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Agglomeration Economies: How "Y'allywood" Became The New Hollywood

Joseph Dugan Walker

AGGLOMERATION ECONOMIES: HOW “Y’ALLYWOOD” BECAME THE NEW HOLLYWOOD

by
Dugan Walker

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Approved by

Advisor: Dr. Christian Sellar

Reader: Dr. John Conlon

Reader: Dr. Steven Skultety

ABSTRACT

JOSEPH DUGAN WALKER: Agglomeration Economies: How "Y'allywood" Became The New Hollywood
(Under the direction of Christian Sellar)

Agglomeration economies have gained special attention in recent decades. With the increasing connectivity of our world, specialized regional economies are stronger now than ever before. A specific agglomeration economy that has developed in recent years is the Georgia Film Industry. This region surpassed Hollywood as the premier filming location for the first time since the early 1900s when New York was number one. This thesis analyzes the reasons why Georgia was so successful in attracting the film industry and encouraging its development by comparing infrastructure, film tax incentives, population, and labor development to that of competing states like New York, New Mexico, Louisiana, and California.

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Chapter 1: Agglomeration Economies and the Development of Y'allywood

Introduction

The world has been changing rapidly over recent centuries. The increasing connectedness, often referred to as Globalization beginning around the 1990s, has become the popularly accepted characteristic of this world. The growing interdependence of regions which, throughout history, have been more or less isolated from one another, can be seen in economics, culture, and populations themselves. A large factor in this globalization has been the cross-border trade of goods and services as well as technology, financial investment, people, and arguably most important, information. It is a common belief that the increasingly global world may have signaled the end of specialized regional economies and industries as seen across history such as cotton in Egypt, technology in Silicon Valley, and film in Hollywood. On the contrary to this belief, researchers, on the whole, argue that regional economies are thriving more in this period than ever before with most goods and services, specifically the production of those in a skill-based industry, are mainly produced in regions with concentrated industries, which then trade their goods globally(Storper, 1997; Piore and Sabel, 1986). These regional economies are often referred to as agglomeration economies, regions "where cities and clusters of activity boost the productivity of firms located within them" (Duranton & Kerr, 2015).

Questions like these will be addressed in this thesis. Why did companies in the film industry concentrate in Atlanta? How did this period of development differ from those before it (e.g. Hollywood)? Is this industry sustainable in Atlanta? These questions will help address how, in this instance, a NEW region became specialized for the film industry. It will address the various questions above and paint a picture of the industries development and why Atlanta was the city that was able to achieve this feat. These characteristics and the reasons for this development can help provide general patterns of development for regional economies.

Agglomeration Economies

Agglomeration economies have been defined in many ways as more research has been focused on them. As described by Storper, agglomeration economies are outcomes due to the minimization of transaction costs. In short, this means that they are a result of individual companies, as well as industries, on the whole, working to produce their good or service at the least possible cost. Theory states, in summary, that companies with similar production models/products tend to concentrate in the same region. This is due to various potential factors that can cut down on their production and innovation costs. These include but are not limited to pre-existing infrastructure, policies and support in place by the local/state governments, and the presence of relevant resources, including human and natural resources.

In terms of pre-existing infrastructure, companies are likely to move to locate in an area with infrastructure in place that their industry needs. Whether this is large highways for trucking, airports or cargo ports for shipping, or other forms of infrastructure, companies are likely to concentrate in areas where these required characteristics already exist. This presence allows these regions to facilitate the production and dispersion/sale of goods at a cheaper cost (Storper, 1997).

In the same way, a local or state government can impact whether or not an industry concentrates in their region. Pre-existing support from these governing bodies, whether in the form of taxes (or lack thereof), financial incentives, or political support, can influence the development of an industry in certain locations (East, 2019; Storper, 1997). For example, providing tax cuts for producers of renewable energy could draw companies in that industry to locate in the same area, all benefiting from these policies not necessarily present in other regions.

Resources are arguably the most important factor in terms of agglomeration economies. When it comes to resources this could include natural resources such as lumber, as was an important resource in the development of the furniture industry in North Mississippi, or other resources such as human labor. In agglomeration economies, human labor is a vital resource. Scholars tend to emphasize the importance of professional culture; i.e. the presence of a skilled labor force that can learn ‘tacit skills’ through repeated, informal communications made possible by living and working in close-by environments (Piore and Sable 1984). The population, over time, becomes specialized in the production of the goods or services for their industry. As they become a specialized population, it attracts more companies as they have less costs in training their labor.

The specialization in labor in these concentrated areas allows for learning between companies, another valuable resource (Puga, 2010). The socialization of workers outside the company, involving the sharing of ideas, allows for individual companies within the regional industry to further develop, learning new techniques and approaches to better do their jobs (Storper, 1997). This allows for technological advancement within not only individual companies, but within the industries themselves, encouraging these companies to concentrate near this source. This is the case in the development of Hollywood where the industry thrived due to the socialization of actors and producers, allowing them to bounce ideas off each other and facilitate the progression of the film industry.

Agglomeration economies exist due to the exchange of learning and information allowing for increased innovation. Knowledge and innovation remain a focus in today’s society/economies. Scholars have begun to analyze the development of high-tech regions which created a culture of encouraging innovation relating the development cycles between research institutions, companies, and infrastructures (Perrin, 1993). Innovation has been present no matter the sector. Traditional sectors have mirrored those of the new age with innovation sitting at the center. Storper (1997) broadened the argument around innovation and regions. He claimed that face-to-face interactions shape innovation, specifically at the local level. Specific regions, he argued, were characterized by their unique trajectories of development. Child and Faulkner (1998) found, similarly, that sustained social relationships were critical to both the agglomeration and innovation of a firm and region where firms decided to locate based on relations of key individuals. Evolutionary economics and economic geography, more recently, have enforced the idea that, in innovative clusters, learning and knowledge are key elements in the change of economic systems (Breschi and Malerba, 2005; Martin, 2008) and therefore are the basis for the success and permanence of agglomeration economies.

The success of regional economies, both caused by and encouraged by continued innovation, lends to a relative ‘stickiness’ of these industries. This raises questions of what determines geographical shifts in the locations of certain industries. What are the factors that may lead successful regional economies to decline, just to see their leading industries resurfacing elsewhere? When such movements occur, do key companies tend to survive and relocate, or new actors emerge? Also, how is the acceleration of globalization occurring since the internet revolution shaping the spatial dynamics within and outside of key regional economies in specific industries?

Hollywood and the Film Industry

As one of the greatest known regional industries, Hollywood has been studied inside and out over the decades. The film industry in the United States is the focus of this research precisely because it experienced profound spatial restructuring in recent decades, including a de-facto relocation of its key cluster in Hollywood towards a variety of new regional economies. It is not surprising then, that attention has fallen on Atlanta in recent years as it is the first city in the United States to begin to rival Hollywood in the film industry, passing them up in various categories of film production. This thesis will focus on research surrounding agglomeration economies, specifically concentrating on the development of the film industry in Atlanta. It will compare and contrast the development of this regional economy with that of Hollywood, a similar industry which was one of the first cases looked at when research began on agglomeration economies and various other regional economies around the world.

Literature Review

General Agglomeration

The concentration of economic activity in specific regions is impressive. Approximately 75% of Americans live in cities, according to the Census Department while these cities occupy only 2% of land area. This pattern pervades amongst any other developed country. Labor and capital concentrate in cities (Rosenthal & Strange, 2003). Literature, more pointedly on the concentration of specific industries in unique regions, began to truly develop in the 1980s. They had begun to notice fundamental differences in new industries and their development. Excessive localization they were witnessing went against that which naturally occurred. Starrett refers to this as the spatial impossibility theorem (Starrett, 1978). Not only were economic developments not evenly spread, but the concentrations themselves were uneven in their locations. These regional economies began showing patterns of increasing returns not seen in “normal” developments. More output was present in these larger, denser, urban industrial environments. The question was whether these patterns were caused by the concentration of firms or visa versa (Puga, 2010). This was the period following the end of World War II and the shift away from Fordism where it became clear to economists and geographers alike that the pattern of industrial development had shifted to the concentrations we see today.

The “First Industrial Divide,” as cited by Piore and Sable (1986), or Fordism, was marked by high-volume production. These industries relied on specialized equipment that could produce mass amounts of a product with the work of highly specialized workers. This system began to falter as it relied upon a high level of demand to cover its high fixed costs caused by the requirement of large capital input. (Piore and Sable, 2986) If demand was not high enough, these industries would collapse as the specialized machines and workers were unable to adjust to the changes in demand. With the fall of Fordism and the shift from mass production to that of specialized yet flexible industries, regional economies began to flourish (Storper, 1997). Piore and Sable cite this same event referring to it now as the “Second Industrial Divide,” the movement away from mass production to that of flexible, general-purpose machines requiring less capital committed for production of goods. These industries were highly susceptible to innovation. An example of one of these industries that emerged was that of the early 2000s which signaled the development of a new industrial region in the Atlanta area centered around film production. Given these developments were not just seen in one region but across various regions of unique make-up and varying industries, researchers began to analyze what made these regions tick and whether there was a pattern or framework for a regional economy to emerge.

