

ADEQUATE PUBLIC FACILITIES ORDINANCE

SYNTHESIS REPORT

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Town of Huntersville, North Carolina

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EXECUTIVE SUMMARY

Pursuant to Task 1.9 of the Scope of Services, we have prepared this “Synthesis Report” in support of the Town of Huntersville Adequate Public Facilities Ordinance (APFO). This Report summarizes the findings made during Phase 1 of the APFO Project, the “Analysis and Technical Documentation for Adequate Public Facilities Ordinance,” and sets forth the methodology that supports the APFO, prepared during Phase 2, and its implementation.

Of the nine (9) facilities analyzed, three (3) were recommended for inclusion in the APFO: parks and recreation, law enforcement, and fire protection facilities. We also have developed a framework for ensuring that transportation impacts also are addressed as new development occurs. This will be accomplished through a separate Traffic Impact Assessment ordinance.

Phase 1 involved extensive data collection, analysis, and interaction with various Town, County, and other governmental agencies to develop reasonable and supportable level of service standards and a methodology tailored to Huntersville’s unique circumstances. For example, during Phase 1, we worked with the Town Parks and Recreation Department to develop a level of service standard for both park land acreage and indoor recreational facilities that properly allocates existing and planned improvements between the current population; approved, unbuilt developments (the “pipeline”); and future residents. Similar steps have been undertaken with the Police Department and the Huntersville/Craighead Volunteer Fire District and the Mecklenburg County Fire Marshall.

Of the three (3) facilities to be included in the APFO, none is deficient at present, based on the recommended level of service (LOS) standards. In other words, existing and planned facilities are adequate to serve the current population, one year of approved, yet unbuilt development, and some amount of new development that will be subject to the APFO. The following table sets forth the recommended adopted level of service standards and the approximate capacity remaining to serve new development proposed after the effective date of the APFO.

Capacity Baseline Overview

Facility Category	Facility Type	Remaining Capacity & Development Potential		
		<u>COLUMN 1</u> Adopted LOS (per 1,000)	<u>COLUMN 2</u> Remaining Facility Capacity	<u>COLUMN 3</u> Development Potential (ERUs)
Fire Protection	Fire Vehicles (#)	0.23	.35	1,333
	Fire Station (sq. ft.)	445	6,721	13,296
Law Enforcement	Police Vehicles (#)	1.91	10.5	5,430
	Police Station (sq. ft.)	171	508	2,923
Parks & Recreation	Gyms (sq. ft.)	710	6,110	3,379
	Parks (acres)	6.41	88	5,370

Column 1 sets out the level of service standard upon which the capacity analysis is based. It should be noted that the LOS standards here are *population*-based (per 1,000 population), consistent with standards typically used by professionals providing and planning for police, fire, and parks facilities. However, the “Capacity Baseline Assessment” set forth in Exhibit A-1 and the APF Schedule referenced in the APFO, are based on demand allocation factors by land use type. This methodology is explained in detail in the “Background” section of the Report.

Column 2 above estimates the capacity of existing and planned public facilities available to accommodate development under the APFO. For example, based on the Adopted LOS standard, there currently exist about 6,721 square feet of fire station capacity that can accommodate development proposed after the effective date of the APFO. The “Capacity Baseline Assessment” set forth in Exhibit A-1 also shows a reservation of facility capacity for one year of projected population growth, based on an analysis of development patterns and trends. This allocation is for reference and planning purposes only and Town procedures actually will track this pre-approved development as it occurs.

Based on the remaining facilities capacity described in Column 2, **Column 3** estimates the number of additional “equivalent residential units¹” (ERUs) that could be developed without exceeding the recommended Adopted LOS standards, by facility.

It is important to note that, as is explained in the Report, these estimates include a reservation of capacity for some development which was approved *prior to* the effective date of the APFO, but which will impact public facilities *after* the effective date. Often referred to as “the pipeline,” this reservation of capacity is referred to here and in the APFO as “Committed Capacity.” Additional facilities capacity also may have to be provided by the Town in order to accommodate this demand that was approved prior to the effective date of the APFO.

Finally, please note that the “Capacity Baseline Assessment” set forth in Exhibit A-1 and the APF Schedule referenced in the APFO allocate development potential between residential and non-residential land uses, as well as in total, through the use of the ERU standard. The potential ERUs are estimates only, but are intended to illustrate the approximate capacity of current facilities allocated between residential and non-residential, based on past land use trends.

