



Smoking Bans and Cigarette Litter at Transition Points

A Report to Keep America Beautiful

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1. Introduction

Cigarette butts are the most frequently littered items in the United States. According to a 2009 study conducted for Keep America Beautiful, tobacco products comprised 38 percent of roadway litter across the United States and 30 percent of all litter at “transition points”, those places where smokers must discontinue smoking before proceeding.¹ Most of the littered tobacco products were cigarette butts.



Keep America Beautiful initiated a Cigarette Litter Prevention Program in 2002 with funding from Philip Morris USA, an Altria company, RAI Service Company and Santa Fe Natural Tobacco Company. The Cigarette Litter Prevention Program (CLPP) has worked with more than 1,800 U.S. communities to implement four strategies to eliminate cigarette litter.

1. Encouraging enforcement of litter laws, including cigarette litter.
2. Raising awareness using public service messages.
3. Placing ash receptacles at transition points such as entrances to public buildings.
4. Distributing pocket or portable ashtrays to adult smokers.

To help frame the future direction of the CLPP, Keep America Beautiful commissioned this study to evaluate cigarette litter at transition points created by laws and other site-specific policies that prohibit smoking in certain locations. The study is designed to answer three key questions about cigarette litter at transition points:

1. Where do smoking bans create transition points?
2. How do smoking bans affect cigarette litter near transition points?
3. What other factors appear to influence cigarette litter near transition points?

Keep America Beautiful retained A. Goldsmith Resources, LLC (AGR) to answer these questions. To that end, AGR reviewed state and local laws across the country to determine where transition points were created and then conducted surveys to assess cigarette litter at these transition points. In each location where surveys were conducted, AGR reports on the policy that created the transition point, the number of cigarette butts counted near the transition point, and site-specific factors that may influence the amount of cigarette litter..

KAB conducted this study to determine how policies prohibiting smoking at certain locations influence the amount of cigarette litter found at the transition points into these locations.

This report presents the findings of this study. **Section 2** describes the laws and institutional policies restricting smoking across the United States that create transition points. **Section 3** describes the methodology and findings of the field surveys. **Section 4** presents conclusions about factors that may influence the amount of cigarette litter at transition points and the

¹ 2009 National Visible Litter Survey and Litter Cost Study, MidAtlantic Solid Waste Consultants for Keep America Beautiful, Inc. Keep America Beautiful, Inc. 2009 national litter and littering behavior research were conducted through a grant from Philip Morris USA, an Altria Company.

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implications for Keep America Beautiful's Cigarette Litter Prevention Program. **Appendix A** contains detailed case studies from selected locations provided valuable information about the impact of smoking bans at transition points and how certain factors appeared to affect the amount of cigarette litter found here.

2. Smoking Policies that Create Transition Points

Across the Country

Three common places where smoking is prohibited by state and local laws in the United States are bars, restaurants, and other (non-hospitality) workplaces. The American Nonsmokers' Rights Foundation (ANRF) tracks state and local laws that meet its strict definitions of "100% Smokefree" which only includes laws that do not allow smoking in in separately ventilated rooms, do not have size exemptions, and do not allow smoking in attached bars (of restaurants). According to ANRF, 30 states had "100% Smokefree" laws in bars, 35 states had "100% Smokefree" laws in restaurants; and 31 states had "100% Smokefree" laws in non-hospitality workplaces as of April 1, 2020 (Table 2-1).

In addition to state laws, ANRF reports that 1,327 local governments had "100% Smokefree" laws in bars; 1,452 had "100% Smokefree" laws in restaurants; and 1,368 had "100% Smokefree laws" in non-hospitality workplaces as of April 1, 2020. A regularly updated list of state and local governments with "100% Smokefree" laws in bars, restaurants and non-hospitality workplaces can be found at <https://no-smoke.org/materials-services/lists-maps/#1518200878061-ebc83fdc-2d6c>.

The number of local governments within each state with "100% Smokefree" laws are indicated on Table 2-2. However, some states exempt some or all provisions of local smoking laws, as described below.

- Connecticut, New Hampshire, and South Dakota preempt local laws related to smoking.
- Florida preempts all local laws related to smoking except those regulating e-cigarettes.
- Michigan preempts local laws relating to restaurants and bars.
- Nebraska preempts local laws relating to cigar bars.
- North Carolina preempts local laws except those enacted/effective before 10/15/93 and those regulating smoking in local government buildings/vehicles and specified public places.
- Oklahoma and Utah preempt local laws except those restricting smoking in public outdoor areas.
- Pennsylvania preempts local laws in enclosed workplaces and public places but permits Philadelphia to enforce smokefree laws other than those pertaining to gambling.
- Tennessee preempts local laws except those regulating smoking in public buildings of specific local governments, authorities, and districts.
- Virginia preempts local laws except those enacted prior to 1/1/90.
- Wisconsin preempts local laws restricting smoking in outdoor areas except those laws applying only to public property.

Since many of the local governments that prohibit smoking are in states that prohibit smoking in the same locations, some jurisdictions are covered both by State and local laws. To get a more comprehensive picture, ANRF estimates the percentage of the U.S. population affected by "100% Smokefree" laws. They estimate that 66.4 percent of the U.S. population lives in a place with "100% Smokefree" bars; 77.8 percent live in a place with "100% Smokefree" restaurants, and 76.1 percent live in a place with "100% Smokefree" non-hospitality workplaces. A regularly updated list of the percentage of the population covered by these laws in each State is available at <https://no-smoke.org/wp-content/uploads/pdf/percentstatepops.pdf>.

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TABLE 2-1 STATES WITH “100% SMOKEFREE” LAWS IN BARS, RESTAURANTS, AND WORKPLACES

Location	Bars	Restaurants	Non-Hospitality Workplaces
Arizona	X	X	X
California	X	X	X
Colorado	X	X	X
Connecticut	X	X	
Delaware	X	X	X
Florida		X	X
Hawaii	X	X	X
Idaho		X	
Illinois	X	X	X
Indiana		X	X
Iowa	X	X	X
Kansas	X	X	X
Louisiana		X	X
Maine	X	X	X
Maryland	X	X	X
Massachusetts	X	X	X
Michigan	X	X	X
Minnesota	X	X	X
Montana	X	X	X
Nebraska	X	X	X
Nevada		X	X
New Hampshire	X	X	
New Jersey	X	X	X
New Mexico	X	X	X
New York	X	X	X
North Carolina	X	X	
North Dakota	X	X	X
Ohio	X	X	X
Oregon	X	X	X
Pennsylvania			X
Rhode Island	X	X	X
South Dakota	X	X	X
Utah	X	X	X
Vermont	X	X	X
Washington	X	X	X
Wisconsin	X	X	X

Source: American Nonsmokers’ Rights Foundation. States, Commonwealths, and Municipalities with 100% Smokefree Laws in Non-Hospitality Workplaces, Restaurants, or Bars, April 2020.

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TABLE 2-2 NUMBER OF LOCAL GOVERNMENTS WITH "100% SMOKEFREE" LAWS IN EACH STATE

Location	Bars	Restaurants	Non-Hospitality Workplaces
Alabama	36	51	46
Alaska	10	14	10
Arizona	8	9	15
Arkansas	3	6	4
California	141	146	138
Colorado	46	47	15
Connecticut	1	1	1
Delaware	0	0	1
District of Columbia	1	1	1
Florida	-	-	-
Georgia	14	23	20
Hawaii	1	3	2
Idaho	3	2	2
Illinois	86	93	103
Indiana	24	35	43
Iowa	4	4	4
Kansas	41	42	35
Kentucky	397	44	38
Louisiana	28	31	35
Maine	1	1	0
Maryland	10	12	3
Massachusetts	196	201	185
Michigan	2	2	22
Minnesota	36	36	36
Mississippi	160	170	161
Missouri	39	46	42
Montana	4	5	5
Nebraska	3	3	3
Nevada	-	-	-
New Hampshire	-	-	-
New Jersey	4	4	6
New Mexico	20	21	9
New York	7	8	8
North Carolina	7	8	2
North Dakota	14	14	16
Ohio	20	20	21
Oklahoma	-	-	-
Oregon	8	8	18
Pennsylvania	0	1	0
Rhode Island	-	-	-
South Carolina	63	64	46
South Dakota	-	-	-

Location	Bars	Restaurants	Non-Hospitality Workplaces
Tennessee	-	-	-
Texas	134	135	130
Utah	1	1	1
Vermont	4	4	0
Virginia	-	-	-
Washington	13	13	13
West Virginia	37	41	51
Wisconsin	72	73	74
Wyoming	6	7	2
TOTAL	1,327	1,452	1,368

Source: American Nonsmokers' Rights Foundation, States, Commonwealths, and Municipalities with 100% Smokefree Laws in Non-Hospitality Workplaces, Restaurants, or Bars, April 2020.

Even state and local governments that do not have laws that meet the “100% Smokefree” definition of the ANRF often have laws that restrict smoking in bars, restaurants and/or workplaces. Some, for example, prohibit smoking in these places except in separately ventilated smoking areas. Others may allow smoking only in bars that do not allow employees or customers younger than a certain age (typically 18 or 21). For a summary of state smoking laws that create transition points, <https://www.workplacefairness.org/state-smoking-rights-workplace>.

Nearly all states restrict smoking in bars, restaurants, and non-hospitality workplaces in a way that creates transition points between where smoking is and is not allowed.

State and local laws as well as institutional and corporate policies prohibit smoking in places beyond bars, restaurants, and workplaces. Updated versions of ANRF’s compilation of states, commonwealths, local governments, institutions and private facilities that prohibit smoking in casinos and gambling facilities, multi-unit housing, public housing, hospital campuses and psychiatric facilities, nursing homes, colleges and universities, correctional facilities, hotels and motels, airports, beaches, outdoor public transit waiting areas, outdoor dining and bar patios, parks, and other types of places can be found <https://no-smoke.org/materials-services/lists-maps/#1518200878061-ebc83fdc-2d6c>. In conclusion, the long list of state and local governments, institutions and private companies that prohibit smoking in a myriad of locations means that most people in the United States are likely to cross a transition point between smoking and no smoking areas multiple times each day.

Most people in the United States are likely to cross a transition point between smoking and no smoking areas multiple times each day.

Laws Creating Transition Points at Survey Locations

The surveys for this project were conducted across the state of Georgia where the Georgia Smokefree Air Act of 2005, Title 31, Chapter 12A of the Georgia Code prohibits smoking in enclosed public places, with the following exemptions:

- private residences;²
- designated smoking areas of bars and restaurants (with a separate ventilation system);
- bars and restaurants that deny access and do not employ any person under the age of 18;
- designated smoking areas in workplaces (with a separate ventilation system);³
- outdoor areas of places of employment;
- common work areas, conference and meeting rooms, and private offices in private places of employment that are open to the general public by appointment only;⁴
- hotel and motel rooms that are rented to guests and are designated as smoking rooms;⁵
- retail tobacco stores;
- long-term care facilities;⁶
- international airports if not prohibited by airport operator;⁷
- workplaces of manufacturer, importer, or wholesaler of tobacco products, tobacco leaf dealer or processor, and all tobacco storage facilities;
- private and semiprivate rooms in health care facilities licensed by the state;⁸
- convention facility rooms while used for private functions and where individuals under the age of 18 are prohibited from attending or working as an employee during the function;⁹ and
- private clubs, military officer clubs, and non-commissioned officer clubs.

The State of Georgia prohibits smoking in most enclosed public places but allows smoking in outdoor areas and separately ventilated designated smoking areas.

