CTP-ICE Existing Conditions Assessment

PROCEDURE

(CTP-ICE Product 1)

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

The purpose of this procedure is to provide instruction for conducting an assessment of existing conditions during a Comprehensive Transportation Plan (CTP) study to serve as the foundation for ICE analysis, called a 'CTP-ICE Existing Conditions Assessment'. This assessment "sets the scene" by describing and evaluating the existing conditions of the CTP Study Area, which serves as the foundation for the ICE assessment during long-range planning (called 'CTP-ICE Assessment'), and for subsequent ICE analysis.

Background

The CTP-ICE Existing Conditions Assessment (CTP-ICE Product 1) provides a baseline characterization of the CTP Study Area within an ICE context and documents important variables, including: growth trends, existing human and natural notable features, economic drivers/market forces at work, and other development factors and indicators within the CTP Study Area. This first step, analyzing the existing conditions, characterizes the context of the CTP Study Area and provides information for subsequent steps in the CTP-ICE Assessment.

In order to conduct the Existing Conditions Assessment for the CTP-ICE Assessment, an Environmental Features Map and a Community Understanding Report (CUR) need to have already been developed for the CTP. These reports will help inform the CTP-ICE assessment.

Responsibility

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

- Conduct the assessment, and produce the CTP-ICE Plan-Level Existing Conditions Matrix.
- Document the assessment and the results of the analysis in a Technical Memorandum

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

- Review the work products
- Provide comments to the MPO/RPO and TPB Staff

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

NCGS Chapter 136, Article 3A, Section 136.66.2(b1)

   Development of a coordinated transportation system and provisions for streets and highways in and around municipalities, requiring local governments to have a Land Development Plan

Scheduling and Time Constraints

The CTP-ICE Existing Conditions Assessment, and existing conditions mapping, occurs very early in the CTP process, at the initial stages of assembling existing data (CTP Step 1a, refer to the CTP Guidance Manual and process chart for more information). It occurs after the Environmental Features Map and Community Understanding Report (CUR) have been developed.)

Procedures

The CTP-ICE Existing Conditions Assessment consists of a CTP-ICE Plan-Level Existing Conditions Matrix (Excel spreadsheet format) and a Technical Memorandum which narratively summarizes the results of the screening tool matrix.

Procedure Input –

- Community Understanding Report (CUR) - The CUR identifies notable community/human resources (historic and recreational resources and current/future land use) that provide a context for the planning process and for assessing the potential for indirect and cumulative effects resulting from projects proposed in the CTP.

- Environmental Features Map- This map (typically consisting of multiple sheets) contains GIS data including: water supply watersheds, wetlands, managed lands protected, threatened and impaired natural environmental resources (including 303d/trout/SA/WSWS

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and protected watersheds, Section 106/Section 4(f), macro-habitat areas and/or Protected, Endangered or Threatened (PET) species).

Procedure Output –

The CTP-ICE Plan-Level Existing Conditions Matrix evaluates social and economic variables known to affect the potential for indirect and cumulative effects, including: forecasted population growth, employment growth, available land, water and sewer availability, market for development, public policy, and notable environmental features. The matrix will be completed by assessing the variables on a scale of High, Medium High, Medium, Medium Low or Low based on their presence and/or notability. This matrix is included in a Technical Memorandum describing the findings of the CTP-ICE Existing Conditions Assessment. Additionally, if a quantitative assessment of available land for development was conducted (refer to Step 4 below), a figure showing available land should be included.

Steps to Conduct the CTP-ICE Existing Conditions Assessment

Step	Action
1	The TPB/MPO/RPO staff will review the CUR and Environmental Features Map for use in preparing the CTP-ICE Plan-Level Existing Conditions Matrix (link to matrix). The staff will utilize their knowledge of local and regional conditions and trends, filling out each category to the best of their ability, ranking categories in the CTP-ICE Plan-Level Existing Conditions Matrix as described in the following steps.
2	The TPB/MPO/RPO staff will rank the matrix category "Forecasted Population Growth" in the CTP-ICE Plan-Level Existing Conditions Matrix based on the following:

Rating	Forecasted Population Growth
High	Greater than 3% annual population growth
Medium High	Annual Population Growth > 2% - 3%
Medium	Annual Population Growth >1% - 2%
Medium Low	Annual Population Growth >0% - 1%
Low	Annual Population Growth 0% or less (Decline)

A high ranking is based upon a greater than 3 percent annual population growth rate, and low being no population growth or a decline. Note that the forecasted population growth projections for the CTP Study Area may be derived from census data and the NC State Demographer Forecast projections in the CUR or existing local projections (e.g. from the land development plan or the previous transportation plan). This information should be used to determine the rating initially. When more specific CTP Study projections are developed (for example, for the travel demand model or other analysis tool), the rating should be reviewed and modified if warranted.

