

Project Delivery QA/QC Program
Oregon Department of Transportation
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Project Delivery Quality Program Manual

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Oregon Department of Transportation

Statewide Project Delivery Branch – Engineering & Technical Services Branch

Project Delivery QA/QC Program

555 13th St. NE

ODOTQualityProgram@odot.oregon.gov Website

Salem, Oregon 97301

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Revision History *the current revision is first entry*

Date Published	Change made by	Section(s) Updated	Summary of what, why changed
8/29/2025	Kristie Gladhill, Project Delivery QA/QC program manager	Contact information	Removed Kristie Gladhill's name and phone number, contact through program email address.
8/7/2025	Kristie Gladhill, Project Delivery QA/QC program manager	Section 2	Administrative update: Updated Section 2 figure of quality standards of practice organization; KPM guidance is now published.
5/22/2025	Kristie Gladhill, Project Delivery QA/QC program manager	Sections 2, 5.3, 5.4, and 5.5; minor wording edits throughout.	Add Project Delivery QA Review Guidance to Fig. 3 and Table 1. Refer to Project Delivery QA Review Guidance in Section 5.3, 5.4, and 5.5. Wording edits throughout to improve clarity and change from program under development to established program.
2/8/2024	Kristie Gladhill, Project Delivery QA/QC program manager	All	Clarification of wording throughout. Use more general term "quality" rather than specifying QC, QA, or QV. Section 2 update Figure 3, add entries into Table 1. Section 5.3 add language to include chief engineer in decision whether to proceed with those types of QA reviews. Section 7.1 additional content bullets; Section 7.2 edits to leave more of the quality reviewer specifics to discipline quality plans; add content on escalation of review issues.
10/31/2022	Kristie Gladhill, Project Delivery QA/QC Program Manager	1.1, 1.2, 2, 3, 5.5, 6, 7.4, Appendix A	Section 1.1 wording to include more of 2019 audit findings. Section 1.2 minor word changes; Section 2 update Figure 3 and Table 1 adding Scoping, ODLAP quality plans; Section 3 update PD QA/QC Manager role wording; add responsibilities for review of consultant quality plans. Appendix A, additions to glossary for QV, technical sufficiency to match "Region Tech Center Quality Plan Template;" update Project Delivery to include ODLAP; add ODLAP.

Quality in project delivery is the degree to which a product, service, or deliverable conforms with established project and design requirements and satisfies its intended purpose. Quality is the result of a cooperative partnership between the providers of project development services and those responsible for quality. Those providing project development services implement quality control (QC), quality assurance (QA), and quality verification (QV) to assure products and services meet or exceed ODOT requirements and expectations. QA reviews ensure quality plans were followed and check that project and program efforts achieve desired results.

The Project Delivery QA/QC Program leads the development, management, communication, and implementation of the ODOT Project Delivery QA/QC program for STIP projects including ODOT delivered local agency program (ODLAP) projects, scoping through contract award. The ODOT chief engineer has authority over quality management requirements for the engineering and technical disciplines. The Statewide Project Delivery Branch (SPDB) manager has authority over quality management requirements for project management, ODLAP, and Scoping. The region technical centers and statewide disciplines (technical disciplines, project management, ODLAP and Scoping) carry out the project quality management work, following the statewide discipline quality plans. The Project Delivery QA/QC Program manager is responsible for defining and promoting QA/QC standards of practice and working to maintain desired levels of quality in ODOT project delivery services and products, especially by means of attention to every stage of the project lifecycle from planning through construction and into maintenance, including coordination across disciplines and seeking and addressing lessons learned.

The Project Delivery QA/QC Program monitors and reports on quality management efforts statewide to foster continuous improvement in the ongoing quest to provide high quality engineering and technical services and make efficient use of resources.

1.1. Quality Program Overview

The Oregon Department of Transportation's mission is to provide a safe and reliable multimodal transportation system that connects people and helps Oregon's communities and economy thrive. Project Delivery's part in that is to deliver high quality, successful projects, to meet the needs for Oregon's transportation system.

