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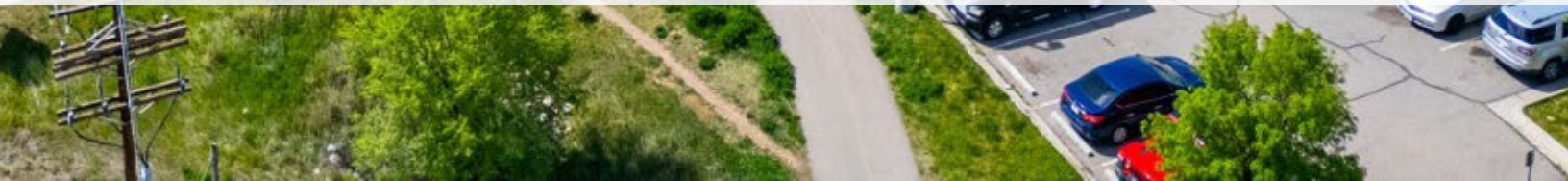
Roaring Fork Transportation Authority

Transit Capital Projects Local Agency Manual

Executive Summary | July 2024



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Preface

As the backbone of a transit system, capital facilities provide space for vehicle maintenance, agency offices, bus/vehicle storage, parking, intermodal connectivity, and much more. While the intention of the TLAM is to provide guidance for larger-scale projects, such as maintenance facilities and park-n-rides, it is not limited to projects of that scale. Local agencies can apply most of this guidance, particularly regarding planning, funding, National Environmental Policy Act (NEPA), and land acquisition, to smaller capital facility projects, such as bus shelters.

The Transit Local Agency Manual (TLAM) is intended for Colorado's rural transit agencies (local agencies) that are within one of the 10 Colorado Department of Transportation (CDOT) rural Transportation Planning Regions (TPRs), participate in the statewide and regional planning process, and/or receive funding through the CDOT Division of Transit and Rail (DTR) for capital projects. The TLAM is primarily intended for rural local transit agencies that are not a part of a Metropolitan Planning Organization (MPO) or an urban TPR, although agencies located in urban areas (MPOs) may find value in the information related to federal requirements for capital projects and ongoing project tasks and requirements, including project management and controls, record keeping, and third-party contracting.

The primary intent of the TLAM is to support rural transit agencies applying for, awarded, and using Federal Transit Administration (FTA) funds for capital projects that are distributed and applied for through CDOT. In the TLAM, local agencies that are awarded federal funds are "subrecipients" once they have received federal funding through CDOT; the wording change from "local agencies" to "subrecipients" is noticeable especially after Chapter 1A Capital Projects Planning and Initiation. Chapter 1A addresses several funding mechanisms, including state sources, but the TLAM primarily focuses on federal funding requirements. Transit agencies applying for only state funding may not find all the necessary information in the TLAMl alone. For state funding inquiries, contact CDOT's DTR.

Purpose	Description
Who	The TLAM is intended for rural local transit agencies that provide transit services for communities with typically fewer than 50,000 people. The TLAM is best suited for rural local transit agency personnel but can be referenced by anyone.
What	The TLAM provides details on all stages of the transit capital facility lifecycle, including planning, environmental clearance, real estate and acquisition, design and engineering, construction, commissioning, and closeout. This Executive Summary will include flowcharts to help rural transit agencies know whom to contact, what steps to take next, and/or when to complete a given task. Additional materials, including checklists and resources, are available online.
When	The TLAM is current as of July 2024 and can be used at any point in the transit capital facility project process.
Where	The most current version of the TLAM is on the Colorado Department of Transportation Division of Transit and Rail website.
Why	The TLAM is the central repository of information for local transit agencies to navigate the process to complete a capital project. It presents the transit capital facility lifecycle process and ensures essential knowledge is stored to create resiliency against lost knowledge in transit local agencies and Colorado Department of Transportation divisions.

Notes on Timelines

The amount of time it takes to complete a capital facility project is unique to each project; therefore, it is impractical, if not impossible, to set a standard timeline for each step for all facilities. The complexity of a capital facility project likely dictates timelines for each step. For example, a major transit facility with offices, bus bays, and a park-n-ride takes significantly longer to complete than a project involving a bus stop. Also, several project elements can impact schedule regardless of project size, such as impacts to critical resources (documented through the NEPA process) and public reception of the project. Therefore, the TlAM does not provide any "hard and fast" timelines required to complete each step. Timelines established by DTR, FTA, and/or federal law are included, but general timelines are not included.

Instead, the TLAM highlights the importance of early and ongoing communication with all project staff, including transit agency staff, CDOT/DTR/FTA staff, and any hired consultants or contractors throughout the project. Open communication is essential to ensure that federal requirements are met, to maintain project schedules, to manage budgets, and to deliver projects. Open communication with CDOT/DTR/FTA provides insight into how long reviews, approvals, and feedback from these governmental entities will take.

Major Hurdles

The following represent potential hurdles to completing a transit capital project:

1. **Mountain Realities:** The Colorado Rocky Mountains, while beautiful (and a major draw for both residents and tourists), can present harsh realities for local transit agencies and their capital facility projects. For example, the mountainous climate often creates environments where local transit agencies need to a) invest in additional equipment to prevent operations from being delayed or ceasing during the winter and/or stormy months and b) anticipate that cold winter months will either significantly slow or cease construction activities. In addition, transporting materials through the mountains can create significant challenges. Transportation costs may increase significantly depending on where the local agency is located. Any major storms or events that either slow or shut down transportation systems may impact construction timelines.
2. **Local Government/Public Buy-In and Business Disruptions:** Local transit agencies must engage both the public and local governing bodies to build consensus around the project. Cities and towns that regularly elect new members to their city/town boards may face challenges; for example, a future board my vote down a project that a previous board supported. It is important to understand the local governing process and to ensure that the public supports the project. Furthermore, construction that disrupts local businesses can be a major hurdle. This may be particularly important in small or mountain towns, where a transit capital facility project could impact several businesses or residents or may affect area tourism. It is important to engage early and often with businesses and residents that may be impacted so that they understand the project, potential impacts, and benefits going forward.
3. **Title VI Equity Analysis:** Local transit agencies should complete the Title VI Equity Analysis as soon as feasible. Local transit agencies MUST complete a Title VI Equity Analysis before acquiring land or selecting a preferred site. The completion of the analysis is required for federal funding.
4. **Federal Grant Requirements, such as the Davis-Bacon Act, Buy America, etc.:** Past subrecipients have noted that complying with federal requirements for their awarded grants can be cumbersome and time-consuming, often requiring full-time support of additional local agency staff to ensure proper documentation. Subrecipients should prepare accordingly, whether by hiring additional consultants/staff or by adding additional existing staff to the project solely for federal requirement compliance and documentation. Chapter 1B Project Lifecycle Reporting and Requirements provides more information on federal requirements.
5. **NEPA:** In most cases, FTA clears transit capital facility projects through a Categorical Exclusion (CE). However, a review and analysis of key resources can greatly impact the CE clearance process if any significant findings are uncovered in the following resource areas:
   - Historic/cultural impacts
   - Section 4(f) impacts
   - Threatened & Endangered (T&E) species
   - Wetlands impacts
   - Hazardous materials

   Significant impacts in these areas may affect the schedule and cost of the CE clearance process and may elevate the NEPA evaluation to an environmental assessment (EA) or an environmental impact statement (EIS).
6. **Uniform Act Requirements:** Land acquisition can present a major hurdle for local transit agencies. For example, local transit agencies must environmentally clear (via NEPA) the project before any acquisition activities (detailed in Chapter 3 Acquisition and Real Estate) can occur. Delays in NEPA clearance can lead to delays in property acquisition. In addition, there can be a time lag between when an offer is made to a property owner and when the property is actually purchased (deed transferred). Some property owners may reconsider selling during this time or may have new information that may be presented to the transit agency that may change the fair market value or settlements described in the original offer. A well-thought-out Acquisition Management Plan and Relocation and Assistance Management Plan can help a local transit agency navigate potential acquisition challenges.
7. **Cost Escalation and Inflation:** The construction phase of a transit capital facility project often provides a reality check for local transit agencies. Construction materials and equipment prices and availability can fluctuate greatly over the course of a project and even over the course of the construction phase.
8. **Business Disruptions:** A local transit agency may find that they are disrupting local businesses during the construction phase of the transit capital facility project. Disruptions to businesses may prevent project buy-in from local governing bodies and/or residents.

