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Final Report

Atlanta's Hotel District: ADA Transition Plan

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Shane Mudrinich, Graduate Student, GaTech
Randall Guensler, Ph.D., GaTech
Alice Grossman, Graduate Student, GaTech

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DISCLAIMER

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Data and observations for this ADA transition plan were collected and interpreted by Georgia Institute of Technology Honors Program undergraduate students enrolled in CEE 4803, "Boulevard of Broken Sidewalks" with Dr. Randall Guensler and Alice Grossman in the fall of 2014. The undergraduate students worked in groups of two to three, inspecting an assigned zone in the Hotel District to assess pedestrian accessibility and ADA compliance for public and private sidewalks and pathway infrastructure. This report compiles the individual reports and expands on the work of the undergraduate students enrolled in the honors course, including: Amanda Burke, Jillian Cagliostro, Jamie Clark, Andy Karsai, Shane Mudrinich, Aylin Nazli, Golda Nguyen, Connor Paton, Breanna Poteet, Mark Rickabaugh, Earl Rousseau, Alberto Sainz De-la Peña, Stephen Song, Lucy Squires, Justin Tamayo, Patrick Tarrant, and Sanmeshkumar Udhayakumar. The students worked very hard conducting field inspections and preparing various elements of this report. The authors and students would also like to thank the staff at the Atlanta Hilton, Sheraton Atlanta, Atlanta Marriott Marquis, Westin Peachtree Plaza, Hyatt Regency Atlanta, AmericasMart, as well as Dragon Con staff, for their assistance in making the class and project possible.

Atlanta's Hotel District: ADA Transition Plan

By:
Shane Mudrinich
Randall Guensler, Ph.D.
Alice Grossman

School of Civil and Environmental Engineering
Georgia Institute of Technology

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ABSTRACT

ADA transition plans document the condition of facilities and programs (such as transportation infrastructure) and identify changes that are necessary to make the facilities fully accessible and in compliance with the Americans Disability Act (ADA) of 1990. This report examines the pedestrian infrastructure in and around the Atlanta downtown convention hotels. The report follows the format of a generic ADA transition plan, outlining: the areas examined, accessibility issues evaluated, tools and methodologies used in evaluation, findings and documentation, suggested mitigation measures and timelines, and potential funding needs.

The researchers Dragon Con as the annual baseline convention event for the area. The research team examined how convention attendees would use and travel between the buildings and transportation options in the area, and conducted accessibility evaluations in those areas. Findings of the report show that the buildings are nearly completely complaint to ADA standards, and have high levels of accessibility for people with all levels of physical ability. However, the sidewalks, crosswalks, and curb ramps in the areas between and around the buildings are in need of significant repairs and redesign to comply with ADA standards. Problems such as crumbling curb ramps, obstructions and narrow sidewalks, crosswalk potholes, and steep grades and cross slopes make some routes inaccessible to many users. Each of the problems found by the research team is documented with photos, text, field measurements, and each includes a proposed fix and associated cost.

EXECUTIVE SUMMARY

ADA transition plans document and prepare for necessary changes to facilities and programs (such as transportation infrastructure) to build or update them to be fully accessible and in compliance with the Americans Disability Act (ADA) of 1990. This report summarizes the state of the pedestrian infrastructure in and around the major Atlanta Downtown convention hotels. The report follows the generic format for an ADA transition plan, outlining the areas examined, evaluating accessibility issues, discussing the tools and methodologies used in evaluation, presenting findings, and suggesting implementation timelines and budgets.

The researchers used the Dragon Con annual convention as the case study for this project. Dragon Con brings tens of thousands of people to Atlanta each year, including a large percent of attendees with limited mobility. The research team examined how convention attendees travel between the buildings and the transportation options in the area, and conducted accessibility evaluations in those areas. The buildings included: the Sheraton Atlanta, the Westin Peachtree Plaza, AmericasMart, the Hyatt Regency Atlanta, the Atlanta Marriott Marquis, and the Atlanta Hilton. Researchers also evaluated connecting skyways, sidewalks, crosswalks, and a selection of the public transit and event shuttle locations. Resources from Dragon Con, such as guidance for guests with disabilities and Dragon Con staff interviews, greatly informed the research efforts behind this study.

Findings of the report show that the buildings are almost completely complaint with ADA standards, and provide high levels of accessibility for people at all levels of physical ability. The sidewalks, crosswalks, and curb ramps in the areas between and around the buildings, however, are in need of significant repair and redesign to bring them up to ADA compliance. Problems such as crumbling curb ramps, obstructions that narrow sidewalks to less than three feet, potholes in crosswalks, and steep grades and cross slopes make some of the outside routes inaccessible to many users. Each problem found by the research team is documented with photos, text, measurements from the field, and includes a proposed fix with an associated cost.

The ADA Transition Plan is a stand-alone project detailing the outreach and education supported by the project. The research was conducted as an extension of an undergraduate honors course, and was developed as an element of outreach for the sidewalk quality research project at the Georgia Institute of Technology funded by the Southeastern Transportation Research, Innovation, Development, and Education Center (STRIDE) and the Georgia Department of Transportation (GDOT).

LIST OF ACRONYMS

ASCII	American Standard Code for Information Interchange
DOT	Department of Transportation
FHWA	Federal Highway Administration, USDOT
Georgia Tech	Georgia Institute of Technology
GDOT	Georgia Department of Transportation
GRA	Graduate research assistant
GRTA	Georgia Regional Transportation Authority
HD	High definition
HDV	Heavy-duty vehicle
HPMS	Highway Performance Monitoring System
MARTA	Metropolitan Atlanta Rapid Transit Authority
NaviGAtor	The intelligent transportation system operated by the Georgia DOT
PTZ	Pan, tilt, zoom (cameras)
USDOT	United States Department of Transportation
URA	Undergraduate research assistant
USB	Universal Serial Bus
USDOT	United States Department of Transportation

1 INTRODUCTION

In 1990, the United States Congress enacted the Americans with Disabilities Act (ADA) under President George H.W. Bush. This important piece of legislation prohibits discrimination against persons with disabilities in the workplace, schools, public spaces, and in the provision of programs and services. Consequently, transportation infrastructure used in day-to-day life must be accessible by persons with disabilities. Title II of the law requires that all buildings and structures operated by government agencies or any entity with over 50 employees bring their infrastructure to compliance. All new buildings must therefore be built to ADA specifications, and all older buildings must be updated or retrofitted where feasibly possible. Transportation infrastructure, such as sidewalks, fall under the category of 'programs' and must also comply with the ADA. ADA Transition Plans are the roadmap or implementation plan to make their spaces accessible.

The purpose of an ADA Transition Plan for any entity is to lay out the physical changes needed to make the all facilities and programs fully accessible and provide a timeline, budget, and administration for implementation. Transition plans may cover programs, such as transportation right-of-way, as well as facilities, such as buildings and their surroundings. Entire cities, counties, and states can and have developed ADA transition plans, as can smaller areas such as a specific site or district such as the Downtown Atlanta Hotel District. This transition plan has been prepared for the stakeholders as discussed in Section 4 of this report in anticipation of aiding the public and private entities such as the hotels, the City of Atlanta, The Atlanta Chamber of Commerce, and the downtown Community Improvement District, Central Atlanta Progress in improving the accessibility for the district. The data collected for and compiled in this report are intended to reduce the amount of work and time other agencies need to expend in making the area more accessible.

This report will examine the context of the Dragon Con convention and its background in the Downtown Atlanta Hotel District, including information on the hotels and other stakeholders in the area. A literature review of other ADA Transition Plans and ADA Transition Plan guidelines as well as how Dragon Con has already addressed accessibility in the area is covered at the beginning of the report as well. The plan then includes the methodology followed, data collected, and detailed information about the field inspections that are divided up into zones. Suggestions on the logistics of carrying out the transition plan, such as a proposed timeline, budget and appointed a coordinator, follow the reports on the state of the rights-of-ways and facilities. The appendices at the end of the report contain tables to display recommended actions giving the location, current conditions, recommended corrective action, estimated cost, and priority level for each item. The appendices also show the photographic evidence corresponding to the recommendations made for improving accessibility.

2 BACKGROUND

2.1 LEGAL PRECEDENTS

In conjunction with the Civil Rights Movement of the 1960s, advocates seeking remedy for discrimination against persons with disabilities became more active and vocal in the public sphere. The following years saw the passage of federal laws affirming the rights of persons with disabilities, and in 1973 the Rehabilitation Act was passed in Congress. The Rehabilitation Act improved rights for the disability community in areas of employment, services, infrastructure accessibility, but perhaps most notably, was the first federal law explicitly prohibiting discrimination against persons with disabilities for any program or activity with federal funding (Jones, 2011).

The Americans with Disabilities Act (ADA) was introduced in the United States Congress in 1998. On July 26, 1990, the ADA was signed into law. The purpose of the ADA is to create a more accessible society and bring improve equity for those with physical disabilities. The law extends to disabled individuals the same protections enjoyed by other citizens in the areas of employment, public accommodations and services, transportation, telecommunications, and services provided by state and local governments. Not only must all individuals be accommodated, but access to all users needs to be integrated into the same system as much as practicable. The ADA of 1990 required changes in the way that new facilities are designed and constructed as well as modification of existing facilities and transportation services to increase accessibility to those with physical disabilities (United States Department of Justice, 2010).

In 2002, Barden vs. City of Sacramento was brought before the Ninth Circuit U.S. Court of Appeals, which ruled that sidewalks fall under Title II of the ADA and must adhere to program accessibility regulations accordingly. The ruling was passed based on the function of sidewalks as a public service (Barden vs. City of Sacramento, 2002). This class action suit led to a need for cities across the country to repair and maintain sidewalks, curb ramps, and pedestrian crossings, begetting the widespread need for development of well-constructed ADA Transition Plans in areas where ADA compliance remains unmet.

2.2 ATLANTA HOTEL DISTRICT STUDY AREA

Each year, the City of Atlanta hosts an annual four-day multi-genre convention called Dragon Con (Dragon Con (web), 2014), one of the premier conventions for fans of comic art, science fiction, fantasy, steampunk, anime, and role-playing games in the Southeastern United States. The convention made its debut in Downtown Atlanta in 1987 with over 2,400 attendees. Attendance has grown exponentially over the years, and the 2014 convention welcomed a record 62,000 participants (Exhibit City News, 2014), a figure which included some 1,100 persons with disabilities (Wren, 2014). Numerous changes in event locations amongst Downtown hotels and event centers have accompanied this growth over time. Dragon Con in its current iteration holds panels and events in the following five locations in Downtown Atlanta's Hotel District: the Sheraton Atlanta, the Westin Peachtree Plaza, AmericasMart, the Hyatt Regency Atlanta, the Atlanta Marriott Marquis, and the Atlanta Hilton.

As this event is one of Downtown's largest tourist events, great care must be taken to ensure that attendees of all physical ability are able to fully participate in the events of their choosing. Under the ADA, the City of Atlanta is responsible for making sure that the areas around the convention centers, within member hotels, and along the parade routes are in compliance with the Americans with Disabilities Act (ADA). An ADA Transition Plan serves as the implementation plan for turning non-compliant public spaces into accessible spaces.

The transition plan presented in this report is based upon a review of ADA transition plans previously adopted by other large American cities, interviews of hotel staff to assess the design and practices of the individual hotels and event centers, a review of ADA services rendered by the convention, on-site inspections, and review of government resources for mitigation recommendations. This plan also takes into account Dragon Con's current services in comparison to other large, similarly-themed conventions, specifically San Diego's world-renowned Comic-Con.

For the purposes of this report, the Atlanta Downtown Hotel District was split into seven zones for physical inspection. Sidewalks abutting each zone are considered to be part of that zone. Sidewalks in the center area between hotels are included in multiple zones of study, as potential walking paths between locations. Each zone is described below:

Zone 1 - Encompasses the Westin Peachtree Plaza and its connections to the Hyatt Regency Atlanta, the Atlanta Marriott Marquis, and the Sheraton Atlanta.

Zone 2 - Encompasses the AmericasMart complex and its connections to the Westin Peachtree Plaza, the Atlanta Marriott Marquis, and the Hilton.

Zone 3 - Encompasses the Hyatt Regency Atlanta and its connections to the Sheraton Atlanta, AmericasMart, and the Atlanta Hilton.

Zone 4 - Encompasses the Atlanta Marriott Marquis and its connections to the Atlanta Hilton, the Sheraton Atlanta, and the Westin Peachtree Plaza.

Zone 5 - Encompasses the Atlanta Hilton and its connections to the Hyatt Regency Atlanta, AmericasMart, and the Westin Peachtree Plaza.

Zone 6 - Encompasses the Sheraton Atlanta and its connections to the Atlanta Hilton, AmericasMart, and the Westin Peachtree Plaza.

Zone 7 - Encompasses the streets along the Dragon Con parade route and connections from the route to Dragon Con's registration at the Sheraton.

Figure 1 illustrates the seven zones in the Hotel District and the principal event locations that fall within those zones (the seven zones are color-coded). Each zone is assigned a different color and features one primary event location (identified with a white letter A-F). The five major hotels that participate in Dragon Con are located in different zones, as is the AmericasMart complex (the primary vendor location during Dragon Con). Each zone is connected to all of the other zones via sidewalks and roads, and in some cases by elevated skyways between buildings. The overlap of the streets connecting the zones ensures consistent and more complete identification of sidewalk-related ADA compliance issues. The black arrows indicate the path of the parade route.

