PRINCE GEORGE'S COUNTY

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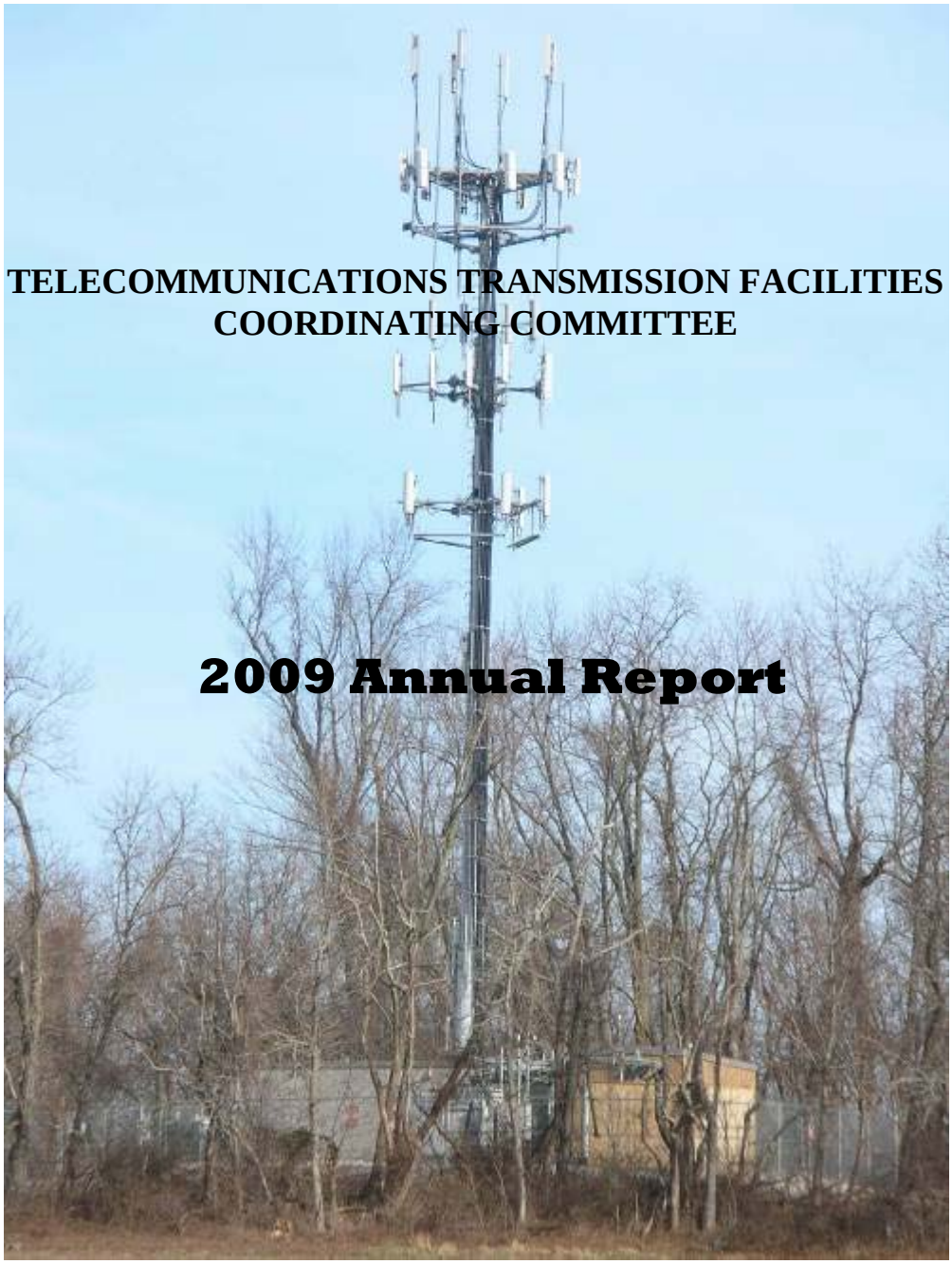
COUNTY EXECUTIVE



TELECOMMUNICATIONS TRANSMISSION FACILITIES COORDINATING COMMITTEE

2009 Annual Report

COVER PHOTO

MONOPOLE EVOLUTION

The monopole shown on the cover of this report is located at 14403 Mount Oak Road near Bowie. The monopole was constructed prior to the County legislation that created the TTFCC. The first application to add more antennas to this structure was reviewed by the TTFCC in 2001. Since that time, six other applications have been reviewed by the TTFCC for changes to this site, resulting in its fully loaded appearance today.

The cabling connecting the structure's initial antenna attachments to the equipment on the ground were concealed within the interior of the monopole. At some point, however, that space filled up, and additional cables for subsequent antennas had to be placed on the exterior of the monopole. Along with the new antennas, this external cabling increases the visual impact of the structure. The pole-mounted antennas that extend above the top of the monopole, although permitted by the current zoning ordinance, further add to the visual impact of the monopole, giving it the appearance of a structure higher than the monopole that was originally conceived.

What cannot be seen in the photo are the two sets of structural modifications performed on the monopole to enable it to support the weight and wind loading of the current platforms, mounting arms, antennas, and cabling. The monopole today has been retrofitted with steel "fins" at strategic locations along its exterior to provide increased structural strength. Early images of this monopole are shown below to illustrate the changes that have occurred over the years. The County GIS image on the left shows the structure as first built. The photo on the right shows the monopole as it appeared in 2007, by which time additional support arms had been attached to support additional weight for co-locations of more antennas. The most recent changes, which replaced the additional structures in the photo on the right with the "fins," occurred in 2009.

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1. Introduction

This report is intended to provide the County Executive and the County Council with a summary of the activities of the Telecommunications Transmission Facilities Coordinating Committee (TTFCC) during 2009. The statistics contained in the report are based on the TTFCC database, updated with actions taken as of the end of the year.

2. Executive Summary

The TTFCC reviewed 257 applications to place wireless facilities in the County in 2009, approximately an 8% increase over the number reviewed in 2008. The TTFCC received more applications for modifications to existing antenna arrays in 2009 than in any other year. In 2009, approximately 74% of applications were for modifications to existing antenna arrays and 23% were for co-location of new antennas on existing structures. In 2008, co-location applications represented approximately 70% of the applications reviewed by the TTFCC.

Competition among the carriers seems to be increasing in the Washington metropolitan area as new frequencies are made available to the carriers to launch or expand data-intensive services. Nearly all of the carriers focused much of their 2009 activity on deploying new antennas for those new services. New services now enable customers to use their cell phones for e-mail, Web browsing, and reception of wireless streaming video applications and television programming.

Additionally, in 2009 new antennas were added to some locations to provide microwave links between cell sites. These links were needed to handle the additional bandwidth required by the new services, which surpassed the capability of the land-based lines used by some carriers. Hence, the dramatic increase in the "modification" category of applications.

In the fall of 2009, Lawrence Fryer and Kim Coleman, representing the Office of the Superintendent of Schools, participated on the TTFCC and worked with the Board of Education to address recommendations to revise the Prince George's County Public Schools (PGCPS) past policy prohibiting wireless facilities on school property. The school properties, mostly located amid residential neighborhoods in which there are no tall buildings where antennas may be sited, and in which gaining approval for new monopoles may be difficult, present an ideal alternative for co-location of antennas to improve wireless coverage to residents in their homes as well as along the County's roadways. For reliable indoor service, antennas need to be closer to residential structures for signals of sufficient strength to reach inside. Indoor use of cell phones is becoming more important as users today expect their phones to work anywhere and because some cell phone users have abandoned use of land lines altogether. The Board of Education approved a new policy on January 4, 2010 to permit the carriers to include use of existing school structures such as high-mast athletic field flood lights and building rooftops as potential locations for co-location of antennas. A copy of the PGCPS policy is attached to this report as Appendix A.

The TTFCC recommends the following additional actions to further improve the overall antenna siting review and coordination process:

1. Clarify the Zoning Ordinance limits on antenna heights above ground level.
2. Consider use of chimneys for antenna attachment.
3. Require the use of stealth and camouflage designs for towers, monopoles, and antennas in residentially zoned areas.
4. Require developer participation in planning for placement of wireless facilities in community projects.
5. Continue to encourage use of County, M-NCPPC, WSSC, and Board of Education facilities for co-locations and new support structures.
6. Establish the preparation and completion of the TTFCC Master Plan and the TTFCC Annual Report on the same schedule.
7. Establish a date by when applications deemed incomplete must be corrected and re-filed with the TTFCC.

3. The TTFCC Membership

The current TTFCC members are:

TTFCC Chair

- Stan Wildesen, Special Assistant, Department of Environmental Resources

TTFCC Vice-Chair

- Clarence Moseley, Permits Supervisor, Permits Information and Management Section, Department of Environmental Resources

TTFCC Members

- Nate Archey, Cable/I-Net Administrator, Office of Information Technology and Communications
- Debbie Gallagher, Supervisor, Permit Review Division, Development Review Division, Maryland-National Capital Park and Planning Commission
- Leslie Jackson-Jenkins, Associate Director, Office of Central Services
- Frank Porter, Committee Director, Prince George's County Council
- Lawrence Fryer, Chief of Supporting Services, Office of the Superintendent of Schools
- Brian Winterwerp, Supervisor, Office of Engineering, Department of Public Works and Transportation

Additional support to the TTFCC is provided by:

- Edwin Raynor, Esq., Associate County Attorney, Office of Law;
- Paivi Spoon, Special Assistant to the Deputy Chief Administrative Officer, Office of the County Executive; and
- TTFCC Facility Coordinators

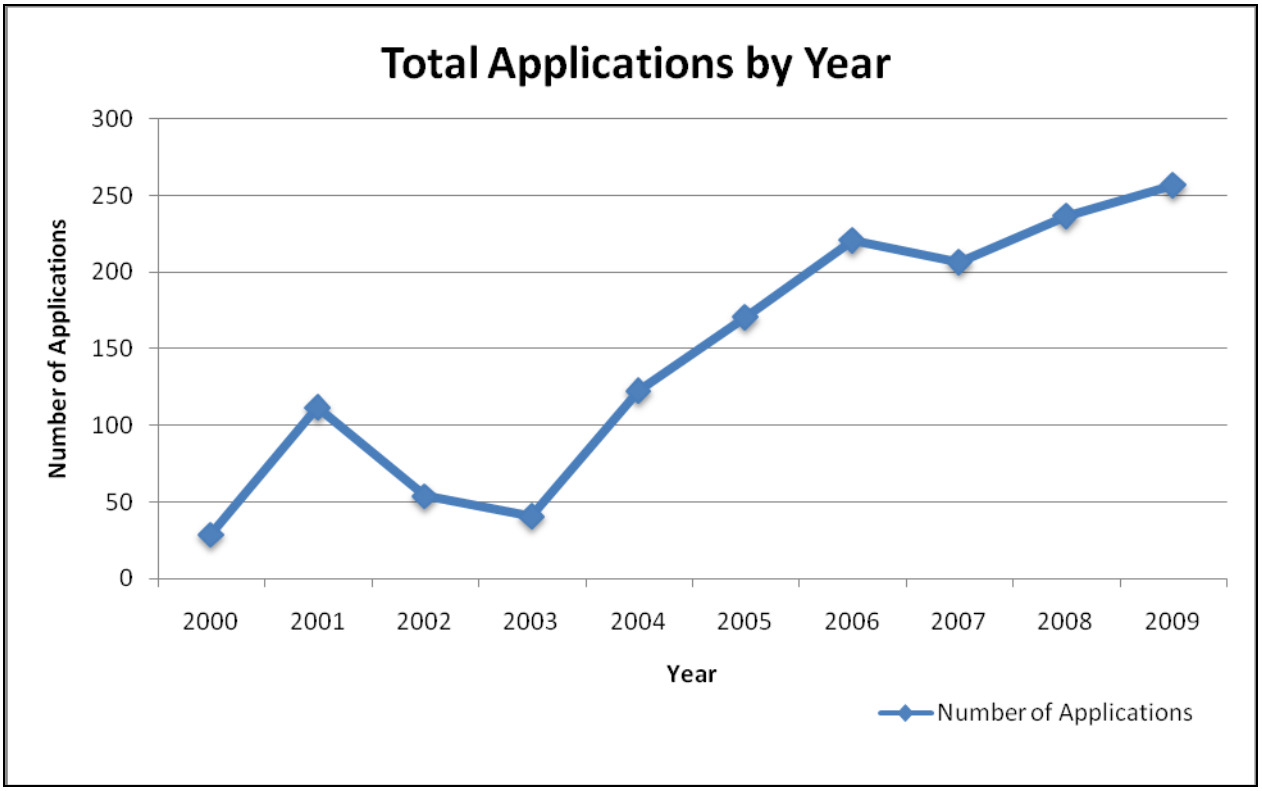
- Robert Hunnicutt, Principal Analyst, Columbia Telecommunications Corporation
- Shivani Gandhi, Senior Engineer, Columbia Telecommunications Corporation

