“Our mission is to search out unifying elements for the Corridor as a whole as well as to reflect and enhance the quality of the diverse places in it along the way.”
Acknowledgments

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We are grateful to Marian Liou for her enthusiasm and for allowing us to participate in her community engagement process; this shed invaluable light on the needs and priorities of stakeholders of the Jimmy Carter Boulevard.

Jonathan Gelber of the Bleakly Advisory Group has been an essential resource and we appreciate their optimism, and prompt assistance with economic and market analyses.

Sincerely,
the Jimmy Carter Boulevard Studio,
2017

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Executive Summary

This studio set out to develop a comprehensive understanding of the diverse, rich, and vibrant Gateway 85 Gwinnett Community Improvement District. From that, our purpose was to create a placemaking framework to spotlight the special character of the Jimmy Carter Boulevard Corridor and its neighborhoods. Thus, our mission was to search out unifying elements for the corridor as a whole, as well as reflect and enhance the quality of the diverse places along the way. This study considers the elements necessary for a comprehensive approach. In our search for placemaking strategies, we considered five core content areas of identity and culture, transportation, economic development, education, and housing, so that we could make well-rounded recommendations for steps towards a better Jimmy Carter Boulevard.

Identity and Culture

Identity incorporates the complex mix of people and their cultures in a changing majority-minority area, the suitability of the forms that house their activities, and the natural environmental assets that frame them.

In this section, we profile the profound demographic, cultural, and social changes that have swept through Jimmy Carter Boulevard over the past thirty years. Some of this period’s changes include its transition to minority-majority status and the massive growth in the share of the population that was born abroad, including the top ten countries of origin for these many immigrants. As a result of these shifts, many of the land uses within the Jimmy Carter Boulevard Corridor are no longer suitable for the community’s desired uses. Therefore, we propose five intervention types to address these identity and cultural changes: opening new Access and Street Network, offering typologies for Commercial Strip Retrofit, Re-imagining Key Parks, introducing a Multi-Use Trail Network, and forming an Interfaith Council.

Transportation

Transportation incorporates the full range of travel modes: cars, trucks, transit, walking, and biking, and ways to rearrange the current systems to better serve community needs, with emphasis on prioritizing access and safety over vehicle mobility.

In this section, we discuss the significant shortcomings of the current system, including the inefficient and dangerous Diverging Diamond Intersection (DDI), the limited transit offerings, and the weak or absent bicycle and pedestrian infrastructure. Based on these conditions, we propose: replacing the DDI with a Double Crossover Merging Interchange, rerouting and expanding the Transit Route system, and improving Bike/Pedestrian Safety, such as comprehensive crosswalk improvement and traffic signal synchronization.
Economic Development

Economic development considers the challenges and opportunities posed by an area with extreme jobs-housing mismatch and a thriving business community surrounded by relatively high unemployment, meager wages, and low educational attainment.

In this section, we discuss the current circumstances of businesses and workers in the Corridor, and propose three key interventions: the introduction of Urban Agriculture, a CID-led Stormwater Management effort, and Community Initiatives including establishing a Center.

Education

Education puts emphasis on assuring that Gwinnett County’s outstanding educational attainment record continues to lift children in this part of the county, even as income disparities and cultural challenges mount.

In this section, we profile education on Jimmy Carter Boulevard, and recommend two CID-level interventions: acting as an Information Hub to disseminate information about resources, and building coalitions to connect workers, employers, and education stakeholders.

Housing

Housing seeks to assure that residential opportunity, cost, and types can accommodate and sustain the full range of incomes, ages, and cultures that characterize the Jimmy Carter Boulevard Corridor, both now and in the future.

This section summarizes current housing issues in the Corridor, including low home values and high cost burdens, before proposing three interventions: Home and Apartment Repair Program providing funds for upkeep, an Ownership Assistance program, and Adaptive Reuse of old warehouses.

It is our hope that the redevelopment, placemaking, and improvement strategies proposed here can help further Gateway 85 Gwinnett CID’s journey towards building a vibrant, thriving, sustainable Jimmy Carter Boulevard Corridor.
For the purpose of analyzing and addressing the range of issues present on site, these five focus areas offer a closer look at key aspects of public life and policy that affect those who live and work in the study area.

**Identity**
Develops strategies to promote density along the Corridor, promote active transportation modes, and leverage existing cultural assets.

**Transportation**
Seeks to promote complete streets by providing convenient, affordable, reliable, efficient, safe, and interactive transportation.

**Economic Development**
Addresses present economic conditions of the corridor and proposes measures to incentivize investment into the region.

**Education**
Lays out the current state of education in the corridor and ways in which the CID can encourage academic excellence.

**Housing**
Summarizes housing conditions and offers steps to preserve units, increase ownership, and rework obsolete buildings.
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<td>Introduction</td>
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Source: Google maps
Introduction

Jimmy Carter Boulevard and Gwinnett County are transitioning in ways that have already begun to shape their culture. Their urban form has not kept pace with these changes, and currently does not fully serve all uses or users.

Countries of Origin for Jimmy Carter Boulevard’s Immigrant Population

Jimmy Carter Boulevard has attracted immigrants from every continent and 70 countries, bringing with them a great diversity of cultural practices and traditions, faiths, cuisines, and lifestyles. Jimmy Carter Boulevard’s current urban design is not well suited for many of the activities this population pursue, such as the scarcity of non-religious, welcoming public gathering and community spaces for performances, classes, and more.

**Top 10 Origin Countries**

<table>
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<th>Country of Origin</th>
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<td>1  Mexico</td>
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<td>2  Vietnam</td>
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<td>3  Guatemala</td>
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<td>8  Ethiopia</td>
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<td>9  Dominican Republic</td>
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Jimmy Carter Boulevard and Gwinnett County are transitioning in ways that have already begun to shape their culture. Their urban form has not kept pace with these changes, and currently does not fully serve all uses or users.

**Introduction**

In 1990, the population along Jimmy Carter Boulevard was 76.89% white. By 2000, that percentage had dropped to just 28.25, while the Hispanic population share of Jimmy Carter Boulevard's people rose at 36.80%. Since then, the white population has continued to decline while the share of foreign-born residents has greatly increased, leading to greater demographic and cultural diversity.

**In Transition**

In 1990, the population along Jimmy Carter Boulevard was 76.89% white. By 2000, that percentage had dropped to just 28.25, while the Hispanic population share of Jimmy Carter Boulevard’s people rose at 36.80%. Since then, the white population has continued to decline while the share of foreign-born residents has greatly increased, leading to greater demographic and cultural diversity.

Origin Countries

Demographics

Jimmy Carter Boulevard is younger than the rest of the county. The median age in Jimmy Carter Boulevard is 30, while Gwinnett County’s is 34.5. Moreover, the non-white population skews young — the white median age in Jimmy Carter Boulevard is 40, while the median age for the non-white population is 26.

Poverty rates have also grown in the study area (see Area 3), especially among the immigrant population, and may call for different modes of travel. Coupled with the fact that 17% of workers have no car, Jimmy Carter Boulevard needs more mobility options.
The population along Jimmy Carter Boulevard has grown by 46.83% since 1990, from 41,743 to 61,291. Gwinnett County is projected to more than double its population by 2035. However, Jimmy Carter Boulevard is already a heavily congested corridor, and will not be able to accommodate this increased load. Auto-centric development has created an environment inimical to all other forms of mobility. Numerous curb-cuts provide access to individual strip centers, but break up the pedestrian realm. Similarly, heavy traffic along Jimmy Carter Boulevard and its collector roads prevent widespread bike infrastructure from being implemented as well as prohibiting a robust transit service that can carry passengers the full north-south route along Jimmy Carter Boulevard. Even for drivers, the corridor can be difficult to navigate since many destination have poor access. If Jimmy Carter Boulevard is to remain a vital corridor as the County grows and accommodate its diversifying population, then it must address the fundamental flaws of auto-centric design.

Reimagining the Walmart Property from being implemented as well as prohibiting a robust transit service that can carry passengers the full north-south route along Jimmy Carter Boulevard. Even for drivers, the corridor can be difficult to navigate since many destination have poor access. If Jimmy Carter Boulevard is to remain a vital corridor as the County grows and accommodate its diversifying population, then it must address the fundamental flaws of auto-centric design.

The Studio proposes five main strategies for addressing both diversity and congestion throughout the study area: 1) opening alternative streets; 2) retrofitting strip centers; 3) enhancing parks; 4) installing bike and pedestrian trails; and 5) facilitating an interfaith council. These strategies aim to build community capacity, promote density along the Corridor, provide alternate routes for pedestrians and cyclists, and open alternative access points for vehicles. With these strategies in mind, Gateway 85 Gwinnett CID can reduce congestion while promoting the attractiveness and economic vibrancy of Jimmy Carter Boulevard.

Highlighting the Gateway to Best Friends Park

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01 Alternative Streets

Offering alternative access to the commercial buildings adjacent to Jimmy Carter Boulevard alleviates congestion, facilitates interparcel connectivity, and offers a safe, pleasant experience for pedestrians.

02 Commercial Strip Retrofit

Retrofitting commercial strip by densifying underutilized parking lots and adding public spaces increases the cultural and economic vibrancy of Jimmy Carter Boulevard while promoting walkability in the area.

03 Park Enhancements

Enhancing parks brings a renewed sense of activation along a corridor characterized by congestion and a lack of green space, while redefining gateways offers new opportunities for hosting community gatherings and landmarking park spaces.

04 Trails

Transforming an auto-centric corridor and creating a livable community with multi-use trails that provide connectivity to parks and vibrant places. The multi-trail network will employ unused land, such as utility, railroad, and right-of-way easements.

05 Interfaith Council

Acting as an intermediary among interested religious organizations to form an Interfaith Council enables more collaborative faith-based community development.
01 | Access and Street Network

Redundant access points to commercial buildings from Jimmy Carter Boulevard contribute to worsening traffic congestion and prevent walkability along the Boulevard.

Introduction

The Jimmy Carter Boulevard Corridor’s land use map (left) shows a high concentration of business, commercial and industrial buildings along the Boulevard. Most of these buildings attract many visitors, the majority of which are motorists. Parking lot sizes are designed to host a large number of vehicles. Access to business and commercial buildings is achieved directly from the Boulevard with singular access to every building. With such land use patterns common throughout the Jimmy Carter Boulevard Corridor and considering the highly congested nature of area roads, this redundant access might adversely affect the quality of experience for both motorists and pedestrians on the Boulevard. Therefore, we recommend thinking about shifting access to side streets to address issues of congestion, access, pedestrian safety, and interparcel connectivity.

