NEPA 101 Part 1 CBT Transcript

Welcome

Welcome to the National Environmental Policy Act 101 course - also known as NEPA 101 course.

Introduction

This series of two courses is provided by the Florida Department of Transportation's or FDOT's Office of Environmental Management, or OEM. The environmental review, consultation, and other actions required by applicable federal environmental laws described in this training are carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016, executed by the Federal Highway Administration, or FHWA, and FDOT.

Learning Objectives

This course intends to educate the listener to:

- Understand the national context that created and still supports NEPA;
- Understand NEPA policies, goals, requirements, and structure;
- Develop an appreciation of NEPA complexity and study length;
- Understand how FDOT complies with NEPA;
- Learn the difference between Law, Regulations, and Guidelines, and
- Develop an awareness of common permit types, and how NEPA precedes them.

Outline and Overview

This NEPA101 course contains eight lessons that are subdivided into two teaching modules. Whether you are a seasoned professional or this is your first exposure, this training was developed to meet the needs of all attendees. Even experienced NEPA practitioners might appreciate the historical context provided and the focused discussions on specific topics and agency authorities.

The course covers the federal process only. Other training is available for state-funded projects; however, the state study process does closely parallel the federal process in the event a project may need to switch to federal funding.

Part 1 of this course provides an overview of the National Environmental Policy Act, also known as "NEPA." We will examine the historical context from which NEPA emerged, look at specific components of the Act, and examine other laws which complement NEPA**.** Finally, we will review how the Florida Department of Transportation complies with NEPA and other applicable federal and state laws.

Part 2 of the course examines the composition of NEPA project schedules. Commonly-encountered requirements are discussed – such as environmental permits and federal land acquisition. We will cover some of the major environmental laws and Presidential Executive Orders, while pausing to take a look at potential project show-stoppers. Finally, we will examine the difference between a law, a regulation, and a guideline. This module titled Historical Context, NEPA Components and FDOT Compliance will cover Part 1.

Other Relevant Training Modules

This two-part NEPA 101 module provides an overview of the federal NEPA process only, with other relating topics. The state study process and other related training modules are available as NEPA Introductory Courses which cover individual topics in more detail.

The training catalog should be consulted for updates; however, here is a short listing of topics:

- Preliminary Environmental Discussion and Advance Notification
- Class of Action
- Environmental Impact Statements Overview and the Draft Environmental Impact Statement
- Final Environmental Impact Statement and Record of Decision
- Environmental Assessments
- Findings of No Significant Impact
- Categorical Exclusions
- Commitments

Lesson 1: Historical Context of NEPA

Before we examine NEPA and its components, it is important to understand the historical context of the United States prior to the environmental movement of the 1960's and 70's.

Age of Industry

After the Civil War, wealthy industrialists led a new movement toward mass production. Factories emerged as an efficient way to match abundant immigrant labor with machinery on assembly lines. Mass production was born. Locomotives, steam and electric power were seen. Populations shifted to cities, which experienced their first traffic jams, slums, and noise and air pollution.

Progressive Era

At the turn of the century, America was growing... with pains. Businesses and industrialization expanded... and America experienced Progressive social reform. World War I created massive supply demands for men, equipment, and staples. Worker protections evolved, as did Labor Unions. Automobiles transformed lives and material delivery – enabling populations to once again spread outward from city centers.

Great Depression & WWII

Economic troubles and famine in the 1930s led to social unrest worldwide. World War II required that millions go to work in factories and defense jobs. The United States experienced massive industrial output.

For example: At the beginning of the War, the US had 8 aircraft carriers – half of which were old and antiquated. By the end of WWII, our country produced 128 carriers, 3 million tanks, 600,000 aircraft, and innumerable supporting vehicles. America was fighting for its own survival – and that of its allies.

Post-War America

The post-war GI Bill sent millions of Veterans to college. America experienced rising affluence and a new, middle class. The US experienced a sustained period of economic prosperity.

Movies and television advocated "The American Dream." Social reform continued as well, via the Civil Rights movement. Populations migrated to America's coastline cities. In fact, the population of Florida tripled during this timeframe.

Federal-Aid Highway Act of 1956

In 1956, the United States embarked on a massive infrastructure plan that would continue for several decades. The Eisenhower Interstate System provided continuous, high-speed highway connections between major cities. Travel to far-off destinations, which formerly required days or even weeks in a car – was reduced to one or several days.

While a tremendous national achievement, the Interstate System did not come without consequences. To start: Most alternative decisions for the interstate system were made by a centralized transportation department. Many highways were designed with an eye on cost rather than impacts.

Public awareness was minimal, and citizens were given almost no opportunity to participate in decisions. In those days, lesser consideration was given to the fledgling sciences of social or economic or environmental disruption.

