History of Sustainability at Emory-Alternative Transportation
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Introduction and Methods

With an outstanding undergraduate college of arts and sciences, highly ranked professional schools, state of the art research facilities, and award winning employee programs, Emory University has emerged as a destination university and only looks to improve. More than 43,000 people visit the North Atlanta campus daily and many of those are irregular and unplanned visits due to the hospital located on campus. Yet being located in a populated and the hilly suburb of Atlanta, Emory has historically been faced with space limitations. While being constricted geographically and striving to become one of the nation's elite universities, space becomes a precious resource. The attempt to maximize Emory's space has spawned the movement towards reducing single occupancy vehicles on Emory's campus and thus increasing alternative transportation at Emory.

This report will analyze chronologically how Emory came to be designated one of the "Best Workplaces for Commuters," as well as a sustainable campus for students. The successes and failures will be noted and analyzed with the layer cake theory and principles from McKenzie-Mohr and Smith's book, *Fostering Sustainable Behavior* (1999). This work is part of a multi-sectoral project to gather oral interviews to record the history of the sustainability movement at Emory University, part of the anthropology course, "Issues in Sustainability" (ANT 585), taught by Peggy Barlett in 2008. Other sectors examined were green buildings, energy, and forest preservation. Information was taken from Emory Report articles, the Clifton Corridor Transportation Management Agency website, and personal interviews. Interviews were conducted with:

- Adelle Clemons, Director of Alternative Transportation
- Erick Gaither, former Senior Associate Vice President for Business Management
- Phil Sauerbrun, Vice President for Campus Services and Manager of Parking Registration and Enforcement
- Robert (Bob) Hascall, Vice President for Campus Services
- Tim Bryson, Librarian and chair of the Committee on the Environment of the University Senate
- Brian Shaw, Director of Alternative Transportation
- Laura Ray, Associate Vice President of Transportation and Parking,

Interviews were conducted over the telephone or in the respective offices of the interviewees. At the beginning of each interview, the purpose of the study was described—to gather information about the emergence of alternative transportation efforts, the key players, and crucial steps. Each interviewee agreed to use his/her interview for the class paper and was offered the opportunity to remain anonymous. Each interviewee reviewed this report before it became a public work. In 2017, the reports for this 2008 class were edited for clarity and consistency, to be part of an archive of Emory's sustainability history.

First Steps toward Alternative Transportation

Now called Commuter Options, the heavy push towards alternative transportation programs began in the mid-1990s. With "one of the smallest university campuses in the US," said Phil Sauerbrun (2008) and having a geologically unstable campus, Emory "painted itself into a corner with parking—the only place to put another parking garage is a flood plain" (Brian Shaw 2008). Not only did space not exist for more parking garages, but the congestion on the main thoroughfare that splits the campus, Clifton Road, became a hazard to hospital and emergency vehicles. Emory began methods of alternative transportation because realistically the University could not sacrifice land for another multimillion dollar parking garage, and with increasing prestige, congestion would only increase. It was not economically rational to build another parking deck to assure parking for everyone, but rather, Emory could "serve itself and its constituents better if it facilitates the ability to get to campus without a car" (Shaw 2008).

Programs had to be started to get people out of their single occupancy vehicles. A faculty member in Geology and later, Environmental Studies, Professor Tony Martin made this first push for an organized alternative transportation program by writing a letter of appeal to the administration. Congestion on the roads was high, parking spaces were running out, and the environment was suffering—faculty wanted a change. The faculty garnered support from the administration—President William Chase and Executive Vice President John Temple in particular—who appointed a Director of Alternative Transportation, Cheryl Dedias, under Erick Gaither (Senior Associate Vice president for Business Management). Few universities "had even heard of a director of alternative transportation" (Gaither 2008). Together, Dedias and Gaither progressively removed the subsidy for parking and moved those funds towards other programs. Parking fees started as low as $23 in 1993 and increased on two separate events to an eventual $600 per year. The programs that benefited from the first reallocation of the parking subsidy were van pools, car pools, and shuttles to Atlanta's public rail system, Metro Atlanta Rapid Transit Association (MARTA).

