Charlotte Department of Transportation



Danny Pleasant, Director

July 28, 2010



Table of Contents

I.	Executive Summary	
	Introduction	
	Summary of Resource Needs	
	Vision, Mission and Commitment	
	Key Needs and Challenges	
	AccomplishmentsOrganization Chart	
	Organization Chart	12
II.	Strategy and KBU Planning	
	Links to Corporate Strategy	13
	Strategic Initiatives	
	CIP / CNA	15
Ш	Service Delivery	
	Core Service Areas	15
	Service History and Trends.	
IV	BSC and Performance Measurement	
	Serve the Customer	23
	Run the Business	23
	Manage Resources	
	Develop Employees	26
V.	Request for Resources	
٧.	request for resources	
	Budgetary Highlights	27
VI.	Conclusion	28
VI	I. Appendices	28
	A – KBU Link to BSC (Visual)	
	B – Departmental Services Inventory	
	C – Transportation Acronyms	31

Charlotte Department of Transportation FY2011 Strategic Operating Plan



I. Executive Summary

Introduction

Charlotte's extensive transportation system has been a key to the city's growth and prosperity for decades. It is a vital resource that provides citizens many lifestyle choices and facilitates business and commerce. As the largest user of public space, the transportation system shapes the look, feel and visual quality of the community; more so than any other infrastructure investment. Flourishing communities understand the community building potential of the transportation system as well as its functional role.

The Charlotte Department of Transportation (CDOT) has 434 employees dedicated to *Connecting Charlotte* by enhancing the driving, biking and walking experience through planning, operating and maintaining the City's transportation choices. This directly relates to City Council's goal to make Charlotte "The premier city in the country for integrating land use and transportation choices." In May 2006, City Council adopted the Transportation Action Plan (TAP), which constituted the City's first comprehensive, multimodal, long-range transportation plan to help accomplish Council's goal. CDOT's near term focus will be to embrace Charlotte's transition from suburban to urban with a keen eye toward sustainability. To embrace Charlotte's urbanism, we will need to leverage and manage our available resources, work in the most environmentally friendly and energy efficient way and strike an accord between maintaining and operating Charlotte's current infrastructure while planning and building new transportation facilities to meet current and future demands.

The City's transportation department consists of six divisions. The CDOT workforce maintains nearly 2,400 centerline miles of streets, 680 signalized intersections, 125,000 traffic control signs and nearly 1,600 linear miles of sidewalks. We work with neighborhoods, developers, special event organizers, as well as utility companies working in the public right of way. We oversee transportation planning and design for a city that currently encompasses over 290 square miles and a population of 726,000 residents. Charlotte's extra-territorial jurisdiction (ETJ) expands this area to 380 square miles.

The following pages contain our Strategic Operating Plan (SOP) for FY2011. The SOP contains the following components: our vision and mission, key needs and challenges, recent accomplishments, key strategic initiatives and corresponding measures and targets, along with a description of our core services and service trend information, our Balanced Scorecard (BSC) and 2011 budgetary highlights.

Summary of Resource Needs

	FY2008	FY2009	FY2010	FY2011
	Actual	Actual	Revised Budget	Approved Budget
Operating Budget	\$22,837,128	\$20,157,672	\$21,244,164	\$20,831,767
Powell Bill*	\$24,761,053	\$28,496,537	\$30,153,757	\$23,824,763
Positions	439.25	430.50	434.50	434.50

^{*}Powell Bill account includes Powell Bill funds provided through state funding formula plus a supplemental general fund allocation by city council.

Vision, Mission and Commitment

Vision: To be a part of building a city of transportation choices through the efforts of our innovative, competent and highly motivated workforce. We will plan, operate and maintain the transportation system in an exemplary manner and continue to anticipate and serve the needs of our citizens and the city.

Mission: *Connecting Charlotte...*enhancing the driving, bicycling and walking experience through planning, operating and maintaining the City's transportation choices.

Commitment:

- To build, operate, and maintain a sustainable urban transportation network which will accommodate more people, jobs, and demands for housing, public services and urban amenities
- To advance Charlotte's position as a livable, economically competitive, and environmentally healthy urban center
- To enhance the public realm
- To recognize the value economic development brings to the community
- To respect lifestyle choices and established development patterns

Transportation Action Plan Goals:

- 1. Continue implementation of the Centers and Corridors strategy.
- 2. Prioritize, design, construct and maintain convenient and efficient transportation facilities to improve mobility, safety and neighborhood livability, promote transportation choices and meet land use objectives.
- 3. Collaborate with local and regional partners on land use, transportation and air quality to enhance environmental quality and promote long-term regional sustainability.
- 4. Communicate land use and transportation objectives and services to key stakeholders.
- 5. Seek financial resources, external grants and funding partnerships necessary to implement transportation programs and services.

Key Needs and Challenges

The City of Charlotte's Transportation key business unit is committed to ensuring Charlotte becomes the premier city in the country for integrating land use and transportation choices. In order to meet that vision, we will need to address key challenges in the near future. Our needs and challenges summarized below are broken into several areas: Sustainable Future, Collaborate and Build Partnerships, Continuing Implementation of the Transportation Action Plan, the MUTCD Sign Retro-Reflectivity Program, and Retaining a Skilled Workforce. These challenges link to the City's and CDOT's Corporate Objectives of Provide Transportation Choices, Invest in Infrastructure, Develop Collaborative Solutions, Enhance Customer Service, Expand the Tax Base and Revenues, and Recruit & Retain Skilled, Diverse Workforce.

Sustainable Future

Charlotte, along with other urban areas around the country, is still feeling the impact of an economic downturn that is 18-months long and counting. This economic downturn can be seen most evidently in the development industry which in years past has over burdened us with activity. The last 18-months however, have seen development plan reviews and subsequent revenues generated from those reviews cut to nearly 35% of 2008 levels. Moving forward, CDOT will continue to focus on managing the current resources we have, strive to do more with less, and do the work we do in an environmentally

Invest In Infrastructure

> Enhance Customer Service

friendly manner. Our core business is to operate and maintain the city's transportation network. A wise investment strategy in this current economic environment is to protect our existing assets through routine maintenance and timely repair. This year CDOT is responding to more potholes than usual on both NCDOT and City maintained streets due to the recent unusually wet and cold weather. In an effort to expedite pothole repairs, CDOT will begin its annual pothole campaign earlier this year with an extra focus towards citizen communication and education.

City Council increased funding for resurfacing recently, which aligns perfectly with CDOT's strategy to invest in our existing infrastructure. Particularly challenging in the coming year is to help the city accommodate growth in a sustainable and environmentally friendly way. We have done much in that regard already by recycling pavement and using warm-mix asphalt within our Street Maintenance Division. For the past several years, our Engineering and Operation Division has been retrofitting traffic signals with light emitting diodes (LEDs). LEDs utilize a fraction of the electricity and last much longer than incandescent lights. All CDOT employees are assisting in this endeavor by planning their work more efficiently, optimizing business processes and reducing fuel consumption by reducing idling among all of our fleet vehicles and equipment.