By mid-century, no major rule or law protected the interests of poor or minority communities. As a result, numerous city areas were isolated and left to deteriorate. Some highways further split cities and their surrounding communities, as well as wildlife habitats and ecosystems. Furthermore, a growing concern evolved about the fair treatment of relocated families and businesses.

Societal Backlash from the Interstate System

Over time, society recognized the potential and sometimes detrimental impacts of highway decisions. "Highway Revolts" occurred in the United States - mainly in cities. For instance, in the 1970s - South Floridians cancelled most of the planned expressways. Tampa cancelled its freeway program as well.

Unregulated Emissions
For a century, factory and automobile emissions took their toll. No meaningful regulations existed. Americans pushed-back, decrying smog as a threat to health and lifestyle. To highlight the point, three pictures of Pittsburgh, Pennsylvania show the city's comparative condition in 1906 and 1950 - and in its present condition after several decades of emissions regulation.

Widespread Pollution
By the 1960's, pollution of our lands and waterways was widespread and often concentrated near industrial centers. Toxic dumps were a notable feature that polluted the land, surface waters, and groundwater. Unregulated point-source discharges into waterways produced massive fish kills and altered downstream environments.

Even by the late 1950's, use of pesticides was common practice – particularly the chemical DDT – which was found to weaken the membrane of birds' eggshells.

In 1962, the book Silent Spring was published by Rachel Carson. She examined the effect of biocides on birds and the environment, and evoked the powerful image of a "silent springtime" when no song birds would be heard. A rising national concern for Bald Eagle offspring further highlighted the issue, and Silent Spring became a rallying point for a new social movement.

Cuyahoga River Fire
Environmental Disasters drew the media spotlight and provided further indicators of systemic failures to protect the environment.

The Cuyahoga River Fire in Cleveland is one such case. Termed a “River of Ooze” by environmentalists, the industrial wastes dumped into the Cuyahoga had created a massive oil slick. Sparks from a passing train ignited the river, which then became a rallying point for environmental reform. A similar event occurred on the Pacific coastline at the Santa Barbara oil spill in 1969.

Keep America Beautiful

Escalating reforms and further attentiveness by the federal government ultimately resulted in the “Keep America Beautiful” campaign. Seen often on television, a variety of commercials lamented the loss of “natural beauty that was once this country.”

The National Condition

Summarizing: In roughly 100 years from the Civil War through Post-War America, our country was growing… and transforming in many ways. Industrial might, national pride, and a personal pursuit of prosperity reigned supreme.

Short-term, national survival and prosperity were valued above long-term consequences. Little or no attention was paid to an environment that we did not understand, and No regulation or accountability existed for polluters. Development decisions were made by powerful, often centralized persons and governmental bodies. The public accepted and abided by these decisions

The public was given almost no opportunity to participate in decisions. Minimal notice was provided for proposed projects and Public outrage resulted from excessive impacts – both to our environment and our communities.

Major concern for the Earth emerged as a new environmental movement, and Community Disruption from highway planning caused societal impacts. With all of these concerns in mind, public outcry resulted as Americans demanded stricter government regulation and oversight.

Public Sentiment

Laws and regulation often result from societal needs, pressures, and transformational movements. We all know that the political needle swings with public sentiment. For the environmental movement born in the 1960’s and continuing through the1970’s – this was no exception. A new environmental movement began then… that still exists today.

Wave of Federal and State Actions

A sustained wave of Federal Actions resulted from the early 1960s through the 1980s and beyond. In 1969, the National Environmental Policy Act was passed. In 1970, two new federal agencies were created: The Environmental Protection Agency or EPA and the National Oceanographic and Atmospheric Administration or NOAA.

Many other federal laws followed – creating processes and increased regulation over the entire array of environmental concerns – including the human environment as well as natural. A series of Presidential Executive Orders complemented these laws, and individual States joined the movement with their own laws.

Federal Actions

Let’s take a look at some of the major federal actions that affect transportation. In 1963, the first versions of the Clean Water Act and Clean Air Act were passed. Then in 1964, the Red Book List was published, which was a precursor to the first endangered species listing of 78 species - in 1967.

Section 106 of The Historic Preservation Act of 1966 protected historic architecture and archaeological sites. The Act created the Advisory Council on Historic Preservation, as well as a National Register of Historic Places.

In 1969, Congress passed the National Environmental Policy Act, or NEPA, which we will cover in detail. As part of NEPA, the President's Council on Environmental Quality was established. EPA and NOAA were created in 1970. In 1972, several laws were passed to regulate water pollution, noise pollution, and development in coastal zones. Then in 1973, the Endangered Species Act was formalized.

