

## Parking Summary

\* \* Information provided  
by Susan Irvin, attorney  
for proposed Davidson Commons  
East Hotel -

<b>I. Proposal</b>	<p>A mix of parking formats including:</p> <ul style="list-style-type: none"> <li>• 78 - on site surface parking</li> <li>• 18 - on-street parking</li> <li>• 15- per shared parking arrangement with the adjacent Woodies Automotive building</li> </ul>	<p>Total spaces in proposal: <u>111</u></p>
<b>II. Other Ordinances (DPO does not address hotel use apart from commercial use)</b>	<ul style="list-style-type: none"> <li>• Chapel Hill, NC .9/room</li> <li>• Belmont, NC 1/room</li> <li>• Asheville, NC ½ /room + additional uses</li> <li>• Carboro, NC .75 to 1/room + additional uses</li> </ul> <p>Ordinances contemplate use of shared or joint parking Meeting rooms (2000 sq ft), Restaurant (intended for hotel guests only), Retail (2000 sq ft) -3800 sq ft/no more than 8 additional spaces</p>	<p><u>104</u> spaces but may be reduced with pedestrian/bike/transit <u>115</u> spaces 58 spaces + 8 = <u>66</u> 86 to 115 spaces + 8 = <u>100 to 121</u></p>
<b>III. Other Communities per parking modeling (See "Parking Generation - Replacing Flawed Standards..." by Kinley-Horn attached as Exhibit 1)</b>	<p>Durham, NC .39/room Tempe, AZ .34/room St. Petersburg, FL .31/room Arlington, VA .71/room</p>	<p>45 spaces 39 spaces 36 spaces 82 spaces</p>
<b>IV. Industry Standards</b>	<p>Institute of Transportation Engineers .64/room Urban Land Institute 1/room Industry average .82/room</p>	<p>74 spaces 115 spaces 94 spaces</p>
<b>V. Projected trends/alternatives to vehicular transportation</b>	<ul style="list-style-type: none"> <li>• pedestrian and bicycle options</li> <li>• public transportation</li> <li>• Uber and other private transportation</li> </ul>	<p>Hotel offers shuttle, bicycle sharing/parking, multi-purpose path, crosswalks, CATS transit stations, Mid-Block crossing and payment toward bridge crossing</p>

Note: The proposed hotel generates 75% less traffic than the two approved buildings per TIA Appendix Table 2 and generates 60% less traffic than a comparable sized office building per TIA Appendix Table 1 (Appendix Tables attached as Exhibit 2)

# Exhibit I

## PARKING GENERATION - Replacing Flawed Standards with the Custom Realities of Park+



The second table below shows additional communities and the generation rates found in their respective modeling exercises.

LAND USE TYPE	UNIT OF MEASURE	STANDARD VALUES		PARK+ MODEL COMMUNITY OUTPUTS					
		ULI	ITE	ST. PETERSBURG, FL	CAPITAL EAST, MADISON, WI	SALINAS, CA	GILBERT, AZ	CRYSTAL CITY, ARLINGTON, VA	FORT COLLINS, CO
Apartment	per dwelling unit	1.5	1.20	0.44	0.85	1.22	0.82	0.71	1.16
Condominium	per dwelling unit	1.7	1.38	0.41	0.60	--	--	0.63	1.31
Retail	per 1,000 SF	3.6	2.65	0.78	2.70	0.68	0.57	0.36	0.64
Hotel	per room	1.00	0.64	0.31	--	15.35	--	0.71	--
Lounge	per 1,000 SF	10	13.30	4.23	4.79	6.54	8.38	--	5.38
Office	per 1,000 SF	3.8	2.84	1.14	1.55	2.88	2.06	1.36	1.60
Restaurant	per 1,000 SF	10.50	10.10	5.17	6.46	9.96	10.12	--	5.27

### • University Parking Characteristics

Unlike municipal settings, there aren't a lot of governing rates for the prediction of parking generation on a university campus. In fact, ITE only provides a generation characteristic for universities based on total population, which is as broad an assessment as one can make when evaluating a campus. That rate (0.33 spaces per school population for a suburban campus and 0.22 spaces per school population for an urban campus) isn't widely used as far as I can tell, leaving academic planners to make their best guess when defining parking supply on their campuses.

The following table summarizes a variety of generation characteristics encountered for the university campuses we've modeled. These campuses vary in scale and context, and that variety is reflected in the rates that represent their users. No comparative rates are defined in this table due to the lack of consistent national planning standards.

