

# Carolina North

## Estimate of Indirect Benefits/Impacts Associated with Carolina North

June, 2008



# UNC Benefits Synopsis

## □ Indirect Benefits Approach

### ✓ Background Info & Case Studies Elsewhere

- Much like appraiser looking @ comps.
- Focus on range of major benefits that accrue
- Focus on specific measurable benefits that accrue.

### ✓ Application of this and TCG other work to the specifics of the proposed investment associated with UNC > unique multipliers, etc.

### ✓ Error on the conservative side.



# UNC Benefits Synopsis

## □ Case Study Results

- ✓ Projects based on needs of the entities.
- ✓ Range of major benefits.
- ✓ \*\*\*\*\* Directed benefits to locals as desired by entities and those with whom impacts are or could be felt!!



# UNC Benefits Synopsis

## □ Institutions/Universities Case Studies

**University of Akron  
Union College  
Yale University  
University of Pennsylvania  
Clark University  
Colgate University  
Trinity College  
Cornell University**

**Princeton University  
University System of Georgia  
University of Rochester  
Duke University  
Carnegie Mellon  
Case Western Reserve U.  
Washington U. in St. Louis  
University of Scranton**



# UNC Benefits Synopsis

## Development Scenarios

SCENARIO 1 - Phasing Balanced/Housing Early

Building	Total SF/Units	PHASING		
		2011-2015	2016-2020	2021-2025
Centers and Institutes I	100,000	100,000		
Centers and Institutes II	122,000		122,000	
Centers and Institutes III	93,000			93,000
Innovation Center	85,000	85,000		
Interdisciplinary Research Center	150,000			150,000
RENCI	170,000		170,000	
School of Law	200,000	200,000		
School of Public Health	155,000		155,000	
UNC Health Care System	200,000			200,000
Carolina North Services Facility	75,000	25,000	50,000	
<b>Corporate Partners I</b>	<b>150,000</b>	<b>150,000</b>		
<b>Corporate Partners II</b>	<b>128,000</b>		<b>128,000</b>	
<b>Corporate Partners III</b>	<b>157,000</b>			<b>157,000</b>
<b>Corporate Partners IV</b>	<b>90,000</b>			<b>90,000</b>
<b>Services</b>	<b>100,000</b>	<b>25,000</b>	<b>50,000</b>	<b>25,000</b>
<b>TOTAL (excluding housing)</b>	<b>1,975,000</b>	<b>585,000</b>	<b>675,000</b>	<b>715,000</b>
<b>Housing - University*</b>	<b>250 Units</b>	<b>125 Units</b>	<b>125 Units</b>	<b>0 Units</b>
<b>Housing - Private**</b>	<b>167 Units</b>	<b>83 Units</b>	<b>84 Units</b>	<b>0 Units</b>
<b>Total with Housing</b>	<b>2,475,500</b>	<b>834,500</b>	<b>926,000</b>	<b>715,000</b>

\*Assumes graduate student housing owned by University and 1,000 square feet per unit  
\*\*Assumes average size of 1,500 square feet per unit and 25% can be considered workforce units.

SCENARIO 2 - Faster Absorption/Less Graduate Student Housing/Later Housing

Building	Total SF/Units	PHASING		
		2011-2015	2016-2020	2021-2025
Centers and Institutes I	100,000	100,000		
Centers and Institutes II	122,000		122,000	
Centers and Institutes III	93,000			93,000
Innovation Center	85,000	85,000		
Interdisciplinary Research Center	150,000			150,000
RENCI	170,000		170,000	
School of Law	200,000	200,000		
School of Public Health	155,000		155,000	
UNC Health Care System	200,000			200,000
Carolina North Services Facility	75,000	25,000	50,000	
<b>Corporate Partners I</b>	<b>150,000</b>	<b>150,000</b>		
<b>Corporate Partners II</b>	<b>128,000</b>		<b>128,000</b>	
<b>Corporate Partners III</b>	<b>97,000</b>			<b>97,000</b>
<b>Corporate Partners IV</b>	<b>150,000</b>		<b>150,000</b>	
<b>Services</b>	<b>100,000</b>	<b>25,000</b>	<b>50,000</b>	<b>25,000</b>
<b>TOTAL (excluding housing)</b>	<b>1,975,000</b>	<b>585,000</b>	<b>825,000</b>	<b>565,000</b>
<b>Housing - University*</b>	<b>125 Units</b>	<b>0 Units</b>	<b>62 Units</b>	<b>63 Units</b>
<b>Housing - Private**</b>	<b>250 Units</b>	<b>0 Units</b>	<b>125 Units</b>	<b>125 Units</b>
<b>Total with Housing</b>	<b>2,475,000</b>	<b>585,000</b>	<b>1,074,500</b>	<b>815,500</b>

\*Assumes graduate student housing owned by University and 1,000 square feet per unit  
\*\*Assumes average size of 1,500 square feet per unit and 25% can be considered workforce units.





# UNC Benefits Synopsis

## □ Primary Differences in Two Alternatives

- ✓ Phasing of “Corporate Partners”
- ✓ Housing On-site
  - Total Number of Units
  - Numbers of UNC Owned Units Versus Private Unit Numbers.
- ✓ Primary Impact Is Associated with Cumulative Benefits Over Time.
- ✓ Beyond 15 years likely to increase!!



# UNC Benefits Synopsis

## □ Primary Quantified Benefits Addressed

- ✓ Employment
- ✓ Income
- ✓ Retail Sales & Minimum Sales Tax Returned to Locals
- ✓ Property Valuation (Off & On-site)
- ✓ Visitor Spending & Lodging Revenues



# UNC Benefits Synopsis

## □ Cumulative Approach

- ✓ 20-Year Time Frame
- ✓ "Build out" @ 15 years (no projections in additional dev. beyond)
- ✓ Major Boost @ 5 yr. increments
- ✓ 2011 Start
- ✓ Current Dollars





