ATTACHMENT A					
Regional Development and Design - TAC Charrette					
DATA DICTIONARY					
Highlands Build Out - Developed and Undeveloped Land Evaluation					
Land Use Code					
1	Residential				
2	Non-Residential				
3	Other - Military				
4	Other - Plat				
5	Other - Transitional Land				
6	Undeveloped - Other				
7	Undeveloped - Agriculture				
8	Undeveloped - Forest				
9	Undeveloped -Forested Wetlands				
10	Undeveloped - Wetlands other				
11	Undeveloped - Water				
12	Undeveloped - Open				
13	Undeveloped - Unavailable				
Developed Land		**Series Name/#**	**2002_Code**	**2002 Label**	**Comments**
ID #					
1	**Residential**	**Series Name/#**	**LU2002_Code**	**Label_2002**	**Comments**
		Urban/1000	1110	RESIDENTIAL, HIGH DENSITY, MULTIPLE DWELLING	
		Urban/1000	1120	RESIDENTIAL, SINGLE UNIT, MEDIUM DENSITY	
		Urban/1000	1130	RESIDENTIAL, SINGLE UNIT, LOW DENSITY	
		Urban/1000	1140	Residential, Rural, Sigle Unit	
		Urban/1000	1150	Mixed Residential	
2	**Non-Residential**	**Series Name/#**	**LU2002_Code**	**Label_2002**	**Comments**
		Urban/1000	1200	COMMERCIAL/SERVICES	
		Urban/1000	1300	INDUSTRIAL	
		Urban/1000	1500	INDUSTRIAL/COMMERCIAL COMPLEXES	
		Urban/1000	1600	MIXED URBAN OR BUILT-UP LAND	
		Barren Land/7000	7300	EXTRACTIVE MINING	

Developed Land, cont.		Series Name/#	2002_Code	2002 Label	Comments
3	Other - Military	Series Name/#	LU2002_Code	Label_2002	Comments
		Urban/1000	1211	MILITARY RESERVATIONS	
4	Other - Plat	Series Name/#	LU2002_Code	Label_2002	Comments
		Urban/1000	1400	TRANSPORTATION/COMMUNICATIONS/UTILITIES	
		Urban/1000	1410	MAJOR ROADWAY	
		Urban/1000	1419	BRIDGE OVER WATER	
		Urban/1000	1440	AIRPORT FACILITIES	
		Urban/1000	1462	UPLAND RIGHTS-OF-WAY, DEVELOPED	
		Urban/1000	1463	UPLAND ROW, UNDEVELOPED	
		Urban/1000	1499	STORMWATER BASIN	
		Urban/1000	1710	CEMETERY	
		Urban/1000	1800	RECREATIONAL LAND	
		Urban/1000	1804	ATHLETIC FIELDS (SCHOOLS)	
		Urban/1000	1810	STADIUM, THEATERS, CULTURAL CENTERS AND ZOOS	
Undeveloped Land		**Series Name/#**	**2002_Code**	**2002 Label**	**Comments**
5	Other - Transitional	Series Name/#	LU2002_Code	Label_2002	Comments
		Barren Land/7000	7500	TRANSITIONAL AREAS	
		Barren Land/7000	7400	ALTERED LANDS	
6	Undeveloped-Other		LU2002_Code	Label_2002	Comments
		Urban/1000	1214	Former Military; Indeterminate Use	
		Urban/1000	1700	OTHER URBAN OR BUILT-UP LAND	
		Urban/1000	1741	PHRAGMITES DOMINATE URBAN AREA	
		Barren Land/7000	7600	UNDIFFERENTIATED BARREN LANDS	
Undeveloped Land		**Series Name/#**	**2002_Code**	**2002 Label**	**Comments**
7	Undeveloped-Agriculture	Series Name/#	LU2002_Code	Label_2002	Comments
		Agriculture/2000	2100	CROPLAND AND PASTURELAND	
		Agriculture/2000	2200	ORCHARDS/VINEYARDS/NURSERIES/ HORTICULTURAL AREAS	
		Agriculture/2000	2300	CONFINED FEEDING OPERATIONS	
		Agriculture/2000	2400	OTHER AGRICULTURE	

8	Undeveloped-Forest	Series Name/#	LU2002_Code	Label_2002	Comments
		Forest/ 4100	4110	DECIDUOUS FOREST (10-50% CROWN CLOSURE)	
		Forest/ 4100	4120	DECIDUOUS FOREST (>50% CROWN CLOSURE)	
		Forest/ 4100	4210	CONIFEROUS FOREST (10-50% CROWN CLOSURE)	
		Forest/ 4100	4220	CONIFEROUS FOREST (>50% CROWN CLOSURE)	
		Forest/ 4100	4230	PLANTATION	
		Forest/ 4100	4311	MIXED FOREST (>50% CONIFEROUS WITH 10%-50% CROWN CLOSURE)	
		Forest/ 4100	4312	MIXED FOREST (>50% CONIFEROUS WITH >50% CROWN CLOSURE)	
		Forest/ 4100	4321	MIXED FOREST (>50% DECIDUOUS WITH 10-50% CROWN CLOSURE)	
		Forest/ 4100	4322	MIXED FOREST (>50% DECIDUOUS WITH >50% CROWN CLOSURE)	
		Forest/ 4100	4500	Severe Burned Upland Forest	