Collaborate and Build Partnerships

A focus and challenge for CDOT in the foreseeable future is to continue to develop and foster our outreach and intergovernmental relations within the City, as well as with stakeholders on a local, regional and state level. We continue to collaborate with NCDOT on expediting the construction of the remaining segment of I-485, and future expansion of Independence Boulevard. CDOT staff supports CATS as it continues to work with NCDOT

Develop Collaborative Solutions

Provide Transportation Choices on transit corridors including the Blue Line Extension. The state also recently reactivated the legislative study commission on urban growth and infrastructure needs. CDOT's Director has been reappointed as one of four public statewide members. The challenge for the commission is to review and consider possible statewide growth management strategies in the upcoming year. Another issue at the state level involves the partnering and assisting NCDOT in developing and implementing the Complete Streets policy. The NC Board of Transportation recently adopted a Complete Streets policy, which has similar expectations to those described in the City's USDG.

Regionally, CDOT is involved in the Interagency Consultation for the development of the upcoming State Implementation Plan (SIP). The SIP is prepared by the state to demonstrate how it can meet air quality standards statewide. Additionally, CDOT is heavily involved in the preparation and production of MUMPO's 2035 Long Range Transportation Plan (LRTP) and Air Quality Conformity update. CDOT has recommended that the 2035 LRTP be based on assuming no new revenues, which produces a major challenge as we plan and integrate the region's transportation needs with future growth.

Locally, CDOT has a number of challenges ahead. We continue to implement the USDG which describes the preferred ways to design streets to respond to the development pattern they are expected to serve. In FY2010-11, we will be drafting amendments to the City's development ordinances to bring them into alignment with the USDG. Our challenge will be to retain the flexibility inherent in the USDG while striving to simplify the land development review and approval processes. CDOT will continue to be tested as it implements the following four programs and plans across the city: Charlotte Bicycle Plan, Charlotte Pedestrian Plan, the Sidewalk Program and the Center City Transportation Plan. CDOT will be heavily involved with the Planning Department in ensuring the Elizabeth, Catawba, Steele Creek and University Research Park area plans continue to move forward in 2011 and beyond. The City continues to be challenged in meeting specific land use targets it has established; in particular the percentage of population within a ¼ mile of schools, parks, transit and shopping. Meeting this target can reduce vehicle miles of travel by shortening trips and making it possible for people to walk, ride bicycles or take transit to more destinations. However, we have been trending in the wrong direction for half of these categories. The decrease in percent of population within ¼ mile of transit (bus and light rail) is particularly striking. According to CDOT and Planning analysis, this trend is a result of 58% of new residential units being permitted outside of a ¼ mile of transit service between FY 03-FY09. To reverse these trends, the City will need to implement the Centers, Corridors and Wedges Growth framework more actively through future plans and rezoning reviews.

Continuing Implementation of the Transportation Action Plan

In FY2011, CDOT will be preparing a 5-year Transportation Action Plan (TAP) update. The Transportation Action Plan demonstrated the need to increase funding for periodic maintenance of street pavement, sidewalks, curbs & gutters, and traffic signs and signals. However, the city has yet to identify the additional funding to fully implement the TAP either for maintenance or for new capacity. During times of limited funding, the process of deciding how to allocate dollars between maintenance and new facilities can be difficult for

Invest In Infrastructure

Provide Transportation Choices elected officials and city staff. CDOT supports placing a high priority on maintaining and sustaining existing infrastructure.

The city's Transportation Action Plan (TAP) projected a gap of more than \$7 billion that will extend full implementation decades beyond its 2030 benchmark. Funding is a chronic problem for transportation. As identified in the TAP, Charlotte lacks a dedicated funding source for non-transit

Expand the Tax Base and Revenues

transportation projects. The lack of a dedicated and stable funding source affects our ability to both address Charlotte's growing transportation needs and maintain what we built in previous years. CDOT has a long list of priority transportation projects that are needed in the near term. These needs are detailed in the city's Capital Needs Assessment program. The lack of a dedicated funding source slows down our ability to meet the City's existing and future mobility, economic competitiveness and our resident's quality of life. The Committee of 21 made recommendations to City Council regarding state and local transportation funding and new revenue sources. While Charlotte has increased transportation funding since the TAP was adopted, a funding gap remains of over \$80 million just in FY2010, and funding beyond the 2010 Bond is uncertain.

MUTCD Sign Retroreflectivity Program

Traffic signs provide important information to drivers during the day and at night. A sign is effective only when it is visible. Retroreflectivity of traffic signs is important for communicating vital safety information to the road

Invest In Infrastructure

users, especially under nighttime driving conditions. A recent report based on crash data from 2004 to 2006 published by the National Safety Council indicates that fatalities per million miles traveled under nighttime conditions were nearly 3 times more than fatalities per million miles traveled under daytime conditions. Poor maintenance of retroreflectivity below standards recommended in the Manual on Uniform Traffic Control Devices (MUTCD) may lead to safety issues for road users at night.

The second revision of the 2003 Manual on Uniform Traffic Control Devices (MUTCD) established minimum retroreflectivity levels that must be maintained for traffic signs. Previously, the MUTCD did not specify minimum retroreflectivity levels. This is a new federal mandate that CDOT will be challenged to meet. This is particularly challenging to CDOT, since we have neither an established sign inventory nor an asset management system in place for signs. Charlotte has until January 2012, to establish and implement a sign assessment or management method demonstrating how we will maintain minimum levels of sign retroreflectivity. The compliance date for bringing regulatory, warning and ground mounted signs into compliance is January 2015. For overhead guide signs and street name signs, the compliance date is January 2018. CDOT currently has five sign crews installing and maintaining signs on our street network of 2,378 centerline miles. Our current sign inventory best estimate is approximately 125,000. These five crews currently install on average about 10,000 signs annually, which means it will take no less than 12+ years to replace our current sign inventory with current resources. Currently, our signs have a typical retroreflectivity life of 10 years based upon the type of sheeting we use in the fabrication process. Based upon our internal analysis, CDOT will need to either hire two signs crews, a sign fabricator, materials and equipment or contract out this work to meet federal mandates that must be met by 2015.

Retaining a Skilled Workforce

While the recent economy brought financial adversity to the City of Charlotte, it did provide an opportunity for the City to hire a skilled workforce. As the economy rebounds, CDOT is at risk

of losing a majority of its labor and trade personnel. The most vulnerable positions – masons, crewmembers, equipment operators, electricians, contract estimators – are in high demand when the construction industry gets busy. We know that the amount of a weekly paycheck is important to labor and trade employees since a majority of them live paycheck-to-paycheck. With limited funds to provide employees with annual merit increases, the City has the

Recruit & Retain Skilled, Diverse Workforce

potential to lose valuable resources to construction firms that are willing to pay higher wages and annual bonuses. For that reason, CDOT is focusing on creating positive relationships between the crewmember and the immediate supervisor, as well as reminding employees of the stability the city historically has afforded its workforce and the value of other benefits.

Accomplishments

Some of CDOT's most recent noteworthy achievements in recent years are:

- Center City Transportation Plan adopted in April 2006
- Transportation Action Plan adopted in May 2006
- Urban Street Design Guidelines adopted in October 2007
- Utility Right-of-Way Ordinance adopted in November 2007
- South Corridor Light Rail Transit Line opened on November 26, 2007
- Bicycle Transportation Plan adopted in September 2008
- National Smart Growth Achievement Award in December 2009 by the US EPA

Transportation Projects

The City continued to implement transportation projects in excess of \$160 million for roadway, signalization, connectivity, traffic calming, bicycle, and

sidewalk facilities funded by Transportation Bonds. In 2010 alone, projects CDOT designed and/or built amounted to:

- 9.7 miles of street projects
- 5 intersection projects
- 14.6 miles of sidewalk projects
- 22.0 miles of bicycle projects
- Replaced approximately 80 obsolete traffic signal controllers
- Re-timed traffic signals at roughly 250 intersections



Annual Transportation Survey

A significant accomplishment occurring in 2010 was CDOT's revision of the UNCC annual transportation survey. CDOT revised the survey to meet City Council's directive of implementing a multifaceted, multi-departmental communication and public outreach plan that explains the City's transportation plans and growth strategy. The retooled and redesigned survey

captured measurable outputs and assessed the community's understanding of the City's transportation plans, priorities, and growth strategy.