¹ An equivalent residential unit (ERU) is used to express equivalent levels of service for different land uses. The ERU is a standardized measure equal to one single-family residential unit.

BACKGROUND

Initial tasks involved the collection of extensive data and meetings with Town service providers for nine (9) public facilities that are required to serve new residential and nonresidential growth in Huntersville (Tasks 1.1-1.3, Scope of Services). Of those nine facilities, we recommended that three (3) were appropriate for inclusion in an APFO: parks and recreation, law enforcement, and fire protection. We further recommended that the Town augment its existing zoning and subdivision regulations to address transportation facilities impacts through a traffic impact assessment (TIA) process. These recommendations were prepared as part of Task 1.4, Scope of Services and a TIA was prepared for the Town.

The next task was to identify appropriate level of service standards, impact areas, and procedural requirements for each of the three facilities to be included in the APFO. Our initial recommendations with respect to these three areas were set forth in Tasks 1.5 – 1.7. Key decision points related to a proposed TIA were set forth in a separate memorandum to staff. Finally, the capacity baselines for the three relevant facilities were set forth in a final preliminary memorandum, pursuant to Task 1.8.

Based on staff comments and discussion related to previously-issued memoranda for the tasks described above, this Report sets forth a recommended approach to an APF Ordinance for Huntersville. The data, growth trends, and capital improvements relied upon here should be updated regularly by the Town to ensure the continued validity of the APF Ordinance.

WHAT IS AN APFO?

It is helpful to remind the reader of what is meant by “APFO.” APFOs simply formalize the Town’s assessment, prior to development approval, of whether key public facilities will have sufficient capacity to serve new development before it occurs. A court in Florida recently noted that the purpose of that state’s APF requirements (known in Florida as “concurrency”) was to “encourage communities to anticipate development and build the infrastructure before development, rather than allowing it to lag behind development.” See Save Our Septic Systems Comm., Inc. v. Sarasota County, 2007 WL 1223845 (April 27, 2007).

This “formalized” procedure is important because it gives the Town a competent basis for making development approval decisions and it provides developers a consistent and transparent methodology for assessing where and when facilities will be adequate to accommodate

additional development. It is important to note that the Town's APFO will address capital capacity only, not personnel and operational costs, which also are increased as new development occurs.

WHAT IS THE "CAPITAL IMPROVEMENT PLAN?"

The capital improvement plan, or "CIP," is an essential component of any planning program and is of particular importance in the APFO context. The CIPs of the Town and the Huntersville/Craighead Fire District should include those capital improvements needed to accommodate projected residential and non-residential development. There currently are CIPs for each of the three facilities that will be subject to the APFO. For each of the three facilities, there are capital improvements planned to address some amount of projected growth. These are described in Exhibits B-D and should be incorporated into the Town's and fire district's CIPs and budgets during the next update and used as a basis for implementing the APFO during its initial stages.

It is important that the Town and fire district maintain CIPs for each facility subject to the APFO and include within the CIPs sufficient improvements to maintain the LOS standards upon which the APF methodology is based. These CIPs should reflect all improvements that contribute to the LOS, regardless of whether they are provided directly by the Town or by other agencies or parties, including developers.

Also, this analysis establishes an important relationship between previously-approved development applications (the "pipeline"), growth projections, and future facility needs and the importance of establishing a comprehensive growth management system that coordinates development approvals with community need. Specifically, the Town's 2020 population (including the ETJ) is projected to be over 69,500 persons, an increase of over 25,000 from 2006, and the residential pipeline (based on already approved single- and multi-family dwellings) is projected to increase by over 7,600 dwelling units. This inventory of total lots and units will accommodate over 20,000 persons. Therefore, the supply of currently-approved pipeline units will accommodate more than 75% of anticipated population needs through 2020.

In sum, under the APFO framework, the Town's capital improvement planning and budgeting is tied to its growth policy. Changes to the CIP will have a direct bearing on the Town's ability to accommodate additional growth. To that end, the APFO includes a requirement that an

annual review and update be conducted at the beginning of each fiscal year, based on the most recently adopted budget and CIPs.

WHAT ARE “LEVEL OF SERVICE” STANDARDS?