Strategy

The process of adding a new street network requires identifying available space that offers the opportunity of adding new arterials without changing the existing features of the built environment. As a first step, such a street network would attempt to connect between the existing side streets through additional streets in order to maximize connectivity, smooth traffic, and create continuity within the Jimmy Carter Boulevard Corridor. Looking at the existing street structure as well as land use patterns, and taking into consideration the physical environment, we came up with a modified street network. By breaking up superblocks, around 20 new streets can be added to the current street map. Most of them connect between already-existing streets. By providing new side street access, development opportunities are improved even as congestion on Jimmy Carter Boulevard is relieved. Parcel size (particularly unused areas) and vacant land may offer other possibilities for such streets.
Current Streets Map

Traffic and access
Jimmy Carter Boulevard is a heavily congested arterial. Most access to the existing buildings is directly from the Boulevard. The recurrent stops performed by vehicles entering and exiting building parcels contributes to increased traffic, vulnerability to crashes, and impedes smoothness of vehicle flow. Thus, having access to these buildings from side streets alleviates traffic on the Boulevard.

Walkability
The Jimmy Carter Boulevard parcel sizes are pedestrian unfriendly. Interparcel disconnection prevents pedestrian from having a pleasant, walkable experience, and there is an absence of easily accessed streets within walking distance from residential areas, which new streets would solve. Having more streets will also provide for tree-lined and well lighted streetscapes.

Aesthetic Benefits
Reducing direct access from the Boulevard will enable sidewalk continuity, which will improve the pedestrian experience. Shifting access has aesthetic benefits as well. It will enable the creation of a green screen on both sides of the Boulevard through adding adequate trees and plants, which will give more character to Jimmy Carter Boulevard and play the role of a pleasant cover to its many large parking lots.

Proposed New Streets

Redundant access points to commercial buildings from Jimmy Carter Boulevard contribute to worsening traffic congestion and prevent walkability along the Boulevard.
Re-enforcing the Use of Existing Streets
In addition to integrating more side streets to the existing street network, reinforcing the usage of existing side streets for access helps connect between the existing streets and the new streets and also contributes to providing possible new access to these parcels.

Parcel Disposition Proposition

Parcel Modification
Incorporating new streets to the existing street map, on one level, helps to reshape and resize the parcels. In doing so, the pedestrian experience on Jimmy Carter Boulevard will become more pleasant, as access becomes easier and walkable. On another level, it prepares the parcels for possible future uses, like mixed-use and more intense development over time. Finally, reorganizing the parcels allows for incorporating more public space such as park and plazas.

Redundant access points to commercial buildings from Jimmy Carter Boulevard contribute to worsening traffic congestion and prevent walkability along the Boulevard.
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

**Evaluation: Identification of Typologies**

Along the Jimmy Carter Boulevard Corridor, there are three distinct types of commercial strips that share some similarities, but still require tailored retrofit strategies. These types are: 1) big box developments centered around an anchor store; 2) strip malls without an anchor store; and 3) groups of adjacent businesses in disconnected parcels.

**“Big Box” with Anchor Store**

Examples of this type of development are the areas around Walmart (image below), Kroger, Oakbrook Square Shopping Center, and the Global Mall. This type of development has an established anchor store that attracts significant numbers of daily visitors. As can be seen in the figure ground of each anchor (left), large building setbacks and a sea of parking hinder connection between the street and activities housed in the buildings.
There are several strip malls such as Gwinnett Horizons, pictured below, along the Jimmy Carter Boulevard Corridor. As shown in the figure grounds to the left, these strip malls have vast parking lots that disconnect them from the street. However, this overabundance of parking spaces also provides room for potential redevelopments that could include the addition of housing, offices, public spaces and improvement of pedestrian facilities. Nevertheless, since these strip malls do not have anchor stores to draw in visitors and promote activity, it is essential to maintain the street visibility and appeal of the strip malls regardless of the kind of redevelopment explored.

Source: Google Maps

Map of Strip Malls without Anchor Stores
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

The parcel-by-parcel development approach that has been employed along the Jimmy Carter Boulevard Corridor obviates the opportunity to develop cohesive access points. Moreover, the large number of curb cuts (see image of businesses along Jimmy Carter Boulevard with many curb cuts and no interparcel connectivity below) negatively impacts pedestrian safety and the potential pleasure of walking or biking. Promoting interparcel connectivity would provide opportunities to increase pedestrians safety, create frameworks for a more efficient system of storm water management, and allow the addition of green and public spaces.
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

Design Principles

01 “Big Box” with Anchor Store

Example 1: Oakbrook Square
Shopping Center, home of the famous Hong Kong Supermarket, a major multicultural activity attractor

Principles

1. Highlight and leverage the existing anchor store.
2. Increase higher density mixed-use development potential for additional retail, office, and residential structures.
3. Incorporate a public plaza and linear green spaces that connect the anchor store, transit options, and trails.
4. Incorporate bio-swales into plaza and structure parking.
5. Reestablish connectivity between Oakbrook Parkway and Jimmy Carter Boulevard with a public street through the property.

Opportunities and concerns

This example addresses a concern many business owners share: visibility. New buildings may maximize density via height while maintaining an open view of the main anchor store. Meanwhile, defined parking areas anticipate a future grid pattern.
02 | Commercial Strip Retrofit

Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

Design Principles

01 “Big Box” with Anchor Store

Example 2: Walmart

Principles

1. Highlight and leverage the existing anchor store.
2. Increase development potential for additional retail and residential structures.
3. Incorporate a public plaza and linear green spaces that connect the anchor store, transit options, and trails.
4. Incorporate bio-swales into plaza and structure parking.

Opportunities and concerns

The prominence of this anchor store provides an opportunity to densify, such as by constructing new housing and offices to increase the area’s supply. The vast underutilized parking lots could be transformed into a public plaza and linear park which would enhance both the cultural and economic vibrancy in the area. Anchor stores a typically have only a 20 year life expectancy, and by re-envisioning this super block to facilitate more remunerative and sustainable land uses, Jimmy Carter Boulevard can retain the economic vibrancy of the area.

Ultimate Potential Built-out of Walmart Property:

To occur in phases driven by markets, beginning with green mall link to Jimmy Carter Boulevard.
The section image above shows the proposed linear park and plaza that stretch from the Jimmy Carter Boulevard to the Walmart as anchor point. The suggested pocket green spaces that are interwoven throughout the site connect to the proposed multi-use trails. Meanwhile, the recommended new street networks would break down the large superblock and facilitate more creative and active land uses and better connectivity to Rockbridge Road.
Due to the complexity of the redevelopment process and current ownership of the sites in question, a phased approach would be necessary to redevelop something like a Walmart. For the first phase, the studio proposes the creation of additional street networks, the addition of liner buildings along these inner street networks, and the provision of an initial public plaza while retaining the current parking spaces. In the second phase, the studio suggests the extension of the public plaza and linear park and the addition of liner buildings along the plaza. Within the last stage, the studio recommends a densification of the area by incorporating residential units and landscaping the pocket green spaces that eventually connect to the proposed trails. This phasing strategy is not exclusive to the Walmart area and can also be applied to other “big box with anchor store” types of development.

Note: The phasing elements can occur in whatever order the market supports.
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

Design Principles

Strip Mall without Anchor Store

Example 1: Brook Hollow Village

**Principles**

1. Incorporate plaza and pedestrian boulevards that connect nodes.
2. Break up the superblock to facilitate a more creative use of frontage and liner buildings.
3. Strategically reduce the number of parking spaces.

**Opportunities and concerns**

This site takes into consideration the view from Jimmy Carter Boulevard at driving speed. The expansive parking lot, even when busy, looks empty. By adding buildings toward the back of the lot, the visual depth is reduced, giving a greater sense of enclosure, occupancy, and activity.
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

**Design Principles**

**Strip Mall without Anchor Store**

**Example 2: Smoketree and Merchants Square**

1. Incorporate plaza and pedestrian boulevards that connect nodes.
2. Break up the superblock to facilitate a more creative use of frontage and liner buildings.
3. Strategically reduce the number of parking spaces.

**Opportunities and concerns**

This area is unique because it has two strip malls (i.e. Smoketree and Merchants Square) right across from one other. By incorporating plazas and pedestrian walkways that stretch between the two strip malls, we have the opportunity to redevelop this area into a green gateway that connects Jimmy Carter Boulevard, Lucky Shoals Park, and the proposed multi-use trails.
Design Principles

**03 Adjacent Businesses inDisconnected Parcels**

**Example 1: Cluster between McDonough Dr NW and Dawson Blvd**

**Principles**

1. Develop interparcel connectivity by reducing the number of curb cuts.
2. Incorporate shared plaza and outdoor dining areas to connect adjacent businesses.
3. Transform parking spaces along the corner into more active green spaces.
4. Add liner buildings close to the street to facilitate a more active ground floor and improve the public realm.

**Opportunities and concerns**

There are several existing restaurants in the cluster between McDonough Dr NW and Dawson Blvd. This arrangement provides an opportunity to redevelop this cluster as a whole entity by connecting several currently-disconnected properties while providing more vibrant public spaces in the process. The reduced number of curb cuts would create more continuous sidewalks, thus improving the walkability and safety of the area.
Many of the commercial developments along Jimmy Carter Boulevard are aging and generic. These typologies and design principles can guide a retrofits for commercial strips and provide vibrant public spaces along the Corridor.

### Design Principles

#### Adjacent Businesses in Disconnected Parcels

**Example 2: Cluster between Live Oak Pkwy and Singleton Rd.**

#### Principles

1. Develop interparcel connectivity by reducing the number of curb cuts.
2. Incorporate shared plaza and outdoor dining areas to connect adjacent businesses.
3. Transform parking spaces along the corner into more active green spaces.
4. Add liner buildings close to the street to facilitate a more active ground floor and improve the public realm.

#### Opportunities and concerns

This site builds on an alternative street created by extending the back road through to another major shopping center and connecting these disconnected strips. Meanwhile, the number of curb cuts along Jimmy Carter Boulevard are reduced. This site, however, does contain two auto-centric uses, a car wash and U-Haul, so some consideration should be given to such sites in redesign.
Overall Interactivity Process

Retrofitting the commercial strips along the Jimmy Carter Boulevard Corridor requires a dynamic process which entails sequential, interactive factors, including design principles, market forces, stakeholder engagement, changes in regulation, and catalytic developments.

Principles

While each development site is unique, the design principles for commercial strip retrofitting which we have proposed for each typology could serve as guidelines for future developments along Jimmy Carter Boulevard.

Catalytic Developments

It is not feasible to retrofit all commercial strip along Jimmy Carter Boulevard at once. The process of retrofitting existing commercial strips while providing vibrant public spaces would be done incrementally. Successful redevelopment in one area can act as a catalyst for other redevelopments in other areas. Once the merits of retrofitting -- including greater economic profitability and community benefits -- gain more prominence, more redevelopments will spring up along the Corridor.

Stakeholder Engagement

There are a variety of stakeholders who should be actively engaged in the process of commercial strip retrofits. The CID can identify property owners who seek to develop their properties. Then, the CID should encourage those property owners to apply the appropriate design principles in their development plans. When land consolidation or easements among different property owners are needed, for example, in attempt to additional street networks, the CID could facilitate that process. Also, Jimmy Carter Boulevard community organizations should be actively informed and engaged in this process.