As addressed briefly in the introduction, the idea of globalization rose to prominence around the same time as the focus on regional economies took hold. Storper addresses how this idea of the growing interconnectedness of regions as well as that of the concentrated "autonomous" industries within individual regions could exist at the same time. It is due not to the involvement of the global world in the "production" of these goods but the localized, concentrated production in a singular region where the product or service is then traded globally, allowing more than this region to benefit and consume the product. This allows for both the theory of globalization to exist in the interconnectedness economically of regions while allowing these areas to exist on their own, specializing in their industries.

A characteristic cited by many researchers was that of the location of regional economies, more often than not, in more urbanized areas. Diego Puga (2010) attempts to address the likelihood and reasoning of an industry moving to more urbanized areas. Generally, in urban areas, rent and wage rates are much higher. Puga argues that, if this is the case, there must be outstanding characteristics or advantages to moving to these areas as no company desires increased costs of production. Storper (1997) refers to cities, not as financial centers but centers of intellectual activities as a base for growth. Puga works along the same lines. He argues that the sharing of intermediate suppliers, pooling in labor markets, and the localized transmission of ideas potentially give cities the productive advantage required to justify locating where rent and wage rates are higher. There is also the idea that the higher wages are not due to the urban area, but to the fact that the labor market may be more skilled, forcing the industry to accept the higher wage rates to benefit from skilled labor (Puga, 2010).

In terms of skilled labor, a large focus of research on regional economies is that of learning and knowledge. Many researchers cite it as one of the most important, if not the most important factor encouraging industries to locate in the same region. Storper (1997) places the most emphasis on untraded interdependencies and increased learning, citing the ability for these regions to benefit due strictly to the localized, face-to-face interactions among firms and their workers. Soest, Gerking, and Oort goes deep into this topic. He argues how critical inter-firm movements of skilled labor influence innovation but delves deeper into not only sharing within an industry, but that of inter-industry spillover (Soest, Gerking, & Oort, 2002). He discusses the ability for "cross-fertilization" of transferable ideas in a competitive environment, promoting further growth. Some researchers disagree with Soest, Gerking, and Oort on this point arguing that the effects of an agglomeration economy as strictly industry-specific and are not applicable between industries. Soest, Gerking, and Oort (2002) go on to argue that the large labor pool in agglomeration economies and the accompanying diversity and competition tend to promote the growth of firms and small sectors of a city similar to how it promotes growth in the city as a whole.

Hollywood Agglomeration

In the late 90s, "runaways" began to cause a problem for Hollywood. This phenomenon where firms within an industry "flee" to another state or country for various reasons peaked for the film industry in 1997. East cites this occurrence when firms began moving to Canada from Hollywood due to the new Film or Video Production Services Tax Credit of 1997. This offered 25% credit on top of what the U.S. was offering at the time (East, 2019). George W Bush, to counter this incentive and decrease the occurrence of runaways passed the American Jobs Creation Act of 2004. As firms began to return to the United States, they began to search out new states with greater incentives, leaving Hollywood in the dust (East, 2019).

Georgia Agglomeration

In the year 1971, then Governor and future United States President Jimmy Carter was inspired while visiting the set of “Deliverance” with Burt Reynolds, Jon Voight and Ned Beatty. Witnessing the production process and later the economic boom caused by the commercial and critical success of the film, he saw this as an opportunity to capitalize on the money maker that was and is the film industry (Grillo, 2001; Dominey, 2018). This marked the beginning of the development of the film industry in Georgia as it spurred the creation of the Georgia Film, Music, and Digital Entertainment Office in 1973 (East, 2019). This office was established with the goal to market Georgia as a shooting location for future markets and by 2007 had recruited over 550 major projects (Dominey, 2018).

The growth of the film industry in the State of Georgia, specifically in the Atlanta area, has been evident. In 2016 alone the state hosted more feature films than any other state or country while the financial report for the 2017 fiscal year reported a direct impact of $9.5 billion from the entertainment industry with $2.7 billion spent in-state by production companies (East, 2019). Dominey with the Georgia Encyclopedia marks the large film projects to include *Smokey and the Bandit/II (1977/80), television’s The Dukes of Hazzard (1979-85),* and *Driving Miss Daisy (1989)*. 21st century projects include *Sweet Home Alabama (2002)*, *We Are Marshall (2006),* and the opening of Tyler Perry Studios in Atlanta in 2006 where he films various projects as well as his television show *House of Payne* on TBS. In addition to major motion picture production, the industry also supports that of smaller independent projects with Independent Media Artists of Georgia, Etc. (IMAGE) hosting annual film festivals hosting films from around the world and a special festival for that of lesbian- and gay-themed films (Dominey, 2018).

Much of the literature surrounding the development of film in the Atlanta area cites a dip in production and revenue from the industry in the mid to late 90s due to labor disputes (Grillo, 2001). Companies began seeking opportunities elsewhere as labor unions began to form. This not only affected the film production firms but many professions had come to rely on this industry including camera operators, lighting specialists, carpenters, electricians, hotels/motels, restaurateurs, property owners, office suppliers, hardware stores, airlines, car rental agencies and actors, all of which began to feel the economic effects of these companies leaving to other states (Grillo, 2001). The Georgia Film, Music, and Digital Entertainment Office, to curb this effect, began introducing tax incentives to production and entertainment companies.

Following the cessation of runways mentioned prior, states began to compete to attract these returning production firms to locate in their state. This occurred mainly through the use of tax incentive programs. Grillo cites Michael Collins, then Chair of the Georgia Film and Videotape Advisory Commission, as having pushed for an early incentive plan to overcome hardships faced in the late 90s. House Bill 610 looked to level the playing field with surrounding states and instituted state sales tax exemptions for digital broadcast and film production equipment and services (Grillo, 2001). This served merely as a band-aid that lasted temporarily till other states began to pas competing incentive programs. Louisiana enacted the first state incentive plan in 2002 followed by New Mexico in 2003, New York in 2004, and Georgia in 2005 (East, 2019). This new Georgia House Bill, GHB 539, was called the “Georgia Entertainment Industry Investment Act.” It was evident to the states involved as well as the film production companies that the film industry would follow the money as they had in previous decades and that we were witnessing the space race of tax incentive programs, each state decreasing their tax revenue in the effort to attract these firms (East, 2019). Georgia managed to provide the greatest incentives in terms of tax cuts for the film and entertainment industry but could only cut so much before having to introduce other methods/resources to attract firms to stay.

Atlanta suburbs, witnessing the growth of the film industry, began to notice a gap in employee skills required by the industry and those available in the labor pool present. Yalanda Bell, head of the career and technical education for Fulton County Schools mentions how firms were resulting to flying in skilled crew employees from the more experienced labor pools in California and New York (Klein, 2016). They needed of skilled laborers, not just actors and actresses but carpenters and film editors. The Wall Street Journal even cited a shortage of makeup artists and costume/set designers in “Y’allywood” as the region has been referred (McWhirter & Schwartzel, 2015). Union City Mayor, Vince Williams, spurred a collaboration with Fulton County Schools to produce industry-ready students. After forums with key industry leaders, the school district focused on career and technical education classes to prepare students to graduate with the qualifications to work in the Atlanta film industry immediately. Benjamin Banneker High School, home to the new Academy of Film Production, sits just 15 minutes from Tyler Perry Studios and has partnered with the studio, providing students with hands-on work experience (Klein, 2016). As well, colleges and universities in the state have begun offering specialized programs, like Clayton State’s Digital Film Technician Certificate Program, with the goal to quickly introduce a skilled and qualified labor force to attract and retain local production firms (Klein, 2016).

Methodology

The purpose of this thesis is to analyze the development of the film industry in the Atlanta area in the scope of agglomeration economies. This will be achieved by researching the following questions: A) What is Georgia able to attract the film industry and have a unique foothold in the industry? B) How is this regional economy developing and is it sustainable? C) How did the development of this regional industry differ from that of Hollywood?

To answer question A) I performed a series of interviews with key professionals in the Atlanta film and entertainment industry as well as policymakers behind relevant developments. Questions were specified to the interviewees' backgrounds. Those in policy were asked about their knowledge or perspective on why certain policies that have worked in Georgia have either not been implemented or have failed to succeed in other states. Those interviewees in the film production industry were asked about what Georgia has successfully done that other states have failed to achieve.

In addition to performing interviews, data and policies of the top competing states were compiled. This was used to compare and contrast with those of Georgia. Significant differences and trends were highlighted.

To answer question B) I performed a series of interviews with key professionals in the Atlanta film and entertainment industry as well as policymakers behind relevant developments. Questions were specified to the interviewees' backgrounds. Policymakers were focused on the current policies being proposed or amended, the overall tone of those currently holding office, and the development they have witnessed in labor growth for the industry. Interviewees that work in the film industry were questioned on their perspective of the growth of the industry from the inside and the attractiveness of out-of-state opportunities as well as the changing labor market. Interviews with Mayor Vince Williams will be used to gain an understanding of how the education system has potentially shifted to prepare students to succeed in this local industry.

To answer question C) I built on textual analysis of the policies that lead to the development of the Atlanta film industry and that of Hollywood in its early stages. Data and policies were compared with significant differences or similar trends being highlighted.

Chapter 1 Appendix. Interviews

Name: Vince Williams

Position: Union City Mayor and leader in effort to further develop CTE education in the field of film production.