4. Summary of 2009 TTFCC Activities

Application Activity Summary

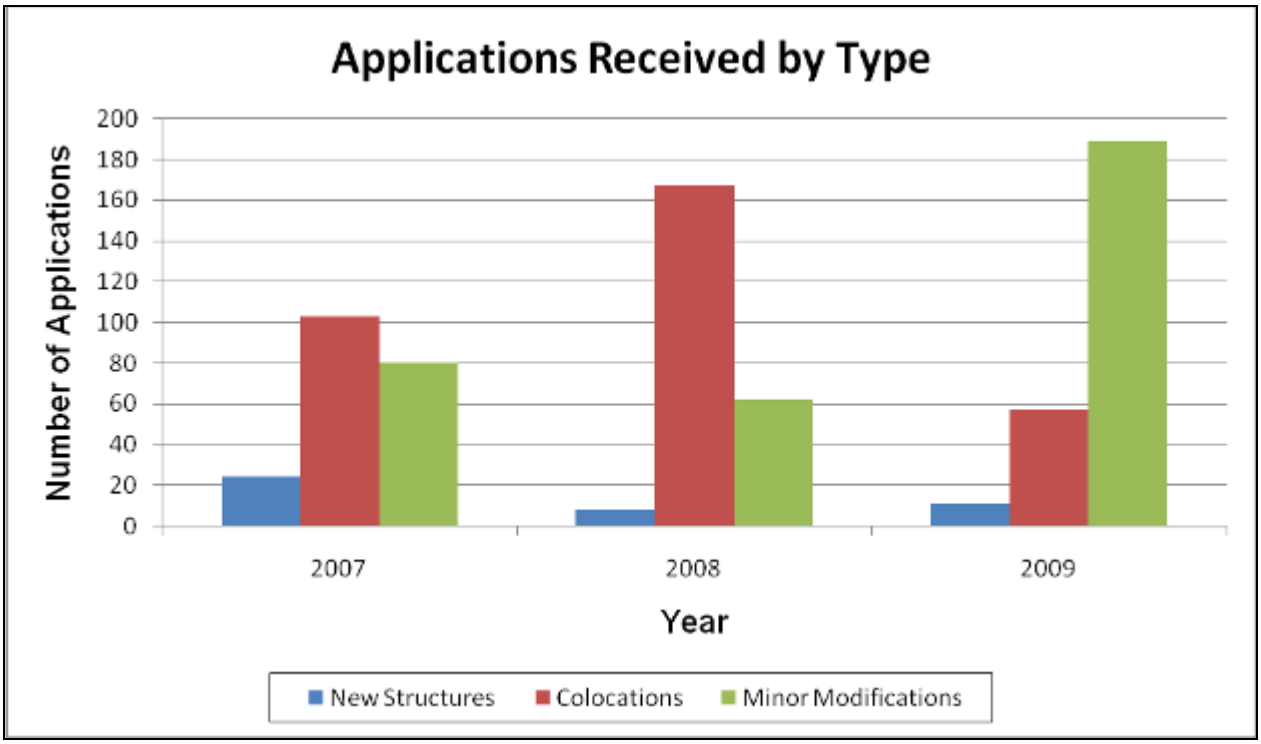
Chart 1 illustrates the number of applications reviewed by the TTFCC since its inception in 2000. To date, a total of 1,451 applications have been reviewed by the TTFCC and, as can be seen in the chart, the number filed by carriers each year continues to increase. A total of 257 applications were reviewed in 2009. As of the end of 2009, 59 of those applications had been deemed incomplete by the County and were awaiting completion by the applicant so they could be reviewed by the Facility Coordinator, who would then make a recommendation for action by the TTFCC. Those applications will be acted upon in 2010.

Chart 1: Number of Applications Received (by Year)



The relative comparison of new, co-location, and minor modification applications is illustrated in Chart 2 below.

Chart 2: Applications Received by Type



Minor Modification Applications

There were 189 applications (73% of the total) for minor modifications, such as to add antennas to existing antenna arrays, add capacity to an antenna site, or replace old antennas with new ones capable of accommodating new frequencies garnered from the Federal Communications Commission (FCC) in recent auctions or through mergers and acquisitions among the wireless service providers.

For example, Verizon Wireless filed approximately 50 applications to replace and/or add to existing antennas to deploy their next generation of services—referred to as Long Term Evolution (LTE) technology—in the 700MHz frequency bandwidth. These new antennas can support operation in multiple frequency bands.

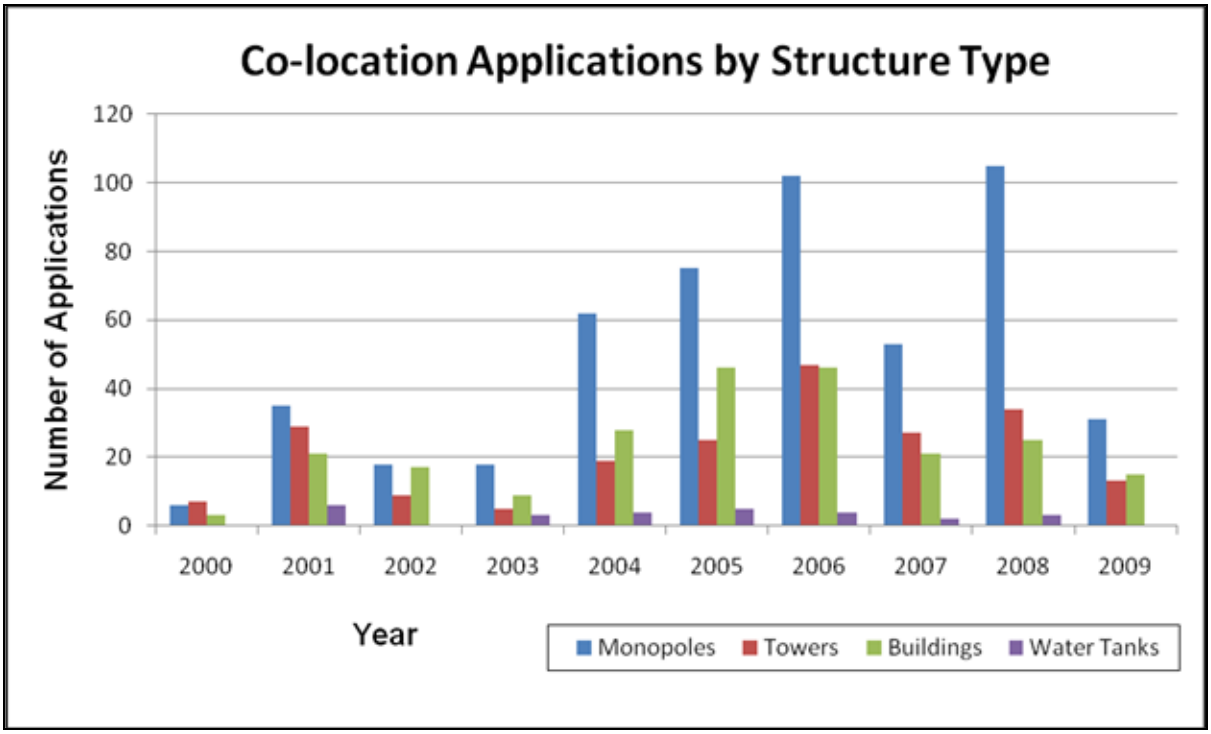
Similarly, Clearwire, through an alignment with Sprint, which holds a 51% interest in Clearwire, began adding microwave dish antennas to most Sprint antenna locations. The microwave antennas are designed to provide "backhaul" (i.e., a link connecting wireless service with land-based facilities) for the WiMax services Clearwire is implementing for Sprint. Over half (58%) of the "minor modification" category of applications that the TTFCC received were filed by Clearwire for this purpose.

Co-location Applications

The TTFCC encourages co-location of antennas on existing structures in lieu of constructing new support structures in the County. There were a total of 57 applications to co-locate antennas on existing structures in 2009. Chart 3 below illustrates the type of structures that were used to support those antennas. The inventory of existing structures used by carriers to support cellular antennas today includes 208 monopoles, 127 towers (mostly PEPCO transmission line towers), 113 building rooftops, and 11 water tanks.

Cricket, a recent entrant to the County wireless service provider market, continued deployment of their antennas to complete their initial network and activation of service in the County. Cricket's attachment policy is to co-locate antennas on existing structures. T-Mobile, also expanding their coverage in the County, added many new locations for their antennas. Together, T-Mobile and Cricket accounted for approximately 60% of the applications for co-location of antennas on existing structures.

Chart 3: Applications by Structure Type



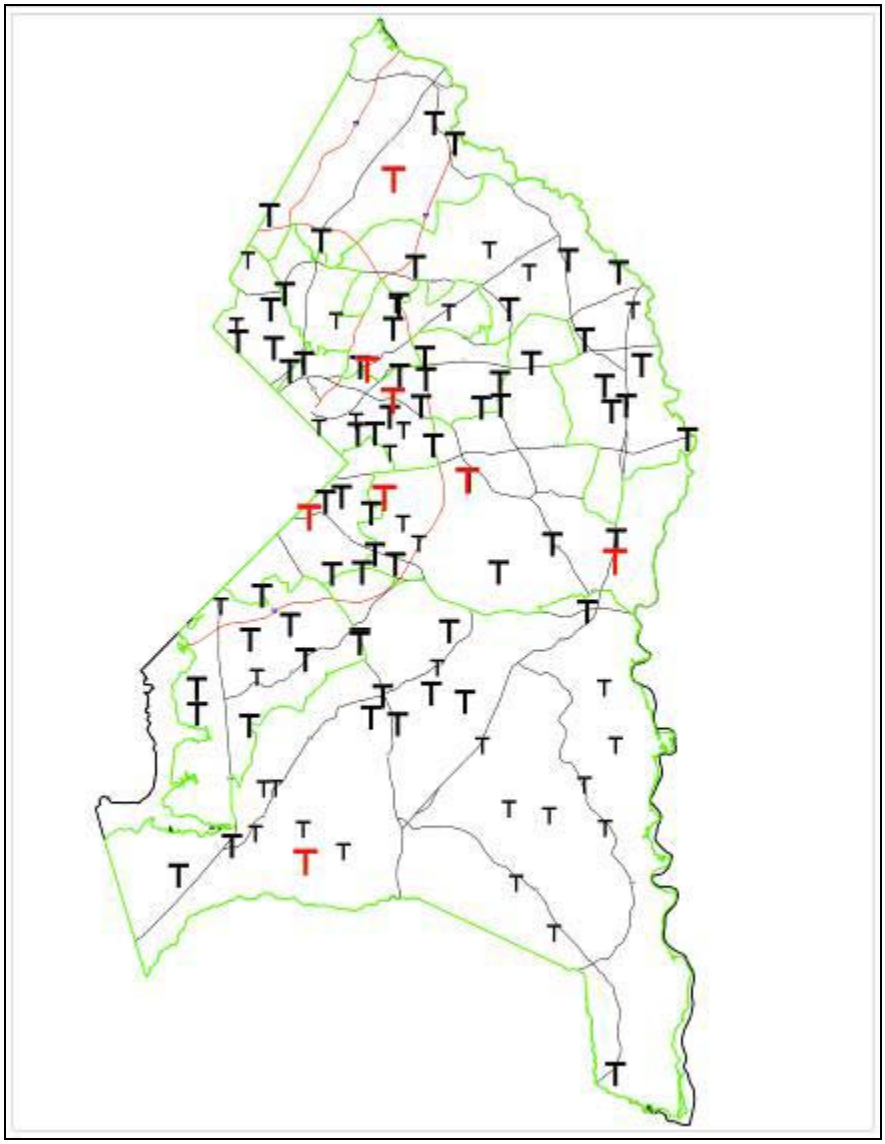
Applications for New Structures

In 2009 only nine applications were for new structures. Of those, six were filed by T-Mobile and three by Verizon Wireless. Verizon Wireless withdrew one of its applications.

New monopoles are constructed when there are no existing tall structures to which the carriers could attach their antennas and possibly meet their target coverage needs. Over the years new monopoles have been constructed where needed in more rural areas where there are no tall buildings or other structures other than electric utility transmission lines, in suburban areas where carriers in-fill between existing adjacent sites as the customer base expands, and in more urban areas where additional capacity is needed to handle the growing call traffic that has resulted in dropped calls. Carrier interest in meeting their competition across the county and individual carrier budgets impact placement of new monopoles as well. And, given that monopoles up to 100 feet high are permitted by-right in residential zones, many monopoles have been placed in the more populated parts of the County and especially located strategically to serve the heavily travelled traffic corridors including Routes 1, 5 and 50, the Baltimore-Washington Parkway, and Interstates 395 and 95.

