



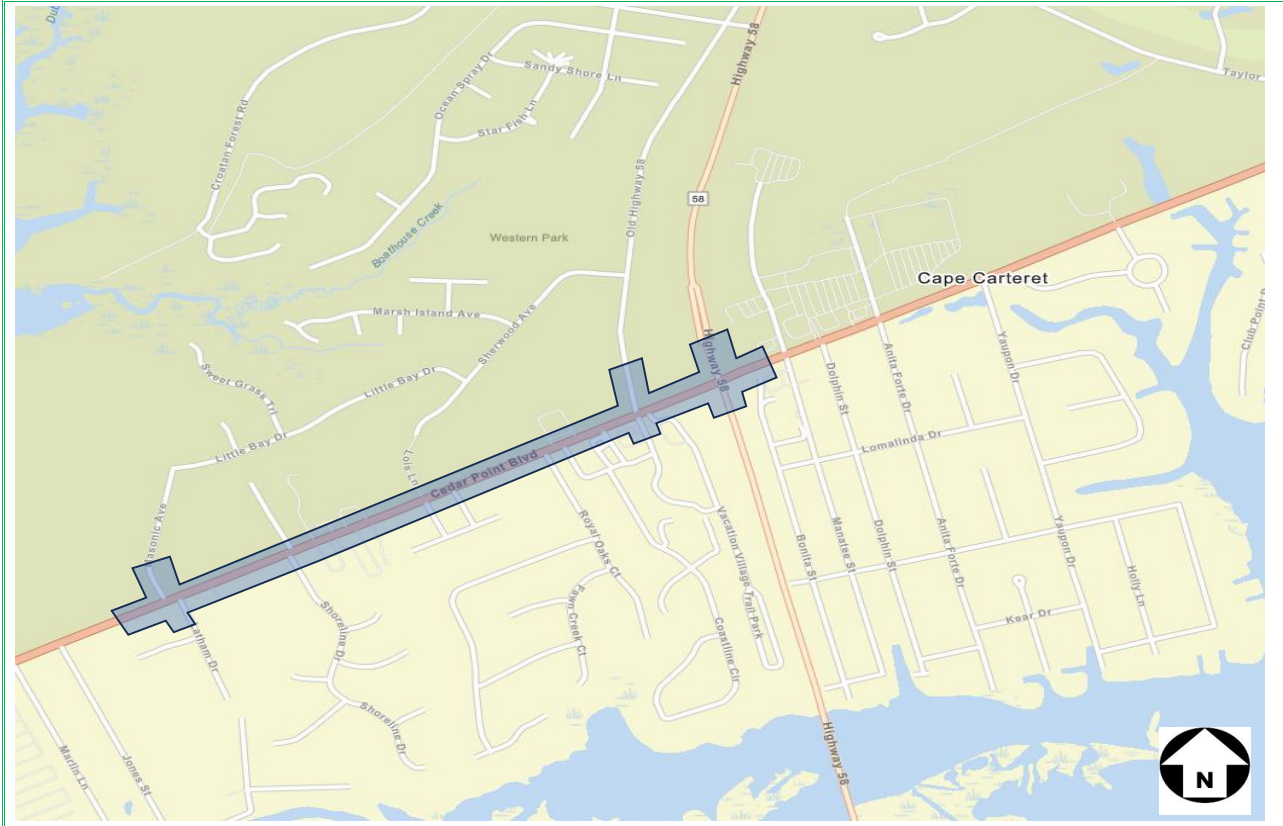
Preliminary – Do Not Use for Construction



SPOT Travel Time Savings Report

NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58
Upgrade Arterial to RCI Corridor

STIP No. - SPOT ID: H250719 WBS No. 34263.1.1 Carteret DIVISION: 2
1/12/2026 Kimley-Horn



ID	Road Name	External	2025 AADT	2035 AADT	ID	Road Name	External	2025 AADT	2035 AADT
01N	Masonic Avenue	Yes	900	1,000					
01E	NC 24 (Cedar Point Boulevard)	No	29,500	30,500					
01S	Driveway 1	Yes	200	200					
01W	NC 24 (Cedar Point Boulevard)	Yes	29,200	30,200					
02N	SR 1113 (Old Highway 58)	Yes	2,100	2,300					
02E	NC 24 (W. B. Mclean Drive)	No	32,200	33,400					
02S	Driveway 2	Yes	1,600	1,800					
02W	NC 24 (Cedar Point Boulevard)	No	29,500	30,600					
03N	NC 58	Yes	11,000	11,900					
03E	NC 24 (W. B. Mclean Drive)	Yes	32,700	34,100					
03S	NC 58 (Emerald Drive)	Yes	17,500	17,900					
03W	NC 24 (W. B. Mclean Drive)	No	32,200	33,400					

2025 AM Peak Travel Time Saving	3
2025 PM Peak Travel Time Saving	10
2025 Total Daily Vehicles	47,600
2025 Daily Travel Time Savings	28.4
2035 AM Peak Travel Time Saving	2
2035 PM Peak Travel Time Saving	0
2035 Total Daily Vehicles	49,700
2035 Daily Travel Time Savings	3.5
Days per Year	260
Travel Time Savings Duration	10 Years

Existing Congestion Level	Non-Congested
Daily Savings Conversion Factor	2.25

10-year Travel Time Savings			
42,000 hours			
Travel Time Savings Per Vehicle			
2025	2 sec/veh	2035	0 sec/veh

