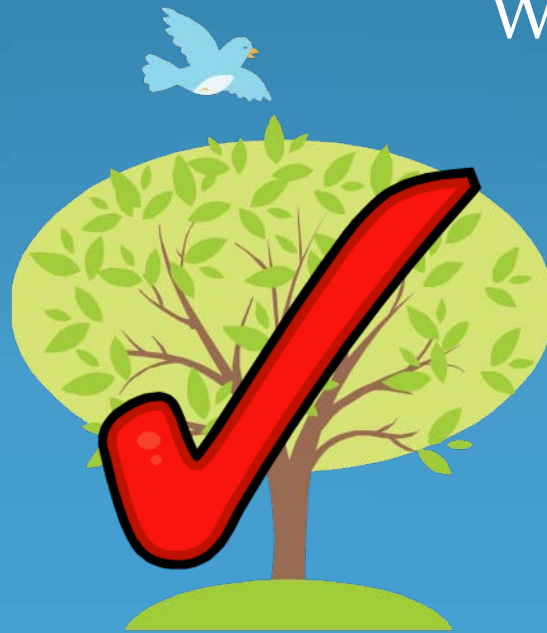


Environmental Checklist

What, Why & How



Overview

- What
 - What is an environmental checklist?
 - Where can it be found?
 - What are the different parts of the checklist?
- Why
 - Why would you fill out an environmental checklist?
- How
 - What steps need to be taken to fill out an ECL
 - How do you fill out each portion
- Decision Document?
 - What
 - Where
 - Why
 - How



What



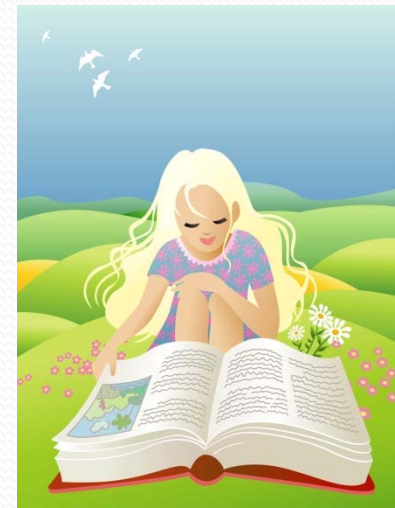
What is an Environmental Checklist?



- The Environmental Checklist is commonly referred to as an ECL. However its technical name is the Programmatic Categorical Exclusion
- An ECL is a form of Environmental Documentation used in place of a Project Concept Report
- Where can the ECL be found?
 - MyNDDOT → Manuals → Design Manual → Reference and forms → Programmatic (ECL)
 - <http://mydot.nd.gov/>

What is an Environmental Checklist?

- Goldilocks and the three bears with a twist.
 - Does all of page one fit?
 - Does all of page two fit?
 - Does all of page three fit?
 - If so than an ECL is just right!



PROGRAMMATIC CATEGORICAL EXCLUSION

Project #: _____ PCN: _____ Date: _____

1

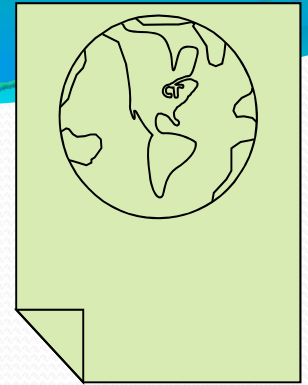
The work for this project is confined to the roadway surface (except signs and structures). The pavement marking will be replaced if removed or covered as a part of this project. The work to be performed consists of:

- _____ 1) **Surface Treatments:** Surfacing projects consist of placing aggregate, hot bituminous pavement, or concrete on top of the existing roadway surface. Use additional pages to discuss the applicable ADA requirements. An asterisk (*) denotes ADA requirements may be required as a part of the project. The abbreviation in the parentheses tells the designer where the project can be found in the Design Guidelines (PM = Preventive Maintenance, MiR = Minor Rehabilitation, SI = Structural Improvements). Select one of the following surface treatments.
- | | |
|---------------------------------------|--|
| _____ Seal Coat (PM) | _____ <u>Macrosurfacing</u> (PM) |
| _____ Slurry Seal (PM) | _____ <u>Microsurfacing</u> (PM) |
| _____ *Patching (PM) | _____ *HBP ≤ 2" (PM) |
| _____ Crack Pouring/Sealing (PM) | _____ *HBP 2"-3" (<u>MiR</u>) |
| _____ Route and Seal (PM) | _____ *HBP > 3" (SI) |
| _____ Repair of depressed cracks (PM) | _____ *Cold in Place Recycle (<u>MiR</u>) |
| _____ Aggregate Surfacing | _____ *White Topping (SI) |
| _____ *Mill and Overlay ≤ 2" (PM) | _____ *Mill and Overlay 2"-3" (<u>MiR</u>) |
- _____ 2) **Preventive Maintenance Concrete Pavement Repair (CPR):** The purpose is to repair the concrete panels that are severely deteriorating. Preventive Maintenance CPR projects will consist of replacing only the deteriorated concrete panels in the driving lane and passing lane. Dowel Bar Retrofits and Grinding may be included on Preventive Maintenance CPR projects. Preventive Maintenance CPR is when less than 10% of the pavement surface area per mile is affected.
- _____ 3) **Grinding:** The purpose is to reestablish a smoother riding pavement surface. Grinding projects can consist of grinding the driving and passing lanes of concrete pavements and enough of the shoulders to tie in. Grinding projects can also include any auxiliary lanes or ramps.
- _____ 4) **Mudjacking:** The purpose is to improve the ride quality on concrete pavements that have settled. Mudjacking projects are commonly done on concrete panels and bridge approach slabs. Approach slabs should not be raised on the bridge end adjacent to a bridge abutment. Safety improvements are not addressed on this type of maintenance work.
- _____ 5) **Miscellaneous Items:** The purpose is to install, replace, or update items.
- | | |
|--------------------------------|-----------------------|
| _____ Fencing | _____ Signs |
| _____ Pavement Markings | _____ Traffic Signals |
| _____ Railroad Warning Devices | _____ Rumble Strips |
- _____ 6) **Minor Structural Work:** This work consists of work done to a structure that does not result in temporary or permanent impacts to wetlands or water bodies. The work will not require placement of embankment or disturb the foreslopes. Select the appropriate minor structural projects.
- | | |
|---------------------------|------------------------|
| _____ Deck Rehabilitation | _____ Abutment Repair |
| _____ Painting | _____ Rail Retrofit |
| _____ Approach Slabs | _____ Deck Replacement |
- _____ 7) **Guardrail Removal, Resetting, or Installation:** This work can be performed as the primary project work or in conjunction with any of the above project types, and will not require placement of embankment or disturb the foreslopes.

2

_____ (signature of person filling out documentation)
 _____ (print name of person filling out documentation)

_____ Date



What is on Page 1?

- 1) The first section is Project #, PCN & Date
- 2) The second section is the where you classify what type of project you are doing and what all that project entails.
 - a) If part of your project doesn't fit into the ECL then you cannot use the ECL as a form of environmental documentation.
 - b) If your project does fit but is not considered a Preventative Maintenance project than you must also fill out a decision document.

Worksheet A ENVIRONMENTAL CHECK LIST

Project #: _____ PCN: _____ Date: _____

In order for this project to be considered programmatic, all answers must be **no** to these environmental questions:

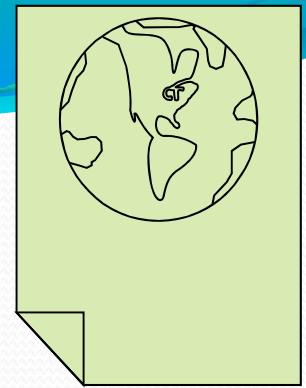
- Yes No SECTION 4(F)/6(F): Are there any impacts to Section 4(f) or 6(f) property (public owned land of a public park, recreation area, or wildlife and waterfowl refuge and historic sites)?
- Yes No HISTORIC / ARCHAEOLOGICAL: Are there any impacts to HISTORIC / ARCHAEOLOGICAL properties?
- Yes No THREATENED OR ENDANGERED SPECIES: Does the action affect species or critical habitat protected by the Endangered Species Act?
- Yes No RIGHT OF WAY: Is there any action required for new right of way or temporary easement, minor access change, relocations, and does it have any risk of hazardous materials involvement?
- Yes No FARMLAND: Does this action involve the acquisition of farmland?
- Yes No STATE SCENIC RIVER: Does the action impact the Little Missouri River, a state designated scenic river?
- Yes No FLOODPLAINS: Based on an email to Jeff Klein jjklein@nd.gov at the State Water Commission, are there any impacts in this area? *(the email is required if the original roadway elevation will be altered)*
- Yes No WETLANDS: Does the action impact wetlands?
- Yes No NOISE: Is this action a Type I action in accordance with Section 772 of the Federal Aid Policy Guide and does it significantly impact noise levels? *(Increases the carrying capacity of the roadway by allowing more volume).*
- Yes No AIR: Will the action significantly impact air quality?
- Yes No WATER QUALITY: Does the project disturb greater than one acre and if it does a North Dakota Pollution Discharge Elimination System (NDPDES) Construction Permit must be obtained.
- Yes No PUBLIC CONTROVERSY: Is this action controversial?



(signature of person filling out documentation)
(print name of person filling out documentation)

Date

What is on Page 2?



1. Page 2 is all environmental questions.
 - a) If you can't answer yes to all the questions then an ECL is not right for you.
 - b) Each question is specific and complex and may take some research

Worksheet B PROJECT DATA

Project #: _____ PCN: _____ Date: _____

Estimated Cost: \$ _____ STIP Cost: \$ _____

Traffic Volumes:
Current ADT: _____ Percent Trucks: _____

Highway Classification	Cross Section
<input checked="" type="radio"/> Interstate <input type="radio"/> State Corridor	<input checked="" type="radio"/> Rural Two Lane <input type="radio"/> Interstate Divided
<input type="radio"/> Interregional <input type="radio"/> District Corridor	<input type="radio"/> Rural Divided
<input type="radio"/> District Collector	<input type="radio"/> Urban (all cross sections)
<input type="radio"/> Other - _____	

Type of Project: _____ Minimum Roadway Width: _____

Have any safety issues been identified through the Statewide Safety Program? Yes _____ No _____

If yes, what: _____

What are the ADA Requirements to be considered for improvements?

Have any traffic control devices been identified that do not comply with the current MUTCD?
Yes _____ No _____ If yes, what? _____

Do all railroad crossings have adequate protective devices in place? Yes _____ No _____

If no, what? _____

Any Design Exception required for this project: Yes _____ No _____
(Check the Design Guidelines)

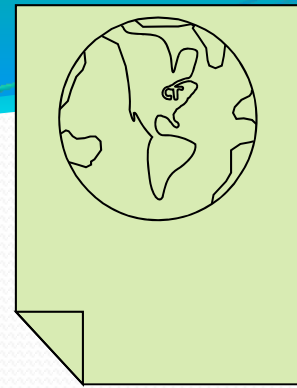
Cost Effective Analysis: The Cost Effective Analysis is for Preventive Maintenance projects only. Delete these sentences prior to final submittal.

STRUCTURAL IMPROVEMENT		PREVENTIVE MAINTENANCE	
Improvement Cost	\$238,500	PM Overlay Cost	\$118,000
Estimated Service Life	20	Estimated Design Life	8.84
Discount Rate	4%	Discount Rate	4%
Life Cycle Cost	\$238,500	Life Cycle Cost	\$238,500

This document was originally issued and sealed by **NAME**, Registration number PE-**NUMBER** on **MM/DD/YY** and the original document is stored at the North Dakota Department of Transportation.