# UNC Benefits Synopsis

## Aggregate Benefits Scenario 1

Scenario 1 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Elements Employment	2314	2314	2314	2314	2314	4097	4097	4097	4097	4097	8618	8618	8618	8618	8618	8618	8618	8618	8618	8618
Cum. HFI Income Increase*	\$19.15	\$36.30	\$57.45	\$76.60	\$95.75	\$204.51	\$313.27	\$422.03	\$530.79	\$639.55	\$915.33	\$1,191.11	\$1,466.89	\$1,742.67	\$2,018.45	\$2,294.23	\$2,570.01	\$2,845.79	\$3,121.57	\$3,397.35
Cum. Retail Sales Increase*	\$41.53	\$83.06	\$124.59	\$166.12	\$207.65	\$239.65	\$271.65	\$303.65	\$335.65	\$367.65	\$448.78	\$529.91	\$611.04	\$692.17	\$773.30	\$854.43	\$935.56	\$1,016.69	\$1,097.82	\$1,178.95
Cum. Tertiary Retail Sales Increase*	\$13.70	\$27.41	\$41.11	\$54.82	\$68.52	\$79.08	\$89.64	\$100.20	\$110.76	\$121.32	\$148.10	\$174.87	\$201.64	\$228.42	\$255.19	\$281.96	\$308.73	\$335.51	\$362.28	\$389.05
Cum. Increase in Student Spending*	\$2.00	6	13	23	43	73	103	133	163	213	263	313	363	413	463	513	563	613	663	713
Cum. Total Retail Sales Increase*	\$57.23	\$116.47	\$178.70	\$243.94	\$319.17	\$391.73	\$464.29	\$536.85	\$609.41	\$701.97	\$859.88	\$1,017.78	\$1,175.68	\$1,333.59	\$1,491.49	\$1,649.39	\$1,807.29	\$1,965.20	\$2,123.10	\$2,281.00
Cum. Retail Sales Tax Return Min.*	\$0.57	\$1.16	\$1.79	\$2.44	\$3.19	\$3.92	\$4.64	\$5.37	\$6.09	\$7.02	\$8.60	\$10.18	\$11.76	\$13.34	\$14.91	\$16.49	\$18.07	\$19.65	\$21.23	\$22.81
Cum Indirect Property Valu. Incr.*	351.728	703.428	1055.128	1406.828	1758.528	2110.228	2461.928	2813.628	3165.328	3517.028	3868.728	4220.428	4572.128	4923.828	5275.528	5627.228	5978.928	6330.628	6682.328	7034.028
Cum. Private On-site Hg Valu Increase*	\$7.64	15.3	22.9	30.5	38.18	53.5	68.9	84.3	99.6	115	130.4	145.7	161.1	176.5	191.8	207.2	222.5	237.9	253.3	268.6
Cum Indirect Property Valu. Incr.*	369.364	718.728	1078.028	1437.328	1796.708	2163.728	2530.828	2897.928	3264.928	3632.028	3999.128	4366.128	4733.228	5100.328	5467.328	5834.428	6201.428	6568.628	6936.628	7302.628
Cum. Change in Vis. Lodging Spending*	\$0.90	1.9	2.8	3.8	4.7	6.5	8.4	10.2	12	13.8	17	20.1	23.3	26.4	29.6	34.5	35.9	29.1	42.2	45.4
Cum Increase in Visitor Spending*	\$5.30	10.7	16	21.3	26.6	36.9	47.2	57.6	67.9	78.2	96	113.8	131.6	149.4	167.3	185.1	202.9	220.7	238.5	256.3

\*In millions



# UNC Benefits Synopsis

## □ Aggregate Benefits Scenario 2

Scenario 2 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Elements Employment	2314	2314	2314	2314	2314	5537	5537	5537	5537	5537	8618	8618	8618	8618	8618	8618	8618	8618	8618	8618
Cum. HH Income Increase*	\$19.15	\$38.30	\$57.45	\$76.60	\$95.75	\$292.35	\$488.95	\$685.55	\$882.15	\$1,078.75	\$1,266.65	\$1,454.55	\$1,642.45	\$1,830.35	\$2,018.25	\$2,206.15	\$2,394.05	\$2,581.95	\$2,769.85	\$2,957.75
Cum. Retail Sales Increase*	\$41.53	\$83.06	\$124.59	\$166.12	\$207.65	\$265.45	\$323.25	\$381.05	\$438.85	\$496.65	\$1,134.05	\$1,321.95	\$1,509.85	\$1,697.75	\$1,885.65	\$2,073.55	\$2,261.45	\$2,449.35	\$2,637.25	\$2,825.15
Cum. Tertiary Retail Sales Increase*	\$13.70	\$27.41	\$41.11	\$54.82	\$68.52	\$87.80	\$106.67	\$125.75	\$144.82	\$163.89	\$374.24	\$436.24	\$498.25	\$560.26	\$622.26	\$684.27	\$746.28	\$808.29	\$870.29	\$932.30
Cum. Increase in Student Spending*	\$2.00	6	13	23	43	73	103	133	163	213	263	313	363	413	463	513	563	613	663	713
Cum. Total Retail Sales Increase*	\$57.23	\$116.47	\$178.70	\$243.94	\$319.17	\$426.05	\$532.92	\$639.80	\$746.67	\$873.54	\$1,771.29	\$2,071.19	\$2,371.10	\$2,671.01	\$2,970.91	\$3,270.82	\$3,570.73	\$3,870.64	\$4,170.54	\$4,470.45
Cum. Retail Sales Tax Return Min.*	\$0.57	\$1.16	\$1.79	\$2.44	\$3.10	\$4.26	\$5.33	\$6.40	\$7.47	\$8.74	\$17.71	\$20.71	\$23.71	\$26.71	\$29.71	\$32.71	\$35.71	\$38.71	\$41.71	\$44.70
Cum Indirect Property Valu. Incr.*	351,728	703,428	1,055,128	1,406,828	1,758,528	2,248,428	2,738,328	3,228,228	3,718,128	4,208,028	4,676,228	5,144,428	5,612,628	6,080,828	6,549,028	7,017,228	7,485,428	7,953,628	8,421,828	8,890,028
Cum. Private On-site Hsg Valu Increase*	\$7.64	15.3	22.9	30.5	38.18	\$11.50	23	34.5	46	57.5	80.5	103.5	126.5	149.5	172.5	195.5	218.5	241.5	264.5	287.5
Cum Indirect Property Valu. Incr.*	359,364	718,728	1,078,028	1,437,328	1,796,708	2,259,928	2,761,328	3,262,728	3,764,128	4,265,528	4,756,728	5,247,928	5,739,128	6,230,328	6,721,528	7,212,728	7,703,928	8,195,128	8,686,328	9,177,528
Cum. Change in Vis. Lodging Spending*	\$0.90	1.9	2.8	3.8	4.7	7.2	9.7	12.2	14.7	17.2	20.3	23.5	26.6	29.8	32.9	36.1	39.2	42.2	45.4	48.6
Cum. Increase in Visitor Spending*	\$5.30	10.7	16	21.3	26.6	40.7	54.7	68.8	82.8	96.9	114.7	132.5	150.3	168.1	185.9	203.7	221.5	238.7	256.5	274.3

