

**TELECOMMUNICATIONS TRANSMISSION FACILITY
COORDINATING COMMITTEE
2021 ANNUAL REPORT**



**PRINCE GEORGE'S COUNTY, MARYLAND
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Cover Photo: Small Wireless Facility Deployment in Prince George’s County (9900 Block of Rhode Island Ave., College Park)

As wireless carriers continue to serve and expand their markets by increasing their networks’ coverage and capacity, proposals to deploy equipment in the public right-of-way remain a prime focus. Most of the equipment being proposed are “small cell” antennas less than 4 feet in height—what the FCC calls Small Wireless Facilities (SWF).

After a generation of antennas mounted primarily on monopoles and towers, the wireless industry’s shift to SWFs has been a source of anticipation but also concern as it entails substantial deployments on smaller structures closer to users—which bring a more personal impact to the citizenry as the infrastructure is commonly located in residential neighborhoods.

The FCC has ruled that state and local governments cannot enact ordinances that prohibit or have the effect of prohibiting the provision of telecommunications services. In other words, local governments cannot establish laws or regulations that arbitrarily deny applications for siting SWFs on streetlights, decorative poles, and utility poles in the public right-of-way. However, local authority over individual zoning decisions regarding the placement, construction, and modification of wireless communications facilities is still preserved.

The FCC also requires a local jurisdiction to abide by specific timelines when processing applications. These ‘shotclocks’ will vary depending on the type of proposal. A jurisdiction must ensure its review is complete and in a timely manner.

In anticipation of the carriers’ SWF siting applications, Prince George’s County has taken measures to ensure that the ongoing need to increase and improve the availability of communications services is balanced and reasonable.

SWF proposals submitted to the Telecommunications Transmission Facility Coordinating Committee (TTFCC) must follow guidelines outlined in the Prince George’s County’s Design Manual for Small Wireless Facilities (published January 31, 2020) and in the updated Prince George’s County Code (which took effect February 3, 2020, through legislation under CB-058-2019 and CB-059-2019).

Section 5A-159 of the County Code (Small Wireless Facilities) outlines the County’s regulations for SWFs on both public and private property and advises carriers on the expectations that the County has when reviewing an application for an SWF in the public right-of-way.

Prince George’s County’s long-term goal is that SWF proposals in the right-of-way are treated fairly while still respecting community standards.

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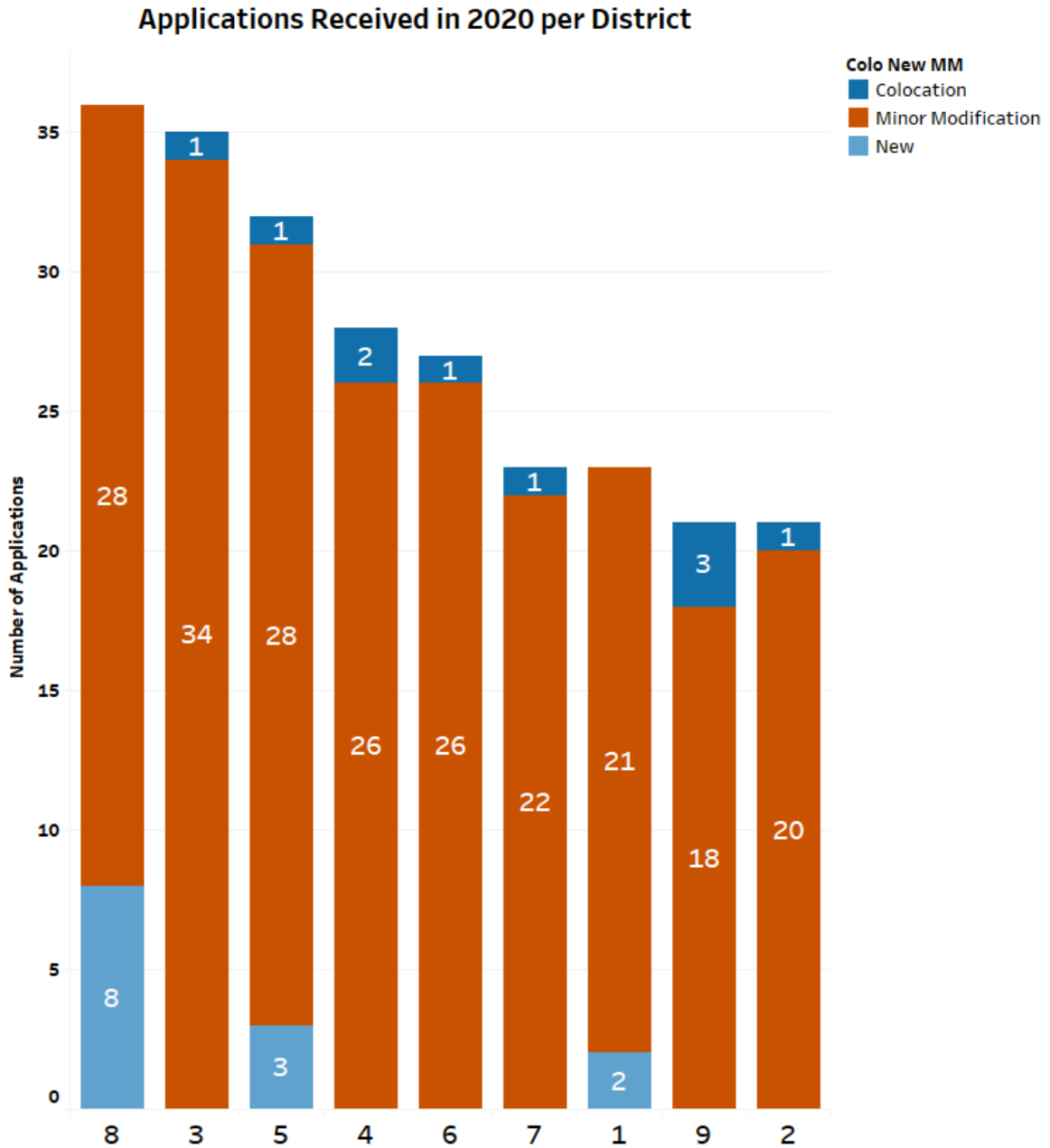
1. Executive Summary

The Telecommunications Transmission Facility Coordinating Committee (TTFCC) received 266 applications in calendar year 2020 (CY20)—a 24.8 percent increase over the 213 applications received in CY2019. And, based on the Annual Plan updates carriers filed with the County in August 2020, the TTFCC expects to receive a significant number of applications in the future; the carriers have identified a total of 540 future sites.