In 1975, the United States required all new automobiles to be equipped with "catalytic converters," which covert 90% of harmful carbon monoxide and hydrocarbons emissions into less harmful carbon dioxide and water. This was a major step in the fight against smog. Other laws and regulations emerged at a slowing pace, well into the late '80s.

In 1987, the Water Quality Act was passed and, of significance to transportation, the US Army Corps of Engineers published its first Wetlands Delineation Manual. While not a law or even a regulation- this guidance manual has made a significant mark on the development of transportation designs.

Even today, new laws emerge and aging laws are frequently amended. Federal agencies also create and amend Regulations that govern actions under their jurisdiction. For example: The development of Total Maximum Daily Loads (or TMDL) as a part of the Clean Water Act, requires the consideration of impaired waters and pollution runoff as a part of the transportation planning process.

Presidential Executive Orders

A Presidential Executive Order is an order issued by the President that is directed toward officers and agencies of the federal government. Executive orders have the full force of law, based on authority derived from statute or the Constitution itself. Over 13,000 Executive Orders have been signed in our nation's history. Five of these are relevant to transportation planning.

Changing Environmental Concerns

New environmental issues will continue to emerge. As well, environmental disasters are a pragmatic expectation – such as the 2010 oil spill in the Gulf of Mexico. These incidents will likely prompt new federal and state actions. Even old problems, like smog, continue to linger and thus require sustained management.

It is within the context of these old and new environmental challenges – that NEPA and other process and protective laws exist. New and amended laws, regulations, and guidelines are necessary to keep pace – and are a pragmatic reality. Oil spills and other calamities still occur today, while smog, deforestation, and other long-term environmental concerns persist. Therefore, transportation professionals must recognize that planning and project development processes will also change from time to time – and then adapt accordingly.

Lesson 2: National Environmental Policy Act

In Lesson 2, let's examine the various components of the National Environmental Policy Act.

NEPA Components

NEPA is comprised of three major components. First, the Act outlines a national environmental policy and associated goals. Secondly, NEPA establishes a Council on Environmental Quality which resides within the Executive Office of the President, and finally, NEPA establishes specific provisions for federal agencies to enforce its policies and goals.

NEPA Preamble

In its preamble, The National Environmental Policy act established a new national value. NEPA declared a policy to:

- Encourage productive and enjoyable harmony between man and his environment;
- Promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and
- Enrich the understanding of the ecological systems and resources

Essentially… NEPA advocates that before any development occurs… responsible parties must STOP… LOOK around… and LISTEN to the input of others. The Act is structured to ensure that relevant environmental factors are appropriately considered when compared to other factors in the decision-making process.

NEPA Policy

NEPA clearly states… …it is the policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

So… how does the federal government ensure that the policy is upheld? Well… by setting up a governing structure with certain authorities, and then ensuring that appropriate actions are taken.

CEQ

The White House Council on Environmental Quality (or CEQ as most practitioners call it) is the federal entity responsible for ensuring that everyone follows NEPA. CEQ produces an annual “State of the Environment” report to the President. CEQ staff work to advance the President's agenda on environment, natural resources, and energy. CEQ oversees federal implementation of the environmental impact assessment process, and finally… CEQ also acts as a referee when federal agencies disagree among themselves.

CEQ – Typical Activities and Products

Beyond reporting, the Council is active with drafting Presidential Executive Orders, lobbying Congress, and coordinating with federal agencies to effect regulatory changes. Recent examples of these might include steps to modernize and reinvigorate NEPA. Environmental justice is an evolving NEPA subject, with new guidance and approaches released by CEQ in 2016. CEQ periodically releases guidelines to interpret NEPA or any new laws and amendments. Therefore, seasoned practitioners often check-in with CEQ for regular updates.

Federal Agency Enforcement
NEPA is very clear on enforcement: All federal agencies are expected to comply with, and enforce NEPA policies and goals. The Council on Environmental Quality is then charged with agency oversight, as well as developing policy in a collaborative manner.

Creation of EPA and NOAA
Recognizing that NEPA was a new policy with broad application, President Nixon prompted the creation of two federal agencies in 1970. These were the: National Oceanographic and Atmospheric Administration, or NOAA, and the Environmental Protection Agency, or EPA, as some call it.

NOAA was charged with understanding and predicting changes in climate, weather, the oceans, and our coastlines. EPA was assigned the mission of protecting human health and the environment.

EPA was assigned with the review of environmental documents for NEPA compliance, and to act as a national repository for all documents. EPA was further charged to administer the Clean Water Act and the Clean Air Act – which has resulted in delegations to other agencies, such as the US Army Corps of Engineers.

NEPA Framework

Beyond the establishment of new agencies and authorities, Essentially, NEPA defines a specific process that should be followed when evaluating the impact of a proposed activity or developmental action.