\*In millions



# UNC Benefits Synopsis

## □ Employment Benefits Assumptions

- ✓ Based on Info Supplied by UNC for New UNC Employment
- ✓ Multiplier Lower than Others
  - Point reached when no new jobs created by continued circulation of incomes + none for on-site service.
- ✓ Total new jobs = 8618, with 3591 On-campus.
- ✓ On-campus Corporate Partners Jobs @ 1 for Every 250 gross sq. ft.



# UNC Benefits Synopsis

## □ Primary Benefits Review - Employment

### Scenario 1 – Employment Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Elements Employment	2314	2314	2314	2314	2314	4097	4097	4097	4097	4097	8618	8618	8618	8618	8618	8618	8618	8618	8618	8618

### Scenario 2 – Employment Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Elements Employment	2314	2314	2314	2314	2314	5537	5537	5537	5537	5537	8618	8618	8618	8618	8618	8618	8618	8618	8618	8618



# UNC Benefits Synopsis

## □ Income Assumptions

- ✓ Income Increases Solely as a Result of Employment Generation
  - (Not from Increases in Expanded Education & Opportunities)
  - (Avg. income lower for service jobs in retail, plant, medical, etc.)
- ✓ 20-Year Totals Range from \$3.4 Billion in Scenario 1 to \$3.0 Billion in Scenario 2.





# UNC Benefits Synopsis

## □ Primary Benefits Review - Income

### Scenario 1 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. HH Income Increase*	\$19.15	\$38.30	\$57.45	\$76.60	\$95.75	\$204.51	\$313.27	\$422.03	\$530.79	\$639.55	\$915.33	\$1,191.11	\$1,466.89	\$1,742.67	\$2,018.45	\$2,294.23	\$2,570.01	\$2,845.79	\$3,121.57	\$3,397.35

\*In millions

### Scenario 2 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. HH Income Increase*	\$19.15	\$38.30	\$57.45	\$76.60	\$95.75	\$292.35	\$488.95	\$685.55	\$882.15	\$1,078.75	\$1,266.65	\$1,454.55	\$1,642.45	\$1,830.35	\$2,018.25	\$2,206.15	\$2,394.05	\$2,581.95	\$2,769.85	\$2,957.75

\*In millions



# UNC Benefits Synopsis

## □ Retail Goods & Related Services Sales Assumptions

- ✓ Annual Household Expenditure on Retail Activity in Area of Influence Est. to be as High as \$17,946 Annually.
- ✓ \$154.7 mil in Annual Sales from New Employment @ Build-out.
- ✓ \$265.1 Mil @ Build-out in Annual Sales Inclusive of Multiplier Effect
- ✓ Cumulative Sales of +/- \$4.5 Bil @ 20 Years
- ✓ Sales Tax @ \$0.01 for local jurisdictions.



# UNC Benefits Synopsis

## □ Primary Benefits Review – Retail Sales

### Scenario 1 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. Retail Sales Increase*	\$41.53	\$83.06	\$124.59	\$166.12	\$207.65	\$239.65	\$271.65	\$303.65	\$335.65	\$367.65	\$448.78	\$529.91	\$611.04	\$692.17	\$773.30	\$854.43	\$935.56	\$1,016.7	\$1,097.8	\$1,179
Cum. Tertiary Retail Sales Increase*	\$13.70	\$27.41	\$41.11	\$54.82	\$68.52	\$79.08	\$89.64	\$100.20	\$110.76	\$121.32	\$148.10	\$174.87	\$201.64	\$228.42	\$255.19	\$281.96	\$308.73	\$335.51	\$362.3	\$389
Cum. Increase in Student Spending*	\$2.00	6	13	23	43	73	103	133	163	213	263	313	363	413	463	513	563	613	663	713
Cum. Total Retail Sales Increase*	\$57.23	\$116.47	\$178.70	\$243.94	\$319.17	\$391.73	\$464.29	\$536.85	\$609.41	\$701.97	\$859.88	\$1,017.78	\$1,175.7	\$1,333.6	\$1,491.49	\$1,649.4	\$1,807.3	\$1,965.2	\$2,123.1	\$2,281
Cum. Retail Sales Tax Return Min.*	\$0.57	\$1.16	\$1.79	\$2.44	\$3.19	\$3.92	\$4.64	\$5.37	\$6.09	\$7.02	\$8.60	\$10.18	\$11.76	\$13.34	\$14.91	\$16.49	\$18.07	\$19.65	\$21.23	\$22.8

\*In millions

### Scenario 2 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. Retail Sales Increase*	\$41.53	\$83.06	\$124.59	\$166.12	\$207.65	\$265.45	\$323.25	\$381.05	\$438.85	\$496.65	\$1,134.05	\$1,321.95	\$1,509.85	\$1,697.75	\$1,885.65	\$2,073.55	\$2,261.45	\$2,449.35	\$2,637.25	\$2,825.15
Cum. Tertiary Retail Sales Increase*	\$13.70	\$27.41	\$41.11	\$54.82	\$68.52	\$87.60	\$106.67	\$125.75	\$144.82	\$163.89	\$374.24	\$436.24	\$498.25	\$560.26	\$622.26	\$684.27	\$746.28	\$808.29	\$870.29	\$932.30
Cum. Increase in Student Spending*	\$2.00	6	13	23	43	73	103	133	163	213	263	313	363	413	463	513	563	613	663	713
Cum. Total Retail Sales Increase*	\$57.23	\$116.47	\$178.70	\$243.94	\$319.17	\$426.05	\$532.92	\$639.80	\$746.67	\$873.54	\$1,771.29	\$2,071.19	\$2,371.10	\$2,671.01	\$2,970.91	\$3,270.82	\$3,570.73	\$3,870.64	\$4,170.54	\$4,470.45
Cum. Retail Sales Tax Return Min.*	\$0.57	\$1.16	\$1.79	\$2.44	\$3.19	\$4.26	\$5.33	\$6.40	\$7.47	\$8.74	\$17.71	\$20.71	\$23.71	\$26.71	\$29.71	\$32.71	\$35.71	\$38.71	\$41.71	\$44.70