Of the 266 applications received, 24 were for new structures. Eleven applications were for colocations on an existing structure. The majority of the applications received—231—were minor modification applications to add antennas or otherwise change existing equipment at existing sites; most of those were administratively approved by the TTFCC Chair as permitted in the County Code. In total, the Committee took action on 234 applications in CY20.

The chart below shows the application types received in CY20 per Council District.

Figure 1: Applications Received Per Council District (2020)



The level of application activity reflects the wireless carriers’ continued efforts to upgrade their networks for service—primarily in areas inside the Beltway, where higher concentrations of antennas are located to serve residents, travelers, and businesses. The table below shows the current number of wireless sites in the County (by type of support structure and Council District).

Table 1: Number of Wireless Sites by Support Structure and Council District

Council District	Building	Light Pole	Monopole	Tower	Utility Pole	Water Tower	Total
1	18		21	28			67
2	29		9	10		1	49
3	28		18	5			51
4	21		32	18		3	74
5	22	2	46	12	1	2	85
6	9		24	29		1	63
7	23		13	6			42
8	19		22	16		5	62
9	11		45	45		2	103
Total	180	2	230	169	1	14	596

The TTFCC collected \$255,070.00 in application, resubmittal, and annual report fees from carriers during CY20. The County’s costs for TTFCC activities, excluding indirect County staff time, were \$303,690. These costs were expenditures for outside services provided at the County’s request by the designated Telecommunications Transmission Facility Technical Consultant, which presently is Columbia Telecommunications Corporation.

2. Background

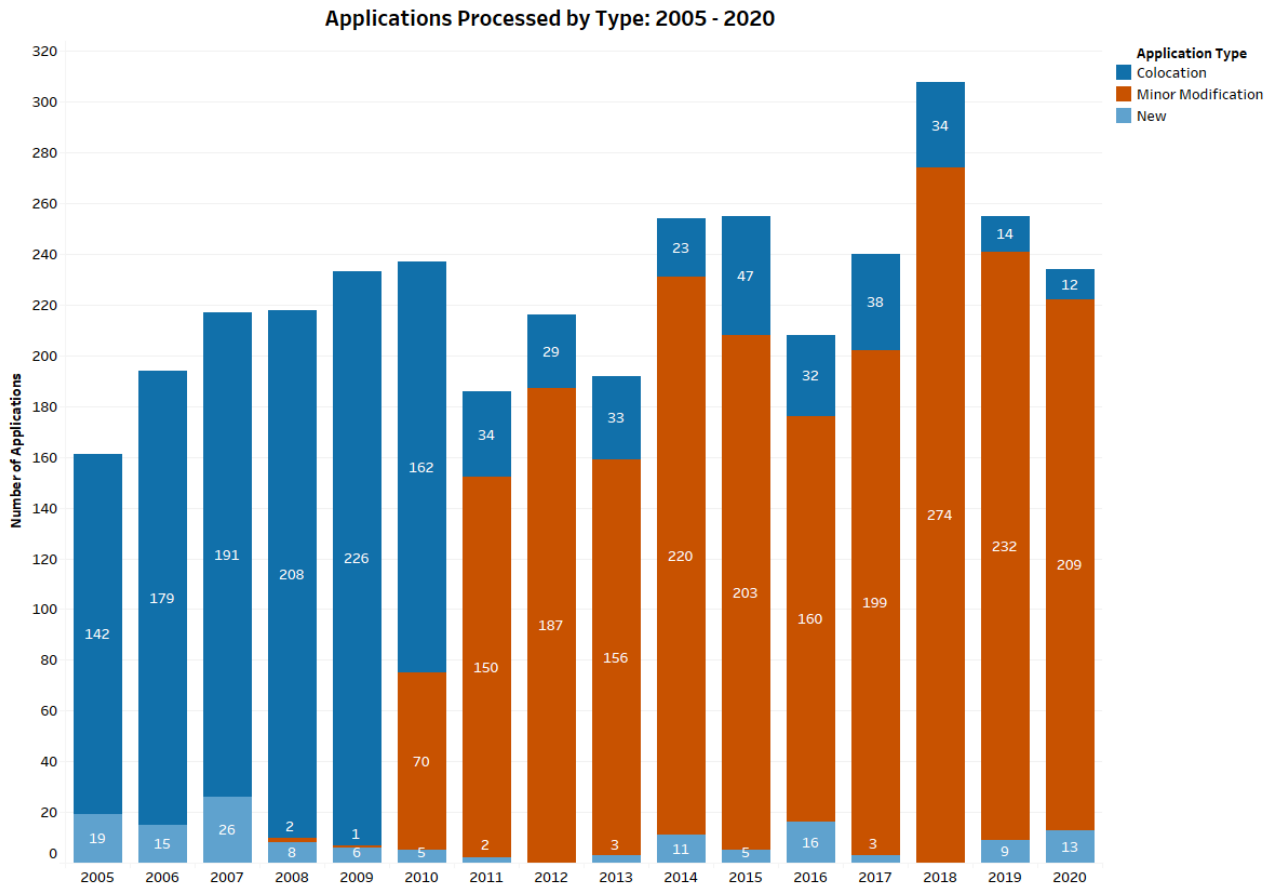
Since the TTFCC’s inception in 2000, the Committee has received 4,260 applications and carriers currently have antennas and other equipment at 596 locations in the County. (Most locations support multiple antennas.) Antennas are mounted on six types of structures in the County—monopoles, buildings, lattice towers, water towers, and light or utility poles. Table 2 shows the number of each type of wireless site:

Table 2: Wireless Sites by Type of Support Structure

Type	Number
Monopole	230
Building	180
Tower	169
Water Tower	14
Light Pole	2
Utility Pole	1
<i>Total</i>	596