Description of Proposed Design

Upgrade Arterial to RCI Corridor

BASE YEAR	2025	FUTURE YEAR	2035	REPORT STATUS	Final	CORRIDOR PROJECT	Yes
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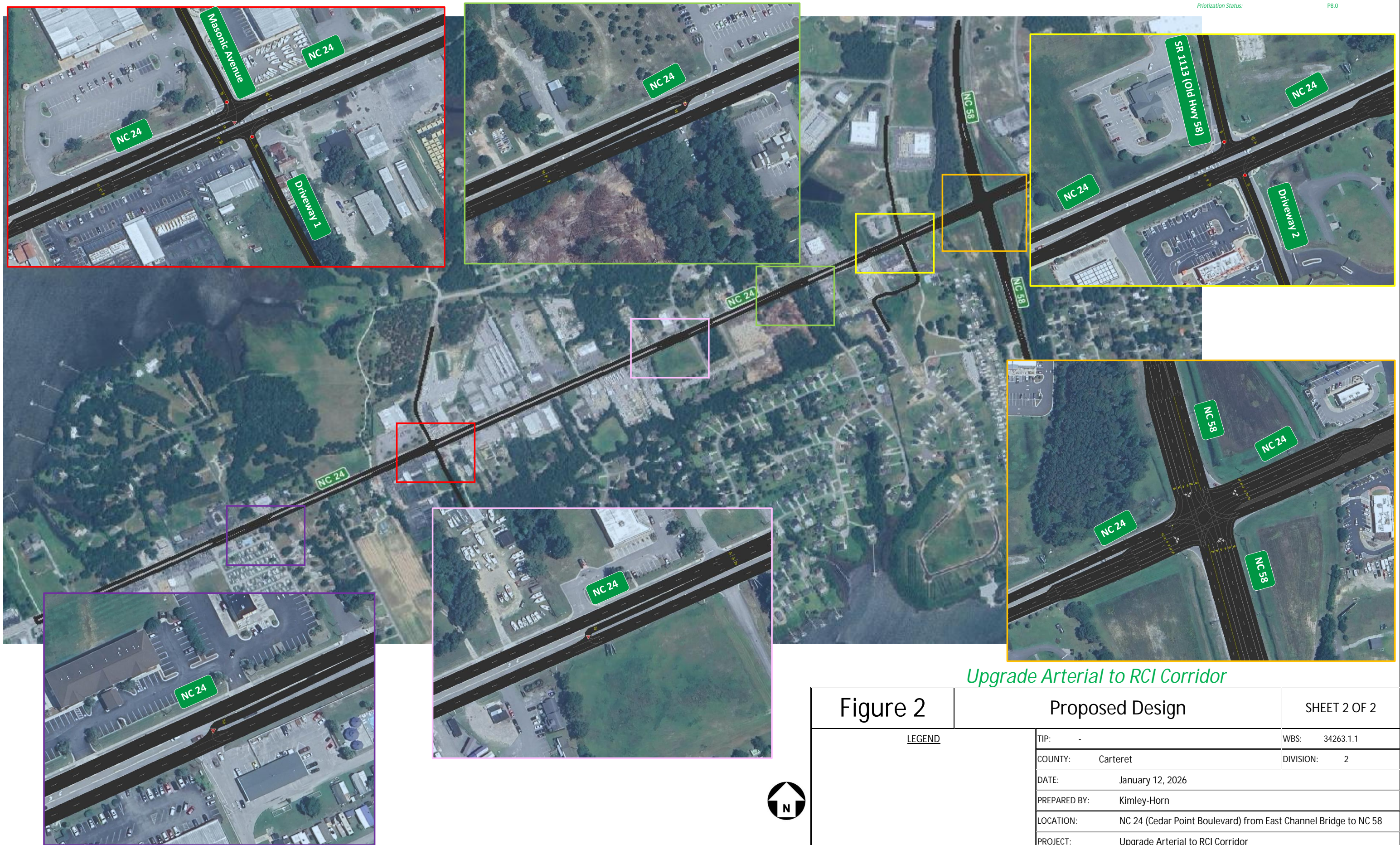
Figure 1

Existing Conditions

SHEET 1 OF 2

LEGEND

TIP:	-	WBS:	34263.1.1
COUNTY:	Carteret	DIVISION:	2
DATE:	January 12, 2026		
PREPARED BY:	Kimley-Horn		
LOCATION:	NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58		
PROJECT:	Upgrade Arterial to RCI Corridor		



Upgrade Arterial to RCI Corridor

Figure 2	Proposed Design		SHEET 2 OF 2
	LEGEND		
TIP:	-	WBS:	34263.1.1
COUNTY:	Carteret	DIVISION:	2
DATE:	January 12, 2026		
PREPARED BY:	Kimley-Horn		
LOCATION:	NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58		
PROJECT:	Upgrade Arterial to RCI Corridor		



SPOT Volume Report



NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58 Upgrade Arterial to RCI Corridor