Changes in Regulation

Zoning regulations need to change to accommodate more mixed-used developments along Jimmy Carter Boulevard. Local governments could also consider applying a “pink zone” (such as those in Detroit) to facilitate redevelopment of “big box with anchor store” sites. The “pink zone” aims to reduce red tape, allowing creative, leaner regulatory options which support the sort of placemaking that drives economic development. This may include allowing development to consolidate stormwater management approvals, modify street design standards, and bypass certain review processes and granting preemptive approval for certain building types.
Parks are the opportunity for the Jimmy Carter Boulevard Corridor to provide venues for exciting community events, promote healthy living, and dedicate space for passive recreation and ecological interactions with nature.

The Oval

The existing network of parks near Jimmy Carter Boulevard are well distributed throughout the corridor, forming a perimeter boundary for the study area. Specifically, the organizational graphic for park siting is “the oval” pictured to the left. Ranging from golf courses, to community centers, to ball fields, parks incorporate some of the Corridor’s only cycle trails. The parks currently in place are a true amenity and provide examples of the value the Jimmy Carter Boulevard Corridor has to offer its residents and day-time workers alike.

In addition, intriguing for its green space future, is the possibility of utilizing the innumerable existing green strips. Utilizing rights-of-way, and even more tantalizing, the headwaters of Peachtree, Beaver Ruin, and Jackson Creeks suggest a fine grain opportunity for trail connectivity.
Parks are the opportunity for the Jimmy Carter Boulevard Corridor to provide venues for exciting community events, promote healthy living, and dedicate space for passive recreation and ecological interactions with nature.

By referencing Gwinnett County Parks and Recreation’s catalogue of county parks, we inventoried current park statistics including size, trails, indoor and outdoor spaces, and environmental features for each parkland. Based on the conditions, we then developed specific interventions and additions that could enhance each park.
Parks are the opportunity for the Jimmy Carter Boulevard Corridor to provide venues for exciting community events, promote healthy living, and dedicate space for passive recreation and ecological interactions with nature.

**Conceptual Designs**

The following pages further develop the aforementioned strategies to enhance specific parks into conceptual designs. We hope these advised enhancements would bring a renewed sense of activation and life to parks along the Jimmy Carter Boulevard Corridor and enable a greater variety of recreation options during the daytime as well as at night. Opportunities for additional trail connections and leveraging natural environmental features are just two of the many elements featured in these concept designs.

A significant issue identified both at Best Friend Park to the east and Lucky Shoals Park to the south is the lack of a welcoming entrance that is both easily visible to residents and visitors and that exemplifies the value that the park adds to the community. Therefore, recommendations for both of these parks focus specifically on re-envisioning a new gateway entrance tailored to each park’s specific circumstances.

Environmental assets come into play most strongly in the proposal for the Beaver Ruin Creek Ecowalk. The presence of a creek within close proximity to the study area is practically undetectable when visiting, but is a feature that stands to significantly benefit the community if made accessible and attractive.

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**01 Beaver Ruin Creek Ecowalk**

**02 Lucky Shoals Gateway Expansion**

**03 Best Friend Gateway**
For this particular trail, typical paving material could be more in keeping with natural surroundings and less costly than a standard multi-purpose trail required to function as a dual recreation and transportation solution. Instead, the Ecowalk would be respectful of adjacent residential uses with minimal impact and disruption. Strict hours would be kept in order to forgo exterior lighting of the Ecowalk, a feature that is both responsive to the natural environment and cost effective. A useful precedent for this informal trail format is the Georgia Botanical Gardens located in Athens, Georgia.

Notable issues and considerations to evaluate and navigate:
- Garnering support from Springdale Estates HOA and residents
- Property acquisition for access easement to provide trail into green space
- Policies in place to protect and maintain water quality
- Maintaining safety in an area with low public visibility
- Inconveniences to neighborhoods in constructing path infrastructure within a tight footprint
- Potential for incorporating stormwater management practices

Conceptual rendering of a protected, passive nature-oriented trail. Placards contain information on landscape species and present opportunities for synthesizing education with recreation.
Overall programming additions:
- Trail overlooks and rest stops
- Gateway, roadside trees, and signaled crosswalks as traffic calming measures
- Iconic sculptural elements that contribute to sense of place

Issues and considerations:
- Coordination with Smoketree HOA and accessibility to Lake Marett
- Study precedents for combining and converting standard baseball fields into larger and more flexible multi-use fields (for cricket, etc)
- Increase exposure and continuity throughout the park through a more formal gateway and expanding the trail north (see below)
The current entrance to Best Friend Park off of Jimmy Carter Boulevard is characterized by minimal landscaping, heavy overhead utilities and supporting structures, and a corroding metal truss archway with signage reading “No Trucks” above one lane of roadway and “Do Not Enter” above the other. In order to create a more inviting entrance to a park that already has a lot to offer the community, the studio proposes retrofitting the metal truss with metal letters that read “Best Friend Park” in an eye-catching font and include the Gateway 85 Gwinnett CID logo with a bright hue. Street tree landscaping and sidewalks along Jimmy Carter will open up the entrance to the public, and a plaza spilling out toward the entrance protects users from the busy street, creates visible view-sheds of the berm alongside Eagle Rock’s property, and creates a gathering space of roughly 2.5 acres for outdoor events.

In a similar view, an entrance off of Buford Highway at Old Rockbridge Road should be developed, improving the streetscape and incorporating a bike and pedestrian path that would cross Buford Highway and connect with the railroad right-of-way.

Overall programming additions:
- Summer film series on pop-up movie lawn with opportunities to screen international films and films in a variety of languages
- Food trucks with local cuisine
- 2.5 acre plaza as a large gathering / concert venue
- Connectivity to the greater proposed trail network
Finding underutilized or leftover “residue” spaces within Best Friend Park and up-programming them to further the health of the community is the premise behind the Best Friend Park movie lawn proposal. In the above images, a dead-end sidewalk is extended and tied into a sidewalk infrastructure, providing a safe place for pedestrian circulation throughout the park. Street lighting, trees, and banners add a sense of place to the park and make it into a much safer space at night.
A multi-use trail network will greatly enhance the auto-centric Jimmy Carter Boulevard Corridor and create a more livable community by providing connectivity to parks and vibrant public spaces and by encouraging active travel and recreation.

A multi-use trail network will greatly enhance the auto-centric Jimmy Carter Boulevard Corridor and create a more livable community by providing connectivity to parks and vibrant public spaces and by encouraging active travel and recreation.

A multi-use trail can provide a sense of place and identity for the community by connecting all the commercial and residential areas to all the parks and to other recreational facilities. Trails are a unique community amenity that can provide the diverse population living around Jimmy Carter Boulevard with a space to interact and form a connection with their neighborhood. It gives residents the opportunity to enjoy the natural beauty of their environment, while also gaining a sense of community pride. Overall, it will improve the character of spaces serving the community living near the Jimmy Carter Boulevard Corridor.

As this region continues to grow, it will be essential to maintain a livable community for all. According to the Atlanta Regional Commission’s Livable Centers Initiative (LCI), a livable community consists of “vibrant, walkable places that offer increased mobility options, encourage healthy lifestyles and provide improved access to jobs and services.” A multi-use trail would be able to meet all of these requirements for a livable community, as it can be used for both recreational and utilitarian purposes.

Communities located near trails benefit from the inflow of visitors that will go to nearby restaurants and retail establishments. It also makes the community a more attractive places to live, as home-buyers rank walking and biking paths as one of the most important features of a new community.

The map to the left shows possible trail routes along with the trail recommendations from the GVCID Indian Trail Road Jimmy Carter Boulevard Pedestrian and Bicycle Connectivity Study (2012). The oval represents the existing network of parks surrounding Jimmy Carter Boulevard. There are opportunities to connect these parks with schools, residential areas, and commercial uses that are located within this oval.
The implementation of the multi-use trail network can take advantage of the existing conditions surrounding the trail to improve the physical built environment. There are opportunities for creating a safe and livable community by providing a convenient non-motorized commute option throughout the community. The usage of road and utility rights-of-way, streams, and underutilized land and excess parking will transform the auto-centric corridor into a safe environment that encourages residents to interact with their neighbors and participate in outdoor recreational activities. The trail network will result in an increase of greenspace and vegetation along the corridor, as well as an opportunity to incorporate storm water management landscaping throughout the trail network.

Protecting the community and the environment will be the main goals for the implementation of this trail network. Floodplains and creeks exist throughout the Corridor and must be considered when implementing the multi-use trail network. Also, the safety of pedestrians should be considered a high priority and be taken into account throughout the trail network's development. Introducing ecological amenities such as boardwalks and natural buffer zones protect these areas from contamination and pollution run-off, and will be necessary for maintaining water quality.

Adding proper, signalized crosswalks in strategic locations will provide the safest and most convenient route for pedestrians. These crosswalks, accompanied by far more numerous streetlights, will work together to ensure a safe, inviting pedestrian environment.

The trail network will utilize some of the space from excess parking lots located throughout the corridor. The topography of this corridor consists of elevated land that drains into nearby floodplains. The incorporation of sustainable landscaping will help to absorb and clean any runoff water. Passive stormwater management systems that apply non-mechanical methods of collecting, cleaning, and storing rainwater can be beneficially used or naturally absorbed into the landscape. Such a system could include landscaping such as bioswales, rain gardens, vegetative swales, drainage ditch check dams, and infiltration systems. In addition, there is an opportunity to activate underutilized land within utility, railroad, and right-of-ways easements. The utilization of easements is a common method of revitalization that many municipalities have successfully implemented in neighborhoods throughout the country.
There may be a few multimodal intersections within the trail network that will contain a high level of activity of pedestrians, bicycles, cars, buses, trucks, and in some cases, trains. The use of warning signs, marked crosswalks, and/or flashing signals ensures that drivers are aware of trail users.

Streetlights are another essential component of providing a safe environment for pedestrians. The placement of streetlights depends on the current conditions of an area, which may have existing traffic signals, benches, bus stops, or shelters.

The impacts on the ecosystem will need to be considered before implementation of the trail network. Thorough research and an environmental assessment of the soil, geology, vegetation, water bodies, and the animal species in the area will be needed to understand the complexities of the Corridor's environment. The following ecological amenities address some of the concerns that are involved with the implementation of trails in ecologically vulnerable areas:

**Buffer Zones:** Creating a buffer zone between the trail and vulnerable areas, like creeks, will mitigate any effects from trail usage. Buffers include grass, shrubs, and trees, which prevent pollution of water and resist erosion.

**Avoid Edge Zones:** The trail should avoid building in edge zones, which is where one type of zone abuts another; for example, where a floodplain ends and human development begins. Edges are places of transition, where many species may reside.

**Preserve Vegetation:** The existing vegetation should be preserved and used as a natural barrier. Avoid the use of non-native species, particularly invasives, as they are inefficient, detrimental to the trail's environment, and difficult to remove.