Undeveloped Land		Series Name/#	2002_Code	2002 Label	Comments
9	Undeveloped-Forested Wetlands				
		Wetlands/ 6000	6210	DECIDUOUS WOODED WETLANDS	
		Wetlands/ 6000	6220	CONIFEROUS WOODED WETLANDS	
		Wetlands/ 6000	6251	MIXED FORESTED WETLANDS (DECIDUOUS DOM.)	
		Wetlands/ 6000	6252	MIXED FORESTED WETLANDS (CONIFEROUS DOM.)	
		Wetlands/ 6000	6221	Atlantic White Cedar Wetlands	
10	Undeveloped-Wetlands other	Series Name/#	LU2002_Code	Label_2002	Comments
		Urban/1000	1750	MANAGED WETLAND IN MAINTAINED LAWN GREENSPACE	
		Agriculture/2000	2140	AGRICULTURAL WETLANDS (MODIFIED)	
		Agriculture/2000	2150	FORMER AGRICULTURAL WETLAND-BECOMING SHRUBBY, NOT BUILT-UP)	
		Wetlands/ 6000	6231	DECIDUOUS SCRUB/SHRUB WETLANDS	
		Wetlands/ 6000	6232	CONIFEROUS SCRUB/SHRUB WETLANDS	
		Barren Land/7000	7430	DISTURBED WETLANDS (MODIFIED)	
		Wetlands/ 6000	6233	MIXED SCRUB/SHRUB WETLANDS (DECIDUOUS DOM.)	
Undeveloped Land		**Anderson Series Name/#**	**2002_Code**	**2002 Label**	**Comments**
10, cont.	Undeveloped-Wetlands other	Series Name/#	LU2002_Code	Label_2002	Comments
		Wetlands/ 6000	6234	MIXED BRUSH AND BOG WETLANDS, CONIFEROUS DOMINATE	
		Wetlands/ 6000	6240	HERBACEOUS WETLANDS	
		Wetlands/ 6000	6241	PHRAGMITES DOMINATE INTERIOR WETLANDS	
		Urban/1000	1461	WETLAND RIGHTS-OF-WAY (MODIFIED)	
		Urban/1000	1711	CEMETERY ON WETLAND	
		Urban/1000	1850	MANAGED WETLAND IN BUILT-UP MAINTAINED REC AREA	

		Wetlands/ 6000	6113	Phragmites Dominated Interior Wetlands	
		Wetlands/ 6000	6120	Freshwater Tidal Marshes	
Undeveloped Land		**Series Name/#**	**2002_Code**	**2002 Label**	**Comments**
11	**Undeveloped - water**	Water/ 5000	5100	STREAMS AND CANALS	
		Water/ 5000	5200	NATURAL LAKES	
		Water/ 5000	5300	ARTIFICIAL LAKES	
12	**Undeveloped - open**				
		Forest/ 4100	4410	OLD FIELD (< 25% BRUSH COVERED)	
		Forest/ 4100	4411	PHRAGMITES DOMINATE OLD FIELD	
		Forest/ 4100	4420	DECIDUOUS BRUSH/SHRUBLAND	
		Forest/ 4100	4430	CONIFEROUS BRUSH/SHRUBLAND	
		Forest/ 4100	4440	MIXED DECIDUOUS/CONIFEROUS BRUSH/SHRUBLAND	
13	**Undeveloped-unavailable**	Barren Land/7000	7100	Beaches	
		Barren Land/7000	7200	Bare Exposed Rock, Rock slides, etc.	

Attachment B
Regional Development and Design – TAC Charrette
Land Use Buildout and Impact Analysis – Technical Approach