Organizational Improvements

Customer satisfaction with our development review functions has been low in recent years. Turnover in key leadership positions gave us a special opportunity to kick off impactful change to address the customer issues. Sound recruitment and thoughtful reassignment of CDOT resources have infused new leadership and a fresh perspective into the development services workgroup.

Under new leadership, CDOT has reached out to the development community to better understand their dissatisfaction. Their feedback combined with staff input drove business process improvements that enhanced service levels and prepared the department for a stronger economy and heavier workloads. The development community has responded favorably to the changes.

CDOT leadership has responded to a weak economy, reduced development activity and decreased user fee revenue, by reassigning six development review staff to CIP funded activities. These changes significantly reduced the impact of user fee revenue shortfalls on the General Fund, but retained the capacity to meet the future demand of a revived economy. At the same time, we have been able to accomplish some important capital project work that CDOT was struggling to find resources to complete. In addition to the budgetary benefits, we have broadened the work experiences of our staff.

Overall, we are pleased with the initial results of these changes and believe we will continue to improve.

Improved Communication

CDOT recently installed a dynamic messaging system at all of our satellite facilities. This new system will help management keep operational employees better informed about city and KBU related news and information. Also this year, we began our Hansen 8 work and asset management system migration. Some key benefits we expect from the system upgrade are:

- Additional pavement management functionality
- Better integration with other critical systems through a corporate service-oriented architecture. This will facilitate the transfer of data between 311 and CDOT resulting in faster response to customers.
- The GIS component will enhance CDOT's ability to effectively schedule and assign work.
- The web-based structure of the new Hansen 8 will allow CDOT to offer customers the opportunity to make service or permit requests through the internet.
- Hansen 8 has more asset management functionality, which will enable CDOT to better management the life cycle of city assets for which CDOT is responsible.

Charlotte Uptown Wayfinding & Parking Program

One of our most recent customer-focused process improvements accomplishments is the development and initial implementation of the Charlotte Uptown Wayfinding and Parking

Program. The program merged from an adopted goal of the Center City Transportation Plan City Council adopted in April 2006. The program is funded from a federal CMAQ grant. The program consists of two components:

- Pedestrian Wayfinding System and
- Vehicular Wayfinding and Parking System to include freeway signs, on-street directional signs, parking guidance signs and egress signage.

The dynamic information element of the system collects real-time available parking information from parking decks every two minutes. This information is routed via Internet clouds and wireless antennae to the City's Traffic Control Center, street signs, the "Find Your Way" website, dynamic gateway signs at primary portals to the CBD, and to PDAs and next generation personal information devices. In addition, the system provides direct information feeds from the Traffic Control Center to street signs, the website, and PDAs to communicate congestion information, street closures/detours, special events, preferred parking locations or evacuation directions.

Once complete, the program will provide a wayfinding system which will result in more efficient and safer circulation of vehicles and pedestrians to and within Center City. It also will provide clear directions to destinations, reduce vehicle miles traveled, frustration and excess emissions, strengthen Uptown as a "park once" destination and will enhance citizens' and visitors' awareness of the branding campaign "Find Your Way".

Improved Pavement Evaluation Process

Another noteworthy achievement was our successful revision of the collection of pavement condition data for our bi-annual pavement condition rating. We have utilized the same method for the past 25 years where we contracted with engineering firms to provide a pavement rating utilizing a "windshield" survey methodology. Due to the involvement of multiple raters, and the assessment occurring while riding in a vehicle, this methodology is subjective and time consuming. In FY2011, our pavement condition analysis and rating survey will capture the condition of our streets utilizing high-resolution video. Once captured, the contractor will rate the pavement condition using the stored video. This method allows for video verification of street conditions prior to deploying crews on work orders. The survey application will also allow CDOT to upload data directly to our new Hansen 8 system. Pairing this survey data with routine maintenance work provides an efficient platform to determine the best combination of streets to resurface each fiscal year. Compiling data in one resource will provide higher returns on limited funds.

Record Resurfacing



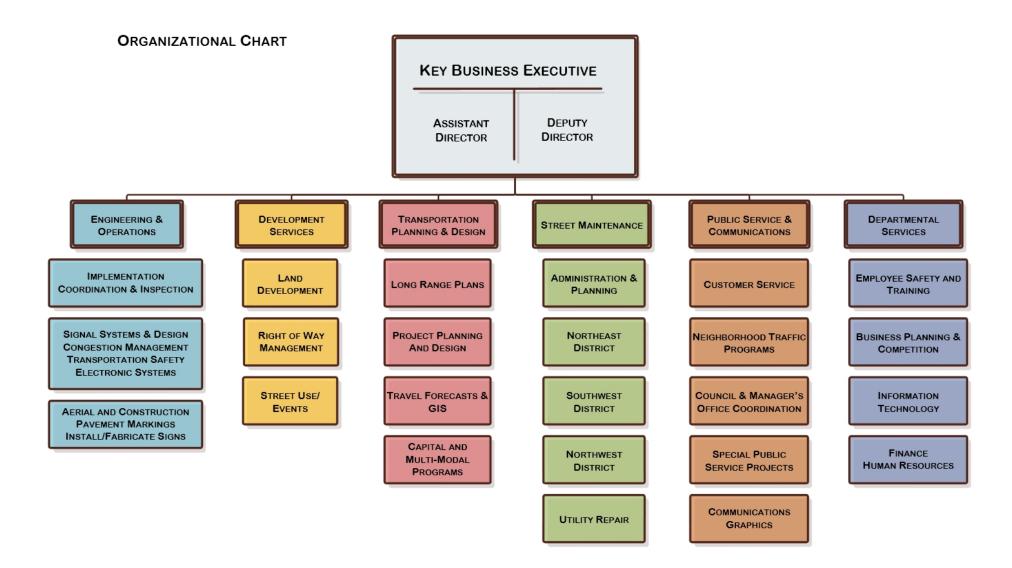
In recent years, City Council has supplemented the Powell Bill with General Fund dollars to improve the City's resurfacing program. To date, the additional supplemental funding has allowed the City to pave an additional 111 miles of roadway. In FY 2010, CDOT took advantage of favorable pricing conditions and kicked off the largest resurfacing effort in the City's history. Our FY 2010 effort includes 197 miles of streets managed within three contracts. This surpasses our two previous resurfacing endeavors of 100 miles in FY

2009 and 104 miles in FY 2008. In conjunction with this large resurfacing effort, CDOT lead a collaborative re-engineering/process improvement project involving multiple key stakeholders impacted by the City's resurfacing program. Participants of the project include City KBU's, County Storm Water Services, NCDOT, Charlotte Mecklenburg Schools, and other organizations. The project included a major upgrade to CDOT's communication plan, ensuring our department communicates all relevant information and changes in a timely manner. The result of these efforts is to minimize the potential for problems that will put a project on hold.

