

COUNTY COMMISSIONERS OF CHARLES COUNTY, MARYLAND

2022 Legislative Session

Bill 2022-06

Adequate Public Facilities – Traffic Section

Introduced by Charles County Commissioners

Amending the Zoning Ordinance provisions governing adequate public facilities 15 for traffic impact study processes and ensure consistency with the Adequate 16 Public Facilities Manual.

Date introduced: 05 / 24 / 2022

Public Hearing: 06 / 29 / 2022 @ 6:00 p.m. Hybrid-Virtually/In-Person

Commissioners Action: 10 / 04 / 2022 _____

Commissioner Votes: RBC: Y, BR: Y, GB: Y, TC: Y, AS: Y

Pass/Fail: Pass

Effective Date: 11 / 18 / 2022

Remarks: _____

NOTE: CAPITALS indicate matter added to existing text.
[Brackets] indicate matter deleted from existing law.

1
2 **COUNTY COMMISSIONERS OF CHARLES COUNTY, MARYLAND**
3
4

5 **2022 Legislative Session**

6 Bill No. 2022-06

7 Chapter. No. 297

8 Introduced by Charles County Commissioners

9 Date of Introduction May 24, 2022
10

11 **BILL**

12 AN ACT concerning

13 **Adequate Public Facilities – Traffic Section**

14 FOR the purpose of

15 Amending the Zoning Ordinance provisions governing adequate public facilities
16 for traffic impact study processes and ensure consistency with the Adequate
17 Public Facilities Manual.
18
19

20 BY amending:

21 CHAPTER 297- Zoning Regulations

22 Article XVI, §256. Adequate public facilities required.
23 *Code of Charles County, Maryland*
24

25 CHAPTER 297- Zoning Regulations

26 Article XVI, §257. Roads.
27 *Code of Charles County, Maryland*
28

29 CHAPTER 297- Zoning Regulations

30 Article XVI, §264. Mitigation.
31 *Code of Charles County, Maryland*
32
33
34

1 **SECTION 1. BE IT ENACTED BY THE COUNTY COMMISSIONERS OF CHARLES**
2 **COUNTY, MARYLAND, that the Laws of Charles County, Maryland read as follows:**

3
4 §297-256. Adequate public facilities required.

5
6 * * * * *

7
8 A. No preliminary plan for a subdivision, or major site plan required for a zoning permit
9 THAT REQUIRES MITIGATION, shall be approved unless the Planning Commission first
10 determines that the proposed subdivision or development will not adversely affect the adequacy
11 of public facilities serving the area, project or development.

12
13 B. For roads and water supply system, this article does not apply to minor residential
14 subdivisions and nonresidential developments OR REDEVELOPMENTS containing less than
15 1,200 square feet of floor area. [except as that development required public water and sewer]

16
17 * * * * *

18
19 §297-257. Roads.

20
21 * * * * *

22
23 B. This section does not apply to those projects INCLUDING EITHER DEVELOPMENTS
24 OR REDEVELOPMENTS which generate fewer than [140 daily vehicle trips or] 35 [14] peak-
25 hour trips per day.

26
27 C. Roads shall be considered adequate to accommodate the projected traffic to be generated
28 by the proposed development if:

29
30 (1) Roads serving the project are or will be capable of accommodating existing traffic,
31 traffic projected to be generated from developments for which plats and plans have
32 been approved and traffic projected to be generated from the proposed development at
33 an adequate level of service, as set forth below, for a specified design year as
34 established by the Commission. Service levels shall at all intersections in the immediate
35 vicinity of the project, as designated by the [Zoning Officer] PLANNING DIRECTOR,
36 be defined by the CRITICAL LANE METHODOLOGY OR current edition of the
37 Highway Capacity Manual published by the Transportation Research Board; or

38
39 (2) The County, state or one of the incorporated towns has programmed for construction
40 in a capital improvements plan or similar plan, additional roads or road improvements
41 necessary, in combination with existing roads and intersections, to comply with the
42 standards specified in Subsection C(1). The programmed improvements must be
43 scheduled to be completed at the time the proposed development will generate new
44 trips.

45
46 Asterisks *** mean intervening code language remaining unchanged
CAPITALS mean language added to the law[Brackets] mean language
deleted from the law

D. (1) The established minimum LEVEL OF SERVICE (LOS) for roads and intersections is LOCATED IN APPENDIX B OF THE CHARLES COUNTY ADEQUATE PUBLIC FACILITIES MANUAL.

[Level of Service

Comprehensive Plan District	Off-Peak	Peak Hour
Development district	C	C
Village centers	B	C
Rural / agricultural conservation areas and others	A	B
Town centers and urban core	C	D
Mixed-use districts (limited to the Waldorf Central And Action Urban Center Zones)]	D	D

(2) If the existing LOS of the affected road or street is less than the standard [above] LOCATED IN APPENDIX B OF THE CHARLES COUNTY ADEQUATE PUBLIC FACILITIES MANUAL, then the transportation facility will be considered inadequate if the proposed development degrades the facility by more than a factor of 0.01 based on the volume-to-capacity ratio.

(a) To meet the Level of Service[D requirements in the WC and AUC Zones], MITIGATION SHALL BE APPLIED TO THE FACILITY(S) BY THE DEVELOPER. A[a]lternate types of transportation improvements, in lieu of roADWAY IMPROVEMENTS[add widening,] may be CONSIDERED IF CIRCUMSTANCES DEEM THAT IMPROVEMENTS WILL BE INFEASIBLE [required]. Alternative types of transportation improvements shall include construction of or fee-in-lieu contributions to off-street public parking, road grid network development, transit facilities, or streetscape improvements.

* * * * *

A. Prior to the submission of a preliminary subdivision plan, SITE PLAN, or an application for a zoning permit, the applicant shall submit a preliminary ADEQUATE PUBLIC FACILITIES APPLICATION (PAPF) [traffic analysis] which indicates the development's anticipated trip generation rates, a list of existing roads and intersections that will be impacted by traffic to and from the development and a design year based upon anticipated completion of the proposed project. The PLANNING DIRECTOR [Zoning Officer] shall review the PAPF [preliminary analysis] to determine if it satisfies the standards adopted by the County Commissioners for the proposed development and shall add or delete roads or intersections necessary to evaluate the impact of the development.

§297-264. Mitigation

A. MITIGATION BY THE DEVELOPER IS PREFERRED, YET ALTERNATIVELY

Asterisks *** mean intervening code language remaining unchanged
CAPITALS mean language added to the law[Brackets] mean language
deleted from the law


1 [M]Mitigation is not limited to, dedication of property to the County, payment of impact fees,
2 fees in lieu of an improvement payment to an escrow account, participation in private/public
3 partnerships, developer agreements, off-site improvements or other mechanisms as may be
4 determined by the Planning Commission. THE MITIGATION SHALL ADDRESS THE
5 NEGATIVELY AFFECTED GEOMETRIC ELEMENT OR ANY OTHER
6 TRANSPORTATION RELATED ELEMENT BECAUSE OF THE PROPOSED PROJECT.
7 ANY PAYMENT IN LIEU OF CONSTRUCTION SHALL BE GREATER THAN OR EQUAL
8 TO THE ESTIMATED COST OF THE IMPROVEMENT.

9
10 * * * * *


11
12 **SECTION 2.** BE IT FURTHER ENACTED, that this act shall take effect
13 forty-five (45) calendar days after it becomes law.

14
15 ADOPTED this 4th day of October, 2022.

16
17 COUNTY COMMISSIONERS
18 CHARLES COUNTY, MARYLAND

19
20 
21
22 Reuben B. Collins, II, Esq., President


23
24 
25
26 Bobby Rucci, Vice President

27
28 
29
30 Gilbert O. Bowling, III

31
32 
33
34 Thomasina O. Coates, M.S.

35
36 
37
38 Amanda M. Stewart, M.Ed.

39 ATTEST:

40 
41 Carol DeSoto, Clerk to the Commissioners

Adequate Public Facilities Manual

*Schools, Water Resources, and Transportation
Procedures and Guidelines*



Adopted July 7, 1997 – October 4, 2022 Update
Charles County Department of Planning & Growth Management

CHARLES COUNTY COMMISSIONERS



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Mission Statement

The mission of Charles County Government is to provide our citizens the highest quality service possible in a timely, efficient, and courteous manner. To achieve this goal, our government must be operated in an open and accessible atmosphere, be based on comprehensive long- and short-term planning and have an appropriate managerial organization tempered by fiscal responsibility. We support and encourage efforts to grow a diverse workplace.