**Boardwalks:** Floodplains and creeks would benefit from the use of boardwalks to allow for water drainage.
The development of a trail within a utility easement has the potential to transform underutilized land into a more functional and visually attractive space, which would benefit the overall community. It is also a way for the utility company to engage more with the public by working with landowners and trail supporters in providing a community amenity. Utility personnel would still be able to access work sites for maintenance and repairs along the trail corridor in their vehicles.

There may be concerns expressed by the utility company about access to their equipment or the ability to do construction and maintenance in the trail corridor. In addition, some members of the community may be concerned with safety. These concerns would be addressed with open communication and the creation of a formal land agreement, specifically an agreement between the local government or CID and the utility company, which will outline accessibility guidelines and mutual safety objectives.

The organization in charge of the trail and the utility company should coordinate and work together to maintain the trail and the power lines in the safest and most convenient way for trail users. There is a possibility that the utility company can donate land for the trail or provide in-kind services such as trail surfacing, general repair work, and overall maintenance of the trail. However, typically the trail’s management organization maintains the corridor and allows the utility the right to access its facilities for repair and general maintenance. Both the utility and trail management organization should be insured. Generally, the trail management organization will have an indemnification agreement that either stipulates reciprocal responsibilities for injuries, damage, or expenses caused by utilities operation or trail operation within the trail corridor.
There is an existing utility easement that starts behind the Carter Rockbridge Plaza Shopping Center and continues past Lucky Shoals Park where it ends at Lawrenceville Highway. The above image shows the possibilities that this space could offer. It would provide connectivity to the shopping centers, residential areas, and a public park within the Jimmy Carter Boulevard Corridor. The addition of a paved pathway, streetlights, and landscaping would be necessary for transforming this easement into a beautiful multi-use trail.
The utilization of a railroad easement is a smart way to use existing infrastructure to improve connectivity and accessibility to transit hubs or destinations located throughout the Jimmy Carter Boulevard Corridor. These type of easements are ideal for both recreational and utilitarian biking and walking. These areas tend to already have gentle grades, which are optimal for trail surfaces. Railroad easements tend to be contiguous and have fewer street crossings as well. All of these factors make railroad easements an excellent source of land for a multi-use trail. Such a trail connection could be made along the south side of the CSX line that parallels Buford Highway, crossing into Best Friends Park at Old Rockbridge Road.

**Utilization of Railroad Easements**

**Opportunities**

Trails near railroad easements offer the community a non-motorized connection that is separate from the existing roads and sidewalks network. Many may prefer this option to on-road bike lanes that are vulnerable to vehicles, noisy, and plagued by car-generated air pollution. The railroad company also benefits from these types of trails, as it reduces the amount of trespassing and potential injuries. Many people tend to cross these railroad tracks when they are not supposed to, and a trail can provide a safer alternative route for people to use. The fact that there is usually only one property owner of railroad easement simplifies the acquisition process for the organization implementing the trail.

**Concerns**

Safety tends to be biggest concern of having trails within railroad easements. Railroad companies tend to be wary of allowing walking and biking routes near active railroad tracks due to fear of liability if someone gets injured. However, there are many successful trails located near railroad tracks throughout the country. According to the Rails-to-Trails Conservancy, nearly 60% of these type of trails exist within 30 feet of the tracks and at least 70% of them have physical barriers separating them from the tracks.

**Negotiations**

The railroad easement located near Jimmy Carter Boulevard is owned by the Class I railroad company Norfolk Southern Corporation. Negotiations may depend on the nature of the property, and the options and interests of the railroad. Norfolk Southern Corporation has previously partnered with government agencies and local organizations to work on rail-to-trail projects. The corporation helped the state of Virginia develop over 285 miles of rails into trails. One notable projects is the 33-mile-long Virginia Creeper Trail, which is managed by the George Washington and Jefferson National Forests. As long as the community fully supports the trail and communicates the significance of the trail, perhaps negotiations for this particular rail-to-trail project will go smoothly.

Source: Biking Bis (St. Paul, MN)
A multi-use trail network will greatly enhance the auto-centric Jimmy Carter Boulevard Corridor and create a more livable community by providing connectivity to parks and vibrant public spaces and by encouraging active travel and recreation.

Example: Railroad Easement at S Rowan St./ S Peachtree St.

The image above is an example of what a rail to trail could look like, located between S Rowan Street and S Peachtree Street. The rail to trail could connect the neighborhoods around Jimmy Carter Boulevard to Indian Trail Road. There is a lot of activity between these two roads, so an increase in accessibility would be a major improvement for the community.
The multi-use trail would be a great opportunity for the community to improve the quality of life in their neighborhood. If property owners donate or sell land for the trail and make their land available for a public trail, the owner would not lose ownership of the land. The owner may set their terms in an easement agreement.

Property owners may be concerned about their privacy and security, which should be addressed in the easement agreement document. The width and specific location of the trail would be approved by the owner before construction. The owner may require fencing or a barrier between the trail and their property (if a private homeowner), or might prefer a spur leading to their business). Trail standards and rules will ensure the safety of trail users and property owners. Overall, public engagement and open communication with the public and owners will be important throughout the trail making process.

Acquiring easements through negotiations are typically less costly than purchasing land, although the purchase of land is an option for a government agency or a nonprofit organization. An option to purchase document, also known as an Option Agreement, is a formal notice to the owner that you’re ready to make a deal. An Option Agreement gives the organization or agency the right to buy and outlines the price and applicable period of ownership. Another possibility is that property owner decides to donate land to the trail in exchange for tax credits or other incentives.

The sections of the trail that will be alongside the road will most likely utilize right-of-way easements. The property owners of land with these easements have to legally agree to allow public access to their property. Many of the easements may be unused land or a part of a parking lot. There is a lot of underutilized space that could be used to create a trail network throughout the Jimmy Carter Boulevard Corridor. The trail would be located in-between the sidewalk and nearby properties, which may be commercial or residential areas. There would be some type of vegetation buffer for the trail to give property owners a sense of privacy and trail users a more pleasant experience on the trail.
A multi-use trail network will greatly enhance the auto-centric Jimmy Carter Boulevard Corridor and create a more livable community by providing connectivity to parks and vibrant public spaces and by encouraging active travel and recreation.

Example: Right-of-way easement at Brook Hollow Pkwy

The image above is an example of a trail alongside Brook Hollow Parkway, which would connect Best Friend Park to the rest of Jimmy Carter Boulevard. It shows how the multi-use trail would be able accommodate those who would like to use it for recreational or utilitarian uses without interfering with the existing sidewalk or roads. This allows a diverse population to use the trail in greats variety of ways.
Planning Process

Good planning is key to creating a successful multi-trail network. The planning process requires public and political support for the proposed trail network in order to incorporate it in the relevant municipality’s official Comprehensive Plan. There are many steps that involve research, analysis, discussion, and evaluation within the trail planning process. Analytical tools like GPS and GIS would help to develop a proposed trail map to present to the community. Issues involving maintenance, land acquisition, public safety, construction, and funding will be addressed and discussed during this planning process. The following figure gives a brief description and rough time estimate of this trail planning process.

The first step is to work on a preliminary trail proposal that includes all the ideas for the trail project. Discussion with stakeholders needs to happen from the beginning of the planning process, including affected government agencies, residents, community organizations, and especially property owners. At this time, there will be permissions request forms to complete and turn in. Some counties require the completion of a Recreational Trail Development & Improvement Request or similar form to satisfy Gwinnett County regulations. Also, there may be forms required from Georgia Power or Norfolk Southwestern to request permission to use land located in their easements.

Once the trail proposal has been completed, the next step is evaluating the feasibility of the ideas presented in the proposal. The staff of the organization planning the trail will need to conduct this feasibility evaluation and investigate potential effects of the trail in an impact assessment. They will need to come up with mitigations and recommendations to address these impacts. This process would also result in a Project Brief, which will include a trail map, summary of the trail’s purpose, feasibility evaluation, impact assessment, section identifying partnerships, maintenance plan, and estimate of construction costs.

Once the Trail Project Brief is completed, the staff will open it to the public and present it during a public hearing. There is usually a 30-day period where the public can turn in their comments about the proposed project. These comments should be reviewed and taken into consideration when finalizing the trail. The staff may also have to present the Trail Project Brief to Gwinnett’s Development Advisory Committee (DAC), which consists of citizens appointed by the Gwinnett County Board of Commissioners.

The recommendations and comments from the public and the county’s advisory committee will be reviewed and incorporated in the Trail Project. Trail-making staff will then have to present the project to the Gwinnett County Board of Commissioners, as it will be included on the agenda for one of their board meetings. The Board of Commissioners will then either approve, amend, or abandon the proposed project. The time length of this phase depends on the decision of the Board.

After the Trail Project has been approved by the county Board of Commissioners, then the last step will be developing the actual trail. The length of development depends on the scale and scope of the project. This phase of the development process can include activities such as engineering, permitting, funding, land/easement acquisition, marketing, and consultation. The trail rules and regulations will be established during this time. In addition, this period allows for arrangements such as hiring contractors and staff to work on maintaining the trail after it is built.
The Jimmy Carter Boulevard Corridor has many thriving, diverse faith-based groups, nonprofits, and places of worship. The CID can introduce interested religious organizations to one another to form an Interfaith Council.

The area immediately around the Jimmy Carter Boulevard Corridor has 103 places of worship serving 22 distinct faith expressions: Ahmadi Muslim, Baptist Christian, Buddhist, Catholic Christian, Charismatic Christian, Eastern Orthodox Chr., Episcopal Christian, Hindu, Jain, Jehovah’s Witness, Jewish. Gateway 85 can bring these diverse groups together to engage in cooperative community development projects. Several of the places of worship in the Corridor have already demonstrated interest in expanding beyond their strict faith-oriented function, in the form of providing religious schooling and/or daycare centers. This practice shows deep investment in the community and possible additional community development capacity. The places of worship currently engaged in this work include: Answer Center Church of God + Answer Center Christian Academy, Campus Church of Christ + Greater Atlanta Christian Schools, Congregation Beth Shalom + The Alefbet Preschool, Christ the King Lutheran + Christ the King Lutheran Preschool, Hopewell Missionary Baptist + Hopewell Christian Academy, The Lord’s Community Church + TASCA Christian Academy, Norcross First United Methodist + Norcross First Creation Kids Preschool, Still Waters United Methodist + Still Waters Learning Center, Victory World Church + Victory World Christian School.
Transportation

2.1 Background  2.2 Diverging Diamond  2.3 Transit  2.4 Bike/Pedestrian Design

Source: Google Maps
The Diverging Diamond Interchange, above, acts as one of the primary identifying landmarks of the Jimmy Carter Boulevard region, but at the same time it hinders traffic and transit flow due to its complex design and time-consuming navigation requirements. The high number of conflict points, which can be seen in the figure above, increases travel time and thus makes the Diverging Diamond Interchange unreliable to traverse for large vehicles such as buses and trucks, limiting its potential usefulness and complicating area traffic.