Despite these exemptions, Georgia law allows any person who owns, operates, manages, or controls an establishment, facility, or outdoor area to declare that entire establishment, facility, or outdoor area as a nonsmoking place. A violation of the law is considered a misdemeanor punishable with a fine of not less than \$100 and not more than \$500.

The State of Georgia does not preempt local smoking laws. This means that local governments can prohibit smoking in areas where smoking is not prohibited by State law and many do. The remainder of this Section looks at the local laws in the Georgia counties and cities where the surveys were conducted.

Georgia does not preempt local smoking laws meaning that local governments can be more restrictive than the State on where smoking is prohibited.

² Unless residence is used as a licensed childcare, adult day-care or health care facility.

³ Smoking areas in workplaces must be located in a nonwork area where no employee, as part of his or her work responsibilities, shall be required to enter, except such work responsibilities shall not include custodial or maintenance work carried out in the smoking area when it is unoccupied.

⁴ This exemption does not apply to bars, restaurants, and medical facilities or to public reception areas in all workplaces.

⁵ No more than 20 percent of hotel and motel rooms can be designated as smoking rooms.

⁶ Any skilled nursing home, intermediate care home, personal care home, or community living arrangement.

⁷ Smoking is prohibited in all indoor areas of Hartsfield-Jackson International Airport as of January 2, 2020.

⁸ If all occupants of room have written authorization by their treating physician to smoke.

⁹ Excludes any convention facility owned, leased, or operated by the State of Georgia, or any political subdivision of the state, municipal corporation, or local board or authority.

City of Atlanta

Atlanta's Indoor Air Ordinance of 1977 was the first of many laws that restricted smoking in public places and places of employment in the City. The most recent of these laws, the Smoke-Free ATL ordinance (19-O-1205), went into effect on January 2, 2020. This law expands the areas where smoking is prohibited in Atlanta. As a result, smoking is now prohibited in most public places within the City of Atlanta, including:

The City of Atlanta prohibits smoking at all indoor areas of bars and restaurants and all indoor and outdoor workplaces with very few exceptions.

- bars and restaurants;¹⁰
- indoor and outdoor workplaces;
- hotels and motels;
- long-term care facilities;
- private and semi-private rooms in health care facilities;
- airports;
- convention facilities;
- public transportation facilities, including bus, rail car, rail station, or intermodal bus stations;
- buildings and vehicles owned, leased, occupied, or operated by the City or State;
- most other public places enclosed by two or more walls/barriers;
- within 10 feet of outside building entrances and windows; and
- outdoor parks and recreational facilities, including but not limited to, parks, athletic fields, aquatic areas, golf courses, tennis courses, hiking/walking/biking trails, playgrounds, off-leash areas, and spectator and concession areas.

Atlanta does not prohibit smoking in private homes¹¹, retail tobacco and vapor stores, cigar bars and hookah lounges, or private, military, and non-commissioned officer clubs. However, as is the case throughout the State of Georgia, an owner, operator, manager, or other person in control may declare an entire establishment, facility, or outdoor area a nonsmoking place.

The penalties for smoking depend on the location. The maximum fine for smoking in the airport is up to \$200 while the fine for smoking in a public park is up to \$1,000, six months in jail or community service. If businesses fail to comply with the ban, they can be fined \$100 for the first violation and \$200 for each additional violation within a year.

Dekalb County

Chapter 16, Article VI, Division 2 of the Dekalb County Code of Ordinances prohibits smoking in:

- public places;
- outdoor recreational public places;
- common areas;
- places of employment; and

¹⁰ Unlike the State, there is no exemption for bars and restaurants that have separately ventilated smoking areas or do not employ or allow entry to people younger than 18 although smoking is still allowed in outdoor seating and serving areas.

¹¹ Unless residence is used as a licensed childcare, adult day-care or health care facility.

- within “twenty (20) feet of any outside entrance, operable window, or ventilation system of a common area, public place, place of employment, or outdoor recreational public place”.

Dekalb County does not prohibit smoking in:

- “freestanding bar” areas;
- retail tobacco stores;
- adult entertainment establishments; private residences¹²;
- any property owned or leased by municipalities, the State of Georgia, or the federal government;
- designated smoking rooms in hotels and motels¹³; and
- outdoor areas of places of employment.

An owner, operator, manager, or other person in control can designate an entire establishment, facility, or outdoor area a nonsmoking place. The person in control of any place where smoking is prohibited is responsible for posting a no smoking sign and removing all ashtrays. The penalty for violating Dekalb County’s ordinance is \$50 for the first violation, \$75 for the second violation with one year; and \$100 for each subsequent violation with one year.

Dekalb County prohibits smoking within 20 feet of an outside entrance, operable window, or ventilation system of those areas where smoking is prohibited.

Fannin County

Fannin County does not restrict smoking in any location beyond those covered by State law. Thus, the policies of the State of Georgia apply.

City of Savannah

The City of Savannah prohibits smoking in the following places:

- enclosed facilities, including vehicles and buildings owned, leased, or operated by the State or the City of Savannah;
- enclosed public places;
- enclosed areas within places of employment;
- any place in which a non-smoking sign is posted;
- in and within 10 feet or a Reasonable Distance ¹⁴ of:
 - any entrance or operable window or ventilation system of enclosed areas where smoking is prohibited when the area is open for business or is occupied by one or more persons;
 - outdoor seating or serving areas of bars and restaurants;
 - outdoor arenas, stadiums, and amphitheaters;
 - bleachers or grandstands at sporting or other public events;
 - public transportation stations and shelters;
 - service lines; and
 - playgrounds.

¹² Except if used as a childcare, an adult day care or a health care facility.

¹³ Shall not comprise more than twenty-five (25) percent of the total number of rooms available for rent.

¹⁴ Reasonable Distance means a minimum of 10 feet or a distance that is sufficient to ensure indoor areas remain smokefree by preventing smoke from infiltrating enclosed public places through any entrance, exit, window, vent or air intake system of a building where smoking is prohibited.

Exemptions to Savannah's Smokefree law include some restaurants and bars meeting specific square footage requirements, which may allow smoking in no more than 20 percent of their outdoor areas with restrictions; hotels and motels, which can designate up to 20 percent of their occupied rooms as smoking rooms; the two Hookah lounges in existence prior to the passage of the ordinance, which will be allowed to continue hookah pipe smoking with restrictions; and private residences provided they are not licensed childcare, adult daycare or healthcare facilities. Smoking is also allowed in Savannah's many outdoor squares.

The City of Savannah allows smoking in some outdoor areas of restaurants and bars, a limited number of hotel and motel rooms and in the City's outdoor squares.

All businesses and public places in Savannah are required to post at least one "No Smoking" sign at the main entrance where smoking is not allowed. Smoking in an area where smoking is prohibited is punishable by a fine of up to \$100. Businesses that allow smoking where prohibited can be fined up to \$100 for a first violation, \$200 for a second violation within one year, and \$500 for any additional violations within one year.

Tybee Island

The City of Tybee Island generally does not prohibit smoking in locations other than those where smoking is prohibited by State law. However, the Tybee Island City Council approved a one-year ban on smoking in a two-block area of the public beach in the main commercial district near the pier, starting on May 1, 2020. The fine for violating this ordinance is \$1,000, significantly higher than the fines stipulated in other no smoking laws.

Tybee Island has banned smoking in a two-block area of the beach for one year to determine the impact of the no smoking policy on cigarette litter.

Glynn County

Glynn County prohibits smoking in all enclosed public facilities in Glynn County including the following places:

- aquariums, galleries, libraries, and museums;
- childcare and adult day care facilities;
- convention facilities;
- dining areas;
- elevators;
- facilities primarily used for exhibiting a motion picture, stage, drama, lecture, musical recital, or other similar performance;
- health care facilities;
- polling places;
- public transportation facilities, including buses and taxicabs, under the authority of Glynn County, and ticket, boarding, and waiting areas of public transit depots;
- restrooms, lobbies, reception areas, hallways, and other common use areas;
- rooms, chambers, places of meeting or public assembly, including school building, under the control of an agency, board, commission, committee or council of the Glynn County Board of Commissioners when a public meeting is in progress, to the extent the place is subject to the jurisdiction of the Glynn County Board of Commissioners;

- service lines;
- sports arenas, including enclosed places in outdoor arenas; and
- within 25 feet outside of any of the facilities listed above.

Smoking is not prohibited in private residences or in private and semiprivate rooms in nursing homes and long-term care facilities that are occupied by one or more persons if all occupants are smokers and have requested in writing to be placed in a room where smoking is permitted. The fine for a violation of this ordinance is up to \$50.00 for each separate violation.

Glynn County prohibits smoking within 25 feet outside of all areas where smoking is prohibited.

City of Brunswick

The City of Brunswick's ordinance prohibits smoking in the same locations as Glynn County's ordinance. Saint Simons and Jekyll Island are unincorporated areas and so Glynn County's ordinance applies to them as well.

3. Field Surveys

Locations

AGR conducted surveys near transition points at 23 locations throughout Georgia in August and September 2020 to assess the impact of smoking bans on cigarette litter. AGR worked with Keep America Beautiful to select locations with the following objectives in mind.

- Focus on several communities across Georgia with different policies regarding where smoking is allowed and prohibited.
- Include locations that participate in Keep America Beautiful's Cigarette Litter Prevention Program.
- Consider a diversity of location types (e.g., not exclusively bars and restaurants or medical facilities).
- Focus on locations where activity is least likely to be impacted by the pandemic (e.g., avoid college campuses, sports arenas, etc. that were not operating at full capacity).

Table 3-1 shows the locations and dates where surveys were conducted. Ten surveys were conducted in the following locations: City of Atlanta (seven), Dekalb County (two), and Fannin County (one). The remaining 13 surveys were performed in the state's six coastal counties. Partners in these counties have joined together in a campaign to eliminate cigarette litter, funded by a grant from Keep America Beautiful's Cigarette Litter Prevention Program. The campaign, led by Keep Golden Isles Beautiful, a Keep America Beautiful affiliate, focuses on the following initiatives.

- Installing cigarette waste receptacles
- Airing radio public service announcements
- Promoting on social media and online videos
- Distributing educational outreach materials, including 25,000 drink coasters with a cigarette litter prevention program message to restaurants and bars
- Recruiting businesses to participate and place signs in their windows
- Sponsoring litter cleanups
- Distributing pocket/car ash trays

Thirteen of 23 surveys were conducted in coastal Georgia where six counties collaborate on a Cigarette Litter Prevention Program funded in part with a KAB grant.