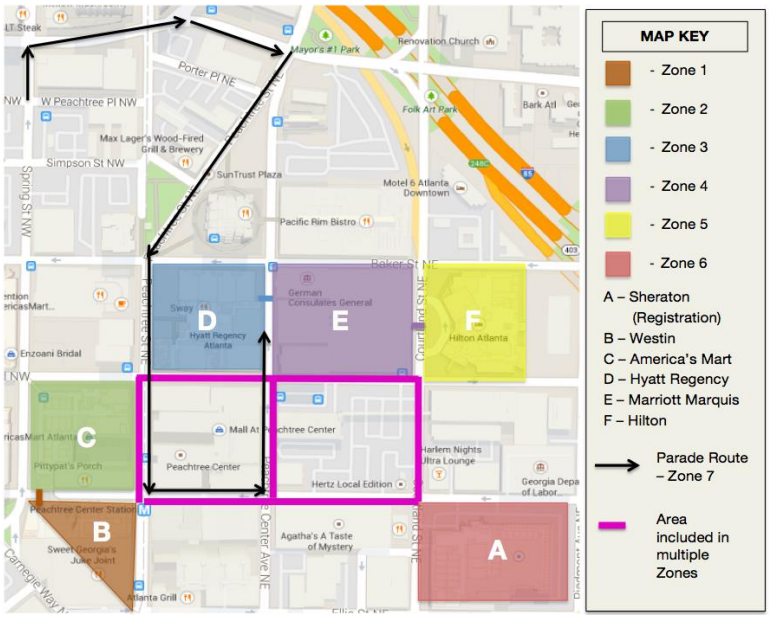

Figure 1: Hotel District Zone Map

3 LITERATURE REVIEW

Modern ADA Transition Plans are guided by the design requirements set forth in the *2010 ADA Standards for Accessible Design*. This standards document provides the minimum requirements that must be met by publicly-accessible infrastructure to be in compliance with the ADA. The relevant ADA design sections for the Atlanta Hotel District can be found in Chapters 3, 4, and 8, which provide design specifications for Building Blocks, Accessible Routes, Special Rooms, Spaces, and Other Elements. Any sidewalk, public space, or hotel in a particular zone that does not meet the ADA design standards must be updated to full compliance.

Select cities across the country have developed documentation and plans to bring local infrastructure into compliance with the ADA. For example, the Chicago Metropolitan Agency for Planning (CMAP) provides an excellent resource for designing an appropriate transition plan in its article, "ADA Transition Plans for Your Community: Accessibility for People with Disabilities." This article provides a procedural checklist designed to help local governments develop transition plans that best suit their cities (CMAP, 2012). Procedural suggestions provided by the CMAP guide were used in this report.

The National Academy of Sciences' National Cooperative Highway Research Program has published a 2009 report entitled *ADA Transition Plans: A Guide to Best Management Practices* that entails an enormous amount of useful information that any city or government can use to efficiently implement structural improvements to existing infrastructure. The NCHRP report stresses a hierarchical organizational structure with plenty of public feedback (FHWA, 2009). Hierarchy and public input are crucial in organizing a transition plan for an area like the Downtown Atlanta Hotel District, which has many stakeholders at the table.

The ADA Transition Plans prepared by various cities were reviewed during the development of this Hotel District//Dragon Con area plan. The *Transition Plan for Structural Changes - Final Report* from the City of Pasadena, California is one such plan that served as a good example. The Pasadena document provides a basis for formatting and structuring an ADA transition plan in a clean, efficient, and effective manner (City of Pasadena, 2009).

Researchers conducted interviews in person, on the phone, and via email with 2014 Dragon Con Disability Services Coordinator for the Atlanta Marriott Marquis, a concierge for the Hyatt Regency Atlanta, the Senior Event Manager of the Hilton, the Dragon Con Parade Director, and the Head of Dragon Con Disability Services. These contacts provided insight into the accessibility of the convention. The commentary of these individuals detailed most of the services that the event centers and convention have in place to ensure accessibility for attendees with disabilities. Disability services range from special queuing for registration to accessible shuttles.

The Dragon Con website (DragonCon.org, 2014) was also helpful for the development of this ADA transition plan. The website details the services and assistance the convention provides to guests with disabilities, including wheelchair seating for events and buses that transport guests

between venues. In addition, the website links to an incredibly useful Dragon Con Disability Services Wiki Guide, which provides many pages of support for attendees with physical disabilities.

Comic-Con, held annually in San Diego, is the world's largest multi-genre convention. Reviewing the Comic-Con practices to identify potential relevant strategies was appropriate for the rapidly growing Dragon Con. The Comic-Con website has plans detailing registration and help areas for people with disabilities as well as information on services, such as a multitude of shuttles. Based on the review of both the Dragon Con and Comic-Con websites, it seems that either the Comic-Con site is not as exhaustive as it could be, or that the San Diego convention's services may be less robust than Dragon Con's despite the fact that the convention in San Diego is larger.

4 STAKEHODLER ANALYSIS

An ADA Transition Plan for the Downtown Atlanta Hotel District, especially with respect to hosting conventions such as Dragon Con, is crucial for the continued success of the burgeoning convention and hospitality industry Downtown. Bringing a significant portion of Downtown to full, legally-required ADA compliance benefits pedestrians of all ages and physical abilities, regardless of the event or time period. A more accessible Downtown is a more attractive Downtown – attractive to new residents, visitors, tourists, businesses, students, and large-scale events to the historic core of Atlanta. As more people come into the area, increased revenue and capital investment follow. Thus, even bringing an area of a few blocks at a time up to proper ADA compliance can be transformative for neighborhoods such as Downtown.

There are numerous stakeholders involved in the implementation of any Atlanta Hotel District ADA Transition Plan. The City of Atlanta, Atlanta Regional Commission, and State of Georgia are key stakeholders in hosting an accessible Dragon Con. The 27th annual event drew over 60,000 people in 2014, which provides a significant economic impact of roughly $55 million to the local and state economies (Exhibit City News, 2014). Additionally, implementing an ADA Transition Plan reduces liability risks for the city. Dragon Con as an organization is a stakeholder, as an accessible event allows for expansion, good reviews, and the ability to host a better program. Participants in the convention are also stakeholders in this transition plan. The convention's member hotels, including the Atlanta Marriott Marquis, also have a vested interest in Dragon Con and other conventions because they bring additional guests and income.

Additional stakeholders include other property owners and businesses along the streets both within the zones and along the parade route. Under current City ordinances, property owners are responsible for the maintenance and repair of sidewalks fronting their property. Hence, the hotels may have to pay for sidewalk repairs that are necessary to comply with ADA standards. However, other local businesses in the area also benefit from repaired sidewalks and the economic activity that comes from conventions and pedestrian friendly design. Residents, tourists, students, and office workers in the Downtown area are all stakeholders because they use the sidewalks every day. Finally, MARTA is a stakeholder as its trains, stations, and buses receive additional use during large conventions.

5 METHODOLOGY

A team of two to three students examined each Hotel District zone during one or more on-site inspections. Each team inspected the interior of the primary event location in the assigned zone, as well as the exterior portions of the zone. The researchers assessed the Dragon Con disability services with the assistance of the Dragon Con disability coordinator.

Students assessed building interior spaces using the specifications in the *2010 ADA Standards for Accessible Design*. Students inspected facilities and photographed any non-compliant areas to document individual findings. In the exterior portions of each zone, sidewalk and pathway compliance was carefully analyzed. The teams verified sidewalk width, surface roughness, grades, and cross-slopes. Obstructions, potholes, and surface discontinuities greater than 1/4:" were identified and photographed. Wheelchair ramp designs and orientations were compared with ADA specifications using a list with the following checkbox options:

- Pothole
- Sidewalk obstruction (pole, car, etc.)
- Disjointed pavement (½" or more height difference, or ¼" to ½" without beveled edges)
- Rough or uneven surface
- Narrow sidewalk (<60" per City Code)
- Sidewalk grade too steep (>5%, unless road slope exceeds this value)
- Sidewalk cross-slope too steep (>2%)
- Improper crosswalk markings
- Pedestrian signal light defective
- Pedestrian walk button defective
- Missing wheelchair ramp
- Other

Intersections were assessed for crosswalk quality, presence of detectable warning strips at ramps and curb cuts, and the functionality of crossing buttons and lights were verified. Photographs were taken of each potential problem and cross-referenced with the corresponding section of the *2010 ADA Standards for Accessible Design* (see Appendices A and B). In addition, photographs from Google Maps' Street View mode provide context (see Appendix B).

Data were also collected using two new Android apps for pedestrian infrastructure evaluation developed at the Georgia Institute of Technology. These apps reduce the amount of time, money, and manpower required to collect data on the accessibility and quality of sidewalks and pedestrian crossing facilities. The first Android app, Sidewalk Sentry (Frackelton, et al., 2013), collects data using rolling video, vibration sensors, and the GPS capabilities of a regular Android tablet attached to a standard, non-motorized wheelchair. Video footage is post-processed to compile and geo-tag information about sidewalk presence, width, and condition. An online interface allows a user to identify and tag problems such as narrow widths, obstructions, potholes, surface discontinuities, etc., the necessary data to inventory and prioritize problems.

The sidewalks are color-coded by their quality rating and overlaid on an Open Streets Map interface, which is accessible to decision-makers.

The second Android and iOS app is Sidewalk Scout (Akanser, et al., 2015), which gives any smartphone user the ability to report sidewalk, ramp, and signal infrastructure issues they encounter throughout Atlanta or in any city across the country. Users can report potholes, obstructions, disjointed pavement, rough surfaces, narrow sidewalks, missing ramps, steep grades or cross slopes, improper crosswalk markings, defective walk buttons, and more. Crowdsourcing these data gives city officials a helpful way to quickly identify more problematic, higher priority areas; areas that are more frequently tagged by users may indicate a higher priority for infrastructure improvement based upon exposure. The map of user-generated tags is publicly available online (sidewalkscout.ce.gatech.edu).

Figure 2 shows the data available for a portion of Downtown and Midtown Atlanta. Government organizations looking to implement ADA transition plans can use apps such as Sidewalk Sentry and Sidewalk Scout to quickly identify problem areas and expedite the process of prioritizing repairs based upon safety, ADA compliance, or general mobility issues (Frackelton, et al., 2015).

Figure 2: Sidewalk Scout Data for Downtown Atlanta

6 FIELD INSPECTION FINDINGS BY ZONE AND POTENTIAL MITIGATION

Each field inspection team was assigned to a particular zone and inspected both the interior of the main event venue in that zone and the external public infrastructure. The conclusions of each assessment team were remarkably similar; the interior spaces of the venues were almost completely ADA compliant, while the infrastructure outside on the sidewalks was often decidedly non-compliant. Appendix A provides the details of all of the problems identified by the teams for local sidewalks, but still may not be exhaustive given the limited prior experience of the field teams. Photographic evidence supporting Appendix A findings is presented in Appendix B. Within the forthcoming sections of the report, prominent examples are provided from Appendix A, with accompanying photographs pulled from Appendix B, to illustrate replacement or repair needs.

The interiors of the hotels and conference rooms were very accessible. Meeting rooms, elevators, and services were often above and beyond the requirements of the ADA. During Dragon Con, these venues provides even more services to accommodate individuals with disabilities, including watchful staff on hand to ensure that any form of disability can be properly and quickly accommodated (Mayer, 2014). Combined with the exceptional services provided by the convention staff, ADA accommodations within event centers appear to be well handled. Indeed, the primary impediments to accessibility are the areas outside of the hotels. This is inevitably problematic, as Dragon Con attendees need to move from hotel to hotel during the convention to attend various events of interest.

The accessibility issues identified outside of the hotels are described zone-by-zone in the sections that follow. The findings for these zones are not exhaustive, and additional review should be undertaken by an ADA Transition Plan advisory panel (recommended later in this report) to ensure the area is brought to full ADA compliance. Specific ADA compliance issues and recommendations are grouped by intersection and listed by item in the tables in Appendix A. Any ADA issues identified on streets that overlap two zones overlap are mentioned in each section, but described in detail in only one zone.

Zone 1 - Westin and Connections to the Hyatt, Marriott, Sheraton, and MARTA

Transit access to the Downtown Hotel District is achieved through MARTA's Peachtree Center Station. The principal heavy-rail station in the Hotel District, Peachtree Center Station serves the Red and Gold Lines (north-bound and south-bound trains). The Peachtree Center MARTA Station is fairly ADA compliant. Wayfaring signs are located in appropriate locations. The station also meets all ADA requirements for leg clearances and button/handle/card reader heights for wheelchair users. Unfortunately, the elevator for persons with disabilities smelled strongly of urine, which provides an uncomfortable and potentially unsanitary experience. To combat this issue, MARTA is currently installing new urine detection devices (UDD) in elevators in some stations. UDD's sense when a rider relieves him- or herself and immediately notify MARTA police (WSB-TV, 2013). The only other issue with the station is that the gap between the trains

and platforms is often wide, posing an issue for pedestrians with visually impairments (using canes that may catch in the gap) and wheelchair users. As this may be an issue in multiple stations, we recommend MARTA examine this issue closely in the future.

Aside from heavy rail, MARTA's bus transit is frequently used Downtown. Transit access includes mobility and access within vehicles and stations, as well as being able to get to and from stations, and having places to wait at designated stops. Hence, review of bus stops and surrounding areas is a necessary part of ADA transition plans. However, not all of the bus stops were examined by students as a part of this assessment (an oversight in the parameters of the honors course assignment). The authors believe that all bus stops should be assessed in ADA transition plans, including an assessment of access to the bus stops and waiting areas.

