Road	0	6	0	0	**6**	-	0	0	3	0	**3**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	11
% Bicycles on Road	0%	2.5%	0%	0%	**0.6%**	-	0%	0%	0.4%	0%	**0%**	-	0.1%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	58	-	-	-	-	-	27	-	-	-	-	-	32	-	-	-	-	-	21	
% Pedestrians	-	-	-	-	-	92.1%	-	-	-	-	-	100%	-	-	-	-	-	84.2%	-	-	-	-	-	95.5%	-
Bicycles on Crosswalk	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	7.9%	-	-	-	-	-	0%	-	-	-	-	-	15.8%	-	-	-	-	-	4.5%	-

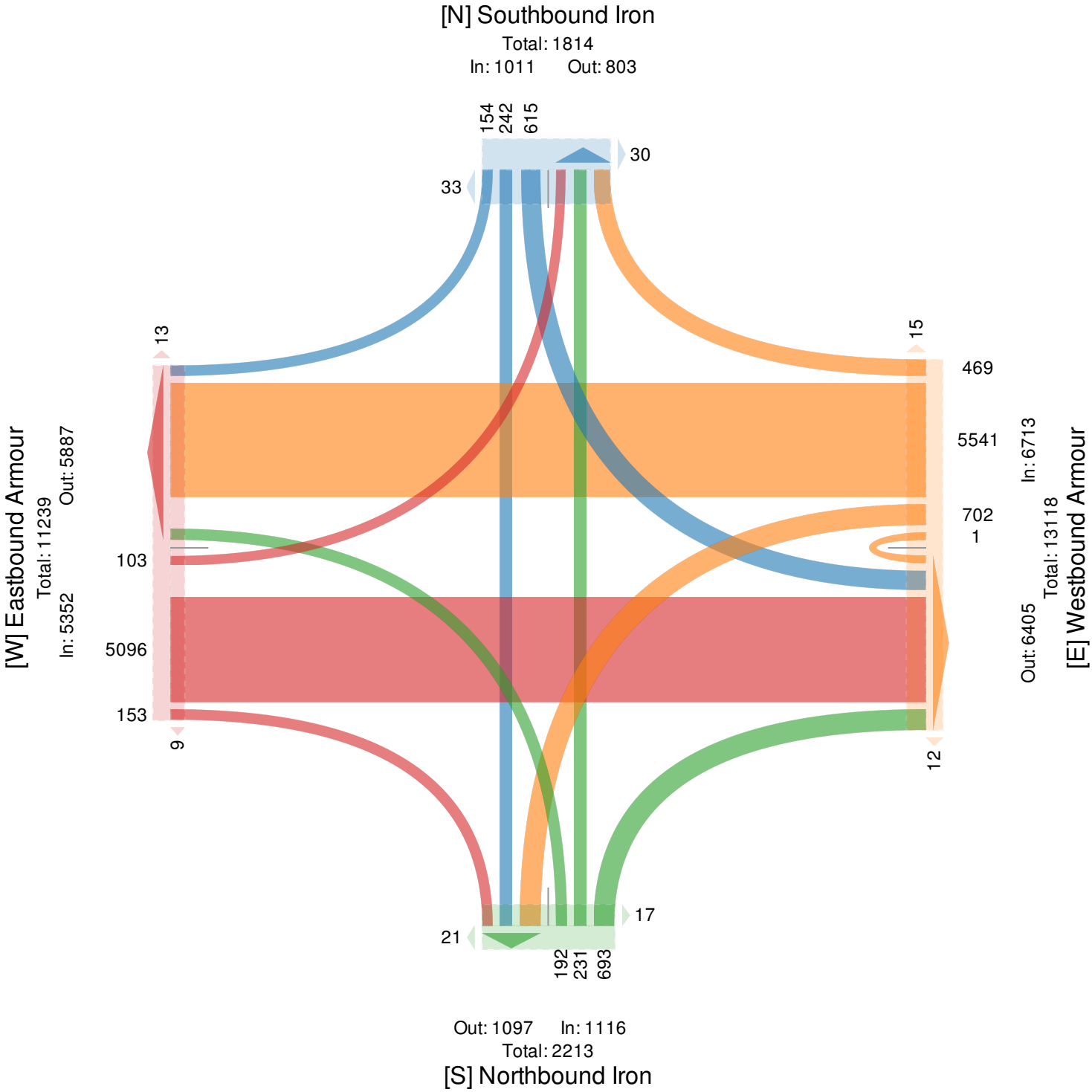
*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Additional Bicycle Trips		
1	8:38 AM	Eastbound Armour to Southbound Iron
2	1:56 PM	Westbound Armour to Northbound Iron
3	3:43 PM	Eastbound Armour to Southbound Iron
4	4:18 PM	Eastbound Armour to Southbound Iron
5	4:45 PM	Southbound Iron to Westbound Armour
6	4:46 PM	Northbound Iron to Eastbound Armour
7	5:03 PM	Northbound Iron to Eastbound Armour
8	5:59 PM	Northbound Iron to Eastbound Armour
9	5:59 PM	Northbound Iron to Eastbound Armour
10	6:01 PM	Southbound Iron
11	6:01 PM	Southbound Iron
12	6:07 PM	Southbound Iron to Westbound Armour
13	6:07 PM	Southbound Iron to Westbound Armour
14	6:40 PM	Southbound Iron
15	6:44 PM	Southbound Iron to Westbound Armour
16	7:01 PM	Southbound Iron to Westbound Armour