Emory continued to grow and face the growing pains of getting everyone to campus, and for a period of five years starting in the late 1990s, Emory had just barely enough spots to accommodate everyone who had a need to park. Phil Sauerbrun, Manager of Parking Registration and Enforcement, notes: "Some years we banked on someone not getting a spot who needed it. Every Tuesday through Thursday from eleven to two, [the parking decks] were completely locked up—filled at capacity." To overcome these growing pains, a wide array of commuting options were made available over the past twelve years and have allowed Emory in 2006 to be recognized as one of the "Best Workplaces for Commuters" by the US Environmental Protection Agency.

MARTA and the Decatur Shuttle

Located on the edge of the metropolitan district of Atlanta, it was not practical for Emory to simply encourage its affiliates to use MARTA—too many barriers existed. In 1995, Emory employees were first able to turn in their parking hang tags to obtain a free MARTA pass. Yet the program had a slow start and took several years to build up, and the barriers to overcome

were extensive. It can take up to 30 minutes with stops for MARTA buses to get someone from the outskirts of Emory's campus to the north-south rail or to the east-west rail station. However, tapping into MARTA as a resource was still considered because it is the only mode the city has instituted for mass transit. With the help from the Atlanta Regional Commission, Cheryl Dedias began an Emory-sponsored transportation management agency (TMA) shuttle to and from the rail station in Decatur. The greatest success of this TMA shuttle was its ability to pull into Emory's and MARTA's bus loops—"it was the first non-MARTA bus allowed in MARTA bus stations" (Clemons 2008). The bus was funded with CMAT funds (from a government grant) for the first three years, and in those three years the shuttle developed a loyal following. Surprisingly, Brian Shaw, ex-Director of Transportation, noted: "the shuttle developed a loyal following we didn't anticipate people using it for. People took the shuttle to Decatur for lunch or to pick up something, and overall it took cars off the road." Due to its success, the shuttle became an instituted program of the TMA. Every unit part of the TMA was billed based on a percent of ridership. "It was a fee-for-service type of enterprise" (Shaw 2008).

In many of my interviews, the staff members all noted a common hurdle to new commuter options—the negative mentality associated with riding buses, especially non-Emory buses. Utilizing the anthropological layer cake model,[1] the TMA could not change the stigma of riding a bus overnight, but it did target the other "layers" of culture. Isolating the ridership population to largely Emory affiliates promoted a comfortable atmosphere on the shuttle, affecting the social aspect of a shuttle ride. The material layer was largely affected as well. Riders were not paying to get transported from Emory to Decatur, and unlike the MARTA shuttle, were being picked up at the Emory bus loop, which is strategically located on the congested campus. The MARTA incentives program allowed an Emory employee to use the Emory shuttle to get to the Decatur MARTA station and on the rail at no cost and little inconvenience.

CCTMA, Van Pools and Car Pools

The shuttle was the first initiative of the Clifton Corridor Transportation Management Association, which formed in the fall of 1997 (Emory Report 52:25). The Clifton Corridor TMA (CCTMA) was essential to Emory's development as a university; before instituting the TMA, each division of the University operated transportation individually. In the nineties, "everyone was running their own routes, and it was very inefficient, off the cuff. There weren't regular routes or timetables" (Sauerbrun 2008). Uniting each division of the university under the same roof, CCTMA allowed the whole university to operate transportation more efficiently and when implementing programs, the CCTMA could draw on participation from all parts of the university.

The CCTMA connected the Centers for Disease Control (CDC), Emory and Veterans Association Hospitals, Yerkes Primate Research Center, Carter Center, the undergraduate College and eight graduate schools. Linking staff from different divisions of the university increased the participation in the carpool program and allowed the vanpool program to have a strong start. Brian Shaw, the Director of Alternative Transportation at the time, was crucial in starting them. He put a minimum standard of seven people to start a van pool, along with three

eligible drivers. While he recognized that "it made it harder to start" it was "more successful to maintain" (Shaw 2008). More than 21 vans were operating by 2006. University affiliates can now use an online map and tool to locate other Clifton Corridor employees in their area in order to establish a van pool program; the current number of vans is up to 42. The program is partially subsidized by the Commuter Options office and is largely subsidized by the different parts of the university, meaning each person in the vanpool pays a different amount. To endorse the program and help alleviate the confusion and frustration of each person paying different costs of the vanpool, the first two months of a van pool are covered by the CCTMA.