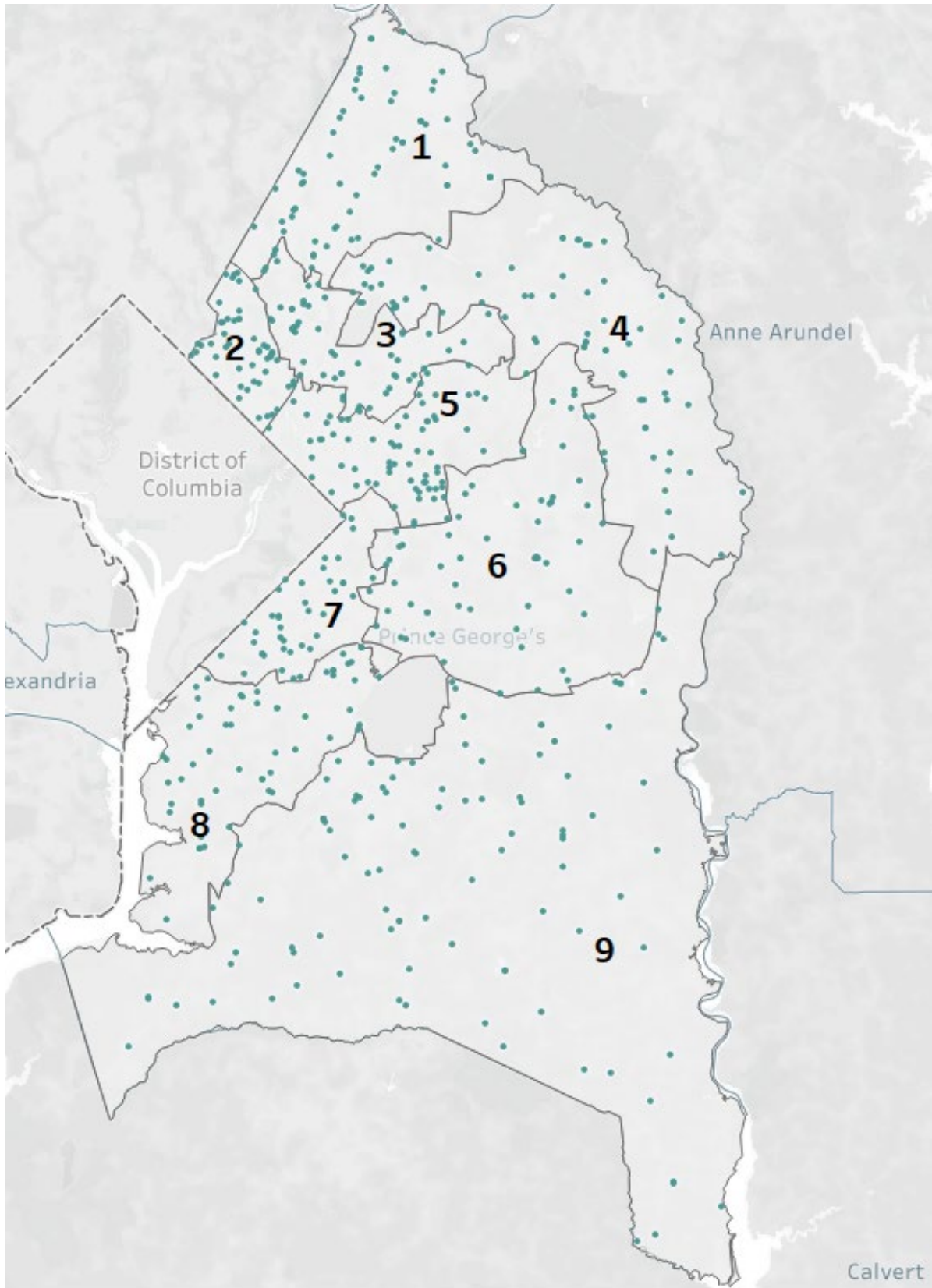
The chart below shows the application types (i.e., new site, colocation, or minor modification) for CY20 and the prior 15 years.

Figure 2: Applications Processed by Type (2005 – 2020)



The map in Figure 3, below, illustrates the locations of wireless sites in the County by Council District.

Figure 3: Map of Wireless Sites by Council District



Over time, the number of structures supporting multiple carriers' wireless facilities has grown. The maps below show the number of locations as well as the number of collocating carriers in 2005, 2010, and presently. The following key applies to each map:

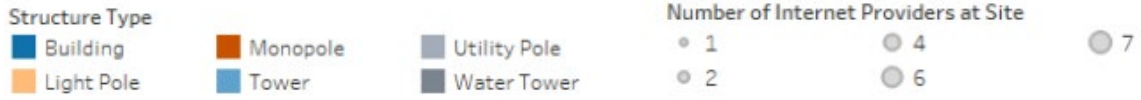
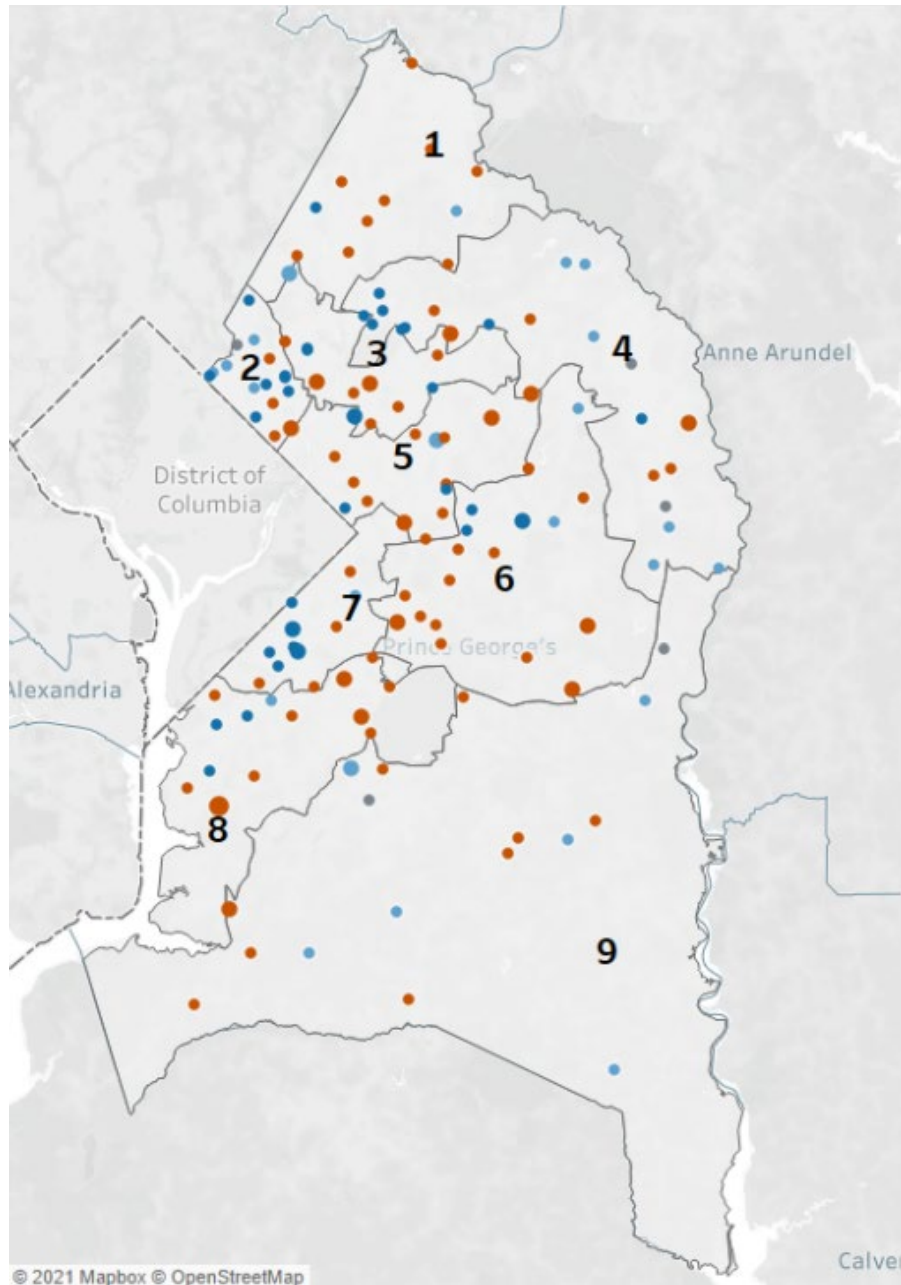