ODOT recognizes that its success will be determined, in part, by the quality of services and products that it provides. Assuring quality requires commitment and a well-conceived and systematic approach. Benefits of having a quality management system include the following:

- Documented standardized processes.
- Quality records that verify quality review was done.
- Reduced project risk.
- Identifying and correcting mistakes, oversights, and logic errors.
- Learning from mistakes.
- Expanding our knowledge, building engineering and technical discipline expertise.
- Improving design packages, leading to improved bids and construction projects.

The 2019 ODOT internal <u>audit</u> findings highlighted the need for statewide consistency in quality management practices across all regions. The audit findings also recommended regular quality assurance reviews to provide ongoing assessments of region's practices, and the need to work towards consistent quality expectations both internally and for out-sourced project delivery work. Aligning quality management practices in all region technical centers, and statewide for disciplines, is a valuable step in ODOT's response to the audit findings. Consistent quality management practices from region to region help technical disciplines and consultants meet quality expectations during the project development processes. 2019 audit response was completed and <u>closed spring 2023</u> with statewide discipline quality plans and all five Region Technical Center quality plans in place.

1.2. Project Delivery QA/QC Program Mission

The mission for ODOT's Project Delivery QA/QC Program is to instill a culture of quality into every aspect of project delivery and develop and standardize statewide project delivery quality management practices to facilitate continuous quality improvement in each discipline and phase of project delivery. This distills into three pillars for the program: quality culture, statewide consistency, and continuous improvement.

Figure 1: Pillars of the ODOT Project Delivery QA/QC Program



Instilling a quality culture into every aspect of project delivery includes, but is not limited to:

- Integrating quality into how we perform project management and technical discipline project delivery work within ODOT
- Providing clear quality expectations for everyone who provides deliverables to ODOT.
- Focusing on quality for projects holistically as well as at individual and discipline levels.
- Providing everyone working in project delivery a good understanding of the expectations and benefits of the quality program.
- Clarifying everyone's understanding of the Project Delivery QA/QC Program and their role(s) in the quality program.

Statewide consistency includes, but is not limited to:

- Developing and maintaining documented quality standards of practice: guidance; quality plans; and forms, checklists and templates.
- Implementing consistent quality practices statewide for project delivery across ODOT.
- Applying consistent quality expectations for internal work as well as work outsourced to consultants.

Continuous improvement includes, but is not limited to:

- Lessons learned and best practices shared for statewide benefit from ODOT and consultant project delivery.
- Performing regular project or program level independent quality assurance reviews to identify opportunities for continuous improvement (see Section 5).
- Implementing improvements from QA reviews or lessons learned through collaboration and communication. Statewide peer groups carry out continuous improvement.
- Establishing and monitoring performance measures to quantify quality in project delivery and objectively measure effectiveness of improvement efforts.

1.3. Quality Management

The basics of a quality management system are straightforward, see Figure 2:

- Decide what you are going to do.
- Document how you will do it.
- Do it.
- Create reviewable quality records.
- Follow through with QA checks and quality process improvements for continuous improvement of the quality management program.

Figure 2: Quality Management Basics



ODOT's Project Delivery QA/QC Program quality management approach keeps benefit to the forefront while building collaboration, effective communication, and follow through.

2. Quality Standards of Practice

The Project Delivery QA/QC Program establishes and implements quality standards of practice to provide a structured, disciplined, and consistent statewide approach to quality and help retain institutional knowledge.

PD-25, Project Delivery QA/QC Program, sets policy and requirements for quality management in project delivery for ODOT delivered projects in all phases of the transportation system project lifecycle from scoping through construction contract award.

Figure 3 shows that the quality standards of practice include guidance, quality plans, and forms, checklists and templates which work together and complement each other.

- The Project Delivery Quality Program Manual defines the quality program.
- Program guidance covering quality program level topics.
- Statewide discipline quality plans, region technical center quality plans and associated forms and checklists document how we do the work.

Table 1 provides more details on the quality plans and quality guidance documentation shown in Figure 3. Table 1 row colors match those in Figure 3: blue for the Project Delivery Quality Program Manual, that defines the quality program; yellow for program guidance; and teal for quality standards of practice on how we do the work, i.e., quality plans and forms.