Preface (Continued)

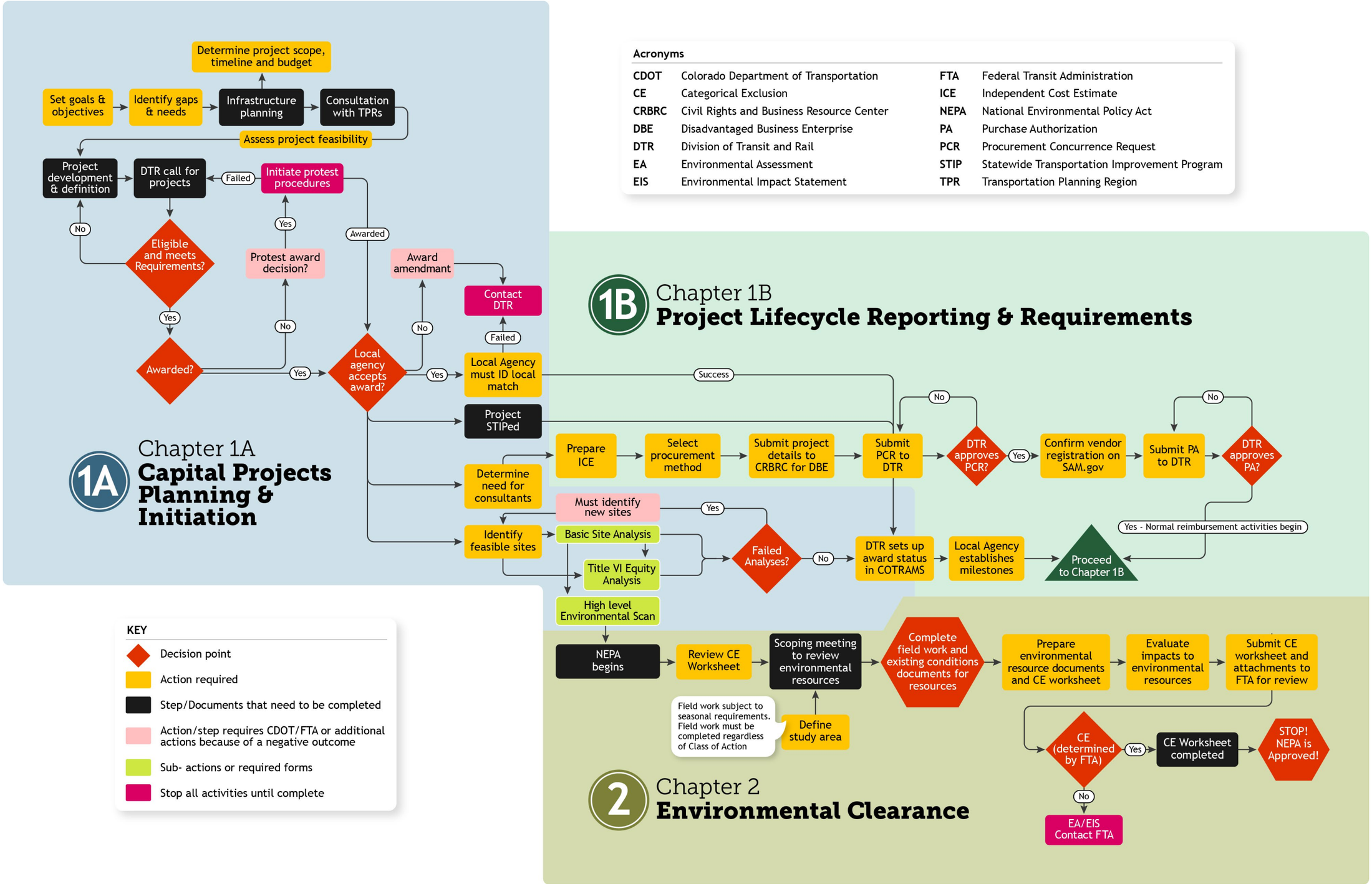
Best Practices

The following best practices are recommended to successfully deliver capital projects:

1. Involve CDOT, local partners, FTA, and TPR as early as possible, particularly as hurdles arise or the project approaches major milestones (such as NEPA clearance or 90% design).
2. Keep and maintain plans and documents for all phases of the transit capital facility project process:
   - Project Management Plan (required for larger transit capital facility projects; optional but recommended for smaller transit capital facility projects)
   - Schedule tracker
   - Budget tracker
   - Stakeholder and public engagement plan
   - Quality assurance/quality control (QA/QC) plans and related documents
   - Risk Management Plan
3. Keep multiple copies of records for audits—ideally, one paper and one electronic for three years after project completion.
4. Maintain open communications with all staff and personnel, whether from CDOT, FTA, transit agency, contractors, construction management, consultants, or others.
5. Hire qualified experts for design, NEPA, and real estate acquisitions, including licensed appraisers and review appraisers.
6. Use competitive selection processes to hire all consultants and contractors, even if federal funds are not used in the early project stages (planning, NEPA, acquisition, etc.). Using a competitive selection process for subject area experts allows the subrecipient to compare approaches by different firms to get the best work for the available funds. If there is the possibility that federal funds will be used for a transit capital facility project, competitive selection of consultants or contractors is a federal requirement and ensures compliance with procurement and contracting-related federal clauses.
7. Consult with the legal representatives throughout your project.
8. Use resources such as the National Rural Transportation Assistance Program's ProcurementPRO, a free web-based application to guide rural and Tribal grantees and state DOTs through FTA procurement procedures. Using basic project information entered by the user, the program provides the required FTA clauses and certifications that must be included in procurement documents. The application also provides other helpful resources such as a procurement document template, checklists, and guidance for preparing procurement documents. ProcurementPRO does what it may have taken agencies days or weeks to do. The program is intended to offer guidance through a procurement process when using federal funding, but it does not constitute full federal compliance. State and local procurement guidelines may supersede federal guidelines and should be reviewed for compliance. The clauses and certification downloaded from ProcurementPRO are for inclusion in procurement documents but may also be inserted into contractual agreements. However, additional clauses and certification may be required for contractual agreements. For more information, visit: https://www.nationalrtap.org/Technology-Tools/ProcurementPRO

Acronyms

CDOT	Colorado Department of Transportation	**FTA**	Federal Transit Administration
CE	Categorical Exclusion	**ICE**	Independent Cost Estimate
CRBRC	Civil Rights and Business Resource Center	**NEPA**	National Environmental Policy Act
DBE	Disadvantaged Business Enterprise	**PA**	Purchase Authorization
DTR	Division of Transit and Rail	**PCR**	Procurement Concurrence Request
EA	Environmental Assessment	**STIP**	Statewide Transportation Improvement Program
EIS	Environmental Impact Statement	**TPR**	Transportation Planning Region



Chapter 1A: Capital Projects Planning and Initiation

CDOT, FTA, and Rural Transit Agency Goals, Objectives, and Initial Planning

CDOT sets goals, objectives, and a vision in the long-range Statewide Transportation Plan, Statewide Transit Plan, 10-Year Vision Plan, and Regional Transit/Transportation Plans. The Statewide Transit Plan, which is a part of the Statewide Transportation Plan, establishes a framework for creating an integrated statewide transit system and supporting transit investments. CDOT's 10-Year Vision Plan identifies projects to be funded in the next 10 years (and beyond, in some cases).

CDOT's Regional Transit/Transportation Plans are individualized resources for each rural TPR (10 total). The Regional Transit/Transportation Plans are updated every four to five years and serve as the Coordinated Public Transit and Human Services Transportation Plan for each respective TPR.

CDOT's 10-Year Vision Plan sets the parameters for the Strategic Project Pipeline, which includes roadway, bridge, multimodal, and transit projects identified throughout the planning process. The 10-Year Vision Plan is based on data analysis, public engagement, and stakeholder input in each planning region across the state.

Project Definition

Depending on the local transit agency or project complexity, a project definition can be a few sentences or several detailed paragraphs. Regardless of the length and level of detail, the project definition should cover the following:

- Why is the facility needed? What problems or deficiencies will it solve?
- What is the anticipated action? Is a capital facility being constructed? Is a building being refurbished to now serve as a transit facility?
- What essential function(s) does the facility need to serve?
- What will constructing a transit facility accomplish?
- What outcomes are expected after the facility is constructed, commissioned, and operational? The local transit agency must consider facility lifespan and plan for the facility to serve its intended purpose for several decades.