Figure 4: Growth Over Time of Structures Supporting Multiple Antennas (2005)



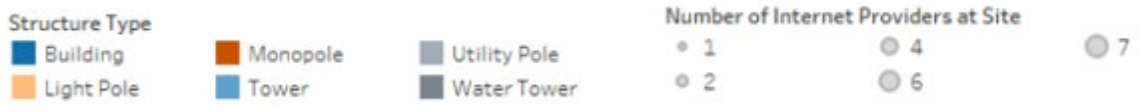
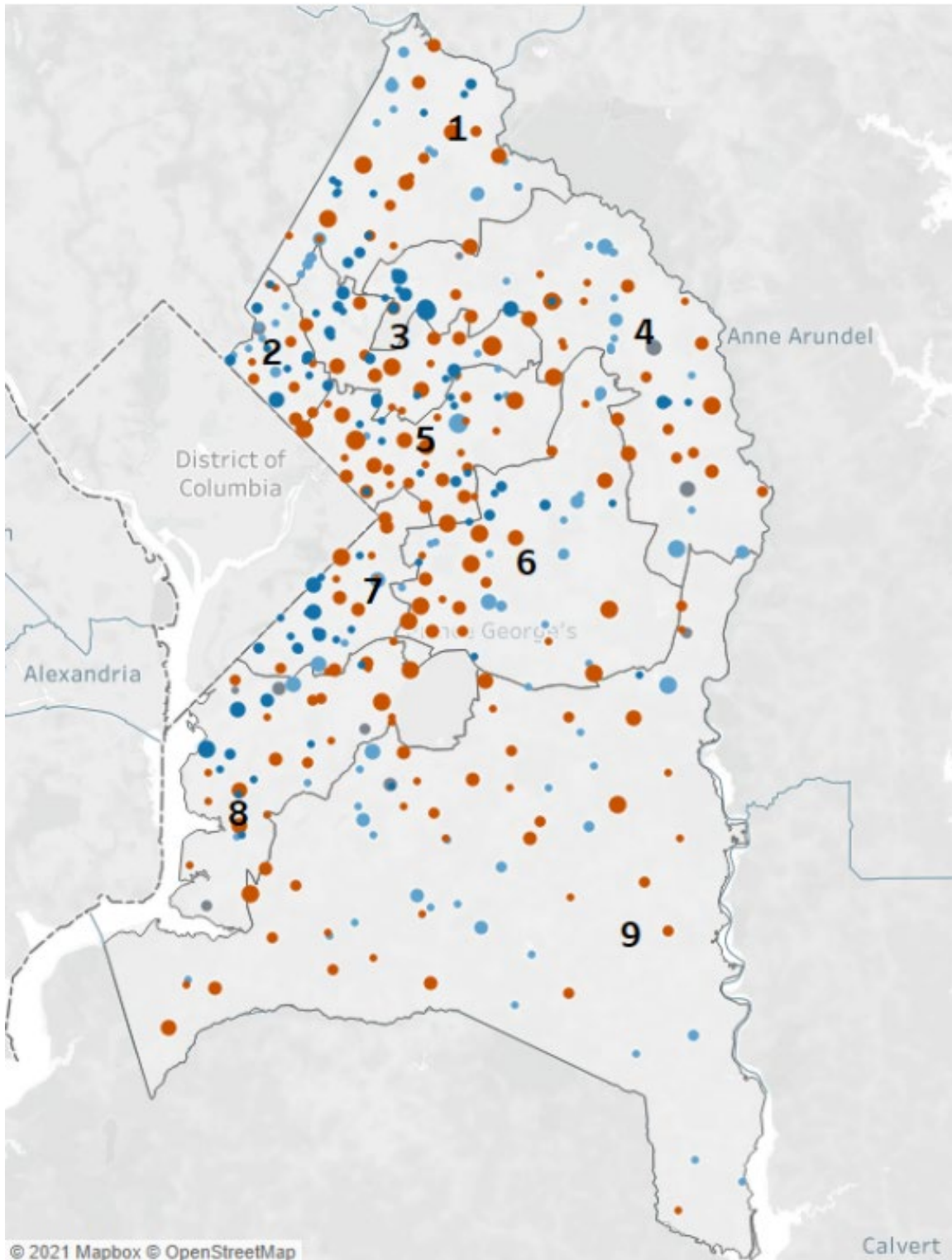


Figure 5: Growth Over Time of Structures Supporting Multiple Antennas (2010)