Figure 1 illustrates the location of new monopoles (indicated by the red monopole symbol) for 2009. Appendix B contains an illustration of the location for new monopoles filed with the TTFCC for each year since 2000 when the TTFCC was created.

Figure 1: Locations of New Monopoles - 2009



TTFCC Action

Of the applications reviewed by the TTFCC, 151 were approved administratively as permitted by the changes to the County Code last year. Those changes were designed to expedite processing of simple, straightforward applications such as the applications to make minor modifications to existing antenna arrays. Also changed last year was the implementation of a resubmission fee to help defray the additional cost of reviewing revised applications that had been filed incomplete with errors or omissions. The $250 fee was expected to encourage applicants to file complete and accurate applications to begin with. However, 51 applications, or 19% of the total applications filed in 2009, were still incomplete and needed to be corrected by the applicants and reviewed again.

The TTFCC is required to "evaluate the aesthetic effects of locating multiple telecommunications transmission facilities in a single location or on a single structure" and "recommend alternative sites and techniques where appropriate to mitigate the visual impact of the proposed and alternative site." The TTFCC recommended 58 applications on the condition of meeting certain requirements. The breakdown of those requirements was as follows:

- Conditioned on submission of a structural analysis report that the additional antennas and related equipment could be safely attached—*24 applications*.

  As noted in the description of this report's cover photo, some towers and monopoles are reaching their capacity. When additional antenna attachments are considered, it is sometimes found that the structure cannot support the additional weight and wind loading of the new equipment and cabling. Consequently, in some cases, structural modifications are needed before the attachment can be safely made. A structural analysis is performed to determine if that is necessary. The results of the analysis dictate whether the attachment will work without any modification. The analysis report will specify what modifications may be necessary. The TTFCC condition flags this as an issue to be addressed at the time of permitting.

  To highlight this issue, we provided statistics in the 2008 annual report showing how many carriers had antennas attached to towers and monopoles. In this report, we have added statistics for activity in 2009. We note that we have adjusted the way in which we counted the 2009 numbers to account for the effects that carrier mergers and acquisitions have had on the monopoles and towers in the community. For example, Sprint and Nextel merged some time ago. Today, we see that where there once had been one set of Nextel antennas, and a separate set of Sprint antennas, now antennas for both former independent carriers are consolidated on single platforms. The same is true for AT&T and Cingular. We now see the result of those consolidations as well. What is interesting is that despite the different methods of counting, one can still see that the structures are filling up as new market entrants add antennas, sometimes in the same place formerly occupied with one or another of the former independent carriers' antennas. The table below shows the statistics for 2008 compared to 2009's numbers.

Table 1: Towers or Monopoles with Multiple Carriers Antennas

Number of Monopoles/Towers with Multiple Carriers Attached				
	Monopoles		**Towers**	
Number of Carriers Attached	**2008**	**2009**	**2008**	**2009**
2	30	29	23	26
3	25	31	10	10
4	33	29	5	10
5	13	24	3	2
6	13	34	2	3
7	1	4	1	2

- Conditioned on approval of a special exception or any modifications which may be needed to an existing special exception—*16 applications*.

  For some applications, there may be a special exception on the property where antennas are proposed to be attached. In other cases the existing monopole may be permitted there by special exception, which may need modification before additional antennas may be added to the structure or additional ground space may be used for more equipment on the site.

- Conditioned on meeting the County's requirements that the equipment on the ground be screened from view in residential or commercial zones to 100% opacity—*7 applications*.

  The current zoning ordinance requires screening the equipment at the base of a monopole from view with, for example, a board-on-board fence, landscaping, or other means. Conditioning the application alerts the applicant that if plans submitted with an application do not show that screening, the plans will need to be revised before a permit can be approved.

- Conditioned on painting the antennas to blend in with the walls to which they are attached to minimize their visual impact—*3 applications*.

  Painting antennas disguises them from view. Some have even been painted to match brickwork to better blend in with the walls to which they are attached, as can be seen in the photo below.

- Conditioned on meeting conditions related to screening inside faux chimney façade—*3 applications*.

  Some building chimneys provide an ideal support alternative for wireless antennas. Currently, the zoning ordinance requires that antennas attached to chimneys be concealed from view behind a façade constructed over the antennas and designed to match the chimney exterior. Simple painting of the antennas may be considered to have less visual impact, however; the photos below, for example, show two locations where antennas are within faux enclosures making them appear larger than they otherwise would need to be. Compared to the antennas on the wall in the photo above, painting may be as effective—if not more so—in minimizing an antenna's appearance. Antennas can also be painted to resemble brick, as have the enclosures in the photos below. The photo on the left shows a large box-like faux structure around an existing chimney. The photo on the right is an extension atop the chimney with the antennas enclosed on the outside the faux chimney.

Other conditions included meeting FCC standards for RF emissions, approval of the Master Plan (which included that site for a new monopole), considering lowering the height of a proposed new monopole, and resolving any conflicts with public safety services (in a case where new

MediaFlo antennas are operating in the same bandwidth as those of the public safety radio services).

5. Public Participation

As a result of legislative changes in 2007, applicants for placement of new support structures in the community are required to provide notice to adjacent property owners and all community associations within one mile of the proposed location, as well as to the Council Member in whose district the structure would be constructed. The TTFCC, as part of its review process, verifies that this requirement has been met. The notice is made in a prescribed format developed by the TTFCC; contained therein is an offer by the applicant and carrier to hold a community meeting if requested by those notified of the pending application. In 2009 several such meetings were held, each attended by a representative from the TTFCC to address any community questions about the County's review process.

Additionally, an annual Master Plan of actual and proposed telecommunications facilities is prepared by the Facility Coordinator; it reflects the antenna locations planned for construction for the succeeding two years, based on updated information provided annually by each of the carriers. The plan is submitted to the County Council for their approval and adopted each October. Once the Plan is approved it is available for public review. The plan is a map showing target areas where new antennas may be sited in the community. Where there are no existing structures to which the carriers could potentially place new antennas, the carriers may seek approval for a new tower or monopole in the community. The Plan is intended to alert residents in those areas of the possibility of new antennas or new support structures.

The Office of Information Technology and Communications maintains a TTFCC website (http://www.goprincegeorgescounty.com/Government/BoardsCommissions/ttfcc.asp), which provides information about the TTFCC and the application process, downloadable application forms, excerpts from related County Code and zoning regulations, the Telecommunications Master Plan, and contact information for interested parties who may have questions or comments.

TTFCC meetings are held on the third Wednesday of each month. Applications are due by the last Wednesday of the month in order to be considered for review at the next month's meeting. The meetings are held in Room 4085 of the County Administration Building in Upper Marlboro and are open to the public, pursuant to the Open Meetings Act.

Prior to action by the TTFCC, the Facility Coordinator makes recommendations based on a review of the technical and aesthetic aspects of the application and its level of compliance with the County zoning ordinance.

Regulatory Changes

In November of 2009 the Federal Communications Commission (FCC) issued a Declaratory Ruling that applications for co-locations should be acted upon within 90 days, and applications for new towers or monopoles be acted upon within 150 days. The TTFCC processed 2009

applications within 55 days on average, including the time it took for applicants to complete applications found to be incomplete—time which, according to the FCC's Ruling, does not count as part of its timeframes. Starting with 2010 applications, we will be tracking processing time to reflect the FCC's definition of the time periods.

6. Administration of the Antenna Siting Review Process

6.1 Revenues

For the 2009 calendar year, the County received $210,500 in filing fees for applications at the new fee amounts established in legislation which became effective at the start of 2009. Expenditures for Facility Coordinator work amounted to $236,927 for 2009.

6.2 Statistical Update

The following statistics are provided as an update to the information provided in the 2008 annual report.

The graph in Chart 4 shows the number of applications for each zoning category. The vast majority of new structures have been placed in residential zones as carriers seek to improve coverage to subscriber homes. In residential zones, the zoning ordinance permits new telecommunications structures up to 100 feet in height.

Chart 4: New Structures by Zoning Category

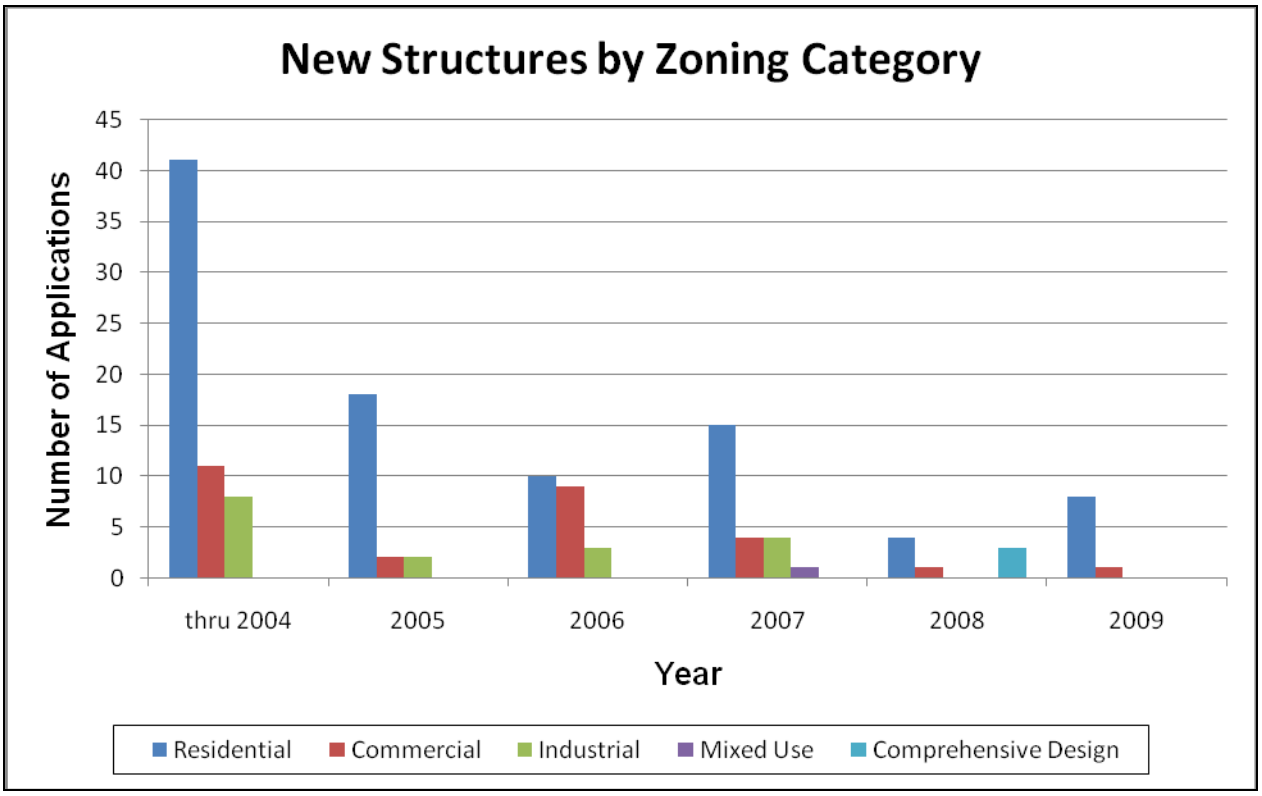


Table 2 provides information regarding new structures by Council District. In 2008 there were six applications for new monopoles. In 2009 nine applications were submitted; six filed by T-Mobile and three by Verizon Wireless. One of the Verizon Wireless applications was withdrawn prior to being reviewed by the TTFCC.

Table 2: New Structures by Council District

Council District	2009 Applications for New Structures	2000 to 2009 Applications for New Structures
1	1	9
2	0	7
3	1	10
4	0	20
5	1	25
6	3	18
7	1	9
8	1	12
9	1	31
Total	**9**	**141**

Table 3 reports the number of applications for facilities on public or institutionally owned property since the TTFCC's inception in 2000. Because there are some sites with multiple carriers at the same location, the total number of sites may be lower than the total number of applications. Applications to site antennas on federal and state property are exempt from the TTFCC requirements but the TTFCC still requires that applicants submit applications for informational purposes and to update the database. Those applications are reviewed and approved administratively in order to add to the TTFCC database.

Table 3: Facilities Sited in the County

Number of Sites on Public Property	2009 Applications	2009 New Structures	Total Applications since 2000	Total New Structures on Public Property	Total Sites on Public Property
PEPCO	22	0	160	0	79
WSSC	13	0	55	5	17
Municipal	10	1	47	11	12
M-NCPPC	76	0	36	13	14
WMATA	1	0	4	1	1
BG&E	3	0	17	1	6
Prince George's County	4	0	28	7	14
Prince George's Community College	1	0	10	1	1
State of Maryland	2	1	4	2	3
Volunteer Fire Dept.	3	0	30	4	10
Total Public Property Sites	**63**	**2**	**388**	**45**	**157**
Private Property	183	7	967	80	271
Church/Religious Org. Property	11	0	93	19	31
Total	**257**	**9**	**1,448**	**144**	**459**

The increasing number of cell phone users, competition for customers, and the need for additional antennas at sites has resulted in antennas from multiple carriers at some sites. Table 4 illustrates the increase in 2009 of the number of sites with antennas from multiple carriers.