Local Resources

- **It is critical that local transit agencies participate in their regional transportation and transit planning processes to identify projects and funding priorities for each region. The planning process occurs every four to five years.**

Funding Sources

Federal Formula Funds	
5310 Enhanced Mobility of Seniors and Individuals with Disabilities	Provides funds to enhance mobility for seniors and individuals with disabilities by removing transportation barriers and expanding mobility options. The program supports capital projects and services in large urbanized, small urbanized, and rural areas. Eligible projects include traditional and nontraditional investments.
5311 Formula Grants for Nonurbanized/ Rural Areas	Provides funds for capital projects in rural and small urban areas for vehicle replacements, facility renovations or construction, preventive maintenance, and mobility management. Up to 15% can be used for program administration, and at least 15% must support intercity bus service unless the governor certifies that intercity bus needs are met after consulting with providers (Section 5311(f)).
5339(a) Bus and Bus Facilities	Provides funding to states and transit agencies through a statutory formula to replace, rehabilitate, and purchase buses and related equipment and to construct related facilities.
5339(b) Grants for Buses and Bus Facilities Programs	Provides funding for capital projects to replace, rehabilitate, and purchase buses, vans, and related equipment and to construct bus-related facilities, including technological changes or innovations to transition to low or no emission vehicles or facilities.
5339(c) Bus and Bus Facilities	Provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses, as well as the acquisition, construction, and leasing of required supporting facilities. Local transit agencies that intend to use 5339(c) funds must have an DTA compliant fleet transition plan requirements.

Application Submission and Project Award

Project application submission and award are two important steps in a transit capital facility project. Local transit agencies often need to apply for funding to complete a capital facility project from planning through construction and commissioning. All transit capital facility projects must start here with this discretionary funding process administered through CDOT.

The following steps provide a roadmap for how DTR solicits projects from local transit agencies, the required materials, the funding that a local transit agency can apply for, how projects are awarded, etc. The application process is specific to DTR; local agencies can learn more about the application process and timelines from DTR, regional Grant Managers, or their TPRs.

DTR Capital Project Funding Application Process:

1. **DTR call for projects**
2. **Determine project funding eligibility**
3. **Identify ability to meet minimum threshold requirements**
4. **Submit application in COTRAMS**
5. **Notification of project award selection**
6. **Initiate project via COTRAMS**
7. **Provide local match**
8. **Follow grant management process**
9. **Add project into Statewide Transportation Improvement Program (STIP)**

Basic Site Assessment and Project Feasibility

The subrecipient (local transit agency) should conduct a basic site and project feasibility assessment once they know that their project is funded, is in the STIP, and is ready to advance. A site assessment reveals any critical right-of-way or parcel issues that may impact NEPA. In addition, this high-level assessment aids the environmental and design stages, which rely on the subrecipient having a basic understanding of where they want to construct/ refurbish a transit capital facility and what may be on or under that parcel.

The subrecipient should also assess project feasibility before advancing into the environmental and design stages. While project feasibility is also a phase during design (having its own steps, criteria, and requirements), it is crucial that the subrecipient understand whether a facility is feasible at a particular time or site. Both a basic site assessment and feasibility assessment can save the subrecipient, their staff, and their consultants, designers, and environmental specialists time and budget.

Title VI Equity Analysis

To comply with regulations, a local transit agency must complete a Title VI Equity Analysis during the planning stage in regard to where a project is located or sited to ensure that the location is selected without regard to race, color, or national origin. FTA grantees must comply with Title VI as a condition of receiving financial assistance. Regardless of how federal funds are received, all grantees must meet Title VI requirements.

The Title VI Equity Analysis must compare the equity impacts of various siting alternatives and occur before the selection of the preferred site. If a local transit agency does not complete a proper equity analysis that complies with Title VI prior to site selection, a project may be ineligible for federal funding.

Chapter 1B: Project Lifecycle Reporting and Requirements

Project Control Overview and the Project Management Plan

Subrecipients should remain in the "captain's seat" of any capital facility project to manage and maintain control of scope, schedule, and budget. Doing so allows subrecipients to track schedule and budget, hold to the pre-determined scope, and deliver the project in a timely and cost effective manner. Effective project control ensures that any hired consultants or contractors also abide by project scope, schedule, and budget.

Elements of Project Control	
Scope	▸ Defines the project ▸ Identifies deliverables and controls deliverable changes ▸ Tracks impacts of any scope changes
Schedule	▸ Defines critical path, defined as dates of activities and milestones ▸ Identifies activities that determine project duration ▸ Tracks and controls schedule changes
Budget	▸ Defines budget and work breakdown structure ▸ Tracks actual costs ▸ Estimates costs at completion ▸ Controls changes to costs and variances of forecast costs

Grants Management through Award Lifecycle

Throughout the award lifecycle, subrecipients must comply with state and federal requirements. DTR works alongside subrecipients to ensure that they are adhering to project implementation, statutory and policy regulations, internal controls/accounting standards, and completing FTA reporting.

Compliance Milestones and Action Items	
Compliance Milestones	Subrecipient Action Item
Local Match Requirements	Ensure local match requirements are met per Chapter 1A, Capital Project Planning and Initiation.
Project Implementation	▸ Participate in Subrecipient Information Request (SIR). ▸ Participate in the Site Review process. Oversight frequency and level are based on Risk Assessment scores in COTRAMS. ▸ Comply with reporting requirements. Refer to Sections 1B.F, 1B.G.1, and 1B.G.2. ▸ Conduct third-party procurements according to FTA and state regulations. Refer to Section1B.E. ▸ Report to National Transit Database. Refer to Section 1B.F.4.
Statutory and Policy Requirements	▸ Participate in a single audit if more than $750,000 in federal assistance will be expended within 1 year. Refer to Section 1B.B.5.
Internal Controls/ Accounting Standards	Ensure reporting requirements outlined in 2 CFR 200, Subparts A-F can be met, including: ▸ Written financial policies and procedures ▸ Defined organizational structure with assigned authority
Internal Controls/ Accounting Standards	▸ Three-year financial plan projecting revenues and expenses ▸ Annual budget to actual reconciliation reports
FTA Reporting	▸ Develop quarterly reports for FTA submittal as required by the specific discretionary grant funding the project. ▸ Develop annual reports for FTA submittal for open projects. ▸ Develop annual Milestones Progress Reports for submittal to the FTA regarding project status.

Procurement Methods and Thresholds

Procurement thresholds with accompanying procurement methods apply depending on the amount of federal funds being used. Each procurement method includes conditions and requirements for qualification. FTA Circular 4220.1F provides more information on micro-purchases and small purchases, DTR's Quick Procurement Guide provides information on procurements above small purchases, and American Public Transportation Association Recommended Practice – The Process of Transit Procurement provides more general information.

Subrecipients complete a four-step procurement process in COTRAMS, where the following forms are collected:

- Procurement Concurrence Request (PCR): Approved by DTR in COTRAMS.
- Purchase Authorization (PA): Approved by DTR in COTRAMS.
- Security Agreement (SA): Completed by the subrecipient, but no formal approval by DTR is required.
- Notice of Acceptance (NA): Completed by the subrecipient, but no formal approval by DTR is required. Applicable to rolling stock and equipment purchases ONLY.

Federal Procurement Thresholds

- **Micro-Purchase: $0 to $3,000**
- **Small Purchase: $3,001 to $250,000**
- **Above Small Purchase: >$250,000**
- **Subrecipients must provide full and open competition when soliciting bids or RFPs. The Common Grant Rules prohibit solicitation requirements that contain features that unduly restrict competition. 49 USC Section 5325(h) also prohibits FTA subrecipients from using FTA assistance to support an exclusionary or a discriminatory specification.**

Performance Reporting

FTA requires a number of progress reports throughout the project lifecycle. While most of these reports are sent to FTA via DTR, the subrecipient must supply the necessary information to DTR/CDOT staff to deliver a complete and accurate report of project finances and milestones.

Milestones Progress Report

DTR submits a Milestones Progress Report annually or quarterly for construction projects to FTA on the status of the projects under each federal award they hold. Milestone Progress Reports provide an update on the status of projects and are submitted 30 days after the end of each federal fiscal year, which is no later than October 31.

DTR determines current status of projects, adjusts milestone dates when needed, and updates the narrative in the federal Program of Projects to describe the status and any changes to milestone dates.

Most capital projects will require the following milestones. The subrecipient should coordinate with DTR to determine all appropriate milestones.

