



**NCACC Urban Issues
Forum: Innovative**

**Strategies to Meet School
Capital Needs**



Mitigating School Capital Needs Through Growth Management

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Why Manage Growth?

- Plan for the provision and funding of key public services and facilities to meet the demands of new development as they occur, rather than after the fact
- Avoid reduction in the levels of service provided to existing residents
- Encourage desired development patterns
- Provides a predictable environment for developers, service providers and the public



NC is a Dillon's Rule State:

Local Governments Must
Have Authority Granted by
the State to Engage in Any
Activity



Broad Statutory Authority

- Subdivision (NCGS § § 153A-331)
 - orderly growth and development
 - coordination of streets and highways
 - distribution of population and traffic in a manner that will avoid congestion and overcrowding and will create conditions essential to public health, safety, and the general welfare



Broad Statutory Authority

- Zoning (NCGS § § 153A-340)
 - promote health, safety, morals, or the general welfare
 - size, coverage, density, and location and use of buildings, structures and land
 - special use permits or conditional use permits with reasonable and appropriate conditions and safeguards



Broad Statutory Authority

- Zoning Purposes (NCGS § 153A-341)
 - lessen congestion in the streets
 - secure safety from fire, panic and other dangers
 - promote health and the general welfare
 - prevent overcrowding of land
 - avoid undue concentration of population
 - facilitate adequate provision of transportation, water, sewerage, schools, parks, and other public requirements



Cabarrus Local Authority

- Session Law 2004-39
 - “Notwithstanding the provisions of Article 19 of Chapter 160A of the General Statutes, the County of Cabarrus or any municipality therein may enforce, within its jurisdiction, any provision of the school adequacy review performed under the Cabarrus County Subdivision Regulations, including approval of a method to address any inadequacy that may be identified as part of that review.”



Two-Tiered Approach to Growth Management

- Subdivision and Zoning Regulations within Unincorporated Areas (new regulations enacted June, 2005)
- Adequate Public Facilities Ordinance - Enforced Countywide for Schools






Types of Subdivisions

- Highly Prescriptive to Achieve Desired Development Patterns and Characteristics
 - Conventional (larger lots on septic)
 - Open Space
 - 40% Open Space in Rural (AO, CR)
 - 35% Open Space in Suburban (LDR, MDR, HDR)
 - Amenity
 - Not Allowed in Rural (AO, CR)
 - 50% Open Space in MDR and HDR
 - 40% Open Space In LDR
 - Additional Amenities Required

Conventional Subdivision



- Open Space
 - None Required
- Minimum Lot Size
 - AO = 3 Acres
 - CR = 2 Acres
 - LDR = 2 Acres
- Allows Rural Street
 - Ditch and Swale
- Governmental Water/
Sewer Not Allowed
in AO/CR

	AO <i>Single-Family Detached</i>	CR <i>Single-Family Detached</i>	LDR <i>Single-Family Detached</i>
CONVENTIONAL SUBDIVISION			
<i>Tract</i> Density (maximum units/acre)	0.33	0.50	0.50
Public water and sewer	not permitted*	not permitted*	optional
<i>Lot Dimensions</i> (minimum)			
Lot area (acres)	3	2	2
Average lot width (feet)	150	150	150
<i>Principal</i> (minimum feet)			
Front yard (minor collector)	75	75	75
Front yard (local road)	50	50	50
Side yard (single)	20	20	20
Side yard (total)	40	40	40
Rear yard	30	30	30
<i>Height</i> (maximum feet)	40	40	40
<i>Lot Coverage</i> (maximum)			
Impermeable surface	15%	20%	20%
Structural coverage	10%	15%	15%

* Governmental water may be provided to individual lots in these areas for public health reasons.

Rural Open Space Subdivision

- ❑ AO, CR Allow Only SF Detached
- ❑ Open Space
 - 40% in AO, CR
- ❑ Density
 - AO = 0.5 units per acre
 - CR = 1.0 units per acre
- ❑ Lot Size = Septic Area
(minimum 1 acre)

<i>Single-Family Detached</i>	
OPEN SPACE SUBDIVISION	
AO	
<i>Tract</i>	
Density (maximum units/acre)	0.50
Area (minimum acres)	10
Open space (minimum)	40%
Public water and sewer	not permitted*
<i>Lot Dimensions (minimum)</i>	
Lot area (square feet)	**
Average lot width (feet)	150
<i>Principal (minimum feet)</i>	
Front yard (minor collector)	75
Front yard (local road)	50
Side yard (single)	20
Side yard (total)	40
Rear yard	30
<i>Height (maximum feet)</i>	40
<i>Lot Coverage (maximum)</i>	
Impermeable surface	15%
Structural coverage	10%
	