TABLE 3-1 LOCATIONS AND DATES SURVEYED

Location	Address	Date/Time Surveyed
Hartsfield-Jackson International Airport	6000 North Terminal Parkway, Atlanta	8/18/2020, 1:00 p.m. 9/17/20, 3:40 p.m.
Grady Memorial Hospital	80 Jesse Hill Drive SE, Atlanta	8/18/2020, 2:30 p.m.
Metropolitan Atlanta Rapid Transit Authority, Civic Center Station	432 West Peachtree Street, Atlanta	8/17/2020, 5:30 p.m.
Moe's and Joe's	1033 N. Highland Avenue, Atlanta	9/13/20, 9:00 a.m.
Fulton County Justice Center	185 Central Avenue, Atlanta	9/14/20, 1:45 a.m.
Five Points Bus Depot	Alabama Street between Peachtree and Broad Streets	9/14/20, 2:05 p.m.
Piedmont Park (2 sites)	400 Park Dr., Atlanta	9/14/20, 1:30 p.m.
Dunkin' Donuts	2827 North Druid Hills Road, Atlanta	8/28/20, 1:20 p.m.
CVS Pharmacy	2586 Lawrenceville Highway, Decatur	8/28/20, 11:50 a.m.
Walmart Superstore	97 Commerce Drive, Blue Ridge	9/6/20, 1:30 p.m. 10/3/20, 12:00 p.m.
City Market	204 W. Julian St., Savannah	9/22/20, 12:30 p.m.
PS Tavern	11 West Bay St., Savannah	9/22/20, 12:55 p.m.
Club One	1 Jefferson Street, Savannah	9/22/20, 1:44 p.m.
Tybee Island Pier and Beach	15 ½ St. Beach Access, Tybee Island	9/22/20, 2:45 p.m.
Barbara Jean's	214 Mallery St., Saint Simons	9/23/20, 3:25 p.m.
Gnat's Landing	310 Redfern Village, Saint Simons	9/21/20, 10:45 a.m.
Beach Village	Beach Village Trail, Jekyll Island	9/21/20, 4:30 p.m.
Hotel Construction Site	South Beachview Drive, Jekyll Island	9/21/20, 4:55 p.m.
Days Inn Motel	60 South Beachview Drive, Jekyll Island	9/21/20, 5:10 p.m.
Summer Waves Water Park	210 S. Riverview Dr, Jekyll Island	9/21/20, 5:35 p.m.
Winn Dixie	284 Hyde Park Commons, Brunswick	9/23/20, 4:50 p.m.
Downtown Brunswick	1400 Block Newcastle Street, Brunswick	9/23/20, 4:10 p.m.
Southeast Georgia Health System Hospital	2415 Parkwood Drive, Brunswick	9/23/20, 4:50 p.m.

Approach

Before visiting the sites, AGR researched the details of the policies prohibiting smoking at a given location including state and local laws, described in Section 2, and institutional or corporate smoking policies, that create a transition point. The policies identified at each site, and the transition point created by these policies, are shown in Table 3-2.

For the most part, the transition points at the surveyed locations are established by local law (or state law if the local government is silent on where smoking is and is not allowed). However, at several of these sites, for example, at the two hospital campuses and the construction site, the transition point is established by institutional or company policy, respectively.

TABLE 3-2 POLICIES CREATING TRANSITION POINTS AT CASE STUDY LOCATIONS

Location	Law/Policy	Transition Point Created
Hartsfield-Jackson International Airport	Atlanta Code of Ordinances §22-68	Boundary of Smoking Zones
Grady Memorial Hospital	Atlanta Code of Ordinances §86-32 Grady Smoke-Free Campus Policy	Boundary of hospital property
MARTA Civic Center Station	Atlanta Code of Ordinances §106-9 MARTA Code of Conduct	10 feet from station property
Moe's and Joe's	Atlanta Code of Ordinances §86-32	10 feet from entrance to indoor
Fulton County Courthouse	Atlanta Code of Ordinances §86-32	Entrance to covered entryway
Five Points Bus Depot	Atlanta Code of Ordinances §106-8 MARTA Code of Conduct	Boarding bus
Piedmont Park (2 sites)	Atlanta Code of Ordinances §110-59	Park entrance
Dunkin' Donuts	Dekalb Co. Code of Ordinances §16-103	20 feet from entrance
CVS Pharmacy	Dekalb Co. Code of Ordinances §16-103	20 feet from entrance
Walmart Superstore	O.C.G.A. §31-12A-4	Store entrance
City Market	City of Savannah Smokefree Air Ordinance of 2010	10 feet from entrance to indoor
PS Tavern	City of Savannah Smokefree Air Ordinance of 2010	10 feet from entrance
Club One	City of Savannah Smokefree Air Ordinance of 2010	10 feet from entrance
Tybee Island Pier and Beach	Smoking ban passed by Tybee City Council, March 2020	At boardwalks from 14 th -16 th St.
Barbara Jean's	Glynn Co. Code of Ordinances §2-25	25 feet from entrance to indoors
Gnat's Landing	Glynn Co. Code of Ordinances §2-25	25 feet from entrance to indoors
Beach Village	Glynn Co. Code of Ordinances §2-25	25 feet from entrance to indoors
Hotel Construction Site	Construction company policy at site	Entrance gate to site
Days Inn Motel	Glynn Co. Code of Ordinances §2-25	25 feet from entrance to indoors
Summer Waves Water Park	Park policy	At designated no smoking area
Winn Dixie	City of Brunswick Code of Ordinances §5-254	25 feet from entrance
Downtown Brunswick	City of Brunswick Code of Ordinances §5-254	25 feet from entrances
Southeast Georgia Health System Hospital	City of Brunswick Code of Ordinances §5-254	Campus boundary ¹

¹ Although transition point is campus boundary, per health system policy, the surveyed site was within the no smoking campus outside the parking lot for the hospital.

Once on site, we counted the number of cigarette butts within a 20-foot by 8-foot area near the transition point (defined as within 50 feet). At each site we also counted cigarette butts in the same size "control" area at least 50 feet away from the transition point. In addition, we noted site characteristics that could affect the amount of cigarette litter including:

At each location, cigarette counts were conducted adjacent to the transition point and at a nearby control area.

- signage indicating where smoking is prohibited or allowed;
- presence of and distance to ash receptacles;
- presence of and distance to trash receptacles;
- the amount of other litter (high, medium, low);
- the condition of surrounding infrastructure; and
- evidence of current or recent litter clean-up efforts.

Findings

Table 3-3 summarizes the key findings at each survey location. A total of 273 cigarette butts were found near transition points at the 23 locations. The number of cigarette butts found at the surveyed locations ranged from zero at several locations to 70 at one location, as shown in Figure 3-1.

TABLE 3-3 CIGARETTE COUNTS AND SITE CHARACTERISTICS AT EACH SITE

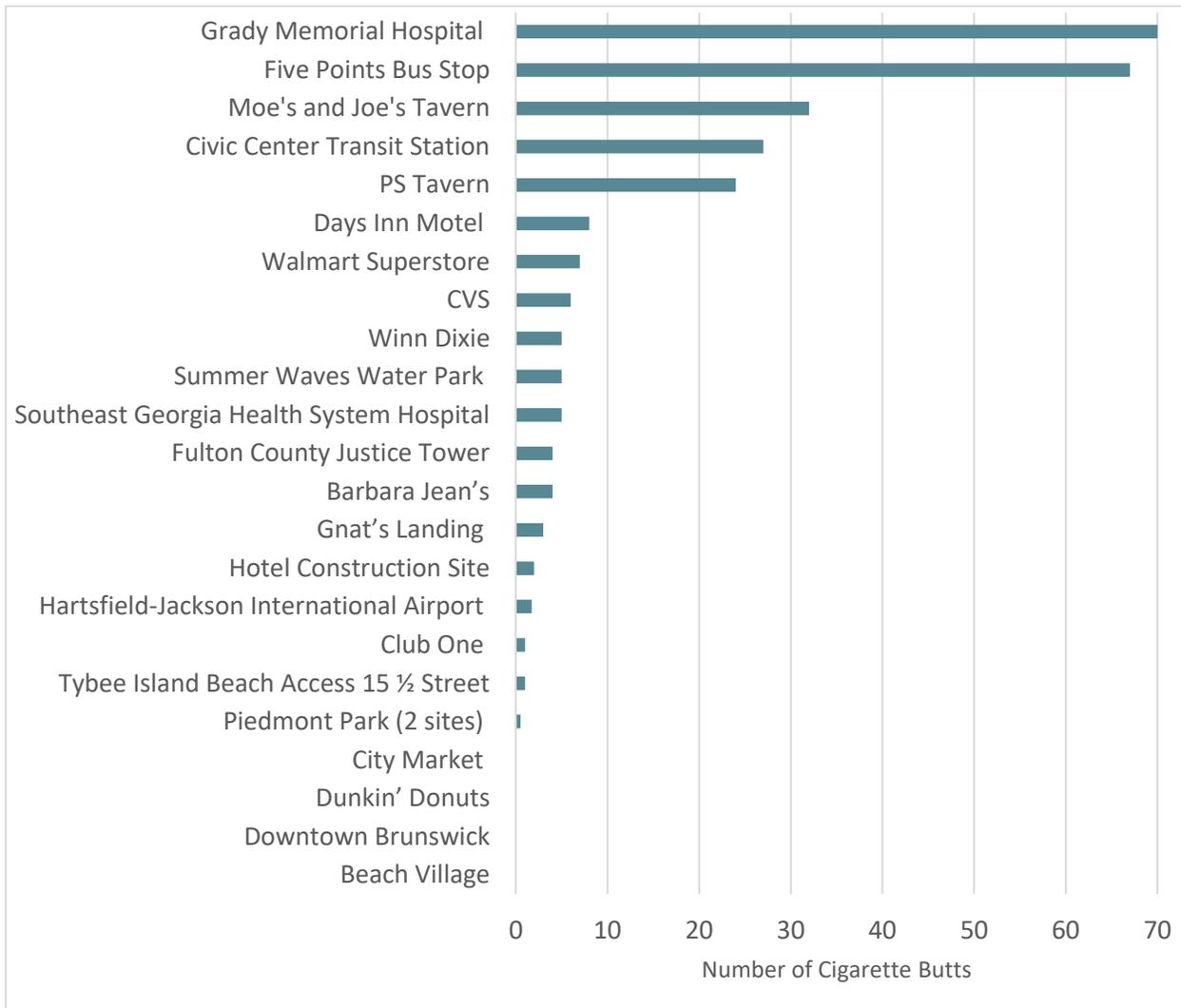
Location	# Cigarette Butts Near Transition Point ¹	Butts Control Area ²	No Smoking sign visible?	Ash Receptacle	Other Litter?	Foot Traffic?
Hartsfield-Jackson International Airport (4 sites)	1	0	Yes, and Smoking Zone signs ³	Yes	Low	High
	4	0				
	2	0				
	0	0				
Grady Memorial Hospital	70	18	Yes	No	High	Medium
MARTA Civic Center Transit Station	27	1	No	No	Medium	Low
Moe's and Joe's Tavern	32	2	No	No ⁴	Medium	Low ⁵
Fulton Co Justice Tower	4	2	Yes	No	Low	Low
Five Points Bus Stop	67	3	No	No	High	High ⁶
Piedmont Park (2 sites)	1	1	No	No	Medium ⁷	Low
	0	0				
Dunkin' Donuts	0	1	No	No	Low	High
CVS	6	0	No	No	Medium	Low
Walmart Superstore	7 ⁸	2	Yes	Yes	High	High ⁹
City Market	0 ¹⁰	3 ¹¹	Yes	No	Low	High
PS Tavern	24 ¹²	2 ¹³	No	Yes	Medium	Low
Club One	1	4 ¹⁴	No	No	Low	Low ¹⁵
Tybee Island Beach Access 15 ½ Street	1	1 ¹⁶	Yes	Yes	Low	High
Barbara Jean's	4 ¹⁷	0 ¹⁸	No	Yes ¹⁹	Medium	Low
Gnat's Landing	3	2	No	Yes ²⁰	Medium	Low ²¹
Beach Village ²²	0	0	No	Yes ²³	Low	Medium ²⁴
Hotel Construction Site	2	0	Yes ²⁵	No	High	Low

Smoking Bans and Cigarette Litter at Transition Points

Location	# Cigarette Butts Near Transition Point ¹	Control Area ²	No Smoking sign visible?	Ash Receptacle	Other Litter?	Foot Traffic?
Days Inn Motel	8 ²⁸	2	Yes ²⁷	Yes	Medium	Medium
Summer Waves Water Park	5	2	Yes	Yes	Medium	None ²⁸
Winn Dixie	5	80-100 ²⁹	No	Yes	Medium	High
Downtown Brunswick	0	0	No	Yes	Very low	Low
SE Georgia Health System Hospital	5 ³⁰	31	Yes	No	Medium	Low