- PCR (Request for Proposal [RFP]/Invitation for Bid/ Request for Quotation issued)
- Procurement Authorization (Purchase order issued after vendor selection)
- First/last invoice
- Project closeout: Contract complete in TrAMS

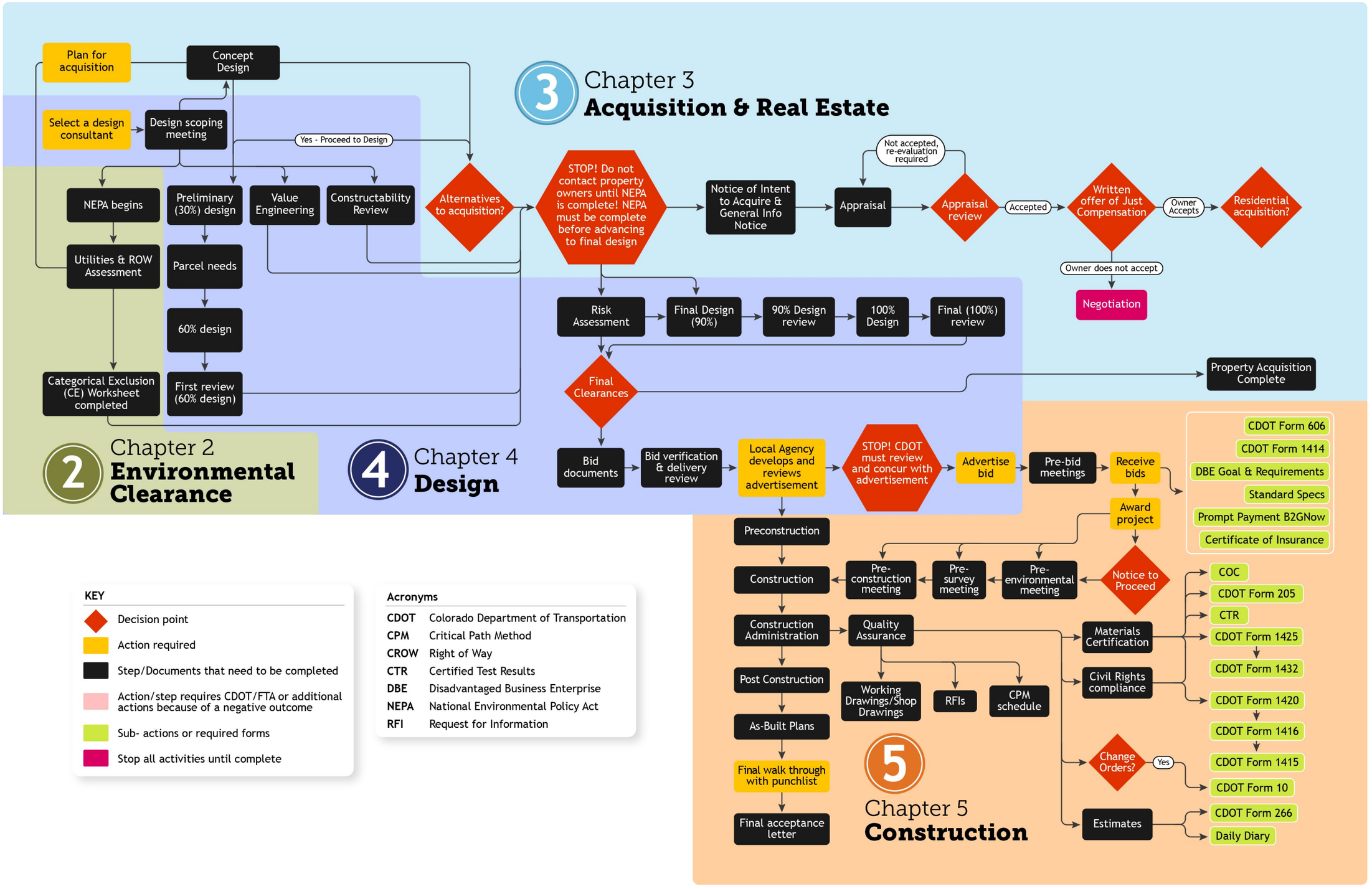
FTA Annual Certifications and Assurances

To ensure compliance with federal requirements, the subrecipient must comply with FTA's Federal Certifications and Assurances for FTA Assistance Programs. A subrecipient applying for assistance under any FTA program must submit Certifications and Assurances applicable to the subrecipient's award during the current federal fiscal year. The documentation for certifications and assurances should be maintained on file in COTRAMS, as Grant Managers can request these documents during the SIR and site review process.

National Transit Database

FTA's National Transit Database (NTD) records the financial, operating, and asset condition of transit systems to track the industry and provide public information and statistics. Subrecipients receiving funding from Section 5311 must annually report to the NTD in uniform categories. Reported items include:

- Sources of revenue (revenue vehicle hours)
- Total annual operating costs by source of revenue
- Total annual capital costs
- Fleet size, fleet type, and related facilities
- Revenue vehicle miles
- Ridership



KEY

- Decision point
- Action required
- Step/Documents that need to be completed
- Action/step requires CDOT/FTA or additional actions because of a negative outcome
- Sub- actions or required forms
- Stop all activities until complete

Acronyms

CDOT	Colorado Department of Transportation
CPM	Critical Path Method
CROW	Right of Way
CTR	Certified Test Results
DBE	Disadvantaged Business Enterprise
NEPA	National Environmental Policy Act
RFI	Request for Information

Chapter 2: Environmental Clearance

National Environmental Policy Act (NEPA)

Signed into law on January 1, 1970, NEPA provides a systematic and an interdisciplinary approach to guide decision-making when actions may affect the quality of the human environment. The purpose of NEPA is to:

- Encourage productive and enjoyable harmony between humans and their environment
- Promote efforts that prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humans
- Enrich the understanding of the ecological systems and natural resources important to the nation
- Establish a Council on Environmental Quality (CEQ)

NEPA is implemented through supporting federal regulations developed by the CEQ and other federal agencies. CEQ regulations establish requirements that must be followed for any project that is "financed, assisted, conducted, or approved by a Federal agency" (40 Code of Federal Regulation [CFR] 1500–1508). Before initiating a project, it is important to determine whether an action is involved and if and how NEPA is applicable to that project. NEPA covers a broad range of actions and includes making decisions on permit applications, adopting federal land management actions, and constructing highways and other publicly owned facilities.

The FTA is the primary federal agency for transit projects in Colorado. The FTA works as a partner with CDOT and subrecipients to implement NEPA for projects that receive funding from FTA.

When Does NEPA Apply to Your Project?

- **Under federal law, NEPA applies to any proposed action or transportation project that has a federal nexus, including, but not limited to, instances where:**
  - **Federal funds or assistance will be used at some phase of project development**
  - **Federal funding or assistance eligibility must be maintained**
  - **Federal permits or approvals are required, such as the following:**
    - **Section 404 (Clean Water Act)**
    - **Section 106 (National Historic Preservation Act)**
    - **Section 4(f) (U.S. Department of Transportation [USDOT] Act of 1966)**
    - **Section 7 (Endangered Species Act)**

NEPA Classes of Action

Under NEPA, there are three levels of environmental review and documentation called classes of action. Based on the significance of the impacts of the proposed project, the classes of action determine how compliance with NEPA is carried out and documented. Since most FTA projects are CEs,the TLAM focuses on the FTA process and procedures for CEs. NOTE: For all FTA-funded projects, only the lead agency grants NEPA approval which, in most cases, will be the FTA.

Categorical Exclusion (Class II)

CEs include a category of actions that typically do not result in any significant environmental impacts (individual or cumulative). Because of this, they are excluded from the requirement to prepare an EA or an EIS when there are no unusual circumstances. CEs are not exempt from NEPA, and completing a CE is still considered a NEPA action; however, the process requires less documentation and impacts assessment. If other environmental laws, regulations, executive orders, and/or permitting requirements apply, the subrecipient must apply for and obtain the necessary permits and approvals prior to an FTA determination, regardless of whether the project may qualify as a CE. Compliance with these requirements does not necessarily elevate the project to an EA or an EIS.

FTA Coordination

- **FTA Region 8 staff created worksheets and templates to assist in determining whether a CE is the appropriate class of action for a project and can provide these to subrecipients.**

STOP!

- **Project activities, including property acquisition, demolition, site preparation, final design, and construction, may not begin until the environmental clearance process is complete.**

Issuance of Categorical Exclusion Determination

When FTA Region 8 issues a CE determination for a project, it represents FTA's final agency NEPA action (that is, NEPA is considered to be complete). A finding/determination is a formal recognition by the FTA that the environmental documents are sufficient to analyze the proposed project and its potential environmental impacts.

STOP!