\*In millions



# UNC Benefits Synopsis

## □ Property Valuation Assumptions

- ✓ Market Impact Off-site Substantial from Corporate Partner & Income Increases.
  - ✓ (Simply, Increased Income Results in Demand for New Hsg., Increased Affordability & Reinvestment)
- ✓ Cumulative Indirect Increases Range from \$7.3 to \$9.2 Billion over 20 yrs.
- ✓ On-site Unit Cost Estimated @ \$92,000
  - ✓ (Based on TCG recent efforts on rental development)



# UNC Benefits Synopsis

## □ Primary Benefits Review – Property Valuations

### Scenario 1 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum Indirect Property Valu. Incr.*	351.728	703.428	1055.128	1406.828	1758.528	2110.228	2461.928	2813.628	3165.328	3517.028	3868.728	4220.428	4572.128	4923.828	5275.528	5627.228	5978.928	6330.628	6682.328	7034.028
Cum. Private On-site Hqg Valu Increase*	\$7.64	15.3	22.9	30.5	38.18	53.5	68.9	84.3	99.6	115	130.4	145.7	161.1	176.5	191.8	207.2	222.5	237.9	253.3	268.6
Cum Indirect Property Valu. Incr.*	359.364	718.728	1078.028	1437.328	1796.708	2163.728	2530.828	2897.928	3264.928	3632.028	3999.128	4366.128	4733.228	5100.328	5467.328	5834.428	6201.428	6568.528	6935.628	7302.628

\*In millions

### Scenario 2 – Indirect Benefits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum Indirect Property Valu. Incr.*	351.728	703.428	1055.128	1406.828	1758.528	2248.428	2738.328	3228.228	3718.128	4208.028	4697.928	5187.828	5677.728	6167.628	6657.528	7147.428	7637.328	8127.228	8617.128	9107.028
Cum. Private On-site Hqg Valu Increase*	\$7.64	15.3	22.9	30.5	38.18	\$11.50	23	34.5	46	57.5	80.5	103.5	126.5	149.5	172.5	195.5	218.5	241.5	264.5	287.5
Cum Indirect Property Valu. Incr.*	359.364	718.728	1078.028	1437.328	1796.708	2259.928	2761.328	3262.728	3764.128	4265.528	4766.928	5268.328	5769.728	6271.128	6772.528	7273.928	7775.328	8276.728	8778.128	9279.528

\*In millions





# UNC Benefits Synopsis

## □ Visitor Spending Assumptions

- ✓ No new sporting events directly related to this proposed investment
- ✓ No new alumni events directly related to this investment
- ✓ Generated conference activity within existing facilities
- ✓ New visitation not solely but primarily linked to Corporate Partners
- ✓ Current Office Space/Visitor Ratios Utilized to Generate Future Estimates Attributable to the new Corp. Part. Space
- ✓ 17.7% Spending on Lodging.



# UNC Benefits Synopsis

## □ Primary Benefits Review – Visitor Spending & Lodging

**Scenario 1 – Visitor Spending Impact Beginning 2011**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. Change in Visitor Lodging Spending*	\$0.9	1.9	2.8	3.8	4.7	6.5	8.4	10.2	12.0	13.8	17.0	20.1	23.3	26.4	29.6	34.5	35.9	29.1	42.2	45.4
Cum. Increase in Visitor Spending*	\$5.3	10.7	16.0	21.3	26.6	36.9	47.2	57.6	67.9	78.2	96.0	113.8	131.6	149.4	167.3	185.1	202.9	220.7	238.5	256.3

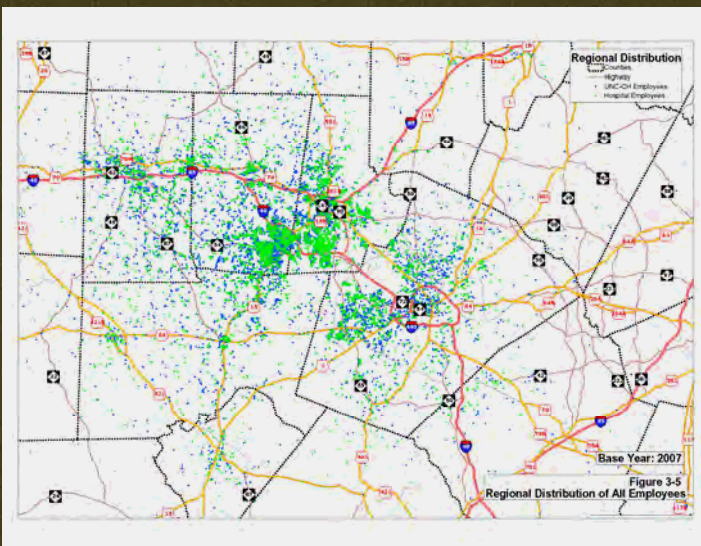
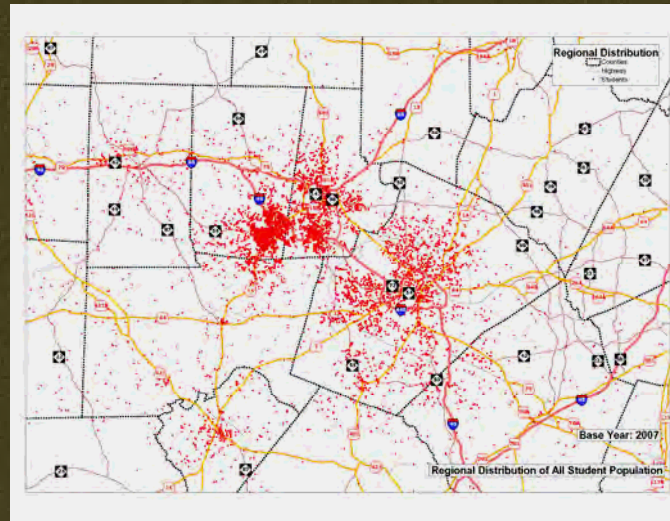
**Scenario 2 – Visitor Spending Impact Beginning 2011**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cum. Change in Vis. Lodging Spending*	\$0.9	1.9	2.8	3.8	4.7	7.2	9.7	12.2	14.7	17.2	20.3	23.5	26.6	29.8	32.9	36.1	39.2	42.2	45.4	48.6
Cum. Increase in Visitor Spending*	\$5.3	10.7	16.0	21.3	26.2	40.7	54.7	68.8	82.8	96.9	114.7	132.5	150.3	168.1	185.9	203.7	221.5	238.7	256.5	274.3