CR	
<i>Tract</i>	
Density (maximum units/acre)	1.00
Area (minimum acres)	5
Open space (minimum)	40%
Public water and sewer	not permitted*
<i>Lot Dimensions (minimum)</i>	
Lot area (square feet)	**
Average lot width (feet)	125
<i>Principal (minimum feet)</i>	
Front yard (minor collector)	75
Front yard (local road)	50
Side yard (single)	20
Side yard (total)	40
Rear yard	30
<i>Height (maximum feet)</i>	40
<i>Lot Coverage (maximum)</i>	
Impermeable surface	20%
Structural coverage	15%

Suburban Open Space Subdivision

- LDR, MDR, HDR Allow Mix of Housing Types
 - SF Detached, Lot Line, Alley-Loaded, Semi-Attached
- Density
 - LDR = 1.5 units per acre
 - MDR = 2.5 units per acre
 - HDR = 4.5 units per acre
- SF Detached Lot Size
 - LDR = 15,000 SF
 - MDR = 8,000 SF
 - HDR = 5,000 SF




Amenity Subdivision

□ Density

- LDR = 2.0 units per acre
- MDR = 3.0 units per acre
- HDR = 6.0 units per acre

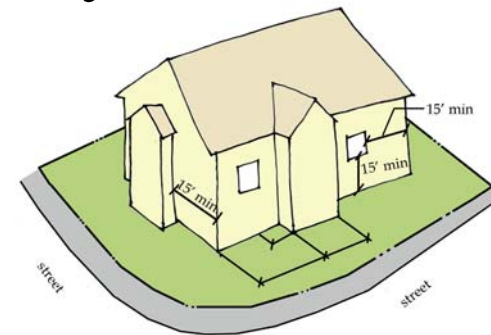
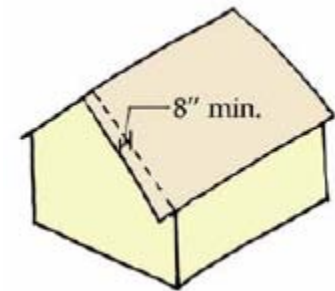
□ SF Detached Lot Size

- LDR = 10,000 SF
- MDR = 5,000 SF
- HDR = 3,000 SF

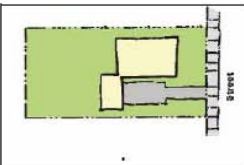
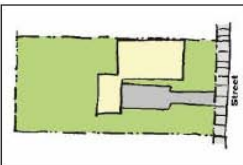
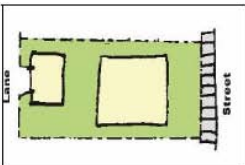