Other Achievements

In FY 2010, we began moving our Hansen 7 work and asset management software to Hansen 8. When complete, the migration will give us additional pavement management functionality, better integration with 311 and other enterprise-wide systems through a corporate service oriented architecture, and increased asset management functionality enabling us to better manage the life cycle of city assets. Currently, we are migrating our existing Hansen data and testing the data in the new environment. We have a go-live date scheduled for August 2010.

In FY2008 CDOT began utilizing new technology within our on-street parking program. We expanded that technology and continued efforts to "go green" by adding solar-powered Pay Stations in FY2009. The new stations were installed in the 500 East Fourth Street and 500-800 blocks of East Third Street. The pay stations are energy efficient and improve the look of city streetscapes where they are located.



II. Strategy and KBU Planning

The Charlotte Department of Transportation Strategic Operating Plan links departmental strategy with the resources needed to assist the City in achieving its overall corporate strategy.

The City of Charlotte's philosophy is that performance matters and that performance should be measured as well as managed. For that reason, in 1996, the City implemented the Balanced Scorecard (BSC) as the organizations performance management system. The BSC provides the City and CDOT with a framework to translate strategy into tangible objectives and measures. To further inspire the City into becoming a strategy-focused organization the City Manager in 2003 instituted an annual "City Strategy" award. This award was created to recognize a key business unit's accomplishments in planning and executing corporate strategy. In 2003, the City redesigned the Corporate Balanced Scorecard that simplifies and adds more visual interest to the City's primary strategic planning tool. Also, in 2007, the City made some Strategy modifications including replacing the City's strategic principle "Smart Growth" with "Comprehensive Citizen Service" as well as replacing the corporate objective "improve technology efficiencies" with "optimize business processes".

Charlotte City Council sets the strategy for the organization during its annual council retreat. The organization then responds to Council's directives and communicates corporate strategy by developing Strategic Focus Area Plans, which outline resource allocations to achieve strategy. Next, all KBU's articulate their strategy through the process of developing a formal Strategic Operating Plan that encompasses the KBU Business Plan, Balanced Scorecard and Budget. The key business unit's BSC demonstrates graphically a clear linkage to the City's Strategy, while the business plan indicates specific targets, initiatives, resources and challenges in meeting the scorecard objectives.

Links to Corporate Strategy

CDOT has developed an illustration that represents our link to City Strategy and the corporate Balanced Scorecard objectives (see appendix A). Below is a summary of our services and how they relate to the four Balanced Scorecard perspectives:

Serve the Customer. CDOT views serving customers as a vital and integral part of our vision and mission. We strive to design and build streets that provide for a safer environment for motorist, pedestrians and bicyclists. We support expanded transportation choices and help safeguard the environment through both the integration of land use and transportation planning and regional air quality conformity. In addition, we promote economic opportunity by enhancing multimodal transportation to, from and within the City, completing roadway and intersection improvements throughout the city, and working with developers to mitigate transportation impacts. Other routine but highly visible work CDOT performs daily includes filling pot holes, maintaining traffic signal operations, and responding to inclement weather when the need arises.

Run the Business. Although Transportation is a large KBU within the City, it is part of a much larger organization all working together to ensure corporate-wide goals are met. Many of our

products and services require collaboration and communication with other Key Business Units and stakeholders. We continue to seek ways to enhance customer service and leverage technology to ensure continued service enhancement for our customers along with continuous improvement in our use of technology.

Manage Resources. CDOT constantly seeks ways to ensure its services are high quality and are competitively priced. Transportation has been an active participant in the City's Competition/Privatization Program since its inception in 1995. The benefits of managed competition continue to payoff. CDOT now operates more efficiently and effectively due to the accountability systems established during competition. CDOT currently utilizes Hansen, our work and asset management system to optimize the operations of our Street Maintenance, Implementation, Electronic Systems Lab, Signs, Signals and Pavement Marking operations. In the future, we will continue this tradition as we seek innovative ways to optimize business processes and deliver effective and efficient services to our customers. Additionally, we invest in infrastructure to ensure appropriate safety and maintenance of roadways and other transportation projects and to keep traffic signals in good repair.

Another way Transportation manages its resources is by using public dollars as a catalyst for sustainable land use and transportation development consistent with approved plans. CDOT supports the higher density centers and transit corridors through both proactive planning and targeted capital investment.

Develop Employees. We understand that the ability to meet citizen demands is directly related to the employees' knowledge, skills and abilities. Therefore, it is important to develop a workforce that is both highly competent and motivated to make the best use of their talents. Our employees are our most valuable assets and we pride ourselves on continuously improving and learning. We see real value in ensuring that our employees understand the strategy and initiatives we have undertaken and the individual and collective roles they play in its achievement.

City's Strategic Initiatives & TAP goals:

- Continuing the implementation and refinement of the Centers, Corridors and Wedges Growth Framework
- Implementation of the 2006, 2008 and 2010 transportation bond projects
- Prioritize, design, construct and maintain convenient and efficient transportation facilities to improve safety, enhance neighborhood livability, promote transportation choices and meet land use objectives
- Seek financial resources, external grants and funding partnerships necessary to implement transportation programs and services
- Communicate land use and transportation objectives as outlined in the Transportation Action Plan
- Collaborate with local and regional partners on land use, transportation and air quality to enhance environmental quality and promote long-term regional sustainability

Capital Investment Plan/Capital Needs Assessment

A major component of Charlotte's goal to become a premier community of choice for living, working and leisure activities is the development of a biennial Capital Needs Assessment (CNA); in conjunction with the annual operating budgeting process, a yearly Capital Investment Plan (CIP). The City's CNA is a ten-year public improvement request that is used as a guide for CIP development. The CIP is our five-year infrastructure plan that is developed in a collaborative manner and based on Smart Growth principles designed to align the City's highest priority capital projects with a financing schedule. The plan benefits all segments of our community and includes investments in the airport, streets, sidewalks, transit, neighborhoods, housing, water and sewer, storm water and government facilities.

In the FY09 – FY18 CNA, projects and programs related to Transportation total more than \$1.5 billion. The CNA matches the funding needs that are outlined in the Transportation Action Plan and includes some 26 programs and 58 projects involving thoroughfares, new connector streets, intersections, sidewalks, bicycle lanes, safety projects, and traffic signal coordination. The FY10-14 CIP has a five year funding need of over \$703 million.

III. Service Delivery

The Transportation KBU consists of five core service areas that maintain, operate and develop a multi-modal transportation system that moves people and goods safely throughout our city and region. Charlotte's transportation system serves an area of 286 square miles and consists of nearly 2,300 centerline miles of streets, 680 signalized intersections, 125,000 traffic control signs and 1,600 linear miles of sidewalk. The goal of the KBU is to manage and operate the system in a manner that offers public information and guidance and ensures resource efficiency, innovation and cost effective service delivery to the 726,000 residents currently residing in Charlotte.

Core Services

Our Key Business Unit achieves corporate strategy by providing services through the five core programs and services described below.

BSC Link:

-Optimize Business Processes -Invest in Infrastructure -Develop Employees Street Maintenance: This service's main components include street repair, street resurfacing, minor street construction, performing sidewalk, curb and gutter repair, repairing both asphalt and concrete utility cuts, storm drainage system maintenance, and emergency response snow and ice removal and any disasters that might impede the city right-of-way. Over 260 skilled and motivated employees whose focus is on quality customer service, preventative maintenance and safe and cost effective service are tasked with delivering these services in Charlotte.