1. 20 foot by 8-foot area within 50 feet of transition point
2. 20 foot by 8-foot area more than 50 feet from transition point
3. Smoking Zones clearly delineated.
4. Ash trays in the outdoor dining area though not necessarily available to those crossing the transition point.
5. Surveyed morning after busy night with customers outside bar.
6. Many smokers at time of survey
7. One cigarette package
8. Most of cigarette butts around base of ash receptacle.
9. Including customers and employees smoking outside store.
10. None on brick walkway but average of one butt in each 3-foot square planter adjacent to transition point area. Many butts around tree roots behind and under benches where customers wait for seats at Café at City Market.
11. Control site was brick walkway in Ellis Square as smoking is allowed in public squares in Savannah.
12. Plus, one cigar tip.
13. Control area was outside another bar, Moon River Brewery two doors down from PS Tavern where smoking is allowed in outdoor area.
14. Control area was adjacent to parking lot that may be used by clubgoers.
15. Club closed at survey time.
16. Beach access at 10th Street where smoking is still allowed on beach.
17. All cigarette butts in parking area, none on sidewalk.
18. Control point was park behind restaurant building. Also, with ash and garbage receptacle.
19. Pole mounted on sidewalk outside restaurant.
20. Ash bucket and garbage can at entry to outdoor seating area.
21. Restaurant closed at time of survey
22. Outdoor public greenspace between retail and restaurants.
23. Several ash and many trash receptacles in view, all attractive and well maintained.
24. Smokers on site but grounds and parking lot spotless.
25. Large No Smoking signs at all entrance gates to construction site.
26. Not on door to entrance but on each motel room door.
27. None on walkway outside rooms and lobby but many within planted area on either side of walkway.
28. Park closed during survey.
29. Control point was in parking lot, curb, and grassed area about 100 feet from grocery store door.
30. Although transition point is campus boundary, per health system policy, the surveyed site was within the no smoking campus outside the parking lot for the hospital. Plus, one cigar tip. All in grass not on walkway.
31. Entire campus within no smoking zone including transition point area surveyed.

FIGURE 3-1 CIGARETTE BUTTS AT TRANSITION POINTS



Transition Points versus Control Areas

To help determine whether cigarette butts found near transition points may be littered there because smokers were approaching the transition point, AGR also counted the number of cigarette butts in a control area at each location. A total of 205.5 cigarette butts¹⁵ were found in the control areas, 25 percent less than the total found near transition points at the same locations. Ninety of the cigarette butts found in control areas (nearly 44 percent) were counted at one control area near the Winn Dixie shopping center in Brunswick. Less than five cigarette butts were counted all but one of the remaining control areas with no cigarette butts found at ten control areas.

As shown in Figures 3-2 and 3-3, more cigarette butts were found near the transition point than in the control area at two-thirds of the locations (15 of 23). More cigarette butts were counted in the control area than near the transition point at only four locations – Club One and City Market in Savannah, Dunkin' Donuts in Dekalb County, and Winn Dixie in Brunswick.

¹⁵ The totals are not whole numbers because more than one area was surveyed at several sites and the number of cigarette butts counted at multiple areas at that locations were averaged.

FIGURE 3-2 TRANSITION VS CONTROL AREAS AT LOCATIONS WITH MORE CIGARETTE BUTTS

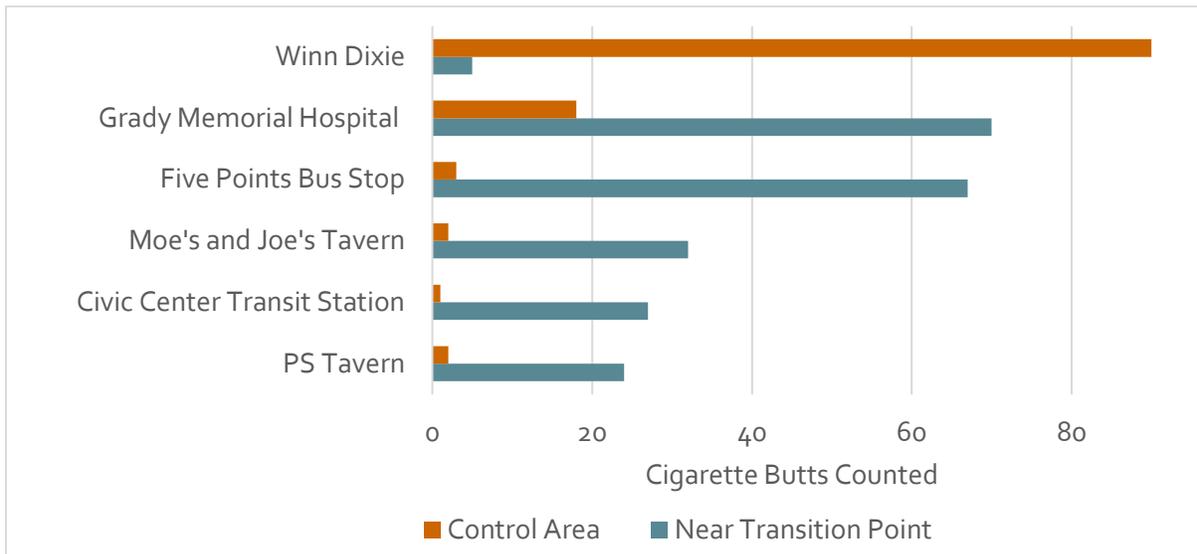
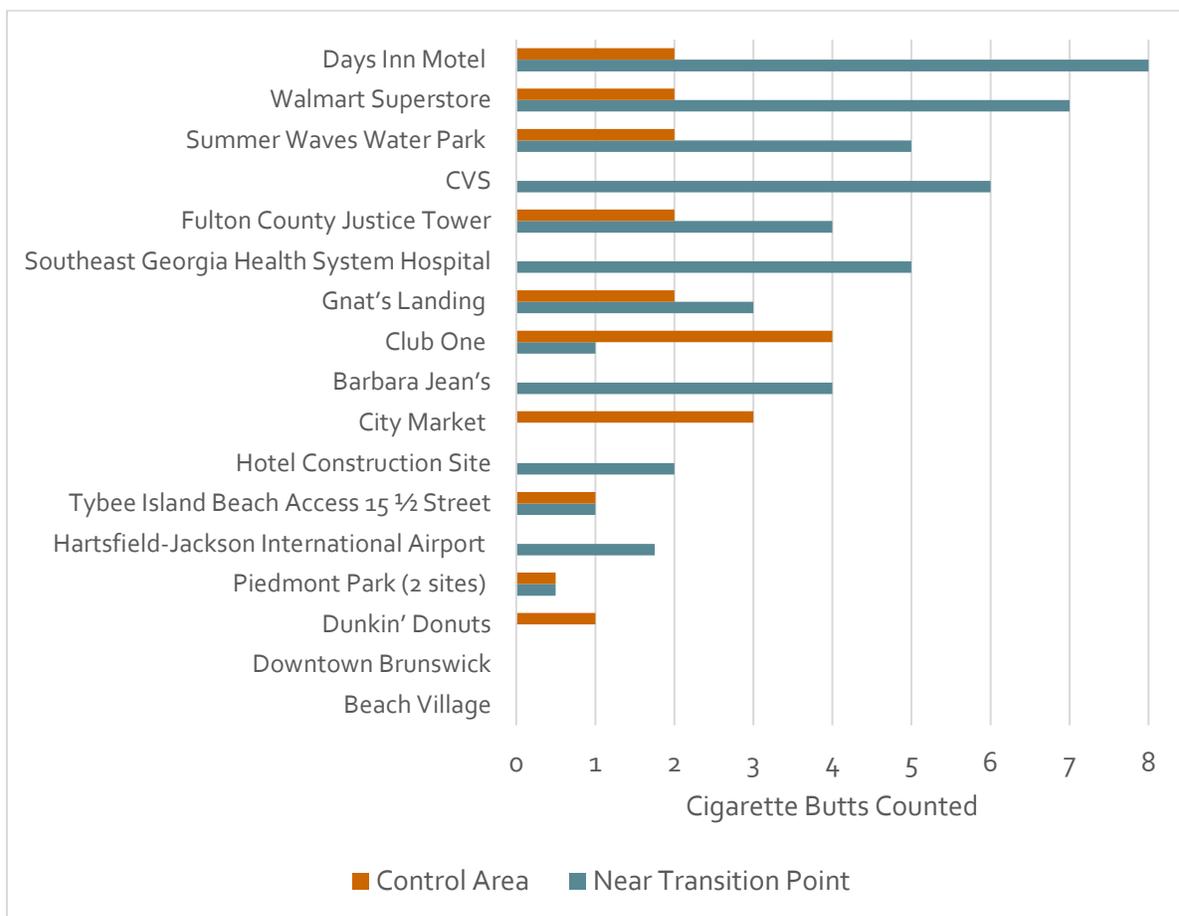


FIGURE 3-3 TRANSITION VS CONTROL AREAS AT LOCATIONS WITH FEWER CIGARETTE BUTTS



The most significant difference between the number of cigarette butts found near the transition point versus the control area were at the six locations with the most *total* number of cigarette butts, those shown in Figure 3-2. These six locations had between 26 and 95 cigarette butts in the transition and control areas combined. In five of six of these locations, the number of cigarette butts near the transition point was significantly higher (from four to 27 times higher) than in the control area. The notable exception was the Winn Dixie shopping center where there were 18 times more cigarette butts in the control area than near the transition point.

There were more littered cigarette butts counted near the transition point than at a nearby control area at two-thirds of the survey locations.

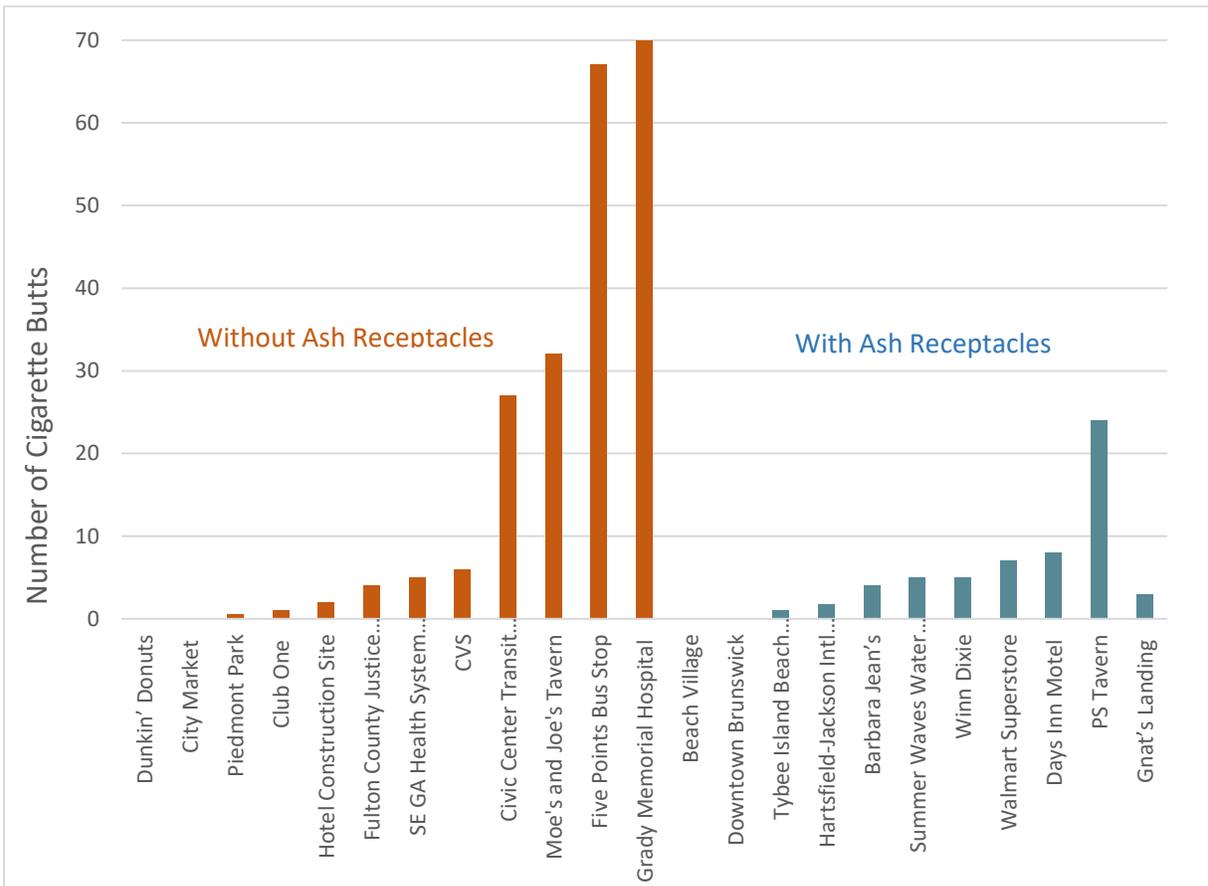
Ash Receptacles

Eleven of the 23 locations had ash receptacles at or near the transition point. All but two of these were in the coastal Georgia counties where Keep America Beautiful provided a CLPP grant, a designated portion of which has been used to install ash receptacles. Trash receptacles were visible from transition points at all but one location but in some cases, required that smokers walk over 50 feet to properly dispose of their cigarette butts.