Level of Service (LOS) standards describe *how much* of a particular facility is or will be provided to serve the population of Huntersville. These standards are essential elements of APFOs because they provide a measure of adequacy that can be used to evaluate each new development. A population-based level of service, expressed as the amount of facility or service per population, is a generally accepted methodology to project future facility and service demand.² The generally accepted ‘rule of thumb’ assumes that a community will maintain its proportionate share of non-residential growth (and population-employment ratio). Non-residential uses generally occur in proportion to existing residential uses, and residential growth in an area is an indicator of future non-residential growth (*e.g.* when developers ‘count rooftops’). Huntersville validates this model.³

Using Population-Based LOS To Project Total Facility Demand

To determine the LOS per 1,000 population for a facility, the facility amount is divided by the total population, which is then divided by 1,000, as shown in the figure below.

² Once the population growth is determined, the next step is to translate the increment of people and workers into added public facilities and costs. For those circumstances when the proportion of population-employment ratio is changing dramatically or if there are significant population shifts occurring on daily or seasonal bases (none of which apply to the Town at this time), then a functional population methodology would be appropriate and the LOS re-evaluated. See *Juergensmeyer, Nelson, and Nicholas, Chicago: APA, 1991*.

³ See footnote 4, *infra*.

LOS Equations

$$\frac{\text{Facility}}{\text{Population}} = \text{Per Person LOS}$$
$$\frac{\text{Per Person LOS}}{1,000} = \text{LOS Per 1,000}$$

Standardized LOS units of measure for facilities and services include square feet of gross floor area (for fire or police stations, and community centers), number of vehicles (for fire or police vehicles) and acreage (for parkland).

Demand Allocation

For purposes of testing residential and non-residential development for the APFO, a demand allocation factor has been calculated for each land use type for each tested facility. The demand allocation factor expresses the population-based LOS in terms of the amount of service demanded by individual land use types. The demand allocation factor for fire and police services was calculated based on an analysis of development patterns and trends and the existing (2006) ratio of calls for service from residential and non-residential land uses (see "Call Volume" data, Exhibits C and D). For residential uses, demand was further allocated based on average household sizes for single and multi-family dwelling units. Non-residential demand was further allocated based on estimated employment generation. Demand allocation factors for each land use type by facility are shown in Exhibit A-1.

In calculating the recommended LOS standard for the APFO, designated portions of several planned, yet unfinished facilities were used to calculate the "Adopted LOS" (see "Planned Capital Improvements," Exhibit A-1), because several facilities currently under construction were planned, in part, to address existing residents of Huntersville. This is discussed in more detail below for each facility.

Finally, in order to transition the Town into the implementation of the APFO, an LOS standard slightly below that existing today has been used for police station space. This will ensure that since additional police station space is not planned for completion within the 3-year CIP, current police station facilities will be considered adequate to accommodate

development proposals submitted in the near term. However, the Town will reevaluate its level of service standards upon the first fiscal year of implementing the current APF system and will dedicate necessary resources to achieve acceptable levels of service. Section 13.7(b) the APF Ordinance specifically provides for this annual review through a monitoring report.

BACKGROUND DEMOGRAPHICS AND CAPACITY BASELINES

There are several key demographic trends and projections found in Huntersville, which relate to each of the facilities discussed in this Report. These are described in more detail in Exhibits A-1 through A-3.

Population Assumptions

First, is the current population of the Town and its extraterritorial jurisdiction (ETJ). As Exhibit A-2 shows, the 2006 population within Huntersville's corporate limits was about 40,877 and within the ETJ was about 2,983, for a total population of 43,860. These estimates are based on US Census reports and recent years of development activity.

"Committed Capacity"

Second, the public facility capacity needed to accommodate development that was approved prior to the adoption of the APFO, but which will create a demand on public facilities when built, has been projected, in order to allow the Town to estimate how much capacity remains for new growth (*i.e.*, that approved after the effective date of the APFO). This is referred to as "committed capacity." Accordingly, the Capacity Baseline (*see* Exhibit A-1), and the APF Schedule "set aside" capacity for about one year of this pre-approved development. However, when implemented, all remaining capacity will be available to all development, even though that approved prior to the APFO's effective date will not be subject to the APFO.

Based on recent trends in certificate of occupancy issuance for single-family units and the inventory of approved multi-family units, it is projected that of those lots and multi-family units already approved in Huntersville, which would not be subject to the APFO, about 1,128 will be issued building permits over a one year period. The following table illustrates these projections.

