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Theory II  
Position Paper

### Sprawl and the Environment

In considering my interests and the direction I would like to tailor my education, two main concepts continue to come to mind. First, for a few years now I have had grand ideas and have questioned “how can we ‘fix’ the suburban sprawl of bedroom communities?” Questions that this poses include: how can density increase in suburbs; how can mix-use functions be integrated into suburbs to increase walking communities; along the lines of mix-use, what would it take to promote businesses and services to grow or have satellite offices in suburban communities to encourage people to work closer to home rather than taking long commutes into the city.

Basically, what would it take to urbanize the suburbs so that the sprawl that is wasting the precious land that is so limited can stop and the suburbs spread along the highways outside of the “big city” can increase density and become fairly self-sufficient cities? On the other side of the coin, I question large urban environments. Some of the same questions that I have posed for redevelopment of suburbs can apply to cities like Atlanta. Questions that arise include those of how can we infill the existing city to encourage more people to stay inside 285 so that they live closer to where they work, how can we introduce more mix-use functions and more true neighborhood development so that people are not so dependent on the automobile?

Like I stated earlier there are two concepts that stand out in my desires to follow up on. The second aspect that I have great interest in is that of the environmental issue of design; sustainability, permeable landscapes and streetscapes, LEED certifications, embodied energy of materials verses material life expectancy, energy consumption of buildings, cost of energy waste and alternate sources of energy or recycled/reused energy, natural ventilation rather than sealed boxes, etc. Being an avid lover of the outdoors and nature, it hits a nerve every time it rains in Atlanta and what little green space that I see around is over saturated and stays soaking wet for

days on end because there is no where else for the water that falls on paved surfaces to run off to. Peter's parking deck on East Campus comes to mind on a place where poor choices were made in using the land. From my understanding the land that the parking deck sits on was given to the campus with the requirement of "green space" to remain there, so what does Tech do... install a parking deck and paint the top surface green and install tennis courts up there... it's green space but not in the true sense of the term. Now the lower level of the deck tends to flood because of improper drainage and there is ever less true green space to absorb all the run off.

With these concepts in mind, the question that must be asked is how can I create a focus position to take to further develop that incorporates both areas? Well, sprawl and the issues of cities verses suburbs is a very broad topic in general, and like Chris Jarrett showed us in class, Green Architecture is a very broad topic as well with many different takes on what should be done and how it should be done. I believe that the environmental costs of developing suburbs and sprawl that is associated with the suburbs is substantial enough to demand a reform in policy, zoning, and developmental processes, limiting undeveloped land (if there is still undeveloped land left) that can be developed and re-evaluating development process of land that is already being developed, lets not forget to consider established suburban bedroom communities and how they can be improved.

At the same time I realize that the "big city" has major issues in environmental depletion as well. I realize that I will have to look closely at both sides of the coin to make sure that I have both argument and counter argument to support my environmental reasoning for wanting to change suburban development not only in its architecture but also its density and planning. I also realize that a number of the ideas that I will most likely be investigating along the way will apply just as well to cities and that at some point in time I may re-evaluate my believe against suburbs and realize that the big city is what needs more major changes not the suburbs. Being an army brat, I

have lived in a number of different places, mostly suburbs, but when I lived in Germany back when I was in elementary school, I remember vividly walking to school and walking to the park and when we did drive it was only to go further out and park so we could walk around to all of the different shops and stores and restaurants, all of these were surrounded by narrow cobblestone streets that were meant for light traffic and mainly pedestrian use. A very frightening memory I had was when I came back to the States. I moved out into bedroom community USA and I was in the second grade. Remember as a kid, parents would always say make sure you stay on the sidewalk and never cross to the other side without adult supervision (or if your walking to school and have to cross the street make sure to look both ways before you cross). Well when I came back to the States, I didn't know what to do... there were no sidewalks for me to walk on, I had to either walk in someone else's yard or on the street. I could not understand the concept. I bet at this point in time your asking "what's the point?" The point is while there are good things and bad things about the big city and suburbs and sprawl, I believe there is an in-between compromise that not only accommodates big city living but also ideals of suburban living and let's not forget about it being environmentally friendly in as many aspects as possible.

While trying to come up with concepts to discuss a list of questions along with thoughts and ideas came together which I feel would be beneficial to list here just to make sure that they are mentioned. Some of these I will be following up on and discuss further trying to help me understand how it pertains to my topic, others are merely points that I feel will play out further as my concepts continue to develop in the next year.

Sustainability – Protect the environment – sprawl – long commutes – own piece of land – own back yard – gallons upon gallons of gas and exhaust – walking communities – know your neighbors – anonymity – smog – fumes – traffic – clean air – throw away buildings – parks and green space – trees and grass – natural – organic – grid – ordered – mix-use – segregated functions – miles upon miles of highway – new urbanist transitional development

model (graphic of transition from dense city to wide open rural lands) – high rises verses low rises – LEED Certification – increasing density of existing suburbs – bringing suburban life into the city – having a yard inside the 285 loop – developing from the ground up verses infill – demolishing existing buildings and developments to start fresh – Atlanta – Atlantic Station – Down with the big box – the pedestrian verses the driver – independent structures verses larger complexes and developments – depletion of natural resources – permeable surfaces – privacy – away from the noise of the city – kids playing in the street – kids playing in the yard – safety/perceived safety – community oriented – drive everywhere – low density – high density – peace and quiet – noise pollution – air pollution – water pollution – the night life – traffic congestion – fast life – lots of pavement – microclimates – local climate control – green fields – brown fields – grey fields – recycle, reduce, reuse – solar energy – wind energy – water energy – alternate methods of conditioning air.