STIP No. - SPOT ID: H250719 WBS No. 34263.1.1
Carteret DIVISION: 2



PROJECT STUDY AREA

PREPARED BY: **Kimley Horn**

1/7/2026



Committed Projects in Study Area

STIP Project and Description: 2026-2035 NCDOT STIP	R-5858: NC 24/NC 58 Intersection Improvements (In Vicinity)
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Traffic Count Data			Travel Demand Model Utilized		
Int_ID	Count_ID	Count Date	Intersection	AADT Source	2022/2023 NCDOT AADT Web Map
1	10590	5/24/2023	NC 24 (Cedar Point Boulevard) @ Masonic Avenue		
2	10591	5/24/2023	B. Mclean Drive/ Cedar Point Boulevard) @ SR 1113 (Old H		<i>Model</i>
3	10592	5/24/2023	NC 24 (W. B. Mclean Drive) @ NC 58/ NC 58 (Emerald Drive		North Carolina Statewide Model (NCSTM)
					<i>Version</i> Gen 4.5 (P8)

BASE YEAR 2025

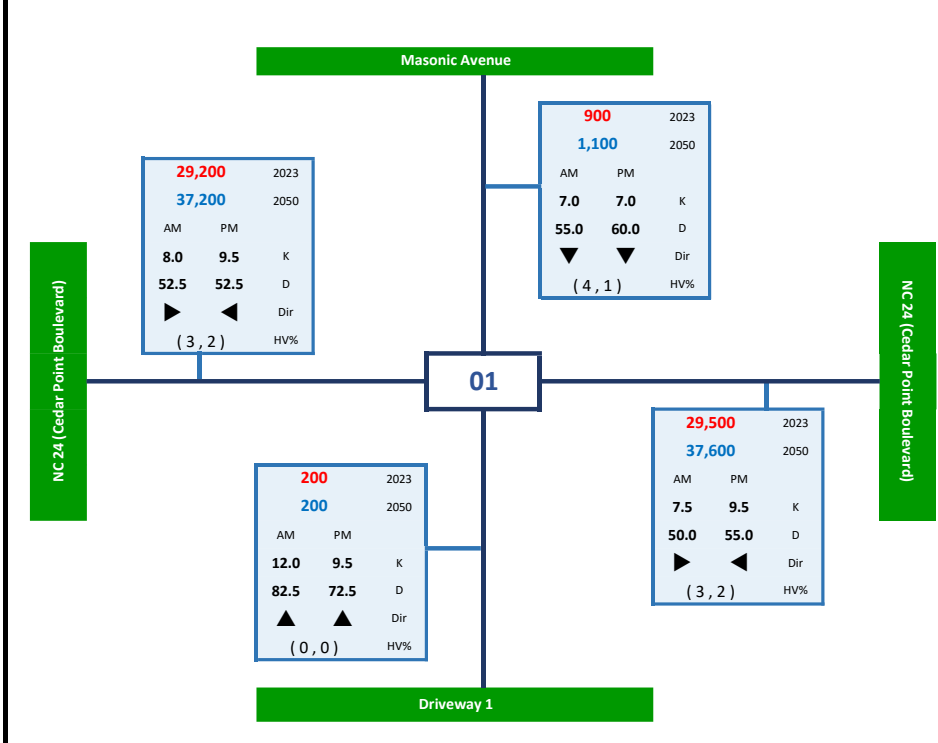
FUTURE YEAR 2035

REPORT STATUS *Final*

CORRIDOR PROJECT Yes

-	H250719	01	Carteret	NC 24 (Cedar Point Boulevard) @ Masonic Avenue
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STIP No. SPOT ID Int. No. County Intersection Location



Express Design Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
15	0 19
←	↓ →
12 ↑	↑ 17
1142 →	← 1089
2 ↓	↓ 2
2023 AM Peak	
←	↑ →
11	0 8
Driveway 1	

Prioritization Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
15	0 19
←	↓ →
12 ↑	↑ 17
1142 →	← 1089
2 ↓	↓ 2
2025 AM Peak	
←	↑ →
11	0 8
Driveway 1	

Express Design Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
9	0 28
←	↓ →
6 ↑	↑ 19
1270 →	← 1478
1 ↓	↓ 5
2023 PM Peak	
←	↑ →
8	1 5
Driveway 1	

Prioritization Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
9	0 28
←	↓ →
6 ↑	↑ 19
1270 →	← 1478
1 ↓	↓ 5
2025 PM Peak	
←	↑ →
8	1 5
Driveway 1	

Express Design Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
18	0 23
←	↓ →
15 ↑	↑ 21
1455 →	← 1393
2 ↓	↓ 2
2050 AM Peak	
←	↑ →
11	0 8
Driveway 1	

Prioritization Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
17	0 20
←	↓ →
14 ↑	↑ 18
1177 →	← 1128
2 ↓	↓ 2
2035 AM Peak	
←	↑ →
12	0 8
Driveway 1	