Scenario	Description	Data Input	Data Output
TREND BASELINE	Impact of a full buildout of available unrestricted land under current municipal zoned land usage (i.e., residential, senior/age restricted, commercial and industrial) and densities, without consideration of NJ Highlands Act implications.	2002 DEP Land Use/Land Cover, Municipal Zoning, environmental constraints, open space/preserved land constraints, road and right of way constraints, Sewer Service Areas including provider and capacity, and Composite Zones and associated Impact Factors.	Buildout results (dwelling units and square feet non-residential space), and related impacts (population, children, water consumption, etc.), by municipality, county and region. Analysis of sewer demand versus capacity for each sewer service area, and required density adjustment.
STATE PLAN BASELINE	Impact of a full buildout of available unrestricted land under current municipal zoned land usage for age-restricted zones, mixed use zones and non-residential floor area ratios (FAR), and State Planning Area average residential densities, without consideration of legislated formation of the NJ Highlands Region.	2002 DEP Land Use/Land Cover, Municipal Zoning, environmental constraints, open space/preserved land constraints, road and right of way constraints, Sewer Service Areas including provider and capacity , and State Planning Map designations with appropriate residential densities, existing zoning densities for age restricted zones, mixed use zones, non-residential zones and composite zones with associated Impact Factors.	Buildout results (dwelling units and square feet non-residential space), and related impacts (population, children, water consumption, etc.), by municipality, county and region. Analysis of sewer demand versus capacity for each sewer service area, and required density adjustment.
HIGHLANDS LAND CAPACITY BASELINE	Impact of a full buildout of available unrestricted land under current municipal zoned land usage and densities with consideration of Highlands land capacity constraints.	2002 DEP Land Use/Land Cover, Municipal Zoning, environmental constraints, open space/preserved land constraints, road and right of way constraints, and Highlands Land Capability Map designations including sewer service capacity analysis with existing zoning densities and associated Impact Factors.	Buildout results (dwelling units and square feet non-residential space), and related impacts (population, children, water consumption, etc.), by municipality, county and region. Analysis of sewer demand versus capacity for each sewer service area, and required density adjustments.
HIGHLANDS GROWTH CAPACITY	Impact of full buildout under Highlands Land Capacity scenario assumptions, after adjustment for higher permitted residential densities in specific growth centers.	2002 DEP Land Use/Land Cover, Municipal Zoning, environmental constraints, open space/preserved land constraints, road and right of way constraints, and Highlands Land Capability Map designations including sewer service capacity analysis, and State Planning Center designations and potential Growth Centers, with appropriate densities and associated Impact Factors.	Buildout results (dwelling units and square feet non-residential space), and related impacts (population, children, water consumption, etc.), by municipality, county and region. Analysis of sewer demand versus capacity for each sewer service area, and required density adjustments.

Attachment C
Regional Development and Design TAC Charrette
Land Use Buildout and Impact Analysis – Model Composite Factors

Table 1 – Highlands Build Out Model Residential Composite Zone Impact Factors

Type	Density du/acre *	Efficiency Factor % (1)	Average Household Size (2)	Average School Children in Household (2)	Trip Generation (3)	Percent Impervious (4)	Water Consumption equals Indoor gallons per person per day plus outdoor demand as gallons per unit (5)	Wastewater Generation Equals Indoor water consumption value (5)	Open Space Acres per Household (6)
SF Estate Residential or (PA-5)	0.05 to 0.20 (0.17 maximum)	95	2.87	0.64	2.55 person trips/day/unit	2.18	75 Indoor 50 Outdoor	75 gallons per person per day	2.05
SF Rural Residential or (PA-4B)	0.21 to 0.5 du/acre (0.17 maximum)	95	2.89	0.66	2.55 person trips/day/unit	3.07	75 Indoor 50 Outdoor	75 gallons per person per day	3.01
SF Low Density or (PA-4)	0.51 to 1.0 du/acre (1.16 maximum)	80	2.98	0.72	2.55 person trips/day/unit	8.17	75 Indoor 50 Outdoor	75 gallons per person per day	0.92
SF Medium Density or (PA-3)	1.01 to 3.0 du/acre (3.81 minimum)	75	2.81	0.60	2.55 person trips/day/unit	15.90	75 Indoor 30 Outdoor	75 gallons per person per day	0.56
SF High Density or (PA-2)	3.01 to 8.0 du/acre (7.04 minimum)	75	2.72	0.56	2.55 person trips/day/unit	19.14	75 Indoor 5 Outdoor	75 gallons per person per day	0.55
Attached/Townhouse or (PA-1)	8.01 to 16.0 du/acre (9.78 minimum)	75	2.59	0.46	2.50 person/trips/day/unit	29.68	75 Indoor 5 Outdoor	75 gallons per person per day	0.55
Garden Apartment or (PA-1)	16.01+ du/acre (9.78 minimum)	70	2.59	0.51	3.35 person/trips/day/unit	38.82	75 Indoor 5 Outdoor	75 gallons per person per day	0.01
Mixed use/Age Restricted Housing (percent mix based on 40% residential and 60% non-residential as Office/Commercial)	Apply zone density and FAR value Note: Use Office/Commercial Impact factors for non-res %	70	Varies Based on zoning Du/Acre description	0.00	2.96 vehicle/trips/day/unit for Res Du/Acre value and 9.20 trips/1,000 sf as Office /Commercial	36.24	75 Indoor 5 Outdoor	75 gallons per person per day	3.12