Vision Statement

Charles County is a place where all people thrive and businesses grow and prosper; where the preservation of our heritage and environment is paramount; where government services to its citizens are provided at the highest level of excellence; and where the quality of life is the best in the nation.

Equal Opportunity Employer

It is the policy of Charles County to provide equal employment opportunity to all persons regardless of race, color, sex, age, national origin, religious or political affiliation or opinion, disability, marital status, sexual orientation, genetic information, gender identity or expression, or any other status protected by law.

Table of Contents:

1.0	INTRODUCTION.....	4
1.1	WHEN REQUIRED	4
1.2	PROCESS	5
2.0	PRELIMINARY ADEQUATE PUBLIC FACILITIES STUDY (APFS)	5
2.1	TRAFFIC IMPACT STUDY (TIS) REQUIREMENTS.....	5
2.2	TRANSITIONAL PROVISIONS	8
3.0	POLICY FOR DETERMINING ADEQUACY OF EXISTING ROADS.....	8
3.1	INTRODUCTION	8
3.2	ROADWAY ELEMENTS.....	9
3.3	TRIP GENERATION	10
3.4	INTERSECTION ANALYSIS	11
3.4.1	UNSIGNALIZED INTERSECTIONS.....	11
3.4.2	SIGNALIZED INTERSECTIONS	12
3.5	ROADWAY LINK ANALYSIS	13
3.5.1	MULTI-LANE HIGHWAYS: LEVEL OF SERVICE CRITERIA	14
3.5.2	TWO-LANE HIGHWAYS: LEVEL OF SERVICE CRITERIA.....	14
3.6	CAPITAL IMPROVEMENTS	15
3.7	IMPACTS OF APPROVED PRELIMINARY SUBDIVISION & SITE PLANS	15
4.0	POLICY FOR DETERMINING ADEQUACY OF SCHOOLS.....	15
5.0	POLICY FOR DETERMINING ADEQUACY OF GROUNDWATER SUPPLY...23	
5.1	PUBLIC SYSTEMS	23
5.2	GROUND WATER	23
5.3	FIRE SUPPRESSION FOR RURAL AREAS	24
6.0	APFS SUBMITTAL.....	25
6.1	ADEQUACY	25
6.2	PHASING	25
7.0	MITIGATION.....	26
8.0	PLANNING COMMISSION CONSIDERATION.....	27
9.0	ADEQUATE PUBLIC FACILITIES MANUAL.....	27
	APPENDIX A: DEFINITIONS	28
	APPENDIX B: COUNTY LEVEL OF SERVICE (LOS) MAP.....	31

1.0 INTRODUCTION

The Adequate Public Facilities element of the Charles County Zoning Ordinance is designed to accomplish several things:

- Assure that proposed developments will not adversely affect the health, safety, and welfare of the public.
- Encourage new development to occur in areas of the County where public facilities are being provided and which are designated in the Comprehensive Plan.
- Require developers to provide new, additional, or upgrades of existing public facilities which are necessary to address the impact on public facilities from their project, when the existing and planned facilities will not provide or maintain an adequate level of service.

This element of the Zoning Ordinance provides a significant tool for implementation of the Comprehensive Plan. Through the development and adoption process of both documents, the public identified the need for having adequate facilities in place when development occurs as a major issue facing the community. The ordinance addresses this need while also providing the opportunity for economic development to continue in the County.

The ordinance provides exemptions for small projects or those that will have a minimal impact. It also requires that an applicant only mitigate the impact caused by the proposed development.

This manual is intended to provide clear guidance to the interpretation, administration, and application of this element of the Charles County Zoning Ordinance. It specifies the standards, criteria, and procedures that are to be followed by both the applicant and County staff in executing this provision of the ordinance.

1.1 WHEN REQUIRED

An Adequate Public Facilities Study (APFS) is required for any subdivision, site plan, or zoning permit application with the following exceptions:

- I. Residential subdivisions that meet the definition of Minor, in accordance with §278, Subdivision Regulations
- II. Non-residential subdivisions that meet the definition of Minor, in accordance with §278, Subdivision Regulations.
- III. New non-residential development containing less than 1,200 square feet (total) of floor area.
- IV. An existing non-residential structure adding less than 1,200 square feet of floor area.
- V. Site Development Plans for a non-residential change-in-use, where the new use has the same or a lesser trip generation than the previous legal or non-conforming use.
- VI. Reconstruction of non-residential buildings that have suffered a loss or damage due to

fire, floods, wind, geological occurrence, or other natural disasters, provided they are reconstructed in-kind and do not exceed an additional 1,200 square feet.

1.2 PROCESS

The Adequate Public Facilities (APF) process would run concurrently with the review of a subdivision or site plan submission. In the case of a subdivision, the Planning Commission would consider both the preliminary subdivision plan and the APF findings concurrently. In the case of a site plan, the Planning Commission will consider the APF findings before site plan approval can be granted by the Planning Director.

2.0 PRELIMINARY ADEQUATE PUBLIC FACILITIES STUDY (APFS)

Prior to submittal of an APFS, a Preliminary Adequate Public Facilities (PAPF) Application must be filed by the applicant with the County. The PAPF Analysis is described as a "Preliminary Traffic Analysis" in the Zoning Ordinance. However, in practice it was found that it was more efficient to identify information for all elements of the study as early as possible. Therefore, the PAPF Analysis considers roads, sewer, and water supply and establishes how the study will proceed. The PAPF analysis will determine whether a Traffic Impact Study (TIS) is required by the applicant for the proposed project and, if so, what will be considered in the study. If a development generates 35 peak hour trips or greater, it will require a TIS for which parameters are determined prior to submittal of either a site plan or a preliminary subdivision plan. When a TIS is required, the study area should include both the existing and proposed site access point(s) as well as one intersection from the site access point(s) and extend to and including the first intersection with an arterial or higher classification roadway in each direction for urban/sub-urban areas (Septic Tier 1 & 2), or the first intersection with a collector or higher classification roadway in rural areas (Septic Tier 3 & 4). In each of these cases, if the roadway at the entrance of the project is an Arterial (for Tiers 1 & 2) or a Collector (for Tiers 3 & 4), the study area should extend to the next intersecting Arterial or Collector, respectively. In cases where the Applicant believes this requirement is unreasonable, a written appeal by the applicant may be considered to not include the first intersection with an arterial (or collector) or higher classification roadway in each direction. A response will be provided by the Planning Director within ten (10) business days.

The design year of a proposed project is the year in which the project, or the phase being considered when appropriate, is expected to be completed. This needs to be considered when background traffic is calculated as defined in 3.2 VI. Adequate facilities are required during all phases of a proposed project.

The determination regarding the acceptability of the PAPF will be made by the Planning Director. Applicants are encouraged to consult with County staff prior to submittal of the Preliminary APF Analysis to minimize any issues that might exist and thereby expedite the entire process.

2.1 TRAFFIC IMPACT STUDY (TIS) REQUIREMENTS

A traffic impact study is a report that assesses the impact of a development, redevelopment or land rezoning on the transportation infrastructure. It is designed to provide data on the adequacy of the existing facilities and its ability to maintain adequate operational performance while providing ingress/egress to the proposed development. When a TIS is needed for a particular development, it must contain the information as outlined in this section in order to be deemed acceptable.

The TIS must follow the outline as described below:

- I. Title sheet including the name of the development and date.
 - i. Name of the Consultant and Developer should be visible.
- II. Table of Contents
- III. Introduction/Study Area
 - i. Clearly define the scope of the project including the intended land use and impact on the study area.
 - ii. Define the expected year of project completion.
 - iii. Describe all key roads and intersections in the study area.
 - iv. Describe Multimodal/transit transportation where applicable.
 - v. Include a figure with an aerial of the study area and clearly display the roadways and intersections. The study area diagram should highlight the site location.
- IV. Existing Conditions
 - i. Describe any transportation related deficiencies that can be observed during the existing conditions.
 - ii. Confirm if the use was in existence as of the date of the traffic count
 - iii. Include a figure with the existing traffic volumes.
 - iv. Include a figure with the existing lane use configurations.
 - v. Include a table(s) with the results of the existing traffic analysis.
- V. Background Condition
 - i. Define the background projected growth and include any information that led to the final decision.
 - ii. List the background developments and their associated trips that will be included in the background condition. Describe any approved yet unbuilt capital projects in the study area.
 - iii. Include a figure with background condition lane use configurations if a change occurs from the existing condition.
 - iv. Include a figure with the background growth volumes.
 - v. Include a figure with the trips from the approved yet unbuilt background developments within the study area.
 - vi. Include a figure with the total background volumes.
 - vii. Include a table(s) with the results of the background traffic analysis.
- VI. Total Condition
 - i. Display the trip generation for the study site and include a figure with the trip distribution through the study area. (Before finalizing the TIS, the Applicant shall consult with County Staff to confirm direction of approach percentages).
 - ii. Include a figure with total condition lane use configurations.
 - iii. Include a figure with the total condition volumes.
 - iv. Include a table(s) with the results of the total traffic analysis. These results should be on a table with both the existing and background conditions to highlight changes through the project duration.