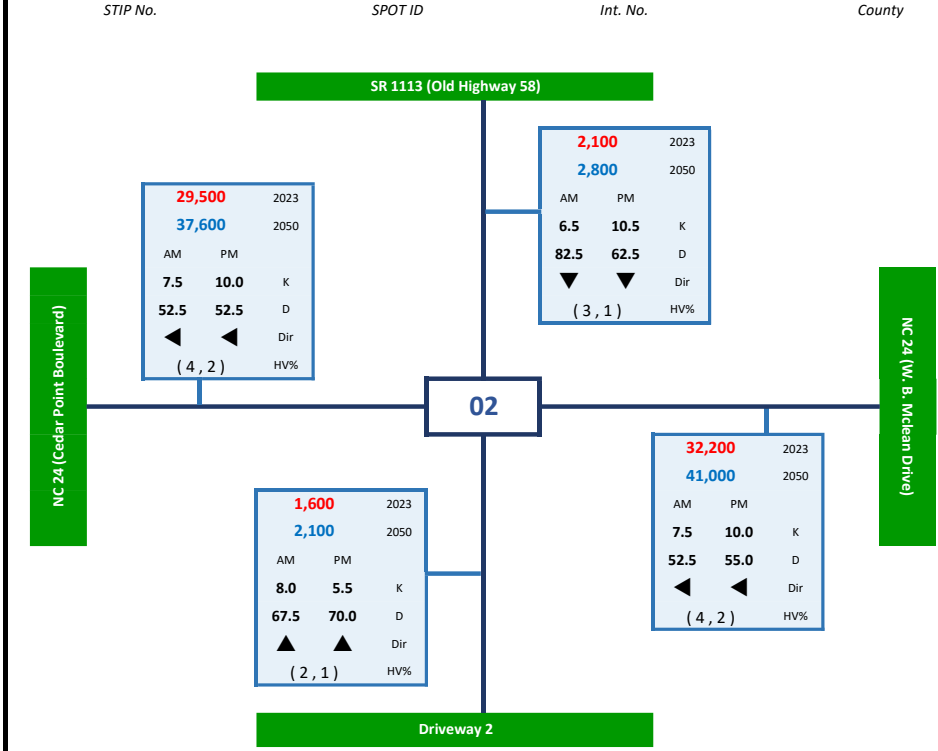
Express Design Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
11	0 34
←	↓ →
8 ↑	↑ 23
1619 →	← 1887
1 ↓	↓ 5
2050 PM Peak	
←	↑ →
8	1 5
Driveway 1	

Prioritization Turn Volumes	
Masonic Avenue	
NC 24 (Cedar Point Boulevard)	NC 24 (Cedar Point Boulevard)
10	0 31
←	↓ →
7 ↑	↑ 21
1312 →	← 1529
1 ↓	↓ 5
2035 PM Peak	
←	↑ →
8	1 5
Driveway 1	

Approach	Road Name	Route Type	No. of Lanes	Facility Type	Functional Class	Capacity	2023 V/C Ratio
North	Masonic Avenue	Local	2	Arterial	Local	15,843	0.06
East	NC 24 (Cedar Point Boulevard)	NC	4	Arterial	Arterial	31,719	0.93
South	Driveway 1	Local	2	Arterial	Local	15,843	0.01
West	NC 24 (Cedar Point Boulevard)	NC	4	Arterial	Arterial	31,719	0.92

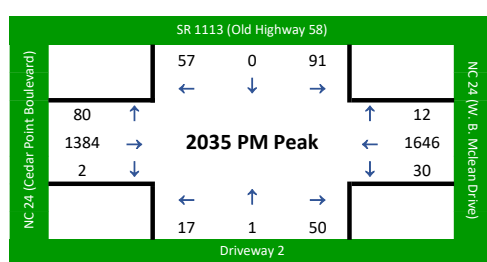
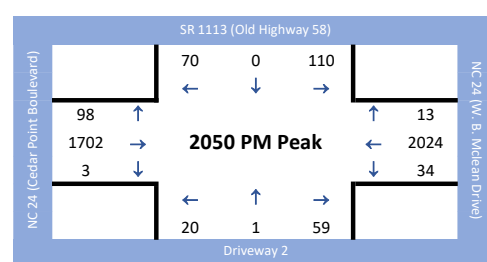
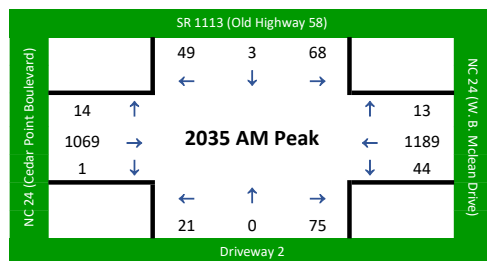
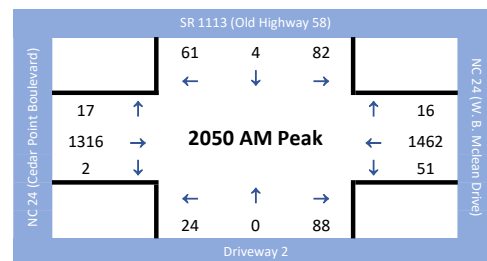
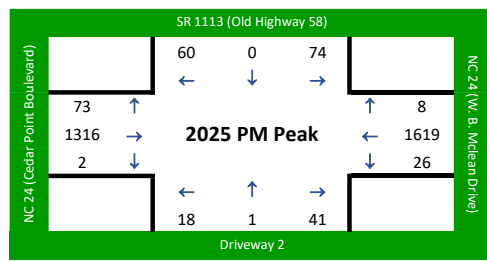
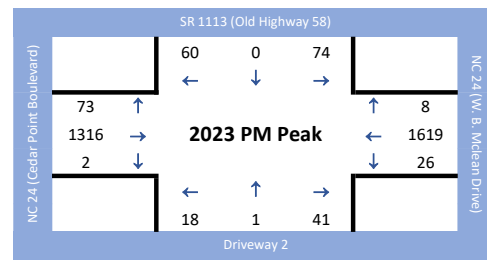
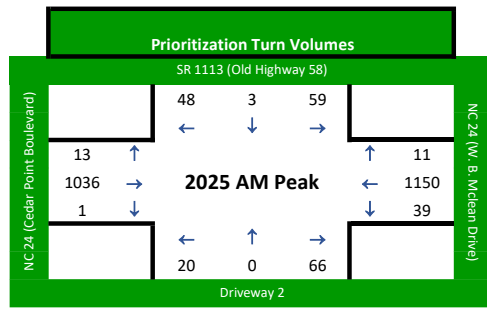
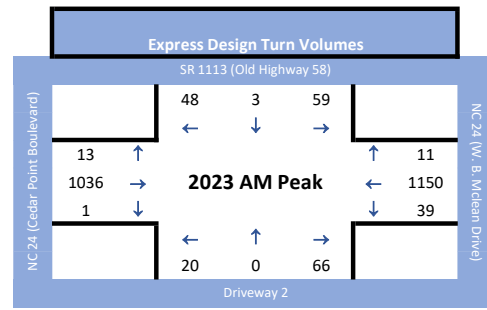
Approach	Road Name	Express Design Traffic Volumes			Prioritization Traffic Volumes		
		2023 AADT	2023-2050 CAGR	2050 AADT	2025 AADT	2025-2035 CAGR	2035 AADT
North	Masonic Avenue	900	0.9%	1,100	900	1.0%	1,000
East	NC 24 (Cedar Point Boulevard)	29,500	0.9%	37,600	29,500	0.3%	30,500
South	Driveway 1	200	0.5%	200	200	1.0%	200
West	NC 24 (Cedar Point Boulevard)	29,200	0.9%	37,200	29,200	0.3%	30,200