# UNC Benefits Synopsis

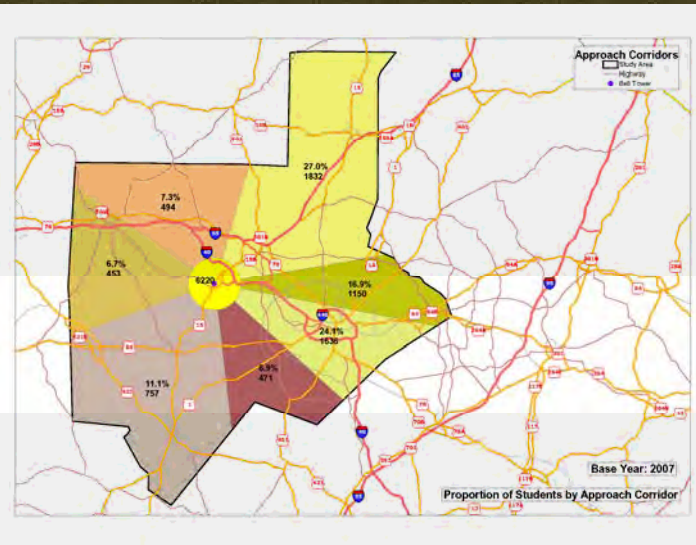
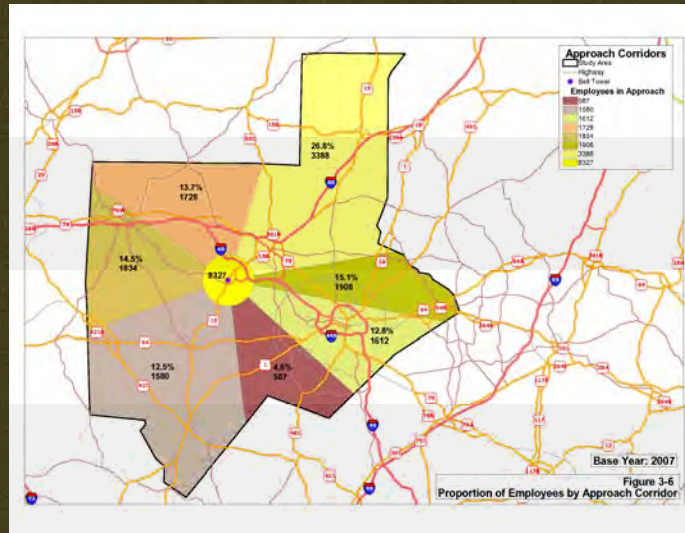
## □ Primary Impact Area: Distribution of Benefits





# UNC Benefits Synopsis

## □ Further Delineation of Distribution



# UNC Benefits Synopsis

## □ Further Delineation of Distribution

Full-Part/Part-time Faculty/Staff Employees by City

	Faculty	Staff	Total
Apex	22	155	177
Bahama	2	8	10
Bear Creek	0	24	24
Burlington	3	192	195
Bynum	0	14	14
Carrboro	214	656	870
Cary	55	182	237
Cedar Grove	1	18	19
Chapel Hill	1,936	2,371	4,307
Durham	431	1,514	1,945
Efland	14	60	74
Elon	1	28	29
Fuquay-Varina	2	12	14
Garner	2	12	14
Graham	9	362	371
Greensboro	17	40	57
Haw River	5	53	58
Hillsborough	87	354	441
Holly Springs	2	16	18
Hurdle Mills	2	22	24
Liberty	0	28	28
Mebane	13	257	270
Moncure	1	30	31
Morrisville	6	62	68
Oxford	1	13	14
Pittsboro	69	469	538
Raleigh	111	296	407
Rougemont	4	23	27
Roxboro	1	34	35
Sanford	4	70	74
Saxapahaw	0	11	11
Siler City	5	105	110
Snow Camp	3	95	98
Timberlake	1	22	23
Wake Forest	10	21	31
Other	179	440	619
No local address on file	9	8	17
<b>Total</b>	<b>3,222</b>	<b>8,077</b>	<b>11,299</b>





