

# ITD Project Charter Guidebook

**SPRING 2023** 

# Table of Contents

Intr	oduction	3
Cha	rter Lifecycle	3
	Sections of the Project Charter	5
	SECTION 1: Project Overview	6
	SECTION 2: Risk Register	10
	SECTION 3: Estimate Summary, Basis of Estimate, Project Status	12
	SECTION 4: Design Standards	16
	SECTION 5: Environmental Considerations	17
	SECTION 6: Traffic	21
	SECTION 7: Materials	24
	SECTION 8: Bridge	24
	SECTION 9: Utilities – Rail Road	25
	SECTION 10: Right of Way	25
	SECTION 11: Operations	26
	SECTION 12: ETS-ITS	26
	SECTION 13: Public Involvement	27
	Appendix A: Charter Document Saving	28
	Appendix B: Use of ProjectWise	29
	Appendix C: How To Print and Sign the Charter	30

# **Project Charter Guidebook**

# Introduction

This guidebook explains why we use charters, the document lifecycle and details of specific areas. If properly utilized a charter will identify project risks in the planning stage, minimize scope and budget increase, and provide parameters for the design of the project.

#### The charter serves two key purposes:

- 1. A document where the department is formally authorizing work to progress on a project
- 2. Consolidates into one place all key information about a project

The Project Charter is a formal document that serves as a contract between the Project Sponsor and the Project Team, stating what will be delivered according to the budget, time constraints, risks, resources, and standards. The Project Charter empowers the Project Manager in their role and formally authorizes them to begin the project activities and obtain the resources to support or work on the project's activities. Most importantly, it is required to have a Project Charter in place BEFORE the project is included into the Idaho Transportation Investment Program (ITIP).

The Charter is designed to be a living document that is updated and refined during the project lifecycle. It starts in the planning section where the scope and limits of the project are defined, and initial risks recorded. The charter is updated as information becomes available, the work becomes more defined, estimates become more granular and risks are realized or mitigated.

# **Charter Lifecycle**

The project charter template is an excel document located at <a href="Charter Template Documents">Charter Template Documents</a> in ProjectWise. Always use the template from this location to start with a blank project using the latest template.

#### **Planning/Scoping Phase:**

Charters are initially developed and signed in the planning and scoping section through the District Engineer (DE) to approve the project entering the program. The planning section broadly defines the project scope and location and develops an initial estimate so funding can be programmed. Additionally, each SME section provides input into their respective areas.

#### These areas include:

- Environmental District Environmental Planner
- 2. Traffic District Traffic Engineer
- 3. Materials District Materials Engineer
- 4. Bridge HQ Bridge
- 5. Utilities/Railroad Project Manager
- 6. ROW District or HQ ROW section

- 7. Operations District Operations Engineer or Area Forman
- 8. ETS-ITS HQ ETS Section
- 9. Public Involvement District Public Affairs Representative

At a minimum the Project Overview and Estimate Summary tabs should be completed. There are many small projects with limited scope and budget where much of the information in the Charter is not applicable. Those tabs that have no bearing on the project may be left blank and "hidden" in the spreadsheet to prevent them from printing.

The planning and scoping section reviews all risk identified by the various sections and ensures the risk register is updated with the probability and impact, risk response, mitigations and contingencies. Considering risks in the early stages of a project can make a significant impact on maintaining scope, schedule, and budget.

#### **Development Phase:**

Once handed off, the project manager review's the charter for an understanding of the scope, potential risks, budget, and design standards.

Once a charter is signed a Charter Change Request (CCR) is needed if there are extensive changes to scope or budget. See the current CCR SOP for further details.

The charter is a living document that Project Managers keep updated. The excel version of the charter is regularly updated with risks, design standards, estimate top sheets and scope refinement. Every year during the ITIP update the estimate top sheet along with backup for CN should be printed as a pdf and saved as historical reference. See Appendix A for instructions on saving.

#### **Construction Phase:**

Once a project has been submitted for PSE the Plans and Specs govern the project not the charter.

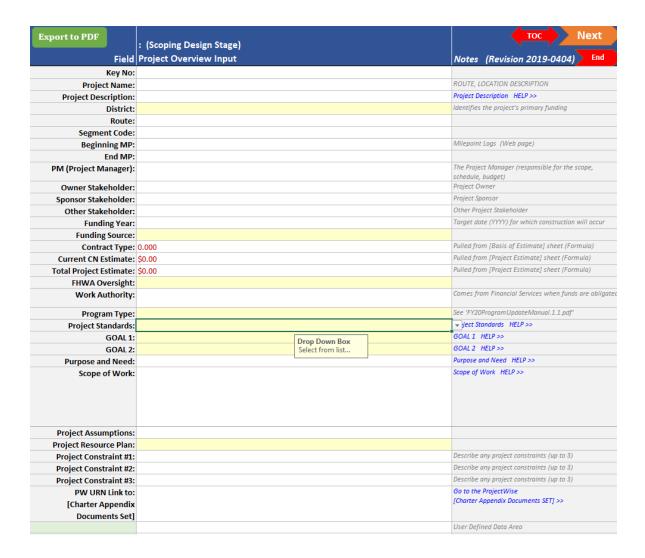
# Sections of the Project Charter

# **Project Charter Contents**



# SECTION 1: Project Overview

The first section of the Charter is for project information. This is where the Project Manager gives the formal name of the project and any other terms that identify the project and the primary groups that will be involved with it. With this consistent terminology, it will be easier for all parties involved—such as the project team, stakeholders, and end users—to discuss and work on the project.



<u>Project Name-</u>This is the "official name" of the project. Make sure that it is unique and clearly defines where and/or what the project is so at first glance it is easily recognized. Here is a sample template that you can use to create a Public Name:

#### TEMPLATE:



- 1) Insert the main highway designation, if applicable.
- 2) General Project location or activity.
- <u>3)</u> Insert the nearest city and/or county.