The <u>ODOT Project Delivery QA/QC Program website</u> provides access to the quality standards of practice and an overview of the Project Delivery QA/QC Program, resources and tools. Technical disciplines have quality documents and their manuals available from their discipline websites. Additional ODOT Project Delivery guidance includes technical directives, bulletins, advisories and <u>operational notices</u>. ODOT users can access quality standards of practice documents on the <u>internal SharePoint quality site</u>.

Project Delivery Quality Program Manual

Figure 3: ODOT Project Delivery QA/QC Program Quality Standards of Practice



Table 1: ODOT Project Delivery QA/QC Quality Standards of Practice

Standards of Practice	What is this?
Project Delivery Quality Program Manual	Defines the statewide Project Delivery QA/QC quality management program; provides an overview of the importance of the quality program, mission, approach, and requirements.
ODOT Consultant Quality Plan Guidance	Program guidance regarding consultant quality plan requirements and approval. • Template with requirements for consultant quality plans. • Requires consultants to provide Certification of quality of deliverables.
ODOT Consultant Quality Plan Review Internal Procedures ¹	ODOT internal document on handling consultant quality plan reviews including assigning reviewers, tracking, and responses to consultants.
Statewide Discipline Quality Plan Template ¹	Template of requirements for statewide discipline quality plans.
Region Technical Center Quality Plan Template ¹	Template of region technical center quality plan requirements.
Maintaining Quality Standards of Practice	Requirements regarding maintaining all the quality standards of practice: format, update and review processes, storage and access.

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Standards of Practice	What is this?
Maintaining Project Delivery QA/QC Program websites and PDEA ¹	Program reference on how to maintain and track posting of documents on the external and internal websites and PDEA.
Project Delivery Electronic Archive User's Guide ¹	Guidance for users and administrators of the PDEA, including how to get to the archive and access documents and metadata.
Project Delivery QA Review Guidance ¹	Provide procedures for project risk based QA reviews (Section 5.3), program level QA reviews (Section 5.4), and agency review of consultant quality (Section 5.5).
Key Performance Measures guidance ¹	Program guidance defining quality key performance metrics and Project Delivery QA/QC Program evaluation.
Lessons Learned guidance ^{1,2}	Program guidance regarding handling lessons learned, both within project delivery and between construction and project delivery.
Quality Resource Tracking guidance ^{1,2}	Program guidance on how we track resources used on quality management, both internally and on outsourced work, to help us better plan quality resource needs going forward.
Region Technical Center Quality Plans and forms	Quality standards of practice for how each region technical center carries out its role in project delivery quality management.
Statewide STR for DAP and PS&E, form 734-5365	Statement of technical review (STR) used at DAP and PS&E signed by ODOT region discipline unit managers to document quality verification.
Statewide Discipline quality plans and forms	Statewide discipline quality plans set discipline quality standards to assure statewide consistency as STIP projects are developed. Consultant quality plans and region Technical Center quality plans refer to the statewide discipline quality plans.
Transportation Project Management Quality Plan	Provides statewide project management quality standards to assure statewide consistency as STIP projects are developed.
Statewide ODOT Delivered Local Agency Program Quality Plan	Provides statewide ODOT Delivered Local Agency Program (ODLAP) quality standards to ensure statewide consistency for ODLAP projects. Highlights differences from non-ODLAP projects.
Statewide Scoping Quality Plan ¹	Quality plan for the ODOT scoping program.
PCO checklist for estimating, form 734-5444	Checklist used for construction estimates.
DAP checklist form 734-5129	Checklist used at DAP phase gate milestone.
PS&E checklist form 734-5455,	Checklist used at PS&E phase gate milestone.
PS&E checklist ER form 734-5457	
ADA Program quality plans and forms	Quality standards of practice specific to the ADA Program.

² As of this revision, this is a placeholder for a document for future release.