As shown in Figure 3-4, on average, the locations with ash receptacles near transition points had fewer cigarette butts than those without. This is consistent with a finding from Keep America Beautiful's 2009 National Visible Litter Survey and Litter Cost Study which concluded that "The presence of ash receptacles, either as stand-alone, or integrated into a trash can, correlates with lower rates of cigarette butt littering. We counted an average of 5.3 cigarette butts near transition points that did have ash receptacles and an average of 17.9 cigarette butts near transition points without ash receptables. The four locations with the highest number cigarette butts near the transition points (Grady Memorial Hospital, Five Points Bus Stop, Moe's and Joe's Tavern and the Civic Center Transit Station) did not have ash receptacles. But it was not always the case that those locations without ash receptacles had the most cigarette butts. The other eight locations without ash receptacles had six or fewer cigarette butts. Generally, those locations with ash receptacles tended to have a small number of cigarette butts. Only one of the 11 locations with ash receptacles near the transition point, PS Tavern in Savannah, had more than eight littered cigarette butts nearby.

On average, there were one-third as many cigarette butts counted near transition points with ash receptacles than those without.

FIGURE 3-4 CIGARETTE BUTTS AND ASH RECEPTACLES



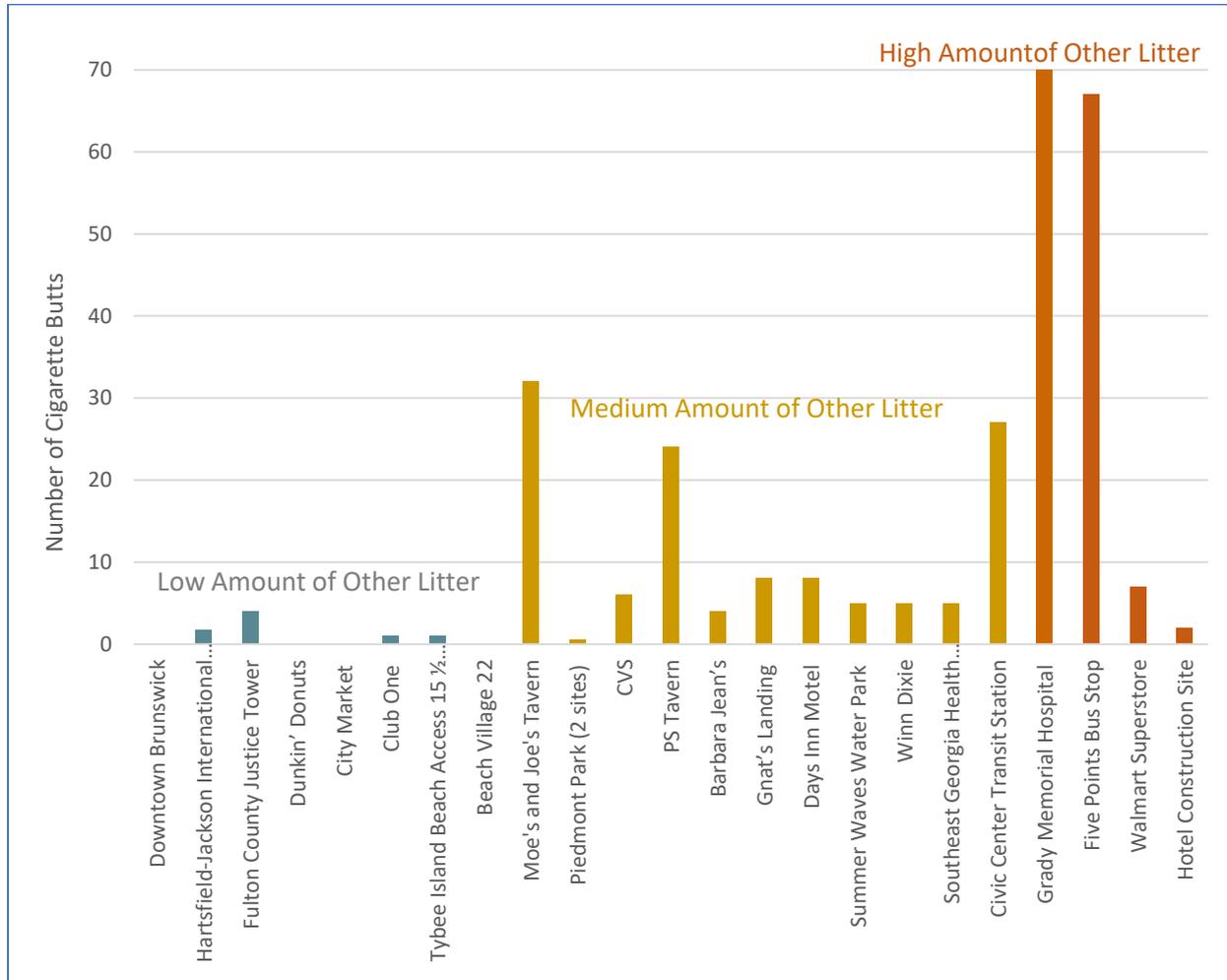
Other Litter

Figure 3-5 shows the number of cigarette butts found near transition points with low, medium, and high amounts of other litter. Two of the four most heavily littered locations, Grady Memorial Hospital and Five Points Bus Stop, had the highest number of cigarette butts of all locations surveyed. This finding is consistent with Keep America Beautiful's 2009 National Visible Litter Survey and Litter Cost Study finding that "Smokers are more likely to litter if the environment contains any type of litter, not just cigarette butts." However, a large amount of other litter did not always correlate to a high number of cigarette butts in these surveys. One of the most heavily littered locations, a hotel construction site on Jekyll Island with large "no smoking" signs posted at each site entrance, only had two cigarette butts counted near the transition point. Those transition points characterized as having a "medium" amount of other litter sometimes had many cigarette butts (e.g. 32 at Moe's and Joe's Tavern) while others had very few (e.g. 2 at Piedmont Park).

One finding that did appear to correlate the number of cigarette butts to the amount of other litter near a transition point was that those area with a low amount of other litter did indeed have the fewest number of littered cigarette butts near the transition point. Of the eight areas that were relatively free of other litter, one had four cigarette butts and the remainder had two or fewer.

Survey locations with a low amount of other litter had few to no cigarette butts near transition points.

FIGURE 3-5 CIGARETTE BUTTS AND OTHER LITTER



In addition to the amount of other litter near transition points, those locations with the most cigarette butts often had deteriorating infrastructure. Sidewalks were broken and/or overgrown and trash receptacles were upended or broken near transition points with the highest number of cigarette butts. Even at the Hartsfield Jackson International Airport, which had a small number of cigarette butts near the transition point around the designated smoking zones, the number of cigarette butts increased on the second visit when the smoking zones enclosures and ash receptacles were absent or damaged.

Clean-Up Efforts

During the conduct of the surveys, two somewhat contradicting observations were made about cigarette butt litter at areas that had been recently cleaned. The first was not unexpected. Those areas that had been recently cleaned (our team witnessed some sweeping, blowing and manual litter pick-up at several locations), often had the fewest number of cigarette butts. But another finding was less intuitive. It appeared that recent cleaning efforts by sweeping or blowing at or near transition points, depending on how it was done and the physical features of the site, created *more* cigarette butt litter near some transition points. For example, when the grounds surrounding an outside seating area of a bar was cleaned, it appeared cigarette butts were blown into the area adjacent to the transition point where the count was conducted. Similarly, at the MARTA Civic Station, most of the walkway into the station, the area near the transition point, was free of cigarette butts. However, along one side of the area surveyed, between an iron fence and a concrete wall, numerous cigarette butts were trapped. At least some of these cigarette butts which looked like they had been accumulating for a while given the stages of decomposition, appeared to have been pushed there by maintenance activities on the main walkway.

At a couple of locations, clean-up efforts appeared to contribute to the number of cigarette butts near transition points.

Traps

Areas near transition points often have many planted areas and borders, sidewalk grooves, and parking lot curbs which serve as traps for cigarette butts. Sweeping or blowing, in addition to natural air currents may trap smaller pieces of litter such as cigarette butts even in areas that are not otherwise very littered. Keep America Beautiful's 2009 National Visible Litter Survey and Litter Cost Study reported that 37 percent of littered cigarette butts were found in bushes and shrubbery and another 15 percent were found in planters.

Areas near transition points often have physical features that trap small litter items like cigarette butts.

Signage

Ten locations had signs at or near the transition point indicating where smoking is allowed and prohibited. Those that did were hospitals, airports, the Justice Center, Walmart, City Market, Tybee Island Beach and Pier, a construction site, and motel. Those that did not were typically transit stops, bars and restaurants, and a couple of the retail locations. No significant difference was noted in the number of cigarette butts near those transition points with no smoking signs and those without. However, it appeared that unique and highly visible signage at some locations, such as those highlighting the location of the Smoking Zones at the Hartsfield-Jackson International Airport, were effective, especially in conjunction with other prevention measures such as ash receptacles and frequent clean-up.

4. Conclusions and Implications

This Section summarizes factors that appear to contribute to and prevent cigarette litter near transition points and how these findings may inform the future direction of Keep America Beautiful's Cigarette Litter Prevention Programs. These conclusions are based on the findings of field surveys at nearly two dozen transition points across the State of Georgia, including the details presented in the case studies in Appendix A.

Most people cross multiple transition points every day.

State and local laws prohibit smoking in most public indoor spaces across the United States, at least to some degree. As a result, people are likely to cross multiple transition points each time they leave home and enter a workplace, store, restaurant, school or other indoor (and sometimes outdoor) space.

Implication for cigarette litter prevention programs: Addressing cigarette litter at transition points means focusing on millions of locations throughout the country. At each of these locations, a person who is smoking must decide, often quickly, about what to do with a cigarette. Because of the ubiquity of these locations, cigarette litter prevention programs that are successful at encouraging smokers to properly dispose of their cigarette butt at transition points could have a huge impact on cigarette litter generally.



More littered cigarette butts were found near transition points than at control areas.