- **If concurrence by another agency is required for NEPA approval, such as Section 106 or Section 4(f), then that concurrence must be completed prior to issuance of the CE.**

Environmental Resources

Environmental resources are evaluated concurrently during the environmental review process. The subrecipient is encouraged to contract with an experienced environmental consultant to complete the environmental evaluation of the project. An experienced professional should assess the following resource areas. In addition, some resource areas, such as cultural, historic, and hazardous materials, are required to be assessed by a professional certified to complete the assessment.

Biological Resources

NEPA requires the assessment and consideration of any FTA-funded project's effects on the quality of the human environment, including protected wildlife and plant species and/or their habitats (that is, impacts to biological resources), regardless of the class of action (EA, EIS, or CE). These environmental reviews are typically conducted during the NEPA process.

Water Resources

NEPA requires the analysis and consideration of the effects of a proposed project on water resources, including coastal zones, floodplains, wild and scenic rivers, navigable waterways, wetlands, and other waters of the U.S. The subrecipient's consultant, in coordination with the subrecipient, should identify any impacts to water resources that apply to the FTA-funded project, regardless of the NEPA class of action.

Section 4(f) Evaluations

Section 4(f) applies to any federally funded project regardless of the NEPA class of action or the timing of the discovery of the Section 4(f) property. Section 4(f) analysis is required for DOT projects undergoing NEPA analysis and documentation if any properties protected by Section 4(f) would be "used." However, a Section 4(f) analysis may also be required for construction activities post-NEPA if there are late discoveries or late designations of properties protected by Section 4(f).

Section 106 Process

Section 106 of the National Historic Preservation Act is required when FTA Region 8 determines a project has the potential to cause effects to historic properties; when a project involves the use of federal financial assistance; and/or when a federal permit, license, or approval is needed.

The term "historic properties" includes districts, sites, buildings, structures, or objects that are included in, or eligible for inclusion in, the National Register of Historic Places. This includes prehistoric archaeological sites and associated artifacts, records, and remains, as well as properties of traditional religious and cultural importance to Indian tribes and Native Hawaiian organizations.

Contaminated Properties Including Brownfields

Hazardous materials include solid waste, hazardous waste, substances contaminated with hazardous materials, radioactive materials, petroleum products, and pollutants. Due to their characteristics, these materials can pose significant risks to health, safety, and the environment if released.

Assessing hazardous materials in site-specific projects is crucial to identifying potential contamination during construction, managing materials, ensuring worker safety, and assessing liability for acquisitions. Early identification of these concerns is essential for effective planning and project completion. Properties considered for acquisition in FTA-funded projects must be thoroughly assessed, especially if they are or may be contaminated, or considered brownfields, before final environmental document approval.

Noise and Vibration Analysis

NEPA mandates noise and vibration assessments for all federally funded projects. The subrecipient's consultant should use the FTA's Transit Noise and Vibration Impact Assessment Manual to determine the required level of analysis. Understanding the project's actions and proximity to noise-sensitive areas is crucial. If the project could cause noise impacts, the subrecipient must then identify any nearby noise-sensitive receptors. If none are within the screening distance, no assessment is needed. If receptors are present, the subrecipient should conduct a general noise assessment per FTA guidelines. If a general noise assessment identifies impacts that can be mitigated to no impact, a detailed analysis might not be necessary. Mitigation measures must be included in the project.

Chapter 3: Acquisition and Real Estate

Every capital facility project must consider its real estate needs. Regardless of whether a capital facility is renovated from an existing structure or is built new, knowing where that facility will be built, who owns the land, and what's on (and beneath) the land are vital. Chapter 3 outlines how and when to identify needed properties and what activities must, can, and cannot be done before the NEPA process is complete. The chapter also discusses the processes for appraising property and relocating and assisting tenants/landowners and what happens if a normal appraisal process fails. In addition, Chapter 3 identifies circumstances that should be considered within the appraisal process. A critical part of land acquisition is how property purchase will be funded. Subrecipients can acquire properties via discretionary funding from FTA only if federal requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), have been met. Local transit agencies may also use certain state funds for acquisition. A local transit agency may also use local dollars, such as local (county/town/city) taxes, property taxes, certain fees, etc. to finance acquisition efforts as a part of the larger capital facility project.

Pre-Acquisition Planning

The subrecipient must understand any land acquisition-related issues as early as possible in the transit capital facility project process. The subrecipient must determine the initial costs of property acquisition, such as appraisal valuation, relocation assistance, or additional property considerations.

Pre-Acquisition Planning Key Elements

- **Identifying Right-of-Way Needs:** Through NEPA, initial design, and the Title VI Equity Analysis, the subrecipient identifies properties that they may need to acquire for a capital facility project. The subrecipient considers all land needs for the entire project lifecycle, including construction, operation, and maintenance.
- **Using Government-Owned Property:** In some cases, the subrecipient can use property already owned by a governmental body, such as a county, city, or town. Doing so may eliminate the need to purchase additional property.
- **Funding an Acquisition - Additional Considerations:** The subrecipient must ensure that acquisition and related expenses are considered "eligible" activities per the grant or funding requirements. The subrecipient may continue to use federal funds for other activities while waiting for NEPA to be completed.
- **Developing a Real Estate Acquisition Management Plan:** FTA requires the subrecipient to develop a Real Estate Acquisition Management Plan for each major capital project within an FTA award as a part of the Project Management Plan.
- **Relocation Planning:** During the early stages of development, the subrecipient must plan for any potential displacement and relocation of individuals, families, businesses, farms, and nonprofit organizations and develop solutions to minimize the adverse impacts of displacement.

NEPA and Design

- **Confirm that concept design is complete, as this design is needed to check that any chosen site is feasible.**

STOP! The subrecipient MUST complete NEPA before starting the process as outlined below. Engaging in any of the following activities before NEPA automatically disqualifies the subrecipient from receiving federal funds, as these actions could constitute a violation of the Uniform Act:

- **Initiating an appraisal**
- **Engaging the property owner**
- **Offering compensation**
- **Acquiring the property**
- **Engaging in negotiation**
- **Assisting with relocation of occupants**

Acquisition Basics and Appraisals

- **Notice of Intent to Acquire and General Information Notice:** Once properties that need to be acquired for a capital facility project are identified, the subrecipient sends out a Notice of Intent to Acquire, and a General Information Notice. For more information, refer to Chapter 3 Section 3.C.
- **Appraisal:** After initial contact through interviews, planning efforts, and required notice, the subrecipient obtains appraisals for all identified parcels for acquisition. A hired appraiser uses all available information to determine a fair market value for the property. The subrecipient must offer to acquire the property's improvements, as well. For more information, refer to Chapter 3 Section 3.C.
- **Appraisal Review:** A qualified review appraiser examines all appraisals to ensure that they meet the definition of appraisal according to federal regulations. The review appraiser corrects or revises as needed. The review appraiser then either accepts or rejects the appraisal.
- **Initial Offer of Just Compensation:** Before the initiation of negotiations, the subrecipient shall establish an amount they believe is just compensation for the real property in a written offer letter. The offer of just compensation must include an offer letter and a summary statement.

Negotiation and Acquisition

Negotiation is the process of delivering an offer of just compensation and preparing for potential negotiations with the property owner. The subrecipient must demonstrate reasonable effort to negotiate acquisition of the property. The FTA is required to provide oversight of Uniform Act compliance.

- **Entering Negotiations:** The subrecipient and specialized negotiation consultants enter into negotiations with property owner(s) to negotiate on price, terms, closing date, and possession date at this time. The subrecipient must give the property owner a reasonable opportunity to consider the subrecipient's revised offer and to present relevant material to the subrecipient. The property owner either accepts terms and appraisal and goes into settlement or rejects terms and appraisal and no agreement can be met. Before requiring the owner to surrender possession of the real property, the subrecipient shall pay the agreed purchase price to the owner.
- **Acquisition - Subrecipient Takes Ownership of the Property:** The subrecipient and property owner sign an agreement for possession and use. A negotiator or title company then closes the acquisition. The acquisition can be fully closed only when all proper documents have been executed. The property is then considered the possession of the subrecipient.

Relocation and Assistance

Relocation is the process of moving the owner or renter of a dwelling unit, business, nonprofit organization, or farm from their property to a different location. In addition, the subrecipient is required to provide relocation-related assistance. Assistance includes consulting services and transportation to view and inspect replacement properties. The subrecipient must also provide dwelling recipients at least a 90-day notice to relocate. A 90-day notice is not effective for a residential occupant unless a comparable replacement dwelling has been made. Depending on the nature of who is being moved, standards related to moving and reestablishment may apply. The subrecipient is NOT required to find replacement sites for businesses. Chapter 3 Section 3.E lists key considerations for moving a dwelling resident or a mobile home resident, as well as the moving expenses a subrecipient may have to cover.