# UNC Benefits Synopsis

## □ Distribution of Benefits by Jurisdiction for Scenario 1

Scenario 1- Benefits Distribution for Select Years (\$ in Millions)																				
Area	2015				2020				2025				2030							
	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor
Apex	21.1	1.5	5.0	28.0	0.4	37.3	10.0	11.0	56.7	1.2	78.4	31.5	23.3	85.3	2.6	78.4	53.0	35.6	113.9	4.0
Bahama	0.1	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.4	0.0	0.5	0.2	0.2	0.5	0.0	0.5	0.3	0.2	0.7	0.0
Bear Creek	2.8	0.2	0.7	3.8	0.1	5.0	1.3	1.5	7.6	0.2	20.6	4.2	3.1	11.5	0.4	20.6	7.1	4.8	15.3	0.5
Burlington	23.4	1.7	5.5	31.1	0.5	41.3	11.1	12.1	62.8	1.4	87	34.9	25.8	94.6	2.9	87	58.8	39.5	126.3	4.4
Bynum	1.6	0.1	0.4	2.2	0.0	2.9	0.8	0.8	4.4	0.1	6.0	2.4	1.8	6.6	0.2	6.0	4.1	2.7	8.8	0.3
Carrboro	104.0	7.4	24.6	138.3	2.0	184	49.2	54.1	279.7	6.0	387	155.4	114.8	421.0	12.9	387	261.6	175.6	562.3	19.7
Cary	28.4	2.0	6.7	37.7	0.6	50.2	13.4	14.7	76.3	1.6	105.6	42.4	31.3	114.8	3.5	105.6	71.3	47.9	153.4	5.4
Cedar Grove	2.3	0.2	0.5	3.1	0.0	4.1	1.1	1.2	6.2	0.1	8.5	3.4	2.5	9.3	0.3	8.5	5.8	3.9	12.4	0.4
Chapel Hill	1479.0	36.5	121.7	684.9	10.3	2618	243.8	267.6	1384.5	29.8	5507	769.4	568.6	2084.1	63.8	5507	1295.1	869.5	2783.8	97.7
Durham	232.3	16.5	54.9	309.2	4.6	411	110.1	120.8	625.1	13.5	865	347.4	256.7	940.9	28.8	865	584.7	392.6	1256.8	44.1
Efland	8.8	0.6	2.1	11.7	0.2	15.5	4.2	4.6	23.6	0.5	32.7	13.1	9.7	35.5	1.1	32.7	22.1	14.8	47.5	1.7
Elon	3.5	0.2	0.8	4.7	0.1	6.2	1.7	1.8	9.4	0.2	13.1	5.2	3.9	14.2	0.4	13.1	8.8	5.9	19.0	0.7
Fuquay-Varina	1.6	0.1	0.4	2.2	0.0	2.9	0.8	0.8	4.4	0.1	6.0	2.4	1.8	6.6	0.2	6.0	4.1	2.7	8.8	0.3
Garner	1.6	0.1	0.4	2.2	0.0	2.9	0.8	0.8	4.4	0.1	6.0	2.4	1.8	6.6	0.2	6.0	4.1	2.7	8.8	0.3
Graham	44.4	3.2	10.5	59.1	0.9	78.6	21.0	23.1	119.5	2.6	165.4	66.4	49.1	179.9	5.5	165.4	111.8	75.0	240.3	8.4
Greensboro	6.8	0.5	1.6	9.0	0.1	12.0	3.2	3.5	18.2	0.4	25.1	10.1	7.5	27.3	0.8	25.1	17.0	11.4	36.5	1.3
Haw River	6.9	0.5	1.6	9.2	0.1	12.2	3.3	3.6	18.5	0.4	25.6	10.3	7.6	27.9	0.8	25.6	17.3	11.6	37.2	1.3
Hillsborough	52.7	3.7	12.4	70.1	1.0	93.2	24.9	27.4	141.6	3.0	196.1	78.7	58.2	213.2	6.5	196.1	132.5	89.0	284.8	10.0
Holly Springs	2.2	0.2	0.5	2.9	0.0	3.8	1.0	1.1	5.8	0.1	8.0	3.2	2.4	8.7	0.3	8.0	5.4	3.6	11.7	0.4
Hurdle Mills	2.2	0.2	0.5	2.9	0.0	3.8	1.0	1.1	5.8	0.1	8.0	3.2	2.4	8.7	0.3	8.0	5.4	3.6	11.7	0.4
Liberty	3.4	0.2	0.8	4.5	0.1	6.0	1.6	1.8	9.1	0.2	12.6	5.0	3.7	13.7	0.4	12.6	8.5	5.7	18.3	0.6
Mebane	32.3	2.3	7.6	42.9	0.6	57.1	15.3	16.8	86.8	1.9	120.1	48.2	35.6	130.7	4.0	120.1	81.2	54.5	174.5	6.1
Moncure	3.6	0.3	0.9	4.9	0.1	6.5	1.7	1.9	9.8	0.2	13.6	5.4	4.0	14.8	0.5	13.6	9.2	6.2	19.7	0.7
Morrisville	8.1	0.6	1.9	10.8	0.2	14.3	3.8	4.2	21.8	0.5	30.2	12.1	8.9	32.8	1.0	30.2	20.4	13.7	43.8	1.5
Oxford	1.6	0.1	0.4	2.2	0.0	2.9	0.8	0.8	4.4	0.1	6.0	2.4	1.8	6.6	0.2	6.0	4.1	2.7	8.8	0.3
Pittsboro	64.3	4.6	15.2	85.5	1.3	113.8	30.4	33.4	172.9	3.7	239.3	96.1	71.0	260.2	8.0	239.3	161.7	108.6	347.6	12.2
Raleigh	48.6	3.4	11.5	64.7	1.0	86	23.0	25.3	130.8	2.8	181	72.7	53.7	196.8	6.0	181	122.3	82.1	262.9	9.2
Rougemont	3.2	0.2	0.8	4.3	0.1	5.7	1.5	1.7	8.7	0.2	12.1	4.8	3.6	13.1	0.4	12.1	8.2	5.5	17.5	0.6
Roxboro	4.2	0.3	1.0	5.6	0.1	7.4	2.0	2.2	11.3	0.2	15.6	6.3	4.6	16.9	0.5	15.6	10.5	7.1	22.6	0.8
Sanford	8.8	0.6	2.1	11.7	0.2	15.5	4.2	4.6	23.6	0.5	32.7	13.1	9.7	35.5	1.1	32.7	22.1	14.8	47.5	1.7
Saxapahaw	1.4	0.1	0.3	1.8	0.0	2.4	0.6	0.7	3.6	0.1	5.0	2.0	1.5	5.5	0.2	5.0	3.4	2.3	7.3	0.3
Siler City	13.1	0.9	3.1	17.4	0.3	23.2	6.2	6.8	35.2	0.8	48.8	19.6	14.5	53.0	1.6	48.8	33.0	22.1	70.8	2.5
Snow Camp	11.7	0.8	2.8	15.6	0.2	20.8	5.6	6.1	31.6	0.7	43.7	17.6	13.0	47.6	1.5	43.7	29.6	19.8	63.5	2.2
Timberlake	2.7	0.2	0.6	3.6	0.1	4.8	1.3	1.4	7.3	0.2	10.1	4.0	3.0	10.9	0.3	10.1	6.8	4.6	14.6	0.5
Wake Forest	3.6	0.3	0.9	4.9	0.1	6.5	1.7	1.9	9.8	0.2	13.6	5.4	4.0	14.8	0.5	13.6	9.2	6.2	19.7	0.7
Others	76.0	5.4	18.0	101.2	1.5	134.6	36.0	39.5	204.5	4.4	283	113.6	84.0	307.8	9.4	283	191.3	128.4	411.1	14.4