VII. Recommendations/Provided Mitigation

- i. Describe the recommended mitigation where applicable to meet the requirements defined by this manual.
- ii. Include a figure with the proposed mitigation.
- iii. Include a table(s) with the results of the traffic analysis with mitigation. These results should be a on table with both the existing, background, and total conditions to highlight changes through the project duration and to display how the mitigation will improve the facility.

VIII. Conclusion

- i. Concisely summarize the report and provide any additional information that will be examined during the review process.

IX. Appendix

- i. Include supplemental information including turning movement counts, pictures, layouts, site plans, etc.
- ii. Include all CLV and/or Synchro/SimTraffic HCM and queueing (if required) reports. Also include the approved trip generation for both the study development as well as any background developments.

The TIS report shall include but not be limited to the following recommendations to mitigate the traffic impact on the transportation system in the area:

- Location of traffic control devices. Recommended intersection for signalization shall include a warrant analysis from the latest Manual on Uniform Traffic Control Devices (MUTCD).
- Access points shall be located and designed in a way to qualify for a traffic signal or otherwise operate at a minimum acceptable level of service without signalization.
- Widening of roadways, intersections and needed right of way.
- Pedestrian and bicycle traffic movements.
- Specific off-site and on-site improvements.

The recommended design of the improvements must be feasible and achievable and designed to the latest MDOT standards and AASHTO sources including any specific Charles County design standards. A TIS without specific recommendation to mitigate negative impacts shall be considered incomplete.

The traffic analysis shall follow the format as described in this section:

- For each intersection in the study area, Critical Lane Volume (CLV) analysis must be completed. The following thresholds shall be used to determine the LOS:

Level of Service	Critical Lane Volume
A	CLV < 1,000 VPH
B	1,000 VPH ≤ CLV ≤ 1,150 VPH
C	1,151 VPH ≤ CLV ≤ 1,300 VPH
D	1,301 VPH ≤ CLV ≤ 1,450 VPH
E	1,451 VPH ≤ CLV ≤ 1,600 VPH
F	CLV > 1,600 VPH

- If the CLV is greater than 1,300 or the intersection is unsignalized, HCM (latest edition) analysis will be necessary. In rural areas, as defined by Appendix B, HCM analysis will be needed when the CLV is greater than 1,150. Once the HCM analysis is triggered, this analysis shall be used as the main method of analysis for the TIS.
- All queueing analysis, when requested, must report the queue length as well as the available storage capacity.
- All analysis results shall be summarized and compared in the same table.

A TIS scope may also include the following types of analysis based upon requirements set during the Preliminary APF Analysis meeting:

- I. Queueing Analysis - This analysis may be required to determine whether existing and proposed left-turn storage at the site entrance(s) and nearby intersections is adequate, to assess U-turn lane storage adequacy, or to determine that lane queuing does not block access to turn lanes or spill back into upstream intersections.
- II. Multi-Modal Transportation – An analysis of bicycle, pedestrian, and transit facilities may be required to identify and evaluate the related impact and the need for enhancements of these types of facilities within the study area.

2.2 TRANSITIONAL PROVISIONS

- I. Applications for Preliminary Adequate Public Facilities (PAPF) Studies and Traffic Impact Studies (TIS), submitted after November 18, 2022, shall be subject to full compliance with the requirements herein.
- II. Preliminary Adequate Public Facilities (PAPF) Studies and Traffic Impact Studies (TIS) submitted as of November 18, 2022 may elect to utilize the requirements in effect at the time of submittal for a period of one (1) year from the adoption of these requirements. After the one-year period, all applications shall be subject to full compliance with the requirements herein.

3.0 POLICY FOR DETERMINING ADEQUACY OF EXISTING ROADS

3.1 INTRODUCTION

This policy sets forth the criteria used to determine adequacy of existing roads to handle additional traffic proposed by land development or subdivision. This policy is intended to be used in conjunction with the Adequate Public Facilities (APF) element of Charles County Zoning Ordinance, effective October 1, 1992 or any latest revisions.

This policy establishes the minimum requirements for roadway elements and traffic operations prior to approval of a preliminary subdivision or site plan.

It should be noted that this policy is generic in scope. Because of the vast roadway configurations and inability to speculate the type of development proposed, the County has issued this policy only as a guide. The Planning Director reserves the right to evaluate each existing road segment on an

individual basis and make a determination of the level of study required prior to approval of additional development by the Planning Commission.

Nothing in this policy shall prevent a development from being developed in phases (sections). Road adequacy determinations shall be binding only for those phases submitted for preliminary approval.

3.2 ROADWAY ELEMENTS

This portion of the policy describes the minimum requirements to deem a road adequate. Traffic generated by the development shall be assigned to the existing road network according to the probable origins and destinations based on existing traffic patterns and experience.

A facility is inadequate if its level of service (LOS) drops below the designated level stated in this manual for each specific type of analysis. The established minimum level of service (LOS) for multi-lane highways and signalized intersections can be found in Appendix B: County Level of Service (LOS) Map.

The LOS is a representation of critical lane volume, volume (of vehicles) to capacity (of the road), or delay caused to a vehicle at a signalized intersection. Road segments and intersections must be analyzed and either can be the source of the inadequacy. The study must consider existing traffic, background traffic, and the traffic expected to be generated by the proposed development. This is evaluated for a design year, which is established in the preliminary traffic analysis as part of the PAPF Application. The design year will usually correspond to projected build-out of the project, although it may be shorter for particularly large projects which are done in phases. In these cases the analysis shall be done for each phase as application is made for each phase. The analysis should also consider any projects that have been funded for construction in either the State, County or Towns Capital Improvement Projects budget.

If the facility will not meet the LOS standard and/or its volume to capacity ratio is degraded by a factor of 0.01 or more (a one percent change), then mitigation will be required to offset this impact. The calculations shall be done in accordance with the methods for link and intersection analysis established in the latest edition of the Highway Capacity Manual or any subsequent revisions by the Transportation Research Board. This manual describes techniques for computing highway capacity. A copy of the Highway Capacity Manual is available at the Department of Planning and Growth Management, Planning Office.

The following assumptions shall be used wherever applicable for the traffic impact analyses.

- I. "Free Right Turns" are defined as movements typically isolated by channelization and controlled by a yield sign. Only if the right turning vehicles are separated from the queue of through vehicles on the approach leg, and there is sufficient exclusive acceleration opportunity on the turn leg, can they be excluded from the analysis.
- II. Where no separate left turn lanes occur at high volume intersections, the left most approach lane should be assumed to handle all the lefts with the other lanes carrying the through traffic and rights. Actual observation/documentation of other conditions will be reviewed on a case-by-case basis.

- III. On one lane approaches where a bypass of the left turning vehicle exists, a separate left turn lane can be assumed, only if there is sufficient stacking to accommodate a through/right lane. Otherwise, it should be considered a left/through/right lane. Actual observation/documentation of other conditions will be reviewed on a case-by-case basis.
- IV. The County will not accept turning movements or 24 hour counts more than 12 months out of date. Turning movement counts shall be conducted when schools are in session.
- V. If data is available, (e.g. peak hour factors, truck percentages) then those figures shall be used in the traffic analyses. Otherwise, default values in the Highway Capacity Manual shall be utilized unless specified by County staff.
- VI. Background traffic to be added to existing volumes should include traffic projected to be generated by any development or site plan that has preliminary approval and identified by County staff to have an impact on the study area. Annual background growth in traffic up to the project design year should be determined and a 1% growth rate per year should be utilized. Growth in traffic is described as a factor representative of travel growth outside the study area.

Transportation improvements to be used in the analysis must have 100% of the construction funds programmed in either a Town or current Charles County Capital Improvement Program or the current State Consolidated Transportation Program prior or concurrent to project design year.