Table 4: Number of Sites with Multiple Attachments

Number of Carriers with Antennas at the Site	2004	2005	2006	2007	2008	2009
2	37	64	70	71	74	90
3	17	35	40	48	49	57
4	1	8	38	37	47	49
5	0	2	12	12	20	32
6	–	–	2	1	36	21
7	–	–	–	–	2	7

7. Recent Industry Activity and Its Impact on the TTFCC

Based on the annual plans filed last August by each current carrier for the upcoming 12-month period, we expect that there may again be between 200 and 300 TTFCC applications filed in 2010, depending on the state of the economy and the carriers' business plans for the market in our area. If the activity experienced toward the end of 2009 continues, we could see more applications to modify antennas at existing sites and more applications for new structures in the southern and eastern parts of the County where there may not be existing tall structures which could be used for co-location. A copy of the 2009-2010 Master Plan is provided in Appendix C.

There are other carriers such as SpectrumCo, and Frontier Wireless that have been authorized by the FCC for wireless services, though at this time we do not know of any plans by either of those carriers to place antennas in the County. Further, although two service providers (NextG and NewPath) that utilize distributed antenna systems (DAS) to support wireless services have deployed networks in neighboring jurisdictions, at this time we do not know of any plans for them to place networks in the County. A DAS may work well to provide services along heavily traveled routes in the rural areas in the southern part of the county where there may not be a need for coverage across a wide, sparsely populated area. Appendix D provides a description of a DAS and how it works. Appendix E contains an illustration of the current spectrum held by various carriers for wireless service in the Washington, D.C. area.

8. Recommendations to Improve the Wireless Antenna Siting Process in the County

In the spirit of the County Executive's Livable Communities Initiative, the TTFCC proposes the following changes to the zoning and telecommunications codes to further minimize the adverse impact of antennas and support structures in residential communities and on scenic roadways in the County. Complete text amendments are provided in Appendix F.

1. Clarify the Zoning Ordinance Limits on Antenna Heights Above Ground Level.

The present zoning ordinance permits mounting antennas up to 15 feet above the height of a support structure, but limits monopole heights to a maximum height. Periodically, the TTFCC has reviewed applications for new monopoles to be constructed with antennas that extend above the maximum height limit for a monopole. In our opinion, this practice circumvents the height limit for the monopole imposed by the zoning ordinance and increases the impact of the facility in the community. In the view of the TTFCC, an attachment above the structure height has the same impact as increasing the overall height of the structure. The TTFCC members believe that the two zoning ordinance sections regarding height limits should be read together so that extensions on existing support structures may be permitted, but only to the extent that the overall height of the facility does not exceed the height limits of a telecommunications tower for the zone. We believe it is in the County's interest to make the zoning language clear on that point. Because the vast majority of the monopoles in the County are on residentially zoned property (see Chart 4 in the previous section of this report) as presently permitted in the zoning ordinance, establishing such a limit will minimize any further impact of an existing monopole or tower.

Proposed action: The TTFCC will propose zoning legislation to clarify the limits on antenna heights above ground level as follows (proposed text underlined).

> ***Subtitle 27. Zoning Code, Sec. 27-445.04***
>
> *(a)(1) The antenna shall comply with the following standards:*
>
> *(B) It shall not extend more than fifteen (15) feet above the height of the tower or structure to which it is attached <u>but only to the extent that the overall height of the facility does not exceed the height limits of a telecommunications tower for the zone</u>;*

2. <u>Consider Use of Chimneys for Antenna Attachment.</u>

The TTFCC has reviewed applications to attach antennas to an existing stand-alone chimney at an apartment complex. The present zoning ordinance does not permit attachment to chimneys unless the chimney is attached to a building. We believe that the use of chimneys that are structurally capable of supporting a number of antennas should be permitted, as long as the antennas are designed to be flush mounted and painted to match the surface of the structure to which they are attached, and the equipment area is screened to meet existing zoning requirements. This option may add many new potential locations for siting antennas with minimal impact to the community.

Proposed Action: The TTFCC will propose zoning legislation to allow the use of stand-alone chimneys for antenna attachments as follows (proposed text underlined).

> ***Subtitle 27. Zoning Code, Sec. 27-445.04.***
>
> *(a)(1) The antenna shall comply with the following standards:*
>
> *(A) Unless otherwise prohibited below, it shall be concealed within the opaque exterior of a structure or be attached to a public utility, radio, television, or telecommunications broadcasting tower/monopole; a light pole; a multifamily dwelling at least five (5) stories in height; a structure owned by a municipality, the Board of Education for Prince George's County, or by Prince George's County; or a structure owned and primarily used by a government agency that is exempt from the requirements of this Subtitle; <u>except that the use of existing stand-alone chimneys that are structurally capable of supporting a number of antennas are permitted with the use of antennas that are designed to be flush mounted and painted to match the surface of the structure to which they are attached, and the equipment area is properly screened;</u>*

3. <u>Require the Use of Stealth and Camouflage Designs for Towers, Monopoles, and Antennas in Residential Zones.</u>

The TTFCC has the responsibility to "minimize adverse impacts on other land uses in the County," "evaluate the esthetic effects," and "recommend alternative sites and techniques where appropriate to mitigate the visual impact of the proposed and alternative site" telecommunication transmission facilities. Because the TTFCC only provides advisory recommendations the telecommunication carrier may or may not follow the recommendations.

Proposed Action: The TTFCC will propose zoning legislation to require the use of stealth and camouflage designs for wireless facilities, such as towers, monopoles, and antennas in residential zones as follows (proposed text underlined).

Subtitle 27. Zoning Code, *Sec. 27-445.04*

(a)(1) The antenna shall comply with the following standards:

(4) The following stealth and camouflage designs shall be required for antennas and telecommunication structures:

(A) Antennas shall be concealed as described in (a) (1) (A).

(B) Structures designed to support antennas shall be camouflaged or concealed as an appropriate placed architectural or natural feature. Such structures may include but are not limited to clock towers, campaniles, steeples, observation towers, water towers, light standards, flag poles, public art structures, artificial trees or other vertical structures as they appear in their existing environments and which shall not visually detract from the initial use.

(C) The proposed stealth structure shall be in character with the area.

(D) Structures that are placed in heavily wooded areas on the site to the maximum extent possible and will lessen the visual intrusiveness of the structure and accessory structures shall be allowed.

(E) Radio and television transmitting and receiving towers that are guyed towers, self-supporting lattice towers or monopoles are not required to have stealth or camouflage designs.

4. Require Developer Participation in Planning for Placement of Wireless Facilities in Community Projects.

We suggest that it may also be prudent for developers of large residential projects to be required to submit for County approval a plan that addresses how the developer proposes to facilitate the deployment of wireless services in and around its development. Set-aside areas for screened or disguised equipment compounds, underground conduit for distributed antenna system cabling, and structures within which antennas may be concealed (such as street lights or a clock tower at a proposed community center) could eliminate the need for a more visually intrusive facility to provide needed wireless services.

Although this is important for residentially zoned areas, it could also be useful for commercial and industrial projects where there will undoubtedly be a need for future wireless services. A planned approach to providing antenna supports may preclude the need for additional towers visible from County shopping areas, roadways, and adjacent residential areas, which will aid in making for a more "livable community."

Proposed Action: The TTFCC will propose zoning legislation to require developer participation in the planning for placement of wireless facilities in and around proposed developments as follows (proposed text underlined).

Subtitle 27 Zoning Code, Division 9, Subdivisions 2 & 3:
Sec. 27-237

(e) A Conceptual Site Plan shall include the following:

(15) Proposed locations where telecommunication facilities may be sited to provide telecommunications to the development and surrounding communities.

Sec. 27-274

(a) The Conceptual Site Plan shall be designed in accordance with the following guidelines:

*(12) **Telecommunication Facilities***

(A) New telecommunication antennas that service the development and the surrounding area are preferred to be co-located on existing buildings, towers, monopoles, tall structures, public utility towers, or light poles.

(B) If existing structures are not available, proposed both public and private sites for new telecommunication structures should be identified in the development or near-by areas. Also, the type of proposed structure and type of stealth and camouflage design needs to be identified.

(C) The visual impact of the facilities shall be mitigated so as to blend with the natural and built environment of the surrounding area.

(D) The structures and accessory uses shall mitigate the visual and noise impacts by blending in the surrounding environment through the use of appropriate color, texture of materials, topography, scale of buildings, landscaping and visual screening.

Sec. 27-282

(e) A Detailed Site Plan shall include the following:

(20) Proposed locations where telecommunication facilities may be sited to provide telecommunications to the development and surrounding areas; and

5. Actively Encourage the Use of County, M-NCPPC, WSSC, and Board of Education Facilities for Co-locations and New Support Structures.

As noted in this and past reports, the successful deployment of wireless services in the County means that there is a continuing and growing demand for antennas near residential areas because carriers feel they need to improve signal levels inside dwellings to meet customers' demands. Additionally, more and sometimes larger antennas are being added to existing antenna arrays to deploy advanced 3G and 4G services. Also, there are new carriers seeking to provide services in this market. Further, more wireless customers expect their phones to provide reliable service inside their homes as well as in their community and cars as they move around their environment. As we have noted before, some subscribers rely solely on their mobile phones for not only voice but also data and, most recently, video services as well; these subscribers are abandoning their land lines entirely. To meet that growing demand, carriers may likely look to public land and facility-owning agencies as potential locations for future antennas. This may be particularly true for sites on public school property, now that the Board of Education has adopted its new policy to permit wireless facilities on school property; these sites are attractive to the carriers because the school sites are in the residential areas where they may be seeking to improve service coverage. Additionally, in 2010 the recently constructed County public safety towers may become available as potential locations for accommodating private sector facilities in lieu of the carriers constructing more new facilities in the vicinity of those towers.

Existing structures are filling up. In some cases, additional antennas would exceed a monopole's structural capacity unless the monopole receives structural modifications. Building new towers to meet this demand, however, may have a potentially negative effect on the County's residential neighborhoods. In the interest of continuing to provide new services to the community and a more competitive market for consumers, the TTFCC strives to encourage the carriers to be creative in antenna and support structure design to diminish the impact of new towers in the community. Toward that end, the TTFCC also encourages all public agencies to consider

allowing wireless facilities to be attached to the agencies' buildings or allow the construction of new support structures in areas with minimum visual impact.

Proposed Action: The TTFCC proposes to continue to work with the carriers and agency representatives to encourage the partnership between the carriers and County, M-NCPPC, WSSC, and the Board of Education to allow for co-locations and new support structures on public properties.

6. Establish the Preparation and Completion of the TTFCC Master Plan and the TTFCC Annual Report at the Same Time and by Fiscal Year.

Currently the TTFCC Master Plan is completed by October 1 of each year and the TTFCC Annual Report by May 1 of each year. Both the Plan and the Report should be prepared, completed, and transmitted to the County Executive and the County Council on the same schedule. The TTFCC will propose a change to the County Code as follows:

> ***Subtitle 5A. Cable Television and Telecommunications, Division 2.***
> ***Sec. 5A-155. Telecommunications transmission facility inventory.***
> *(d) The TTFCC Chair shall submit the TTFCC Annual Report to the County Executive for approval. The County Executive will transmit the Annual Report to the County Council no later than ~~May 1~~ October 1 of each year. The report shall inform the County Executive and the County Council of the activities of the TTFCC and recommend strategies for further improving the deployment of wireless services to the citizens.*

7. Establish a Date by When Applications Deemed Incomplete Must be Corrected and Re-filed with the TTFCC.

In many past cases, when an application has been deemed incomplete and the applicant has been so notified, it has taken months for the applicant to resubmit a corrected application. In those instances, because so much time has passed and aspects of the initial review or of the site itself may have changed, the corrected application requires, in effect, a complete review. A complete review obviously requires more time than a re-evaluation, so these re-submitted applications take longer to process (and cost the County more for the Facility Coordinator's time than even the increased re-filing fee established in 2009). Consequently, to meet the timelines established by the FCC as discussed above, the TTFCC will require that submission of a corrected application must occur within 30 days from the date of notice that an application is deemed incomplete, or the application will be deemed withdrawn and the case will be closed. If the applicant intends to pursue that antenna siting in the future, it must file a new application to begin the process anew, restart the counting of time toward the limits established by the FCC, and pay the appropriate application fee for the type of antenna placement. Hopefully, this action will encourage applicants to submit correct applications from the start, eliminating the need for additional time by County staff and for County expenditures for the Facility Coordinator's time in reviewing an application for a second time. The TTFCC will propose a change to the County Code as follows:

> ***Subtitle 5A. Cable Television and Telecommunications, Division 2. Telecommunications,***
> ***Sec. 5A-156. Telecommunications transmission facility applications.***
> *(g) All applications shall be reviewed in an efficient and timely manner, with a goal of making a TTFCC recommendation within 60 days after a complete application is submitted to the*

Telecommunications Transmission Facility Coordinator. Any application that requires the submission of a corrected application must occur within 30 days from the date of notice that an application is deemed incomplete, or the application will be deemed with drawn and the case will be closed.