#### FOR EXAMPLE:

SH00 Main Street to Lake Shore Drive, Lunarville, Obadiah County

#### **Project Description (Public Description)**

The Project Description is also known as the "Public Description" which is found in OTIS. It is a short narrative of the project. A successful Project/Public Description should be concise and clear. Any ITD staff personnel and the general public should have a good idea of the activities the project will do and what the final product will be. Here is a sample template that you can use to create and write a Public Description:

#### **TEMPLATE:**



The <u>(insert the highway and project name)</u> is located near/in <u>(insert the closest city)</u> in <u>(insert the county here)</u> will <u>(insert major outcome or deliverable)</u> in order to (explain why they might care).

#### FOR EXAMPLE:

The <u>State Highway 00 Main Street to Lake Shore Drive project</u> is located within the city of Lunarville in Obadiah County will <u>seal coat and do some minor curve</u> improvements in order to improve ride quality and extend the pavement lifespan.

Beginning and Ending Mileposts – Use Linier Referencing System

To find a beginning or an ending milepost: <a href="http://itd.idaho.gov/highways/milepointlog/">http://itd.idaho.gov/highways/milepointlog/</a>

<u>Route - Remember there are some projects that do not have a specified route such as a planning project or a project that is has many locations.</u>

#### Stakeholders -

The Project Manager is the primary contact who is responsible for the project.

The Owner is the Design Construction Manager or Bridge Engineer assigned for the project.

The Sponsor is the District Engineer who has oversight of the project.

If you have external stakeholders that you need to address, a separate Stakeholder register should be used.

<u>Work Authority -</u> This field holds the project accounting work authority number that comes from Financial Services when funds are obligated on the project and it has been set up in accounting. This number is what Financial Services uses for billing purposes. This may change during the project (i.e. ST to Fed or back to ST).

<u>Program</u> - This is the anticipated program funding category which typically follows the ITIP definition.

Project Standards -This field is for identifying the type of project you plan to develop.

- AASHTO Use this for new/reconstruction on the NHS or interstate's
- State Use this for new/reconstruction on non NHS roads, and all LPA Projects)
- 3R Use this for resurfacing, restoration, rehabilitation on NHS
- 1R Use this for rehabilitation on state roads
- Pavement Maintenance Use this for surface treatment projects
- Other Any other project standards not falling in the above categories

<u>Goal 1 and Goal 2 -</u>The goals specifically identify the primary and secondary objectives of the project.

<u>Purpose and Need -</u> A successful Purpose and Need statement should be concise and clear. Anyone reading the statement should have a good idea of the project purpose and how it will meet the department's goals. Here is a sample template that you can use to create and write a clear statement of Purpose and Need:

#### TEMPLATE:

The objective of the <u>(insert project name)</u> is to <u>(insert major outcome or deliverable)</u>. This will be completed by <u>(insert the project due date)</u>. This project will meet the department's goal to (safety, mobility, and/or economic opportunity).

#### FOR EXAMPLE:

The objective of the SH-00, Main Street to Lake Shore Drive Project, Lunarville, Obadiah County is to repair the rutting that has occurred in the wheel paths and to extend the life of the existing ballast section on State Highway 00. Furthermore, preservation is needed occasionally throughout pavement lifecycle to improve ride quality and extend the pavement lifespan. This will be completed by delivering a PS&E package by October 2025 and constructing the project by the end of the 2026 construction season. This project will meet the department's goal to improve safety and enhance the mobility of the traveling public.

<u>Scope of Work -</u> A successful Scope of Work (SOW) should be concise and clear. Anyone reading the statement should have a good idea of the activities the project will do (and/or not do) and its approach to completion. Here is a sample template that you can use to create and write a SOW:

#### TEMPLATE:

The scope of the <u>(insert project name here and highway designation)</u> from <u>(insert location information)</u>. This will be accomplished by <u>(insert project description or approach)</u>. The result of this project will be to <u>(insert the anticipated results of the project)</u>.

#### FOR EXAMPLE:

The scope of the <u>Main Street to Lake Shore Drive Project on State Highway 00</u> is to do a <u>full-width sealcoat</u> from <u>mileposts 14.3</u> and 21.4 and <u>some curve improvements</u> from <u>mileposts 16.1</u> and 16.5. This will be accomplished by performing a rut-box method fill-in in the wheel paths along with a full width sealcoat on State Highway 00 from <u>mileposts 14.3</u> and 21.4. The advantage of doing the rut-box method is that it would maintain the roadway width of 30-feet without steepening the fore slope of the roadway. In addition, minor curve improvements will be done between mileposts 16.1 and 16.5. Guardrail will be added along the curve to reduce drive-off the road incidents along the curve. The advantage of doing the minor curve improvements will enable drivers to safely navigate a sharp curve without fear of sliding off into the lake when heavy water is present. The culvert bridge at milepost 18.3 will be inspected but no new culvert bridge will be included in this project. The results of this project will be a smooth roadway surface on State Highway 00 that is free from wheel path ruts and a more linear curve.

# SECTION 2: Risk Register

The second section is for risk analysis. Risks import from the subject matter tabs such as Materials, Design Standards, Environmental, etc. This rollup of each subject area allows for a rating, risk response, mitigation and contingency plan for each risk. A risk owner is assigned for each deemed High or above.

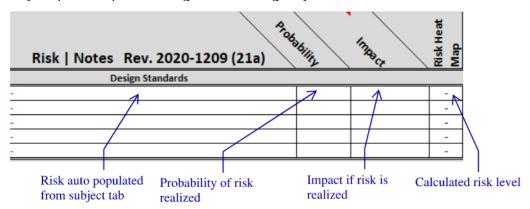


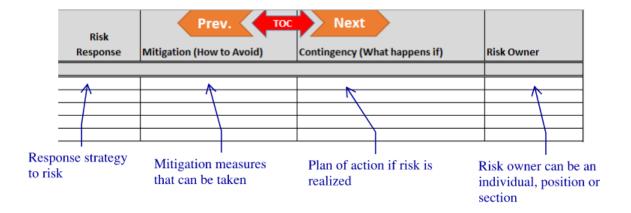
Not all risks are threats to a project. Sometimes a risk is an opportunity and strategies can be developed to capitalize on these.