-	H250719	02	Carteret	NC 24 (W. B. Mclean Drive/ Cedar Point Boulevard) @ SR 1113 (Old Highway 58)
STIP No.	SPOT ID	Int. No.	County	Intersection Location



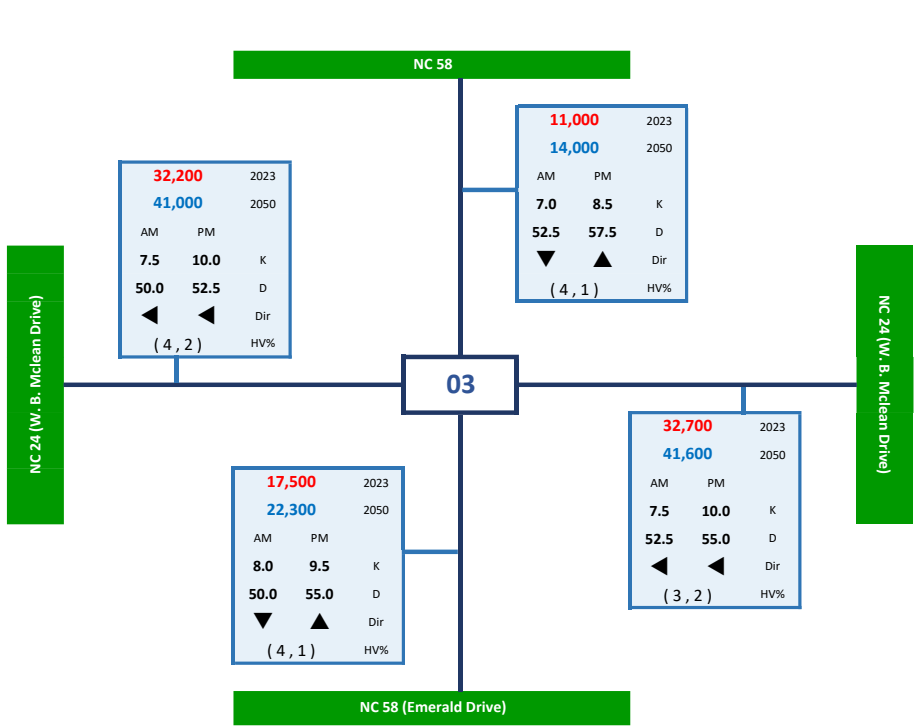
Approach	Road Name	Route Type	No. of Lanes	Facility Type	Functional Class	Capacity	2023 V/C Ratio
North	SR 1113 (Old Highway 58)	SR	2	Arterial	Local	15,843	0.13
East	NC 24 (W. B. Mclean Drive)	NC	4	Arterial	Arterial	31,719	1.02
South	Driveway 2	Local	2	Arterial	Local	15,843	0.10
West	NC 24 (Cedar Point Boulevard)	NC	4	Arterial	Arterial	31,719	0.93

Approach	Road Name	Express Design Traffic Volumes			Prioritization Traffic Volumes		
		2023 AADT	2023-2050 CAGR	2050 AADT	2025 AADT	2025-2035 CAGR	2035 AADT
North	SR 1113 (Old Highway 58)	2,100	1.1%	2,800	2,100	1.0%	2,300
East	NC 24 (W. B. Mclean Drive)	32,200	0.9%	41,000	32,200	0.4%	33,400
South	Driveway 2	1,600	1.1%	2,100	1,600	1.0%	1,800
West	NC 24 (Cedar Point Boulevard)	29,500	0.9%	37,600	29,500	0.4%	30,600



-	H250719	03	Carteret	NC 24 (W. B. Mclean Drive) @ NC 58/ NC 58 (Emerald Drive)
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STIP No. SPOT ID Int. No. County Intersection Location



NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		127	133	135		
		←	↓	→		
124	↑				↑	138
805	→	2023 AM Peak			←	789
252	↓				↓	331
		←	↑	→		
		320	112	252		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		127	133	135		
		←	↓	→		
124	↑				↑	138
805	→	2025 AM Peak			←	789
252	↓				↓	331
		←	↑	→		
		320	112	252		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		132	136	121		
		←	↓	→		
169	↑				↑	202
1064	→	2023 PM Peak			←	1197
267	↓				↓	361
		←	↑	→		
		406	179	310		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		132	136	121		
		←	↓	→		
169	↑				↑	202
1064	→	2025 PM Peak			←	1197
267	↓				↓	361
		←	↑	→		
		406	179	310		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		162	169	172		
		←	↓	→		
158	↑				↑	175
1024	→	2050 AM Peak			←	1004
321	↓				↓	422
		←	↑	→		
		408	144	321		

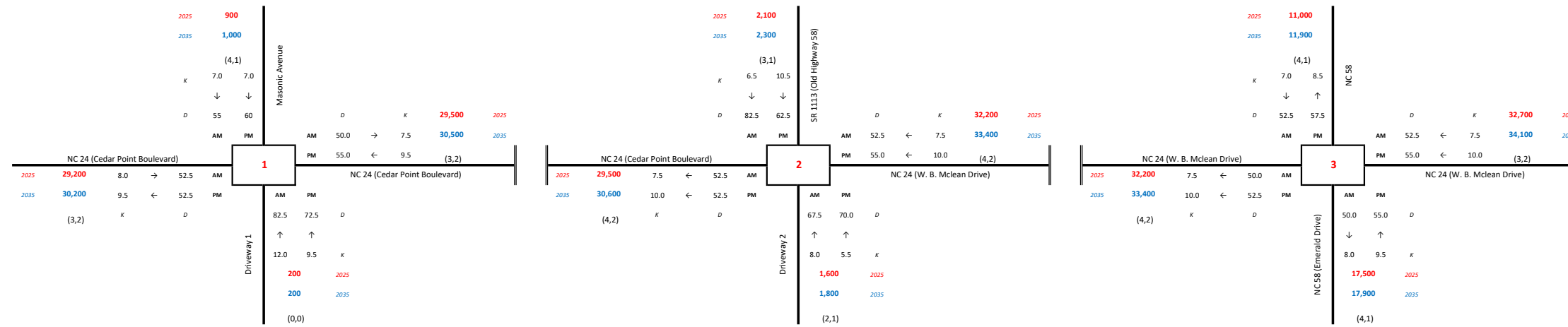
NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		137	142	149		
		←	↓	→		
134	↑				↑	151
837	→	2035 AM Peak			←	823
253	↓				↓	338
		←	↑	→		
		322	120	258		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		167	173	156		
		←	↓	→		
213	↑				↑	258
1357	→	2050 PM Peak			←	1519
339	↓				↓	462
		←	↑	→		
		513	228	400		

NC 24 (W. B. Mclean Drive)		NC 58			NC 24 (W. B. Mclean Drive)	
		142	145	135		
		←	↓	→		
180	↑				↑	223
1110	→	2035 PM Peak			←	1243
266	↓				↓	371
		←	↑	→		
		405	190	321		

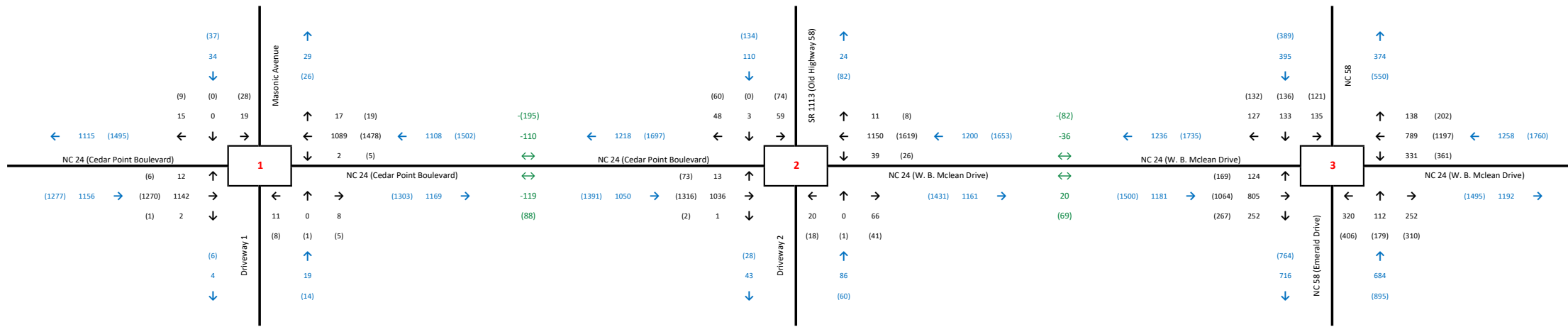
Approach	Road Name	Route Type	No. of Lanes	Facility Type	Functional Class	Capacity	2023 V/C Ratio
North	NC 58	NC	2	Arterial	Arterial	15,843	0.69
East	NC 24 (W. B. Mclean Drive)	NC	4	Arterial	Arterial	31,719	1.03
South	NC 58 (Emerald Drive)	NC	2	Arterial	Arterial	15,843	1.10
West	NC 24 (W. B. Mclean Drive)	NC	4	Arterial	Arterial	31,719	1.02