Date: February 27th, 2020

To answer question A)

- What about the Atlanta/Fulton County area do you believe attracted the film industry to begin with?
- Why was Georgia able to attract the film industry?
- Why are other states and regions not ass attractive for these production firms?
- Do you see the process Atlanta/Georgia has gone through as able to be replicated in other states?

To answer question B)

- What progression of the film industry do you see in the Atlanta area and Georgia as a whole?
- Are there school districts enacting CTE policies similar to those you helped Fulton County Schools to produce career ready students in film production?
- What is the approach local policy makers are taking to the film industry?
- What impact have you seen from the CTE policies you were part of enacting?
- Have you seen an increase in the quantity and quality of the labor pool for the production industry in the Atlanta Area?

Name: Lee Thomas

Position: Deputy Commissioner of the Georgia Film, Music & Digital Entertainment Office

Date: January 27th, 2020

To answer question A)

- What about the Atlanta area and Georgia as a whole do you believe attracted the film industry to begin with?
- Why was Georgia able to attract the film industry?
- Why are other states and regions not ass attractive for these production firms?
- Do you see the process Atlanta/Georgia film industry has gone through as able to be replicated in other states?

To answer question B)

- What progression of the film industry do you see in the Atlanta area and Georgia as a whole?
- What is the approach is the State of Georgia policy taking to ensuring the film industry remains strong in the state?
- Have you seen trajectory for the industry change in any ways?
- What efforts has the Georgia government taken to increase/attract skilled workers in the production industry?
- What has been the trajectory of employment related to the production industry?

Name: John Raulet

Institution: Raulet Property Partners, Inc

Date: January 9th, 2020

To answer question A)

- What about the film industry attracted Raulet Property Partners, Inc to begin servicing that industry specifically?
- What about Georgia was able to attract the film industry?
- Do you believe a company providing the service similar to yours, with a division focused on production firms, would be successful in other states?
- Do you see the process Atlanta/Georgia film industry has gone through as able to be replicated in other states?

To answer question B)

- What progression of the film industry do you see in the Atlanta area and Georgia as a whole?
- From your interactions with production firms, what does the trajectory of the film industry seem to be?
- Are policies being put in place encouraging the growth of your industry in relation to the film industry?

Chapter 2: Why Atlanta is the Place to be

Why Atlanta?

As stated earlier in chapter 1, the theory of agglomeration economies is based on the fact that companies' business decisions work to minimize production costs. Cost minimizing decisions typically center around pre-existing infrastructure, policies and support in place by the local/state governments, and the presence of relevant resources, including human and natural resources. Atlanta exhibits all of the above characteristics.

Infrastructure

As stated, pre-existing infrastructure is one factor that firms consider when deciding where to locate. This infrastructure could range from railways, ports, and transit, to solid waste, schools, and drinking water. For the film industry, the most important factors of infrastructure are aviation and roads. These two elements of infrastructure help decrease travel time and costs. In an industry where they are often flying crew members and actors into the region and driving across it to reach various filming locations, it is vital to keep these costs down. One way the infrastructure will be analyzed is by using the 2017 Infrastructure Report Card. It assigned a letter grade to the country as a whole as well as each state for every infrastructure category to allow for easy comparison. These grades include an A/- (exceptional, fit for the future), B/+/- (Good, adequate for now), C/+/- (Mediocre, requires attention), D/+/- (Poor, at risk) and F (Failing/critical, unfit for purpose). These grades will be used throughout this chapter as well as chapter 3 to compare the infrastructures of various states.

In terms of pre-existing infrastructure, Atlanta, in no way, is short in supply. According to the 2019 Report Card for Georgia's Infrastructure, the State of Georgia received an overall

GPA of C+ compared to the national average of a D+. In terms of road quality, Georgia gets a C+. This is compared to the national average of a D (America's Infrastructure Grade, 2017; Engineers G. S., 2019). If you're considering simply the presence of highways, Atlanta is accessible via interstates 20, 75, 85, and Georgia 400. The I-285 beltway around the city provides easy access to all surrounding suburbs (Highways and Connections, 2020). Considering aviation, A receives a grade of B+ compared to the national D (Engineers G. S., 2019; America's Infrastructure Grade, 2017). The city hosts the busiest airport in the world, Hartsfield-Jackson Atlanta International Airport. It offers service to 150 domestic and 70 international destinations (About ATL, 2020). Lee Thomas, Deputy Commissioner of the Georgia Film, Music & Digital Entertainment Office, cites the accessibility to a reliable and efficient international airport as a large part of making Atlanta attractive to these firms.

> Some of this stuff is something that is not in our hands such as the world's busiest airport. We compete with Wilmington and Shreveport, but you have to come through Atlanta to get there. Direct flights save time and money since directors are available sooner since they aren't delayed at another airport. (Thomas)

Companies can easily fly in professionals for productions. In any production industry, the ability to easily transport resources and products into and out of your region is key to keeping costs down.

Other than transportation costs, pre-existing infrastructure specific to the film industry has allowed for lowering of start-up costs. Raulet Property Partners, Inc. is involved in many of Atlanta's "adaptive reuse" properties. These are properties that were existing buildings that have been renovated for a purpose other than what originally built or designed for. For example, Raulet Property Partners, Inc has purchased old storage warehouses that have been converted to serve as soundstages for production firms. When interviewing John Raulet of Raulet Property Partners, Inc. on how they got involved in real estate for the film industry, he cited the financial crisis around 2008. Many warehouses, typically used as storage for companies in the Atlanta area, were left empty following this economic crash. The Raulet brothers, knowing the growing interest of film industries (make sure this is highlighted above) to move to the region, renovated these existing structures into film stages. They currently provide film stage leases in various locations allowing production firms to locate in the Atlanta area without the worry of large startup and construction costs.

Landscape/Scene Variety

"Atlanta can be Everytown." (Dockterman, 2018). For the film industry, one resource many people do not consider is the landscape. Many times films, especially movies, are not produced solely on a sound stage but out in the real world. One advantage Atlanta has is a diverse landscape allowing for the filming of various scenes all within driving distance of one another. For movies like Baby Driver (2017), firms can make use of the city scene of Atlanta itself (Baby Driver: Filming and Production, n.d.) while for movies like Deliverance (1972), a mere two hour drive puts you in the blue ridge mountains with scenes of creeks and waterfalls (Deliverance: Filming and Production, n.d.). As well, this proximity of various scenes is a greater attraction to projects that require not only one type of landscape but many. The Walking dead for example used not only the City of Atlanta as a backdrop but took advantage of the small towns present in the surrounding suburbs of Atlanta such as Senoia, Georgia (The Walking Dead: Filming and Production, n.d.). They made use of the various scenes available to them in the Atlanta area. Lee Thomas cites the variety of landscapes and potential scenes as a large factor attracting production firms to Atlanta versus other large cities.

> Georgia has mountains, coastlines, big cities, small towns. I mean we compete head to head with states like New Mexico who have great tax incentives and New Mexico has a very specific look. Georgia has a lot of different looks. (Thomas)

Tax Cuts/Breaks

Tax cuts/breaks are a large factor in the location of production firms. Starting in the early 2000s, states began implementing programs to be competitive in the production industry. Georgia was just the 4th state to put a film tax incentive in place and it was competitive. To this day the tax breaks Georgia offers help to ensure that, when considering where to locate, Georgia is always near the top of their list. The key characteristics of Georgia's tax plan that stand out are the fact that the credits are transferable, there are uplifts, and there is no cap.

The state of Georgia had been giving special attention to the film industry starting back in 1973 with Governor Jimmy Carter's establishment of the Georgia Film, Video, and Music Office but future policies would go further to encourage the development of the film industry in the state. Following the occurrence of "runaways" (production firms moving to Canada in the late 1990s in response to Canada's new Film or Video Production Services Tax credit of 1997) President George W Bush enacted the American Jobs Creation Act in 2004 (East, 2019). This encouraged production firms to return to the United States where they began looking for similar incentives to those of Canada instead of just returning to Hollywood, California. Georgia was the 4th state to implement a tax credit system following only Louisiana (2002), New Mexico (2003), and New York (2004). In all interviews, a large portion of the success of the film industry in the state of Georgia was credited to these tax credits first implemented under Governor Sonny Perdue in 2005. This bill, Georgia House Bill 539, was referred to as the Georgia Entertainment Industry Investment Act (East, 2019). This competition began a "race to the bottom" where states were driving up tax incentives to remain competitive and in turn (in theory) drove down the return in revenue from productions. The more tax incentives the state gave out, the more they cut into the net profit the state received from productions occurring in-state. Numerous studies cite Georgia as “winning the race to the bottom” (East, 2019). They were the third state to introduce legislation on film tax incentives giving them a head start on most other states. As well, Georgia didn’t wait to make their policies the most competitive. They jumped in front, immediately placing themselves at the forefront. Providing the greatest credits, they effectively attracted firms and convinced them to set roots in Georgia before other places had time to act. It is the case that this “race to the bottom” scared some states from remaining competitive, such as Louisiana, fearing they were losing money on the credits. Georgia on the other hand has shown they make money in the long run, surpassing the tax funds “lost” in credits to production firms with money made from tourism, jobs created, and investment by firms in the state.

