

DRAFT

# General Development Policies

GDP



Transit  
Station  
Area  
Principles



Residential  
Location &  
Design



Retail-Oriented  
Mixed / Multi-Use  
Centers



Plan  
Amendment  
Process



Environment



Infrastructure



*making all the right connections*

Future Update

Future Update

Future Update

Future Update

Future Update

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## ***General Development Policies***

The Charlotte-Mecklenburg Planning Department has worked with an interdepartmental staff team and a group of citizens representing neighborhood and development interests, to update the City's General Development Policies (GDP).

The first phase of the update process included policies addressing four priority topics:

- |   |                           |
|---|---------------------------|
| ▪ Transit Station Area Principles         | adopted in November, 2001 |
| ▪ Residential Location and Design         | adopted in November, 2003 |
| ▪ Retail-Oriented Mixed/Multi-Use Centers | adopted in November, 2003 |
| ▪ Plan Amendment Process                  | adopted in November, 2003 |

Phase two of the update includes draft policies addressing two additional topics:

- |                  |                            |
|------------------|----------------------------|
| ▪ Environment    | under review, August, 2007 |
| ▪ Infrastructure | under review, August, 2007 |

Once the phase two policies are adopted, they will be incorporated into a single document with the phase one policies.

**This current document includes proposed revisions to overall GDP goal statements and the draft Infrastructure Chapter of the GDP.**

**Charlotte-Mecklenburg Planning Department**

**Draft**

**August 2007**

*The following goals were adopted by City Council in 2003 as part of the first phase of the GDP. As each successive “chapter” of the GDP is developed, the goals will be reviewed, and revised if necessary, to reflect and guide the policy framework provided by the addition of that chapter. Proposed revisions to the goals to better represent the focus of the work on the Infrastructure policies are indicated by underlined text and strikethroughs in the box below.*

## **Goals of the GDP**

The intent of the land use policies discussed in this document is to achieve certain key goals by enabling appropriate, quality development in the rapid transit corridors (South/Northeast, Southeast, West and North) and at major activity centers/transit hubs. Additionally, the policies provide guidance to ensure that development outside of the corridors is equally appropriate, well-designed and consistent with the long-term goals of the entire community. The GDP help guide development to achieve these important community goals:

1. Provide a broad range of housing, employment, leisure and educational opportunities throughout the community.
2. Foster long-term neighborhood and economic viability.
3. Protect the natural environment, by preserving air quality, water quality and the tree canopy; retaining natural areas; providing open space; and minimizing impervious cover, as feasible.
4. Create well-designed communities that are interconnected; well-maintained; have adequate open space; are appropriately served by ~~accessible to~~ public infrastructure, facilities and services; promote healthy lifestyles; and offer a variety of transportation choices.
5. Integrate land use and transportation.
6. Ensure that the availability of public infrastructure is considered when making land use and development decisions.
7. Support the Centers and Corridors land use vision by focusing higher intensity development in transit station areas and key activity centers.
8. Encourage a more compact, multi-use development pattern to enable people to live, work and shop in close proximity.

## VI.

### ***Infrastructure***

#### Definition and Purpose

The City of Charlotte - like many other communities experiencing growth - is attempting to balance investments in capital infrastructure between maintaining viable systems and expanding systems to accommodate growth and increasing demand. Meanwhile, decisions regarding infrastructure investment are not always well connected to decisions regarding future land use and development. This creates the potential for infrastructure shortfalls which impact the quality of life, particularly within fast-growing areas of the community.



*Johnston Road*

These Infrastructure GDP are therefore intended to provide guidance to City Council, City staff, and the broader community in recognizing the relationship between infrastructure availability and investments, and land use and land development decisions that will impact the demand for that infrastructure. They can also be used to guide infrastructure providers in enhancing the processes used to project and anticipate infrastructure needs and to identify innovative measures to fund and provide infrastructure to the Charlotte community.