Mixed use (percent mix based on 40% residential and 60% non-residential as Office/Commercial)	Apply zone density and FAR value Note: Use Office/Commercial Impact factors for non-res %	70	Varies Based on zoning Du/Acre description	Varies Based on zoning Du/Acre description	Apply 15 % Trip Reduction factors for appropriate Res Du/Acre value and 9.20 trips/1,000 sf as Office /Commercial	36.24	75 Indoor 5 Outdoor	75 gallons per person per day	3.12
Senior or Age restricted Housing	Varies Based on zoning Du/Acre description	70	2.43	0.00	3.48 Vehicle/ trips/day/unit	6.78	75 Indoor 5 Outdoor	75 gallons per person per day	2.00

Table 1 Sources

* Residential dwelling units generated by the build out model will include both market rate and affordable units. The affordable units will be determined using COAH's Third Round Procedural Rules (# of net residential units divided by 9).

(1) Source: Efficiencies are given as a percentage, between 0 and 100, where a 100 value means complete efficiency (no land lost to development), and a 0 value means no buildings will be estimated for that land use. For example an efficiency of 70% may be representative of developable land that has a 10% set aside for parks and 20% for roads (100% - 10% - 20% = 70%). Project determined values.

(2) Source: NCNBR, Rutgers University, December 15, 2005. The average household size and average school children in household data represent averages of 2000 U.S. Census Block Group data weighted for the number of residential developed acres in each composite zone. The raw data was obtained by overlaying NJ Highlands Zoning, 2002 DEP LU/LC and 2000 U.S. Census Block Group spatial data files, and extracting Census data for each intersecting polygon made up of a municipal zone with developed residential land. This produced a total of 4,056 unique polygons. All polygons representing non-residential zones or having less than one-acre of developed residential land were removed from this data set, reducing it to 1,943 unique polygons or records.

(3) Source: ITE Trip Generation Report, 7th Edition. Rates are for a typical weekday. Person trips/day/unit are determined based on average household size value.

ITE does not classify single family detached by type or density and rates are generally seen as applicable to "suburban lifestyle." The "Multi-apts." rate is based on what ITE calls "High Rise." Senior Housing comes in two forms attached and detached—the rate of 3.48 is for attached (high zoning density). The detached rate is 3.71-vehicle trips/day per unit. The attached value is the project determined value.

In regard to percentage reduction for mixed use developments, no adjustments are made for mixed use from ITE. A project determined Trip Reduction Factor of 15% was applied to mixed use. As further and more reliable data becomes available such rates may be modified in the future.

Codes Used:
210- SFD – for all Single family detached housing
220 Apartment for Garden Apts.
222 Multi-use apts.
230 Residential condominium/Townhouse

(4) Source: NCNBR, Rutgers University, December 20, 2005. The data represent averages of NJ Highlands Percent Impervious Surface weighted for the acres of residential or non-residential developed land in each composite zone. The raw data was obtained by overlaying NJ Highlands Zoning and DEP 2002 LU/LC spatial data files, and extracting the calculated percent impervious surface area attached to each LU/LC developed land polygon and the acres of associated developed land in each intersecting municipal zone polygon. This produced a total of 6,767 unique residential polygons and 4,428 non-residential polygons. The total impervious surface area in each composite zone was divided by the total developed land area, to produce a weighted IS average for each composite zone.

(5) Source: "The Costs and Benefits of Alternative Growth Patterns: The Impact Assessment of the New Jersey State Plan", Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, Rutgers The State University, September 2000. Page 210. Note: Data are considered average summertime use rate.

(6) Source: NCNBR, Rutgers University, December 15, 2005. The data represent averages of NJ Highlands Open Space per Household data weighted for the number of open space acres in each composite zone. The raw data was obtained by overlaying NJ Highlands Zoning, NJ Highlands Open Space project data layer and 2000 U.S. Census Block Group spatial data files, and extracting Census data for each intersecting polygon made up of a municipal zone with open space land. This produced a total of 1,205 unique polygons of at least one-acre in size. All polygons representing non-residential zones were then removed from this data set, reducing it to 814 unique polygons or records.

Table 2 – Highlands Build Out Model Non-Residential Composite Zone Impact Factors

Type	Floor Area Ratio	Build Out Efficiency Factor %(1)	Jobs per 1,000 sf (2)*	Trip Generation (3)	Percent Impervious (4)	Water Consumption (5)	Wastewater Generation (5)
Office/Commercial	Based on zoning	80	3.5	15.12/1000 sf	85	0.125 gallons/day/sf	0.125 gallons/day/sf
Retail	Based on zoning	80	2.5	95.03/1,000 sf	85	0.125 gallons/day/sf	0.125 gallons/day/sf
Industrial	Based on zoning	80	1.5	7.92/1,000 sf	72	25 gallons per person per day	25 gallons per person per day

* Employment opportunities generated by the build out model will be used to calculate the number of affordable units. The affordable units will be determined using COAH's Third Round Procedural Rules (# of net jobs divided by 25).