Step	Action
3	The TPB/MPO/RPO staff will rank the next category in the Matrix, "Forecasted Employment Growth" based on the following:

Rating	Forecasted Employment Growth
High	Greater than 3% annual employment growth
Medium High	Annual Employment Growth >2% - 3%
Medium	Annual Employment Growth >1% - 2%
Medium Low	Annual Employment Growth >0% - 1%
Low	Annual Employment Growth 0% or less (Decline)

A high ranking is based on an employment growth rate greater than 3 percent, and low would be no job growth or job losses. Note that the forecasted employment growth projections for the CTP Study Area may be derived from data in the CUR or existing local projections (e.g. from the land development plan or the previous transportation plan). This information should be used to determine the rating initially. When more specific CTP Study projections are developed (for example, for the travel demand model or other analysis tool), the rating should be reviewed and modified if warranted.

Step	Action
4	The TPB/MPO/RPO staff will rank the next category in the Matrix, "Available Land" There are two options for developing this ranking. It may be done either qualitatively, using best professional judgment, or quantitatively, using GIS data (refer to the guidance that follows).

Available Land is defined to include undeveloped parcels of land (those without building structures) and underutilized parcels. Underutilized parcels are identified by selecting parcels in which the total value of improvements (i.e. buildings and/or structures) is less than the value of the parcel (i.e. land) without improvements. Available land does not include protected lands such as public parks, Voluntary Agricultural Districts (VADs), NCDOT on-site mitigation properties, or lands managed for conservation and open space. Other land that is not considered developable includes right of ways for roads and rail lines, rivers and streams, floodways and land protected by buffer regulations. Wetlands may be more difficult to develop; however, these are not excluded from the land considered developable, with the exception of tidal coastal wetlands.

The qualitative method uses the staff's professional judgment to determine available land. Staff estimates qualitatively the amount of land in the CTP Study Area that is currently developed. Staff would then assess the remaining areas to determine whether the existing land use is likely to change and develop over the planning period. Staff may use aerial photography, the CTP Environmental Features Map, and existing and future land use maps to inform in this estimate. The qualitative method approximates existing levels of development using the expertise of local staff.

The quantitative method uses GIS data to determine approximate acreage of available land. The TPB/MPO/RPO will use the acreage determined from this assessment of GIS data to enter a rating in the matrix, based on the rating categories described in the table below.

Rating	Available Land for Development
High	40 60 + percent
Medium High	30 45 – 39 59 percent
Medium	20 30 – 29 44 percent
Medium Low	10 15 – 19 29 percent
Low	0 – 9 14 percent

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Step	Action
5	The TPB/MPO/RPO staff will rank the next category in the Matrix, "Water and Sewer Availability", with high being ranked based on the provision of 100 percent of the municipality land area and 20 percent of the county land area, and low being limited or no existing service. Areas served by water and sewer service are determined by utilizing available GIS data, or estimates of available land, and discussions with local contacts to determine the portion of the CTP Study Area currently served and planned extensions of service.
6	The TPB/MPO/RPO staff will rank the next category in the Matrix, "Market for Development." This category is more subjective, with information on development trends, and the current development pressures within the CTP Study Area being assessed, along with a review of the land development policies and regulations. A high ranking would denote abundant development activity, while a low ranking would indicate development activity is lacking. A review of building permits and applications and interviews with local zoning and permitting staff and economic development staff can provide information on market trends. Low-growth communities may wish to consider including their economic development strategies in making estimates of future land needs, and make adjustments to address unique community needs and features.
7	The TPB/MPO/RPO staff will rank to the best of their ability the next category in the Matrix, "Public Policy." A high rank is assessed based on less stringent development policies and regulations, and no growth management, and a low rank is based on the presence of stringent policies and growth management. The assessment of growth management also includes the degree to which the protection of resources is incorporated into existing environmental regulations at the state, local and/or federal level. A review of development ordinances and land use plans can provide information on public policy pertaining to growth and the level of existing resource protection. The CTP-ICE Product 1- Public Policy Interview Form may be used when gathering information from local sources about their public policies (link to form). Note that a high ranking is based on a development scenario where regulations are less stringent, since less growth management allows the potential for higher indirect and cumulative effects. Conversely, a low ranking is given when more stringent regulations and growth management provisions are in place since a higher degree of public policy management has the potential to lessen indirect and cumulative effects.