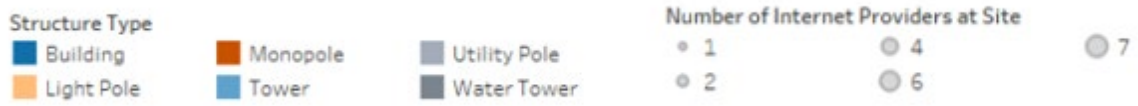
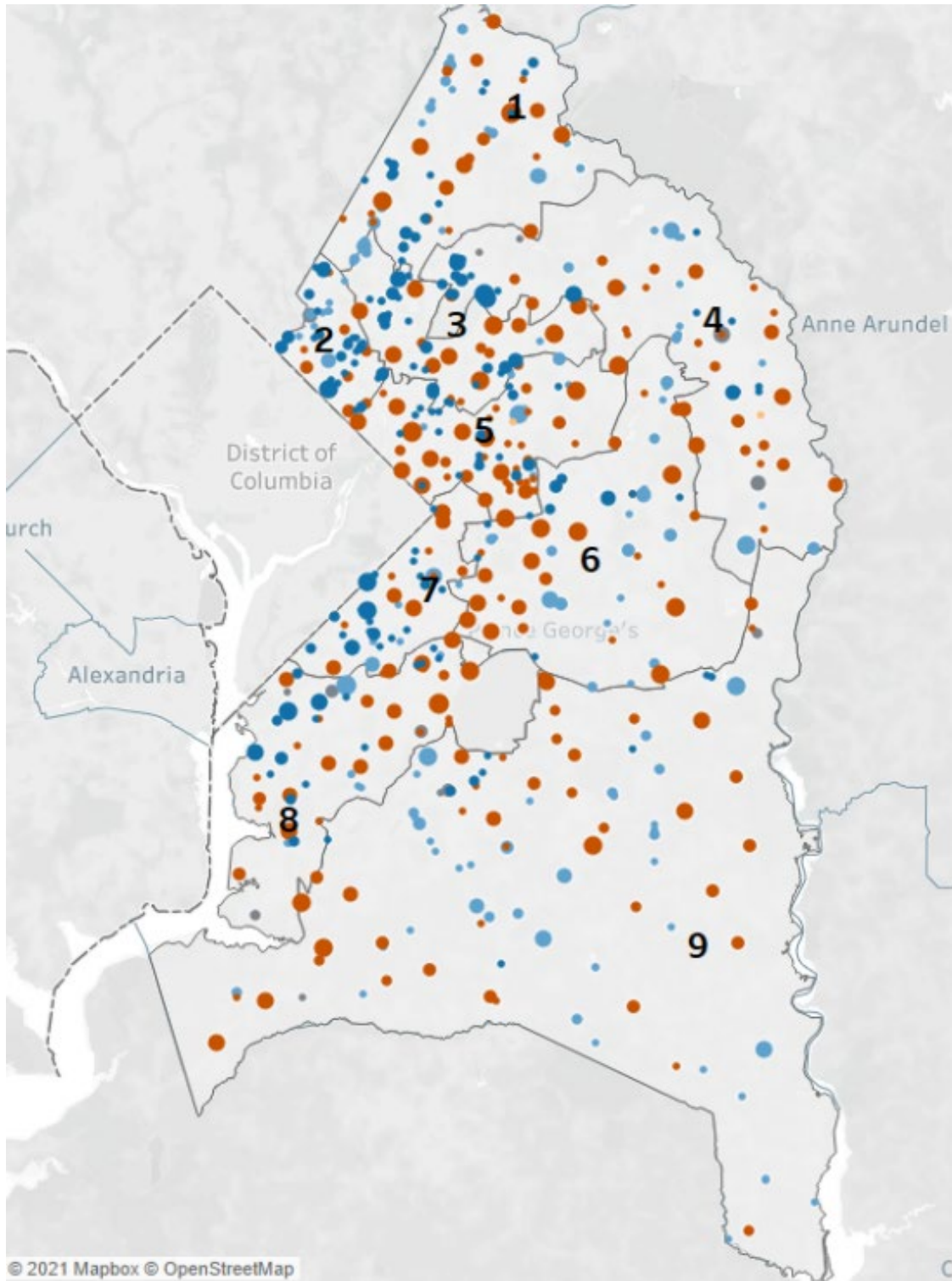


Figure 6: Growth Over Time of Structures Supporting Multiple Antennas (12/2020)

