

## INTERSECTION ANALYSIS SHEET

Project:	RTA NC 54 Multi Modal Analysis
Location:	Durham, NC
Ct. Date	10/6/2016
N/S Street:	Huntingridge Road
E/W Street:	NC 54

Annual Growth Rate:	1.0%
Growth Factor:	0.149474

Existing Year:	2016
Buildout Year:	2030

### AM PEAK HOUR AM PHF = 0.92

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Huntingridge Road <u>Northbound</u>			Huntingridge Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	20	1683	6	8	2435	1	41	4	24	16	1	20
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	20	1683	6	8	2435	1	41	4	24	16	1	20
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	3	252	1	1	364	0	6	1	4	2	0	3
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	96	0	0	86	0	0	0	0	0	0	0
<b>Total Committed Traffic</b>	0	96	0	0	86	0	0	0	0	0	0	0
<b>2030 Background Traffic</b>	23	2031	7	9	2885	1	47	5	28	18	1	23

### 1-2 PM STUDY PEAK HOUR Off-Peak PHF = 0.97

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Huntingridge Road <u>Northbound</u>			Huntingridge Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	17	1255	23	33	1279	2	25	4	18	18	1	5
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	17	1255	23	33	1279	2	25	4	18	18	1	5
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	3	188	3	5	191	0	4	1	3	3	0	1
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	106	0	0	80	0	0	0	0	0	0	0
<b>Total Committed Traffic</b>	0	106	0	0	80	0	0	0	0	0	0	0
<b>2030 Background Traffic</b>	20	1549	26	38	1550	2	29	5	21	21	1	6

### PM PEAK HOUR PM PHF = 0.99

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Huntingridge Road <u>Northbound</u>			Huntingridge Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	17	2005	25	37	1908	3	18	1	10	37	5	20
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	17	2005	25	37	1908	3	18	1	10	37	5	20
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	3	300	4	6	285	0	3	0	1	6	1	3
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	78	0	0	109	0	0	0	0	0	0	0
<b>Total Committed Traffic</b>	0	78	0	0	109	0	0	0	0	0	0	0
<b>2030 Background Traffic</b>	20	2383	29	43	2302	3	21	1	11	43	6	23

## INTERSECTION ANALYSIS SHEET

Project:	RTA NC 54 Multi Modal Analysis
Location:	Durham, NC
Ct. Date	10/6/2016
N/S Street:	Falconbridge Rd./Celeste Cir.
E/W Street:	NC 54

Annual Growth Rate:	1.0%
Growth Factor:	0.149474

Existing Year:	2016
Buildout Year:	2030

### AM PEAK HOUR AM PHF = 0.97

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Falconbridge Road <u>Northbound</u>			Celeste Circle <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	17	1693	56	28	2260	76	0	0	43	0	0	14
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	17	1693	56	28	2260	76	0	0	43	0	0	14
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	3	253	8	4	338	11	0	0	6	0	0	2
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	22	74	0	0	80	0	0	0	0	0	0	6
<b>Total Committed Traffic</b>	22	74	0	0	80	0	0	0	0	0	0	6
<b>2030 Background Traffic</b>	42	2020	64	32	2678	87	0	0	49	0	0	22

### 1-2 PM STUDY PEAK HOUR Off-Peak PHF = 0.95

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Falconbridge Road <u>Northbound</u>			Celeste Circle <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	17	1341	87	33	1334	52	0	0	63	0	0	28
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	17	1341	87	33	1334	52	0	0	63	0	0	28
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	3	200	13	5	199	8	0	0	9	0	0	4
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	23	83	0	0	65	0	0	0	0	0	0	15
<b>Total Committed Traffic</b>	23	83	0	0	65	0	0	0	0	0	0	15
<b>2030 Background Traffic</b>	43	1624	100	38	1598	60	0	0	72	0	0	47

### PM PEAK HOUR PM PHF = 0.97

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Falconbridge Road <u>Northbound</u>			Celeste Circle <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	3	1914	120	39	1931	33	0	0	30	0	0	21
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	3	1914	120	39	1931	33	0	0	30	0	0	21
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	0	286	18	6	289	5	0	0	4	0	0	3
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	78	0	0	88	0	0	0	0	0	0	21
<b>Total Committed Traffic</b>	0	78	0	0	88	0	0	0	0	0	0	21
<b>2030 Background Traffic</b>	3	2278	138	45	2308	38	0	0	34	0	0	45

## INTERSECTION ANALYSIS SHEET

Project:	RTA NC 54 Multi Modal Analysis
Location:	Durham, NC
Ct. Date	9/9/2015
N/S Street:	Farrington Road
E/W Street:	NC 54

Annual Growth Rate:	1.0%
Growth Factor:	0.149474

Existing Year:	2016
Buildout Year:	2030

### AM PEAK HOUR AM PHF = 0.94

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Farrington Road <u>Northbound</u>			Farrington Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	84	1611	51	224	2322	220	135	193	455	295	126	142
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	84	1611	51	224	2322	220	135	193	455	295	126	142
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	13	241	8	33	347	33	20	29	68	44	19	21
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	74	0	0	0	0	133	0	26	0	135	18	75
<b>Total Committed Traffic</b>	74	0	0	0	0	133	0	26	0	135	18	75
<b>2030 Background Traffic</b>	171	1852	59	257	2669	386	155	248	523	474	163	238

### 1-2 PM STUDY PEAK HOUR Off-Peak PHF = 0.94

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Farrington Road <u>Northbound</u>			Farrington Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	95	1244	100	217	1131	154	114	95	262	184	137	96
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	95	1244	100	217	1131	154	114	95	262	184	137	96
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	14	186	15	32	169	23	17	14	39	28	20	14
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	83	0	0	0	0	150	0	28	0	117	21	65
<b>Total Committed Traffic</b>	83	0	0	0	0	150	0	28	0	117	21	65
<b>2030 Background Traffic</b>	192	1430	115	249	1300	327	131	137	301	329	178	175