Georgia’s incentive plan codified as the Official Code of Georgia (O.C.G.A) has continuously evolved over the years in the face of competition from other states. Requirements for qualification and new features have altered these policies on a routine basis. The goal has always been to “position the state as a premier location for film, music, and entertainment technology” (Perdue, 2005) by allowing companies to receive credits for expenditures on preproduction, production, and post-production. The Georgia Entertainment Industry Act (the Act) is the primary incentive plan for the state. It covers production expenditures for production companies filming or producing projects within the state. This can include set construction, make-up, wardrobes, renting facilities, and “other direct costs of producing the project in accordance with general practices” (O.C.G.A. 48-7-40.26, 2010). These credits can be applied to the production of new films, videos, music videos, and digital products. News, sports, and corporate videos are not included under this act. To qualify, a film or television production must meet minimum investment of $500,000 and can receive a 20% transferable tax credit. The credit can only be sold or transferred for a minimum of 60% of the face value of the credit. If a Georgia promotional logo is included in the credits, an additional 10% uplift can be added in addition to the original 20% (holding that the Georgia Department of Economic Development determines that the film will create valuable promotions to enhance the State's brand) (East, 2019). Georgia's film incentive plan does not include sunset provisions, nor does it include a cap on yearly credits. Sunset provisions are expiration dates on policies. These are dates set where policies must be re-authorized or will no longer be in effect. Having sunset provisions leads to uncertainty for production firms as they do not know if their financial advantage is long-term or will be short-lived.

Why Not Elsewhere?

Given the impact of Georgia's incentive plan, The Georgia Entertainment Industry Act, and the apparent weight of its importance relative to other factors, the following sections will focus on those states that are closest in competition with Georgia. This will include Louisiana, New Mexico, and New York City. California, specifically Hollywood and the relation of its situation to that of Atlanta will be addressed in detail in chapter 3. The infrastructure of these states, specifically roads and aviation will be compared, while the population demographics of each state will be analyzed to show a distinct advantage for Georgia over Louisiana, and New Mexico. The film tax incentive programs will be compared, highlighting the differences between those states and Georgia to show how Georgia's lack of cap and sunset provisions sets it apart from the rest. Georgia overall has superior infrastructure due to funding and future capacity when considering aviation and roads, has a relatively large and highly educated population resulting in an availability of skilled labor, and is very competitive concerning film tax incentives.

Infrastructure

Louisiana, New Mexico, and New York are those states that are most competitive when it comes to film tax incentives. This section will break down each of these states into an additional factor, infrastructure. It will outline why Georgia is more attractive in terms of this pre-existing infrastructure and outlook on it as well. Roads and aviation will be compared as these are two factors that are very important to the film industry. The same grading system mentioned in "Why Georgia?" will be used to compare these three states. The grading system ranges from A to F. Descriptions of those grades can be found in "Why Georgia?".

Louisiana. As discussed, prior, Atlanta, and the State of Georgia as a whole has a relatively high infrastructure grade with an average of a C+. Louisiana on the other hand falls at the national average of a D+ (Engineers L. S., 2017). In terms of just roads, compared to Georgia's C+, Louisiana is below the national average with a D. The state sits with 2 roads projects currently unfinished due to lack of funding where $15 million are being dedicated to the completion of an Interstate 49 in northern Louisiana. New Orleans and Baton Rouge, the two largest cities in the state with populations of 389,648 and 225,362 people respectively, rank 54th and 38th nationally for travel delays (Louisiana Cities by Population, 2020; Engineers L. S., 2017). Much of the delay and capacity problems for Baton Rouge is a direct result of population migration following Hurricane Katrina. Operations and maintenance as well as public safety are all reported as decreasing since 2012, according to the 2017 report (Engineers L. S., 2017).

To compare the advantage of Atlanta's Hartfield Jackson International Airport to that of the aviation in Louisiana, the latter scored a C compared to Georgia's B+ (Engineers L. S., 2017). This is still a higher score than that of the national average by an entire letter grade. From 2016-2017, funding for aviation in Louisiana saw a 6.5% increase (Engineers L. S., 2017). The problem for the future of the industry comes in with a lack of concrete funding following 2017, according to the report, which restricted airports implementing development plans. In terms of condition and management, the capacity, condition, and operations & maintenance all remained relatively unchanged from 2012-2017 while public safety decreased due to increased incursions, "any occurrence at an airport involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the arrival and departure of an aircraft" (Engineers L. S., 2017). While funding has remained constant since 2012, there is a backlog of projects from Fiscal Year 2016-2017 totaling $1.105 billion with an increase of $25 million since 2016. There were no new funding streams identified at the time of the report to alleviate this issue for development (Engineers L. S., 2017).

New Mexico. New Mexico was not given a grade by the Infrastructure report. In terms of roads, New Mexico has approximately 27,853 lane miles in its highway system. Considering capacity, the population of metropolitan areas is expected to increase quickly in the coming years. It's expected that Albuquerque will reach 1 million people by 2025 (New Mexico Department of Transportation: Roads, 2012). From 1990 to 2009, travel on New Mexican highways increased by 61% resulting in congestion in 19% of New Mexico's major urban areas. Transportation funding id inadequate to keep up with wear and tear caused by this increase in traffic. In 2008, their highway system ranked 4th but requires expansion and upkeep due to increased capacity requirements. With a 20-year plan set to finish in 2032, only 20% of the $16 billion needed is available in funding (New Mexico Department of Transportation: Roads, 2012).

In terms of Aviation, the 2009 New Mexico Airport System Plan showed that aviation supported 48,795 jobs and generated $1.3 billion in payroll annually with $3.1 billion to the economy (New Mexico Department of Transportation: Aviation, 2012). The New Mexico

Airport System is made up of 177 private and public airports. 50 of those 117 are considered significant to the national air transportation system and therefore receive funding from the FAA Airport Improvement Program. Current FAA funding levels are the largest problem facing New Mexican airports. Funding had recently been cut back by 5% while congress doesn't allow long-term authorizations for the AIP. With Capital Improvement Projects averaging a need of $45 million a year, and only $30 million per year being available, the system is low in funds to continue upkeep and necessary expansions of its aviation systems(New Mexico Department of Transportation: Aviation, 2012).

New York. Similar to Georgia, New York's overall infrastructure grade (from the 2015 report) is higher than the national average where NY scored a C- (Council, 2015). The most recent information for NY is only 2015 versus Georgia's 2019 but a general picture cans still be painted. In terms of roads, NY scored only a D- compared to LA's D and Georgia's C+. According to the report, a third of the state of New York's 240,000-mile road network is considered to be in poor or fair condition while the miles driven continue to increase across the state. The U.S. Department of Transportation's Federal Highway Administration cited the State of New York containing 114,559 miles of public roads with 19% being in poor condition (Office of Highway Policy Information, 2017). In 2015, the combination of congestion (53 hours a year sitting in traffic for NYC area drivers) and poor road conditions cost drivers an average of $694 in NYC, $504 in Albany, and $477 for Syracuse. It was predicted that by 2030, $40 billion would need to be invested in roads to be in "decent" shape ($2 billion/year) with only $317 million spent from 2012-2013 and a total of a little over $400 million since 2008, far below the $2 billion/year estimation (Council, 2015).

New York's aviation score also fell below that of Louisiana and Georgia amounting to a D. The aviation system, as of 2015, contained 18 large commercial airports and 67 smaller public airports. John F. Kennedy International Airport (JFK) in Queens, New York, New York, was the 22nd busiest airport in 2017 with an approximate 4% increase in traffic from 2017 (PANYNJ, 2018). By 2030 traffic is expected to have increased to 150 million passengers from the 2015 total of 104 million. According to the 2015 report, the 3 major airports for the NYC region, JFK, LaGuardia (LGA), and Newark Liberty International (EWR) in nearby New Jersey. are major contributors to delays across the country with 188 required projects totaling approximately $4.7 billion leading up to 2030 (Council, 2015). In terms of funding, there are approximately $3.03 billion in unfunded projects in the above 188. This, in conjunction with the capacity soon being surpassed, requires increased funding for this aviation industry to remain beneficial and competitive (Council, 2015).

New York's higher overall score than Louisiana is simply based on the higher parks and Solid Waste ratings of B- relative to that of Louisiana's C+ solid waste grade and lacking a parks grade (Council, 2015; Engineers L. S., 2017).

Population

Firms, no matter the industry, are reliant on the population of the region they locate in. The largest factor being that of the civilian labor force. In this section, the civilian labor force (CLF) is defined as the population aged 16+ who are currently employed or unemployed (looking for work). The numbers cited below were all found by the United States Census Bureau for the year 2019 (U.S. Census Bureau, 2019). See table 1 for the total data used.

Louisiana. In 2019, the population of Louisiana was approximately 4.65 million people. This is less than half the size of that of Georgia. While Louisiana's population over 65 years old (15.4%)

is slightly larger relative to Georgia (13.9%), in terms of the portion of the population, they are similar. The same goes for those under 18 years old (LA: 23.5%; GA: 23.8%). While the portions are similar, the actual population is drastically different. Louisiana has a population older than 65 of approximately 720,000 people and only 1,090,000 people under 18. Given those over 65 will likely be leaving the workforce in the coming years, being replaced by those under 18, that leaves only a 370,000 increase in those available to work. This is assuming all 370,000 people remain in Louisiana and enter the CLF, which is unlikely given the 59.3% CLF participation rate seen in 2019. In Georgia, this number is 1,050,000 people with a 2019 CLF participation rate of 62.4%. There will be a greater growth, in terms of population, of the CLF in Georgia compared to Louisiana.