3.3 TRIP GENERATION

The latest edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual will be used as the primary source of trip generation factors for all land uses. The fitted curve equation shall be used for all trip generation estimates except for land uses where the fitted curve equation is not available, or County staff recommends using an average rate instead of the fitted curve equation. Trip generation rates for many uses not specifically cited in the ITE Manual may be estimated by using other available sources of information, subject to approval by the Planning Director. All traffic studies will consider AM, PM, and Saturday peak hour trip generation, unless specified by County staff. . All traffic studies will consider AM and PM peak hour trip generation and analysis for both weekday and weekends.

In addition to peak hour trip generation, a computation of average daily traffic generation should also be made and included in the traffic impact study.

For commercial retail development only, the applicant may make reasonable assumptions regarding pass-by traffic. Pass-by percentages may be selected after consultation with the Planning Director or his/her designee and in accordance with the latest edition of the ITE, Trip Generation Manual. Pass-by percentages shall not be used to reduce parking or other on-site requirements, or to determine the threshold level for performing a full traffic impact study.

The Planning Director may approve the use of public transit or other transportation modes rather than vehicular traffic when performing traffic studies where available.

Site generated traffic volumes entering and exiting, shall be assigned to the roadway network within the impact area by the Applicant using the distribution factors based on the current directional distribution subject to approval by County staff. The Developer/Consultant may

conduct independent traffic studies necessary to justify trip distribution factors different from the ones established by the historical trends.

3.4 INTERSECTION ANALYSIS

Any intersection that has been identified in the preliminary analysis (PAPF) shall be analyzed using the methods identified in the following sections. Any intersection that is not controlled by at least a three-section traffic signal (red, yellow, green) is required to perform the unsignalized analysis. Any intersection that is controlled by at least a three-section traffic signal shall utilize the signalized intersection analysis only if the critical lane volume exceeds the thresholds noted in Section 2.1 of this document.

3.4.1 UNSIGNALIZED INTERSECTIONS

At any unsignalized intersection the procedures recommended in the latest edition of the Highway Capacity Manual (HCM) for analyzing such intersections should be employed. Unsignalized intersections make up the vast majority of at-grade junctions in any street system. Stop and yield signs are used to assign the right-of-way to one street at such intersections. This designation forces drivers on the controlled street to judgmentally select gaps in the major street flow through which to execute crossing or turning maneuvers.

The Highway Capacity Manual unsignalized intersection analysis is used to determine the reserve capacity of the conflicting movements as well as average total delay during the peak hour flow. The following table shall be used to determine the level of service at an unsignalized intersection:

TABLE 3.1
LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTIONS – TWO WAY STOP CONTROLLED

LEVEL OF SERVICE	CONTROL DELAY (Seconds/Vehicle)
A	≤ 10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	>25 and ≤ 35
E	>35 and ≤ 50
F	>50

Table 3.1 corresponds to Exhibit 20-2 in Volume 3 of the HCM. In the event that a new version of the Highway Capacity Manual is released, the updated table referencing this information shall be used.

Unsignalized intersections shall be determined to be inadequate if future traffic analyses result in intersection delay/level of service which drops below the designated levels of service as shown on the map provided in Appendix B of this manual, or if there is no reserve capacity in any movement in the future traffic condition. If negative capacity exists for the background analyses, then any degradation of the negative capacity (future traffic shows a greater negative number, e.g. -20 future vs -10 background) will be deemed as creating an inadequate condition. Reserve capacity is to be calculated by subtracting movement capacity minus the flow rate for each applicable movement.

Additional studies should be conducted to determine potential means to correct the deficiency. The type of study deemed appropriate should be determined after consultation with County staff.

If a traffic signal warrant analysis is deemed appropriate, the study must be conducted in accordance with the requirements set forth in the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD).

3.4.2 SIGNALIZED INTERSECTIONS

Signalized intersections shall be analyzed utilizing Critical Lane Volume (CLV) or the Highway Capacity Manual (Chapter 19), when required (See Section 2.1 of this manual), for determining its level of service. Capacity analysis of signalized intersections results in the computation of volume to capacity (v/c) ratios for individual movements and a composite v/c ratio for the sum of critical movements. The v/c ratio is the actual or projected rate of flow on a approach or designated group of lanes during a peak 15-minute interval divided by the capacity of the approach or designated group of lanes. Level of service is based on the average stopped delay per vehicle for various movements within the intersection. While v/c ratios affect delay, there are other parameters that more strongly affect it, such as the quality of progression, length of green phases, cycle lengths, and others.

The following level of service criteria for signalized intersections will be used:

TABLE 3.2
LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY (Seconds/Vehicle)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35

D	$> 35 \text{ and } \leq 55$
E	$> 55 \text{ and } \leq 80$
F	> 80

Table 3.2 corresponds to Exhibit 19-8 in Volume 3 of the 6th Edition of the Highway Capacity Manual (HCM). In the event that a new version of the Highway Capacity Manual is released, the updated table referencing this information shall be used.

Roadways controlled by a coordinated signal system should be analyzed using Synchro/SimTraffic or a similar industry standard programs to determine the adequacy of intersections. The TRANSYT-7F or Passer II-90 computer software program shall be utilized for the purpose of progression analysis. Intersections shall be analyzed for queuing, (i.e. queuing analysis to determine the required storage area needed for a left turn lane) if requested by County staff. The Maryland State Highway Administration queuing analysis method shall be utilized to determine the required storage area needed. In addition, 95th percentile and average queues from SimTraffic shall be utilized.

3.5 ROADWAY LINK ANALYSIS

When intersections within the study area operate at inadequate levels of service, roadway link analysis as defined by the latest edition of the HCM shall be necessary. Rated capacity for roadway links shall be determined using acceptable methods described in the latest edition of the Highway Capacity Manual.

The following information is required as inputs to the operational analysis procedure:

- I. Geometrics - refers to the physical roadway characteristics.
 - Design Speed - the maximum safe speed the road was designed or constructed that can be maintained over a specified section of highway
 - Lane Widths - the widths of the travel lane
 - Shoulder and Median Clearances - the distance of any object from the travel lane, such as curbs, poles, guardrails etc.
 - Grades and Lengths of Grades - Describes the slope of a section of Highway.
 - Type of Terrain - 3 general types of terrain: Level, Rolling, Mountainous
- II. Volumes
 - Existing traffic volume and the projected future volume
- III. Traffic Characteristics
 - Peak Hour Factor (PHF) - depicts the flow rates during the peak hour

- Percent Trucks - Percentage of total traffic comprised of trucks
- Percent Recreation Vehicles (RVs) - Percentage of total traffic comprised of Recreation vehicles
- Percent Buses - Percentage of total traffic comprised of Buses
- Driver Population - factors in users utilizing highway: commuter, Recreational, etc.

3.5.1 MULTI-LANE HIGHWAYS: LEVEL OF SERVICE CRITERIA

An operational analysis for a multi-lane highway will require input in terms of geometric conditions for an existing highway or projections of those for a future highway. These are analyzed to determine the existing or projected level of service and the approximate speed and density of the traffic stream. The multi-lane highway must also be classified as either divided or undivided and either rural or suburban.

Level of service (LOS) criteria for multi-lane highways is defined in terms of density. Density is a measure which quantifies the proximity to other vehicles in the traffic stream or passenger cars per mile per lane (pc/mi/ln). It expresses the degree of maneuverability within the traffic stream. Boundary values of density are given, as follows, for the various levels of service:

TABLE 3.4
LEVEL OF SERVICE CRITERIA
MULTI-LANE HIGHWAYS

LEVEL OF SERVICE	MAXIMUM DENSITY (pc/mi/ln)
A	≤ 11
B	> 11 and ≤ 18
C	> 18 and ≤ 26
D	> 26 and ≤ 35
E	> 35 and ≤ 45
F	Demand Exceeds Capacity or Density > 45

Complete LOS criteria are given in Chapter 12 (Exhibit 12-15) of the 6th Edition of the Highway Capacity Manual. In the event that a new version of the Highway Capacity Manual is released, the updated table referencing this information shall be used.

Level of Service criteria depends on the free-flow speed of the highway element being studied. A "highway element" can be an isolated geometric element, such as a curve or grade having a reduced design speed, or a series of such geometric elements that dominate the operation of a longer segment of highway.

3.5.2 TWO LANE HIGHWAYS: LEVEL OF SERVICE CRITERIA

Two lane highways may be defined as a two-lane roadway having one lane for use in each

direction. An operational analysis may be required to analyze the level of service on the two-lane roads when applicable, as required above in Section 3.5. The inputs will consist of existing traffic, roadway conditions or projected future conditions, and general terrain or specific grades. To perform a two-lane highway link analysis the study will follow the standards and methodology mentioned in the latest edition of the Highway Capacity Manual.

