

CTP-ICE Future Growth Potential Assessment PROCEDURE (CTP-ICE Product 2)

Transportation Planning Branch OR Project Development and Environmental Analysis Branch		Approved: Insert final approval date Version 1 (The most current version of the procedure will be numbered. Older versions will be archived.)
[Contents]		
Purpose Background Responsibility Policy, Regulatory, and Legal Requirements Scheduling and Time Constraints Procedures	Growth Potential Maps Warnings and Precautions Resources and Tools Contacts Glossary User Access Appendix	

Purpose

The purpose of this procedure is to describe how to conduct an assessment of future growth potential during the development of a Comprehensive Transportation Plan (CTP) for Indirect and Cumulative Effects Analysis (ICE). This CTP-ICE Future Growth Assessment is conducted by considering the local vision for growth and its resulting land use. This assessment ~~is used to inform~~ the socio-economic data projections at the Transportation Analysis Zone (TAZ) level, performed as part of the that are developed as part of the CTP development process, at the Transportation Analysis Zone (TAZ) level, as well as to inform the ICE analysis.

Background

Prior to conducting the CTP-ICE Future Growth Assessment, the CTP- ICE Existing Conditions Assessment (CTP-ICE Product 1) should be completed, describing and evaluating the existing conditions of the CTP Study Area. The CTP-ICE Future Growth Assessment (CTP-ICE Product 2) is used to assess the potential for growth and inform the CTP planning process, including the development of land use scenarios and alternatives, and, ultimately, the selection of a land use scenario if multiple land use scenarios are considered.

Responsibility

It is the responsibility of the Transportation Planning Branch (TPB), Metropolitan Planning Organizations (MPOs), and/or Rural Planning Organizations (RPOs) to:

- Collect data and information
- Prepare the Map and Technical Memorandum

It is the responsibility of the NCDOT PDEA Human Environment Section-Community Studies (HES-CS) Staff to:

- Review the Map and Technical Memorandum
- Ensure consistency with NEPA ICE analysis

Policy, Regulatory, and Legal Requirements

National Environmental Policy Act (NEPA)

<http://ceq.hss.doe.gov/>

State Environmental Policy Act (SEPA)

http://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_113A.html

Scheduling and Time Constraints

The CTP-ICE Future Growth Potential Assessment occurs in the CTP process when the CTP Study Area future data projections are being developed (CTP Step LU 18). The Future Growth Potential Assessment is used to inform the distribution of growth projections to TAZs, for multiple scenarios if applicable, that occurs during CTP Step LU 18.

The results of the assessment are considered again when the viable land use scenarios to be carried forward are being determined (CTP Step LU 23), prior to the identification and evaluation of CTP scenarios and alternatives (CTP Steps 3c and 3d). Refer to the CTP Guidance Manual and process chart for more information.

Procedures

The CTP-ICE Future Growth Potential Assessment consists of a Future Growth Potential Map and supporting information contained in a Technical Memorandum. Future land development plans and maps from the local jurisdictions will be assessed in the context of available land data and planning objectives identified in local zoning and development plans (referenced in the CTP-ICE Product 1 Technical Memorandum).

Procedure Input –

- CTP-ICE Existing Conditions Assessment (CTP-ICE Product 1), including identified available land and water/sewer availability (current and future service areas)
- [Existing Future land use/development plans and maps from the local jurisdictions within the MPO/RPO; future land use estimates by TAZ](#)

Procedure Output –

- Future Growth Potential Map
- A Technical Memorandum describing analysis of the future growth potential, to determine where future growth can be expected and whether or not there is consistency with the local government's land use and development policies. This memo details areas available for development (when possible analyzing in the near term and areas in transition or targeted for growth much later in the planning time horizon. When possible, it is beneficial to analyze growth in various horizon years, representing short term and long term. It is important to note that the time horizons could vary based upon the availability and stated time horizon of locally adopted plans and the local market for development. The horizon years may be selected to align with other horizon years established for the CTP Study, such as those set for air quality analysis and/or the travel demand model.