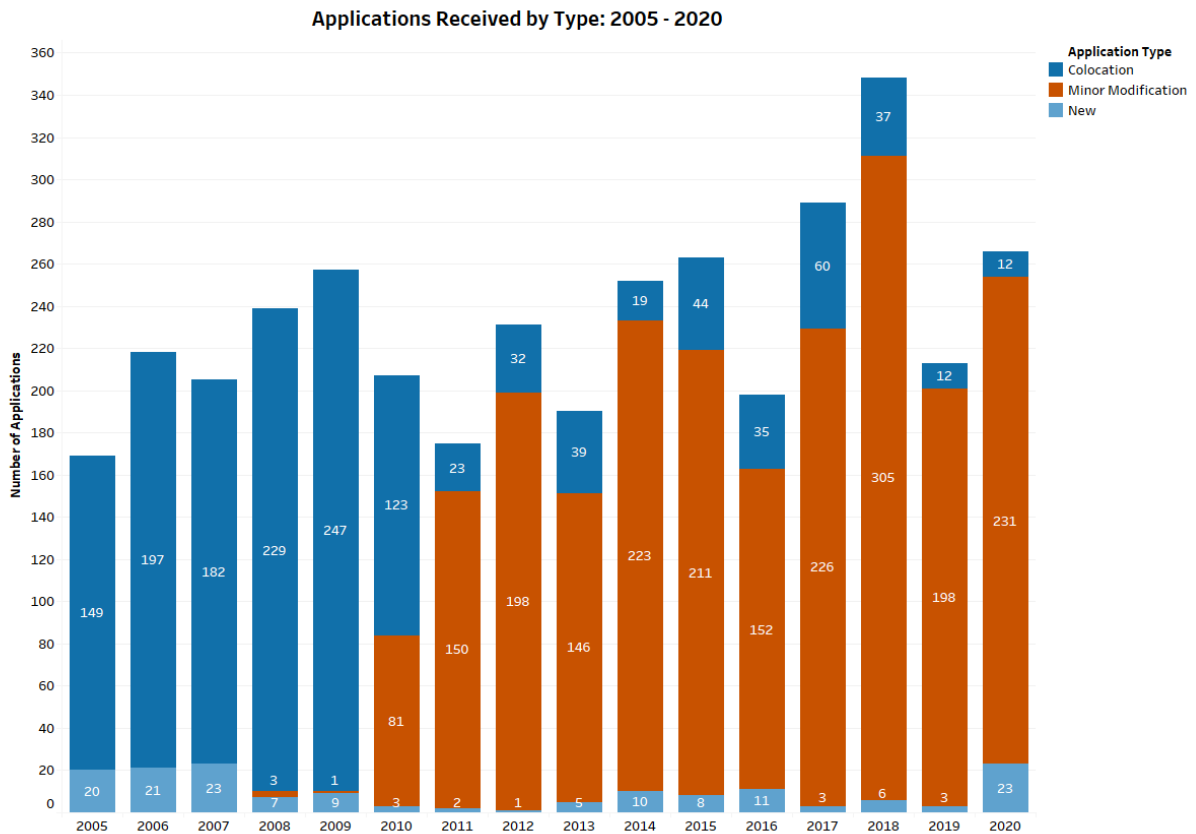


3. 2020 TTFCC Activities

In 2020, carriers and infrastructure companies filed 266 applications for TTFCC review. The TTFCC reviewed most of those applications, as well as applications carried over from 2019.¹

The following chart compares the types of applications received between 2005 and 2020.

Figure 7: Applications Received by Type (2005 – 2020)



The charts below illustrates the applications that received a disposition following submission to the TTFCC in 2020 and the prior 15 years. The potential outcomes for an application are: 1) recommended by the TTFCC, 2) not recommended by the TTFCC, 3) subsequently withdrawn by the applicant, or 4) tabled due to administrative issues. Circumstances leading to a withdrawal may include the applicant filing in the wrong jurisdiction, submitting the wrong type of application for the proposed scope of work, or not responding to requests for information (RFI) sent by the TTFCC in response to an incomplete or inaccurate application.

¹ For a variety of reasons, applications are not always reviewed in the year in which they are filed. Some of the applications reviewed in 2020 were filed in 2019; similarly, some of the applications filed in 2020 will be reviewed in 2021.

While it is not uncommon for an application to be tabled or not recommended, the process over the last 15 years has seen the majority of applications either recommended or withdrawn.

Figure 8: Applications Processed by Type of Outcome (Total, 2005 – 2020)

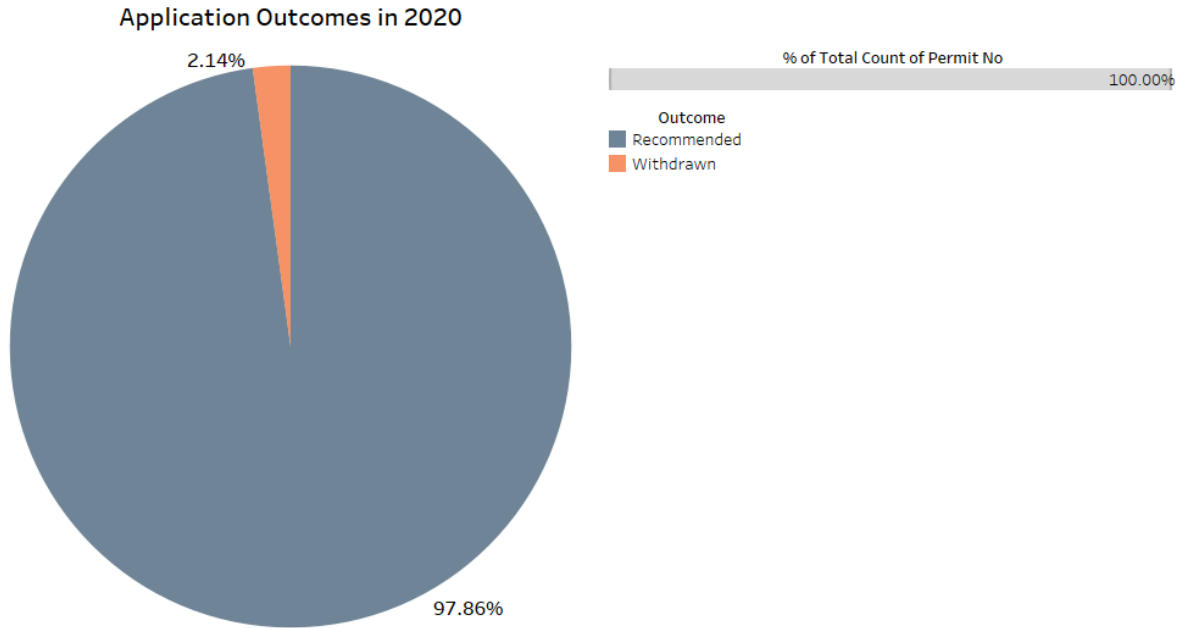
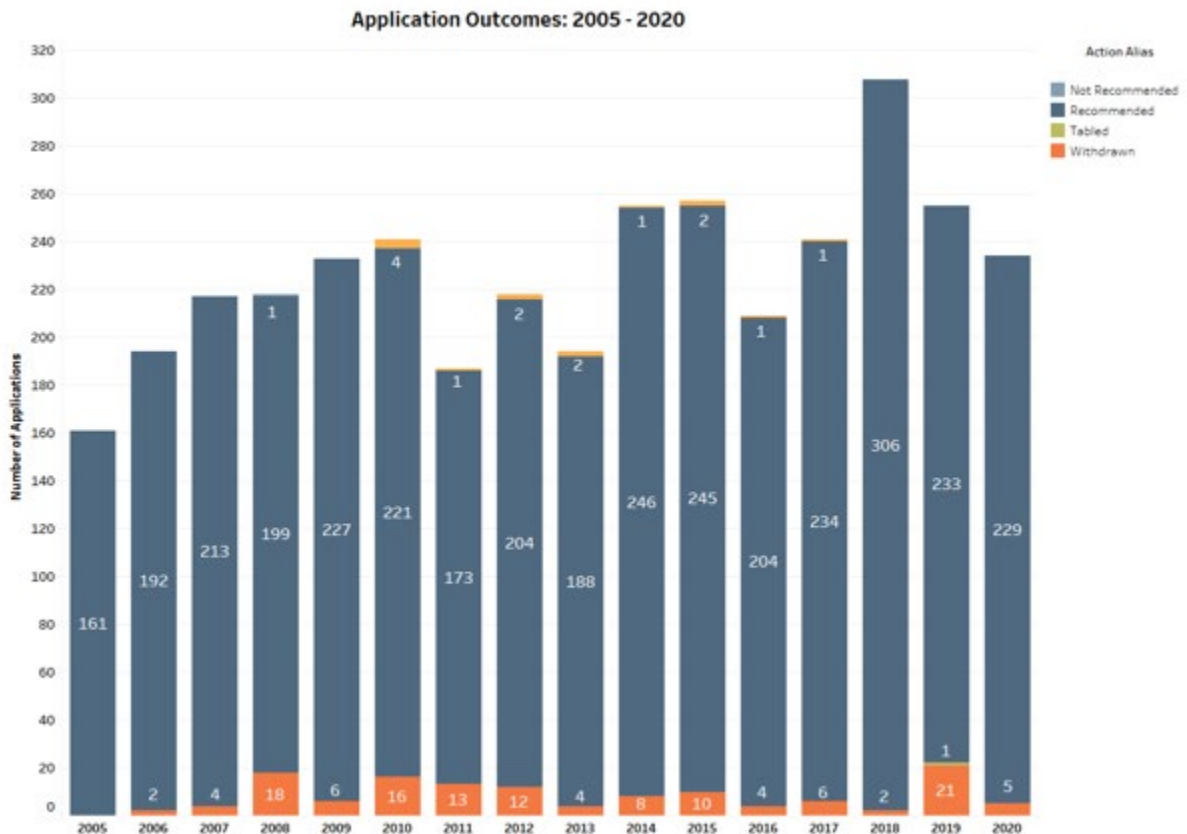