**Background**

A top issue of concern for residents, workers, and shoppers in the Jimmy Carter Boulevard corridor is inadequate transportation. Through a Livable Centers Initiative (LCI) grant, Gateway 85 Gwinnett Community Improvement District (CID) is developing a Master Plan for Jimmy Carter Boulevard to create a vision for its future. As part of this LCI process, they conducted an extensive survey to analyze residents’ needs and wants for the development of the Jimmy Carter Boulevard Corridor. This survey was answered by 592 residents, an impressive sample size; however, the answers were skewed towards white residents who are in their thirties and forties, making the survey’s original responses less than representative. To correct for this skew and better understand the priorities of the diverse population that lives, works, and plays within the Jimmy Carter Boulevard region, we conducted a weighted analysis, giving more weight to underrepresented communities with respect to age and race according to each group’s actual share of the population (as reported by Census data). These corrected values are used in the following section as background for our analysis and recommendations.

As can be seen in figure to the left, for the majority of the population transportation appears to be the primary concern. 77.08% of respondents mentioned at least one form of transportation as their primary focus or basic requirement. Plans to improve the transportation options in the Jimmy Carter Boulevard Corridor are explained in detail in the following sections.
Survey Results

Survey results represent the elements that could make an impact on transportation modes choices of residents of Jimmy Carter Boulevard area.

What motivates you to use transit?

As you can see in the chart below, 68% of people surveyed indicate that they are willing to use transit service provided that it offers better coverage and cheaper fares. Based on our suggestions, these are improvements that should be fairly easy to provide, thus allowing us to aid far more of the population, providing financial connectivity to the residents that need it the most while relieving automotive congestion.

What motivates you to walk more?

As can be seen in the image below, the major concern for most of the residents regarding walking is safety, as they prefer roads with slower-moving traffic to feel safer while walking in the region. Improving pedestrian infrastructure, both in the form of the multi-use trails proposed in Area 1 and through sidewalk and other improvements, would open up this healthful, Eco-friendly option to provide the last-mile connectivity to an improved transit network.

What motivates you to bike more?

Similar to factors driving the preference for walking, residents report that they have an intent or desire to bike, but the lack of dedicated bike lanes or other safe pathway and absence of safer crossings restricts them from enjoying this active, environmentally-friendly mode of transportation. Improving those factors would motivate more residents to use biking as a viable mode of transportation.
Diverging Diamond Interchange

The DDI was constructed as a temporary solution to solve congestion and safety concerns. Though it rectified some of these problems, it created more in the process.

Current DDI Design

The primary reason for opting to construct a Diverging Diamond Interchange, or DDI, was to find a cheap alternative to expanding the existing bridge and to improve safety while making easier left turns onto the interstate. However, the design’s unfamiliarity for most drivers has made the DDI accident-prone, to the point that it has one of the highest rates of accidents per 1000 vehicles in the entirety of Georgia. Indeed, the DDI’s design contributes to danger, as design-based crashes alone have gone up by 2.2 incidents per month since the DDI opened.

Also, the DDI’s design is not quite feasible for truck traffic, which is a small (~6%) but significant and necessary source of traffic in the Jimmy Carter Boulevard Corridor and important for the many warehouses in the area, most of which are still operational and require good truck access. Truck drivers need to make sharp turns on ramps to get on/off the bridge, which is likely to result in yet more crashes around the DDI.
The number of fatal accidents has been increasing over the years in the DDI area. Rather than another temporary solution, we suggest trying to implement a permanent solution suitable for the long term.

### Crashes near DDI (2013-2016)

The picture on the far left shows the crashes that occurred in and around the Diverging Diamond Interchange over a 5-year period. There are various causes for the accidents but the unfamiliarity with the design is an underlying reason for most of them. To further detail this data, crashes that occurred primarily due to the design of the bridge are highlighted in the picture to the left.

Though it appears insignificant, each of those dots represent a fatal crash, a considerable death toll that is quite high for a single bridge given in such a short time frame.

### Design Related Crashes

The number of fatal accidents has been increasing over the years in the DDI area. Rather than another temporary solution, we suggest trying to implement a permanent solution suitable for the long term.

### Traffic Volume Near DDI (2016)

<table>
<thead>
<tr>
<th></th>
<th>Location 1</th>
<th>Location 2</th>
<th>Location 3</th>
<th>Location 4</th>
<th>Location 5</th>
<th>Location 6</th>
<th>Location 7</th>
<th>Location 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak</td>
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<td>1376</td>
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<td>5917</td>
<td>2330</td>
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<tr>
<td>Truck Traffic</td>
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<td>87</td>
<td>866</td>
<td>51</td>
<td>185</td>
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<td>355</td>
<td>140</td>
</tr>
<tr>
<td>Through</td>
<td>9118</td>
<td>1449</td>
<td>8244</td>
<td>1376</td>
<td>3244</td>
<td>1710</td>
<td>3587</td>
<td>2330</td>
</tr>
</tbody>
</table>

### Locations of Observation Stations
Proposed Plan

Over the course of the studio, we went over several designs in the initial phase. In this section, we expand on those designs and why we finally decided to propose a Double Crossover Merging Interchange (DCMI) for this complex intersection.

Traditional Pattern

Our first alternative for the existing DDI was to come up with a conventional bridge which did not have the conflict points. The purpose of having a design with a traditional traffic pattern is that it can decrease the confusion caused by switching between two sides of road. In this case, drivers who are not familiar with Jimmy Carter Boulevard don't need to bear the risk of driving on wrong side of the road and causing a crash.

Unfortunately, the grade clearance between the bridge and the exit ramps of I-85, along with the weave conflicts it would introduce, rendering this idea not feasible for this plan.

In addition, the CID should press for an interchange justification study for the I-85 bridge crossing at the Dawson Boulevard Button Gwinnett connector.

Redesign of Exit Ramps

The second proposed design involved adding more access points, thus easing the traffic getting off of I-85’s ramps. With more access points, traffic flow can be separated into several sub-flows, which can lower the traffic pressure compared to when there is only one access point.

However, this design would be only a partial answer, since buses wouldn’t be able to access the bridge even after the “solution” was implemented. This design pushes conflict points away from bridges, but conflict points still exist -- the conflict is not being solved at its root. Also, there is another layer of issue where residents might not traverse the proposed streets because they are used to their regular travel patterns. Yet this idea should be pursued further as a near term, relatively low cost mitigation for the current conflicts.

Double Crossover Merging Interchange

Our final design proposal was to replace the existing DDI with a Diverging Crossover Merging Interchange (DCMI) with a pedestrian pathway passing through the middle, as shown in figure above, to make it easier and safer for pedestrians to cross the region.

There are no traffic lights needed for a DCMI, which can help improve traffic flow and decrease traffic delay. It also entirely eliminates conflict points, which will decrease crashes rate significantly. This idea should be pursued for detailed analysis on a longer term, costly yet potentially effective solution. The result of this study might lead to a full interchange justification study.
In this section, we showcase our feasibility analysis along with the merits of the proposed DCMI design over the existing design.

Double Crossover Merging Interchange (DCMI)

To ensure that the DCMI design is feasible, we took the existing traffic volume along the region and ran a simulation for the existing bridge and then increased the traffic volume by 15% to ensure that the DCMI can handle increased traffic in the future. Even with a higher count volume, the DCMI performed better with respect to travel times. Along with short travel times, the lack of conflict points means that there would be reduced chances of accidents. As mentioned earlier, one of the major flaws of the existing design is that transit agencies hesitate to use the section due to uncertain travel times; replacing the existing design with the proposed design would eliminate this issue. One of the major objectives of this transportation section was to make traveling safer and easier for non-motorized users (pedestrian and cyclists). Though it is not part of the DCMI bridge itself, adding a pedestrian pathway between the two elevated bridges would simplify pedestrian and cyclist crossing of the interstate while also giving a newfound identity to the Jimmy Carter Boulevard Corridor.
The final proposed DCMI design is showcased in this section, along with the reasons for choosing it.

As you can see in figure the above, due to the intricate design of the current DDI, the signal timings are quite long, which tends to cause bottlenecks and in turn clashes when frustrated users try to cross the region in a short time.

By contrast, as the figure below shows, there are no stoppages in the DCMI design because there are no conflict points due its elevations. This essentially means short travel times and increased safety.

The new DCMI design would also help with public transit travel times and reach in the region, which was the second major concern for the residents of Gwinnett Village and the Jimmy Carter Boulevard Corridor. Since buses are unable to travel through the existing DDI due to unpredictable travel times caused by its intricate design and signalization, buses are instead forced to take a longer route, and are thus unable to effectively serve a large share of destinations. What’s more, even when a potential rider does have access to a bus stop on a route running through their area, the inefficient patterns demanded by avoidance of the DDI make their travel times extremely prolonged, as explained in figure above and detailed further in the next page.
Many Jimmy Carter Boulevard residents are interested in transit, but current routes are limited. Due to the simplicity of the transit improvement suggestions here, they can be tested over a short period of time before full implementation.

As shown in the chart, left, transit use increases travel time by a huge margin, and as the survey results indicate, a large number of people would like to use transit but cannot due to various constraints. To ensure that large parts of the region are covered by bus, we did a GIS analysis comparing the characteristics of block groups. Based upon results shown in the maps, we suggested routes that would have high ridership.
Many Jimmy Carter Boulevard residents are interested in transit, but current routes are limited. Due to the simplicity of the transit improvement suggestions here, they can be tested over a short period of time before full implementation.

At the regional scale, the CID needs to continue to explore its connectivity options along with the County, GCT, and MARTA. The possibility of a MARTA rail and BRT hub on MARTA land at the est edge of the County, connecting to a new “North Doraville” station seems too good to pass up. Such a study should become an early action priority. Routing alternatives through this part of the County should pay close attention to real and potential ridership. Connecting high concentrations of jobs and housing, along with serving those with the greatest needs for access to jobs and services, will be essential for establishing transit feasibility at this scale.
Pedestrian Safety

The one certain aspect of any trip is that it begins and ends with walking. As planners, it is our primary goal to ensure that citizens feel safe and comfortable during this necessary activity.

As explained in the survey results, the major concern for non-motorized users in the region is safety and their concern is not unwarranted. As can be seen in the graphs above, fatality in the region has been growing in recent years and the major reason for it has been the speed of vehicles. This is of major concern as the probability of fatality increases on an exponential rate with increasing speed, as shown in the bottom left graph. To counteract this alarming trend, we suggest various correction factors in the following sections.

Along with these suggestions, another ideal change to the region would be to use synchronized signals. This allows the county to enforce existing speed limits and also helps to penalize speeding vehicles at each signal, thus motivating patrons to stick to the speed limit. We recommend a consistent, enforced speed limit through the corridor to be set at 35 mph. Though vehicles are traveling at slower speeds, their lack of red lights would reduce their travel time overall. Streamlining the trip also allows us to narrow the lanes, and this extra space can be dedicated to medians, buffered bike lanes, and wider pedestrian pathways.
Bike/ Pedestrian Design

Taking bike design and pedestrian design into consideration helps to achieve equity when proposing any transportation plan, and is a good way to give incentives to healthier, more Eco-friendly active and multimodal transportation options.