Education of the population is key as well when considering the skill of the available labor force. The percentage of the population in 2019 with at least a high school diploma/equivalent certification was 84.8% (3.94 million). Those that went on to receive a bachelor's degree or greater (bachelors, masters, professional certification, or doctoral degree) made up 23.7% of the population (1.1 million). Georgia had a greater overall population to graduate with a high school diploma/equivalent certification with 86.7% (9.21 million) with 30.7% (3.26 million) attaining a bachelor's degree or higher.

New Mexico. In 2019, the population of New Mexico was approximately 2.1 million people. This is less than half the size of that of Louisiana and one fifth the size of Georgia's. New Mexico's population over 65 years old (17.5%) is relatively large compared to Georgia's (13.9%), in terms of the portion of the population. For those under 18 years old (NM: 23%; GA: 23.8%) the portions are similar. When considering the impressive difference in population, New Mexico has a population older than 65 of approximately 367,500 people and only 483,000 people under 18. Making the same assumptions as before with Louisiana, that leaves only a 115,500 increase in those available to work. This is also assuming all 115,500 people remain in New Mexico and enter the CLF, which is unlikely given the 57.4% CLF participation rate seen in 2019. This is a larger difference with Georgia then Louisiana had. There will be a greater expectance for growth, in terms of population, of the CLF in Georgia compared to New Mexico

The percentage of the population of New Mexico in 2019 with at least a high school diploma/equivalent certification was 85.3% (1.79 million). Those that went on to receive a bachelor’s degree or greater made up 27.1% of the population (569,100). Georgia once again had a greater overall population to graduate with a high school diploma/equivalent certification with 86.7% (9.21 million) with 30.7% (3.26 million) attaining a bachelor’s degree or higher.

New York. In 2019, the population of New York was approximately 19.45 million people. This is almost double the size of Georgia’s, over four times the size of Louisiana’s and almost 10 times that of New Mexico. New York’s population over 65 years old (16.4%) is relatively large compared to Georgia’s (13.9%), in terms of the portion of the population. For those under 18 years old (NY: 20.8%; GA: 23.8%) the portions are similar. When considering the impressive difference in population, New York has a population older than 65 of approximately 3.19 million people and only 4.04 million people under 18. Making the same assumptions as before, that leaves an 850,000 increase in those available to work. This is also assuming all 850,000 people remain in New York and enter the CLF, which is more likely than with Louisiana and New Mexico with a 63% CLF participation rate seen in 2019. In Georgia, this number is 1,050,000 people with a 2019 CLF participation rate of 62.4%. While the population is still greater in New York, there will be a greater growth, in terms of population, of the CLF in Georgia.

The percentage of the population of New York in 2019 with at least a high school diploma/equivalent certification was 86.5% (16.82 million). Those that went on to receive a bachelor's degree or greater made up 35.9% of the population (6.98 million). Georgia had a greater percentage of the population with at least high school diploma/equivalent certification with 86.7% (9.21 million) but a lower percentage to attain a bachelor's or higher with 30.7% (3.26 million). As well, even though there was a higher proportion of those with at least high school diploma/equivalent certification in Georgia, New York produces more people in each category based on population.

New York is the only state of those analyzed that can compete with Georgia in terms of population. Georgia's population is larger than that of New Mexico and Louisiana as well as it has a larger portion of the population under 18. This means its potential workforce now and, in the future, will be much larger. As well, its population is more educated than that of Louisiana, New Mexico, leading to the assumption that the workforce is greater in skill. These factors make Georgia more competitive than those two states. Simply due to the large population of New York, Georgia cannot compete in this factor. While it has a higher portion of the population with a high school degree or higher, New York's large population still allows them to have a greater number of people in that group. They simply have a larger workforce.

Tax Cuts/Breaks Comparison

Louisiana. Louisiana was the first state to institute a fil tax credit beating out Georgia, New Mexico, and New York. In comparison to Georgia, Louisiana's tax credit, they are similar in the allowance of credit transfers, and uplifts. However, Louisiana is less competitive as a whole simply because they placed a cap on its program of $150 million per year where Georgia does not have a cap at all

When considering the timeline of tax incentive programs following the stemming of runaways to Canada, Louisiana was quick off the mark. They were the first state to adopt a film incentive program in 2002 and to this day hold a steady spot near the top of the charts for films per state. In 2013, Louisiana was first in film production while remaining top 6 until 2017.

The plan (LA Rev. Stat. § 47:6007, 2011) was amended multiple times leading up to 2005. A major amendment in 2003 allowed the received credits to be transferable (McIntire, 2014). This is echoed in The Georgia Entertainment Industry Act outlined earlier in the chapter.

In 2004, credits were set at 10% income tax credit for productions spending between $300,000 and $8 million and 15% for those over $8 million (East, 2019). The base credit was raised to 25% in 2016 for those spending at least $300,000 with an additional 10% for productions employing Louisiana residents (McIntire, 2014). This was lowered to 5% in 2009. A cap of $20-25 million was added for individual projects as well as a cap for the state funds allocated for the program (East, 2019).

With backlash from taxpayers who had to carry a heavier weight of tax revenue, these credits were altered with a maximum credit of 40% or up to $180 million with a yearly maximum credit issuance of $150 million. This amount was depleted quickly leading to the shift of the industry to three states over (Boudreaux, 2019). Additional credits are offered for those productions outside New Orleans (5%) and those of screenplays written by a Louisianan (10%) (East, 2019).

New Mexico. New Mexico's plan occurred just 2 years before Georgia. Unlike Georgia, this program instituted a cap of $50 million per year but has no minimum budget requirements to qualify. This cap is much lower than Louisiana's of $150 million and Georgia's no cap, however, both those states have minimum budget requirements. The program has similar uplifts to Georgia with state promotional logos to be included in the film.

New Mexico followed quickly behind Louisiana with the implementation of a film incentive program in 2003. It has been classified as an “aggressive” tax credit (East, 2019). It originally based entirely around a $15 million interest-free loan; it has been drastically amended. Since the enactment of the program, New Mexico saw 90 films produced in-state from 2003-2008 (McIntire, 2014).

In 2011, studies showed losses due to the incentive program so it was amended with the introduction of a $25 million rolling cap (N.M. Stat § 7-2F, 2011; East, 2019).

Like Georgia, the New Mexico program is required to include a promotion of the state in the end credits (N.M. Stat § 7-2F-1(M), 2011). It deviates from the typical points of film incentive plans in its lacking minimum budget threshold to qualify (East, 2019).

A 25% credit is available if production expenditures are made within New Mexico (N.M. Stat § 7-2F-1(B)(1), 2011). An additional 5% is available for television productions of six or more episodes and budgets of at least $50,000 (N.M. Stat § 7-2F-1(C)(1), 2011). In place of, not addition to, the 5% television credit, a firm can receive a 5% credit for hiring a state resident as a below-the-line worker (N.M. Stat § 7-2F-1(C)(2), 2011). New Mexico increased its cap on the credits to be distributed from $ 25 million to $ 50 million (N.M. Stat § 7-2F-1(D), 2011).

New York. New York’s film tax incentive plan includes similar characteristics to that of Georgia. It is similar to Georgia in its use of minimum budget requirements, qualified expenditures, and uplifts. New York strays from Georgia in its use of qualified film production facilities, time to claim credits, priority for filing, sunset provisions, and credit for postproduction expenditures (East, 2019). Their cap on credits and sunset provisions give Georgia a distinct advantage.

Following Louisiana and New Mexico, New York implemented a film incentive program in 2004. Having the historical basis for film production, this early entrance into the tax incentive race for the film industry gave them a head start in stemming runaways unlike California which will be discussed later.

The original incentive plan constituted a 10% credit capped at $25 million (East, 2019). In response to other state's incentive plans, including Georgia's, they amended this original plan and increased the cap to $60 million in 2006. The credit was increased to 30% in 2008 with incremental changes eventually raising the cap to $420 million.

New York separates productions into two levels. Level one productions contain budgets under $15 million and less than 5% of the firm be owned by a public company. These firms must have at least one day of filming and 75% of its expenses done at any facility must be a qualified production facility. Level two productions contain budgets over $15 million or over 5% is owned by a publicly-traded company. They must utilize a qualified facility for at least 10% of principal shooting days. Expenditures at qualified facilities are the same as level one except with a minimum of $3 million. Work not done at a qualified facility can qualify for the incentives if shot in New York State (NY Tax L § 24(a)(2)).

New York made their credit fully refundable within 1 year for those under $1 million, 2 years for those within $1-$5 million, and 3 years for those over $5 million (East, 2019).

In terms of Uplifts, New York gives attention to out-of-zone filming. Productions in upstate counties are eligible for a 10% bonus on their credit withholding their budget is a minimum of $500,000. The state only allows $5 million for this incentive with a sunset provision of 2022 (NY Tax L § 24(a)(5)). Like Georgia and New Mexico, a production logo, video, or phrase “filmed with the support of the New York State Governor’s Office of Motion Picture and Television Development” must be included in the screen credits (NY Tax L § 24(a)(4)).