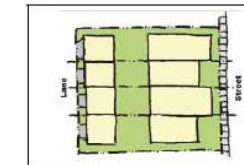
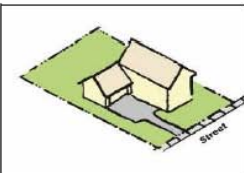
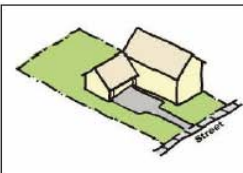
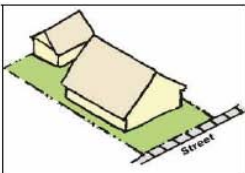
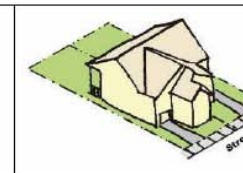
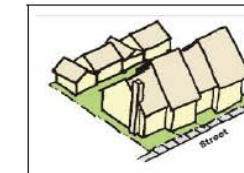
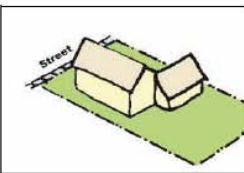
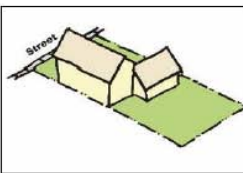
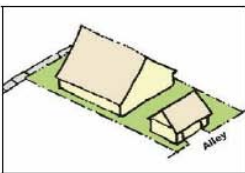
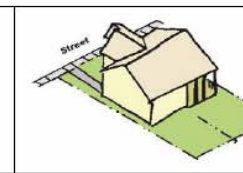
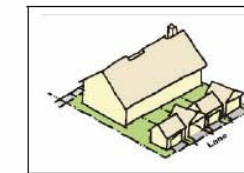
	Single-Family Detached	Zero Lot Line House	Alley-Loaded House	Semi-Attached House	Townhouse or Rowhouse
TTY SUBDIVISION					
HDR					
Maximum units/acre	6.00	6.00	6.00	6.00	6.00
Area (minimum acres)	5	5	5	5	5
Open space (minimum)	50% required	50% required	50% required	50% required	50% required
Drainage water and sewer					
Dimensions (minimum)					
Lot area (square feet)	3,000	3,000	2,500	--	2,500
Minimum lot width (feet)	30	30	30	--	24
Setbacks (minimum feet)					
Per building	--	--	--	3,000	7,500
Per unit	--	--	--	1,500	2,500
Site Width	--	--	--	30	100
Setbacks (minimum feet)					
Front yard	15	15	10	15	10
Front yard (corner)	10	10	10	10	10
Side yard (single)	5	0	5	0	0
Side yard (total)	10	10	10	5	5
Rear yard	15	15	15	15	15
Setback from front ROW	20	20	--	20	--
Height (maximum feet)	40	40	40	40	40
Coverage (maximum)					
Impermeable surface	50%	50%	50%	50%	50%
Structural coverage	40%	40%	40%	40%	40%

Required Amenities

- Block Length Restriction
 - 600' typical
 - 1000' w/ mid-block pedestrian access
 - Single loaded street more flexible
- Residential Collectors = Parkways
- Site and Building Elements
 - Roof Overhang
 - Corner Lot Treatments
 - Front Yard Trees

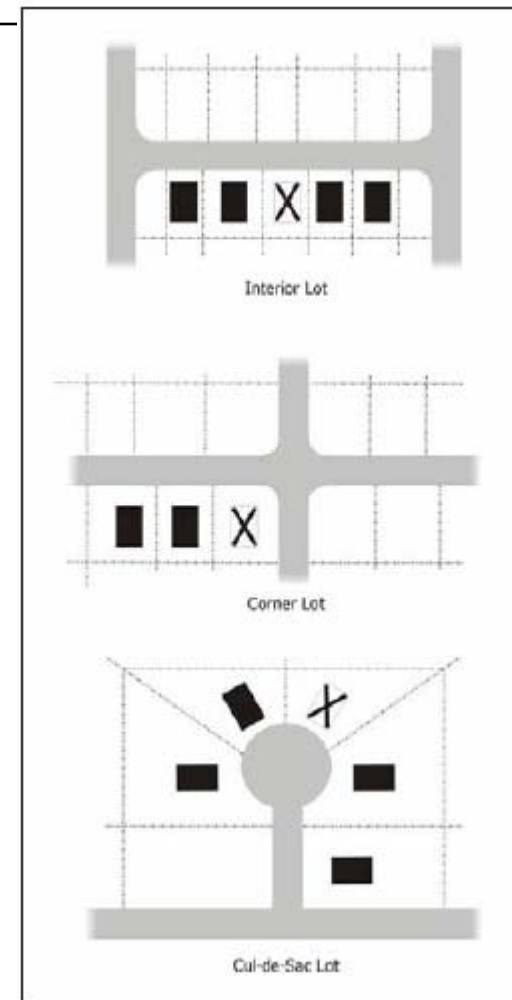


Variety of Housing Types

<i>Single Family Detached</i>	<i>Zero Lot Line House</i>	<i>Alley-Loaded House</i>	<i>Semi-Attached House</i>	<i>Townhouse</i>
<p>A dwelling unit located on a single lot with private yards on all four sides</p>	<p>A dwelling unit located on a single lot with private yards on three sides. The house has only a single side yard comprising the equivalent of the two side yards of a single-family detached house.</p>	<p>A dwelling unit located on a single lot with private yards on all four sides. The house is set much closer to the street than a single-family detached house, and alley access is required.</p>	<p>Two attached single-family units located on two lots that share a common wall along the lot line, providing for fee-simple ownership.</p>	<p>Three or more attached units where the units are lined up in a row and share side walls. Access to garages is from the rear.</p>
				
				
				