**Projected Permitted Development,
by Dwelling Units (DUs) and Population**

Year	SF DUs	SF Pop Change	MF DUs	MF Pop Change	Total DUs	Total Population Change
2007	878	2,391	250	482	1,128	2,872
2008	878	2,391	173	333	1,051	2,724
2009	878	2,391	173	333	1,051	2,724
TOTAL	2,634	7,172	596	1,148	3,230	8,320

Source: Town of Huntersville; Planning Department, 2007

In addition, non-residential land use projections have been developed in order to identify the capacity likely to be consumed by previously-approved development during the first year of APFO implementation.

Projected non-residential growth for commercial, office and industrial uses was calculated using 2003 through 2007 land use data from the Mecklenburg County Assessor’s Office. The trend data indicates that the Town was experiencing an average annual non-residential increase of approximately 550,000 square feet of gross floor area per year.⁴ However, about 150,000 square feet of this amount has been attributable to uses that will not be tested for adequacy under the APFO, including “facilities operated by governmental or quasi-governmental agencies that provide services on behalf of the public, which are critical to the health, safety, and welfare of the public.” (see section 13.3 of the APFO, definition of “essential public services.”) However, non-residential development

⁴ Two different methods were employed to project new non-residential growth in Huntersville, one based on population growth and one based on historical building permit data trends. The first method calculated the existing ratio of population to non-residential square footage, and then used population projections and residential certificate of occupancy trends (2000 to 2006) to project future non-residential growth. In other words, for every projected person, a proportional amount of non-residential space was projected. This method projects approximately 557,000 square feet of gross floor area per year.

The second method used tax assessor data for non-residential building permits (2003 to 2007) to project an annual average of approximately 555,000 square feet of gross floor area per year. The population-based projection was within less than 1% of the projection based on historical non-residential building trends, validating the assumption that non-residential uses generally occur in proportion to existing residential uses, and residential growth in an area is an indicator of future non-residential growth.

considered typical and customary commercial, office and industrial uses are subject to the facility testing provisions of the APFO and therefore were considered as part of the non-residential, "committed capacity" set-aside. Although "essential public services" will not be subject to the APFO, the public facility capacity they consume will be tracked as "reserved capacity" in the "APF Schedule."

Therefore, 402,616 square feet of gross floor area is projected as the "committed capacity" needed to serve previously-approved, yet unbuilt nonresidential capacity during the first fiscal year of APFO implementation.

In sum, the following amounts of gross additional floor area are anticipated to be built in Huntersville on an annual basis for the next three years.

Commercial:	312,210
Office:	44,207
<u>Industrial:</u>	<u>46,199</u>
Total:	402,616

Based on these projections, the Capacity Baseline set forth in Exhibit A-1 estimates one year's worth of facility capacity for approved yet unbuilt residential and nonresidential development.

An entire year's worth of project residential and nonresidential development has been set aside as "committed capacity," even though a portion of this growth may be subject to the APFO. In that case, some of the committed capacity could be carried forward into subsequent years of implementation until most of this pre-approved development has been constructed. These assumptions and projections will be revisited as part of the annual monitoring report for the Town's APFO.

"Planned Capital Improvements"

Finally, "Planned Capital Improvements," which are included on the Town's CIP and expected to be available by the end of the third fiscal year from the date of this Report, are considered available to serve developments proposed under the APFO. For purposes of the current

analysis, we have considered Fiscal Year 2009-2010 to be the “cut off” for planned facilities under this standard.⁵

APFO DISCUSSION BY FACILITY

This section of the Report discusses each of the three facilities to be included in the APFO and each of the following issues is addressed by facility:

- Impact Area
- Adopted Level of Service (LOS) Standard⁶; and
- Capacity Baseline

If the Board elects to implement an APFO, it is essential that the data and assumptions related to these key areas and the CIPs be monitored. As changes occur – for example, additional capacity is funded and “pipeline” development is approved – the methodology for testing new development should be updated to reflect those changes. Similarly, as new improvements are added to or removed from the CIPs, the APFO methodology should be updated accordingly. This is of particular relevance to the law enforcement component, as is discussed below.

Parks and Recreation Facilities

The following types of park land were recommended for inclusion in the APFO (see Task 1.4):

- District
- Community; and
- Neighborhood

Subsequently, the Board requested that indoor recreational areas, specifically including gyms, be included in the APFO, as well. Clearly, each type of capital facility is in high demand, and will continue to be, as new residential development continues in Huntersville. It is important to note that operational issues – such as the placement and funding for park improvements such as softball fields – must be addressed outside of the APFO.