• Street Repair: CDOT is responsible for repairing potholes and general street failures. The bulk of this work is preparing streets for resurfacing and responding to citizen requests. We receive nearly 650 requests to repair potholes annually.

- Street Resurfacing: The majority of this service is achieved through annual resurfacing contracts, which are funded through General Fund and Powell Bill Revenues. Using current FY09 bid costs, the FY2010 funding level supported a 14-year resurfacing cycle, which brings us back closer in line with our 12-year cycle threshold. An annual12-year resurfacing cycle is optimal once the resurfacing backlog has been addressed and the average street condition rating of 90 or above is achieved.
- Minor Street Construction: This work includes grading or constructing shoulders, grading widening strips, street widening, asphalt repair, undercut excavations, compactions, clearing shoulders, and removing debris or obstructions from the right-of-way.
- Sidewalk, Curb and Gutter Repair: CDOT actively maintains Charlotte's sidewalks to ensure safe conditions for pedestrian traffic, thereby reducing the City's exposure to liability as a result of trip hazards.
 Work varies from the repair of a single sidewalk panel to multiple blocks of sidewalk, curb and gutter.



• *Utility Cut Repair:* This service includes repairs to both asphalt and concrete utility cuts in the right-of-way for public and private utility companies. This is a 24-hour, seven day a week service. Our main concern is to ensure that the integrity of the street system is preserved and the public right-of-way remains safe.



- Storm Drainage Maintenance: The
 Transportation Department repairs, and cleans the
 storm drainage system throughout the City. In
 addition, the department builds and maintains
 roadway ditches and shoulders including grading,
 trash removal, seeding and mulching. Failure to
 maintain a quality storm-water drainage system
 accelerates street degradation and can cause pavement
 failure.
- *Emergency Response:* CDOT provides a 24/7 emergency response service for ice control, snow removal, or other natural and un-natural disasters. The department has a plan to mobilize equipment and personnel during and immediately following an emergency event. As first responder's, this service is critical to the City's ability restore a safe environment for citizens.

BSC Link:

- -Provide Transportation Choices
- -Optimize Business Processes
- -Invest in Infrastructure
- -Develop Employees

Traffic Control: This service encompasses the installation, operation and maintenance of traffic control devices (signals, signs, and markings). Oncall service is provided 24 hours a day to service to traffic control devices. The key to this service is the use of a comprehensive transportation systems approach that employs strategic solutions to promote pedestrian and traffic safety, improve infrastructure maintenance, and integrate with land development strategies.

• *Traffic Signals:* CDOT maintains approximately 680 signalized intersections. Annually, the department installs 25-30 new signals and upgrades 50 existing intersections, and installs/replaces hundreds of vehicle surveillance and detection devices. Crews maintain approximately 400 signal controlled intersections located on NCDOT streets within the City as well as all signals on City System Streets. This 24-hour traffic control service



assists with the safe and efficient movement of the City's pedestrian and vehicular traffic. City staff also is responsible for the operation and coordination of signal timing of these traffic signals to assure that they remain responsive to the City's changing travel demands.

. Signs and Pavement Markings: CDOT fabricates and installs approximately 8,000-10,000 signs each year. Pavement Marking Crews install more than 2 million linear feet of pavement markings and 800 arrows, crosswalks and stop bars each year. These services, in addition to our service related response time objectives, are

required to maintain public safety and minimize the City's potential liability resulting from vehicle related accidents.

BSC Link:

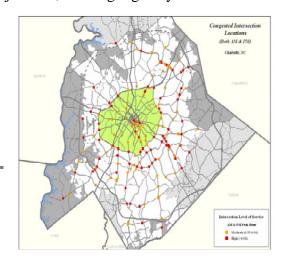
- -Provide Transportation Choices
- -Invest in Infrastructure
- -Enhance Customer Service
- -Develop Collaborative Solutions
- -Develop Employees

Transportation Planning and CIP Management: Charlotte's population is projected to increase by 350,000 people by 2030. This extraordinary growth will require a coordinated and comprehensive effort to maintain transportation mobility within a built out city and protect Charlotte's quality of life. Transportation Planning and CIP Management is a multifaceted service that involves short-term and long-term comprehensive coordination and stakeholder collaboration in the design and planning for travel by motorists, pedestrians, bicyclists, and prioritizing transportation improvements. Furthermore, this service influences land-use decisions that enhance transportation choices.

• Regional Planning: This particular service involves conducting a variety of transportation planning functions that extend beyond the City's limits. These include technical support for the Mecklenburg-Union Metropolitan Planning Organization (MUMPO), including preparing the Long Range Transportation Plan and Air Quality Conformity and the Transportation Improvement Program (TIP) documents. Additional technical services include producing population and employment projections, creating highway and transit

networks, applying and refining the new regional travel forecasting model, and analyzing transportation performance and air quality effects for programs and projects in the nonattainment area.

 Local Planning: CDOT supports and implements a wide array of dynamic planning initiatives to enhance mobility of motorists,



pedestrians, bicyclists and transit riders locally. These include collaborating with others in the development of Area Plans and preparing corridor and station area plans that include multimodal connectivity and accessibility strategies and projects. Other more CDOT specific services include updating thoroughfare and collector plans, refining connectivity requirements, developing and applying Urban Street Design Guidelines, implementing the City's Bicycle and Pedestrian Plans and leading the implementation and monitoring of the Transportation Action Plan for City Council. Additionally, staff provides comments on monthly rezoning applications and produces travel forecasts and GIS-based analyses that are used by CDOT and Transit and other departments as well as conducting traffic counts and special studies on an ongoing or as needed basis.

• Capital Program / Design & Implementation: CDOT provides management and technical expertise in all facets of transportation capital project programming, planning, design, construction and acceptance. CDOT staff participate on multi-departmental teams that develop and implement the City's roadway, pedestrian, bicycle, streetscape, utility, storm water, transit and traffic management programs and projects.

BSC Link:

- -Enhance Customer Service -Optimize Business Processes -Develop Collaborative Solutions
- -Develop Employees

Land Development Regulations and Right-of-Way Management:

Provisions for service includes reviewing rezoning petitions and development proposals to mitigate transportation impacts, achieve good access management and to ensure compliance with City standards. Additionally, it involves managing use of the public rights-of-way and coordinating with stakeholders to achieve quality customer service.

- Ordinance Enforcement: Involves the reviewing of all site plans for residential and commercial subdivisions to ensure developers comply with City ordinances and policies. Plans are reviewed for appropriate internal street design, connectivity, and street connections to thoroughfares. Furthermore, the department provides land use, conditional site plan and petition review to ensure integration of transportation, land use concerns, and pedestrian/transit oriented design, and identification and commitment by the developer to mitigate transportation impacts.
- *Permits:* CDOT reviews all commercial building sites to ensure developers comply with City ordinance and policy. Staff reviews for appropriate design of driveways, interior vehicle and pedestrian circulation, design and operation of loading docks and service areas for large commercial vehicles. Additional services include the identification of proposed curb locations to facilitate the installation of new curb, gutter and widening strips. Traffic studies can be required to identify transportation related impacts of the proposed development and requirements for corresponding improvements by the developer.
- Right of Way Use: Right-of-way use programs include managing, coordinating and permitting special events, parades, encroachments, abandonments and long and short
 - term use of the right-of-way all in an effort to keep the right-of-way safe for motorists and pedestrians. Special events coordinators work with CDOT staff to plan, coordinate and implement events that impact the right-of-way, such as



parades and street festivals. Right-of-way that is no longer necessary for public use can be closed upon request through the abandonment program. The encroachment program provides an approval process for constructing non-standard items in the right-of-way, such as irrigation systems and decorative sub-division entrances structures. Finally, CDOT manages the short and long term closure of travel lanes and sidewalks through its right-of-way management program.