Figure 1 - Screen Shot of the Risk Register

Risks entered in the subject tabs will auto populate in the risk register. For each risk determine probability, impact, response, mitigation, contingency and a risk owner. See below.





#### **Risk Response Definitions:**

#### • Threat

- Avoid, seek to eliminate risk
- Transfer, pass ownership and/or liability to a third party
- Mitigate, reducing the probability and/or severity of the risk below a threshold of acceptability
- Accept, recognizing residual risks and devising responses to control and monitor

## Opportunity

- Exploit, seek to ensure the opportunity happens
- o Share, allocate ownership of opportunity to third party best able to capitalize
- Enhance, seek to increase probability and/or impact

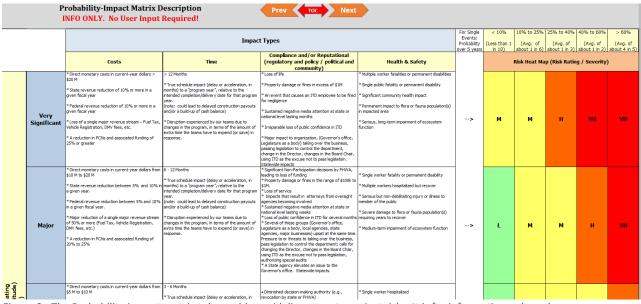


Figure 2 - The Probability impact matrix tab provides guidelines to rate project risks. It is for information only and serves as a guide when rating the probability and impacts of identified risks.

# SECTION 3: Estimate Summary, Basis of Estimate, Project Status

The third section is to identify the budget for your project. The estimate section includes the following three tabs.

- Estimate Summary This is known as the estimate top sheet. It calculates what should be programed for funding based on estimated cost and planning contingencies.
- Basis of Estimate This sheet provides a summary of facts and assumptions used when creating the cost estimates.
- Project Statues This checklist identifies cost affecting aspects and if they have been addressed.

For an in-depth look at estimating and using the estimate top sheet see training provided by the PMO.

#### **Estimate Summary**

This is where the Project Manager compiles the costs for each project component and captures them into one project estimate summary. Key information to input includes:

- Date of Estimate/update
- Intended Bid Date
- Design Stage
- Contingency
- Inflation
- Base Estimate

The first section in yellow is used to input the base estimate assumptions which should be unadjusted, unloaded and uninflated. In this section, contingency percentages should also be determined commensurate with the level of project maturity, complexity and uncertainty. Recommended contingency levels are provided for each design stage, however, the project

#### **Budget Phases**

#### Development

- Preliminary Engineering by staff = PE
- Preliminary Engineering by consultant=PC
- Utilities = UT
- Right of Wat Acquisition = RW
- Land Purchase LP

#### Construction Administration

- Construction Engineering = CE
- Consultant Construction = CC

#### Construction = CN

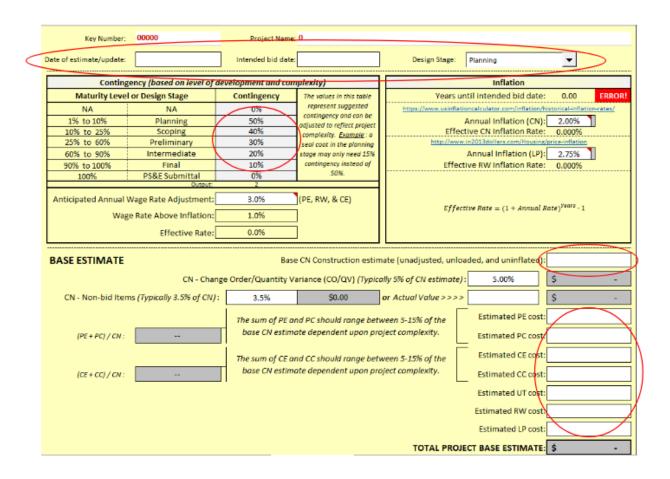
- CN: Construction: unadjusted, unloaded and uninflated
- CN: Construction Contingency: Set-aside amount for construction change orders and quantity overruns
- CN: Non-Bid Items: Set-aside amount for potential expenses such as contract incentives or escalation adjustments (fuel and asphalt).

manager may elect to change these values to better reflect the certainty or uncertainty of the current base estimate.

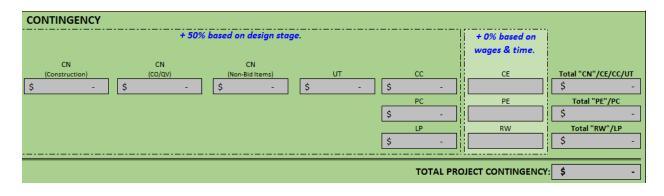


At a minimum the estimate summary needs to be updated during the yearly ITIP update and a PDF copy saved in PW.

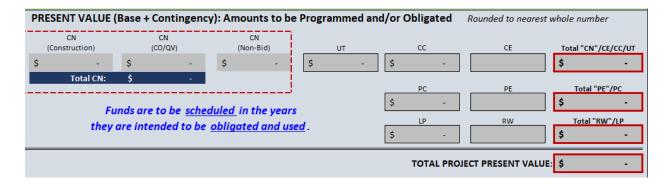
See screen shot below of key input areas.



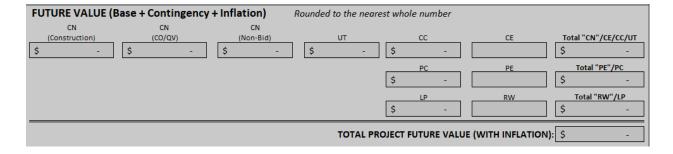
The second section in green is used to calculate contingency. As long as the design stage and the base estimate values are supplied in the first section, this section should calculate contingency automatically. As mentioned earlier, if the project manager believes the contingency to be inadequate for the project, the percentage value can be modified in the first section of the worksheet.



The third section in blue combines the base estimate from the first section and the contingency in the second section to formulate the estimated Present Value. These are the values that should be programmed and scheduled in the years they are intended to be obligated and expended. By doing so, this will aid in stabilizing the overall state program and will make the most efficient use of highway funds.