The Highway Capacity Manual analysis evaluates the potential delay due to the unavailability of vehicles to pass or overtake slower vehicles. Therefore, when there is a significant volume of vehicles on a roadway with little or no passing opportunities, there is a chance that some vehicles will experience a delay, due to slower vehicles. This type of situation could be labeled as a LOS "E" condition, which would require mitigation under existing conditions, even though the roadway is not operating at or near capacity. These analyses have illustrated that many of the two-lane roadways would need to be four-lanes to operate at acceptable levels of service. Therefore, two-lane highways shall be determined to be adequate if actual capacity does not exceed 80% of rated capacity as determined by the Highway Capacity Manual.

3.6 CAPITAL IMPROVEMENTS

Any project that is included in an adopted Capital Improvements Program of the State, Charles County, or an incorporated Town, may be considered when analyzing the adequacy of road facilities. The capacity associated with such an improvement may only be counted when the project is scheduled for completion prior or concurrent to project design year. If the road facilities are not adequate to serve the proposed development, and improvements are programmed that would address the needs of the proposed development, then the proposed development may not proceed until those improvements are scheduled to be in place.

3.7 IMPACTS OF APPROVED PRELIMINARY SUBDIVISION and SITE PLANS

In calculating the impact of a development proposal, all approved preliminary subdivisions and site plans must be considered. The applicant should consult with County staff to determine which approved subdivisions will have an impact on the roads associated with the development proposal. Only those approved preliminary subdivisions and site plans that directly impact the road facilities within the study area of the proposed development will need to be considered. This determination will be made formally as part of the Preliminary APF Analysis. The impact of these approved subdivisions is then incorporated into the background traffic volumes that are analyzed in the Traffic Study.

4.0 POLICY FOR DETERMINING ADEQUACY OF SCHOOLS

This document is intended to provide guidance in the application of the Adequate Public Facilities element of the Charles County Zoning Ordinance as it applies to school facilities. It sets forth the criteria to be used in combination with the Zoning Ordinance to determine the ability of existing school facilities to adequately accommodate the students projected to be generated by the proposed development.

I. PURPOSE

In order to provide for the orderly expansion of public school facilities and at the same time manage the county's growth in a manner consistent with the goals and objectives of the comprehensive

plan, this policy for the allocation of school capacity has been developed. The statutory authority and regulatory requirements, as specified in the Land Use Article of the Annotated Code of Maryland, and in Article XVI, Adequate Public Facilities Requirement, Charles County Zoning Ordinance, provide the basis for the establishment of a policy to allocate school capacity.

II. APPLICABILITY

This policy applies to all residential subdivisions and developments proposing dwelling units in the unincorporated areas of Charles County. This policy is not applicable to subdivisions or developments within the limits of any incorporated towns in the county.

III. ALLOCATION OF AVAILABLE CAPACITY

- A. An allocation shall be required for any residential project located within the unincorporated areas of Charles County, which is potentially capable of generating school students, as required in II. Applicability, above, and as required by the adequate public facilities requirements of the Charles County Zoning Ordinance. No plat of subdivision shall be approved by the County without School Allocations, either through the bulk allocations, School Adequate Public Facilities Eligibility List allocations, Development Rights and Responsibilities Agreement allocations, granting of allocations under the time limit provisions of section VI.C, or granting of allocations under the priority development project provisions of section VIII.
- B. The annual school capacity allocation committee, composed of the Charles County Commissioners and the Charles County Board of Education, and/or their designated representatives, will meet to decide on the appropriate allocations for the upcoming year. This committee will consider the following factors, as well as any other information deemed pertinent, in establishing the allocatable school capacity for the upcoming year:
 - 1. Current enrollments;
 - 2. Projected enrollments;
 - 3. Current capacities of individual schools;
 - 4. student yield for each dwelling type by school level;
 - 5. Capacity to be provided by any current Capital Improvement Program (CIP) projects;
 - 6. Additional capacity provided by the use of relocatables within the Board of Education's relocatable policy guidelines;
 - 7. Current district boundaries for school attendance and redistricting opportunities within the Board of Education's policy guidelines;
 - 8. Residential development and growth within the incorporated towns which will impact the enrollments at County schools;
 - 9. Number of lots from minor subdivisions recorded in previous year;
- C. With the exception of allocations granted to Priority Development Projects and those projects granted allocations under the time limit provisions of Section VI, allocations may be granted to a project only if school capacity current exists or is programmed to exist under the then applicable capital improvement projects program. Allocatable capacity will be based on 110% of state rated capacity in all schools, except where it is not feasible. School capacity must exist at all three school levels within the current school district attendance boundaries for which the board of education has determined the

students from the project will attend. All schools (elementary, middle and high) to which the students from the project attend must have capacity. When capacity is programmed to exist through an approved CIP project, allocations may be granted within the eighteen month period prior to the opening of the new school facility.

- D. Upon agreement on the amount of allocatable school capacity for the upcoming year, the County Commissioners shall publish a listing of the approved allocatable school capacity.
- E. The number of development units will be determined by applying the student generation yield factors to the dwelling unit type per school level.
- F. Residential school capacity allocations shall be granted in the order in which projects appear on the school capacity allocation eligibility list.
- G. The project allotments may be supplemented from unused allocations. In no case shall a project be eligible for an additional allocation prior to the Charles County Government first offering allocatable capacity to all eligible projects on the school capacity allocation eligibility list.
- H. A single development project may not receive more than fifty percent (50%) of the available allocations for a specific school zone until all other eligible development projects in the same school zones have declined their offer of the balance of available allocations.
- I. All valid preliminary subdivision plans shall be placed on the school capacity eligibility list in the order in which they receive approval from the Planning Commission. Site plans approved after the effective date of this policy shall be placed on the list in the order in which they receive approval from either the Charles County Planning Commission or the Department of Planning and Growth Management, whichever is applicable. If two or more projects receive preliminary approval on the same date, the order of position shall be determined by the date in which the projects were originally submitted for review.

Minor subdivisions that exceed five (5) total lots including the parent parcel shall be placed on the list according to their official submittal date to the Department of Planning and Growth Management. Subdivision proposals that create no more than five (5) lots since October 1992, the adoption of the APF provisions, may proceed to final plat without waiting on the school allocation eligibility list. This is consistent with the treatment of minor subdivisions which create no more than five (5) lots, including the parent parcel.
- J. Bulk reservations- A quantity of bulk reservations shall be set aside annually to provide for the approval of school APF minor subdivisions, as defined by this policy and lots recorded prior to the effective date of this policy. Although exempt from the requirement of having to be placed on the school capacity allocation eligibility list, the following projects will be subject to all other provisions of this policy.

- 1. Residential lots recorded after October 1992.

- 2. Multi-Family dwelling units building up to four (4) new units; however, multi-family buildings may not be phased such that four (4) units are approved with the balance of

the building being unfinished. Where a habitable residential structure(s) exist(s) on the lot, parcel or property and a building permit is submitted to replace or improve the existing structure(s), then that unit will not be counted toward the 4 new units and will not be deducted from the bulk allocation. The determination of habitable structure will be as set forth in the policy and procedure for excise tax exemption adopted 8/24/2005.

- K. The Director of Planning and Growth Management, or the Director's designee, is authorized to approve allocations for school capacity in conformance with this policy, and in the manner established in Section VII and Section VIII.

IV. TRANSITION PROVISION

- A. Any lot recorded prior to the effective date of this policy shall be considered as part of the bulk reservation allocation.

V. TRANSFERS OF ALLOCATION

- A. An approved school capacity allocation may be transferred from one developer or builder to another developer or builder for the same number of units in the same project, subject to the same conditions and time limit as the original allocation and subject to approval as explained below. A school capacity allocation is granted for a specific site plan or subdivision and may not be transferred to another project.

B. All requests for a transfer of allocation shall be made in writing to the Director of Planning and Growth Management with reasons given for the need for a transfer. The Charles County Commissioners shall set appropriate fees for the transfer of school capacity allocations. The Charles County Commissioners may elect to deny such a request for a transfer of allocation if such request is deemed to be not in the best interest of the health, safety, welfare, or convenience of the citizens of Charles County. All such requests shall be made subject to the provisions of Section V. A. above.

- C. A grant of a special exception, zoning reclassification or change of use of any project does not entitle a person, corporation or public entity to an allocation, or an increase in a previous allocation, of school capacity. If a grant of special exception, zoning reclassification or change of use within a part of any project reduces the school capacity needed for that project, the excess allocated capacity may be transferred within the remainder of that project but may not be transferred to another project. This excess allocated capacity, if not transferred within a specific project, shall be duly allocated to the next project in line on the priority listing. If a grant of special exception, zoning reclassification or change of use within a part of any project increases the school capacity needed for that project, an "application for School Capacity Allocation" must be submitted and approved in accordance with these regulations.