⁵ Note that the data upon which this Report is based are subject to change as growth continues in Huntersville and will be updated accordingly as the APFO is implemented.

⁶ “Adopted” Level of Service standard refers to the LOS standards upon which the APFO is based.

Parks and Recreation Impact Area

The need for additional parks and recreation capacity is driven by residential development which will be approved pursuant to the Town’s zoning and subdivision regulations; both townwide and within the Town’s ETJ. The parks and recreation component of the APFO, therefore, has an impact area that includes lands within the Town and its ETJ. In other words, the APFO for parks and recreation applies to residential development within both the Town and the ETJ.

Parks and Recreation Level of Service (LOS) Standards

Park Lands.

The Parks and Recreation Systemwide Master Plan (the “Parks Plan”), adopted by the Town Board in January 2004, adopted the following LOS standards for the relevant park lands:

Park Type	# of acres/1,000
District	5
Community	5
Neighborhood	2.5
Combined LOS	12.5

Source: Parks and Recreation Systemwide Master Plan; Revised December 2003, p. 17.

According to the Parks Plan, the desirable size of the relevant categories of parks ranges from about 7 acres to 400 acres. Parks within the Town that meet these criteria include:

Existing Parks	
	Size (in acres)
<i>Hambright Fields</i>	10
<i>Holbrook Park</i>	8
<i>Huntersville Athletic Park</i>	42
<i>North Mecklenburg Park</i>	98
<i>Waymer Park</i>	17
TOTAL	175

Source: Parks and Recreation Systemwide Master Plan; Revised December 2003, pp. 4-5.

Assuming a Town and ETJ population of 43,860, there is an existing LOS of 4.0 acres/1,000 population. However, in addition to these existing parks, two (2) major district parks currently are under construction. Once completed, these parks will be under the control of the Town. The planned parks are:

Planned Parks	
	Size (in acres)
<i>Bradford</i>	170
<i>Richard Barry</i>	42
<i>TOTAL</i>	212

Source: Town of Huntersville, Parks and Recreation Department, November 2006.

There are several considerations the Town made with respect to the park land adopted LOS in the APFO. First, the LOS could have been based on existing parks only (4.0 acres/1,000), and allow the 212 acres of planned parks to be counted as available for new development. However, the Town has made significant efforts to secure and improve these additional parks in order to bring the Town closer to its preferred LOS of 12.5 acres/1,000. Under that scenario, the Town's population would more than double before the 4.0 acres/1,000 LOS would be exceeded, without getting closer to the preferred 12.5 acres/1,000 LOS.

Second, the Town could allocate all 212 acres of parks under construction to existing residents since both Bradford and Richard Barry parks are underway and will be open relatively soon.

The third approach the Town considered was to allocate a portion of the planned total park capacity (212 acres) to new development and a portion to achieving the preferred LOS; something closer to the 12.5 acres/1,000 adopted in the Parks Plan. Given the history of the Bradford and Richard Barry parks and the lack of significant park expansion beyond these two parks, 50% of these current expansions were allocated to the existing population and 50% allocated to future development (see Exhibit B). This resulted in a population-based LOS of about 6.4 ac./1,000 residents, with the following demand allocation factor by land use category:

Single-Family Dwelling Units: 0.017442 acres /DU

Multi-Family Dwelling Units: 0.012347 acres /DU

Indoor Park and Recreation Facilities.

The Town, through its ongoing efforts and partnership with Charlotte-Mecklenburg Schools, has provided additional gym and other cultural resource capacity for Town residents in the past and plans to continue to

do so in the future. As Exhibit B demonstrates, the following indoor facilities currently are in place to serve existing residents:

- Huntersville Elementary School Gym
- Waymer Center Gym
- Torrence Creek Elementary School Multi-Purpose Room
- Arts and Cultural Center

In addition, about 16,300 square feet of additional indoor recreational facilities are planned for completion at:

- Lake Norman Charter School (gym): and
- Beatties Ford Road Elementary School (gym)

While the Town's preferred LOS is 1,700 sq. ft. per 1,000 residents,⁷ existing facilities fall short of the goal by almost 70%, and facilities are not currently planned that would achieve the preferred LOS. Additionally, allocation of all capacity created by these planned facilities to existing development would result in immediate failure of the APF test. Therefore, similar to the approach described with respect to park lands, the Town has allocated one-half of this planned capacity to existing residents and one-half to future development. This results in a population-based LOS of about 710 s.f./1,000 residents, with the following demand allocation factor by land use category:

Single-Family Dwelling Units: 1.933530 sq. ft. /DU

Multi-Family Dwelling Units: 1.368668 sq. ft./DU

Parks and Recreation Capacity Baseline

As Exhibit A-1 demonstrates, if 50% of the park lands currently under construction (about 106 acres) were allocated to existing residents and the remaining 50% were allocated to future development, with the addition of Bradford and Richard Barry parks, the Town could accommodate about 5,370 additional equivalent residential units before new park lands would need to be developed.