Failed Negotiations

Occasionally, the subrecipient and property owner cannot agree on items such as property value or replacement properties. At this point, an administrative settlement, which includes legal settlements, or attempts at resolution (via Alternative Dispute Resolution) can be made. CDOT permits only "voluntary acquisitions," and, therefore, does not permit condemnation (eminent domain) actions to acquire properties from unwilling property owners. Chapter 3 Section 3.F. provides additional information.

Chapter 4: Design and Engineering

Chapter 4 provides the subrecipient with key concepts regarding management of the design phase. During the design phase, the subrecipient oversees the translation of the project requirements into detailed drawings and specifications to be used for construction contract documents. This chapter addresses the key points regarding oversight of project development and engineering, management of the project schedule, constructibility reviews, value engineering, peer reviews, and QA/QC for the design phase. The design phase uses the project requirements to develop design criteria and move into project development and engineering to create construction documents (CDs) for a contractor to bid on. The design phase involves interaction with the real property acquisition and third-party coordination processes. During the design and engineering phases, the subrecipient, likely in coordination with a consultant, prepares the drawings, specifications, and bid documents required for awarding facility construction, equipment fabrication, and installation contracts.

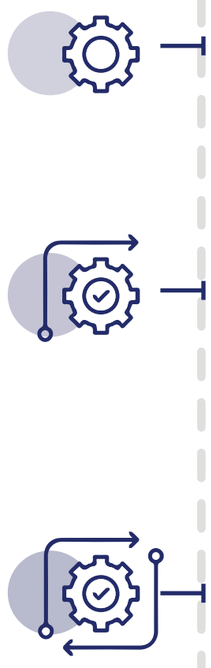
Scoping Process

Scoping involves the review of a project before concept and preliminary design. Initial scoping typically involves an on-site review of the project site. The scoping process ensures that the development of a statement of work (SOW) will be consistent with planning and design characteristics. The scoping process establishes the project objectives and goals, a SOW and project standards, requirements, criteria, and other considerations. At this time, scope, schedule, and budget for the design phase will be solidified. Chapter 4 Section 4.B includes more information on scope, schedule and budget, as well as design requirements.

- **Project Considerations and Criteria:** The design team develops the design criteria for the project based on the SOW. The design process establishes a range of acceptable criteria or project standards. Categories to consider include site work, facility type, building, structures, utilities, mechanical equipment needs, and lighting.

Project Development.

FTA defines design and engineering phases as project development and engineering. Project development represents the development of enough design to support the approval of the environmental document. Overall, the project development phase begins with scoping and ends roughly at 30% design. The project development phase includes concept design, alternatives selection, preliminary design, and submission of any project development.



- Project development is kicked off with the establishment of a conceptual design. The subrecipient considers elements such as fleet size, space requirements, entrances and exits, and the location of facilities, for project development.
- During the project development phase, the design team finalizes the concept design for the facility and any associated equipment, design criteria, property/right-of-way requirements, and third-party coordination work that will be used for final design.
- Several reviews occur during the project development and engineering phases, including the First Review (60% design and constructibility); Second Review (90% design and cost estimate completion), the Third Review (all Second Review comments have been addressed), and Bid Document Verification and Delivery Review (all Third Review comments have been addressed). For more information on these reviews, refer to Chapter 4 Section 4.C.

Design Reviews

Design reviews provide a formalized, structured approach to assure interdisciplinary coordination and compliance with design criteria and environmental, site, and operational constraints. Reviews at these key design points represent important control points in the design management process. These reviews ensure that the project goals are identified in the Project Requirement Definition and SOW, design criteria are being met, project costs are consistent with the budget, and the project is on schedule. Chapter 4 Section 4.D provides a list of what must be accomplished during a design review.

Worth Noting - Project Development Submittal: This 30% plan level submittal coincides with the identification of the environmental resource impacts, mitigation plan, and determination of the anticipated level of clearance document, for example, CE, EA, EIS.

Constructibility Reviews

As soon as the design has been developed with a sufficient level of detail to evaluate how the project will be constructed, the design team must perform constructibility reviews. Constructibility reviews ensure that a facility is constructible; considers materials, labor, and standards; and verifies accurate depictions of site conditions, considering access, utilities, and general configuration. Constructibility reviews are preferred early in the design process, often during project development, and no later than early engineering, to ensure what is depicted on the final drawings, technical specifications, and construction bid documents can be built.

Third-Party Coordination

Third-party coordination should be initiated as early as possible during the project development phase. During the project development and engineering phases, the design consultant may find it necessary to relocate or rearrange existing facilities or structures either before or during the construction phase. The subrecipient should always initiate coordination with third parties regardless of the size of the transit capital facility project.

Quality Assurance/Quality Control

Quality Assurance/Quality Control (QA/QC) is the process of assuring that all project documents are accurate, are understandable, and meet the standards set by project requirements, design criteria to final design, and subrecipient input. QA usually occurs at specific intervals, such as during 30%, 90%, and 100% design reviews. The timing and frequency of these reviews may change depending on the nature of the project, such as the size of the capital facility or complexity of project requirements/ design criteria.

Final Engineering Phase

STOP! Federal law requires that final engineering cannot begin before NEPA completion as denoted by an FTA Record of Decision, Finding of No Significant Impact, or Categorical Exclusion determination. DO NOT PROCEED if NEPA has not been completed.

The engineering phase of design moves a capital facility project from the project development phase (as described in Section 4.C) into the construction bid package containing the final drawings and specifications. The final drawings and specifications will also detail the property or right-of-way needed to accommodate the project, include the appropriate permits and associated conditions from other agencies, and identify any coordination of work with or by third parties (such as utility companies) discussed in Section 4.J.

Chapter 5: Construction

Chapter 5 addresses the procedures to advance a capital facility project from the design phase to and through the construction phase. During the construction phase, the subrecipient must ensure that a project is properly awarded to a construction contractor and that the successful contractor constructs the improvements in accordance with the contract documents. The design phase ends when CDs have been completed. After CDs have been completed, the subrecipient must acquire a qualified contractor to construct the project. The bid phase of a project begins with the advertisement for construction, bidding, and award and ends with the eventual completion of the contract. Upon the execution of a contract and receipt of the Notice to Proceed, the construction contractor may begin work on the project.

During the pre-construction phase, the CM assists the subrecipient with the pre-construction meetings, surveys, environmental coordination, utility coordination meetings, and all other relevant pre-activity meetings to ensure success using a proactive approach to construction.

During the construction phase, the construction management team will execute payroll and daily reporting as federally required. The construction management team also assists CDOT with all meetings including pre-activity, safety critical, structural concrete, bi-weekly progress meetings, as well as concrete pre-pours, review, and pending conformity.

Roles and Responsibilities of the Construction Manager

The subrecipient needs project staff with expertise and experience in construction management to successfully manage a project through the construction phase. If the subrecipient lacks staff experienced in construction management, the subrecipient will need to retain a construction manager. Regardless of whether the CM role is filled by a consultant or the subrecipient's own personnel, the CM:

- Acts as the subrecipient's representative with the contractors
- Provides construction oversight of the work performed by the contractors
- Observes the work to verify that the work conforms to contract document requirements
- Recommends the payment of progress payments
- Partners with the contractors with the shared goal of a successfully completed project

The CM is a key team member who should be present on the project on a full-time basis. The CM should have an exclusive field office for larger projects. On smaller projects, the CM may perform the work on a part-time intermittent basis with site visits conducted at appropriate times to observe key construction events.

Pre-Construction

Upon completion of the design and preparation of the bid documents, the subrecipient begins the pre-construction phase of the project.

- **Advertisement:** The subrecipient uses a competitive process to select a construction contractor. CDOT concurrence to advertise a project must be received before the subrecipient advertises a project for bid. The subrecipient must include specific CDOT forms in the package of bidding documents provided to all bidders. Chapter 5 Section 5.B describes those forms. Bidders are expected to include and submit the forms when they submit their bids. While the project is under advertisement, the subrecipient must provide all bidders with an equal opportunity to view the proposed construction site and conduct sit reviews equally to all bidders.
- **Pre-Bid Meetings and Bidding:** Bidders will likely need to visit the project site before submitting their bids. A pre-bid conference should be held so that the CM may show the project to the prospective bidders and hold a question-and-answer session so that all bidders obtain the same information. Bidding is the process of consultants or contractors submitting a response to a solicitation, including a proposal under a negotiated acquisition according to Federal Acquisition Regulation 28.001. The subrecipient must publicly open all sealed bids submitted by the deadline. Immediately after bid opening, the subrecipient must provide to the apparent low bidder the CDOT forms listed in Chapter 5 Section 5.B (Table 5-2).
- **Award:** The subrecipient must obtain CDOT's concurrence before awarding the project to the selected contractor. The subrecipient must send a letter to the awarded contractor that includes project documentation and civil rights requirements. The subrecipient then prepares an "Award Set" of the plans and specifications that are properly signed and sealed. The successful bidder then signs and returns the contract, along with the necessary documentation. The contract is not considered effective until it has been fully executed by all parties to the contract.