BSC Link:

- -Provide Transportation Choices -Enhance Customer Service
- -Develop Collaborative Solutions
- -Develop Employees

Transportation Safety and Neighborhood Services: This important and vital service area provides outreach to neighborhoods to solve localized transportation problems, manages the neighborhood traffic management program, responds to inquiries and problem calls and initiates remedies. Services also include managing the City's street lighting and ParkIt! programs.

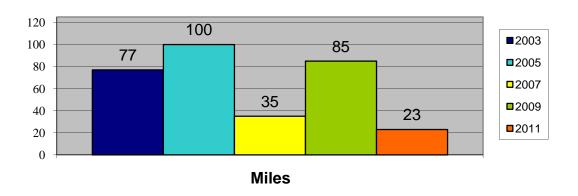
- Safelight Program: Established in August 1998, Charlotte's SafeLight Program was North Carolina's first red-light monitoring program. The program was suspended in FY2007.
- Pedestrian/Traffic Analysis and Safety: CDOT is actively working with citizens and neighborhoods to enhance pedestrian and traffic safety. This service includes collection and analysis of all of the City's crash data, development of the City's annual High Accident Location (HAL) listing, development of treatment alternatives for identified crash locations, conducting before and after studies on safety improvement projects, developing targeted enforcements strategies for CMPD, investigating and clearing sight obstructions and developing/implementing awareness and prevention programs/multi-media campaigns (Click It & Ticket It, Booze It & Lose It, School Pedestrian Safety, Speeding).
- ParkIt!: The ParkIt! Program is the City's on-street parking program for the Center City. It offers visitors short-term, inexpensive parking while they shop, dine and conduct business. Most spaces located within the Center City are metered. The program also administers the residential on-street parking permit program in areas where parking is at a premium for residents.
- Neighborhood Programs and Customer Service: This service is the citizen's first contact with CDOT and coordinates customer service, investigation of inquiries and follow-up. These include neighborhood programs, investigation of sight obstructions, signal timing inquiries, parking requests, traffic calming, street name changes, right-of-way obstructions and school zone investigations.
- Street Lighting: Charlotte streetlights are installed within the City by request and petition both for individuals and whole subdivisions. CDOT also installs lighting by design through a thoroughfare street lighting program. We work closely with Duke Power to design a pattern of streetlights for specific neighborhoods and thoroughfare streets that will best serve the needs of Charlotte.

Currently the city is tracking and providing electricity for approximately 79,000 street lights.

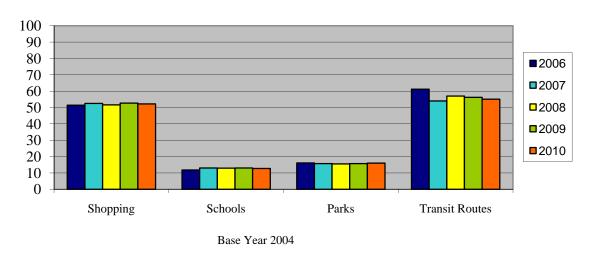
Service History and Trends

The charts below illustrate Charlotte's continuous street network expansion and growth through annexation and our recent trends in various land uses:

Street Centerline Miles Annexed



Percent of Population within 1/4 mile of Various Land Uses

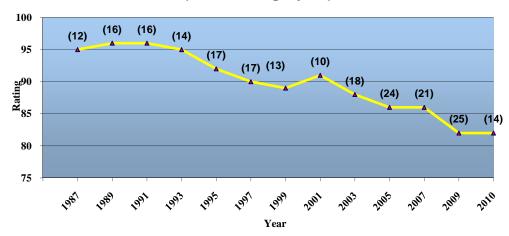


The trend that began in 1993 of shifting expenses from the General Fund to the Powell Bill has had a negative impact on Charlotte's street system. The following graphs illustrate the problem:

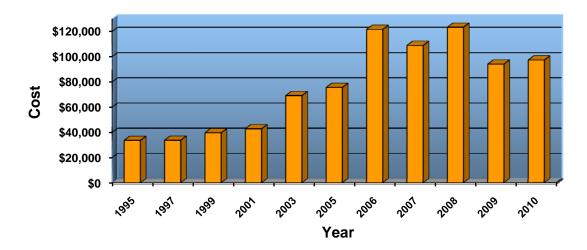
This graph depicts the trend in pavement condition:

This graph represents Charlotte's escalating resurfacing costs:

Street Conditon Rating (Resurfacing Cycle)



Resurfacing Cost Per Mile



IV. BSC and Performance Measurement Matrix

Cor	orporate Objective COOT Strategic Initiative CDOT Strategic Initiative		CDOT Strategic Initiative	Strategic Measure (\$) - indicates incentive pay measure	Target	² CDOT Services Inventory	FY2010 Results
				Complete and/or build new bikeways annually	10 miles of bikeways	4c 6b, 6c	22
			City of Charlotte Pedestrian Plan	Complete and/or build new sidewalks annually	10 miles of sidewalks	4e 6b, 6c	14.6
				% of transportation bond projects on schedule	90% completed or forecasted to be on time	4f 6a, 6b, 6c	90%
				Vehicular accidents per mile traveled	Decrease annually	1a, 1b 2a, 6b	-14.56%
				Pedestrian and bicycle accidents per capita	Decrease annually	1a , 1b 2a, 6b	P -16.1% B -29.0%
				Monitor intersection crash rate	>2 crashes per million entering vehicles	1a , 1b 2a, 6b	0.87
				Continue to implement the Urban Street Design	Continue to apply the USDG to 100% of Area Plans and CIP projects	5a, 6a, 6b	100%
				Guidelines (USDG)	Staff to recommend for Council's consideration a set of amendments to the City Code based on the USDG by Dec 2010.	5a, 6a, 6b	50%
			Enhance City connectivity ratio consistent with TAP objective 2.9	Monitor City connectivity ratio	1.45 inside Route 4 1.35 outside Route 4	6b, 6c	1.48 1.20
			Provide street degradation management	Citywide pavement condition rating	Improve survey rating over the previous survey (82 – 2008)	4a – 4g	No new survey in FY10
		Endure that small businesses have the opportunity to participate in informal City procurement and contracts through SBE programs ED-2	Ensure that small business enterprises have opportunities to do business with CDOT	Meet established SBE utilization goal for KBU	5% utilization	All	3.88%
RUN THE BUSINESS	Develop Collaborative Solutions	Develop Ilaborative Collaborate with local and		Annual hours of congestion per traveler, as measured by Texas Transportation Institute for the Charlotte Urban area compared to top 25 cities.	Percentage change in annual hours of delay per traveler in Charlotte will be less than the 5- year average percent change for the top 25 cities in the nation.	6a, 6b, 6c	Charlotte - 2.1% Top 25 + 0.5%
				Promote long-term reduction in ozone causing emissions from the transportation sector	Establish partnerships with business / management organizations to encourage increases in travel by alternative modes to/from two mixed use activity centers by June 2010	6a, 6b, 6c	100%
				Monitor the % of City population within ¼ mile of parks, schools, shopping and transit (2004 base)	Parks above 16.9% Schools above 13.0% Shopping above 45.6% Transit above 63.5%	6a, 6b, 6c	16.0% 12.7% 52.2% 55.1%