Appendix A:
Prince George's County Public Schools Administrative Procedure #0800

ADMINISTRATIVE PROCEDURE

TELECOMMUNICATIONS
TRANSMISSION FACILITIES

0800
Procedure No.

January 4, 2010
Date

I. **PURPOSE:** To establish the criteria by which the Board of Education will evaluate and make decisions concerning applications to place private telecommunications transmission facilities on sites owned by the Board of Education.

There have been requests to place private telecommunications transmission facilities on sites owned by the Board of Education. Federal and county laws provide for such placements. The following criteria shall be considered in evaluating and/or approving such requests, without compromising the school system's primary mission to provide a safe and supportive environment for the academic success of every student.

II. **POLICY:** The Board of Education authorizes the placement of private telecommunications transmission facilities on sites owned by the Board as provided by federal and County laws. (Board Policy 0123)

III. **PROCEDURES:**

A. Evaluation and Approval Process:

1. Prince George's County Public Schools (PGCPS) support federal and County legislation relating to the infrastructure of modern telecommunications systems and will implement these laws without contravening the primary mission of the organization which is to provide a safe and supportive environment for the academic success of every student.

2. Factors such as site size, compatibility with the County's Telecommunications Transmission Facility Coordination Committee's (TTFCC) Master Plan, PGCPS' Master Plan and school site development plan, impact on school operations, school and community input (including school personnel and neighborhood citizens' concerns), compensation, and the ability to co-locate telecommunication facilities at the site shall all be considered when evaluating sites for telecommunications facilities on school property. Specifically, the following criteria will be considered in the evaluation of proposals:

a. Conformance with the requirements of federal and County legislation and the County's TTFCC regulations. (See attachment.)

b. Telecommunications providers must have a long-range master plan for future telecommunications transmission facilities throughout the County.

c. Impact on the school site and operations based on input obtained through community hearing or forum from school staff, PTSA, community groups and facilities staff. These considerations should include, but not be limited to, the following:

(1) No site shall be considered unless it meets the acreage needed for standard setback requirements in accordance with applicable zoning regulations.

(2) No private structure shall be placed on school buildings unless specifically negotiated and agreed to in the terms of the lease.

(3) Any proposed installation must satisfy all legal, safety, and health requirements set forth in federal, state, and County codes and regulations.

(4) Any proposed installation must be architecturally and aesthetically compatible with the school site.

(5) For applications involving rooftop sites, the applicant is responsible for demonstrating that the site will be undetectable from the street view below in all directions to the fullest extent possible.

(6) For applications involving new monopoles or towers, the applicant making the proposal is responsible for notification of potentially affected communities.

(7) Installation and location shall not disrupt normal operation of school system activities and/or community activities as determined by the principal or site manager.

(8) The applicant shall bear all responsibility and related costs for liability and maintenance arising from the installation and its operation. This would include related upkeep, repair, and appearance of the tower, monopole, equipment building, enclosed grounds and fencing, and provision for its removal.

d. Demonstrated record in other site installations of compliance with contractual agreements and adherence to regulatory standards. In the event of the telecommunications company's bankruptcy, a sufficient bond must be provided to cover the cost of removing the transmission facility and returning the site to its previous condition.

e. Benefit to the Board including provision of revenue to support educational improvements.

f. The Board shall receive an annual report on approval and installation of any telecommunication transmission facilities, which shall include any reports, concerns or complaints involving the installation of the facility and facility itself and safety or health concerns.

3. A PGCPS lease form shall govern all leases and permits for telecommunications facilities on school property. The lease/permit shall require indemnification of the Board, its employees, and agents by the applicant for any contingent liability arising from the operation of the facility. The telecommunications company may not access the property during school hours except with prior notice and approval of the official designated by the building administrator. The school system reserves the right, prior to the conclusion of its stated term, to terminate the lease with or without cause, including for lack of adequate maintenance as a basis, for example, of lease termination for cause. Revisions to the standard lease/permit form, except for changes required due to site specific concerns, shall not be accepted.

4. The Superintendent will review and, if necessary, gather additional views of the community as well as principals and/or site managers and evaluate those views prior to making a recommendation to the Board for approval/disapproval of a request for placement of telecommunications facilities at a school site.

B. Implementation Strategies:

1. In compliance with Prince George's County Regulation 5A-14914-96, the TTFCC will review and approve the initial application for a telecommunications facilities site, including obtaining any required approvals of M-NCPPC

2. The Superintendent shall notify site managers, i.e., Principals, and school PTAs of the proposed installation for their comments prior to any request for BOE approval and shall notify them of any final Board action taken on any proposed installation.

3. Based on the criteria set forth in this procedure, the Board will decide whether to give final approval the request and, if approved, the Superintendent shall negotiate the most favorable terms of a

lease and/or permit and present the contract to the Board for final approval. The applicant will be responsible for removing the installation completely and returning the site to its previous condition at conclusion of the lease.

IV. **RELATED PROCEDURES:** None.

V. **MAINTENANCE AND UPDATE OF THESE PROCEDURES:** This Administrative Procedure originates with the Division of Supporting Services and will be reviewed on an ongoing basis in accordance with the Board of Education's policy review process. Bi-annual reports on the implementation of this procedure, including input from affected schools and communities, will be reviewed by the Board.

VI. **CANCELLATIONS AND SUPERSEDURES:** None. This is a new Administrative Procedure.

VII. **EFFECTIVE DATE:** January 4, 2010.

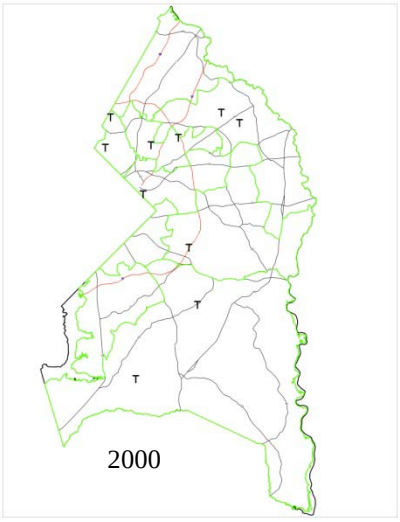
Approved by:
William R. Hite
Superintendent of Schools

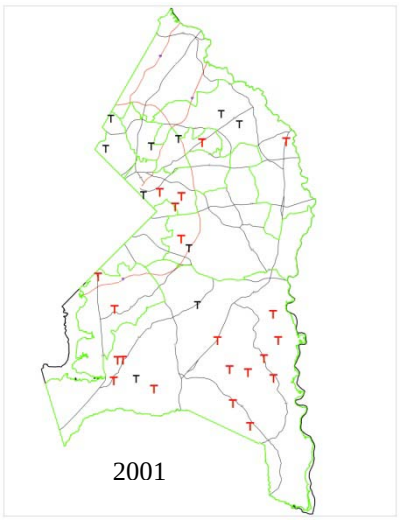
Attachment: Subtitle 5A. Cable Television and Telecommunications

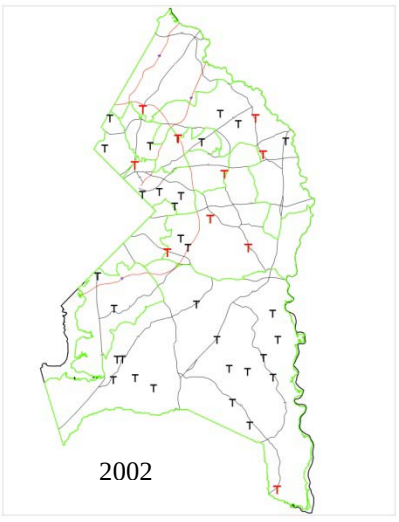
Distribution: Lists 1, 2, 3, 4, 5, 6, 10, and 11

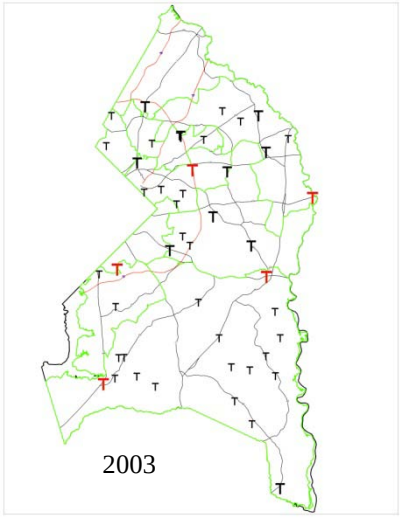
Appendix B:
Location of New Monopoles by Year

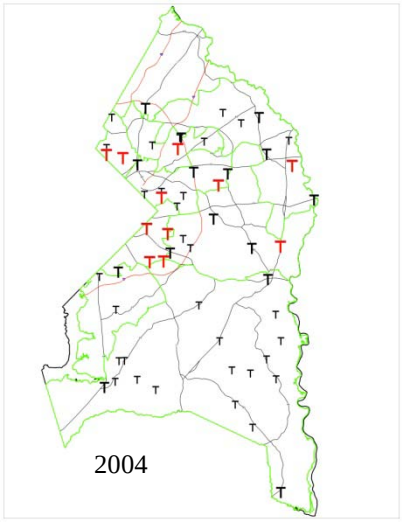
Location for New Monopoles by Year of TTFCC Application