(1) Source: Efficiencies are given as a percentage, between 0 and 100, where a 100 value means complete efficiency (no land lost to development), and a 0 value means no buildings will be estimated for that land use. For example an efficiency of 70% may be representative of developable land that has a 10% set aside for parks and 20% for roads (100% - 10% - 20% = 70%). Project determined values.

(2) Source: Adapted from "Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan, Report I: Research and Strategies", page 127, prepared for the New Jersey Office of State Planning, by Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, Rutgers The State University, 1992.

(3) Source: ITE Trip Generation Report, 7th Edition. 1,000 sf Gross Floor Area, Weekday
Nonresidential land use types include Codes: 710, 714, 720, 733, 750 and 770 for Office/Commercial; 813, 814, 820, 850, 931, and 912 for Retail; and 760, 770, 110 and 140 for Industrial.

(4) Source: NCNBR, Rutgers University, December 20, 2005. The data represent averages of NJ Highlands Percent Impervious Surface weighted for the acres of residential or non-residential developed land in each composite zone. The raw data was obtained

by overlaying NJ Highlands Zoning and DEP 2002 LU/LC spatial data files, and extracting the calculated percent impervious surface area attached to each LU/LC developed land polygon and the acres of associated developed land in each intersecting municipal zone polygon. This produced a total of 6,767 unique residential polygons and 4,428 non-residential polygons. The total impervious surface area in each composite zone was divided by the total developed land area, to produce a weighted IS average for each composite zone.

(5) Source: NJDEP N.J.A.C. 7:10 Safe Drinking Water Act Regulations Adopted November 4, 2004, 7:10-12.6 Water Volume Requirements

Attachment D

Regional Development and Design – TAC Charrette

Land Use Buildout and Impact Analysis – State Plan Residential Density Factors

State Plan Scenario Approach

The State Plan build out scenario will utilize the same build out data layers as the Trend scenario and will include an evaluation of Estimated Residential Density Factors (ERDF) based on 2000 US Census data correlated to State Planning Areas at the municipal zone level. The State Plan map used for this analysis was the current preliminary Cross Acceptance State Development and Redevelopment Plan map. The State Plan area wastewater demand will be evaluated against the existing permitted wastewater capacity limitations within existing sewer service areas.

Planning Area (PA) Density Analysis

The 2000 US Census Tract household data was utilized with overlays of the State Plan Planning Areas (PAs) and residential developed land from the newer 2002 DEP Land Use/Land Cover (LU/LC) data. All tracts showing less than an acre of residential developed land were deleted, as well as those that were indicating densities of more than 100 dwelling units (du)/acre. The density for each PA/Tract was multiplied by the amount of developed residential land in the PA/Tract. The data were totaled and divided by total developed residential land in the PA to derive these weighted averages:

Planning Area	Developed Acres	Average Density
PA1	33,948	9.802
PA2	13,368	6.934
PA3	3,083	3.961
PA4	11,773	4.815
PA4B	19,817	3.238
PA5	67,577	4.079
Totals	149,565	5.959

The PA1 thru PA3 densities decreased in a very linear fashion. However PA4 through 5 showed an increase. To address this discrepancy a linear regression was used to estimate a value of 1.058 for PA4 with an R squared valued of almost a perfect 1.0. Unfortunately, a further linear estimate for PA4B and PA5 yielded a negative number.

A cubic regression was used to refine density estimates for PA4 through 5. Using the actual PA1-3 values derived from census, the above estimated PA4 value derived from linear regression and an estimate of 0.2 du/acre for PA5 (5 acre minimum zoning) creates a curve with the following predicted values (PA4B and PA5 are assumed equal):

Planning Area	Estimated Residential Density Factor (ERDF)
PA1	9.78
PA2	7.04
PA3	3.81
PA4	1.16
PA4B	0.17
PA5	0.17

Using the above census tract analysis, PA4-5 estimated densities have limited accuracy because of the way in which the 2002 LU/LC estimates developed and undeveloped land area. Therefore, the above estimated residential density factors represent the best estimates using the cubic regression analysis to identify realistic density averages for each of the PA's that can be used in the buildout analysis.

Criteria for Applying Density Factors to Buildout Model

The ERDF for State Plan Planning Areas PA-1 will be a minimum of 9.78 du/acre, PA-2 will be a minimum of 7.04 du/acre, and PA-3 will be a minimum of 3.81 du/acre. If the existing residential zoning density is greater than the PA-1, PA-2 and PA-3 ERDF then the existing residential zoning density shall be used for the build out du/acre value. If the existing residential zoning density is less than the PA-1, PA-2 and PA-3 ERDF then the ERDF shall be used for the build out du/acre value. The PA-1 and PA-2 maximum achievable density will be determined based on existing wastewater capacity within the appropriate sewer service area.