In cases where a Planned Development Zone (PDZ) is applied to an approved preliminary plan, the preliminary plan may maintain the position on the school eligibility list as long as the preliminary plan remains valid. In cases where a preliminary plan of subdivision is reconfigured to add more lots, the portion of the project with the increased lots will be treated separately with a new approval date. The additional lots will be placed

on the school allocation eligibility list based on the approval date of the revised preliminary plan. The additional lots can be shown on the revised preliminary plan of subdivision; however, they need to be clearly identified.

VI. TIME LIMIT ON ALLOCATIONS

- A. Whenever preliminary plans, site plans or other Planning Commission reviews are part of a project, an allocation will not be granted until the plans have been (1) approved by the Planning Commission, as in the case of preliminary plans or other projects required to be approved by the Planning Commission, or (2) administratively approved by the Director of Planning and Growth Management, as in the case of site plans. Any allocation granted after the adoption of this policy shall be valid for a period of sixty (60) months from the date granted. An allocation for school capacity will automatically become void if the preliminary plan or site plan with which it is associated becomes invalid for any reason.
- B. Failure of the applicant (or his successor or assignee) to record the lots for which an allocation has been granted, within sixty (60) months of the date of the grant of the allocation, will result in the forfeiture of the allocation and 50% of the deposit. In the case of a residential multi-family apartment / condominium site plan, an issued development services permit must be obtained within sixty (60) months of the date of the grant of the allocation. Forfeiture of allocations under these circumstances are not reoffered to projects on the waiting list since the school capacity for individual schools is set each year by the student enrollment counts.
- C. Development projects that have remained on the school allocation eligibility waiting list shall be granted school allocations no later than six (6) years from their date of initial/original approval of the preliminary subdivision plan and/or site development plan. On the sixth (6th) anniversary date of the initial/original preliminary subdivision plan and/or site development plan, the development project shall be granted fifty-percent (50%) of the remaining allocations for the subject project based on the school allocation eligibility waiting list. On the seventh (7th) anniversary of the initial/original development project, the remaining allocations shall be granted. This section does not apply to portions of development projects that have a valid Development Rights and Responsibilities Agreement (DRRA).
- D. Development projects that have been on the school allocation eligibility waiting list for at least six (6) years as of December 15, 2020 shall be subject to the following transition provisions:
 - 1. Development projects that meet this criteria shall be granted twenty-five percent (25%) of their remaining allocations from the school capacity eligibility waiting list each year for four (4) consecutive years.
 - 2. In no circumstance will a development project receive greater than sixty (60) allocations per year under this provision.
 - 3. Any development projects which meet this criterion, and which have eighty (80) units or less awaiting school allocations will be granted no fewer than twenty (20) school

allocations per year.

4. If at any point ten (10) or fewer allocations remain on the school capacity eligibility waiting list for a given development project, the balance shall be granted to the development project.
5. Upon the effective date of this amendment (December 15, 2020), and in the case where the annual school allocation cycle meeting has occurred, the planning director will issue allocations to eligible development projects consistent with the criteria of this section.
6. These allocations will be valid not to exceed five (5) years from the date of granting.
7. Development projects taking advantage of this provision shall be awarded school allocations in ascending order based upon the original preliminary plan and/or site plan approval date.
8. The Director of Planning and Growth Management shall grant allocations not to exceed 250 per year under this provision.

VII. ADMINISTRATIVE PROCEDURES FOR THE ALLOCATION OF AVAILABLE SCHOOL CAPACITY

- A. Prior to seeking approval for a school capacity allocation, the applicant shall have obtained preliminary plan and/or site plan approval, or, in the case of APF school minor subdivisions shall have submitted their final plats, in accordance with the requirements above and be placed on the school capacity allocation eligibility list. If two or more projects receive preliminary approval on the same date, the order of position shall be determined by the order in which the projects were originally submitted for review.
- B. Projects may seek school capacity allocation only from the individual schools to which the students they generate will attend. However, if a project's location is split between more than one school attendance zone, the following provisions shall apply:
 1. Projects containing 100 lots or less - the school attendance zone in which the project may apply for and receive allocation will be decided by where the majority of the lots approved for the preliminary or site plan (not the majority of the land area) are located. Allocation for all lots in the project will be granted from the district in which the majority of the lots are located. For example, if the project contains 96 lots and 56 are located in a certain school attendance zone, all allocations will be granted from that zone.
 2. Projects greater than 100 lots - school capacity allocation must be granted for each lot shown on the approved preliminary or site plan only from the school attendance zone in which the lots are located.
- C. Within 30 days of the effective date of this policy, the Department of Planning and Growth Management shall notify the owners of the residential projects on the school capacity allocation eligibility list of their opportunity to apply for allocations.

D. Application for school capacity shall require the submittal of an "Application for School Capacity Allocation" provided by the Charles County Department of Planning and Growth Management. These applications shall include, but not be limited to, the following information:

1. Location;
2. Specific address, plus location, description and tax map and parcel numbers for the subject proper, school impact fee districts for elementary, middle and high school;
3. Name, address and telephone number of developer, builder and owner;
4. Tax identification number;
5. Type of project;
6. Total number of lots or units to be developed, and type(s) of units;
7. Number of lots current application is requesting approval for
8. Date of preliminary or site plan approval;
9. Phasing plan or number of units to be constructed per year;
10. Date application filed;
11. Signature of owner and developer, builder;
12. A block "for office use only", stating the action taken (granted, conditioned, denied, amount of allocation, number of units allocated, signature of acting official, time limitations, time extensions or other changes).

E. The Department of Planning and Growth Management shall notify all applicants within thirty (30) calendar days after the application closing date what action has been taken on the applications.

F. The annual school capacity allocation committee shall decide on the number of bulk reservations which shall be set aside each year.

Within sixty (60) months of the date of the grant of an allocation, the applicant (or successor or assignee) shall record all lots for which allocation has been granted on a final plat of subdivision or, in the case of a site plan, shall have their development services permit issued for all portions of the project for which allocation has been granted. Failure to do so shall cause a forfeiture of the allocation and 50% of the deposit. Development projects that had valid school allocations at the time of the implementation of the Watershed Conservation District (WCD) Zone shall be entitled to a full refund under this policy.

G. No application for allocation on a project will be accepted on a project that has had a previous allocation forfeited until the next allocation cycle following the forfeiture.

H. When an allocation is forfeited, by a project owner through the decline of an offer, the resultant number of lots or units shall be offered to the next eligible project on the school allocation waiting list during the same allocation cycle.

I. If an application for allocation of units within a project does not cover all units within the project, the remaining units shall retain the same priority as the original project for allocations in subsequent years.

J. Approval of an allocation for a portion of a site plan or subdivision project in no way assures the future availability of school capacity on demand for lots or units other than

those with approved allocations.

VIII. PRIORITY DEVELOPMENT PROJECTS

- A. This section determines the applicable criteria and regulations for Priority Development Projects (PDP). These projects shall be exempt from all other provisions of Section 4.0.
- B. The Director of Planning and Growth Management shall grant allocations equivalent not to exceed 650 per year under this provision.
- C. These allocations will be offered to development projects that are located within the areas corresponding to the Comprehensive Plan's Development District or the land zoned Waterfront Planned Community (WPC), provided that at least one of the following criteria is met (C.i, C.ii, or C.iii) and a Development Agreement is executed with Charles County and includes a build-out schedule. In the case of a Mixed-Use development, the build-out schedule must include a proportional build-out/phasing plan of commercial and residential development phases throughout the project. The residential development may not be granted allocations until each sequential commercial phase has commenced construction (completion of foundation or footings). Priority Development Projects must include one (1) of the following:
 - i. The development project must be a Mixed-Use development
 - ii. The development project must be a minimum of twenty-five percent (25%) affordable / workforce housing
 - iii. The development project must be located within either the WC or AUC zone within the Waldorf Urban Redevelopment Corridor (WURC)
- D. Development projects which meet the above criteria, may file an application that is provided by the Charles County Department of Planning and Growth Management. The application may be filed when the development project has recorded a Development Agreement, which includes a build-out schedule, and meets one or more of the following criteria:
 - i. The development project has obtained preliminary subdivision plan approval.
 - ii. The development project has obtained site development plan approval.
 - iii. The development project has obtained master plan approval.
- E. Development projects that have successfully submitted a PDP Allocation Application will be granted school allocations on a first come first serve basis.
 - i. The allocations will be granted for the year in which they are to be utilized, consistent with the build-out schedule within the subject project's executed Development Agreement. Allocations are considered to be utilized upon issuance of a valid building permit for multi-family projects or the recording of plats for

single family attached or detached homes.