3. Roles and Responsibilities

Table 2: Quality Management Program Roles and Responsibilities

Roles	Quality Management Program Responsibilities
Project Delivery QA/QC Program manager	 Lead statewide project delivery quality efforts: establish and implement governance for the Project Delivery QA/QC Program. This includes providing technical assistance, subject matter expertise, and reviewing all quality standards of practice. Coordinate review and approval of consultant quality plans. Serve as primary point of contact for program. Share quality program content with regions and statewide peer groups and other internal and external groups upon request, at least annually. Develop and implement systems to report on the performance of the Project Delivery QA/QC Program to stakeholders, including SPDB and ETSB management, people performing STIP project delivery quality program work throughout ODOT, and consultant partners through ACEC.
Statewide technical discipline (HQ) professionals, engineers and staff	 Develop and maintain standards and policies for technical discipline work throughout ODOT. Maintain statewide technical discipline quality plan(s), forms, and templates. Perform statewide technical discipline program quality assurance reviews. Assist in review of consultant quality plans submitted for approval. Responsible that QA/QC/QV training is provided for all technical professionals as needed, e.g., for new employees and with updates to quality standards of practice.
Region and HQ staff performing Project Delivery work	 Assure consistent quality of technical discipline work as design deliverables are developed, scoping through construction contract award. Produce deliverables following applicable regulations, design standards, ODOT manuals, and the statewide technical discipline quality plans. Review consultant deliverables and make a recommendation to the contract administrator whether to accept.
TPM and RE-CP's	 Oversee the quality of the project management discipline, scoping through construction contract award, per the statewide Transportation Project Management Quality Plan. Assure that the project schedule is up to date and has adequate time for quality reviews. If consultant is a provider for part of the project: Review quality related language in SOW. Ensure the consultant follows the WOC and discipline quality plan requirements. Coordinate technical discipline reviews of consultant deliverables.

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Roles	Quality Management Program Responsibilities
Area managers	 Review and ensure that projects follow project management quality practices. Responsible that QA/QC/QV training is provided for agency project managers as needed, e.g., for new employees and with updates to quality standards of practice.
Project Management Office (PMO)	Maintain the statewide Transportation Project Management Quality Plan, forms, and templates.
Region technical center unit managers	 Assured QC was performed within the technical discipline. Ensure applicable quality reviews were performed at each milestone. Ensure that the statement of technical review (STR) was prepared.
Region technical center manager (TCM)	 Responsible for overall quality management of region technical center projects. Verify that technical discipline and cross-discipline quality processes were followed for the deliverables on each project. Confirm that scoping, DAP, and PS&E packages meet technical sufficiency. Provide adequate resources for quality reviews. Ensure that staff have training and appropriate competence to complete quality work and reviews.
Consultants providing out- sourced project delivery work	 Provide a consultant quality plan for approval by the Project Delivery QA/QC Program for use with contract(s). The consultant quality plan demonstrates that they have the capability to meet quality requirements for contract work for ODOT. Follow their ODOT approved quality plan as they produce deliverables, doing both QC and QA. Meet or exceed the ODOT technical discipline quality plan expectations for deliverables. Meet applicable standards, manuals, directives and other procedural guidance for deliverables. Submit complete deliverables to ODOT, including deliverable quality records. Certify the quality of deliverables they provide.
Project Controls Office (PCO)	 Perform QA review of PS&E packages before bid letting. Can assist in QA review of advance and final plan milestone packages. Assist in review of consultant quality plans submitted for approval.

4. Quality Control

QC is product-oriented. We are defining QC as the part of quality management focused on fulfilling quality requirements for products and deliverables. QC takes place as the deliverable is developed and refers to the procedures put in place to control, measure, and verify the quality of a deliverable related to established design requirements and to satisfy ODOT's needs. QC includes activities such as:

- Providing oversight by experienced individuals.
- Verifying project quality tasks are done by staff who are adequately trained and capable of performing those tasks.
- Checking deliverables are accurate and complete.
- Documenting decisions, assumptions, and recommendations accurately.

QC procedures ensure that the work is done correctly the first time. Document QC findings and responses to review comments. Address QC review comments and document reviewer acceptance of changes made in response. The QC role is to verify that the quality of the deliverable meets ODOT's minimum requirements.

Each of the statewide discipline quality plans and region technical center quality plans define QC processes. Statewide discipline quality plans call out QC review requirements for that discipline at applicable milestone phases.