Bicycle Level of Service

Bicycle level of service measures the feasibility for different types of cyclists to ride bikes on the street.

There are four types of cyclists on the road: interested but concerned, comfortable but cautious, confident and enthused, and strong and fearless. BLOS 1 means the street is suitable for all types of cyclists, while BLOS 4 means the street is only suitable for cyclists who are strong and fearless.

The BLOS is mainly determined by whether the street has dedicated bike facilities, whether it has street parking, the number of lanes in each direction, the traffic volume, and the road’s classification.

Pictured in the center are the current BLOS map of study area, with examples for each BLOS level.

According to the conditions of streets with different BLOSs, various plans are proposed as shown in the pictures below. Methods include narrowing down lanes or taking out lanes where is possible to do so to have more space to build bike lanes. Buffers between vehicle lanes and bike lanes are recommended to ensure the safety of cyclists.
Design Scenarios

Crosswalk Improvements

On the intersection of Jimmy Carter Boulevard & Story Circle, there are no crosswalk markings. Also, the curb radius is too large. The larger the curb radius is, the more likely drivers will turn at a higher speed. The proposed scenario paints crosswalk markings and decreases the curb radius.

At the Walmart intersection, there is a lack of marking for this highly pedestrian-traveled crosswalk, and the sidewalk discontinues on northeast corner of the intersection. The redesign suggestion here includes installing markings for all crosswalks and implementing full sidewalks to improve continuity.
Economic Development

3.1 Introduction  3.2 Issues  3.3 Urban Agriculture  3.4 Stormwater  3.5 Community Initiatives
Household incomes in Jimmy Carter Boulevard, already low, have been declining faster than the rest of Gwinnett. 69% of area households make less than $50,000 per year, and 26% of the Jimmy Carter Boulevard Corridor’s population lives in poverty.

The median household income for Jimmy Carter Boulevard is $36,038, much lower than Gwinnett County’s median of $60,289. What’s more, Jimmy Carter Boulevard’s value is declining faster, down by $25,842 since 1990 (inflation adjusted), compared to a $21,074 decrease for Gwinnett. Nearly twice the share of Jimmy Carter Boulevard’s households (compared to Gwinnett County) make less than $25,000 per year, the approximate federal poverty line for a family of four. Despite it advantageous geography, the Jimmy Carter Boulevard area is struggling financially.
The Jimmy Carter Corridor is full of thriving industrial and business ventures, and enjoys excellent geographical access to the City of Atlanta and more. However, misalignments between workers and employers leads to jobs mismatch and heavy traffic.

### Top Ten Occupations of Residents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Jobs (% of Jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Construction/Extraction</td>
<td>6,113 (21%)</td>
</tr>
<tr>
<td>2 Production/Transportation/Moving</td>
<td>3,854 (13%)</td>
</tr>
<tr>
<td>3 Building Cleaning/Maintenance</td>
<td>3,421 (12%)</td>
</tr>
<tr>
<td>4 Office/Administrative Support</td>
<td>3,350 (11%)</td>
</tr>
<tr>
<td>5 Sales + Related Occupations</td>
<td>3,252 (11%)</td>
</tr>
<tr>
<td>6 Food Preparation/Service + Related</td>
<td>2,050 (7%)</td>
</tr>
<tr>
<td>7 Management/Business/Financial</td>
<td>1,530 (5%)</td>
</tr>
<tr>
<td>8 Education/Legal/Arts/Media</td>
<td>1,291 (4%)</td>
</tr>
<tr>
<td>9 Personal Care/Service</td>
<td>1,281 (4%)</td>
</tr>
<tr>
<td>10 Installation/Maintenance/Repair</td>
<td>1,054 (4%)</td>
</tr>
</tbody>
</table>

### Occupational Classes Breakdown

Most Jimmy Carter Boulevard residents’ 2013 occupations were working class (maintenance, construction, etc) or service class (food preparation, retail sales, etc), which tend to require moderate, low, or no formal training and/or specialized skills, but pay little and offer no benefits.

### Congressional Districts

### Top Sub-Region Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Jobs (%)</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Retail</td>
<td>59K (14)</td>
<td>1.03</td>
</tr>
<tr>
<td>2 Wholesale Trade</td>
<td>41K (10)</td>
<td>1.89</td>
</tr>
<tr>
<td>3 Health care</td>
<td>40K (10)</td>
<td>0.83</td>
</tr>
<tr>
<td>4 Accommodation/Food</td>
<td>39K (10)</td>
<td>1.05</td>
</tr>
<tr>
<td>5 Administrative/Waste</td>
<td>35K (8)</td>
<td>1.62</td>
</tr>
<tr>
<td>6 Manufacturing</td>
<td>34K (8)</td>
<td>2.08</td>
</tr>
<tr>
<td>7 Professional/Technical</td>
<td>32K (8)</td>
<td>0.67</td>
</tr>
<tr>
<td>8 Construction</td>
<td>28K (7)</td>
<td>0.75</td>
</tr>
<tr>
<td>9 Other Services</td>
<td>18K (5)</td>
<td>0.47</td>
</tr>
<tr>
<td>10 Finance/Insurance</td>
<td>17K (4)</td>
<td>0.70</td>
</tr>
</tbody>
</table>

### Industries of Local Advantage

<table>
<thead>
<tr>
<th>Industry</th>
<th>Jobs (%)</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Management</td>
<td>15K (4)</td>
<td>5.44</td>
</tr>
<tr>
<td>2 Information</td>
<td>17K (4)</td>
<td>2.35</td>
</tr>
<tr>
<td>3 Transportation</td>
<td>16K (4)</td>
<td>1.31</td>
</tr>
</tbody>
</table>
Despite these serious impediments to economic development and prosperity, the Jimmy Carter Boulevard Corridor has a variety of factors working in its favor, including unique cultural shopping opportunities and existing policies to fund development.

**TAD + Opportunity Zone**

Two important resources for economic development program funding in the Jimmy Carter Boulevard Corridor area are the Norcross Opportunity Zone and the Jimmy Carter Boulevard Tax Allocation District, or TAD. Opportunity Zones (the blue area in the map above) are Georgia Department of Community Affairs-designated areas which tend to have a concentration of older commercial and industrial stock and high poverty rates. Within these Zones, revitalization efforts are eligible for the maximum State Job Tax Credit of $3,500 per job created for two jobs minimum. What’s more, the green area on the map above represents the Jimmy Carter Boulevard Tax Allocation District, or TAD. TADs are areas with special taxing permission, possessing the ability to “freeze” the amount of taxes paid to the state in order to divert tax base gains to finance projects with public benefit.

**Unique Attractors**

The Corridor features a many exciting restaurant, shopping, and entertainment options. Some of the greatest attractors include highly-ranked, culturally diverse shopping at centers like the Hong Kong Supermarket and Global Mall, and unique experiences like Gangnam Sauna and the Netherworlds Haunted House.

**Promising Improvements**

The Jimmy Carter Boulevard area has also shown a number of promising improvements in recent years. As the map above shows, whole a number of Census tracts within the Corridor were considered food deserts by the USDA (no grocer within one mile), the 2015 food desert area is much smaller, and there are a number of grocery options in the southern portion of the Corridor both large and small (though more shopping opportunities are still needed in the north).

Similarly, despite relatively low rents compared to Gwinnett County, the Jimmy Carter Boulevard area has improved in recent years, offering hope for further development.
The corridor experiences several issues due to lack of investment, the effects of recession, and increasing traffic. We discuss four main issues that we believe, if resolved, will boost development and attract people to Jimmy Carter Boulevard.

There is not a lot of development pressure in the area, and no new commercial buildings have been built since the 1980s. Although Gwinnett County itself has been fast growing since the 1980s, the Jimmy Carter Boulevard Corridor has not experienced the same growth. Gwinnett as a whole has been growing almost 3% per year over the last 17 years, while Jimmy Carter Boulevard, on the other hand, has been static, growing at a less than 1% rate. Unemployment was at 9.6% in Jimmy Carter Boulevard in 2015, compared to Gwinnett at 8.3%.

One of the biggest issues to economic development in Jimmy Carter Boulevard is that, as a rule of thumb, developers will not tear something down and rebuild it unless they’re sure they can triple their value. Currently, property owners are getting relatively low rents, and no one has indicated that they can get higher, so owners are just sitting on their properties for now.

## Major Issues

### Loss of 18% of the jobs in Gwinnett County
Address the causes of this loss, shift focus to sectors that grew, facilitate business creation and training programs.

### 4% of those who work in the CID also live in the CID
Rezone parcels for balanced/mixed uses, improve residential to office connectivity, introduce workforce development programs.

### Old buildings, underdeveloped parcels
By improving on all fronts (transportation, design, landscaping, community initiatives, etc) the JCB area can become an attractive target for investment in large-scale infrastructure improvement.

### Lack of anchor store or magnet urban space
Introduce projects/development unique to the character of Jimmy Carter Boulevard, making the Corridor a destination.
Urban Agriculture

Urban agriculture has the ability to promote sustainable living, as well as community interaction. Additionally, the endeavor could serve as host to an entrepreneurial development program and site for community employment.

Vertical Farming

Vertical farming is the practice of producing food in stacked layers, on vertically inclined surfaces, and/or integrated in other structures (such as a skyscraper, used warehouse, or shipping container). Many vertical farming practices incorporate indoor farming techniques and controlled-environment agriculture (CEA) technology, where all environmental factors can be controlled. These facilities utilize artificial control of light, environmental control (humidity, temperature, gases), and fertilization.

These vertical farming systems are very efficient (320 square feet of vertical farm space can produce the equivalent of four acres of traditional farmland using 97% less water) and eliminate many environmental pollution concerns. This method also cuts down on or totally eliminates the need for pesticides, therefore rendering discussions surrounding food safety concerns related to chemical use obsolete.

Entrepreneurship

The urban vertical agricultural program could host an in-house entrepreneurial program for individuals interested in building not only their own business, but also in cultivating leadership and community organizing skill sets. The program could be modeled as a twelve-month resident entrepreneur program. Participants would have access to the vertical agricultural program platform to grow food and become entrepreneurial leaders. Resident Entrepreneurs would be expected to participate in a curriculum consisting of skill-based training, professional development plans, and experiential learning in the four pillars of Farming, Business, Community, and Leadership.

Coursework would include classes, workshops, coaching sessions, training sessions, proficiency reviews, and practical experiences, both one-on-one and in group settings. Ideally, after completing the program, Resident Entrepreneurs will have the skill sets necessary to build their own independent business, further adding to the commercial diversity of businesses in Jimmy Carter Boulevard. The entrepreneurship program would be structured in a way that the skills gained from the program can be translated into a model for different business types.
Developers are currently burdened with handling all stormwater on every construction project. Beyond the immediate cost, developers fear ongoing liability associated with stormwater, and this concern even prompts some developers to create stormwater LLCs as a shield against liability.

The study area is situated at the top of several basins, and is therefore ripe to incentivize new development with a stormwater management system.