^{1 –} Direct Link to City of Charlotte 2011 Strategic Focus Area Plan

^{2 -} Link to Appendix B

	Corporate Objective	¹ Corporate Strategic Initiative	CDOT Strategic Initiative	Strategic Measure (\$) – indicates incentive pay measure	Target	² CDOT Services Inventory	FY2010 Results
		Collaborate with local and		Percent of City & NCDOT road designs consistent with TAP and USDG	100%	2c 6b	100%
	Develop Collaborative Solutions	regional partners on land use, transportation and air quality to enhance environmental quality and promote long-term regional sustainability T-2		Working with MUMPO, the City will conduct a study to evaluate the strengths and weaknesses of various MPO structures used across the country	Complete study by January 2011	ба	50%
			In accordance with TAP Policy 2.2.2 develop transportation adequacy policies and advance to City Council for consideration	Consider implementation of TAP policy 2.2.2	December 2010	6a, 6b, 6c	25%
		Continue implementation of Centers, Corridors and Wedges Growth Framework T-1		Monitor % of residential and office developments located within Centers and Corridors	40% new housing units 70% new multi-family 75% new office sq ft 75% new employment	5a 6a, 6b, 6c	38.8% 68.2% 98.1% 96.7%
S		Business Facilitation / Business Process Improvements ED-6		Conduct "competitive advantage" analysis of permitting systems and processes	Elimination of System Barriers / Conflict / Impediments in application of regulations	5a, 5b, 5c	On Track
RUN THE BUSINESS			Implement the educational component of the Pedestrian and Traffic Safety Plan	Conduct public awareness campaign on traffic safety related issues	Implement <u>one</u> public safety awareness campaign annually	2a	Met
THE			Plan review process	Percent of plan reviews completed on time annually	95%	5a, 5b, 5c	93%
RUN	Enhance			(\$) Complete and present annual Transportation Action Plan status report to the City Council	January 2011	All	100%
	Customer Service	Communicate land use and transportation objectives as outlined in the Transportation Action Plan (TAP) T-4		The City will continue to implement a multifaceted and multi-departmental communication and public outreach plan that explains the City's transportation plans and growth strategy. The communication plan will include specific tools and measurable outputs to determine the community's understanding of the City's transportation plans, priorities and growth strategy,	The City will conduct an annual survey, to benchmark existing community awareness of the City's transportation plans and growth strategy by December 2010	All	100%
			Providing emergency repair response	Percentage response to all missing stop signs and yield signs and traffic signal emergencies within 1 hr during routine works hours and 2 hrs during other times	90%	1a 1b	100% Signals 100% Signs

 $^{1- \}mbox{Direct Link}$ to City of Charlotte 2011 Strategic Focus Area Plan $2- \mbox{Link}$ to Appendix B

	Corporate Objective	¹ Corporate Strategic Initiative	CDOT Strategic Initiative	Strategic Measure (\$) – indicates incentive pay measure	Target	² CDOT Services Inventory	FY2010 Results
	Optimize Business		Deliver services that provide value and are competitive in cost and quality	Report on CDOT performance utilizing the NC Institute of Gov't Annual Performance Measurement Report for benchmarking purposes	Resurfacing cost per lane mile resurfaced less than benchmark average	1b 4a – 4g	Met
	Processes	Citywide Work and Asset Management (WAM) Project		Ensure CDOT Hansen 8 technology and business processes align with City's WAM project	100% alignment	All	Met
	Expand Tax Base & Revenues	Seek financial resources, external grants and funding partnerships necessary to		Prepare a legislative agenda to fund the Transportation Action Plan by seeking additional revenue sources and by ensuring that Charlotte receives increased funding for planning, constructing, operating, and maintaining multi-modal transportation facilities and services	December 2010	6a 6b	50%
RCES		implement transportation programs and services T-5		City Council, in partnership with the County and the Chamber of Commerce will consider the Transportation Task Force Committee of 21's funding and process recommendation to the legislature as needed for implementation	December 2010	6a 6b	50%
MANAGE RESOURCES			Improve traffic control devices maintenance	Continue enhanced traffic control maintenance program in conjunction with NCDOT schedule C & D maintenance programs	Perform preventative maintenance on 100% of traffic signals every 2 years	1a	Met
MANAG			programs	Develop and implement a comprehensive traffic control devices inventory	Obtain funding and develop Citywide inventory	1a, 1b 4c – 4f 6b, 6c	Partially Met
	degradation management f	Monitor street degradation fee and track revenues associated with the fee	Report annual revenues generated	4a	\$823K collected		
			Provide street degradation management	(\$) Response to and resolution of all service requests involving potholes that are deemed to be on city maintained streets	3-hour response to potholes involving safety and property damage and 24-hour resolution of service requests 97% of the time. 5-day response to other potholes and 10-day	4a, 4c 4d, 4f	100% 100%
					resolution of service requests 95% of the time		99%

^{1 –} Direct Link to City of Charlotte 2011 Strategic Focus Area Plan2-Link to Appendix B

	Corporate Objective	¹ Corporate Strategic Initiative	CDOT Strategic Initiative	Strategic Measure (\$) – indicates incentive pay measure	Target	² CDOT Services Inventory	FY2010 Results
YEES	Achieve Positive Employee Climate	Citywide Biennial Survey	Ensure CDOT has continuous improvement in the workplace by developing a strategy to improve in target areas	Percentage of questions receiving a score of 7.0 or higher on a 10 point scale on the City's biennial employee survey	90%	All	No survey in 2010
			Ensure timely employee performance and development plan review	(\$) Ensure all annual employee Performance Review & Development (PRD) Plans between July 1, 2010 and June 30, 2011 are completed within 30 days of their due date	95%	All	91%
DEVELOP EMPLOYEES			City Wellness Program – Worksite Environment	(\$) CDOT will track employee utilization of various wellness programs and establish baselines	Establish baselines with future target of increasing awareness and participation	ALL	New in 2011
DEVELO				(\$) Designate a Wellness Works Area (bulletin board) in all locations where CDOT employees reside	CDOT will display wellness information on designated bulletin boards changing themes 6 times per year	All	8 themes in 2010
	Recruit and Retain Skilled and Diverse Workforce		Workforce Planning	Monitor CDOT turnover rate to that of the average Citywide rate	CDOT rate less than that of the average Citywide rate for calendar year 2010	All	City 6.1% CDOT 7.0%
	Promote Learning & Growth		Provide on-going safety and driver training to all CDOT employees who hold City driving permits	(\$) Minimize the number of preventable employee vehicle accidents	30 or less	All	16

 $¹⁻Direct\ Link$ to City of Charlotte 2011 Strategic Focus Area Plan2-Link to Appendix B

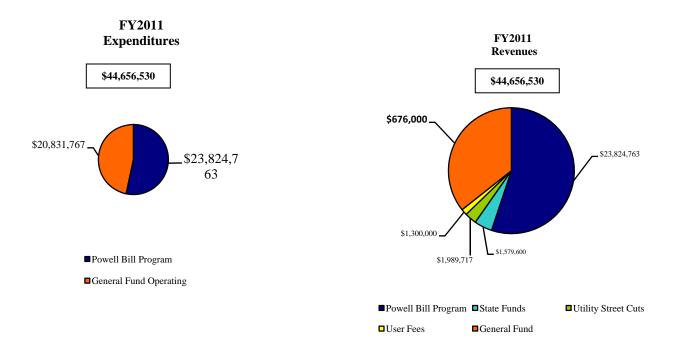
V. Request for Resources

Budgetary Highlights:

	FY2009	FY2010	FY2011
	Actual	Revised Budget	Approved Budget
Operating Budget	\$20,157,672	\$21,244,164	\$20,831,767
Powell Bill Program	\$28,496,537	\$30,153,757	\$23,824,763
Departmental Charges	(\$12,697,891)	(\$14,002,079)	(\$15,410,051)
General Fund Revenues	(\$4,318,371)	(\$6,111,070)	(\$5,561,817)
Powell Bill Revenues	(\$28,496,537)*	(\$30,153,757)**	(\$23,824,763)***
Positions	430.50	434.50	434.50

^{*}Includes \$4,261,000 in General Fund transfer and \$2,741,915 in Fund Balance

^{***} Includes \$4,261,000 in General Fund Transfer and \$1,224,763 in Fund Balance



Total Request for Resources: Fiscal Year 2011 total request of \$44,656,530 with 434.50 positions, which includes General Fund Operating of \$20,831,767 and Powell Bill of \$23,824,763.

CDOT had one Change to Current Level (CCL) request approved in the FY11 adopted budget. The CCL increase of \$364,000 is in our Street Lighting program. The suspension of new streetlights in FY2011 is a result of the increase in Duke Energy rates that took effect in January 2010. The suspension of new installations removes the potential of an additional \$235,000 budget increase. Specifically, the City will save \$215,000 in electricity charges and \$20,000 in installation charges.

^{**} Includes \$4,261,000 in General Fund Transfer and \$7,934,537 in Fund Balance

As part of a city-wide effort to reduce FY2011 budget requests, CDOT offered to reduce our Arena Traffic Control funding by \$180,000, from \$292,000 to \$112,000. Even with this reduction, CDOT was able to negotiate with the parking services provider to guarantee adequate staffing at large events; tournaments with an expected attendance of at least 10,000 patrons; and the anticipated increase of large hockey crowds attending games for the new minor league Hurricanes team.

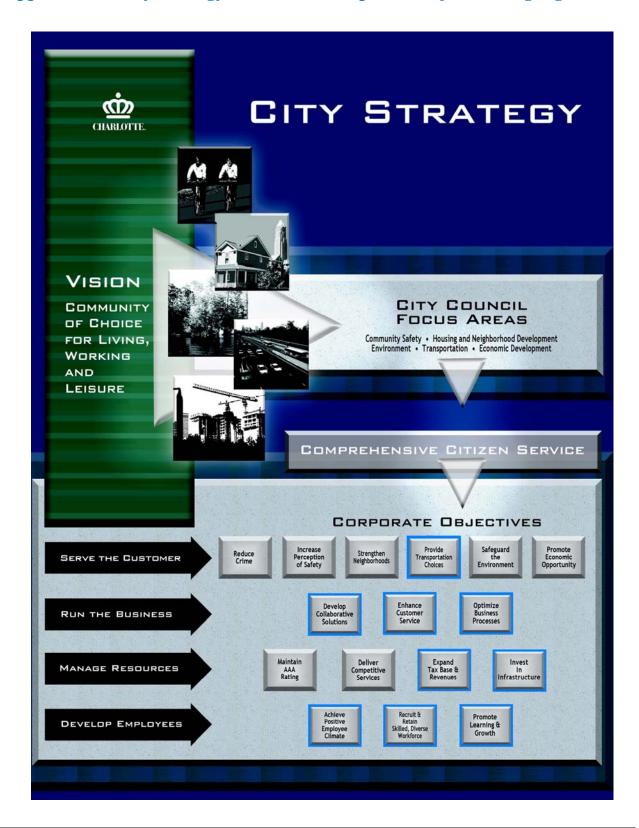
VI. Conclusion

As you read this document, we hope you gained an understanding of CDOT's roles and responsibilities. But more importantly, you sensed the pride we take in providing quality comprehensive services to Charlotte's citizens and businesses. We are passionate about the role we play in sustaining the qualities that make Charlotte special and keep it moving into the future. Charlotte Department of Transportation is a strategy-focused organization and we look forward to a productive year serving the city.

VII. Appendices

- A City Strategy with CDOT Corporate Objectives
- B Transportation Services Inventory
- C List of Transportation Acronyms

Appendix A – City Strategy with CDOT Corporate Objectives Highlighted



Appendix B – Transportation Services Inventory

Transportation

- 1. Traffic Control
 - a. Traffic Signals
 - b. Signs and Pavement Markings
- 2. Transportation Safety and Neighborhood Services
 - a. Pedestrian/Traffic Analysis and Safety
 - b. ParkIt! (Parking Meters)
 - c. Neighborhood Programs and Customer Service
- 3. Street Lighting
- 4. Street Maintenance
 - a. Utility Cut Repair
 - b. Storm Drainage Maintenance
 - c. Street Resurfacing
 - d. Street Repair
 - e. Sidewalk/Curb and Gutter Repair
 - f. Minor Street Construction
 - g. Emergency Response (Ice and Snow Removal, Debris Removal)
- 5. Land Development Regulations
 - a. Ordinance Enforcement
 - Subdivision
 - Zoning
 - b. Permits
 - Building
 - Driveway
 - c. Right-Of-Way Use
 - Special Events and Parades
 - Utility Planning and Coordination
 - Abandonments, Encroachments, and Leases
 - Right-Of-Way Use < 30 days and Coordination of Citywide R-O-W MOU
- 6. Transportation Planning and Capital Project Implementation and Management
 - a. Regional Planning
 - b. Local Planning
 - c. CIP/Design and Implementation

Appendix C – Transportation Acronyms

AQ – Air Quality

AICP – American Institute of Certified Planners

APA - American Planning Association

APBP – Association of Pedestrian and Bicycle Professionals

APWA - American Public Works Association

ARTBA – American Road and Transportation Builders Association

ASCE – American Society of Civil Engineers

BAC – Bicycle Advisory Committee

CATS – Charlotte Area Transit Services

CDOT – Charlotte Department of Transportation

CIP – Capital Improvement Program

CNA - Capital Needs Assessment

CCTS – Center City Transportation Study

CMU – Charlotte Mecklenburg Utilities

CRAFT – Charlotte Regional Alliance for Transportation

CTC – Council Transportation Committee

FHWA – federal Highway Administration

FTA – Federal transit Administration

ITE – Institute of Transportation Engineers

LRTP – Long Range Transportation Plan

MPO – Metropolitan Planning Organization

MTC – Metropolitan Transit Committee

MUMPO – Mecklenburg-Union Metropolitan Planning Organization

NCDOT – North Carolina Department of Transportation

NCSITE – North Carolina Section of the Institute of Transportation Engineers

PRD – Performance Review and Development

TAP – Transportation Action Plan

TIP – Transportation Improvement Program

TLU – Transportation and Lane Use

TSAC - Traffic Safety Advisory Committee

ULI – Urban Land Institute

USDG – Urban Street Design Guidelines

USDOT – United States Department of Transportation

VMT – Vehicle Miles Traveled

WAM – Work and Asset Management