Step	Action
8	The TPB/MPO/RPO staff will rank the next category in the Matrix, "Notable Environmental Features" based on the sensitivity and abundance of notable environmental resources. Sensitivity of an environmental feature can be determined by consulting local, state, and federal regulations, programs, and agencies overseeing these notable resources such as the NC Division of Water Resources. The Environmental Features Map should be used in this assessment, as well as discussion with local representatives knowledgeable of area resources. Several examples of more sensitive environmental features would be those protected by conservation easements, waters classified as High Quality Waters (HQW), and species listed as threatened or endangered. Less sensitive environmental features would be those that do not have specific protection, and do not appear on the lists of threatened or endangered species, are not classified as sensitive waters, or maybe deemed to be of little environmental importance by local representatives.
	The "Notable Environmental Features" category is also ranked based on abundance within the CTP Study Area. As this category is qualitative, the staff's best professional judgment should be used to take into account both the sensitivity and abundance of the resource. For example, if there are a few notable environmental features, this category may be given a medium ranking since abundance is low but sensitivity is high. Note that a high ranking would constitute several environmental features that are more sensitive, and a low ranking would indicate that there are very few environmental features that are less sensitive.
	Upon completing the individual assessment of each category in the matrix, results of the CTP-ICE Plan-Level Existing Conditions Matrix are then reviewed comprehensively to evaluate the existing conditions on a macro level. The matrix tool automatically uses the ratings entered for the categories to determine an overall rating of more or less concern, which is shown in the 'Results' column. The completed CTP-ICE Plan-Level Existing Conditions Matrix results are to be included in the Technical Memorandum developed in Step 9 below.
9	The TPB/MPO/RPO staff will develop a draft Technical Memorandum containing the completed CTP-ICE Plan-Level Existing Conditions Matrix and narrative summary. The screening results are summarized in a narrative format in the Technical Memorandum. Each category of the matrix will be supported by summary documentation sections in the Technical Memorandum that include all supporting research and interview records for each category in the matrix. The summary will generally contain: a brief narrative description of the CTP Study Area and its boundary, the results of the CTP-ICE Plan-Level Existing Conditions Matrix, a population and employment trends summary, available land determinations, a summary of existing and planned water and sewer infrastructure, a description of the market for development, a summary of the existing public policies and an inventory of the notable environmental feature(s) present. Refer to the template for drafting the Technical Memorandum (link to Tech Memo template).
10	The TPB/MPO/RPO will provide a draft copy of the Technical Memorandum and CTP-ICE Plan-Level Existing Conditions Matrix to the PDEA Human Environment Section-Community Studies (HES-CS) staff planners for review and comment. This review by the Community Studies Group is essential for maintaining consistency between the CTP early planning process and the NEPA project development process.
11	The TPB/MPO/RPO staff will consider HES-CS comments and make any necessary revisions to the Technical Memorandum and CTP-ICE Plan-Level Existing Conditions Matrix. After the CTP-ICE Existing Conditions Assessment Technical Memorandum and Matrix 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.

Resources and Tools

- CTP-ICE Plan-Level Existing Conditions Matrix (link)
- CTP-ICE Plan-Level Existing Conditions Technical Memorandum Template (link)
- CTP-ICE Product 1- Public Policy Interview Form (link)
- CTP-ICE Plan-Level Existing Conditions Technical Memorandum & Matrix Example (link)
- Available Land for Development Map Example (for quantitative assessment) (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.