⁷ The Town's preferred LOS is one (1) full-sized gym per 5,000 residents. A full-sized gym is considered to be 8,500 sq. ft., therefore the preferred LOS can be expressed as 1,700 sq. ft. per 1,000 residents. The Town has second priority to the schools in using joint facilities, and on average has access to these gyms for 40 hours a week. Typically an elementary school multi-purpose room is 4,000-4,500 square feet, but is upgraded to a full gym of approximately 8,500 sq. ft. through Town participation.

Similarly, if 50% of indoor recreation facilities under construction (about 8,150 square feet) is allocated to existing residents, existing facilities and the gyms at the Lake Norman Charter School and the Beatties Ford Road Elementary School have sufficient capacity to accommodate about 3,379 additional equivalent residential units.

Based on these assumptions, currently there exist sufficient parkland and indoor recreational facilities to accommodate current residents and a few years of projected growth. Details related to these conclusions are illustrated in Exhibit A-1 and Exhibit B.

Fire Protection Facilities

The APFO also “tests for” the capacity of the Huntersville/Craighead Volunteer Fire District (the “District”) to serve new residential and nonresidential development prior to its approval. Although the District works with other volunteer districts to provide fire protection services, it is the principal provider of fire protection services to current and future residents and employees within the Town and the ETJ. Accordingly, development will be tested under the APFO, based on the capital capacity (vehicles and stations) of the Huntersville/Craighead District only. The Capacity Baseline and Level of Service standards are based on the existing District station, the East and West Huntersville Stations to be completed within the next two (2) years, and the vehicles currently in the existing station. (see Exhibit C) As new vehicles are purchased or transferred to the new stations, the APFO methodology and Capacity Baseline will be adjusted to reflect this change.

Fire Protection Impact Area

Since the District provides services to both the Town and its extraterritorial areas, the fire protection component of the APFO applies within both the Town and its ETJ and will be based on the stations and vehicles under the control of the Town and the District.

Fire Protection Level of Service (LOS)

Vehicles.

As is shown in Exhibit C, currently, there are ten (10) vehicles in service in the District. These include:

- 3 Engine Pumpers
- 3 Tankers

- 1 Ladder Truck
- 1 Brush Truck
- 2 Equipment Units

Based on this inventory, there is a current, population-based LOS of .23 vehicles/1,000 population. Additionally, the District has a ladder truck planned for purchase within the next three years. Based on the existing and planned inventory of fire vehicles, a vehicle LOS of .23 vehicles/1,000 population is adopted, with the following demand allocation factor by land use category:

Single-Family:	.000277 vehicles/dwelling unit
Multi-Family:	.000196 vehicles/dwelling unit
Commercial:	0.000861 vehicles/1,000 sf gfa
Office:	0.001230 vehicles/1,000 sf gfa
Industrial:	0.000861 vehicles/1,000 sf gfa

Stations.

Exhibit C describes the existing inventory of fire stations. Currently, the District operates out of an 11,524 square foot station. However, the East Huntersville and West Huntersville stations planned for construction in the near term are included because they will be located within the Town and its ETJ and will be under the control of the Huntersville/Craighead District with principle control and funding residing with the Town Board. Consistent with the methodology used for parks and recreation facilities, 50% of the capacity to be added by the addition of these facilities is allocated to meet existing needs, resulting in a population-based LOS of 445 square feet/1,000 population, with the following demand allocation factor by land use category:

Single-Family:	.540518 sf gfa of station/dwelling unit
Multi-Family:	.382611 sf gfa of station/dwelling unit
Commercial:	1.680335 sf gfa of station/1,000 sf gfa
Office:	2.400479 sf gfa of station/1,000 sf gfa
Industrial:	1.680335 sf gfa of station/1,000 sf gfa

Fire Protection Capacity Baseline

Based on the assumptions discussed above and set forth in detail in Exhibit C, the District's planned and existing fire stations and vehicles are adequate to serve the existing population as well as a portion of new growth. As per Exhibit A, there are sufficient fire vehicles to serve about 7,437 additional equivalent residential units and sufficient station space to serve about 13,296 additional ERUs.