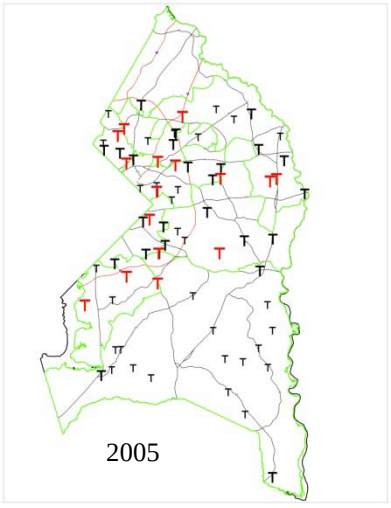


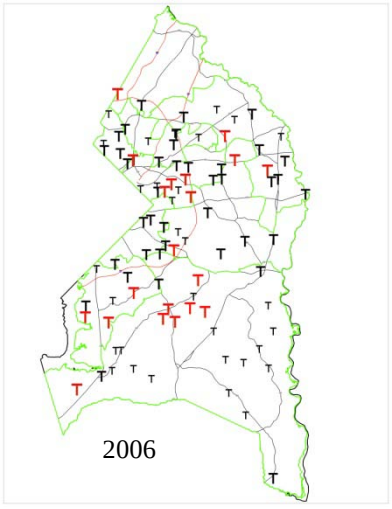


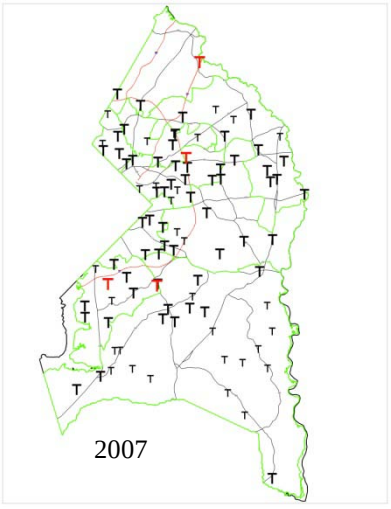


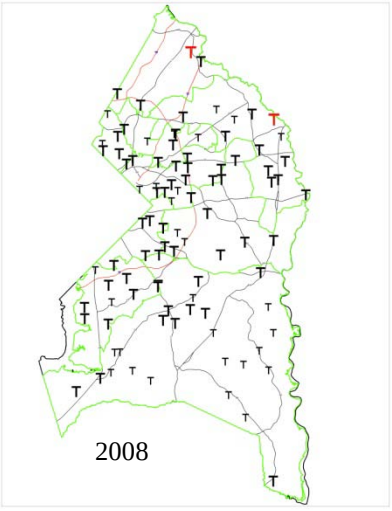








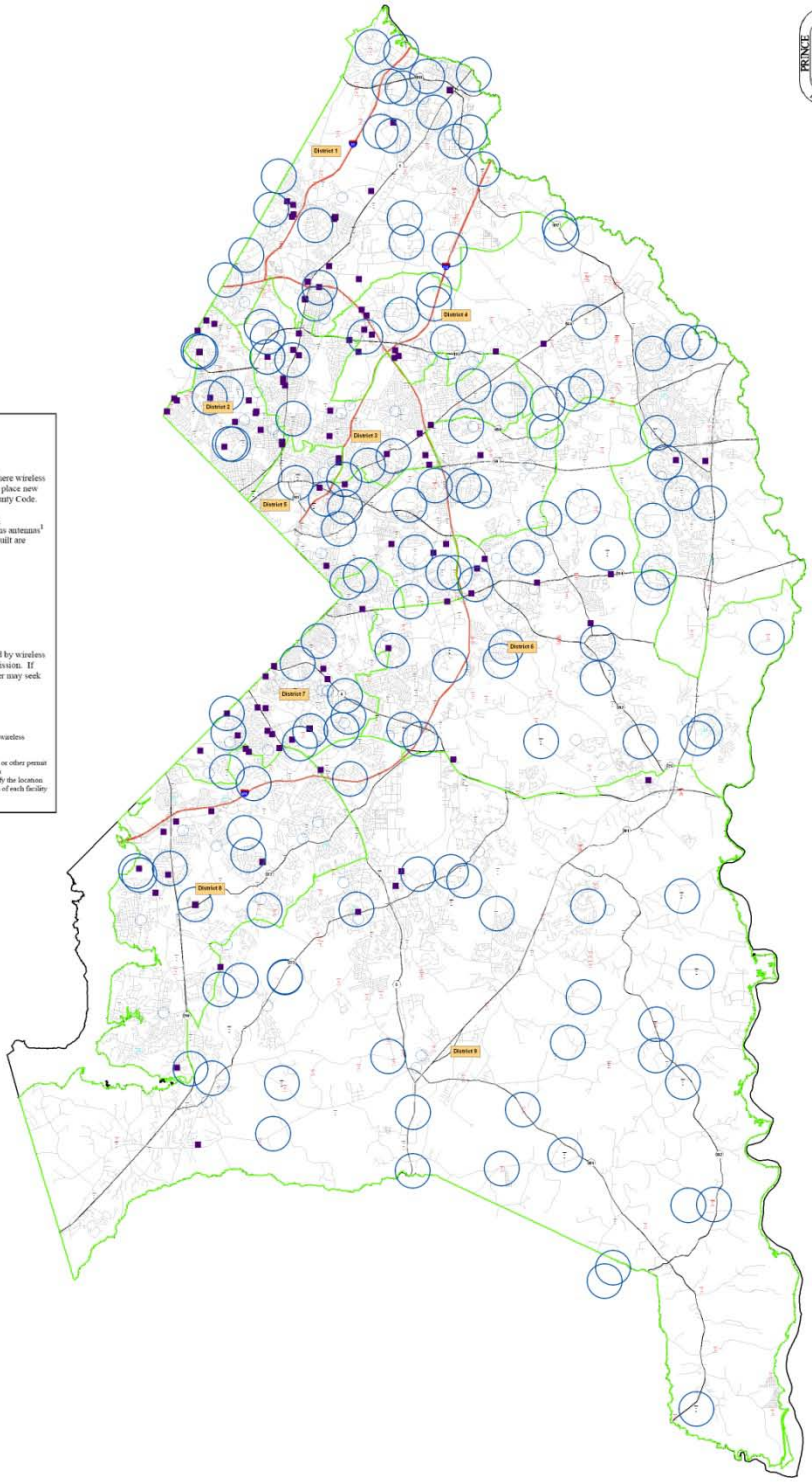




Appendix C:
2009-2010 Master Plan

Telecommunications Transmission Facilities Master Plan 2009-2010

Telecommunications Transmission Facility Coordinating Committee



Legend

Master Plan 2009-2010

This Master Plan represents a compilation of potential service areas where wireless telecommunications service providers have indicated they may seek to place new antennas within the next two years pursuant to § 5A-155 (b) of the County Code.

Existing locations and support structure types approved by the TTFCC

Locations and type support where there are existing telecommunications antennas[1] or proposed antennas previously approved by the TTFCC but not yet built are shown below:

- Water Tower
- Building
- Monopole
- Tower

Target Service Area for New Antennas

- Target area for new telecommunications antennas as designated by wireless telecommunications service providers in their 2009 plan[2] submission. If there is no existing support structure for the antennas, the carrier may seek construction of a new tower or monopole in this area.

School Locations

- High school and middle school locations

[1] Some existing structures may have multiple sets of antennas belonging to different wireless telecommunications service providers.

[2] Pursuant to § 5A-155 (b) of the County Code, every applicant for a building permit or other permit for the erection of a telecommunications transmission facility shall annually submit a telecommunications transmission facility location plan. The plan shall clearly identify the location of every existing telecommunications transmission facility and the proposed location of each facility to be constructed or located in accordance with the permit application.

CTC
Communications Engineering & Analysis For The Public Interest

Appendix D:
CTC Report on Distributed Antenna Systems

Distributed Antenna Systems

June 2009

Prepared by
Columbia Telecommunications Corporation
10613 Concord Street, Kensington, MD 20895
www.CTCnet.us

Distributed Antenna Systems

Why and When They Are Used

Ordinarily, carriers seek to provide coverage to relatively large service areas, which may include roads, highways, residences, and businesses. In providing such coverage carriers are often required to construct relatively tall towers or monopoles or locate their antennas on existing tall buildings or structures. However, there are circumstances when a carrier seeks to provide coverage to a particular area and there are no feasible locations in the area where a new tower can be constructed or where an existing tower is in use. In such areas, the carrier may consider constructing a distributed antenna system (DAS). A DAS employs multiple antennas placed atop utility poles alongside a road or highway to provide coverage to vehicles on the road and to nearby neighborhoods adjacent to the road.[1] While a DAS cannot provide extensive coverage far from a road or highway, due to the fact that the utility poles employed in a DAS are generally somewhat lower than towers and monopoles, a DAS can sometimes be an ideal solution to a carrier's on-street service needs in areas where such extensive coverage is not necessary.[2]

How They Are Configured

As discussed above, DAS involve the use of multiple antennas situated on utility poles alongside roads and highways. Depending on the number and height of existing utility poles on the desired street, a carrier may simply place its antennas atop those existing poles,[3] or, if necessary, replace existing poles with newly constructed poles.[4] On each utility pole, approximately eight to 10 feet above ground, is a small cabinet, which contains equipment that converts the radio frequency (RF) signals received by the antenna to optical signals. Those optical signals are then transmitted, by fiber-optic cables installed in the public rights-of-way under/along the road, to a nearby base station, which converts the optical signals back to RF signals for transmission to the carrier's network.

Other Unique Features of a DAS

The antennas of a DAS may be used to accommodate the transmissions of multiple carriers (e.g., in one proposed DAS in Montgomery County, the applicant, Crown Castle, reported that it would be able to transmit up to eight different signals from a single antenna). Thus, a DAS could preclude the need for additional antenna sites in a given area, thereby limiting the impact on communities caused by the construction of new monopoles and towers (see illustration below).

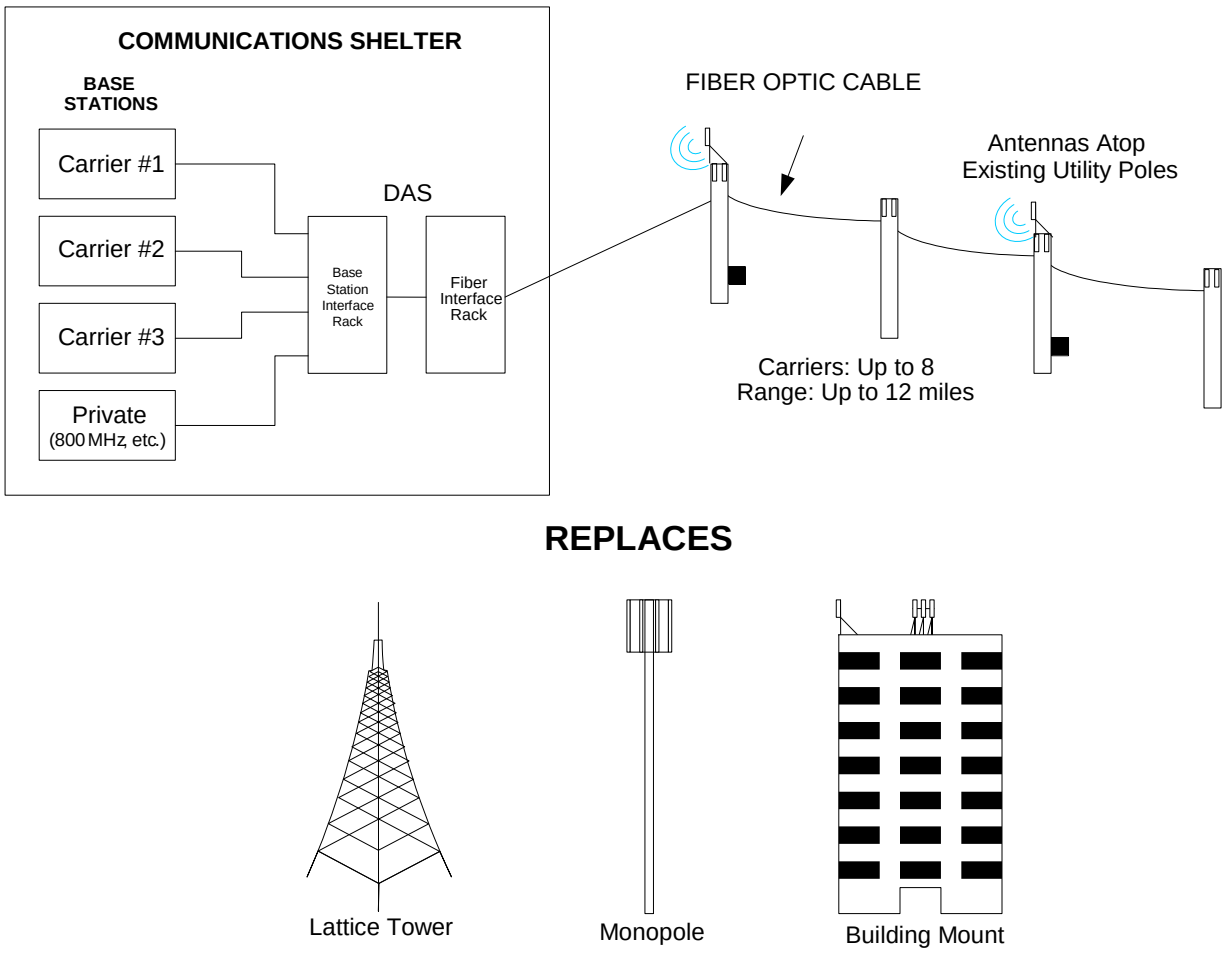
[1] In a DAS, antennas are generally placed on poles along a road approximately every half mile.

[2] A DAS antenna generally transmits a usable signal about one-quarter of a mile.

[3] Antennas can be either omnidirectional whip antennas or small, directional panel antennas.

[4] A new pole may be necessary when the existing pole is not structurally capable of accommodating the carriers' antennas or when it is too short to permit the safe attachment of antennas above the primary electric lines on the pole. And sometimes, when such a replacement pole is constructed, it can be built taller than the existing pole in order to obtain better coverage for the carrier.

Figure 1: Configuration of DAS vs. New Monopole/Tower



Limitations of DAS

A DAS, with all of its advantages, does not always work. For example, if a carrier seeks to provide coverage both to roadways and to residences farther than a quarter mile from the road, it may still require an appropriately placed monopole. Recently, NextG Networks installed a DAS near the Bretton Woods Country Club, near Darnestown in Montgomery County, to meet the company's coverage requirements; however, A&T indicated that the limited off-road signals of that DAS would not meet its coverage needs. The approval of an AT&T monopole in that area is pending.

Potential Uses for DAS in Prince George's County

There are a number of roads in rural parts of the County where there is sufficient vehicular traffic to warrant cell phone coverage, but where there may not be a need for strong signals from a monopole (e.g., if there are not many residences situated far from the roads). In such areas, a DAS might provide needed coverage without the use of a tall monopole or tower. The southern part of Croom Road, where there is a pending application for a new tall monopole, may be a likely candidate for a DAS, though none has been proposed.

The following information describes the state of treatment of DAS as experienced by nearby jurisdictions.

Montgomery County

Montgomery County adopted a Telecommunications Ordinance that requires carriers to obtain a franchise agreement to place DAS facilities, fiber optic cables, antennas, and related equipment in the right-of-way. Crown Castle and NextG have proposed DAS networks in Montgomery County, but only NextG obtained a franchise and has deployed a DAS. The NextG network covers a 15-mile-long section of roadways between Darnestown and Potomac near the Beltway's American Legion Bridge crossing over the Potomac River. Photos of some of those antennas sites are in the attached document.