NEPA requires certain measures and analytical actions. The first is transparency - with a full description of the project and its justification - as well as identification of resources that might be impacted.

NEPA then requires development of a range of alternatives that meet the project need - yet also seek to avoid or minimize impact to the resources identified. Impacts are then quantified, and relevant data is considered. Public involvement is typically required, as is coordination with local governments, relevant state and federal agencies, Indian tribes, and other stakeholders. Their input is incorporated and responses are provided for any comments. Finally, a decision can be reached and mitigation is considered for making-up-for impacts to certain resources.

Every project is different and may not follow the same chronological steps. But NEPA does require certain study components and check-points. Projects that follow the NEPA process, provide quality analysis, consider all impacts, and make reasonable decisions that are legally defensible.

NEPA Tells the Project Story

One goal under NEPA was to eliminate past occurrences of centralized or isolated decision-making – without the knowledge or input of the public, agencies, or other stakeholders. Interaction with the public and other stakeholders is structured to provide adequate baseline information, analysis, and present proposed solutions – and then seek feedback. As previously discussed, the structure of NEPA study documents is specifically intended to “Tell the Project Story” in a logical and understandable manner.

NEPA Documents
Congress followed a common-sense approach when formulating NEPA legislation. Sponsors recognized that proposed actions could range in size and scope, therefore NEPA offers a variety of document types that “fit” the project scope and environmental impacts.

Projects of minor scope with small impact require less study, and thus a smaller document. Conversely, projects with big impacts require considerable study and resultantly, a large and comprehensive document.

NEPA defines these differing document types as “Class of Action.” Furthermore, NEPA uses only one measuring-stick to define the difference. That measurement is: “Significance” – in terms of the project’s impacts on the human and the natural environment. Degree of Significance goes hand-in-hand with determining a project’s Class of Action. Let’s delve further into these definitions.

NEPA Classes of Action

NEPA created only three Classes of Action. A Class I action is the large, comprehensive document - the Environmental Impact Statement or which some call an EIS. Class II is the smaller series of documents, termed Categorical Exclusions. Professionals often refer to these as a CEs.

Naturally then, certain mid-sized projects in terms of scope or impact, are to be expected. These actions fall into the Class III designation of Environmental Assessments, or EA as many like to say. We will delve into the structure of each document in just a few moments. But first, let’s bring back our NEPA measuring stick.

Significance Determines the Class of Action

Expectation of Significance is the key determining factor when selecting a particular project’s Class of Action. First, let’s consider the Class I Environmental Impact Statement, or EIS. If a project is expected to cause significant impacts, then the EIS process and document format will be followed.

Conversely, if a smaller project is not expected to cause any significant impacts – or the project scope falls within a pre-categorized listing of activities that do not cause significant impact… then the project is determined to be a Class III Categorical Exclusion. Or there is another way to approach this decision: A smaller project may be **excluded** from major study because it falls into a certain category of work that does not cause significant impacts.

Once again, the mid-sized projects might present a challenge. At the beginning of a project study, it can be difficult to predict whether impacts will be significant. However, it is possible to determine whether the project scope does NOT fall within the list of Categorical Exclusions. These cases present scenarios when significance is not yet known, therefore a Class II Environmental Assessment is used in order to “assess” the significance of environmental impact.

How is Class of Action Determined?

Class of Action is determined based on a preliminary estimate of whether the impacts of a project are going to be significant. First, it must be determined that the project is federally funded or is a federal action. In determining significance, practitioners look at the proposed project characteristics and consider the potential impacts to the natural and human environment. This includes not only direct impacts, but long-term effects – both indirect and cumulative.

What is Significance?

Thus far we established that Class of Action is determined by the degree of significant impact. So… what is Significance, anyway? How is it measured? Would one person judge significance differently than another? The truth is: Significance represents one of the most difficult concepts in NEPA**.**

Even seasoned NEPA practitioners may differ in opinion. The concept of “Significant Impact” is very broad in its application across innumerable resources, scientific disciplines, and yes – even individual, professional judgement. Furthermore, the degree of significant impact can change over time. Technological advances may yield new solutions – or problems! And… continued studies of our environment yield ever-new information.

In addition: changing laws and societal values can and do affect the public’s perspective. A project delivered 30 years ago may have occurred without controversy… yet the same project today might yield public protest. Many, many factors can apply.

Therefore, and in this arena of uncertain and changing thresholds: The Council on Environmental Quality offers specific guidelines to consider Significance, whereby the determination of a significant impact is a function of both context… and intensity. Context refers to the geographical, physical, natural, economic, and social settings of the action. The context is both the broader arena, such as the society as a whole or watershed, for example, and the narrower environment, such as a specific neighborhood or stream. Intensity refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make a decision about partial aspects of a major action. The severity of the impacts must be viewed in both the larger and smaller contexts applicable to action.