Anti-Monotony

- Lots Less than One Acre
- Two Lots on Each Side
- Considerations:
 - Number of Stories
 - Garage Location
 - Roof Type
 - Front Façade Articulation



Garage Restrictions

- Lots Less than One Acre
- Options:
 - Side Loaded
 - Rear Loaded or Rear Access
 - Front Loaded
 - Four feet behind front wall; OR
 - Flush or forward of building
 - Requires architectural treatment and single doors





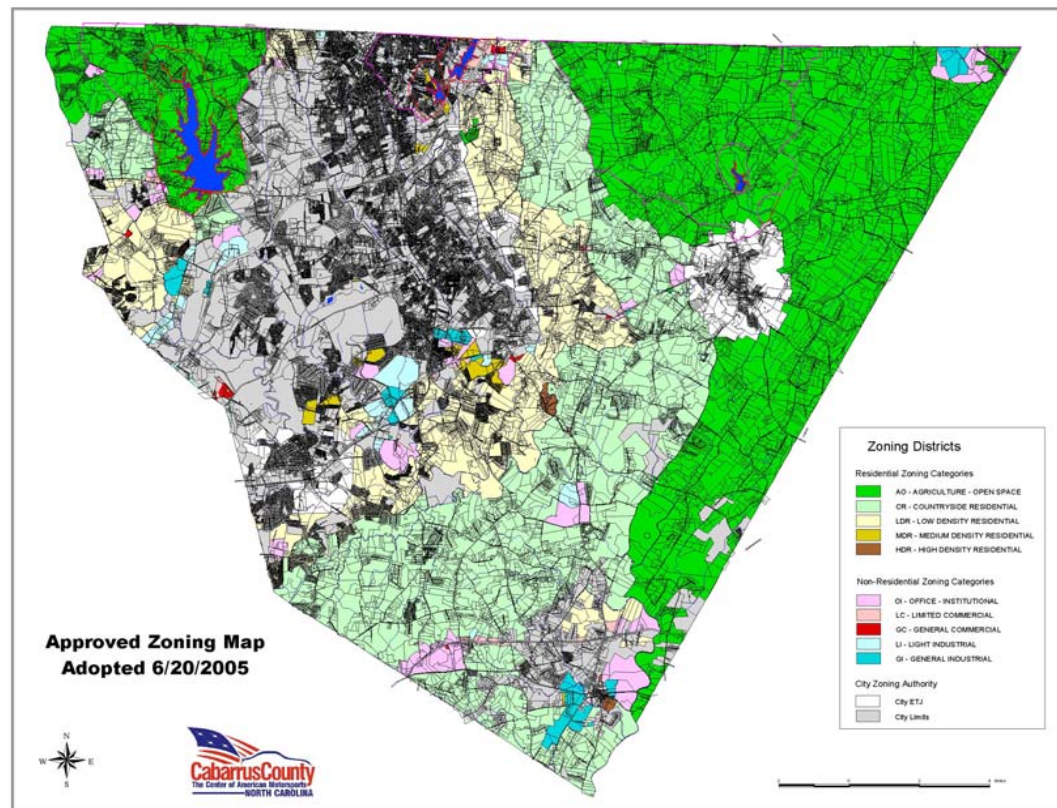
Permitted Densities

Zoning District
(Maximum Density Per Acre)

Type of Subdivision	Agricultural Open Space	Countryside Residential	Low Density Residential	Medium Density Residential	High Density Residential
Conventional Subdivision	0.33	0.5	NA	NA	
Open Space Subdivision	0.5	1.0	1.5	2.5	4.5
Amenity Subdivision	NA	NA	2	3	6

No Utility Systems Permitted in Green Areas

- Development densities in dark green areas range from 1 unit per 3 acres to 1 unit per 2 acres
- Development densities in light green areas range from 1 unit per 2 acres to 1 unit per acre





Factors Moderating Rate of Residential Development and Corresponding School Capital Needs in Unincorporated Areas:

- ❑ Prescriptive, high quality development standards
- ❑ Very low permitted densities
- ❑ Prohibition of Utility Service to Subdivisions
- ❑ Only 1 subdivision application submitted under new standards



What is an Adequate Public Facilities Ordinance?

- An APFO is a requirement that:
 - Specified public facilities and services in defined areas of the county...
 - ✓ Are Available
 - ✓ Are Adequate
 - ✓ Meet adopted level of service (LOS) standards at the time the impacts of development will be felt

Ensures that existing service levels are not degraded as a result of new development and that citizens continue to receive adequate services.