City of Gaithersburg

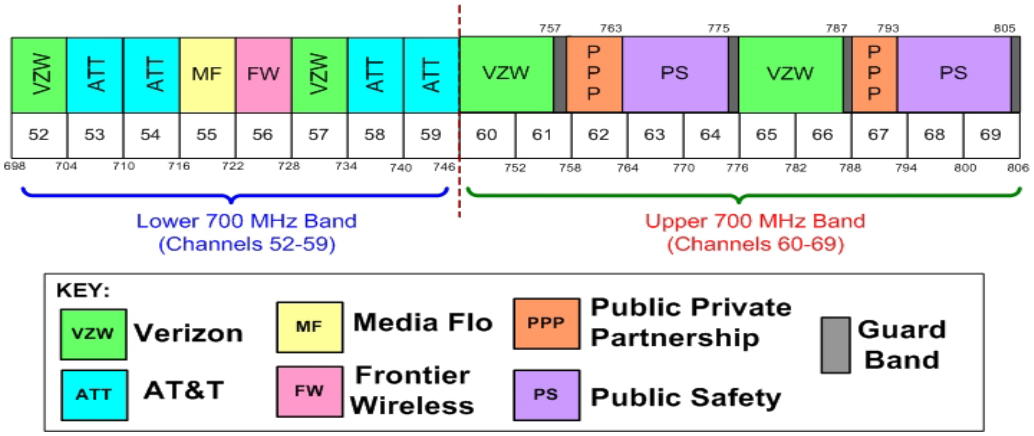
New Path Networks has a DAS within the City limits. The City only required electrical permits for the DAS antennas. Photos of the New Path DAS are also attached.

Baltimore County

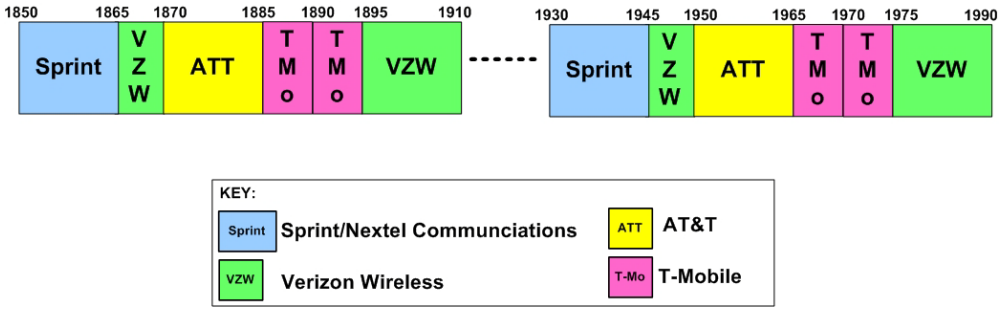
Baltimore County also has a Telecommunications Ordinance and is presently negotiating a franchise agreement with NextG.

Appendix E:
Frequency Band Assignments

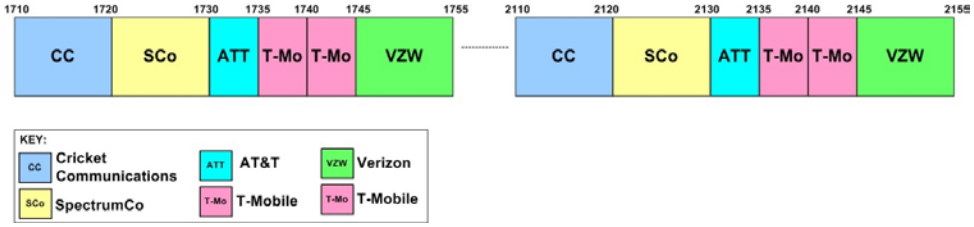
700 MHz Band Plan



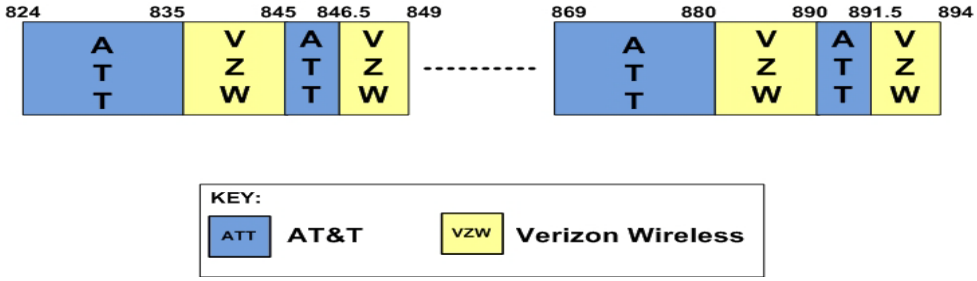
PCS Band Plan



AWS Band Plan



Cellular Band Plan



Appendix F:
Proposed Legislative Changes

APPENDIX F

Legislation changes for Recommendations #1, #2 and #3 are identified below in Subtitle 27. Zoning Code, Sec, 27-445.04:

RESIDENTIAL

Sec. 27-445.04. Antennas, monopoles, and related equipment buildings for wireless telecommunications.

(a) Antennas, monopoles, and related equipment buildings permitted (P) in the Table of Uses shall be subject to the following requirements:

(1) The antenna shall comply with the following standards:

(A) Unless otherwise prohibited below, it shall be concealed within the opaque exterior of a structure or be attached to a public utility, radio, television, or telecommunications broadcasting tower/monopole; a light pole; a multifamily dwelling at least five (5) stories in height; a structure owned by a municipality, the Board of Education for Prince George's County, or by Prince George's County; or a structure owned and primarily used by a government agency that is exempt from the requirements of this Subtitle; except that the use of existing stand-alone chimneys that are structurally capable of supporting a number of antennas are permitted with the use of antennas that are designed to be flush mounted and painted to match the surface of the structure to which they are attached, and the equipment area is properly screened;

(B) It shall not extend more than fifteen (15) feet above the height of the tower or structure to which it is attached but only to the extent that the overall height of the facility does not exceed the height limits of a telecommunications tower for the zone;

(C) It shall not exceed the following dimensions:

(i) Twenty (20) feet in length and seven (7) inches in diameter for whips;

(ii) Ten (10) feet in length and two (2) feet in width for panels;

(iii) Seven (7) feet in length and one (1) foot in diameter for cylinders; or

(iv) Seven (7) feet in diameter for parabolic dishes; and

(D) On privately owned land, it shall not support lights or signs unless required for aircraft warning or other safety reasons.

(2) The related telecommunications equipment building or enclosure shall comply with the following standards:

(A) It shall not exceed five hundred sixty (560) square feet of gross floor area or twelve (12) feet in height;

(B) The building or enclosure shall be screened by means of landscaping or berming to one hundred percent (100%) opacity from any adjoining land in a Residential Zone (or land proposed to be used for residential purposes on an approved Basic Plan for a Comprehensive Design Zone, or any approved Conceptual or Detailed Site Plan);

(C) When attached to an existing building, it shall match the construction material and color(s) of that building;

(D) When constructed as a freestanding building, it shall be constructed of brick and its design shall coordinate with the design of any existing main building on the same lot or on an adjoining lot; and

(E) The building or enclosure shall be unmanned, with infrequent (four (4) or fewer per year) visits by maintenance personnel, and with access and parking for no more than one (1) vehicle.

(3) The monopole shall comply with the following standards:

(A) The maximum height shall be one hundred ninety-nine (199) feet when located on public property or one hundred (100) feet when located on all other properties;

(B) For privately owned land, the minimum setback from all adjoining land and dwelling units shall be equal to the height of the structure measured from its base; for publicly owned land, the minimum setback shall be one-half (1/2) of the height of the structure measured from the base to the adjoining property lines;

(C) For privately owned land, the minimum area required shall be two and one-half acres (2 ½);

(D) On privately owned land, the structure shall not support lights or signs unless required for aircraft warning or other safety reasons;

(E) The structure shall be designed, galvanized, and/or painted in a manner which is harmonious with surrounding properties;

(F) The applicant shall provide certification from a registered engineer that the structure will meet the applicable design standards for wind loads of the Electronic Industries Association (EIA) for Prince George's County; and

(G) Any monopole which is no longer used for telecommunications purposes for a continuous period of one (1) year shall be removed by the monopole owner at owner's expense.

(4) The following stealth and camouflage designs shall be required for antennas and telecommunication structures:

(A) Antennas shall be concealed as described in (a) (1) (A).

(B) Structures designed to support antennas shall be camouflaged or concealed as an appropriate placed architectural or natural feature. Such structures may include but are not limited to clock towers, campaniles, steeples, observation towers, water towers, light standards, flag poles, public art structures, artificial trees or other vertical structures as they appear in their existing environments and which shall not visually detract from the initial use.

(C) The proposed stealth structure shall be in character with the area.

(D) Structures that are placed in heavily wooded areas on the site to the maximum extent possible and will lessen the visual intrusiveness of the structure and accessory structures shall be allowed.

(E) Radio and television transmitting and receiving towers that are guyed towers, self-supporting lattice towers or monopoles are not required to have stealth or camouflage designs.

(CB-61-1988; CB-81-1993; CB-123-1994; CB-103-1997; CB-13-1998; CB-65-2000; CB-33-2007)

Editors Note: CB-33-2007 established that monopoles and associated equipment buildings and studios for which a building permit had been issued prior to September 11, 2007 shall not be considered non-conforming structures.

Legislation changes for Recommendation #4 are identified below in Subtitle 27 Zoning Code, Division 9, Subdivisions 2 & 3:

DIVISION 9. SITE PLANS.

Subdivision 2. Requirements for Conceptual Site Plans.

Sec. 27-272. Purpose of Conceptual Site Plans.

(a) **Examples**.

(1) There is often a need for approval of a very general concept for developing a parcel of land before subdivision plans or final engineering designs are begun. Such cases include:

(A) Planned employment parks;

(B) Planned mixed-use developments;

(C) Recreational Community Developments;

(D) Large single-use developments;

(E) Development which is potentially incompatible with land uses on surrounding properties; and

(F) Developments involving environmentally sensitive land, or land that contains important natural features that are particularly worthy of attention.

(b) **General purposes**.

(1) The general purposes of Conceptual Site Plans are:

(A) To provide for development in accordance with the principles for the orderly, planned, efficient, and economical development contained in the General Plan, Master Plan or other approved plan;

(B) To help fulfill the purposes of the zone in which the land is located;

(C) To provide for development in accordance with the site design guidelines established in this Division; and

(D) To provide approval procedures that are easy to understand and consistent for all types of Conceptual Site Plans.

(c) **Specific purposes**.

(1) The specific purposes of Conceptual Site Plans are:

(A) To explain the relationships among proposed uses on the subject site, and between the uses on the site and adjacent uses;

(B) To illustrate approximate locations where buildings, parking lots, streets, green areas, and other similar physical features may be placed in the final design for the site;

(C) To illustrate general grading, woodland and tree preservation areas, planting, sediment control, and storm water management concepts to be employed in any final design for the site; and

(D) To describe, generally, the recreational facilities, architectural form of buildings, and street furniture (such as lamps, signs, and benches) to be used on the final plan.

(CB-75-1989; CB-84-1990; CB-47-1996)

Sec. 27-273. Submittal requirements.

(a) The Conceptual Site Plan shall be submitted to the Planning Board by the owner of the property (or his authorized representative).

(b) The Conceptual Site Plan shall be prepared by an engineer, architect, landscape architect, or urban planner.

(c) Upon filing the Plan, the applicant shall pay to the Planning Board a fee to help defray the costs related to processing the Plan. The scale of fees shall be determined by the Planning Board. A reduction in the fee may be permitted by the Planning Board if it finds that payment of the full amount will cause an undue hardship upon the applicant.

(d) If more than one (1) drawing is used, all drawings shall be at the same scale (where feasible).

(e) A Conceptual Site Plan shall include the following:

(1) Location map, north arrow, and scale;

(2) Boundaries of the property, using bearings and distances (in feet) around the periphery;

(3) Zoning categories of the subject property and all adjacent properties;

(4) General locations and types of major improvements that are within fifty (50) feet of the subject property, and a general description of all land uses on adjacent properties;

(5) Existing topography, at not more than five (5) foot contour intervals;

(6) Limits of the one hundred (100) year floodplain (if any);

(7) Street names, right-of-way and pavement widths of existing streets and interchanges within and adjacent to the site; and

(8) Existing rights-of-way and easements (such as railroad, utility, water, sewer, access, and storm drainage);

(9) Existing tree cover as shown on a forest stand delineation and any important natural features on the site (such as stream beds, steep slopes, significant stands of trees, individual trees of significant size or species, and rock outcroppings;

(10) Areas of existing tree cover, vegetation, or other natural features proposed to be retained as shown on the proposed Tree Conservation Plan;

(11) Proposed system of internal streets, including right-of-way widths;

(12) Proposed lot lines and the land use proposed for each lot;

(13) General locations of areas of the site where buildings and parking lots are proposed to be located, and the general orientation of buildings on individual lots; and

(14) A stormwater concept plan approved pursuant to Section 4-322 of this Code.