This Infrastructure chapter of the GDP focuses generally on types of infrastructure that can be most directly impacted by development and land use changes, and that may include the following:

- transportation systems
- storm water facilities
- sewer and water facilities
- schools
- public safety facilities
- parks, greenways, nature preserves and recreation facilities.

***Purpose of the Infrastructure GDP:*** *More closely link land use and land development decisions to the availability of public infrastructure needed to support it.*

This Infrastructure GDP is intended to be used to:

- help make future land use decisions (both during the land development review process and the area planning process),
- guide the identification, prioritization, and funding of infrastructure projects,
- enhance the levels of collaboration among infrastructure planning providers,

- guide the identification of alternative funding and innovative delivery of infrastructure, and
- help guide the design, location, and construction processes of future infrastructure improvements.

Many communities that are grappling with the issues of growth and the ability to provide the infrastructure to accommodate that growth have enacted laws and ordinances that deal specifically with the land development permitting process. Impact fees, adequate public facilities ordinances (APFO's) and concurrency are the three most common tools applied to the complex relationship between development and infrastructure. The Infrastructure GDP takes a different approach, instead identifying a set of broad policies that certainly deal with the development approval process, but also deal with such diverse issues as:

- the internal City capital investment planning process,
- the various facilities and infrastructure planning initiatives undertaken by different infrastructure agencies,
- the identification of potential new and innovative methods to fund infrastructure,
- the relationship between various infrastructure providers,
- the use of the area planning process and growth framework as a means of identifying and prioritizing future infrastructure investment,
- the impacts upon the environment of infrastructure development, and
- the regional context of infrastructure.

The Infrastructure GDP provide a comprehensive policy framework that can be used to draft appropriate implementation tools to respond to a broad spectrum of the complex issues of development and infrastructure, ranging from land development proposal review, to capital infrastructure planning coordination, to land use planning.

## Planning Context



*South Boulevard*

The *Centers, Corridors and Wedges Growth Framework* was originally introduced in the early 1990's and reaffirmed in 1997 with the adoption of the *2015 Plan*, as a key tool to guide future growth. *Centers, Corridors and Wedges* is intended as a framework for organizing and managing growth to help ensure that development happens in a way that enhances the community and contributes to its character and identity.

*Centers, Corridors and Wedges* is discussed in the introduction of this GDP document. However, it is currently being revisited to provide an updated growth strategy for the community that focuses on strengthening the ties between land use and transportation networks; promoting more efficient use of existing infrastructure systems; and



establishing a context for addressing land use and economic development issues. The framework is intended to help the City of Charlotte achieve the vision of becoming an urban community of choice for living, working and leisure.

Policies and principles have been created as part of the *Centers, Corridors and Wedges* update which focus on various “characteristics” in three distinct geographies - activity centers, growth corridors, and wedges – by providing guidance relative to land use, transportation systems, infrastructure, and urban design. These characteristics help define and differentiate the unique conditions found in the activity centers, growth corridors, and wedges, and may be used to better determine where population and infrastructure improvements can be targeted within these areas.

From an infrastructure perspective, *Centers, Corridors and Wedges* provides a policy context within which both private development investments and public infrastructure investments can be coordinated, and which infrastructure development can be aligned with one another, as well as with other related City policies and initiatives. An outcome will not only be more efficient use of land, but also more efficient use of limited resources committed to the development of infrastructure.

## Existing Conditions and Trends

The local governmental agencies within Charlotte and Mecklenburg County responsible for the construction and maintenance of infrastructure (notably Charlotte-Mecklenburg Schools, the City Department of Transportation, Charlotte Mecklenburg Utility Department, and Mecklenburg Park & Recreation) typically develop long-range facilities needs assessments and master plans based upon generally-accepted growth projections and established infrastructure levels of service. Additionally, a ten-year Capital Needs Assessment is developed every two years: in even-numbered years for City agencies and



*Ardrey Kell High School*

in odd-numbered years for County agencies. Finally, Charlotte and Mecklenburg County annually develop Capital Investment Plans that prescribe infrastructure implementation and funding.

