



WEBINAR – FIO/PILOT PROJECTS (EXTERNAL) – QUESTIONS

Project: TxDOT Digital Delivery Program
Date: January 13, 2026 | 1:30 PM – 3:00 PM CST
Location: Microsoft Teams

QUESTIONS/RESPONSES

- (Ken Smith) If the Digital Model is used to Provide Contractual Plan Sheets, why is the digital file that was used only for informational purposes?

The files sent out **For Information Only (FIO)** are not contractual. Pilot projects will remain separate in a different environment and will be posted on the final plan FTP site when ready. These files are for supplemental use only, alongside the standard PDF plan sets. To clarify, these models are not contractual.
- (Ken Smith) A stated benefit is easy Take offs. What happens when the Model does not match the E&Q?

With this process, the final letting package becomes the contractual document. This means the E&Q sheet, summary tables, and everything included in the traditional PDF plan set are the authoritative documents. If a contractor decides to rely on the models—something explicitly outlined in the license agreement—they accept any associated risks and liabilities. Contractors should use the finalized documents from the FTP site for their bidding or letting packages to ensure accuracy and separation. As we transition into pilot projects that utilize complete **models as legal deliverables (MALD)**, these will be governed by separate contractual agreements. Such projects generally require a mandatory pre-bid meeting at the area office or a designated location to clarify unique provisions and specifications defined for model-based governance. During bidding for these projects, contractors need to recognize that DGN files represent the official legal documents, with no accompanying PDFs. The E&Q sheets for these cases will be generated directly from the models. Essentially, there are two distinct processes depending on the project type.
- (Ken Smith) Are there guidelines as to what LOD applies to project types or specific elements?

Our Digital Delivery website offers guidance on LODs and our quality control checklist under the documents section. We recommend downloading these documents as they contain the most up-to-date information. Please note that some documents are being updated based on feedback from pilot projects, but the versions posted online will always be current.
- (Ken Smith) Are there visual examples on the File Index?

Our Digital Delivery website contains a folder with all necessary DGN files, resources, and an example index sheet to help you create index of files. Go to "3D models for information only" section and use the provided link to access the relevant box.com folder; all resources are available for public download.
- (Jonathan Maes) A DGN really only translates with Microstation. I've found as a GC that if they export the corridor as an XML, it translates to most CAD programs such as TBC or C3D. I'm curious if they will only be required to send out as a DGN. If so, is Microstation going to be the program that TxDOT wants contractors to be more familiar with versus anything else?

We aren't requiring contractors to purchase Bentley licenses, which is why we're considering XML and ISC file formats for importing into Trimble Business Center, Civil 3D, or Autodesk Construction Cloud—platforms that support these formats. DGN files can also be used, though some background work may be needed. During our San Antonio pilot project, we successfully imported IFC files into Trimble Business Center.



6. (John Padilla) Some Districts have recently provided guidance on structure of digital file deliverables. Will this supersede all District requirements?

Currently, we are continuing to develop several guidance documents to assist districts in implementing improved file and folder naming conventions, as well as a streamlined folder structure within Project Wise. Our aim is to reach a broad consensus among the groups, though not necessarily from all 25 districts, as that process would be excessively time-consuming. Once general agreement has been achieved on these guidelines, they will supersede existing district requirements and establish standardized statewide practices for Project Wise folder structures. We have already provided districts with information regarding the proposed reduced file structure for their reference only; for now, districts should continue to follow the current guidance. We do not intend to make immediate or drastic changes. For files uploaded to box.com, we have shared the recommended convention, which includes the CSJ, highway name, letting year and month, and an appropriate descriptor at the end. Regarding pilot projects, further discussion is needed, but we are working to establish procedures that will support and reinforce this initiative.

7. (Ken Smith) Will FIO files be available Pre Bid or only provided to the successful bidder?

This is for early plan posting before bidding. Files will be pulled from box.com 21 days before the letting schedule, but contractors will still use their FTP sites to access final bid documents. After a successful bid, contractors may request these files, and districts can share them as needed, similar to cross sections, after bidding concludes. Everything shown for FIO here is pre-bid.