Overall, thirty three percent more cigarette butts were counted near transition points than at associated control areas, suggesting that smokers may litter cigarette butts as they approach at point at which smoking is prohibited more frequently than in other areas.

Implication for cigarette litter prevention programs: Since transition points can be a magnet for cigarette litter, successfully preventing cigarette litter at transition points may have significant impact on cigarette litter as a whole.

Preventing cigarette litter at transition points may require different strategies than preventing cigarette litter elsewhere.

Because transition points are typically an identifiable point, for example an entrance into a building, rather than a dispersed area, cigarette litter prevention can focus on that point and therefore may be more effective than strategies directed at preventing cigarette litter generally.

Implication for cigarette litter prevention programs: Measures that reduce cigarette litter, such as placement of ash receptacles or keeping transition points free of litter, can be targeted directly at or near a transition point for maximum effectiveness.



Ash receptacles appeared to reduce the number of cigarette butts near a transition point but were not a panacea.

Generally, transition points with ash receptacles had fewer littered cigarette butts than those without ash receptacles. The transition points with the most cigarette butts were found at locations with no ash receptacles. However, several transition points with ash receptacles had a significant number of littered cigarette butts (one had more than 20), and several transition points without ash receptacles had few to no cigarette butts. Trash receptacles at transition points did not seem to reduce cigarette litter at the surveyed locations.



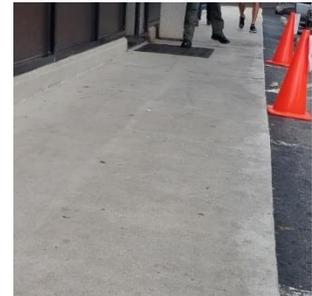
Implication for cigarette litter prevention programs: Convenient, highly visible, locked, and well-maintained ash receptacles are likely to reduce cigarette butt litter. Because smokers nearing some transition points may be in a hurry to dispose of cigarette butts, such as at bus stops and transit stations, convenient, highly visible, and well-placed ash receptacles are especially important at these locations. Distribution of pocket ashtrays

may also provide pedestrians at these type of transition points an alternative to littering as well.

Transition points in locations with the least amount of visible litter had few cigarette butts.

All surveyed locations with a low amount of other litter also had few cigarette butts, a finding consistent with other litter studies conducted by Keep America Beautiful. However, the converse was not always true. Surveyed locations with a moderate or high amount of visible litter did not always have a large number of cigarette butts.

Implication for cigarette litter prevention programs: Any successful cigarette litter prevention program must include a way to ensure that the area surrounding a transition point is free of litter. Other prevention measures appear to be less successful near transition points where even a moderate amount of litter was visible.



Several locations with the most cigarette butt litter also had degraded or damaged infrastructure.



Locations near transition points with broken or overgrown sidewalks or overflowing or damaged trash or ash receptacles also had the most cigarette butts. Even at Hartsfield-Jackson International Airport, which had relatively few cigarette butts, more littered cigarette butts were seen near the transition point when the Smoking Zone enclosures and ash receptacles were damaged or dismantled.

Implication for cigarette litter prevention programs: Maintaining infrastructure appears to reduce the number of littered cigarette butts near transition points. As with litter clean-up, this requires that someone be specifically responsible for maintaining sidewalks, parking lots, ash and

trash receptacles and other infrastructure.

Clean-up efforts sometimes appeared to contribute to cigarette litter near transition points.

In most surveyed locations, those areas near transition points where litter was cleaned up had few, if any cigarette butts. But in a couple of the surveyed locations, it appeared sweeping or blowing some part of the property shifted cigarette butts into the area near the transition point.

Implication for cigarette litter prevention programs: Effective cigarette litter prevention programs at transition points need to ensure that littered cigarette butts are picked up rather than shifted from one location to another. Many local governments require business owners (or operators) to maintain the property and other infrastructure adjacent to their property (e.g., the sidewalk or parking lot outside their storefront).



Areas near transition points abound with potential traps for cigarette butts.

Many areas near transition points are sidewalks or parking lots that typically have grooves, curbs, planted areas and other features that trap cigarette butts. Even when areas near transition points are cleaned routinely, cigarette butts may remain caught in these traps.



Implication for cigarette litter prevention programs: In some cases, the traps that capture cigarette butt litter can be eliminated but often they are either necessary (e.g. sidewalk grooves or curbs) or provide added benefit (e.g., planted areas) at the location. When site features that trap cigarette butts and other litter are generally a benefit, extra effort may be required to extract cigarette butts and other litter from these traps. This may require specialized equipment other than just brooms and blowers.

In summary, smoking bans create transition points where cigarette litter appears to accumulate in the absence of a multi-pronged prevention program. To minimize the accumulation of cigarette litter at transition points, prohibitions on smoking in certain locations bans should be accompanied by cigarette litter prevention programs at the transition point that includes:

- clear signage indicating where the no smoking area begins and what should be done with the cigarette butts;
- highly visible and locked ash receptacles at the transition point that are maintained and regularly emptied;
- distribution of pocket ashtrays at transition points where pedestrians may be crossing rapidly;
- maintenance of the infrastructure surrounding the transition point; and
- a rigorous cleanup protocol that includes picking up littered cigarette butts at and near the transition point, including removing them from planted areas, curbs, and other “traps”.

These efforts are only effective if responsibilities for associated tasks, for example, emptying ash receptacles and picking up littered cigarette butts, are clearly assigned, with associated incentives for compliance and enforcement for non-compliance. The responsible party could be the local public works or sanitation department or a property owner or tenant, similar to the responsibility given for emptying trash containers in the public right-of-way. Specific prevention measures and the entity responsible should be articulated in no smoking or litter prevention ordinances or in lease agreements between property owners and tenants.

Appendix A
Case Studies

Hartsfield-Jackson International Airport

About the Location

Hartsfield-Jackson International Airport is owned by the City of Atlanta although the airport property is located in multiple jurisdictions including the cities of Atlanta, College Park and Hapeville and the unincorporated areas of Fulton and Clayton counties. Over 110 million passengers passed through Hartsfield-Jackson International Airport in 2019, more than any other airport in the world. However, in late summer 2020, when this survey was conducted, passenger counts were reportedly down by approximately two-thirds due to the pandemic.



Smoking Policies

Prior to 2020, smoking was allowed in designated smoking rooms within Hartsfield-Jackson International Airport terminals, one of the last international airports in the country to allow smoking inside the building. However, the Atlanta City Council passed a law in 2019 prohibiting smoking anywhere inside the airport as of January 2, 2020. To accommodate smokers, the airport established eleven outdoor "Smoking Zones", nine outside of the domestic terminal and two outside of the international terminal. These Smoking Zones are located at least 25 feet from terminal entrances in the areas where passengers are dropped off and picked up.

Areas Surveyed

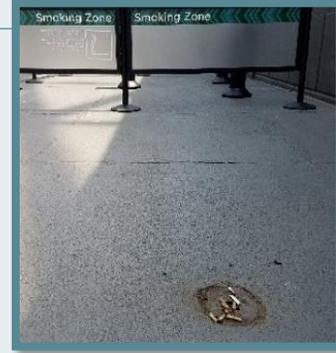
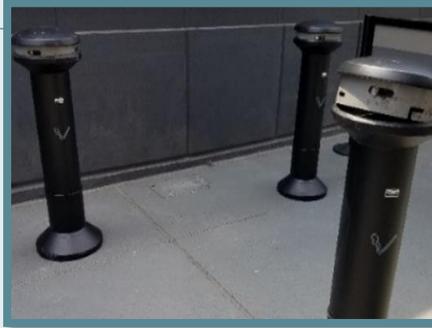
AGR surveyed an area within 20 feet of the transition point at four Smoking Zones at the domestic terminal and within the same size control area at least 50 feet from the transition point at each of the same four Smoking Zones. No smoking signs were visible at airport entrances and in passenger waiting areas. Signs directing people to the Smoking Zones were also clearly visible. A repeating public announcement outside the terminal also informed travelers where smoking is and is not allowed. Each Smoking Zone was surrounded by a movable barrier. There were labeled ash receptacles inside each Smoking Zone.



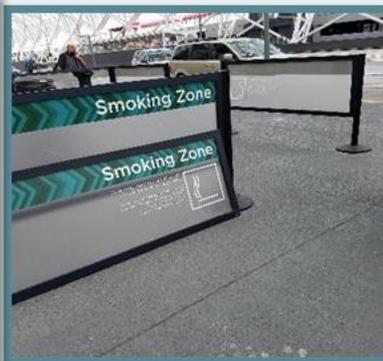
Findings

Between zero to four discarded cigarette butts were found in the surveyed areas near the transition points, with more found adjacent to the transition points with more foot traffic and where more smokers were using the Smoking Zones. No cigarette butts were found at the control areas although several cigarette butts were clustered in one low-lying area just outside of the surveyed area.

Area	# Cigarette Butts			
	Site 1	Site 2	Site 3	Site 4
Transition Point Area	1	4	2	0
Control Area	0	0	0	0



The airport and the Smoking Zones were busier on a second visit one month later. At that visit, several portions of the Smoking Zone enclosures were missing or displaced and several of the ash receptacles were dismantled. Several people were smoking just outside the Smoking Zones and more cigarette butt litter was found adjacent to Smoking Zones than in the initial survey. At one of the busier Smoking Zones, where a portion of the enclosure wall was missing and the ash receptacles were dismantled, several people were smoking outside the Smoking Zone enclosure. Six cigarette butts were noted along one side on the enclosure adjacent to the transition point and four on the other side. There were still no cigarette butts at the control area. Shortly after these littered cigarette butts were noted airport staff swept the area. Cleaning staff noted that each location is swept every 15 minutes or so.



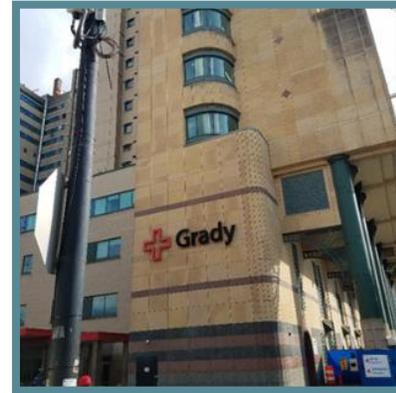
Conclusions

Highly visible signs directing travelers and employees to Smoking Zones, enclosed Smoking Zones with abundant labeled ash receptacles, and frequent clean-up efforts likely contributed to the limited cigarette butt litter found at the airport. Given the slight increase in cigarette butts and other litter near the transition points in the second visit, it appears that the lack of maintenance of enclosures and ash receptacles encouraged some smokers to smoke outside the Smoking Zone and litter cigarette butts. However, frequent sweeping limited the accumulation of cigarette litter, even when the enclosures and ash receptacles were not maintained.

Grady Memorial Hospital, Atlanta

About the Location

Grady Memorial Hospital is the public hospital for the City of Atlanta and surrounding region. Located in downtown Atlanta, the hospital's main entrance is fronted by two-lane city streets. Interstate I-75/I-85 borders the back side of the main hospital buildings.



Smoking Policies

In addition to the City of Atlanta's ordinance prohibiting smoking at enclosed places of employment and within ten feet of outside building entrances and windows, Grady Memorial Hospital is a smoke-free campus. Grady Health System's smoke-free campus policy creates a transition point immediately off the city sidewalk onto hospital property.

Areas Surveyed

The area surveyed near the transition point was across the street from the main entrance to the hospital, along a sidewalk next to a parking deck and across the street from a large, active construction site. The control area surveyed was one block away from the hospital, also along the sidewalk on the same street and next to a parking deck. Unlike the transition point area, the control site had a strip of pine straw with shrubbery between the sidewalk and the parking deck wall.