How is Significance Determined?

So… how is significance determined? Well, the severity of the impact must be examined in terms of the type, quality and sensitivity of the resource involved; the location of the proposed project; the duration of the effect and other consideration of context. Significance of the impact will vary with the setting of the proposed action and the surrounding area (including residential, industrial, commercial, and natural sites).

Let’s discuss context, which essentially represents the affected environment. The significance of an action must be analyzed in several contexts such as: society as a whole, the affected region, the affected interests, and locality. Short term vs. long term effects are also relevant.

Then, practitioners review intensity of impacts. CEQ rules direct the consideration of ten factors when evaluating intensity including:

1. Impacts that may be beneficial or adverse. A significant effect may exist even if the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
5. The degree to which the possible effects on the human environment are highly uncertain or include unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

8. The degree to which the action may adversely affect historic districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Is There a List of Significant Impact Thresholds?

We previously discussed the difficulty in defining "significant," therefore no specific listing of thresholds exists at a federal level. Categorical Exclusion checklists do serve as a basis to help identify minor projects that usually require less study. For each project, the unique contextual parameters must be considered, then the intensity of the impacts must be gauged against that background.

Experience with past projects or consultation with other agencies or stakeholders is considered when determining significance. The policies of agencies with jurisdiction or models or previous analysis can also assist with the determination. Part 1, Chapter 2 of the PD&E Manual provides additional information about significance. A link to this can be found on the resources page.

Example Scenario

For this example, let's say there is a proposed highway that will impact 12 acres of wetlands. What do you think? Is this a significant impact?

Answer

Well it all depends on the context and intensity.

What if the wetland impact occurs among thousands of acres of similar ecosystem? In this case the impact is not severe to the environment. But what if the impact is to a wetland in a desert oasis? Now THAT is different… because the impact would be severe and the wetland's function is likely vital to the region. For example: the wetland may offer the only water, forage, and shelter for 100 miles in any direction, and be a known stop for migratory birds – as well as humans.

Many considerations can apply. Do the 12 acres of wetlands carry a rare or special designation? For example, is the area within core foraging habitat for wood storks?

Is it a mitigation site for another project? Or is it used for water treatment? Can mitigation be provided to offset impacts? The determination of significance will depend on these and other project-specific details.

Many practitioners ask whether "Thresholds of Significance" are listed anywhere. In fact, they are <u>not.</u> Each project is different. Significance depends on a carefully-weighed balance of Context and Intensity – and no standard set of thresholds, rules, or equations can possibly foresee all of the potential scenarios.

How is Class of Action Determined?

So how do we actually determine the class of action? Early on, scoping helps set conceptual project limits. Practitioners review the proposed project footprint and identify areas that may be impacted. Alternatives to solve the transportation challenge are developed and then screened using GIS information to quantify and compare potential impacts.

Past projects and other knowledge of the area may also help to identify resources. For FDOT projects, this screening happens through the Efficient Transportation Decision Making process using the Environmental Screening Tool. Practitioners often refer to the acronym EST.

Potential impacts to the human and natural environment are considered, as well as future development potential as it relates to indirect and cumulative impacts. Feedback from agencies and stakeholders also contributes. With the information at hand, one can quantify potential impacts and consult with the FDOT Office of Environmental Management.

The Environmental Impact Statement

Let's take a look at the Environmental Impact Statement, or EIS. Using our "significance" measuring-stick, this NEPA approach is used when significant impacts are expected.

An Environmental Impact Statement represents a series of three documents – with accompanying processes. The first document – a Draft EIS, commonly mentioned as DEIS:

- Announces the project description and the purpose and need;
- Describes the existing environment;
- Explains how and why alternatives were developed;
- And then… evaluates the benefit and impacts of each alternative.

The DEIS is published and then circulated to agencies, tribes, local governments, and stakeholders. Typically, a Public Hearing or series of hearings would be held. All these activities are intended to promote transparency of the proposed project – and to then seek input on the project decisions thus far.

A Final EIS or FEIS is then developed, which

- Responds to comments on the DEIS;
- Provides supplemental studies, as warranted, and which may introduce additional alternatives; and
- Announces a decision on the alternative preference.

A Record of Decision or ROD is then prepared, which responds to comments on the FEIS and announces a final decision. Historically a ROD has typically followed after a FEIS; however new laws advocate that a single FEIS/ROD document is often practicable for a particular action or program.

Tiered EIS's

For projects that involve multiple phases and considerable time between those phases: CEQ also developed a Tiered EIS protocol. Rather than preparing a single Environmental Impact Statement as the basis for approving the entire project, the responsible agency conducts two or more rounds – or "tiers" – of environmental review.