Armour & Iron - Thu Jun 4 2020 - TMC

Thu Jun 4, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769382, Location: 39.143035, -94.571475

Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US



Armour & Iron - Sun Jun 28 2020 - TMC
Sun Jun 28, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769383, Location: 39.143035, -94.571475

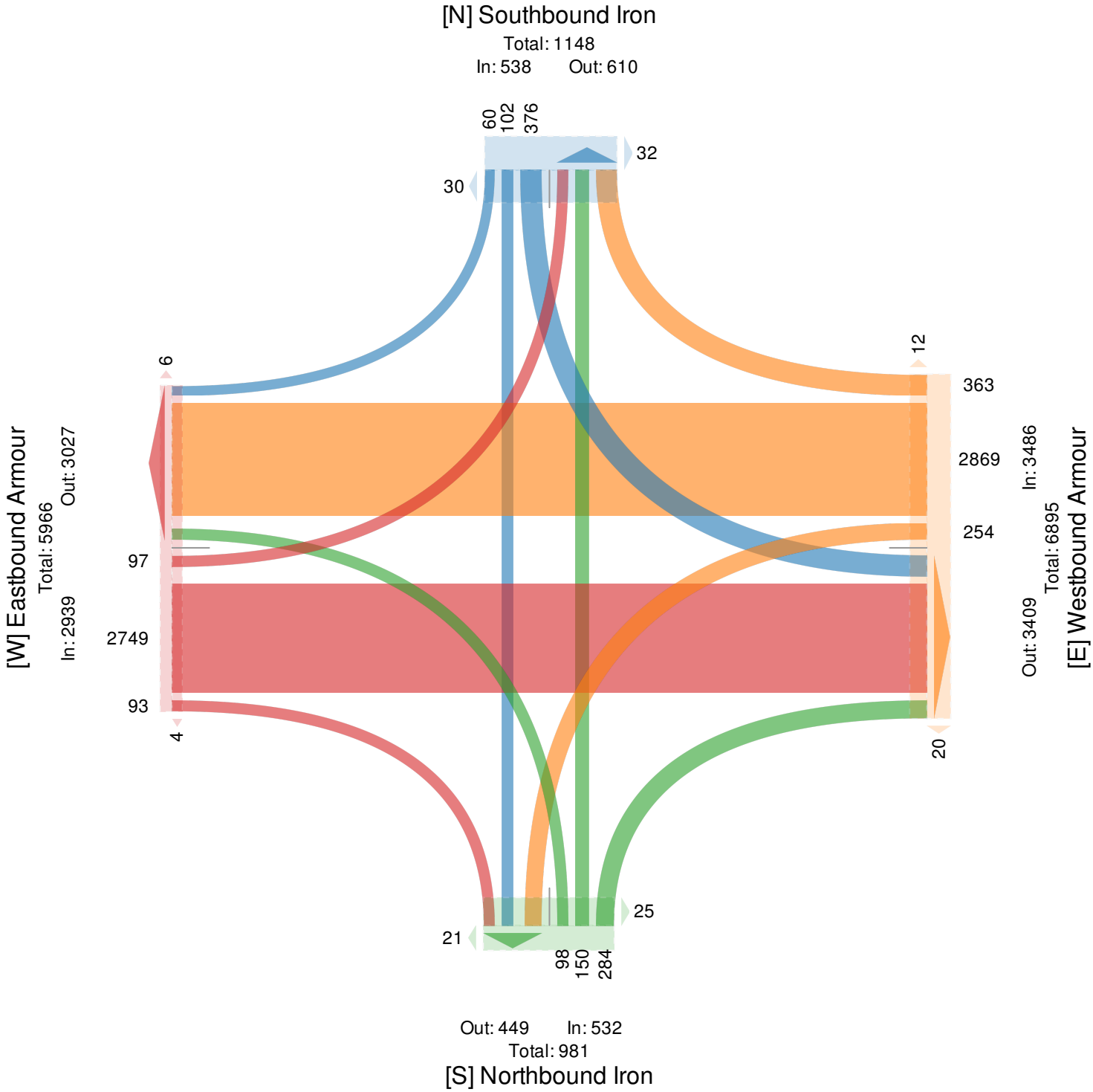
Provided by: BikeWalk KC
1106 East 30th Street, Suite G,
Kansas City, MO, 64109, US