There are two bus stops near the Westin Peachtree Plaza; one at Peachtree Street and Andrew Young International Boulevard and another at Spring Street and Carnegie Way. Both bus stops are situated in locations that allow safe and accessible navigation from the bus to the hotel, and vice-versa. Still, there are other bus stop signs that are hard to locate, such as the one at the northwest corner of John Portman Boulevard and Courtland Street, adjacent to the Hilton, where the bus stop sign is hidden among other traffic signs and behind several tree branches. Adding benches or shelters and making the signs more identifiable could lead to more enjoyment of the bus system and possibly more people choosing MARTA for their trips Downtown. The Atlanta Streetcar also now stops at Peachtree Center Station. The streetcar stop is designed with wheelchair accessibility in mind, complete with a raised platform and waiting shelter prioritized for pedestrians with disabilities.

The sidewalk from Peachtree Center Station to the front door of the Westin Peachtree Plaza has only a slight incline, but one small area has a cross slope greater than 2%. The main entrance to the Westin Peachtree Plaza is located on Peachtree Street and is completely inaccessible to wheelchair users, as it has only stairs (no ramp). Wheelchair users must instead travel west on Andrew Young International Boulevard to a ramp-equipped side entrance to the hotel. There is a visible way-finding sign for wheelchair users on the northern side of the building at the intersection of Peachtree Street and Andrew Young International Boulevard, but this sign is not visible coming from the east on Andrew Young International Boulevard. Another sign should be placed to aid westbound pedestrians. The sidewalk on Andrew Young is very steep, with a running slope of nearly 6.5%. This route also includes a driveway curb cut for waste removal trucks, and the curb cut results in a non-compliant cross slope of around 5%. The sidewalk slope at the door to the handicap accessible entrance is 7.6%, following the slope of the street (compared to ADA standards of 5% slope). However, in this case, the 7.6% grade of the sidewalk is allowable as it follows the natural topography of the street. Additionally, the sidewalks are not constructed with concrete; they are large stone slabs, which, while visually appealing, are bumpy and have less friction than regular concrete. Students Breanna Poteet and Patrick Tarrant confirmed this using a standard, non-motorized wheelchair. While approaching Spring Street, the wheels actually begin sliding on the stone slab sidewalk, even in dry conditions. Additionally, ventilation grates are present in the sidewalk running parallel to the direction of travel rather than perpendicular, presenting a hazard for wheelchair and cane users.

The intersection of Peachtree Street and Andrew Young International Boulevard has an artistic mosaic of bricks, with long, narrow strips of a light-colored stone bricks to indicate the crosswalks that were installed at about the time of the 1996 Olympics (see Figure 3). The crossing signals are easy to see and to operate. However, The narrowness of these strips, and the lack of perpendicular stripes present in standard crosswalks, may result in drivers being less aware of pedestrians, thereby reducing pedestrian visibility. The mosaic could be tastefully updated to increase safety.

At the intersection of Andrew Young International Boulevard and Spring Street, the southeastern curb ramp does not extend to the east/west crosswalk. Using the ramp requires a wheelchair to enter traffic. Crossing signals were obvious and easy to use.

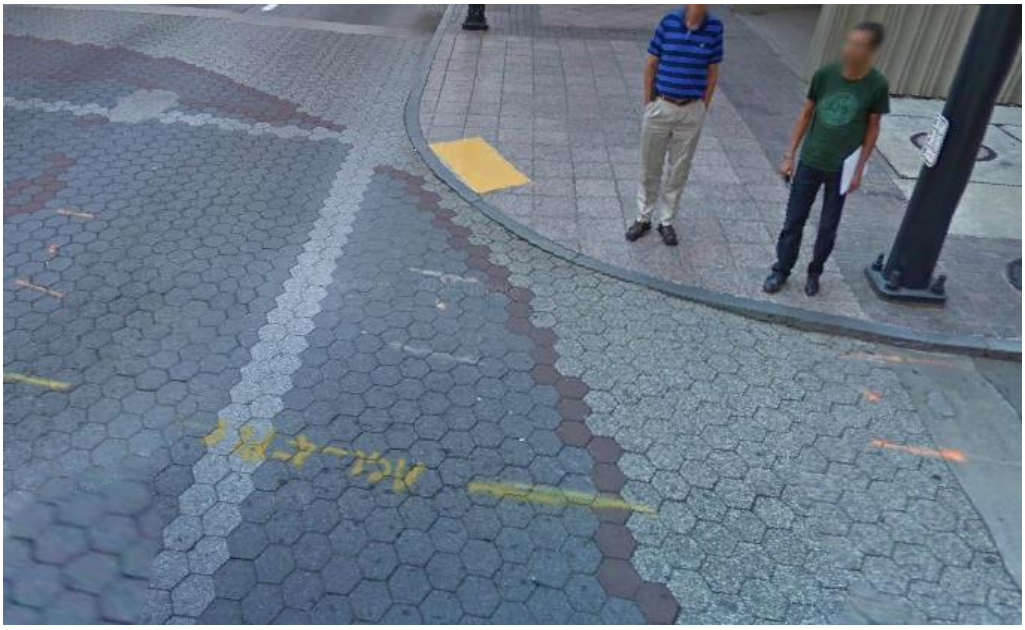

Figure 3: Poorly Delineated Crosswalks at Peachtree Street and Andrew Young International Boulevard

The Dragon Con shuttle stop for the Westin Peachtree Plaza is located across the street from the side entrance, which presents the problem of visitors having to travel halfway up the block to cross at a crosswalk and then travel back down, or vice-versa,. The grade of the road presents a tremendous challenge to wheelchair users, and as mentioned earlier, cannot be considered accessible because the slope of the walking surface is greater than 5%. Although nothing can be done to change the local topography, the shuttle stop could be moved to a flatter and more accessible location.

Zone 2 - AmericasMart and Connections to the Westin, Marriott, and Hilton

Inside the AmericasMart complex itself, no obvious ADA issues were observed during field inspections during the guided tour of the venue exhibition halls. ADA-accessible entrances to Building 1 were compliant and easy to find. The facility's main internal ADA issue is that the sky bridge connection between AmericasMart and the Westin Peachtree Plaza. The doors entering into the connection are either not automated, or the button for the automatic doors did not function. Thus, an individual using a wheelchair would not be able to access the bridge without performing a difficult maneuver or receiving assistance from someone else.

This Atlanta Marriott Marquis' connection points to AmericasMart are mostly ADA-compliant. However, the street-side access point to the sky bridge system is only accessible by a flight of stairs, and interior access to the sky bridge is not clearly designated. Additionally, the interior doors leading from the hotel into the sky bridge lack a button for automatic door functionality**.**

The Hilton's connection points to AmericasMart are largely ADA-compliant. Ramps and signs to elevators are plentiful. The entrance to the sky bridge system is also clearly designated. Again, the only notable issue is the lack of a button for automatic door functionality.

The sidewalks and crosswalks surrounding AmericasMart, Westin Peachtree Plaza, Atlanta Marriott Marquis, and Hilton exhibit some ADA compliance problems. The intersections of John Portman Boulevard at Peachtree Street, John Portman Boulevard at Spring Street, and Andrew Young International Boulevard at Spring Street all have various ADA issues with varying degrees of severity. The tables in Appendix A contain further details of these problems. Additionally, moving downhill on John Portman Boulevard towards the Atlanta Marriott Marquis and Atlanta Hilton, it becomes evident that the journey in a manual wheelchair may be considered dangerous downhill and nearly impossible uphill. The steep incline and narrow sidewalks going down John Portman Boulevard are likely to cause problems for downhill-travelling wheelchair users, including potential loss of control of the wheelchair. An uphill-travelling wheelchair user would need superior strength to surmount the grade. In addition to the slope issue, this sidewalk is too narrow to adequately handle the throngs of people who use it during the Dragon Con event. Expansion of the sidewalk area is advised. It would also be beneficial for Dragon Con or hotel officials to add signage to indicate that this route is inadvisable for pedestrians using non-motorized wheelchairs.

Zone 3 - Hyatt and Connections to the Sheraton, AmericasMart, and Hilton

Overall, the team found more issues with the sidewalks than with ramps and crosswalks in this zone. Sidewalk issues are mostly on Courtland Street, John Portman Boulevard, and Andrew Young International Boulevard (documented in Zones 1, 2, and 4 sections). Many of these issues involve the crumbling, disjointed sidewalks of Courtland Street (See Figure 4, below).

The steepness of John Portman Boulevard and Andrew Young International pose issues in some places. However, the ADA does not require sidewalks to overcome natural road topography. Hence, sidewalk slopes are compliant, but are still not necessarily accessible (see Figure 5**).** Additionally, some cross slopes in this area have problems, such as those all along Courtland Street and along John Portman Boulevard between Peachtree Street and Peachtree Center Avenue.

Figure 4: Courtland Street NE between Andrew Young International and John Portman Boulevard

There is one issue with the Hyatt Regency Atlanta in this zone that must be noted. At the front drive entrance on Peachtree Street, the pavement is composed of tiles, in both the vehicle right-of-way and pedestrian right-of-way. The tile floor appears to be a pedestrian walkway, but is actually shared with vehicle traffic. The tile floor continues to the street and serves vehicles entering the lobby drop-off area. Thus, cars and pedestrians can both use the tiled area and neither may realize that this is a shared pathway. Slab pillars are present to protect pedestrians from these cars. However, during peak periods of pedestrian activity, some pedestrians move beyond the slab pillars into what appears to be a pedestrian walkway. This mixed-use right-of-way could contribute to collisions between vehicles and pedestrians. Detectable warning strips or a physical separation intervention is recommended to mark the mode change between the drive-in portion and pedestrian-only portion of the front driveway/walkway area.

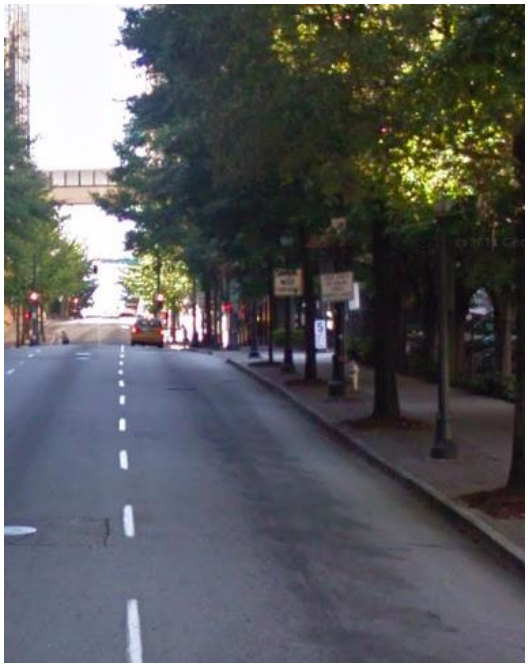

Figure 5: Westward View up Andrew Young International Boulevard and Naturally Steep Topography

Zone 4 - Marriott Marquis and Connections to the Hilton, Sheraton, and Westin

The area around the Atlanta Marriott Marquis has sidewalks, curb cuts, ramps, grades, cross-slopes, and curbs that are in various states of disrepair and ADA non-compliance. The tables in the Appendices and the recommendations in this section will help guide and direct repairs and replacement. The most pressing issue is the alignment and quality of the wheelchair ramps at almost every intersection around the Atlanta Marriott Marquis. Most of these ramps are cracked and crumbling, and misaligned with the common pedestrian path. Uneven asphalt bumps that exceed ADA 1/2" standards are present at almost all transitions between the ramp and the street surface at the crosswalks. New ramps need to be installed and the asphalt surface needs to be replaced or milled to provide a smooth transition from crosswalk to sidewalk. Additionally, all of the crosswalks in this area require maintenance. Much of the paint is gone, diminishing the visibility of established pedestrian right-of-way. The asphalt within the crosswalks often contains potholes and the surface provides an uneven transition from the street to the curb ramps (see Figure 6). The streets below the crosswalks will need to be repaved prior to repainting the crosswalk.

Sidewalks throughout this zone are crumbling, exhibit prominent gaps, include pavement disjoints, and have grade issues. Large iron grates also create issues for wheelchair users. Sidewalks in most of the zone should be re-paved and re-graded to comply with ADA design standards and to meet any desired stylistic design goals.

Figure 6: NE Corner of John Portman Boulevard at Peachtree Center Avenue, with Non-compliant Wheelchair Ramp

The sidewalk on the southern edge of the Atlanta Marriott Marquis integrates large advertising structures that impede pedestrian travel (see Figure 7). These signs obstruct the pathway, reduce passing width, and limit available public space. This sidewalk is a problem during Dragon Con, allowing only two people to walk side-by-side, which leads to slow moving crowds and a heightened possibility of the street being used as a walkway. Hence, the structures also create safety concerns for pedestrian-vehicle interactions. These advertising structures should be removed before the sidewalk is reconstructed, to promote as wide a walking space as possible. The sidewalks on the eastern, northern, and western sides of the Atlanta Marriott Marquis's block are in fairly good condition, but should be updated with detectable warning strips to aid visually impaired users in the many areas where sidewalks are contiguous with vehicle entrances/ramps. There are many cracked and disjointed concrete sidewalk slabs that need to be replaced, milled, or patched. In addition, grates need to be added around the trees to eliminate the combined wheelchair, visually-impaired pedestrian, and trip hazards.

Figure 7: Northern Sidewalk of John Portman Boulevard with Advertising Structures

The sidewalks and almost all the ramps on Peachtree Street between John Portman Boulevard NE and the Westin Peachtree Plaza are in very good condition and are aesthetically pleasing. Only a few ramps need updating (specifically noted in Appendix A). Sidewalks along three of the streets near the Atlanta Marriott Marquis and connecting routes need to be repaved, widened, or heavily updated: 1) John Portman Boulevard NE, between Peachtree Street and Courtland Street NE; 2) Baker Street NE, between Peachtree Center Avenue NE and Courtland Street NE; and 3) Courtland Street NE, between John Portman Boulevard and Andrew Young International Boulevard NE. In these locations, sidewalks were often narrow, falling apart, and covered in plant debris or trash. In many cases, there is no curb to separate pedestrians from vehicles or and one erstwhile "ramp" leads into the street at a mid-block location with no crosswalk.