Tiering is typically adopted to:

- Simplify the management of complex NEPA parameters - for lengthy corridors or large projects;
- Pre-authorize corridor preservation, when construction is not anticipated for many years;
- Authorize construction for multiple phases over many years; and
- Prevent EIS document expiration – by stretching out the EIS process into a series of studies.

The challenge in preparing a tiered study is to determine the content and details of each tier.

Categorical Exclusions

Let's move to the other end of the spectrum – where No Significant Impacts are expected. For federally-funded projects of these types, CEQ created the Categorical Exclusion.

Categorical Exclusions by their very nature, imply project types that cause LOW or NO impacts. Either these projects are pre-Categorized on a published list that literally EXCLUDES the action from exhaustive environmental study OR Preliminary review of the project verifies that NO significant impact is expected.

Categorical Exclusion Types

Often called "CE's," Categorical Exclusions are processed with a single document. FDOT further subdivides CE's into two types: Type 1 Categorical Exclusions are projects that fall into a checklist of low-impact projects. For example: The paving of existing roadway shoulders. Type 2 Categorical Exclusions include projects that may not fall into the checklist of excluded projects – however after preliminary review are not expected to cause any significant impacts.

Categorical Exclusion Examples

Examples of several Type 1 categories might be:

- Minor widening & road shoulder work,
- Improvements within existing right-of-way that substantially conform to the preexisting design, function, and location, or
- Landscaping work.

Examples of Type 2 CEs that are not on a pre-categorized list, but are expected to NOT have significant impacts might include:

- Bridge replacements involving a Coast Guard Permit,
- Road realignments and lane additions with right-of-way acquisition, and
- Multi-use trails

The Environmental Assessment

As we previously mentioned, Class III Environmental Assessments fall into the middle-ground… when we are not sure of a project's significance, but we know it is more than a Categorical Exclusion.

Often termed an "EA," Environmental Assessments are prepared when the significance of an action is not clearly established. The Environmental Assessment is published and then circulated to agencies, tribes, local governments, and stakeholders.

If a significant impact is determined during an EA study period, then an EIS is required. In this case, some study time may have been lost by pursuing an EA instead of an EIS*;* however, the EA's technical reports and project documentation would typically support development of a DEIS document. If NO significant impacts are determined, then an EA is typically followed by a smaller decision-making document called a "Finding of No Significant Impact," or FONSI.

FONSI

In addition to summarizing the EA's findings, a Finding of No Significant Impact provides a documented ability to obtain, consider, and address any comments generated by publishing the EA.

Comments may originate from public hearings or workshops - or simply from readers of the published document. Typically, state and federal agencies provide comments at this time, as do other non-governmental organizations and stakeholders. Therefore, a FONSI serves to document consideration of comments received, to discuss any new information identified, and to explain a determination of NO Significant Impact was made.

Other Supporting Documents

Now that we have looked at the three Class of Action documents, one should be aware that other, "supporting" documents exist.

These are: A Re-evaluation – which is commissioned when any changes have occurred in the project or the environment itself, which might affect the validity of previous NEPA documents, decisions, or determinations. Changes in applicable laws, designations of new Threatened and Endangered Species, and other such changes may also trigger a need for re-evaluation.

Another document type: a Supplemental EIS - might be necessary on the back-side of an EIS, should changes be discovered which result in significant adverse effects that were not identified in the original, approved document.

Re-evaluations

FHWA will not fund actions such as Right-of-Way, utility relocation, or Construction - unless a project's NEPA documentation remains valid. Resultantly, FHWA provides guidance on this subject.

If more than three years have transpired since the last approved federal document – or if new circumstances arise – or if new information becomes known that might challenge the previous NEPA decisions – or if new laws or regulations apply - then a re-evaluation may be required by FHWA**.**

Re-evaluations essentially recognize that our environment is constantly changing, and provide a documented opportunity for FDOT to confirm that previous decisions made during the PD&E Study remain valid. Legal and regulatory changes can occur to independent laws such as the Endangered Species Act. For example: a newly-listed endangered species might trigger a re-evaluation need.

Lesson 3: FDOT Compliance with NEPA

Now that federal requirements are outlined, in Lesson 3, let's examine how the Florida Department of Transportation complies with NEPA.

In short, FDOT maintains capable and experienced staff that understand federal and state laws and applicable regulations. The Office of Environmental Management stays updated on laws and collaborates with agencies to provide standardized procedures for NEPA compliance.

Project Development & Environment or PD&E studies are conducted according to the PD&E Manual and other FDOT references. With Central Office assistance, District staff ensure that projects proceed in compliance with the National Environmental Policy Act.