(signature of person filling out documentation)
(print name of person filling out documentation)

Date



What is on Page 3?

1. Section 1 is the estimated and STIP cost
2. Section 2 is your place to input traffic volumes
3. Section 3 is where you input your type of highway
4. Section 4 is the wrap-up section of the ECL where you finally put in all of the details of the project that have not been covered yet.
5. Section 5 is the cost analysis section to show that a project that qualifies for an ECL is cost effective.

Why



Why fill out an Environmental Checklist?

- The choice to fill out an ECL can be made in place of doing the time consuming Project Concept Report
- An ECL can help you prepare for further planning stages.
 - By asking sometimes in depth questions you are forced to begin research and drawing at an early stage.
 - This research and drawings can often be helpful later on and provide a reference to pull from.



How



How do you fill out the ECL?

- Page 1:
 - Page one is large on paper but the easiest in reality.
 - It is the basic classification of your project
 - It is the first place that you could find out that an ECL is ultimately not right for you.
 - The most likely use for an ECL is on a preventative maintenance project.
 - If your project is not preventative maintenance than you have to fill out a second form called the Decision Document.



How do you fill out the ECL?

- Page 2:
 - The question page has many different things that involve some research however, more often than not if you are doing a project that does not disturb an area outside of the surface of the existing roadway that will imply for most questions that the answer is no.
 - Each question refers to an important environmental aspect that could be affected by a project



Page 2:



- Question 1

- This question refers to the impact on Section 6(f) and 4(f) property
 - Section 4(f) property is part of the 1966 US Department of Transportation Act, this gave specific protection to certain classes of public properties
 - Public Parks
 - Recreation Areas
 - Wildlife and waterfowl refuges
 - Historical Properties
 - Section 4(f) properties can only be used for a project when there is no alternative AND you do all possible planning to minimize the effect on the property

Page 2:

- Question 1 Cont'd

- Section 6(f) property is part of the 1965 Land and Water Conservation Fund Act (L&WCF) which provides grants to communities to be used for acquiring or improving lands for recreation uses
 - If any 6(f) property is used the city or state that received the grant must acquire replacement land
 - The only exception to this is temporary easements in which case the State Liaison Officer (SLO) will decide if that is considered as a conversion of use or not.
 - The SLO for North Dakota is the director of the State Parks and Recreation Department.



Page 2:



- Question 2

- Are there any Historical/Archaeological impacts?
 - Any NDDOT project that involves Federal funds must take cultural resources into consideration.
 - By contacting the State Historical Society and local Native American tribes that may be affected by the project you can find out if there will be any impacts

Page 2:

- Question 3



- Does the action affect species or habitat protected by the Endangered Species Act?

- Endangered Species in North Dakota

- Whooping Crane
- Eskimo Curlew
- American Burying Beetle
- Black-Footed Ferret
- Piping Plover
- Pallid Sturgeon
- Tern
- Gray Wolf
- Western Prairie Fringed Orchid



Page 2:

- Question 4:
 - Right of Way
 - Look at the current ROW and think about your project
 - Do you need a new ROW?
 - Do you need a temporary easement
 - Are there any minor access changes or relocations?
 - Is there any hazardous material risks?
 - If the answer is 'yes' to any of these parts then the answer to the entire question is 'yes'.



Page 2:

- Question 5
 - Will you need to acquire any farmland for your project?
 - Find a map of the location of your project and if available look at old plans from your location.
 - It may be necessary to draw up a scope of work to determine if there will be any changes that involve farmland acquisition.



Page 2:

- Question 6
 - Does your project have any impact on the Little Missouri River?