8. (John Padilla) Is upload to Box restricted to TxDOT staff or can it be delegated to consultants?

Upload access will be limited to TxDOT staff. Directors from TP&D have named their points of contact. Districts have requested more accounts, so we may raise the limit from 2 to 4 per district, but access will remain exclusive to TxDOT staff.

9. (Clayton Terry) When will the 3D models start being required for projects?

3D models will be required for projects letting in May and especially June. Projects in these months must submit their existing terrain, alignment, and corridor files. If you're at 60% or 90% completion, contact us so we can ensure your files are correct. We're targeting these letting months as the initial group of projects to use model files.

10. (Jonathan Maes) Corridor exports as a DGN do not really work well with those of us who don't use MicroStation. Could corridors export as an XML too? As a GC, unless you have MicroStation it never translates well. Linework functions but never 3D surfaces.

It is possible to export data in XML format if required. For those familiar with IFC, this file type can also be downloaded and typically imports effectively into Trimble Business Center, depending on your software version. It is advisable to include the native DGN file, as well as supplemental XML or IFC files, to ensure compatibility and completeness of your data transfer.

11. (Anonymous) There was mention of LOD requirements not being in effect, but instead for future consideration. Is there any status on pending updates to the TxDOT ORD workspace which may serve as guidance for these future LOD requirements?

Yes, we are considering implementing LOD in our future pilot projects. Currently, the workspace for these pilots is housed in a separate data environment within ProjectWise. Since this workspace is also in a testing phase, it's designated specifically for these projects. For now, LOD isn't required for these types of projects because they are still being delivered as traditional PDFs, so the same level of detail is not necessary. However, as we begin or transition the 25 district pilot projects to the new data set, those will need to meet LOD requirements, follow quality control guidance, and undergo more thorough



reviews before being sent to FIO. The public release date for the workspace hasn't been determined yet. Please check our website for updates as more information becomes available.

12. (Jose Sandoval) For superelevation, what type of file would be preferred?

For this phase, only your corridor file is needed. In our previous full digital delivery project, we also included a separate super elevation lanes file as part of the legal deliverable. Since your corridor file already reflects the super elevation information, submitting just the corridor DGN should be sufficient for FIO.

13. (Jakob Bottcher) Is there a recommended program for contractors to use to be able to view these files?

There are no specific recommendations for contractors on which software to use for viewing files. Bentley products offer straightforward access, but files can also be imported into Trimble Business Center and Autodesk Construction Cloud without issue. TxDOT does not endorse any particular viewer. Bentley provides free DGN viewers that work well and are available for download from their website.

14. (Alberto Munguia) Let's say we are a CEI consultant. Are the 3D models available after letting? How will we get them?

Decisions will be made at the district level. Please contact your district's project lead for more information, as specifics cannot be provided at this time. To validate documents, we recommend using a hash 256 code, similar to our pilot projects, ensuring consistency between models and PDF plans. The PDF plans are the official bidding documents. We will guide districts on implementing the hash code if they choose that method and support them throughout the process.

15. (Tri Nguyen) Will corridor model be required to be use with Item types for quantities takeoff? If so could TxDOT create a report quantities by named boundary for item types? There are ways to get item types calculate quantities to TON, GAL, and etc.

Good question. For these models, requirements are FIO—no mandatory actions. As part of our pilot project, the enhanced workspace will include built-in item type functionalities and generate quantities from models. Conversion tables are being developed, so future releases will allow conversions to tons, gallons, etc., such as for asphalt. However, model deliverables in the first phase won't require this. Contractors can use their own software, like Trimble Business Center, for quantity takeouts.

16. (Ghazal Sokhansefat) Do we need to rely on district to tell us which LOD they need for each project for 3D model or if there is any guidance on that? for more model details (like adding item types for quantities etc), it needs to be scoped by each project.