**FINAL DAVIDSON COMMONS EAST HOTEL TRANSPORTATION IMPACT ANALYSIS**

Traffic Generation  
February 23, 2017

**Table 1: Davidson Commons East Proposed Hotel Trip Generation Table**

Land Use		ITE Site Code	Size	Trip Generation														
				ITE Trip Generation			Daily			AM Peak			Mid-Day Peak			PM Peak		
				Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Hotel		310	107 rooms	874	437	437	56	33	23	20	12	8	64	33	31			
High-Turnover Sit-Down Restaurant		932	5000 sf	636	318	318	66	35	31	23	10	13	93	50	43			
<b>Subtotal</b>				1510	755	755	122	68	54	43	22	21	157	83	74			
* Internal Capture Percentage: DAILY - 8% ; AM - 5% ; Mid-Day - 9% ; PM - 8%				-121	-60	-60	-6	-3	-3	-4	-2	-2	-13	-7	-6			
* Non-Internally Captured Trips				1389	695	695	116	65	51	39	20	19	144	76	68			
** Multi-Modal Connectivity Reduction: 5%				-69	-35	-35	-6	-3	-3	-2	-1	-1	-7	-4	-3			
<b>Subtotal</b>				1319	660	660	110	62	48	37	19	18	137	72	65			
				Pass-By's														
Land Use		Pass-By Percentages		Daily			AM Peak			Mid-Day Peak			PM Peak					
		Daily	AM	PM	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit		
Hotel (310)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
High-Turnover Sit-Down Restaurant (932)		-	-	43%	-	-	-	-	-	-	-	-	-	-37	-20	-17		
<b>Subtotal</b>				-	-	-	-	-	-	-	-	-	-	-37	-20	-17		
<b>Overall</b>				Daily			AM Peak			Mid-Day Peak			PM Peak					
				Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit			
<b>Total New Trips</b>				1319	660	660	110	62	48	37	19	18	100	52	48			

- \* For internal capture percentage, daily and mid-day percentages were calculated using the ITE Internal Capture methodology; AM and PM percentages were calculated using NCHRP 08-51 methodology
- \*\* Multi-Modal Connectivity Reduction accounts for walkability and connectivity to adjacent parcels.

Exhibit 2



**FINAL DAVIDSON COMMONS EAST HOTEL TRANSPORTATION IMPACT ANALYSIS**

Traffic Generation  
February 23, 2017

**Table 2: Davidson Commons East Previously Approved Office-Retail Trip Generation Table**

		ITE Trip Generation Davidson Commons East - Previously Approved Development												
Land Use	ITE Site Code	Size	Trip Generation											
			Daily			AM Peak			Mid-Day Peak			PM Peak		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
General Office Building	710	40000	654	327	327	92	81	11	57	31	26	123	21	102
General Retail	820	20000	2386	1193	1193	58	36	22	198	93	105	204	98	106
<b>Subtotal</b>			3040	1520	1520	150	117	33	255	124	131	327	119	208
* Internal Capture Percentage: DAILY - 6% ; AM - 8% ; Mid-Day - 5% ; PM - 6%			-182	-91	-91	-12	-9	-3	-13	-6	-7	-20	-7	-12
Non-Internally Captured Trips			2858	1429	1429	138	108	30	242	118	124	307	112	196
** Multi-Modal Connectivity Reduction: 5%			-143	-71	-71	-7	-5	-2	-12	-6	-6	-15	-6	-10
<b>Subtotal</b>			2715	1358	1358	131	103	28	230	112	118	292	106	186
			Pass-Byz											
Land Use	Poss-By Percentages	Daily	Daily			AM Peak			Mid-Day Peak			PM Peak		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
General Office Building (710)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Retail (820)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal</b>			-	-	-	-	-	-	-	-	-	-	-	-
<b>Overall</b>														
			Daily			AM Peak			Mid-Day Peak			PM Peak		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
<b>Total New Trips</b>			2715	1358	1358	131	103	28	230	112	118	227	75	152

\* For internal capture percentage, daily and mid-day percentages were calculated using the ITE Internal Capture methodology; AM and PM percentages were calculated using NCHRP 08-51 methodology  
 \*\* Multi-Modal Connectivity Reduction accounts for walkability and connectivity to adjacent parcels.