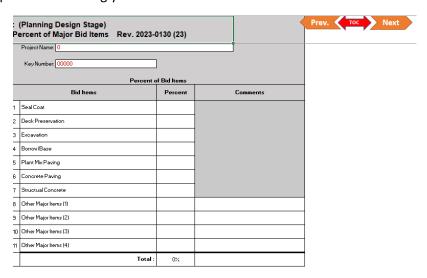


The fourth section is reserved for inflation and is based on three components located in the first section: (1) Date of Estimate/Update, (2) Intended Bid Date and (3) designated annual inflation for construction and land purchase. This section is labeled Future Value which combines the base estimate, contingency and inflation amounts and is for informational purposes only. Financial Planning and Administration (FP&A) sets the annual percentage and automatically applies inflation to the primary Present Value amounts in the program.



#### Major Bid Items as a Percent of Total Construction Costs

The intent of this tab is to identify the major bid items and their percent of construction cost. This will allow ITD to share this information with the Association of General Contractors so they know what is coming and can plan for accordingly.

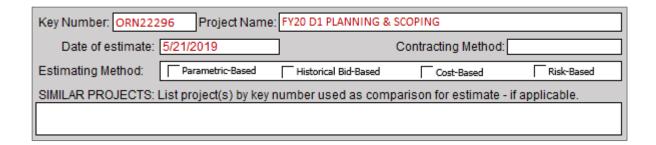


#### **Basis of Estimate**

This tab details the premise, or basis, from which critical aspects of the project cost estimate were developed including cost and labor estimates, material availability, any assumptions or deviations, any studies or analysis used as a reference, and any other details which impact the cost estimate. The basis of estimate will also serve as an excellent tool to effectively communicate estimate assumptions to team members, reviewers and management. The more thorough the basis of estimate is, the better historic values will be as well as improve future estimating assumptions. To support the estimate, the following information can be provided in the Basis of Estimate.

- Similar Projects
- Major Cost Components
- Allowances
- Assumptions
- Exclusions
- Exceptions
- Risks and Uncertainty
- Mobilization

See the basis of estimate tab for a description of each item



#### **Project Status**

The Project Status tab of the Charter can be used to help estimators define project maturity and identify the "known" aspects of the project. This will serve as another strong communication tool and should be considered part of the basis of estimate.

	Project Name: FY20 D1 PLANNING & SCOPING						
	Key Number: ORN22296			imate:	5/21/2019		
	Project Status at the time of this cost estimate						
	Questions		Responses Yes No N/A		Comments		
1	Has the environmental process begun?	Г	Г	Г			
2	Has a preferred alternative been selected?	Г	Г	Г			
3	Are environmental mitigation measures included?	Г	Г	Г			
4	Has an alignment been established?	Г		Г			
5	Has a grade been established?	Г		Г			
6	Have right-of-way requirements been researched and priced?	Г	Г	Г			
7	Has a typical section been established?	Г	Г	Г			
8	Have geotechnical site conditions and costs been researched?	Г	Г	Г			
9	Has a drainage report and concept plan been prepared?	Г	Г	Г			
10	Has a noise analysis been performed?	Г	L	Г			
11	Are sound walls included in the estimate?	Г	L	Г			
12	Have retaining wall types been defined?	Γ	Г	Г			
13	Has a safety analysis been performed?	Γ	L	Γ			
14	Has a traffic analysis (capacity modeling, LOS, etc.,) been performed?	Г		Г			

# SECTION 4: Design Standards

This section is used to identify any design standard considerations for the project. Information included in this area includes:

- The design standards as well as if design exceptions anticipated.
- Certain fields will auto populate from other tabs.
- Information on the current and future pavement such as the pavement width, proposed design alignment, design year, posted and design speed limits, current and future average daily traffic, posted structures and standards; traffic signals, and railroad crossing protection.

Field	: (Scoping Design Stage) Design Standards Input	Prev Toc Next  Notes (Revision 2019-0404)
Terrain Type:		<< Drop down box
Functional Class:		<< Drop down box
Roadway Widths:		[Existing] and Proposed (includes shoulder width)
Proposed Design Vehicle:		<< Drop down box
Design Year:	-	Calculated: FY + 20 + 2 (From Project Overview Sheet)
Traffic ADT:	-	Existing   Proposed (From Traffic Sheet)
Traffic DHV:		Existing   Proposed (From Traffic Sheet)
Posted Speed:		From Traffic Sheet
Design Speed:		From Traffic Sheet
Minimum Level of Service (Design Year):		From Traffic Sheet
Access Control:		Q. What input are we expecting here? Type I to V is obsolete (Access control policy 4005 - 5/9/2013)?
Proposed Maximum Superelevation:		Existing   Proposed
Max Grade :		Existing   Proposed
Max Curve Radius:		Existing   Proposed
Clear Zone:		Cz' Cut Slope:1   Cz' Fill Slope:1
Design Exceptions :		<< Drop down box
Design Standards Risk 1:		Risks (event or situation that may negatively impact the project IF IT OCCURS)
Design Standards Risk 2:		Risks (event or situation that may negatively impact the project IF IT OCCURS)



It is important to note that even if the project is not being funded by HSIP dollars, the following information is important when designing a project. Do not skip this section!

#### **Design Exception Anticipated**

Designers and engineers are faced with many complex tradeoffs when designing highways and streets. On occasion, designers encounter situations in which the appropriate solution may suggest that using a design value or dimension outside the normal range of practice is necessary. However, when this is not possible, that is when a design exception may be considered. A dropdown box offers the following choices: Yes and No.

#### Pavement Width

The term "roadway" refers to the area of the street right-of-way used for vehicular travel, including cars, trucks, bicycles, and transit. The roadway may also include a number of additional uses such as on-street parking, curbed structures such as medians and crossing islands, and utility access points. This includes the total pavement width including lanes and shoulders. This field requests the pavement width of the project.