Page 2:

- Question 7
 - Is your project affected by an area floodplain?
 - If you are altering the original roadway elevation you must contact Jeff Klein of the State Water Commission
 - His contact email can be found on the ECL in the question



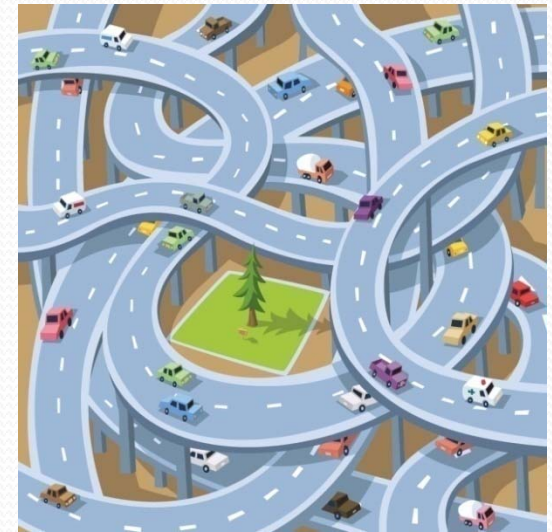
Page 2:

- Question 8
 - Does your project affect wetlands?
 - If it is necessary to determine whether or not you are going to disturb wetlands then you need to look on GIS or possibly even USGS maps to determine.



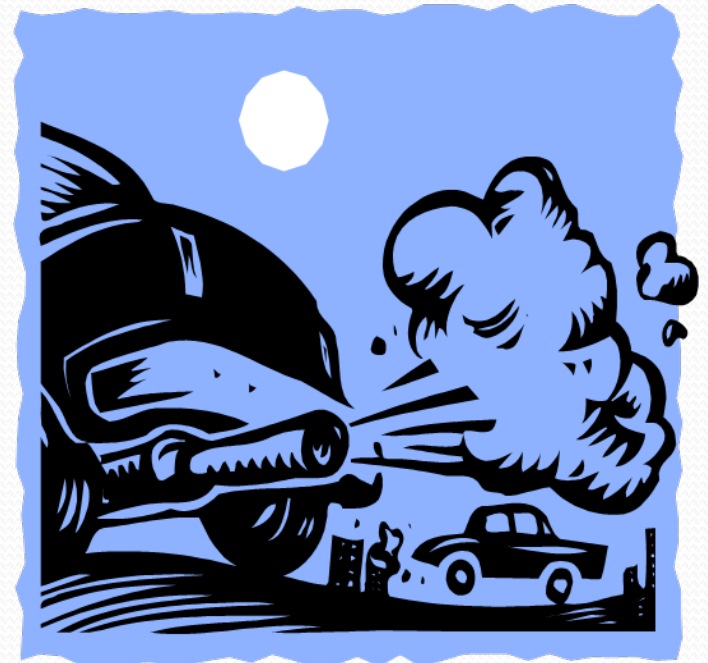
Page 2:

- Question 9
 - Will your project significantly impact noise levels?
 - A Type 1 action according to the Federal Aid Policy Guide Section 772 is a proposed Federal or Federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.



Page 2:

- Question 10
 - Will the project significantly affect air quality?
 - Will you be significantly increasing the number of cars traveling the area?
 - Will there be a significantly larger number of high polluting vehicles such as Semis?



Page 2:

- Question 11

- What is the effect on Water Quality?
- Will the project disturb greater than 1 acre of topsoil? If it does do you need to obtain a North Dakota Pollution Discharge Elimination System Construction Permit?
 - This Permit allows you to discharge relatively uncontaminated waters from temporary dewatering activities into the waters of the state of North Dakota
 - The entire permit can be found on ndhealth.gov
 - [NDPDESCP](#)



Page 2:

- Question 12
 - Is there any public controversy over this project?



How do you fill out the ECL?

- Page 2:
 - If you have answered yes to any of these 12 questions then you will not be able to use an ECL as your form of environmental documentation.
 - However if you were able to answer no to all 12 than you may proceed to Page 3



How do you fill out the ECL?



- Page 3:
 - Estimated and STIP Cost
 - STIP cost can be found under the NDDOT's public section/Plans and reports/Final STIP for your year
 - <http://mydot.nd.gov/>
 - To determine your estimated cost it will depend on your timeframe.
 - Little to no time you can use the STIP cost but double check that it is realistic by going to the design manual/references and forms/Cost history use the number corresponding your project as a per mile estimate and make sure that that is close to the stip.
 - If you have more time you can go through and figure out how much your main expenses will be.