- ii. PDP allocations will be granted on a first come first serve basis.
- iii. In the case of two (2) or more Priority Development Projects seeking school allocations for the same school allocation year, allocations will be offered in the order of the earliest date of approval between preliminary subdivision plans, site development plans, or master plans.

F. PDP school allocations will remain valid as long as the development project is adhering to the executed Development Agreement and build-out schedule.

- i. If the development project progress falls behind more than two (2) years on their build-out schedule, the Development Agreement will become void.
- ii. The development project may revise the Development Agreement and build-out schedule at any time to maintain the PDP allocation status. Any request to revise the Development Agreement must be made to the Director of Planning and Growth Management in writing, prior to the end of the 2-year grace period allowed under F.i above.

IX. SEVERABILITY

If any section, subsection, sentence, phrase, or portion of these regulations is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and said holding shall not affect the validity of the remaining portion of these regulations; it being the intent of the County Commissioners of Charles County that these regulations remain in effect, notwithstanding the invalidity of any section, subsection, sentence, clause, phrase or portion thereof.

5.0 POLICY FOR DETERMINING ADEQUACY OF GROUNDWATER SUPPLY

This document is intended to provide guidance in the application of the Adequate Public Facilities element of the Charles County Zoning Ordinance as it applies to water supply. It sets forth the criteria to be used in combination with the Zoning Ordinance to determine the ability of existing ground water supplies and facilities to accommodate the demands projected to be generated by the proposed development.

5.1 PUBLIC SYSTEMS

If a development is to be connected to the public water system, then the adequacy of the system which will provide the water to the site is the concern and then such issues as line size, capacity, looping, fire protection, and ultimate system design will be considered in the project design and in the review of the engineering drawings.

5.2 GROUND WATER

If a development is proposed to utilize groundwater from wells, then a Ground Water Appropriation Permit (GAP) shall be required prior to recordation of the final site plan. The

applicant shall also demonstrate that there is no adverse impact on adjacent properties. In practice, this shall require that in appropriating groundwater, the applicant will demonstrate in any area where there has been a problem with any existing wells, that this appropriation would not affect the water levels of wells in that aquifer. The GAP, for a development will be approved based on the 80% safe yield management level as permitted by the Maryland Department of Natural Resources, Water Rights Division. The 80% safe yield is generally considered to be the quantity of water that can be withdrawn indefinitely without lowering the water levels to uneconomical limits and without impairing the quality of the water. In determining the rates of withdrawal from a groundwater reservoir, the limiting factors are rates of recharge, the transmissibility (or productivity) of the aquifer, and its susceptibility to contamination.

5.3 FIRE SUPPRESSION FOR THE RURAL AREAS

I. Subdivision Design Criteria

Residential preliminary major subdivision plans located in a W6 Water Service Area will be required to provide adequate fire suppression, as per Section 261 of the Zoning Ordinance. The level of service for fire suppression is directly related to the size of the development. If adequate water sources are not found to exist, then the developer must mitigate.

II. Determination of Acceptable Water Source

For locations where an off-site water source is acceptable, the developer may contact existing landowners (private party, County, State, or Federal Government) with ponds or streams meeting the requirements and negotiate access to the water source. The developer may need to develop all weather access to the water source. The distance from the existing water source to the project will be scaled off a map to check that the source is within the four (4) mile round trip distance. This distance, from the water source to the project, is driving distance and not straight-line distance.

III. Alternative Mitigation Options

1. If the existing water source does not have all weather access, a dry hydrant may be installed to provide all weather access if it can draw at least 1,000 gallons per minute (gpm) of flow for a minimum duration of thirty (30) minutes. This could be applied to either streams or ponds which are easily accessible from a County or State road.
2. The developer may use existing water sources or develop new sources such as designing a pond with a dry hydrant or installing an underground storage tank.
3. A storage tank must be capable of holding 30,000 gallons and a suitable method for replenishment of the tank must be approved by the Planning Commission.
4. The Planning Commission can approve alternative but equal mitigation for fire suppression, as a condition of the adequate public facilities findings for a

residential subdivision.

IV. General Regulations for Existing Water Source or Mitigation Options

1. The developer must convey a perpetual easement to the County or dedicate the easement to the fire department, for water sources within the subdivision or elsewhere. The easement is for access to the water source, either existing or proposed. This easement will be required at the time of approval of the final plat(s) of subdivision.
2. All water sources, whether on-site or off-site, must be approved by the County and coordinated with the "first due" fire department prior to final design of the storage tank or dry hydrant assembly. This approval will be part of the preliminary subdivision review process and will be approved by all parties before being presented to the Planning Commission.

6.0 APFS SUBMITTAL

At the time of site plan or subdivision submittal, an APFS shall be submitted and a fee paid for its review. The report shall evaluate the proposed development's impact on the public facilities in the area. It shall include background information regarding the proposed development, its location, and the condition of the existing public facilities in the area. It shall include the amount of traffic that the development will likely generate. The impact of the demands on the road and water supply facilities must be evaluated and where inadequacies exist that will be exacerbated by the proposal, or will be created by the proposed development, a mitigation proposal will be submitted.

6.1 ADEQUACY

A facility is adequate if the facility will not be utilized beyond its ability to function. This determination varies depending on the type of facility being analyzed.

If a Preliminary APF Analysis report can demonstrate that all the following are true, it will be considered sufficient, and would be granted an exemption from performing a full study of the impacted facility.

- I. For roads: The development will generate 34 peak hour trips or fewer.
- II. For ground water supply: The development proposed will be connecting to existing public water system.
- III. For all facilities: If it demonstrates that the existing facilities, considering all other approved developments, are adequate or improvements are currently funded by the State, County, or Town which will make the facility adequate.

6.2 PHASING

A project can be phased in sections. This is an acceptable method of delaying the build-out of a project so that it coincides with the improvement of the public facilities. This can be accomplished by conditioning the preliminary approval such that final plat approval will only occur after specific

milestones or dates are reached. Phasing to lessen the degree of inadequacy is not acceptable without some other form of mitigation.

7.0 MITIGATION

If the initial computation of the impact on a public facility, which is subject to the Adequate Public Facilities element of the Charles County Zoning Ordinance, results in the finding of inadequacy, then the applicant must prepare a mitigation proposal. A fee is paid when a mitigation proposal is submitted for review. See current fee schedule. The submittal is then reviewed by the appropriate agencies and comments or further requests are provided to the applicant. If the mitigation proposal requires a mitigation program agreement, then the applicant shall provide such a document. It is then forwarded to the County Attorney for review of form and content. Finally, a staff report is prepared for Planning Commission consideration of the proposal.

In the case of traffic, mitigation shall be proposed when the total condition causes the facility to become inadequate as defined by Appendix B in the APFM or the volume to capacity ratio degrades by 0.01 or more when compared to the background condition. The Developer shall propose mitigation for the degradation of the facility (intersection and/or road link) and present a mitigation proposal to the Planning Commission that demonstrates how the chosen physical improvement option mitigates the degradation that was caused by the development. If the Planning Commission deems that the required physical mitigation is excessive for the development, the following are alternative mitigation options that may then be considered, and must be approved by the Planning Commission:

- Fee in lieu
- Alternative off-site improvements
- Participation in a Public-Private Partnership (PPP)

Fees in lieu shall only be utilized when the Planning Commission deems that the physical improvement is not reasonable for the scale of the development. When this occurs, the developer shall provide a detailed cost-estimate of the required physical improvements and submit the estimate for County staff review. A mitigation agreement shall be drafted that outlines that rationale for the fee in lieu that includes how the calculation was achieved, the timing of the payment, and the addition of CPI if the project is going to take multiple years to complete.

Alternative off-site improvements may also be considered when the Planning Commission deems that physical mitigation at the affected facility is excessive for the development. Off-site improvements shall only be proposed to other facilities that were studied in the same Traffic Impact Study (TIS). When this occurs, the Developer must complete an off-site improvement that is greater than the pro-rata share of the originally required physical improvements to mitigate the impacts of the development project.