\*In Millions of Dollars



# UNC Benefits Synopsis

## □ Distribution of Benefits by Jurisdiction for Scenario 2

Scenario 2- Benefits Distribution For Select Years (\$ in Millions)

Area	2015						2020						2025						2030					
	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop	Visitor	Employ	Inc.	Sales	Prop
Apex	21.1	1.5	5.0	28.0	0.4	45.2	16.8	13.6	66.5	1.5	78.4	31.5	46.3	104.9	2.9	78.4	46.1	69.7	143.2	4.3				
Bahama	0.1	0.0	0.0	0.2	0.0	0.3	0.1	0.1	0.4	0.0	0.5	0.2	0.3	0.7	0.0	0.5	0.3	0.4	0.9	0.0				
Bear Creek	2.8	0.2	0.7	3.8	0.1	6.1	2.3	1.8	9.0	0.2	20.6	4.2	6.2	14.1	0.4	20.6	6.2	9.4	19.3	0.6				
Burlington	23.4	1.7	5.5	31.1	0.5	50.1	18.7	15.1	73.8	1.7	87	34.9	51.4	116.3	3.2	87	51.2	77.3	158.8	4.7				
Bynum	1.6	0.1	0.4	2.2	0.0	3.5	1.3	1.0	5.1	0.1	6.0	2.4	3.6	8.1	0.2	6.0	3.5	5.4	11.0	0.3				
Carrboro	104.0	7.4	24.6	138.3	2.0	222.9	83.1	67.3	328.4	7.5	387	155.4	228.8	517.6	14.3	387	227.7	344.2	706.7	21.1				
Cary	28.4	2.0	6.7	37.7	0.6	60.8	22.7	18.3	89.6	2.0	105.6	42.4	62.4	141.2	3.9	105.6	62.1	93.9	192.7	5.8				
Cedar Grove	2.3	0.2	0.5	3.1	0.0	4.9	1.8	1.5	7.3	0.2	8.5	3.4	5.1	11.4	0.3	8.5	5.0	7.6	15.6	0.5				
Chapel Hill	1479.0	36.5	121.7	684.9	10.3	3170	411.2	333.0	1626.0	36.9	5507	769.4	1132.5	2562.2	70.9	5507	1127.5	1704.1	3498.5	104.6				
Durham	232.3	16.5	54.9	309.2	4.6	498.1	185.7	150.3	734.1	16.7	865	347.3	511.3	1156.8	32.0	865	509.0	769.4	1579.5	47.2				
Efland	8.8	0.6	2.1	11.7	0.2	18.8	7.0	5.7	27.7	0.6	32.7	13.1	19.3	43.7	1.2	32.7	19.2	29.1	59.7	1.8				
Elon	3.5	0.2	0.8	4.7	0.1	7.5	2.8	2.3	11.1	0.3	13.1	5.2	7.7	17.5	0.5	13.1	7.7	11.6	23.9	0.7				
Fuquay-Varina	1.6	0.1	0.4	2.2	0.0	3.5	1.3	1.0	5.1	0.1	6.0	2.4	3.6	8.1	0.2	6.0	3.5	5.4	11.0	0.3				
Garner	1.6	0.1	0.4	2.2	0.0	3.5	1.3	1.0	5.1	0.1	6.0	2.4	3.6	8.1	0.2	6.0	3.5	5.4	11.0	0.3				
Graham	44.4	3.2	10.5	59.1	0.9	95.2	35.5	28.7	140.3	3.2	165.4	66.4	97.7	221.1	6.1	165.4	97.3	147.1	301.9	9.0				
Greensboro	6.8	0.5	1.6	9.0	0.1	14.5	5.4	4.4	21.3	0.5	25.1	10.1	14.9	33.6	0.9	25.1	14.8	22.4	45.9	1.4				
Haw River	6.9	0.5	1.6	9.2	0.1	14.8	5.5	4.5	21.8	0.5	25.6	10.3	15.2	34.3	0.9	25.6	15.1	22.8	46.8	1.4				
Hillsborough	52.7	3.7	12.4	70.1	1.0	112.9	42.1	34.1	166.4	3.8	196.1	78.7	115.9	262.1	7.3	196.1	115.4	174.3	357.9	10.7				
Holly Springs	2.2	0.2	0.5	2.9	0.0	4.6	1.7	1.4	6.8	0.2	8.0	3.2	4.8	10.8	0.3	8.0	4.7	7.2	14.7	0.4				
Hurdle Mills	2.2	0.2	0.5	2.9	0.0	4.6	1.7	1.4	6.8	0.2	8.0	3.2	4.8	10.8	0.3	8.0	4.7	7.2	14.7	0.4				
Liberty	3.4	0.2	0.8	4.5	0.1	7.2	2.7	2.2	10.7	0.2	12.6	5.0	7.4	16.8	0.5	12.6	7.4	11.2	22.9	0.7				
Mebane	32.3	2.3	7.6	42.9	0.6	69.2	25.8	20.9	101.9	2.3	120.1	48.2	71.0	160.6	4.4	120.1	70.7	106.8	219.3	6.6				
Moncure	3.6	0.3	0.9	4.9	0.1	7.8	2.9	2.4	11.5	0.3	13.6	5.4	8.0	18.1	0.5	13.6	8.0	12.1	24.8	0.7				
Morrisville	8.1	0.6	1.9	10.8	0.2	17.4	6.5	5.2	25.6	0.6	30.2	12.1	17.8	40.3	1.1	30.2	17.7	26.8	55.1	1.6				
Oxford	1.6	0.1	0.4	2.2	0.0	3.5	1.3	1.0	5.1	0.1	6.0	2.4	3.6	8.1	0.2	6.0	3.5	5.4	11.0	0.3				
Pittsboro	64.3	4.6	15.2	85.5	1.3	137.8	51.3	41.6	203.0	4.6	239.3	96.1	141.4	319.9	8.8	239.3	140.8	212.8	436.9	13.1				
Raleigh	48.6	3.4	11.5	64.7	1.0	104.2	38.8	31.4	153.6	3.5	181	72.7	107.0	242.0	6.7	181	106.5	160.9	330.4	9.9				
Rougemont	3.2	0.2	0.8	4.3	0.1	6.9	2.6	2.1	10.2	0.2	12.1	4.8	7.1	16.1	0.4	12.1	7.1	10.7	22.0	0.7				
Roxboro	4.2	0.3	1.0	5.6	0.1	9.0	3.3	2.7	13.2	0.3	15.6	6.3	9.2	20.8	0.6	15.6	9.2	13.9	28.5	0.9				
Sanford	8.8	0.6	2.1	11.7	0.2	18.8	7.0	5.7	27.7	0.6	32.7	13.1	19.3	43.7	1.2	32.7	19.2	29.1	59.7	1.8				
Saxapahaw	1.4	0.1	0.3	1.8	0.0	2.9	1.1	0.9	4.3	0.1	5.0	2.0	3.0	6.7	0.2	5.0	3.0	4.5	9.2	0.3				
Siler City	13.1	0.9	3.1	17.4	0.3	28.1	10.5	8.5	41.4	0.9	48.8	19.6	28.8	65.2	1.8	48.8	28.7	43.4	89.0	2.7				
Snow Camp	11.7	0.8	2.8	15.6	0.2	25.2	9.4	7.6	37.1	0.8	43.7	17.6	25.8	58.5	1.6	43.7	25.7	38.9	79.8	2.4				
Timberlake	2.7	0.2	0.6	3.6	0.1	5.8	2.2	1.7	8.5	0.2	10.1	4.0	5.9	13.4	0.4	10.1	5.9	8.9	18.4	0.5				
Wake Forest	3.6	0.3	0.9	4.9	0.1	7.8	2.9	2.4	11.5	0.3	13.6	5.4	8.0	18.1	0.5	13.6	8.0	12.1	24.8	0.7				
Others	76.0	5.4	18.0	101.2	1.5	162.9	60.7	49.2	240.1	5.5	283	113.6	167.3	378.4	10.5	283	166.5	251.7	516.7	15.4				