Figure 9: Number of Applications Processed by Type of Outcome (Annually, 2005 – 2020)



Minor Modification Applications

Of the 266 applications received by the TTFCC in 2020, the vast majority—231—were to modify an existing wireless siting location. These included applications to replace existing antennas, add new antennas to an existing array, add additional transmitting equipment, or add electrical generators.

Revisions were made to the County Code in 2008 to permit the Chair of the TTFCC to administratively approve minor modification applications, which allows the applicant to apply for a building permit without having to wait for the next scheduled TTFCC meeting (i.e., at which the full Committee makes a recommendation on each application). This procedure was updated with new legislation in February 2020, which allowed the same administrative approval for non-SWF micro-wireless facilities and cells on wheels (COWS).

Colocation Applications

In 2020, the TTFCC received 11 colocation applications seeking to place antennas on existing structures where the carrier did not currently have antennas. Like minor modification applications (which are to upgrade a carrier's existing antenna arrays), these colocation applications represent the carriers' ongoing focus on adding capacity to their current 4G networks and enabling future 5G deployment. In some cases, carriers apply to colocate because an existing nearby wireless site such as a building is being decommissioned or demolished and the carrier is relocating.

New Facility Applications

Between January 1, 2020, and December 31, 2020, the TTFCC received 24 applications to construct new light poles, utility poles, or monopoles to host wireless facilities.

For example, an application was submitted to construct a 160-foot monopole in an O-S-zoned parcel adjacent to and owned by the Baden Volunteer Fire & EMS Department. The application was on behalf of Verizon Wireless; as of this writing, it has not been presented for discussion to the Committee members (pending corrections and submittal of additional documentation by the applicant). A community meeting to discuss the proposal was held on February 27, 2021, and was attended by the TTFCC Chair.

Verizon submitted two applications in the Hyattsville area (Council District 2) for replacement Pepco poles. After the TTFCC sent Verizon a request for information and additional documentation, Verizon withdrew these applications and resubmitted them as colocations in March 2021 (with Pepco taking responsibility for the pole replacement).

AT&T submitted one application in the Temple Hills area for a replacement Pepco pole which it also withdrew and resubmitted in March 2021 as a colocation (also with Pepco taking responsibility for the pole replacement).

AT&T Wireless applied to construct a 26-foot light pole in a parking lot owned and used by American Legion Post #275 in Lanham. This application was reviewed by the Committee at the August 2020 meeting and recommended. This structure will support 5G-capable antennas.

Verizon submitted an SWF application to replace a streetlight in College Park. The application was reviewed by the Committee at the November 2020 meeting and recommended. This structure will support 5G-capable antennas.

Verizon submitted nine applications for new light poles in the area of FedExField. Two sites in the right-of-way were recommended by the Committee at the December 2020 meeting. The remaining seven proposals are for locations within a Public Utility Easement and are pending corrections and additional documentation.

AT&T submitted eight applications for new light poles within the National Harbor complex. All were located on private property and were recommended by the Committee at the October 2020 meeting.

AT&T also submitted one application for a new light pole in a private commercial parking lot in the City of Laurel. After reviewing the submission, this application was referred to the City of Laurel, which has zoning authority for that location.

4. Administration of the Wireless Facility Siting Review Process

The TTFCC was created in 2000 to “promote the appropriate and efficient location and colocation of telecommunications transmission facilities to minimize adverse impacts on other land uses in the County. The Telecommunications Transmission Facility Coordinating Committee shall, among other things, evaluate the esthetic effects of locating multiple telecommunications transmission facilities in a single location or on a single structure.” [County Code Section 5A.161]

The County Code requires that the TTFCC shall:

- (1) “Review the siting of each proposed telecommunications transmission facility;
- (2) Evaluate the technical rationale of proposed locations;
- (3) Recommend alternative sites and techniques where appropriate to mitigate the visual impact of the proposed and alternative site and provide a copy of the recommendation to the council member in whose district the telecommunications transmission facility is to be located;
- (4) Recommend provisions governing removal of the proposed telecommunications transmission facility at the end of its useful life, including the posting of a bond or other financial guarantee;
- (5) Facilitate public participation in the telecommunications transmission facility siting process; [and]
- (6) Report annually to the County Executive and/or the County Council [or] and as requested on siting policy issues.”