However, under the Clean Water Act, before the CID can proceed, it must receive a National Pollutant Discharge Elimination System (“NPDES”) Permit. Such permits are broken into three primary categories: construction permits, industrial permits, and municipal separate storm sewer system (“MS4”) permits. While some have argued this type of project may qualify as a “common development” and is thereby well suited for a construction permit, it is unpersuasive for multiple reasons. For example, statutory language specifies construction site owners and operators, which the CID is not, and the Georgia Environmental Protection Division (“EPD”) is not likely to support such a fiction. Therefore, the CID should focus on obtaining an MS4 permit as a “special district under State law.”

MS4 permits are broken down into three categories: small, medium, and large. The medium and large permits were the result of 1990 Phase I regulation, and under these rules, MS4s established in Gwinnett must obtain large permits. However, in 1999, Phase II regulation was promulgated to account for small MS4s, and while the regulations still define Gwinnett MS4s as requiring large permits, all permitting in Georgia is now done under the Phase II regulations. Therefore, the CID must apply to EPD with a Notice of Intent to be considered for inclusion under the statewide general Phase II permit. EPD will require the CID to be the owner and operator of the MS4, and will also consider factors such as population density and impaired streams in the area when determining whether a permit is appropriate.

Impaired Streams
There are at least three issues weighing against the CID’s MS4. First, both major streams crossing the study area, as well as both major streams near the study area, are considered impaired: Jackson Creek, North Fork Peachtree Creek, Beaver Ruin Creek, and Camp Creek are all impaired streams.

County Fee
Gwinnett County already charges a stormwater user fee to all developed properties in the county. This fee supports the county-wide stormwater utility, not to be confused with a county-wide pipe system. Collecting further funds to support an MS4 in the study area will present challenges.

Developed Land
Under standard developers, all developed land that disturbed more than an acre or was part of a common development received some sort of stormwater management, so the MS4 would likely only apply to new development and certain kinds of redevelopment.
In 2015, the JCB Corridor area had an unemployment rate of 9.6%, compared to Gwinnett County’s 2015 unemployment rate of 8.3%. In additional to more traditional workforce development interventions such as job training, entrepreneurship training, job-worker pairing, and so on, one more unusual employment option could be a community currency program.

In the first step of this program, residents work to benefit the JCB/CID area, such as by cleaning parks and public spaces, tending community gardens, and more, depending on their skills and capacity.

Workers can contribute to their community on their own schedule, which may allow people who would otherwise be unwilling or unable to work -- such as those with child or elder care responsibilities -- to gain access to additional resources while deepening their connection with and commitment to the community.

In exchange, the CID pays these volunteers in community currency, the “JCBuck”, “CIDollar,” or similar. This currency also has an advantage over more traditional payment in that it keeps value within the community, supporting local businesses.

Volunteers paid in JCBucks can use the community currency at participating stores, restaurants, and other commercial ventures to purchase goods and services.

In addition to standard business transactions, some community currency programs have grown strong enough to launch new cooperative businesses, host community training events, and even facilitate investment and personal savings, such as through ROSCAS (rotating savings and credit associations, also known as tandas), a sort of round-robin small-scale investing system based on trust.

Local businesses that participate in the program receive many benefits. Most directly, their CID dues are reduced by 5% and they have special access, such as a prime booth location, at CID-sponsored events.

Their area of business is more attractive and vibrant in general, and their customer base is widened. What’s more, research into the effects of work relief projects such as those in the New Deal shows that such programs result in an additional 44 cents in area retail spending per dollar invested, as well as increasing community safety by reducing idleness and desperation.
Community Center

A community center, either in a new building or a re-purposed existing structure, integrates well with the proposed development nodes on Jimmy Carter Boulevard and fills the need for a culturally-neutral, inclusive gathering space.

The community center could be used as a neutral space for workforce trainings, neighborhood meetings, community events, skills workshops, and official ceremonies.

Community Center Impacts on Community & Programming

A vibrant community center can have a stabilizing effect on the lives of community members. When bolstered by partnerships with local nonprofit and for profit organizations and sponsors, the presence of a physical, multiuse facility that is open to all can provide safe and adequately equipped spaces for physical activities, meetings, workshops, cultural activities, and celebratory events.

**Workforce**

The Community Center could offer training spaces for workforce development organizations and co-working spaces for local, start-up phase entrepreneurs.

**Exercise**

A beginner-friendly community exercise series that is open to the public would provide the opportunity for individuals to connect through play and movement.

**Arts + Cultural**

Music and dance performances by local performance artists and pop-up galleries featuring pieces by local artists could be showcased in the community center space.

**Retail**

The community center could play host to pop-up markets throughout the year and showcase local retailers.

**Programming**
Introduction

Educating the community around Jimmy Carter Boulevard, in an effort to provide meaningful programs that provide resources to residents in the corridor.

Position for Prosperity

The previous section laid out the economic conditions of the Jimmy Carter Boulevard Corridor area, which are somewhat daunting. A poverty rate of 26% and an area-adjusted median household income of $36,038 are stunting the area’s growth, discouraging entrepreneurship, starving human capital development, exacerbating jobs-housing mismatch, increasing housing burden, and in general reducing the quality of life for everyone who lives, works, shops, and plays in the Jimmy Carter Boulevard Corridor. This section will address the low educational attainment, struggling schools, and low preschool enrollment that are hindering the community’s potential.

GATEWAY 85 GWINNETT CID’S MISSION: INCREASE COMMERCIAL VALUES, PROMOTE ECONOMIC DEVELOPMENT AND ENHANCE THE QUALITY OF LIFE FOR THOSE THAT LIVE, WORK AND/OR PLAY IN THE VILLAGE.

To support its mission, the CID must invest in the future of not only the physical space, but also the people of Jimmy Carter Boulevard. Workforce development and education systems must be strengthened and residents must be supported from the cradle through their careers. The quality of education in the Jimmy Carter Boulevard area affects all its residents and businesses. The CID does not hold any authority over the local schools, but nevertheless has an obligation to encourage excellence and reduce disparities in achievement by supporting a strong educational foundation for all its residents, setting them up for successful lives.

The larger context for this challenge is promising. The Gwinnett County School District is a top performer across the board in state school rankings. Notably, while the school clusters in the CID perform below the County average, the District is amping up its attention and commitment of resources to improve performance. The CID therefore, is well placed to support and extend a partnership to reach for superior results. An example of progress in the recent recognition of Meadowcreek High School’s principle as the best in the state, advancing to national level competition.

Gateway to Education

The mission of the Gateway 85 Gwinnett CID is inextricably connected to the state of education in the Jimmy Carter Boulevard area. Poverty, crime, home values, and income are directly impacted by academic success. Making sure all residents receive high-quality educations will ultimately make the Jimmy Carter Boulevard Corridor a more sustainable and livable place.

Improving local infrastructure will undoubtedly have positive effects on the local schools. Children and parents will be able to get to school more safely and easily. Note that the following section will address housing issues; maintaining affordable housing will support those already living in the area and prevent the disruption and reduced academic achievement associated with multiple moves (such as due to unaffordable or unlivable/unsafe housing drives). Housing stability and rising school performance also encourages teachers and other workers to move to the area. The majority of movers to an area report school quality is a major factor in their decision of where to purchase a home, and improving the educational ecosystem in Jimmy Carter Boulevard will also support home values and neighborhood vibrancy.
The Jimmy Carter Boulevard area is part of the Meadowcreek and Norcross School Clusters. Meadowcreek is the lowest performing Gwinnett cluster according to the Georgia Department of Education’s College and Career Ready Performance Index (CCRPI).

The College and Career Ready Performance Index (CCRPI) is a comprehensive school improvement, accountability, and communication platform for all educational stakeholders that will promote college and career readiness for all Georgia public school students. The Georgia Department of Education uses a 100 point scale, with the possibility of 10 bonus points. The lowest passing score is 60.

Meadowcreek and Norcross School Clusters

<table>
<thead>
<tr>
<th>JCB vs Gwinnett Schools</th>
<th>JCB</th>
<th>Gwinnett</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average CCRPI Score</td>
<td>73.1</td>
<td>81.7</td>
</tr>
<tr>
<td>School Climate Score (of 5)</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Free/Reduced Lunch</td>
<td>81%</td>
<td>55%</td>
</tr>
<tr>
<td>Buildings’ Filled Capacity</td>
<td>93%</td>
<td>107%</td>
</tr>
<tr>
<td>Average Building Age</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>HS Graduation Rate</td>
<td>73%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Gwinnett spends $8,000 per child on education, which is a 10% decrease since 2007 and $4,000 less than the national average. This may be a sign of underinvestment in the future workforce.
The average graduation rate of the area’s schools is 73%, and 35% of the population has no high school degree. This indicates that young people may not be prepared for the jobs of the future.

Seventy-nine percent of the study area is below the age of 44 and 40% is 24 years old and younger. This young population is an opportunity for the area, but their educational needs must be met so that they can be prepared for well-paying jobs and can lead successful lives.

Only 15% of the Jimmy Carter Boulevard population has any post-secondary or graduate education. In fact, 63% of adults 25 years of age and older have only a high school education or less. As jobs become more technical and technology advances, particularly given the threat that automation poses to many of the top jobs in the Corridor currently -- for example, transportation is the second-largest occupation for area residents at 13% of Jimmy Carter Boulevard workers and is profoundly threatened by the looming promise of automated vehicles -- the workforce will need more skilled workers -- and workers will need the funding, time, and opportunity to receive the training they need to develop those skills and keep up with an ever-evolving employment landscape.

Georgia will need an additional 250,000 college-educated workers by 2020. In skilled manufacturing alone, the state will need to replace nearly half of its workforce by 2020 due to retirement. This demand for workers can be a great boon to the struggling, underemployed population of the Jimmy Carter Boulevard Corridor, but only if they have access to the training and education they need to take advantage of these new opportunities.
To position the study area for prosperity, the community must invest in a strong foundation of hard and soft skills for its residents from early childhood to their careers.

### Early Childcare

Eighty percent of a child’s brain development occurs before the age of 3. High-quality childcare from an early age sets children up for the rest of their lives. A strong foundation of learning before kindergarten means children are more likely to succeed in reading and math, avoid disciplinary action, and graduate high school on time. High school graduates fare better in the job market and are positioned to receive post-secondary training.

![Image: Huffington post]

#### Source: Huffington post

| 44% | Of 3-4 year olds are enrolled in preschool |

### Afterschool

The hours after school gets out and working parents return home are prime time for learning and advancement. Afterschool programming allows children to build on foundational skills and competencies. Participation in afterschool activities has been shown to close the achievement gap in reading and math, decrease the likelihood of dropping out of school, and increase classroom engagement.

![Image: Beyond the Brochure]

#### Source: Beyond the Brochure

| 25% | Of JCB's residents are school aged (3-18) |

### Job Training

Job training for residents of all ages can help them create pathways to economic security. For those still in school, career and technical education classes, along with college preparatory classes, can provide necessary skills for the job market. Adult education programs equip workers with the tools to transition to post-secondary degree or certification programs.