Leg	Southbound Iron						Westbound Armour						Northbound Iron						Eastbound Armour						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2020-06-28 6:00AM	1	3	5	0	**9**	2	5	60	5	0	**70**	2	4	3	0	0	**7**	1	1	38	0	0	**39**	0	**125**
7:00AM	1	1	14	0	**16**	5	14	55	7	0	**76**	4	2	1	1	0	**4**	3	0	48	1	0	**49**	1	**145**
8:00AM	3	5	14	0	**22**	0	14	101	5	0	**120**	0	8	6	0	0	**14**	3	1	61	2	0	**64**	0	**220**
9:00AM	3	5	29	0	**37**	3	11	144	11	0	**166**	2	9	6	0	0	**15**	1	7	136	4	0	**147**	1	**365**
10:00AM	5	11	28	0	**44**	6	23	217	33	0	**273**	2	24	12	8	0	**44**	3	12	164	8	0	**184**	1	**545**
11:00AM	8	12	34	0	**54**	4	21	241	24	0	**286**	0	40	12	10	0	**62**	0	8	237	5	0	**250**	0	**652**
12:00PM	7	9	41	0	**57**	8	32	281	29	0	**342**	6	29	10	12	0	**51**	5	10	273	8	0	**291**	0	**741**
1:00PM	8	11	39	0	**58**	7	40	271	23	0	**334**	5	30	24	11	0	**65**	7	8	284	6	0	**298**	4	**755**
2:00PM	4	12	24	0	**40**	4	34	271	34	0	**339**	0	33	14	15	0	**62**	6	9	267	6	0	**282**	0	**723**
3:00PM	2	7	34	0	**43**	2	33	239	13	0	**285**	1	38	11	11	0	**60**	1	6	250	13	0	**269**	0	**657**
4:00PM	4	8	32	0	**44**	4	40	254	24	0	**318**	0	25	20	11	0	**56**	1	8	245	10	0	**263**	2	**681**
5:00PM	4	8	23	0	**35**	0	37	272	23	0	**332**	2	11	14	10	0	**35**	9	9	262	9	0	**280**	0	**682**
6:00PM	7	4	33	0	**44**	10	34	239	10	0	**283**	3	16	12	5	0	**33**	5	10	253	13	0	**276**	0	**636**
7:00PM	3	6	26	0	**35**	7	25	224	13	0	**262**	5	15	5	4	0	**24**	1	4	231	12	0	**247**	1	**568**
Total	60	102	376	0	**538**	62	363	2869	254	0	**3486**	32	284	150	98	0	**532**	46	93	2749	97	0	**2939**	10	**7495**
% Approach	11.2%	19.0%	69.9%	0%	-	-	10.4%	82.3%	7.3%	0%	-	-	53.4%	28.2%	18.4%	0%	-	-	3.2%	93.5%	3.3%	0%	-	-	-
% Total	0.8%	1.4%	5.0%	0%	**7.2%**	-	4.8%	38.3%	3.4%	0%	**46.5%**	-	3.8%	2.0%	1.3%	0%	**7.1%**	-	1.2%	36.7%	1.3%	0%	**39.2%**	-	-
Lights	59	95	371	0	**525**	-	359	2848	253	0	**3460**	-	282	140	98	0	**520**	-	93	2731	96	0	**2920**	-	7425
% Lights	98.3%	93.1%	98.7%	0%	**97.6%**	-	98.9%	99.3%	99.6%	0%	**99.3%**	-	99.3%	93.3%	100%	0%	**97.7%**	-	100%	99.3%	99.0%	0%	**99.4%**	-	99.1%