Conclusion

Georgia is more attractive to film production firms, relative to those states above, due to the presence of -pre-existing infrastructure, advantageous population demographics, and highly competitive tax incentives. The funding available for infrastructure as well as the economic benefit of the Hartsfield-Jackson International Airport allows Georgia to differentiate itself from other states. Instead of having a layover in Atlanta to then fly to other states like New York, Louisiana, or New Mexico, time and money can be decreased dramatically by stopping there. Georgia also has more room to grow in terms of capacity limits while states like New York are beginning to max out on capacity due to limited space. As well, Georgia has a large labor force that is competitive in education and skills. Only New York was competitive in this regard simply due to a drastically larger population. In addition, the landscape of Georgia provides a variety that production firms need to film various projects. They are not restricted to desert locations like New Mexico but can film in small towns, a large city, swamps, farmland, in the mountains, etc. as all these locations are within driving distance of the industry’s central hub of Atlanta.

Chapter 2 Appendix. Table 1

	GA	LA	NM	NY
Total Population (in millions)	10.62	4.65	2.1	19.45
Age				
Under 18	23.8%	23.5%	23.0%	20.8%
Over 65	13.9%	15.4%	17.5%	16.4%
Economy				
Civilian Labor Force*	62.4%	59.3%	57.4%	63.0%
CLF Total Pop. (in millions)	6.63	2.75	1.21	12.25
Education				
Minimum High School Equivalence	86.7%	84.8%	85.3%	86.5%
Bachelor or Higher	30.7%	23.7%	27.1%	35.9%

Data gathered from the United States Census Bureau for the year 2019 for the states Georgia, Louisiana, New Mexico, and New York. Civilian labor force defined as that population aged 16+ who are currently employed or unemployed (looking for work).

Chapter 3: Evolution of Development

Hollywood was the center of the film production world since the beginning of the 20th century. It was a perennial powerhouse who is now being truly challenged for the first time. In recent decades, Hollywood has begun to lose production firms and feature films to other states, specifically Georgia. A large reason for this is California's film tax credit that is not competitive relative to leading states.

This chapter will focus on the comparison of California and Hollywood to Georgia and Atlanta. It will outline "Hollywood Then," describing what characteristics of Hollywood allowed it to succeed in the first place. Then a comparison of Atlanta to Hollywood today will be done via infrastructure, population, tax credits, and the economics of each film industry.

Hollywood Then

Hollywood began to develop in the early 20th century in what is now Los Angeles. At that time, there were not film tax credits like there are today. The main focus came down to a region where the weather enabled the industry to thrive, in this case sunny weather for the film industry, and low labor costs. California at the time was known for cheap labor as well as ideal weather for film production. This enabled it to become competitive right off the bat.

Weather/Location

Early film production saw its centers in New York, New Jersey, and Chicago. In the early 20th century, director-led shooting units began starting to seek out locales that could provide year-round sunshine for reliable filming (Roland, 2017). In 1911, the Moving Picture World trade magazine cited that 320 days a year there was weather ideal for motion picture photography in California. In addition to weather, after filming there for a while, production firms found additional advantages in Southern California that kept them there. The variety of geographic locations within a small radius was impressive. Mountains, desert, and sea all within driving distance with various architectural styles able to convey a broad range of settings allowed for easy variety for production firms (Roland, 2017).

Labor

Another large attraction at the time was cheap labor. Sklar wrote that "as studios moved into feature production and built more elaborate and authentic sets, they needed skilled craftworkers—carpenters, electricians, dressmakers, and many other specialists – and lower costs became an increasingly important factor in locating production in Los Angeles." (Sklar, 1994) Los Angeles was known then as the capital of open-shop, a system where employees in a place of work are not required to join a labor union. This allowed businesses to exploit cheap workers in large numbers. It was noted that on the set of one of the first Hollywood films, The Squaw Man, that the wages for carpenters and other service personnel were 25- 50% cheaper than on the East Coast. The pro-business orientation of the courts and city council allowed employers and businesses to undercut the strength of organized labor. (Roland, 2017)

Atlanta vs. Hollywood Now

To compare these two film production regions, infrastructure, population, tax credits, and state film economies will be analyzed and compared. We will detail how Georgia's pre-existing infrastructure is in better condition with greater outlook while population demographics are more competitive. As well, the tax incentive program for California is less competitive. In terms of state film economics, Georgia's outlook and trajectory of the film industry is bright while California is struggling to stay prominent. This difference in trajectory will be addressed and as resulting from a lack of competitive credits leading to an ever-decreasing number of major feature film productions leaving California while Georgia is seeing increasing numbers of feature films due to lack of cap and sunset provisions in their film tax incentives.

Infrastructure

To detail the infrastructure of California, we will use the Infrastructure Report Card used to analyze Louisiana, New Mexico, New York, and Georgia. Using the same scale, California received a C- average from the American Society of Civil Engineers with a C+ in aviation and a D in roads. Both falling short of Georgia's B+ and C+ respectively (Engineers A. S., 2019).

In terms of aviation, Los Angeles (Hollywood) is fairly competitive with Atlanta. The state as a whole has 26 commercial airports and 217 general aviation airports. 11 airports rank nationally in terms of passenger traffic with Los Angeles International Airport coming in 2nd nationally only to Hartsfield-Jackson International Airport and comes in 3rd internationally behind Atlanta again and Beijing Capital International Airport. As well, the state houses the San Francisco International Airport which is 7th nationally. While runway condition is healthy, their problems come in when capacity is considered. While still competitive, they saw 17% of flight delayed at their 11 busiest airports in 2017 which was just under the national average of 18%. Aviation has a 10-year capital improvement plan starting in 2017 with 1,735 projects requiring $2.77 billion. Longer-term FAA funding authorizations are needed to increase investment and planning for aviation expansions (Engineers A. S., 2019).

Annually, there are approximately $61 billion in costs to Californians due to congestion-related delays, traffic collisions, and increased vehicle operating costs caused by poor road conditions. They ranked 49th nationally in road conditions in the US News & World Report Ranking. In April 2017 the Road Repair and Accountability Act provided $52 billion for local and state road repairs over 10 years. Estimates show that $130 billion total is needed over that period to bring roads to good repair. Southern California and the Bay area ranked 2nd and 3rd in most congested urban areas in the nation. The average driver spends approximately 3 days stuck in traffic each year with $29.1 billion lost by Californians from lost time and wasted fuel leaving the average driver with losses between $299 and $1774 annually. 2018 TRIP's analysis of Federal Highway Administration data says only 19% of major roads and highways are in good condition with 68% in mediocre and 13% fair. 52 of the 58 counties' local streets and roads were categorized as "at-risk" or "poor". There is a 10-year maintenance backlog of $137 billion with only $52 billion provided in funding leaving a gap of $85 billion. They must rely on local cities and counties to raise and invest their revenues to make up the room (Engineers A. S., 2019).

Population

Given the vast size of California compared to that of Georgia, and our focus on the Hollywood neighborhood, populations of Atlanta and Los Angeles will be compared here. (United States Census Bureau, 2019)

In 2019, the population of Los Angeles was approximately 4 million, 8 times that of Atlanta (~500,000). LA's population over 65 years old (12.1%) is slightly higher than Atlanta's (11.4%), in terms of the portion of the population. For those under 18 years old (LA: 21%; ATL: 18.5%) the portions have a wider gap with LA having a 2.5% larger portion of their population. LA then has a population over 65 years old of approximately 484,000 people and under 18 of approximately 840,000 people. Using the same assumptions from populations discussed in Chapter 2, that leaves a 356,000 increase in those available to work, assuming all people remain in LA and enter the CLF (LA CLF participation rate of 66.4%). (United States Census Bureau, 2019)

In Atlanta, the population over 65 is ~57,000 people with ~92,500 people under 18. This leaves an increase in those available to work at 35,500 people, assuming all people remain in Atlanta and enter the CLF (ATL CLF participation rate of 65.1%). (United States Census Bureau, 2019)

The percentage of the population of LA in 2019 with at least a high school diploma/equivalent certification was 77% (3.08 million). Those that went on to receive a bachelor's degree or greater made up 33.7% of the population (1.35 million). Atlanta had a greater percentage of the population with at least a high school diploma/equivalent certification with 90.3% (451,500) and a higher percentage to attain a bachelors or higher with 49.9% (249,500). As well, even though there was a higher proportion of both those with at least a high school diploma/equivalent certification, as well as at least a bachelor's degree, in Atlanta, LA produces more people in each category based on population. (United States Census Bureau, 2019)

A similar issue is seen in this population comparison as that of New York and Georgia. Los Angeles has a drastically larger population overall than Atlanta. This increased the population size of each category even if it is a smaller portion of the population than that of LA. LA has a larger workforce given these facts. However, the population of Georgia is more highly educated by a rather large margin. This could lead to the assumption of a potentially more skilled labor force.

Tax cuts/breaks

There are various comparisons to be made about California and Georgia in terms of film tax incentive programs. California arrived on the scene much later than Georgia. A requirement for budget of in-state expenditures for California is something that was much larger than that of

Georgia as well as the presence of a cap on credits of $330 million. This is more competitive of a cap than Louisiana and New Mexico but far behind New York’s $420 million cap and Georgia’s lack of a cap. It has uplifts like Georgia but includes a sunset provision like New York which is not seen in Georgia.