#### **Proposed Design Vehicle**

This is the vehicle used in the design of the main alignment and the major intersections. Guidance for the proper vehicle to use for each project is given in the Design Manual Section 555.00.

# SECTION 5: Environmental Considerations

#### This section includes:

- The primary and secondary reasons for the project as it relates to the environmental documentation.
- Anticipated environmental deliverables such as cultural, Section 4F, noise, air quality and hazmat assessments.
- Project interactions with or alterations of wetlands, streams, navigable waters or floodplains.
- Identify species and habitat that may be impacted by the project and mitigation measures.

• Describing how storm water and runoff will be handled.

• Level of environmental documentation needed; Environmental Assessment, FONSI, Categorical

Exclusion or Environmental Impact Statement.

	(Service Perior State)	Prev TOC Next		
	: (Scoping Design Stage) Environmental Input	Notes (Revision 2019-0404)		
Primary Need:	-	CC Drop down box		
Secondary Need:		<< Drop down box+ *** Can choose ONE or MORE		
Purpose and Need (from		Fulled from [Project Overview] sheet (Formula)		
Project Overview):				
Scope of Work (from Project		Fulled from [Froject Overview] sheet (Formula)		
Overview):				
Is the project within a		CC Drop down box		
boundary of an Indian				
Reservation?				
If Yes, then Indian		CC Drop down box		
Reservation:				
Tribal Area of Interest?		CC Drop down box		
Describe Tribal Interest:				
Is the project located on a		CC Drop down box		
Federal land (Including				
easement)?				
If Yes, then Federal Agency				
and Field Office:				
Cultural or Historic Resources		CC Drop down box		
Present?				
Describe Cultural/Historic:				
Section 4(f) Resources		CC Drop down box		
Present?				
Describe Section 4(f):				
Potential for Hazardous		CC Diap dawn box		
Materials?				
Describe Hazardous				
Materials:				
Noise - Type 1 Project?		<< Drap down box		
Describe Noise - Type 1				
Project:		WB 1 1		
Noise - Sensitive Receptors		CC Drop down box		
in the ROI?				
Describe Noise - Sensitive				
Receptors in the ROI:		10 P 1 1		
Neighborhoods / Businesses		CC Drop down box		
Present?				
Describe Neighborhoods /				
Businesses Present:		<< Drop down box		
Potential for Controversy?		XX Diap down bax		
Describe Potential for				
Controversy:		<< Brop down box		
Water Resources Present?		(\ Diop doll'n box		
Describe Water Resources:		KK Drop down box		
Biological Resources		XX Diap dollin bax		
Present?				
Describe Biological				
Resources:		User Delined Data Area		
Corps permit required?		User Delined Data Area		
Anticipated Environmental		OSEI DEIINEU DAIA MIEG		
Decision:		<< Drop down box+ *** Can choose ONE or MORE		
Anticipated Deliverables:		List the Environmental Commitments		
Environmental				
Commitments:		Risks (event or situation that may negatively		
Environmental Risk 1:		impact the project IF IT DCCURS(		
Environmental Risk 2:		Flisks (event or situation that may negatively		
		ima and the assistant IF IT (1000) IDS)		



Most questions are yes or no with an open text box to describe any yes answers. Complete all questions and then determine anticipated deliverables and anticipated environmental decision type.

**Anticipated Deliverables** 

A drop down box allows you to select as many anticipated deliverables needed depending on the scope of the project. The following explains each one.

<u>Cultural</u> Cultural environmental deliverables are anything that can have an effect on people or historic sites. It is necessary to determine to area of potential effect (APE).

Section 4F- Section 4F is a federal term that protects the following basic types of properties: publicly owned park and recreation areas that are open to the general public, publicly owned wildlife and waterfowl refuges, and public or privately owned historic sites. It is important to note that a property's Section 4F status is determined not by its name, but by the criteria that define it. Properties designated as 4(F) must be avoided unless no reasonable alternative is available. The criteria used to evaluate if a Section 4F applies to a property can be found: https://www.environment.fhwa.dot.gov/section4f/properties.aspx

Noise, Air Quality and Hazmat-Noise, Air Quality and Hazmat areas considered here. Sometimes projects will be developed close to residences or businesses that can be affected by increased noise. Other areas within the state may have air quality issues (like Pinehurst and the Treasure Valley). In those areas, air quality modeling may be needed to justify the project.

Miscellaneous- Here is a list of other miscellaneous environmental deliverables.

- LWCF (Land and Water Conservation Fund) Recreation Areas 6f Lands Report
- Visual Impact Report
- Prime Farmland Report
- Environmental Justice Report
- FAA Airspace Intrusion
- NA

<u>Wetland/Lake/Stream Alteration-</u>If your project plans to interact with or alter a wetland or stream, you will probably need to do a field survey, report or get a permit.

<u>Corps Permit-</u>Navigable waters are any body of water such as a river, canal or lake that is deep enough for a vessel to pass. If work is planned that will impact the navigability, then a corp permit will most likely be needed.

<u>Threatened and Endangered Species and Habitat-</u>A habitat is an ecological or environmental area that is inhabited by a particular species of animal, plant, or other type of organism. It is very important to make sure that this is noted in the Project Charter. In these cases, you will need to work closely with the Environmental Section to determine the special species or habitat and if a special plan will be required. The project may require a Biological assessment.

Floodway Floodplain-A floodway is a channel of a river or stream and the parts of the floodplain adjoining the channel that are reasonably required to efficiently carry and discharge the flood water or flood flow of a river or stream. The floodplain is the area adjoining a river or stream that has been or may be covered by the 100-year flood. The following may be needed:

- Field Survey
- Floodplain Encroachment Report

- Floodplain Encroachment Permit Application
- Floodway Encroachment Report
- Sole Source Aquifer Packet

<u>Stormwater-</u> The surface water that originates during precipitation events and snow/ice melts is called stormwater. When considering this section, determine if there will be any stormwater run-off that needs to be addressed and whether a storm water pollution plan (SWPP) or a pollution prevention plan (PPP) is needed.