Transportation Project Development Process

FDOT pursues its transportation program through five major phases. These are:

- Planning
- Project Development & Environment studies
- Design
- Right-of-Way, and
- Construction

In Planning Phase, the Central Office works with citizens, MPOs, and county governments to generate long-range, regional and system-wide planning products that paint a vision for the State's transportation future.

The principle long-range plan is the Florida Transportation Plan, which has a 50-year planning horizon. As funding projections materialize, FDOT generates a 25-year Cost Feasible Plan, that also includes FDOT's designated Strategic Intermodal System.

Planning Phase

The Planning Phase incorporates activities which support the selection of candidate projects into the FDOT 5-Year Work Program, and help to refine those projects with regard to viable alternatives, cost, and realistic delivery schedules.

As candidate projects are selected for the Work Program, a series of Planning and Environmental Linkage activities begin to occur – which link the long-range planning products to actual project implementation.

These might include efforts such as:

- Efficient Transportation Decision Making or ETDM Screenings, such as the Planning and Programming Screens. These screens include an evolving Preliminary Environmental Discussion sub-component.
- Following the Statewide Acceleration Transformation, or SWAT, process to ensure that appropriate pre-PD&E activities are identified, funded, and scheduled.
- Alternative Corridor Evaluation, or ACE, and
- Preparing a consultant scope of work for the upcoming PD&E Phase.

Pre-PD&E Planning Studies may be commissioned to further define or refine project parameters. These studies may help to:

- Establish Purpose and Need
- Define the project area and suitable termini
- Further develop alternatives
- Provide a reliable cost estimate and schedule which support programming into the Five-Year Work Program, and
- Facilitate scope of work for the PD&E Phase

ETDM

FDOT's ETDM process satisfies federal statutory requirements to link long-range planning to project development. ETDM provides appropriate information to determine a project's recommended Environmental Document type or Class of Action.

Projects need to meet specific screening criteria to be eligible for ETDM screening. These screening criteria can be found in the FDOT ETDM Manual. A link to this manual is found on the resources page. The ETDM analysis essentially screens projects for potential impacts to the human and natural environment. The process also engages agencies, local governments, tribes, and other stakeholders with an opportunity for early input and consideration of the environment.

As the flowchart indicates, ETDM screens in chronological order from a higher-level Planning Screen to a more detailed Programming Screen – in preparation for start of the Project Development & Environment Phase.

The ETDM Planning Screen ideally occurs for candidate projects – prior to their selection to the 5-Year Work Program. These screens are ideally conducted by MPOs or Counties as part of local Long-Range Transportation Plans, or County Growth Management Plans.

Planning Screens begin at different times; however, they might commence as soon as a project is considered for the Cost Feasible Plan, – meaning that they might obtain funding commitments. Programming Screens typically occur after a project is programmed into the 5-Year Work Program. This more-detailed screening builds upon the Planning Screen, and supports development of a PD&E scope of services. Both ETDM screens are web-based tools.

PD&E Phase

The Project Development & Environment or PD&E phase seeks to obtain approval of decisions made in the Environmental Document in a manner consistent with laws and permit regulations. Collaboration with the public, agencies, tribes, and other stakeholders is also key to success.

The PD&E Phase commences in time to complete studies and move into the follow-on Design Phase – prior to the scheduled right-of-way or construction target dates. PD&E builds on prior Planning and Environmental Linkages, including ETDM screens, Planning Studies, and further alternative development.

At this time, FDOT determines the appropriate funding source and, if federally-funded, the appropriate Class of Action. Efforts henceforth move toward selection of a recommended alternative.

Over time, FDOT has ensured that its PD&E Process complies with NEPA, federal and state laws, regulations, and other requirements. FDOT's Office of Environmental Management maintains the "PD&E Manual" to provide comprehensive guidance that conforms with all requirements.

The manual provides a framework for a consistent approach and technical documentation requirements – and applies to both federal and state actions. Each project is different; therefore, the degree of necessary documentation will reflect the specific project and its impacts.

FDOT Documents Satisfy NEPA

FDOT documents tell the "Project Story." Each FDOT Environmental Document fully describes:

- The proposed action;
- The purpose and need;
- Studies of the existing environment;
- Involvement of stakeholders, including the public, local governments, agencies, and tribes;
- And the appropriate range of alternatives that was studied;
- How impacts to the human and natural environment were identified, studied, and considered in decision-making.
- These considerations also incorporate indirect and cumulative effects – of this project and others.
- Any federal findings are documented, and then
- The document announces a decision and its justification, which are supported by a detailed alternatives analysis.

Mitigation

NEPA discusses but does not specifically require "mitigation," however numerous other laws and permits do require this activity. Therefore, mitigation planning is another primary activity during the PD&E phase, so that the appropriate laws are met and permits can be obtained at a later date.