Findings

No smoking signs were posted at the transition point in front of the hospital. A single trash receptacle was visible near the transition point, but no ash receptacles were visible.

Area	# Cigarette Butts
Transition Point Area	70
Control Area	18

Seventy discarded cigarette butts were counted near the transition point, along the sidewalk across the street from the hospital, and 18 were counted at the control site along a sidewalk one block away. There was a significant amount of other litter at both sites. Much of the litter at the transition point area, including the cigarette butts, was pushed up against the wall of the parking deck at the edge of the sidewalk. The cigarette litter at the control area was also primarily on the edge of the sidewalk in the planted area.



Conclusions

The difference in the cigarette litter at the transition point area and the control area may be due to smokers littering cigarette butts as they enter the hospital campus, or because they are approaching a transition point. The “no smoking” signs are clearly visible yet there are no ash receptacles nearby.

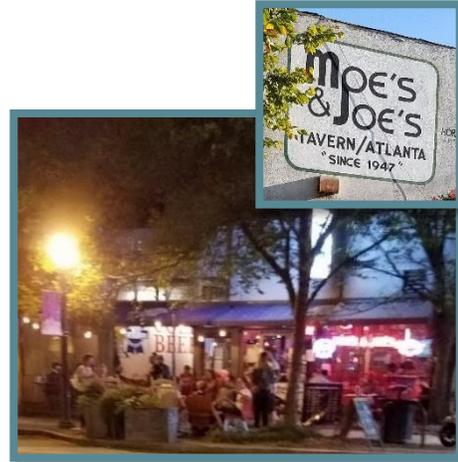
However, other factors at the site may contribute to the higher amount of cigarette litter closer to the transition point. Foot traffic was heavier here than at the control area at the time of the survey, including activity in and out of the adjacent construction site. There were also more people standing and sitting near the surveyed area close to the transition point than at the control area.



Moe's and Joe's Tavern, Atlanta

About the Location

Moe's and Joe's, a popular bar and grill in the Virginia-Highlands neighborhood of Atlanta, has outside seating in a fenced off area along the sidewalk and several chairs across the sidewalk on a bricked area along the street. During the warm weather, when the bar is crowded, as it usually is on weekend nights, customers often congregate on the sidewalk between the two seating areas.



Smoking Policies

Smoking is prohibited inside the bar but is allowed in the outside seating area per the City of Atlanta's ordinance. By ordinance, the transition point at Moe's and Joe's is ten feet from the entrance to the indoor area of the bar. However, since the outdoor seating area is immediately outside the entry door, and smoking is allowed here, the transition point is at the door to the indoor seating area.

Areas Surveyed

The surveyed area near the transition point was along the sidewalk just outside the fenced seating area. The control area was on the same block in front of a hardware store, between 50 and 100 feet from the entrance into the bar.



Findings

There was no signage identifying where smoking was allowed and prohibited at the Tavern entrance. There were ashtrays in the outdoor seating area and a trash receptacle on the street near the transition point. There was a separate trash receptacle on the street within 20 to 50 feet of the control site.

Thirty-two cigarette butts were counted at the 20 by 8-foot area adjacent to the transition point. Several were in the planted area between the street and sidewalk, but most were on the sidewalk between the outdoor seating area of the restaurant and the chairs across the sidewalk from the outdoor seating area.

Site	# Cigarette Butts
Transition Point Area	32
Control Area	2

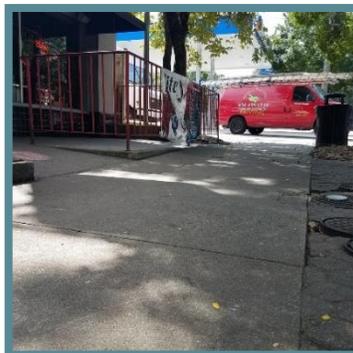
There was other litter at the surveyed area near the transition point, but cigarette butts were by far the most predominant. The control area was relatively uncluttered, with two cigarette butts counted. The outdoor seating area of the bar, within a fenced area, where smoking is allowed, was relatively uncluttered.



Conclusions

Although sidewalk maintenance is the responsibility of the owner of the property abutting the sidewalk (as well as any area between the sidewalk and property and sidewalk and curb), it did not appear the sidewalk outside the seating area had been cleaned at the initial survey time, the morning after a busy night at the tavern. In fact, given the lack of cigarette butts within the outdoor seating area, it is possible that area was cleaned onto the adjacent sidewalk.

However, when the area adjacent to the transition point was revisited the day after the initial survey (a Monday morning about 11:15 a.m.), the sidewalk was clean. The planted area within the survey area adjacent to the transition point still had significant cigarette litter, possibly even more than at the time of the initial survey. It is possible that while cleaning the sidewalk, some of the cigarette litter was blown or swept into the planted area and trapped there.



Civic Center Station, Metro Atlanta Rapid Transit Authority

About the Location

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is the public transit agency that operates buses and trains in metro Atlanta. The cigarette butt litter survey was conducted at MARTA's Civic Center station located in downtown Atlanta.

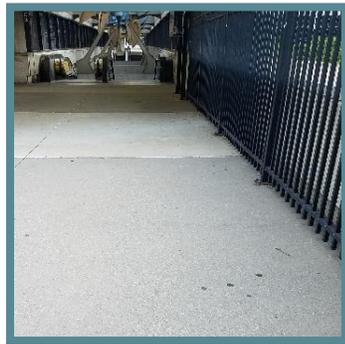


Smoking Policies

In addition to the City of Atlanta's ordinance prohibiting smoking at transit stations, MARTA's customer Code of Conduct prohibits "Smoking any kind of tobacco or using electronic cigarettes or vaporizers in a bus, rail car, rail station, or intermodal bus station."

Areas Surveyed

The surveyed area near the transition point was along the sidewalk approaching the escalator into and out of the station. The control area was also along the sidewalk a block further down on the same street. An office building, that appeared shuttered at the time, was adjacent to the control area.



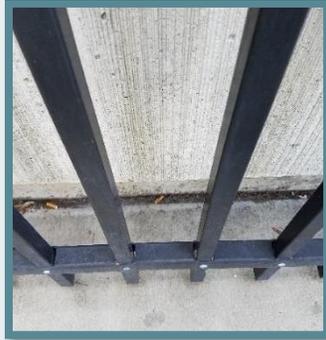
Findings

Although the survey was conducted at rush hour on a weekday, traffic was light at and around the station, most likely due to the pandemic. There was no clear signage identifying the point at which smoking was prohibited. There was a trash receptacle at the top of the escalator into and out of the station.

Twenty-seven cigarette butts were counted at the transition point area approaching the entrance to the station. Nearly all of these were found with other small litter items, on a portion of the sidewalk lying between a metal rod fence, raised several inches off the ground, and a concrete wall a couple of inches behind the metal fence. There was minimal litter on the open concrete area approaching the transition point area.

Site	# Cigarette Butts
Transition Point Area	27
Control Area	1

One cigarette butt was found at the control area on the edge of the sidewalk although more were noted in the planted area adjacent to the control area.



Conclusions

At this location, it seemed like the most significant contributor to the aggregation of cigarette butt litter was the physical structures that captured cigarette butts and other litter. The litter may have gotten to this hard-to-reach area either by blowing or sweeping of the sidewalk or by air currents from passing cars or foot traffic. In any case, it did not appear that this portion of the surveyed area was maintained while the rest of the area near the transition point (the walkway to the station entrance) did appear to be cleaned. The lack of ash receptacles at the transition point may have also contributed to the amount of cigarette litter at this location.

Five Points Bus Stop, Atlanta

About the Location

This bus stop surveyed is across the street from the Little Five Points station, the central station of the Metropolitan Atlanta Rapid Transit Authority (MARTA) rail network. At this stop on Alabama Street between Peachtree and Broad Streets, buses line up along the curb. Cars are not allowed on this block. Typically, passengers and others congregate along the sidewalk. A currently shuttered storefront and an open drugstore are located on the sidewalk opposite the street.

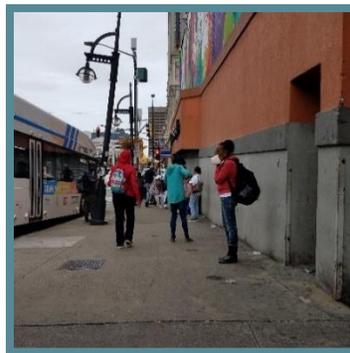


Smoking Policies

Although MARTA's Customer Code of Conduct and the Georgia law prohibits "smoking tobacco in any form, or using electronic cigarettes or vaporizers in a bus, rail car, rail station, or intermodal bus station" at this location, it is difficult for smokers to discern where these laws would apply along the sidewalk since there is not a clear "station" or even a semi-enclosed area for passengers to wait for a bus. Thus, the transition point at this location is the point at which passengers enter the busses.

Areas Surveyed

The area surveyed next to the transition point was along the sidewalk between parked buses and storefronts where a crowd of people were gathered, many of whom were smoking. The control area surveyed was across the street from the bus stop, adjacent to a hotel. This area had much less foot traffic at the time of the survey.



Findings

There were no signs indicating where smoking was allowed or prohibited near the transition point or at the control area. There were trash receptacles, but no ash receptacles visible at both areas but between 20 to 50 feet away at the area near the transition point.

Site	# Cigarette Butts
Transition Point Area	67
Control Area	3

The sidewalk along the entire block was highly littered. A total of 67 cigarette butts were counted in a 20 foot by 8-foot area. There was also litter at the control area but significantly less than near the transition point, including three cigarette butts.



Conclusions

The high number of cigarette butts near the transition point could be attributed to many factors. The area was very crowded and many of people present were smoking. All types of litter were found at this location.

There were no ash receptacles at the site and although garbage receptacles were within view, when a bus arrives, those waiting to board may not have the opportunity to walk to the receptacle to dispose of their cigarette. Also, there was no evidence that the area around the bus stop had been recently cleaned.

Walmart Supercenter, Blue Ridge

About the Location

The Walmart Supercenter in Blue Ridge, Georgia is off the main four-lane bypassing town. The entrance has a roped off queue line to limit the number of people inside the store due to the COVID-19 pandemic.



Smoking Policies

The State of Georgia prohibits smoking at public places, including retail stores. Fannin County and the City of Blue Ridge do not have any additional restrictions on smoking. Although state law does allow workplaces to offer indoor ventilated smoking areas, this Walmart does not. Thus, employees come outside to smoke.

Areas Surveyed

The area surveyed adjacent to the transition point was along the walkway to the store entrance where customers line up to enter the store. The store building is on one side of the walkway and the parking lot on the other. The control site was along the same walkway approaching the store but further from the entrance.



Findings

When surveyed at 1:30 p.m. on the Sunday of Labor Day weekend, the parking lot was full and there was a steady stream of customers entering the store. However, there was no queue to enter the store. There were two ash receptacles along the walkway to the entrance, within the surveyed area near the transition point. In addition, there was a garbage receptacle just outside the entrance door. A sign on the door indicated smoking was not allowed in the store.



There were seven discarded cigarette butts (including whole cigarettes) along the walkway approaching the store entrance, most at the base of the ash receptacle. There were

Site	# Cigarette Butts
Transition Point Area	7
Control Area	2

two cigarette butts in the control area. There was a large amount of litter, including cigarette litter, in the parking lot, on nearby grassed areas and along the walkway to the store entrance.

On a second visit to the site, about one month later but on an equally busy Saturday, there were no cigarette butts found at the survey area approaching the store entry.,. However, the area around the store remained significantly littered. The ash receptacles remained in the same location, but no cigarette butts were clustered at the base.