#### Anticipated Environmental Decision

Select the most likely environmental decision needed for this project. This determination should be in consultation with the district environmental planner.

- Cat EX/ITD Categorical Exclusion, ITD Approved
- Cat EX/FHWA Categorical Exclusion, FHWA Approved
- FHWA EA FONSI Finding of No Significant Impact (FONSI)
- FHWA EIS/ROD Environmental Impact Statement (EIS) and a Record of Decision (ROD)

<u>Environmental Narrative</u>-This is an open box for you to put any environmental information you feel would be helpful to identify for example, there may be an area of special habitat for ground squirrels nearby and it would be helpful to remember that when construction occurs.

## SECTION 6: Traffic

The sixth section identifies crash rate, posted speed, design speed, average daily traffic, present and future, as well as level of service, and safety recommendations.

	: (Scoping Design Stage)	Prev TOC Next
Field	: (Scoping Design Stage) Traffic Input	Notes (Revision 2019-0404)
Crash rate within project		
limits:		
HALs (High Accident		
Locations):		
Posted Speed:		
Design Speed:		
Traffic ADT Present:		
Traffic ADT Future:		
Traffic DHV Present:		
Traffic DHV Future:		
Minimum Level of Service		Transferred to [Design Standards]
(Design Year):		
Traffic Signals:		Also needed is narrative box for description
ETS (Enterprise Technology		<< Drop down box Also needed is narrative box for
Services) Required?		description
HSCA Value:		Q. IN PSS THIS IS ON: Project Objective Scope and
		Strategic Goals PAGE?
Proposed Safety		Recommendations based on HSCA Analysis
Recommendations (from		
HSCA Analysis):		
HSIP Narrative:		The Narrative MUST answer ALL these questions: (1) How the project is safety data-driven? (2) How does the project align with and help implemen the strategies found in the Strategic Highway Safety Plan? (3) How does the project eliminate death and serious injury?  FHWA will NOT approve any HSIP project without
		appropriate safety justification. Project Managers mus answer each of the three questions found above. It is recommended that when formulating your answers, yo list the question with the response.
Traffic Risk 1:		Risks (event or situation that may negatively impact the project IF IT OCCURS)
Traffic Risk 2:		Risks (event or situation that may negatively impact the project IF IT OCCURS)
Traffic Risk 3:		Risks (event or situation that may negatively impact the project IF IT OCCURS)
Traffic Risk 4:		Risks (event or situation that may negatively impact the project IF IT OCCURS)
Traffic Risk 5:		Risks (event or situation that may negatively impact the project IF IT OCCURS)

<u>Crash Rate with Project Limits-</u> A safety analysis of a crash rates within the project limits allows ITD to objectively determine whether a crash pattern within the project limits is significantly higher than the same crash pattern at other locations with similar geometric, traffic, and environmental factors. The crash rate comes from the Office of Highway Safety at: <a href="http://itd.idaho.gov/ohs/stats.htm">http://itd.idaho.gov/ohs/stats.htm</a>.

<u>Crash Base Rate-</u> A safety analysis of a specific location requires the knowledge of "base crash rates", also known in the as "expected values", for identifying crash patterns at the study location. The base crash rates will allow ITD to objectively determine whether a crash pattern at a study location is significantly higher than the same crash pattern at other locations with similar geometric, traffic, and environmental factors. The crash base rate comes from the Office of Highway Safety.

<u>Identify HALs</u> (High Accident Locations)- High Accident Locations that are found within the project area should be described here. There is a blank box here for you to identify those locations.

Posted Speed-The posted speed should be the actual/current posted speed for the project as mph.

<u>Design Speed-</u> The design speed is the maximum safe speed that can be maintained over a specified section of a highway when conditions are so favorable that the design features of the highway govern. The selection of a suitable design speed will depend on the terrain and functional class of the highway.

The minimum design speeds are found in the AASHTO Green Book and in the State Standards. Freeways 2004 Green Book Page 503 NHS (Principal Arterial) 2004 Green Book Page 444 (Rural) & 470 (Urban) Non-NHS State Design Standards ITD uses the general rule of 75 mph for Interstate, 60 mph for ramps and state highways, or at least equal to the posted speed. If more than one speed zone exists on a project, list them with limits. They may be placed on a separate sheet if necessary. 3R Projects should have the Posted Speed listed and both the Average Running Speed and the 85th Percentile Speed listed instead of the Design speed. This should be obtained from the District Traffic Section. (See the Design Manual, Appendix A). Place the design speed of the road in this location.

<u>Traffic ADT Present-</u> Traffic volumes are the traffic engineer's measure or indicator of traffic volume is the average daily traffic (ADT). The ADT is the volume that results from dividing a traffic count obtained during a given time period by the number of days in that time period. Place the current average daily traffic (ADT) for the route in this location. The most current traffic flow maps can be found: <a href="https://iplan.maps.arcgis.com/apps/webappviewer/index.html?id=e8b58a3466e74f249cca6aad30e83b">https://iplan.maps.arcgis.com/apps/webappviewer/index.html?id=e8b58a3466e74f249cca6aad30e83b</a> a2.

Traffic ADT Future- Place the calculated future ADT for the route in this location.

<u>Traffic DHV Present-</u> The design hour volume (DHV) is a two-way traffic volume that is determined by multiplying the ADT by a percentage called the K-factor. Values for K typically range from 8 to 12% for urban facilities and 12 to 18% for rural facilities. Neither the AADT nor the ADT indicate the variations in traffic volumes that occur on an hourly basis during the day, specifically high traffic volumes that occur during the peak hour of travel. The traffic engineer needs to balance the desire to provide an adequate level of service (LOS) for the peak hour traffic volume with proposing a design in which the highway capacity would only be utilized for a few hours of the year. This is where the design hour volume (DHV) comes in.

<u>Traffic DHV Future-</u> It is often necessary to determine the future design hour volume the infrastructure. Place the future DHV for the route in this location.

<u>Traffic Signals-</u> Are there traffic signals at this location? A dropdown box offers the following choices: Yes and No.