Within designated State Plan Planning Areas PA-4 the maximum residential zoning density will be the ERDF or 1.16 du/acre, for PA-4B and PA-5 the maximum residential zoning density shall be the ERDF or 0.17 du/acre. If the existing residential zoning density is lesser than the PA-1, PA-2 and PA-3 ERDF then the existing residential zoning density shall be used for the build out du/acre value.

Attachment E
Regional Development and Design - TAC Charrette
2000 US Census Housing Data for NJ Highlands

2000 Geography	Total population: Total	Housing units: Total	Occupied housing units: Owner occupied; 1; detached	Housing units: Occupied	Housing units: Vacant	Occupied housing units: Owner occupied	Occupied housing units: Renter occupied	Housing units: Median year structure built	Housing units: Complete plumbing facilities	Housing units: No bedroom	Housing units: 1 bedroom	Housing units: 2 bedrooms	Housing units: 3 bedrooms	Housing units: 4 bedrooms	Housing units: 5 or more bedrooms
Mahwah township, Bergen County, New Jersey	24062	9577	3960	9340	237	7851	1489	1984	9558	137	1306	3007	2606	2032	489
Oakland borough, Bergen County, New Jersey	12466	4345	3814	4255	90	3967	288	1958	4334	19	146	533	2177	1245	225
Alexandria township, Hunterdon County, New	4698	1598	1381	1535	63	1416	119	1973	1583	0	10	246	630	631	81
Bethlehem township, Hunterdon County, New	3820	1303	1200	1266	37	1214	52	1978	1296	5	38	105	442	659	54
Bloomsbury borough, Hunterdon County, New	886	342	244	322	20	265	57	1939	342	2	29	62	143	102	4
Califon borough, Hunterdon County, New Jersey	1055	410	347	401	9	349	52	1957	408	2	18	64	205	118	3
Clinton town, Hunterdon County, New Jersey	2632	1095	589	1068	27	797	271	1970	1095	13	156	205	443	245	33
Clinton township, Hunterdon County, New Jersey	12957	4234	3132	4129	105	3752	377	1981	4218	0	354	613	1171	1783	313
Glen Gardner borough, Hunterdon County, New	1902	829	348	805	24	554	251	1983	829	6	241	269	170	125	18
Hampton borough, Hunterdon County, New	1546	574	330	559	15	370	189	1961	574	4	92	139	233	94	12
High Bridge borough, Hunterdon County, New	3776	1478	1057	1428	50	1186	242	1964	1478	0	91	357	679	316	35
Holland township, Hunterdon County, New Jersey	5124	1942	1626	1881	61	1740	141	1966	1917	4	60	407	856	493	122
Lebanon borough, Hunterdon County, New	1065	477	192	458	19	360	98	1965	474	5	74	154	163	68	13
Lebanon township, Hunterdon County, New	5816	2020	1681	1963	57	1714	249	1967	2010	20	41	356	907	587	109
Milford borough, Hunterdon County, New Jersey	1195	484	289	469	15	322	147	1955	484	2	60	122	219	68	13
Tewksbury township, Hunterdon County, New	5541	2052	1759	1986	66	1817	169	1972	2052	30	44	146	640	841	351
Union township, Hunterdon County, New Jersey	6160	1725	1061	1666	59	1418	248	1979	1725	0	396	304	346	543	136
Boonton town, Morris County, New Jersey	8496	3352	1690	3272	80	1960	1312	1942	3352	45	462	786	1279	573	207
Boonton township, Morris County, New Jersey	4287	1510	1226	1476	34	1368	108	1963	1510	0	37	219	616	496	142
Butler borough, Morris County, New Jersey	7420	2923	1811	2868	55	1905	963	1953	2915	49	491	645	1256	444	38
Chester borough, Morris County, New Jersey	1635	627	400	609	18	469	140	1971	627	0	85	119	157	228	38
Chester township, Morris County, New Jersey	7282	2377	2156	2323	54	2156	167	1972	2377	0	44	134	535	1064	600
Denville township, Morris County, New Jersey	15824	6178	4550	5990	188	5148	842	1963	6170	58	518	1202	2422	1579	399
Dover town, Morris County, New Jersey	18188	5568	2297	5436	132	2869	2567	1953	5499	156	1230	1425	1876	603	278
Hanover township, Morris County, New Jersey	12898	4818	3597	4745	73	4367	378	1964	4818	24	169	992	1770	1540	323
Harding township, Morris County, New Jersey	3180	1243	945	1180	63	1093	87	1965	1243	0	23	203	311	328	378
Jefferson township, Morris County, New Jersey	19717	7527	5792	7131	396	6308	823	1964	7442	33	532	2103	3066	1596	197
Kinnelon borough, Morris County, New Jersey	9365	3123	2948	3062	61	2988	74	1965	3111	4	51	189	1053	1287	539
Mendham borough, Morris County, New Jersey	5097	1828	3233	1781	47	1524	257	1971	1821	0	118	277	455	678	300
Mendham township, Morris County, New Jersey	5400	1849	1238	1788	61	1711	77	1973	1849	0	6	154	402	835	452
Mine Hill township, Morris County, New Jersey	3679	1388	1663	1365	23	1227	138	1958	1367	0	40	324	696	284	44
Montville township, Morris County, New Jersey	20839	7541	1035	7380	161	6340	1040	1979	7532	14	593	1448	2203	2268	1015
Morris township, Morris County, New Jersey	21796	8298	4840	8116	182	6887	1229	1967	8287	30	735	1199	2531	2876	927
Morris Plains borough, Morris County, New Jersey	5236	1994	5617	1955	39	1793	162	1957	1994	7	133	262	682	773	137
Morristown town, Morris County, New Jersey	18544	7615	1630	7252	363	2859	4393	1954	7550	463	2328	1773	1881	789	381
Mountain Lakes borough, Morris County, New	4256	1357	1726	1330	27	1288	42	1947	1357	0	8	83	321	508	437
Mount Arlington borough, Morris County, New	4663	2039	1179	1918	121	1535	383	1971	2039	22	355	570	762	286	44
Mount Olive township, Morris County, New Jersey	24193	9311	983	9068	243	5080	3988	1973	9253	107	2711	1715	1961	2566	251
Netcong borough, Morris County, New Jersey	2580	1043	4890	1008	35	646	362	1947	1043	11	172	224	506	99	31