5. Quality Assurance

QA is process-focused. We define QA as the planned and systematic activities and procedures implemented in a quality system so that quality requirements for a product or service will be fulfilled. QA maintains a desired level of quality in services and products. The QA process needs to be objective, transparent, and effectively communicated. QA seeks to provide tools and manage provider performance for the benefit of all concerned, but especially the citizens of Oregon.

QA reviews are documented activities performed in accordance with written procedures or checklists to check quality standards are consistently met for transportation projects and to cultivate continuous improvement. QA reviews are provided to the Project Delivery QA/QC Program and stored in a SharePoint listing on the internal quality program website and in the PDEA to provide Project Delivery staff access. Metadata will include tracking review report date and contact person.

5.1. Project Quality Assurance Reviews

Statewide discipline quality plans include guidance on project QA of deliverables.

5.2. Discipline Quality Assurance Reviews

The purpose of a discipline QA review is to take a statewide look at a specific discipline's quality program, examining quality records and quality standards of practice to evaluate how the discipline's quality program has been developed and documented, and whether it is being implemented effectively. Discipline QA review will usually occur after project development is complete, either during or after construction.

A discipline QA review is an opportunity to look at whether procedures should be updated, revised, and/or clarified for continuous process improvements to ensure quality deliverables. Selection of projects to review may be based on risk, scope, schedule, or budget and should represent different regions. QA reviews involve a collaboration between headquarters and region staff, including utilizing the discipline statewide peer groups. The discipline QA reviews should:

- Document how/why projects were selected for QA review.
- Provide feedback on what is being done well (best practices).
- Provide feedback on any gaps identified or needs for improvement.
- Note any unexpected or surprising outcomes.
- Review how well the quality plan(s) are followed.

Each discipline's statewide quality plan outlines discipline QA review guidelines and frequency. Provide a copy of the QA review to the Project Delivery QA/QC Program to be posted on the SharePoint listing on the internal quality program website and in the PDEA.

5.3. Project Risk Based QA Reviews

A project risk based QA review is a targeted method of mitigating risk and improving project or program risk management. The level of effort for the QA review should be proportionate to the risk profile. A risk based review can be requested for a high profile or high risk project to provide real time feedback to design teams during project development. The Project Delivery OA Review Guidance provides further guidance for project risk based QA reviews.

The risk-based review request can be made to the Project Delivery QA/QC Program manager, who will work with the chief engineer to consider whether to proceed. If proceeding, the Project Delivery QA/QC program manager will work with the project Risk Program, region technical center and design team to put together the QA review team.

The QA review team will develop and document objective and defined standards to use in the review at the review initiation. These standards will be shared with both reviewers and providers. The following must be included; the review team may include additional review standards:

- Review the risk register for the project to understand the risk profile (risk level) and assess the quality of the risk register.
- Provide feedback on what is being done well (best practices).
- Provide feedback on any gaps identified or needs for improvement.
- Note any unexpected or surprising outcomes (triggered risk).
- Review how well the quality plan(s) are being followed.
- Identify and articulate any project risks, relative to the project quality, which were not already identified by the design team.

The Project Delivery QA/QC Program will post a copy of the QA review on the SharePoint listing on the internal quality program website and in the PDEA.

5.4. Program Level Quality Assurance Reviews

Program level project delivery quality assurance reviews provide an objective evaluation of projects under construction or after construction is complete, to give feedback to all disciplines. This practice ensures consistent quality and standards for all ODOT projects.

Program level reviews can be initiated by the Project Delivery QA/QC Program or requested by headquarters, a region, or project management. The Project Delivery QA/QC Program manager will work with the chief engineer to consider whether to proceed. The Project Delivery QA/QC Program will define methods of project selection to ensure providers are reviewed on a consistent and fair basis. The program will establish review procedures and conduct reviews. Project review teams will include region and headquarters staff. The <u>Project Delivery QA Review Guidance</u> provides further guidance for program level QA reviews.