Steps to Conduct the Future Growth Potential Assessment

Step	Action
1	<p>The TPB/MPO/RPO staff will analyze the future land use data and mapping from the various jurisdictions in the CTP Study Area that have been gathered as part of the CTP Study, as well as information from the CTP-ICE Existing Conditions Assessment (CTP-ICE Product 1), in order to assess where future growth is expected.</p>
2	<p>The TPB/MPO/RPO staff will overlay or combine the data inputs defined in Step 1 above to create a Future Growth Potential Map (refer to Appendix of this procedure for an example), in order to determine where future growth can be expected and where there is congruence or incompatibility between the future land use map (i.e. consistency with the local government's land use and development policies) and land available for development/redevelopment. The Future Growth Potential Map may include, but is not limited to:</p> <ul style="list-style-type: none"> • Land Classification System (refer to Appendix of this procedure for an example) • Available Lands (vacant and underutilized) • Growth and Development Areas • In-fill, Preservation and Redevelopment Areas • Conservation, Open Space, and Agricultural Areas • Utility Service Areas (existing and future planned service) • Short term and long term growth areas (when possible) <p>Note that if the existing mapping for the CTP Study Area appropriately represents these considerations, it may not be necessary to develop a new Future Growth Potential Map. Instead, these existing maps may be referenced. However, typically in a multi-jurisdictional area it will be necessary to create a single map to represent the analysis of the individual plans and develop a single depiction (using common categories or classification systems) for the entire CTP Study Area.</p>
3	<p>Once the future land use estimates by TAZ have been developed, the TPB/MPO/RPO staff will analyze these projections, for multiple land use scenarios (if applicable), and information from the CTP-ICE Existing Conditions Assessment (CTP-ICE Product 1), in order to identify inconsistencies between the future land use projections and local land use plans.</p>
4	<p>The TPB/MPO/RPO staff will draft a Technical Memorandum describing the assessment of future growth potential, including interpretation of the Future Growth Potential Map and indicating where future growth can be expected and whether or not there is consistency with the local governments' land use and development policies. The Technical Memorandum and map are to be submitted to the HES-CS staff for review and comment.</p>
5	<p>The TPB/MPO/RPO staff will consider HES-CS comments and make appropriate revisions. After the CTP-ICE Future Growth Potential Assessment Technical Memorandum and map are finalized, they are to be distributed to appropriate recipients and used in subsequent steps of the CTP process and the CTP-ICE assessment in particular. Ultimately, the CTP-ICE assessment documentation will be included in the final CTP Study Project File and referenced/included in other study documentation, as appropriate. These products may also be used to inform project development (NEPA/Merger process) and would typically be shared during the scoping process.</p>

Resources and Tools

- CTP-ICE Future Growth Potential Assessment Technical Memorandum Template ([link](#))
- CTP-ICE Future Growth Potential Assessment Technical Memorandum Example ([link](#))