Articulated Trucks and Single-Unit Trucks	1	1	3	0	**5**	-	3	16	1	0	**20**	-	2	1	0	0	**3**	-	0	12	0	0	**12**	-	40
% Articulated Trucks and Single-Unit Trucks	1.7%	1.0%	0.8%	0%	**0.9%**	-	0.8%	0.6%	0.4%	0%	**0.6%**	-	0.7%	0.7%	0%	0%	**0.6%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.5%
Buses	0	0	2	0	**2**	-	1	5	0	0	**6**	-	0	0	0	0	**0**	-	0	4	1	0	**5**	-	13
% Buses	0%	0%	0.5%	0%	**0.4%**	-	0.3%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	1.0%	0%	**0.2%**	-	0.2%
Bicycles on Road	0	6	0	0	**6**	-	0	0	0	0	**0**	-	0	9	0	0	**9**	-	0	2	0	0	**2**	-	17
% Bicycles on Road	0%	5.9%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0%	6.0%	0%	0%	**1.7%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Pedestrians	-	-	-	-	-	51	-	-	-	-	-	20	-	-	-	-	-	36	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	82.3%	-	-	-	-	-	62.5%	-	-	-	-	-	78.3%	-	-	-	-	-	70.0%	-
Bicycles on Crosswalk	-	-	-	-	-	11	-	-	-	-	-	12	-	-	-	-	-	10	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	17.7%	-	-	-	-	-	37.5%	-	-	-	-	-	21.7%	-	-	-	-	-	30.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Additional Bicycle Trips		
1	8:02 AM	Southbound Iron to Westbound Armour
2	10:01 AM	Southbound Iron to Westbound Armour
3	10:29 AM	Northbound Iron
4	11:03 AM	Southbound Iron to Westbound Armour]
5	12:00 PM	Southbound Iron
6	12:09 PM	Westbound Armour to Northbound Iron
7	12:29 PM	Eastbound Armour to Southbound Iron
8	12:29 PM	Eastbound Armour to Southbound Iron
9	12:29 PM	Eastbound Armour to Southbound Iron
10	12:29 PM	Eastbound Armour to Southbound Iron
11	12:30 PM	Northbound Iron to Eastbound Armour
12	1:12 PM	Northbound Iron
13	3:05 PM	Eastbound Armour
14	4:37 PM	Southbound Iron to Westbound Armour
15	5:33 PM	Northbound Iron to Westbound Armour
16	5:36 PM	Westbound Armour to Northbound Iron
17	7:59 PM	Eastbound Armour

Armour & Iron - Sun Jun 28 2020 - TMC

Sun Jun 28, 2020
Full Length (6 AM-8 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 769383, Location: 39.143035, -94.571475

Provided by: BikeWalk KC
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