Approach	Road Name	Express Design Traffic Volumes			Prioritization Traffic Volumes		
		2023 AADT	2023-2050 CAGR	2050 AADT	2025 AADT	2025-2035 CAGR	2035 AADT
North	NC 58	11,000	0.9%	14,000	11,000	0.8%	11,900
East	NC 24 (W. B. Mclean Drive)	32,700	0.9%	41,600	32,700	0.4%	34,100
South	NC 58 (Emerald Drive)	17,500	0.9%	22,300	17,500	0.2%	17,900
West	NC 24 (W. B. Mclean Drive)	32,200	0.9%	41,000	32,200	0.4%	33,400



<small>Prioritization Status: PB.0</small>		
2025/2035	SPOT Traffic Volumes	SHEET 1 OF 1
LEGEND ## Intersection Number K Design Hour Factor D Directional Distribution (Dual, TTST) Heavy Vehicle Percentage (Dual, TTST) 2025 Base Year AADT Volume 2035 Future Year AADT Volume		TIP: - COUNTY: Carteret DATE: January 7, 2026 PREPARED BY: Kimley Horn LOCATION: NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58 PROJECT: Upgrade Arterial to RCI Corridor
		WBS: 34263.1.1 DIVISION: 2

TURNING MOVEMENT VOLUMES (SPOT)



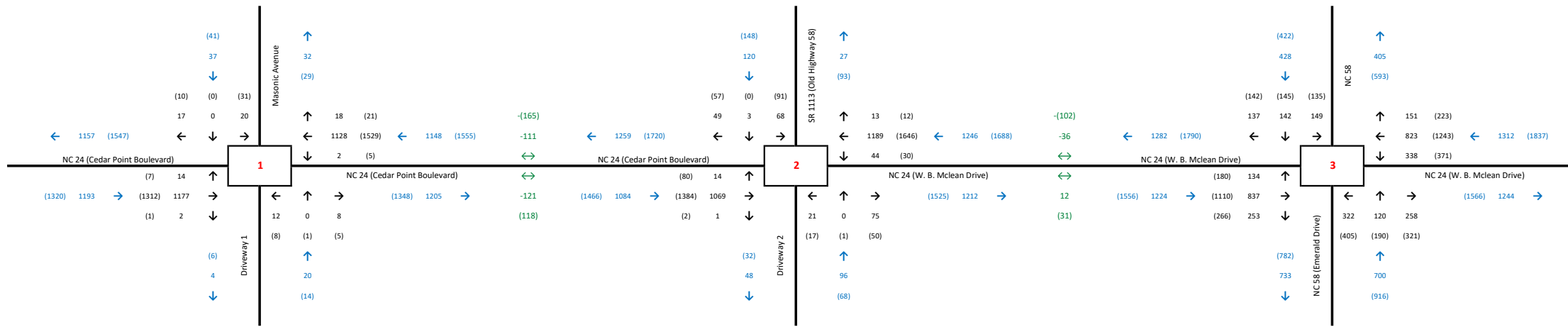
Prioritization Status: P8.0

UNBALANCED

2025	Base Year (Existing)	SHEET 1 OF 1
<p>LEGEND</p> <p>## Intersection Number</p> <p>AM (PM) Peak Hour Intersection Volume</p> <p>AM (PM) Peak Hour Approach Volume</p> <p>AM (PM) Peak Hour Volume Balancing</p>		<p>TIP: -</p> <p>WBS: 34263.1.1</p> <p>COUNTY: Carteret</p> <p>DIVISION: 2</p> <p>DATE: January 7, 2026</p> <p>PREPARED BY: Kimley Horn</p> <p>LOCATION: NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58</p> <p>PROJECT: Upgrade Arterial to RCI Corridor</p>



TURNING MOVEMENT VOLUMES (SPOT)