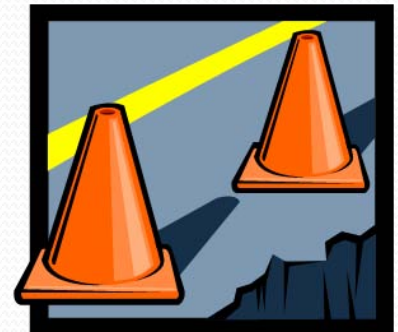
How do you fill out the ECL?

- Page 3
 - Traffic Volumes
 - Traffic Data is available through RIMS
 - Highway Classification and Cross Section Type
 - The highway classification can be found on the map posted around the office and online.
 - The Cross section is your basic road type.
 - Type of Project and Roadway Width
 - Minimum Roadway width can be found on a chart in the design guidelines



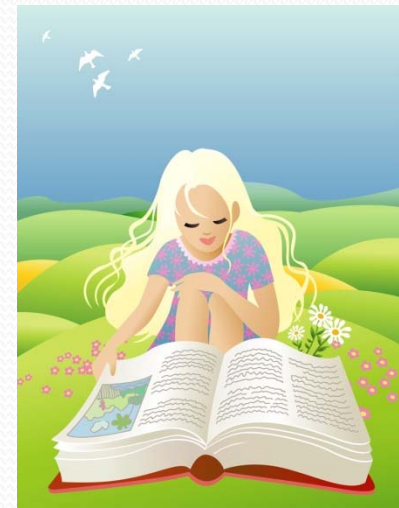
How do you fill out the ECL?

- Page 3 :
 - Safety Issues?
 - ADA Requirements
 - Most likely ADA update on an ECL typed project will be ramps.
 - Traffic Devices
 - MUTCD
 - Railroad Crossings
 - Design Exceptions
 - Cost Effective Analysis
 - Life Cycle Costs
 - Construction Costs
 - Salvage Value



So now know if an ECL is right for you.

- So back to Goldilocks...
 - Does all of page 1 fit?
 - Does all of page 2 fit?
 - Does all of page 3 fit?
 - Than an ECL is just right!



Decision Document

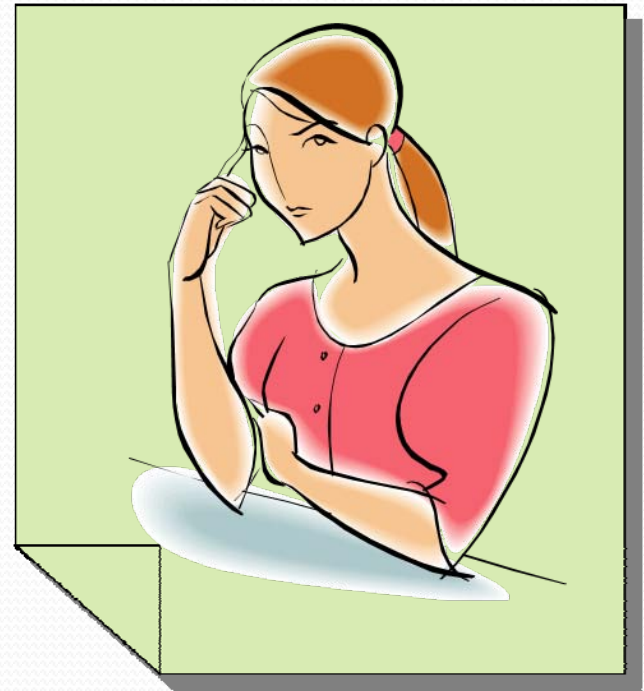


What



What is the Decision Document?