Yes. Final guidance on the Levels of Development (LODs) will be provided by the districts; however, the design division will ultimately determine which features are recommended at each level. While it is acceptable to exceed these recommendations, we advise against selecting lower LODs for certain item types. You raised a valid point regarding the need to scope requirements for each project. We are actively working to enhance the scope language in our PS&E contracts. Please note that our current standing contracts do not include this language, as we are still in the piloting phase for selected district projects. Those projects will eventually be subject to the updated LOD requirements, but for now, compliance is not mandatory.

17. (Anonymous) Are the design consultants expected to submit 3D models as FIO at all milestones and then receive comments from TxDOT?

Beginning with the May and June lettings and moving forward, design consultants are expected to submit their models to TxDOT for posting. This posting may take place following the completion of milestone reviews; for example, the 30-60-90 milestone reviews can be conducted first, after which models should be posted promptly. For pilot projects, model reviews will be conducted in a separate



environment—currently, this will be Infrastructure Cloud Platform. As additional platforms become available, they will be evaluated for use. For FIO-related processes, standard model reviews will remain the primary method, supplemented by traditional PDF plan reviews and markups where necessary. Any required changes identified during these reviews should be incorporated into the models, which should then be reposted soon after the review process concludes. Districts are requested to perform this process at all project milestones.

18. (Dwayne James) Is the May time frame for the Pilot projects or all letting projects?

For all letting projects, the memo distributed to the districts stated that projects scheduled for letting in May and June will be required to post their models FIO.

19. (Francisco Garcia) do you have a list of the new File Naming Convention?

It's not finalized yet—we're close at the division level, but we still need input from district representatives. Before publishing, it may go through more review rounds. We might post a preliminary version online for consultants to preview. The consensus is nearly reached, but it's not posted yet.

20. (Michael Meinecke) Since letting dates change this could cause the files to be renamed.

This is a good point. The file name only changes when the engineer exports files from ProjectWise to Box.com. At that time, the folder is renamed with the new letting date—month and year. Creating the folder on Box.com prompts user for a name, so you simply enter it then. We're not changing individual DGN names, just the folder that external partners access. This helps organize information for districts with multiple projects.

21. (Nick Becker) With one slide saying DGN and XML deliverables, and the recent discussion of IFC, is there going to be a need for exports to IFC?

IFC conversions are worth exploring, especially since Bentley includes built-in tools for converting files to IFC format. While I can't comment on Autodesk or other software, IFC generally imports data more cleanly with richer metadata, making it useful for platforms like Trimble Business Center. We plan to support DGN and XML files but see IFC as a promising, agnostic data schema—already adopted by AASHTO—and expect its functionality in future ORD versions to keep improving.

22. (Anonymous) Will these 3D models be for every project, or just projects with certain scopes of work? Example; Mill & fill project, roadway widening, bridge construction, etc.

Essentially, every project that involves a model will require this. For example, if you're working on a maintenance project such as replacing a metal beam guard fence—where elements aren't modeled and everything is done using traditional 2D CAD—you won't need to provide additional PGN or XML files. However, for any earthwork project that uses modeling in ORD, we ask that you include a 3D model along with your usual PDF documentation. This also applies to bridge construction; since a model is already required for bridge review, you should be able to share that information with external parties when you have it available.

23. (Anonymous) Is there any official stance on old projects that have not been upgraded beyond Geopak and have been put on hold?

All projects should now be upgraded from Geopak to at least ORD 10.12. If a project still uses Geopak, the Design Division reviews requests to keep it, but approval is rare as Bentley no longer supports Geopak, making it insecure. Requests to upgrade are coordinated with districts, and we're currently starting tests on ORD 2025, our upcoming state version. Conversion is straightforward for projects already in ORD 10.10 or 10.12. For older, paused projects, upgrading is strongly recommended.

24. (Nick Becker) With 10.12 (2022R3) no longer supported by Bentley at the end of 2026, is there going to be a request for all active projects to upgrade to 2025 when that comes out to reduce risk?



Also with the changes now per year and with the amount of change in IFC, is TxDOT going to upgrade more often?