\*In Millions of Dollars



# UNC Benefits Synopsis

## □ Housing Unit Growth Assumptions

- ✓ 1 Unit for every 0.75 new jobs for Corporate Partners & Less Others
- ✓ Excludes on-site housing
- ✓ Pattern Used Is Present Pattern For UNC
- ✓ Substantial ability to direct benefits @ local level and somewhat less at university level
- ✓ Distribution as follows



# UNC Benefits Synopsis

## □ Housing Unit Impact Scenario 1

Scenario 1 – Distribution of New Housing Units (Excluding On-site)

Area	Housing Units		
	2015	2020	2025
Apex	18.0	35.0	60.4
Bahama	0.1	0.2	0.4
Bear Creek	2.4	4.7	8.1
Burlington	20.0	38.8	67.0
Bynum	1.4	2.7	4.6
Carrboro	89.1	172.7	298.0
Cary	24.3	47.1	81.3
Cedar Grove	2.0	3.8	6.6
Chapel Hill	441.0	855.0	1475.2
Durham	199.1	386.0	666.0
Efland	7.5	14.6	25.2
Elon	3.0	5.8	10.1
Fuquay-Varina	1.4	2.7	4.6
Garner	1.4	2.7	4.6
Graham	38.1	73.8	127.3
Greensboro	5.8	11.2	19.4
Haw River	5.9	11.4	19.7
Hillsborough	45.1	87.5	150.9
Holly Springs	1.9	3.6	6.2
Hurdle Mills	1.9	3.6	6.2
Liberty	2.9	5.6	9.7
Mebane	27.7	53.6	92.5
Moncure	3.1	6.1	10.4
Morrisville	6.9	13.5	23.2
Oxford	1.4	2.7	4.6
Pittsboro	55.1	106.8	184.2
Raleigh	41.7	80.7	139.3
Rougemont	2.8	5.4	9.3
Roxboro	3.6	7.0	12.0
Sanford	7.5	14.6	25.2
Saxapahaw	1.2	2.2	3.9
Siler City	11.2	21.8	37.5
Snow Camp	10.1	19.5	33.7
Timberlake	2.3	4.5	7.7
Wake Forest	3.1	6.1	10.4
Others	65.1	126.3	217.9





# UNC Benefits Synopsis

## □ Housing Unit Impact Scenario 2

Scenario 2 – Distribution of New Housing Units (Excluding On-site)

Area	Housing Units		
	2015	2020	2025
Apex	18.0	47.6	60.4
Bahama	0.1	0.3	0.4
Bear Creek	2.4	6.4	8.1
Burlington	20.0	52.8	67.0
Bynum	1.4	3.7	4.6
Carrboro	89.1	235.1	298.0
Cary	24.3	64.1	81.3
Cedar Grove	2.0	5.2	6.6
Chapel Hill	441.0	1163.8	1475.2
Durham	199.1	525.4	666.0
Efland	7.5	19.8	25.2
Elon	3.0	7.9	10.1
Fuquay-Varina	1.4	3.7	4.6
Garner	1.4	3.7	4.6
Graham	38.1	100.4	127.3
Greensboro	5.8	15.3	19.4
Haw River	5.9	15.6	19.7
Hillsborough	45.1	119.1	150.9
Holly Springs	1.9	4.9	6.2
Hurdle Mills	1.9	4.9	6.2
Liberty	2.9	7.6	9.7
Mebane	27.7	73.0	92.5
Moncure	3.1	8.2	10.4
Morrisville	6.9	18.3	23.2
Oxford	1.4	3.7	4.6
Pittsboro	55.1	145.3	184.2
Raleigh	41.7	109.9	139.3
Rougemont	2.8	7.3	9.3
Roxboro	3.6	9.5	12.0
Sanford	7.5	19.8	25.2
Saxapahaw	1.2	3.1	3.9
Siler City	11.2	29.6	37.5
Snow Camp	10.1	26.6	33.7
Timberlake	2.3	6.1	7.7
Wake Forest	3.1	8.2	10.4
Others	65.1	171.9	217.9





# UNC Benefits Synopsis

## □ Synopsis of Cumulative Indirect Impacts/Benefits

- ✓ More than 8600 New Jobs
- ✓ More than \$17 Billion Over Initial 20 Year Time Frame
- ✓ Distribution of Benefits Can Be Impacted; Impacting One Component (such as Housing) Impacts Distribution of Others.