Attachment E
Regional Development and Design - TAC Charrette
2000 US Census Housing Data for NJ Highlands

2000 Geography	Total population: Total	Housing units: Total	Occupied housing units: Owner occupied; 1; detached	Housing units: Occupied	Housing units: Vacant	Occupied housing units: Owner occupied	Occupied housing units: Renter occupied	Housing units: Median year structure built	Housing units: Complete plumbing facilities	Housing units: No bedroom	Housing units: 1 bedroom	Housing units: 2 bedrooms	Housing units: 3 bedrooms	Housing units: 4 bedrooms	Housing units: 5 or more bedrooms
Parsippany-Troy Hills township, Morris County, New Jersey	50649	20066	547	19624	442	11868	7756	1965	19983	356	5788	3478	5167	4345	932
Pequannock township, Morris County, New	13888	5097	3880	5026	71	4499	527	1960	5097	30	632	715	1917	1572	231
Randolph township, Morris County, New Jersey	24847	8903	6132	8679	224	6431	2248	1976	8874	197	1511	811	1898	3242	1244
Riverdale borough, Morris County, New Jersey	2498	940	638	919	21	756	163	1956	940	0	83	221	438	179	19
Rockaway borough, Morris County, New Jersey	6473	2491	1555	2445	46	1679	766	1955	2491	44	354	496	949	533	115
Rockaway township, Morris County, New Jersey	22930	8506	6187	8108	398	6870	1238	1965	8464	26	716	1434	3494	2442	394
Roxbury township, Morris County, New Jersey	23883	8550	6166	8364	186	7011	1353	1971	8537	31	709	1696	2790	2922	402
Victory Gardens borough, Morris County, New	1546	588	88	564	24	231	333	1964	579	62	207	213	88	18	0
Washington township, Morris County, New Jersey	17592	5890	4741	5755	135	5064	691	1978	5862	62	243	631	1672	2773	509
Wharton borough, Morris County, New Jersey	6298	2394	1098	2328	66	1452	876	1956	2387	28	352	725	740	424	125
Bloomingdale borough, Passaic County, New	7610	2940	2012	2847	93	2131	716	1960	2940	32	432	605	1360	462	49
Pompton Lakes borough, Passaic County, New	10640	4024	2559	3949	75	3047	902	1957	4004	8	627	813	1544	837	195
Ringwood borough, Passaic County, New Jersey	12396	4221	3847	4108	113	3880	228	1965	4221	18	66	586	1863	1512	176
Wanaque borough, Passaic County, New Jersey	10266	3500	2348	3444	56	2751	693	1959	3461	24	177	1041	1254	898	106
West Milford township, Passaic County, New	26410	9909	7514	9190	719	8230	960	1963	9812	42	718	2467	4209	2137	336
Bedminster township, Somerset County, New	8302	4467	875	4235	232	3398	837	1985	4467	36	559	2253	1143	274	202
Bernards township, Somerset County, New	24575	9485	5003	9242	243	7999	1243	1985	9479	70	849	2454	2285	2819	1008
Bernardsville borough, Somerset County, New	7345	2807	2073	2723	84	2271	452	1958	2796	28	167	372	873	921	446
Far Hills borough, Somerset County, New Jersey	856	384	167	366	18	281	85	1967	384	3	27	102	132	70	50
Peapack and Gladstone borough, Somerset County, New Jersey	2433	871	629	840	31	658	182	1955	867	2	53	131	267	231	187
Byram township, Sussex County, New Jersey	8235	3057	2567	2825	232	2608	217	1968	3030	14	72	555	1349	999	68
Franklin borough, Sussex County, New Jersey	5187	2002	1012	1906	96	1373	533	1954	1999	26	211	724	763	222	56
Green township, Sussex County, New Jersey	3212	1066	959	1042	24	976	66	1975	1062	9	16	121	395	426	99
Hamburg borough, Sussex County, New Jersey	3105	1233	508	1173	60	868	305	1980	1230	0	200	495	445	89	4
Hardyston township, Sussex County, New Jersey	6144	2685	1566	2311	374	1889	422	1972	2609	6	412	698	1104	408	57
Hopatcong borough, Sussex County, New Jersey	15951	6193	4839	5657	536	4958	699	1961	6161	39	356	1624	2822	1253	99
Ogdensburg borough, Sussex County, New	2638	903	726	881	22	740	141	1962	903	4	52	125	456	235	31
Sparta township, Sussex County, New Jersey	18107	6614	5371	6237	377	5620	617	1969	6587	103	273	931	2361	2464	482
Stanhope borough, Sussex County, New Jersey	3521	1416	732	1383	33	1115	268	1967	1410	8	252	314	512	280	50
Vernon township, Sussex County, New Jersey	24686	9994	6667	8368	1626	7187	1181	1975	9973	35	815	2588	4359	1851	346
Allamuchy township, Warren County, New Jersey	3877	1774	647	1692	82	1441	251	1981	1766	24	134	614	532	387	83
Alpha borough, Warren County, New Jersey	2482	1034	569	989	45	706	283	1950	1034	7	131	234	541	107	14
Belvidere town, Warren County, New Jersey	2771	1165	646	1088	77	729	359	1939	1162	44	172	261	462	199	27
Franklin township, Warren County, New Jersey	2768	1019	773	972	47	844	128	1969	1015	3	46	199	429	307	35
Frelinghuysen township, Warren County, New	2083	755	624	722	33	641	81	1976	749	4	18	72	349	265	47
Greenwich township, Warren County, New Jersey	4365	1477	1278	1421	56	1310	111	1992	1465	0	27	195	410	817	28
Hackettstown town, Warren County, New Jersey	10403	4347	1700	4134	213	1990	2144	1966	4337	108	1321	1071	1159	592	96
Harmony township, Warren County, New Jersey	2729	1076	872	1010	66	892	118	1957	1072	0	57	236	485	264	34