#### **HSCA**

The Highway Safety Corridor Analysis (HSCA) is a data-driven program for safety analysis on roadways and bridges throughout the state. The HSCA has been used to identify statewide priorities for safety needs and investments. Each District has a safety corridor map that shows the highest priority locations and an HSCA score for safety investment. The score developed by the Office of Highway Safety should be placed in this box. If you have any additional questions concerning the Strategic Highway Safety Plan

or how the HSCA score has been developed, please contact the Office of Highway Safety or the Transportation Systems Section.



The HSCA scores were updated and available in December 2015. You can find this information by going to the Office of Highway Safety SharePoint site and clicking on the "Documents" tab on the left. Go to the "HSCA Project" folder to access the information. Also in this folder are the county maps and tables. These might be helpful as well.

#### **HSCA Narrative**

If your project will be using Highway Safety Improvement Program (HSIP) funding, FHWA <u>requires</u> <u>complete justification</u> to be included as part of the Project Charter. FHWA expects that each Project Charter will state exactly how the project is safety data-driven; that the proposed project is based on the SHSP; and how it addresses safety issues.

Within the HSCA narrative box, it is encouraged that each project answers (at minimum) the following three questions:

- 1. How is the project safety-driven?
  - Base answers upon the Strategic Highway Safety Plan.
  - Site statistics and results such as the basis of crash experience, crash potential, crash rate, or other data-supported means.
- 2. <u>How does the project align with and help implement the strategies found in the Strategic Highway Safety Plan?</u>
  - Pinpoint safety problems either through a site analysis or systematic approach;
  - Identify counter measures to address those problems;
  - Prioritize projects for implementation; and
  - Evaluate projects to determine their effectiveness
- 3. How does the project eliminate death and serious injury?
  - Address identified safety issues within a highway safety corridor or a spot location such as an intersection or High Accident Location (HAL) or does it incorporate a system-wide approach such as rumble strips.
  - Each district has a corridor map outlining safety corridors (also known as the HSCA Project). Make sure to review these maps for pertinent system-wide safety corridor analysis.



FHWA will <u>NOT</u> approve any HSIP project without appropriate safety justification. Project Managers must answer each of the three questions found above. It is recommended that when formulating your answers, you list the question with the response. There is an HSIP Guidebook available from the Transportation Systems Section if you would like more details.

More safety information will be asked in the "Evaluation Design Standards" section such as crash base rate, crash rate with project limits, spot locations that exceed base rate, and high accident locations. This information is necessary for consideration for all projects, not just those using HSIP funding.

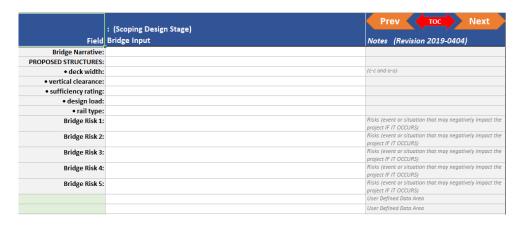
# SECTION 7: Materials

The seventh section addresses the Materials considerations for a project. It includes existing pavement type, proposed treatment, and required materials reports.



# SECTION 8: Bridge

The eighth section addresses Bridge parameters. It will include a narrative, proposed structures, deck width, vertical clearance, sufficiency rating, design load, rail type and bridge risks.



There is a button in the TOC tab to increase or decrease the number of bridge tabs based on specific projects.



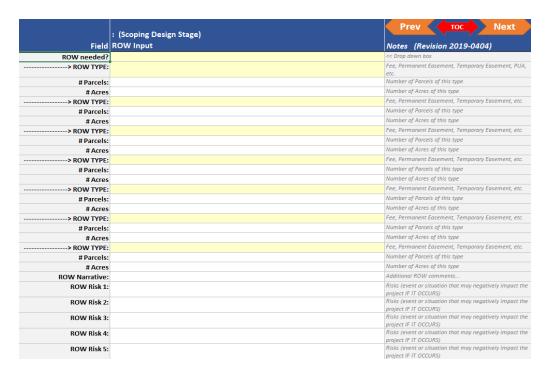
# SECTION 9: Utilities – Rail Road

The ninth section addresses utilities and railroad. It will be used to document the various utilities within the project limits.



# SECTION 10: Right of Way

The tenth section contains the Right of Way outline. It will be used with the Right of way section to outline the various ROW activities needed for the project.



# SECTION 11: Operations

The eleventh section of the Charter lists the operations concerns or issues with the project. It will include a needs summary and identify the operations stakeholders.



# SECTION 12: ETS-ITS

The twelfth section of the Charter is for HQ ETS-ITS. The project should be shared with ETS to determine if they have any input or needed additions to state infrastructure.



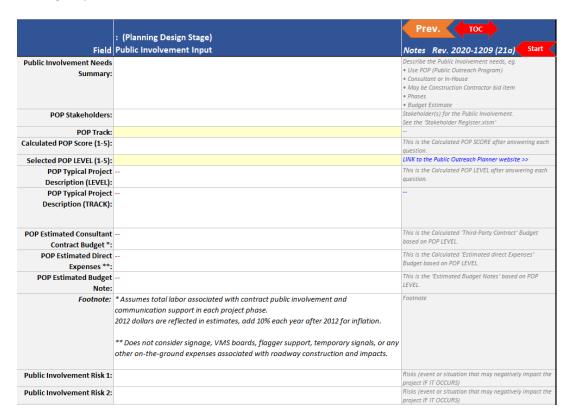
#### SECTION 13: Public Involvement

The thirteenth section deals with public involvement. Large projects often result in public interest and it is best practice to plan ahead for public involvement. The district public information officer can assist with developing this section when it is needed.

In this section you will identify the Public Outreach Planner (POP) track, POP level, POP score and consultant needs and budget.