Zone 5 - Hilton and Connections to the Hyatt, AmericasMart, and the Westin

The greatest accessibility issue in this zone is again the poor quality of the streets and sidewalks. The initial investigation of the pedestrian routes between hotels revealed many stretches of sidewalks that were broken, disjointed, steeply sloped, and/or narrow. Many street corners, such as those at the intersection of John Portman Boulevard and Courtland Street, had improperly designed ramps or were missing ramps altogether. Some curb ramp issues may be attributed to pre-existing objects that would be difficult to relocate, such as manhole covers and fire hydrants. Nonetheless, a lack of quality curb ramps is a major barrier for those accessing the sidewalks in a wheelchair. Along with poor street quality, the painted crosswalks in many locations were chipped and faded, making it hard to distinguish if there was a crosswalk and creating a potential safety issue for pedestrians crossing the street.

With respect to street design standards, the visibility triangles and building setbacks in this zone are appropriate. Atlanta's Code of Ordinances requires a 20 feet by 20 feet visibility triangle at intersections where there is nothing to obstruct the view between 2.5 feet and 8 feet above the sidewalk (Section 16.9.a).

Many sidewalks in this zone are narrow. There are also design obstructions that cause the sidewalks to feel narrow and uncomfortable. Elements such as wide planting strips without tree grate covers, and advertisement marquees take up space in the pedestrian right-of-way and contribute to both actual and perceived narrowing of the sidewalk. There is a considerable distance between the buildings and the street, leaving room for sidewalk expansion.

Another accessibility issue in this zone can be found in the sky bridge linking the Hilton to the Atlanta Marriott Marquis (see Figure 8). This route is popular with conventioneers, but does not have an automatic door at either access point. While the width of the doors were ADA compliant, guests using wheelchairs or other assistive devices may encounter difficulties operating the manual doors themselves. Automated door openers should be considered at this location given the potential number of users, especially during conventions. The walking surface of the sky bridge was also very smooth, increasing the chances of an individual slipping and falling, especially if the surface is wet. The sky bridge between the Atlanta Marriott Marquis and Hyatt Regency Atlanta has a different type of flooring but also has a moderately-steep slope, measured at 3.7 degrees. While this is also compliant with the ADA running slope requirements, it is still difficult for a person using a wheelchair to move uphill, especially with slow moving pedestrian traffic. Other than the sky bridge issues identified above, accessing the hotels was easy with wide hallways and helpful service staffs to provide direction. Data for this zone and pictorial evidence can be found in Appendices A and B.

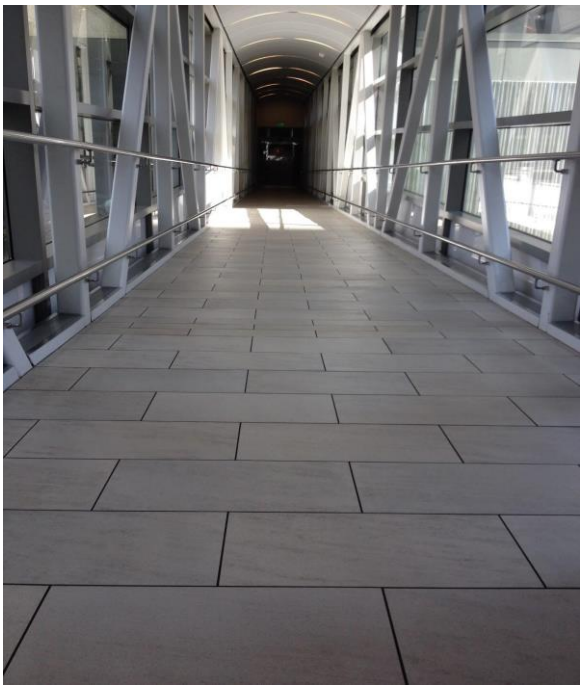

Figure 8: Sky Bridge between the Hyatt and Marriott Hotels

Zone 6 - Sheraton and Connections to the Hilton, AmericasMart, the Westin, and MARTA

The Sheraton Atlanta is the convention's registration location and hosts a number of events. The primary MARTA connection to the Sheraton Atlanta is still the Peachtree Center Station. The registration process has been streamlined to accommodate the needs of people with disabilities. However, the exterior of the hotel still has some potential ADA issues. Conditions of all of the streets within this zone have been discussed in previous sections.

Zone 7 - Dragon Con Parade Route and Connections to the Sheraton

Zone 7 consists of the streets along the Dragon Con parade route and connections to Dragon Con registration at the Sheraton Atlanta. The parade is the largest event in the Dragon Con

Convention and one of the largest on-street events in Atlanta every year. The Atlanta Journal-Constitution reported that each year the Dragon Con parade attracts more than 3,000 parade participants and 75,000 observers (Ruggieri, 2014). In 2014, the parade route was modified to avoid some downtown construction (Price, 2014). The 2014 parade started on Spring Street and ended in front of the entrance to the Atlanta Marriott Marquis on Peachtree Center Avenue. Figure 9 shows a full map of the route, including a staging area for floats and participants.

Official convention policy allows all Dragon Con members, regardless of physical ability, to participate in the parade, should they choose to do so. Rides and vehicles such as scooters have been arranged through external contacts for people who are not able to walk the entire route (Price, 2014). Dragon Con pays for barricades and police officers for control of the parade route, but an increased presence of officers would help to handle the volume of people present. As previously noted, some 75,000 spectators attended last year's parade, and sidewalks were flooded with people standing 8 to 10 deep. The sidewalks were so full that many people chose to view the parade from parking garages and adjacent buildings. From an ADA perspective, there's little that Dragon Con can do regarding the parade route itself, other than redirecting the route along existing roadways and sidewalks that are more ADA compliant (Price, 2014) and potentially working with the City to establish viewing zones for disabled spectators.

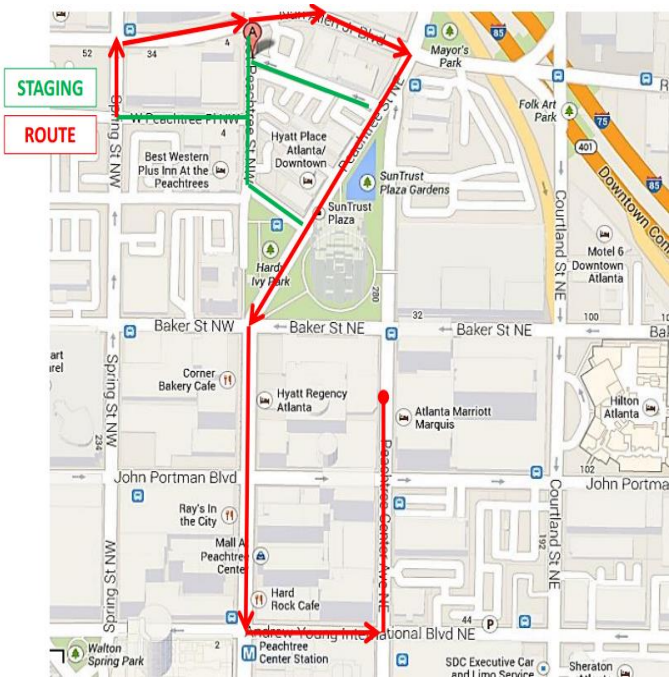

Figure 9: Dragon Con Parade Route Map

The sidewalks at the beginning of the parade route on Spring Street appear to have been recently upgraded and are wide and well-constructed. The northwest corner of the intersection of Spring Street and West Peachtree Place features attractive detectable warning strips made with brick. The west side of the street is not as wide or aesthetically pleasing, but meets ADA sidewalk standards. The intersection of Spring Street and Ivan Allen Junior Boulevard is almost entirely ADA compliant, with the exception of small pole obstructions on the sides of detectable warning strips (located at the northwest corner) and a large signal controller cabinet (a large metal electrical box) close to the northeast corner, which may need to be moved to accommodate crowds. Both sides of the sidewalk on Ivan Allen Junior Boulevard between Spring Street and West Peachtree Street are fully ADA compliant and aesthetically pleasing. At the intersection of West Peachtree Street and Ivan Allen Junior Boulevard, the only problem is that the landing area at the northeast corner's wheelchair ramp is only about one foot deep, nearly 4 feet shorter than the required 5-feet long landing area. The landing is also obstructed by a traffic signal pole (see **Figure 9**). This problem could be remedied by making the entire corner flat and level with the street. Continuing along the northern side of Ivan Allen Junior Boulevard, there are no

wheelchair ramps at the island or corners of the intersection with Alexander Street. The rest of this sidewalk appears to be compliant. The southern sidewalk on Ivan Allen Junior Boulevard is starting to crack and is too narrow in certain areas to allow for adequate passing room. Widening the Alexander Street sidewalk along this stretch is recommended.

Figure 9: NE Corner of the Intersection of West Peachtree Street and Ivan Allen Junior Boulevard (Parade Route)

At the intersection of Peachtree Street and Ivan Allen Boulevard, and onward down Peachtree Street, the sidewalks are made of decorative pavers or tiles. The pavers are of good quality and surface roughness appears reasonable. The city could consider incorporating similar aesthetic materials into future sidewalk infrastructure, provided that these materials will not create problems with surface roughness or create surface discontinuities over their expected 40-year lifecycles. Aesthetic design elements have the potential to improve the pedestrian environment and perception of the city, provided that construction and lifecycle maintenance costs are reasonable. However, it is imperative that the city ensure that such aesthetic design treatments do not create maintenance or ADA compliance issues over 40-year sidewalk lifecycles.

The most common issues along the parade route, and indeed in most of the study areas, arise at the intersections. Many corners do not have any form of detectable warning strips, are not flush with the crosswalks, and/or have issues with wheelchair ramps. Many wheelchair ramps are too narrow, have inadequate landing areas, or are missing entirely. The rest of the sidewalks and intersections featured in this zone have already been covered well in previous sections and are documented thoroughly in Appendices A and B.

7 TRANSITION PLAN LOGISTICS AND ADMINISTRATION

Based upon the field inspection results and the observed state of the infrastructure in the Hotel District, there is a clear and urgent need for an ADA Transition Plan to be implemented to better serve all those who use these public amenities. Updating these streetscapes to be ADA compliant and have more pedestrian-friendly design should be a high priority for the Hotel District. Improving ADA compliance should increase property values and pedestrian attractiveness, which positively impacts residents and visitors to the city. Increasing accessibility in this area will help make Downtown a more appealing neighborhood for businesses, events, tourism, convention-goers, residents, and students.

7.1 PRIORITIZATION

Not all of the ADA issues identified within the scope of this study carry the same weight. Some of the problems need to be fixed much more urgently than others. In general, the highest priority should be assigned to repairs of problems that either pose a significant danger to pedestrians and/or occur in well-travelled areas. All the issues highlighted in this report are discussed and prioritized as 1-high, 2-medium, and 3-low in Appendix A. Higher priority is given to more hazardous problems in the areas of with high pedestrian traffic, closer to entrances and the parade route. For instance, a broken or missing wheelchair ramp close to the parade route, where foot traffic is heavy, is a higher priority than a misaligned detectable warning strip closer to the Interstate, where foot traffic is light.

Highest priority improvements include: the replacement of all wheelchair ramps at Peachtree Center Avenue and John Portman Boulevard, the reconstruction and widening of the Courtland Street sidewalks between John Portman and Andrew Young International Boulevards, the installation of the wheelchair ramps the installation of wheelchair ramps at all crosswalks along the parade route (such as Peachtree Street at West Peachtree Street), the installation or replacement of wheelchair ramps at Courtland Street and John Portman Boulevard, the repaving of asphalt street-to-sidewalk transitions along John Portman Boulevard, Andrew Young International Boulevard, Courtland Street, and Peachtree Street, and the installation of appropriate wheelchair ramps at Alexander Street and Ivan Allen Junior Boulevard. The improvements could outlined above are of equal "high" priority and could be made in any order.

7.2 ESTIMATED COST

Using information contained in the City of Pasadena's ADA Transition Plan, cost estimates were assigned to the specific problems identified (see Appendix A). The costs for specific items in Pasadena's plan were used as the projected costs for corresponding items in the Atlanta Hotel District plan. Given these costs, and accounting for the overlap between zones, the preliminary cost of implementing all recommended repairs and upgrades is about $1.5 million. The costs for infrastructure improvements in Pasadena, California may differ widely from those in Atlanta, Georgia, adding some uncertainty to this cost estimate. The severe deterioration of the sidewalks in the Hotel District made identification of non-compliant pavement disjoints very difficult.

Hence, sidewalk repair costs estimates may be low. Unforeseen issues may also arise during the process of implementing the improvements, which could increase total costs. Hiring staff, drafting final design plans, hiring contractors, unforeseen delays, and extra improvements could bring the total repair costs closer to $3 million. For the Hotel District and parade route area consisting of eight city blocks, the average price per block would be about $375,000, not including bond interest. Given that the average life utility of a sidewalk is 40 years, these repairs and upgrades could be amortized to about $9,375/block/year, perhaps allocated proportionally between property owners based upon sidewalk frontage, land area, or some other parameter.

