This Technical Memorandum documents the CTP-ICE Future Growth Potential Assessment for the Eden 2009 Comprehensive Transportation Plan (CTP), for use in the CTP study including any subsequent Indirect and Cumulative Effects Analysis (ICE).

The Transportation Planning Branch and Metropolitan Planning Organizations (MPOs) and/or Rural Planning Organizations (RPOs) have collected the data and information, and have gathered Future Growth Potential Mapping, and produced the Technical Memorandum. The NCDOT Human Environment Section-Community Studies (HES-CS) planners have reviewed the work products and provided comments to the MPO/RPO and Transportation Planning Branch (TPB) Staff to ensure consistency between long-range planning and the National Environmental Policy Act (NEPA) process during project development.

**CTP-ICE Future Growth Potential Mapping**

The City of Eden Land Development Plan (2007) documents historical, existing, and future land use as well as factors that determine land use patterns such as zoning, water and sewer, development limitations, and natural and cultural features. These factors are depicted on several maps that when assessed together, provide insight into future growth potential. These figures provide the basis for analyzing the future growth potential.

**Overview and Characterization of the Land Classification System**

The Future Land Use and Growth Strategy maps provided in the Eden Land Development Plan use a typical land classification approach for classifying land and a growth strategy approach to map growth zones. The land classification types are: commercial center; town center; employment center; traditional neighborhood; suburban residential; rural residential; rural; and parks, greenways, and open spaces. The growth zones are: primary, secondary, and future growth areas as well as economic development, rural, and conservation zones.

*References:* City of Eden Land Development Plan (2007)
Available Lands

Approximately 24,000 acres or 57 percent of the CTP Study Area is available land currently being used for agriculture or as open space. The majority of this land is outside Eden’s municipal limits, while the remaining falls inside Eden’s Extraterritorial Jurisdiction (ETJ). Within the City, there are opportunities for in-fill and redevelopment. The Eden Land Development Plan identifies vacant land in the Central Area, which is between Meadow Rd. and the Dan River. There may be opportunities for in-fill and redevelopment on sites of former textile mills in the City.

References: City of Eden Land Development Plan (2007)

Growth and Development Areas

The Eden Land Development Plan attempts to limit urban sprawl by concentrating development in the primary growth area, falling entirely within Eden’s boundaries, and includes the Central Business District. According to the Eden Land Development Plan there are vacant lands in this area, which would be suitable for in-fill development as well as opportunities for redevelopment. The Eden Land Development Plan targets growth in this area by recommending incentives and infrastructure to encourage development over the next five years. Development is also targeted for economic development areas over the next five years. These areas have access to existing infrastructure and are located in close proximity to existing industrial uses.

References: City of Eden Land Development Plan (2007)

In-Fill, Preservation, and Redevelopment Areas

Much of Eden is already developed, but there are opportunities for in-fill development and redevelopment. The Eden Land Development Plan calls for in-fill development in the Central Area where population densities are currently the lowest within Eden’s municipal limits. The Central Area is located between Meadow Rd. and the Dan River. The Plan also recommends redevelopment of Eden’s historic downtown. Downtown redevelopment and historic preservation were the top two themes identified by the community during a plan visioning session. The plan emphasizes redevelopment of existing urban areas and in-fill development as an alternative to growth outside of the City.

References: City of Eden Land Development Plan (2007)

Conservation, Open Space, and Agricultural Areas

Within the CTP Study Area there are existing and future conservation, agriculture, and recreation land uses. Development is not expected to occur on these lands as they are protected in the Eden Land Development Plan and Rockingham County Land Use Plan. In addition, there are state designations for significant natural heritage areas and Voluntary Agricultural Districts (VADs).
According to the Eden Land Development Plan, there is land protected as parks and open space in the center of Eden and at the confluence of the Smith and Dan rivers. There are several natural heritages areas in the CTP Study Area: sites located along the Smith River and several northeast of Eden. In 2004, Rockingham County enacted a farmland preservation ordinance to establish VADs, providing limitations on development to protect agricultural lands. VADs can be found throughout the CTP Study Area. A significant portion of the CTP Study Area outside of Eden is currently in agricultural use and the City and County land use plans limit development of this land. The Eden Land Development Plan zones this region as rural residential, which allows for low density residential development. The Rockingham County Land Use Plan identifies this area as urban transition, meaning that development could be higher density. Given that a majority of this region is within the Eden ETJ, development is more likely to be guided by the rural residential designation.

References: City of Eden Land Development Plan (2007); Rockingham County Land Use Plan (2005)

**Utility Service Areas**

Water and sewer service is provided by the City of Eden Sewer Collection and Treatment System. This system currently provides 25 percent of its current capacity and covers the entire City. In a few locations it extends into the City's ETJ where it serves residential and industrial customers. The region currently served by water and sewer coincide with the regions of the CTP Study Area that are most developed. Conversely, regions outside of Eden do not have water or sewer service currently and are less developed.

In the future, water service is anticipated for unincorporated areas of the CTP Study Area, primarily west and south of Eden. Sewer service is not planned to be extended into this same region. Due to the anticipated water service extension and available capacities of the water and sewer system, development is expected in this region. However, this development is expected to be limited by the current absence of sewer service and future land use designation as rural residential.


**Short-Term and Long-Term Growth**

The Eden Land Development Plan outlines a growth strategy for the next 20 years. This strategy divides regions of the CTP Study Area into three main categories: primary (0 to 5 years), secondary (5 to 10 years), and future growth areas (10 to 15 years). The three zones are arranged concentrically with primary growth occurring in the center of Eden, secondary growth planned in the Eden ETJ, and future growth occurring outside of the ETJ.

Economic development areas are also planned in addition to these three zones. These areas are given the highest priority and already have access to existing city water and sewer infrastructure. They are located north and south of Eden’s municipal limits where some industry
is already present. Conservation corridors are proposed along streams and rivers and where there are development limitations due to natural features such as steep slopes. Development is discouraged in these corridors. Another zone, rural areas, exists between the future growth zone and CTP Study Area border. Rural areas are to remain rural with limited development over the next 20 years.

*References:* City of Eden Land Development Plan (2007)

**Conclusions**

The Eden Land Development Plan suggests that growth will occur concentrically, with future growth most likely to occur first in the Central Area of Eden due to existing infrastructure and availability of land. Industrial development is most likely to occur in the economic development zones established by the Eden Land Development Plan. These zones are adjacent to existing industrial uses and have the infrastructure necessary to support this type of use. Secondary growth is expected to occur in Eden’s ETJ and subsequent growth in the unincorporated part of the CTP Study Area. This projected growth is consistent overall with the market for development, utility service areas, and the region’s land use plans.

In addition to the growth specified in the Eden Land Development Plan, there may also be development pressure in the western portion of the CTP Study Area. Water service is expected to be extended into this area and there is a high availability of land for development. Furthermore, access is provided by existing NC 770 and Old State Highway 87. Suburban residential neighborhoods already exist in this area.