

Loudoun County
Countywide Transportation Planning Context
(As discussed with the Planning Commission 7/1/09)

With the extension of the major sewer interceptor to serve Dulles Airport in the mid-1960s, Loudoun set its course for future growth and development. The Eastern Loudoun Area Management Plan (ELAMP) and Dulles North Area Management Plan (DNAMP), which were area plans adopted in the 1980s, and the Choices and Changes General Plan (General Plan) adopted in 1991 provided the policy guidance and solidified this growth strategy. With assistance and coordination from VDOT and regional transportation entities, the County laid out a transportation network focused on establishing and enhancing connectivity both internally and regionally. Through these plans, the County affirmed its commitment to a primary north-south and east-west road network of major arterials, major and minor collectors and to participate in addressing regional transportation concerns. Development of the transportation network started with the existing/historical roads as the envelope and parallel connections were added as necessary; based on the location of planned activity centers, not the intensity/density. Even at this early stage, these plans called for Routes 7, 28 and 50 and, at the time conceptual, Dulles Toll Road Extension, to ultimately be limited access facilities and included general locations for their planned interchanges. The plans also acknowledged that implementation of this network would occur or be refined through actual development activity; development proposals (re-zonings, etc.); more specific corridor studies; and in conjunction with federal, state and regional funding priorities.

While today's analytical tools like computers and geographic information systems (GIS) were not available for the preparation of these plans, the results were policies and accompanying maps for the network that were well vetted and extremely important. By 1991, the County had already approved development proposals in accordance with these plans for a substantial number of large, new planned communities and employment centers. Critical pieces of the road network were starting to emerge and the County was beginning to establish itself in the regional prioritization and funding decisions. Without these plans the County would not have been a part of these discussions; would have been unable to secure right-of-way reservations and frontage improvements for by-right development and would have been unable to negotiate development proffers (during re-zonings) in a coordinated, holistic manner.

Subsequent area plan efforts including the Dulles South Area Management Plan (DSAMP) (1993) and the Toll Road Plan (TRP) (1995) represented a significant expansion of the County's "urban growth area" and higher planned densities. With the priority of developing infrastructure and services focused elsewhere (e.g., the Route 7 corridor, Ashburn Village Blvd., etc.), citizens from this area of the County were eager for comparable services (particularly central utilities) and for stronger linkages to the emerging employment centers. At the time, there was virtually

nothing of the planned road network in place; Route 50 (east-west) and Route 659 (north-south) were 2-lane roads and the Greenway was not yet constructed. The transportation policies, maps and design specifications adopted with these plans largely reaffirmed the network contained in the General Plan. They did acknowledge the need for closer linkages between land use and transportation and that building in additional capacity to the road network alone would not adequately serve the transportation demands of the County's planned growth. In this regard, there were provisions/policies in these plans to guide the review and recommendation on land development applications that would consider higher densities only when and if the infrastructure was put in place (for example, road phase, bus phase and rail phase thresholds in the TRP). The bigger picture discussions of a comprehensive and consolidated transportation strategy, however, were deferred to the Countywide Transportation Plan (CTP) effort that was underway in the same time frame (April 1993 to July 1995).

This first CTP effort included the consideration of the future transportation needs in both an immediate and long range planning context. The immediate plan once again focused on and maintained the primary network contained in then adopted plans (i.e., the General Plan, the VDOT six year plans and the State's long range plan). In terms of the long range plan, the CTP looked at network and corridor issues (gaps in planned improvements that may create future bottlenecks or demand on roads in otherwise unplanned corridors) and provided conceptual recommendations that would warrant further analysis and feasibility studies (e.g., complete the Route 50 corridor study, modify the Route 7 corridor study, endorse and support the Major Investment Study (MIS) planning for the Western By-pass). The County did use consultant services in the development of the CTP particularly with respect to the long term vision, however, still relied primarily on VDOT estimates of current and projected traffic volumes to evaluate conditions and frame recommendations. These projected traffic volumes reflected regional growth estimates of which Loudoun was/is a part but were not tied to the specific densities called for ultimately in the County plans.

The next planning efforts which included the DSAMP (1997) and TRP (1998) amendments and the Revised General Plan (RGP) and Revised CTP in 2001 had the advantage of access to more sophisticated tools and technology to allow closer consideration of the impacts of land use on the transportation network. These plans were able to use more accurate mapping and modeling to assess the fiscal impacts and affordability of the County's growth and development pattern. By 1995, approximately 47,000 new residential units and over a hundred million square feet of new non-residential land use had been approved. Also, at this time, the region and Loudoun were emerging from the recession and this approved but as yet un-built "inventory" was materializing and generating significant service delivery impacts. With the analytical tools now at hand, as well as actual local traffic data/counts from new development, it became quickly apparent that the County's infrastructure, existing and/or planned, would not likely accommodate or be able to keep pace with the planned land use (residential densities and employment estimates) envisioned

in those early- to mid-1990's plans. As a result, significant reductions in planned growth, particularly with respect to residential land use, were adopted for the Rural Policy Area and the new Transition Policy Area. The regional transportation model, which continued to assume the 1995 CTP road network, was used during the 2001 RGP and Revised CTP effort. This led to recommendations for modifications to the ultimate conditions, typical sections and design guidelines for certain roads, particularly in the Rural and Transition Policy Areas. The plan also resulted in much greater policy direction for transit and bicycle and pedestrian modes.

The current CTP update effort, initiated by the Board of Supervisors in 2006, provided the first real opportunity to actually document and test whether a *completed* 2001 Revised CTP network would accommodate the County's growth projections for the year 2030 (a considerable distance in the future but not at the point of a final build-out). The County secured the services of the Michael Baker Corporation to update the County's transportation model, estimate the 2030 travel demand on the County's major road corridors assuming all current CTP roads would be in place, determine if there would be excess travel demand and if so recommend possible strategies and policies (roads, transit, etc.) to include in a plan revision to address these conditions. The Constrained Long Range Plan (the funded primary road network) was used as a yardstick for comparison. The County's growth projections used for the current CTP effort are based on the Round 7.0 forecasts approved by the Board of Supervisors in 2005 for the year 2030. These forecasts reflect the County's estimates (as prepared and reviewed by the County's Fiscal Impact Committee for the Board) of existing development, an amount of the approved and not yet built inventory of development that will occur by 2030 given best estimates of current and future market conditions, and an amount of potential new development in accordance with the current planned land use as per the 2001 RGP.

Not surprising, in all of these planning efforts, new ideas and concepts have surfaced and became part of the review process aimed at addressing the various challenges of the day. New road link recommendations have come and gone (some more than once), like the Western Transportation Corridor or the Route 9 and Route 15 by-passes and there have been changes recommended in the design or configuration of the network improvements (specifying interim and ultimate conditions; integration of roundabouts; modifications to lane designations; paving or improving rural roads). Transit and bicycle and pedestrian modes/options have also played a bigger role. Through it all, the County has remained committed to completion of the primary regional road network and taken purposeful strides to adopt land use policies (for mixed use) in synch with the needed infrastructure, which are sensitive to fiscal and environmental concerns.