![Image: Long Beach Unified School District]

#### Source: Long Beach Unified School District

| 9.6% | Of people in JCB are unemployed |

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**Education: Analysis** 64
Information Hub

Advertise existing resources

The JCB area is fortunate to lie in the Greater Atlanta Metro Region. Many organizations, foundations, and businesses are already doing innovative work with cradle to career education. The **Gateway 85 Gwinnett CID’s** website could provide a database of scholarship, training, afterschool, and tutoring opportunities.

Increase document access

Increase transparency and facilitate civic participation by providing links to key Gwinnett County and Community Improvement District materials. Encourage the County and other government agencies to translate documents. The CID could also offer accessible guides to translation technologies for citizens, such as Google Translate.

Translate web pages

Fully translate all of Gateway 85’s web pages and menus into, at least, the primary languages spoken in the JCB Corridor. This could potentially increase awareness of and participation with the CID’s projects by the limited-English population.

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38%

Of people age 5+ speak limited English

- Spanish: 79%
- Vietnamese: 9%
- Chinese: 3%
- All Others: 9%

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Coalitions

The entire community is invested in the welfare of its residents and economy. The CID can bring together many disparate stakeholders to strengthen education opportunities.

01 Join, support, or create coalitions

As shown above, religious institutions, nonprofits, foundations, and local colleges are all working on education and workforce issues. The CID is uniquely positioned with existing strong ties to the local government, businesses, and community members. The CID could utilize these connections to bridge stakeholders that may otherwise not interact -- for example, serving as a convener between philanthropic, business, and school leaders to address funding and programmatic gaps.

Coalitions and public-private partnerships of this kind have been very successful in driving student achievement in other parts of the country (see example discussed below). Large corporations like Home Depot, state and local governments, and even the United States Chamber of Commerce understand the critical importance of investing in education and have dedicated programs towards education from cradle to career.

EXAMPLE: Commit Partnership - Dallas, TX

The Commit Partnership was founded in 2012 to act as a backbone organization supporting a broad coalition of stakeholders addressing education from cradle to career across Dallas County. The Partnership is currently made up of over 200 public school districts, charter school networks, private schools, higher education institutions, foundations, businesses, and nonprofits. They form 6 strategically organized support councils that focus on the measurement of 11 critical community achievement indicators.

02 Connect with local employers

OFS Fitel, a fiber-optic cable in the study area, is building another tower to increase manufacturing capacity. In addition, the film industry is booming in Georgia and Eagle Rock Studios lies in the study area. Both industries could provide jobs for residents, if they receive the necessary training. In order to find out what skills local workers would need, the CID could convene local employers like OFS and Eagle Rock. With the knowledge of their workforce needs, employers could then be connected with Gwinnett Technical College and other career and technical education sources to find ways to address their needs through training Jimmy Carter Boulevard’s population.
Lake Marett with Ashford Jackson Court Apartments in Background
Home values in Jimmy Carter Boulevard, already relatively low, have been declining faster than the rest of Gwinnett, and many households are locked out of homeownership, cost burdened, or stuck with home repairs they can’t afford.

Duration of Homeownership (Years)

Home sales are slow (~ 0.3% of all owner-occupied stock per year). The rental population is more cost-burdened than owners (next page), but most renters have been in the same unit for 1-5 years, suggesting possible mobility issues.

Homeownership Age Disparity

The left chart shows the percent of all homeowners each age group represents, compared to the right chart, which shows each age group’s percent of all households. Adults under 45 represent 63% of all households, but only 35% of all homeowners.

Median Home Values in Jimmy Carter Boulevard

The median home value for Jimmy Carter Boulevard is $102,316, much lower than Gwinnett County’s median of $167,700. What’s more, Jimmy Carter Boulevard’s value is declining faster, down by $31,519 since 1990 (inflation adjusted), compared to a $10,505 decrease for Gwinnett.

In general, home values are modest and should be achievable, but may be out of reach for younger householders given their disproportionately high cost burden and low homeownership rates.
Introduction

Home values in Jimmy Carter Boulevard, already relatively low, have been declining faster than the rest of Gwinnett, and many households are locked out of homeownership, cost burdened, or stuck with home repairs they can’t afford.

Housing Cost Burden, Total

60% of all households in the Jimmy Carter Boulevard area are housing cost burdened, paying 30% or more of their income every month in housing costs. 27% of residents are severely cost burdened, paying 50% or more of their income for housing.

By contrast, only 41% of all Gwinnett County residents are cost burdened, and 19% are severely burdened. Jimmy Carter Boulevard’s cost burden is not evenly distributed; as the charts below show, 65% of renters are burdened, while only 43% of owners are.

Renter Burden (L) + Owner Burden (R)

The median rent value for Jimmy Carter Boulevard is $921, much lower than Gwinnett County’s median of $1,043. What’s more, Jimmy Carter Boulevard’s median rent is declining faster, down by $189 since 2000 (inflation adjusted), compared to a $98 decrease for Gwinnett.

In general, rents are on the higher side of moderate for the Atlanta metro area, but nevertheless are inflicting heavy housing cost burdens on renting Jimmy Carter Boulevard residents (left).
Introduction

Home values in Jimmy Carter Boulevard, already relatively low, have been declining faster than the rest of Gwinnett, and many households are locked out of homeownership, cost burdened, or stuck with home repairs they can’t afford.

Era Housing Was Built, Total

Housing in the Jimmy Carter Boulevard Corridor is older (median year built 1985, versus Gwinnett’s 1994), and only 34% of rented and 28% of owned units were built since 1990. These units’ age suggests that repairs are essential to prevent obsolesce and neighborhood decline, a threat which Jimmy Carter Boulevard’s 11% housing vacancy rate already invites.

Despite this threat, most housing units in Jimmy Carter Boulevard are in decent shape, with only 9.5% of units overcrowded and 6.1% distressed.

Overcrowded (L) + Distressed (R) Units

There are 5 HUD- and 2 LIHTC-rent-restricted multifamily properties in the Jimmy Carter Boulevard area, but all are far from residential cores.
Many homes in the Jimmy Carter Boulevard Corridor are aging and will need repairs. Research shows that the cost of home repairs is a major threat to stable homeownership for low- and moderate-income households. A Home Repair Fund can help.

Homes Needing Repairs

72% of owner-occupied housing units in the JCB Corridor area were built before 1990. Many units may need repairs and updates in order to maintain them as healthy, attractive housing contributing to thriving, vibrant neighborhoods.

At the same time, housing affordability is a major concern in the area, and the development and improvement projects proposed elsewhere in this report risk inspiring gentrification if the JCB Corridor area is beautified and improved without affordable housing interventions being put in place before such development occurs.

Gateway 85 Repair Loan

With the proposed fund, the CID offers small loans of $10,000 or less to residents in order to repair and improve their homes. These loans bear a moderate interest rate, perhaps of 5% depending on current investment markets, but all interest and payments are deferred until the time the home is sold. By deferring repayment on the loan, the CID would avoid replicating the immediate repair-inspired financial strain on residents which threatens homeownership, and would also limit the clouding of the home's title by having such a loan. In exchange, the owner signs a contract limiting the profit they can make when selling the home in the future.

Eventually Home Is Sold

After years of enjoying their healthy, repaired home, the contracted homeowner may eventually sell their house. When they do, the contract they signed with the CID when they received their home repair loan limits the price they can ask for their home: the original purchase price, adjusted for inflation, plus the appraised value of any home improvements they have made (such as expansions, appliance upgrades, flooring enhancements, etc), plus 5% appreciation profit. This limit on asking price ensures that the home remains relatively affordable for a new owner despite the value of the CID-funded repairs and improvements.

Repayment + Affordable Housing

When the sale is completed, everyone wins! The original owner who contracted with the CID for the repair loan had a number of additional years in their safer, healthier home without undue financial strain, and made a fair profit upon sale. The CID gets its money back, with interest, and can reinvest it in additional home repair loans, beautifying parks, entrepreneurship training, or any other project it is pursuing at that time. Finally, the new homeowner had the chance to buy an affordable, well-maintained home. A similar strategy could be developed for rental properties, where repair lending support could be offered in return for limiting rent increases.
Low rates of homeownership in the Corridor, particularly for younger residents, are a major challenge to long-term affordability and wealth-building for lower-income households. A Homeownership Assistance Program can help.

Adults under 45 are 63% of householders in the Corridor, but only 35% of homeowners. Across the country, renters are more likely to be cost burdened than owning peers, and younger renters are particularly vulnerable: in JCB, under-35 households are 86% renters and 63% of these renters are burdened.

Homeownership has a number of important financial and social benefits for both the owner and their community. Research shows homeownership is a key path to building wealth and closing the racial wealth gap, particularly for lower-income families, and increases community social participation.

In the first phase of the Homeownership Assistance Program, the CID partners with local nonprofit organizations with financial expertise, such as the two area Credit Unions, Associated Credit Union and Georgia United Credit Union. These organizations then provide first-time homebuyer education to interested potential borrowers, particularly for first-in-family borrowers.

Research has shown that first-time homebuyer education can reduce the likelihood of the buyer subsequently becoming seriously delinquent on their loan by 29% and result in better budgeting.

When the first-time homebuyer has completed their ownership education, a representative from the partner organization facilitating the program accompanies them through the loan process, providing valuable industry insights, helping borrowers avoid predatory lenders, and possibly offering grants for downpayment assistance.

The presence of an expert observer may also reduce lenders’ racial discrimination in underwriting, an important factor given the history of disproportionate sub-prime lending to minority borrowers regardless of good credit or qualifications.

As part of the downpayment assistance and lending guidance, first-time homebuyers going through the Ownership Assistance Program include a repairs escrow account in their mortgage. Escrow accounts for future expenses are a common feature of many mortgages, and a few extra dollars per month should be affordable for the new homeowners given the value of assistance they have received.

Research has shown that unexpected home repairs are a major threat to stable lower-income homeownership, and a repairs escrow fund can cushion such surprises.
Adaptive Reuse

There are many underutilized, aging warehouses in the Jimmy Carter Boulevard Corridor area. While no single kind of reuse is appropriate for all sites, some warehouses could be very successfully adapted into airy, affordable apartments.

The majority of warehouses in the Jimmy Carter Boulevard area were built in the 1970s and 1980s, with then-common 11-foot ceilings. Though some still thrive, many of these warehouses have become obsolete due to their age and relatively low height, which makes them less suitable for modern warehousing needs. While every site is different and every warehouse should be considered for a variety of potential reuses -- such as indoor agriculture, cultural/community space, small retail, and more -- one option for some of these underutilized warehouses is conversion into affordable multifamily housing. Where a ceiling height of 11 feet may be insufficient in an operating warehouse, it is extremely luxurious and desirable for housing, offering a valuable built-in amenity. What’s more, the Jimmy Carter Boulevard area has limited affordable housing options, and these underused warehouses can provide beautiful, affordable apartments. The CID can partner with an experienced affordable housing developer to apply for Low-Income Housing Tax Credits or similar funding for such warehouse conversions.


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