What is an Adequate Public Facilities Ordinance?

- ❑ Establishes standards for capacity or levels of service for public facilities
- ❑ Usually contained in zoning and subdivision regulations
- ❑ Tied to CIP
- ❑ Merges County's police and fiscal powers



Objectives of APFO

- ❑ Link provision of key public facilities to new development
- ❑ Avoid or manage congestion
- ❑ Coordinate capacity with development demands
- ❑ Provide measurable standards
- ❑ Encourage desired development patterns
- ❑ Avoid reduction in the levels of service provided to existing residents
- ❑ Ensure that new residents receive all necessary public facilities and services



Components of APFO

- ❑ Listing of specific public facilities and services affected
- ❑ The areas, and sub areas, of the County within which the APFO will apply
- ❑ The level of service (LOS) standards for each public facility or service to be included in the APFO.
- ❑ Current and projected public facility and service capacities



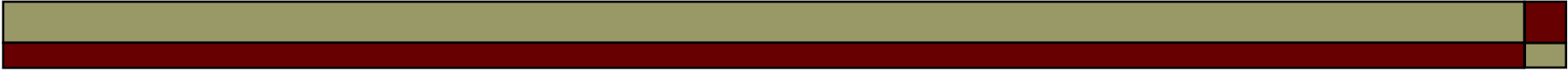
Components of APFO

- The types of development approvals/permits to which the APFO requirements will apply, e.g., subdivision applications
- The point in the development approval process when adequacy of public facilities will be determined (early and often)
- The conditions and mitigation requirements resulting from failure to meet one or more APFO standards.
- The ability to reserve facility capacity



What an APFO is NOT

- ❑ a comprehensive plan amendment
- ❑ a rezoning (or down zoning) of property
- ❑ an exaction/dedication requirement
- ❑ an impact fee
- ❑ a moratorium



Application of the Cabarrus APFO Related to Schools

□ School Facility Test

■ Inputs

- ☑ 15 Year School Facility Plan
- ☑ Approved Funding (GO Bonds, COPs, Cash)
- ☑ 10th Day School Enrollment
- ☑ School Capacity Figures
 - Acceptable LOS is 110% of Capacity
- ☑ Subdivision Lot Inventory
- ☑ Survey to Determine Average Number of Students Per Household



School Capacity Test Formula

$$AC = (EC + PC) - (ED + CD)$$

AC	Available Capacity	Available for new development
EC	Existing Capacity	Design capacity
PC	Planned Capacity	In CIP
ED	Existing Demand	Current Enrollment
CD	Committed Development	Projected new enrollment from previously approved subdivisions



Test Indicates Adequate Capacity

- Development may proceed
- Adequacy will be tested again after land development is complete but before building permits are granted - inadequacy at this point halts building and requires mitigation
- Developer may avoid uncertainty by reserving capacity through the advancement process



Test Indicates Inadequate Capacity

- Developer must wait until adequate capacities are available, or
- Developer may “advance” capacity through mitigation
 - direct (monetary) or indirect (land, infrastructure) contributions or a combination of both
 - Phased development plans
 - Value of contribution for single-family units must equal 50% of incurred capital cost as shown in the 1996 study, “Capital Costs Due to Growth” (\$4034)
 - For multi-family amount is 25% of the single-family requirement (\$1331)

Results After 7 Years

- Has the APFO Slowed Growth?
 - **SF Permits:**
2001=1721,
2004=2022 2005=2703
- Has impact of adequacy advancement been sufficient?
- Have Facilities Kept Up, Caught Up, or Continued to Fall Behind?

Percent of Seat Capacity

Yr	ES	MS	HS
03	109%	103%	108%
05	114%	125%	106%



Lessons Learned

- The APFO Forces Proactive Facility and Financial Planning
- The APFO has Provided for Valuable Contributions From Developers/Builders, but total has been small compared to school construction costs
- Timing of mitigation matters - payment at time of building permit is too late
- System-wide school adequacy testing results in overcrowding in some areas
- Considerable Staff Time is Required to Administer
- Vagueness and Inconsistent Application Leads to Court



Current Efforts

- More thorough and defensible APFO being drafted that includes several other services in addition to schools
- New APFO will test school adequacy in high school feeder districts, rather than system-wide
- Study being performed to determine capital costs of facilities and establish level of service standards - costs of capacity advancement or mitigation is expected to increase



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