7.3 ADMINISTRATION

To ensure sidewalk and ramp repairs and upgrades are implemented properly, the team recommends that an advisory panel be appointed to serve as the temporary overseer for this area's ADA transition plan implementation. Representative officials could include one member from each of the following organizations: the Atlanta Department of Public Works, the Atlanta Department of Procurement, the Atlanta City Council, Central Atlanta Progress, Dragon Con, Convention and Visitors Bureau, the Atlanta Marriott Marquis, the Westin Peachtree Plaza, Atlanta Hilton, Hyatt Regency Atlanta, Sheraton Atlanta, AmericasMart, and Georgia Tech/Georgia State University. This committee could be headed up by the representative from the Atlanta Department of Public Works to help increase communication and planning for this large-scale improvement project. The stakeholder panel would work with the City to develop an appropriate fiscal approach for plan implementation, help prioritize repairs and ensure that all ADA design standards are met. The member hotels would participate on this committee, which would also handle grievances and requests from property owners within its jurisdiction. All of the stakeholders involved are likely to experience significant benefits from transition plan implementation.

The team recommends that a representative from the Department of Public Works be chosen to head up the committee in charge of this ADA transition plan in July 2015. This individual would need to begin assembling advisory panel members by the end of August 2015. The committee could begin meeting in August on a weekly or bi-weekly basis to begin discussing objectives, methods, standards, funding, etc. Repair work could be well underway before the end of 2015. We recommend all zones be brought up to full structural ADA compliance in 2016.

8 CONCLUSIONS

Many structural changes must be implemented to bring the Downtown Hotel District up to complete ADA compliance for sidewalks, pathways, and ramps. Most of the changes required in this area involve replacing wheelchair ramps, adding detectable warning strips to ramps and curb cuts, sidewalk expansion, obstruction removal, and repaving sidewalks, filling cracks, and milling pavement disjoints. For approximately $3 million, the area surrounding the Hotel District of Downtown Atlanta could be brought up to appropriate ADA standards, creating and inclusive and equal space for all pedestrians. Implementing the transition plan is a starting point for implementing changes to improve the accessibility of mega-events such as Dragon Con. Moreover, bringing the District into ADA compliance may boost the local economy and promote future investment and tourism in Downtown Atlanta. Splitting costs between property owners and other stakeholders in the area, such as Central Atlanta Progress (the Downtown Central Improvement District), and the City of Atlanta would make the overall estimated $3 million cost more palatable for all of the stakeholders involved.

City officials, property owners, and local business owners should meet to review, modify, and concur on a final ADA transition plan for the Atlanta Downtown Hotel District. The final plan should establish assign responsibility for repairs to specific entities. There are still some incomplete and items in this report, such as a complete inventory of bus stops that should be reviewed, in addition to any addition reviews or follow-up field measurements for problems didentified in this report. The research team has provided this as a guidance document and initial data collection effort to try to encourage stakeholders to finalize and implement an ADA transition plan to improve the Atlanta Downtown Hotel District for all users.

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Photograph Sources

Photographs B-3 through B-6 and B-28 through B-36 are screen captures from Google Maps' StreetView Mode on Nov. 10, 2014, while C-37 through C-64 were taken on Mar. 17, 2015.

10 APPENDIX A: SPECIFIC ADA ISSUES AND RECOMMENDATIONS

Appendix A contains tables which break the zones of study down by street and intersection. Each table lists specific ADA issues at that intersection or on that street, giving locations with directional names or pictorial reference. The current condition of the non-compliant infrastructure is described and corrective actions are recommended. For each line item, a specific cost and priority ranking are given. The rationale for that priority ranking is explained.

Cost estimates are based upon the information found in the City of Pasadena's ADA Transition Plan (City of Pasadena, 2009). Infrastructure improvement costs in Pasadena, California may differ significantly from those in Atlanta, Georgia. Although labor and materials costs may be lower in Atlanta, given the severe deterioration of the Atlanta sidewalks, net repair costs per square foot in Atlanta may actually be higher. Unforeseen issues may also arise during the process of implementing the improvements, which could increase total costs.

All the issues have been prioritized as 1-high, 2-medium, and 3-low. Higher prioritization is given to more hazardous problems in areas of higher foot traffic closer to entrances and the parade route. For instance, a broken or missing wheelchair ramp close to the parade route, where foot traffic is heavy, would be higher priority than a misaligned detectable warning strip closer to the Interstate, where foot traffic is light.

Column two of the Tables in Appendix A contain the Figure reference to photographic evidence in Appendix B that corroborates the issues enumerated in the Appendix A. The ADA issues presented in each photograph are also identified in Appendix B figure captions.

10.1 COURTLAND STREET NE AT JOHN PORTMAN BOULEVARD NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
1	NE Corner Figure B-2	Wheelchair ramp damaged, road transition uneven, partial obstruction of ramp (Sec 4.3.8)	Realign wheelchair ramp to remove obstruction by fire hydrant and grade the road transition to be smoother and gap-free	$3,000	2-Medium	Current condition is compliant, but these obstructions are in a fairly high traffic area.
2	NW Corner Figure B-1	No wheelchair ramp on east side (Sec 4.7.1)	Install a wheelchair ramp	$3,000	1-High	This creates a serious impediment for users and limits accessibility.
3	All crosswalks at this intersection Figure B-1	Fading paint on top of cracked and uneven asphalt	Repair asphalt on the sidewalk	$2,000	3-Low	Fading lines can impede visibility of pedestrians in the intersection.
4	SW Corner Figure B-28	Curb ramp is not flush with the road	Make the road flush with the curb ramp	$1,000	1-High	Creates a serious impediment for users and limits accessibility.

10.2 JOHN PORTMAN BOULEVARD NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
5	Figure B-21	A large dip is present in the middle of the walkway (Sec 4.3.8)	Infill the dip	$800	3-Low	This is an impediment to people who travel in wheelchairs as well as being a trip hazard, but it does not block the path completely for wheelchair users.
6	Figure B-20	The pathway is very narrow with obstacles protruding into the path that are too high off of the ground (Sec 4.3.3, Sec 4.4.1)	The obstacles on the right should be removed to open up more of the sidewalk and to eliminate potential hazards	$18,000	2-Medium	This could be a very useful improvement to the pedestrian flow in the area.

10.3 COURTLAND STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
7	Figure B-15	There is a large change in height along the pathway (Sec 4.3.8) and the path is too narrow for a wheelchair (Sec 4.3.3)	The change in height should be smoothed and the costs of cutting into the wall to widen the sidewalk should be explored	Contact a structural engineer for a quote	3-Low	The hotel already has a handicap accessible entrance, but this change would provide a more convenient, direct, accessible route for wheelchair users.
8	Figure B-16	The pathway is too narrow to allow a wheelchair to pass (Sec 4.3.3)	The flower box should be redesigned to allow for a larger path past the choke point	$3000	3- Low	The hotel already has a handicap accessible route available, but access to this hotel entrance is preferable.
9	Figure B-3	No detectable warning strip (Sec 4.7.7)	Add a warning strip on the ramp	$800	1-High	There is no warning strip on the ramp for visually impaired pedestrians which could lead to injury. The strip should be added as soon as possible.

10.4 BAKER STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
10	Figure B-10	Sidewalk is uneven with the metal plate around the tree (Sec 4.3.8)	Reposition the metal plate to make it even with the sidewalk	$400	2-Medium	Leveling the walkway will allow for easier passage of wheelchair users (easy fix).
11	Figure B-11	The driveway has become cracked and uneven (Sec 4.3.8)	Patch the driveway	$300	2-Medium	There is a bit of cracking in the pavement and it has become slightly uneven which could pose a problem for the visually-impaired and wheelchair users
12	Figure B-22	No detectable warning strip (Sec 4.7.7)	Add detectable warning strips	$2000	1-High	Warning strips should be added as soon as possible so as to prevent any injury to the visually impaired.
13	Figure B-23	Large change in height between the sidewalk and tree grate (Sec 4.3.8)	Level the sidewalk to the grate	$200	3-Low	Uneven surface can still be traversed by a wheelchair user but should be fixed to remove the trip hazard
14	Figure B-12	Driveway is cracked (Sec 4.5.1)	Repair the cracks on the driveway	$500	3-Low	The driveway has cracks and the surface is uneven

10.5 PEACHTREE CENTER AVE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
15	Marriott Entrance Figure B-7	No detectable warning strip (Sec 4.7.7)	Add detection strips	$2000	1-High	This is a high priority because detection strips are useful for keeping visions impaired people safe from the dangers of traffic.
16	Figure B-26	No detectable warning strip (Sec 4.7.7)	Add detection strips	$2000	1-High	This is a high priority because detection strips are useful for keeping visions impaired people safe from the dangers of traffic.
17	Figure B-27	Door is difficult to open	Add a button-activated door opener	$7000	2-Medium	The skyway is the most wheelchair friendly way of getting between hotels and needs a door that can easily be opened by wheelchair users.

10.6 PEACHTREE CENTER AVE AT JOHN PORTMAN BOULEVARD

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
18	NW Corner Figure B-24	No detectable warning strips on any of the curb ramps (Sec 4.7.7)	Add detectable warning strips	$1,600	1-High	Detectable warning strips prevent visually impaired individuals from walking into traffic.
19	All ramps Figure B-25	Curb ramp not flush with street (Sec 4.3.8)	Fill or grind ramps to make flush	$800	1-High	The curb ramp needs to be flush with the street or the wheelchair user.

10.7 PEACHTREE CENTER AVE AT BAKER STREET

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
20	SE Corner Figure B-9	Curb ramp is not flush with road (Sec 4.3.8)	even out road to make the two flush	$100	1-High	This is a serious problem because it could force a wheelchair user out in the road into traffic.
21	SW Corner Figure B-8	Asphalt around drain is uneven and grate has long grooves that are not ADA compliant (Sec 4.3.8)	level out road and raise up drain and make drain ADA compliant	$1000	1-High	This is important to do quickly because a wheelchair could get stuck in the road because of the drain.

10.8 COURTLAND STREET NE AT BAKER STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
22	SW Corner Figure B-13 Figure B-14	Ramp obstructed by access plate, ramp not flush with road (Sec 4.3.8)	Insert slanted access plate to smooth ramp and make a flush transition	$1,500	1-High	The access plate could cause a wheelchair to get stuck near the road and in the process of getting unstuck they could wind up in traffic.

10.9 PEACHTREE STREET AT JOHN PORTMAN BOULEVARD NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
23	SW Corner Figure B-29	No detectable warning strip at ramp (Sec 4.7.7)	Install a warning strip	$800	1-High	Detectable warning strips are important in keeping visually impaired individuals safe from the traffic dangers.
24	SW Corner Figure B-29	The crosswalk is very worn down (Sec 4.5.1)	Repair that section of road	$600	1-high	Since the problem is in the middle of the crosswalk it is possible for the wheelchair user to become stuck in some of the worn sections of the road.

10.10 PEACHTREE STREET AT ANDREW YOUNG INTERNATIONAL BOULEVARD

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
25	Figure B-33	The crosswalk does not have a sufficient warning strip for the curb ramp width	A larger warning strip should be installed	$1600	3-Low	Even though a small warning strip is present, visually impaired pedestrians may miss the strip.

10.11 COURTLAND STREET NE (JOHN PORTMAN BOULEVARD TO ANDREW YOUNG INTERNATIONAL)

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
26	Figure B-32	Narrow, cracked, uneven, deteriorating sidewalk with no curb separation from street (ersatz ramp)	Sidewalk should be replaced with a wider one with a prominent curb to separate the sidewalk from the street	$3000	1-High	This needs to be fixed because if a wheelchair user were to use this "ramp" they could wheel into traffic. Impassable sidewalk in wheelchair. Visual impairment hazard.
27	Figure B-31	Cracked, sloped, deteriorating sidewalk with no curb separation from street	Sidewalk should be replaced with a wider one with a prominent curb to separate the sidewalk from the street	$3000	1-High	Uncomfortable sidewalk in wheelchair. Visual impairment hazard. Lack of mode separation presents dangerous hazard.

10.12 COURTLAND STREET NE AT ANDREW YOUNG INTERNATIONAL BOULEVARD NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
28	SW Corner Figure B-35	Road is not flush with curb ramp	Make the road flush with the ramp	$800	1-High	May cause harm to people in wheelchairs if obstacle by the road are not repaired.
29	NW Corner Figure B-36	Road is not flush with curb ramp	Make the road flush with the ramp	$800	1-High	May cause harm to people in wheelchairs if obstacle by the road are not repaired.
30	SE Corner Figure B-34	Crosswalk is completely faded and full of uneven asphalt	Repaint and repave the crosswalk	$1,000	1-High	Crosswalk in this case is barely visible and thus is a danger to pedestrians crossing in this intersection.

10.13 ANDREW YOUNG INTERNATIONAL BOULEVARD NE AT PEACHTREE CENTER AVENUE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
31	NW Corner Figure B-61	Curb height and narrow ramp prevent wheelchair use of corner. Lack of detectable warning strip	Flatten corner to make flush with crosswalk asphalt. Add detectable warning strips	$1,500	2-medium	Fairly high traffic area with a moderate barrier to accessibility.
32	NE Corner Figure B-62	Curb begins to rise halfway through each crosswalk. No detectable warning strips.	Flatten corner to make flush with crosswalk asphalt. Add detectable warning strips	$1,500	2-medium	Fairly high traffic area with a decent barrier to accessibility
33	SE Corner Figure B-63	Curb height rises in the middle of the corner, preventing wheelchair use of corner. Lack of detectable warning strip	Flatten corner to make flush with crosswalk asphalt. Add detectable warning strips	$1,500	2-medium	Fairly high traffic area with a moderate barrier to accessibility.
34	SW Corner Figure B-64	Curb height here makes wheelchair travel difficult. One detectable warning strip missing and other covered with asphalt.	Flatten corner to make flush with crosswalk asphalt. Add detectable warning strips	$1,500	2-medium	Fairly high traffic area with a moderate barrier to accessibility.