### PM PEAK HOUR PM PHF = 0.99

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			Farrington Road <u>Northbound</u>			Farrington Road <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	124	1767	75	305	1626	316	85	142	366	270	296	172
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	124	1767	75	305	1626	316	85	142	366	270	296	172
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	19	264	11	46	243	47	13	21	55	40	44	26
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	78	0	0	0	0	140	0	20	0	153	27	85
<b>Total Committed Traffic</b>	78	0	0	0	0	140	0	20	0	153	27	85
<b>2030 Background Traffic</b>	221	2031	86	351	1869	503	98	183	421	463	367	283

## INTERSECTION ANALYSIS SHEET

Project:	RTA NC 54 Multi Modal Analysis
Location:	Durham, NC
Ct. Date	9/10/2015
N/S Street:	I-40 EB Ramps
E/W Street:	NC 54

Annual Growth Rate:	1.0%
Growth Factor:	0.149474

Existing Year:	2016
Buildout Year:	2030

### AM PEAK HOUR AM PHF = 0.97

Description	NC 54 Eastbound			NC 54 Westbound			I-40 EB Ramps Northbound			I-40 EB Ramps Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	0	772	1552	35	2152	0	0	0	0	110	0	324
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	0	772	1552	35	2152	0	0	0	0	110	0	324
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	0	115	232	5	322	0	0	0	0	16	0	48
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	78	57	0	92	0	0	0	0	0	0	41
<b>Total Committed Traffic</b>	0	78	57	0	92	0	0	0	0	0	0	41
<b>2030 Background Traffic</b>	0	965	1841	40	2566	0	0	0	0	126	0	413

### 1-2 PM STUDY PEAK HOUR Off-Peak PHF = 0.99

Description	NC 54 Eastbound			NC 54 Westbound			I-40 EB Ramps Northbound			I-40 EB Ramps Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	0	631	988	52	1253	0	0	0	0	59	0	180
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	0	631	988	52	1253	0	0	0	0	59	0	180
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	0	94	148	8	187	0	0	0	0	9	0	27
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	73	44	0	112	0	0	0	0	0	0	38
<b>Total Committed Traffic</b>	0	73	44	0	112	0	0	0	0	0	0	38
<b>2030 Background Traffic</b>	0	798	1180	60	1552	0	0	0	0	68	0	245

### PM PEAK HOUR PM PHF = 0.97

Description	NC 54 Eastbound			NC 54 Westbound			I-40 EB Ramps Northbound			I-40 EB Ramps Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	0	942	1501	227	1986	0	0	0	0	134	0	269
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	0	942	1501	227	1986	0	0	0	0	134	0	269
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	0	141	224	34	297	0	0	0	0	20	0	40
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	0	96	57	0	105	0	0	0	0	0	0	35
<b>Total Committed Traffic</b>	0	96	57	0	105	0	0	0	0	0	0	35
<b>2030 Background Traffic</b>	0	1179	1782	261	2388	0	0	0	0	154	0	344

## INTERSECTION ANALYSIS SHEET

Project:	RTA NC 54 Multi Modal Analysis
Location:	Durham, NC
Ct. Date	9/9/2015
N/S Street:	I-40 WB Ramps
E/W Street:	NC 54

Annual Growth Rate:	1.0%
Growth Factor:	0.149474

Existing Year:	2016
Buildout Year:	2030

### AM PEAK HOUR AM PHF = 0.97

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			I-40 WB Ramps <u>Northbound</u>			I-40 WB Ramps <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	364	518	0	0	726	168	10	0	249	0	0	1461
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	364	518	0	0	726	168	10	0	249	0	0	1461
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	54	77	0	0	109	25	1	0	37	0	0	218
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	33	45	0	0	45	0	0	0	0	0	0	48
<b>Total Committed Traffic</b>	33	45	0	0	45	0	0	0	0	0	0	48
<b>2030 Background Traffic</b>	451	640	0	0	880	193	11	0	286	0	0	1727

### 1-2 PM STUDY PEAK HOUR Off-Peak PHF = 0.99

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			I-40 WB Ramps <u>Northbound</u>			I-40 WB Ramps <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	223	467	0	0	430	89	10	0	26	0	0	875
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	223	467	0	0	430	89	10	0	26	0	0	875
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	33	70	0	0	64	13	1	0	4	0	0	131
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	34	39	0	0	50	0	0	0	0	0	0	62
<b>Total Committed Traffic</b>	34	39	0	0	50	0	0	0	0	0	0	62
<b>2030 Background Traffic</b>	290	576	0	0	544	102	11	0	30	0	0	1068

### PM PEAK HOUR PM PHF = 0.97

Description	NC 54 <u>Eastbound</u>			NC 54 <u>Westbound</u>			I-40 WB Ramps <u>Northbound</u>			I-40 WB Ramps <u>Southbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
<b>2016 Traffic Count</b>	288	788	0	0	780	200	10	0	56	0	0	1433
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
<b>2016 Existing Traffic</b>	288	788	0	0	780	200	10	0	56	0	0	1433
Growth Factor (0.01 per year)	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
<b>2030 Background Growth</b>	43	118	0	0	117	30	1	0	8	0	0	214
<b>Committed Projects</b>												
Smart Property/Carolina Crossing II	45	51	0	0	47	0	0	0	0	0	0	58
<b>Total Committed Traffic</b>	45	51	0	0	47	0	0	0	0	0	0	58
<b>2030 Background Traffic</b>	376	957	0	0	944	230	11	0	64	0	0	1705