The car pool program provided another way to reduce the number of single occupancy vehicles on Emory's campus. The program granted free parking to any carpool of three or more persons, as well as a reserved parking spot. Although these programs were just a "spit in the Grand Canyon," according to Gaither, authors Mckenzie-Mohr and Smith note that incentives have had a substantial impact on shaping behavior in regards to transportation, especially incentives "to reward people for taking positive actions" (Mckenzie-Mohr and Smith 1999:158). Unknown to Gaither, though, were all the sociological issues that would set back the car and van pool initiatives. In meetings regarding van and car pools, people would bring up "issues with the radio station, smoking…. It was like a study in sociology" (Gaither 2008). It became more than just giving up the ability to drive, but also giving up many of the other freedoms people have while driving their own cars. The social aspect of the triple bottom line can never be under-estimated when attempting to change behavior.

Clairmont Campus and Bridge

While these two programs were getting people out of their cars, more and more people kept coming to Emory. A total of ten parking decks had been built in the previous thirty years, and in 2002, Emory's eleventh was built. Construction on Clairmont Campus, an upperclass and graduate housing complex, was completed in 2002. Parking was available to those living there, as well as to healthcare workers needing a place to park. Everyone parking at Clairmont needed a shuttle to get to their final destination, which is something they share with 70% of Emory's driving population (Clemons 2008). In order to shuttle them efficiently between the two campuses, a road and bridge was built that extended through the Lullwater Estate.

Building such a bridge was a point of great contention, and the wounds that the contention opened up are even still a bit sore. Without the bridge. building a large parking deck was superfluous because there would be no incentive for people to park at Clairmont and there would be "no net savings for them in terms of time" (Hascall 2008). The bridge provided a quick way for people to get from one campus to the other. Concerned about damage to the forest, the University Senate's Committee on the Environment voted against the shuttle road and bridge. However, when the University Senate overturned the Committee on the Environment regarding this issue, they did so with restrictions. The bridge could be built, but once it was built, only 100% alternatively-fueled vehicles would be allowed on it. The Director of Alternative Transportation at the time, Brian Shaw, was disappointed in Emory's restrictions placed on the road, as he thought from an "operation engineering perspective there was no reason. Far more pollution comes from the railroad adjacent to the bridge that has been allowed than anything the

buses would cause. The decision was made in a vacuum and never evaluated from an environmental cost standpoint" (Shaw 2008). Overall though, the Vice President for Campus Services, Bob Hascall. thought the restrictions placed on the bridge played a huge role in the sustainability movement, even before sustainability became incorporated into the strategic plan. Librarian Tim Bryson, the chair of the Committee on the Environment, admitted that the building of the bridge "annoyed me so much. I used to bike down the dirt path, and now all the trees had been cut down." It gave him and many others the motivation to be the voices of environmental concerns. Shortly after the overturn to build the bridge, the Ad Hoc Committee on Environmental Stewardship was formed, and overall, the building of the bridge "inaugurated a whole new era of environmental concern" (Bryson 2008).

Emory Shuttles

Argenbright, which switched its name to Cognisa, was Emory's shuttle provider up until 2007, when Emory switched over to First Transit. Due to the stipulations set by the Senate Committee, Emory started using electric and compressed natural gas (CNG) powered vehicles. Eventually it was thought that "more than half (16 out of 31 total buses) would be alternatively fueled" (Emory Report). Brian Shaw was skeptical at first about the alternative fuel movement. In 2004 and 2005, Emory was running out of buses that could be fueled with natural gas. The buses were also relying on MARTA's natural gas supply, and "if MARTA decides to get out of natural gas business, we are up a creek" (Shaw 2008). Some electric buses were used, and according to Shaw, "They were a nightmare to work [with], charge properly, maintain and just an overall logistical nightmare at the end of the day" (Shaw 2008). Before the sustainability movement came about, "The average person could care less what was powering the shuttles. All they wanted was to sit down. What was powering the bus didn't make a damn difference" (Shaw 2008).

Subsequently, Adelle Clemons took over for Shaw, after he was offered a job at the University of Chicago in institutionalizing their TMA. Within her first month, Clemons met with a student, Eric Fyfe, who proposed using biodiesel in the shuttles. To Clemons, "It simply made sense. We would be using 120,000 gallons of biodiesel, and 20% would be recycled [cooking] oil (B-20)." Laura Ray, the Associate Vice president of Transportation and Parking, noted how "Cooking oil used to feed students is now taking them around campus. All the cooking oil we need right now is in a ten-mile radius of campus." There was very little profit to the fuel provider, and yet "We can't use anything greater than B-20 because the manufacture hasn't caught up to do any greater percentage" (Clemons 2008). Now all the buses are alternatively fueled: biodiesel powers 45% of the 53 buses and compressed natural gas or electricity powers the rest (Emory Report, V58:33).