Within the Charlotte-Mecklenburg growth environment, the resources needed to adequately maintain current infrastructure and construct new infrastructure to meet projected needs, nearly always exceed available and anticipated resources.

Levels of infrastructure service consequently have eroded as demand exceeds local government’s ability to meet that demand. As evidence of this shortfall:

- since 2000, CMS student enrollment has grown by 33,000 students while 20 new schools were constructed, yet building utilization has increased from 91% to 102%.
- Some 29 percent of City major roads are currently ranked as having extremely poor levels of service.
- In 1990, there were 13 acres of land per 1,000 population designated for public parks while today that figure stands at 12 acres per 1,000 population.

## Applicability

The policies contained in this chapter apply throughout the City of Charlotte, as well as the area it can eventually annex (its extraterritorial jurisdiction).

The Infrastructure GDP will be used to help guide:

- decisions regarding future land use and development
- decisions relating to land development regulations such as revisions to the Zoning and Subdivision Ordinances
- updates to infrastructure needs assessments and facilities plans,
- decisions regarding prioritization for funding of various infrastructure types,
- the manner in which limited infrastructure resources may be used and
- allocated,
- options associated with the funding or delivery of infrastructure,
- the role of the private sector in the provision of infrastructure,
- the consideration of potential environmental impacts of the development of infrastructure, and
- the assessment of the impact of infrastructure upon the community and the region

In applying the Infrastructure GDP, it will be important to balance the needs and benefits of the Infrastructure GDP with the needs and benefits of other City Council policies.

## Guiding Principles

Charlotte Mecklenburg continues to be challenged with the rapid physical changes that accommodate growth, and its ability to effectively respond to increased demands upon its infrastructure to support this growth. At the same time, aging infrastructure in need of modernization and replacement is competing for limited resources with the needs associated with system expansions to address growth. To enhance our community's ability to coordinate growth and development with its responsibility to provide infrastructure to serve its citizens and visitors, the City of Charlotte embraces the following Guiding Principles:

1. *Define infrastructure needs comprehensively and with enhanced coordination among infrastructure providers.*



2. *Use existing and future infrastructure resources efficiently.*
3. *Seek new/additional/innovative funding sources to help meet unfunded local government-identified priority infrastructure needs.*
4. *Coordinate growth with the provision of infrastructure.*
5. *Ensure that infrastructure provision seeks to minimize negative impacts to both the natural and social environment.*
6. *Seek regional solutions – where applicable – to infrastructure issues and problems.*

## Policies

### ***GUIDING PRINCIPLE 1: Define infrastructure needs comprehensively and with enhanced coordination among infrastructure providers.***

*POLICY 1.a: Take a comprehensive and coordinated approach to defining existing and future infrastructure needs, based on the City's land use policies and overall growth framework of Centers, Corridors and Wedges.*

Currently, both the City and County identify capital needs for a 10-year planning horizon through their Capital Needs Assessment (CNA) processes. However, City and County needs aren't identified together or cumulatively, don't cover the same 10-year period, and may not be based upon the same assumptions, geography, or growth policy framework. Additionally, many major infrastructure providers (CMS, CDOT, etc.) derive CNA projects from their own agency's infrastructure needs assessments and master plans that are developed and updated on schedules unrelated to one another.

The intent of this Policy is to build on existing processes so that individually identified needs of both City and County (including CMS) can be identified jointly to provide a more comprehensive and coordinated picture of the needs the community is facing, and to recognize the inter-relatedness of some categories of infrastructure investments. Needs identified by other key agencies (e.g. NC Department of Transportation) should also be included for reference. As proposed, the needs assessment would:

- Establish a common and consistent growth framework,
- Identify all infrastructure needs and costs together to allow a better understanding of the cumulative impact,
- Include short and long-term needs (including planning for Charlotte's entire extraterritorial jurisdiction), even if funding is not available,
- Include the need for - in addition to system expansions to accommodate growth – renovation and/or expansion/upgrade of existing facilities (including

defining terms such as “renovation/upgrade” and making a clear distinction between what is a capital budget expense vs. an operating budget expense),

- Be based on the same assumptions (e.g. population projections),
- Address any needed adjustments to level of service standards/expectations from individual infrastructure service providers,
- Address any needed adjustments to how infrastructure needs may be met differently in the future (e.g. enhanced use of technology, changing lifestyle preferences,
- Be multi-jurisdictional (eg, reflect City, County, State – and possible other – infrastructure need for Charlotte’s jurisdiction.),
- Be conveniently summarized for public review; and
- Assure that there are no redundant and/or overlapping processes among multiple City and County agencies.