- Why do people move out to the suburbs?
- What are the environmental impacts of urban/suburban living?
- Can suburbs be urbanized either with or without demolishing and starting from scratch?
- What is the energy consumption of materials verses the life expectancy of the material?
- What is the overlying argument in relation to the environment and land usage?
- How can changes be made to improve things over time?
- What politics are involved?
- What has to be done to implement major changes in zoning to help allow improvement?

Granted the terms and questions listed above are purposely in no particular order at this point in time other than the order they came to mind, the reason for this is because I do not want to mistakenly add importance to some terms or questions that may later prove to lack importance. As far as discussing some of the terms and questions now is to show my understanding and

knowledge and at the same time to display my lack of understanding and lack of knowledge that exists around some of the concepts that are stated along with concepts that might be missing from the list.

Just because it is at the beginning of the questions, I am going to start with “why do people move out to the suburbs?” There are many reasons for people to move out to the suburbs some of which may or may not be pertinent to the discussion but I will save the sorting of reasons for a later point in time. Right now I feel they all should be looked at.

White flight, cultural similarities, the desire for a backyard for pets and kids to play in, economic basis, school districts, trees and grass, fresh air, clear skies, a feeling of safety, a place to raise a family, get away from the noise of the city, slower life style, larger single family homes, owning your own land and home, etc.

It is interesting; a couple of friends of mine who have been together for a number of years just recently had a house built out in Dallas, Georgia because they wanted to have a place of their own and they were tired of renting apartments, and lets not forget that they have a dog in the “family.” I of course being the friend that I am helped them make the move out to Dallas which if you do not know is a forty-five minute drive without traffic. The entire time the house was being built and even during the process of helping them move I was trying to figure out what it was that enticed them to move so far out. Over all Dallas is a slightly older and more conservative town though their “neighborhood” or I should say housing development is a younger more liberal development and did I mention that they live forty-five minutes away from town without traffic. Well upon asking them, I found out that the driving force of them moving out there was because it was as close as they could afford to have a house built. They decided it was better off to build a new house based on a pick from the KBHomes catalogue model instead of buying an already built home that was closer. Disliking the suburbs the way that I do and the fact that they now almost live in the sticks, my thoughts were along the lines of well thanks for the answer, I’m glad

your happy with the new place but don't expect me to come out there very often. At the same time I was wondering if they factored in the daily commute that they were going to have to deal with because they both either go to school or work in downtown Atlanta, not only is there the fuel consumption but also the wear and tear on the vehicles. Now this is just a single case and I am sure there are even more reasons that I have not mentioned here but this gives a quick taste of why people move out to the suburbs.

Moving on, what are the environmental impacts of suburban and urban development? Good question, this is one that will take more investigation. Questions that need to be considered are typical building materials including embodied energy and life expectancy, building types (are they meant to last or are they throw away buildings), porous landscaping (grass, gravel, sand, plantings, etc) in comparison to hardscaping (concrete, asphalt, buildings, brick paving, non-porous materials), park space and nature space allotted, pollution involved in the development, commutes involved, ability to use mass transit or walk as other means of transportation.

Atlanta is a prime tool for investigation; it has the good the bad and the ugly. It is said that the metropolis of Atlanta spreads all the way to the Alabama border and as far if not further north. To give another view of how far Atlanta spreads, there are home phone plans that make calling between Athens, Georgia and Atlanta a local call where typically that would be a long distance call. The city proper is also prime real-estate to investigate integration of mix-use, traffic and smog, infill development, brown field development, and more. Public transit is a topic on its own. MARTA is not one of the best transits around. It really doesn't go anywhere and you still have to drive to get to the train. The buses are unreliable and also don't really go to many places. The trains that should go out into the suburban areas do not go out there because of local politics in the different suburban communities not wanting the trains to come out to their area for one

reason or another. Needless to say the people who want to ride transit still have to drive half an hour or more to get to the first transit station.

Atlantic Station is a good source for learning, being an experiment in mix-use there are a lot of things that were hoped would occur in the development and a number of things that are already looking like possible misfortunes in the development. In the process of developing Atlantic Station there was a good bit of research done to help ensure that the 17<sup>th</sup> street bridge could be built. It was supported because it was determined that having the bridge there would ease the traffic in the surrounding areas because of this new connection across the highway. Atlantic Station is promoted as a “live, work, play” community with the desire to have people and companies move in and be able to walk to work and walk to the shops etc. Yet there is a huge parking deck under the entire complex that encourages people to drive to Atlantic Station, at the same time there are people who have already purchased space in the unbuilt buildings who will be living in Atlantic Station and then commuting out to their current place of employment. They want to have a diverse group of people and opportunities within the development yet at the same time everything is being developed so monolithically and regular, there is not any variety within the architecture of the different types of living. Then to top things off rather than having a wide range of space available for different types of shops and stores things are basically big box style. IKEA while a great store is a big box that stands out like a sore thumb that won't allow for variety of other functions to move in if IKEA ever moves out; the other big name shops that are moving in to Atlantic Station that will automatically alter the clientele that will use and possibly live in the development which is either a good thing or a bad thing that is yet to be determined. While there are a few negative criticisms being written about Atlantic Station, it does have its good points. First of all, Atlantic Station is being developed on a brown field that was Atlantic Steel, also being an experiment and trying to redevelop and revitalize the downtown area of Atlanta it is bound to have issues but it is trying. While the initial desires will most likely not be

what occurs when the development is done, there will be a lot to learn from and there will be benefits from Atlantic Station being in Atlanta.

There is a great deal that need to be investigated and so many different aspects to be taken into consideration. What I hope to discover by the end of next year, I honestly do not know. I know that I won't find a complete solution to the problems but I do know that I will be one step closer and will have possible solutions to parts of the issues and maybe one day the suburban sprawl and the environment will be better off than it is now.