Administration Support

The support of the Emory administration was essential to implement the alternative transportation and shuttle programs. Sustainability was incorporated as a wide concern in the university's strategic plan, and the administration not only created an Office of Sustainability

Initiatives in the Fall of 2006, but it also increased funding and support for alternative transportation initiatives. It was always the goal of Transportation Demand Management (TDM) to reduce congestion and get people out their cars. "It did not change what we were doing, just how we framed it—in a sustainability manner: reduce congestion, reduce greenhouse gas emission, global warming, carbon footprint. It changed how we discussed what we had done" (Clemons 2009).

The effort also sought to make people more aware of the smaller impact they were having on the environment by utilizing Emory transportation. All of the buses had signs thanking their riders for reducing their carbon footprint. Recently, a TransLoc visualization system has gone online which shows exactly where the shuttles are at any time. This app allows individuals to be comfortable with the shuttle routes and timetables and reduces the overall stigma of riding a shuttle.

Incorporating sustainability into the strategic plan was a shift in ideology for the university. The top-down approach has had wide-reaching effects in determining how affiliates view commuter options and their effect on the environment. According to "the amoeba of culture change" approach developed by Atkisson (1999:173-185), the administration served as the change agents to programs that were already initiated, and they directed the masses of the amoeba in the right direction. Because the administration agreed with the initiatives, starting from the letter by Tony Martin to incorporating sustainability into a university initiative, little push back and resistance existed.

Pedestrian-Friendly Campus

Another student initiative occurred in the spring of 2006, when Emory went completely towards a largely walking-friendly campus. Some gradual progression did take place before Emory made this change: President William Chase closed off a few Emory streets and the shuttle program began. The shuttles were then expanded when the students' cars became restricted and students started to live in the Clairmont complex, increasing shuttle ridership. This exponential rise in the amount and frequency of shuttles driving past Cox Hall made the originally outdoor-friendly dining area an uncomfortable place to eat. Students did not like the fumes, and safety started to become a concern, especially after a student was hit by a shuttle bus. By removing buses and other university vehicles driving through the center of campus, Emory began to foster an environment around sustainability and demonstrated its commitment to a healthy and safe campus.

At first faculty and staff gave a lot of pushback for not being able to ride the shuttle through campus. Yet, as Hascall said, "We tried to make the case of sustainability—Cox Hall will become a more lively place. Having shuttle buses near socializing wasn't a good thing. Eventually people just gave up their arguments" (Hascall 2008). Forcing students, faculty, and staff to walk through the campus served as a constant reminder of the benefits of walking and the positive social aspects of sustainability initiatives. Normally, a common theme in terms of sustainability initiatives is how we need to stop polluting and to control behavior ruining the environment, yet changing to a pedestrian-friendly campus was carried out to improve the

atmosphere on campus. Emory leaders have done a tremendous job focusing on the positive aspects of sustainability by looking at how we can better our own lives and not just put uncomfortable restrictions on ourselves.

Reallocation of the Parking Subsidy

As Emory kept increasing programs for alternate means of transportation, in 2006 the Parking Office announced that it was no longer going to subsidize parking, but rather charge the true cost of parking to its single occupancy vehicle patrons. The parking rate more than doubled for parking on campus from $25 to $50 a month, and executive reserved parking doubled as well, going up to $1500, with the individual persons paying for all the true costs of parking. A subsidy was put in place for the first three years for those employees who earned $30,000 or less. They got a reduction of parking costs, $300 the first year, $200 the second and $100 the third. Emory took socioeconomic concerns into consideration when changing its parking rates to make the increase in parking charges as fair as possible.

Taking the money once used as a subsidy for parking, Emory started a Park and Ride program under Laura Ray. A Park and Ride is a simple and effective concept to keep cars and congestion off campus. By increasing of the material costs of parking while decreasing the barriers of the Park and Ride program, over 400 individuals have already made the switch. Currently there are three strategic Park and Ride locations: North DeKalb Mall, South DeKalb Mall, and Northlake Mall. North DeKalb is currently the most popular, with Emory employees using more than the 200 contracted spots. Each mall does not mind sacrificing its spots to Emory for a small fee, because the spots were going unused during the day, and the Park and Ride brings more potential customers to the mall daily. The costs for the program include an average of $3.00 per spot per year, along with the costs of the shuttle buses transporting Park and Ride participants to and from campus. Absolutely no revenue is generated from the Park and Ride, but it accomplishes the main goal of Emory—to avoid building more parking decks and to decrease congestion.