- The Decision Document is for projects that qualify for the ECL but are not a preventative maintenance project.
- When a Decision Document is combined with the ECL it kind of is like a mini PCR

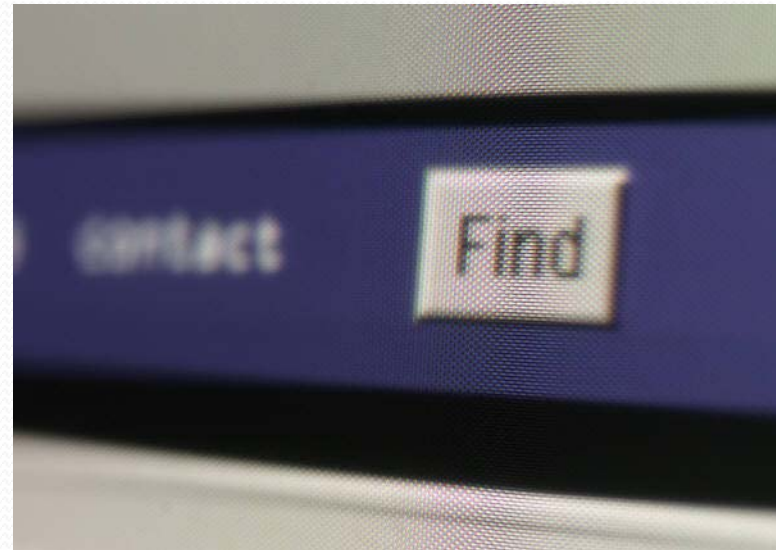


Where



Where can the Decision Document be found?

- <http://mydot.nd.gov/>
- MyNDDOT → Manuals → Design Manual → Reference and forms → Programmatic (Decision Document for ECL)



Why



Why fill out a Decision Document?

- If you are doing an ECL project that would not be classified Preventative Maintenance than you must fill out a Decision Document
- But why?
 - More often than not an ECL project that is not PM is going to be more expensive and is generally to improve structural integrity and life of the road for a longer extent than PM
 - The Decision Document has a whole section that involves the opinions and approvals of many people in the state. So you get more eyes on the project to ensure that this is the right decision



How



How to fill out a Decision Document

- Figure out your basic project description info:
 - Highway Number
 - District Number
 - Projects
 - From (RP)
- Determine your project schedule
 - Project start and completion
 - Plan completion
 - Bid Opening



How to fill out a Decision

Document

- What is the purpose of your project?
- What is the need for your project?
 - What are the existing conditions?
 - What are the deficiencies with the current conditions?
- What is the Scope of work for the project?
 - The Original Scope of Work
 - The Proposed Scope of Work in the ECL
 - Original Investment Strategy
 - Cost Est. for the STIP
 - Scoping Report
 - Also any notes that may be relevant



How to fill out a Decision Document

- What are alternatives to the project?
 - Include the alternative ideas
 - Optional Work Items
 - Engineering problems
 - Environmental Problems
 - And finally compare your alternatives
- Are there any Public Concerns or need for Public Input?
- How does the project fit into the ECL Category?



How to fill out a Decision Document



- Finally compare all the recommendations to decide whether or not the answers are yes or no for the final Executive Decisions
 - To get the recommendations distribute your Decision Document Draft the same manner as the PCR draft would be distributed for approval (See Design Guidelines)
- Last any amendments or comments for the project
- All that's left before final submittal is to attach the completed ECL to the back of the Document

I'm All Done!!
Right?



...Not Quite

Paper Shuffle

- Here at DOTSC we are lucky, once we finish we have the simple task of passing it on to Matt
- From there Matt puts his PE stamp in the correct place(s) and sends it off.
 - The type of project determines where and to whom the ECL is submitted



Paper Shuffle



- NDDOT Central Office Projects
 - Electronic Version of the ECL is placed in FileNet by designer
 - Original Hard copy of ECL and a FileNet link is submitted to the Administrative Assistant of Office of Project Development (OPD)
- NDDOT District Projects
 - Electronic version of the ECL is place in FileNet by designer
 - Original Hard Copy of ECL and a Filenet link is submitted to the Technical Support Contact

So now you know!



- The What's Why's and How's of ECL's and Decision Documents.