To assist the TTFCC in its review of applications to place wireless telecommunications facilities in the County, a Telecommunications Transmission Facility Technical Consultant role was established to:

- Maintain a database of telecommunications facilities
- Provide information
- Serve as a technical resource to the public and interested carriers and agencies
- Review applications
- Evaluate the technical need for the facility
- Recommend alternative locations where appropriate

Fees Collected

Costs for the work of the TTFCC are funded in part by TTFCC application fees established in 2008 and revised in 2020 to include SWF applications. Those fees are as follows:

\$3,000	TTFCC Application to install or mount one SWF on a new pole
\$1,800	TTFCC Application to install or mount one SWF on a replacement pole
\$1,500	TTFCC Application to collocate one SWF on an existing structure
\$800	TTFCC Application for a minor modification to one SWF
\$2,500	TTFCC Application (excluding SWF) for a new tower, monopole, or support structure located outside the public right-of-way
\$1,500	TTFCC Application (excluding SWF) for a collocation on an existing structure located outside the public right-of-way
\$500	TTFCC Application for a minor modification to an existing facility (excluding SWF) located outside the public right-of-way
\$250	Modification or revision to a TTFCC Application
\$500	Annual Master Plan update

The TTFCC collected approximately \$255,070.00 in application and annual plan fees during 2020. The County's costs for TTFCC activities, excluding indirect County staff time, were \$303,690. These costs were expenditures for outside services provided at the County's request by the designated Telecommunications Transmission Facility Technical Consultant (Columbia Telecommunications Corporation). These services included an engineering review of each submission for compliance with County and Federal Communications Commission (FCC) regulations. Many applications required multiple submissions due to errors by the applicants.

Site Visits

While an application for a new site requires a site survey by the Technical Consultant, it is the County's policy that all existing sites also be visited and photographed once per year. To track the progress of each of the hundreds of submissions and the status of the site surveys, Columbia Telecommunications Corporation developed and populated a database that captures updates regarding sites and applications in real time.

Electronic Applications

On August 1, 2019, the TTFCC began requiring applications to be submitted electronically using Prince George’s County’s Department of Permitting, Inspections and Enforcement’s (DPIE) existing online Permitting and Licensing System.² Prior to implementation, the TTFCC offered in-person training for applicants. The development of this new process has been part of an effort within DPIE to accurately track each type of wireless sting application and ensure that FCC “shot clock” requirements are met by all responsible parties.

The change from a paper to electronic system benefits both the applicants and the TTFCC as it allows for timely tracking of fees, deadlines, and the disposition of individual applications.

TTFCC Membership

The current TTFCC members are:

TTFCC Chair/Coordinator

- Michelle Lyons, Administrator of Boards and Commissions,
Prince George’s County Department of Permits, Inspections and Enforcement

TTFCC Vice-Chair

- Clarence Moseley, Permits Supervisor, Permits and Licensing Division,
Prince George’s County Department of Permits, Inspections and Enforcement

TTFCC Members

- Lakisha Pingshaw, Broadband Manager,
Prince George’s County Office of Information Technology
- James Stepowany, Acting Planning Coordinator, Permit Review Section,
Maryland National Capital Parks and Planning Commission
- Nathaniel K. Tutt III, Administration,
Prince George’s County Council
- Vincent Curl, Facility Supervisor, Maintenance Department,

² <https://dpiepermits.princegeorgescountymd.gov/>

Prince George's County Public Schools

- Jared Miller, Engineer I/II, Site/Road Permit Section,
Prince George's County Department of Permitting, Inspections and Enforcement
- Hadi Quiayum, Chief, Traffic Engineering & Safety Division,
OEPM/Department of Public Works & Transportation

Additional support to the TTFCC is provided by:

- Jared McCarthy, Associate County Attorney
Prince George's County Office of Law
- Columbia Telecommunications Corporation, TTFCC Technical Consultant

Public Information

The Committee's website (<http://www.princegeorgescountymd.gov/693/Telecommunications-Transmission-Facility>) features public information about the TTFCC, including (once the material is approved by the County Council) a Master Plan map illustrating carriers' proposed locations for new antennas based on the annual information the carriers provide the County.

In addition, the County has required that a carrier seeking to construct a new tower or monopole in the County send a public notice to property owners and community organizations within 1 mile of the location proposed for the structure. The carriers are also obligated to notify the TTFCC Chair of any meetings that are subsequently held in response to those notices.

The legislation passed in February 2020 requires this procedure for applicants seeking to construct SWFs in the right-of-way.

TTFCC meetings are generally held on the third Wednesday of each month. All meetings are open to the public. However, in the event that all applications in a given month have been administratively approved, the Chair may choose not to hold a meeting. There were two such months in 2020. Beginning in March 2020, the TTFCC meetings have been held remotely due to Covid-19 procedures.

5. Future Expectations for Wireless Siting in the County

The map below illustrates the location and number of future antenna sites planned by the carriers based on the Annual Plan updates they filed with the County in August 2020 and the preceding year. Cumulatively, there are a total of 540 future sites listed by all carriers. As the map illustrates, the TTFCC expects to receive a significant number of applications in the future.

Given the County's growing population³ and a range of industry trends (including increased capacity demand for machine-to-machine communications), Prince George's County will likely see an increase in all types of carrier applications:

- Minor modifications
 - Age, obsolescence, and development of new types of antennas lead carriers to modify their equipment on existing sites; this includes initiatives by the major carriers to develop dedicated data networks for public safety
 - The ongoing goal to increase capacity is expected to lead carriers to seek relatively low-height mounting sites for 5G deployment in a variety of areas
- New and/or replacement towers and monopoles
 - As carriers adapt to emerging technologies and strategies, it is expected that some older structures will be replaced, and new locations sought
- Colocations
 - New colocations on existing buildings will continue to be encouraged as a reasonable strategy to meet carriers' coverage and capacity needs

It is expected that applications that qualify as SWFs under the FCC's definition will also increase, reflecting the above-stated trends. Until 2020, Prince George's County had permitted a relatively small number of SWFs on private property. The trend toward applications in the public right-of-way has begun.

The legislation passed in February 2020, as well as the County's Design Manual, provide applicants with the guidelines and procedures to successfully site their desired 5G SWFs while considering FCC requirements unique to SWFs.

³ State of Maryland Population Growth Rates, <http://msa.maryland.gov/msa/mdmanual/01glance/html/pop.html> (accessed August 2020).

Figure 10: Sites Proposed in Carriers' Annual Plans (2020 and Beyond)