Outside Influence and Setbacks

When asked about setbacks, many of the administrators felt fortunate to have not had to face too many roadblocks, but one that nearly every interviewee addressed was funding. Bob Hascall said that Commuter Options at Emory has been a "victim of its own success, in that our own shuttle bus system ridership has become so great. A lot of people want to use it. Now we get more and more requests for specific shuttle service. We don't have the money to initiate a new route" (Hascall 2008).

External grants and outside influence were able to counter part of the funding issues. Cheryl Dedias was "instrumental in finding grant money" because when the program was starting, "money was out there for this sort of thing; [you] just had to find it" (Gaither 2008). Emory was awarded grant money from the Clean Air Campaign starting in 2000, a governmental grant to create incentive programs to change commuter behavior. The grant money "helped

expand programs, provide additional resources, incentives that we would have never been able to do on our own" (Shaw 2008). Specific initiatives affected were the walk program, car pools, and van pools. People who utilized these programs were afraid of turning in their parking hangtags, because of the social implications of being stuck at work. Without a personal vehicle, one cannot run errands during the day or even be able to get somewhere in an emergency or unpredicted situation. Grant money was used to buy loaner cars, and thus removed a barrier to using alternative methods.

Atlanta Gas Light Company and Georgia Power showed their support as well, but not unselfishly. Atlanta Gas Light was looking to encourage people to try clean-burning natural gas, and the more publicity they received, the better their outlooks were. Georgia Power had its future in mind and was instrumental in "putting us in touch with people that were knowledgeable from a standpoint of alternative fueled vehicles" (Gaither 2008).

Conclusion

Through great administration, seamless transitions, and leadership, Emory has been climbing the ladder in performance, from academics to sustainability in operations and is now ranked 17th in the nation for an undergraduate university. "Emory has not stood still and needs to be applauded for that" (Shaw 2008). The years that lie ahead, though, will bring their growing pains along with them. As Emory continually looks to expand but with an existing strong dedication to Commuter Options, the future will only build on its strong foundation. Emory currently has 13.5% of its employees using alternative transportation and has an achievable goal of 25% by 2015. Marketing and continuing on Brian Shaw's path of "making transportation fun," will be the next big step to be filled by Brian Cook, who is working on a marketing and enticement campaign called Emory Moves. Even though frustrating for staff members at times, Emory needs to continue to plan for a variable future and not be afraid to scrap strategies or abandon initiatives. Lobbying for light rail or extended MARTA routes should continue, and "There is no telling what that will do in terms of percentages [of ridership]" (Gaither 2008). The leadership, from continued constant backing of administration to seamless transition between presidents, is what has allowed Emory to be in the forefront of sustainability and alternative transportation for universities around the country. With its continued dedication and realistic mindset, Emory will be able to reach the goal of 25% of Emory employees utilizing Commuter Options programs. "Not everyone will be able to use alternative form of transportation, but we need to get the word out in order to maximize it, so more people can take advantage of it. People do have an option" (Clemons 2008).

References Cited

Atkisson, Alan, 1999. Believing Cassandra: An Optimist Looks at a Pessimist's World. White River Junction, VT: Chelsea Green.

Bryson, Tim, 2008. Interview.

Clemons, Adelle, 2008. Interview.

Emory Report, Emory University. Vol. 52(25).

Emory Report, Emory University, Vol. 58(33).

Hascall, Robert (Bob), 2008. Interview.

Gaither, Erick, 2008. Interview.

McKenzie-Mohr, Doug, and William Smith, 1999. Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing. Gabriola Island, BC: New Society Publishers.

Ray, Laura Ray, 2008. Interview.

Sauerbrun, Phil, 2008. Interview.

Shaw, Brian, 2008. Interview.

[1] The layer cake model of cultural analysis directs attention to three aspects: material conditions (economic, environmental, technological, and demographic dimensions of the situation being analyzed), social patterns (including family, political groups, and other patterns of social life), and ideological dimensions (including values, worldviews, and religious beliefs).