Hollywood, followed closely by New York, lead the way in film production leading up to the late 1990s. They began to falter when Canada introduced film tax incentives in 1997 and production firms began “running away” to take advantage of those credits (East, 2019). In 2004, the Job Creations Act stemmed from this occurrence of runaways, bringing firms back to the United States. Instead of returning to Hollywood though, other states had begun implementing strong film tax incentives and firms chose to locate elsewhere (East, 2019). Hollywood had a weak incentive that faded out in 2000 and was not replaced until 2009. Until this point, lawmakers in California chose to rely on their historical advantage, holding off a new incentive plan hoping companies would stay loyal to the panache and amenities of Hollywood rather than follow the money elsewhere. They were incorrect as firms took advantage of new incentives in early states like Louisiana, New Mexico, New York, and Georgia. California was one of the last to adopt a film tax incentive plan (East, 2019).

In 2009, Schwarzenegger finally helped pass a new tax incentive for production firms. It was called the California Film & Television Tax Credit Program. It set a cap of $100 million for qualified productions setting a total of $10 million aside for independent films (East, 2019). The criteria films had to meet was dependent on the type of project (feature film, movie of the week, television shows, etc.). A 20% tax credit per production was allowed. 25% was allowed for television shows and indie films that relocated to the state. To qualify, 75% of their budget and/or production days had to be spent in-state. These early incentives were awarded via a lottery system while the plan as a whole had a set sunset provision of 2014 (East, 2019).

In 2014, the "California Film & Television Tax Credit Program 2.0" was introduced and has continued to be amended. It increased the cap from $100 million to $330 million placing California on more even footing with states who had higher caps (CA Rev & Tax Code § 23685, 2018). As well, 35% of the cap was reserved for feature films. Uplifts were added similar to New York and Georgia where Out-of-zone areas of principal production facilities could qualify productions for an additional 5% credit (CA Rev & Tax Code § 23685, 2018). This uplift was only available to firms currently limited under the 20% credit. As well, the lottery system was removed and replaced with a job ratio analysis. It was meant to identify projects which create the most jobs and activity in the state. It was calculated via qualified wage expenditures plus 35% of the nonwage expenditures, all divided by the amount of credit requested by the production (CA Rev & Tax Code § 23685, 2018).

The incentive program was essentially a nonrefundable, nontransferable state tax credit where the credits could only be transferred to affiliate corporations that were a member of the generally controlled group. Independent films were an exception to the nonrefundable/nontransferable rules. Credits could be carried over for 5 years. As well, the amount allowed for visual effects work, and music scoring was increased, but the credit limit of 25% for qualified expenditures did not change (CA Rev & Tax Code § 23685, 2018). Program 3.0 is set to begin in June of 2020 with a sunset date in June 2025. It does not change the cap of $330 million per year. The more relevant features will not change (Tax Credit Program 3.0, 2020).

State Film Economies

The Georgia Fiscal Year 2019 report outlines the recent development of the film industry in Georgia (Georgia Department of Economic Development, 2019). 3,040 motion picture and television industry businesses are located in Georgia now with $2.9 billion in direct production spending in-state. FY19 saw 391 film and television productions and $9.2 billion in total wages in the film industry alone. The state has 1.1 billion square feet of purpose-built soundstage space and 2.1 billion square feet of retrofitted soundstage space. Tied in with the development of the film industry, small businesses in Georgia are benefiting directly. The FY19 report outlines various small Georgia businesses that are benefiting (Georgia Department of Economic Development, 2019). In North Georgia, Myers Carpet in Dalton has sold more than $1 million worth of carpet to film companies. Call me Crafty of Clarkesville has provided craft services to more than 35 film and television projects statewide. Cinema Greens has a 13,000-square-foot greenhouse, a six-acre nursery, and a 5,000-square-foot warehouse in Hampton dedicated to providing plants to the film industry. Those are just a few of the dozen companies mentioned in the report.

California has been able to retain the largest production of tv shows nationwide. Besides that, the state has run into trouble when it comes to the competitiveness of their incentive programs. A report by the Milken Institute cites a couple of problems and how the state can address them (Klowden & Jackson, 2018). First is the cap at $330 million per year in film tax credits. The state quickly reached capacity for credits with this cap and Milken recommended an increase to a $420 million cap to at least match that of New York. This will still be less competitive than the straight lack of cap for the incentive program in Georgia (Klowden & Jackson, 2018). As well, California has a 75% required spending of the budget in-state to receive tax credits. For films over $100 million in budget, this is difficult, especially with the fact that many productions now film in various locations rather than one spot. Milken recommended that this be lowered to allow larger productions to locate back in California (Klowden & Jackson, 2018). One advantage California did have, according to Milken, is the employment base. They cited Georgia's population and relatively new entrance into the industry in the mention of a lack of employment base specifically for the film industry (Klowden & Jackson, 2018).

Conclusion

Hollywood developed as a regional film production economy long before Georgia entered the market. Due to ideal weather and cheap labor costs, firms flocked to the Hollywood neighborhood. Due to increasing competition from other states following the stemming of runaways to Canada, Hollywood began to falter in its place as the Mecca of filmmaking. They waited too long to institute their film tax incentive programs, allowing other states like Georgia to get a foothold in the industry. In addition, their tax incentives are weak with sunset provisions causing uncertainty for future funding as well as a low yearly cap, limiting the number of projects that can receive a cap. Los Angeles is competitive in population demographics but without film tax incentives, there are no firms to make use of that skilled labor.

Chapter 3 Appendix. Table 2

	ATL	LA
Total Population (in millions)	.5	4
Age		
Under 18	18.5	21
Over 65	11.4%	12.1%
Economy		
Civilian Labor Force*	65.1%	66.4%
CLF Total Pop. (in millions)	.33	2.65
Education		
Minimum High School Equivalence	90.3%	77%
Bachelor or Higher	49.9%	33.7%

Data gathered from the United States Census Bureau for the year 2019 for Atlanta Georgia and Los Angeles, California. Civilian labor force defined as that population aged 16+ who are currently employed or unemployed (looking for work).

Chapter 4: Resource Development and Industry Sustainability

Labor development

As addressed in the literature review, a skilled labor force is vital to the success of regional economies. Without it there is less incentive for companies to locate in that region and if they do, the local population is not able to receive maximum economic benefit. It was the case in the early 2000s when Georgia began to appear on the film industry map that the labor force in Georgia was, in general, lacking in the skills required to facilitate film production. Instead of hiring Georgians, the few firms that first arrived flew their people in from out of state. Mayor Vince Williams of Union City Georgia (Southeast Atlanta) recalls this situation.

> The film industry has to understand that they must hire Georgia people. When this first started years before, they were bringing in their own people from New York, Los Angeles, or wherever it may have been, but we have to make sure these dollars stay in our community. (Williams)

Following the introduction of Georgia's film tax incentive program, legislatures like Mayor Williams began to realize the opportunity here for Georgian's and began putting in efforts to grow this skilled labor force. A large part of this was working with local colleges/academies to produce film professionals. Lee Thomas credits former Governor Nathan Deal with putting together the Georgia Film Academy to help fast track people into the industry. She cites over 6000 people who have completed the program and begun working on these sets in Georgia.

Along with these higher education institutions, there have been efforts at the high school level to provide industry exposure to those interested in the field. Georgia Career and Technical Education is a high school program that provides multiple paths for students across the state (Georgia Department of Education). It allows them to take classes aimed at providing professional skills/certifications in various fields including healthcare, engineering, marketing, agriculture, culinary, and now film production. Mayor Williams helped lead the efforts to introduce this new film production pathway in Fulton County Schools in the early 2010s (Klein, 2016). He describes sitting and watching the credits at the ends of movies and the vast number of people who work on these sets and saw this as an opportunity for students in Georgia to succeed.

> Those are real jobs that are needed when they make films and not only are they great jobs but they are jobs that make good money… that's a job for someone without a college education to come in and make a great career out of something they have a passion for. (Williams)

When discussing how the industry has developed to where we are today, he is grateful for the progress but mentions the importance of continued workforce development.

> One of the things that has to continue to take place is workforce training, workforce development, and workforce housing but also being able to make sure the skills are put in place by education. Partnering with Fulton County Schools, Clayton State, Georgia State, Atlanta Metro Studios, and the Georgia Film Academy, I thought that was the right thing to do if I were to bring an industry like this to the area. (Williams)

As well as the development of residents of Georgia, many professionals from industries across the country have followed the film industry to Atlanta. Overall though, Lee Thomas talks about how typically, as reported by the unions in Georgia, productions are about 85% local labor and 15% out-of-state with some projects, like The Walking Dead (90%+ local labor), surpassing expectations.

Is the current growth sustainable?

Sustainability of Atlanta

The film industry in Georgia is heavily reliant on Atlanta whether you consider the population, the resources, filming locations, an international airport, or the multitude of other factors it presents. Given this fact, the sustainability of the Georgia film industry is directly tied to the sustainability of Atlanta as a highly relevant, productive, and economically viable city. This sustainability can be looked at in terms of environmental sustainability or that of economic sustainability. The Atlanta Office of Resilience focuses on ventures that help to achieve both of those approaches. “The City of Atlanta’s Office of Resilience is entirely focused on ensuring these ideas. “The City of Atlanta Mayor's Office of Resilience creates and supports programming that addresses the region’s most pressing stresses and builds capacity among residents and city systems alike to better withstand future shocks” (The City of Atlanta Mayor's Office of Resilience, n.d.). Below are some initiatives by the Office of Resilience working towards the sustainability of the city.