Conclusions

Ash receptacles did not always keep customers and employees from littering cigarette butts. At the initial survey, several cigarette butts were found at the base of the ash receptacle. The employee break area and the employee entrance both had ash receptacles, yet both were also littered with cigarette butts.

Despite the fact there was significant amounts of cigarette butts and other litter in the parking lot and in the planted areas, a limited number of cigarette butts were found on the walkway to the entrance, in both the area near the transition point and the control area. On a second visit, no cigarette butts were found. Either customers and employees dispose of their cigarette butts further from the entrance (in the parking lot and on the sides of the building) or the walkway approaching the store entrance is more regularly maintained.



West Bay Street Bars, Savannah

About the Location

PS Tavern and Moon River Brewing Company sit two doors apart in an area of downtown Savannah that attracts residents and tourists alike. Moon River Brewing Company has an outdoor area with a smoking section while PS Tavern does not.



Smoking Policies

Savannah's Smokefree law allows restaurants and bars meeting specific square footage requirements to allow smoking in up to 20 percent of their outdoor areas with restrictions as does Moon River Brewing Company. The transition point for both bars, per Savannah's ordinance, is ten feet from the door to the indoor seating area.

Surveyed Areas

The survey was conducted on a weekday at lunchtime. The area surveyed near the transition point was along the sidewalk outside PS Tavern, starting just over 10 feet from the entrance. The control area was on the same sidewalk outside the outdoor dining area of Blue Moon Brewery where smoking is allowed.



Findings

The outdoor area of the Moon River Brewery was moderately busy when the survey was conducted and there were a few customers were inside PS Tavern. There were no signs visible at either bar/restaurant indicating where smoking was allowed or prohibited. An ash receptacle sat on either side of the entrance to PS Tavern. Public trash receptacles were on the curb, between 20 and 50 feet from PS Tavern's entrance and more than 50 feet from Moon River Brewing Company's entrance.

Twenty-four cigarette butts and one cigar tip were counted in the 20 by 8-foot area near the transition point into PS Tavern, where smoking is prohibited. Two cigarette butts were counted in the control area near the entrance to the outside seating area of Moon River Brewing Company where smoking is allowed at designated tables.

Site	# Cigarette Butts
Transition Point Area	24
Control Area	2

Conclusions

The difference in the number of cigarette butts outside the two bars could be because smoking was not allowed at PS Tavern, and thus the entrance is a transition point, but smoking is allowed in the outdoor seating area of the Moon River Brewing Company. The ash receptacles on either side of the entrance to the PS Tavern did not appear to eliminate cigarette butt litter nearby.

Despite the proximity of the two bars, the sidewalk outside PS Tavern was generally more littered and otherwise not as well maintained. Thus, the difference in the cigarette butt litter may also be due in part to the difference in maintenance procedures in front of the two bars/restaurants.



Tybee Island Pier and Beach

About the Location

Tybee Island is a barrier island 20 miles east of Savannah with a resident population of just over 3,000 people. Hundreds of thousands of people visit the island each year. The Tybee Island Pier and Pavilion located between 14th and 16th streets is at the center of the tourist activity.



Smoking Policies

Historically smoking has been allowed on the Pier and beaches in Tybee Island. However, the City Council passed a one-year ban on smoking on the Tybee Island beach between 14th and 16th streets starting May 2020. These two blocks are adjacent to the busiest commercial area on the Island and include the Tybee Island Pier and Pavilion. The stated goal of the one-year ban is to reduce cigarette litter on beaches.

Areas Surveyed

The prohibition on smoking in the two-block area of the beach creates transition points at the entry to the several boardwalks that cross the dunes from 14th to 16th street, including the entry ramp to the Pier and Pavilion. Another transition point is on the beach, at the start of the no smoking zone, adjacent to 14th and 16th streets. AGR surveyed the area near the entry to the boardwalk over the dunes at 15 ½ Street as the primary transition point.



The control area selected was the 20 by 8-foot area approaching the boardwalk to the beach at 10th Street, which is outside of the designated no smoking area. This is a less busy area of the beach.

Findings

At the transition point, the entry from the parking lot onto the boardwalk at 15 ½ Street, the “No Smoking, No Vaping” signs were large and positioned where they were difficult to miss. There were ash, trash, and recycling receptacles immediately at the entrance to the boardwalk and adjacent to the parking meter, a necessary stop for anyone arriving at this access point by car. There were no ash or trash receptacles at the control area.

Site	# Cigarette Butts
Transition Point Area	1
Control Area	1

One cigarette butt was seen in the 20 by 8-foot area leading up to the boardwalk at 15 ½ Street. One cigarette butt was found at the approach to the 10th street boardwalk, the control area.

AGR also surveyed the transition point onto the Tybee Island Pier and Pavilion. The No Smoking signs here were also large and clear. There were no cigarette butts on a 20 by 8-foot area on the paved ramp to the Pier. Several pole-mounted ash receptacles remain along the pier from before the one-year smoking ban went into effect.



Within the adjacent commercial areas, there was a lot of foot traffic during the survey and many people smoking. Unlike the relatively clean beach access areas, there was quite a bit of cigarette litter on the sidewalks and curbs, even on the blocks with ash receptacles.

Conclusions

The beaches and boardwalks near the transition points into the no smoking areas were relatively free of cigarette butt litter as was the control area, the beach access point outside of the no smoking area. However, further from the busier beach access points, in the parking lots and on village streets, more cigarette butts and other litter were visible.

Clear signage at the access point could have contributed to the lack of cigarette butt litter near the transition point. The ash, trash and recycling receptacles at the transition points may have had an effect as well; however, the ash receptacles within the commercial area did not seem to eliminate cigarette litter along the sidewalks and streets.

Another possible contributing factor to the limited amount of cigarette litter on the beach and near access points could be the clean-up efforts conducted by the City of Tybee Beach and Tybee Clean Beach Volunteers, a group of local volunteers who “sweep Tybee’s beaches free of trash on a regular basis, often daily”. The Tybee Clean Beach Volunteers, partners in the regional Cigarette Litter Prevention Program, funded by Keep America Beautiful, report that they collected over 340,000 cigarette butts in three years. A couple of these volunteers encountered while conducting the field survey reported that although they collect plenty of cigarette butts and other litter on the beach, cigarette litter is most significant in beach parking lots.

Historic Downtown Brunswick

About the Location

The Brunswick, Georgia historic district is lined with stores, restaurants and pocket parks maintained in the original Victorian style. The office of Keep Golden Isles Beautiful, the organization that coordinates the coastal Georgia regional Cigarette Litter Prevention Program, is located here.

Smoking Policies

The City of Brunswick prohibits smoking within 25 feet of most indoor public areas and workplaces, including the businesses and restaurants that line the sidewalks of historic downtown Brunswick. Smoking is allowed in the pocket parks and squares if they are at least 25 feet from entrances to shops and restaurants.

Areas Surveyed

AGR surveyed the area in front of Old City Hall, along Newcastle Street, outside the no smoking zone that extended 25 feet from the building entrance. We also surveyed several 20 by 8-foot areas approximately 25 feet from the entrances to restaurants and storefronts along the same street. The control area was within Jekyll Square, a small park straddling Newcastle Street, where smoking is allowed.



Findings

Although some of the shops and restaurants were open at the time of the survey, few people were seen on the sidewalk when the survey was conducted. These were several people in Jekyll Square, the control area, and several people were dining in the outdoor areas of local restaurants.



A no smoking sign was posted at the transition point at Old City Hall, and two ash receptacles stood on either side of the steps leading up to the entrance. In the control area, Jekyll Square, there were free standing ash receptacles on one side of the street and trash receptacles on both sides. Two laminated notes from Keep Golden Isles Beautiful were posted in the planted area reading "Please Don't Be the First One to Throw a Butt Down".

No cigarette butts were found within any of the surveyed areas adjacent to transition points or in the control area. Only one cigarette butt was found in a scan a larger area of the park bordering the street.

Site	# Cigarette Butts
Transition Point Area	0
Control Area	0

Minimal litter was seen along the sidewalks and curbs, even in the planted areas in the three-block area along this commercial street, including Jekyll Square. There was litter along the sidewalk and curb in front of one closed storefront and three cigarette butts under one full pole-mounted ash receptacle. A nearby smoker that the adjacent business owner had called for the full ash receptacle to be emptied. The City's Department of Public Works empties the ash receptacles.

Conclusions

The lack of litter in historic downtown Brunswick could be attributable to several factors. These include the lack of foot traffic the area at the time of the survey, the far-reaching outreach campaign of Keep Golden Isles Beautiful and the ubiquity of ash receptacles along the road. But one of the most likely reasons the area is uncluttered is consistent cleaning. According to the Executive Director of Keep Golden Isles Beautiful, two full time staff are dedicated to maintaining the area on an ongoing basis.

Pier Village, Saint Simons

About the Location

Saint Simons is an 18 square mile island off the coast of southeast Georgia in Glynn County. An estimated 14,302 people live on the island but many more visit each year. The Pier Village District is the island's downtown social hub with the pier, shopping, restaurants, and recreational areas all within a concentrated walkable area.



Smoking Policies

Glynn County prohibits smoking within 25 feet of most indoor public areas and workplaces, including the businesses and restaurants that line the sidewalks of Pier Village. Smoking is allowed on the Pier and in the parks throughout Pier Village as long as smokers are at least 25 feet from entrances to shops and restaurants.

Areas Surveyed

AGR surveyed the area in front of Barbara Jean's, a popular restaurant in Pier Village. The area surveyed incorporated the sidewalk, street parking, and a planted area. The control area surveyed was along a sidewalk behind the restaurant building. This area also encompassed the sidewalk, street parking area and grassed area.



Findings

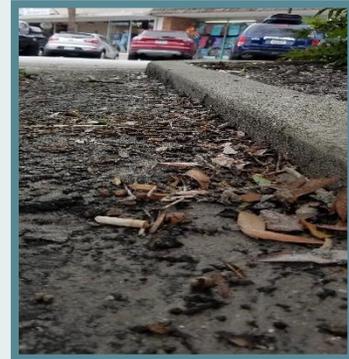
The restaurant was open at the time of the survey but not busy. No signs indicating where smoking was prohibited were visible. There was an ash receptacle mounted on a pole within 20 to 50 feet of the surveyed area near the transition point and a garbage receptacle less than 20 feet away. There were also ash and trash receptacle visible between 20 to 50 feet away from the control area.



Four cigarette butts were found within the surveyed area near the transition point, all in the street/parking portion of the surveyed area rather than on the sidewalk or in the planted area in front of the restaurant. None were found within the control area.

Site	# Cigarette Butts
Transition Point Area	4
Control Area	0

We observed cigarette butts in other areas of Pier Village, both immediately adjacent to transition points and those further away. Although there was some cigarette litter along sidewalks near transition points, more was found in planted areas along the sidewalk, in gutters along the curb of the street/parking area, and against the walls. This was despite the widespread availability of pole-mounted ash receptacles and trash receptacles throughout Pier Village.



Conclusions

The location of the cigarette litter in Pier Village suggests that local government employees and/or shopkeepers may be maintaining the sidewalk along most storefronts but that the street parking area and a the portion of the waterfront park (Neptune Park) closest to the commercial area, in particular, may not get as much maintenance attention. It appeared that in some locations, those maintaining the sidewalks in front of stores blew or swept cigarette butts and other small litter items into the street and planted areas. It also may be that visitors to Pier Village drop their cigarettes when they get out of their cars rather than wait until they reach the ash receptacles, and the cigarette litter gets blown against the curbs. Some people are using the ash receptacles. Volunteers and public works staff empty them on a regular basis. But ash receptacles alone are not preventing littering of cigarette butts in Pier Village.