Construction

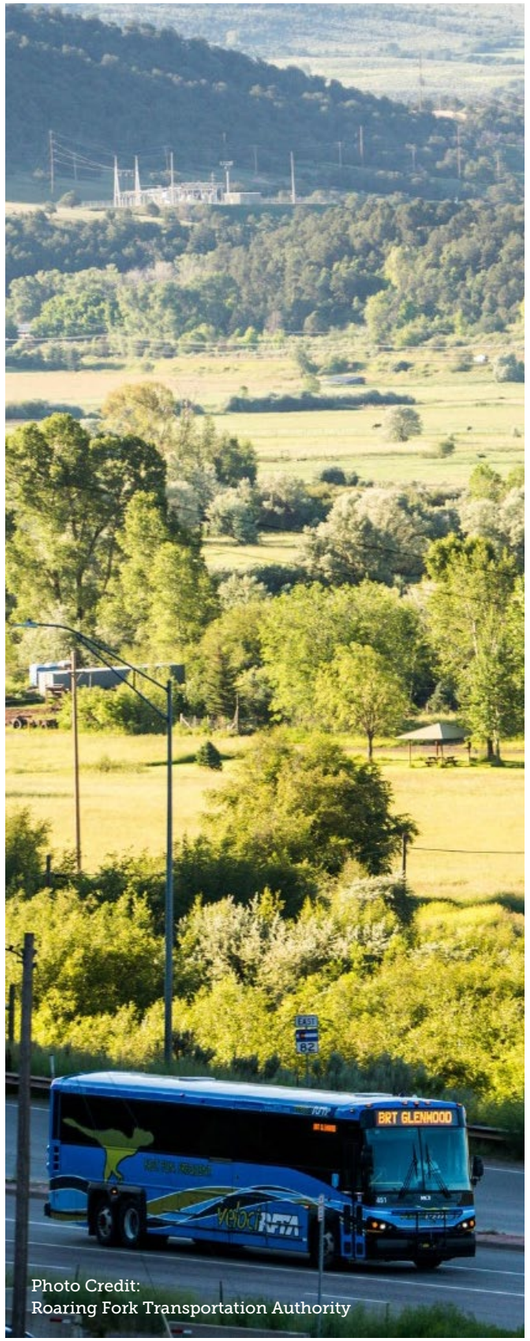
- **Pre-Construction Documentation:** The contractor must complete a safety management plan and CDOT Transit Form 205. Once these are complete, the contractor tracks them in CDOT's B2GNow system. Subcontractors may not begin work on a project until a CDOT Transit Form 205 has been approved in the B2GNow system. From there, the CDOT Project Manager provides the subrecipient with a Project Documentation Checklist that includes a list of all required CDOT forms and contractor submittals. The CM uses the Project Documentation Checklist to ensure that all required documentation is provided to CDOT at the appropriate time.

Construction Administration

- **Project Control and Local Agency Observation:** The subrecipient administers the construction contract to control cost, quality, and schedule. The CM performs construction observation of the work and ensures that the work conforms to the approved plans. The contractor is not permitted to perform extra work without written authorization from the subrecipient. Any work performed without written authorization is considered at the contractor's risk of the subrecipient not compensating them for the extra work.
- **Source Document for Payments:** The CM prepares a source document for all payments made to the contractor. This document thoroughly shows the work that was completed with its location and the measurements to support the quantity to be paid. The CM includes sketches and copies of the plan sheets with markups to illustrate where the work being paid for was completed. The CM should attach photos to the pay documentation to further support the justification for the payment.
- **Shop and Working Drawing Submittals:** The CM reviews all submittals of materials and equipment permanently included in the work. Shop drawings are required to be submitted for review and approval, while working drawings are submitted for the CM's information only without a formal review returned to the contractor. For more information on shop and working drawings, refer to Chapter 5 Section 5.D.

Disadvantaged Business Enterprise

The DBE program is a federally mandated program that seeks to ensure non discrimination in the award of USDOT assisted contracts. Where appropriate as determined by CDOT, a goal for DBE participation may be set on a contract. The DBE contract goal signifies reasonable participation by DBEs on the contract based on the availability of subcontracting opportunities and the DBEs ready to perform those needed services. When a contract goal for DBE participation has been set, the DBE contract goal should be listed in the solicitation and included with the subrecipient's PCR submission via COTRAMS.



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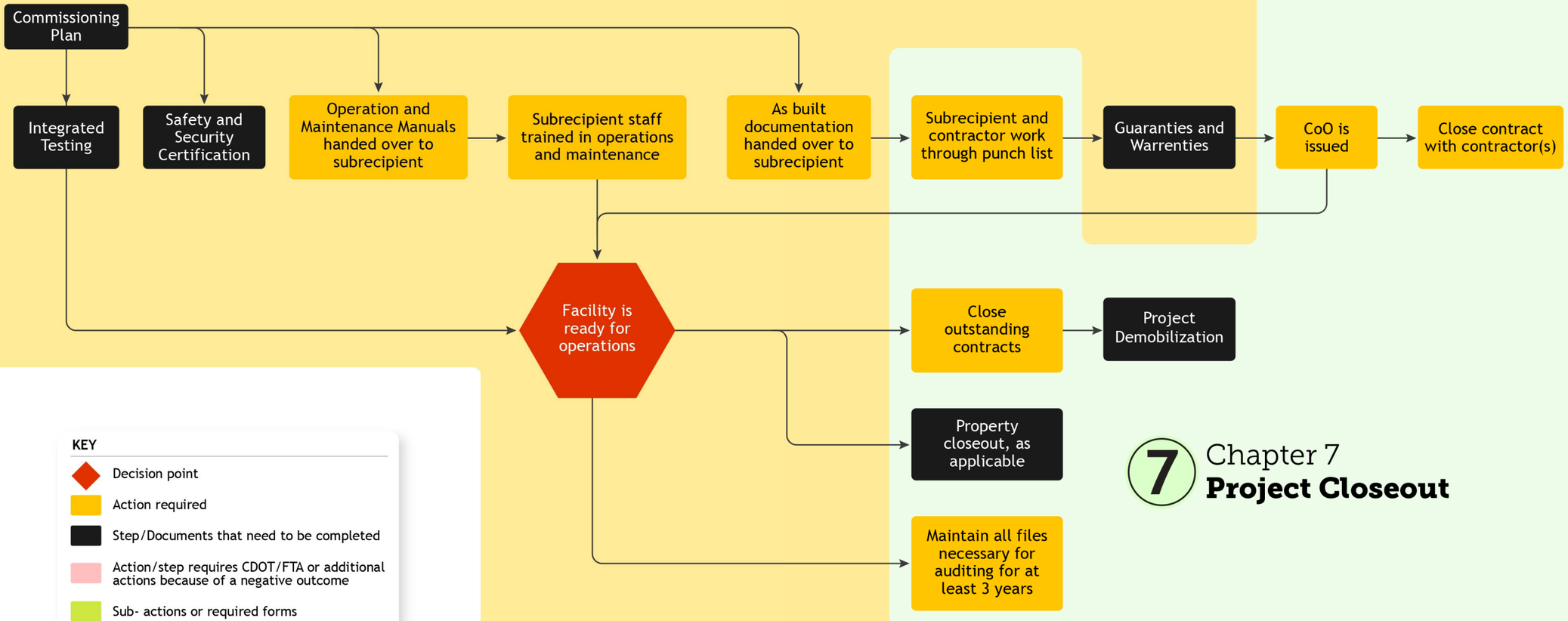
Roaring Fork Transportation Authority

6 Chapter 6 Commissioning



Acronyms

CoO Certificate of Occupancy

7 Chapter 7 Project Closeout

Chapter 6: Commissioning

Commissioning is the process of testing the completed project to ensure that all parts of the project work as expected. Commissioning is an essential step in validating building equipment and systems in coordination with operations personnel and third parties. The CM administers the commissioning process in accordance with the specifications required for the project. The designer of record, who is a part of the engineering design team, specifies the process required to commission each element.