Flowchart

Comprehensive Transportation Planning Process

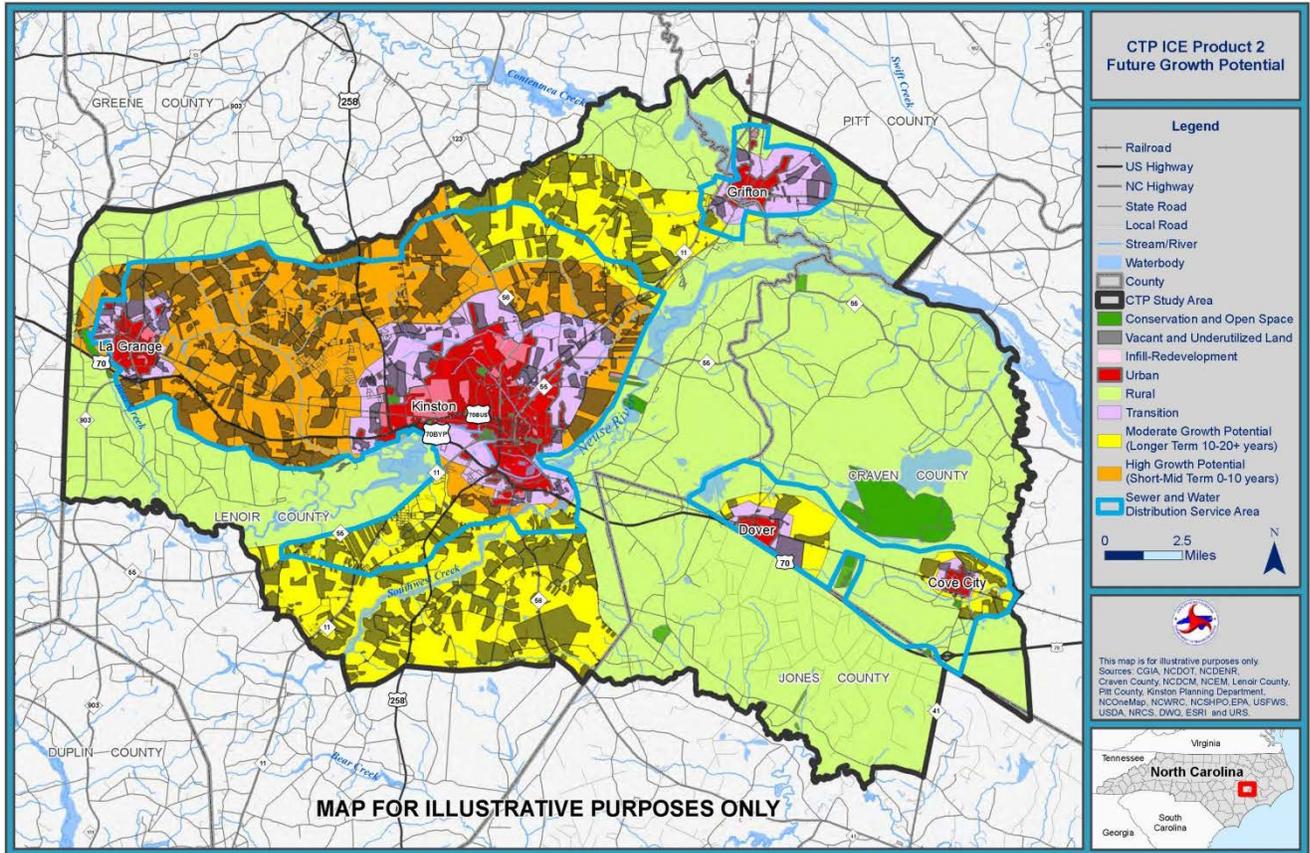
Record of Revision

Version	Section Affected	Description	Effective Date

For more information, refer to the "[Revising and Archiving Procedures](#)" procedure.

Appendix

Sample Future Growth Potential Map



Examples of Land Classification Systems

Land Classification Approach – Typical Class Descriptions *	Growth Strategy Map – Typical Mapped Descriptions *	Land Use Design – Typical Functional Area Descriptions *
<ul style="list-style-type: none"> – Developed – Urban transition – Limited transition – Community – Rural – Conservation <p>* N.C. CAMA Planning Guidelines, 1995.</p>	<ul style="list-style-type: none"> – Growth center – Village center – Growth corridor – Enterprise corridor – Conservation corridor <p>* Lenoir County LUP; correspondence with Glenn Harbeck, AICP.</p>	<ul style="list-style-type: none"> – Conservation areas – Living areas – Shopping areas – Work areas – Community facility systems <p>* Kaiser, Godschalk, and Chapin, <i>Urban Land Use Planning</i>, pg. 282.</p>

*Excerpted from the 2002 Technical Manual for Coastal Land Use Planning

Methods for Projecting Land Use

Method 1: Example of Residential Land Needs Projection*

	0 – 10 years	10 – 20+ years	Total
Population Growth	2,600	3,000	5,600
Estimated acres/person	0.5 ac	0.5 ac	N/A
Estimated acres needed	1,300 ac	1,500 ac	2,800 ac

*Note: This example was derived from the 2002 Technical Manual for Coastal Land Use Planning

In this example the total estimated residential acres needed for a hypothetical planning area is approximately 73% of the total land in urban use (developed category). So in order to obtain the estimate of total land needed, assuming this percentage holds, the total land needed for urban uses including residential, commercial, and industrial, is calculated as follows ($2,800/0.73=3,835$). This is a rough estimate only, and it should be used only with a large measure of professional judgment.

The CAMA Technical Manual contains a provision that allows low-growth communities to consider their economic development strategies in making estimates of future land needs. This provision is important since population projections based on trends in low-growth communities probably will indicate little or no growth, and without an adjustment for economic development, the future residential land need will be marginal. Note: the amount of land allocated to residential uses on the future land use map may not exceed the projected land needs.

Method 2: Example of Building Permit Method to Determine Residential Land Needs*

	Avg. # of res permits in past 5 years	Avg. acreage per dwelling unit	Gross acreage annually	Gross acreage 0-10 years	Gross Acreage 10-20+ years	Total
Planning Subarea A	310	2.0	620	6,200	6,200	12,400
Planning Subarea B	20	3.0	60	600	600	1,200
Total	330	--	680	6,800	6,800	13,600

*Note: This example was derived from Currituck County's 2006 Land Use Plan