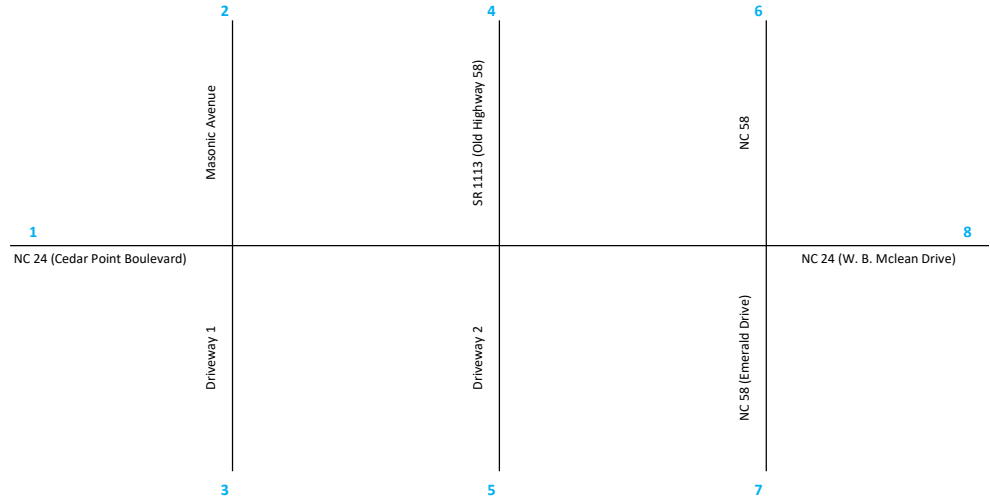
Prioritization Status: P8.0

UNBALANCED

2035	Future Year Build	SHEET 1 OF 1
<p>LEGEND</p> <p>## Intersection Number</p> <p>AM (PM) Peak Hour Intersection Volume</p> <p>AM (PM) Peak Hour Approach Volume</p> <p>AM (PM) Peak Hour Volume Balancing</p>		<p>TIP: -</p> <p>WBS: 34263.1.1</p> <p>COUNTY: Carteret</p> <p>DIVISION: 2</p> <p>DATE: January 7, 2026</p> <p>PREPARED BY: Kimley Horn</p> <p>LOCATION: NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58</p> <p>PROJECT: Upgrade Arterial to RCI Corridor</p>



ORIGIN-DESTINATION MATRICES (SPOT)



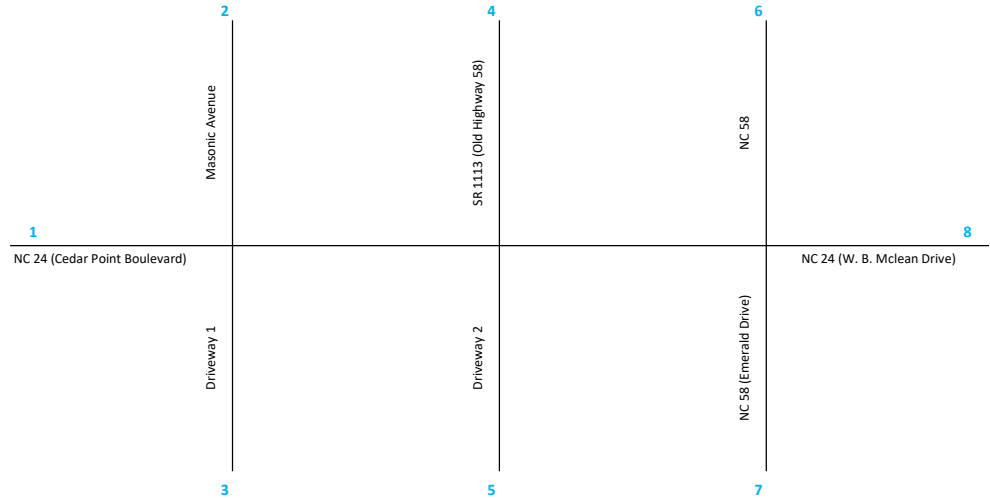
AM	1	2	3	4	5	6	7	8	TOTAL
1	0	12	2	13	1	116	235	740	1119
2	15	0	0	0	0	2	4	12	33
3	11	0	0	0	0	1	2	5	19
4	44	1	0	0	3	4	8	46	106
5	18	0	0	0	0	4	9	51	82
6	111	2	0	1	4	0	132	131	381
7	283	5	1	3	11	112	0	247	662
8	672	11	1	7	26	147	351	0	1215
Total	1154	31	4	24	45	386	741	1232	3617

PM	1	2	3	4	5	6	7	8	TOTAL
1	0	5	1	68	1	128	199	869	1271
2	8	0	0	2	0	3	5	20	38
3	7	1	0	0	0	1	1	4	14
4	48	1	0	0	0	6	9	69	133
5	14	0	0	1	0	3	5	36	59
6	105	1	0	1	2	0	133	141	383
7	326	4	1	3	6	177	0	366	883
8	1015	14	4	8	19	241	424	0	1725
Total	1523	26	6	83	28	559	776	1505	4506

Prioritization Status: P8.0

2025	Base Year (Existing)
TIP: -	34263.1.1
COUNTY: Carteret	DIVISION: 2
DATE: January 7, 2026	
PREPARED BY: Kimley Horn	
LOCATION: NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58	
PROJECT: Upgrade Arterial to RCI Corridor	

ORIGIN-DESTINATION MATRICES (SPOT)



AM	1	2	3	4	5	6	7	8	TOTAL
1	0	14	2	14	1	126	236	762	1155
2	17	0	0	0	0	2	4	13	36
3	12	0	0	0	0	1	2	5	20
4	46	1	0	0	3	5	9	53	117
5	19	0	0	0	0	5	10	58	92
6	120	2	0	1	5	0	141	144	413
7	284	5	1	4	12	120	0	252	678
8	700	11	1	9	29	160	357	0	1267
Total	1198	33	4	28	50	419	759	1287	3778

PM	1	2	3	4	5	6	7	8	TOTAL
1	0	6	1	74	1	137	200	896	1315
2	9	0	0	2	0	3	5	22	41
3	7	1	0	0	0	1	1	4	14
4	45	1	0	0	0	7	11	82	146
5	13	0	0	1	0	4	6	44	68
6	114	2	0	1	2	0	142	156	417
7	328	5	1	4	7	188	0	373	906
8	1058	15	4	11	22	262	430	0	1902
Total	1574	30	6	93	32	602	795	1577	4709

Prioritization Status: PB.0	
2035	Future Year Build
TIP: -	34263.1.1
COUNTY: Carteret	DIVISION: 2
DATE: January 7, 2026	
PREPARED BY: Kimley Horn	
LOCATION: NC 24 (Cedar Point Boulevard) from East Channel Bridge to NC 58	
PROJECT: Upgrade Arterial to RCI Corridor	