- Clean Energy Plan: In 2017 the City Council voted to start transitioning Atlanta to 100% clean energy by 2035 while highlighting equity and affordable clean energy options.
- AgLanta Grows-A-Lot: This initiative invites entrepreneurs, non-profits, and residents to adopt vacant lots for 5-year periods to start urban gardens and farms.
- RED Lab: Atlanta Resilience: The Lab is designed to help residents use data and technology to solve community problems that are detracting from the resilience and livability of their neighborhoods. Early projects included code enforcement and rat issues.
- Parks and Greenspace: The Department of Parks, Recreation, and Cultural Affairs, to provide all residents with high-quality parks, facilities, and recreational programs introduced in 2005 the Greenspace and Recreation Opportunity Bond. This provides $105 million for land acquisition, new rec. amenities, and badly needed infrastructure improvements. This will also be adding bike trails to the BeltLine project.

These are a few examples of the projects in place to help ensure Atlanta not only remains a desirable place to live but becomes more self-sufficient.

Economic sustainability and outlook are important as well. The City of Atlanta is currently home to 13 Fortune 500, welcoming homebuilder PulteGroup and railroad giant Norfolk Southern, and 24 Fortune 1000 headquarters (Trubey, 2020; City of Atlanta, n.d.). Since 2010, Metro Atlanta has gained more than 650,000 jobs (Trubey, 2020). The population of Atlanta has increased by almost 20% in the past 2 years while the % of people that are high school graduates or higher rose from 86.2% → 90.3% and those receiving a bachelor's degree or higher also jumped from 45% → 49.9% (The United States Census Bureau, 2010; The United States Census Bureau, 2019). Building permits issued in 2010 totaled merely $1.35 billion compared to 2019's over $5.7 billion with the BeltLine, Midtown, and Buckhead leading the way in development (Trubey, 2020).

In terms of transportation, Atlanta isn't known for being a benign creature. One cannot speak about the city without mentioning the traffic jams, and the recent bridge collapse. In the wake of these stories and ideas of Atlanta transportation, there have been efforts to increase the quality and availability of public transportation. MARTA, for example, was approved for new tax revenues while the fuel tax was overhauled to pump millions of dollars into road and bridge improvements (Trubey, 2020). To top it all off, Hartsfield-Jackson International Airport isn't going anywhere anytime soon with a $6 billion renovation underway.

In sports culture, both the Braves and Falcons built brand new stadiums and while the Thrashers left in 2011, the city replaced them with Atlanta United who brought the city's second championship in its history and its first since the 1995 Braves World Series win (Baseball Reference; Trubey, 2020). As well, the Hawks' State Farm Arena had a $200 million makeover (Check out Atlanta Hawks renovated arena, 2018). Georgia State University took over the Braves' former Turner Field converting it into a new football stadium and is using the old parking lots for campus expansions (Tucker, 2017). The city has hosted NCAA Final Fours, the 2018 NCAA Football National Championship, the annual SEC Football Championship, the annual Chick-fil-a Kickoff Classics, Superbowl LI, and is home to the College Football Hall of Fame. It will also host the 2021 MLB All-Star festivities and is in the running for the 2026 FIF World Cup (FIFA; Trubey, 2020).

Georgia Film Industry Sustainability

When considering the development of an industry, it is important to look at not only how it got to where it is, but what the trends are and if the industry is sustainable for the foreseeable future. A larger part of this sustainability is ensuring that the factors that lead to the development, like the tax incentives, don't go anywhere.

It was said by all those interviewed and was addressed in various pieces of the literature cited previously that the main selling point, among many, for the film industry to locate in Georgia was the implementation of a very competitive tax incentive program. The goal of this program was to "position the state as a premier location for film, music, and entertainment technology" (Perdue, 2005). One can safely assume that, up to this point, this program has succeeded in its original goal. In Fiscal Year 2018 alone, the state saw 455 qualified productions which were the most since the tax credits passed in 2008. These productions saw upwards of $2.7 billion in direct spending in the state which is approximately the same amount as FY2017 where "Black Panther" and "Avengers: Infinity War" were in production (Ho, 2018). With $800 million in tax credits doled out to film production companies in FY2017, it appears that the incentive program is seeing a decent return on investment. That $800 million surpasses all other states with New York and California handing out only $420 million and $320 million respectively (Ho, 2018). As well, studios have put down roots in Georgia. Pinewood, for example, has just recently built a Georgia campus in Fayette County. This firm that plays host to many Marvel films, built this campus with 18 soundstages on 700 acres with its own Home Depot. (Dockterman, 2018)

Another factor mentioned earlier, besides the tax incentives, was infrastructure. For the film industry, there is a heavy reliance on soundstages for their production needs. For smaller films, this is not as big a problem as their needs are not too extreme but for big-budget films such as “Avengers: Infinity War”, larger studios are required. Firms looking to produce films incur large overhead when they have to build these themselves. In Georgia, Lee Thomas highlights the fact that we are lucky that we had a lot of local investors put a tremendous amount of money into soundstages.

> We can attract projects we’ve never been able to in the past because they require large soundstages in order to shoot here. That is something that’s hard to get people to do. (Thomas)

Buy-in from local investors has given Georgia a distinct advantage over other filming locations. Firms can lower their costs due to the pre-existing infrastructure built by firms like Raulet Property Partners, Inc.

On top of everything stated above, it is of utmost importance that, for this industry to continue to thrive and have a prosperous future in Georgia, that the legislatures elected prioritize it. When asked about his expectations for the growth of the industry, Mayor Williams cites the importance of legislative backing.

> I tell you I do see continued growth but what I’m concerned about is what will happen from a legislative approach. Will we have legislatures that won't understand the real impact this is having on this community? (Williams)

The main threat this legislature sees to the film industry in Atlanta is not it being “stolen” by another region, but that legislatures will not value its impact on the community and will not prioritize keeping them here. For example, North Carolina made policy decisions not conducive to attracting and keeping production firms in the state. In 2016 North Carolina passed HB2 which required citizens to use public restrooms that corresponded with the gender on their birth certificate. In response to this controversial policy, the NCAA, musicians like Bruce Springsteen, and film production firms like Disney pulled from the state or excluded it from future consideration (Ingram, 2017). With the industry beginning to dry up, many workers in the film industry and production companies themselves moved shop to Georgia. A similar situation was seen in Georgia following the signing of the controversial "heartbeat bill" by then newly elected Governor Brian Kemp. There was immediate backlash similar to that of North Carolina (Evans, 2020). If not for the bill being blocked by a federal judge from going into effect on January 1st, 2020, Georgia may have seen the same problem North Carolina saw. While these two instances were not policies directly related to the film industry, they affected the perception of their states. Legislatures must be aware of the impacts their policies will have on an industry, whether it be film or another.

Chapter 5: Conclusion

The occurrence of agglomeration economies has increased in recent decades. This phenomenon includes the film industry. Georgia has developed a successful regional economy focused on film production that has quickly risen to represent "New" Hollywood, "Yallywood". Many publications and pieces of literature cite film tax incentives as reasoning for the development of the Georgia film industry and leave it at that. Georgia was one of the very first on the scene with tax incentives giving them strategic footing on top of their highly competitive policies. While the incentive program is competitive and is a large part of the reason firms moved to Georgia, the success of this regional economy is reliant on many other factors.

Infrastructure, landscape, and the growth of a skilled labor force all lend to the success of the Georgia Film Industry. If it came down solely to the tax incentive program, then any state could implement a similar program and attract production firms away from Georgia. Instead, those factors mentioned above that are unique to Georgia put it on a different playing field than other regions. Its all-around infrastructure is in better shape than that of other competitive states. Hartsfield-Jackson International Airport is a large part of this. As well, Georgia's variety of landscape is like none other, providing a multitude of filming locations all within driving distance of the film industries central hub of Atlanta. In terms of skilled labor, the literature on the development of Georgia cited a lack thereof in the early 2000s. With efforts from state officials in creating the Georgia Film Academy as well as local lawmakers implementing film production career technical education in high schools, the availability of passionate, skilled workers in the film industry is booming in the State of Georgia.

As well, the state has support from its legislatures and citizens to court this industry. Tom Luse is a Georgia native who began his career on the Georgia-based film *Glory* and is now a producer of the *Walking Dead* is quoted saying "It's not enough to just get us here," in reference to tax incentives, "The mayor [of Senoia] and the state are eager to help, allowing us to shut down bridges and streets and take over towns." (Dockterman, 2018) From top to bottom, Governor to student, there was interest in the success of the Georgia Film Industry. Local investors, like the Raulets, had to do their part. They had to build the infrastructure to attract these firms. This was not an effort by singular actors, but a statewide effort to sell Georgia and its people as a place for the film industry to thrive. Mayor Williams referenced this phenomenon.

> We have a lot of great people from the state level who support this and see the value in this and certainly our schools, children, and communities deserve to be a part of this but it will take all of us to ensure we reap the benefits of it. (Williams)

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