***GUIDING PRINCIPLE 2: Use existing and future infrastructure resources efficiently.***

*POLICY 2.a: Support a coordinated and comprehensive funding/prioritization strategy for all public infrastructure (as defined in these GDP) making Centers and Corridors priority areas for capital investments.*

The intent of this Policy is to improve upon existing capital investment planning processes, in particular to use the information from the needs assessment detailed in Policy 1.a and to align priorities with the Centers, Corridors and Wedges Growth Framework. Implementation of this policy could include the development of a comprehensive land use and infrastructure plan/policy and would also likely result in some revisions to the “Guiding Principles of Capital Planning.”

*POLICY 2.b: Strive to have infrastructure projects that address a variety of needs, are multi-purpose (e.g. Right-of-Way and greenway) and take advantage of opportunities to share elements (e.g. parking, best management practices for stormwater projects, sidewalks, and schools/parks/watershed protection).*

*POLICY 2.c: Seek innovative techniques for meeting infrastructure needs.*

This Policy recognizes that there may be a variety of ways to meet infrastructure needs that would help to use resources more efficiently. For example, in the future greater reliance on technology may help lessen the burden on some types of infrastructure. Expanding partnerships with the private and/or not-for-profit sectors may also leverage resources or enhance efficiencies. Additionally, greater use of design/build strategies and joint use opportunities could help to “stretch” infrastructure budgets. Finally, the ability of philanthropic gifts in helping to meet infrastructure resources should be fully explored.

*POLICY 2.d: Ensure that privately-constructed infrastructure (e.g. stormwater infrastructure) meets all local standards prior to the City accepting ownership of it.*

*POLICY 2.e: Design and construct public infrastructure to maximize anticipated life and minimize life cycle costs.*

This Policy recognizes that there must be a balance between the cost of providing public infrastructure and the longer term costs (e.g. maintenance, replacement) often associated with the quality of infrastructure design, construction and materials. Using infrastructure resources efficiently may sometimes mean spending more up front and/or exceeding minimum design and/or construction requirements to provide a high quality product that avoids more costly maintenance, repair or replacement in the longer term.

*POLICY 2.f: Provide funding to ensure that existing infrastructure is well maintained.*

This Policy recognizes that any cost savings realized in the short term by not adequately maintaining our existing infrastructure will be more than offset, in the longer term, by the cost of repairing or replacing it when it fails due to inadequate maintenance. The Policy also recognizes that as our community continues to grow and mature, increased interest in (and emphasis upon) redevelopment and infill development will be dependent upon well maintained and well functioning infrastructure in previously developed areas.

***GUIDING PRINCIPLE 3: Seek new/additional/innovative funding sources to help meet unfunded local government-identified priority infrastructure needs.***

*POLICY 3.a: Continue to consider both non-financial and financial strategies that are potential/feasible options for Charlotte to better meet infrastructure needs.*

From 1996 – 2006, the City has been able to fund about 43% of non- enterprise funded needs identified in the City C.N.A. (with 2007-08 figure improving slightly above 50%). The intent of this Policy is to provide guidance to ensure that funding can be provided to meet Council identified priority infrastructure needs.

***GUIDING PRINCIPLE 4: Coordinate growth with the provision of infrastructure.***

*POLICY 4.a: Facilitate growth consistent with the Centers, Corridors and Wedges Growth Framework.*

*POLICY 4.b: Encourage infill and redevelopment as one strategy to take advantage of existing infrastructure*

This Policy intends to encourage infill and redevelopment located where it can be served by existing or planned infrastructure and services, and which supports the City's overall growth framework, as well as the draft Environment chapter of the GDP.