Public Outreach Planner (POP) Track – A dropdown menu offers the following choices

- Corridor Plan
- Environmental & Design
- Construction
- Non-Construction Roadway Impacts
- Emergency/Disaster





ITD Office of Communication maintains a website that provides an in-depth guide to the concepts in this tab. You can find the guide here:

http://projects.langdongroupinc.com/testing/ITDCommPortal/ITDPOP 1.html

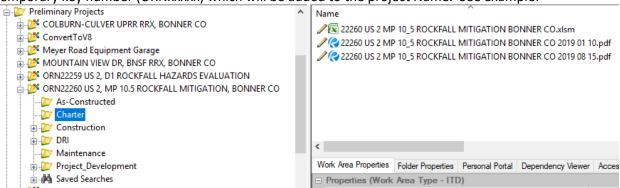
# Appendix A: Charter Document Saving

The final section of this Charter Guidebook details the lifecycle of project charter. It will describe how it is created, stored, saved to PDF for signatures, and maintained.

The charter template is in ProjectWise at this location:

#### **Charter Template Documents**

1. The template is "copied out" in ProjectWise (see Appendix A, Use of ProjectWise) to the Charter folder in the Project Folder for the Project. Initially it will be in the District Preliminary Projects folder under Location Name of the Project. Once it is programmed into OTIS, it will be given a temporary key number (ORNxxxxx) which will be added to the project Name. See example:



Once the charter is complete and ready for approvals, convert the document to a PDF format
using the built-in macro, saving it in the Charter Folder within the project with the date (ie.
2019 08 10) appended to the end of the project name to identify and archive all versions of the
document (see examples below).

√ 22260 US 2 MP 10\_5 ROCKFALL MITIGATION BONNER CO 2019 01 10.pdf
√ 22260 US 2 MP 10\_5 ROCKFALL MITIGATION BONNER CO 2019 08 15.pdf
√ 22260 US 2 MP 10\_5 ROCKFALL MITIGATION BONNER CO.xlsm

3. Copy the URN to the excel charter document to the Charter Link to ProjectWise field in PSS. (See use of ProjectWise in Appendix A) This will enable you to Link to Projectwise to the charter file for updates.

Charter link to ProjectWise pw:\\itdhq1app57.itd.state.id.us:PWITD\Documents\District 1\Preliminary Projects\ORN22260 US 2, MP 10.5 ROCKFALL MITIGATION, BONNER CO\Charter\22260 US 2 MP 10\_5 ROCKFALL MITIGATION BONNER CO.xlsm

# ProjectWise Link

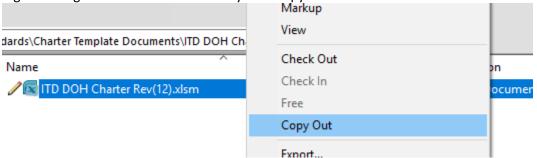
#### Link to ProjectWise

- 4. Use Bluebeam (preferred method, but can use Adobe) to create signature fields in the document and route for signatures (3). Everyone signing using the same software to eliminate issues between Bluebeam and Adobe.
- 5. Place the signed file in the charter folder.
- 6. Keep previous signed PDF's for history of the project to have a record of changes in the charter.

# Appendix B: Use of ProjectWise

#### 1.) Using the Copy Out feature in ProjectWise

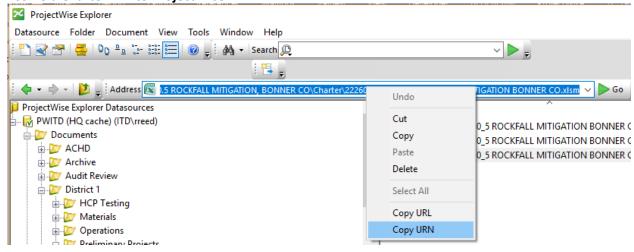
Right clicking on a document will allow you to copy it out to another location.



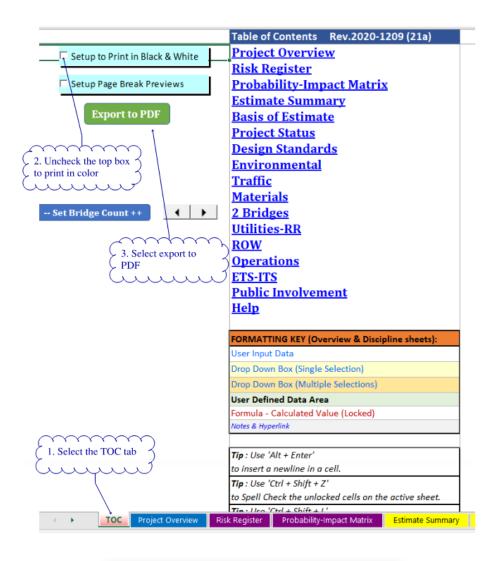
In this way, you can "Copy Out" the latest charter in the Standards folder, Charter Template Documents to the project charter folder.

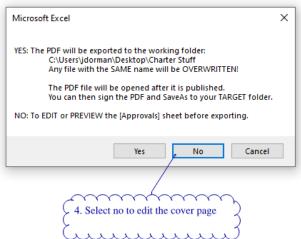
2.) Using the "Copy URN" feature in ProjectWise.

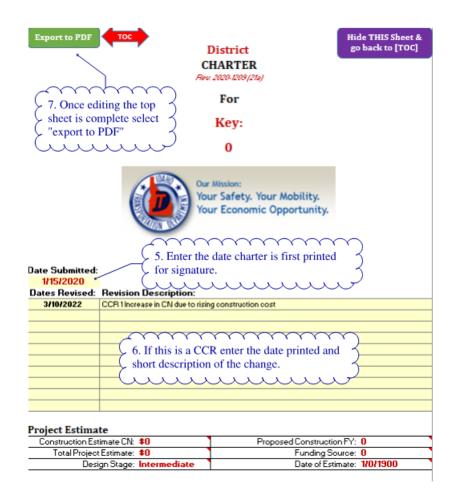
By right clicking on the address field in ProjectWise, choose "Copy URN" and paste in the PSS field **Charter link to ProjectWise.** 



# Appendix C: How To Print and Sign the Charter







Approval Sig	<u>şnatures</u>		
Project Manager	Date		
Owner	Date	Sponsor	Date
6/13/2022	8. Save PDF into PW and email link digital signature.	~~~~	Page 1 of 24