10.14 PEACHTREE STREET NE BETWEEN WEST PEACHTREE STREET NW AND PORTER PLACE NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
35	Western Sidewalk Figure B-52	Random curb cut. Inconsistent paving material. Narrow passing space by building.	Curb cut should be replaced by regular sidewalk made of material consistent with existing sidewalk. Sidewalk expansion recommended.	$3,500	2-Meidum	Fairly poor condition on parade route / Peachtree Street

10.15 IVAN ALLEN JR BOULEVARD NW AT SPRING STREET NW

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
36	NE Corner Figure B-37	The ramps are both well-constructed, but the signal controller cabinet narrows the landing area and may be an issue for crowds	The electrical should be relocated	$2,000	3-Low	Area is in great condition otherwise
37	NW Corner Figure B-38	Ramps are in excellent shape, but two poles abut both detect able warning strips, narrowing the right-of-way	All four poles should be removed and paved over	$800	2-Medium	Annoyance/barrier to accessibility. Low traffic area.

10.16 IVAN ALLEN JR BOULEVARD NW AT WEST PEACHTREE STREET NW

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
38	NE Corner Figure B-39	Well-constructed corner, but the sidewalk is narrow and there is no landing area for wheelchairs	Extend sidewalk to allow for landing area and move planters to improve passing sidewalk	$1,500	3-Low	Low traffic area. Area in great condition otherwise, but narrow sidewalk is a concern.

10.17 IVAN ALLEN JR BOULEVARD NW (WEST PEACHTREE STREET NW TO PEACHTREE STREET NE)

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
39	Southern sidewalk Figure B-40	Sidewalk is cracking and narrow	Widen and repave southern sidewalk	$20,000	3-Low	Fairly low traffic area, and sidewalk already in passable shape
40	Southern sidewalk Figure B-41	Sidewalk is cracking and narrow	Widen and repave southern sidewalk	$20,000 (not in addition to item above)	3-Low	Fairly low traffic area, and sidewalk already smooth and not broken, but narrow in places due to obstructions

10.18 IVAN ALLEN JR BOULEVARD NW AT ALEXANDER STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
41	NW Corner Figure B-42	No wheelchair ramp	Build fully compliant wheelchair ramps with warning strip	$2,000	2-Medium	Although this is a fairly low traffic area, wheelchair ramps are required.
42	Median Figure B-42	The island median has no detectable warning strip and the crosswalks are poorly marked.	Build two fully compliant wheelchair ramps and paint both crosswalks	$5,000	2-Medium	Although this is a fairly low traffic area, wheelchair ramps are required.
43	NE Corner Figure B-43	Ramp is too narrow and lacks detectable warning strip	Reconstruct fully compliant wheelchair ramps.	$2,000	2-Medium	Although this is a fairly low traffic area, wheelchair ramps are required.

10.19 IVAN ALLEN JR BOULEVARD NW AT PEACHTREE STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
44	NW Corner Figure B-44	Ramps are not aligned to crosswalks and have small landing areas. Asphalt in front of the ramp cracked.	Realign and extend ramps to allow for larger landing area. Add larger detectable warning strips. Fix asphalt in front of ramps.	$3,500	1-Low	Fairly low traffic area on edge of parade route.
45	NE Corner Figure B-45	Detectable warning strips are small. The ramps are slightly misaligned with the right-of-way. Utility access cuts into ramp.	Smooth ramps to incorporate access portal. Add longer detectable warning strips.	$2,000	1-Low	Fairly low traffic area on edge of parade route.
46	SW Corner Figure B-46	Ramps not oriented with right-of-way. The curb is not flush with crosswalk through the curve.	Realign and extend ramps. Add larger detectable warning strips. Smooth the crosswalk transition.	$2,000	2-Medium	Higher traffic area on edge of parade route/Peachtree. In decent condition except for flush transitions.
47	SE Corner Figure B-47	Ramp/corner are too small for crosswalk width. No detectable warning strips are present and the asphalt is cracking.	Flatten curb/corner to make flush with crosswalk asphalt. Add detectable warning strips.	$3,000	2-Medium	Curb height here is prohibitive to wheelchair access. No heavy traffic.

10.20 PEACHTREE STREET NE AT PORTER PLACE NE AND PEACHTREE CENTER AVENUE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
48	NE Corner at Peachtree Center Avenue Figure B-48	Ramp lacks detectable warning strip and not fully flush to crosswalk	Smooth curb to crosswalk transition and add detectable warning strips	$1,500	1-Low	Only a small update is necessary.
49	Central Median Figure B-49	Neither ramp has detectable warning strips	Install one detectable warning strip per ramp made of appropriate material	$1,000	1-Low	Only a small update is necessary.
50	NW Corner Figure B-50	Crosswalk poorly painted. No detectable warning strip and asphalt transition uneven.	Install detectable warning strip. Add paint to crosswalks. Smooth the crosswalk transition	$2,000	2-Medium	Fairly poor condition on parade route / Peachtree Street
51	SW Corner Figure B-51	No detectable warning strip and wheelchair ramp doesn't serve east-west travel well	Flatten and round out corner to serve crosswalks better. Install detectable warning strip. Paint crosswalk lines.	$3,000	2-Medium	Fairly poor condition on parade route / Peachtree Street

10.21 PEACHTREE STREET NE AT WEST PEACHTREE STREET NW

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
52	NW Corner Figure B-53	Corner not flush with cross-walk. Noticeable bump to surmount if coming from the east. No detectable warning strips are present.	Flatten and round out corner to serve crosswalks better. Install detectable warning strips.	$2,500	2-Medium	Fairly poor condition on parade route / Peachtree Street.
53	NE "Corner" Figure B-54	No wheelchair ramp	Install fully ADA compliant wheelchair ramp using material consistent with existing design	$3,000	1-High	Lack of ramps is a major impediment to accessibility on parade route / Peachtree Street.
54	SE "Corner" Figure B-55	No detectable warning strips are present.	Install detectable warning strip.	$800	2-Medium	Only a small update is necessary.
55	SW Corner Figure B-56	Ramp not flush with crosswalk in all directions. Ramp are too narrow. No detectable warning strip.	Flatten and round out edges at ramp to crosswalk transitions. Install detectable warning strips.	$2,500	2-Medium	In decent condition, but an impediment on the high traffic parade route / Peachtree Street.

10.22 PEACHTREE STREET AT BAKER STREET NE

Item No.	Location	Current Condition	Proposed Corrective Action	Estimated Cost	Priority Level	Priority Rationale
56	NW of Intersection Figure B-57	Ramp lacks detectable warning strip	Install detectable warning strip	$800	2-Medium	Already in fair condition, but this is a high traffic area on Peachtree Street.
57	NW Corner Figure B-58	Crosswalk asphalt badly cracked / potholed. Small, detectable warning strip/concrete.	Repave crosswalk asphalt or fill potholes. Repaint if necessary. Replace detectable warning strip.	$3,000	3-Low	In fair condition, but this is a high traffic area on Peachtree Street.
58	NE Corner Figure B-59	Both ramps are well-constructed, but the E-W ramp lacks a detectable warning strip	Install detectable warning strip made of material consistent with existing sidewalk	$800	3-Low	In fair condition, but high traffic parade route / Peachtree Street.
59	SW Corner Figure B-60	Ramp area forms into high curb halfway through E-W crosswalk. Detectable warning strip is too small for corner.	Flatten and round out corner to serve crosswalks better. Install larger detectable warning strips.	$2,500	2-Medium	Obstructs accessibility on high traffic parade route / Peachtree Street.

11 APPENDIX B – PHOTOGRAPHIC EVIDENCE

Appendix B contains the photographic evidence designed to corroborate the specific ADA issues enumerated in Appendix A. The ADA issues for each photograph are identified below each photo.

Figure B-1. Northern intersection of John Portman Blvd. and Courtland St. NE, facing west, up John Portman Boulevard towards the Atlanta Marriott Marquis. Only one ramp exists on the other corner (NW corner) and it faces south. An east-facing ramp needs to be installed. The street unevenly meets NE wheelchair ramp, posing issues for users. The crosswalk is faded.

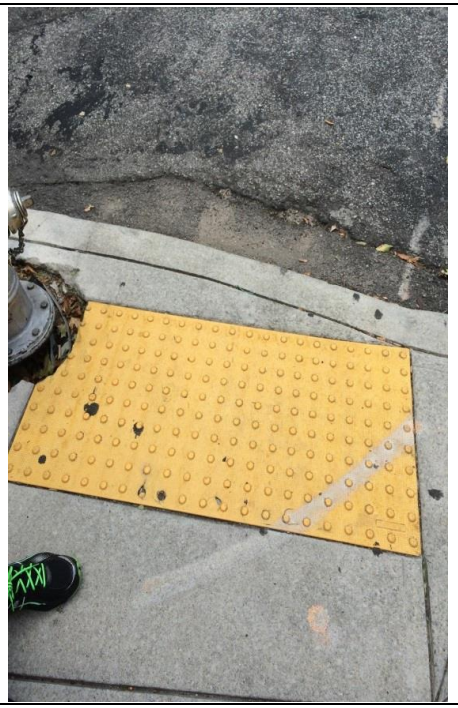

Figure B-2. South-facing wheelchair ramp at the NE corner of intersection John Portman Boulevard and Courtland Street NE (same block as Atlanta Hilton). The uneven connection to ramp from street poses issues for wheelchair users. The ramp is also partially blocked by fire hydrant.

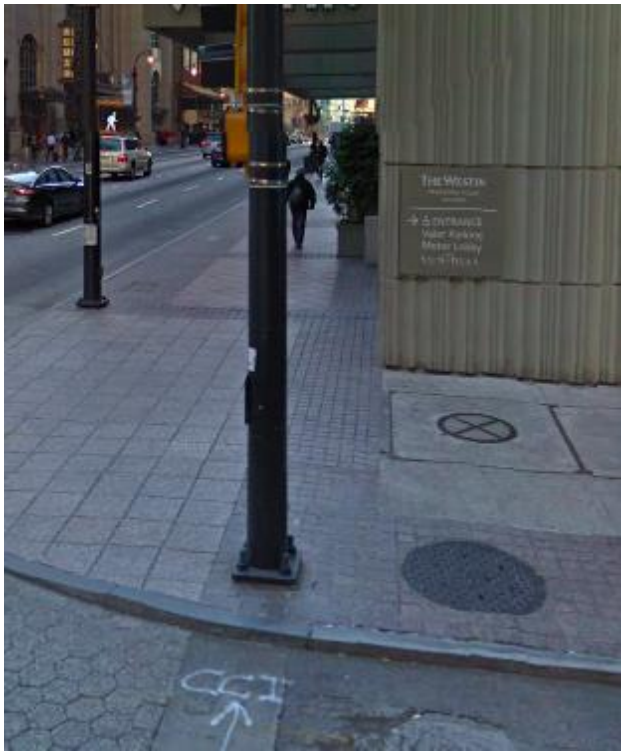

Figure B-3. Westin Peachtree Plaza's wheelchair ramp. The wayfinding sign is visible walking Southbound on Peachtree Street, but is not visible from the east.

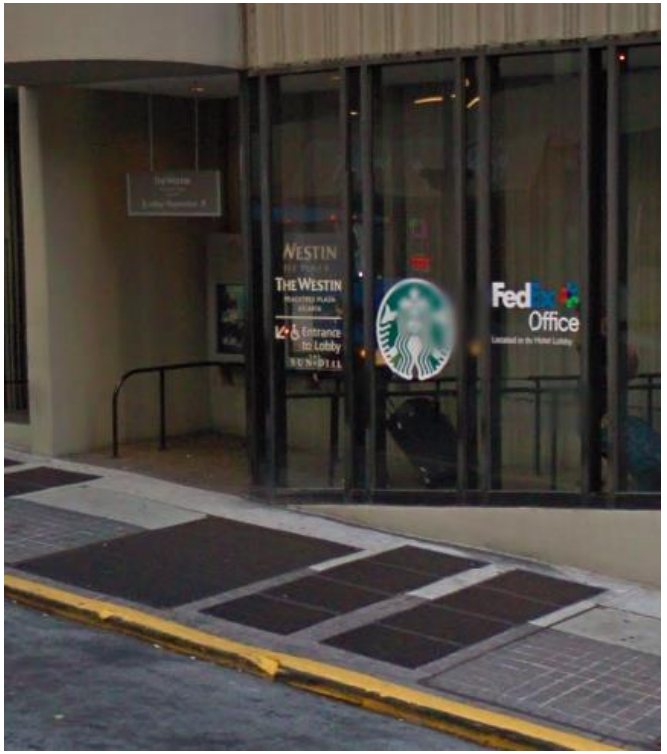

Figure B-4. Westin Peachtree Plaza wheelchair ramp (viewed from Andrew Young International Boulevard). Problematic grating throughout the sidewalk.

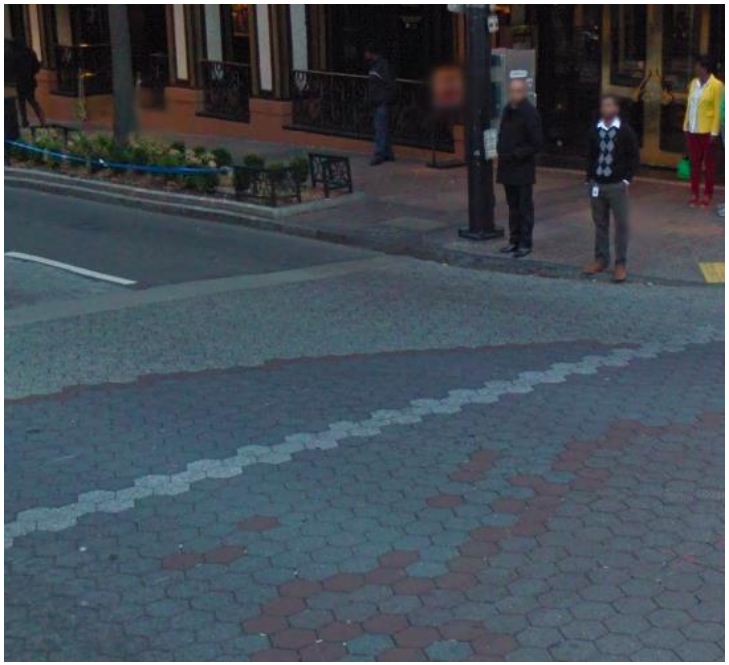

Figure B-5. Andrew Young International Boulevard and Peachtree Street. Another example of poor crosswalk designation. Pavers should be installed to clearly mark horizontal stripes and create perpendicular stripes for the crosswalk area, or the area should be repaved.