2000 Geography	Total population: Total	Housing units: Total	Occupied housing units: Owner occupied; 1; detached	Housing units: Occupied	Housing units: Vacant	Occupied housing units: Owner occupied	Occupied housing units: Renter occupied	Housing units: Median year structure built	Housing units: Complete plumbing facilities	Housing units: No bedroom	Housing units: 1 bedroom	Housing units: 2 bedrooms	Housing units: 3 bedrooms	Housing units: 4 bedrooms	Housing units: 5 or more bedrooms
Hope township, Warren County, New Jersey	1891	747	617	697	50	623	74	1969	735	4	39	134	326	203	41
Independence township, Warren County, New	5603	2210	1103	2146	64	1692	454	1984	2194	21	375	687	478	538	111
Liberty township, Warren County, New Jersey	2726	1085	799	975	110	875	100	1970	1081	14	84	242	392	308	45
Lopatcong township, Warren County, New Jersey	5765	2429	1616	2143	286	1636	507	1971	2420	22	331	532	862	641	41
Mansfield township, Warren County, New Jersey	6653	2415	1525	2334	81	1686	648	1973	2415	13	384	401	1002	532	83
Oxford township, Warren County, New Jersey	2307	938	583	886	52	746	140	1961	934	0	71	266	428	158	15
Phillipsburg town, Warren County, New Jersey	15166	6651	2489	6044	607	3451	2593	1939	6603	123	961	1812	2996	622	137
Pohatcong township, Warren County, New Jersey	3416	1411	1077	1341	70	1165	176	1948	1411	7	77	334	730	221	42
Washington borough, Warren County, New	6712	2876	1092	2724	152	1408	1316	1944	2876	35	660	806	990	343	42
Washington township, Warren County, New	6248	2174	1782	2099	75	1880	219	1970	2168	0	35	415	898	704	122
White township, Warren County, New Jersey	4245	1770	1223	1668	102	1331	337	1976	1766	0	201	484	725	322	38