Law Enforcement Facilities

Law Enforcement Facilities are provided by the Town Board and additional facilities will be needed, in the long run, to serve new residential and non-residential development.

Law Enforcement Impact Areas

Since the Town Police Department serves the incorporated area of Huntersville and will be responsible for serving new developments to be annexed, new development within the corporate limits of the Town and those areas proposed for voluntary annexation will be subject to the law enforcement component of the APFO. If extraterritorial lands to the east of the current town boundaries are annexed as planned, LOS standards and other components of the APFO methodology should be reviewed and updated if necessary.

Law Enforcement Level of Service (LOS)

Vehicles.

As Exhibit D illustrates, there currently are seventy-eight (78) vehicles in the Police Department's fleet. Fifty-six (56) of these are marked patrol units, while the balance serves other purposes in support of law enforcement services. This inventory results in an existing LOS of about 1.9 vehicles/1,000 population, which is lower than that of surrounding Mecklenburg County and the Police Department's desired LOS. See Exhibit D. The following demand allocation factors apply:

Single-Family:	.002071 vehicles/dwelling unit
Multi-Family:	.001466 vehicles/dwelling unit
Commercial:	.007818 vehicles/1,000 sf gfa
Office:	.011169 vehicles/1,000 sf gfa
Industrial:	.007818 vehicles/1,000 sf gfa

The Police Department has current plans to add an average of six (6) new sworn officers to the force for each of the next several years. This, in turn,

will require six (6) additional patrol vehicles each year, on average.⁸ However, since the FY 2007/08 budget included only four (4) additional vehicles, the total planned vehicles for the next three years is only 16. It is assumed that the two subsequent years will include six (6) additional vehicles, consistent with Department projected personnel additions. These planned vehicles are allocated to new development. If fewer new vehicles are actually budgeted, the analysis changes and there will be a reduction in the amount of capacity available to new development.

Stations.

As Exhibit D illustrates, the Town Police Department currently operates out of an existing 8,000 square foot police station. Although a new 35,000 square foot station is being planned, with funding in Fiscal Year 2010, it is not anticipated to be operational by the end of fiscal year 2009/10 and therefore has not been considered available at this time. In order to fairly allocate some existing capacity to developments that already have been approved and those which will be subject to the APFO during its initial phases of implementation, 1,000 square feet of the existing station is allocated to accommodate new development subject to the terms of the APFO. This results in a reduced LOS of about 12.5% to 171 sq gfa/1,000,⁹ or by demand allocation factor, as follows:

Single-Family:	.185883 sf gfa of station/dwelling unit
Multi-Family:	.131579 sf gfa of station/dwelling unit
Commercial:	.701615 sf gfa of station/1,000 sf gfa
Office:	1.002308 sf gfa of station/1,000 sf gfa
Industrial:	.701615 sf gfa of station/1,000 sf gfa

Law Enforcement Capacity Baseline

Based on the approach outlined above, and as shown in Exhibit A-1, there are sufficient police vehicles to serve about 5,430 additional ERUs, and sufficient square footage to serve about 2,923 additional ERUs.

⁸ About eight replacement vehicles also are budgeted for the coming years, but these vehicles do not represent a net increase in capacity, but simply will replace existing units.

⁹ The existing LOS has been calculated using the Town population and does not include the ETJ. However, as new developments within the ETJ near completion, those areas likely will be annexed into the Town, requiring law enforcement services. Therefore, while the existing LOS is calculated using only the Town population, the committed capacity demand is calculated using the Town, plus the ETJ population.

CONCLUSION

This Report provides the technical foundation for the APFO adopted by the Town Board in 2007. This analysis quantifies the demands new development places on three key public facilities so that the Town's ongoing planning efforts are consistent, transparent, and applied equitably over time. As the APFO is implemented, the data here will be updated. Capital improvement plans, budgets, and other factors change over time and it is important that the APFO and the APF Schedule be updated accordingly.

Finally, based on the projected relationship between approved lots and units and the anticipated growth in the Town, it is recommended that the Town implement planning guidelines that identify how much approved, unbuilt development (along with the type, location and timing of that development) is required to accommodate projected population growth, so that capital planning is consistent with actual projected growth.