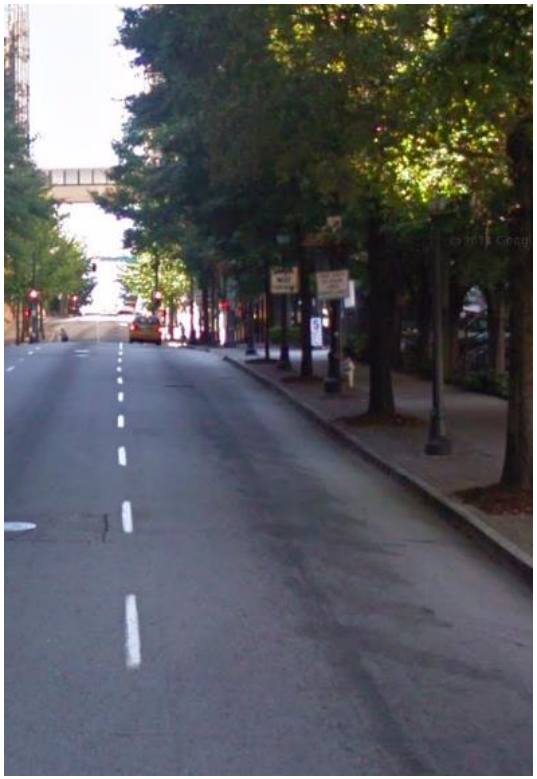

Figure B-6. Example of the naturally steep topography of this area, especially along the east-west streets, such as Andrew Young International Boulevard (shown above)

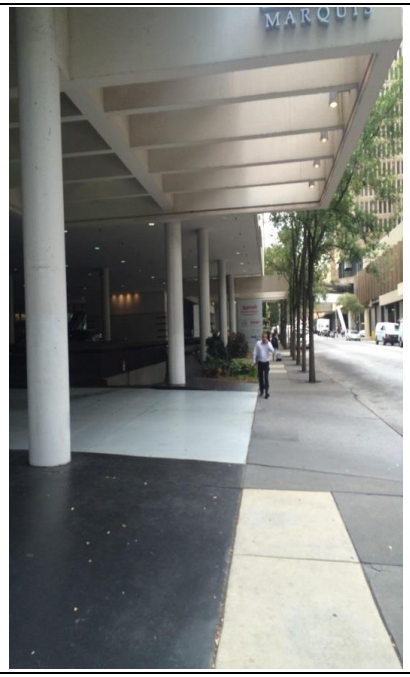

Figure B-7. Sidewalk on Peachtree Center Avenue NE in front of the main vehicular and pedestrian entrance to the Atlanta Marriott Marquis. The sidewalk here is flat and well-maintained, but lacks any form of transition pavers or detectable warning strip to alert the visually impaired pedestrian that they are entering car zones.

Figure B-8. The SE corner of Baker Street NE and Peachtree Center Avenue looking north on Peachtree Center Avenue. Wheelchair ramps are slightly narrow but feature detectable warning strips and flat grade. The crosswalks meet the wheelchair ramps in a bumpy, uneven way that makes crossing the street in a wheelchair difficult (no flush transition). The asphalt under the crosswalk is also uneven.

Figure B-9. Looking west toward the Hyatt Regency Atlanta on Baker Street NE from the SE corner of the intersection of Baker Street NE and Peachtree Center Avenue. The SW corner features only one ramp that is not wide to accommodate the needs of users coming from both directions. Crosswalk paint is fading and meets the corner ramps poorly.

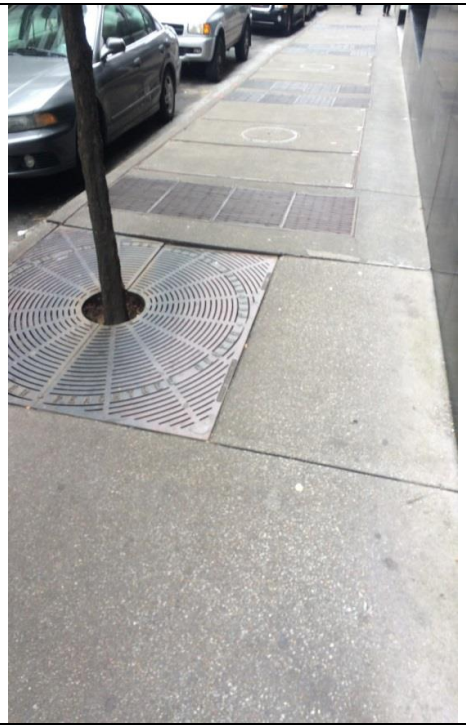

Figure B-10. Baker Street NE, looking eastward on the northern side of the Atlanta Marriott Marquis block, features disjointed sidewalk slabs and tree covers, which are more noticeable in person than in this photograph. Milling and patching would likely suffice in many locations.

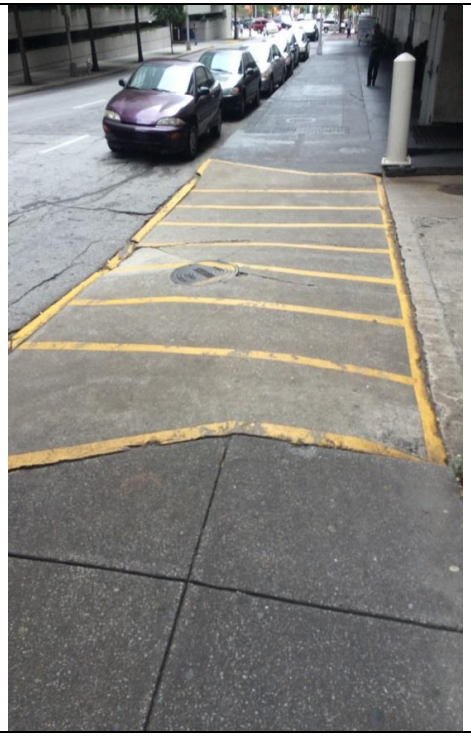

Figure B-11. Vehicle entrance ramp on Baker Street NE looking east towards the Atlanta Hilton. The curbcut is very uneven with many cracks, disjointed slabs, and grade/cross-slope issues. Although the ramp is marked with yellow lines, detectable warning strips are not present to aid visually-impaired pedestrians.

Figure B-12. Another service vehicle entrance curbcut on Baker Street NE on the northern side of the Atlanta Marriott Marquis building. There are two curbcuts and both have steep ramps connecting to the sidewalk, lack detectable warning strips, and are cracked and uneven.

Figure B-13. Wheelchair ramp at the SW corner of Baker Street NE and Courtland Street NE looking east towards the Atlanta Hilton. The ramp partially broken with service box and deterioration visible in bottom left corner of view. Gap between street and beginning of ramp causes issues for wheelchair users. The crosswalks are starting to fade.

Figure B-14. Wheelchair ramp at the SW corner of Baker Street NE and Courtland Street NE. The ramp is partially broken with service box and deterioration visible in bottom left corner of view. A gap is present between the street and beginning of ramp. Crosswalks are starting to fade and a steep slope is present on street.

Figure B-15. Sidewalk connecting into car loop and entrance on the eastern side of the building. Although the grade is smooth up into the entrance/waiting area, a large pole obstructs accessibility for those in wheelchairs. The lack of detectable warning strip along red line between vehicular space and pedestrian space could pose problem for individuals with visual impairment.

Figure B-16. Sidewalk on the other side of the eastern car bay and entrance features another pedestrian way somewhat blocked by support columns. The only other location to reach the eastern entrance on this street in a wheelchair is down at the intersection of Courtland Street and John Portman Boulevard (quite inconvenient).

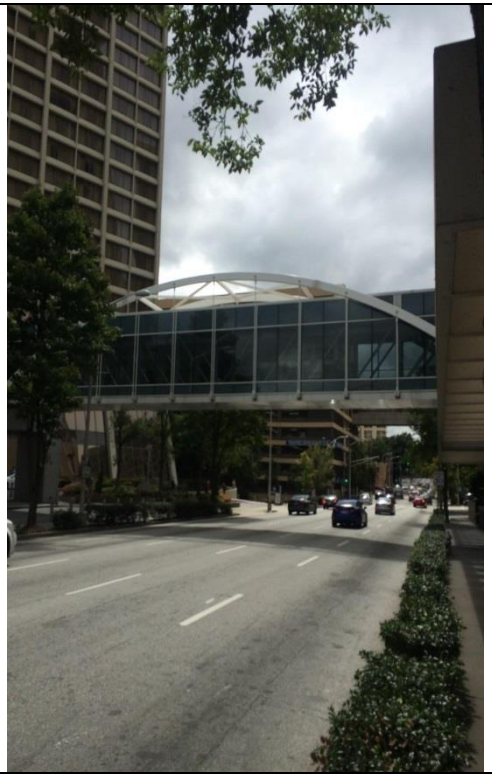

Figure B-17. Sky bridge connecting the Atlanta Marriott Marquis to the Atlanta Hilton (left) over Courtland Street NE

Figure B-18. Smooth slope up from Courtland Street NE on the eastern side of the Atlanta Marriott Marquis building towards the eastern/lower entrance. A vehicle gate provides some obstruction, but ultimately the slope/grade here may be the only obstacle to accessibility.

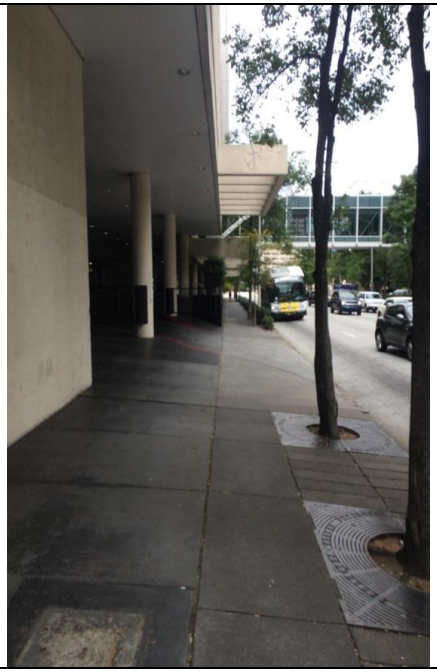

Figure B-19. The sidewalk along the eastern side of the Atlanta Marriott Marquis along Courtland Street NE is in fairly good condition, although some joints from tree root covers and old slabs may need some patchwork.

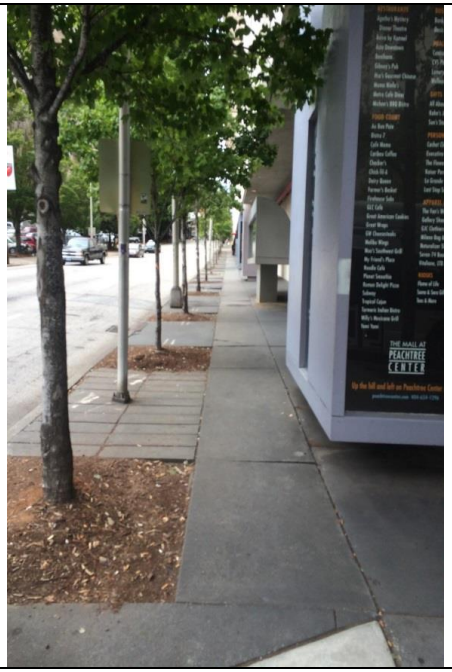

Figure B-20. Sidewalk on the Atlanta Marriott Marquis' south side, looking west on John Portman Boulevard. Trees on this street need grated root zone covers to prevent mulch/debris from entering sidewalk. Slabs all along this sidewalk are disjointed and hazardous for wheelchair users. Outdated advertising boxes for the Mall at Peachtree Center greatly reduce pedestrian space and negatively impact the walking experience.

Figure B-21. Side inlet on John Portman Boulevard NE to the Atlanta Marriott Marquis' eastern entrance and car loop. Pavement is smooth, but no detectable warning strip is present to give visually-impaired users notice of the truck loading bay and other mode changes. The cross-slope of the curbcut also appears to be an issue for wheelchair users.

Figure B-22. Vehicle curbcut ramp on John Portman Boulevard NE on southern side of Atlanta Marriott Marquis building. Although the ramp is well marked, the cross-slope is somewhat steep and the transition from sidewalk to vehicle ramp and back are very steep. Also, there are no detectable warning strips in place to alert persons with visual impairments to the change in mode.