Types of program level quality assurance reviews may include:

- Cross-regional reviews of region technical center quality plans for statewide consistency, consistent use of the template for region technical center quality plans, and maintenance of quality plans.
- Cross-discipline review of statewide discipline quality plans for statewide consistency, consistent use of the template for statewide discipline quality plans, and maintenance of quality plans.
- Post-construction project review looking across all disciplines.
 Project selection may be random (blind selection) or targeted. Reasons for targeted selection may include but are not limited to the contract having had a lot of addenda during advertisement, multiple change orders during construction, major change orders affecting scope, risk, or information found in the resident engineer project management narrative at the end of the project.
- Review of a collection of work on more than one project from a provider.

Program level quality assurance reviews will:

- Provide feedback on what is being done well (best practices).
- Provide feedback on any gaps or inconsistencies identified or needs for improvement.
- Try to identify causes for large number of project changes or addenda, when applicable.
- Note any unexpected or surprising outcomes.
- Review the usability of quality plans and how well the quality plan(s) are being followed.
- Review whether quality expectations are verifiable.

Reviews will be performed based on objective and defined standards developed at the review initiation and documented both for reviewers and providers. The review team may add review standards to those listed above.

The Project Delivery QA/QC Program will post a copy of the QA review on the <u>SharePoint</u> <u>listing</u> on the internal quality program website and in the PDEA.

5.5. Agency Review of Consultant Quality

The ODOT Consultant Quality Plan Guidance calls out that ODOT may, at any time, perform a QA review of the consultant's QA/QC documentation to verify that the appropriate procedures were followed while developing the deliverable. The <u>Project Delivery QA Review Guidance</u> provides further guidance for QA reviews of consultant quality.

The Project Delivery QA/QC Program will post a copy of the QA review on the <u>SharePoint</u> <u>listing</u> on the internal quality program website and in the PDEA.

6. Quality Records

Quality records provide reviewable evidence documenting that quality work was done. Quality records are the basis for project or program level quality assurance reviews and/or audits (by audit professionals). Further guidance on quality records can be found in the statewide discipline and region technical center quality plans, as well as guidance on "Maintaining Quality Standards of Practice."

7. Quality Best Practices

7.1. Professional Standards

The agency has the right, responsibility, and authority to establish the procedures, policies, codes, standards of practice, and level of quality for work products and tasks.

- Produce ODOT deliverables according to applicable laws or regulations, design standards, and ODOT manuals and quality plans.
- Check deliverable content for technical accuracy, completeness, appearance, organization, grammar, and readability.
- Provide an interdisciplinary review to check consistency across disciplines.
- Check design documents for constructability and materials compatibility.
- When required, documents must be sealed, signed, and dated by the responsible Oregon licensed professional.

7.2. Quality Reviewers

Individuals in the role of quality control or quality assurance reviewer are required to be technically competent in whatever discipline they are reviewing. If a provider is "one deep" in the staff competencies needed for quality control review, they shall seek out alternatives such as cross-region resourcing, HQ technical staff, or consultants.

When there are issues deemed to be complex and/or risk sensitive, secondary review might be sought from headquarters or another region.

Handle comments and disagreement resolutions within a technical discipline per their discipline specific quality plan.

Handle comments that don't fit one specific discipline at the lowest level possible. First discuss the issue at the project development team level with the specific reviewer and if resolved, document in the comment log.

If an issue can't be resolved at the designer/reviewer level, then engage discipline unit managers. At times, it may be necessary to involve the region Technical Center manager.

If the issue cannot be resolved at the region level, involve the Engineering Tech Services discipline managers. Ultimately, the issue may need to be resolved by the chief engineer.

Project management and ODLAP quality escalation involves the area managers, and if needed escalation to the PMO.

If a Scoping quality issue can't be resolved in the region, escalate the issue to the PMO.

7.3. Communication and Collaboration

Good communication is essential for successful project delivery. Members of the project team are encouraged to freely communicate throughout the life of the project to assure a high level of service and quality and reduce significant amounts of rework, errors, or omissions. We encourage frequent communication. Communication requirements specified in the contract or quality standards of practice are the minimum that should be done.

Communication within technical disciplines is important. Specific communication requirements between designer and reviewer and/or checker found in technical discipline quality plans are required to be documented as quality records. Communication facilitates the learning process from review and dispute resolution.