*POLICY 4.c: Use area plans as a tool to better link future land uses with infrastructure needed to serve it and with the Centers, Corridors and Wedges Growth Framework.*

This Policy is intended to better utilize the area planning process to identify, coordinate, and prioritize future infrastructure needs and to better coordinate these needs with planned future land uses identified in the area plans. Additionally, it is intended to raise the funding priority for infrastructure projects identified in an adopted plan developed through an inclusive, community-based process with interdepartmental/agency cooperation. Implementation of this Policy might call for greater participation of infrastructure providers in area planning processes and for greater participation of land use planners in the infrastructure planning processes. It may also call for some land use recommendations in area plans to depend upon the existence of Capital Investment Plans that would ensure availability of infrastructure to serve the recommended land uses.

***POLICY 4.d: Ensure that decisions regarding location and intensity of development take into account geographic areas in which infrastructure is (and will be) available.***

The centerpiece of this Policy would be revising the GDP Residential location criteria to emphasize geographic areas in which infrastructure is available. This might involve replacing the current “potential connectivity” standard with an infrastructure indicator tied to existing and/or funded projects, and/or a refinement of the road network evaluation.

***POLICY 4.e: Consider both the on-site and community-wide impacts of a proposed development on public infrastructure (e.g., roadways, parks and recreation, police and fire protection, schools, stormwater, water and sewer); as well as the possibility of timing/phasing development as infrastructure can be provided.***

The intent of this Policy is to provide a more complete picture of developments’ infrastructure impacts and to help determine any needed mitigation measures, mitigation timeline, and mitigation responsibility.

***GUIDING PRINCIPLE 5: Ensure that infrastructure provision seeks to minimize negative impacts to both the natural and social environment.***

***POLICY 5.a: Make the protection of the natural environment a priority in the infrastructure design and construction process, while acknowledging the need to balance the advantages of the improvements with their environmental impacts.***

The intent of this Policy is to ensure that infrastructure projects are designed and constructed so that their impacts on the natural environment are acknowledged and can be minimized as much as reasonably possible. The Policy recognizes that environmental protection is one of many competing priorities and that it must be balanced with these other factors. (Guidance for minimizing/mitigating environmental impacts is provided in the draft Environment Chapter of the GDP.)

***POLICY 5.b: Consider the impacts to existing neighborhoods when providing infrastructure.***

The intent of this Policy is to ensure that when constructing new infrastructure, such as streets and sewer and water lines, impacts are considered such as physically

dividing neighborhoods, creating safety issues and/or eyesores or negatively impacting existing service.

*POLICY 5.c: Consider sustainability (location, design, materials, operation) when making infrastructure decisions.*

The intent of this Policy is to ensure that decisions pertaining to future infrastructure include consideration of principles of “sustainability”, defined as the long-term implications of the infrastructure’s location, design, etc. upon the community, the environment and upon operations and maintenance expenses. This exercise needs to acknowledge any additional costs associated with sustainability and the potential benefits (including lower maintenance and operational expenses and environmental benefits).

***GUIDING PRINCIPLE 6: Seek regional solutions – where applicable – to infrastructure issues and problems.***

*POLICY 6.a: Encourage regional partners to be engaged in collaborative problem-solving to identify creative regional solutions to infrastructure issues.*

Infrastructure solutions might be found in the development of partnerships with organizations beyond the boundaries of the City of Charlotte. Many transportation, stormwater and utilities infrastructure issues can be more effectively addressed with regional infrastructure investment solutions. Additionally, it is important to ensure that local decisions do not have unintended impacts regionally. Enhanced communication on infrastructure issues with regional partners is one means of achieving this.

Also important to understand is that the nature of the issue will influence the definition of “regional”. For example, the regional partners gathered to address an air quality issue may represent different geographic areas than those gathered to address water quality issues.