Contract documents specify whether the commissioning may begin before substantial completion of the work or if it will take place once all construction is complete. Various project components may be completed and commissioned before other parts of the project as approved by the CM.

Commissioning Plan

A Commissioning Plan is a supporting document to the Project Management Plan. The Commissioning Plan is developed early in the design phase and further refined with additional details as information becomes available with the completion of design. The Commissioning Plan must be finalized well before construction is complete. In addition, the Commissioning Plan provides guidance and details the key elements of the commissioning process, including roles and responsibilities, critical equipment list, owner furnished equipment (OFE) integrated testing, safety and security and emergency preparedness, Operations & Maintenance (O&M) manuals, training, as-built drawings, and warranty administration.

The Commissioning Plan is prepared with significant input from all internal and external stakeholders, although the Commissioning Manager is ultimately responsible for preparing the plan. The Commissioning Manager receives direction and oversight from the CM and completes the Commissioning Plan in close coordination with the design and construction teams. Prepared as early as the design stage and used as a living document, the plan assures that all requirements are accurately incorporated in the design and construction bid documents and executed during construction and commissioning.

Key Elements of Commissioning

Owner Furnished Equipment

- Transit capital projects may require OFE due to lengthy equipment procurement cycles, specialty needs, or unknown engineering-phase equipment requirements.
- The subrecipient must integrate OFE into project schedules and budgets. The CM ensures timely procurement, delivery, and facility readiness for OFE operation by the contractor.
- OFE includes equipment not provided by the contractor but needing installation by them, or equipment required for project acceptance but not furnished or installed by the contractor.

Integrated Testing & Start-Up

- Objectives of integrated testing are to:
- Verify all proof of design and construction tests performed by the contractor. The CM must observe all proof of design and construction tests.
- Ensure compliance with system performance requirements as a whole.
- Coordinate and comply with third-party requirements such as fire, police, etc.
- Document integrated testing results for safety and security certification.
- An Integrated Test Plan (ITP) describing the test program is essential to fulfilling the previously identified objectives. The ITP supports the activities to verify compatibility of all new and old system elements.

Safety & Security Certification

- Safety is used to describe hazards (due to unintentional acts), while security is used to address vulnerabilities (due to intentional acts).
- The CM, in collaboration with safety and security personnel, usually self-certifies transit capital facility projects through a Safety and Security Certification Plan. This plan outlines the procedures to ensure all safety and security requirements are fulfilled, documented, and lead to operational readiness and final certification. It's an essential tool for the subrecipient in managing a robust certification program.

Operations & Maintenance Manuals

- The contractor prepares and submits O&M manuals in accordance with specification requirements. Specifications address the systems and subsystems for which manuals are required.
- O&M manuals outline the media (bound hard copy, PDF, etc.), Quantities, formatting, and schedule for all deliverables and documentation.
- The CM ensures that the designers of record address all technical requirements for O&M manuals. In addition, the CM must also ensure that the designers of record specify schedule requirements for submitting O&M manuals well in advance of construction completion.

Training & Transition to Operations

- The subrecipient may develop a training plan summarizing all needed training and identifying employees subject to training requirements.
- Training must also be developed and delivered for new or updated plans, procedures, or rules applicable to a transit capital facility project. Training programs should be developed to support the effective and safe implementation of operation and use through standard O&M practices.
- Training programs for critical safety and security practices must include qualification components, such as exams or field practicals, to verify participants have retained and can skillfully execute assigned tasks. The contractor must maintain training documentation to ensure that all employees have met and continue to meet training requirements while employed by the subrecipient.

The CM, in coordination with the contractor and training manager, must ensure that all training requirements are met and training material is turned over to the subrecipient.

As-Built Documentation

- As-built documentation refers to a set of drawings marked-up by the contractor building a facility or fabricating a piece of equipment that shows how the item or facility was actually built versus the way it was originally designed. At project completion, the as-built drawings describe what was actually built.
- The CM verifies that the construction contractor maintains up-to-date drawings and may require a review each month as a condition for processing monthly progress payments. The CM uses the as-built documentation as necessary to commission the project.
- As-built drawings save significant project costs and help local agencies avoid potential safety hazards during the operation and life of a facility.

Warranty Administration

- A warranty is a manufacturer's written assurance to the subrecipient whereby the manufacturer assumes responsibility for the performance of equipment for a specified period after acceptance. The CM should not accept a piece of equipment before it is ready for overall operations.
- The CM should consider provisions for an extended warranty when equipment arrives.
- All equipment must be accepted well in advance of total operations, defined as the state of the transit capital facility where construction has completely ceased, and operations at the fullest level can commence.

Chapter 7: Project Closeout

Project closeout, in general, is the term used to signify the process by which a subrecipient, CDOT, and FTA agree that all activities approved for the award have been completed and/or the federal assistance awarded has been expended for eligible costs. Project closeout involves wrapping up construction and professional services contracts, ensuring that stakeholders are engaged before the project wraps up, demobilizing subrecipient staff from the effort, and evaluating all project components to ensure that they meet agency standards.

In addition, the subrecipient must determine how to best store any information or property related to the project until records are no longer required and how to close out any financial obligations for FTA grants. FTA requires that a subrecipient maintain records related to the project for at least three years should any post closeout activities, disputes, or other matters arise. Any subrecipient that has purchased property or holds other titles in their possession first needs to determine what to do with those assets. Coordination with the DTR during this step is essential.

Grants and financial closeout include submittals via COTRAMSfor the subrecipient. DTR and other CDOT divisions mostly handle formal closeout and post closeout reporting with FTA.

Construction Contracts Closeout

A subrecipient must close out a capital facility's construction contract agreements. For a typical construction contract, a subrecipient must confirm the completion and acceptability of the following activities:

- The construction contractor delivers any O&M manuals for the facilities constructed and equipment installed and provides any associated training of subrecipient staff.
- The construction contractor hands over all documentation to the subrecipient. Refer to Chapter 7 Section 7.A.for a full list of potential handover documentation.
- The project architect issues a punch list to the general contractor before a Certificate of Occupancy is requested from a local permitting authority.
- The subrecipient confirms that the contractor has initiated the guaranties and warranties associated with the facility and equipment.
- The subrecipient confirms that the contractor has submitted the drawings of record showing the as-built condition of the constructed facility and installed equipment.
- The subrecipient conducts a final walk-through inspection of the facility to confirm that the contractor has completed the open punch list items and all work has been completed correctly and satisfactorily.
- The subrecipient resolves any outstanding change/claim disputes, as well as the determination/recovery of liquidated damages (as applicable).
- With the previous activities satisfactorily completed, the subrecipient approves the final payment to the contractor and closes the contract.

Professional Services Contracts Closeout

Closing a professional services contract for projects involving design or management services does not involve as many milestones and activities as for a construction contract. The following closeout activities are typical for a professional services contract:

- The subrecipient confirms that the professional services contractor has satisfactorily delivered the services called for in the contract SOW.
- Where contract payments are on a cost plus fee basis, the contract provisions give the subrecipient the right to audit the contractor's costs. The audit must verify items such as direct labor rates, support for time charges, support for other direct costs, and justification for overhead rates.
- Once the SOW is satisfactorily completed and an audit is completed (as applicable), the subrecipient approves the final payment and releases any retention held back from previous contract payments.

Grants and Financial Closeout

The subrecipient initiates closeout of the award, within 90 days after the end of the period of performance or after all approved activities are completed and/or the applicable federal assistance has been expended for all eligible costs. The subrecipient must document any deviation from the approved award in a closeout amendment.

Final Financial Audit

Before final acceptance of the contract work, CDOT's External Audit Branch may perform a closing audit. This final closeout audit is performed upon completion of the contract to verify the accuracy of the billings and compliance with contract provisions.

Records Closeout and Final Audit Report

The subrecipient must keep written documentation of each procurement process for three years following completion of the project/procurement or project closeout, as recommended in FTA's Procurement Best Practices Manual and FTA Circular 4220.1F.

Preferred Communication Protocols

DTR is the CDOT division that works with rural transit agencies to plan, fund, and coordinate to complete transit capital facility projects in Colorado. The following table lists post-award DTR staff contacts for rural transit capital projects.

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George Gromke	Transit Planner	George.gromke@state.co.us
Emily Crespin	Assistant Director - Transit Grants Program	Emily.crespin@state.co.us
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TBD	Region 1 Liaison	TBD
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TBD	Region 4 Liaison	TBD
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Roaring Fork Transportation Authority