Communication is important between disciplines, such as between Pavement and Roadway. Communication is also important between in-house disciplines, the project manager (TPM or RE-CP), and consultants for out-sourced work.

Collaboration is also essential for successful project delivery. The project comment log and responses are one key overall project documentation and communication tool. Reviews and issue resolution provide opportunities for learning, knowledge transfer, professional growth, and a means to strengthen core competencies within the agency. Collaboration expands our knowledge, building engineering and technical discipline expertise.

7.4. Continuous Improvement

Follow through fosters continuous improvement in the Project Delivery QA/QC Program. Continuous improvement supports the success of each project, and the success of Project Delivery as a whole. QA reviews confirm that QC review was done and provide an opportunity to look for improvements to quality processes. Sharing lessons learned, including within project development and feedback from construction, provides statewide benefit. Program level quality reviews take a broad look across disciplines and regions. Performance measures will be developed and monitored to objectively measure the effectiveness of improvement efforts.

Appendix A - Glossary

Table 3: Glossary of Terms, Titles, and Acronyms

Term	Explanation
ACEC	American Council of Engineering Companies
Agency	ODOT
Continuous improvement	The on-going effort that seeks to improve the processes and deliverables in project delivery. The central goals of continuous improvement are to reduce waste, increase effectiveness, and increase efficiency of the organization. This may be accomplished through quality assurance reviews, audit responses, or other means.
DAP	Design acceptance package; statewide phase gate project delivery milestone
Deliverable	The final required work product or service delivered in-house or by consultant design team.
Disciplines	Refers to project management, scoping, ODLAP, and technical disciplines
ETSB	Engineering and Technical Services Branch
HQ	ODOT headquarters
LPA	Local public agency
ODOT	Oregon Department of Transportation
ODLAP	ODOT delivered local agency program
PCO	Project Controls Office
PDEA	Project Delivery electronic archive in FileNet
PDII	Project development improvement initiative
PMO	Project Management Office
PS&E	Plans, specifications, and estimates; the final phase gate for project delivery designs; statewide phase gate project delivery milestone
Project Delivery	In this document it refers only to STIP projects and ODOT delivered local agency program (ODLAP) projects, scoping through contract award. Maintenance, planning, and construction are excluded.
Provider	As used in this document, "provider" includes anyone (ODOT or consultant staff) providing project delivery services or deliverables.

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Term	Explanation
QA	Quality assurance, focused on the process and assurances that quality requirements are fulfilled.
	 Verifying QC was done following the quality processes. Reviews of QC and QA processes, supporting continuous improvement. Project and program level QA reviews.
QC	Quality control, focused on the product fulfilling quality requirements as it is developed.
Quality management	Policies, processes, activities, and responsibilities that ensure the overall quality of tasks and deliverables in project delivery. Quality management is implemented by means such as quality planning, quality control, quality assurance, and continuous improvement within the system.
Quality record	Reviewable evidence that quality review was performed and quality processes were followed, i.e., forms, checklists, reports, drawings, calculations, comment log.
Quality reviewer	An individual designated to perform independent quality reviews following the statewide discipline quality plans and the region Technical Center quality plan. Individuals in the role of quality control reviewer must be technically competent in the discipline.
Quality standards of practice	Documentation of how quality management will be done for ODOT project delivery. ODOT's project delivery quality standards of practice include the Project Delivery Quality Program Manual; region and discipline quality plans; forms, checklists, templates and other guidance
QV	Quality verification, review process to ensure technical sufficiency of all deliverables, verify performance of all quality tasks, and to document the completion of those tasks.
RE-CP	Resident engineer - consultant projects
SOW	Statement of work
SPDB	Statewide Project Delivery Branch
STIP	Statewide Transportation Improvement Program
STR	Statement of technical review
TCM	Region Technical Center manager
Technical sufficiency	Technical review process checking the deliverable complies with all applicable laws, rules, regulations, technical standards, guidance, policies and procedures, suitable for the milestone. An initial check of key elements can be used to decide whether further review is warranted.
TPM	Transportation project manager