## ***Implementation Tools – Infrastructure***

### ***Infrastructure Master Planning and Capital Investment Planning***

- Ensure that City and County infrastructure providers understand the Centers, Corridors and Wedges Growth Framework and are enabled to use it to guide infrastructure master planning initiatives and capital needs assessments.
- Update the City's capital planning principles to incorporate the Centers, Corridors and Wedges Growth Framework and to more strongly address the need for collaborative and coordinated infrastructure planning. Additionally, ensure that these principles are consistently used to identify and prioritize capital projects.
- Work with City and County infrastructure providers to enhance infrastructure master plans and needs assessment processes so that needs are identified in coordination with one another and data and reporting is more standardized among providers.
- Seek greater collaboration between and among City and regional (especially County, but also including NC Department of Transportation) Infrastructure Master Planning and Capital Investment initiatives.
- Create a reliable timely and convenient electronic medium that can be used by each infrastructure provider (City and County) that allows for comparison among various agencies' infrastructure Master Plans and capital investment plans so that adjustments may be made accordingly in Master Plan and capital investment plan updates.

### ***Land Development Review and Regulatory Processes***

- Create mechanisms that allow all infrastructure providers to more actively and meaningfully participate in reviewing & evaluating land development proposals.
- Consider short-term and long-term (ie. in excess of 10 years) infrastructure implications as articulated in various long range infrastructure plans when reviewing land development plans and proposals.
- Review land development ordinances and regulations to ensure that they do not make it more difficult to develop in infill and Center and Corridor areas than in other geographies.

### ***Communication and Coordination***

- Explore means of establishing more formal inter-jurisdictional relationships (e.g. joint resolution like Joint Use Task Force) that may involve development of interdepartmental and inter agency agreements to coordinate major planning initiatives.



- Utilize regional organizations (such as the Centralina Council of Governments) as a platform for regional infrastructure planning, communication, and coordination discussions, focusing particularly upon establishing and maintaining regular, meaningful, and reliable communications on pertinent infrastructure issues with a goal of enhanced collaboration.

### ***Land Use Planning***

- As part of the update of the Phase I General Development Policies, incorporate greater consideration of infrastructure availability and capacity.
- Incorporate greater consideration of infrastructure availability in developing recommendations in area plans.
- Reflect infrastructure needs articulated as part of Area Plans in:
  - Individual agencies' infrastructure needs assessments and
  - Capital Investment Programs and Capital Needs Assessments.

### ***Funding and Resources***

- Explore the potential role of the NCDOT for roadway improvements outside of the City's corporate limits.
- Continue the process to explore new funding sources for infrastructure used following passage of the Transportation Action Plan in 2006. This should include identification and examination of funding and resource approaches used successfully in comparable communities to finance/expedite/enable infrastructure to be developed, and the identification of regulations that may be obsolete, duplicative, or otherwise unnecessary that unfairly burdens localities' ability to develop needed infrastructure.
- Identify and monitor legislative approaches to innovation (e.g. proposed legislative authority to use "design-build" process for utilities projects; legislative authority to allow school districts to contractually partner with private sector to build schools, etc.); advocate for legislative reforms where warranted.
- Explore potential creative financing opportunities that may involve public/private partnerships, IRS tax codes, naming rights, philanthropic gifts of infrastructure or funding, etc.
- Explore alternate means of infrastructure service delivery in annexation areas as a means of potentially softening the infrastructure cost impacts of serving annexed areas.

### ***Research & Data Analysis***

- Quantify the funding gap between projected infrastructure needs and likely resources available to meet those needs, using reasonable revenue projections alongside updated capital needs assessments and infrastructure plans.

- Explore innovative approaches that can be used to reduce the demand for infrastructure and to ensure that environmental impacts are minimized.
- Develop an infrastructure sustainability checklist to help determine sustainability of infrastructure decisions (location, design, materials, etc.).
- Develop and maintain an inventory of environmental resources and obstacles to be considered both in location and design of infrastructure and for land use and land development decision-making.