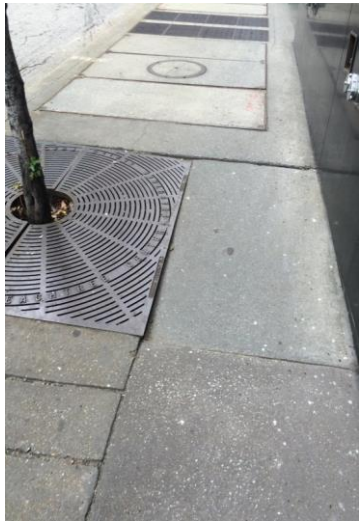	
Figure B-23. Disjointed sidewalk slabs on John Portman Boulevard NE on Atlanta Marriott Marquis' southern side. Gaps appear small in the photograph, but present serious issues along most of the tree root covers on this stretch, near the grates, manhole covers, and access slabs. The sidewalk is difficult to traverse in a wheelchair.	**Figure B-24.** Wheelchair ramp on the NE corner of John Portman Boulevard NE and Peachtree Center Avenue NE looking west on John Portman towards the Hyatt Regency Atlanta. The wheelchair ramp services neither direction of pedestrian traffic and lacks detectable warning strips. Crosswalks are full of patches, bumps, and potholes. The NW corner ramps in both directions lack warning strips and the connection from the crosswalk to the corner across the street needs to be patched or filled to allow for smoother transition.

Figure B-25. Wheelchair ramp on the NE corner of John Portman Boulevard NE and Peachtree Center Avenue NE looking south on Peachtree Center Ave. The wheelchair ramp services neither direction of pedestrian traffic and lacks a detectable warning strip. The crosswalk is adequately mark but full of patches, bumps, and potholes. The wheelchair ramps across the street on the SE corner also need to be replaced as they are in the same condition.

Figure B-26. Sidewalk between Peachtree Center buildings and Atlanta Marriott Marquis entrance on Peachtree Center Avenue NE. The pedestrian route to the entrance is visible on the far right-hand side of photograph. Sidewalks feature attractive pavers and marble tiles but lack detectable warning strips between the car entrance and contiguous sidewalk. There is no clear demarcation between automobile and pedestrian right-of-way.

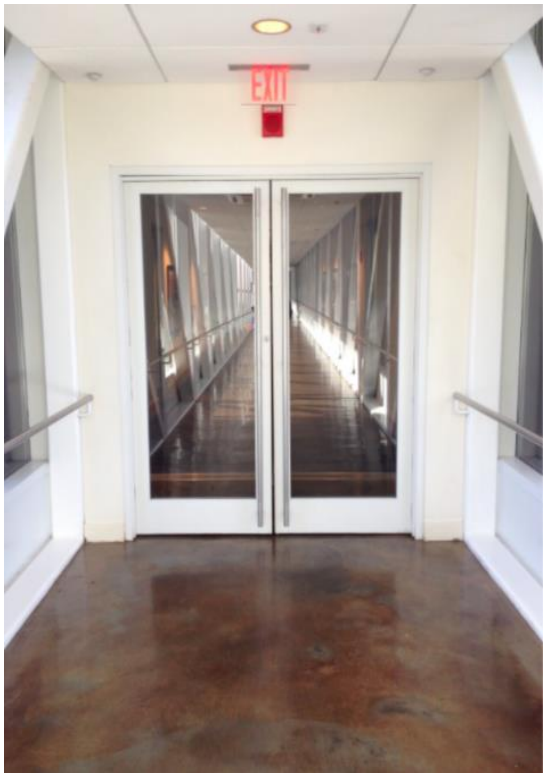

Figure B-27. Sky Bridge Entrance to Atlanta Marriott Marquis from Atlanta Hilton. Heavy doors could not be manually opened by a person with disabilities. Lack of door automatic door operation limits accessibility.

Figure B-28: The SW corner of the intersection of Courtland Street NE and John Portman Boulevard NE. The wheelchair ramps are narrow and are connected via unsmooth transitions into crosswalks that are largely faded.

Figure B-29: The SW corner of Peachtree Street and John Portman Boulevard NE features a wheelchair ramp on Peachtree Street that requires improvement. Some pavers are starting to come loose and should be replaced, or removed and replaced with concrete. The patchwork in the bottom left hand corner should is poorly installed and inconsistent. Filler could be applied on the westward side of the corner to fill in the rough transition from crosswalk to corner. A detectable warning strip should be installed.

Figure B-30: The SW corner of Peachtree Street and John Portman Boulevard NE. Although the corner and ramp is wide enough to accommodate users coming from either direction, cracks forming on the eastern side of the corner lead to an unsmooth transition for wheelchair users. A bump on the northern side leads to the same problem. Milling and patchwork could fix both problems.

	
Figure B-31: The western sidewalk on Courtland Street NE (photographed from south-facing perspective) contains broken, narrow sidewalks throughout. There is little to no curb separation from the street. The sidewalk should be replaced to feature a curb and smooth, unbroken slabs, and widened to increase pedestrian space and passing room.	**Figure B-32:** Additional examples can be seen on Courtland Street NE between the Atlanta Marriott Marquis and Sheraton Atlanta of narrow, broken sidewalks with legacy curbcuts (and non-compliant cross-slopes) that need to be removed. The sidewalk should be replaced to feature a curb and smooth, unbroken slabs, and widened to increase pedestrian space and passing room.

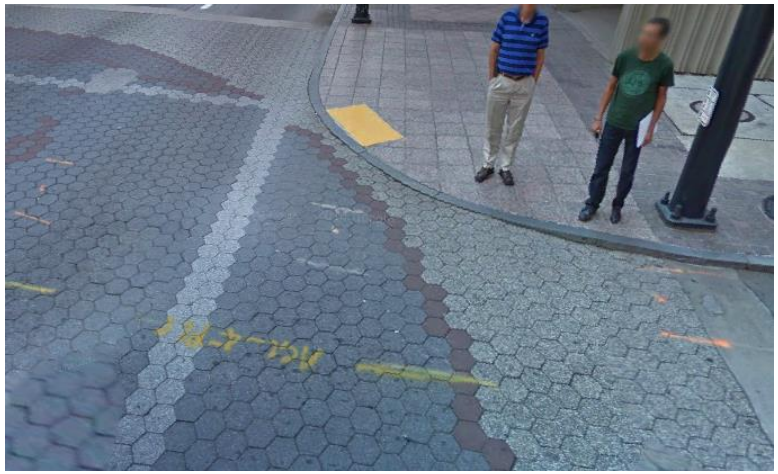

Figure B-33: The crosswalk does not feature formal paint strips, but colored pavers indicate pedestrian right-of-way. Additional, perpendicular pavers could be added to make this clearer, or pavers could be removed. The curb ramp is wide and flat, but should have a flush transition at the intersection.

Figure B-34: The SE corner of the intersection of Courtland Street NE and Andrew Young International Boulevard NE. The ramp transitions from street to sidewalk are not flush. Crosswalks have faded dramatically and need to be repainted.

Figure B-35: The SW corner of Andrew Young International Boulevard at Courtland Street NE has quality sidewalk pavers and features warning strips for both directions, but has non-compliant transitions from street to sidewalk. The transition is hazardous for wheelchair uses and could accumulate debris.

Figure B-36: NW corner of Courtland Street NE at Andrew Young International Boulevard NE. The wheelchair ramps and sidewalks are in good condition, but the transition into the crosswalk needs to be milled, filled, or otherwise smoothed. The crosswalks have all but disappeared and need to be repainted.

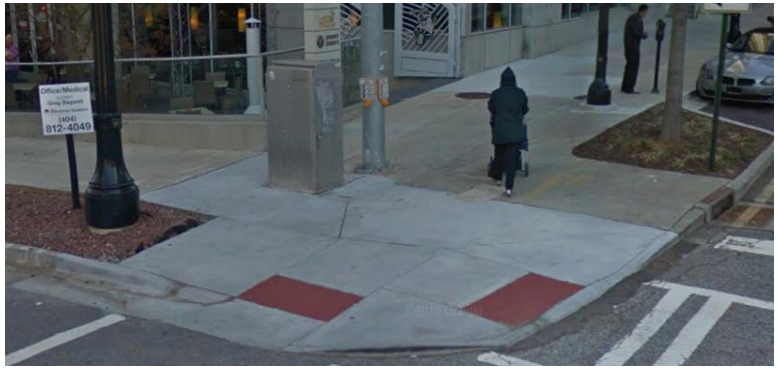

Figure B-37: NE corner of Ivan Allen Junior Boulevard at Spring Street NW. The traffic signal controller cabinet (metal box) may pose as an obstacle for wheelchair users and could be relocated.

Figure B-38: NW corner of Ivan Allen Junior Boulevard at Spring Street NW. The quality of the ramps and asphalt is good, but the poles on either side of the wheelchair ramps make the pathway narrower for wheelchair users.

Figure B-39: NE corner of Ivan Allen Junior Boulevard at West Peachtree Street NW. There is no real landing area behind the wheelchair ramps, which poses an issue for wheelchair users. The planter also narrows the sidewalk area. Widening of the sidewalk could remedy this issue.

Figure B-40: The southern stretch of Ivan Allen Junior Boulevard between West Peachtree and Peachtree Street Sidewalk is beginning to crack and is fairly narrow.

Figure B-41: Southern side of Ivan Allen Junior Boulevard between West Peachtree and Peachtree Streets. Clear example of infrastructure features (tree plantings and random abutments) that narrow sidewalk and passing space. The sidewalk should be widened.

Figure B-42: Intersection of Ivan Allen Boulevard Junior and Alexander Street, looking West. Sidewalk and pedestrian island lack wheelchair ramps. Crosswalks are poorly painted, not very visible, and full of potholes. This image is dated 2007, but the condition is the same in 2015.

Figure B-43: Intersection of Ivan Allen Boulevard Junior and Alexander Street, looking east. Ramp is present, but severely inadequate. Ramp should be widened, made flush with the crosswalk, and have a detectable warning strip installed. Crosswalk poorly painted and an uneven blend of asphalt paving.

Figure B-44: NW corner of the intersection of Ivan Allen Junior Boulevard and Peachtree Street. Ramps are somewhat misaligned to crosswalks. The landing area is too small, and the concrete in front of the ramp on the right is horribly cracked, leading to an uncomfortable transition for wheelchair users.

Figure B-45: NE corner of the intersection of Ivan Allen Junior Boulevard and Peachtree Street. Detectable warning strips are too small for the corner, and the ramps are somewhat misaligned to the right-of-way. A utility access portal also cuts into the ramp.

Figure B-46: SW corner of Ivan Allen Junior Boulevard and Peachtree Street. Ramps are poorly oriented to the right-of-way, and the curb is not flush to the crosswalk, leading to a rough transition.

Figure B-47: SE Corner of Ivan Allen Junior Boulevard and Peachtree Street. The ramp is far too small for the orientation of the crosswalks. There is no detectable warning strip present, and the asphalt is cracking and deteriorating.

Figure B-48: The eastern sidewalk where Peachtree Street and Peachtree Center Avenue merge is made of pavers/tiles. The ramp lacks a detectable warning strip and is not fully flush to crosswalk.

Figure B-49: The median where Peachtree Street and Peachtree Center Avenue merge. Both ramps and sidewalk are made of high quality pavers/tiles and are well constructed. However, neither ramp has detectable warning strips for visually impaired pedestrians.

Figure B-50: NW corner of the intersection of West Porter Place and Peachtree Street. The crosswalk is poorly painted. The wheelchair ramp lacks a detectable warning strip and meets the crosswalk very unevenly. The ramp transitions are not flush.

Figure B-51: SW corner of the intersection of Porter Place and Peachtree Street. The wheelchair ramp lacks a detectable warning strip.

Figure B-52: There is an unexplained ramp leading to the street on the western sidewalk on Peachtree Street, north of its intersection with West Peachtree Street. The sidewalk should be repaired to eliminate this ramp that could lead to confusion for visually impaired pedestrians and a cross-slope hazard. The bricks here should be reset or replaced with concrete to flatten the sidewalk out. The sidewalk here is narrow due to tree placement and could be expanded.

Figure B-53: NW Corner of the intersection of West Peachtree Street and Peachtree Street. The corner is not flush with the crosswalk; there is a noticeable bump to surmount if coming from the east. There are no detectable warning strips present.

Figure B-54: Across from the NW corner of the intersection of West Peachtree Street and Peachtree Street there is no wheelchair ramp present.

Figure B-55: Across from the SW corner of the intersection of West Peachtree Street and Peachtree Street, the ramp is well constructed and made of quality materials, but there is no detectable warning strip.

Figure B-56: SW Corner of the intersection of West Peachtree Street and Peachtree Street. The ramp area is too narrow and isn't flush from all directions. There is also no detectable warning strip present.

Figure B-57: NW of the intersection of Peachtree Street and Baker Street on the western sidewalk. The ramp lacks a detectable warning strip.

Figure B-58: NW corner of the intersection of Peachtree Street and Baker Street. The crosswalk's asphalt is deteriorating badly. The ramp is mostly compliant, but should be made flush with the crosswalk.

Figure B-59: NE Corner of the intersection of Peachtree Street and Baker Street. The ramp coming from the west lacks a detectable warning strip.

Figure B-60: SW Corner of the intersection of Peachtree Street and Baker Street. The ramp area starts to form into a high curb halfway through the westbound crosswalk and needs to be flush. The detectable warning strip should be extended in a more attractive medium.

Figure B-61: NW corner of the intersection of Peachtree Center Avenue NE and Andrew Young International Boulevard. The curb is not flush, making wheelchair use of the ramp difficult. There is no detectable warning strip for eastbound pedestrians. The crosswalk transition is rough and uneven.

Figure B-62: NE corner of the intersection of Peachtree Center Avenue NE and Andrew Young International Boulevard. The curb begins to rise halfway through each crosswalk. There are no detectable warning strips.

Figure B-63: SW corner of the intersection of Peachtree Center Avenue NE and Andrew Young International Boulevard. The curb height and pavement disjoint makes using the wheelchair ramp nearly impossible. There are no detectable warning strips.

Figure B-64: SE corner of the intersection of Peachtree Center Avenue NE and Andrew Young International Boulevard. The curb height here makes using the wheelchair ramp very difficult. There are no detectable warning strips.