Therefore, let us examine mitigation briefly. In its generic definition, Mitigation is the:

- lessening of the force or intensity of something unpleasant;
- the act of making a condition or consequence less severe; or
- the process of becoming milder, gentler, or less severe.

With project planning, it is possible to make-up, or mitigate, for specific environmental impacts. In fact, these decisions should be considered as a project progresses – including incorporation of the appropriate mitigation sequencing.

CEQ regulations define mitigation sequencing as:

- First, by Avoiding the impact altogether by not taking a certain action or parts of an action.
- Then, minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Third, Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Next, Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Finally, compensating for the impact by replacing or providing substitute resources or environments…. providing Mitigation.

For most laws - the NEPA study must document that project studies followed the mitigation sequence. Jumping directly to mitigation – without first attempting to avoid or minimize impacts – may provide a barrier to legal compliance.

Post-Project Results from an FDOT study
Recalling that NEPA studies involve both legal and regulatory requirements, a short review of these requirements verifies that FDOT projects are legally-defensible. This occurs through:

- Documented and balanced decision-making
- Involvement of, and consideration of comments from: the public, local governments, agencies, tribes, and other stakeholders
- A solid procedural process to obtain agency permits, which involved:
- NEPA-compliant decision-making
- Interagency coordination
- Appropriate federal findings on pertinent laws, and
- The appropriate avoidance of resources, and then identification of mitigation needs and opportunities.

FDOT Documents Satisfy NEPA
We have established that FDOT environmental documents do satisfy NEPA for the three NEPA Classes of Action. While NEPA provides a framework to present project studies, a variety of other environmental laws and regulations also apply- which must be melded into the NEPA project study.

If any of these laws are not appropriately met, then the project may not proceed. Environmental Permits are a good example of this. Part 2 of the NEPA 101 module will present many of these laws and permits. We are almost done with this module. In just a few slides, let's take a quick look at remaining project phases and Local Agency Projects.

Design Phase
After the Environmental Document is approved, the Design Phase produces final designs for Right-of-Way acquisition, and at a later time: construction plans and specifications. In cases where a recommended alternative appears very low-risk in terms of not being selected, FDOT can consider beginning final design ahead of document approval – at risk.

During design, drawings might be supplied to support Permit coordination. Plans typically locate and quantify impacts on the project, while also serving as a basis for minimization discussions.

Prior to obtaining federal funds for right-of-way acquisition, FDOT must maintain its NEPA consistency by complying with any project commitments made along the way. In addition, a Re-evaluation of the Environmental Document may be required. Design staff follow updated internal guidance for plans preparation.

Right-of-Way and Construction Phases
The Right-of-Way Phase:

- Involves the appraisal, negotiation, and acquisition of needed parcels and easements
- Specific statutes require adequate notice to property owners and tenants
- FDOT then provides comprehensive relocation assistance

During Right-of-Way, additional Design tasks are completed to prepare for the construction phase. Other tasks might include:

- Securing mitigation
- Obtaining Permits, and
- Utility Relocation (as able)

Finally, in the Construction Phase, FDOT delivers and opens a new facility through:

- Quality construction work
- Continued utility work
- Following environmental commitments, and
- Mitigation (as applicable)

Local Agency Program Projects
Now that we have covered NEPA and the various project phases, let's look at one last aspect of federally-funded projects. Local governments or agencies can seek federal funds through the Federal Highway Administration's locally-administered Federal-Aid Projects Program. That's a lot of words for what we call in Florida… The Local Agency Program … or LAP.

LAP projects are developed by the local government or agency under the administration and oversight of FDOT. And… because they are federally-funded, LAP projects must comply with NEPA. More information is available in the PD&E Manual, and in the FDOT LAP Manual.

Resources
The Office of Environmental Management maintains a central library of training materials as well as documents and publications including manuals, handbooks, guidelines and agreements.
Key references pertinent to this NEPA 101 module include:

- The PD&E Manual,
- The ETDM Manual, and
- The SWAT Workbook.

Links to these can be found on the resources page.

Summary

You have now completed the NEPA Assignment Course, NEPA 101 Part 1. Part 2 of the NEPA 101 training module will build upon the NEPA process to take a closer look at important project parameters such as:

- Understanding NEPA schedules,
- Common Environmental Permits and Federal Land issues,
- Substantial Environmental Laws and Presidential Executive Orders,
- Potential Project Show-Stoppers, and
- The difference between Laws, Regulations, and Guidelines.

For maximum learning application, participants are encouraged to proceed directly to the shorter, Part 2 training.

Conclusion

Congratulations on completing NEPA 101 - Part 1! Thank you for your time and attention.