(15) Proposed locations where telecommunication facilities may be sited to provide telecommunications to the development and surrounding communities.

(f) The submittal requirements in (e), above, may be modified in accordance with Section 27-277.

(CB-54-1986; CB-75-1989; CB-84-1990; CB-47-1996)

Sec. 27-274. Design guidelines.

(a) The Conceptual Site Plan shall be designed in accordance with the following guidelines:

(1) **General**.

(A) The Plan should promote the purposes of the Conceptual Site Plan.

(B) The applicant shall provide justification for, and demonstrate to the satisfaction of the Planning Board or District Council, as applicable, the reasons for noncompliance with any of the design guidelines for townhouses and three-family dwellings set forth in paragraph (11), below.

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(12) **Telecommunication Facilities**

(A) New telecommunication antennas that service the development and the surrounding area are preferred to be co-located on existing buildings, towers, monopoles, tall structures, public utility towers, or light poles.

(B) If existing structures are not available, proposed both public and private sites for new telecommunication structures should be identified in the development or near-by areas. Also, the type of proposed structure and type of stealth and camouflage design needs to be identified.

(C) The visual impact of the facilities shall be mitigated so as to blend with the natural and built environment of the surrounding area.

(D) The structures and accessory uses shall be mitigate the visual and noise impacts by blending in the surrounding environment through the use of appropriate color, texture of materials, topography, scale of buildings, landscaping and visual screening.

(CB-20-1990; CB-55-1996)

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Subdivision 3. Requirements for Detailed Site Plans.

Sec. 27-281. Purpose of Detailed Site Plans.

(a) **Examples**.

(1) Because the detailed design of land development significantly affects the health, safety, and welfare of the general public, and because regulation of land development through fixed standards can result in monotonous design and lower quality development, certain types of land development are best regulated by a combination of development standards and a discretionary review of a Detailed Site Plan. Such cases include:

(A) Attached housing, such as townhouses and multifamily dwellings;
(B) Planned employment parks;
(C) Planned mixed-use developments;
(D) Large parking compounds;
(E) Recreational community developments;
(F) Screening or buffering as a necessary design element;
(G) Large single-use developments;
(H) Environmentally sensitive land, or land that contains important natural features that are particularly worthy of attention;
(I) Development which is potentially incompatible with land uses on surrounding properties; and
(J) Buildings or land uses that are a part of particularly sensitive views as seen from adjacent properties or streets.

(b) **General purposes**.

(1) The general purposes of Detailed Site Plans are:

(A) To provide for development in accordance with the principles for the orderly, planned, efficient and economical development contained in the General Plan, Master Plan, or other approved plan;
(B) To help fulfill the purposes of the zone in which the land is located;
(C) To provide for development in accordance with the site design guidelines established in this Division; and
(D) To provide approval procedures that are easy to understand and consistent for all types of Detailed Site Plans.

(c) **Specific purposes**.

(1) The specific purposes of Detailed Site Plans are:

(A) To show the specific location and delineation of buildings and structures, parking facilities, streets, green areas, and other physical features and land uses proposed for the site;
(B) To show specific grading, planting, sediment control, tree preservation, and storm water management features proposed for the site;
(C) To locate and describe the specific recreation facilities proposed, architectural form of buildings, and street furniture (such as lamps, signs, and benches) proposed for the site; and
(D) To describe any maintenance agreements, covenants, or construction contract documents that are necessary to assure that the Plan is implemented in accordance with the requirements of this Subtitle.

(CB-120-1984; CB-75-1989; CB-84-1990; CB-47-1996)

Sec. 27-282. Submittal requirements.

(a) The Detailed Site Plan shall be submitted to the Planning Board by the owner of the property or his authorized representative.

(b) The Detailed Site Plan shall be prepared by an engineer, architect, landscape architect, or urban planner.

(c) Upon filing the Plan, the applicant shall pay to the Planning Board a fee to help defray the costs related to processing the Plan. The scale of fees shall be determined by the Planning Board, except that the filing fee for a day care center for children shall not exceed the Special Exception filing fee for a day care center for children as set forth in Section 27-297(b)(1.1). A fee may be reduced by the Planning Board if it finds that payment of the full amount will cause an undue hardship upon the applicant.

(d) If more than one (1) drawing is used, all drawings shall be at the same scale (where feasible).

(e) A Detailed Site Plan shall include the following:

(1) Location map, north arrow, and scale;

(2) Boundaries of the property, using bearings and distances (in feet); and either the subdivision lot and block, or liber and folio numbers;

(3) Zoning categories of the subject property and all adjacent properties;

(4) Locations and types of major improvements that are within fifty (50) feet of the subject property and all land uses on adjacent properties;

(5) Limits of the one hundred (100) year floodplain, perennial streams, proposed stream buffer, and nontidal wetlands (if any);

(6) Street names, right-of-way and pavement widths of existing streets and interchanges within and adjacent to the site;

(7) Existing rights-of-way and easements (such as railroad, utility, water, sewer, access, and storm drainage);

(8) Existing site conditions, including a forest stand delineation, vegetation, soil types, topography using contours at a minimum of two (2) foot intervals, and other natural features;

(9) Areas of existing tree cover, vegetation, or other natural features proposed to be retained as shown on the proposed Tree Conservation Plan;

(10) An approved stormwater management concept plan;

(11) Proposed system of internal streets including right-of-way widths;

(12) Proposed lot lines and the dimensions (including bearings and distances, in feet) and the area of each lot;

(13) Exact location and size of all buildings, structures, sidewalks, paved areas, parking lots (including striping) and designation of waste collection storage areas and the use of all buildings, structures, and land;

(14) Proposed grading, using one (1) or two (2) foot contour intervals, and any spot elevations that are necessary to describe high and low points, steps, retaining wall heights, and swales;

(15) A landscape plan prepared in accordance with the provisions of the Landscape Manual showing the exact location and description of all plants and other landscaping materials, including size (at time of planting), spacing, botanical and common names (including description of any plants that are not typical of the species), and planting method;

(16) Exact location, size, type, and layout of all recreation facilities;

(17) Exact location and type of such accessory facilities as paths, walks, walls, fences (including widths or height, as appropriate), entrance features, and gateway signs (in accordance with Section 27-626 of this Subtitle);

(18) A detailed statement indicating the manner in which any land intended for public use, but not proposed to be in public ownership, will be held, owned, and maintained for the indicated purpose (including any proposed covenants or other documents);

(19) Description of the physical appearance of proposed buildings (where specifically required), through the use of architectural elevations of facades (seen from public areas), or through other illustrative drawings, photographs, or renderings deemed appropriate by the Planning Board; ~~and~~

(20) Proposed locations where telecommunication facilities may be sited to provide telecommunications to the development and surrounding areas; and

~~(20)~~ (21) Any other pertinent information.

(f) The submittal requirements in (e) may be modified in accordance with Section 27-286.

(CB-23-1988; CB-1-1989; CB-75-1989; CB-109-1989; CB-111-1989; CB-84-1990; CB-47-1996)

Sec. 27-283. Site design guidelines.

(a) The Detailed Site Plan shall be designed in accordance with the same guidelines as required for a Conceptual Site Plan (Section 27-274).

(b) The guidelines shall only be used in keeping with the character and purpose of the proposed type of development, and the specific zone in which it is to be located.

(c) These guidelines may be modified in accordance with Section 27-286.

Legislation changes for Recommendation #6 are identified below in Subtitle 5A. Cable Television and Telecommunications, Division 2. Telecommunications, Sec. 5A-155:

Sec. 5A-155. Telecommunications transmission facility inventory.

(a) Prior to August 1 of each year, each agency of the County and each agency which receives County funding shall submit to the Telecommunications Transmission Facility Coordinator its telecommunications transmission facility location plan. The plan shall identify the location of each existing telecommunication transmission facility and the proposed location of each facility to be constructed by or for such agency in the succeeding two years. The plan shall be updated whenever the actual or proposed location of a facility changes.

(b) Prior to August 1 of each year, each owner of a telecommunications transmission facility in the County shall submit to the Telecommunications Transmission Facility Coordinator its telecommunication transmission facility location plan. The plan shall identify the location of each existing telecommunication transmission facility and the proposed location of each facility proposed to be constructed in the succeeding two years.

(c) Before a recommendation may be granted to site a telecommunications transmission facility in the County, the Telecommunications Transmission Facility Coordinator shall draft a master plan of actual and proposed telecommunications transmission facilities in the County. The TTFCC Chair shall submit the master plan to the County Executive for advisory approval. The County Executive will transmit the master plan to the County Council for advisory approval only no later than October 1 of each year. The County Council shall have sixty (60) calendar days to review and comment. The months of August and December shall not be considered when calculating the sixty (60) day period. The County Council may provide any recommendation(s) to the proposed plan within the sixty (60) day period by submitting a letter to the TTFCC Chair. The master plan shall identify areas of the County where additional sites for telecommunications transmission facilities are anticipated to be needed to provide service for public and private uses. Notice of all changes to the plan shall be made as provided in this Subsection.

(d) The TTFCC Chair shall submit the TTFCC Annual Report to the County Executive for approval. The County Executive will transmit the Annual Report to the County Council no later than ~~May 1~~ October 1 of each year. The report shall inform the County Executive and the County Council of the activities of the TTFCC and recommend strategies for further improving the deployment of wireless services to the citizens.

(CB-98-1998; CB-2-2006; CB-67-2008)

Legislation changes for Recommendation #7 are identified below in Subtitle 5A. Cable Television and Telecommunications, Division 2. Telecommunications, Sec. 5A-156 (g):

Sec. 5A-156. Telecommunications transmission facility applications.

(a) Every applicant for a building permit or other permit for the erection of a telecommunications transmission facility shall submit to the Telecommunications Transmission Facility Coordinator a telecommunications transmission facility location plan or an amendment to an existing plan. The plan shall clearly identify the location of every existing telecommunications transmission facility and the proposed location of each facility to be constructed or located in accordance with the permit application.

(b) Every applicant for a building permit or other permit for the erection of a telecommunications transmission facility shall submit to the Telecommunications Transmission Facility Coordinator a statement regarding whether the telecommunications transmission facility is proposed for location on an existing structure. If the application includes the construction or erection of a new supporting structure for the facility, the applicant shall provide a detailed statement describing the applicant's efforts to locate the proposed telecommunications

transmission facility on an existing structure; a description of any potential alternate locations for the telecommunications transmission facility not requiring such construction or erection; and a brief explanation of the reasons why such sites were not selected.

(c) The Telecommunications Transmission Facility Coordinator shall not disclose to any person any information in the plan which qualifies as confidential information under the Maryland Public Information Act.

(d) Nothing in this provision shall exempt an applicant from any applicable zoning requirements or other requirements of law.

(e) At least 30 days prior to the acceptance by the Telecommunications Transmission Facility Coordinating Committee of an application for a Telecommunications Transmission Facility for a new monopole, tower or pole for the support of an antenna (electronic, radio, television, transmitting, or receiving) every applicant shall send an informational mailing to all adjoining property owners, including owners whose property lie directly across a street, alley, or stream and to every municipality located within one mile of the new facility, to the County Council member of the District where the new facility is proposed and to all civic associations registered with the Maryland-National Capital Park and Planning Commission located within one mile of the new monopole, tower or pole for the support of an antenna. The parties will be notified by the informational mailing that they may request a briefing within 30 days of the mailing. An application that proposes to increase the height of an existing tower, monopole or pole is included as one that requires notification required in this Section.

(f) Every applicant and the TTFCC Chair or Chair's designee shall meet and brief the above mentioned parties if requested by these parties within 30 days of the date of sending the informational mailing. The requested meeting and briefing must occur prior to the recommendation of the new facility by the Telecommunications Transmission Facility Coordinating Committee.

(g) All applications shall be reviewed in an efficient and timely manner, with a goal of making a TTFCC recommendation within 60 days after a complete application is submitted to the Telecommunications Transmission Facility Coordinator. Any application that requires the submission of a corrected application must occur within 30 days from the date of notice that an application is deemed incomplete, or the application will be deemed with drawn and the case will be closed.

(h) Applications for Minor Modifications and COWs may be administratively reviewed and recommended by the TTFCC Chair or designee on behalf of the TTFCC without prior review by the TTFCC members.

(i) The recommendation for an application by the TTFCC or TTFCC Chair will remain valid for one year from the date of the TTFCC's disposition. If a building permit application has not been made within that time the TTFCC's recommendation is no longer valid and a new application must be submitted for review by the TTFCC. All previous applications for which a TTFCC recommendation has been issued which have not been permitted within one year of the effective date of enactment of this bill will no longer be valid.

(CB-98-1998; CB-34-2007; CB-67-2008)