Requests will be made as needed, depending on whether it makes sense to finish projects under 10.12 or wait for an upgrade. If a project is close to completion, at the 90% or 100% milestones, we won't upgrade to 2025 yet since approval and validation are still pending. An official memo will announce any changes statewide once they're finalized. Regarding IFC and software updates, we don't expect frequent major upgrades; even though ORD 2026 is in progress, rapid adoption is unlikely. We'll continue with minor updates as usual. Bentley suggests future upgrades will be more backward compatible, which could speed up our upgrade process, but we'll confirm this through testing.

25. (Gabriel De Haro) Will the corridor files require some type of signature or seal from a PE?

Only MALD or final packages require signing a license agreement to specify their use and intent. These do not need a Professional Engineer's seal if they're not FIO.

26. (Andrew Schweser) Have you opened the files in AGTEK?

During our initial review, our consultant evaluated several types of construction software to ensure file compatibility. Specifically, TBC, TopGun, Leica, and Agtek were assessed, and it was determined that the files should be accessible within these platforms. We believe they will be compatible with Agtek; however, if you encounter any issues, please inform us. We conducted tests across various leading construction software to verify that the files could be successfully imported.

27. (Campbell Weldon) What about use in Agtek?

During our initial review, our consultant evaluated several types of construction software to ensure file compatibility. Specifically, TBC, TopGun, Leica, and Agtek were assessed, and it was determined that the files should be accessible within these platforms. We believe they will be compatible with Agtek; however, if you encounter any issues, please inform us. We conducted tests across various leading construction software to verify that the files could be successfully imported.

28. (Ryan) Why will DXF and DWG files types not be shared?

Currently, we're following a phased approach and are in phase two, focusing on existing terrain and corridor alignment files. If you're working on a TxDOT project, you should be using Bentley or similar platforms; therefore, we're only requesting DGN, XML and IFC file types at this stage. As we progress towards a complete model deliverable package, other formats may be included, especially if work is done by counties or with other entities using CAD, or Autodesk. In those cases, those files may be shared as part of the package. However, at this early stage, it's not necessary to use those file types yet, so we'll continue using the DGN format for now.

29. (Mustafa Al Shammary) Is there any guidance or recommendation for performing QC on 3D models?

Our Digital Delivery website includes a checklist for reviewers, which serves as useful guidance. As digital delivery progresses, more training and resources will become available, both internally and for consultants. For pilot projects, we've used Bentley's Infrastructure Cloud Platform to conduct 3D model design reviews. This platform connects projects in PW and provides its own review tools. We have documentation outlining our review steps, and although it's not yet a universal guide for all districts or projects, it's helpful for understanding our current process.

30. (Tri Nguyen) Will earthwork need to be provided with the 3D model?

The primary purpose of using these models FIO is to demonstrate earthwork-related projects to our contractors. Therefore, it is recommended that any project involving earthwork be used as an opportunity to share relevant information with them.



31. (Azamat Kasymov) Is there a folder structure that TxDOT wants the FIO files to be placed? Corridors, alignments, etc?

Currently, we are not asking anyone to change their existing file or folder naming conventions. Districts should continue using their current practices in ProjectWise, and engineers will export files with established naming conventions for Box.com folders. As new naming standards for PW are developed, they will be shared with districts for future use.

32. (Ryan Blair) Will models for signing, striping and signals bridge, drainage other non-earthwork type of data be required as well?

Not at this time. In phase two of our approach, only earthwork, alignment, and corridor files will be shared FIO on the box.com site.

33. (Leticia Lopez Espinosa) For the Traffic Control Plan design, Is each phase going to need a 3D model?

This is still being decided, but phase modeling won't be required for phase two. Digital delivery will likely include traffic control phase modeling in the future, though it may not apply to every phase or project. We'll consider whether it's worth the effort, as modeling minor steps like basic traffic rerouting or re-striping may add little value.

34. (Tri Nguyen) Do we need to submit an .itl (Template library)? Will there be a standard for all template creation for control? Example: point control or corridor horizontal constraint reference to be used with display rules.