At the County's discretion, the Developer and the County may also enter in a Public-Private Partnership (PPP). For the purposes of APF mitigation, a PPP can be one or more developers entering into a mitigation agreement to share costs of a physical improvement that benefits the public road or intersection impacted by the proposed development project(s). This option shall only be available when there is a proposed State or County Capital Project for the impacted intersection or road link. The developer shall submit a detailed cost estimate for the physical improvements and a proposed apportionment of the cost-share among the parties involved. If acceptable to the County, the PPP mitigation proposal must be presented to the Planning

Commission for approval. If approved, a mitigation agreement shall be drafted that outlines the terms and conditions of the PPP that includes how the calculation was achieved, the timing of the developer(s) payment(s), and the addition of Consumer Price Index (CPI) if the project is going to take multiple years to complete.

When roads are determined to require mitigation, the proposal must at least maintain the Background Condition level of service where appropriate. Often, the traffic study which is done as part of the APFS will describe what improvements would be necessary to meet these criteria. This is not to say that the applicant is committed to only considering those improvements described in the study, however, it does provide a point of reference for negotiation. The mitigation proposal shall include the type or types of mitigation, the methods, and schedules including project phasing, if applicable, for the implementation of the mitigation program.

The mitigation program shall be contained in a legal, binding, adequate public facilities agreement between the applicant and the County, which has been approved for form and content by the County Attorney.

A mitigation program shall also run with the land. The deed or title for a property shall contain references to the mitigation program.

8.0 PLANNING COMMISSION CONSIDERATION

The Planning Commission shall review the Adequate Public Facilities Study and other information submitted by the applicant to determine if the level of infrastructure exists or will exist to meet the standards of the Charles County Zoning Ordinance and whether the approval of the proposed development is in the public interest. This review shall occur for any project which is subject to the specific provisions of each section of Article XII of the Zoning Ordinance.

The Planning Commission shall find that: 1) the public facilities are adequate and grant approval of the APFS, 2) find that they are inadequate, and approve the mitigation, or 3) find that they are inadequate and do not find the mitigation acceptable, in which case the subdivision or site plan is not approved.

If the Planning Commission determines that the public facilities are not adequate, they may disapprove the project or require mitigation from an applicant to assure that there exists adequate public facilities consistent with the County standards.

9.0 ADEQUATE PUBLIC FACILITIES MANUAL

This document is intended to establish specific standards, criteria, and procedures for use in determining the adequacy of the public facilities required to support and service any proposed subdivision or development. This manual is adopted by the County Commissioners after public hearings have been held in accordance with the Charles County Zoning Ordinance provisions.

The Commissioners shall consider any proposed changes to this manual on at least a bi-annual basis. Any request for revision should be submitted in writing to the Zoning Officer in accordance with the provisions for a Zoning Ordinance text amendment.

APPENDIX A: DEFINITIONS

Adequate Road - Road(s) segment determined to be adequate for the additional traffic generated by a proposed development, based on actual measurements and traffic engineering studies.

ADT - Average Daily Traffic. Two-way volume.

Affordable / Workforce Housing – For purposes of the Charles County School Allocation Policy, affordable / workforce housing shall be defined as development projects that contain at least twenty-five percent (25%) of the housing units that are affordable to households earning eighty percent (80%) or less of the Average Family Income (AFI) for Charles County.

Allocatable School Capacity - The discrete amount of public-school capacity in each high school district, available for allocation. A new listing of the allocatable school capacity shall be made available each year and shall be used to allocate school capacity for the period of one year.

Allocation - The granting of an allocation of school capacity is an assurance of the availability of public school capacity for the students generated by the proposed residential dwelling units from the county for the time period specified in this policy, when such capacity is requested and allotted in conformance with the procedures outlined in this policy.

APF - The adopted Adequate Public Facilities element of the Charles County Zoning Ordinance effective October 1, 1992, and any revision thereof.

APFS - Adequate Public Facilities Study. The complete analysis of public facilities that must be submitted with preliminary subdivision or site plan submittals.

APF School Minor Subdivisions – Residential subdivisions proposing the creation of four (4) or less dwelling units or those projects proposing the creation of FOUR (4) or less dwelling units. The parent parcel retains one (1) development right in addition to the proposed subdivided lots, not to exceed five (5) total lots. The definition of minor subdivisions for the purposes of this policy shall not be confused with the definition of a minor subdivision as defined by the Charles County Subdivision Regulations. Subdivisions proposing the creation of six (6) or seven (7) lots shall not be considered a minor subdivision under this policy.

BOE - The Board of Education for Charles County.

Build-Out Schedule: A timeline which describes the unit type and unit count for each phase of development and specifies when residential building construction will begin.

Capacity - Maximum number of vehicles which can pass a give point during a one-hour period under prevailing conditions. Computed using methods of critical lane volume technique and/or Highway Capacity Manual method, (modified).

Consultant - Architect, Civil Engineer, Traffic Engineer, Land Surveyor or other professional retained by the developer to act on behalf of or perform various professional assignments to obtain development approval.

Developer - Any individual commencing proceedings to affect a subdivision or development of land for himself or another.

Development - Consisting of new subdivisions and site plans for new construction received for approval by the Charles County Planning Commission after the effective date of the ordinance.

DHV - Design Hourly Volume.

Final Plat - The official division of land approved by the department and recorded in the land records of Charles County. It is the formal plat prepared for legal recordation of land subdivision, easements, buffers, or other matters of real property ownership or responsibilities.

Floor Area - The total area of a building measured by taking the outside dimensions of the building at each floor level intended for occupancy or storage.

Horizontal Sight Distance - the length of roadway ahead of any object in the roadway, of specified height, visible to the driver when negotiating a horizontal curve.

Intersection - The crossing of two or more roads at the same elevation.

LOS - Level of Service. A set of rating conditions describing the ability of a road network to handle traffic efficiently.

Mitigation of Impacts - Steps taken to correct adverse effects of proposed development to the levels or requirements established in the policy.

Mixed-Use Development - Mixed-Use Development is a development that 1) provides three or more significant revenue-producing uses (such as retail/entertainment, office, residential, hotel, and/or civic/cultural/recreation), 2) fosters integration, density, and compatibility of land uses, and 3) creates a walkable community with uninterrupted pedestrian connections. (citation: urban land institute's mixed-use development handbook)

Original Tract of Land - A parcel of real estate un-subdivided as of the effective date of the APFO (October 1, 1992).

Plat - A map, plan, chart or drawing indicating the subdivision or re-subdivision of land filed or intended to be filed for the record.

Preliminary Consultation - A meeting with the Planning Staff prior to submittal of a subdivision plat or site plan, to determine preliminary requirements and development criteria required by the County.

Preliminary Subdivision Plan Approval - Approval of a preliminary plan of subdivision, or a portion thereof, by the Charles County Planning Commission. Approval of a single phase or portion of a project by the Planning Commission shall not constitute approval of the plan in its entirety but only of that phase or portion.

Project - A residential development being proposed on a preliminary plan of subdivision, a final plat, or a site plan, or a distinctly identifiable phase or portion of that development in accordance with the policies of the Charles County Government.

Road - Public right-of-way, intended for vehicular traffic, including freeways, expressway, arterials, parkways, thoroughfares, collector streets, local streets, cul-de-sacs, marginal access roads, avenues, boulevards, lanes and other public ways.

Roadway Link - Segment of road between intersecting roads which have traffic control devices which interrupt traffic flow.

Road Width - Measured width of a road from edge of usable pavement to edge of usable pavement.

School Capacity Allocation Eligibility List - Listing of approved residential development projects, consisting of either preliminary subdivision plans, minor subdivisions creating four (4) or more lots, or site development plans. Placement on the school capacity allocation eligibility list does not guarantee the availability of school capacity for the students generated by the proposed residential dwelling units.

Site Plan Approval - Administrative approval of a site plan by the Director of Planning and Growth Management, or, as in the case of a proposed residential use in a Planned Unit Development (PUD), Waterfront Planned Community Zone (WPC) or any zoning approval with a special condition requiring approval, then action by the Charles County Planning Commission shall constitute approval of the site plan.

Trip Distribution - Method of assigning trips to road network based on projected travel origins and destinations.

Trip Generation - Analytical process that provides the relationship between land use and vehicle trip production. A one-way movement.

Zoning Officer - Director of Planning and Growth Management or a person duly authorized by the County Administrator shall be the Zoning Officer. Zoning Officer shall have primary responsibility for the administration and enforcement of this ordinance and the established guidelines.

Zoning Permit (also known as Building Permit) - Official document issued by the Department of Planning and Growth Management which grants legal permission to start construction of a building project.

APPENDIX B: COUNTY LEVEL OF SERVICE (LOS) MAP