We haven't decided if the ITL should be included in the box.com folder structure. If you use a nonstandard ITL, especially as a consultant, attaching it may help contractors access necessary features. We're developing a new ITL library to improve control over templates and point naming conventions. The Template Point Naming Convention PDF on our website outlines these updates, addressing contractor feedback for easier model integration in Trimble Business Center. This new ITL aims to reduce confusion, and we're progressing with pilot projects, but there's no release date yet.

35. (Trey Weatherly) Will these 3D models provide existing project conditions in addition to the proposed design?

The quality of your survey data influences your design accuracy. With our Digital Delivery pilot projects, Lidar scanning will become the standard for hard surfaces, while traditional surveys may still be used for softer areas. Lidar offers more comprehensive information about existing conditions, which supports better design outcomes. Traditional surveys may not always provide sufficient detail for projecting conditions throughout a project. Moving towards model-based deliverables enables clearer communication of site conditions to designers, contractors, and supports asset management in our digital twin initiative.

36. (Campbell Weldon) From a contractor standpoint, why do DXF and DWG files not get shared?

Currently, we are in the early phases of rolling out models for FIO. Right now, our focus is on DGN files and a limited selection of file types.

37. (Jonathan Maes) Will cross sections still be available?

Yes, the decision is up to each district. For early plans or projects that are still being distributed and bid on through traditional methods, posting cross sections for early plan review or FIO is possible. However, this remains at the districts' discretion.

38. (Campbell Weldon) Will the districts have final rule of the files being shared? Or will the state dictate that and disseminate to all districts?

Currently, we're concentrating on identifying which types of DGN files should be reposted—specifically your existing terrain, alignment, and corridor files. As we progress to later phases, we'll suggest



additional types of files for sharing as our modeling skills improve. For now, these recommendations apply whether the projects are pilot initiatives or full model-as-legal-deliverable (MALD) projects. Each project type will have its own set of criteria, and those criteria will be implemented accordingly.

39. (John Harvey) Will TxDOT be making an interim switch to ORD 2024 or moving straight to 2025?
We will transition directly to ORD 2025, skipping an interim switch to 24. Early testing is underway; more details on the timing of the shift will be provided soon.
40. (Anonymous) If we have a project that hasn't started yet and the letting date is after June 2026 then all the 3D models will be contractual documents and not FIO?
The projects will continue to be FIO. We are currently initiating the process with the May-June lettings; however, all of these projects are being developed in accordance with traditional plan set requirements. This means that standard 2D PDF plan sets, DGN, and model files will remain FIO. The sole exception involves those projects specifically designated by the districts. All 25 districts are required to let certain projects as MALD by December 2027, but this applies only to select projects participating in the digital delivery pilot initiative. Therefore, when working within the traditional plan set framework, all models will be considered FIO and none of these documents will serve as contractual deliverables.
41. (Suzanne Wright) Does TxDOT plan to use the geographic coordinate tools in design seeds to align projects with the built in available data/resources in the Bentley software?
Using seed files is more efficient because each new DGN will have the necessary setup from the start. While we don't require districts or consultants to follow a specific process, this is our best practice for digital delivery pilot projects. We've placed seed files in project folders or work areas in PW so in-house staff can easily access them when starting Digital Delivery projects.
42. (Campbell Weldon) With these files being FIO only, will they be viable for verifying TxDOT earthwork quantities, and hold no weight in this decision or is the contractor encouraged to asked the district for verification?
The model's accuracy depends on the survey type. High-density surveys like Lidar improve earthwork precision and lower contractor risk when using models in Trimble Business Center. However, contractors should consider this accuracy when applying the data. For final bidding, only documents from the final FTP site are contractual, so contractors assume any risk from using preliminary models.
43. (John Harvey) Will the next workspace release be 2025? I mean, there will not be another interim 10.12 workspace?
We do not expect further interim releases for 10.12. If testing goes well, ORD 2025 should be released statewide in the spring.